

	mm	L1 mm	L2 mm	Wt
151.3106	6,0	186,0	38,0	50
151.3107	7,0	197,0	41,0	80
151.3108	8,0	208,0	44,0	100
151.3110	10,0	234,0	50,0	150
151.3112	12,0	262,0	57,0	250
151.3114	14,0	294,0	70,0	270
151.3117	17,0	337,0	80,0	300
151.3119	19,0	360,0	89,0	350
151.3301	1/16"	91,0	15,5	10
151.3302	5/64"	102,0	18,0	10
151.3303	3/32"	114,5	20,5	10
151.3304	7/64"	129,0	23,0	30
151.3305	1/8"	129,0	23,0	50
151.3306	9/64"	140,0	25,5	50
151.3307	5/32"	144,0	29,0	80
151.3308	3/16"	156,0	30,5	120
151.3309	7/32"	165,0	33,0	150
151.3311	1/4"	186,0	38,0	180
151.3312	5/16"	208,0	44,0	200
151.3313	3/8"	234,0	50,0	220
151.3314	1/2"	267,0	63,0	250
151.3315	9/16"	294,0	70,0	350

BALL ENDED HEXAGON KEY WRENCH SETS

CHROMEplus® Ball ended hexagon key wrench set

- In accordance to DIN / ISO 2936
- With ball end
- Ideal for difficult to access screws
- Continuous hardened
- Chrome plated and mirror polished
- Special steel
- In a durable folding holder with two component housing



	Wt
158.3520 8 pcs 2.5 - 3 - 4 - 5 - 6 - 7 - 8 - 10 mm	440

3 in 1 Ball ended hexagon key wrench set

- Long execution
- DIN / ISO 2936
- Ball head on the long end
- Ideal for difficult to access screws
- Handle with double function (holder / T-handle)
- Continuous hardened
- Matt chrome
- Special steel



	Wt
151.2100 8 pcs 2 - 2.5 - 3 - 4 - 5 - 6 - 8 - 10 mm	330

3 in 1 Ball ended hexagon key wrench set

- Long execution
- DIN / ISO 2936
- Imperial sizes
- Ball head on the long end
- Ideal for difficult to access screws
- Handle with double function (holder / T-handle)
- Continuous hardened
- Matt chrome
- Special steel



	Wt
151.2130 8 pcs 5/64" - 3/32" - 1/8" - 5/32" - 3/16" - 1/4" - 5/16" - 3/8"	310

Ball ended hexagon key wrench set in a folding holder

- Long execution
- DIN / ISO 2936
- Ball head on the long end
- Ideal for difficult to access screws
- Continuous hardened
- Matt chrome
- Special steel



	Wt
151.3200 10 pcs 1.5 - 2 - 2.5 - 3 - 4 - 5 - 6 - 7 - 8 - 10 mm	500

3 in 1 Ball ended hexagon key wrench set

- Long execution
- DIN / ISO 2936
- With ball head on the long end
- Ideal for difficult to access screws
- Continuous hardened
- Handle with double function (holder / T-handle)
- Matt chrome
- Special steel



	Wt
920.2200 10 pcs 1.5 - 2 - 2.5 - 3 - 4 - 5 - 6 - 7 - 8 - 10 mm	600

3 in 1 Ball ended hexagon key wrench set

- Long execution
- DIN / ISO 2936
- Imperial sizes
- With ball head on the long end
- Ideal for difficult to access screws
- Continuous hardened
- Handle with double function (holder / T-handle)
- Matt chrome
- Special steel



	Wt
920.2250 10 pcs 1/16" - 5/64" - 3/32" - 1/8" - 5/32" - 3/16" - 7/32" - 1/4" - 5/16" - 3/8"	600

3 in 1 Ball ended hexagon key wrench set

- Extra long execution
- DIN / ISO 2936
- Ball head on the long end
- Ideal for difficult to access screws
- Handle with double function (holder / T-handle)
- Continuous hardened
- Matt chrome
- Special steel



	Wt
151.2180 8 pcs 2 - 2.5 - 3 - 4 - 5 - 6 - 8 - 10 mm	440

Ball ended hexagon key wrench set

- Extra long execution
- DIN/ISO 2936
- With ball head on the long end
- Ideal for difficult to access screws
- Continuous hardened
- Matt chrome
- Chrome vanadium
- In a convenient folding holder



	Wt
151.3220 9 pcs 1.5 - 2 - 2.5 - 3 - 4 - 5 - 6 - 8 - 10 mm	500

3 in 1 Ball ended hexagon key wrench set

- Extra long execution
- DIN / ISO 2936
- Imperial sizes
- With ball head on the long end
- Ideal for difficult to access screws
- Continuous hardened
- Handle with double function (holder / T-handle)
- Matt chrome
- Special steel



	Wt
920.2400 10 pcs 1.5 - 2 - 2.5 - 3 - 4 - 5 - 6 - 7 - 8 - 10 mm	600

Ball ended hexagon key wrench set

- Extra long execution
- DIN / ISO 2936
- Ball head on the long end
- Ideal for difficult to access screws
- Continuous hardened
- Matt chrome
- Special steel



	Wt
151.2150 10 pcs 3 - 4 - 5 - 6 - 7 - 8 - 10 - 12 - 14 - 17 mm	2.38



3 in 1 Ball ended hexagon key wrench set

- Long execution
- DIN / ISO 2936
- Imperial sizes
- With ball head on the long end
- Ideal for difficult to access screws
- Continuous hardened
- Handle with double function (holder / T-handle)
- Matt chrome
- Special steel



920.2450	10 pcs	1/16" - 5/64" - 3/32" - 1/8" - 5/32" - 3/16" - 7/32" - 1/4" - 5/16" - 3/8"	600
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BALL ENDED HEXAGON KEY WRENCH DISPLAYS

CHROMEplus® Ball ended hexagon key wrench display

- In accordance to DIN / ISO 2936
- With ball end
- Ideal for difficult to access screws
- Continuous hardened
- Chrome plated and mirror polished
- Special steel
- In a durable folding holder with two component housing



158.35200	12 pcs	12 x 158.3520	4.98
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3 in 1 Ball ended hexagon key wrench display

- Long execution
- DIN / ISO 2936
- Ball head on the long end
- Ideal for difficult to access screws
- Handle with double function (holder / T-handle)
- Continuous hardened
- Matt chrome
- Special steel



151.2100D	24 pcs	24 x 151.2100	8.00
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Ball ended hexagon key wrench display

- Extra long execution
- In accordance to DIN / ISO 2936
- Ball head on the long end
- Ideal for difficult to access screws
- Continuous hardened
- Matt chrome
- Special steel



151.3200D	10 pcs	10 x 151.3200	5.60
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3 in 1 Ball ended hexagon key wrench display

- Long execution
- DIN / ISO 2936
- Imperial sizes
- Ball head on the long end
- Ideal for difficult to access screws
- Continuous hardened
- Matt chrome
- Special steel



151.2130D	24 pcs	24 x 151.2130	7.60
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3 in 1 Ball ended hexagon key wrench display

- Extra long execution
- DIN / ISO 2936
- Ball head on the long end
- Ideal for difficult to access screws
- Handle with double function (holder / T-handle)
- Continuous hardened
- Matt chrome
- Special steel

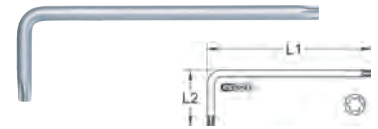


151.2180D	18 pcs	18 x 151.2180	8.00
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TX-HEXAGON KEY WRENCH

TX key wrench, short

- Short execution
- Continuous hardened
- Matt chrome
- Special steel



		L1 mm	L2 mm	Ø
151.2341	T6	42,0	16,0	10
151.2342	T7	48,0	16,0	10
151.2343	T8	48,0	16,0	10
151.2344	T9	48,0	16,0	10
151.2345	T10	51,0	17,0	10
151.2346	T15	54,0	18,0	10
151.2347	T20	57,0	19,0	10
151.2348	T25	60,0	20,0	10
151.2349	T27	64,0	21,0	20
151.2350	T30	70,0	24,0	30
151.2351	T40	76,0	26,0	40
151.2352	T45	82,0	28,0	50
151.2353	T50	95,0	32,0	60
151.2354	T55	108,0	35,0	130
151.2355	T60	120,0	38,0	190

TX key wrench, long

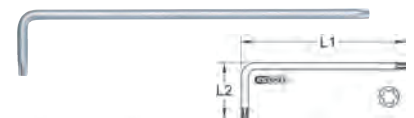
- Long execution
- Continuous hardened
- Matt chrome
- Special steel



		L1 mm	L2 mm	Ø
151.2312	T6	66,0	16,0	10
151.2313	T7	71,0	16,0	10
151.2314	T8	76,0	16,0	10
151.2315	T9	80,0	16,0	10
151.2301	T10	86,0	17,0	10
151.2302	T15	90,0	18,0	10
151.2303	T20	95,0	19,0	10
151.2304	T25	100,0	20,0	20
151.2309	T27	105,0	21,0	30
151.2305	T30	114,0	24,0	40
151.2306	T40	124,0	26,0	70
151.2307	T45	133,0	28,0	100
151.2308	T50	152,0	32,0	140
151.2310	T55	171,0	35,0	180
151.2311	T60	190,0	38,0	280

TX key wrench, extra long

- Extra long execution
- Continuous hardened
- Matt chrome
- Special steel



		L1 mm	L2 mm	Ø
151.3161	T10	90,0	14,0	10
151.3162	T15	100,0	16,0	10
151.3163	T20	112,0	18,0	10
151.3164	T25	126,0	20,0	20
151.3165	T27	140,0	25,0	30
151.3166	T30	160,0	28,0	40
151.3167	T40	180,0	32,0	60
151.3168	T45	200,0	36,0	90
151.3169	T50	224,0	40,0	130

TX TAMPERPROOF HEXAGON KEY WRENCH SETS

CHROMEplus® TX key wrench set

- Continuous hardened
- Chrome plated and mirror polished
- Special steel
- In a durable folding holder with two component housing



158.3510	8 pcs	T8 - T10 - T15 - T20 - T25 - T27 - T30 - T40	300
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3 in 1 TX key wrench set

- Short execution
- Continuous hardened
- Handle with double function (holder / T-handle)
- Matt chrome
- Special steel



920.2500	10 pcs	T8 - T10 - T15 - T20 - T25 - T27 - T30 - T40 - T45 - T50	500
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3 in 1 TX key wrench set

- Long execution
- Continuous hardened
- Handle with double function (holder / T-handle)
- Matt chrome
- Special steel



151.2300	8 pcs	T10 - T15 - T20 - T25 - T30 - T40 - T45 - T50	310
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3 in 1 TX key wrench set

- Long execution
- Continuous hardened
- Handle with double function (holder / T-handle)
- Matt chrome
- Special steel



920.2520	10 pcs	T8 - T10 - T15 - T20 - T25 - T27 - T30 - T40 - T45 - T50	500
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3 in 1 TX key wrench set

- Extra long execution
- Continuous hardened
- Handle with double function (holder / T-handle)
- Matt chrome
- Special steel



151.2380	8 pcs	T10 - T15 - T20 - T25 - T30 - T40 - T45 - T50	420
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3 in 1 TX key wrench set

- Extra long execution
- Continuous hardened
- Handle with double function (holder / T-handle)
- Matt chrome
- Special steel



920.2540	10 pcs	T8 - T10 - T15 - T20 - T25 - T27 - T30 - T40 - T45 - T50	700
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TX-HEXAGON KEY WRENCH DISPLAYS

CHROMEplus® TX key wrench display

- Continuous hardened
- Chrome plated and mirror polished
- Special steel
- In a durable folding holder with two component housing



158.3510D	12 pcs	12 x 158.3510	3.84
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3 in 1 TX key wrench display

- Long execution
- Continuous hardened
- Handle with double function (holder / T-handle)
- Matt chrome
- Special steel



151.2300D	24 pcs	24 x 151.2300	7.55
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3 in 1 TX key wrench display

- Extra long execution
- Continuous hardened
- Handle with double function (holder / T-handle)
- Matt chrome
- Special steel



151.2380D	18 pcs	18 x 151.2380	7.55
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TX BALL ENDED HEXAGON KEY WRENCH

TX ball ended key wrench, long

- Long execution
- Continuous hardened
- Ball head on the long end
- Ideal for difficult access screws
- Matt chrome
- Special steel



		L1 mm	L2 mm	Weight
151.2401	T10	86.0	17.0	10
151.2402	T15	90.0	18.0	10
151.2403	T20	95.0	19.0	10
151.2404	T25	100.0	20.0	20
151.2405	T30	114.0	24.0	30
151.2406	T40	124.0	26.0	50
151.2407	T45	133.0	29.0	60
151.2408	T50	152.0	32.0	90

TX BALL ENDED HEXAGON KEY WRENCH SETS

3 in 1 TX ball ended key wrench set

- Long execution
- Continuous hardened
- Ball head on the long end
- Ideal for difficult to access screws
- Handle with double function (holder / T-handle)
- Matt chrome
- Special steel



151.2400	8 pcs	T10 - T15 - T20 - T25 - T30 - T40 - T45 - T50	310
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TX BALL ENDED HEXAGON KEY DISPLAYS

3 in 1 TX ball ended key wrench display

- Long execution
- Continuous hardened
- Ball head on the long end
- Ideal for difficult to access screws
- Handle with double function (holder / T-handle)
- Matt chrome
- Special steel



151.24000	24 pcs	24 x 151.2400	7.65
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TX TAMPERPROOF HEXAGON KEY WRENCH

TX tamperproof key wrench, short

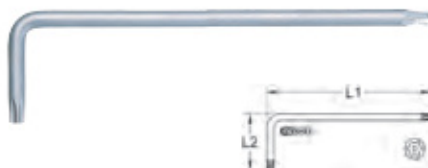
- Short execution
- Bore hole at the short and long end
- Continuous hardened
- Matt chrome
- Special steel



		L1 mm	L2 mm	W
151.2241	TB6	42.0	16.0	10
151.2242	TB7	48.0	16.0	10
151.2243	TB8	48.0	16.0	10
151.2244	TB9	48.0	16.0	10
151.2245	TB10	51.0	17.0	10
151.2246	TB15	54.0	18.0	10
151.2247	TB20	57.0	19.0	10
151.2248	TB25	60.0	20.0	10
151.2249	TB27	64.0	21.0	20
151.2250	TB30	70.0	24.0	30
151.2251	TB40	76.0	26.0	40
151.2252	TB45	82.0	28.0	50
151.2253	TB50	95.0	32.0	60
151.2254	TB55	108.0	35.0	130
151.2255	TB60	120.0	38.0	190

TX tamperproof key wrench, long

- Long execution
- Bore hole at the short and long end
- Continuous hardened
- Matt chrome
- Special steel



		L1 mm	L2 mm	W
151.2212	TB6	66.0	16.0	10
151.2213	TB7	71.0	16.0	10
151.2214	TB8	76.0	16.0	10
151.2215	TB9	80.0	16.0	10
151.2201	TB10	86.0	17.0	10
151.2202	TB15	90.0	18.0	10
151.2203	TB20	95.0	19.0	10
151.2204	TB25	100.0	20.0	20
151.2209	TB27	105.0	21.0	30
151.2205	TB30	114.0	24.0	40
151.2206	TB40	124.0	26.0	70
151.2207	TB45	133.0	28.0	100
151.2208	TB50	152.0	32.0	140
151.2210	TB55	171.0	35.0	180
151.2211	TB60	190.0	38.0	280

TX tamperproof key wrench, extra long

- Extra long execution
- Bore hole at the short and long end
- Continuous hardened
- Matt chrome
- Special steel



		L1 mm	L2 mm	W
151.3181	TB10	90.0	14.0	10
151.3182	TB15	100.0	16.0	10
151.3183	TB20	112.0	18.0	10
151.3184	TB25	126.0	20.0	20
151.3185	TB27	140.0	25.0	30
151.3186	TB30	160.0	28.0	40
151.3187	TB40	180.0	32.0	60
151.3188	TB45	200.0	36.0	90
151.3189	TB50	224.0	40.0	130

TX TAMPERPROOF KEY WRENCH SETS

TX tamperproof key wrench set

- Short execution
- With tamperproof
- Continuous hardened
- Matt chrome
- Special steel



151.4150	7 pcs	TB10 - TB15 - TB20 - TB25 - TB27 - TB30 - TB40	100
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CHROMEplus® TX tamperproof key wrench set

- With tamperproof
- Continuous hardened
- Chrome plated and mirror polished
- Special steel
- In a durable folding holder with two component housing



158.3530	8 pcs	TB8 - TB10 - TB15 - TB20 - TB25 - TB27 - TB30 - TB40	300
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3 in 1 TX tamperproof key wrench set

- Short execution
- With tamperproof
- Continuous hardened
- Handle with double function (holder / T-handle)
- Matt chrome
- Special steel



920.2550	10 pcs	TB8 - TB10 - TB15 - TB20 - TB25 - TB27 - TB30 - TB40 - TB45 - TB50	600
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3 in 1 TX tamperproof key wrench set

- Long execution
- With tamperproof
- Handle with double function (holder / T-handle)
- Continuous hardened
- Matt chrome
- Special steel



151.2200	8 pcs	TB10 - TB15 - TB20 - TB25 - TB30 - TB40 - TB45 - TB50	250
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3 in 1 TX tamperproof key wrench set

- Long execution
- With tamperproof
- Continuous hardened
- Handle with double function (holder / T-handle)
- Matt chrome
- Special steel



920.2570	10 pcs	TB8 - TB10 - TB15 - TB20 - TB25 - TB27 - TB30 - TB40 - TB45 - TB50	600
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3 in 1 TX tamperproof key wrench set

- Extra long execution
- With tamperproof
- Handle with double function (holder / T-handle)
- Continuous hardened
- Matt chrome
- Special steel



151.2280	8 pcs	TB10 - TB15 - TB20 - TB25 - TB30 - TB40 - TB45 - TB50		420
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3 in 1 TX tamperproof key wrench set

- Extra long execution
- With tamperproof
- Continuous hardened
- Handle with double function (holder / T-handle)
- Matt chrome
- Special steel



920.2590	10 pcs	TB8 - TB10 - TB15 - TB20 - TB25 - TB27 - TB30 - TB40 - TB45 - TB50		800
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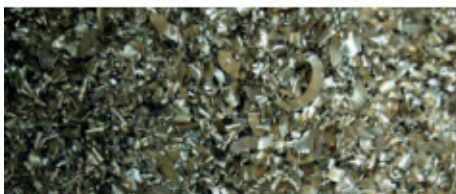
TX TAMPERPROOF KEY WRENCH DISPLAYS

CHROMEplus® TX tamperproof key wrench display

- With tamperproof
- Continuous hardened
- Chrome plated and mirror polished
- Special steel
- In a durable folding holder with two component housing



158.3530D	12 pcs	12 x 158.3530		3.84
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3 in 1 TX tamperproof key wrench display

- Long execution
- With tamperproof
- Handle with double function (holder / T-handle)
- Continuous hardened
- Matt chrome
- Special steel



151.2200D	24 pcs	24 x 151.2200		8.50
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3 in 1 TX tamperproof key wrench display

- Extra long execution
- With tamperproof
- Handle with double function (holder / T-handle)
- Continuous hardened
- Matt chrome
- Special steel

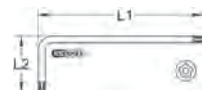


151.2280D	18 pcs	18 x 151.2280		7.51
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FIVE STAR PROFILE TAMPERPROOF KEY WRENCH

Five star profile tamperproof key wrench, extra long

- Extra long execution
- Bore hole at the short and long end
- Continuous hardened
- Matt chrome
- Special steel

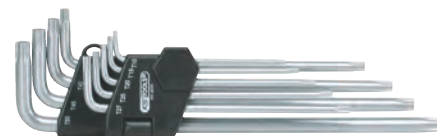


		L1 mm	L2 mm	
151.2471	TS10	94.0	18.0	10
151.2472	TS15	104.0	20.0	10
151.2473	TS20	116.0	22.0	10
151.2474	TS25	130.0	25.0	20
151.2475	TS27	133.0	30.0	30
151.2476	TS30	167.0	34.0	40
151.2477	TS40	190.0	38.0	60
151.2478	TS45	190.0	44.0	90
151.2479	TS50	245.0	50.0	130

FIVE STAR PROFILE TAMPERPROOF KEY WRENCH SETS

Five star profile tamperproof key wrench set

- Long execution
- Bore hole at the short and long end
- Continuous hardened
- Matt chrome
- Special steel

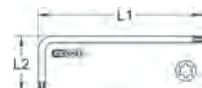


151.2470	9 pcs	TS10 - TS15 - TS20 - TS25 - TS27 - TS30 - TS40 - TS45 - TS50		330
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RIBE TAMPERPROOF KEY WRENCH

RIBE® Key wrench, extra long

- Extra long execution
- Continuous hardened
- Matt chrome
- Special steel



		L1 mm	L2 mm	
151.2451	M4	144.0	29.0	20
151.2452	M5	165.0	33.0	30
151.2453	M6	186.0	38.0	50
151.2454	M7	197.0	41.0	80
151.2455	M8	208.0	44.0	104
151.2456	M9	219.0	47.0	150
151.2457	M10	234.0	50.0	170
151.2670	M12	262.0	57.0	280
151.2671	M14	294.0	70.0	436
151.2672	M16	337.0	80.0	598
151.2458	M18	379.0	89.0	1027

RIBE HEXAGON KEY WRENCH SETS

RIBE® Key wrench set

- Long execution
- Continuous hardened
- Matt chrome
- Special steel



					9
151.2450	7 pcs	M4 - M5 - M6 - M7 - M8 - M9 - M10			310

SPLINE-HEXAGON KEY WRENCH (XZN®)

Spline key wrench, short

- Short execution
- Continuous hardened
- Matt chrome
- Special steel



		L1 mm	L2 mm	9
151.4101	M4	63,0	20,0	10
151.4102	M5	72,0	24,0	10
151.4103	M6	76,0	26,0	20
151.4104	M8	82,0	28,0	40
151.4105	M10	93,0	31,0	80
151.4106	M12	106,0	34,0	80
151.4107	M14	125,0	45,0	80
151.4108	M16	140,0	55,0	80
151.2673	M18	178,0	81,0	333

SPLINE-HEXAGON KEY WRENCH SETS (XZN®)

Spline key wrench set

- Short execution
- Continuous hardened
- Matt chrome
- Special steel

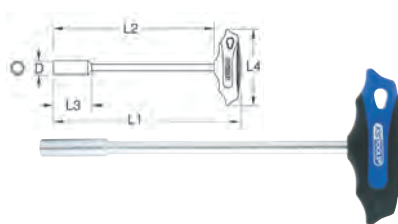


					9
151.4100	5 pcs	M5 - M6 - M8 - M10 - M12			150

T-HANDLE NUT SCREWDRIVER

CHROMEplus® T-handle socket screwdriver, long

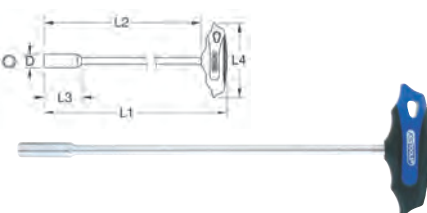
- 6 point
- Two component handle
- With hanging hole
- Chrome plated and mirror polished
- Chrome vanadium



	mm	D mm	L1 mm	L2 mm	L3 mm	L4 mm	9
158.50055	5,5	9,9	264,0	230,0	10,0	95,0	80
158.5006	6	9,9	264,0	230,0	10,0	95,0	100
158.5007	7	10,1	264,0	230,0	10,0	95,0	120
158.5008	8	12,5	270,0	230,0	14,0	115,0	140
158.5009	9	13,6	270,0	230,0	12,0	115,0	150
158.5010	10	14,5	270,0	230,0	14,0	115,0	160
158.5011	11	15,7	270,0	230,0	15,0	115,0	180
158.5012	12	16,7	270,0	230,0	15,0	115,0	180
158.5013	13	17,6	270,0	230,0	16,0	115,0	180
158.5014	14	19,2	270,0	230,0	15,0	115,0	190

CHROMEplus® T-handle socket screwdriver, extra long

- 6 point
- Two component handle
- With hanging hole
- Chrome plated and mirror polished
- Chrome vanadium



	mm	D mm	L1 mm	L2 mm	L3 mm	L4 mm	9
158.5408	8	12,5	390,0	350,0	13,0	115,0	180
158.5409	9	13,6	390,0	350,0	14,0	115,0	190
158.5410	10	14,7	390,0	350,0	15,0	115,0	220
158.5413	13	17,7	390,0	350,0	15,0	115,0	230
158.5414	14	19,1	390,0	350,0	16,0	115,0	250

T-HANDLE NUT SCREWDRIVER SETS

CHROMEplus® T-handle socket screwdriver set

- 6 point
- Two component handle
- With hanging hole
- Chrome plated and mirror polished
- Chrome vanadium

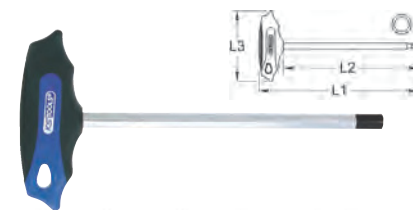


					9
158.5000	6 pcs	6 - 8 - 10 - 12 - 13 - 14 mm			140

T-HANDLE HEXAGON SOCKET KEY WRENCH

ERGOTORQUEplus® T-handle hexagon key wrench

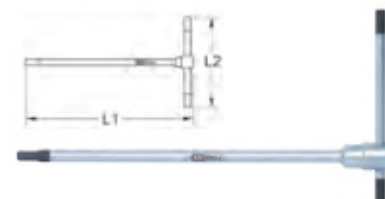
- With two component handle
- Continuous hardened
- Tip burnished
- Chrome plated and mirror polished
- Special steel



	mm	L1 mm	L2 mm	L3 mm	9
158.8032	2,0	130,0	100,0	80,0	20
158.80325	2,5	130,0	100,0	80,0	30
158.8033	3,0	130,0	100,0	80,0	30
158.8034	4,0	180,0	150,0	80,0	50
158.8035	5,0	185,0	150,0	100,0	100
158.8036	6,0	185,0	150,0	100,0	140
158.8037	7,0	185,0	150,0	100,0	157
158.8038	8,0	230,0	200,0	100,0	320
158.8040	10,0	235,0	200,0	115,0	360

3 Way T-handle hexagonal key wrench

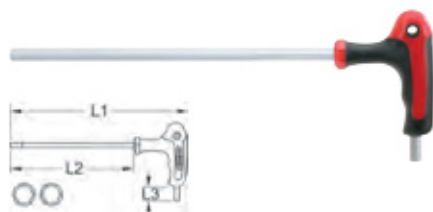
- Hexagonal profile on three ends
- For difficult to access areas
- Matt finish
- Chrome finish with burnished tips
- Chrome vanadium



	mm	L1 mm	L2 mm	9
158.5102	2,0	125,0	65,0	23
158.51025	2,5	125,0	65,0	23
158.5103	3,0	125,0	65,0	23
158.5104	4,0	180,0	90,0	59
158.51045	4,5	180,0	90,0	59
158.5105	5,0	180,0	90,0	60
158.5106	6,0	210,0	105,0	126
158.5108	8,0	250,0	125,0	208
158.5110	10,0	300,0	145,0	384

ERGOTORQUEplus® T-handle hexagon key wrench

- Ideal for difficult to access screws
- With two component handle
- Continuous hardened
- Matt chrome
- Special steel



	mm	L1 mm	L2 mm	L3 mm	9
151.2686	2,0	142,0	100,0	12,0	12
151.2687	2,5	142,0	100,0	12,0	15
151.2688	3,0	167,0	125,0	12,0	19
151.2689	4,0	211,0	150,0	14,0	49
151.2690	4,5	211,0	150,0	14,0	60
151.2691	5,0	211,0	150,0	14,0	68
151.2692	6,0	236,0	175,0	14,0	91
151.2693	7,0	261,0	200,0	14,0	142
151.2694	8,0	279,0	200,0	16,0	175
151.2695	10,0	304,0	225,0	16,0	257

T-HANDLE HEXAGON SOCKET KEY WRENCH SETS

ERGOTORQUE^{plus}® T-handle key wrench set

- In accordance to DIN / ISO 2936
- Continuous hardened
- Chrome plated and mirror polished
- Tip burnished
- Special steel
- In durable wall holder



158.8130	8 pcs	2 - 2.5 - 3 - 4 - 5 - 6 - 8 - 10 mm	1.08
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3 Way T-handle hexagonal key wrench set

- Hexagonal profile on three ends
- For difficult to access areas
- Matt finish
- Chrome finish with burnished tips
- Chrome vanadium
- In durable plastic storage case



158.5100	8 pcs	2 - 2.5 - 3 - 4 - 5 - 6 - 8 - 10 mm	2.00
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T-HANDLE BALL ENDED-HEXAGON KEY WRENCHES

ERGOTORQUE^{plus}® T-handle ball ended hexagon key wrench

- With ball head on the long end
- Ideal for difficult to access screws
- With two component handle
- Continuous hardened
- Tip burnished
- Matt chrome
- Special steel



	mm	L1 mm	L2 mm	L3 mm	mm
151.8130	2.0	138.0	100.0	12.0	20
151.8131	2.5	140.0	100.0	13.0	30
151.8132	3.0	140.0	100.0	15.0	30
151.8133	4.0	188.0	150.0	15.0	50
151.8134	5.0	205.0	150.0	15.0	100
151.8135	6.0	205.0	150.0	15.0	140
151.8136	7.0	210.0	150.0	15.0	300
151.8137	8.0	250.0	200.0	15.0	320
151.8138	10.0	275.0	200.0	18.0	360
151.8139	12.0	275.0	200.0	20.0	420

T-HANDLE BALL ENDED HEXAGON SOCKET KEY WRENCH SETS

ERGOTORQUE^{plus}® T-handle ball ended hexagon key wrench set

- With ball head on the long end
- Ideal for difficult to access screws
- With two component handle
- Continuous hardened
- Tip burnished
- Matt chrome
- Special steel



151.8155	8 pcs	2 - 2.5 - 3 - 4 - 5 - 6 - 8 - 10 mm	0.44
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ERGOTORQUE^{plus}® T-handle ball ended hexagon key wrench set

- With ball head on the long end
- Ideal for difficult to access screws
- With two component handle
- Continuous hardened
- Tip burnished
- Matt chrome
- Special steel
- In durable plastic storage case

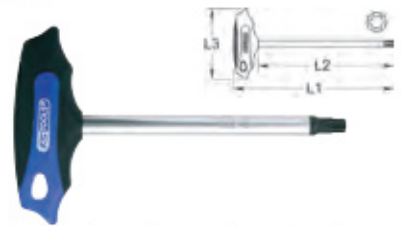


151.8150	9 pcs	2 - 2.5 - 3 - 4 - 5 - 6 - 8 - 10 - 12 mm	1.80
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T-HANDLE TX-KEY WRENCH

ERGOTORQUE^{plus}® T-handle TX key wrench

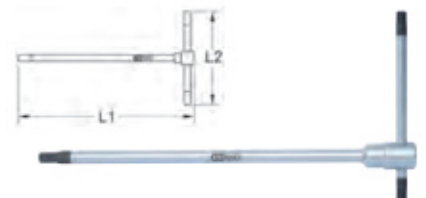
- With two component handle
- Continuous hardened
- Tip burnished
- Chrome plated and mirror polished
- Special steel



		L1 mm	L2 mm	L3 mm	mm
158.8015	T5	130.0	100.0	80.0	18
158.8016	T6	130.0	100.0	80.0	18
158.8017	T7	130.0	100.0	80.0	18
158.8018	T8	130.0	100.0	80.0	33
158.8019	T9	130.0	100.0	80.0	38
158.8020	T10	130.0	100.0	80.0	38
158.8021	T15	130.0	100.0	80.0	30
158.8022	T20	130.0	100.0	80.0	30
158.8023	T25	135.0	100.0	100.0	50
158.8024	T27	135.0	100.0	100.0	100
158.8025	T30	135.0	100.0	100.0	100
158.8026	T40	235.0	200.0	100.0	300
158.8027	T45	285.0	250.0	100.0	320
158.8028	T50	290.0	250.0	115.0	360

3 Way T-handle TX key wrench

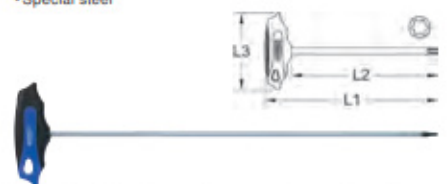
- TX profile on three ends
- For difficult to access areas
- Matt finish
- Chrome finish with burnished tips
- Chrome vanadium



		L1 mm	L2 mm	mm
158.5201	T10	125.0	65.0	23
158.5202	T15	125.0	65.0	23
158.5203	T20	125.0	65.0	23
158.5204	T25	180.0	90.0	59
158.5205	T27	180.0	90.0	59
158.5206	T30	180.0	90.0	60
158.5207	T40	180.0	90.0	126
158.5208	T45	180.0	90.0	208
158.5209	T50	250.0	125.0	384

ERGOTORQUE^{plus}® T-handle TX key wrench, long

- Extra long execution
- With two component handle
- Continuous hardened
- Tip burnished
- Chrome plated and mirror polished
- Special steel



		L1 mm	L2 mm	L3 mm	mm
158.8051	T10	403.0	373.0	80.0	30
158.8052	T15	403.0	373.0	80.0	30
158.8053	T20	403.0	373.0	100.0	40
158.8054	T25	408.0	373.0	100.0	40
158.8055	T27	408.0	373.0	100.0	40
158.8056	T30	408.0	373.0	100.0	45

T-HANDLE TX-HEXAGON KEY WRENCH SETS

ERGOTORQUEplus® T-handle TX key wrench set

- Continuous hardened
- Chrome plated and mirror polished
- Tip burnished
- Special steel
- In durable wall holder



158.8160	9 pcs	T10 - T15 - T20 - T25 - T27 - T30 - T40 - T45 - T50	1.33
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3 Way T-handle TX key wrench set

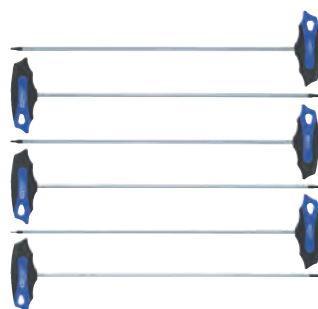
- TX profile on three ends
- For difficult to access areas
- Matt finish
- Chrome finish with burnished tips
- Chrome vanadium
- In durable plastic storage case



158.5200	9 pcs	T10 - T15 - T20 - T25 - T27 - T30 - T40 - T45 - T50	1.88
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ERGOTORQUEplus® T-handle TX key wrench set

- Extra long execution
- With two component handle
- Continuous hardened
- Tip burnished
- Chrome plated and mirror polished
- Special steel

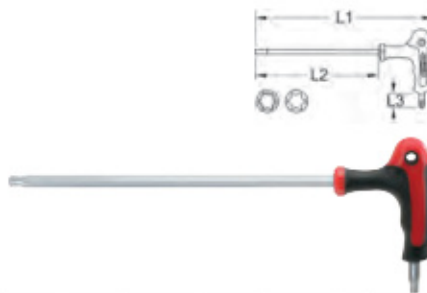


158.8050	6 pcs	T10 - T15 - T20 - T25 - T27 - T30	375
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T-HANDLE TX-BALL ENDED KEY WRENCH

ERGOTORQUEplus® T-handle ball ended TX key wrench

- With ball head on the long end
- Ideal for difficult to access screws
- With two component handle
- Continuous hardened
- Matt chrome
- Special steel



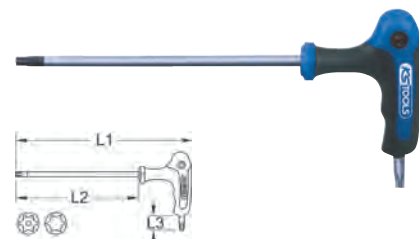
		L1 mm	L2 mm	L3 mm	Ø
151.2751	T6	167.0	125.0	12.0	20
151.2752	T7	167.0	125.0	12.0	20
151.2753	T8	167.0	125.0	12.0	20
151.2754	T9	167.0	125.0	12.0	25
151.2755	T10	167.0	125.0	12.0	30
151.2756	T15	167.0	125.0	12.0	35
151.2757	T20	167.0	125.0	12.0	40
151.2758	T25	211.0	150.0	14.0	50
151.2759	T27	211.0	150.0	14.0	70
151.2760	T30	211.0	150.0	14.0	75
151.2761	T40	254.0	175.0	16.0	120



T-HANDLE TX TAMPERPROOF KEY WRENCH

ERGOTORQUEplus® T-handle TX tamperproof key wrench

- Tamperproof
- With two component handle
- Continuous hardened
- Tip burnished
- Matt chrome
- Special steel



		L1 mm	L2 mm	L3 mm	Ø
151.8119	TB9	100.0	100.0	13.0	20
151.8121	TB10	140.0	100.0	13.0	20
151.8122	TB15	140.0	100.0	15.0	30
151.8123	TB20	140.0	100.0	15.0	30
151.8124	TB25	208.0	150.0	15.0	50
151.8125	TB27	208.0	150.0	15.0	100
151.8126	TB30	208.0	150.0	15.0	140
151.8127	TB40	260.0	200.0	15.0	300
151.8128	TB45	260.0	200.0	18.0	320
151.8129	TB50	280.0	200.0	20.0	360



T-HANDLE TX TAMPERPROOF KEY WRENCH SETS

ERGOTORQUEplus® T-handle TX tamperproof key wrench set

- Tamperproof
- With two component handle
- Continuous hardened
- Tip burnished
- Matt chrome
- Special steel



151.8165	8 pcs	TB9 - TB10 - TB15 - TB20 - TB25 - TB27 - TB30 - TB40	0.70
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ERGOTORQUEplus® T-handle TX tamperproof key wrench set

- Tamperproof
- With two component handle
- Continuous hardened
- Tip burnished
- Matt chrome
- Special steel
- In durable plastic storage case



151.8160	9 pcs	TB10 - TB15 - TB20 - TB25 - TB27 - TB30 - TB40 - TB45 - TB50	1.80
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SCREWDRIVERS

**KS TOOLS®**

Innovation is
our mission!

	PAGE
ERGOTORQUE® WOOD SCREWDRIVER	230
ERGOTORQUE® SCREWDRIVER	231 - 232
ERGOTORQUE® SCREWDRIVER SETS	232 - 233
ERGOTORQUE® SCREWDRIVER DISPLAYS	234
ERGOTORQUE <i>plus</i> ® SCREWDRIVER	234 - 236
ERGOTORQUE <i>plus</i> ® SCREWDRIVER SETS	236 - 237
ERGOTORQUE <i>plus</i> ® SCREWDRIVER DISPLAYS	237
ERGOTORQUE@ <i>max</i>	237 - 238
ERGOTORQUE@ <i>max</i> SCREWDRIVER SETS	238
ERGOTORQUE@ <i>max</i> SCREWDRIVER DISPLAYS	239
VDE	239
VDE SCREWDRIVER SETS	239
VDE SCREWDRIVER DISPLAYS	240
KEY WRENCH	240
1/4" BIT SCREWDRIVERS	240
1/4" RATCHET BIT SCREWDRIVERS	240 - 241
MAGNETISING AND DE-MAGNETISING ATTACHMENT	241
1/2" HAND IMPACT SCREWDRIVER	241

SCREWDRIVERS

Hammer cap with a direct connection to the blade

Optimum power transmission and perfect operation

Blue handle component made out of impact resistant plastic

Black handle zone made out of structured soft material

Ergotorque® handle with ergonomic design adapts itself perfectly to the hand

6 point wrench drive

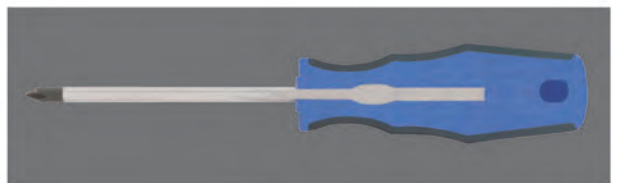
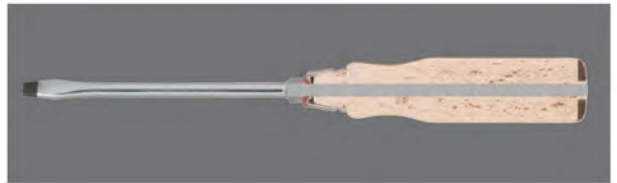
Blades made from S2 special steel continuous hardened matt chrome

Rigid hexagon blade for high torsion power

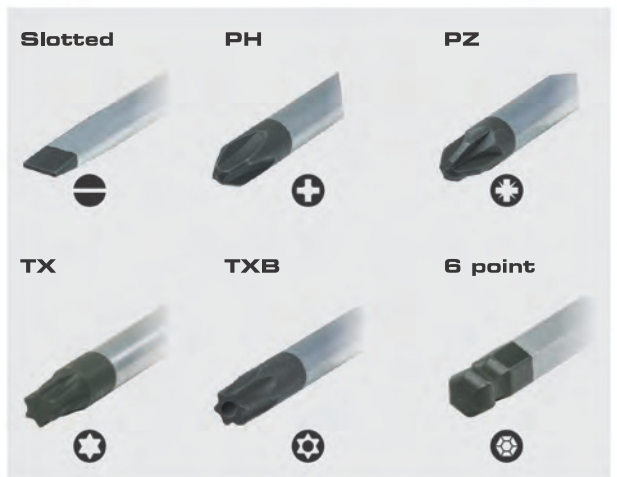
Black blade tip, with high size accuracy



Composition



Profiles



1/4" Additional square drive for use with the T handle ratchet (duplication of the torque)

Screwdriver profil

ERGOTORQUE[®] Wood

- Ergonomic handle design
- Handles made of hard wood beech
- Forged hexagon spanner drive
- Blade made of special chrome molybdenum vanadium alloy

ERGOTORQUE[®]

- Robust 1 component plastic handle (black)
- Ergonomic handle design - with micro structured surface
- Rigid hexagonal blade
- Blade made of S2 special steel - continuous hardened and matt chrome finis

ERGOTORQUE[®] plus

- 2 Component comfort handle with striking cap
- Ergonomic handle design
- Hard blue core with soft black component with micro structured surface
- Rigid hexagonal blade with forged hexagon spanner drive
- Blade made out of S2 special steel - continuous hardened and matt chrome finis

ERGOTORQUE[®] max

- 2 Component comfort handle
- Ergonomic handle design
- Hard blue core with soft black component with micro structured surface
- Rigid round blade with forged hexagon spanner drive
- Blade made out of S2 special steel - continuous hardened and matt chrome finis

Handle variants

Wood



- Hard wood beech
- Protective leather cap for shatter protection
- Continuous blade



- Hard wood beech
- Ergonomic, convex handle contour
- Metal striking cap
- Firm connection between blade and striking cap

Plastic



- Robust 1 component plastic handle
- Black
- Ergonomic handle design
- Handle zone with micro structure surface
- Chemical and oil resistant

2 Component



- Ergonomic handle design
- Blue handle made out of impact resistant plastic
- Black handle zone made out of structured soft material
- Handle with hanging eyelet

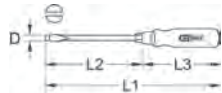


- Ergonomic handle design
- Blue handle made out of impact resistant plastic
- Black handle zone made out of structured soft material
- Handle end with striking cap
- Firm connection between blade and striking cap

ERGOTORQUE® WOOD SCREWDRIVER

ERGOTORQUE® WOOD screwdriver for slotted screws

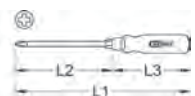
- DIN 5265 / ISO 2380
- Includes hexagon drive for a spanner or wrench
- Protective leather cap on the handle end
- Optimal power transmission
- Ergonomically formed and sealed beech wood handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



	D mm	L1 mm	L2 mm	L3 mm		
300.1001	3,5	170,0	75,0	95,0		50
300.1002	4,5	185,0	90,0	95,0		50
300.1003	5,5	200,0	100,0	100,0		70
300.1004	7,0	235,0	125,0	110,0		120
300.1005	9,0	280,0	150,0	120,0		170
300.1006	10,0	300,0	175,0	125,0		220
300.1007	12,0	330,0	200,0	130,0		310
300.1008	14,0	390,0	250,0	140,0		360

ERGOTORQUE® WOOD screwdriver for phillips screws PH

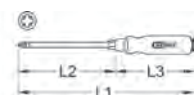
- DIN 8764
- Includes hexagon drive for a spanner or wrench
- Protective leather cap on the handle end
- Optimal power transmission
- Ergonomically formed and sealed beech wood handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



		L1 mm	L2 mm	L3 mm		
300.1011	PH 1	175,0	80,0	95,0		50
300.1012	PH 2	220,0	100,0	120,0		90
300.1013	PH 3	270,0	150,0	120,0		170
300.1014	PH 4	340,0	200,0	140,0		330

ERGOTORQUE® WOOD screwdriver for phillips screws PZ

- DIN 8764
- Includes hexagon drive for a spanner or wrench
- Protective leather cap on the handle end
- Optimal power transmission
- Ergonomically formed, sealed beech wood handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



		L1 mm	L2 mm	L3 mm		
300.1021	PZ 1	175,0	80,0	95,0		50
300.1022	PZ 2	220,0	100,0	120,0		90
300.1023	PZ 3	270,0	150,0	120,0		170
300.1024	PZ 4	340,0	200,0	140,0		330

ERGOTORQUE® WOOD screwdriver set

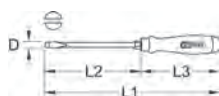
- Includes hexagon drive for a spanner or wrench
- Protective leather cap on the handle end
- Optimal power transmission
- Ergonomically formed, sealed beech wood handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



300.1100	6 pcs	ERGOTORQUE® WOOD screwdriver set			420
4 x		3,5 - 4,5 - 5,5 - 7 mm			
2 x		PH1 - PH2			

ERGOTORQUE® WOODmax screwdriver for slotted screws

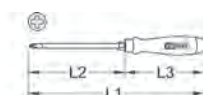
- DIN 5265
- Includes hexagon drive for a spanner or wrench
- Protective cap on the handle end
- Optimal power transmission
- Ergonomically formed, sealed beech wood handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



	D mm	L1 mm	L2 mm	L3 mm		
300.1051	3,5	175,0	75,0	100,0		50
300.1052	4,5	190,0	90,0	100,0		50
300.1053	5,5	205,0	100,0	105,0		70
300.1054	7,0	240,0	125,0	115,0		120
300.1055	8,0	275,0	150,0	125,0		170

ERGOTORQUE® WOODmax screwdriver for phillips screws PH

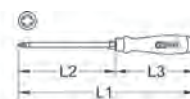
- DIN / ISO 8764
- Includes hexagon drive for a spanner or wrench
- Protective cap on the handle end
- Optimal power transmission
- Ergonomically formed, sealed beech wood handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



		L1 mm	L2 mm	L3 mm		
300.1061	PH 1	180,0	80,0	100,0		50
300.1062	PH 2	225,0	100,0	125,0		90
300.1063	PH 3	275,0	150,0	125,0		170

ERGOTORQUE® WOODmax screwdriver for phillips screws PZ

- DIN / ISO 8764
- Includes hexagon drive for a spanner or wrench
- Protective cap on the handle end
- Optimal power transmission
- Ergonomically formed, sealed beech wood handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



		L1 mm	L2 mm	L3 mm		
300.1071	PZ 1	180,0	80,0	100,0		50
300.1072	PZ 2	225,0	100,0	125,0		90
300.1073	PZ 3	275,0	150,0	125,0		170

ERGOTORQUE® WOODmax screwdriver set

- Includes hexagon drive for a spanner or wrench
- Protective cap on the handle end
- Optimal power transmission
- Ergonomically formed, sealed beech wood handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



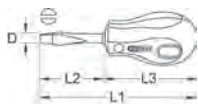
300.1050	6 pcs	ERGOTORQUE® WOODmax screwdriver set			500
4 x		3,5 - 4,5 - 5,5 - 7 mm			
2 x		PH1 - PH2			



ERGOTORQUE® SCREWDRIVER

ERGOTORQUE® screwdriver for slotted screws, stubby

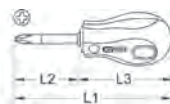
- DIN 5265
- Extra short blade
- One component handle
- Optimal power transmission
- With hanging hole
- Hardened blade
- Chrome finish wi h burnished tips
- Blade made of chrome vanadium



	D mm	L1 mm	L2 mm	L3 mm	g
911.3755	4,0	75,0	25,0	50,0	35
911.3756	5,0	75,0	25,0	50,0	36
911.1141	6,0	90,0	38,0	52,0	40
911.3757	6,5	75,0	25,0	50,0	39
911.3758	8,0	75,0	25,0	50,0	44

ERGOTORQUE® screwdriver for phillips screws PH, stubby

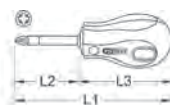
- DIN / ISO 8764
- Extra short blade
- One component handle
- Optimal power transmission
- With hanging hole
- Hardened blade
- Chrome finish wi h burnished tips
- Blade made of chrome vanadium



		L1 mm	L2 mm	L3 mm	g
911.3759	PH 1	75,0	25,0	50,0	42
911.1132	PH 2	90,0	38,0	52,0	40

ERGOTORQUE® screwdriver for phillips screws PZ, stubby

- DIN / ISO 8764
- Extra short blade
- One component handle
- Optimal power transmission
- With hanging hole
- Hardened blade
- Chrome finish wi h burnished tips
- Blade made of chrome vanadium



		L1 mm	L2 mm	L3 mm	g
911.3760	PZ 1	75,0	25,0	50,0	42
911.1136	PZ 2	90,0	38,0	52,0	40

ERGOTORQUE® screwdriver for slotted screws

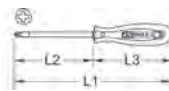
- DIN 5265
- One component handle
- Optimal power transmission
- With hanging hole
- Hardened blade
- Chrome finish wi h burnished tips
- Blade made of chrome vanadium



	D mm	L1 mm	L2 mm	L3 mm	g
911.1146	3,2	175,0	75,0	100,0	20
911.1641	3,5	180,0	80,0	100,0	30
911.1138	4,5	175,0	100,0	75,0	30
911.1181	4,0	205,0	125,0	80,0	30
911.1182	4,0	280,0	200,0	80,0	40
911.1183	5,0	175,0	75,0	100,0	40
911.1184	5,0	250,0	150,0	100,0	40
911.1185	5,0	350,0	250,0	100,0	40
911.1139	5,5	200,0	100,0	100,0	40
911.1147	6,5	200,0	100,0	100,0	40
911.1142	6,5	225,0	125,0	100,0	40
911.1642	6,5	250,0	150,0	100,0	108
911.1144	8,0	260,0	150,0	110,0	40
911.1186	8,0	310,0	200,0	110,0	40
911.1643	10,0	285,0	175,0	110,0	229
911.1644	12,0	310,0	200,0	110,0	250
911.1645	14,0	345,0	225,0	120,0	286

ERGOTORQUE® screwdriver for phillips screws PH

- DIN / ISO 8764
- One component handle
- Optimal power transmission
- With hanging hole
- Hardened blade
- Chrome finish wi h burnished tips
- Blade made of chrome vanadium



		L1 mm	L2 mm	L3 mm	g
911.1646	PH 0	140,0	60,0	80,0	33
911.1130	PH 1	175,0	75,0	100,0	40
911.1187	PH 1	350,0	250,0	100,0	140
911.1131	PH 2	200,0	100,0	100,0	60
911.1188	PH 2	350,0	250,0	100,0	140
911.1133	PH 3	255,0	150,0	105,0	60
911.1647	PH 4	310,0	200,0	110,0	252

ERGOTORQUE® screwdriver for phillips screws PZ

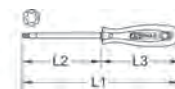
- DIN / ISO 8764
- One component handle
- Optimal power transmission
- With hanging hole
- Hardened blade
- Chrome finish wi h burnished tips
- Blade made of chrome vanadium



		L1 mm	L2 mm	L3 mm	g
911.1648	PZ 0	140,0	60,0	80,0	33
911.1134	PZ 1	175,0	75,0	100,0	40
911.1135	PZ 2	200,0	100,0	100,0	60
911.1137	PZ 3	260,0	150,0	100,0	140
911.1649	PZ 4	310,0	200,0	110,0	252

ERGOTORQUE® screwdriver for TX screws

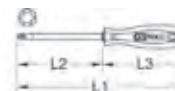
- One component handle
- Optimal power transmission
- With hanging hole
- Hardened blade
- Chrome finish wi h burnished tips
- Blade made of chrome vanadium



		L1 mm	L2 mm	L3 mm	g
911.1651	T5	130,0	60,0	70,0	35
911.1652	T6	130,0	60,0	70,0	36
911.1653	T7	130,0	60,0	70,0	36
911.1150	T8	150,0	75,0	75,0	40
911.1158	T9	150,0	75,0	75,0	40
911.1151	T10	200,0	100,0	100,0	40
911.1152	T15	200,0	100,0	100,0	40
911.1153	T20	200,0	100,0	100,0	40
911.1154	T25	200,0	100,0	100,0	40
911.1155	T27	200,0	100,0	100,0	40
911.1156	T30	200,0	100,0	100,0	40
911.1157	T40	200,0	100,0	100,0	40
911.1654	T45	240,0	130,0	110,0	102

ERGOTORQUE® screwdriver for TX screws, long

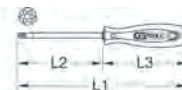
- One component handle
- Optimal power transmission
- With hanging hole
- Hardened blade
- Chrome finish wi h burnished tips
- Blade made of chrome vanadium



		L1 mm	L2 mm	L3 mm	g
911.1670	T15	330,0	250,0	80,0	60
911.1671	T20	343,0	250,0	93,0	60
911.1672	T25	345,0	250,0	95,0	70
911.1673	T30	360,0	250,0	110,0	70

ERGOTORQUE® screwdriver for TX screws, tamperproof

- One component handle
- Optimal power transmission
- With hanging hole
- Hardened blade
- Chrome finish wi h burnished tips
- Blade made of chrome vanadium



		L1 mm	L2 mm	L3 mm	g
911.1674	TB7	130,0	60,0	70,0	25
911.1160	TB8	175,0	75,0	100,0	40
911.1168	TB9	200,0	100,0	100,0	40
911.1161	TB10	175,0	75,0	100,0	40
911.1162	TB15	200,0	100,0	100,0	40
911.1163	TB20	200,0	100,0	100,0	40
911.1164	TB25	200,0	100,0	100,0	40
911.1165	TB27	200,0	100,0	100,0	40
911.1166	TB30	200,0	100,0	100,0	40
911.1167	TB40	200,0	100,0	100,0	40

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ERGOTORQUE® screwdriver for hexagon screws with ball end

- One component handle
- Optimal power transmission
- With hanging hole
- Incorporates hexagon blade
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



	mm	L1 mm	L2 mm	L3 mm	Weight
911.1191	2.0	175.0	100.0	75.0	30
911.1192	2.5	175.0	100.0	75.0	30
911.1193	3.0	175.0	100.0	75.0	30
911.1194	4.0	175.0	100.0	75.0	30
911.1195	5.0	195.0	100.0	95.0	30
911.1196	6.0	195.0	100.0	95.0	30
911.1197	8.0	210.0	100.0	110.0	30

ERGOTORQUE® bit screwdriver

- Extra short execution
- Magnetic
- One component handle
- Optimal power transmission
- 1/4" hexagonal holder for bits
- Hanging hole



	1/4"	L mm	Weight
911.1190	1/4"	63.0	30

ERGOTORQUE® bit screwdriver

- One component handle
- Optimal power transmission
- Magnetic
- For bits to DIN 3126 / C 6,3
- Hanging hole
- Blade made of chrome vanadium



	1/4"	L1 mm	L2 mm	L3 mm	Weight
911.1198	1/4"	200.0	100.0	100.0	90
911.1199	1/4"	250.0	150.0	100.0	100

ERGOTORQUE® quick change bit screwdriver

- Locking and fast change device
- One component handle
- Optimal power transmission
- Magnetic
- For bits to DIN 3126 / C 6,3
- Hanging hole
- Blade made of chrome vanadium



	1/4"	L1 mm	L2 mm	L3 mm	Weight
911.1145	1/4"	200.0	100.0	100.0	100

ERGOTORQUE® Soldering tip 4.5mm, diagonal

- One component handle
- Includes clamping ring
- For bits to DIN 3126
- Optimal power transmission
- With hanging hole



	1/4"	L mm	Weight
911.1170	1/4"	110.0	50

ERGOTORQUE® bit screwdriver

- Flexible
- Limited torque
- Double spiral shaft
- One component handle
- Plastic protective coating
- 1/4" hexagonal holder for bits
- Hanging hole



	1/4"	L1 mm	L2 mm	L3 mm	L4 mm	Weight
911.1129	1/4"	200.0	150.0	50.0	8.0	200

ERGOTORQUE® Square screwdriver

- Flexible blade with double spiral shaft
- Limited torque
- Square drive adaptor to DIN 3120 / ISO 1174 with ball lock
- Plastic protective coating
- One component handle
- With hanging hole



	1/4"	D mm	L1 mm	L2 mm	L3 mm	Weight
911.1120	1/4"	15.0	200.0	150.0	50.0	150

ERGOTORQUE® socket screwdriver

- 6 point
- Flexible
- Limited torque
- Double spiral shaft
- Plastic protective coating
- With hanging hole
- Chrome vanadium



	mm	D mm	L1 mm	L2 mm	L3 mm	L4 mm	Weight
911.1126	6	10.8	259.0	150.0	109.0	9.3	150
911.1127	7	11.7	259.0	150.0	109.0	10.0	200
911.1128	8	11.9	259.0	150.0	109.0	10.0	200
911.1125	10	12.5	279.0	170.0	109.0	14.3	250

ERGOTORQUE® SCREWDRIVER SETS

ERGOTORQUE® screwdriver set

- One component handle
- Optimal power transmission
- With hanging hole
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



	911.2110	6 pcs	ERGOTORQUE® screwdriver set	Weight
				600
	3 x		4.5 - 5 - 6 mm	
	3 x		PH1 - PH2 - PH3	

ERGOTORQUE® screwdriver set

- One component handle
- Optimal power transmission
- With hanging hole
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



	911.2120	6 pcs	ERGOTORQUE® screwdriver set	Weight
				630
	3 x		4.5 - 5 - 6 mm	
	3 x		PZ1 - PZ2 - PZ3	

ERGOTORQUE® screwdriver set

- One component handle
- Optimal power transmission
- With hanging hole
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



	911.2130	7 pcs	ERGOTORQUE® screwdriver set	Weight
				630
	3 x		5 - 6 - 8 mm	
	2 x		PH1 - PH2	
	1 x		6 mm	
	1 x		PH2	

ERGOTORQUE® screwdriver set

- One component handle
- Optimal power transmission
- With hanging hole
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



911.2125	7 pcs	ERGOTORQUE® screwdriver set	630
7 x		TB10 - TB15 - TB20 - TB25 - TB27 - TB30 - TB40	

ERGOTORQUE® screwdriver set

- One component handle
- Optimal power transmission
- With hanging hole
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



911.2115	7 pcs	ERGOTORQUE® screwdriver set	630
7 x		T10 - T15 - T20 - T25 - T27 - T30 - T40	

ERGOTORQUE® screwdriver and bit set

- One component handle
- Optimal power transmission
- With hanging hole
- Contains also the most current 1/4" bits
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium
- In durable plastic storage case



911.2101	25 pcs	ERGOTORQUE® screwdriver and bit set	1.25
4 x		4,5 - 5,5 - 6,5 - 8 mm	
2 x		PH1 - PH2	
1 x		1/4"	
1 x		PH3	
3 x		PZ1 - PZ2 - PZ3	
7 x		2 - 2,5 - 3 - 4 - 5 - 5,5 - 6 mm	
7 x		T10 - T15 - T20 - T25 - T27 - T30 - T40	

ERGOTORQUE® double ended blade set

- Double ended blades
- Includes screwdriver handle
- Interchangeable through clamping ring
- Hardened blade
- Matt finish
- Chrome vanadium
- In durable plastic storage case



911.2400	9 pcs	ERGOTORQUE® double ended blade set	750
1 x			
1 x		5 x 6 mm	
1 x		PH1 x PH2	
1 x		PZ1 x PZ2	
2 x		3 x 4 mm - 5 x 6 mm	
3 x		T10 x T15 - T20 x T25 - T30 x T40	



ERGOTORQUE® screwdriver and bit set

- One component handle
- Optimal power transmission
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium
- In durable plastic storage case



911.2150	50 pcs	ERGOTORQUE® screwdriver and bit set	1.50
3 x		5,5 - 6,5 - 8 mm	
3 x		PH1 - PH2 - PH3	
1 x		6 mm	
1 x		PH2	
1 x		1/4"	
3 x		2 - 2,4 - 3 mm	
2 x		PH00 - PH0	
2 x		T15 - T20	
1 x		1/4"	
1 x		1/4"	
1 x		1/4"	
1 x		140 mm	
4 x		3 - 4 - 5 - 6 mm	
3 x		PH1 - PH2 - PH3	
3 x		PZ1 - PZ2 - PZ3	
6 x		2,5 - 3 - 4 - 5 - 6 - 7 mm	
7 x		T10 - T15 - T20 - T25 - T27 - T30 - T40	
7 x		TB10 - TB15 - TB20 - TB25 - TB27 - TB30 - TB40	



ERGOTORQUE® SCREWDRIVER DISPLAYS

ERGOTORQUE® screwdriver display

- One component handle
- Optimal power transmission
- With hanging hole
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium
- In display stand



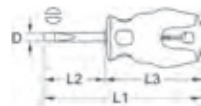
		ERGOTORQUE® screwdriver display			
911.0136	136 pcs			21.22	
20 x		5 x (3 - 4 - 5 - 6 mm)			
15 x		5 x (PH1 - PH2 - PH3)			
15 x		5 x (PZ1 - PZ2 - PZ3)			
45 x		5 x (T8 - T9 - T10 - T15 - T20 - T25 - T27 - T30 - T40)			
5 x		6 mm			
5 x		PH2			
5 x		PZ2			
15 x		5 x (4 - 5 - 8 mm)			
5 x		PH2			
5 x		100 mm			



ERGOTORQUE^{plus}® SCREWDRIVER

ERGOTORQUE^{plus}® screwdriver for slotted screws, stubby

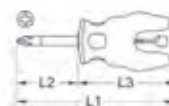
- DIN 5265
- Extra short blade
- Two component handle
- Optimal power transmission
- With hanging hole
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



D mm	L1 mm	L2 mm	L3 mm	
159.1001	6,0	98,0	38,0	60,0 40

ERGOTORQUE^{plus}® screwdriver for phillips screws PH, stubby

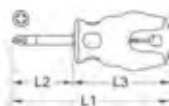
- DIN / ISO 8764
- Extra short blade
- Two component handle
- Optimal power transmission
- With hanging hole
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



L1 mm	L2 mm	L3 mm	
159.1026	PH 2	98,0	38,0 60,0 40

ERGOTORQUE^{plus}® screwdriver for phillips screws PZ, stubby

- DIN / ISO 8764
- Extra short blade
- Two component handle
- Optimal power transmission
- With hanging hole
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium

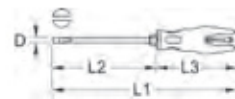


L1 mm	L2 mm	L3 mm	
159.1046	PZ 2	98,0	38,0 60,0 40



ERGOTORQUE^{plus}® screwdriver for slotted screws

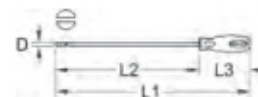
- DIN 5265
- Two component handle
- Hexagon drive
- Optimal power transmission
- With hanging hole
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



	D mm	L1 mm	L2 mm	L3 mm		
159.1002	3,0	155,0	75,0	80,0		40
159.1003	4,0	155,0	75,0	80,0		40
159.1004	4,0	180,0	100,0	80,0		50
159.1005	5,5	205,0	100,0	105,0		50
159.1006	5,5	230,0	125,0	105,0		50
159.1007	5,5	255,0	150,0	105,0		60
159.1008	6,5	230,0	125,0	105,0		60
159.1009	6,5	255,0	150,0	105,0		90
159.1010	8,0	265,0	150,0	115,0		130
159.1011	8,0	315,0	200,0	115,0		150
159.1012	10,0	315,0	200,0	115,0		180
159.1013	10,0	365,0	250,0	115,0		190

ERGOTORQUE^{plus}® screwdriver for slotted screws, extra long

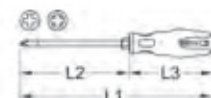
- DIN 5265
- Two component handle
- Optimal power transmission
- With hanging hole
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



D mm	L1 mm	L2 mm	L3 mm	
159.1107	5,5	405,0	300,0	105,0 100

6 in 1 ERGOTORQUE^{plus}® screwdriver

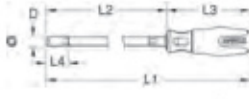
- DIN / ISO 8764
- Two component handle
- Hexagon drive
- Optimal power transmission
- With hanging hole
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



L1 mm	L2 mm	L3 mm		
159.1100	230,0	125,0	105,0	30

ERGOTORQUE^{plus}® socket screwdriver, extra long

- 6 point
- Flexible
- Limited torque
- Double spiral shaft
- Plastic protective coating
- Two component handle
- With hanging hole
- Chrome vanadium



	D	L1	L2	L3	L4	L5	
mm	mm	mm	mm	mm	mm	mm	
911.1175	5	11.9	614.0	500.0	114.0	8.9	270
911.1176	6	10.9	614.0	500.0	114.0	11.3	280
911.1177	7	11.7	614.0	500.0	114.0	11.3	280
911.1178	8	11.7	614.0	500.0	114.0	11.3	280

ERGOTORQUE^{plus}® SCREWDRIVER SETS

ERGOTORQUE^{plus}® bit set

- Two component handle
- Optimal power transmission
- Power screwdriver handle with fast change device
- With hanging hole
- Hardened blade
- Nickel plated
- Blade made of chrome vanadium
- In practical folding case



159.2010	17 pcs	ERGOTORQUE ^{plus} ® bit set	750
1 x		1/4"	
1 x		5,5 mm	
3 x		PH1 - PH2 - PH3	
3 x		PZ1 - PZ2 - PZ3	
4 x		3 - 4 - 5 - 6 mm	
5 x		TB10 - TB15 - TB20 - TB25 - TB30	

ERGOTORQUE^{plus}® screwdriver set

- Two component handle
- Optimal power transmission
- With hanging hole
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



159.0005	5 pcs	ERGOTORQUE ^{plus} ® screwdriver set	270
3 x		4 - 5,5 - 6,5 mm	
2 x		PH1 - PH2	

ERGOTORQUE^{plus}® screwdriver set

- Two component handle
- Optimal power transmission
- With hanging hole
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



159.0010	6 pcs	ERGOTORQUE ^{plus} ® screwdriver set	708
4 x		3 - 4 - 5,5 - 6,5 mm	
2 x		PH1 - PH2	

ERGOTORQUE^{plus}® screwdriver set

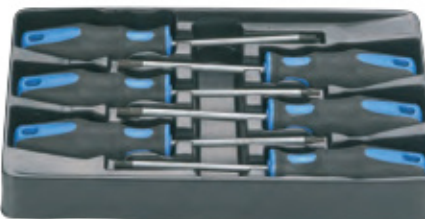
- Two component handle
- Optimal power transmission
- With hanging hole
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



159.0020	6 pcs	ERGOTORQUE ^{plus} ® screwdriver set	580
4 x		3 - 4 - 5,5 - 6,5 mm	
2 x		PZ1 - PZ2	

ERGOTORQUE^{plus}® screwdriver set

- Two component handle
- Optimal power transmission
- With hanging hole
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



159.0030	6 pcs	ERGOTORQUE ^{plus} ® screwdriver set	580
6 x		T10 - T15 - T20 - T25 - T30 - T40	

ERGOTORQUE^{plus}® screwdriver set

- Two component handle
- Optimal power transmission
- With hanging hole
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



159.0040	6 pcs	ERGOTORQUE ^{plus} ® screwdriver set	580
6 x		TB10 - TB15 - TB20 - TB25 - TB30 - TB40	

ERGOTORQUE^{plus}® screwdriver and bit set

- Two component handle
- Optimal power transmission
- Includes the most current 1/4" bits, bit holder and screwdriver bits
- With hanging hole
- Hardened blade
- Chrome finish with burnished tips
- Chrome vanadium
- In durable plastic storage case



159.0100	39 pcs	ERGOTORQUE ^{plus} ® screwdriver and bit set	2.91
6 x		3 - 4 - 5,5 - 6,5 - 8 - 10 mm	
4 x		PH0 - PH1 - PH2 - PH3	
4 x		PZ0 - PZ1 - PZ2 - PZ3	
1 x		6 mm	
1 x		PH2	
1 x		100 mm	
1 x		1/4"	
7 x		2 - 2,5 - 3 - 4 - 5 - 6 - 8 mm	
7 x		T10 - T15 - T20 - T25 - T27 - T30 - T40	
7 x		TB10 - TB15 - TB20 - TB25 - TB27 - TB30 - TB40	

ERGOTORQUE^{plus}® socket screwdriver set

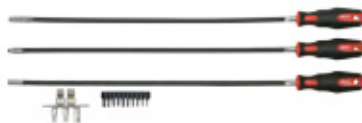
- 6 point
- Two component handle
- With hanging hole
- Matt finish
- Chrome vanadium



159.1200	8 pcs	ERGOTORQUE ^{plus} ® socket screwdriver set	800
8 x		5 - 6 - 7 - 8 - 10 - 11 - 12 - 13 mm	

ERGOTORQUE® screwdriver set

- Flexible blade with double spiral shaft
- Limited torque
- Plastic protective coating
- Two component handle
- With hanging hole
- Contains also the most current 1/4" bits and sockets
- In display box



911.1180	16 pcs	ERGOTORQUE® screwdriver set	1.30
1 x		1/4"	
1 x		1/4"	
1 x		7 mm	
3 x		5 - 6 - 8 mm	
2 x		5.5 - 6.5 mm	
2 x		PH1 - PH2	
6 x		T10 - T15 - T20 - T25 - T27 - T30	

ERGOTORQUE^{plus}® SCREWDRIVER DISPLAYS

ERGOTORQUE^{plus}® screwdriver display

- Two component handle
- Optimal power transmission
- With hanging hole
- Hardened blade
- Chrome finish with h burnished tips
- Blade made of chrome vanadium
- In display stand



159.0136	136 pcs	ERGOTORQUE ^{plus} ® screwdriver display	26.00
30 x		5 x (3 - 4 - 5,5 - 6,5 - 8 - 10 mm)	
15 x		5 x (PH1 - PH2 - PH3)	
15 x		5 x (PZ1 - PZ2 - PZ3)	
45 x		5 x (T8 - T9 - T10 - T15 - T20 - T25 - T27 - T30 - T40)	
5 x		6 mm	
5 x		PH2	
5 x		PZ2	
5 x		5,5 mm	
5 x		PH2	
5 x		100 mm	

ERGOTORQUE^{max}

ERGOTORQUE^{max} T-handle ratchet

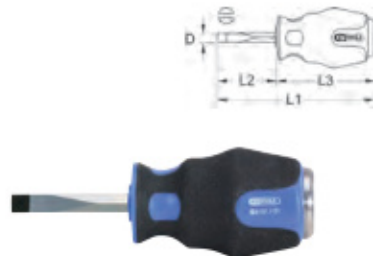
- DIN 3122 / ISO 3315
- Reversible
- 1/4" square drive adaptor to DIN 3120 / ISO 1174
- With ball lock
- Exact gearing with 45 teeth
- Two component handle
- With hanging hole
- Handy and compact
- Matt finish
- Chrome vanadium



151.1109	1/4"	B mm	L1 mm	L2 mm	40
		115.0	110.0	55.0	

ERGOTORQUE^{max} hammer cap screwdriver for slotted screws, stubby

- DIN 5265
- Extra short blade
- Two component handle
- Protective cap on the handle end
- Internal square drive adaptor to DIN 3120 / ISO 1174 in the hammer cap
- Ideal for usage with T-handle screwdriver drive and standard ratchet
- Optimal power transmission
- Hardened blade
- Chrome finish with h burnished tips
- Blade made of chrome vanadium



151.1131	D mm	L1 mm	L2 mm	L3 mm	40
	6.0	98.0	38.0	60.0	

ERGOTORQUE^{max} hammer cap screwdriver for phillips screws PH, stubby

- DIN / ISO 8764
- Extra short blade
- Two component handle
- Protective cap on the handle end
- Internal square drive adaptor to DIN 3120 / ISO 1174 in the hammer cap
- Ideal for usage with T-handle screwdriver drive and standard ratchet
- Optimal power transmission
- Hardened blade
- Chrome finish with h burnished tips
- Blade made of chrome vanadium



151.1107	PH 2	L1 mm	L2 mm	L3 mm	40
		98.0	38.0	60.0	

ERGOTORQUE^{max} hammer cap screwdriver for phillips screws PZ, stubby

- DIN / ISO 8764
- Extra short blade
- Two component handle
- Protective cap on the handle end
- Internal square drive adaptor to DIN 3120 / ISO 1174 in the hammer cap
- Ideal for usage with T-handle screwdriver drive and standard ratchet
- Optimal power transmission
- Hardened blade
- Chrome finish with h burnished tips
- Blade made of chrome vanadium

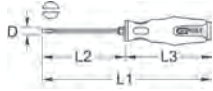


151.1147	PZ 2	L1 mm	L2 mm	L3 mm	40
		98.0	38.0	60.0	



ERGOTORQUE[®]max hammer cap screwdriver for slotted screws

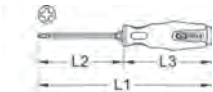
- DIN 5265
- Two component handle
- Hexagon drive
- Protective cap on the handle end
- Internal square drive adaptor to DIN 3120 / ISO 1174 in the hammer cap
- Ideal for usage with T-handle screwdriver drive and standard ratchet
- Optimal power transmission
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



	D mm	L1 mm	L2 mm	L3 mm		
151.1123	3,5	185,0	80,0	105,0		70
151.1125	4,5	195,0	90,0	105,0		70
151.1128	5,5	205,0	100,0	105,0		150
151.1132	7,0	230,0	125,0	105,0		240
151.1133	8,0	230,0	125,0	105,0		240
151.1134	10,0	230,0	125,0	105,0		300

ERGOTORQUE[®]max hammer cap screwdriver for phillips screws PH

- DIN / ISO 8764
- Two component handle
- Hexagon drive
- Protective cap on the handle end
- Internal square drive adaptor to DIN 3120 / ISO 1174 in the hammer cap
- Ideal for usage with T-handle screwdriver drive and standard ratchet
- Optimal power transmission
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



		L1 mm	L2 mm	L3 mm		
151.1101	PH 0	165,0	60,0	105,0		120
151.1102	PH 1	185,0	80,0	105,0		150
151.1104	PH 2	205,0	100,0	105,0		220
151.1105	PH 3	255,0	150,0	105,0		250
151.1106	PH 4	305,0	200,0	105,0		280

ERGOTORQUE[®]max hammer cap screwdriver for phillips screws PZ

- DIN / ISO 8764
- Two component handle
- Hexagon drive
- Protective cap on the handle end
- Internal square drive adaptor to DIN 3120 / ISO 1174 in the hammer cap
- Ideal for usage with T-handle screwdriver drive and standard ratchet
- Optimal power transmission
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



		L1 mm	L2 mm	L3 mm		
151.1141	PZ 0	165,0	60,0	105,0		120
151.1142	PZ 1	185,0	80,0	105,0		150
151.1144	PZ 2	205,0	100,0	105,0		230
151.1145	PZ 3	255,0	150,0	105,0		250
151.1146	PZ 4	305,0	200,0	105,0		280

ERGOTORQUE[®]max SCREWDRIVER SETS

ERGOTORQUE[®]max hammer cap screwdriver set

- Two component handle
- Hexagon drive
- Protective cap on the handle end
- Internal square drive adaptor to DIN 3120 / ISO 1174 in the hammer cap
- Ideal for usage with T-handle screwdriver drive and standard ratchet
- Optimal power transmission
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



151.1160	6 pcs	ERGOTORQUE [®] max hammer cap screwdriver set	1,33
3 x		5,5 - 7 - 8 mm	
3 x		PH1 - PH2 - PH3	

ERGOTORQUE[®]max hammer cap screwdriver set

- Two component handle
- Hexagon drive
- Protective cap on the handle end
- Internal square drive adaptor to DIN 3120 / ISO 1174 in the hammer cap
- Ideal for usage with T-handle screwdriver drive and standard ratchet
- Optimal power transmission
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium

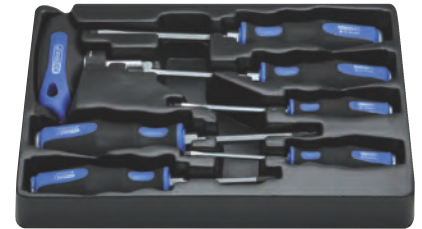


151.1165	6 pcs	ERGOTORQUE [®] max hammer cap screwdriver set	1,13
3 x		5,5 - 7 - 8 mm	
3 x		PZ1 - PZ2 - PZ3	



ERGOTORQUE[®]max hammer cap screwdriver set

- Two component handle
- Hexagon drive
- Includes T-handle ratchet
- Protective cap on the handle end
- Internal square drive adaptor to DIN 3120 / ISO 1174 in the hammer cap
- Ideal for usage with T-handle screwdriver drive and standard ratchet
- Optimal power transmission
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



151.1100	7 pcs	ERGOTORQUE [®] max hammer cap screwdriver set	0,98
4 x		3,5 - 4,5 - 5,5 - 7 mm	
2 x		PH1 - PH2	
1 x		1/4"	

ERGOTORQUE[®]max hammer cap screwdriver set

- Two component handle
- Hexagon drive
- Includes T-handle ratchet
- Protective cap on the handle end
- Optimal power transmission
- Hardened blade
- Blade made of chrome vanadium
- In durable plastic storage case



151.1150	13 pcs	ERGOTORQUE [®] max hammer cap screwdriver set	2,70
5 x		3,5 - 5,5 - 7 - 8 - 10 mm	
5 x		PH0 - PH1 - PH2 - PH3 - PH4	
1 x		6 mm	
1 x		PH2	
1 x		1/4"	

VDE SCREWDRIVER DISPLAYS

ERGOTORQUE® VDE screwdriver display

- Insulated to IEC 60900
- Two component handle
- Includes voltage tester
- Burnished tip
- Blades made from S2 special steel
- In display stand



	120 pcs	ERGOTORQUE® VDE screwdriver display	6.75
50 x		5 x 2.5 - 5 x 3.0 - 5 x 3.5 - 5 x 4.0 10 x 5.5 - 10 x 6.5 - 5 x 8.0 - 5 x 10.0 mm	
20 x		3.0 mm	
25 x		5 x PH0 - 5 x PH1 - 10 x PH2 - 5 x PH3	
25 x		5 x PZ0 - 5 x PZ1 - 10 x PZ2 - 5 x PZ3	

KEY WRENCH

Offset screwdriver, slotted

- Short execution
- DIN / ISO 8764
- Continuous hardened
- Matt chrome
- Special steel



	D mm	L1 mm	L2 mm	Weight
151.2674	3.5	90.0	12.4	10
151.2675	4.0	100.0	15.3	12
151.2676	5.5	125.0	20.4	25
151.2677	8.0	150.0	24.8	50
151.2678	10.0	175.0	32.8	135
151.2679	12.0	200.0	42.4	228

Offset screwdriver, PH

- Short execution
- DIN / ISO 8764
- Continuous hardened
- Matt chrome
- Special steel



	L1 mm	L2 mm	Weight	
151.2680	PH 1 - PH 2	100.0	25.4	40
151.2681	PH 2 - PH 3	150.0	33.1	77
151.2682	PH 3 - PH 4	200.0	38.6	77

Offset screwdriver, PZ

- Short execution
- DIN / ISO 8764
- Continuous hardened
- Matt chrome
- Special steel



	L1 mm	L2 mm	Weight	
151.2683	PZ 1 - PZ 2	125.0	24.4	40
151.2684	PZ 3 - PZ 4	200.0	37.9	156

1/4" BIT SCREWDRIVERS

ERGOTORQUE® bit screwdriver

- Extra short execution
- Magnetic
- One component handle
- Optimal power transmission
- 1/4" hexagonal holder for bits
- Hanging hole



	1/4"	L mm	Weight
911.1190	1/4"	63.0	30

ERGOTORQUE® bit screwdriver

- One component handle
- Optimal power transmission
- Magnetic
- For bits to DIN 3126 / C 6,3
- Hanging hole
- Blade made of chrome vanadium



	1/4"	L1 mm	L2 mm	L3 mm	Weight
911.1198	1/4"	200.0	100.0	100.0	90
911.1199	1/4"	250.0	150.0	100.0	100

ERGOTORQUE® quick change bit screwdriver

- Locking and fast change device
- One component handle
- Optimal power transmission
- Magnetic
- For bits to DIN 3126 / C 6,3
- Hanging hole
- Blade made of chrome vanadium



	1/4"	L1 mm	L2 mm	L3 mm	Weight
911.1145	1/4"	200.0	100.0	100.0	100

ERGOTORQUE® bit screwdriver

- Flexible
- Limited torque
- Double spiral shaft
- One component handle
- Plastic protective coating
- 1/4" hexagonal holder for bits
- Hanging hole



	1/4"	L1 mm	L2 mm	L3 mm	L4 mm	Weight
911.1129	1/4"	200.0	150.0	50.0	8.0	200

ERGOTORQUEplus® bit screwdriver

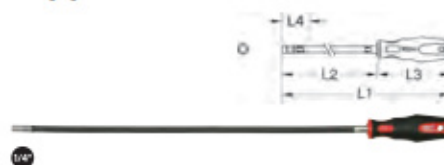
- Two component handle
- Optimal power transmission
- Magnetic
- For bits to DIN 3126 / C 6,3
- Hanging hole
- Blade made of chrome vanadium



	1/4"	L1 mm	L2 mm	L3 mm	Weight
159.1198	1/4"	205.0	100.0	105.0	90

ERGOTORQUEplus® bit screwdriver, extra long

- Flexible blade with double spiral shaft
- Limited torque
- For bits to DIN 3126 / C 6,3
- Plastic protective coating
- Two component handle
- Hanging hole



	1/4"	L1 mm	L2 mm	L3 mm	L4 mm	Weight
911.1172	1/4"	614.0	500.0	114.0	43.0	280

1/4" RATCHET BIT SCREWDRIVERS

Ratchet bit screwdriver

- Robust gearing with 24 teeth
- Ratchet function
- 180° multi adjustable blade
- For bits to DIN 3126 / C 6,3
- Magnetic
- Integrated bit magazine with 13 bits
- Ergonomically designed handle



	1/4"	D mm	L1 mm	L2 mm	L3 mm	Weight
911.2470	1/4"	10.0	190.0	82.0	108.0	380

T-handle ratchet bit screwdriver

- Robust gearing with 24 teeth
- Ratchet function
- Locking and fast change device
- 45° two way revolving head
- For bits to DIN 3126 / C 6,3
- Fast change bit stop function
- Magnetic
- Integrated bit magazine with 5 bits
- Two component handle



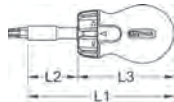
1/4"

	Ø	D mm	L1 mm	L2 mm	L3 mm	g
911.2475	1/4"	15.0	140.0	26.0	114.0	380



Mini ratchet screwdriver

- Exact gearing with 72 teeth
- Ratchet function
- For bits to DIN 3126 / C 6,3
- Magnetic
- Two component handle
- Blade mirror polished chrome

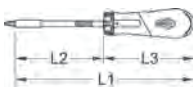


1/4"

	Ø	L1 mm	L2 mm	L3 mm	g
159.2061	1/4"	95.0	27.0	68.0	140

Revolver ratchet bit screwdriver

- Exact gearing with 72 teeth
- Ratchet function
- Handle with double function (standard and pistol handle)
- For bits to DIN 3126 / C 3,6
- Magnetic
- 40 Nm maximum torque
- Integrated bit magazine
- Two component handle
- Blade mirror polished chrome



1/4"

	Ø	L1 mm	L2 mm	L3 mm	g
159.2051	1/4"	260.0	130.0	130.0	450



GEARplus® ratchet screwdriver set

- Exact gearing with 72 teeth
- Ratchet function
- For bits to DIN 3126 / C 6,3
- Magnetic
- 40 Nm maximum torque
- Integrated bit magazine
- Two component handle
- Chrome plated and mirror polished
- In durable plastic storage case



1/4"

	g	g
159.2050	58 pcs	GEARplus® ratchet screwdriver set
		1200
13 x		4 - 4,5 - 5 - 5,5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 mm
10 x		5/32" - 3/16" - 7/32" - 1/4" - 9/32" - 5/16" - 11/32" - 3/8" - 7/16" - 1/2"
1 x		1/4"
1 x		1/4" x 1/4"
1 x		300 mm
1 x		250 mm
2 x		150 - 250 mm
3 x		4 - 5,5 - 7 mm
3 x		PH1 - PH2 - PH3
3 x		PZ1 - PZ2 - PZ3
7 x		T10 - T15 - T20 - T25 - T27 - T30 - T40
7 x		TB10 - TB15 - TB20 - TB25 - TB27 - TB30 - TB40
6 x		3 - 4 - 5 - 6 - 7 - 8 mm

MAGNETISING AND DE-MAGNETISING ATTACHMENT

Magnetizer and demagnetizer

- Easy to use
- To magnetise by pulling the blade through
- To demagnetise by pulling the blade over the recess
- For screwdrivers, tweezers and similar tools made of steel
- Plastic housing



	B mm	H mm	L mm	g
550.1126	15.0	20.0	47.0	70

You can find precision screwdrivers in the Precision Mechanics section

1/2" HAND IMPACT SCREWDRIVER

Hand-impact screwdriver

- Reversible
- Square drive adaptor to DIN 3120 / ISO 1174 with ball lock
- 1/4 Revolution of the impact screwdriver through hammer blow (Parable mechanism)
- Optimal feed rate
- No slippage of the blade bit possible
- Ideal for loosening jammed screw connections
- Ideally suited for the automotive area
- Special steel



1/2"

	□	D mm	L mm	g
515.1004	1/2"	35.0	135.0	950

Hand impact screwdriver set

- Reversible
- Square drive adaptor to DIN 3120 / ISO 1174 with ball lock
- 1/4 Revolution of the impact screwdriver through hammer blow (Parable mechanism)
- Optimal feed rate
- No slippage of the blade bit possible
- Ideal for loosening jammed screw connections
- Ideally suited for the automotive area
- Includes the most current impact bits, impact bit adaptor
- Special steel
- In durable plastic storage case



1/2"

	g	g
515.1003	11 pcs	Hand impact screwdriver set
		1.00

consists of:

	g	g
515.1004	1/2" Hand impact screwdriver 1/2"	950
911.4351	1/2" x 5/16" Bit adaptor steel ball type	25
911.1283-1	5/16" Impact bit PH1	10
911.1268-1	5/16" Impact bit PH2	10
911.1284-1	5/16" Impact bit PH3	10
911.1276	5/16" Slotted impact bit 5 mm	10
911.1271	5/16" Slotted impact bit 6 mm	10
911.1286	5/16" Slotted impact bit 8 mm	10
911.1287	5/16" Slotted impact bit 10 mm	10
911.5143	5/16" Slotted bit, 12 mm	10
911.1275	5/16" Slotted impact bit 14 mm	20

PLIERS

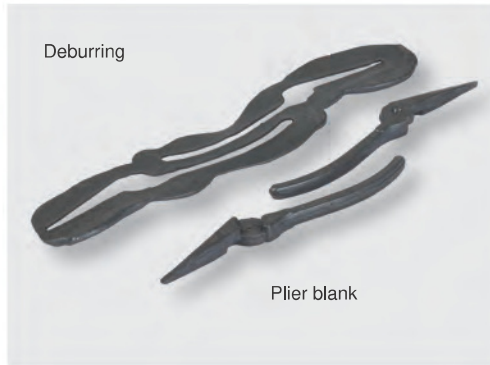
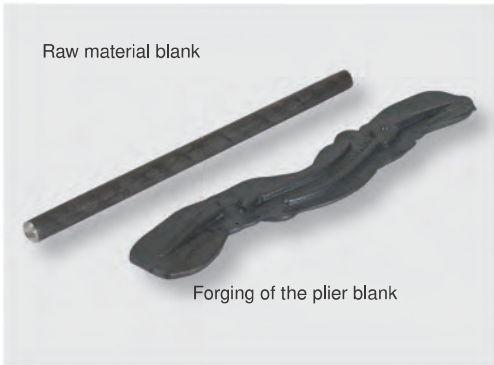
**KSTOOLS**

Innovation is
our mission!

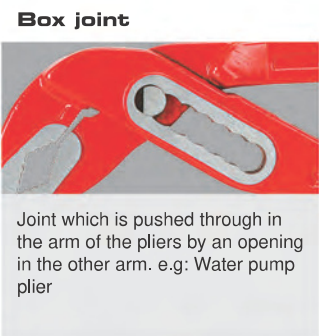
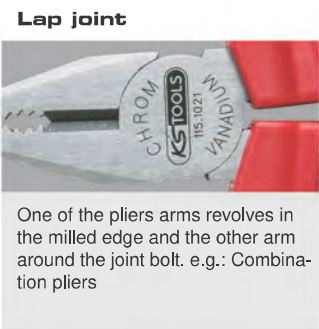
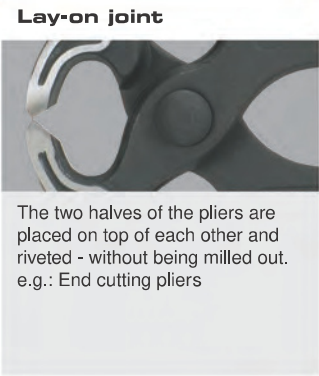
	PAGE	
		1
		2
COMBINATION PLIERS	246	
FLAT PLIERS	246	3
NEEDLE NOSE PLIERS	246 - 247	4
TELEPHONE PLIERS	247 - 248	
CUTTING PLIERS AND SIDE CUTTERS	248 - 249	5
WIRE STRIPPER	249	6
UNIVERSAL PLIER SETS	249 - 250	
WATER PUMP PLIERS	251	7
WATER PUMP PLIER SETS	251 - 252	
PIPE WRENCHES	252 - 254	8
PIPE WRENCH SETS	254	9
FITTERS PLIERS	254	
CIRCLIP PLIERS FOR INTERNAL CIRCLIPS	254 - 255	10
CIRCLIP PLIERS FOR IEXTERNAL CIRCLIPS	255	11
CIRCLIP PLIER SETS FOR CIRCLIPS	255	
LOCKING PLIERS	256 - 261	12
RIVETING PLIERS	261 - 263	
CRIMPING PLIERS	263 - 264	13
WIRE PROCESSING PLIERS	265	14
BOLT CUTTERS	265	
SADDLER PLIERS	266	15
REVOLVING PUNCH PLIERS	266	
PUNCHED HOLE AND JOGGLER PLIERS	266	16
PLUMBER PLIERS	266 - 267	17
AUTOMOTIVE CLIP REMOVAL PLIERS	267	
CARTRIDGE TIP PLIERS	267	18
WHEELS & TYRES PLIERS	267 - 268	19
CHASSIS & BRAKE PLIERS	268 - 269	
BRAKE PLIERS	269	20
OIL & FUEL SERVICE PLIERS	269 - 270	
HOSE CLAMP PLIERS	270	21
HOSE CLAMP PLIERS	270 - 272	22
HOSE CLAMP PLIER SETS	272 - 273	
HOSE STRP CUTTER PLIERS	273	23
SOLDERING WIRE HOLDING FORCEPS	273	24
INCANDESCENT BULB PLIERS	273	
VALVE AND PISTON PLIERS	273	25
IGNITION COILS AND GLOW PLUG PLIERS	273 - 274	
EXHAUST PLIERS	274	26
CIRCUIT STOPPER PLIERS	274	27

PLIERS

Manufacturing and fabrication steps



Plier joints



Surfaces



Handle designs



Plier profil

CLASSIC

- Dip coated handle
- Hot forged and tempered
- Ground heads
- Precise machined, oil hardened and tempered
- Cutting edges inductively hardened
- High cutting performance
- Special quenched and tempered steel

Handle colour: red

ERGOTORQUE®

- 2 Component handle with ergonomic hand protection
- Hot forged and tempered
- Ground heads
- Precise machines, oil hardened and tempered
- Cutting edges inductively hardened
- Perfect torque transmission
- High cutting performance
- Special quenched and tempered steel

Handle colour: black / red

ULTIMATE PLUS

- 2 Component handle with ergonomic hand protection
- Hot forged and tempered
- Head chrome plated titan finishe
- Precise machined, oil hardened and tempered
- Cutting edges inductively hardened
- Perfect torque transmission
- Excellent cutting performance
- Special quenched and tempered steel

Handle colour: black / red

GRIP Xtreme

- Forged gripping jaws
- Prevents slipping even at high forces
- Well thought through jaw teeth
- Size adjustment using the adjustment wheel
- With loosening lever
- No flaring under the strongest loads
- Nickel-plated

ESD pliers

Can be found in the Precision Mechanics section



Insulated pliers

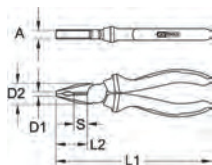
Can be found in the VDE and general electrician tool kits section



COMBINATION PLIERS

Combination pliers

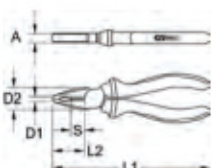
- In accordance to DIN ISO 5748
- Long cutting edge
- Suitable for wire
- Inductively hardened precision cutting edges
- With PVC dipped handle
- Matt chrome
- Special tool steel



	A mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	U
115.1320	11.0	7.0	25.0	165.0	34.0	15.0	150
115.1321	12.0	8.0	28.0	180.0	36.0	16.0	230
115.1322	12.0	9.0	33.0	200.0	41.0	20.0	380

ERGOTORQUE® combination pliers

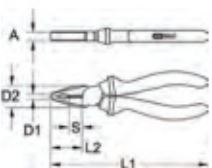
- In accordance to DIN ISO 5748
- Long cutting edge
- Suitable for wire
- Inductively hardened precision cutting edges
- With two component handle
- Matt chrome
- Special tool steel



	A mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	U
115.1020	11.0	7.0	24.0	160.0	35.0	15.0	300
115.1021	12.0	7.0	28.0	180.0	36.0	15.0	300
115.1022	12.0	7.0	32.0	200.0	41.0	20.0	390

ULTIMATEplus combination pliers

- In accordance to DIN / ISO 5748
- Long cutting edge
- Suitable for wire
- Inductively hardened precision cutting edges
- With two component handle
- Titanium coated surface
- Special tool steel

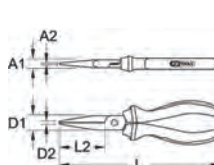


	A mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	U
119.2020	11.0	7.0	24.0	160.0	35.0	15.0	300
119.2021	12.0	7.0	28.0	180.0	36.0	15.0	300
119.2022	12.0	7.0	32.0	200.0	41.0	20.0	400

FLAT PLIERS

Flat pliers

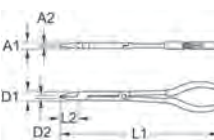
- In accordance to DIN / ISO 5232
- With locking jaw opening
- With adjusting screw and spring
- With two component handle
- For wires from 0,5 - 4,0 mm²
- Titanium coated surface
- Special tool steel



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	U
115.1316	11.0	7.0	19.0	7.0	165.0	51.0	150
115.1317	13.0	7.0	20.0	7.0	200.0	63.0	230

Double jointed flat pliers, extra long

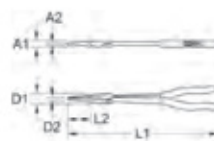
- Serrated execution
- With double joint
- Extremely narrow design
- For difficult to access areas
- With PVC dipped handle
- Matt chrome
- Special tool steel



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	U
500.7062	11.0	3.0	18.0	5.0	335.0	65.0	450

Telephone pliers, extra long

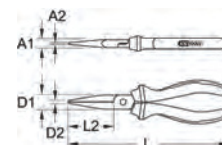
- Long nosed jaws
- Serrated execution
- With PVC dipped handle
- Extra long execution
- Matt chrome
- Special tool steel



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	U
500.7051	11.0	4.0	18.0	7.0	270.0	70.0	330

ERGOTORQUE® flat pliers

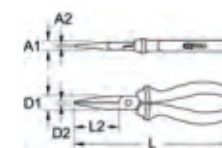
- In accordance to DIN ISO 5745
- Serrated execution
- With two component handle
- Matt chrome
- Special tool steel



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	U
115.1016	9.0	6.0	18.0	5.0	160.0	51.0	250
115.1017	13.0	8.0	20.0	7.0	200.0	65.0	260

ULTIMATEplus flat pliers

- In accordance to DIN / ISO 5745
- Serrated execution
- With two component handle
- Titanium coated surface
- Special tool steel

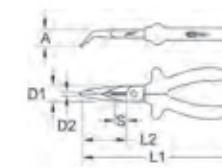


	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	U
119.2016	9.0	6.0	18.0	5.0	160.0	51.0	250

NEEDLE NOSE PLIERS

Long nosed pliers, curved

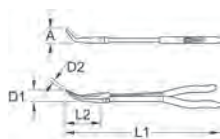
- In accordance to DIN / ISO 5745
- With PVC dipped handle
- 45° curved jaws
- For soft and medium wire
- Inductively hardened precision cutting edges
- Matt chrome
- Special tool steel



	A mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	U
115.1318	14.0	19.0	5.0	165.0	50.0	11.0	150
115.1319	24.0	22.0	5.0	200.0	68.0	14.0	230

Telephone pliers 45° curved, extra long

- Long nosed jaws
- Serrated execution
- 45° curved jaws
- With PVC dipped handle
- Extra long execution
- Matt chrome
- Special tool steel



	A mm	D1 mm	D2 mm	L1 mm	L2 mm	g
500.7052	26.0	18.0	7.0	270.0	70.0	330



Double jointed long nosed pliers 45° curved, extra long

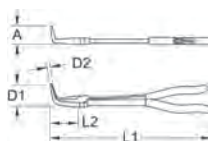
- Serrated execution
- With double joint
- Extremely narrow design
- 45° curved jaws
- With PVC dipped handle
- For difficult to access areas
- Matt chrome
- Special tool steel



	A mm	D1 mm	D2 mm	L1 mm	L2 mm	g
500.7063	22.0	17.0	5.0	330.0	60.0	450

Telephone pliers 90° curved, extra long

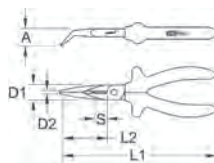
- Long nosed jaws
- Serrated execution
- 90° curved jaws
- With PVC dipped handle
- Extra long execution
- Matt chrome
- Special tool steel



	A mm	D1 mm	D2 mm	L1 mm	L2 mm	g
500.7053	46.0	18.0	7.0	270.0	42.0	330

ERGOTORQUE® long nosed pliers, curved

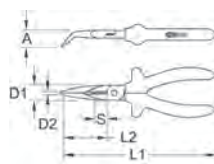
- In accordance to DIN / ISO 5745
- With two component handle
- 45° curved jaws
- For soft and medium wire
- Inductively hardened precision cutting edges
- Matt chrome
- Special tool steel



	A mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	g
115.1018	18.0	18.0	3.0	165.0	50.0	11.0	250
115.1019	27.0	22.0	5.0	210.0	67.0	16.0	260

ULTIMATEplus long nosed pliers, curved

- In accordance to DIN / ISO 5745
- With two component handle
- 45° curved jaws
- For soft and medium wire
- Inductively hardened precision cutting edges
- Titanium coated surface
- Special tool steel

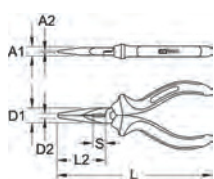


	A mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	g
119.2018	18.0	18.0	3.0	165.0	50.0	11.0	250
119.2019	27.0	22.0	5.0	210.0	67.0	16.0	270

TELEPHONE PLIERS

Telephone pliers

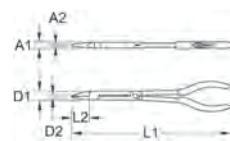
- In accordance to DIN ISO 5745
- Long nosed jaws
- Serrated execution
- With PVC dipped handle
- With integrated cutting edge
- Matt chrome
- Special tool steel



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	g
115.1323	9.0	3.0	18.0	5.0	165.0	51.0	11.0	150
115.1324	11.0	3.0	22.0	5.0	200.0	75.0	15.0	230

Double jointed telephone pliers, extra long

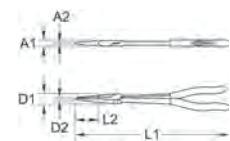
- Serrated execution
- With double joint
- Extremely narrow design
- With PVC dipped handle
- For difficult to access areas
- Matt chrome
- Special tool steel



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	g
500.7061	10.0	10.0	18.0	3.0	300.0	32.0	450

Telephone pliers, extra long

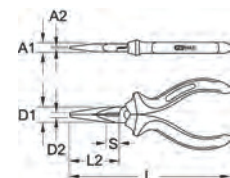
- Long nosed jaws
- Serrated execution
- With PVC dipped handle
- Extra long execution
- Matt chrome
- Special tool steel



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	g
500.7051	11.0	4.0	18.0	7.0	270.0	70.0	330

ERGOTORQUE® telephone pliers

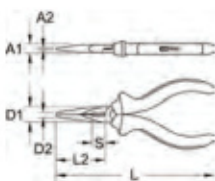
- In accordance to DIN ISO 5745
- Long nosed jaws
- Serrated execution
- With two component handle
- With integrated cutting edge
- Matt chrome
- Special tool steel



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	g
115.1023	9.0	3.0	18.0	4.0	160.0	49.0	12.0	153
115.1024	11.0	3.0	22.0	4.0	200.0	75.0	16.0	230

ULTIMATE^{plus} telephone pliers

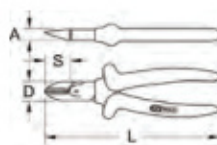
- In accordance to DIN / ISO 5745
- Long nosed jaws
- Serrated execution
- With two component handle
- With intergrated cutting edge
- Titanium coated surface
- Special tool steel



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	Weight
119.2023	9.0	3.0	18.0	4.0	160.0	49.0	12.0	150
119.2024	11.0	3.0	22.0	4.0	200.0	75.0	16.0	230

Diagonal side cutter

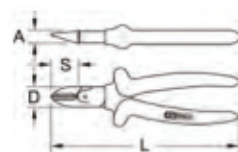
- In accordance to DIN ISO 5749
- Long cutting edge
- Suitable for various types of wire
- Induction-hardened precision cutting
- With PVC dipped handle
- Matt chrome
- Special tool steel



	A mm	D mm	L mm	S mm	Weight
115.1311	20.0	19.0	130.0	5.0	110
115.1312	20.0	22.0	165.0	5.0	160

High leverage side cutter

- In accordance to DIN ISO 5749
- 30° angled head
- Long cutting edge
- Suitable for various types of wire
- Induction-hardened precision cutting
- With PVC dipped handle
- Matt chrome
- Special tool steel

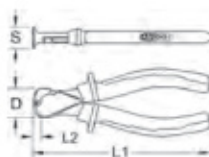


	A mm	D mm	L mm	S mm	Weight
115.1313	13.0	28.0	180.0	18.0	230

CUTTING PLIERS AND SIDE CUTTERS

Cutting pliers

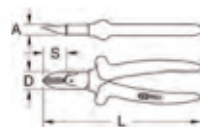
- In accordance to DIN ISO 5748
- Suitable for various types of wire
- Induction-hardened precision cutting
- With PVC dipped handle
- Matt chrome
- Special tool steel



	D mm	L1 mm	L2 mm	S mm	Weight
115.1315	31.0	165.0	18.0	39.0	180

ERGOTORQUE[®] diagonal side cutter

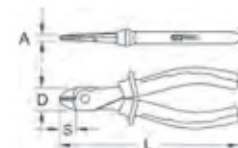
- In accordance to DIN ISO 5749
- Long cutting edge
- Suitable for various types of wire
- Induction-hardened precision cutting
- With two component handle
- Matt chrome
- Special tool steel



	A mm	D mm	L mm	S mm	Weight
115.1011	9.0	18.0	125.0	18.0	140
115.1012	11.0	22.0	160.0	20.0	260

ERGOTORQUE[®] high leverage side cutter

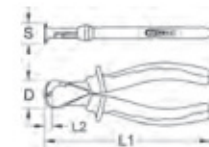
- In accordance to DIN ISO 5749
- 30° angled head
- Long cutting edge
- Suitable for various types of wire
- Induction-hardened precision cutting
- With two component handle
- Matt chrome
- Special tool steel



	A mm	D mm	L mm	S mm	Weight
115.1013	12.0	29.0	180.0	21.0	260

ERGOTORQUE[®] cutting pliers

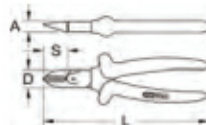
- In accordance to DIN ISO 5748
- Suitable for various types of wire
- Induction-hardened precision cutting
- With two component handle
- Matt chrome
- Special tool steel



	D mm	L1 mm	L2 mm	S mm	Weight
115.1015	31.0	160.0	7.0	24.0	270

ULTIMATE^{plus} diagonal side cutter

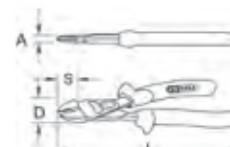
- In accordance to DIN / ISO 5749
- Long cutting edge
- Suitable for various types of wire
- Induction-hardened precision cutting
- With two component handle
- Titanium coated surface
- Special tool steel



	A mm	D mm	L mm	S mm	Weight
119.2011	10.0	20.0	145.0	20.0	140
119.2012	11.0	22.0	170.0	24.0	260

ULTIMATE^{plus} high leverage side cutter

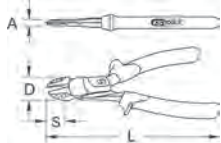
- In accordance to DIN / ISO 5749
- 30° angled head
- Long cutting edge
- Suitable for various types of wire
- Induction-hardened precision cutting
- With two component handle
- Titanium coated surface
- Special tool steel



	A mm	D mm	L mm	S mm	Weight
119.2013	12.0	29.0	180.0	21.0	260

ULTIMATE^{plus} high leverage side cutter

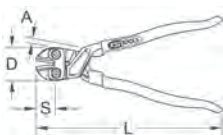
- Long cutting edge
- Induction-hardened precision cutting
- With two component handle
- Suitable for various types of wire
- Extremely robust execution
- Titanium coated surface
- Special tool steel



	A mm	D mm	L mm	S mm	Weight
119.2025	17,0	30,0	210,0	23,0	300

Mini bolt cutter, self-releasing

- Cutting performance up to 60-63 HRC
- Cutter head made of high quality special steel
- Inductively hardened precision cutting edges
- Phosphate
- Chrome molybdenum

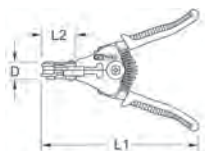


	L mm	S mm	D mm	A mm	Weight
118.0015	205,0	14,0	34,0	17,0	270

WIRE STRIPPER

Automatic wire stripper

- Plastic handle
- For damage free Stripping
- Durable clamping jaw for the adherence of the wire
- Self closing due to the spring mechanics



	Ø mm	AWG	D mm	L1 mm	L2 mm	Weight
115.1028	0,5-2,0	2,0-0,5	20,0	170,0	35,0	280
115.1029	1,0-3,2	3,2-1,0	20,0	170,0	35,0	280

Self regulating wire stripper

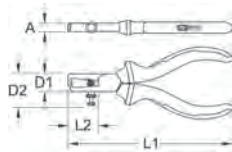
- Easily interchangeable knife modules
- Cutting function
- Light weight
- Exact adjustment possible for safe stripping
- For damage free stripping
- Length stop for 0,02 - 10,0 mm
- Smooth running mechanics



	Ø mm ²	AWG	D mm	L1 mm	L2 mm	Replacement blades	Weight
115.1244	0,1-4	28-12	48,0	190,0	73,0	115.1247	130
115.1245	0,02-10	34-8	48,0	190,0	73,0	115.1246	130
115.1249	4-16	12-6	48,0	190,0	73,0	115.1248	130

Wire stripper

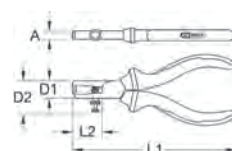
- In accordance to DIN / ISO 5232
- Locking jaw opening
- Adjusting screw and spring
- PVC dipped handle
- For wires from 0,5 - 4,0 mm²
- Matt chrome
- Special tool steel



	A mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
115.1314	9,0	20,5	33,0	176,0	39,0	170

ERGOTORQUE[®] wire stripper

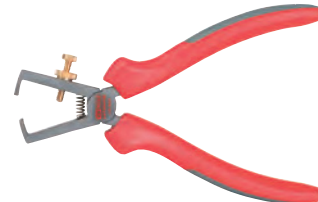
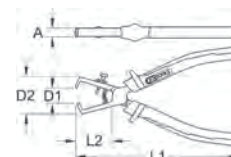
- In accordance to DIN / ISO 5232
- Locking jaw opening
- Adjusting screw and spring
- Two component handle
- For wires from 0,5 - 4,0 mm²
- Matt Chrome
- Special tool steel



	A mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
115.1014	9,0	20,5	33,0	179,0	39,0	300

ULTIMATE^{plus} wire strippers

- In accordance to DIN / ISO 5232
- With locking jaw opening
- With adjusting screw and spring
- With two component handle
- For wires from 0,5 - 4,0 mm²
- Titanium coated surface
- Special tool steel

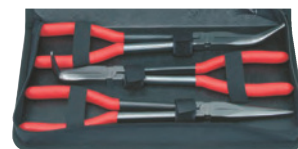


	A mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
119.2014	9,0	20,5	33,0	180,0	40,0	220

UNIVERSAL PLIER SETS

Pliers set, extra long

- Serrated execution
- With PVC dipped handle
- Extra long execution
- Matt chrome
- Special tool steel



	Weight
500.7050	3 pcs Pliers set, extra long 1,20
1 x	270 mm
1 x	270 mm
1 x	270 mm

Double jointed pliers set, extra long

- Serrated execution
- With double joint
- Extremely narrow design
- With PVC dipped handle
- For diffi ult to access areas
- Matt chrome
- Special tool steel



	Weight
500.7060	3 pcs Double jointed pliers set, extra long 1,40
1 x	300 mm
1 x	340 mm
1 x	335 mm



Plier set

- Long cutting edge
- Suitable for various types of wire
- Induction-hardened precision cutting
- With PVC dipped handle
- Matt chrome
- Special tool steel



115.1010	3 pcs	Plier set	0.90
1 x		160 mm	
1 x		180 mm	
1 x		200 mm	

Plier set

- Long cutting edge
- Suitable for various types of wire
- Induction-hardened precision cutting
- With PVC dipped handle
- Matt chrome
- Special tool steel



115.1304	4 pcs	Plier set	1.70
1 x		165 mm	
1 x		180 mm	
1 x		200 mm	
1 x		256 mm	

ERGOTORQUE® plier set

- Suitable for various types of wire
- Induction-hardened precision cutting
- With two component handle
- Matt chrome
- Special tool steel



115.1010	3 pcs	ERGOTORQUE® plier set	0.90
1 x		160 mm	
1 x		180 mm	
1 x		200 mm	

ERGOTORQUE® plier set

- Suitable for various types of wire
- Induction-hardened precision cutting
- With two component handle
- Matt chrome
- Special tool steel



115.1004	4 pcs	ERGOTORQUE® plier set	1.44
1 x		160 mm	
1 x		180 mm	
1 x		200 mm	
1 x		240 mm	



ULTIMATEplus plier set

- In accordance to DIN ISO 5748
- Suitable for various types of wire
- Induction-hardened precision cutting
- With two component handle
- Titanium coated surface
- Special tool steel



119.2010	3 pcs	ULTIMATEplus plier set	1.00
1 x		160 mm	
1 x		180 mm	
1 x		200 mm	



ULTIMATEplus plier set

- In accordance to DIN ISO 5748
- Suitable for various types of wire
- Induction-hardened precision cutting
- With two component handle
- Titanium coated surface
- Special tool steel

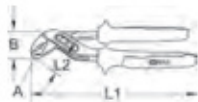


119.2004	4 pcs	ULTIMATEplus plier set	1.00
1 x		160 mm	
1 x		180 mm	
1 x		180 mm	
1 x		165 mm	

WATER PUMP PLIERS

Water pump pliers

- In accordance to DIN 8976
- Toothed gripping surfaces
- Optimum power transfer
- Industrial and ground heads
- Red powder coating
- Chrome vanadium

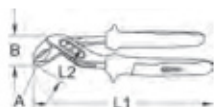


	A mm	B mm	L1 mm	L2 mm	Weight
115.1000	35.0	30.0	175.0	30.0	160
115.2000	45.0	35.0	240.0	36.0	310
115.3000	55.0	40.0	300.0	42.0	620



Water pump pliers

- In accordance to DIN 8976
- With PVC dipped handle
- Toothed gripping surfaces
- Optimum power transfer
- Industrial and ground heads
- Chrome vanadium



	A mm	B mm	L1 mm	L2 mm	Weight
115.2001	36.0	46.0	240.0	34.0	350

Water pump pliers, black

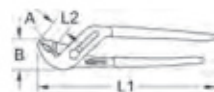
- In accordance to DIN 8976
- With PVC dipped handle
- Toothed gripping surfaces
- Optimum power transfer
- With grooved handle adjustment
- Chrome vanadium



	A mm	B mm	L1 mm	L2 mm	Weight
115.7000	45.0	55.0	250.0	40.0	340

Professional water pump pliers

- Toothed gripping surfaces
- Optimum power transfer
- With grooved handle adjustment
- Progressive teeth
- With PVC dipped handle
- Chrome vanadium



Industrial	A mm	B mm	L1 mm	L2 mm	Weight	
115.1350	7	46.0	45.0	265.0	50.0	380
115.1351	7	66.0	60.0	330.0	60.0	920
115.1352	11	77.0	74.0	420.0	74.0	1150

ULTIMATEplus waterpump pliers

- In accordance to DIN 8976
- With two component handle
- 10 stage adjustment
- Optimum power transfer
- Toothed gripping surfaces
- Industrial and ground heads
- Titanium coated surface
- Chrome vanadium



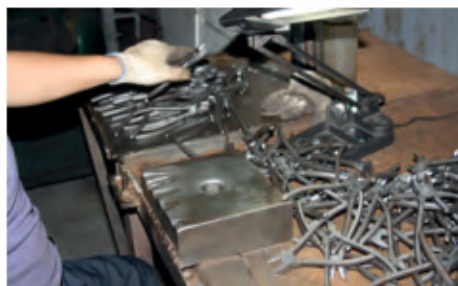
	A mm	B mm	L1 mm	L2 mm	Weight
119.2027	50.0	55.0	260.0	38.0	355

Water pump pliers

- With accurate industrial adjustment
- With safety clamping protection
- Optimum power transfer
- Asymmetric grip profile with offset teeth
- Ground heads
- With PVC dipped handle
- Chrome vanadium

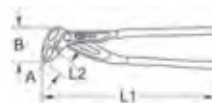


	A mm	B mm	L1 mm	L2 mm	Weight
115.2011	35.0	38.0	175.0	20.0	160
115.2010	45.0	47.0	240.0	25.0	360
115.2012	55.0	53.0	300.0	30.0	560



Water pump pliers

- With accurate industrial adjustment
- With safety clamping protection
- Optimum power transfer
- Double sided gripping jaws
- Ground heads
- With PVC dipped handle
- Chrome vanadium



	A mm	B mm	L1 mm	L2 mm	Weight
115.8502	36.0	44.0	175.0	26.5	185
115.8000	51.0	54.0	250.0	33.5	340
115.8500	61.5	65.0	300.0	41.5	510

Water pump pliers Quattro Grapp

- Maximum jaw opening approx. 40% above DIN ISO
- Push-button with 4 tooth technique
- With accurate industrial adjustment
- With safety clamping protection
- Optimum power transfer
- Substantial precision through joint
- Ground heads
- Handle dip insulated
- Chrome vanadium



	A mm	B mm	L1 mm	L2 mm	Weight
115.8520	50.0	50.0	260.0	40.0	370
115.8525	70.0	60.0	320.0	50.0	630
115.8530	100.0	90.0	400.0	65.0	1250

WATER PUMP PLIER SETS

Water pump pliers set

- In accordance to DIN 8976
- Toothed gripping surfaces
- Optimum power transfer
- 7 stage adjustment
- Industrial and ground heads
- Red powder coating
- Chrome vanadium



	Weight
115.0000 3 pcs 175 - 240 - 300 mm	1.20

Water pump pliers set

- With accurate industrial adjustment
- With safety clamping protection
- Optimum power transfer
- Double sided gripping jaws
- Ground heads
- With PVC dipped handle
- Chrome vanadium



115.8501	2 pcs.	250 - 300 mm		960
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PIPE WRENCHES

Special pipe wrench

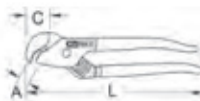
- 2-stage adjustment
- PVC dipped handle
- Ideal for round turned pipe fittings
- Polished surface
- Chrome vanadium



	A mm	L mm	C mm	
115.1361	0-16	178.0	23.0	180

Special pipe wrench

- 4 stage industrial adjustment
- PVC dipped handle
- Optimum power transfer
- Grooved handle adjustment
- Polished surface
- Ideally suited for twisting both thrust and track rods
- Usably on axle joints and exhaust pipes
- Chrome vanadium

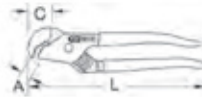


	A mm	L mm	
115.1362	0-30	242.0	470



Special pipe wrench

- 6 stage industrial adjustment
- PVC dipped handle
- Optimum power transfer
- Grooved handle adjustment
- Polished surface
- Ideally suited for twisting both thrust and track rods
- Usably on axle joints and exhaust pipes
- Chrome vanadium

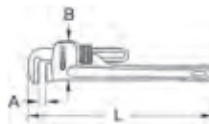


	A mm	L mm	C mm	
115.1363	0-51	345.0	41.0	1.10

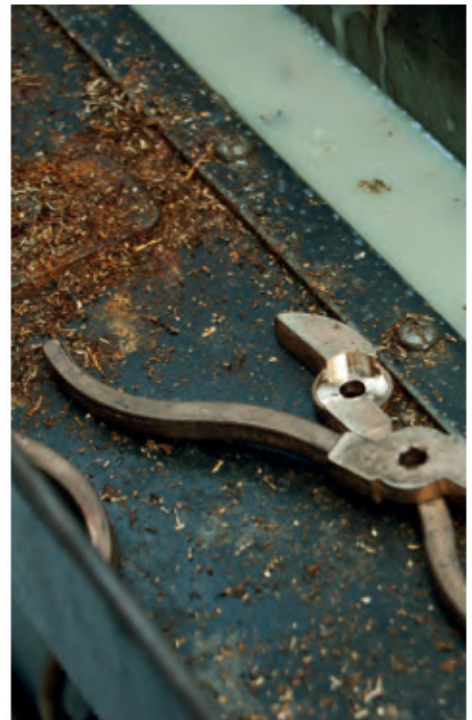


One handed pipe pliers

- Type "Stillson"
- Heavy execution
- Ground heads
- Infinitely variable
- Drop forged

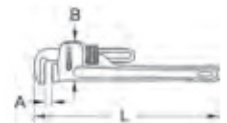


	A	B mm	L mm	
114.0008	3/4"	50.0	200.0	0.25
114.0010	1"	64.0	250.0	0.60
114.0012	1.1/4"	68.0	300.0	0.70
114.0014	1.1/2"	82.0	350.0	1.10
114.0018	2"	93.0	450.0	1.75
114.0024	2.1/2"	111.0	600.0	3.50
114.0036	3.1/2"	134.0	900.0	6.25



One handed pipe pliers

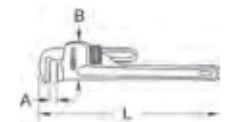
- Type "Stillson"
- Aluminium cast body
- Ground heads
- Infinitely variable
- Aluminium drop forged



	A	B mm	L mm	
111.3100	1.1/2"	75.0	350.0	0.88
111.3200	2"	90.0	450.0	1.46
111.3300	2.1/2"	100.0	600.0	2.44

One handed steel pipe pliers

- Type "Stillson"
- Ground heads
- Infinitely variable
- Die forged head
- Handle of steel



	A	B mm	L mm	
111.3500	3/4"	50.0	200.0	0.37
111.3505	1"	60.0	250.0	0.65
111.3510	1.1/4"	65.0	300.0	0.87
111.3515	1.1/2"	70.0	350.0	1.27
111.3520	2"	85.0	450.0	1.85
111.3525	2.1/2"	95.0	600.0	3.00
111.3530	3.1/2"	125.0	900.0	5.10
111.3535	5"	150.0	1200.0	9.10

Pipe wrench with adjustable head

- Type "Stillson"
- Aluminium cast body
- Upper jaw HRC 54-57
- Lower jaw HRC 52-55
- Stepless adjustment via milled nut
- 160° revolving handle
- Aluminium handle

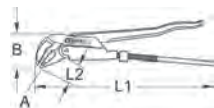


	A	B mm	L mm	kg
111.3550	1.1/2"	97,0	250,0	650



Offset pipe pliers, 45° angled

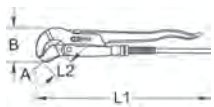
- In accordance to DIN 5234
- Swedish form
- Jaw 45° offset
- Infinitely variable
- Gear, contrary to the direction of rotation
- Red powder coating
- Chrome vanadium



	A	B mm	L1 mm	L2 mm	kg
112.1000	1"	65,0	320,0	65,0	0,75
112.1500	1.1/2"	70,0	430,0	75,0	1,38
112.2000	2"	75,0	580,0	85,0	2,75

S Jaw angled pipe plier, offset

- In accordance to DIN 5234
- Jaw 45° offset
- Ground heads
- Infinitely variable
- Gear, contrary to the direction of rotation
- Red powder coating
- Drop forged
- Chrome vanadium



	A	B mm	L1 mm	L2 mm	kg
113.0500	1/2"	48,0	245,0	45,0	0,48
113.1000	1"	95,0	320,0	60,0	0,82
113.1500	1.1/2"	73,0	420,0	73,0	1,40
113.2000	2"	87,0	550,0	87,0	2,57
113.3000	3"	112,0	630,0	112,0	4,30

Offset pipe pliers, 90° angled

- In accordance to DIN 5234
- Swedish form
- Jaw 90° offset
- Infinitely variable
- Gear, contrary to the direction of rotation
- Red powder coating
- Chrome vanadium



	A	B mm	L1 mm	L2 mm	kg
111.1000	1"	35,0	320,0	15,0	0,79
111.1500	1.1/2"	31,0	430,0	41,0	1,40
111.2000	2"	51,0	580,0	58,0	2,69
111.3000	3"	60,0	670,0	62,0	3,45

Siphon pliers

- With 4 adjustable steps
- Insulated foot for chrome fitting
- For screw fittings up to max. Ø 65 mm
- With PVC dipped handle
- For loosening pipe fitting
- Interchangeable jaw protector
- For hard to reach places
- Chrome plated and mirror polished
- Chrome vanadium

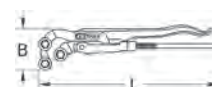


	A mm	C mm	L mm	Replacement jaws	kg
116.1200	20,0 - 65,0	45,0	225,0	116.1201	320



Thread roughing pliers

- For roughening of the thread after thread cutting
- Uniform roughening over the entire circumference
- Special tool steel



	Ø mm	Ø	B mm	L mm	kg
995.6500	12,7 - 50,8	1/2" - 2"	100,0	335,0	1,77

Strap pipe pliers

- For hard to reach places
- Especially suited for plastic pipes
- Glass fibre reinforced handle
- Belt made of reinforced, non slip rubber



	Ø mm	L mm	kg
114.0150	110,0	190,0	180

Strap pipe pliers

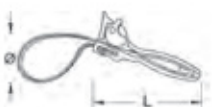
- With metal grip
- For hard to reach places
- Especially suited for plastic pipes
- Belt made of reinforced, non-slip rubber
- Chrome vanadium



	Ø mm	L mm	kg
114.0160	160,0	250,0	1,00

Strap wrench

- With metal handle
- For hard to reach places
- Especially suited for plastic pipes
- Belt made of reinforced, non-slip webbing
- Chrome plated
- Chrome vanadium



	mm	Ø mm	Ø	L mm	Replacement head	kg
114.0170	20,0	140,0	9/64"	220,0	114.0170-1	278
114.0171	25,0	200,0	13/64"	280,0	114.0171-1	600



Chain pipe wrench

- Function is similar to a ratchet
- For hard to reach places
- Hardened teeth
- Drop-forged
- Chrome vanadium



	Ø mm	L mm	
114.0040	110,0	390,0	1,36

PIPE WRENCH SETS

Angled pipe pliers set

- With PVC dipped handle
- Toothed gripping surfaces
- Optimum power transfer
- With grooved handle adjustment
- Progressive teeth
- Chrome vanadium

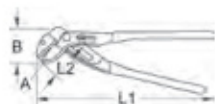


113.2100 3 pcs 1" - 1.1/2" - 2"	4,79

FITTERS PLIERS

Fitters pliers

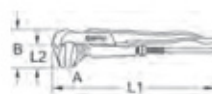
- With accurate industrial adjustment
- With safety clamping protection
- With setting scale
- Smooth, polished head area
- Optimum power transfer
- Ground heads
- With PVC dipped handle
- Chrome vanadium



	A mm	B mm	L1 mm	L2 mm	
115.8510	53,0	50,0	250,0	60,0	350

Fitters pliers, angled

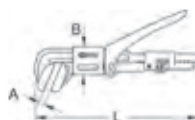
- 90° Jaw position
- Interchangeable jaw protector
- For pipe up to max. Ø 35 mm
- For mild assembly
- Infinitely variable
- Red powder coating
- Chrome vanadium



	A mm	B mm	L1 mm	L2 mm	Replacement jaws	
116.1000	1"	25,4	81,0	315,0	54,0	116.1001 790

Fitters wrench

- Interchangeable jaw protector
- For screw fittings up to max. Ø 60 mm
- Smooth, parallel adjustment jaws
- For mild assembly
- Infinitely variable
- Matt chrome
- Chrome vanadium

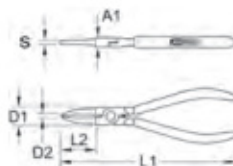


	A mm	B mm	L mm	Replacement jaws	
116.1002	60,0	47,0	265,0	116.1003	550

CIRCLIP PLIERS FOR INTERNAL CIRCLIPS

Circlip pliers for internal circlips

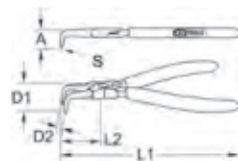
- In accordance to DIN 5254
- Durable, rolled precision tips
- Self opening
- With PVC dipped handle
- Chrome vanadium



	Ø mm	A1 mm	S mm	D1 mm	D2 mm	L1 mm	L2 mm	
500.1034	12,0 - 25,0	8,0	1,0	17,0	2,0	130,0	29,0	120
500.1035	19,0 - 60,0	10,0	1,7	18,0	2,0	160,0	40,0	150
500.1036	40,0 - 100,0	11,0	2,2	22,0	2,0	230,0	44,0	200

Circlip pliers for internal circlips, angled

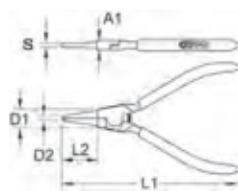
- In accordance to DIN 5256
- Durable, rolled precision tips
- 90° angled tips
- Self opening
- With PVC dipped handle
- Chrome vanadium



	Ø mm	A mm	S mm	D1 mm	D2 mm	L1 mm	L2 mm	
500.1031	12,0 - 25,0	11,0	1,0	15,0	2,0	130,0	21,0	120
500.1032	19,0 - 60,0	19,0	1,7	17,0	2,0	160,0	23,0	150
500.1033	40,0 - 100,0	25,0	2,2	23,0	2,0	230,0	30,0	200

Circlip pliers for internal circlips

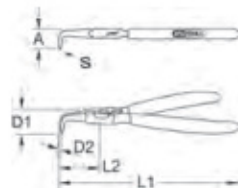
- In accordance to DIN 5254
- Slip inhibiting machined precision tips
- Durable, straight version
- With rubber grip
- Power version
- Die forged
- Chrome vanadium



	Ø mm	A1 mm	S mm	D1 mm	D2 mm	L1 mm	L2 mm	
119.2053	12,0 - 25,0	7,5	1,2	15,0	2,7	135,0	30,0	80
119.2058	19,0 - 60,0	9,5	1,6	18,0	5,0	180,0	40,0	150
119.2063	40,0 - 100,0	10,0	2,5	20,0	6,0	230,0	50,0	250

Circlip pliers for internal circlips, angled

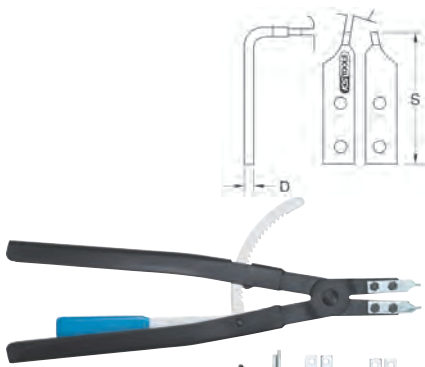
- In accordance to DIN 5256
- Slip inhibiting machined precision tips
- 90° angled tips
- With rubber grip
- Power version
- Die forged
- Chrome vanadium



	Ø mm	A mm	S mm	D1 mm	D2 mm	L1 mm	L2 mm	
119.2054	12,0 - 25,0	16,5	1,0	14,5	2,5	125,0	20,0	80
119.2059	19,0 - 60,0	21,0	1,5	18,0	3,0	165,0	25,0	150
119.2064	40,0 - 100,0	25,0	2,0	20,0	5,0	210,0	35,0	250

Circlip pliers for internal circlips with 0° + 90° tips

- For internal circlips
- Interchangeable tips
- For circlips according to DIN 472 / DIN 984
- Black powder coating
- Chrome vanadium

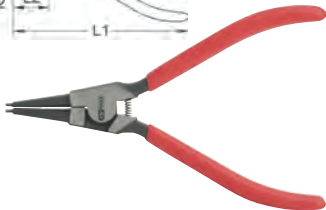
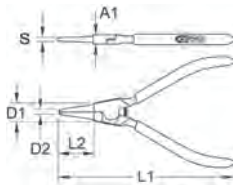


	D mm	L mm	Ø mm	g
500.1340	3,5	540,0	122,0 - 300,0	2025

CIRCLIP PLIERS FOR EXTERNAL CIRCLIPS

Circlip pliers for external circlips

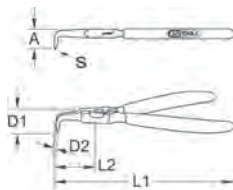
- In accordance to DIN 5254
- Durable, straight precision tips
- Self opening
- With PVC dipped handle
- Chrome vanadium



	Ø mm	A1 mm	S mm	D1 mm	D2 mm	L1 mm	L2 mm	g
500.1028	10,0 - 25,0	8,0	1,0	18,0	1,0	130,0	28,0	120
500.1029	19,0 - 60,0	10,0	2,0	30,0	6,0	160,0	38,0	150
500.1030	40,0 - 100,0	11,0	3,0	33,0	6,0	230,0	44,0	200

Circlip pliers for external circlips, angled

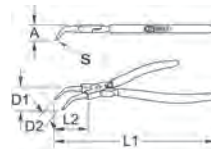
- In accordance to DIN 5254
- Durable precision tips
- 90° angled tips
- Self opening
- With PVC dipped handle
- Chrome vanadium



	Ø mm	A1 mm	S mm	D1 mm	D2 mm	L1 mm	L2 mm	g
500.1025	10,0 - 25,0	13,0	1,0	12,0	2,0	130,0	18,0	120
500.1026	19,0 - 60,0	19,0	1,7	17,0	2,0	160,0	23,0	150
500.1027	40,0 - 100,0	24,0	2,2	21,0	2,0	230,0	27,0	200

Wheel bearing circlip pliers, angled

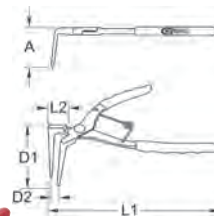
- In accordance to DIN 5256
- Slip inhibiting machined precision tips
- 45° angled version
- Self closing
- With rubber grip
- Power version
- Die forged
- Chrome vanadium



	Ø mm	A mm	S mm	D1 mm	D2 mm	L1 mm	L2 mm	g
500.1038	19,0 - 60,0	22,0	2,5	23,0	2,3	240,0	32,0	250
500.1039	19,0 - 60,0	22,0	3,0	23,0	3,0	300,0	46,0	490

Long arm circlip pliers for external circlips, angled

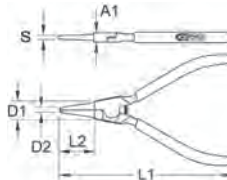
- Durable, extra long precision points
- 90° angled tips
- Self opening
- PVC dipped handle
- Ideal for brake calliper and transmission work
- Chrome vanadium



	A mm	D1 mm	D2 mm	L1 mm	L2 mm	g
500.1037	63,0	18,0	4,0	185,0	18,0	190

Circlip pliers for external circlips

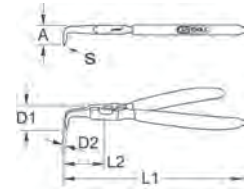
- In accordance to DIN 5254
- Slip inhibiting machined precision tips
- Durable, straight design
- Self closing
- With rubber grip
- Power version
- Die forged
- Chrome vanadium



	Ø mm	A1 mm	S mm	D1 mm	D2 mm	L1 mm	L2 mm	g
119.2051	10,0 - 25,0	8,0	1,0	13,5	3,5	135,0	30,0	80
119.2056	19,0 - 60,0	9,0	1,5	15,0	4,5	175,0	40,0	150
119.2061	40,0 - 100,0	10,0	2,5	20,0	6,0	230,0	50,0	250

Circlip pliers for external circlips, angled

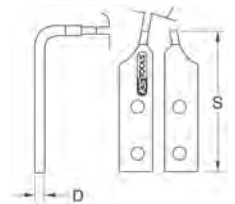
- In accordance to DIN 5256
- Slip inhibiting machined precision tips
- 90° angled version
- Self closing
- With rubber grip
- Power version
- Die forged
- Chrome vanadium



	Ø mm	A mm	S mm	D1 mm	D2 mm	L1 mm	L2 mm	g
119.2052	10,0 - 25,0	20,0	1,0	15,0	3,0	125,0	20,0	80
119.2057	19,0 - 60,0	25,0	1,5	20,0	4,5	165,0	32,0	150
119.2062	40,0 - 100,0	30,0	2,0	25,0	6,0	210,0	40,0	250

Circlip pliers for external circlips with 0° + 90° tips

- For external security rings
- Interchangeable tips
- For circlips according to DIN 472 / DIN 984
- Black powder coating
- Chrome vanadium



	D mm	L mm	Ø mm	g
500.1345	3,5	540,0	122,0 - 300,0	2005



CIRCLIP PLIER SETS FOR CIRCLIPS

Circlip pliers set with ratchet function

- For inside and outside circlips
- With rubber grip
- Interchangeable tips
- 6 types of pliers by reversing the tips
- Includes disassembly and assembly heads
- Chrome vanadium

Internal circlips: 78,0 mm - 159,0 mm
External circlips: 89,0 mm - 159,0 mm



500.1300	14 pcs	Circlip pliers set with ratchet function	1.80
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Universal circlip pliers set

- For inside and outside circlips
- Simply plier reconfiguration
- With rubber grip
- Interchangeable tips
- 16 types of pliers by reversing the tips
- Includes disassembly and assembly heads
- Chrome vanadium



500.1320	10 pcs	Universal circlip pliers set	1.80
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4 x		1,0 - 1,2 - 1,8 - 2,3 mm
4 x		1,0 - 1,2 - 1,8 - 2,3 mm
1 x		120 mm
1 x		120 mm

Circlip pliers set with ratchet function

- For inside and outside circlips
- With rubber grip
- Interchangeable tips
- 8 types of pliers by reversing the tips
- Includes disassembly and assembly heads
- Chrome vanadium

Internal circlips: 60,0 mm - 100,0 mm
External circlips: 40,0 mm - 85,0 mm



500.1350	20 pcs	Circlip pliers set with ratchet function	1.80
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Circlip pliers set

- For inside and outside circlips
- With rubber grip
- 90° angled tips
- Durable, straight precision tips
- All outside circlips with opening spring
- Power version
- Chrome vanadium



119.2050	4 pcs	Circlip pliers set	455
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consists of:

119.2051	Circlip pliers for external circlips, 10-25 mm	80
119.2052	Circlip pliers for external circlips, angled, 12-25 mm	80
119.2053	Circlip pliers for internal circlips, 12-25 mm	80
119.2054	Circlip pliers for internal circlips, angled, 12-25 mm	80

Circlip pliers set

- For inside and outside circlips
- With rubber grip
- 90° angled tips
- Durable, straight precision tips
- All outside circlips with opening spring
- Power version
- Chrome vanadium



119.2055	4 pcs	Circlip pliers set	735
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consists of:

119.2056	Circlip pliers for external circlips, 19-60 mm	150
119.2057	Circlip pliers for external circlips, angled, 19-60 mm	150
119.2058	Circlip pliers for internal circlips, 19-60 mm	150
119.2059	Circlip pliers for internal circlips, angled, 19-60 mm	150

Circlip pliers set

- For inside and outside circlips
- With rubber grip
- 90° angled tips
- Durable, straight precision tips
- All outside circlips with opening spring
- Power version
- Chrome vanadium



119.2060	4 pcs	Circlip pliers set	1000
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consists of:

119.2061	Circlip pliers for external circlips, 40-100 mm	250
119.2062	Circlip pliers for external circlips, angled, 40-100 mm	250
119.2063	Circlip pliers for internal circlips, 40-100 mm	250
119.2064	Circlip pliers for internal circlips, angled, 40-100 mm	250

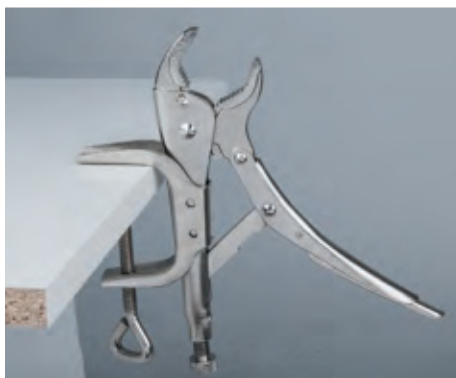
LOCKING PLIERS

Locking pliers holder

- Alternative for a vice
- For light work
- For screwing onto workbenches, worktables etc.

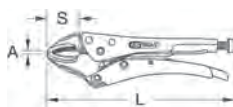


	L mm	B mm	T mm	Weight
115.2072	91.0	84.0	24.3	300



Locking pliers

- Forged gripping jaws
- Serrated execution
- Size adjustment using the adjustment wheel
- With loosening lever
- With easy locking action
- For round and flat material
- To hold when welding
- No flaring under the strongest loads
- Loosening under continuous pressure of a spring
- Nickel plated
- Chrome vanadium

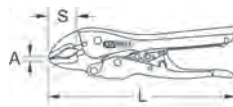


	A mm	L mm	S mm	Weight
115.1031	0-50	140.0	19.3	180
115.1032	0-55	175.0	24.0	340
115.1033	0-60	220.0	27.5	520



Power locking pliers

- Forged gripping jaws
- Prevents slipping even at high forces
- Well thought through jaw teeth
- Size adjustment using the adjustment wheel
- With loosening lever
- With easy locking action
- For round and flat material
- To hold when welding
- No flaring under the strongest loads
- Loosening under continuous pressure of a spring
- Nickel plated
- Chrome vanadium



	A mm	L mm	S mm	Weight
115.1196	0-40	175.0	30.0	400
115.1197	0-50	220.0	37.0	600

Locking pliers with quick-release lever

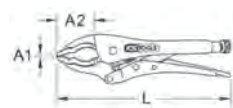
- Forged gripping jaws
- Serrated execution
- Size adjustment using the adjustment wheel
- With easy locking action
- For round and flat material
- To hold when welding
- With quick-release lever
- No flaring under the strongest loads
- Loosening under continuous pressure of a spring
- Nickel plated
- Chrome molybdenum
- With dual component handle



	A mm	L mm	S mm	Weight
115.2031	0-30	125.0	21.0	300
115.2032	0-40	175.0	27.0	390
115.2033	0-55	225.0	30.0	600

Wide jaw locking pliers

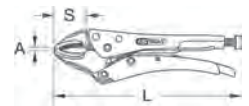
- Forged gripping jaws
- Serrated execution
- Size adjustment using the adjustment wheel
- With loosening lever
- With easy locking action
- For round and flat material
- To hold when welding
- No flaring under the strongest loads
- Loosening under continuous pressure of a spring
- Nickel plated
- Chrome molybdenum



	A mm	L mm	S mm	Weight
115.1506	0-64	235.0	50.0	600

Wide jaw locking pliers with quick-release lever

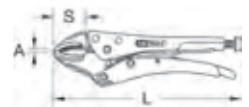
- Forged gripping jaws
- Serrated execution
- Size adjustment using the adjustment wheel
- With easy locking action
- For round and flat material
- To hold when welding
- With quick-release lever
- No flaring under the strongest loads
- Loosening under continuous pressure of a spring
- Nickel plated
- Chrome molybdenum
- With dual component handle



	A mm	L mm	S mm	Weight
115.2006	0-65	230.0	51.0	620

Locking pliers, straight jaws

- Forged gripping jaws
- Serrated execution
- Size adjustment using the adjustment wheel
- With loosening lever
- With easy locking action
- For round and flat material
- To hold when welding
- No flaring under the strongest loads
- Loosening under continuous pressure of a spring
- Nickel plated
- Chrome molybdenum



	A mm	L mm	S mm	Weight
115.1501	0-28.5	175.0	27.0	370
115.1502	0-45.5	225.0	30.0	600

Locking pliers with quick-release lever, straight jaws

- Forged gripping jaws
- Serrated execution
- Size adjustment using the adjustment wheel
- With easy locking action
- For round and flat material
- To hold when welding
- With quick-release lever
- No flaring under the strongest loads
- Loosening under continuous pressure of a spring
- Nickel plated
- Chrome molybdenum
- With dual component handle



	A mm	L mm	S mm	Weight
115.3011	0-40	175.0	25.0	400
115.3012	0-50	250.0	30.0	600

Locking pliers, V jaws

- Forged gripping jaws
- Serrated execution
- Size adjustment using the adjustment wheel
- With loosening lever
- With easy locking action
- For round and flat material
- To hold when welding
- No flaring under the strongest loads
- Loosening under continuous pressure of a spring
- Nickel plated
- Chrome molybdenum



	A mm	L mm	S mm	Weight
115.1151	0-25	185.0	24.0	400
115.1152	0-32	225.0	27.5	600

Clamping pliers for pipes

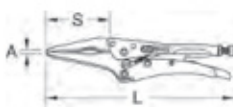
- Forged gripping jaws
- Size adjustment using the adjustment wheel
- With loosening lever
- With easy locking action
- With hexagonal nut for safe fastening
- For clamping pipes
- No flaring under the strongest loads
- Loosening under continuous pressure of a spring
- Nickel plated
- Chrome molybdenum



	A mm	L mm	S mm	Weight
115.1504	0-30,5	175.0	29.5	360

Clamping pliers for pipes

- Forged gripping jaws
- Serrated execution
- Size adjustment using the adjustment wheel
- With loosening lever
- With easy locking action
- For clamping pipes
- No flaring under the strongest loads
- Loosening under continuous pressure of a spring
- Nickel plated
- Chrome molybdenum



	A mm	L mm	S mm	Weight
115.1505	0-86	255.0	118,0	500

Round jaw locking pliers with wire cutter

- For safe gripping of nuts and screw heads
- 3 level points prevents slipping and rounding
- With loosening lever
- With easy locking action
- Size adjustment using the adjustment wheel
- Good adaptation to existing surfaces
- With wire cutting function
- No flaring under the strongest loads
- Loosening under continuous pressure of a spring
- Nickel plated
- Chrome molybdenum



	mm	L mm	Weight
115.1175	11-19	175.0	370
115.1176	16-27	240.0	700



Chain grip pliers

- For fastening and clamping of different profiles
- With loosening lever
- With easy locking action
- Size adjustment using the adjustment wheel
- Ideal for confined spaces
- Good adaptation to existing surfaces
- No flaring under the strongest loads
- Loosening under continuous pressure of a spring
- Nickel plated
- Chrome molybdenum



	Ø mm	L mm	Replacement chain	Weight
115.1171	150,0	220,0	115.1172	0,76

Long nose locking pliers

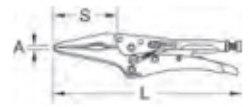
- Forged gripping jaws
- Serrated execution
- Size adjustment using the adjustment wheel
- With loosening lever
- With easy locking action
- For round and flat material
- To hold when welding
- No flaring under the strongest loads
- Loosening under continuous pressure of a spring
- Nickel plated
- Chrome molybdenum



	A mm	L mm	S mm	Weight
115.1177	0-25	125.0	35	110
115.1034	0-35	150.0	45.0	180
115.1035	0-45	210.0	65.0	340

Long-nose locking pliers with quick-release lever

- Forged gripping jaws
- Serrated execution
- Size adjustment using the adjustment wheel
- With easy locking action
- For round and flat material
- To hold when welding
- With quick-release lever
- No flaring under the strongest loads
- Loosening under continuous pressure of a spring
- Nickel plated
- Chrome molybdenum
- With dual component handle



	A mm	L mm	S mm	Weight
115.2034	0-45	170.0	45.0	300
115.2035	0-60	205.0	53.0	500

Wide and flat jaw locking pliers

- Forged gripping jaws
- With loosening lever
- With easy locking action
- Size adjustment using the adjustment wheel
- For clamping of flat or bended metal sheets
- No flaring under the strongest loads
- Loosening under continuous pressure of a spring
- Nickel plated
- Chrome molybdenum



	A mm	B mm	C mm	L mm	Weight
115.1076	0-53	90.0	40.0	205.0	480
115.1077	0-57	100.0	45.0	245.0	650

Wide jaw flat die locking pliers with quick-release lever

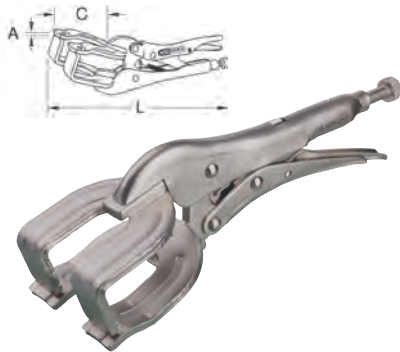
- Forged gripping jaws
- With easy locking action
- Size adjustment using the adjustment wheel
- For clamping of flat or bended metal sheets
- With quick-release lever
- No flaring under the strongest loads
- Loosening under continuous pressure of a spring
- Nickel plated
- Chrome molybdenum
- With dual component handle



	A mm	C mm	L mm	B mm	Weight
115.2076	0-40	45.0	205.0	80.0	600
115.2077	0-55	45.0	250.0	80.0	800

Welding gripping pliers

- With malleable cast iron jaws
- Suitable for setting the welding points between the cut outs
- With loosening lever
- Size adjustment using the adjustment wheel
- To hold and adjust sheets and profiles
- With easy locking action
- No flaring under the strongest loads
- Loosening under continuous pressure of a spring
- Nickel plated
- Chrome molybdenum



	A mm	C mm	L mm	kg
115.1078	0-45	70,0	220,0	600
115.1079	0-55	70,0	260,0	780

Welding gripping pliers, extra long

- Round forged gripping jaws
- Quick-release lever
- Easy locking action
- Size adjustment using the adjustment wheel
- For profiled bulky components
- Large clamping depth for front and rear panels
- Good adaptation to existing surfaces
- No flaring under the strongest loads
- Loosening under continuous pressure of a spring
- Nickel plated
- Chrome molybdenum



	A mm	B mm	L mm	kg
115.1072	0-270	250,0	450,0	1.18

Welding clamp gripping pliers with quick-release lever

- Very good clamping capacity
- Round forged gripping jaws
- With quick-release lever
- With easy locking action
- Size adjustment using the adjustment wheel
- For profiled bulky components
- Good adaptation to existing surfaces
- No flaring under the strongest loads
- Loosening under continuous pressure of a spring
- Nickel plated
- Chrome vanadium
- With dual component handle



	A mm	B mm	L mm	kg
115.2008	0-45	45,0	165,0	300
115.2009	0-90	85,0	280,0	900

Welding gripping pliers with quick-release lever

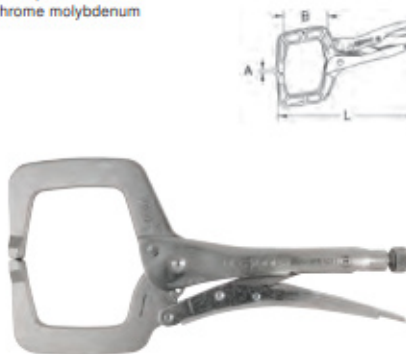
- With malleable cast iron jaws
- Suitable for setting the welding points between the cut outs
- Size adjustment using the adjustment wheel
- To hold and adjust sheets and profiles
- With easy locking action
- With quick-release lever
- No flaring under the strongest loads
- Loosening under continuous pressure of a spring
- Nickel plated
- Chrome vanadium
- With dual component handle



	A mm	C mm	L mm	kg
115.2078	0-45	70,0	220,0	710
115.2079	0-65	70,0	260,0	875

Welding gripping pliers

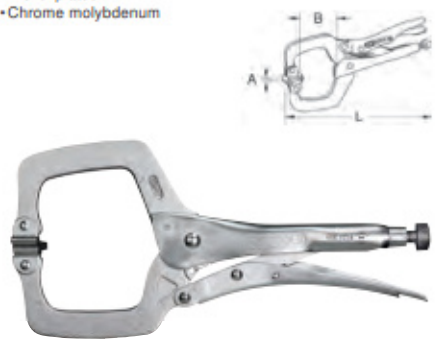
- Very good clamping capacity
- Round forged gripping jaws
- Quick-release lever
- Easy locking action
- Size adjustment using the adjustment wheel
- For profiled bulky components
- Good adaptation to existing surfaces
- No flaring under the strongest loads
- Loosening under continuous pressure of a spring
- Nickel plated
- Chrome molybdenum



	A mm	B mm	L mm	kg
115.1071	0-100	90,0	270,0	780

Welding gripping pliers with movable clamping jaws

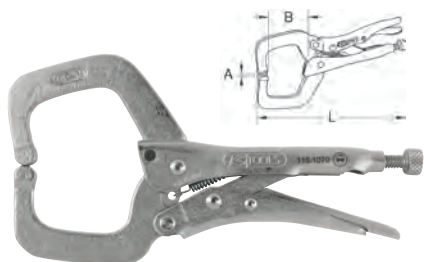
- Flat gripping jaws
- Movable clamping jaws
- Quick-release lever
- Easy locking action
- Size adjustment using the adjustment wheel
- For profiled bulky components
- Good adaptation to existing surfaces
- No flaring under the strongest loads
- Loosening under continuous pressure of a spring
- Nickel plated
- Chrome molybdenum



	A mm	B mm	L mm	kg
115.1178	0-25	25,0	125,0	0.15
115.1073	0-35	40,0	170,0	0.24
115.1074	0-100	70,0	285,0	0.78
115.1075	0-270	240,0	420,0	1.25
115.0570	0-420	395,0	610,0	1.54

Welding gripping pliers

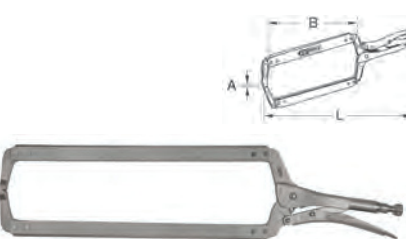
- Forged semi-circular gripping jaws
- With loosening lever
- With easy locking action
- Size adjustment using the adjustment wheel
- For profiled bulky components
- Good adaptation to existing surfaces
- No flaring under the strongest loads
- Loosening under continuous pressure of a spring
- Nickel plated
- Chrome molybdenum



	A mm	B mm	L mm	kg
115.1070	0-35	40,0	170,0	240

Welding gripping pliers, extra long

- Round forged gripping jaws
- With loosening lever
- With easy locking action
- Size adjustment using the adjustment wheel
- For profiled bulky components
- Large clamping depth for front and rear panels
- Good adaptation to existing surfaces
- No flaring under the strongest loads
- Loosening under continuous pressure of a spring
- Nickel plated
- Chrome molybdenum

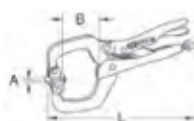


	A mm	B mm	L mm	kg
115.0573	0-295	415,0	610,0	1.50



Welding gripping pliers with movable clamping jaws

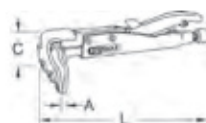
- Flat gripping jaws
- Movable clamping jaws
- With quick-release lever
- With easy locking action
- Size adjustment using the adjustment wheel
- For profiled bul y components
- Good adaptation to existing surfaces
- No fla ing under the strongest loads
- Loosening under continuous pressure of a spring
- Nickel plated
- Chrome molybdenum
- With dual component handle



	A mm	B mm	L mm	W
115.2013	0-105	115.0	170.0	0.40
115.2014	0-420	395.0	275.0	1.00

Welding gripping pliers

- For applications that need a straight jaw
- Jaws from special steel
- Easy locking action
- Quick-release lever
- Size adjustment using the adjustment wheel
- Ideal for spot welding
- Nickel plated handle
- Chrome molybdenum



	A mm	C mm	L mm	W
115.1080	0-20	56.0	205.0	548

Welding gripping pliers

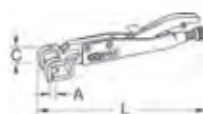
- For applications that required double curved jaws
- Jaws from special steel
- Easy locking action
- Quick-release lever
- Size adjustment using the adjustment wheel
- Ideal for fi ting and mounting of body parts
- Nickel plated handle
- Chrome molybdenum



	A mm	C mm	L mm	W
115.1081	0-20	39.0	230.0	568

Welding gripping pliers

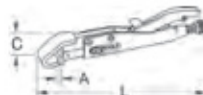
- For applications that required double curved jaws
- Jaws from special steel
- Easy locking action
- Quick-release lever
- Size adjustment using the adjustment wheel
- For welding of the hole between the panels
- Also suitable for U-profil
- Nickel plated handle
- Chrome molybdenum



	A mm	C mm	L mm	W
115.1082	0-15	26.0	215.0	562

Welding gripping pliers

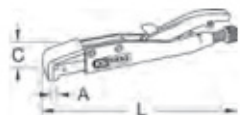
- For applications that need a angled jaw
- Jaws from special steel
- Easy locking action
- Quick-release lever
- Size adjustment using the adjustment wheel
- Ideal for welding in the fold
- Also suitable for U-profil
- Nickel plated handle
- Chrome molybdenum



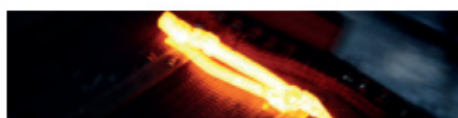
	A mm	C mm	L mm	W
115.1083	0-20	30.0	210.0	509

Welding gripping pliers

- For applications that need a straight jaw
- Slim design
- Jaws from special steel
- Easy locking action
- Quick-release lever
- Size adjustment using the adjustment wheel
- For right-angled terminals in the fold
- For diffi ult to access areas
- Nickel plated handle
- Chrome molybdenum



	A mm	C mm	L mm	W
115.1084	0-16	30.0	195.0	488



Welding gripping pliers set

- For applications that need a straight jaw
- Extra slim design
- Jaws from special steel
- With easy locking action
- With quick release lever
- Size adjustment using the adjustment wheel
- For right angled terminals in the fold
- For diffi ult to access areas
- For welding of the hole between the panels
- Also suitable for U-profil
- Ideal for spot welding
- Nickel plated handle
- Chrome molybdenum



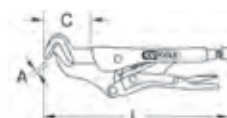
	W
115.1085 5 pcs. Welding gripping pliers set	2.62

consists of:

	W
115.1080 Welding self grip pliers, 205mm	548
115.1081 Welding self grip pliers, 230mm	568
115.1082 Welding self grip pliers, 215mm	562
115.1083 Welding self grip pliers, 210mm	509
115.1084 Welding self grip pliers, 210mm	488

Automotive welding gripping pliers

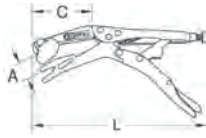
- Forged gripping jaws
- Serrated execution
- Quick-release lever
- Easy locking action
- For fla ged material
- To hold when welding
- No fla ing under the strongest loads
- Loosening under continuous pressure of a spring
- Nickel plated
- Chrome molybdenum



	A mm	C mm	L mm	W
115.1068	0-40	60.0	200.0	400

Welding gripping pliers

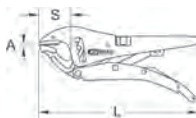
- Flat gripping jaws
- Movable clamping jaws
- Serrated execution
- No sticking to the electrode
- Quick-release lever
- Easy locking action
- Good adaptation to existing surfaces
- Copper alloy clamping jaws
- No flaring under the strongest loads
- Loosening under continuous pressure of a spring
- Nickel plated handle
- Chrome molybdenum



	A mm	C mm	L mm	Weight (g)
115.1180	0-70	85,0	240,0	500

Locking pliers, serrated

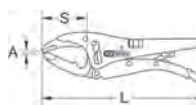
- Forged gripping jaws
- Serrated execution
- Quick release lever
- Size adjustment using the adjustment wheel
- For round and flat material
- To hold when welding
- Nickel plated
- Chrome vanadium



	A mm	L mm	S mm	Weight (g)
115.1036	0-55	220,0	40,0	670

Locking pliers, serrated

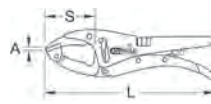
- Forged gripping jaws
- Serrated execution
- Quick release lever
- Size adjustment using the adjustment wheel
- For round and flat material
- To hold when welding
- Nickel plated
- Chrome vanadium



	A mm	L mm	S mm	Weight (g)
115.1037	0-85	250,0	60,0	800

Locking pliers, serrated

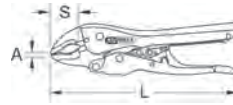
- Forged gripping jaws
- Movable clamping jaws
- Serrated execution
- Quick-release lever
- Size adjustment using the adjustment wheel
- For round and flat material
- To hold when welding
- Nickel plated
- Chrome vanadium



	A mm	L mm	S mm	Weight (g)
115.1038	0-85	250,0	60,0	800

Automatic locking pliers

- Forged gripping jaws
- Automatic adjustment by cam mechanism
- Serrated execution
- Quick-release lever
- For round and flat material
- Heavy but controlled clamping
- To hold when welding
- Knurled handle
- Nickel plated
- Chrome vanadium



	A mm	L mm	S mm	Weight (g)
115.1150	0-32	170,0	22,0	250
115.1155	0-47	250,0	29,0	620

Automatic long nosed locking pliers

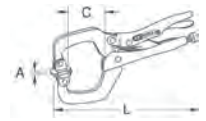
- Forged gripping jaws
- Automatic adjustment by cam mechanism
- Serrated execution
- Quick-release lever
- Heavy but controlled clamping
- For round and flat material
- To hold when welding
- Knurled handle
- Nickel plated
- Chrome molybdenum



	A mm	L mm	S mm	Weight (g)
115.1160	0-51	200,0	55,0	260

Automatic gripping pliers

- Flat gripping jaws
- Movable clamping jaws
- Automatic adjustment by cam mechanism
- Quick-release lever
- Heavy but controlled clamping
- For round and flat material
- For profiled bulb components
- Good adaptation to existing surfaces
- Knurled handle
- Nickel plated
- Chrome molybdenum



	A mm	C mm	L mm	Weight (g)
115.1165	0-68	55,0	215,0	330
115.1170	0-90	90,0	310,0	860

Special clamping gripping pliers

- For the cutting of plastic pipes
- Enormous time and costs saving
- Suitable for narrow hard to access areas
- Versatile use
- With loosening lever
- With easy locking action
- Size adjustment using the adjustment wheel
- Black lacquer
- Chrome molybdenum



	Size mm	Ø mm	L mm	Weight (g)
450.0350	1	8 / 9 / 10 / 11 / 12	260,0	775
450.0351	2	7 / 9 / 10 / 12 / 14	265,0	775
450.0352	3	15 / 16 / 18	255,0	636

RIVETING PLIERS

Plastic rivet pliers set included rivets

- Suitable for plastic rivets
- Narrow head pliers
- Can be used in hard to access areas
- 90° angled rivet head
- With rubber grip
- Includes 40 plastic rivets
- Die-cast metal body

Plastic rivets: 5.0x15.8 - 5.0x17.2 - 6.3x25.2 - 6.6x17.2 mm



	Weight (g)
150.9650 41 pcs Plastic rivet pliers set included rivets	760

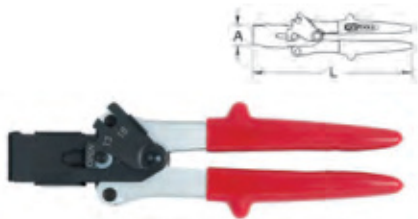
consists of:

150.9651	Plastic rivet pliers	580
150.9652	Replacement rivets Pack of 10, 17,2 x 6,6 mm	20
150.9653	Replacement rivets Pack of 10, 25,2 x 6,3 mm	22
150.9654	Replacement rivets Pack of 10, 17,2 x 5 mm	15
150.9655	Replacement rivets Pack of 10, 15,8 x 5 mm	16

Anchor rivet pliers

- Suitable for anchor rivets
- With PVC dipped handle
- Die-cast metal body

Anchor rivets: 4 - 5 - 6 - 8 mm (5/32" - 3/16" - 15/64" - 5/16")

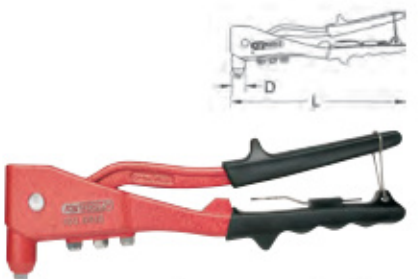


	A mm	L mm	
150.9580	30.0	230.0	438

Standard hand riveting tool

- Suitable for blind rivets
- Including four interchangeable mouthpieces
- Magazine and key in the riveter body
- Narrow head pliers
- With safety lock on the handle end
- With rubber grip
- Die-cast metal body

Blind rivets: 2,4 - 3,2 - 4,0 - 4,8 mm



	D mm	L mm	
150.9510	21.0	270.0	920

Standard hand riveting tool set

- Suitable for blind rivets
- Four interchangeable mouthpieces
- Magazine and key in the riveter body
- Includes 200 blind rivets
- With rubber grip
- Die-cast metal body

Blind rivets: 2,4 - 3,2 - 4,0 - 4,8 mm



150.9520	205 pcs Standard hand riveting tool set	1.25

Hand rivet tool

- Suitable for blind rivets
- 360° rotating head
- For difficult to access areas
- Narrow head pliers
- With safety lock on the handle end
- Including four interchangeable mouthpieces
- Die-cast metal body

Blind rivets: 2,4 - 3,2 - 4,0 - 4,8 mm



	D mm	L1 mm	L2 mm	
150.9540	21.0	290.0	70.0	751

Universal hand riveting tool set

- Suitable for blind rivets and blind rivet nuts
- 360° rotating head
- For difficult to access areas
- Four interchangeable mouthpieces and nut rivet pulling inserts
- Die-cast metal body

Blind rivets: 2,4 - 3,2 - 4,0 - 4,8 mm
Rivet nuts: M3 - M4 - M5 - M6

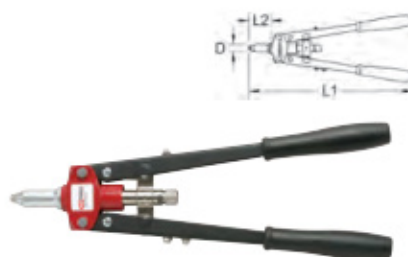


150.9610	10 pcs Universal hand riveting tool set	1.96

Long arm hand riveting tool

- Suitable for blind rivets
- Including four interchangeable mouthpieces
- Extra long lever arms
- High power transmission
- Magazine and key in the riveter body
- With rubber grip
- Die-cast metal body

Blind rivets: 2,4 - 3,2 - 4,0 - 4,8 mm

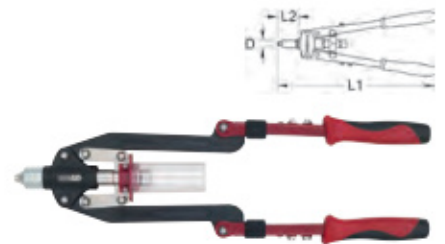


	D mm	L1 mm	L2 mm	
150.9630	21.0	410.0	59.0	1.50

Universal riveting tool

- Suitable for blind rivets and blind rivet nuts
- Retractable legs for increased power consumption
- Mouthpiece magazine integrated in the handle
- With two component handle
- Die cast metal body

Blind rivets: 2,4 - 3,2 - 4,0 - 4,8 - 6,4 mm



	D mm	L1 mm	L2 mm	
150.9633	30.0	510.0	45.0	1.60

Universal riveting tool set

- Suitable for blind rivets and blind rivet nuts
- Retractable legs for increased power consumption
- Mouthpiece magazine integrated in the handle
- With two component handle
- Die-cast metal body

Blind rivets: 2,4 - 3,2 - 4,0 - 4,8 - 6,4 mm
Rivet nuts: M4 - M5 - M6 - M8 - M10



150.9630	11 pcs Universal riveting tool set	2.67

accessories:

150.9570	Rivet holders for riveting tool small and large, 2,4 mm	10
150.9571	Mouthpieces for riveting, 3,2 mm	10
150.9572	Mouthpieces for riveting, 4,0 mm	10
150.9573	Mouthpieces for riveting, 4,8 mm	10
150.9574	Mouthpieces for riveting, 5 mm	10
150.9575	Mouthpieces for riveting, 6,4 mm	10
150.9578	Replacement jaw grips suitable for rivet head, suitable for 150.9610	10
150.9579	Replacement gripping jaws for rivet head, for 150.9630	10
150.9620	Cavity wall fixing rivet head, for 150.9610	160
150.9613	Rivet nut pulling spindle for small rivet tool, M3, suitable for 150.9610	30
150.9614	Rivet nut pulling spindle for riveting tools, M4	30
150.9615	Rivet nut pulling spindle for riveting tools, M5	30
150.9616	Rivet nut pulling spindle for riveting tools, M6	30
150.9634	Rivet nut pulling spindle for riveting tools, M4	40
150.9635	Rivet nut pulling spindle for riveting tools, M5	40
150.9636	Rivet nut pulling spindle for riveting tools, M6	40
150.9638	Rivet nut pulling spindle for riveting tools, M8	70
150.9640	Rivet nut pulling spindle for riveting tools, M10	70
150.9611	Spare rivet heads, suitable for 150.9610	60
150.9631	Replacement rivet heads for rivet tools, for 150.9630	100
150.9632	Replacement rivet heads for rivet tools, for 150.9630	40

CRIMPING PLIERS

Wire end ferrule pliers

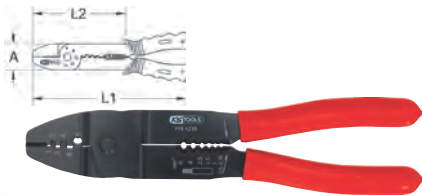
- For cable cutting and wire stripping
- For crimping cable lugs and connectors
- With PVC dipped handle
- Plier body made of fl t steel



	D mm	L mm	W
115.1236	0,25 - 2,5	155,0	165
115.1237	0,5 - 16,0	220,0	240

Crimp pliers for not insulated, opened cable connector

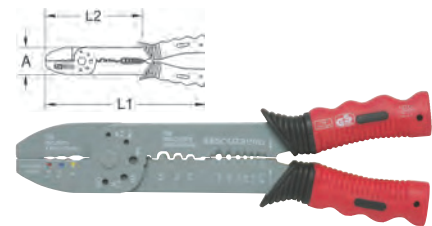
- Ideally suited for converting not insulated contacts
- For stripping of wires from 0.5 - 6.0 mm²
- Cut wires up to 6.0 mm²
- For crimping blade terminals 2.8 / 4.8 / 6.3 mm and other contacts with open crimp sleeve
- Handle dip insulated
- Plier body from special steel
- Material strength 3 mm



	A mm	L1 mm	L2 mm	W
115.1235	38,0	220,0	120,0	196

Multifunction pliers for insulated and non insulated cable terminals

- For professional cable cutting and stripping of wires from 0,75 - 6,0 mm²
- For crimping cable lugs and connectors of 1,5 - 6,0 mm²
- Cutting function
- Two component handle
- Pliers body made of fl t steel



	A mm	L1 mm	L2 mm	W
115.1231	40,0	220,0	130,0	230

Multifunction crimping pliers set

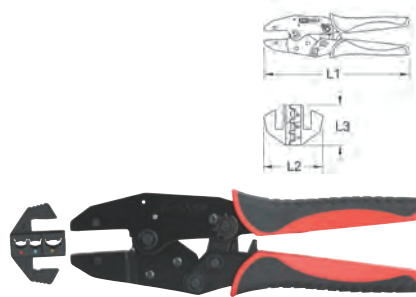
- For insulated and un-insulated cable terminals
- Includes 270 pcs consumables
- For professional cable cutting and stripping wires from 0,75 - 6,0 mm²
- For crimping cable terminals and connectors from 1,5 - 6,0 mm²
- Cutting function
- Two component handle
- Pliers body made of fl t steel
- In durable plastic storage case



	W
115.1230	271 pcs Multifunction crimping pliers set 560

Crimping pliers for non insulated terminals

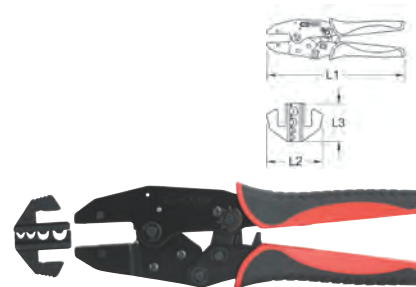
- Extremely robust and reliable
- Safety lock
- Inserts lock and to they click to prevent possible misuse
- Optimal crimping through precision profil
- Ratchet function
- Adjustment of the crimping pressure
- Easy to change the crimp heads through quick locking device
- Two component handle
- Burnished
- Pliers body made of fl t steel



	mm ²	AWG	L1 mm	L2 mm	L3 mm	W
115.1425	0,5-1,0;1,5-2,5;4,0-6,0	22-18/16-14/12-10	220,0	50,0	34,0	115.1415 491

Crimping pliers for insulated terminals

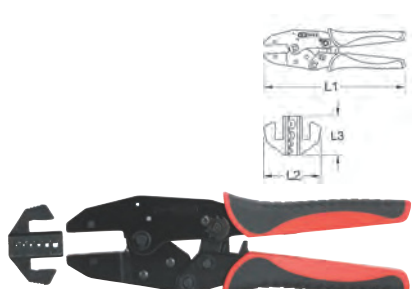
- Extremely robust and reliable
- Safety lock
- Inserts lock and to they click to prevent possible misuse
- Optimal crimping through precision profil
- Ratchet function
- Adjustment of the crimping pressure
- Easy to change the crimp heads through quick locking device
- Two component handle
- Burnished
- Pliers body made of fl t steel



	mm ²	AWG	L1 mm	L2 mm	L3 mm	W
115.1430	1,5;2,5/6,0/10,0	20-18/16-14/12-10/8	220,0	50,0	34,0	115.1416 487

Crimping pliers for pin terminals

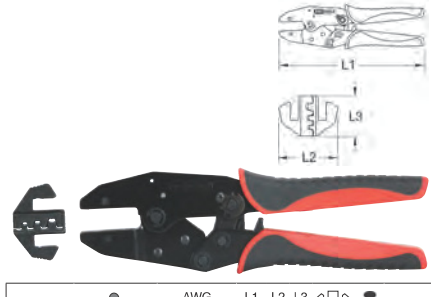
- Extremely robust and reliable
- Safety lock
- Inserts lock and to they click to prevent possible misuse
- Optimal crimping through Precision profil
- Ratchet function
- Adjustment of the crimping pressure
- Easy to change the crimp heads through quick locking device
- Two component handle
- Burnished
- Pliers body made of fl t steel



	mm ²	AWG	L1 mm	L2 mm	L3 mm	W
115.1440	0,50;7,51;0,1;5,2;5;4;0	22/20/18/16-14/12-10	220,0	50,0	34,0	115.1418 499
115.1450	6,0/10,0/16,0	10/8/6	220,0	50,0	34,0	115.1420 499

Crimping pliers for spade terminals

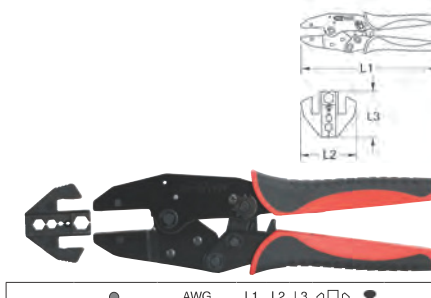
- Extremely robust and reliable
- Safety lock
- Inserts lock and to they click to prevent possible misuse
- Optimal crimping through precision profil
- Ratchet function
- Adjustment of the crimping pressure
- Easy to change the crimp heads through quick locking device
- Two component handle
- Burnished
- Pliers body made of fl t steel



	mm ²	AWG	L1 mm	L2 mm	L3 mm	W
115.1435	0,5-1,0/1,5-2,5;4,0-6,0	20-18/16-14/12-10	220,0	50,0	34,0	115.1417 499
115.1455	2,5/0,5/8,0/10,0	14-22/8-6	220,0	50,0	34,0	115.1421 505

Crimping pliers for coaxial terminals

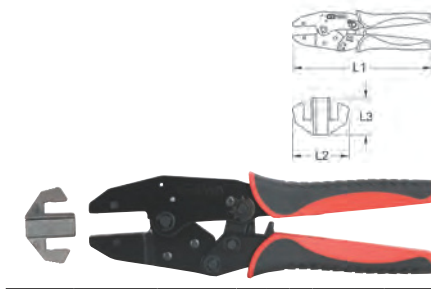
- Extremely robust and reliable
- Safety lock
- Inserts lock and to they click to prevent possible misuse
- Optimal crimping through precision profil
- Ratchet function
- Adjustment of the crimping pressure
- Easy to change the crimp heads through quick locking device
- Two component handle
- Burnished
- Pliers body made of fl t steel



	mm ²	AWG	L1 mm	L2 mm	L3 mm	W
115.1445	1,7/2,5/0,5;4,0;6;4/8/2,3	RG58/RG59/RG62	220,0	50,0	34,0	115.1419 491

Crimping pliers for Western terminals

- Extremely robust and reliable
- Safety lock
- Inserts lock and to they click to prevent possible misuse
- Optimal crimping through precision profil
- Ratchet function
- Adjustment of the crimping pressure
- Easy to change the crimp heads through quick locking device
- Two component handle
- Burnished
- Pliers body made of fl t steel



	mm ²	AWG	L1 mm	L2 mm	L3 mm	W
115.1460	RJ22	22-24	220,0	50,0	34,0	115.1422 500
115.1465	RJ11/RJ12	22-24	220,0	50,0	34,0	115.1423 505
115.1470	RJ45	22-24	220,0	50,0	34,0	115.1424 505

Electricians crimping pliers set

- Ideal configuration for electricians
- Extremely robust and reliable
- Safety lock
- Inserts lock and to they click to prevent possible misuse
- Optimal crimping through precision profil
- Ratchet function
- Adjustment of the crimping pressure
- Easy to change the crimp heads through quick locking device
- In durable plastic storage case
- Two component handle
- Burnished
- Pliers body made of fl t steel



115.1480	3 pcs	Electricians crimping pliers set	910	
1 x		220 mm		
1 x		Ø 0,5 - 4,0 mm, H		
1 x		Ø 1,5 - 10,0 mm, B		

Net working crimping pliers set

- Ideal configuration for network cabling
- Extremely robust and reliable
- Safety lock
- Inserts lock and to they click to prevent possible misuse
- Optimal crimping through precision profil
- Ratchet function
- Adjustment of the crimping pressure
- Easy to change the crimp heads through quick locking device
- In durable plastic storage case
- Two component handle
- Burnished
- Pliers body made of fl t steel

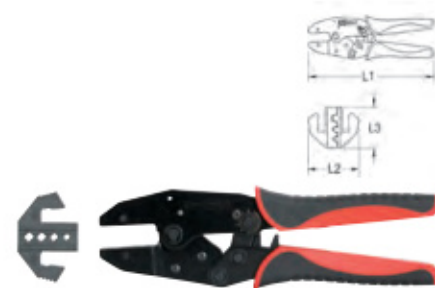


115.1490	5 pcs	Net working crimping pliers set	1,05	
1 x		220 mm		
1 x		AWG: 22 - 14 - 6 - 8, H		
1 x		AWG: 22 - 24, G1		
1 x		AWG: 22 - 24, G2		
1 x		AWG: 22 - 24, G3		



Crimping pliers for Solarlok

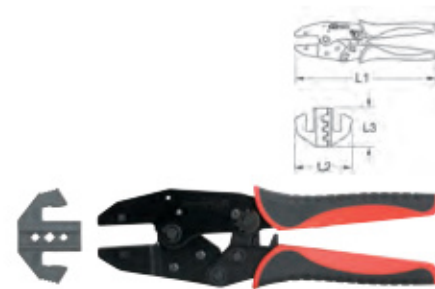
- Extremely robust and reliable
- Safety lock
- Inserts lock and to they click to prevent possible misuse
- Optimal crimping through precision profil
- Ratchet function
- Adjustment of the crimping pressure
- Easy to change the crimp heads through quick locking device
- Two component handle
- Burnished
- Pliers body made of fl t steel



		mm²	AWG	L1 mm	L2 mm	L3 mm	
115.1520		6,0 / 4,0 / 2,5 / 1,5	10 - 15	220,0	50,0	34,0	115.1412 540

Crimping plier for solar coupler MC 3

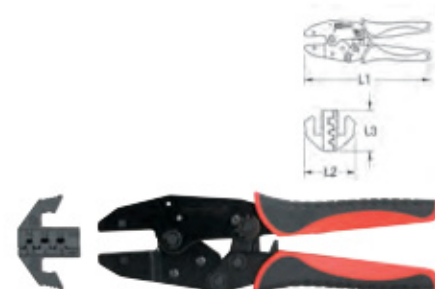
- Extremely robust and reliable
- Safety lock
- Inserts lock and to they click to prevent possible misuse
- Optimal crimping through precision profil
- Ratchet function
- Adjustment of the crimping pressure
- Easy to change the crimp heads through quick locking device
- Two component handle
- Burnished
- Pliers body made of fl t steel



		mm²	AWG	L1 mm	L2 mm	L3 mm	
115.1521		4,0 / 6,0 / 2,5	12 / 10 / 14	220,0	50,0	34,0	115.1413 545

Crimping pliers for solar coupler MC 4

- Extremely robust and reliable
- Safety lock
- Inserts lock and to they click to prevent possible misuse
- Optimal crimping through precision profil
- Ratchet function
- Adjustment of the crimping pressure
- Easy to change the crimp heads through quick locking device
- Two component handle
- Burnished
- Pliers body made of fl t steel



		mm²	AWG	L1 mm	L2 mm	L3 mm	
115.1522		2,5 / 4,0 / 6,0	14 / 12 / 10	220,0	50,0	34,0	115.1414 550

Universal crimping tool set with automatic wire stripper

- Extremely robust and reliable crimping plier
- Safety lock
- Inserts lock and to they click to prevent possible misuse
- Optimal crimping through precision profil
- Ratchet function
- Adjustment of the crimping pressure
- Easy to change the crimp heads through quick locking device
- In durable plastic storage case
- Two component handle
- Burnished
- Pliers body made of fl t steel
- Includes self-closing and damage free automatic wire stripper



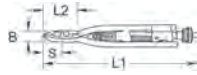
115.1400	8 pcs	Universal crimping tool set with automatic wire stripper	2,37	
1 x		220 mm		
1 x		Ø 0,5 - 4,0 mm, H		
1 x		Ø 1,5 - 10,0 mm, B		
1 x		Ø 0,5 - 6,0 mm, C		
1 x		Ø 0,5 - 4,0 mm, D		
1 x		RG 58 - RG 71, E		
1 x		1,0 - 3,2 mm		
1 x				



WIRE PROCESSING PLIERS

Wire twisting pliers

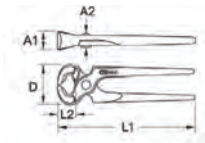
- Anticlockwise
- Serrated execution
- 30° angled jaws
- With additional cutting
- Enables precise, in seconds wire twisting
- Suitable for wire up to 1,0 mm
- Narrow nose for optimal mobility
- Burnished
- Special tool steel



	B mm	L1 mm	L2 mm	S mm	Weight
116.1301	10,0	215,0	40,0	10,0	230
116.1302	12,0	265,0	60,0	13,0	360

Rabitz pliers

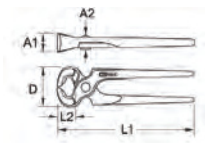
- In accordance to DIN / ISO 9242
- With PVC dipped handle
- Ground heads
- For cutting and twisting tie wire
- Oil-hardened
- Black surface
- Special tool steel



	A1 mm	A2 mm	D mm	L1 mm	L2 mm	Weight
116.1404	18,0	19,0	26,0	190,0	17,0	350
116.1401	20,0	19,0	29,0	220,0	17,0	400
116.1400	25,0	20,0	36,0	250,0	17,0	400
116.1403	26,0	20,0	37,0	280,0	17,0	500

Heavy pinchers

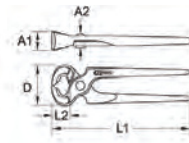
- In accordance to DIN / ISO 9243
- With PVC dipped handle
- Ground heads
- For heavy applications
- Oil-hardened
- Black surface
- Special tool steel



	A1 mm	A2 mm	D mm	L1 mm	L2 mm	Weight
116.1300	24,0	23,0	52,0	200,0	23,0	410

Self opening rabitz pliers

- In accordance to DIN / ISO 9242
- With PVC dipped handle
- Ground heads
- Self-opening handle with internal spring
- For cutting and twisting tie wire
- Oil-hardened
- Black surface
- Special tool steel

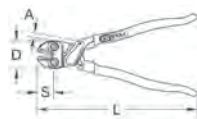


	A1 mm	A2 mm	D mm	L1 mm	L2 mm	Weight
116.1411	23,0	20,0	30,0	220,0	17,0	400
116.1410	27,0	22,0	36,0	250,0	19,0	400
116.1412	25,0	21,0	35,0	280,0	18,0	400

BOLT CUTTERS

Mini bolt cutter, self-releasing

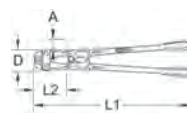
- With pipe handle
- With steel tube legs and eccentric adjustment
- With interchangeable cutter head
- Cutter head made of high quality special steel
- Inductively hardened precision cutting edges
- Phosphate
- Chrome molybdenum



	L mm	S mm	D mm	A mm	Weight
118.0015	205,0	14,0	34,0	17,0	260

Bolt cutters

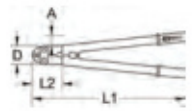
- With pipe handle
- With steel tube legs and eccentric adjustment
- With interchangeable cutter head
- Cutter head made of high quality special steel
- Inductively hardened precision cutting edges
- Phosphate finis
- Special tool steel



	A mm	D mm	L1 mm	L2 mm	Replacement cutter head	Weight
118.0118	20,0	65,0	450,0	115,0	118.0119	1,50
118.0124	22,0	85,0	600,0	136,0	118.0125	2,50
118.0130	27,0	95,0	750,0	155,0	118.0131	4,88
118.0136	35,0	110,0	900,0	170,0	118.0137	6,70
118.0142	40,0	120,0	1050,0	195,0	118.0143	6,70

Bolt cutters

- With forged arms
- With steel tube legs and eccentric adjustment
- With interchangeable cutter head
- Cutter head made of high quality special steel
- Inductively hardened precision cutting edges
- Phosphate finis
- Special tool steel



	A mm	D mm	L1 mm	L2 mm	Replacement cutter head	Weight
118.0218	20,0	65,0	460,0	120,0	118.0119	2,60
118.0224	25,0	82,0	610,0	135,0	118.0125	2,90
118.0230	30,0	95,0	760,0	155,0	118.0131	3,20
118.0236	35,0	110,0	900,0	170,0	118.0137	5,40

Bolt cutter display

- With steel tube legs and eccentric adjustment
- With interchangeable cutter head
- Cutter head made of high quality special steel
- Inductively hardened precision cutting edges
- Phosphate finis
- Special tool steel
- In display stand



	Weight
118.0032 37 pcs Bolt cutter display	96.16
16 x 2 x 450 - 4 x 600 - 4 x 750 - 4 x 900 - 2 x 1050 mm	
16 x 2 x 450 - 4 x 600 - 4 x 750 - 4 x 900 - 2 x 1050 mm	

Reinforcement steel mesh cutter

- Cutting performance up to 40 HRC
- With adjustable cutters
- Low separating force effort
- Limit stop with extra-large buffer area
- Unproblematic gripping of fl t lying construction steels



	S mm	L mm	Weight
118.0246	45,0	820,0	2,79

SADDLER PLIERS

Seat clamp plier set

- Straps for attaching bolster clamps to vehicle seats
- For all common bolster clamps
- Includes 100 clamps
- With PVC dipped handle
- Chrome vanadium



118.0160	101 pcs	Seat clamp plier set	310
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consists of:

118.0161	Clamps, 100 pcs	85
118.0162	Seat clamp plier	180

REVOLVING PUNCH PLIERS

Revolving punch pliers

- With an ergonomic, molded handle
- With inspection panel
- Automatic locking device
- Interchangeable hole punches
- Nickel plated
- Chrome vanadium



118.0041	L1 mm	L2 mm	Weight
	220.0	10.0	325

Revolving punch and eyelet pliers

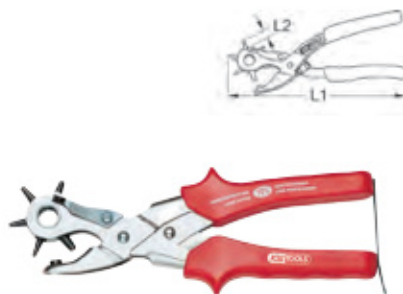
- Ideal for working with eyelets
- With an ergonomic, molded handle
- With inspection panel
- Automatic locking device
- Interchangeable hole punches
- Nickel plated
- Chrome vanadium



118.0042	L1 mm	L2 mm	Weight
	220.0	10.0	325

Revolving punch pliers, normal hand

- Up to 70% power savings
- With an ergonomic, molded handle
- With inspection panel
- Automatic locking device
- Interchangeable hole punches
- Nickel plated
- Chrome vanadium



118.0043	L1 mm	L2 mm	Weight
	250.0	10.0	430

PUNCHED HOLE AND JOGGLER PLIERS

Mini jogger pliers

- Self opening
- For the flanging of sheet metal and body parts
- Up to 1 mm thickness
- Particularly suitable for thin sheet metal edges, curves and arches
- Requires light expenditure of energy
- Hardened flanging jaws
- Special tool steel



118.0056	L mm	T mm	Weight
	220.0	13.0	900

Jogger pliers

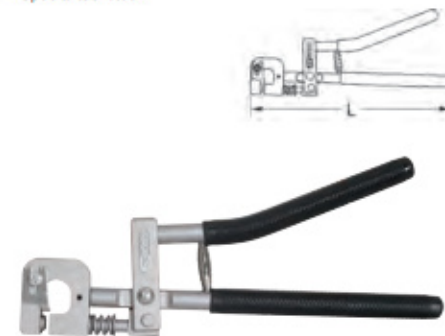
- Self opening
- For the flanging of sheet metal and body parts
- Up to 1 mm thickness
- Requires light expenditure of energy
- Hardened flanging jaws
- Special tool steel



118.0058	L mm	T mm	Weight
	280.0	13.0	1.00

Jogger pliers

- Self opening
- For punching straight and bent sheet metal
- Up to 1.25 mm thickness
- Radius to 40.0 mm
- Hole diameter 5 mm
- Requires light expenditure of energy
- Special tool steel



118.0057	L mm	hole diameter	Weight
	300.0	max. 5 mm	1.00

Punched hole and jogger pliers

- Self opening
- Fast conversion by simply turning the head
- For the flanging and punching sheet metal and body parts
- Punching up to 1,25 mm thickness
- Hole diameter 5 mm
- Requires light expenditure of energy
- Special tool steel



118.0055	L mm	T mm	hole diameter	Weight
	285.0	13.0	max. 5 mm	1.23



PLUMBER PLIERS

Seaming pliers

- For folding of sheet metal
- Straight design
- Insulated handle
- Cast iron



222.1601	L mm	B mm	Weight
	280.0	52.0	660

Seaming pliers

- For folding of sheet metal
- 45° angled jaws
- Insulated handle
- Cast iron



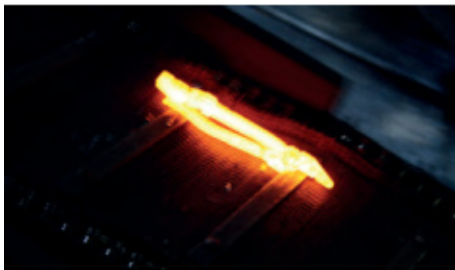
	L mm	B mm	Weight
222.1602	260.0	52.0	670

Seaming pliers

- For folding of sheet metal
- 90° angled jaws
- Insulated handle
- Cast iron



	L mm	B mm	Weight
222.1603	260.0	52.0	760



AUTOMOTIVE CLIP REMOVAL PLIERS

Door panel rivet tool

- For the gentle release of clips of all kinds on the entire vehicle
- Through the gentle release of the clips can be reused
- Self-closing
- With spring clip
- Head burnished
- Chrome vanadium

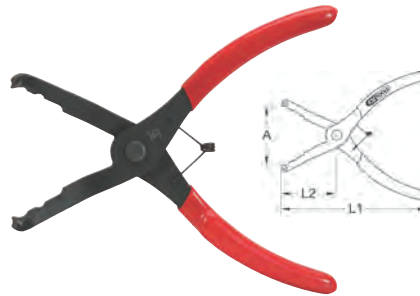


	A mm	L1 mm	L2 mm	Weight
115.1051	32.0	240.0	80.0	240



Trim clip pliers

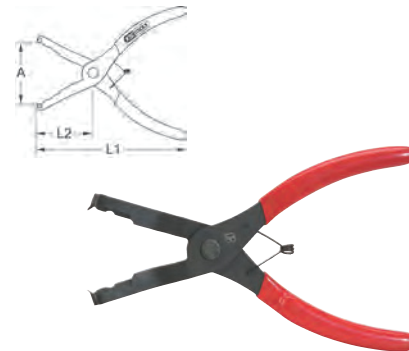
- 35° angled tips
- With various profiles
- For the removal of re-usable plastic rivets and clips
- Self opening
- Chrome vanadium



	A mm	L1 mm	L2 mm	Weight
115.1087	0-82	190.0	60.0	180

Trim clip pliers

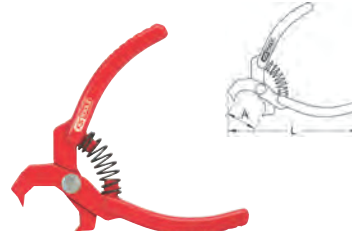
- 80° angled tips
- With various profiles
- For the removal of re-usable plastic rivets and clips
- Self opening
- Chrome vanadium



	A mm	L1 mm	L2 mm	Weight
115.1088	0-72	200.0	66.0	190

Rivet removal pliers, offset

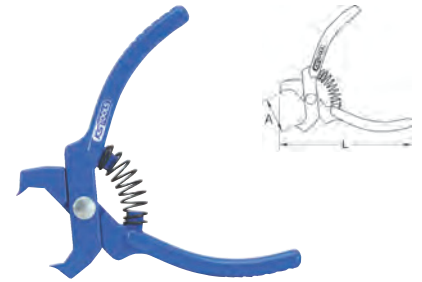
- For the removal of two piece plastic rivets
- Self opening
- Plastic



	A mm	L mm	Weight
115.1097	0-28	100.0	20

Rivet removal tool

- For the removal of two piece plastic rivets
- Self opening
- Plastic

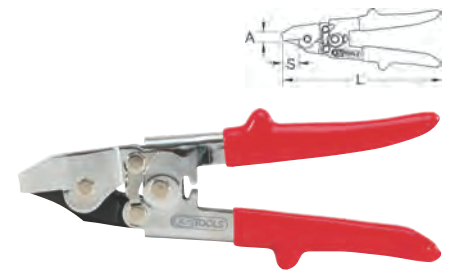


	A mm	L mm	Weight
115.1098	0-20	100.0	20

CARTRIDGE TIP PLIERS

Cartridge tip pliers

- PVC dipped handle
- Very versatile
- Safety locking device
- Clean V-cut in the cartridge tip
- Cut from solid steel
- Chrome vanadium

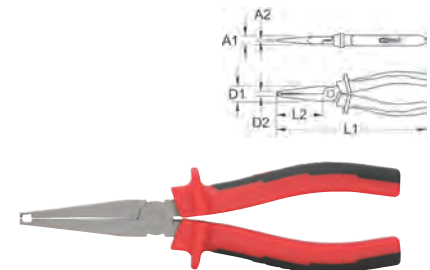


	A mm	L mm	S mm	Weight
140.2220	33.0	210.0	20.0	420

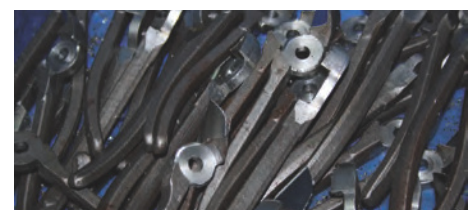
WHEELS & TYRES PLIERS

Wheel nut cap pliers

- For the disassembly and assembly of nut caps
- Two component handle
- Easy removal due to the special mouth pliers
- Chrome vanadium

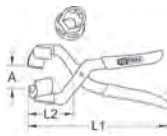


	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
150.2023	0,0-11,5	6,5	20,0	7,0	200,0	64,0	260



HGV wheel nut cap pliers

- PVC dipped handle
- For removing of wheel nut caps
- No slipping through specially coated jaws
- Ideally suited for commercial vehicles
- Special tool steel

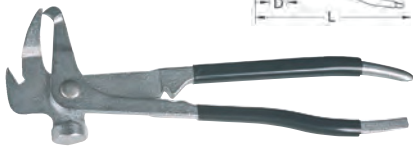
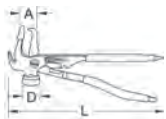


	A mm	L1 mm	L2 mm	
150.1995	28-60	250.0	72.0	305



Wheel balance weight pliers

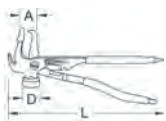
- Dipped covered handles
- For cutting off the balance weights
- With additional function for opening and closing the spring clips
- Chrome vanadium



	A mm	D mm	L mm	
150.2025	26,0	22,0	250,0	450

Wheel balance weight pliers, self opening

- Dipped covered handles
- For cutting off the balance weights
- Pliers and Hammer plastic covered
- Suitable for alloy wheels
- With additional function for opening and closing the spring clips
- Chrome vanadium



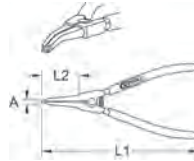
	A mm	D mm	L mm	
150.2024	32,0	28,0	250,0	380

CHASSIS & BRAKE PLIERS

Drive shaft removal pliers

- 30° angled
- With PVC dipped handle
- Self-closing
- Plier head with cut out and ring stop body
- For the disassembly and assembly of nut caps without lug retainer
- Chrome vanadium

Application range: For the dismantling of the external (bellow joints in the exchange of the axle boots and / or the drive shaft sleeves). e.g.: for Audi, Opel, VW (Golf, T4), Fiat, Mitsubishi.

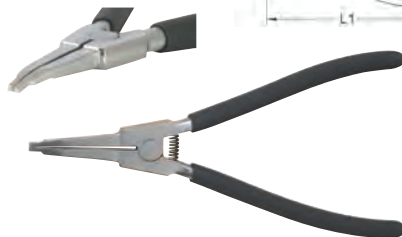
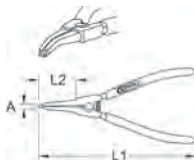


	A mm	L1 mm	L2 mm	
115.0991	0-33	210.0	50.0	215

Drive shaft removal pliers

- Slightly angled
- With PVC dipped handle
- Self-closing
- Checkered plier head
- For the disassembly and assembly of drive shaft circlips without lug retainer
- Slip proof
- Chrome vanadium

Application range: For the removal of external circlips e.g. on synchronisation joints



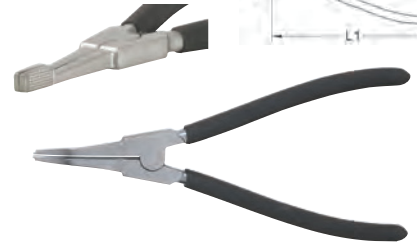
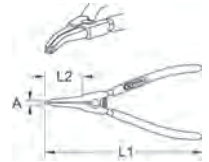
	A mm	L1 mm	L2 mm	
115.0992	0-37	210.0	50.0	220



Drive shaft removal pliers

- Straight form
- With PVC dipped handle
- Self-closing
- Checkered plier head
- For the disassembly and assembly of drive shaft circlips without lug retainer
- Slip proof
- Chrome vanadium

Application range: For the removal of external circlips e.g. on drive shafts, transmissions, etc



	A mm	L1 mm	L2 mm	
115.0993	0-37	210.0	48.0	220

Locking pliers, serrated

- With PVC dipped handle
- Serrated and angular tip
- With self closing mechanism
- For the dismantling and assembly locking
- For external security rings
- No slipping due to the serrated tips
- Chrome molybdenum

Ideally suited for the dismantling and assembly of locking on drive shafts on for example VW, MB and Opel.

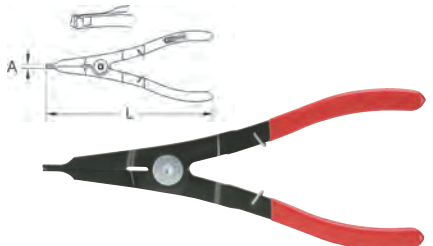


	A mm	L mm	
115.1048	0-20	210,0	220

Locking pliers, fully formed tips

- With PVC dipped handle
- Fully formed tips
- With self closing mechanism
- For the dismantling and assembly locking
- For external security rings
- No slipping due to the serrated tips
- Chrome molybdenum

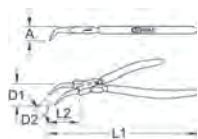
Ideally suited for the dismantling and assembly of locking on drive shafts on for example VW, MB, Opel, BMW and Ford.



	A mm	L mm	
115.1049	0-20	240,0	600

Wheel bearing circlip pliers, angled

- In accordance to DIN 5256
- Slip inhibiting machined precision tips
- 45° angled version
- Self closing
- With rubber grip
- Power version
- Die forged
- Chrome vanadium

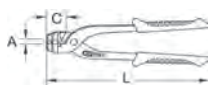


	mm	A mm	D1 mm	D2 mm	L1 mm	L2 mm	kg
500.1038	19.0 - 60.0	22.0	23.0	2.3	240.0	32.0	250
500.1039	19.0 - 60.0	22.0	23.0	3.0	300.0	46.0	490

BRAKE PLIERS

Brake pipe bending pliers, 2 in 1

- For 4,75 and 6,00 mm brake pipes
- With plastic handle
- Ideally suitable for bending pipes directly
- Suitable for copper, steel, and plastic coated brake pipes
- Burnished
- Special tool steel



	A mm	L mm	C mm	kg
120.2000	0-27.5	240.0	37.0	400

Car brake spring pliers

- For attaching and dismantling the brake shoes retaining spring
- For glued and riveted brake shoes
- Special surround
- Chrome vanadium



	A mm	L mm	kg
150.2211	130.0	325.0	335



Grease cap pliers

- Hard rubber handle
- For the damage free drawing off of grease caps
- 2x6 moveable adjustable steps
- Wedge shaped jaw profil
- Head burnished
- Special tool steel



	A mm	C mm	L mm	kg
450.0210	0-100	85.0	500.0	1.20

Brake spring pliers

- For the disassembly and assembly of hand brake cables
- Allows a safe working environment
- Chrome vanadium

Application range: VW, Audi, BMW, Citroën, Nissan, Peugeot, Renault, Rover, Seat etc.



	L mm	kg
150.2118	225.0	175

Car brake spring pliers

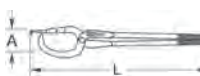
- For attaching and dismantling the brake shoes retaining spring
- For glued and riveted brake shoes
- Special surround
- Chrome vanadium



	A mm	L mm	kg
150.2116	130	220.0	340

HGV brake spring pliers

- For attaching and dismantling the brake shoes retaining spring
- For glued and riveted brake shoes
- Special surround
- Interchangeable tip
- Knurled handle
- Chrome vanadium



	A mm	L mm	Replacement tip	kg
450.0320	205.0	500.0	450.0321	1.25

OIL & FUEL SERVICE PLIERS

Special hose pliers

- With PVC dipped handle
- Extra fl t jaws to the end
- For dismantling and assembly
- For removing of hose connections from hose tails
- Special tool steel

Ideally suited in e.g. fuel vacuum hoses, low pressure systems and water hoses.



	A mm	L mm	C mm	kg
115.1044	0-30	195.0	70.0	190

Fuel pipe pliers

- Two component handle
- Cranked execution
- Integrated cutting edge
- For loosening and tightening on fuel lines that are difficult to reach
- No damage of the overfl w pipe
- Matt chrome
- Chrome vanadium

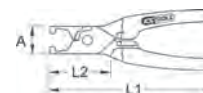
Ideally usable in security ring at fuel directions and change valve on BMW motorcycles with 2 valve technology Suitable e.g. for VW/Audi, Mercedes Benz, Ford, Opel, Peugeot, Volvo, Daihatsu, Mazda and Toyota.



	A mm	L1 mm	L2 mm	S mm	kg
115.1067	0-75	200.0	75.0	15.0	220

Fuel connection pliers

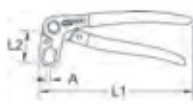
- PVC dipped handle
- For unbolting of fuel pipe siezed connections
- Suitable for service and maintenance works
- Special tool steel



	A mm	L1 mm	L2 mm	kg
115.1094	0-30	160.0	50.0	220

Fuel pipe pliers, offset

- PVC dipped handle
- 90° angled head
- For the correct unbolting of the sized connections with rest tongues
- Suitable for service and maintenance works on the fuel tank
- For difficult to access areas
- Painted black
- Aluminium



	A mm	L1 mm	L2 mm	Weight
115.1099	0-24	220.0	39.0	280

Fuel pipe connection pliers

- For opening and closing the coupling on fuel pipe connections
- Is required for fuel filter changes and/or engine repairs
- With two component handle
- Chrome vanadium

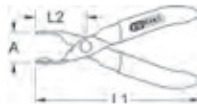
Application range: Volkswagen Audi, Fiat, GM, Opel, Mercedes (e.g. M class petrol engine) etc.



	L mm	Weight
115.0900	230.0	310

Fuel connection pliers

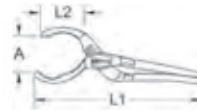
- PVC dipped handle
- For opening the coupling on fuel pipe connections
- Blue and green: for compression couplings connected fuel pipe
- Red: with 2 noses 6,5 mm x 6,0 mm for GM and Opel fuel pipe
- Special tool steel



	A mm	L2 mm	L1 mm	Weight
115.1091	20,0	35,0	120,0	80
115.1092	22,0	35,0	120,0	80
115.1093	22,0	35,0	120,0	80

Oil filter pliers

- With PVC dipped handle
- 5-stage industrial adjustment
- Universal usage
- Special tooth profile on the jaws
- Safety stop on the external diameter
- Special tool steel



	A mm	L1 mm	L2 mm	Weight
150.9317	50-125	290.0	110.0	500

HOSE CLAMP PLIERS

Hose clamp pliers, ear type

- Knurled handle
- To the dismantling and assembly of "ear type" hose clamp
- For connections on axle boots, coolers and fuel hoses
- Universal usage
- Chrome molybdenum

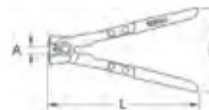


	A mm	L1 mm	L2 mm	Weight
115.1039	0-60	230.0	25.0	320

Hose clamp pliers, ear type

- With PVC dipped handle
- For the fitting of ear clamps
- No sticking up of the ears during the press process
- Uniform compressing of the ear piece
- No damage to the sleeve
- Nickel-plated finish
- Chrome molybdenum

Application range: Axle boots, coolant and fuel hoses for Volkswagen, Audi, Opel, BMW, Mercedes, Honda, Nissan and Mazda

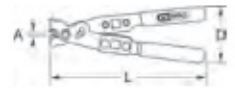


	A mm	L mm	Weight
115.1050	0-22	260.0	380

Hose clamp pliers

- With PVC dipped handle
- With 3/8" drive for use with a torque wrench
- For the fitting and clamping of ear clamps
- 1/2" 4-point recess in the handle for use with torque wrench
- Chrome molybdenum

Application range: Volkswagen, Opel, Seat, GM, Ford, Nissan, Mercedes, Mazda, Honda, Chrysler, BMW and Audi



	A mm	L mm	Weight
115.1053	0-17	240.0	540

Hose clamp pliers for torque wrench

- Black plastic handle
- 3/8" drive for use with a torque wrench
- Enables clamping and/or compressing of the hose clamps
- Suitable for the stainless steel hose clamps on drive shafts
- Robust cast steel construction

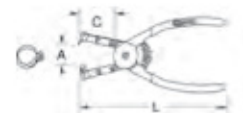


	A mm	L mm	Weight
115.1056	0-45	270.0	880

HOSE CLAMP PLIERS

Click hose clamp pliers

- Suitable for the correct assembly and disassembly of Click, Click-R and Cobra clamps
- Also suitable for self-tensioning hose clamps with fl 13 pinch ends
- With PVC dipped handle
- Self-opening
- Chrome molybdenum

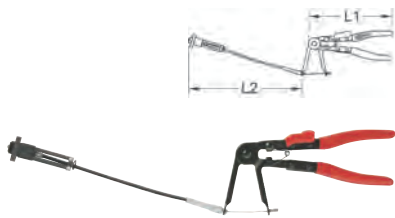


	A mm	C mm	L mm	Weight
115.1040	0-25	40.0	160.0	120



Hose clamp pliers with bowden cable

- PVC dipped handle
- For spring pipe clamps
- 650 mm bowden cable
- Includes locking mechanism
- Internal spring
- For difficult to reach clamps
- Chrome molybdenum



	Ø mm	L1 mm	L2 mm		g
115.1041	0 - 60	200,0	650,0	115.1041-1	470



Hose clamp pliers type MU3

- For secure and correct dismantling and assembly of clamps
- Suitable for fitting and eccentric clamps
- With 600 mm bowden cable
- Adjustable length bowden cable
- Includes locking mechanism and ratchet function
- For difficult to reach clamps
- For new type and hard to access steel band clamps
- Special tool steel
- Suitable for VAG 2,0 TDI / MC:BKD, Volkswagen Passat from 2005, Touran, Golf V, Skoda Octavia, Audi A3.



	Ø mm	L1 mm	L2 mm		g
115.1064	0 - 50	240,0	600,0	115.1066	540

Hose clamp pliers with double bowden cable

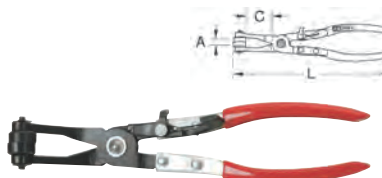
- PVC dipped handle
- For spring pipe clamps
- 600 mm bowden cable
- Adjustable length bowden cable
- Includes locking mechanism
- For difficult to reach clamps
- Special tool steel



	Ø mm	L1 mm	L2 mm		g
115.1065	0 - 70	270,0	600,0	115.1065-1	540

Hose clamp pliers, angled

- 45° angled head
- With variable jaws
- For difficult to reach clamps
- Includes locking mechanism
- With PVC dipped handle
- Chrome molybdenum

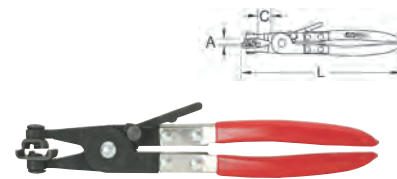


	A mm	C mm	L mm	g
115.1042	0-65	55,0	220,0	210



Universal hose clamp pliers

- Universal crown profile
- For difficult to reach clamps
- With PVC dipped handle
- Includes locking mechanism
- Versatile usage
- Chrome molybdenum



	A mm	C mm	L mm	g
115.1043	0-48,5	40,0	220,0	240

Click hose clamp pliers, forged

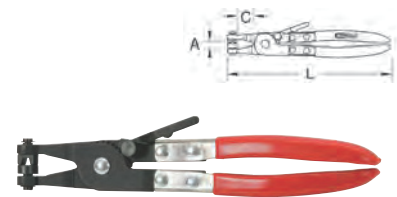
- Suitable for the correct assembly and disassembly of Click, Click-R and Cobra clamps
- Also suitable for self-tensioning hose clamps with fitted 3 pinch ends
- Re-usable V2A-clamps
- With PVC dipped handle
- With self-opening mechanism
- Chrome molybdenum



	A mm	C mm	L mm	g
115.1045	0-38	25,0	180,0	215

Hose clamp pliers

- PVC dipped handle
- For spring pipe clamps
- Includes locking mechanism and ratchet function
- Chrome molybdenum



	A mm	C mm	L mm	g
115.1046	0-45	37,0	220,0	230

Spring band clamp pliers with gooseneck

- For actuation of self tensioning spring band clamps
- For cooling and heating systems
- Semi rigid, plastic coated gooseneck
- Convenient one handed operation in deep regions
- Fixing of the clamp by micro teeth
- Ideal for confined spaces
- Working head with raised grippers and wide opening
- Working head with slide guide and retraction spring
- With two component handle
- Chrome molybdenum

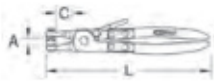
Application area: NORMA FBS, MUB FBS-STD, FBS-RSV, etc.



	Ø mm	L1 mm	L2 mm		g
115.1190	18-54	220,0	660,0	115.1190-1	620

Hose clamp pliers

- PVC dipped handle
- For spring pipe clamps
- Includes locking mechanism and ratchet function
- Chrome molybdenum



	A mm	C mm	L mm	
115.1047	0-45	37.0	220.0	230

Hose clamp pliers

- Work side
- For compressing locking hose clips
- With PVC dipped handle
- Chrome vanadium



	L mm	
115.1185	240.0	335

Hose clamp pliers with prism reception

- For self-tensioning hose clamps with flat 3- terminal ends
- In particular for fuel lines, cooling and washing water hoses
- Prism reception
- Self opening
- Surface nickel-plated
- Special steel Application range: VW, Audi, Mercedes Benz, Toyota etc.



	Clamping range mm	L mm	
115.1187	8-18	195.0	170

Hose clamp pliers with swivel prism reception

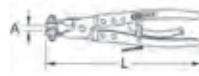
- For self-tensioning hose clamps with flat 3- terminal ends
- In particular for fuel lines, cooling and washing water hoses
- Swivel prism reception
- Self opening
- Surface nickel-plated
- Special steel Application range: VW, Audi, Mercedes Benz, Toyota etc.



	Clamping range mm	L mm	
115.1188	8-18	210.0	200.0

Hose clamp pliers type MU1

- For secure and correct dismantling and assembly of clamps
- Suitable for flat fitting and eccentric clamps
- Includes locking mechanism and ratchet function
- For difficult to reach clamps
- For new type and hard to access steel band clamps
- Special tool steel Suitable for VAG



	A mm	L mm	
115.1062	0-30	235.0	390

Hose clamp pliers type MU2

- For secure and correct dismantling and assembly of clamps
- Suitable for flat fitting and eccentric clamps
- Includes locking mechanism and ratchet function
- For difficult to reach clamps
- For new type and hard to access steel band clamps
- Special tool steel Suitable for VAG 2.0 TDI / MC: BKD, VW Passat from 2005, Touran, Golf V, Skoda Oktavia, Audi A3 etc.



	A mm	L mm	
115.1063	0-40	295.0	470

Hose clamp pliers

- Variable jaws
- 45° angled head
- For opening and closing of click and click R hose clamps
- Especially suitable for narrow hard to access areas
- Chrome molybdenum



	A mm	C mm	L mm	
115.1057	0-30	45.0	200.0	180

Hose clamp gripping plier

- Forged gripping jaws
- Serrated execution
- Size adjustment using the adjustment wheel
- Quick release lever
- Easy locking action
- For round and flat material
- Nickel plated
- Chrome vanadium



	Clamping range mm	L mm	
115.1126	18-36	175.0	231
115.1127	18-54	230.0	420

HOSE CLAMP PLIER SETS

Hose clamp gripping plier set

- Forged gripping jaws
- Serrated execution
- Size adjustment using the adjustment wheel
- Quick release lever
- Easy locking action
- For round and flat material
- Nickel plated
- Chrome vanadium



115.1125	2 pcs 175 - 230 mm	653

Automotive hose clamp plier set

- Handle dip insulated
- Ideal for clamps low down in the engine
- Includes locking mechanism
- For self tensioning spring pipe clamps with 3 point mounting
- Self opening
- For opening and closing re/useable clic hose clamps, type Clic + Clic-R
- For difficult to reach clamps
- Special tool steel

Application area: For connecting and removing fuel, immersed ventilation, coolant, washer water and vacuum hoses, etc.

Application range: VW, Audi, Mercedes Benz, Toyota etc.



115.1104	4 pcs Automotive hose clamp plier set	1.12

consists of:

115.1045	Click hose clamp plier, forged, 180mm	240
115.1042	Hose clamp plier, angled, 220mm	210
115.1187	Hose clamp plier with prism reception, 8-18mm	170
115.1065	Hose clamp plier with double bowden cable, 600mm	550

Automotive hose clamp plier set

- PVC dipped handle
- For opening and closing of cobra hose clamps
- Swivel pressed jaws
- Includes locking mechanism and ratchet function
- Self opening mechanism
- For the dismantling and assembly of hose clamps
- Includes bowden cable
- Chrome molybdenum



				kg
115.1055	7 pcs	Automotive hose clamp plier set	4.00	

consists of:

			kg
115.1041	Hose clamp plier with bowden cable, 650 mm	470	
115.1042	Hose clamp plier, angled, 220mm	210	
115.1043	Hose clamp plier, lockable, with swivel jaw (crown profile)	240	
115.1044	Tube loosening plier	190	
115.1045	Click hose clamp plier, forged, 180mm	240	
115.1046	Hose clamp plier standard execution, lockable, straight	230	
115.1047	Hose clamp plier standard execution, lockable, straight	230	



HOSE STRP CUTTER PLIERS

Hose strap cutter, angled

- To be sliced from earless hose clamps
- For connections on axle boots, coolers and fuel hoses
- Dipped covered handle
- Chrome vanadium

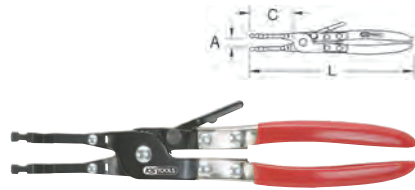


		L mm	kg
115.1186		220.0	345

SOLDERING WIRE HOLDING FORCEPS

Soldering wire pliers

- With PVC dipped handle
- For the safe fixing of b aded wire
- With self opening internal spring
- Includes locking mechanism
- Chrome molybdenum



	A mm	C mm	L mm	kg
115.1052	78,0	65,0	245,0	260

INCANDESCENT BULB PLIERS

Incandescent bulbs plier

- With protecting foam material
- For the removal and replacement of incandescent bulbs
- With internal spring
- Plier jaws with foam protection material
- Suited for glass socket lamps of 4,0 mm until 6,0 mm
- Special plastic

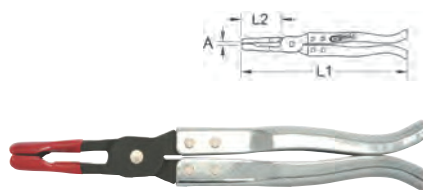


	A mm	C mm	L mm	kg
115.1054	0-32	45,0	160,0	70

VALVE AND PISTON PLIERS

Valve shaft removal pliers

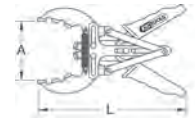
- Slim execution
- Plastic coated jaws
- Knurled handle
- With self opening mechanism
- Quick and easy removal of valves from the valve shaft
- For the extension of the valve spring lever
- Ideally suitable for engines with 4 valve technology
- Nickel plated execution
- Special tool steel



	A mm	L1 mm	L2 mm	kg
115.1061	0-125	275,0	100,0	380

Piston ring pliers

- PVC dipped handle
- For the safe disassembly and assembly of piston rings
- Nickel plated surface
- Special tool steel



	Ø mm	A mm	L mm	kg
150.1175	50-100	0-100	210,0	305
150.1176	80-120	0-120	220,0	340
150.1177	110-160	0-160	280,0	445

Piston ring pliers

- For the removal and replacement of piston rings
- Suitable for most cars and vans
- Plastic coated handle
- Self closing pliers
- Special steel

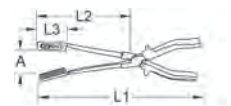


	L mm	kg
150.1179	221,0	210

IGNITION COILS AND GLOW PLUG PLIERS

Spark plug pliers

- Long, angular gripper sleeves
- Gripping sleeves with milled inner profil
- Long plier arms
- Wide safety margin to the hot assembly
- For extracting low lying spark plugs
- With two component handle
- Chrome vanadium



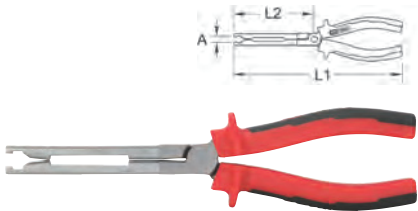
	A mm	L1 mm	L2 mm	L3 mm	kg
500.7510	0-80	290,0	145,0	50,0	280



Glow plug pliers

- With two component handle
- Specially milled pliers profile for positive holding
- Suitable for very firmly seated glow plugs
- For the expert installation and removal of glow plugs
- For difficult to access areas
- Special tool steel

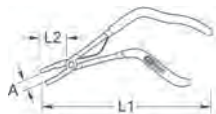
Ideally suitable for glow plugs in the newer diesel engine generation e.g. Mercedes, BMW, Volkswagen and Audi.



	A mm	L1 mm	L2 mm	Weight g
500.7330	0-125	265,0	95,0	400

Glow plug dismantling pliers

- With rubber dipped handle
- Serrated jaws
- Length wise mounted handle arranged at the plier jaw
- With self opening mechanism
- In order to pull out the glow plugs from the glow plug canal in the cylinder head
- Range also possible to extract incompletely inserted glow plugs
- Optimum power transmission with rotary and train movements
- Special tool steel

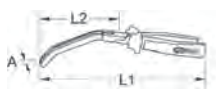


	A mm	L1 mm	L2 mm	Weight g
500.7335	0-35	260,0	40,0	280

Glow plug pliers, angled

- With two component handle
- Angled head
- Specially milled plier profile for positive holding
- Suitable for very firmly seated glow plugs
- For the expert installation and removal of glow plugs
- For difficult to access areas
- Special tool steel

Ideally suitable for glow plugs in the newer diesel engine generation e.g. Mercedes, BMW, Volkswagen and Audi.

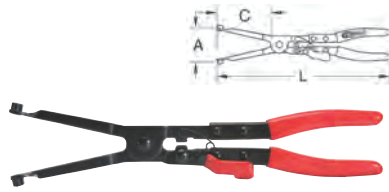


	A mm	L1 mm	L2 mm	Weight g
500.7310	0-105	235,0	120,0	400

EXHAUST PLIERS

Exhaust clamp pliers PSA

- With PVC dipped handle
- Includes locking mechanism
- With self opening mechanism
- For the dismantling and assembly of exhaust clamps
- Plier points-guide sleeve prevents slippage
- No tension loss when holding
- Chrome molybdenum



	A mm	C mm	L mm	Weight g
150.1535	0-55	95,0	310,0	430

Exhaust rubber unhooking tool

- For removal of rubber exhaust holders
- A 25° angle
- For all common vehicle types
- Plastic coated handle
- Chrome vanadium



	L mm	Weight g
150.1245	280,0	345

CIRCUIT STOPPER PLIERS

ALLinONE Hose clamp pliers set

- Simple sealing of pipe lines, 4.75 mm (3/16") to 14.0 mm (9/16")
- Rotary magazine with 4 slots for the corresponding pipe size
- Ideal for maintenance work with gasoline, oil, water and antifreeze
- Protects against ingress of moisture and dirt
- Ideal for use in passenger cars, vans and large vans, commercial vehicles, tractors, agricultural machinery, construction machinery and industrial applications
- Special plastic



	Ø mm	A mm	L mm	Weight g	
122.1295	2 pcs	4,75-14	38,0	120,0	149

consists of:

	Weight g
122.1296 ALLinONE Fluidstopper Ø 4,75 - 14 mm	60
122.1297 Replaceable plastic plugs for 122.1296 pipe stopper pliers	50

Hose clamp pliers set

- For simple clamping of flexible for hoses from 15.9 mm (5/8") up to 60.0 mm (2,3/8")
- For stopping the flow
- The hose is a broad area squeezed against the stable support surface, damaging the hose is avoided
- Variable adjustment with locking function
- Ideal for maintenance work with gasoline, oil, water and antifreeze
- Protects against leakage of fuel, oil, water and antifreeze
- Ideal for use in passenger cars, vans and large vans, commercial vehicles, tractors, agricultural machinery, construction machinery and industrial applications
- Heat resistant up to 160 ° C
- Plastic



	Weight g
115.5050 3 pcs Hose clamp pliers set	370

consists of:

	Weight g
115.5052 Clamping pliers 150 mm for hoses up to Ø 15 mm	80
115.5053 Clamping pliers 180 mm for hoses up to Ø 30 mm	130
115.5054 Clamping pliers 250 mm for hoses up to Ø 60 mm	160



Hose clamp pliers set 90° angled

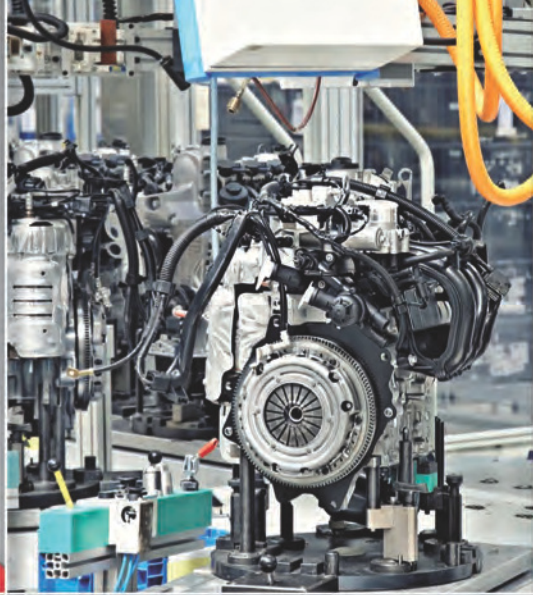
- For simple clamping of flexible for hoses from 15.9 mm (5/8") up to 60.0 mm (2,3/8")
- Angled design for use in confined spaces
- For stopping the flow
- The hose is a broad area squeezed against the stable support surface, damaging the hose is avoided
- Variable adjustment with locking function
- Ideal for maintenance work with gasoline, oil, water and antifreeze
- Protects against leakage of fuel, oil, water and antifreeze
- Ideal for use in passenger cars, vans and large vans, commercial vehicles, tractors, agricultural machinery, construction machinery and industrial applications
- Heat resistant up to 160 ° C
- Plastic



	Weight g
115.5055 3 pcs Hose clamp pliers set 90° angled	370

consists of:

	Weight g
115.5057 Hose clamp gripper 90°, Ø 15mm	55
115.5058 Hose clamp gripper 90°, Ø 23mm	95
115.5059 Hose clamp gripper 90°, Ø 35mm	130



KSTOOLS

Innovation is our mission!

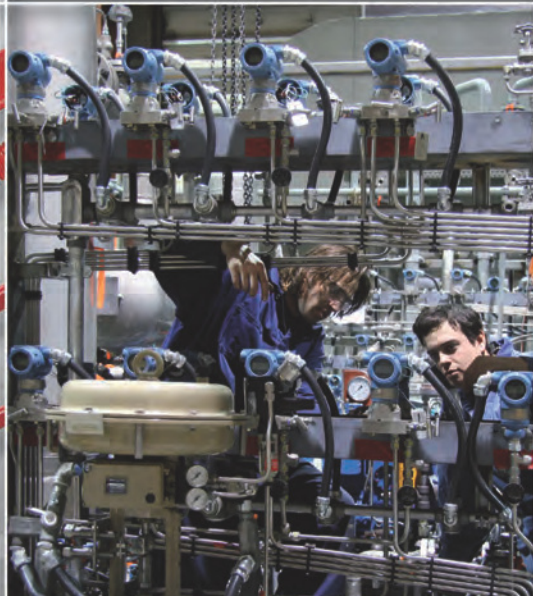
PLIERS

CLASSIC

ERGOTORQUE

ULTIMATE PLUS

GRIPfix Xtreme



PRECISION TOOLS



Innovation is
our mission!

	PAGE
MAGNETIC LIFTER	280
INSPECTION MIRRORS	280 - 281
VDE PRECISION SCREWDRIVER	281 - 282
VDE PRECISION SCREWDRIVER SETS	282
PRECISION SCREWDRIVER	282 - 283
PRECISION SCREWDRIVER SETS	283 - 284
PRECISION SCREWDRIVER DISPLAY STANDS	284
MAGNETIZERS AND DEMAGNETIZERS	284
PRECISION PLIERS	284 - 285
PRECISION PLIER SETS	285 - 286
ESD PRECISION PLIERS	286 - 289
ESD PRECISION PLIER SETS	290
SOLDERING TECHNOLOGY	290

PRECISION



For the protection of electrostatically endangered construction elements and in order to avoid disturbances in circuits. These handles have as the required and relevant standards and rules (e.g., IEC TR 61340-5, DIN EN 61340-5, SP Method 2472) for slow and controlled discharging of electrical loads.



CAUTION:
ESD tools should not be used on live working i.e. the power source must be disconnected. Damages are not to be expelled by an electrical impact!

ESD standard IEC61340-5-1

Capacity :	Definition according to DIN EN 61340-5-1
Slightly rechargeable:	Minimisation of the load generation
Against screen properties electrostatic unloading: (protection)	Barrier or exposure which limits the current passage and the energy of an electrostatic unloading is dampend that the maximum energy of a human body model discharge from 1000 V does not exceed 50nJ.
Electrostatic conductivity:	$1 \times 10^2 \Omega \leq R_o < 1 \times 10^5 \Omega$
Electrostatic sliding:	$1 \times 10^5 \Omega \leq R_o < 1 \times 10^{11} \Omega$
Insulation:	$R_o \geq 1 \times 10^{11} \Omega$

Applications:



ESD - electrical working (electrostatic discharge)

Pliers

- 2 Component handle with ergonomic design
- Hot forged and tempered
- Head with anti glare surface
- Precise machines, oil hardened and tempered
- Cutting edges inductively hardened
- Accurately worked joint for even opening with very little friction
- Self opening due to a double spring
- Perfect torque transmission
- High cutting performance
- Ideal for delicate applications in electronics, precision mechanics as well as model construction area

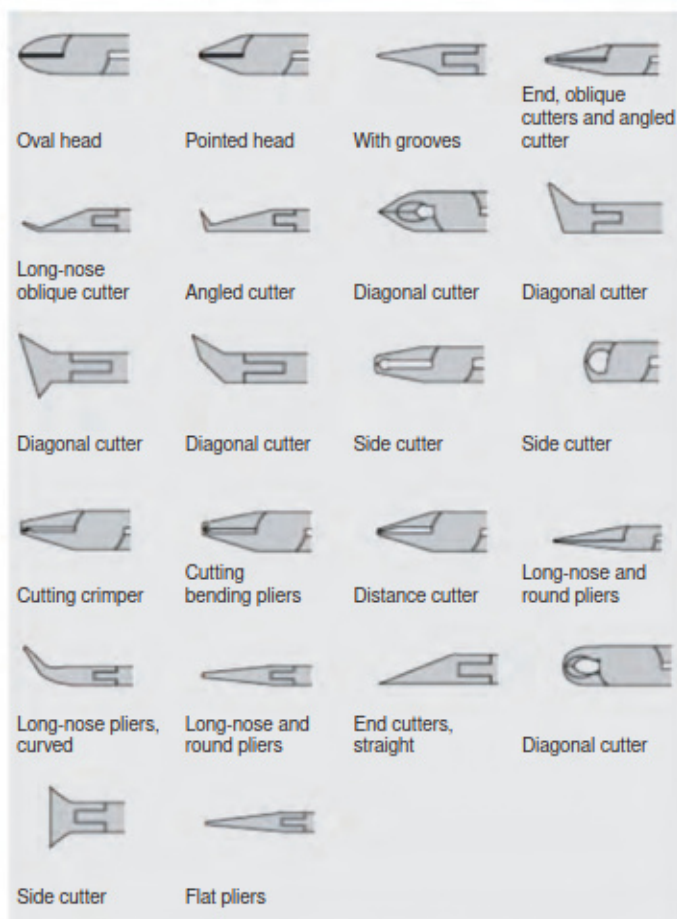
Optimum power transmission and perfect operation due to the ergonomic handle design



ESD protection - suitable for ESD workplace



Pliers profil



Wire classes

Material examples	Copper, plastic	Wire cable fibre, steel wire	Spring steel wire
Wire type	Flexible	Hard	Piano wire
Tensile strength N/mm ² kp/mm ²	220 22	1800 180	2300 230



MAGNETIC LIFTER

2 in 1 Telescopic magnetic holder

- Load capacity to 0.5 kg
- Extendable telescopic function
- Cleaning needle
- Clip for the breast pocket
- Ideal for adjusting wiper nozzles
- Aluminium



	Head Ø mm	L mm	Wt g
550.1001	8.0	150,0 - 675,0	25

Telescopic magnetic lifter

- Magnet power raised 35% due to energy safety cap
- Stainless steel



	Head Ø mm	L mm	Wt g
550.1004	13.0	178,0 - 675,0	70

Telescopic magnetic lifter

- Load capacity to 1.5 kg
- Extendable telescopic function
- Magnet power raised 35% due to energy safety cap
- Stainless steel



	Head Ø mm	L mm	Wt g
550.1002	18.0	178,0 - 675,0	80

Telescopic magnetic lifter

- Load capacity to 2 kg
- With an extendable telescopic function
- Clip for the breast pocket
- Special steel



	Head Ø mm	L mm	Wt g
550.1000	13.0	130,0 - 630,0	30

Telescopic magnetic lifter

- Load capacity to 5 kg
- With rotary head
- With an extendable telescopic function
- Magnet power raised 35% due to energy safety cap
- Stainless steel



	Head Ø mm	L mm	Wt g
550.1003	18.0	200,0 - 700,0	90

Flexible magnetic holder

- 200 g capacity
- Flexible shaft
- 4 mm with a very thin magnetic seat
- One component handle



	L mm	Wt g
550.1032	400,0	20

Flexible magnet lifter

- Load capacity to 1 kg
- Flexible shaft
- Two component handle
- Special steel



	Head Ø mm	L mm	Wt g
550.1025	15.0	510,0	185

Flexible magnet lifter

- Load capacity to 2 kg
- Detachable inner cover
- Magnet power raised 35% due to energy safety cap
- Special steel



	Head Ø mm	L mm	Wt g
550.1010	10.0	585,0	130

Flexible magnet lifter

- Load capacity to 2 kg
- Flexible shaft
- Two component handle
- Special steel



	Head Ø mm	L mm	Wt g
550.1026	17.0	510,0	200

Telescopic magnetic lifter

- Load capacity to 2.5 kg
- With flexible magnetic head
- With an extendable telescopic function
- Includes cleaning needle for washer jet nozzles
- Clip for the breast pocket
- Aluminium



	Head Ø mm	L mm	Wt g
550.1023	11.0	150,0 - 590,0	60

Flexible magnet lifter

- Load capacity to 3 kg
- Flexible shaft
- Two component handle
- Special steel



	Head Ø mm	L mm	Wt g
550.1027	19.0	510,0	200

Flexible pick up tool

- Flexible
- Circular diameter max. 20.0 mm
- Stainless steel



	Ø mm	L mm	Wt g
550.1301	20	600,0	150

Magnet lifting and claw type gripper set

- Ideally suited for picking up screws and small parts
- Load capacity to 200 g
- Flexible shaft
- 4 mm with a very thin magnetic seat
- Pick-up tool with max. diameter of 20.0 mm
- Magnet holder with one component handle
- Stainless steel pick-up tool



			Wt g
550.1050	2 pcs	Magnet lifting and claw type gripper set	182



INSPECTION MIRRORS

Insulated inspection mirror

- Insulated handle to IEC 60900
- Insulated
- Chrome vanadium



	D mm	L mm	Wt g
117.1630	22.0	175.0	20

Mechanics mirror

- For visual monitoring and troubleshooting
- Ideal for difficult to access areas
- Special steel



	D mm	L mm	Wt g
118.0086	12.0	130.0	4
118.0087	21.0	130.0	9
118.0088	27.0	130.0	16

Telescopic mechanics mirror

- Extendable telescopic function
- For visual monitoring and troubleshooting
- Double ball joint
- Head swiveling in all directions
- Clip for the breast pocket
- Ideal for difficult to access areas
- Special steel



	D mm	L mm	Wt g
550.1030	32.0	178 - 530	40

Telescopic inspection mirror

- Extendable telescopic function
- For visual monitoring and troubleshooting
- With single ball joint
- Head swivels in all directions
- Impact resistant mirror
- Stainless steel



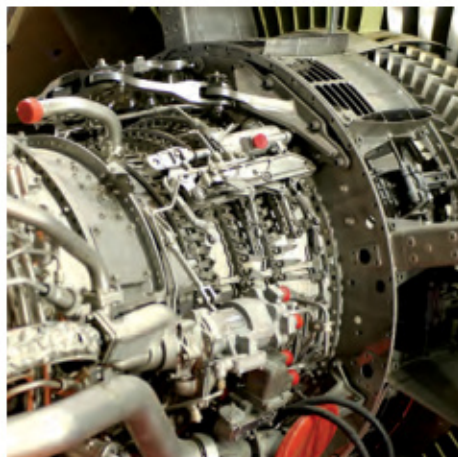
	B mm	H mm	L mm	Wt g
550.1007	45.0	63.0	178.0-675.0	100

Telescopic inspection mirror

- Extendable telescopic function
- For visual monitoring and troubleshooting
- Single ball joint
- Mirror out of stainless steel with plate-glass
- Stainless steel



	B mm	H mm	L mm	Wt g
550.1019	57.0	63.0	178.0-630.0	100



Flexible inspection lamp with magnet and mirror

- Halogen lamp
- Flexible long shaft, 400 mm
- With optional attachable flexible mirror (35 x 20 mm)
- With optional clip-on light-flooded magnet
- Includes extension 500 mm
- Approx: 60 hours lamp duration
- Includes 3 x AA batteries
- Impact proof housing



	L mm	D mm	Mirror size mm	Scope tube	Wt g
550.1138	600.0	7.0	22 x 37	550.1188	215

Telescopic inspection mirror

- Extendable telescopic function
- For visual monitoring and troubleshooting
- With single ball joint
- Stainless steel mirror



	B mm	H mm	L mm	Wt g
550.1021	57.0	95.0	178.0-630.0	100

Telescopic set TK 1000

- Extendable telescopic function
- Telescopic-Magnet up to 1.5 kg
- Magnet power raised 35% due to energy safety cap
- Telescopic-Inspection mirror, 45.0 x 63.0 mm
- Length 178.0-860.0 mm
- Special steel
- In durable plastic storage case



	Wt g
550.1102 2 pcs Telescopic set TK 1000	280

consists of:

	Wt g
550.1007 Telescopic-Inspection mirror, L=178-675mm, 45x63mm	100
550.1002 Telescopic-Magnet holder up to 5.0 kg, 178 - 675 mm	80

Magnetic welding mirrors

- Mirror chrome
- Flexible arm
- Special steel



	B mm	L1 mm	L2 mm	Wt g
903.6000	70.0	500.0	80.0	470

Telescopic magnifying glass

- Extendable telescopic function
- Single ball joint
- 360° revolving
- Impact proof acrylic glass
- Special steel

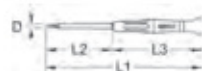


	B mm	H mm	L mm	Wt g
550.1009	44.0	63.5	178.0-660.0	50

VDE PRECISION SCREWDRIVER

Insulated precision screwdriver for slotted screws

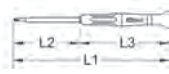
- Slotted
- Insulated to IEC 60900
- Twist end cap
- Colour coding
- Hardened blade
- Burnished tip
- Blades made from special steel



	D mm	L1 mm	L2 mm	L3 mm	Wt g
500.6138	1.5	140.0	40.0	100.0	10
500.6139	1.8	160.0	60.0	100.0	10
500.6140	2.0	160.0	60.0	100.0	15
500.6141	2.5	175.0	75.0	100.0	15
500.6142	3.0	175.0	75.0	100.0	15

Insulated precision screwdriver for phillips screws PH

- PH
- Insulated to IEC 60900
- Twist end cap
- Colour coding
- Hardened blade
- Burnished tip
- Blades made from special steel



		L1 mm	L2 mm	L3 mm		
500.6136	PH 00	175.0	75.0	100.0		15
500.6137	PH 0	175.0	75.0	100.0		15

VDE PRECISION SCREWDRIVER SETS

Insulated precision screwdriver set

- Insulated to IEC 60900
- Twist end cap
- Colour coding
- Hardened blade
- Burnished tip
- Blade made of chrome vanadium
- In durable ABS storage case



500.6165	7 pcs	Insulated precision screwdriver set	310
2 x		PH 0 - PH 00	
5 x		1,5 - 1,8 - 2,0 - 2,5 - 3,0 mm	



PRECISION SCREWDRIVER

Precision screwdriver for slotted screws

- Twist end cap
- Ergonomically designed electronic handle
- Two component handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



	D mm	D	L1 mm	L2 mm	L3 mm	
500.7701	0,8	-	145,0	50,0	95,0	10
500.7141	1,0	-	145,0	50,0	95,0	10
500.7702	1,2	-	145,0	50,0	95,0	10
500.7108	1,4	-	145,0	50,0	95,0	10
500.7109	2,0	-	145,0	50,0	95,0	15
500.7110	2,4	-	145,0	50,0	95,0	20
500.7111	3,0	-	145,0	50,0	95,0	20
500.7713	3,5	-	145,0	50,0	95,0	20
500.7142	4,0	-	145,0	50,0	95,0	20
500.7144	-	1/16"	145,0	50,0	95,0	10
500.7145	-	3/32"	145,0	50,0	95,0	10
500.7146	-	9/64"	145,0	50,0	95,0	20

Precision screwdriver for phillips screws PH

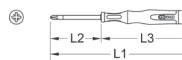
- Twist end cap
- Ergonomically designed electronic handle
- Two component handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



		Ø mm	L1 mm	L2 mm	L3 mm	
500.7126	PH 000	1,6	145,0	50,0	95,0	10
500.7106	PH 00	2,0	145,0	50,0	95,0	15
500.7107	PH 0	2,4	145,0	50,0	95,0	20
500.7128	PH 1	3,0	145,0	50,0	95,0	20
500.7125	PH 1	3,5	145,0	50,0	95,0	20
500.7129	PH 1	4,0	145,0	50,0	95,0	20

Precision screwdriver for phillips screws PZ

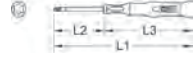
- Twist end cap
- Ergonomically designed electronic handle
- Two component handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



		Ø mm	L1 mm	L2 mm	L3 mm	
500.7156	PZ 0	3,0	145,0	50,0	95,0	15
500.7157	PZ 1	4,0	145,0	50,0	95,0	15

Precision screwdriver for TX screws

- Twist end cap
- Ergonomically designed electronic handle
- Two component handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



		L1 mm	L2 mm	L3 mm	
500.7726	T1	145,0	50,0	95,0	15
500.7727	T2	145,0	50,0	95,0	15
500.7728	T3	145,0	50,0	95,0	15
500.7729	T4	145,0	50,0	95,0	15
500.7140	T5	145,0	50,0	95,0	10
500.7112	T6	145,0	50,0	95,0	10
500.7113	T7	145,0	50,0	95,0	15
500.7114	T8	145,0	50,0	95,0	20
500.7115	T9	145,0	50,0	95,0	20
500.7116	T10	145,0	50,0	95,0	20
500.7117	T15	145,0	50,0	95,0	25
500.7124	T20	145,0	50,0	95,0	25

Precision screwdriver for TX tamperproof screws

- Twist end cap
- Ergonomically designed electronic handle
- Two component handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



		L1 mm	L2 mm	L3 mm	
500.7151	TB7	145,0	50,0	95,0	20
500.7152	TB8	145,0	50,0	95,0	20
500.7153	TB9	145,0	50,0	95,0	20
500.7154	TB10	145,0	50,0	95,0	20
500.7155	TB15	145,0	50,0	95,0	25
500.7730	TB20	145,0	50,0	95,0	18

Precision screwdriver for hexagon screws

- Twist end cap
- Ergonomically designed electronic handle
- Two component handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



		D mm	D	L1 mm	L2 mm	L3 mm	
500.7721		0,7	-	145,0	50,0	95,0	10
500.7722		0,9	-	145,0	50,0	95,0	10
500.7723		1,3	-	145,0	50,0	95,0	10
500.7119		1,5	-	145,0	50,0	95,0	10
500.7120		2,0	-	145,0	50,0	95,0	10
500.7121		2,5	-	145,0	50,0	95,0	15
500.7122		3,0	-	145,0	50,0	95,0	20
500.7123		3,5	-	145,0	50,0	95,0	20
500.7718		-	0,05"	145,0	50,0	95,0	15
500.7147		-	1/16"	145,0	50,0	95,0	10
500.7724		-	5/64"	145,0	50,0	95,0	10
500.7148		-	3/32"	145,0	50,0	95,0	15
500.7725		-	7/64"	145,0	50,0	95,0	15
500.7149		-	1/8"	145,0	50,0	95,0	20

Precision screwdriver for external hexagon screws

- Twist end cap
- Ergonomically designed electronic handle
- Two component handle
- Hardened blade
- Blades made from special steel



	D mm	D	L1 mm	L2 mm	L3 mm	Weight
500.7731	1,5	-	165,0	75,0	90,0	10
500.7130	2,0	-	165,0	75,0	90,0	10
500.7131	2,5	-	165,0	75,0	90,0	10
500.7132	3,0	-	165,0	75,0	90,0	15
500.7133	3,2	-	165,0	75,0	90,0	30
500.7134	3,5	-	165,0	75,0	90,0	30
500.7135	4,0	-	165,0	75,0	90,0	30
500.7733	4,5	-	165,0	75,0	90,0	22
500.7734	5,0	-	165,0	75,0	90,0	22
500.7735	5,5	-	165,0	75,0	90,0	25
500.7136	-	3/32"	165,0	75,0	90,0	20
500.7137	-	7/64"	165,0	75,0	90,0	20
500.7738	-	1/8"	165,0	75,0	90,0	22
500.7138	-	9/64"	165,0	75,0	90,0	30
500.7139	-	11/64"	165,0	75,0	90,0	30

PRECISION SCREWDRIVER SETS

Precision screwdriver set

- Reversible interchangeable bits
- Twist end cap
- Clip for the breast pocket
- Plastic handle
- Bits made of special steel



	Weight
911.2175 4 pcs Precision screwdriver set	150
1 x PH000 - PH00 - PH0 - PH1	
1 x PZ000 - PZ00 - PZ0 - PZ1	
1 x 1,5 - 2,0 - 2,5 - 3,0 mm	
1 x T6 - T7 - T8 - T9	



Precision screwdriver set TX

- Twist end cap
- Ergonomically designed electronic handle
- Two component handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium
- In durable ABS storage case



	Weight
500.7160 7 pcs Precision screwdriver set TX	100
7 x T6 - T7 - T8 - T9 - T10 - T15 - T20	



Precision screwdriver set PH and slotted

- Twist end cap
- Ergonomically designed electronic handle
- Two component handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium
- In durable ABS storage case



	Weight
500.7165 7 pcs Precision screwdriver set PH and slotted	100
3 x PH00 - PH0 - PH1	
4 x 1,4 - 2,0 - 2,4 - 3,0 mm	

Precision screwdriver set PH, slotted and TX

- Twist end cap
- Ergonomically designed electronic handle
- Two component handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium
- In durable plastic storage case



	Weight
500.7170 14 pcs Precision screwdriver set PH, slotted and TX	200
3 x PH00 - PH0 - PH1	
4 x 1,4 - 2,0 - 2,4 - 3,0 mm	
7 x T6 - T7 - T8 - T9 - T10 - T15 - T20	

Precision screwdriver set

- Twist end cap
- Ergonomically designed electronic handle
- Two component handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium
- In durable plastic storage case



	Weight
500.7150 37 pcs Precision screwdriver set	1.80
6 x PH000 - PH00 - PH0 x 3,0 - PH0 x 2,0 - PH1 x 3,5 - PH1 x 4,0	
7 x 1,0 - 2,0 - 3,0 - 4,0 mm - 1/16" - 3/32" - 9/64"	
2 x T5 - T6	
7 x 1,5 - 2,0 - 2,5 - 3,0 - 1/16" - 3/32" - 1/8"	
10 x 2,0 - 2,5 - 3,0 - 3,2 - 3,5 - 4,0 - 3/32" - 7/64" - 9/64" - 1.1/64"	
5 x TB7 - TB8 - TB9 - TB10 - TB15	

Precision tool set

- Electrical working
- Includes precision screwdrivers and tweezers
- Suitable for wire
- Serrated execution
- Induction hardened precision cutting
- Self opening double spring
- Twist end cap
- Ergonomically designed electronic handle
- Hardened blade
- Chrome finish with burnished surface
- Dual component handle
- Black chrome
- Blades made from special steel
- In durable plastic storage case



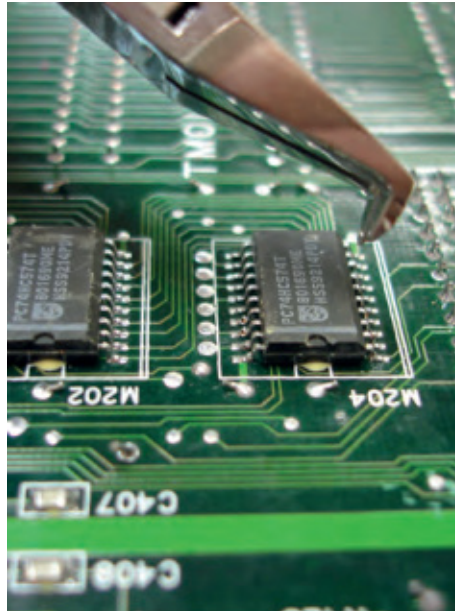
		9	
500.7180	10 pcs	Precision tool set	400
1 x		125 mm	
1 x		100 mm	
1 x		145 mm	
3 x		PH00 - PH0 - PH1	
4 x		1,4 - 2,0 - 2,4 - 3,0 mm	

Precision tool set

- Electrical working
- Includes precision screwdrivers and tweezers
- Suitable for wire
- Serrated execution
- Induction hardened precision cutting
- Self opening double spring
- Twist end cap
- Ergonomically designed electronic handle
- Blades hardened
- Chrome finish with burnished surface
- Dual component handle
- Black chrome
- Blades made from special steel



		9	
500.7190	21 pcs	Precision tool set	1.40
2 x		125 - 130 mm	
1 x		100 mm	
1 x		100 mm	
1 x		125 mm	
1 x		150 mm	
1 x		145 mm	
3 x		PH00 - PH0 - PH1	
4 x		1,4 - 2,0 - 2,4 - 3,0 mm	
7 x		T6 - T7 - T8 - T9 - T10 - T15 - T20	



PRECISION SCREWDRIVER DISPLAY STANDS

Precision screwdriver display stand

- Twist end cap
- Ergonomically designed electronic handle
- Two component handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium
- Display of robust sheet steel construction



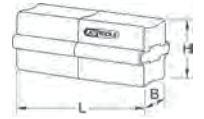
		9	
500.0190	190 pcs	Precision screwdriver display stand	1.80
30 x		5 x (PH000 - PH00 - PH0 x 3 mm - PH0 x 2 mm - PH1 x 3,5 mm - PH1 x 4 mm)	
35 x		5 x (1,0 - 2,0 - 3,0 - 4,0 mm - 1/16" - 3/32" - 9/64")	
10 x		5 x (T5 - T6)	
25 x		5 x (TB7 - TB8 - TB9 - TB10 - TB15)	
35 x		5 x (1,5 - 2,0 - 2,5 - 3,0 mm - 1/16" - 3/32" - 5 x 1/8")	
50 x		5 x (2,0 - 2,5 - 3,0 - 3,2 - 3,5 - 4,0 mm - 3/32" - 7/64" - 9/64" - 1.1/64")	
5 x		5 x 4 mm	



MAGNETIZERS AND DEMAGNETIZERS

Magnetizer and demagnetizer

- Easy to use
- To magnetise by pulling the blade through
- To demagnetise by pulling the blade over the recess
- For screwdrivers, tweezers and similar tools made of steel
- Plastic housing

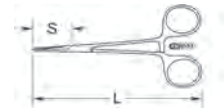


	B mm	H mm	L mm	9
550.1126	15,0	20,0	47,0	70

PRECISION PLIERS

Mounting clamp pliers

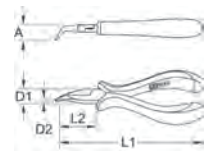
- 3 way adjustable locking
- Toothed gripping surfaces
- Anti glare - no annoying reflection
- Matt finish
- Stainless special steel



	L mm	S mm	9
500.7006	140,0	35,0	30
500.7007	160,0	40,0	40

Precision long nosed pliers, curved

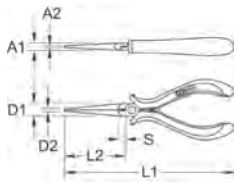
- Electrical working
- Suitable for wire
- 45° curved jaws
- Induction hardened precision cutting
- Self opening double spring
- Dual component handle
- Black chrome
- Special tool steel



	A mm	D1 mm	D2 mm	L1 mm	L2 mm	9
500.7022	12,0	18,0	7,0	130,0	33,0	80

Precision telephone pliers

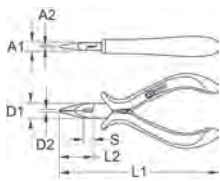
- Electrical working
- Suitable for wire
- Extra long jaws
- Induction hardened precision cutting
- Self opening double spring
- Dual component handle
- Black chrome
- Special tool steel



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	g
500.7032	7,0	2,0	12,0	3,0	160,0	55,0	8,0	90

Precision telephone pliers

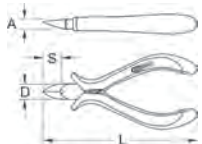
- Electrical working
- Suitable for wire
- Serrated execution
- Induction hardened precision cutting
- Self opening double spring
- Dual component handle
- Black chrome
- Special tool steel



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	g
500.7021	7,0	2,0	12,0	3,0	130,0	29,0	8,0	80

Precision diagonal side cutter

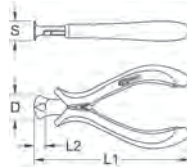
- Electrical working
- Suitable for wire
- Induction hardened precision cutting
- Self opening double spring
- Dual component handle
- Black chrome
- Special tool steel



	A mm	D mm	L mm	S mm	g
500.7024	7,0	13,0	120,0	15,0	80

Precision cutting pliers

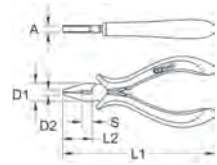
- Electrical working
- Suitable for wire
- Induction hardened precision cutting
- Self opening double spring
- Dual component handle
- Black chrome
- Special tool steel



	D mm	L1 mm	L2 mm	S mm	g
500.7025	18,0	110,0	7,5	14,0	80

Precision combination pliers

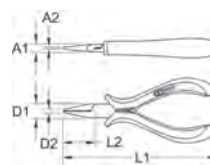
- Electrical working
- Suitable for wire
- Induction hardened precision cutting
- Self opening double spring
- Dual component handle
- Black chrome
- Special tool steel



	A mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	g
500.7030	7,0	10,0	15,0	120,0	22,0	8,0	90

Precision flat pliers

- Electrical working
- Suitable for wire
- Induction hardened precision cutting
- Self opening double spring
- Dual component handle
- Black chrome
- Special tool steel



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	g
500.7028	7,0	2,0	13,0	3,0	125,0	27,0	80

PRECISION PLIER SETS

Precision plier set

- Electro static discharge - electrostatically protect
- Suitable for wire
- Serrated execution
- Induction hardened precision cutting
- Self opening double spring
- Dual component handle
- Black chrome
- Special tool steel



			g
500.7020	5 pcs	Precision plier set	420

1 x		130 mm
1 x		120 mm
1 x		110 mm
1 x		120 mm
1 x		160 mm

Precision tool set

- Electrical working
- Includes precision screwdrivers and tweezers
- Suitable for wire
- Serrated execution
- Induction hardened precision cutting
- Self opening double spring
- Twist end cap
- Ergonomically designed electronic handle
- Hardened blade
- Chrome finish with burnished surface
- Dual component handle
- Black chrome
- Blades made from special steel
- In durable plastic storage case



			g
500.7180	10 pcs	Precision tool set	400

1 x		125 mm
1 x		100 mm
1 x		145 mm
3 x		PH00 - PH0 - PH1
4 x		1,4 - 2,0 - 2,4 - 3,0 mm

1
2
3
4
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6
7
8
9
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11
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27

Precision tool set

- Electrical working
- Includes precision screwdrivers and tweezers
- Suitable for wire
- Serrated execution
- Induction hardened precision cutting
- Self opening double spring
- Twist end cap
- Ergonomically designed electronic handle
- Blades hardened
- Chrome finish with burnished surface
- Dual component handle
- Black chrome
- Blades made from special steel



500.7190	21 pcs	Precision tool set	1.40
2 x		125 - 130 mm	
1 x		100 mm	
1 x		100 mm	
1 x		125 mm	
1 x		150 mm	
1 x		145 mm	
3 x		PH00 - PH0 - PH1	
4 x		1.4 - 2.0 - 2.4 - 3.0 mm	
7 x		T6 - T7 - T8 - T9 - T10 - T15 - T20	

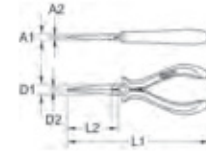


ESD PRECISION PLIERS

Tweezers can be found in the VDE and general electrician tool kits section.

ESD long-nose pliers – straight – without cut

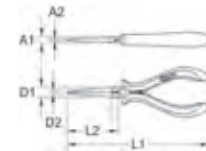
- Electrical working
- Suitable for wire
- Short, straight jaws
- Without cut
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Special tool steel



500.7064	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	U
	6.5	1.0	10.0	2.0	130.0	23.0	62

ESD long-nose pliers – straight – with cut

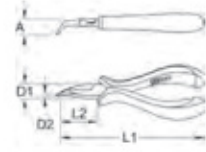
- Electrical working
- Suitable for wire
- Short, straight jaws
- With cut
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Special tool steel



500.7065	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	U
	6.5	1.0	10.0	2.0	130.0	23.0	62

ESD long-nose pliers – curved – without cut

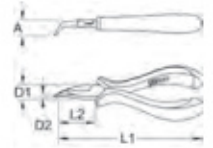
- Electrical working
- Suitable for wire
- Short, curved jaws
- Without cut
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Special tool steel



500.7066	A mm	D1 mm	D2 mm	L1 mm	L2 mm	U
	10.0	10.0	2.0	130.0	20.0	62

ESD long-nose pliers – curved – with cut

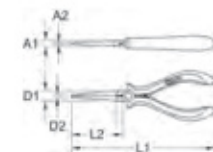
- Electrical working
- Suitable for wire
- Short, curved jaws
- With cut
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Special tool steel



500.7067	A mm	D1 mm	D2 mm	L1 mm	L2 mm	U
	10.0	10.0	2.0	130.0	20.0	62

ESD long-nose pliers – straight – without cut

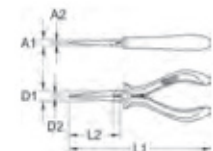
- Electrical working
- Suitable for wire
- Long, straight jaws
- Without cut
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Special tool steel



500.7068	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	U
	6.5	1.0	10.0	2.0	140.0	32.0	68
500.7077	7.5	1.2	12.5	2.4	155.0	40.0	93

ESD long-nose pliers – straight – with cut

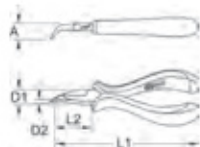
- Electrical working
- Suitable for wire
- Long, straight jaws
- With cut
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Special tool steel



500.7069	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	U
	6.5	1.0	10.0	2.0	140.0	32.0	68
500.7072	7.5	1.2	12.5	2.4	155.0	40.0	93

ESD long-nose pliers – curved – without cut

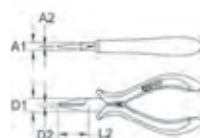
- Electrical working
- Suitable for wire
- Long, curved jaws
- Without cut
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D1 mm	D2 mm	L1 mm	L2 mm	W
500.7070	14.0	10.0	2.0	140.0	26.0	68
500.7073	20.0	12.5	2.4	155.0	33.0	93

ESD flat pliers

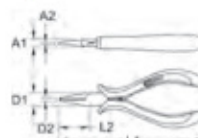
- Electrical working
- Suitable for wire
- Short jaws
- Without cut
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Special tool steel



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	W
500.7075	6.5	3.5	10.0	1.5	130.0	22.0	61

ESD flat pliers

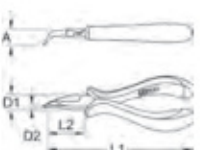
- Electrical working
- Suitable for wire
- Long jaws
- Without cut
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Special tool steel



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	W
500.7079	7.5	4.5	12.0	1.5	150.0	40.0	82

ESD long-nose pliers – curved – with cut

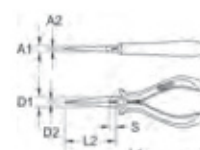
- Electrical working
- Suitable for wire
- Long, curved jaws
- With cut
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D1 mm	D2 mm	L1 mm	L2 mm	W
500.7071	14.0	10.0	2.0	140.0	26.0	68

ESD round pliers

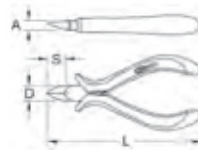
- Electrical working
- Suitable for wire
- Short jaws
- Without cut
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Special tool steel



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	W
500.7076	6.0	1.0	10.0	2.0	130.0	20.0	62

ESD mini side cutters

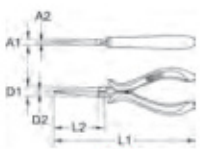
- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Flexible steel: 0.8 mm/AWG 20
- Copper wire: 1.5 mm/AWG 15
- Small, oval head
- With subtle control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	W
500.7080	6.0	9.0	120.0	9.0	55

ESD needle-nose pliers – straight – without cut

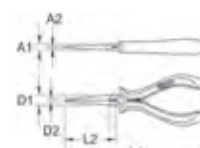
- Electrical working
- Suitable for wire
- Very fine, long jaws
- Without cut
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Special tool steel



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	W
500.7074	7.5	1.2	11.0	2.0	150.0	37.0	74

ESD long-nose pliers – straight – without cut

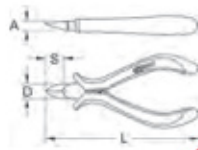
- Electrical working
- Suitable for wire
- Short, straight jaws
- Ultra-fine precision tips for extremely fine work
- Without cut
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Special tool steel



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	W
500.7078	6.5	0.1	10.0	0.2	130.0	22.0	56

ESD mini side cutters

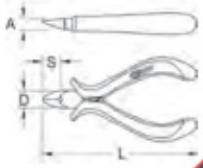
- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Flexible steel: 0.8 mm/AWG 20
- Copper wire: 1.5 mm/AWG 15
- Small, pointed head
- With subtle control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	W
500.7081	6.0	9.0	120.0	9.0	55

ESD mini side cutters

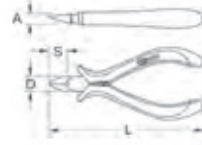
- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Flexible steel: 0.8 mm/AWG 20
- Copper wire: 1.5 mm/AWG 15
- Short, pointed head with grooving
- With subtle control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	Wt g
500.7082	6.0	9.0	120.0	9.0	53

ESD side cutters

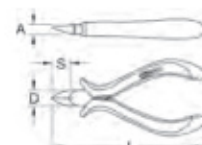
- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Hard wire: 0.4 mm/AWG 26
- Flexible steel: 1.0 mm/AWG 18
- Copper wire: 1.5 mm/AWG 15
- Oval head with wire holder
- With control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	Wt g
500.7085	7.5	11.0	125.0	13.0	75

ESD side cutters

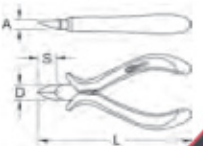
- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Hard wire: 0.7 mm/AWG 21
- Flexible steel: 1.0 mm/AWG 18
- Copper wire: 1.5 mm/AWG 15
- Oval, sturdy head
- With control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	Wt g
500.7088	9.0	14.5	135.0	20.0	105

ESD side cutters

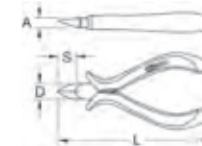
- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Hard wire: 0.4 mm/AWG 26
- Flexible steel: 1.0 mm/AWG 18
- Copper wire: 1.5 mm/AWG 15
- Oval head
- With control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	Wt g
500.7083	7.5	11.0	125.0	13.0	70

ESD side cutters

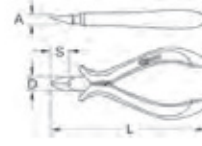
- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Hard wire: 0.3 mm/AWG 28
- Flexible steel: 1.0 mm/AWG 18
- Copper wire: 1.5 mm/AWG 15
- Pointed head
- With control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	Wt g
500.7086	7.5	11.0	125.0	13.0	62

ESD side cutters

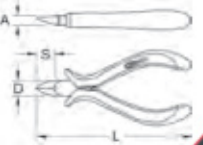
- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Flexible steel: 1.5 mm/AWG 15
- Copper wire: 2.0 mm/AWG 12
- Pointed, sturdy head
- With subtle control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	Wt g
500.7089	9.0	14.5	135.0	18.0	105

ESD side cutters

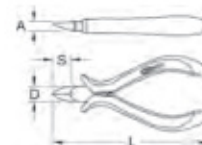
- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Flexible steel: 1.0 mm/AWG 18
- Copper wire: 1.5 mm/AWG 15
- Oval head
- With subtle control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	Wt g
500.7084	7.5	11.0	125.0	13.0	70

ESD side cutters

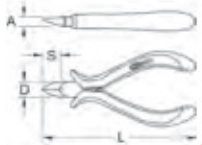
- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Flexible steel: 1.0 mm/AWG 18
- Copper wire: 1.5 mm/AWG 15
- Pointed head
- With subtle control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	Wt g
500.7087	7.5	11.0	125.0	13.0	62

ESD carbide side cutters

- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 84-86 HRA
- Piano wire: 0.6 mm/AWG 22
- Hard wire: 1.0 mm/AWG 18
- Flexible wire: 2.0 mm/AWG 12
- Oval head
- With control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	Wt g
500.7090	7.5	11.0	125.0	10.0	62

ESD carbide side cutters

- Electrical working
- Suitable for wire
- Hard metal cutting edge in plier head for the highest cutting performance
- Induction-hardened precision cutting, 84-86 HRA
- Oval head
- With special control only for glass fibre (e.g. Kevlar)
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	W
500.7091	7.5	11.0	125.0	10.0	62

ESD carbide side cutters

- Electrical working
- Suitable for wire
- Hard metal cutting edge in plier head for the highest cutting performance
- Induction-hardened precision cutting, 84-86 HRA
- Piano wire: 0.4 mm/AWG 26
- Hard wire: 0.8 mm/AWG 20
- Flexible wire: 1.8 mm/AWG 13
- Pointed head with grooves for working in hard to access places
- With subtle control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	W
500.7092	7.5	11.0	125.0	10.0	61

ESD end cutters

- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Medium wire: 0.6 mm/AWG 22
- Flexible wire: 0.8 mm/AWG 20
- Slim jaws
- With subtle control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	W
500.7093	6.5	11.0	130.0	5.0	64

ESD mini angled cutters

- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Hard wire: 0.4 mm/AWG 26
- Medium wire: 1.0 mm/AWG 18
- Flexible wire: 1.2 mm/AWG 16
- Straight head for working in small spaces
- With subtle control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	W
500.7094	6.5	10.0	120.0	12.0	61

ESD mini carbide oblique cutter

- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 84-86 HRA
- Piano wire: 0.6 mm/AWG 22
- Hard wire: 1.0 mm/AWG 18
- Flexible wire: 2.0 mm/AWG 12
- Straight head for working in small spaces
- With subtle control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	W
500.7095	6.5	10.0	120.0	12.0	62

ESD mini angled cutters

- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Hard wire: 0.5 mm/AWG 24
- Medium wire: 1.2 mm/AWG 16
- Flexible wire: 1.6 mm/AWG 14
- Wide head with long cutters
- With subtle control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	W
500.7096	7.5	11.0	125.0	18.0	77

ESD mini side cutter

- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Medium wire: 0.6 mm/AWG 22
- Flexible wire: 0.8 mm/AWG 22
- Slim jaws with small cutting edges
- With subtle control
- Self-opening double spring
- With dual component handle
- Special tool steel



	D mm	L1 mm	L2 mm	S mm	W
500.7097	10.0	120.0	17.0	2.5	63

ESD side cutter

- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Hard wire: 0.5 mm/AWG 24
- Medium wire: 1.2 mm/AWG 16
- Flexible wire: 1.6 mm/AWG 14
- Wide head with long cutters
- With subtle control
- Self-opening double spring
- With dual component handle
- Special tool steel



	D mm	L1 mm	L2 mm	S mm	W
500.7098	11.0	125.0	6.0	15.0	74

ESD wire strippers

- Electrical working
- With internal brass adjusting screw
- Suitable for PVC, Teflon etc.
- Induction-hardened precision cutting
- Medium wire: 0.8 mm/AWG 20
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D1 mm	D2 mm	L1 mm	L2 mm	W
500.7099	12.0	32.0	18.0	140.0	50.0	79

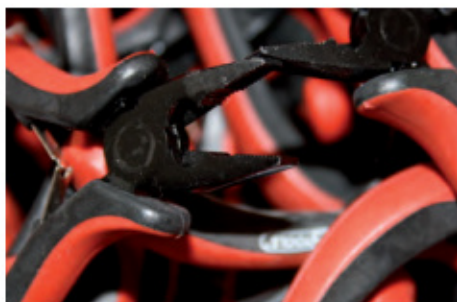
ESD PRECISION PLIER SETS

ESD pliers service map

- Electro static discharge - electrostatically protect
- Suitable for wire
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Special tool steel



			Weight
			g
500.7019	6 pcs	ESD pliers service map	620
1 x		140 mm	
1 x		140 mm	
1 x		130 mm	
1 x		120 mm	
1 x		125 mm	
1 x		120 mm	



SOLDERING TECHNOLOGY

Mini pocket soldering torch

- Gas operated micro soldering device up to 1,300°C / 2,450°F
- Piezo ignition
- Optimal for light soldering
- Safety lock



		Weight
		g
960.1110	80.0	130

Mini pocket soldering torch

- Gas operated micro soldering device up to 1,300°C / 2,450°F
- With piezo ignition
- For melting, hard soldering, small soldering jobs
- Filled with standard lighter gas/ISO butane gas
- Compact construction
- With child-proofing and switch-off function



	L1 mm	L2 mm	H mm	Weight
960.1215	75.0	50.0	110.0	112



Small soldering torch

- Gas operated micro soldering device up to 1,300°C / 2,450°F
- With piezo ignition
- Optimal for fine soldering
- Table stand



	L mm	Weight
960.1200	140.0	350

Small soldering torch with flame deflector

- Gas operated micro soldering device up to 1,300°C / 2,450°F
- With piezo ignition
- Optimal for fine soldering
- Shrink / flame deflector
- Table stand



	L mm	Weight
960.1210	140.0	350

Micro terminal set

- Gas operated micro soldering device up to 1,300 / 2,450°F
- Optimal for fine working
- Gas supply totally adjustable
- Filled with standard lighter gas / ISO butane gas
- Includes different attachments soldering wire and soldering sponge
- In durable plastic storage box



		Weight
		g
960.1150	13 pcs	200

consists of:

		Weight
		g
960.1151	Gas soldering iron	110
960.1152	Bunsen burner nozzle head	20
960.1153	Soldering head including 6 different on screw solder tips	30
960.1154	Flat attachment for flame protection for Bunsen burner nozzle head	10
960.1155	Attachment for Bunsen burner nozzle head	10
960.1156	Soldering sponge	6
960.1157	Soldering wire spool	24

Micro soldering terminal set


- Gas operated micro soldering device up to 1,300°C / 2,450°F
- With piezo ignition
- Optimal for fine working
- Gas supply totally adjustable
- Filled with standard lighter gas / ISO butane gas
- Includes different attachments soldering wire and soldering sponge
- In durable plastic storage box



		Weight
		g
960.1160	10 pcs	370


consists of:

		Weight
		g
960.1161	Soldering iron with piezo ignition	80
960.1162	Soldering head for screw solder tips	9
960.1163	Soldering tip 3.5 mm, chisel	3
960.1164	Soldering tip 4.5mm, diagonal	3
960.1165	Soldering tip knife	3
960.1166	Shrink hose attachment	3
960.1167	Soldering sponge	12
960.1168	Soldering wire spool	25
960.1169	Protective cap	14
960.1170	Housing for additional adaptors for 960.1160	7



Innovation is
our mission!

PRECISION TOOLS



NON SPARKING TOOLS



KS TOOLS®

*Innovation is
our mission!*

	PAGE	
NON SPARKING OPEN ENDED SPANNER	296 - 297	2
NON SPARKING COMBINATION SPANNER	297 - 298	3
NON SPARKING RING SPANNERS	298 - 300	4
NON SPARKING IMPACT SPANNERS	300 - 302	
NON SPARKING INSTALLATION WRENCH	303	5
NON SPARKING HOSE COUPLING WRENCHES & HOOK WRENCHES	303 - 304	
NON SPARKING SPECIAL BITS	304 - 305	6
NON SPARKING BOX SPANNERS	305 - 308	
NON SPARKING FRICTION RATCHETS	308	7
1/4" DRIVE NON SPARKING SOCKETS	308 - 309	
1/2" DRIVE NON SPARKING SOCKETS	309 - 312	8
3/4" DRIVE NON SPARKING SOCKETS	312 - 314	9
1" DRIVE NON SPARKING SOCKETS	314 - 315	
NON SPARKING SCREWDRIVERS	316 - 317	10
NON SPARKING KEY WRENCHES	317 - 318	
NON SPARKING PLIERS	319 - 321	11
NON SPARKING TWEEZERS	321	
NON SPARKING DRILLS	321	12
NON SPARKING SAWS	322	
NON SPARKING WIRE BRUSHES	322 - 323	13
NON SPARKING FILES	323	14
NON SPARKING KNIVES	323	
NON SPARKING SHEARS	323 - 324	15
NON SPARKING CUTTING TOOLS	324	
NON SPARKING SCRAPERS	324 - 325	16
NON SPARKING FLANGE SPREADERS	325	
NON SPARKING HAMMERS	325 - 328	17
NON SPARKING AXES	328	18
NON SPARKING PICKS	328 - 329	
NON SPARKING CHISELS	329 - 330	19
NON SPARKING PIN PUNCHES & PUNCHES	330 - 331	
NON SPARKING CONSTRUCTION TOOLS	331 - 332	20
NON SPARKING SPATULAS	332	
NON SPARKING SHOVELS & FORKS	332 - 333	21
NON SPARKING WEDGES	333 - 334	22
NON SPARKING PRY BARS	334	
NON SPARKING CROWBARS	334 - 335	23
NON SPARKING DRUM LIFTERS	335	
NON SPARKING SHACKLES	335	24
NON SPARKING PIPE CUTTERS	336	
NON SPARKING CLAMPING TOOLS	336	25
NON SPARKING NEEDLES	336	
NON SPARKING OIL PUMPS	336	26
NON SPARKING HOISTS	336	27

NON SPARKING TOOLS

Explosion protection after **ATEX** = **AT**mosphere **EX**plosible

Directive 137 (also known as directive 99/92) determines that the end user (employer) is responsible for the safety of the employees working (installing, operating or maintaining equipment) in a potentially explosive atmosphere.

The directive has been in force since July 2003.

Classification of the zones by explosion risks

ATEX Feasibility	high	average-low	very low
Gases	<p>ZONE 0</p> <p>is an area, in which dangerous atmosphere capable of explosion as a mixture from air and combustible gases, damping or fogs exists constantly, for long time or frequently. The notion „frequently“ is to be used for means of „temporally mainly“, which means that explosion-endangered areas are to be assigned zone 0, if the atmosphere is capable of explosion for more than 50% during the working duration of an arrangement. Actually, this is only inside tubes and reservoirs the case.</p>	<p>ZONE 1</p> <p>is an area in which at normal working duration, occasionally a dangerous atmosphere is capable of explosion as a mixture from air and combustible gases, damping or fogs. If the existence of atmosphere capable of explosion comes to a duration of approximately 30 minutes per year or this appears occasionally, e.g. daily, however, it is smaller than 50% of the activity duration of the arrangement, zone 1 applies according to general opinion.</p>	<p>ZONE 2</p> <p>is an area in which at normal working duration, occasionally a dangerous atmosphere is capable of explosion as a mixture from air and combustible gas, damping or fogs. Among a number of experts the general consensus consists the fact that the notion corresponds „briefly“ to a duration of approximately 30 minutes per year. Furthermore it is stated that atmosphere capable of explosion is not to be expected at normal activity usually. If atmosphere capable of explosion already appears once a year briefly, the affected area should be already classified in zone 2.</p>
Dust	<p>ZONE 20</p> <p>is an area in which dangerous atmosphere, that is capable of explosion, exists in form of a cloud in the air which contains combustible dust constantly, for long time or frequently.</p>	<p>ZONE 21</p> <p>is an area in which at normal activity occasionally a dangerous atmosphere capable of explosion exists in form of a cloud in the air which contains combustible dust.</p>	<p>ZONE 22</p> <p>is an area in which at normal activity a dangerous atmosphere capable of explosion does not appear in form of a cloud in the air which contains combustible dust usually or, however, only briefly.</p>

Application remarks:

- Non sparking tools are softer than usual tools. The operation with these tools has to be carried out with accuracy and care. Overstraining has to be prevented.
- Only using non sparking tools as a protection measure in fire endangered and explosion endangered areas is not enough. Please consider the instructions of local health and safety regulations for the protection of employees and accommodation.

Reworking:

- Technical marking sheets are available on request for reworking (e.g. re-sharpen).



BERYLLIUMplus					
Material	Be	Ni+Co	Impurity		Balance
min in %	1.8	0.2			Cu
max in %	2.0	0.8	0.5		
Technical properties	800-940 Mp (average value 850 Mp)				
Tensile strength	HRC35-42				
Hardness	8,5 (average value)				
Specific weight	1.0004				
Magnetic characteristics	0,53079 S/m				
Electrical conduction					
BRONZEplus					
Material	Al	Ni	Fe	Mn	Balance
min in %	9.0	4.0	4.0	0.8	Cu
max in %	10.0	5.0	5.0	2.5	
Technical properties	700-740 Mp (average value 725 Mp)				
Tensile strength	120 Mp				
Yield stress	HRC25-32				
Hardness	7,5 (average value)				
Specific weight	1.348				
Magnetic characteristics	0,42463 S/m				
Electrical conduction					

Non sparking tool - lines

BRONZE *plus*

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

BERYLLIUM *plus*

- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



Applications BERYLLIUMplus / BRONZEplus

- Chemical industries
- Petro refineries
- Oil and gas carriages
- Pipeline business
- Drilling platforms
- Fuel service (cleaning etc.)
- Gas and electricity works
- Varnishing
- Federal armed forces, army
- Civil defence and civil protection
- Fire department

You can use it on all places where sparks create potential danger of explosion and fire. For the activities which require the use (application) of a hundred percent non-magnetic and extremely rustproof tools.



NON SPARKING OPEN ENDED SPANNER

BRONZEplus double open ended spanner

- In accordance to DIN 895 / ISO 3318 / ISO 1085
- Jaw 15° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



mm	L mm	A mm	B1 mm	B2 mm	Weight
963.7005	6x7	125.0	6.0	15.0	17.0 0.03
963.7006	6x8	125.0	6.0	15.0	17.0 0.03
963.7007	7x8	125.0	6.0	19.0	22.0 0.03
963.7008	7x9	125.0	6.0	19.0	22.0 0.04
963.7009	8x9	125.0	6.0	19.0	22.0 0.04
963.7010	8x10	125.0	6.0	19.0	22.0 0.06
963.7011	9x10	125.0	6.0	19.0	22.0 0.06
963.7012	9x11	140.0	7.0	22.0	27.0 0.09
963.7013	10x11	140.0	7.0	22.0	27.0 0.09
963.7014	10x12	140.0	7.0	22.0	27.0 0.06
963.7015	10x13	140.0	7.0	22.0	27.0 0.08
963.7016	10x14	160.0	7.5	27.0	30.0 0.18
963.7017	11x13	160.0	7.5	27.0	30.0 0.18
963.7018	11x14	160.0	7.5	27.0	30.0 0.18
963.7019	12x13	160.0	7.5	27.0	30.0 0.18
963.7020	12x14	160.0	7.5	27.0	30.0 0.17
963.7021	16x15	160.0	7.5	27.0	30.0 0.17
963.7022	14x15	200.0	8.0	30.0	36.0 0.11
963.7023	14x16	200.0	8.0	30.0	36.0 0.22
963.7024	14x17	200.0	8.0	30.0	36.0 0.22
963.7025	16x17	200.0	8.0	35.0	38.0 0.21
963.7026	16x18	200.0	8.0	35.0	38.0 0.21
963.7027	17x19	225.0	10.0	35.0	38.0 0.35
963.7028	17x22	225.0	10.0	39.0	44.0 0.32
963.7029	18x19	225.0	10.0	39.0	44.0 0.32
963.7030	18x20	225.0	10.0	39.0	44.0 0.31
963.7031	18x21	225.0	10.0	39.0	44.0 0.30
963.7032	19x22	240.0	11.0	39.0	44.0 0.44
963.7033	19x24	240.0	11.0	44.0	48.0 0.42
963.7034	20x22	240.0	11.0	44.0	48.0 0.44
963.7035	21x23	240.0	11.0	44.0	48.0 0.42
963.7036	22x24	240.0	11.0	44.0	48.0 0.42
963.7037	22x27	270.0	12.0	48.0	54.0 0.73
963.7038	23x26	270.0	12.0	48.0	54.0 0.73
963.7039	24x26	270.0	12.0	48.0	54.0 0.73
963.7040	24x27	270.0	12.0	48.0	54.0 0.73
963.7041	24x30	270.0	13.0	54.0	60.0 0.70
963.7042	25x28	270.0	13.0	54.0	60.0 0.70
963.7043	26x29	270.0	13.0	54.0	60.0 0.70
963.7044	27x29	300.0	13.0	54.0	60.0 0.81
963.7045	27x30	300.0	13.0	54.0	60.0 0.80
963.7046	27x32	300.0	14.0	59.0	62.0 0.80
963.7047	30x32	300.0	14.0	59.0	62.0 0.78
963.7048	30x34	320.0	16.0	70.0	75.0 1.24
963.7049	30x36	320.0	16.0	70.0	75.0 1.22
963.7050	32x34	320.0	16.0	70.0	75.0 1.20
963.7051	32x36	320.0	16.0	70.0	75.0 1.14
963.7052	34x36	320.0	16.0	70.0	75.0 1.10
963.7053	35x38	370.0	16.0	75.0	88.0 1.48
963.7054	36x41	370.0	16.0	75.0	88.0 1.48
963.7055	41x46	370.0	18.0	85.0	100.0 1.45
963.7056	46x50	390.0	19.0	95.0	105.0 1.40
963.7057	50x55	440.0	20.0	100.0	115.0 1.70
963.7058	50x60	440.0	22.0	110.0	125.0 1.70
963.7059	55x60	470.0	22.0	110.0	125.0 1.80
963.7060	60x65	470.0	22.0	125.0	135.0 1.80
963.7061	65x70	630.0	24.0	130.0	145.0 3.50
963.7062	70x80	630.0	24.0	140.0	155.0 3.40
963.7063	75x80	630.0	24.0	150.0	165.0 3.30

	mm	L mm	A mm	B1 mm	B2 mm	Weight
963.7065	7/32x1/4"	125.0	6.0	15.0	17.0	0.03
963.7066	1/4x5/16"	125.0	6.0	15.0	17.0	0.03
963.7067	5/16x3/8"	125.0	6.0	19.0	22.0	0.06
963.7068	3/8x7/16"	140.0	7.0	22.0	27.0	0.09
963.7069	7/16x1/2"	140.0	7.0	22.0	27.0	0.04
963.7070	1/2x5/8"	160.0	7.5	27.0	30.0	0.17
963.7071	1/2x9/16"	160.0	7.5	27.0	30.0	0.17
963.7072	1/2x11/16"	200.0	8.0	30.0	36.0	0.22
963.7073	9/16x5/8"	200.0	8.0	30.0	36.0	0.22
963.7074	9/16x3/4"	200.0	8.0	30.0	38.0	0.22
963.7075	19/32x11/16"	200.0	8.0	35.0	38.0	0.22
963.7076	19/32x25/32"	200.0	8.0	35.0	38.0	0.22
963.7077	5/8x11/16"	200.0	8.0	35.0	38.0	0.20
963.7078	5/8x3/4"	225.0	10.0	39.0	44.0	0.31
963.7079	11/16x25/32"	225.0	10.0	39.0	44.0	0.30
963.7080	11/16x7/8"	225.0	10.0	39.0	44.0	0.30
963.7082	3/4x25/32"	225.0	10.0	39.0	44.0	0.30
963.7083	3/4x13/16"	225.0	10.0	39.0	44.0	0.31
963.7084	3/4x7/8"	225.0	10.0	39.0	44.0	0.31
963.7085	25/32x13/16"	225.0	10.0	39.0	44.0	0.30
963.7086	25/32x7/8"	225.0	10.0	39.0	44.0	0.30
963.7087	13/16x7/8"	225.0	10.0	39.0	44.0	0.30
963.7088	7/8x15/16"	225.0	10.0	39.0	44.0	0.30
963.7089	7/8x31/32"	240.0	10.0	44.0	48.0	0.40
963.7090	7/8x1"	240.0	10.0	44.0	48.0	0.40
963.7091	7/8x1.1/16"	270.0	12.0	48.0	54.0	0.72
963.7092	15/16x1"	270.0	12.0	48.0	54.0	0.72
963.7093	15/16x1.1/16"	270.0	12.0	48.0	54.0	0.72
963.7094	1x1.1/8"	270.0	12.0	48.0	54.0	0.70
963.7095	1x1.5/16"	300.0	14.0	59.0	62.0	0.75
963.7096	1.1/16x1.1/4"	300.0	14.0	59.0	62.0	0.75
963.7097	1.1/8x1.5/16"	300.0	14.0	59.0	62.0	0.75
963.7098	1.1/16x1.7/16"	320.0	16.0	70.0	75.0	1.22
963.7099	1.1/8x1.1/2"	320.0	16.0	70.0	75.0	1.15
963.7100	1.1/4x1.3/8"	320.0	16.0	70.0	75.0	1.15
963.7101	1.1/4x1.7/16"	320.0	16.0	70.0	75.0	1.15
963.7102	1.5/16x1.1/2"	370.0	16.0	75.0	88.0	1.48
963.7103	1.1/4x1.5/8"	370.0	16.0	75.0	88.0	1.40
963.7104	1.3/8x1.1/2"	370.0	16.0	75.0	88.0	1.40
963.7105	1.7/16x1.5/8"	370.0	16.0	75.0	88.0	1.40
963.7106	1.1/2x1.11/16"	370.0	16.0	75.0	88.0	1.40
963.7107	1.5/8x1.1/4"	370.0	16.0	75.0	88.0	1.40
963.7108	1.5/8x1.3/4"	370.0	16.0	75.0	88.0	1.35
963.7109	1.11/16x1.7/8"	370.0	18.0	85.0	100.0	1.35
963.7110	1.11/16x2"	390.0	19.0	95.0	105.0	1.70
963.7111	1.13/16x2"	390.0	19.0	95.0	105.0	1.70
963.7112	1.3/4x2.1/16"	390.0	19.0	95.0	105.0	1.70
963.7113	2x2.3/16"	440.0	20.0	100.0	115.0	1.70
963.7114	2x2.5/16"	440.0	20.0	100.0	115.0	1.70
963.7115	2.3/16x2.3/8"	470.0	22.0	110.0	125.0	1.80
963.7116	2.1/4x2.3/8"	470.0	22.0	110.0	125.0	1.80

BRONZEplus double open ended spanner set

- In accordance to DIN 895
- Jaw 15° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	Weight
963.7064	12 pcs 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22 - 21x23 - 24x26 - 25x28 - 30x32 mm	3.50
963.7117	8 pcs 1/4x5/16 - 3/8x7/16 - 7/16x1/2 - 1/2x9/16 - 9/16x5/8 - 5/8x11/16 - 3/4x7/8 - 15/16x1"	1.70

BRONZEplus Double open ended spanner

- Jaw 15° and 75° offset
- Both jaws the same size
- Extra fl t heads
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



mm	A mm	B mm	L mm	Weight
963.7118	4	6.0	12.0	70.0 30
963.7119	4.5	6.0	12.0	70.0 30
963.7120	5	6.0	15.0	78.0 30
963.7121	5.5	6.0	15.0	78.0 10
963.7122	6	6.0	15.0	78.0 10
963.7123	7	6.0	19.0	91.0 10
963.7124	8	6.0	19.0	96.0 50
963.7125	9	6.0	22.0	103.0 60
963.7126	10	6.0	22.0	105.0 20
963.7127	11	7.0	25.0	116.0 20
963.7128	12	7.0	25.0	116.0 80
963.7129	13	7.0	30.0	131.0 110
963.7130	14	8.0	30.0	131.0 110

BRONZEplus Double open ended spanner-set

- Jaw 15° and 75° offset
- Both jaws the same size
- Extra fl t heads
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	Weight
963.7131	10 pcs 5 - 5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 mm	180

BRONZEplus Double open ended spanner

- Jaw 15° offset
- Extra fl t heads
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



mm	A mm	B1 mm	B2 mm	L mm	Weight
963.7132	3x3,5	5.0	9.0	12.0	50.0 20
963.7133	4x4,5	5.0	12.0	14.0	60.0 20
963.7134	5x5,5	6.0	12.0	14.0	70.0 20
963.7135	6x7	6.0	14.0	16.0	80.0 30
963.7136	8x9	6.0	17.0	20.0	90.0 10
963.7137	10x11	6.0	20.0	22.0	100.0 60

	mm	A mm	B1 mm	B2 mm	L mm	kg
963.7138	5/32x3/16"	5.0	12.0	14.0	60.0	5
963.7139	3/16x7/32"	6.0	12.0	14.0	70.0	6
963.7140	1/4x9/32"	6.0	14.0	16.0	80.0	8
963.7141	1/4x5/16"	6.0	14.0	16.0	80.0	8
963.7142	5/16x11/32"	6.0	17.0	20.0	90.0	10
963.7143	5/16x3/8"	6.0	17.0	20.0	90.0	10
963.7144	5/16x13/32"	6.0	20.0	22.0	100.0	12
963.7145	3/8x7/16"	6.0	20.0	22.0	100.0	12

BRONZEplus open ended spanner

- In accordance to DIN 894 / ISO 3380
- Jaw 15° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	A mm	B mm	L mm	kg
963.7146	6	6.0	21.0	90.0	0.01
963.7147	7	6.0	21.0	90.0	0.01
963.7148	8	6.0	21.0	90.0	0.01
963.7149	9	6.0	21.0	90.0	0.01
963.7150	10	7.0	28.0	100.0	0.03
963.7151	11	7.0	28.0	100.0	0.02
963.7152	12	7.0	33.0	140.0	0.05
963.7153	13	7.0	33.0	140.0	0.04
963.7154	14	8.0	40.0	165.0	0.08
963.7155	15	8.0	40.0	145.0	0.08
963.7156	16	8.0	40.0	165.0	0.07
963.7157	17	8.0	40.0	165.0	0.07
963.7158	18	8.0	40.0	165.0	0.07
963.7159	19	10.0	44.0	190.0	0.10
963.7160	20	10.0	44.0	190.0	0.10
963.7161	21	12.0	46.0	205.0	0.14
963.7162	22	12.0	46.0	205.0	0.13
963.7163	23	14.0	52.0	220.0	0.17
963.7164	24	14.0	52.0	220.0	0.17
963.7165	25	14.0	57.0	220.0	0.16
963.7166	26	14.0	57.0	220.0	0.16
963.7167	27	14.0	57.0	220.0	0.15
963.7168	28	15.0	63.0	250.0	0.27
963.7169	29	15.0	63.0	250.0	0.26
963.7170	30	15.0	63.0	250.0	0.25
963.7171	32	16.0	69.0	285.0	0.34
963.7172	33	16.0	69.0	285.0	0.34
963.7173	34	17.0	75.0	285.0	0.32
963.7174	35	17.0	75.0	285.0	0.32
963.7175	36	17.0	75.0	285.0	0.30
963.7176	37	17.0	75.0	285.0	0.30
963.7177	38	18.0	86.0	330.0	0.54
963.7178	41	18.0	86.0	330.0	0.52
963.7179	42	18.0	86.0	330.0	0.50
963.7180	46	21.0	95.0	360.0	0.65
963.7181	47	21.0	95.0	360.0	0.63
963.7182	50	22.0	105.0	440.0	1.10
963.7183	52	22.0	105.0	440.0	1.10
963.7184	54	23.0	117.0	440.0	1.05
963.7185	55	23.0	117.0	440.0	1.05
963.7186	56	23.0	117.0	440.0	1.00
963.7187	58	23.0	125.0	480.0	1.48
963.7188	60	23.0	125.0	480.0	1.48
963.7189	63	24.0	135.0	520.0	1.70
963.7190	65	24.0	135.0	520.0	1.70
963.7191	67	25.0	145.0	520.0	1.70
963.7192	70	25.0	145.0	540.0	1.90
963.7193	71	25.0	145.0	540.0	1.90
963.7194	75	25.0	155.0	540.0	1.80
963.7195	77	25.0	155.0	540.0	1.80
963.7196	80	27.0	165.0	630.0	2.90
963.7197	82	27.0	165.0	630.0	2.80
963.7198	85	29.0	175.0	680.0	3.40
963.7199	88	30.0	185.0	680.0	3.30
963.7200	90	30.0	185.0	680.0	3.20
963.7201	94	32.0	195.0	830.0	5.00
963.7202	95	32.0	195.0	830.0	4.80
963.7203	100	32.0	209.0	800.0	5.90
963.7204	105	33.0	210.0	850.0	8.90
963.7205	110	33.0	230.0	900.0	9.00
963.7206	115	33.0	240.0	950.0	9.30
963.7207	120	35.0	245.0	990.0	9.60
963.7208	125	35.0	250.0	1000.0	8.30
963.7209	130	35.0	270.0	1000.0	8.30
963.7210	135	35.0	275.0	1000.0	8.30

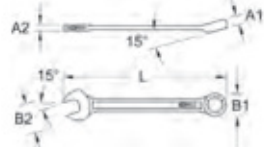
	mm	A mm	B mm	L mm	kg
963.7211	1/4"	6.0	21.0	90.0	0.01
963.7212	5/16"	6.0	21.0	90.0	0.01
963.7213	11/32"	6.0	21.0	90.0	0.01
963.7214	3/8"	6.0	21.0	90.0	0.01
963.7215	13/32"	7.0	28.0	100.0	0.03
963.7216	7/16"	7.0	28.0	100.0	0.02
963.7217	1/2"	7.0	33.0	140.0	0.04
963.7218	9/16"	8.0	40.0	165.0	0.08
963.7219	19/32"	8.0	40.0	165.0	0.08
963.7220	5/8"	8.0	40.0	165.0	0.07
963.7221	11/16"	8.0	40.0	165.0	0.07
963.7222	3/4"	10.0	44.0	190.0	0.10
963.7223	25/32"	10.0	44.0	190.0	0.10
963.7224	13/16"	12.0	46.0	205.0	0.14
963.7225	7/8"	12.0	46.0	205.0	0.13
963.7226	15/16"	14.0	57.0	220.0	0.17
963.7227	31/32"	14.0	57.0	220.0	0.17
963.7228	1"	14.0	57.0	220.0	0.16
963.7229	1.1/16"	14.0	57.0	220.0	0.15
963.7230	1.1/8"	15.0	63.0	250.0	0.27
963.7231	1.3/16"	15.0	63.0	250.0	0.25
963.7232	1.1/4"	16.0	69.0	285.0	0.34
963.7233	1.5/16"	16.0	69.0	285.0	0.34
963.7234	1.3/8"	17.0	75.0	285.0	0.32
963.7235	1.7/16"	17.0	75.0	285.0	0.30
963.7236	1.1/2"	18.0	86.0	330.0	0.54
963.7237	1.9/16"	18.0	86.0	330.0	0.52
963.7238	1.5/8"	18.0	86.0	330.0	0.52
963.7239	1.11/16"	18.0	86.0	330.0	0.50
963.7240	1.3/4"	21.0	95.0	360.0	0.65
963.7241	1.13/16"	21.0	95.0	360.0	0.65
963.7242	1.7/8"	21.0	95.0	360.0	0.63
963.7243	2"	22.0	105.0	440.0	1.10
963.7244	2.1/16"	22.0	105.0	440.0	1.10
963.7245	2.1/8"	22.0	105.0	440.0	1.05
963.7246	2.3/16"	22.0	105.0	440.0	1.05
963.7247	2.1/4"	23.0	125.0	480.0	1.00
963.7248	2.5/16"	23.0	125.0	480.0	1.48
963.7249	2.3/8"	23.0	125.0	520.0	1.48
963.7250	2.7/16"	24.0	135.0	520.0	1.70
963.7251	2.1/2"	24.0	135.0	520.0	1.70
963.7252	2.9/16"	24.0	135.0	520.0	1.70
963.7253	2.5/8"	24.0	135.0	520.0	1.70
963.7254	2.3/4"	25.0	145.0	540.0	1.90
963.7255	2.13/16"	25.0	145.0	540.0	1.90
963.7256	2.15/16"	25.0	155.0	540.0	1.90
963.7257	3"	25.0	155.0	540.0	1.80
963.7258	3.1/8"	27.0	165.0	630.0	2.90
963.7259	3.1/4"	27.0	165.0	630.0	2.80
963.7260	3.3/8"	30.0	185.0	680.0	3.40
963.7261	3.1/2"	30.0	185.0	680.0	3.30
963.7262	3.5/8"	30.0	185.0	680.0	3.20
963.7263	3.3/4"	32.0	195.0	830.0	5.00
963.7264	3.7/8"	32.0	195.0	830.0	4.80



NON SPARKING COMBINATION SPANNER

BRONZEplus combination spanner, offset

- FlankTraction profil
- In accordance to DIN 3113 Form A / ISO 3318 / ISO 7738
- Jaw 15° offset
- Ring head 15° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	A1 mm	A2 mm	B1 mm	B2 mm	L mm	kg
963.7265	6	6.0	5.0	11.0	20.0	130.0	0.05
963.7266	7	6.0	5.0	11.0	20.0	130.0	0.06
963.7267	8	7.0	6.0	15.0	17.0	135.0	0.06
963.7268	9	7.0	6.0	18.0	22.0	150.0	0.10
963.7269	10	7.0	6.0	18.0	22.0	150.0	0.09
963.7270	11	7.0	6.0	18.0	22.0	150.0	0.09
963.7271	12	9.0	7.0	20.0	25.0	190.0	0.17
963.7272	13	10.0	7.0	22.0	32.0	190.0	0.17
963.7273	14	10.0	7.0	22.0	32.0	190.0	0.16
963.7274	15	11.0	8.0	27.0	34.0	210.0	0.23
963.7275	16	11.0	8.0	27.0	34.0	210.0	0.23
963.7276	17	11.0	8.0	27.0	34.0	210.0	0.22
963.7277	18	13.0	9.0	31.0	40.0	230.0	0.33
963.7278	19	13.0	9.0	31.0	40.0	230.0	0.33
963.7279	20	13.0	9.0	31.0	40.0	230.0	0.33
963.7280	21	14.0	9.0	36.0	43.0	250.0	0.36
963.7281	22	14.0	9.0	36.0	43.0	250.0	0.36
963.7282	23	14.0	9.0	36.0	43.0	250.0	0.35
963.7283	24	15.0	10.0	38.0	48.0	270.0	0.50
963.7284	25	15.0	10.0	38.0	48.0	270.0	0.48
963.7285	26	15.0	10.0	38.0	48.0	270.0	0.47
963.7286	27	17.0	13.0	43.0	55.0	280.0	0.67
963.7287	28	17.0	13.0	43.0	55.0	280.0	0.68
963.7288	29	17.0	13.0	43.0	55.0	280.0	0.63
963.7289	30	20.0	13.0	49.0	60.0	300.0	0.73
963.7290	32	22.0	14.0	53.0	64.0	300.0	0.85
963.7291	34	22.0	14.0	53.0	64.0	320.0	0.95
963.7292	36	22.0	14.0	54.0	72.0	330.0	0.93
963.7293	38	23.0	16.0	58.0	82.0	400.0	2.15
963.7294	41	24.0	18.0	61.0	87.0	410.0	2.00
963.7295	46	24.0	18.0	67.0	95.0	410.0	1.90
963.7296	50	27.0	18.0	75.0	100.0	540.0	3.40
963.7297	55	27.0	22.0	90.0	105.0	520.0	3.50
963.7298	60	32.0	27.0	92.0	125.0	515.0	3.90
963.7299	65	34.0	28.0	95.0	140.0	500.0	3.20
963.7300	70	35.0	28.0	100.0	145.0	510.0	3.80
963.7301	75	35.0	29.0	105.0	157.0	680.0	3.90
963.7302	80	36.0	29.0	112.0	165.0	680.0	4.00

		A1 mm	A2 mm	B1 mm	B2 mm	L mm	
963.7330	1.7/16"	22.0	14.0	55.0	72.0	330.0	0.84
963.7331	1.1/2"	22.0	14.0	55.0	72.0	330.0	0.84
963.7332	1.9/16"	24.0	18.0	67.0	95.0	410.0	2.00
963.7333	1.5/8"	24.0	18.0	67.0	95.0	410.0	2.00
963.7334	1.1/16"	24.0	18.0	67.0	95.0	410.0	2.00
963.7335	1.3/4"	24.0	18.0	67.0	95.0	410.0	1.90
963.7336	1.13/16"	24.0	18.0	67.0	95.0	410.0	1.90
963.7337	1.7/8"	27.0	20.0	78.0	100.0	435.0	1.60
963.7338	2"	27.0	20.0	78.0	100.0	435.0	1.60
963.7339	2.1/16"	27.0	20.0	78.0	100.0	435.0	1.60
963.7340	2.1/8"	27.0	22.0	90.0	105.0	455.0	2.00
963.7341	2.3/16"	27.0	22.0	90.0	105.0	455.0	2.00
963.7342	2.1/4"	30.0	25.0	92.0	110.0	475.0	2.50

BRONZEplus combination spanner set, offset

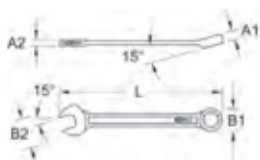
- FlankTraction profile
- In accordance to DIN 3113 Form A / ISO 3318 / ISO 7738
- Jaw 15° offset
- Ring head 15° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



963.7303	8 pcs	8 - 9 - 10 - 11 - 13 - 14 - 17 - 19 mm	1.20
963.7304	11 pcs	8 - 10 - 11 - 12 - 13 - 14 - 16 - 17 - 18 - 19 - 22 mm	2.20
963.7305	12 pcs	10 - 11 - 12 - 13 - 14 - 17 - 19 - 22 - 24 - 27 - 30 - 32 mm	4.10
963.7306	26 pcs	6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22 - 23 - 24 - 25 - 26 - 27 - 28 - 29 - 30 - 32 mm	8.45
963.7343	12 pcs	1/4" - 5/16" - 3/8" - 7/16" - 1/2" - 9/16" - 5/8" - 3/4" - 7/8" - 1" - 1.1/16" - 1.14"	3.30

BRONZEplus combination spanner, extra long

- FlankTraction profile
- In accordance to DIN 3113 / ISO 3318
- Jaw 15° offset
- Ring head 15° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



		A1 mm	A2 mm	B1 mm	B2 mm	L mm	
963.7344	10	10.0	7.0	17.0	28.0	190.0	0.07
963.7345	12	12.0	8.0	20.0	32.0	210.0	0.07
963.7346	13	12.0	8.0	22.0	34.0	225.0	0.09
963.7347	17	13.0	9.0	28.0	43.0	280.0	0.14
963.7348	19	13.0	9.0	30.0	47.0	310.0	0.20
963.7349	22	15.0	10.0	35.0	53.0	350.0	0.26
963.7350	24	16.0	10.0	38.0	57.0	400.0	0.37
963.7351	27	18.0	12.0	42.0	64.0	450.0	0.50
963.7352	30	20.0	13.0	46.0	68.0	480.0	0.90
963.7353	32	22.0	14.0	50.0	74.0	500.0	0.73
963.7354	36	24.0	16.0	56.0	83.0	550.0	1.20
963.7355	41	24.0	17.0	63.0	93.0	600.0	2.00
963.7356	46	25.0	19.0	73.0	99.0	640.0	2.80

BRONZEplus Combination spanner set, extra long

- FlankTraction profile
- In accordance to DIN 3113 / ISO 3318
- Jaw 15° offset
- Ring head 15° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



963.7357	6 pcs	10 - 12 - 13 - 17 - 19 - 22 mm	0.83
963.7358	10 pcs	10 - 12 - 13 - 17 - 19 - 22 - 24 - 27 - 30 - 32 mm	3.33

BRONZEplus Combination spanners, offset

- FlankTraction profile (12 point)
- In accordance to DIN 3113 Form B / ISO 3318 / ISO 7738
- Jaw 15° offset
- Ring head 70° offset
- Ring head 10° angled
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



		A1 mm	A2 mm	B1 mm	B2 mm	L mm	
963.7359	10	10.0	7.0	17.0	28.0	148.0	70
963.7360	12	12.0	8.0	20.0	32.0	168.0	65
963.7361	13	12.0	8.0	22.0	34.0	185.0	80
963.7362	17	13.0	9.0	28.0	43.0	232.0	140
963.7363	19	13.0	9.0	30.0	47.0	258.0	190
963.7364	22	15.0	10.0	35.0	53.0	292.0	300
963.7365	24	16.0	10.0	38.0	57.0	318.0	370
963.7366	27	18.0	12.0	42.0	64.0	352.0	500
963.7367	30	20.0	13.0	46.0	68.0	390.0	645
963.7368	32	22.0	14.0	50.0	74.0	412.0	780

BRONZEplus Combination spanners set, offset

- FlankTraction profile (12 point)
- In accordance to DIN 3113 Form B / ISO 3318 / ISO 7738
- Jaw 15° offset
- Ring head 70° offset
- Ring head 10° angled
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



963.7369	6 pcs	10 - 12 - 13 - 17 - 19 - 22 mm	0.85
963.7370	10 pcs	10 - 12 - 13 - 17 - 19 - 22 - 24 - 27 - 30 - 32 mm	3.14

NON SPARKING RING SPANNERS

BRONZEplus double ring ended spanner

- FlankTraction profile
- In accordance to DIN 838 / ISO 1085 / ISO 10104 / ISO 3318
- Ring head 75° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

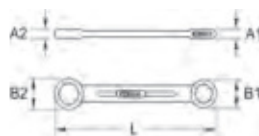


		A1 mm	A2 mm	B1 mm	B2 mm	L mm	
963.7371	6x7	6.0	6.0	12.0	14.0	170.0	0.11
963.7372	6x8	6.0	6.0	12.0	14.0	170.0	0.11
963.7373	7x8	6.0	6.0	12.0	14.0	170.0	0.10
963.7374	7x9	7.0	7.0	15.0	18.0	170.0	0.10
963.7375	8x9	7.0	7.0	15.0	18.0	170.0	0.10
963.7376	8x10	7.0	7.0	15.0	18.0	180.0	0.14
963.7377	9x10	7.0	7.0	15.0	18.0	180.0	0.13
963.7378	9x11	8.0	8.0	17.0	20.0	180.0	0.14
963.7379	10x11	8.0	8.0	17.0	20.0	180.0	0.15
963.7380	10x12	8.0	8.0	17.0	20.0	180.0	0.14
963.7381	10x13	9.0	9.0	20.0	23.0	195.0	0.18
963.7382	10x14	9.0	9.0	20.0	23.0	195.0	0.17
963.7383	11x13	9.0	9.0	20.0	23.0	195.0	0.19
963.7384	11x14	9.0	9.0	20.0	23.0	195.0	0.18
963.7385	12x13	9.0	9.0	20.0	23.0	195.0	0.18
963.7386	12x14	9.0	9.0	20.0	23.0	195.0	0.18
963.7387	13x14	9.0	9.0	20.0	23.0	195.0	0.18
963.7388	13x15	10.0	10.0	22.0	26.0	230.0	0.24
963.7389	13x16	10.0	10.0	22.0	26.0	230.0	0.24
963.7390	13x17	10.0	10.0	22.0	26.0	230.0	0.25
963.7391	14x15	10.0	10.0	22.0	26.0	230.0	0.25
963.7392	14x16	10.0	10.0	22.0	26.0	230.0	0.24
963.7393	14x17	10.0	10.0	22.0	26.0	230.0	0.23
963.7394	16x17	10.0	10.0	24.0	26.0	230.0	0.24
963.7395	16x18	12.0	12.0	26.0	30.0	280.0	0.42
963.7396	17x19	12.0	12.0	26.0	30.0	280.0	0.40
963.7397	17x22	12.0	13.0	26.0	35.0	280.0	0.38
963.7398	18x19	12.0	12.0	26.0	30.0	280.0	0.40
963.7399	18x20	13.0	13.0	30.0	35.0	280.0	0.39
963.7400	18x21	13.0	13.0	30.0	35.0	280.0	0.39
963.7401	19x22	13.0	13.0	30.0	35.0	280.0	0.37
963.7402	19x24	14.0	14.0	35.0	37.0	290.0	0.53
963.7403	20x22	13.0	13.0	30.0	35.0	280.0	0.38
963.7404	21x23	14.0	14.0	35.0	37.0	290.0	0.51
963.7405	21x24	14.0	14.0	35.0	37.0	300.0	0.51
963.7406	22x24	14.0	14.0	35.0	37.0	300.0	0.51
963.7407	22x27	15.0	15.0	38.0	42.0	330.0	0.65
963.7408	23x26	15.0	15.0	38.0	42.0	330.0	0.67
963.7409	24x26	15.0	15.0	38.0	42.0	330.0	0.68
963.7410	24x27	15.0	15.0	38.0	42.0	330.0	0.67
963.7411	24x30	15.0	15.0	42.0	47.0	370.0	0.93
963.7412	25x28	15.0	15.0	38.0	42.0	330.0	0.66
963.7413	26x29	15.0	15.0	42.0	47.0	370.0	1.00
963.7414	27x29	15.0	15.0	42.0	47.0	370.0	1.00
963.7415	27x30	15.0	15.0	42.0	47.0	370.0	0.90
963.7416	27x32	16.0	16.0	46.0	50.0	370.0	0.90
963.7417	30x32	16.0	16.0	46.0	50.0	370.0	0.86
963.7418	30x34	18.0	18.0	52.0	54.0	430.0	0.85
963.7419	30x36	18.0	18.0	52.0	54.0	430.0	1.30
963.7420	32x34	18.0	18.0	52.0	54.0	430.0	1.30
963.7421	32x36	18.0	18.0	52.0	54.0	430.0	1.30
963.7422	34x36	18.0	18.0	52.0	54.0	430.0	1.25
963.7423	35x38	18.0	18.0	54.0	56.0	450.0	1.40
963.7424	36x38	18.0	18.0	54.0	56.0	450.0	1.45
963.7425	36x41	20.0	20.0	56.0	62.0	450.0	1.45
963.7426	38x42	20.0	20.0	54.0	62.0	450.0	1.45
963.7427	41x46	20.0	20.0	63.0	68.0	460.0	1.80
963.7428	46x50	24.0	24.0	69.0	74.0	480.0	2.10
963.7429	50x55	23.0	23.0	72.0	83.0	540.0	3.00
963.7430	50x60	23.0	23.0	72.0	90.0	540.0	2.80
963.7431	55x60	24.0	24.0	80.0	90.0	540.0	2.80
963.7432	60x65	25.0	25.0	90.0	98.0	690.0	4.20
963.7433	65x70	25.0	25.0	98.0	105.0	690.0	4.20
963.7434	70x80	27.0	27.0	105.0	115.0	770.0	6.00
963.7435	75x80	27.0	27.0	110.0	115.0	790.0	6.60
963.7436	85x90	30.0	30.0	115.0	120.0	800.0	7.00

	⚙️	A1 mm	A2 mm	B1 mm	B2 mm	L mm	📏
963.7438	1/4x5/16"	6.0	6.0	12.0	14.0	170.0	0.11
963.7439	5/16x3/8"	6.0	6.0	12.0	14.0	170.0	0.10
963.7440	3/8x7/16"	8.0	8.0	17.0	20.0	180.0	0.14
963.7441	7/16x1/2"	9.0	9.0	20.0	23.0	195.0	0.19
963.7442	1/2x9/16"	9.0	9.0	20.0	23.0	195.0	0.18
963.7443	1/2x19/32"	10.0	10.0	22.0	26.0	230.0	0.24
963.7444	9/16x5/8"	10.0	10.0	22.0	26.0	230.0	0.25
963.7445	19/32x11/16"	10.0	10.0	22.0	26.0	230.0	0.23
963.7446	5/8x11/16"	10.0	10.0	22.0	26.0	230.0	0.24
963.7447	5/8x3/4"	12.0	12.0	26.0	30.0	280.0	0.40
963.7448	11/16x3/4"	12.0	12.0	26.0	30.0	280.0	0.40
963.7449	11/16x25/32"	12.0	12.0	26.0	30.0	280.0	0.38
963.7450	3/4x25/32"	12.0	12.0	26.0	30.0	280.0	0.36
963.7451	3/4x7/8"	12.0	12.0	26.0	30.0	280.0	0.37
963.7452	13/16x7/8"	12.0	12.0	26.0	30.0	280.0	0.38
963.7453	25/32x13/16"	12.0	12.0	26.0	30.0	280.0	0.35
963.7454	7/8x15/16"	14.0	14.0	35.0	37.0	300.0	0.51
963.7455	7/8x1"	14.0	14.0	35.0	37.0	300.0	0.50
963.7456	7/8x1.1/16"	15.0	15.0	38.0	42.0	330.0	0.65
963.7457	15/16x1"	15.0	15.0	38.0	42.0	330.0	0.67
963.7458	1x1.1/8"	15.0	15.0	38.0	42.0	330.0	0.66
963.7459	1.1/16x1.1/8"	15.0	15.0	42.0	47.0	370.0	1.00
963.7460	1.1/16x1.1/4"	15.0	15.0	42.0	47.0	370.0	0.90
963.7461	1.1/8x1.5/16"	15.0	15.0	42.0	47.0	370.0	0.88
963.7462	1.3/16x1.5/16"	18.0	18.0	52.0	54.0	430.0	0.85
963.7463	1.1/4x1.5/16"	18.0	18.0	52.0	54.0	430.0	1.20
963.7464	1.1/4x1.3/8"	18.0	18.0	52.0	54.0	430.0	1.30
963.7465	1.1/4x1.7/16"	18.0	18.0	52.0	54.0	430.0	1.30
963.7466	1.5/16x1.1/2"	18.0	18.0	52.0	54.0	430.0	1.20
963.7467	1.3/8x1.1/2"	18.0	18.0	54.0	56.0	450.0	1.40
963.7468	1.7/16x1.5/8"	18.0	18.0	54.0	56.0	450.0	1.45
963.7469	1.5/8x1.13/16"	20.0	20.0	63.0	68.0	460.0	1.80
963.7470	1.11/16x1.7/8"	20.0	20.0	63.0	68.0	460.0	1.80
963.7471	1.13/16x2"	24.0	24.0	69.0	74.0	480.0	2.10
963.7472	1.3/4x2.1/16"	24.0	24.0	69.0	74.0	480.0	2.00
963.7473	2x2.3/16"	24.0	24.0	80.0	90.0	540.0	3.00
963.7474	2x2.3/8"	24.0	24.0	80.0	90.0	540.0	2.80
963.7475	2.3/16x2.3/8"	24.0	24.0	80.0	90.0	540.0	2.80
963.7476	2.1/4x2.7/16"	24.0	24.0	80.0	90.0	540.0	2.70

BRONZEplus double ring ended spanner, straight

- FlankTraction profil
- In accordance to DIN 838
- Straight form
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



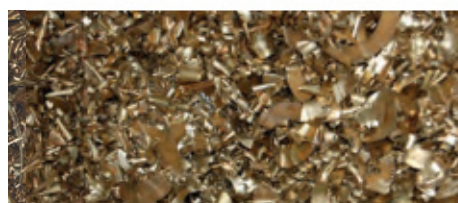
	⚙️	A1 mm	A2 mm	B1 mm	B2 mm	L mm	📏
963.7478	6x7	6.0	6.0	12.0	14.0	100.0	0.01
963.7479	8x9	7.0	7.0	15.0	18.0	115.0	0.02
963.7480	8x10	7.0	7.0	15.0	18.0	120.0	0.02
963.7481	9x11	8.0	8.0	17.0	20.0	125.0	0.02
963.7482	10x11	8.0	8.0	17.0	20.0	130.0	0.02
963.7483	10x13	9.0	9.0	20.0	23.0	130.0	0.02
963.7484	12x13	9.0	9.0	20.0	23.0	140.0	0.04
963.7485	12x14	9.0	9.0	20.0	23.0	140.0	0.05
963.7486	13x14	9.0	9.0	20.0	23.0	140.0	0.05
963.7487	13x15	9.0	9.0	20.0	23.0	140.0	0.05
963.7488	13x17	10.0	10.0	22.0	26.0	155.0	0.05
963.7489	14x15	10.0	10.0	22.0	26.0	155.0	0.05
963.7490	14x17	10.0	10.0	22.0	26.0	155.0	0.05
963.7491	16x17	12.0	12.0	26.0	30.0	170.0	0.07
963.7492	16x18	12.0	12.0	26.0	30.0	170.0	0.07
963.7493	17x19	12.0	12.0	26.0	30.0	190.0	0.08
963.7494	18x19	12.0	12.0	26.0	30.0	190.0	0.08
963.7495	19x22	14.0	14.0	35.0	37.0	200.0	0.12
963.7496	19x24	14.0	14.0	35.0	37.0	200.0	0.12
963.7497	20x22	14.0	14.0	35.0	37.0	200.0	0.12
963.7498	21x23	14.0	14.0	35.0	37.0	200.0	0.12
963.7499	22x24	14.0	14.0	35.0	37.0	200.0	0.12
963.7500	24x26	15.0	15.0	38.0	42.0	210.0	0.14
963.7501	24x27	15.0	15.0	38.0	42.0	210.0	0.13
963.7502	24x30	16.0	16.0	42.0	47.0	255.0	0.19
963.7503	25x28	16.0	16.0	42.0	47.0	255.0	0.20
963.7504	26x28	16.0	16.0	42.0	47.0	255.0	0.19
963.7505	27x29	16.0	16.0	42.0	47.0	255.0	0.19
963.7506	27x32	16.0	16.0	46.0	50.0	265.0	0.23
963.7507	30x32	16.0	16.0	46.0	50.0	265.0	0.23
963.7508	30x36	18.0	18.0	52.0	54.0	285.0	0.28
963.7509	32x36	18.0	18.0	52.0	54.0	285.0	0.28
963.7510	36x41	20.0	20.0	63.0	64.0	460.0	0.33
963.7511	41x46	21.0	21.0	63.0	68.0	432.0	0.81
963.7512	46x50	24.0	24.0	69.0	74.0	477.0	1.04

BRONZEplus single-end box wrench, straight

- FlankTraction profil
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	⚙️	A mm	B mm	L mm	📏
963.7527	14	10.5	24.0	140.0	0.13
963.7528	15	10.5	24.0	140.0	0.13
963.7529	16	11.5	29.0	155.0	0.15
963.7530	17	11.5	29.0	155.0	0.15
963.7531	18	12.0	30.0	170.0	0.25
963.7532	19	12.0	30.0	170.0	0.28
963.7533	20	13.5	35.0	190.0	0.28
963.7534	21	13.5	35.0	190.0	0.30
963.7535	22	13.5	35.0	190.0	0.30
963.7536	23	14.5	38.0	215.0	0.30
963.7537	24	14.5	38.0	215.0	0.40
963.7538	25	16.0	42.0	230.0	0.43
963.7539	26	16.0	42.0	230.0	0.45
963.7540	27	16.0	42.0	230.0	0.50
963.7541	28	17.0	48.0	265.0	0.52
963.7542	29	17.0	48.0	265.0	0.51
963.7543	30	17.0	48.0	265.0	0.50
963.7544	32	17.0	51.0	265.0	0.45
963.7545	33	17.0	51.0	265.0	0.43
963.7546	34	17.5	51.0	290.0	0.67
963.7547	35	17.5	51.0	290.0	0.66
963.7548	36	17.5	55.0	290.0	0.65
963.7549	37	21.0	65.0	325.0	0.90
963.7550	38	21.0	65.0	325.0	0.90
963.7551	41	21.0	65.0	325.0	0.90
963.7552	42	21.0	65.0	325.0	0.90
963.7553	46	23.0	72.0	365.0	1.10
963.7554	47	23.0	72.0	365.0	1.10
963.7555	50	24.5	79.0	400.0	1.40
963.7556	52	26.0	87.0	430.0	1.80
963.7557	54	26.0	87.0	430.0	1.70
963.7558	55	26.5	87.0	445.0	1.65
963.7559	56	27.5	93.0	465.0	1.80
963.7560	58	27.5	93.0	465.0	1.80
963.7561	60	27.5	93.0	465.0	2.00
963.7562	63	29.0	100.0	500.0	2.30
963.7563	65	29.0	100.0	500.0	2.10
963.7564	67	29.0	100.0	500.0	2.00
963.7565	70	30.0	107.0	550.0	3.00
963.7566	71	30.0	107.0	550.0	2.80
963.7567	75	32.0	115.0	620.0	5.00
963.7568	77	32.0	115.0	620.0	5.00
963.7569	80	32.0	125.0	620.0	4.50
963.7570	82	32.0	125.0	620.0	4.30
963.7571	85	35.0	130.0	650.0	5.00
963.7572	88	37.0	138.0	650.0	4.80
963.7573	90	37.0	138.0	650.0	4.20
963.7574	94	39.0	145.0	700.0	5.20
963.7575	95	39.0	145.0	700.0	5.20



BRONZEplus double ring ended spanner set

- FlankTraction profil
- In accordance to DIN 838 / ISO 1085 / ISO 10104 / ISO 3318
- Ring head 75° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	📏	📏	📏
963.7437	12 pcs	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22 - 21x23 - 24x27 - 25x28 - 30x32 mm	4.10
963.7477	8 pcs	1/4"x5/16" - 3/8"x7/16" - 7/16"x1/2" - 1/2"x9/16" - 9/16"x5/8" - 8/5"x11/16" - 3/4"x7/8" - 15/16x1"	2.10



	⚙️	A mm	B mm	L mm	📏
963.7576	1/2"	10.5	24.0	140.0	0.13
963.7577	9/16"	10.5	24.0	140.0	0.13
963.7578	19/32"	10.5	24.0	140.0	0.13
963.7579	5/8"	11.5	29.0	155.0	0.15
963.7580	11/16"	11.5	29.0	155.0	0.15
963.7581	3/4"	12.0	30.0	170.0	0.28
963.7582	25/32"	13.5	35.0	190.0	0.28
963.7583	13/16"	13.5	35.0	190.0	0.30
963.7584	7/8"	13.5	35.0	190.0	0.30
963.7585	15/16"	14.5	38.0	215.0	0.40
963.7586	31/32"	14.5	38.0	215.0	0.43
963.7587	1"	16.0	42.0	230.0	0.43
963.7588	1.1/16"	16.0	42.0	230.0	0.50
963.7589	1.1/8"	17.0	48.0	265.0	0.52
963.7590	1.3/16"	17.0	48.0	265.0	0.50
963.7591	1.1/4"	17.0	51.0	265.0	0.45
963.7592	1.5/16"	17.0	51.0	265.0	0.43

		A mm	B mm	L mm	
963.7593	1.3/8"	17.5	51.0	290.0	0.66
963.7594	1.7/16"	21.0	65.0	325.0	0.90
963.7595	1.1/2"	21.0	65.0	325.0	0.90
963.7596	1.9/16"	21.0	65.0	325.0	0.85
963.7597	1.5/8"	21.0	65.0	325.0	0.90
963.7598	1.11/16"	21.0	65.0	325.0	0.85
963.7599	1.3/4"	23.0	72.0	365.0	1.20
963.7600	1.13/19"	23.0	72.0	365.0	1.10
963.7601	1.7/8"	23.0	72.0	365.0	1.10
963.7602	2"	24.5	79.0	400.0	1.40
963.7603	2.1/16"	25.0	87.0	430.0	1.80
963.7604	2.1/8"	26.0	87.0	430.0	1.70
963.7605	2.3/16"	26.5	87.0	445.0	1.65
963.7606	2.1/4"	27.5	93.0	465.0	1.80
963.7607	2.5/16"	27.5	93.0	465.0	1.80
963.7608	2.3/8"	27.5	93.0	465.0	2.00
963.7609	2.7/16"	29.0	100.0	500.0	2.10
963.7610	2.1/2"	29.0	100.0	500.0	2.00
963.7611	2.9/16"	29.0	100.0	500.0	2.10
963.7612	2.3/4"	30.0	107.0	550.0	3.00
963.7613	2.15/16"	32.0	115.0	620.0	5.00
963.7614	3"	32.0	115.0	620.0	5.00
963.7615	3.1/8"	32.0	115.0	620.0	4.50
963.7616	3.3/8"	35.0	130.0	650.0	5.00
963.7617	3.1/2"	37.0	138.0	650.0	4.80
963.7618	3.3/4"	39.0	145.0	700.0	5.20

NON SPARKING IMPACT SPANNERS

BRONZEplus slogging open ended spanner

- In accordance to DIN 133
- Jaw 15° offset
- With impact area
- For heavy duty applications
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



		A mm	B mm	L mm	
963.7619	14	11.0	30.0	180.0	0.35
963.7620	17	11.0	36.0	125.0	0.12
963.7621	19	12.0	40.0	120.0	0.13
963.7622	22	13.0	44.0	135.0	0.15
963.7623	24	14.0	46.0	150.0	0.20
963.7624	27	16.0	55.0	180.0	0.38
963.7625	28	16.0	55.0	180.0	0.37
963.7626	29	17.0	63.0	190.0	0.36
963.7627	30	17.0	63.0	190.0	0.35
963.7628	32	17.0	64.0	210.0	0.68
963.7629	33	19.0	70.0	210.0	0.67
963.7630	34	19.0	70.0	210.0	0.66
963.7631	35	20.0	75.0	210.0	0.65
963.7632	36	20.0	75.0	210.0	0.64
963.7633	38	21.0	80.0	210.0	0.63
963.7634	41	21.0	85.0	220.0	0.79
963.7635	42	21.0	85.0	220.0	0.75
963.7636	46	22.0	97.0	250.0	1.15
963.7637	47	22.0	97.0	255.0	1.20
963.7638	50	23.0	105.0	275.0	1.35
963.7639	52	23.0	105.0	275.0	1.50
963.7640	54	25.0	115.0	300.0	1.90
963.7641	55	25.0	115.0	290.0	1.60
963.7642	56	25.0	125.0	290.0	1.55
963.7643	58	25.0	125.0	290.0	1.50
963.7644	60	26.0	125.0	320.0	2.60
963.7645	63	27.0	135.0	330.0	3.00
963.7646	65	27.0	135.0	330.0	3.00
963.7647	67	28.0	135.0	380.0	4.20
963.7648	70	28.0	135.0	380.0	3.80
963.7649	71	28.0	135.0	380.0	3.70
963.7650	75	30.0	155.0	380.0	3.60

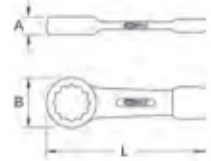
		A mm	B mm	L mm	
963.7651	77	30.0	155.0	380.0	5.00
963.7652	80	32.0	165.0	370.0	4.80
963.7653	82	32.0	165.0	370.0	4.70
963.7654	85	32.0	170.0	370.0	4.50
963.7655	88	34.0	185.0	430.0	7.20
963.7656	90	34.0	185.0	430.0	7.00
963.7657	94	36.0	200.0	430.0	6.90
963.7658	95	36.0	200.0	430.0	6.80
963.7659	100	38.0	215.0	470.0	9.50
963.7660	105	38.0	215.0	470.0	9.30
963.7661	110	40.0	235.0	510.0	14.10
963.7662	115	40.0	235.0	510.0	13.30
963.7663	120	42.0	250.0	545.0	16.40
963.7664	125	42.0	250.0	545.0	15.50
963.7665	130	45.0	270.0	575.0	19.80
963.7666	135	45.0	270.0	575.0	19.20
963.7667	140	45.0	282.0	575.0	19.00
963.7668	145	48.0	295.0	640.0	27.00
963.7669	150	48.0	302.0	640.0	26.80
963.7670	155	48.0	320.0	640.0	26.50
963.7671	160	48.0	320.0	640.0	26.30
963.7672	165	50.0	340.0	715.0	39.50
963.7673	170	50.0	340.0	715.0	38.50
963.7674	175	55.0	355.0	715.0	37.00
963.7675	180	55.0	367.0	715.0	36.00
963.7676	185	55.0	390.0	715.0	35.80
963.7677	190	55.0	390.0	715.0	38.50
963.7678	195	55.0	390.0	715.0	38.50
963.7679	200	55.0	400.0	715.0	38.00
963.7680	205	55.0	400.0	715.0	37.50
963.7681	210	55.0	410.0	715.0	37.00
963.7682	220	55.0	410.0	715.0	36.50
963.7683	230	55.0	410.0	715.0	36.50

		A mm	B mm	L mm	
963.7684	1"	14.0	46.0	150.0	0.20
963.7685	1.1/16"	16.0	55.0	180.0	0.38
963.7686	1.1/8"	16.0	55.0	180.0	0.37
963.7687	1.3/16"	17.0	63.0	190.0	0.35
963.7688	1.1/4"	17.0	64.0	210.0	0.68
963.7689	1.5/16"	19.0	70.0	210.0	0.67
963.7690	1.3/8"	19.0	70.0	210.0	0.65
963.7691	1.7/16"	20.0	75.0	210.0	0.64
963.7692	1.1/2"	20.0	75.0	210.0	0.63
963.7693	1.9/16"	21.0	85.0	220.0	0.75
963.7694	1.5/8"	21.0	85.0	220.0	0.79
963.7695	1.11/16"	21.0	85.0	220.0	0.75
963.7696	1.3/4"	22.0	97.0	250.0	1.10
963.7697	1.13/16"	22.0	97.0	250.0	1.15
963.7698	1.7/8"	22.0	97.0	255.0	1.20
963.7699	2"	23.0	105.0	275.0	1.35
963.7700	2.1/16"	23.0	105.0	275.0	1.50
963.7701	2.1/8"	25.0	115.0	300.0	1.90
963.7702	2.3/16"	25.0	115.0	290.0	1.60
963.7703	2.1/4"	25.0	115.0	290.0	1.50
963.7704	2.5/16"	25.0	115.0	290.0	1.50
963.7705	2.3/8"	26.0	125.0	320.0	2.60
963.7706	2.7/16"	27.0	135.0	330.0	3.00
963.7707	2.1/2"	27.0	135.0	330.0	3.00
963.7708	2.9/16"	27.0	135.0	330.0	3.00
963.7709	2.5/8"	28.0	155.0	380.0	4.20
963.7710	2.3/4"	28.0	155.0	380.0	3.80
963.7711	2.13/16"	28.0	155.0	380.0	3.70
963.7712	2.15/16"	30.0	155.0	380.0	3.50
963.7713	3"	30.0	155.0	380.0	4.00
963.7714	3.1/8"	32.0	165.0	370.0	4.80
963.7715	3.1/4"	32.0	165.0	370.0	4.70
963.7716	3.3/8"	32.0	165.0	370.0	4.50
963.7717	3.1/2"	34.0	185.0	430.0	7.20
963.7718	3.5/8"	34.0	185.0	430.0	7.00
963.7719	3.3/4"	36.0	200.0	430.0	6.80
963.7720	3.7/8"	36.0	200.0	430.0	6.60
963.7721	4"	37.0	210.0	470.0	9.50
963.7722	4.1/8"	37.0	210.0	470.0	9.50
963.7723	4.1/2"	40.0	235.0	510.0	13.30



BRONZEplus slogging ring spanner

- FlankTraction profile (12 point)
- In accordance to DIN 7444
- With impact area
- For heavy duty applications
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



		A mm	B mm	L mm	
963.7724	17	15.0	38.0	150.0	0.40
963.7725	19	15.0	38.0	150.0	0.40
963.7726	22	15.0	38.0	150.0	0.35
963.7727	24	15.0	38.0	150.0	0.35
963.7728	27	18.0	45.0	190.0	0.60
963.7729	28	18.0	45.0	190.0	0.58
963.7730	29	19.0	50.0	190.0	0.56
963.7731	30	19.0	50.0	190.0	0.55
963.7732	32	19.0	53.0	190.0	0.58
963.7733	33	19.0	53.0	190.0	0.57
963.7734	34	21.0	58.0	210.0	0.68
963.7735	35	21.0	58.0	210.0	0.70
963.7736	36	21.0	58.0	210.0	0.69
963.7737	37	21.0	58.0	210.0	0.68
963.7738	38	21.0	63.0	230.0	1.10
963.7739	41	21.0	63.0	230.0	1.00
963.7740	42	21.0	63.0	230.0	1.00
963.7741	46	23.0	70.0	240.0	1.25
963.7742	47	23.0	70.0	240.0	1.27
963.7743	50	27.0	77.0	255.0	1.40
963.7744	52	27.0	77.0	255.0	1.40
963.7745	54	27.0	85.0	255.0	1.35
963.7746	55	27.0	85.0	255.0	1.34
963.7747	56	27.0	85.0	255.0	1.33
963.7748	57	27.0	85.0	255.0	1.30
963.7749	58	29.0	92.0	280.0	2.50
963.7750	60	29.0	92.0	280.0	2.40
963.7751	63	30.0	104.0	295.0	2.90
963.7752	65	30.0	104.0	295.0	2.80
963.7753	67	30.0	104.0	295.0	2.70
963.7754	70	33.0	110.0	320.0	3.40
963.7755	71	33.0	110.0	320.0	3.30
963.7756	75	35.0	115.0	320.0	3.20
963.7757	76	35.0	115.0	320.0	3.10
963.7758	77	35.0	115.0	320.0	3.00
963.7759	80	37.0	120.0	355.0	3.60
963.7760	82	37.0	120.0	355.0	3.50
963.7761	85	42.0	125.0	365.0	5.00
963.7762	88	44.0	135.0	360.0	4.80
963.7763	90	44.0	135.0	360.0	4.60
963.7764	94	45.0	145.0	360.0	4.50
963.7765	95	45.0	145.0	360.0	4.40
963.7766	100	46.0	150.0		

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		A mm	B mm	L mm	
963.7788	11/16"	15.0	38.0	150.0	0.40
963.7789	3/4"	15.0	38.0	150.0	0.40
963.7790	25/32"	15.0	38.0	150.0	0.39
963.7791	13/16"	15.0	38.0	150.0	0.38
963.7792	7/8"	15.0	38.0	150.0	0.35
963.7793	15/16"	15.0	38.0	150.0	0.35
963.7794	1"	15.0	38.0	150.0	0.34
963.7795	1.1/16"	19.0	50.0	190.0	0.70
963.7796	1.1/8"	19.0	50.0	190.0	0.58
963.7797	1.1/4"	19.0	50.0	190.0	0.58
963.7798	1.3/16"	19.0	50.0	190.0	0.55
963.7799	1.5/16"	20.0	55.0	190.0	0.57
963.7800	1.3/8"	21.0	58.0	210.0	0.70
963.7801	1.7/16"	21.0	58.0	210.0	0.69
963.7802	1.1/2"	21.0	63.0	230.0	1.10
963.7803	1.9/16"	21.0	63.0	230.0	1.00
963.7804	1.5/8"	21.0	63.0	230.0	1.00
963.7805	1.11/16"	21.0	63.0	230.0	1.00
963.7806	1.3/4"	23.0	70.0	240.0	1.20
963.7807	1.13/16"	23.0	70.0	240.0	1.25
963.7808	1.7/8"	23.0	70.0	240.0	1.27
963.7809	2"	27.0	77.0	255.0	1.40
963.7810	2.1/16"	27.0	77.0	255.0	1.40
963.7811	2.1/8"	27.0	85.0	255.0	1.35
963.7812	2.3/16"	27.0	85.0	255.0	1.34
963.7813	2.1/4"	27.0	85.0	255.0	1.30
963.7814	2.5/16"	29.0	92.0	280.0	2.50
963.7815	2.3/8"	29.0	92.0	280.0	2.40
963.7816	2.7/16"	30.0	104.0	295.0	2.70
963.7817	2.1/2"	30.0	104.0	295.0	2.90
963.7818	2.9/16"	30.0	104.0	295.0	2.80
963.7819	2.5/8"	30.0	104.0	295.0	2.70
963.7820	2.3/4"	33.0	110.0	320.0	3.20
963.7821	2.13/16"	33.0	110.0	320.0	3.30
963.7822	2.7/8"	33.0	110.0	320.0	3.30
963.7823	2.15/16"	35.0	115.0	320.0	3.20
963.7824	3"	35.0	115.0	320.0	3.10
963.7825	3.1/8"	37.0	120.0	355.0	3.60
963.7826	3.1/4"	37.0	120.0	355.0	3.50
963.7827	3.3/8"	43.0	125.0	365.0	5.00
963.7828	3.1/2"	44.0	135.0	360.0	4.80
963.7829	3.5/8"	44.0	135.0	360.0	4.50
963.7830	3.3/4"	45.0	145.0	360.0	4.50
963.7831	3.7/8"	46.0	150.0	360.0	4.30
963.7832	4"	46.0	150.0	360.0	4.20
963.7833	4.1/8"	46.0	150.0	360.0	3.90
963.7834	4.1/2"	47.0	167.0	450.0	8.10

BRONZEplus slogging ring spanner, offset

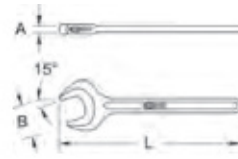
- FlankTraction profile (12 point)
- In accordance to DIN 7444
- Ring head 75° offset
- With impact area
- For heavy duty applications
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	A mm	B mm	H mm	L mm	
963.7835	27	17.0	42.0	245.0	1.10
963.7836	30	18.0	53.0	270.0	1.50
963.7837	32	18.0	55.0	270.0	1.50
963.7838	36	20.0	60.0	280.0	1.60
963.7839	41	22.0	67.0	310.0	2.10
963.7840	46	23.0	70.0	320.0	2.50
963.7841	50	27.0	77.0	320.0	2.50
963.7842	55	27.0	85.0	320.0	2.60
963.7843	60	29.0	92.0	350.0	3.20
963.7844	65	30.0	104.0	380.0	3.80
963.7845	70	33.0	110.0	400.0	4.60
963.7846	75	35.0	115.0	400.0	5.70
963.7847	80	37.0	120.0	420.0	6.60
963.7848	85	43.0	125.0	440.0	7.00
963.7849	90	44.0	135.0	440.0	9.30
963.7850	95	45.0	145.0	440.0	10.00
963.7851	100	46.0	150.0	440.0	11.70
963.7852	110	47.0	167.0	440.0	13.40
963.7853	115	47.0	167.0	440.0	14.50

BRONZEplus open ended spanner 15°

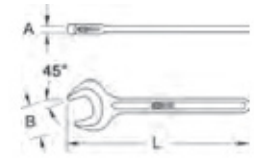
- Jaw 15° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	A mm	B mm	L mm	
963.7854	22	10.5	48.0	0.45
963.7855	23	10.5	48.0	0.45
963.7856	24	11.0	52.0	0.60
963.7857	25	11.0	52.0	0.60
963.7858	26	11.5	60.0	0.85
963.7859	27	11.5	60.0	0.85
963.7860	28	12.0	65.0	1.00
963.7861	29	12.0	65.0	1.00
963.7862	30	12.0	65.0	1.00
963.7863	32	12.5	70.0	1.00
963.7864	33	12.5	70.0	1.00
963.7865	34	13.0	74.0	1.00
963.7866	35	13.5	80.0	1.40
963.7867	36	13.5	80.0	1.40
963.7868	37	13.5	80.0	1.40
963.7869	38	15.0	90.0	1.40
963.7870	41	15.0	90.0	1.80
963.7871	42	15.0	90.0	1.80
963.7872	46	16.0	100.0	2.50
963.7873	47	16.0	100.0	2.50
963.7874	50	17.0	110.0	3.20
963.7875	52	17.0	110.0	3.20
963.7876	54	18.0	120.0	4.40
963.7877	55	18.0	120.0	4.40
963.7878	56	18.0	120.0	4.40
963.7879	58	19.0	130.0	5.60
963.7880	60	19.0	130.0	5.60

BRONZEplus open ended spanner 45°

- Jaw 45° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	A mm	B mm	L mm	
963.7881	22	10.5	48.0	0.45
963.7882	23	10.5	48.0	0.45
963.7883	24	11.0	52.0	0.60
963.7884	25	11.0	52.0	0.60
963.7885	26	11.5	60.0	0.85
963.7886	27	11.5	60.0	0.85
963.7887	28	12.0	65.0	1.00
963.7888	29	12.0	65.0	1.00
963.7889	30	12.0	65.0	1.00
963.7890	32	12.5	70.0	1.00
963.7891	33	12.5	70.0	1.00
963.7892	34	13.0	74.0	1.00
963.7893	35	13.5	80.0	1.40
963.7894	36	13.5	80.0	1.40
963.7895	37	13.5	80.0	1.40
963.7896	38	15.0	90.0	1.40
963.7897	41	15.0	90.0	1.80
963.7898	42	15.0	90.0	1.80
963.7899	46	16.0	100.0	2.50
963.7900	47	16.0	100.0	2.50
963.7901	50	17.0	110.0	3.20
963.7902	52	17.0	110.0	3.20
963.7903	54	18.0	120.0	4.40
963.7904	55	18.0	120.0	4.40
963.7905	56	18.0	120.0	4.40
963.7906	58	19.0	130.0	5.60
963.7907	60	19.0	130.0	5.60

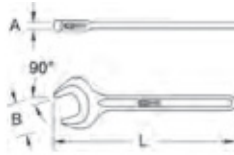
	A mm	B mm	L mm	
963.7935	13/16"	10.5	48.0	0.45
963.7936	7/8"	10.5	48.0	0.45
963.7937	15/16"	11.0	52.0	0.60
963.7938	31/32"	11.0	52.0	0.60
963.7939	1"	11.5	60.0	0.60
963.7940	1.1/16"	11.5	60.0	0.85
963.7941	1.1/8"	12.0	65.0	1.00
963.7942	1.3/16"	12.0	65.0	1.00
963.7943	1.1/4"	12.0	65.0	1.00
963.7944	1.5/16"	12.5	70.0	1.00
963.7945	1.3/8"	12.5	70.0	1.40
963.7946	1.7/16"	13.5	80.0	1.40
963.7947	1.1/2"	15.0	90.0	1.40
963.7948	1.9/16"	15.0	90.0	1.80
963.7949	1.5/8"	15.0	90.0	1.80
963.7950	1.11/16"	15.0	90.0	1.80
963.7951	1.3/4"	16.0	100.0	2.50
963.7952	1.13/16"	16.0	100.0	2.50
963.7953	1.7/8"	16.0	100.0	2.50
963.7954	2"	17.0	110.0	3.20
963.7955	2.1/16"	17.0	110.0	3.20
963.7956	2.1/8"	18.0	120.0	4.40
963.7957	2.3/16"	18.0	120.0	4.40
963.7958	2.1/4"	19.0	130.0	5.60
963.7959	2.5/16"	19.0	130.0	5.60
963.7960	2.3/8"	19.0	130.0	5.60

	A mm	B mm	L mm	
963.7961	13/16"	10.5	48.0	0.45
963.7962	7/8"	10.5	48.0	0.45
963.7963	15/16"	11.0	52.0	0.60
963.7964	31/32"	11.0	52.0	0.60
963.7965	1"	11.5	60.0	0.60
963.7966	1.1/16"	11.5	60.0	0.85
963.7967	1.1/8"	12.0	65.0	1.00
963.7968	1.3/16"	12.0	65.0	1.00
963.7969	1.1/4"	12.0	65.0	1.00
963.7970	1.5/16"	12.5	70.0	1.00
963.7971	1.3/8"	12.5	70.0	1.40
963.7972	1.7/16"	13.5	80.0	1.40
963.7973	1.1/2"	15.0	90.0	1.40
963.7974	1.9/16"	15.0	90.0	1.80
963.7975	1.5/8"	15.0	90.0	1.80
963.7976	1.11/16"	15.0	90.0	1.80
963.7977	1.3/4"	16.0	100.0	2.50
963.7978	1.13/16"	16.0	100.0	2.50
963.7979	1.7/8"	16.0	100.0	2.50
963.7980	2"	17.0	110.0	3.20
963.7981	2.1/16"	17.0	110.0	3.20
963.7982	2.1/8"	18.0	120.0	4.40
963.7983	2.3/16"	18.0	120.0	4.40
963.7984	2.1/4"	19.0	130.0	5.60
963.7985	2.5/16"	19.0	130.0	5.60
963.7986	2.3/8"	19.0	130.0	5.60



BRONZEplus open ended spanner 90°

- Jaw 90° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



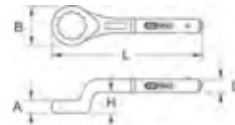
	mm	A mm	B mm	L mm	kg
963.7908	22	10.5	48.0	320.0	0.45
963.7909	23	10.5	48.0	320.0	0.45
963.7910	24	11.0	52.0	350.0	0.60
963.7911	25	11.0	52.0	350.0	0.60
963.7912	26	11.5	60.0	380.0	0.85
963.7913	27	11.5	60.0	380.0	0.85
963.7914	28	12.0	65.0	420.0	1.00
963.7915	29	12.0	65.0	420.0	1.00
963.7916	30	12.0	65.0	420.0	1.00
963.7917	32	12.5	70.0	450.0	1.00
963.7918	33	12.5	70.0	450.0	1.00
963.7919	34	13.0	74.0	450.0	1.00
963.7920	35	13.5	80.0	500.0	1.40
963.7921	36	13.5	80.0	500.0	1.40
963.7922	37	13.5	80.0	500.0	1.40
963.7923	38	15.0	90.0	500.0	1.40
963.7924	41	15.0	90.0	550.0	1.80
963.7925	42	15.0	90.0	550.0	1.80
963.7926	46	16.0	100.0	600.0	2.50
963.7927	47	16.0	100.0	600.0	2.50
963.7928	50	17.0	110.0	660.0	3.20
963.7929	52	17.0	110.0	660.0	3.20
963.7930	54	18.0	120.0	660.0	4.40
963.7931	55	18.0	120.0	730.0	4.40
963.7932	56	18.0	120.0	730.0	4.40
963.7933	58	19.0	130.0	800.0	5.60
963.7934	60	19.0	130.0	800.0	5.60

	mm	A mm	B mm	L mm	kg
963.7987	13/16"	10.5	48.0	320.0	0.45
963.7988	7/8"	10.5	48.0	320.0	0.45
963.7989	15/16"	11.0	52.0	350.0	0.60
963.7990	31/32"	11.0	52.0	350.0	0.60
963.7991	1"	11.5	60.0	380.0	0.80
963.7992	1.1/16"	11.5	60.0	380.0	0.85
963.7993	1.1/8"	12.0	65.0	420.0	1.00
963.7994	1.3/16"	12.0	65.0	420.0	1.00
963.7995	1.1/4"	12.0	65.0	420.0	1.00
963.7996	1.5/16"	12.5	70.0	450.0	1.00
963.7997	1.3/8"	12.5	70.0	450.0	1.40
963.7998	1.7/16"	13.5	80.0	450.0	1.40
963.7999	1.1/2"	15.0	90.0	500.0	1.40
963.8000	1.9/16"	15.0	90.0	500.0	1.80
963.8001	1.5/8"	15.0	90.0	500.0	1.80
963.8002	1.11/16"	15.0	90.0	500.0	1.80
963.8003	1.3/4"	16.0	100.0	550.0	2.50
963.8004	1.13/16"	16.0	100.0	550.0	2.50
963.8005	1.7/8"	16.0	100.0	600.0	2.50
963.8006	2"	17.0	110.0	600.0	3.20
963.8007	2.1/16"	17.0	110.0	660.0	3.20
963.8008	2.1/8"	18.0	120.0	660.0	4.40
963.8009	2.3/16"	18.0	120.0	660.0	4.40
963.8010	2.1/4"	19.0	130.0	730.0	4.40
963.8011	2.5/16"	19.0	130.0	730.0	5.60
963.8012	2.3/8"	19.0	130.0	800.0	5.60



BRONZEplus Offset single ring spanner

- FlankTraction Profil
- Ring head 75° offset
- With shaft for snap-on handle
- With locking pin
- Heavy duty to deliver maximum torque
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	A mm	B mm	D mm	H mm	L mm	kg
963.8013	22	19.0	36.0	15.5	31.0	260.0	1 0.96
963.8014	24	19.0	36.0	15.5	31.0	260.0	1 1.00
963.8015	27	19.0	40.0	15.5	31.0	260.0	1 0.96
963.8016	30	19.0	45.0	15.5	33.0	260.0	1 0.95
963.8017	32	19.5	48.0	21.7	33.0	260.0	1 0.94
963.8018	33	19.5	48.0	21.7	33.0	260.0	1 0.92
963.8019	34	20.0	53.0	21.7	35.0	260.0	1 0.91
963.8020	35	20.0	53.0	21.7	35.0	260.0	1 0.91
963.8021	36	20.0	53.0	21.7	35.0	260.0	1 0.91
963.8022	37	20.0	53.0	21.7	35.0	270.0	1 1.20
963.8023	38	21.0	59.0	21.7	40.0	270.0	1 1.90
963.8024	41	21.0	59.0	21.7	40.0	270.0	1 1.10
963.8025	42	21.0	59.0	21.7	40.0	270.0	1 1.10
963.8026	46	24.0	66.0	21.7	43.0	300.0	2 1.50
963.8027	47	24.0	66.0	21.7	43.0	300.0	2 1.50
963.8028	50	28.0	72.0	21.7	46.0	300.0	2 1.70
963.8029	52	28.0	72.0	21.7	46.0	350.0	2 2.60
963.8030	54	30.0	79.0	21.7	49.0	350.0	2 2.50
963.8031	55	30.0	79.0	21.7	49.0	300.0	2 1.90
963.8032	56	30.0	79.0	21.7	49.0	350.0	2 2.60
963.8033	58	36.0	86.0	21.7	57.0	350.0	2 2.50
963.8034	60	36.0	86.0	21.7	57.0	370.0	3 2.50
963.8035	63	36.0	86.0	21.7	57.0	370.0	3 2.50
963.8036	65	38.0	93.0	21.7	60.0	400.0	3 3.20
963.8037	67	38.0	93.0	21.7	60.0	400.0	3 3.10
963.8038	70	41.0	103.0	21.7	62.0	400.0	3 3.00
963.8039	71	41.0	103.0	21.7	62.0	400.0	3 2.80
963.8040	75	43.0	109.0	21.7	67.0	400.0	3 2.70
963.8041	77	43.0	109.0	21.7	67.0	400.0	3 2.60
963.8042	80	43.0	119.0	21.7	68.0	410.0	3 5.00
963.8043	82	43.0	119.0	21.7	68.0	410.0	3 5.00
963.8044	85	45.0	128.0	21.7	72.0	410.0	3 5.10
963.8045	90	45.0	135.0	21.7	72.0	410.0	3 5.01
963.8046	95	45.0	142.0	21.7	72.0	410.0	3 4.79
963.8047	100	45.0	150.0	21.7	75.0	412.0	3 4.55

	mm	A mm	B mm	D mm	H mm	L mm	kg
963.8051	1.3/16"	19.0	36.0	15.5	31.0	260.0	1 0.95
963.8052	1.1/4"	19.5	48.0	21.7	33.0	260.0	1 0.94
963.8053	1.5/16"	19.5	48.0	21.7	33.0	260.0	1 0.92
963.8054	1.3/8"	20.0	53.0	21.7	35.0	260.0	1 0.91
963.8055	1.7/16"	20.0	53.0	21.7	35.0	260.0	1 0.91
963.8056	1.1/2"	21.0	59.0	21.7	40.0	270.0	1 1.90
963.8057	1.9/16"	21.0	59.0	21.7	40.0	270.0	1 1.20
963.8058	1.5/8"	21.0	59.0	21.7	40.0	270.0	1 1.10
963.8059	1.11/16"	21.0	59.0	21.7	40.0	270.0	2 1.10
963.8060	1.3/4"	24.0	66.0	21.7	43.0	270.0	2 1.00
963.8061	1.13/16"	24.0	66.0	21.7	43.0	300.0	2 1.50
963.8062	1.7/8"	24.0	66.0	21.7	43.0	300.0	2 1.50
963.8063	2"	28.0	72.0	21.7	46.0	300.0	2 1.70
963.8064	2.1/16"	28.0	72.0	21.7	46.0	350.0	2 2.60
963.8065	2.1/8"	30.0	79.0	21.7	49.0	350.0	2 2.40
963.8066	2.3/16"	30.0	79.0	21.7	49.0	300.0	2 1.90
963.8067	2.1/4"	36.0	86.0	21.7	57.0	350.0	2 2.50
963.8068	2.5/16"	36.0	86.0	21.7	57.0	350.0	3 2.50
963.8069	2.3/8"	36.0	86.0	21.7	57.0	370.0	3 2.50
963.8070	2.7/16"	36.0	86.0	21.7	57.0	370.0	3 2.50
963.8071	2.1/2"	38.0	93.0	21.7	60.0	370.0	3 2.50
963.8072	2.9/16"	38.0	93.0	21.7	60.0	400.0	3 3.20
963.8073	2.5/8"	38.0	93.0	21.7	60.0	400.0	3 3.10
963.8074	2.3/4"	41.0	103.0	21.7	62.0	400.0	3 3.00

	mm	A mm	B mm	D mm	H mm	L mm	kg
963.8075	2.13/16"	41.0	103.0	21.7	62.0	400.0	3 2.80
963.8076	2.15/16"	43.0	109.0	21.7	67.0	400.0	3 2.70
963.8077	3"	43.0	109.0	21.7	67.0	400.0	3 2.50
963.8078	3.1/8"	43.0	119.0	21.7	68.0	410.0	3 4.90
963.8079	3.1/4"	43.0	119.0	21.7	68.0	410.0	3 5.00
963.8080	3.3/8"	45.0	128.0	21.7	72.0	410.0	3 5.10

BRONZEplus Snap-on handle for single ring spanner

- Three different sizes
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	D mm	L mm	#	kg
963.8048	22-42	1.3/16-1.5/8"	22.0	600.0	1 1.10
963.8049	46-58	1.11/8-2.1/4"	25.0	750.0	2 2.80
963.8050	60-100	2.5/16-3.3/8"	30.0	850.0	3 3.80

BRONZEplus Offset single ring spanner set

- FlankTraction Profil
- Ring head 75° offset
- With shaft for snap-on handle
- With locking pin
- Heavy duty to deliver maximum torque
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



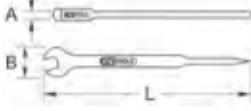
	mm	kg
963.8081	18 pcs 24 - 27 - 30 - 32 - 36 - 41 - 46 - 50 - 55 - 60 - 65 - 70 - 75 - 80 - 85 mm	40.20
15 x	24 - 27 - 30 - 32 - 36 - 41 - 46 - 50 - 55 - 60 - 65 - 70 - 75 - 80 - 85 mm	
3 x	22-42 - 46-58 - 60-100 mm	



NON SPARKING INSTALLATION WRENCH

BRONZEplus Installation open end spanner with mandrel

- Practical combination of open ended spanner and setting punch
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	Ø mm	A mm	B mm	L mm	kg
963.8082	17	11.0	35.0	320.0	0.27
963.8083	18	11.0	35.0	320.0	0.27
963.8084	19	12.0	40.0	350.0	0.47
963.8085	20	12.0	40.0	350.0	0.47
963.8086	21	13.0	46.0	350.0	0.47
963.8087	22	13.0	46.0	350.0	0.47
963.8088	23	15.0	49.0	370.0	0.65
963.8089	24	15.0	49.0	370.0	0.65
963.8090	25	16.0	54.0	370.0	0.65
963.8091	26	16.0	54.0	370.0	0.65
963.8092	27	16.0	54.0	370.0	0.65
963.8093	28	17.0	62.0	400.0	0.95
963.8094	29	17.0	62.0	400.0	0.95
963.8095	30	17.0	62.0	400.0	0.95
963.8096	32	18.0	65.0	400.0	0.95
963.8097	33	18.0	65.0	400.0	0.95
963.8098	34	18.0	65.0	400.0	0.95
963.8099	35	20.0	75.0	430.0	1.40
963.8100	36	20.0	75.0	430.0	1.40
963.8101	37	20.0	75.0	430.0	1.40
963.8102	38	21.0	85.0	430.0	1.40
963.8103	41	21.0	85.0	470.0	1.90
963.8104	42	21.0	85.0	470.0	1.90
963.8105	46	22.0	95.0	500.0	2.70
963.8106	47	22.0	95.0	500.0	2.70
963.8107	50	24.0	105.0	530.0	3.55

	Ø mm	A mm	B mm	L mm	kg
963.8108	11/16"	11.0	35.0	320.0	0.27
963.8109	3/4"	12.0	40.0	350.0	0.27
963.8110	25/32"	12.0	40.0	350.0	0.47
963.8111	13/16"	12.0	40.0	350.0	0.47
963.8112	7/8"	13.0	46.0	350.0	0.47
963.8113	15/16"	15.0	49.0	370.0	0.47
963.8114	31/32"	15.0	49.0	370.0	0.65
963.8115	1"	16.0	54.0	370.0	0.65
963.8116	1.1/16"	16.0	54.0	370.0	0.65
963.8117	1.1/8"	16.0	54.0	400.0	0.65
963.8118	1.3/16"	17.0	62.0	400.0	0.65
963.8119	1.1/4"	18.0	65.0	400.0	0.95
963.8120	1.5/16"	18.0	65.0	400.0	0.95
963.8121	1.3/8"	20.0	75.0	430.0	0.95
963.8122	1.7/16"	20.0	75.0	430.0	1.40
963.8123	1.1/2"	21.0	85.0	430.0	1.40
963.8124	1.9/16"	21.0	85.0	470.0	1.40
963.8125	1.5/8"	21.0	85.0	470.0	1.90
963.8126	1.11/16"	21.0	85.0	470.0	1.90
963.8127	1.3/4"	22.0	95.0	500.0	1.90
963.8128	1.13/16"	22.0	95.0	500.0	2.70
963.8129	1.7/8"	22.0	95.0	500.0	2.70
963.8130	2"	24.0	105.0	530.0	3.55



BRONZEplus Installation open end spanner with mandrel, offset

- Mouth 75° offset
- Practical combination of open ended spanner and setting punch
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

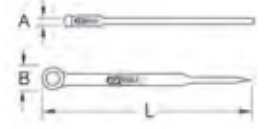


	Ø mm	A mm	B mm	L mm	kg
963.8131	17	11.0	35.0	320.0	0.30
963.8132	18	12.0	40.0	320.0	0.30
963.8133	19	12.0	40.0	350.0	0.51
963.8134	20	12.0	40.0	350.0	0.51
963.8135	21	13.0	46.0	350.0	0.51
963.8136	22	13.0	46.0	350.0	0.51
963.8137	23	15.0	49.0	370.0	0.72
963.8138	24	15.0	49.0	370.0	0.72
963.8139	25	15.0	49.0	370.0	0.72
963.8140	26	16.0	54.0	370.0	0.72
963.8141	27	16.0	54.0	370.0	0.72
963.8142	28	17.0	62.0	400.0	1.15
963.8143	29	17.0	62.0	400.0	1.15
963.8144	30	17.0	62.0	400.0	1.15
963.8145	32	18.0	65.0	400.0	1.15
963.8146	33	18.0	65.0	400.0	1.15
963.8147	34	18.0	65.0	400.0	1.15
963.8148	35	20.0	75.0	430.0	1.54
963.8149	36	20.0	75.0	430.0	1.54
963.8150	37	20.0	75.0	430.0	1.54
963.8151	38	21.0	85.0	430.0	1.54
963.8152	41	21.0	85.0	470.0	2.09
963.8153	42	21.0	85.0	470.0	2.09
963.8154	46	22.0	95.0	500.0	2.97
963.8155	47	22.0	95.0	500.0	2.97
963.8156	50	24.0	105.0	530.0	3.90

	Ø mm	A mm	B mm	L mm	kg
963.8157	11/16"	11.0	35.0	290.0	0.30
963.8158	7/8"	13.0	46.0	355.0	0.51
963.8159	15/16"	15.0	49.0	355.0	0.51
963.8160	1.1/16"	16.0	54.0	380.0	0.72
963.8161	1.3/16"	17.0	62.0	410.0	0.72
963.8162	1.1/4"	18.0	65.0	380.0	1.15
963.8163	1.7/16"	20.0	75.0	460.0	1.54
963.8164	1.1/2"	21.0	85.0	460.0	1.15
963.8165	1.5/8"	21.0	85.0	510.0	2.09
963.8166	1.13/16"	22.0	95.0	550.0	2.97
963.8167	2"	24.0	105.0	550.0	3.90

BRONZEplus Installation ring spanner with mandrel, offset

- Ring head 75° offset
- Practical combination of ring spanner and setting punch
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	Ø mm	A mm	B mm	L mm	kg
963.8168	17	12.0	28.0	320.0	0.30
963.8169	18	12.0	28.0	320.0	0.30
963.8170	19	13.0	30.0	350.0	0.51
963.8171	20	13.0	30.0	350.0	0.51
963.8172	21	15.0	34.0	350.0	0.51
963.8173	22	15.0	34.0	350.0	0.51
963.8174	23	17.0	38.0	370.0	0.72
963.8175	24	17.0	38.0	370.0	0.72
963.8176	25	17.0	38.0	370.0	0.72
963.8177	26	21.0	43.0	370.0	0.72
963.8178	27	21.0	43.0	370.0	0.72
963.8179	28	23.0	48.0	400.0	1.15
963.8180	29	23.0	48.0	400.0	1.15
963.8181	30	23.0	48.0	400.0	1.15
963.8182	32	24.0	50.0	400.0	1.15
963.8183	33	24.0	50.0	400.0	1.15
963.8184	34	25.0	56.0	400.0	1.15
963.8185	35	25.0	56.0	430.0	1.54
963.8186	36	25.0	56.0	430.0	1.54
963.8187	37	25.0	56.0	430.0	1.54
963.8188	38	25.0	56.0	430.0	1.54
963.8189	41	27.0	62.0	470.0	2.09
963.8190	42	27.0	62.0	470.0	2.09
963.8191	46	29.0	71.0	500.0	2.97
963.8192	47	29.0	71.0	500.0	2.97
963.8193	50	33.0	76.0	530.0	3.90

	Ø mm	A mm	B mm	L mm	kg
963.8194	11/16"	12.0	28.0	290.0	0.30
963.8195	7/8"	13.0	30.0	355.0	0.51
963.8196	15/16"	13.0	30.0	355.0	0.51
963.8197	1.1/16"	21.0	43.0	380.0	0.72
963.8198	1.3/16"	23.0	48.0	410.0	0.72
963.8199	1.1/4"	24.0	50.0	380.0	1.15
963.8200	5/7/16"	25.0	56.0	460.0	1.54
963.8201	1.1/2"	25.0	56.0	460.0	1.15
963.8202	1.5/8"	27.0	62.0	510.0	2.09
963.8203	1.13/16"	29.0	71.0	550.0	2.97
963.8204	2"	33.0	76.0	550.0	3.90

NON SPARKING HOSE COUPLING WRENCHES & HOOK WRENCHES

BRONZEplus Coupling spanner A-B-C

- For fire brigade (Storz) couplings A - B - C
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	Ø mm	L mm	kg
963.8205	14	440.0	800

BRONZEplus Coupling spanner B-C

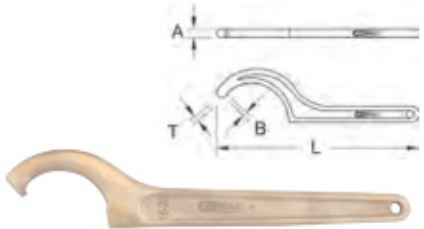
- For fire brigade (Storz) couplings B - C
- Handle insulated with plastic against cold
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	Ø mm	L mm	Wt kg
963.8206	12	290.0	450

BRONZEplus hook wrench with spigot

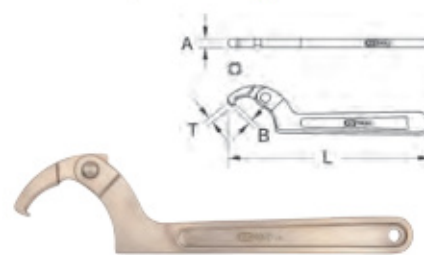
- In accordance to DIN 1810 Form B
- With spigot for cross drilled nuts to DIN 1816
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	Open with mm	A mm	B mm	L mm	T mm	Wt kg
963.8210	12-14	3.0	1.5	110.0	2.0	0.03
963.8211	16-20	3.0	2	110.0	2.5	0.03
963.8212	25-28	4.0	2.5	135.0	3.0	0.05
963.8213	30-32	4.0	2.5	135.0	4.0	0.05
963.8214	34-36	5.0	3	170.0	4.0	0.10
963.8215	40-42	5.0	3	170.0	4.0	0.10
963.8216	45-50	6.0	3.5	205.0	5.0	0.19
963.8217	52-55	6.0	3.5	205.0	5.0	0.19
963.8218	58-62	7.0	4	240.0	5.0	0.22
963.8219	68-75	7.0	4	240.0	6.0	0.20
963.8220	80-90	8.0	5	280.0	6.0	0.41
963.8221	95-100	8.0	5	280.0	8.0	0.41
963.8222	110-115	10.0	6	335.0	8.0	0.73
963.8223	120-130	10.0	6	335.0	8.0	0.73
963.8224	135-145	12.0	7	390.0	8.0	1.15
963.8225	155-165	12.0	7	390.0	8.0	1.15
963.8226	180-195	14.0	8	465.0	10.0	1.41
963.8227	205-220	14.0	8	465.0	10.0	1.39

BRONZEplus pivot hook wrench with pin

- In accordance to DIN 1810 Form A
- With pin for for slotted nuts to DIN 981
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	Span with mm	A mm	B mm	L mm	T mm	Wt kg
963.8207	32-75	8.0	6.0	205.0	5.0	230
963.8208	50-120	10.0	7.0	285.0	6.0	450
963.8209	115-170	12.0	10.0	310.0	7.0	500

NON SPARKING SPECIAL BITS

BRONZEplus Slide claw

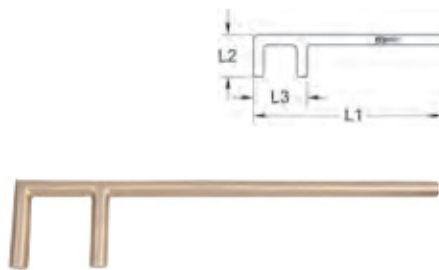
- Handle insulated with plastic against cold
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	L mm	Wt kg
963.8228	30-40	500.0	720

BRONZEplus valve hook

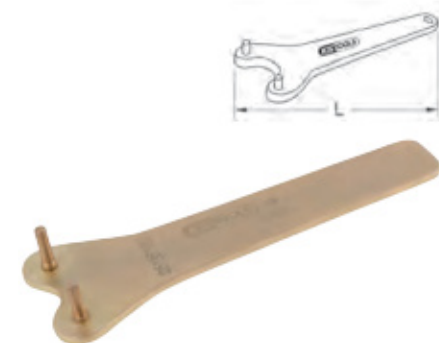
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	Ø mm	L1 mm	L2 mm	L3 mm	Wt kg
963.8229	13	300.0	50.0	30.0	0.35
963.8230	13	350.0	55.0	35.0	0.60
963.8231	16	400.0	60.0	40.0	0.68
963.8232	16	450.0	65.0	45.0	1.10
963.8233	19	500.0	70.0	50.0	1.20
963.8234	22	600.0	75.0	60.0	2.00
963.8235	25	700.0	80.0	70.0	3.00
963.8236	28	800.0	85.0	80.0	5.30

BRONZEplus Face pin spanner

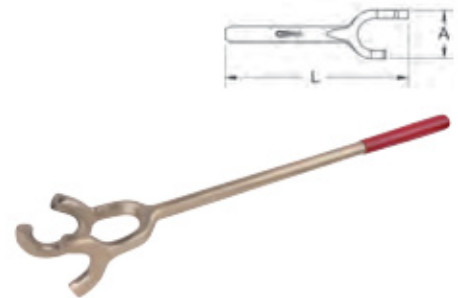
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	Pin key mm	Stud Ø mm	L mm	Wt kg
963.8237	35.0	5.0	180.0	150

BRONZEplus hand key

- In accordance to DIN 87311
- Handle insulated with plastic against cold
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	Ø mm	A mm	L mm	Wt kg
963.8238	36x60	60.0	370.0	0.65
963.8239	48x80	80.0	430.0	2.60
963.8240	62x102	102.0	550.0	1.30

BRONZEplus B-hand key

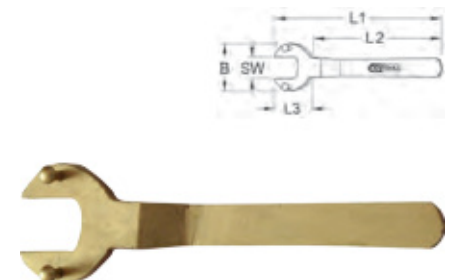
- In accordance to DIN 87311
- Handle insulated with plastic against cold
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	Ø mm	L mm	Wt kg
963.8241	36x60	330.0	0.60
963.8242	48x80	470.0	1.40
963.8243	62x102	600.0	2.60

BRONZEplus Spanner for tanker valve

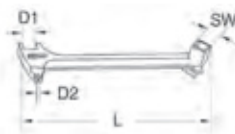
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



Type	dim mm	Stud Ø mm	B mm	L1 mm	L2 mm	L3 mm	Wt kg	
963.8244	A	64.0 x 32.0	20.0	90.0	660.0	500.0	160.0	1.80
963.8245	B	64.0 x 32.0	20.0	90.0	650.0	500.0	150.0	1.60
963.8246	C	95.0 x 47.5	20.0	90.0	690.0	500.0	190.0	2.50

BRONZEplus universal barrel key

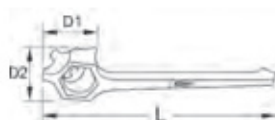
- For 22 barrel clasps
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	dm mm	L mm	D1 mm	D2 mm	W mm
963.8270	18 x 22	380.0	27.0	6.0	1.25

BRONZEplus universal barrel key

- For current plug cover caps
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	D1 mm	D2 mm	L mm	W mm
963.8271	38.0	52.0	300.0	600

BRONZEplus universal barrel key

- For current barrel clasps
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	D1 mm	D2 mm	D3 mm	D4 mm	L mm	W mm
963.8272	70.0	70.0	65.0	95.0	400.0	1.70

BRONZEplus Sewer lid hook

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	L mm	W mm
963.8273	500.0	770

BRONZEplus Sewer lid hook, reinforced

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

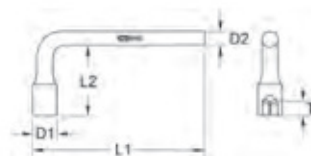


	L mm	W mm
963.8274	700.0	1.20

NON SPARKING BOX SPANNERS

BRONZEplus box spanner, offset

- 4 point
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	D1 mm	D2 mm	L1 mm	L2 mm	T mm	W mm
963.8247	8	18.0	8.0	150.0	33.0	15.0	90
963.8248	9	20.0	8.0	160.0	35.0	15.0	100
963.8249	10	22.0	8.0	175.0	37.0	15.0	120
963.8250	12	24.0	10.0	215.0	42.0	18.0	220
963.8251	13	26.0	10.0	230.0	45.0	18.0	280
963.8252	14	27.0	12.0	240.0	45.0	18.0	280
963.8253	17	32.0	14.0	280.0	51.0	22.0	330



BRONZEplus socket

- 3 point
- In accordance to DIN 3124 / ISO 2725-1
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	D1 mm	D2 mm	L mm	W mm
963.8254	6	16.0	25.0	40.0	70
963.8255	8	18.0	25.0	40.0	75
963.8256	10	22.0	25.0	40.0	80
963.8257	12	24.0	25.0	40.0	90
963.8258	16	30.0	25.0	50.0	150
963.8259	20	37.0	28.0	50.0	215
963.8260	25	44.0	32.0	60.0	435



BRONZEplus socket

- 3-point
- In accordance to DIN 22417
- With pushed through, movable drive handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	L mm	W mm
963.8261	4	95.0	0.08
963.8262	5	110.0	0.10
963.8263	6	115.0	0.17
963.8264	8	125.0	0.28
963.8265	10	140.0	0.39
963.8266	12	160.0	0.70
963.8267	16	180.0	0.98
963.8268	20	200.0	2.10
963.8269	24	220.0	3.10



BRONZEplus box spanner

- 6-point
- For use with tommy bar
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	L mm	⚙️	kg
963.8275	8	190.0	1	0.11
963.8276	9	200.0	1	0.14
963.8277	10	215.0	1	0.16
963.8278	11	230.0	2	0.21
963.8279	12	250.0	2	0.26
963.8280	13	265.0	3	0.35
963.8281	14	265.0	3	0.35
963.8282	15	280.0	3	0.40
963.8283	16	280.0	3	0.40
963.8284	17	300.0	4	0.45
963.8285	18	300.0	4	0.45
963.8286	19	325.0	4	0.65
963.8287	20	325.0	4	0.65
963.8288	21	350.0	4	0.83
963.8289	22	350.0	4	0.83
963.8290	23	380.0	5	1.14
963.8291	24	380.0	5	1.14
963.8292	25	415.0	5	1.45
963.8293	26	415.0	5	1.45
963.8294	27	415.0	5	1.45
963.8295	28	450.0	6	1.80
963.8296	29	450.0	6	1.80
963.8297	30	450.0	6	1.80
963.8298	32	485.0	6	2.45
963.8299	33	485.0	6	2.45
963.8300	34	485.0	6	2.45
963.8301	35	530.0	7	3.30
963.8302	36	530.0	7	3.30
963.8303	37	530.0	7	3.30
963.8304	38	530.0	7	3.30
963.8305	41	580.0	8	4.00
963.8306	42	580.0	8	4.00
963.8307	46	635.0	8	4.80
963.8308	47	635.0	8	4.80
963.8309	50	320.0	9,10	4.90
963.8310	52	320.0	9,10	4.90
963.8311	54	340.0	9,10	6.50
963.8312	55	340.0	9,10	6.50
963.8313	56	340.0	9,10	6.50
963.8314	58	360.0	9,10	8.30
963.8315	60	360.0	9,10	8.30
963.8316	63	360.0	9,10	8.30
963.8317	65	380.0	11	10.50
963.8318	67	380.0	11	10.50
963.8319	70	380.0	11	10.50
963.8320	71	380.0	11	10.50
963.8321	75	400.0	11	14.30
963.8322	77	400.0	11	14.30
963.8323	80	400.0	11	14.30
963.8324	82	400.0	11	14.30
963.8325	85	425.0	12	19.20
963.8326	88	425.0	12	19.20
963.8327	90	425.0	12	19.20
963.8328	94	455.0	12	26.00
963.8329	95	455.0	12	26.00
963.8330	100	455.0	12	26.00

BRONZEplus Tommy bar for box spanner

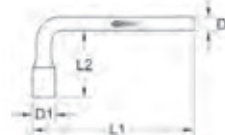
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	D mm	L mm	⚙️	kg
963.8331	10	6.0	150.0	1	0.04
963.8332	12	8.0	190.0	2	0.08
963.8333	16	10.0	190.0	3	0.09
963.8334	22	10.0	250.0	4	0.19
963.8335	27	12.0	315.0	5	0.31
963.8336	34	16.0	400.0	6	0.60
963.8337	38	16.0	500.0	7	0.92
963.8338	47	20.0	630.0	8	1.60
963.8339	63	24.0	800.0	9	2.70
963.8340	63	24.0	1000.0	10	3.50
963.8341	82	30.0	1250.0	11	6.00
963.8342	100	36.0	1600.0	12	12.00

BRONZEplus box spanner, offset

- 6 point
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

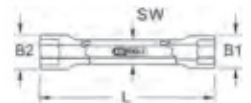


	mm	D1 mm	D2 mm	L1 mm	L2 mm	⚙️	kg
963.8343	8	16.0	8.0	175.0	30.0	0.10	
963.8344	9	17.0	8.0	185.0	33.0	0.12	
963.8345	10	18.0	8.0	195.0	37.0	0.14	
963.8346	11	20.0	9.0	205.0	42.0	0.18	
963.8347	12	21.0	9.0	220.0	42.0	0.22	
963.8348	13	22.0	10.0	240.0	45.0	0.28	
963.8349	14	22.0	10.0	240.0	45.0	0.28	
963.8350	15	25.0	11.0	250.0	48.0	0.30	
963.8351	16	25.0	11.0	250.0	48.0	0.30	
963.8352	17	27.0	12.0	270.0	51.0	0.32	
963.8353	18	27.0	12.0	270.0	53.0	0.32	
963.8354	19	30.0	12.0	290.0	55.0	0.53	
963.8355	20	30.0	12.0	290.0	57.0	0.53	
963.8356	21	32.0	12.0	310.0	57.0	0.68	
963.8357	22	32.0	12.0	310.0	59.0	0.68	
963.8358	23	35.0	14.0	335.0	63.0	0.83	
963.8359	24	35.0	14.0	335.0	63.0	0.83	
963.8360	25	39.0	14.0	365.0	69.0	1.00	
963.8361	26	39.0	14.0	365.0	69.0	1.00	
963.8362	27	39.0	14.0	365.0	69.0	1.00	
963.8363	28	43.0	15.0	395.0	72.0	1.30	
963.8364	29	43.0	15.0	395.0	72.0	1.30	
963.8365	30	43.0	15.0	395.0	72.0	1.30	
963.8366	32	47.0	16.0	425.0	75.0	1.70	
963.8367	33	47.0	16.0	425.0	75.0	1.70	
963.8368	34	47.0	18.0	425.0	75.0	1.70	
963.8369	35	52.0	18.0	465.0	80.0	2.80	
963.8370	36	52.0	18.0	465.0	80.0	2.80	
963.8371	37	52.0	18.0	465.0	80.0	2.80	
963.8372	38	52.0	18.0	465.0	80.0	2.80	
963.8373	41	58.0	20.0	510.0	85.0	3.60	
963.8374	42	58.0	20.0	510.0	85.0	3.60	
963.8375	46	65.0	21.0	555.0	90.0	4.00	
963.8376	47	65.0	21.0	555.0	90.0	4.00	
963.8377	50	72.0	22.0	605.0	93.0	4.80	
963.8378	52	72.0	22.0	605.0	93.0	4.80	
963.8379	54	76.0	24.0	660.0	97.0	6.40	
963.8380	55	76.0	24.0	660.0	97.0	6.40	

	mm	D1 mm	D2 mm	L1 mm	L2 mm	⚙️
963.8381	56	76.0	24.0	660.0	97.0	6.40
963.8382	58	84.0	25.0	730.0	103.0	8.20
963.8383	60	84.0	25.0	730.0	103.0	8.20
963.8384	63	89.0	25.0	730.0	103.0	8.20
963.8385	65	89.0	27.0	800.0	108.0	10.40
963.8386	67	95.0	27.0	800.0	108.0	10.40
963.8387	70	95.0	27.0	800.0	115.0	10.40
963.8388	71	95.0	27.0	800.0	115.0	10.40
963.8389	75	105.0	30.0	880.0	120.0	14.10
963.8390	77	105.0	30.0	880.0	120.0	14.10
963.8391	80	112.0	30.0	880.0	125.0	14.10
963.8392	82	112.0	30.0	880.0	125.0	14.10

BRONZEplus box spanner, double sided

- 6-point
- For use with open ended spanner or tommy bar
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	B1 mm	B2 mm	mm	L mm	⚙️	kg
963.8393	7x8	14.0	15.0	10	95.0	1	0.05
963.8394	9x10	16.0	18.0	10	105.0	2	0.07
963.8395	10x11	18.0	19.0	14	120.0	2	0.09
963.8396	12x14	21.0	22.0	17	135.0	3	0.16
963.8397	14x17	24.0	27.0	17	150.0	3	0.21
963.8398	17x19	27.0	30.0	19	160.0	4	0.28
963.8399	19x22	30.0	32.0	22	170.0	4	0.34
963.8400	20x22	32.0	39.0	22	170.0	4	0.36
963.8401	24x28	35.0	39.0	24	180.0	5	0.48
963.8402	24x27	35.0	39.0	24	190.0	5	0.53
963.8403	27x32	39.0	47.0	27	200.0	6	0.87
963.8404	30x32	43.0	47.0	27	210.0	6	0.89
963.8405	30x36	43.0	52.0	30	220.0	6	1.08
963.8406	36x41	52.0	58.0	32	230.0	6	1.70

BRONZEplus Tommy bar for box spanner

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



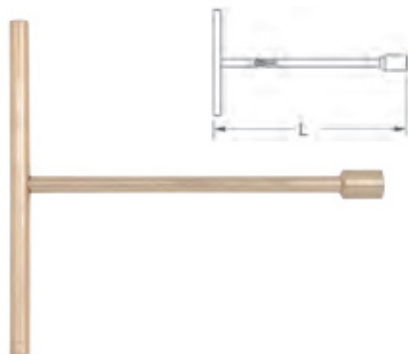
	D mm	L mm	mm	⚙️	kg
963.8407	5.0	110.0	7x8	1	15
963.8408	6.0	150.0	10x11	2	40
963.8409	10.0	220.0	14x17	3	120
963.8410	12.0	300.0	20x22	4	300
963.8411	15.0	390.0	24x27	5	480
963.8412	16.0	500.0	36x41	6	750





BRONZEplus Hexagonal socket spanner from sliding bar

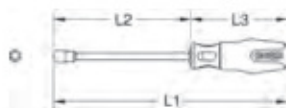
- 6-point
- With fixed drive handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	L mm	#
963.8413	8	196.0	0.14
963.8414	9	209.0	0.17
963.8415	10	223.0	0.19
963.8416	11	240.0	0.26
963.8417	12	256.0	0.31
963.8418	13	275.0	0.41
963.8419	14	275.0	0.41
963.8420	15	292.0	0.46
963.8421	16	292.0	0.46
963.8422	17	314.0	0.56
963.8423	18	314.0	0.56
963.8424	19	339.0	0.79
963.8425	20	339.0	0.79
963.8426	21	376.0	1.05
963.8427	22	376.0	1.05
963.8428	23	393.0	1.24
963.8429	24	393.0	1.24
963.8430	25	431.0	1.70
963.8431	26	431.0	1.70
963.8432	27	431.0	1.70
963.8433	28	464.0	2.10
963.8434	29	464.0	2.10
963.8435	30	464.0	2.10
963.8436	32	506.0	2.75
963.8437	33	506.0	2.75
963.8438	34	506.0	2.75
963.8439	35	550.0	4.00
963.8440	36	550.0	4.00
963.8441	37	550.0	4.00
963.8442	38	550.0	4.00
963.8443	41	600.0	5.40
963.8444	42	600.0	5.40
963.8445	46	655.0	6.00
963.8446	47	655.0	6.00
963.8447	50	345.0	6.30
963.8448	52	345.0	6.30
963.8449	54	365.0	8.00
963.8450	55	365.0	8.00
963.8451	56	365.0	8.00
963.8452	58	390.0	10.50
963.8453	60	390.0	10.50
963.8454	63	390.0	10.50
963.8455	65	410.0	14.00
963.8456	67	410.0	14.00
963.8457	70	410.0	14.00
963.8458	71	410.0	14.00
963.8459	75	430.0	19.00
963.8460	77	430.0	19.00
963.8461	80	430.0	19.00
963.8462	82	430.0	19.00

BERYLLIUMplus socket screwdriver

- 6-point
- With two component handle
- Optimal power transmission
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	mm	L1 mm	L2 mm	L3 mm	#
962.0970	3.5	175.0	75.0	100.0	55
962.0971	4.5	180.0	80.0	100.0	55
962.0972	5	180.0	80.0	100.0	60
962.0973	5.5	185.0	85.0	100.0	60
962.0974	6	190.0	90.0	100.0	65
962.0975	6.5	190.0	90.0	100.0	65
962.0976	7	190.0	90.0	100.0	80
962.0977	7.5	200.0	100.0	100.0	80
962.0978	8	200.0	100.0	100.0	100
962.0979	9	210.0	110.0	100.0	100
962.0980	10	210.0	110.0	100.0	115
962.0981	11	220.0	110.0	110.0	115
962.0982	12	220.0	110.0	110.0	130
962.0983	13	230.0	120.0	110.0	170
962.0984	14	230.0	120.0	110.0	210
962.0985	15	240.0	130.0	110.0	210
962.0986	16	240.0	130.0	110.0	235
962.0987	17	250.0	130.0	120.0	235

		L1 mm	L2 mm	L3 mm	#
962.0988	1/8"	175.0	75.0	100.0	55
962.0989	5/32"	180.0	80.0	100.0	55
962.0990	3/16"	185.0	85.0	100.0	60
962.0991	7/32"	190.0	90.0	100.0	65
962.0992	1/4"	190.0	90.0	100.0	80
962.0993	5/16"	210.0	100.0	110.0	100
962.0994	3/8"	220.0	110.0	110.0	115
962.0995	7/16"	230.0	120.0	110.0	170
962.0996	1/2"	230.0	120.0	110.0	210
962.0997	9/16"	240.0	120.0	120.0	235
962.0998	5/8"	250.0	130.0	120.0	235
962.0999	11/16"	250.0	130.0	120.0	240



BRONZEplus Pronged wrench

- Light work in inaccessible places
- For use with tommy bar
- Jaw 90° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	L mm	#	#
963.8463	13	160.0	1	0.10
963.8464	14	160.0	1	0.10
963.8465	15	200.0	1	0.17
963.8466	16	200.0	2	0.17
963.8467	17	200.0	2	0.17
963.8468	18	200.0	2	0.19
963.8469	19	200.0	3	0.22
963.8470	20	200.0	3	0.25
963.8471	21	200.0	3	0.26
963.8472	22	200.0	3	0.30
963.8473	23	200.0	4	0.35
963.8474	24	250.0	4	0.40
963.8475	25	250.0	4	0.40
963.8476	26	250.0	4	0.45
963.8477	27	250.0	4	0.45
963.8478	28	250.0	5	0.50
963.8479	29	250.0	5	0.55
963.8480	30	250.0	5	0.60
963.8481	32	250.0	5	0.65
963.8482	36	250.0	6	0.70
963.8483	41	315.0	6	1.15
963.8484	46	315.0	7	1.23
963.8485	50	315.0	7	1.50

BRONZEplus Tommy bar for pronged wrench

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	D mm	L mm	#	#
963.8486	13-15	8.0	160.0	1	0.07
963.8487	16-18	10.0	200.0	2	0.13
963.8488	19-22	12.0	200.0	3	0.22
963.8489	23-27	14.0	250.0	4	0.40
963.8490	28-32	16.0	250.0	5	0.60
963.8491	36-41	18.0	315.0	6	1.00
963.8492	46-50	20.0	315.0	7	1.60

BRONZEplus Crowfoot wrench, hexagonal

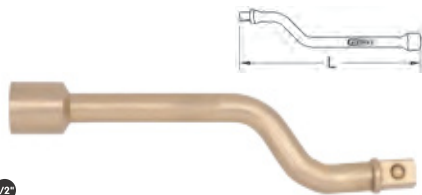
- 6 point
- With internal square drive
- For manual operation
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	L mm	T mm	W
963.8493	13	40.0	15.0	50
963.8494	14	40.0	15.0	50
963.8495	15	43.0	20.0	80
963.8496	16	43.0	20.0	80
963.8497	17	43.0	20.0	80
963.8498	18	49.0	22.0	110
963.8499	19	49.0	22.0	120
963.8500	20	49.0	22.0	130
963.8501	21	52.0	26.0	150
963.8502	22	52.0	26.0	170
963.8503	23	52.0	29.0	200
963.8504	24	55.0	29.0	200
963.8505	25	55.0	32.0	220
963.8506	26	59.0	32.0	220
963.8507	27	59.0	32.0	250
963.8508	28	59.0	32.0	270
963.8509	29	63.0	34.0	300
963.8510	30	63.0	34.0	320
963.8511	32	67.0	37.0	350
963.8512	36	76.0	42.0	570
963.8513	41	86.0	48.0	620
963.8514	46	97.0	55.0	750
963.8515	50	105.0	60.0	800

BRONZEplus Special extender for crowfoot spanner

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	L mm	W
963.8516	1/2	150.0	200
963.8517	1/2	250.0	400



NON SPARKING FRICTION RATCHETS

BRONZEplus Construction ratchet

- 8-point
- With centring point
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	L mm	W
963.1105	17	230.0	0.62
963.1106	19	240.0	0.65
963.1107	21	250.0	0.83
963.1108	22	260.0	0.83
963.1109	24	270.0	1.02
963.1110	26	280.0	1.05
963.1111	27	285.0	1.10
963.1112	30	300.0	1.32
963.1113	32	315.0	1.10
963.1114	35	325.0	1.63
963.1115	36	330.0	1.67
963.1116	41	330.0	1.95



BERYLLIUMplus Friction ratchet

- 12 point
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	L mm	W
962.0109	9	150.0	0.15
962.0111	11	150.0	0.15
962.0113	13	155.0	0.16
962.0114	14	155.0	0.16
962.0117	17	200.0	0.26
962.0119	19	200.0	0.26
962.0122	22	220.0	0.34
962.0124	24	220.0	0.34
962.0127	27	245.0	0.56
962.0130	30	280.0	0.84
962.0132	32	280.0	0.84
962.0136	36	290.0	1.18
962.0141	41	295.0	1.23
962.0146	46	360.0	2.06
962.0150	50	360.0	2.23
962.0155	55	440.0	2.90
962.0160	60	440.0	2.90

1/4" DRIVE NON SPARKING SOCKETS

BERYLLIUMplus socket

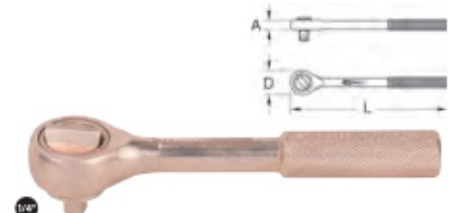
- 6 point
- In accordance to DIN 3124 / ISO 2725-1
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	mm	D1 mm	D2 mm	L mm	W
962.1404	4.0	10.0	15.0	25.0	10
962.14045	4.5	10.0	15.0	25.0	10
962.1405	5.0	11.0	15.0	25.0	10
962.14055	5.5	11.0	15.0	25.0	10
962.1406	6.0	12.0	15.0	25.0	10
962.1407	7.0	13.0	15.0	25.0	10
962.1408	8.0	14.0	15.0	25.0	20
962.1409	9.0	15.0	15.0	25.0	20
962.1410	10.0	16.0	15.0	25.0	20
962.1411	11.0	18.0	15.0	25.0	20
962.1412	12.0	19.0	15.0	27.0	30
962.1413	13.0	20.0	15.0	27.0	30
962.1414	14.0	22.0	15.0	27.0	30

BERYLLIUMplus reversible ratchet

- In accordance to DIN 3122 / 3315
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Reversible
- Gearing with 45 teeth
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	mm	A mm	D mm	L mm	W
962.1490	1/4"	15.0	30.0	150.0	200

BERYLLIUMplus Ratchet handle with coupler

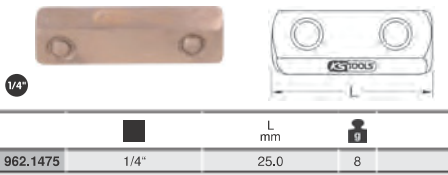
- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- The direction of rotation (clockwise and counter clockwise) can be changed by simply rotating the square drive piece
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	mm	A mm	D mm	L mm	W
962.1491	1/4"	14.0	36.0	150.0	320

BERYLLIUMplus Coupler

- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	1/4"	L mm	8
962.1475	1/4"	25.0	8

BERYLLIUMplus Extension

- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	1/4"	L mm	8
962.1450	1/4"	55.0	20
962.1451	1/4"	100.0	60
962.1452	1/4"	200.0	100

BERYLLIUMplus Swivel handle

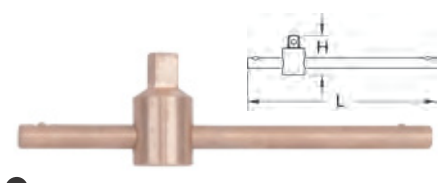
- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	1/4"	L mm	8
962.1455	1/4"	165.0	160
962.1456	1/4"	215.0	350

BERYLLIUMplus sliding T-handle

- In accordance to DIN 3122 / ISO 3315
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	1/4"	H mm	L mm	8
962.1460	1/4"	28.0	200.0	160

BERYLLIUMplus Square drive screwdriver

- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	1/4"	L1 mm	L2 mm	L3 mm	8
962.1465	1/4"	140.0	55.0	85.0	65

BERYLLIUMplus adaptor and reducing adaptor

- In accordance to DIN 3123 / ISO 3316
- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	1/4"	1/2"	L mm	8
962.1470	1/4"	1/2"	30.0	40
963.1280	1/2"	1/4"	40.0	60

BERYLLIUMplus universal joint

- In accordance to DIN 3123 / ISO 3316
- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	1/4"	1/4"	L mm	8
962.1480	1/4"	1/4"	55.0	55

BERYLLIUMplus Socket set

- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)
- In durable plastic storage case



	1/4"			8
962.1485	15 pcs	BERYLLIUMplus Socket set		875
13 x			4 - 4.5 - 5 - 5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 mm	
1 x			100 mm	
1 x			250 mm	

1/2" DRIVE NON SPARKING SOCKETS

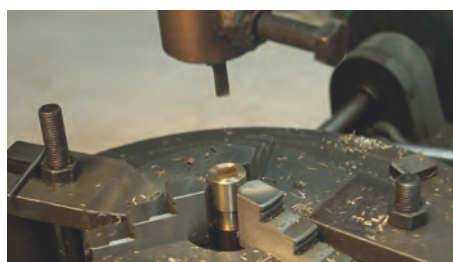
BRONZEplus socket

- 6 point
- In accordance to DIN 3124 / ISO 2725-1
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	D1 mm	D2 mm	L mm	8
963.1204	6	14.0	24.0	40.0	50
963.1205	7	14.0	24.0	40.0	55
963.1206	8	15.0	24.0	40.0	50
963.1207	9	16.0	24.0	40.0	50
963.1208	10	17.0	24.0	40.0	50
963.1209	11	19.0	24.0	40.0	50
963.1210	12	20.0	24.0	40.0	50
963.1211	13	20.0	24.0	40.0	50
963.1212	14	24.0	24.0	40.0	55
963.1213	15	25.0	25.0	40.0	55
963.1214	16	25.0	25.0	40.0	60
963.1215	17	26.0	26.0	40.0	65
963.1216	18	29.0	27.0	40.0	75
963.1217	19	30.0	28.0	40.0	85
963.1218	20	31.0	28.0	40.0	95
963.1219	21	32.0	28.0	40.0	100
963.1220	22	33.0	28.0	40.0	110
963.1221	23	34.0	31.0	40.0	120
963.1222	24	35.0	31.0	40.0	125
963.1223	25	36.0	32.0	40.0	130
963.1224	26	37.0	34.0	40.0	145
963.1225	27	38.0	34.0	40.0	150
963.1226	28	40.0	36.0	40.0	175
963.1227	29	42.0	36.0	40.0	185
963.1228	30	43.0	40.0	40.0	195
963.1229	32	45.0	42.0	42.0	240
963.1230	34	48.0	42.0	50.0	300
963.1231	36	50.0	42.0	50.0	380
963.1341	41	57.0	44.0	50.0	450

	1/4"	D1 mm	D2 mm	L mm	8
963.1249	1/4"	15.0	24.0	40.0	50
963.1250	5/16"	15.0	24.0	40.0	50
963.1251	11/32"	16.0	24.0	40.0	50
963.1252	3/8"	17.0	24.0	40.0	50
963.1253	13/32"	18.0	24.0	40.0	50
963.1254	7/16"	19.0	24.0	40.0	50
963.1255	1/2"	21.0	24.0	40.0	50
963.1256	9/16"	23.0	24.0	40.0	55
963.1257	19/32"	24.0	24.0	40.0	55
963.1258	5/8"	26.0	26.0	40.0	60
963.1259	11/16"	28.0	26.0	40.0	65
963.1260	3/4"	29.0	26.0	40.0	85
963.1261	25/32"	31.0	26.0	40.0	95
963.1262	13/16"	32.0	26.0	40.0	95
963.1263	7/8"	33.0	28.0	40.0	110
963.1264	15/16"	35.0	31.0	40.0	120
963.1265	1"	36.0	34.0	40.0	130
963.1266	1.1/16"	39.0	34.0	40.0	150
963.1267	1.1/8"	41.0	36.0	40.0	175
963.1268	1.3/16"	43.0	40.0	40.0	195
963.1269	1.1/4"	45.0	42.0	42.0	240



BRONZEplus socket, long

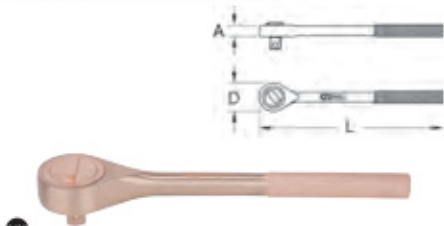
- 6 point
- In accordance to DIN 3124 / ISO 2725-1
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	D1 mm	D2 mm	L mm	G
963.1232	10	19.0	25.0	77.0	110
963.1233	12	20.0	25.0	77.0	135
963.1234	13	21.0	25.0	77.0	105
963.1235	14	22.0	25.0	77.0	110
963.1236	15	25.0	25.0	77.0	120
963.1237	16	25.0	25.0	77.0	125
963.1238	17	27.0	27.0	77.0	140
963.1239	18	28.0	28.0	82.0	145
963.1240	19	30.0	28.0	82.0	180
963.1241	21	32.0	28.0	82.0	205
963.1242	22	33.0	28.0	82.0	210
963.1243	24	36.0	30.0	82.0	250
963.1244	27	40.0	30.0	82.0	285
963.1245	30	44.0	32.0	82.0	345
963.1246	32	46.0	32.0	82.0	375
963.1247	34	48.0	34.0	82.0	415
963.1248	36	50.0	34.0	82.0	425

BERYLLIUMplus reversible ratchet

- In accordance to DIN 3122 / 3315
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Reversible
- Gearing with 45 teeth
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	A mm	D mm	L mm	G	
962.1290	1/2"	23.0	54.0	250.0	590

BERYLLIUMplus Ratchet handle with coupler

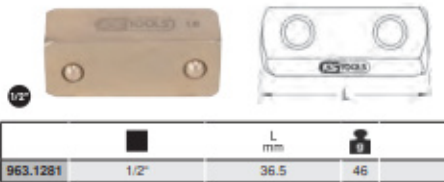
- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- The direction of rotation (clockwise and counter clockwise) can be changed by simply rotating the square drive piece
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	A mm	D mm	L mm	G	
962.1291	1/2"	17.0	45.0	250.0	430

BRONZEplus Coupler

- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



BRONZEplus extension

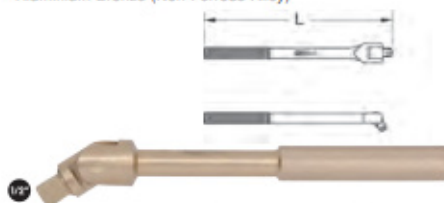
- In accordance to DIN 3123 / ISO 3316
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	L mm	G	
963.1270	1/2"	100.0	180
963.1271	1/2"	200.0	315
963.1272	1/2"	250.0	360

BRONZEplus flexi drive handle

- In accordance to DIN 3122 / ISO 3315
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	L mm	G	
963.1273	1/2"	215.0	350
963.1274	1/2"	250.0	560
963.1275	1/2"	300.0	920
963.1276	1/2"	380.0	590

BRONZEplus sliding T-handle

- In accordance to DIN 3122 / ISO 3315
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	H mm	L mm	G	
963.1277	1/2"	46.0	250.0	450
963.1278	1/2"	46.0	320.0	550

BRONZEplus adaptor and reducing adaptor

- In accordance to DIN 3123 / ISO 3316
- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	L mm	G		
963.1279	1/2"	3/4"	22.0	120
963.1280	1/2"	1/4"	40.0	60

BRONZEplus universal joint

- In accordance to DIN 3123 / ISO 3316
- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	L mm	G		
963.1282	1/2"	1/2"	70.0	135

BRONZEplus L-Handle

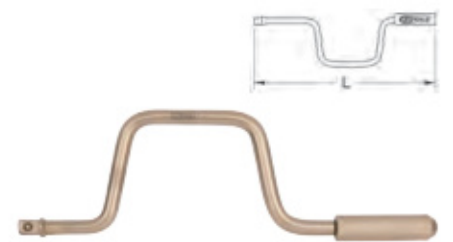
- In accordance to DIN ISO 2936
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	L mm	G	
963.1283	1/2"	220.0	260
963.1284	1/2"	260.0	400

BRONZEplus Speed brace

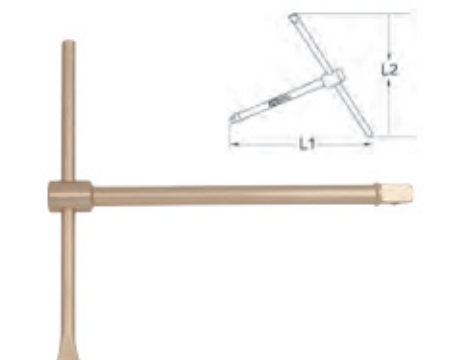
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



Item No.	Drive	L mm	Weight
963.1285	1/2"	410.0	700

BRONZEplus T-handle

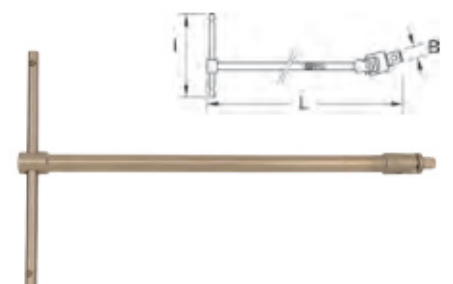
- In accordance to DIN 3122 / ISO 3315
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



Item No.	Drive	L1 mm	L2 mm	Weight
963.1286	1/2"	245.0	220.0	500

BRONZEplus T-handle

- In accordance to DIN 3122 / ISO 3315
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- With flexible head
- For difficult to access areas
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



Item No.	Drive	B mm	l mm	L mm	Weight
963.1287	1/2"	12.5	250.0	460.0	760

BRONZEplus Bit socket for slotted screws

- Slotted
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



Item No.	W mm	D mm	L mm	T mm	Weight
963.1292	4.0	25.0	60.0	9.0	140
963.1293	6.0	25.0	60.0	9.0	140
963.1294	8.0	25.0	60.0	9.0	140
963.1295	10.0	25.0	60.0	9.0	140

BRONZEplus Bit socket for phillips head screws PH

- PH
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



Item No.	Drive	D mm	L mm	T mm	Weight
963.1296	PH 1	25.0	60.0	8.0	140
963.1297	PH 2	25.0	60.0	8.0	140
963.1298	PH 3	25.0	60.0	8.0	140
963.1299	PH 4	25.0	60.0	8.0	140

BRONZEplus Bit socket for hexagon screws

- Hexagon socket
- In accordance with DIN 7422
- Internal square drive to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



Item No.	W mm	D mm	L mm	T mm	Weight
963.1300	4	25.0	60.0	12.0	110
963.1301	5	25.0	60.0	12.0	70
963.1302	6	25.0	60.0	12.0	70
963.1303	7	25.0	60.0	12.0	110
963.1304	8	25.0	60.0	12.0	80
963.1305	9	25.0	60.0	12.0	110
963.1306	10	25.0	60.0	12.0	110
963.1307	12	25.0	60.0	12.0	120
963.1308	14	25.0	60.0	12.0	130
963.1309	17	25.0	60.0	12.0	140
963.1310	19	25.0	60.0	12.0	230

BRONZEplus Bit socket for hexagon screws, long

- Hexagon socket
- In accordance with DIN 7422
- Internal square drive to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



Item No.	W mm	D mm	L mm	T mm	Weight
963.1311	5	25.0	90.0	12.0	90
963.1312	5	25.0	180.0	12.0	100
963.1313	6	25.0	90.0	12.0	80
963.1314	6	25.0	140.0	12.0	120
963.1315	6	25.0	160.0	12.0	130
963.1316	7	25.0	100.0	12.0	90
963.1317	8	25.0	90.0	12.0	90
963.1318	8	25.0	120.0	12.0	160
963.1319	10	25.0	140.0	12.0	150
963.1320	12	25.0	140.0	12.0	190
963.1321	14	25.0	140.0	12.0	250

BRONZEplus Socket set

- 6 point
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)
- In durable plastic storage case



Item No.	Quantity	Item Name	Weight
963.1288	11 pcs	BRONZEplus Socket set	5.30
	9 x	10 - 11 - 13 - 14 - 15 - 17 - 19 - 22 - 24 mm	
	1 x	100 mm	
	1 x	250 mm	

Item No.	Quantity	Item Name	Weight
963.1289	23 pcs	BRONZEplus Socket set	4.10
	22 x	10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22 - 23 - 24 - 25 - 26 - 27 - 28 - 29 - 30 - 32 mm	
	1 x	250 mm	

963.1290	24 pcs	BRONZEplus Socket set	2.00
22 x		10-11-12-13-14-15-16-17-18-19-20-21 22-23-24-25-26-27-28-29-30-32 mm	
1 x		250 mm	
1 x		250 mm	

963.1291	26 pcs	BRONZEplus Socket set	4.10
22 x		10-11-12-13-14-15-16-17-18-19-20 21-22-23-24-25-26-27-28-29-30-32 mm	
1 x		250 mm	
1 x		250 mm	
1 x		320 mm	
1 x		380 mm	

BRONZEplus Bit socket set for hexagon screws

- Hexagon socket
- In accordance with DIN 7422
- Internal square drive to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



963.1322	9 pcs	BRONZEplus Bit socket set for hexagon screws	1.24
9 x		1/2": 5 - 6 - 7 - 8 - 9 - 10 - 12 - 14 - 17 mm	

963.1323	11 pcs	BRONZEplus Bit socket set for hexagon screws	2.99
1 x		1/2"	
1 x		1/2": 250 mm	
9 x		1/2": 5 - 6 - 7 - 8 - 9 - 10 - 12 - 14 - 17 mm	

963.1324	15 pcs	BRONZEplus Bit socket set for hexagon screws	2.79
9 x		1/2": 5 - 6 - 7 - 8 - 9 - 10 - 12 - 14 - 17 mm	
6 x		1/2": 5/90 - 6/90 - 8/90 - 10/140 - 12/140 - 14/140 mm	



3/4" DRIVE NON SPARKING SOCKETS

BRONZEplus socket

- 6 point
- In accordance to DIN 3124 / ISO 2725-1
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



mm	D1 mm	D2 mm	L mm	mm	
963.3405	18	31.0	36.0	60.0	180
963.3406	19	32.0	36.0	60.0	180
963.3407	21	34.0	36.0	60.0	180
963.3408	22	36.0	36.0	60.0	180
963.3409	24	38.0	36.0	55.0	350
963.3410	25	39.0	36.0	55.0	350
963.3411	26	40.0	36.0	50.0	330
963.3412	27	41.0	36.0	50.0	300
963.3413	28	42.0	38.0	50.0	300
963.3414	29	43.0	38.0	50.0	300
963.3415	30	45.0	38.0	50.0	310
963.3416	32	48.0	40.0	60.0	430
963.3417	33	50.0	40.0	60.0	450
963.3418	34	50.0	40.0	60.0	470
963.3419	35	51.0	44.0	55.0	400
963.3420	36	52.0	44.0	60.0	430
963.3421	38	55.0	46.0	60.0	490
963.3422	41	64.0	50.0	65.0	560
963.3423	42	64.0	50.0	65.0	600
963.3424	46	68.0	50.0	65.0	840
963.3425	50	72.0	55.0	70.0	1080
963.3426	55	80.0	60.0	70.0	900
963.3427	58	80.0	60.0	60.0	950
963.3428	60	82.0	60.0	70.0	1290

mm	D1 mm	D2 mm	L mm	mm	
963.3429	7/8"	36.0	36.0	60.0	180
963.3430	15/16"	39.0	36.0	55.0	350
963.3431	1"	39.0	36.0	55.0	350
963.3432	1.1/16"	41.0	36.0	50.0	300
963.3433	1.1/8"	41.0	36.0	50.0	300
963.3434	1.1/4"	48.0	40.0	60.0	430
963.3435	1.5/16"	50.0	40.0	60.0	400
963.3436	1.3/8"	52.0	44.0	55.0	400
963.3437	1.7/16"	55.0	46.0	60.0	430
963.3438	1.1/2"	55.0	46.0	60.0	490
963.3439	1.9/16"	55.0	46.0	60.0	490
963.3440	1.5/8"	64.0	50.0	65.0	560
963.3441	1.11/16"	64.0	50.0	65.0	560
963.3442	1.3/4"	68.0	50.0	65.0	600
963.3443	1.13/16"	68.0	50.0	65.0	840
963.3444	1.7/8"	68.0	50.0	65.0	1000
963.3445	2"	72.0	55.0	70.0	700



BERYLLIUMplus reversible ratchet

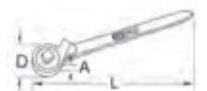
- In accordance to DIN 3122 / 3315
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Reversible
- Gearing with 45 teeth
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



mm	A mm	D mm	L mm	mm	
962.3490	3/4"	22.0	59.0	300.0	1.90

BERYLLIUMplus Ratchet handle with coupler

- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- The direction of rotation (clockwise and counter clockwise) can be changed by simply rotating the square drive piece
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



mm	A mm	D mm	L mm	mm	
962.3491	3/4"	22.0	60.0	500.0	1.80

BRONZEplus Coupler

- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



mm	L mm	mm	
963.3457	3/4"	51.5	130

BRONZEplus extension

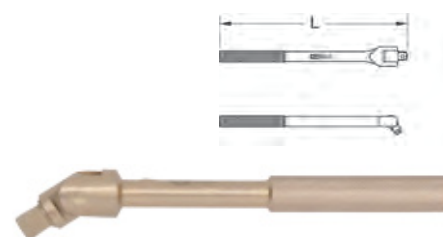
- In accordance to DIN 3123 / ISO 3316
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	■	L mm	kg
963.3446	3/4"	100.0	0.35
963.3447	3/4"	250.0	0.70
963.3448	3/4"	380.0	1.67
963.3449	3/4"	430.0	1.50

BRONZEplus fl xli drive handle

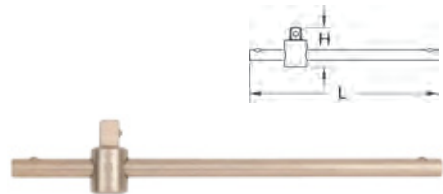
- In accordance to DIN 3122 / ISO 3315
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	■	L mm	kg
963.3450	3/4"	380.0	0.76
963.3451	3/4"	460.0	1.30
963.3452	3/4"	550.0	1.95

BRONZEplus sliding T-handle

- In accordance to DIN 3122 / ISO 3315
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	■	L mm	T mm	kg
963.3453	3/4"	65.0	260.0	0.60
963.3454	3/4"	65.0	500.0	1.48

BRONZEplus adaptor and reducing adaptor

- In accordance to DIN 3123 / ISO 3316
- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	□	■	L mm	kg
963.3455	3/4"	1"	61.0	325
963.3456	3/4"	1/2"	57.0	165

BRONZEplus universal joint

- In accordance to DIN 3123 / ISO 3316
- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	□	■	L mm	kg
963.3458	3/4"	3/4"	85.0	550
963.3459	3/4"	3/4"	106.0	570

BRONZEplus L-Handle

- In accordance to DIN ISO 2936
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	■	L mm	kg
963.3460	3/4"	300.0	800

BRONZEplus Speed brace

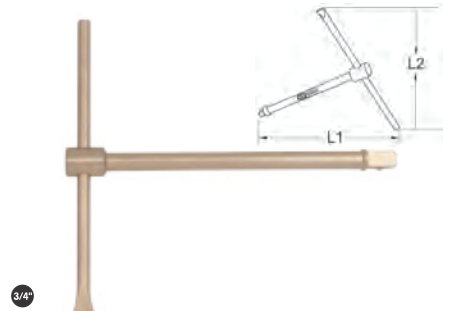
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	■	L mm	kg
963.3461	3/4"	380.0	1.25

BRONZEplus T-handle

- In accordance to DIN 3122 / ISO 3315
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	■	L1 mm	L2 mm	kg
963.3462	3/4"	260.0	250.0	850

BRONZEplus T-handle

- In accordance to DIN 3122 / ISO 3315
- Square drive in accordance to DIN 3122 / ISO 1174 with ball lock
- With flexible head
- For difficult to access areas
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	■	B mm	I mm	L mm	kg
963.3463	3/4"	20.0	300.0	560.0	1.20

BRONZEplus Bit socket for hexagon screws

- Hexagon socket
- In accordance with DIN 7422
- Internal square drive to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	D mm	L mm	T mm	kg
963.3465	14	36.0	80.0	18.0	350
963.3466	17	36.0	80.0	18.0	390
963.3467	19	36.0	80.0	18.0	435
963.3468	22	36.0	80.0	18.0	480
963.3469	24	36.0	80.0	18.0	520
963.3470	27	36.0	80.0	18.0	550
963.3471	30	36.0	80.0	18.0	570
963.3472	32	36.0	80.0	18.0	590
963.3473	36	36.0	80.0	18.0	620
963.3474	41	36.0	90.0	18.0	720
963.3475	46	36.0	90.0	18.0	820

BRONZEplus Socket set

- 6 point
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)
- In durable plastic storage case



963.3464		12 pcs	BRONZEplus Socket set			12.70	
7 x		36 - 38 - 41 - 46 - 50 - 55 - 60 mm					
1 x		380 mm					
1 x		300 mm					
1 x		500 mm					
1 x		380 mm					

1" DRIVE NON SPARKING SOCKETS

BRONZEplus socket

- 6 point
- In accordance to DIN 3124 / ISO 2725-1
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

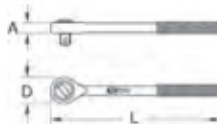


		D1 mm	D2 mm	L mm	
963.1005	32	50.0	50.0	60.0	0.51
963.1006	36	52.0	50.0	65.0	0.55
963.1007	41	63.0	50.0	70.0	0.73
963.1008	42	63.0	50.0	65.0	0.71
963.1009	46	67.0	52.0	65.0	0.71
963.1010	50	72.0	52.0	70.0	0.93
963.1011	55	78.0	60.0	75.0	1.13
963.1012	60	83.0	60.0	75.0	1.35
963.1013	65	90.0	65.0	75.0	1.50
963.1014	70	98.0	75.0	85.0	1.75
963.1015	75	104.0	75.0	85.0	2.30
963.1016	80	110.0	85.0	85.0	2.50
963.1017	85	116.0	85.0	90.0	2.80
963.1018	90	120.0	90.0	85.0	4.40
963.1019	95	130.0	95.0	85.0	4.50
963.1020	100	136.0	95.0	85.0	4.60

		D1 mm	D2 mm	L mm	
963.1021	1.7/16"	52.0	50.0	65.0	0.55
963.1022	1.1/2"	54.0	50.0	65.0	0.68
963.1023	1.5/8"	63.0	50.0	70.0	0.73
963.1024	1.11/16"	65.0	50.0	65.0	0.71
963.1025	1.13/16"	68.0	52.0	65.0	0.71
963.1026	1.7/8"	69.0	52.0	65.0	0.73
963.1027	2"	70.0	52.0	70.0	0.93
963.1028	2.1/16"	73.0	60.0	70.0	0.95
963.1029	2.3/16"	77.0	60.0	75.0	1.13
963.1030	2.3/8"	82.0	65.0	75.0	1.13
963.1031	2.1/4"	80.0	65.0	75.0	1.35
963.1032	2.7/16"	83.0	65.0	75.0	1.40
963.1033	2.9/16"	90.0	70.0	75.0	1.50
963.1034	2.5/8"	91.0	70.0	75.0	1.55
963.1035	2.3/4"	96.0	75.0	85.0	1.75
963.1036	2.13/16"	98.0	75.0	85.0	1.75
963.1037	2.15/16"	103.0	80.0	85.0	2.30
963.1038	3"	104.0	80.0	85.0	2.35
963.1039	3.1/8"	110.0	80.0	85.0	2.50
963.1040	3.3/8"	116.0	85.0	90.0	2.80
963.1041	3.1/2"	120.0	90.0	90.0	4.40
963.1042	3.3/4"	130.0	95.0	90.0	4.50
963.1043	3.7/8"	135.0	95.0	90.0	4.60
963.1044	4.1/4"	113.0	85.0	90.0	5.00

BERYLLIUMplus reversible ratchet

- In accordance to DIN 3122 / 3315
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Reversible
- Gearing with 45 teeth
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



		A mm	D mm	L mm	
962.1090	1"	30.0	72.0	550.0	340



BERYLLIUMplus Ratchet handle with coupler

- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- The direction of rotation (clockwise and counter clockwise) can be changed by simply rotating the square drive piece
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



		A mm	D mm	L mm	
962.1091	1"	23.0	72.0	550.0	3.50

BRONZEplus Coupler

- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



		L mm	
963.1051	1"	68.0	325

BRONZEplus extension

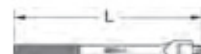
- In accordance to DIN 3123 / ISO 3316
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



963.1045	1"	100.0	0.80
963.1046	1"	250.0	1.40
963.1047	1"	400.0	2.09

BRONZEplus fl x xi drive handle

- In accordance to DIN 3122 / ISO 3315
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

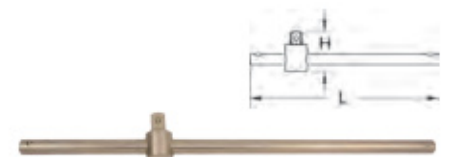


		L mm	
963.1048	1"	380.0	1.20



BRONZEplus sliding T-handle

- In accordance to DIN 3122 / ISO 3315
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	■	H mm	L mm	M
963.1049	1"	76.0	700.0	3.99

BRONZEplus reducing adaptor

- In accordance to DIN 3123 / ISO 3316
- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	□	■	L mm	M
963.1050	1"	3/4"	75.0	540

BRONZEplus universal joint

- In accordance to DIN 3123 / ISO 3316
- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	□	■	L mm	M
963.1052	1"	1"	141.0	1.45

BRONZEplus L-Handle

- In accordance to DIN ISO 2936
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	■	L mm	M
963.1053	1"	300.0	1.00

BRONZEplus Speed brace

- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



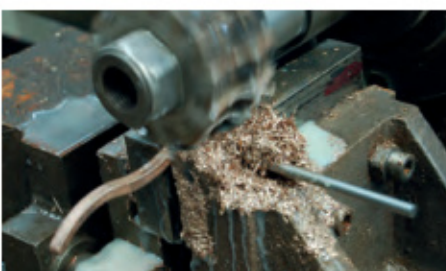
	■	L mm	M
963.1054	1"	380.0	1.40

BRONZEplus T-handle

- In accordance to DIN 3122 / ISO 3315
- Square drive in accordance to DIN 3122 / ISO 1174 with ball lock
- With flexible head
- For difficult to access areas
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	■	B mm	I mm	L mm	M
963.1055	1"	25.0	400.0	660.0	1.70



BRONZEplus Bit socket for hexagon screws

- Hexagon socket
- In accordance with DIN 7422
- Internal square drive to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	D mm	L mm	T mm	M
963.1056	17	47.0	90.0	23.0	0.58
963.1057	19	47.0	90.0	23.0	0.67
963.1058	22	47.0	90.0	23.0	0.71
963.1059	24	47.0	90.0	23.0	0.77
963.1060	27	47.0	90.0	23.0	0.86
963.1061	30	47.0	90.0	23.0	0.91
963.1062	32	47.0	90.0	23.0	0.95
963.1063	36	47.0	90.0	23.0	0.99
963.1064	41	47.0	100.0	23.0	1.20
963.1065	46	47.0	100.0	23.0	1.40

BRONZEplus Socket set

- 6 point
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)
- In durable plastic storage case



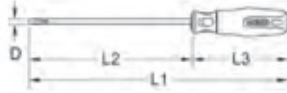
		M
963.1066	23 pcs BRONZEplus Socket set	33.10
10 x	36 - 41 - 46 - 50 - 55 - 60 - 65 - 70 - 75 - 80 mm	
10 x	1.1/2" - 1.5/8" - 1.7/8" - 2" - 2.1/16" - 2.1/4" - 2.3/8" - 2.9/16" - 2.3/4" - 3"	
2 x	250 - 400 mm	
1 x	550 mm	

		M
963.1067	13 pcs BRONZEplus Socket set	21.10
10 x	36 - 41 - 46 - 50 - 55 - 60 - 65 - 70 - 75 - 80 mm	
2 x	250 - 400 mm	
1 x	550 mm	

NON SPARKING SCREWDRIVERS

BERYLLIUMplus screwdriver for slotted screws

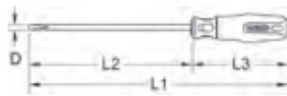
- Slotted
- In accordance to DIN ISO 2380-2 / 2380-1 Form A
- With hanging hole
- With two component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	D mm	L1 mm	L2 mm	L3 mm	⚖️
962.0911	3,0	165,0	75,0	90,0	30
962.0912	4,5	200,0	100,0	100,0	30
962.0913	4,5	250,0	150,0	100,0	60
962.0914	6,0	200,0	100,0	100,0	80
962.0915	6,0	250,0	150,0	100,0	90
962.0916	8,0	260,0	150,0	110,0	130
962.0917	10,0	320,0	200,0	120,0	190
962.0918	10,0	420,0	300,0	120,0	230

BERYLLIUMplus screwdriver for slotted screws, parallel blade

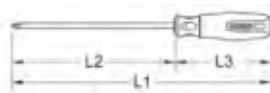
- With parallel blade
- Slotted
- With hanging hole
- With two component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	D mm	L1 mm	L2 mm	L3 mm	⚖️
962.0920	3,0	165,0	75,0	90,0	20
962.0921	4,0	240,0	150,0	100,0	20
962.0922	5,0	250,0	150,0	100,0	30
962.0923	6,0	300,0	200,0	100,0	110
962.0924	6,5	400,0	300,0	100,0	150

BERYLLIUMplus screwdriver for Phillips screws PH

- PH
- In accordance to DIN 5262 / ISO 8764-1
- With hanging hole
- With two component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



		L1 mm	L2 mm	L3 mm	⚖️
962.0900	PH 0	150,0	60,0	90,0	30
962.0901	PH 1	170,0	80,0	90,0	60
962.0902	PH 2	200,0	100,0	100,0	90
962.0903	PH 3	250,0	150,0	100,0	170
962.0904	PH 4	310,0	200,0	110,0	270

BERYLLIUMplus screwdriver set

- With hanging hole
- With two component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	⚖️
962.0805	4 pcs BERYLLIUMplus screwdriver set 320
4 x	3 (75 mm) - 4,5 (100 mm) - 6 - 8 (150 mm)

BERYLLIUMplus screwdriver set

- With hanging hole
- With two component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	⚖️
962.0808	4 pcs BERYLLIUMplus screwdriver set 400
4 x	PH1 - PH2 - PH3 - PH4

BERYLLIUMplus screwdriver set

- With hanging hole
- With two component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	⚖️
962.0806	6 pcs BERYLLIUMplus screwdriver set 500
4 x	4,5 - 6 (100 mm) - 6 - 8 (150 mm)
2 x	PH1 - PH2

BERYLLIUMplus screwdriver set

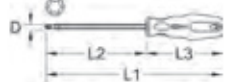
- With hanging hole
- With two component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	⚖️
962.0807	10 pcs BERYLLIUMplus screwdriver set 1.20
6 x	4,5 - 6 (100 mm) - 4,5 - 6 - 8 (150 mm) 10 (200 mm)
4 x	PH1 - PH2 - PH3 - PH4

BERYLLIUMplus screwdriver for TX screws

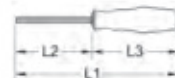
- TX
- With hanging hole
- With two component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



		L1 mm	L2 mm	L3 mm	⚖️
962.0930	T5	160,0	70,0	90,0	30
962.0931	T6	160,0	70,0	90,0	70
962.0932	T7	160,0	70,0	90,0	70
962.0933	T8	160,0	70,0	90,0	70
962.0934	T9	160,0	70,0	90,0	70
962.0935	T10	170,0	80,0	90,0	80
962.0936	T15	170,0	80,0	90,0	80
962.0937	T20	190,0	90,0	100,0	80
962.0938	T25	190,0	90,0	100,0	100
962.0939	T27	210,0	110,0	100,0	100
962.0940	T30	210,0	110,0	100,0	110
962.0941	T40	220,0	120,0	100,0	120
962.0942	T45	230,0	120,0	110,0	140
962.0943	T50	230,0	120,0	110,0	150

BRONZEplus screwdriver for hexagon screws

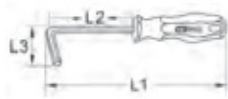
- 6 point
- With hanging hole
- With two component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



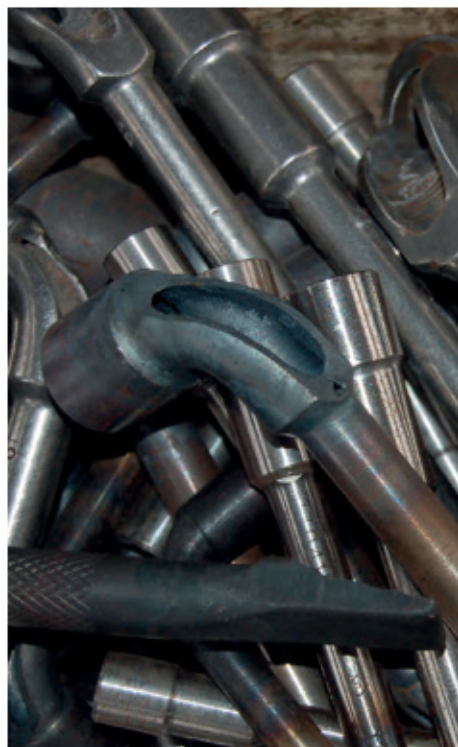
	⚖️	L1 mm	L2 mm	L3 mm	⚖️
963.1068	3,0	190,0	100,0	90,0	40
963.1069	4,0	190,0	100,0	90,0	50
963.1070	5,0	200,0	100,0	100,0	60
963.1071	6,0	225,0	125,0	100,0	90
963.1072	8,0	260,0	150,0	110,0	140
963.1073	10,0	260,0	150,0	110,0	210
963.1074	12,0	280,0	150,0	130,0	280

BRONZEplus screwdriver for hexagon screws, angled

- 6 point
- With hanging hole
- With two component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

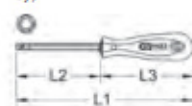


	mm	L1 mm	L2 mm	L3 mm	g
963.1505	3,0	153,0	75,0	20,0	25
963.1506	4,0	153,0	75,0	25,0	40
963.1507	5,0	180,0	80,0	28,0	50
963.1508	6,0	180,0	80,0	32,0	75
963.1509	8,0	240,0	120,0	36,0	140
963.1510	10,0	240,0	120,0	40,0	220
963.1511	12,0	240,0	120,0	45,0	290



BERYLLIUMplus screwdriver for hexagon screws with ball end

- 6 point
- With hanging hole
- With two component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)

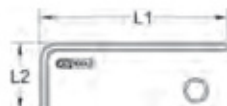


	mm	L1 mm	L2 mm	L3 mm	g
962.0950	3,0	190,0	100,0	90,0	35
962.0951	4,0	190,0	100,0	90,0	50
962.0952	5,0	200,0	100,0	100,0	60
962.0953	6,0	225,0	125,0	100,0	90
962.0954	8,0	260,0	150,0	110,0	140
962.0955	10,0	260,0	150,0	110,0	210
962.0956	12,0	280,0	150,0	130,0	290

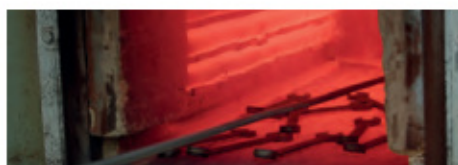
NON SPARKING OFFSET SCREWDRIVERS

BRONZEplus key wrench for hexagon socket screws, short

- 6 point
- Short version
- In accordance to DIN ISO 2936
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	mm	L1 mm	L2 mm	g
962.04015	1,5		55,0	13,0	0,01
962.0402	2,0		55,0	13,0	0,01
962.04025	2,5		55,0	13,0	0,01
963.1519	3,0		60,0	25,0	0,01
963.1520	4,0		70,0	30,0	0,01
963.1521	5,0		80,0	32,0	0,02
963.1522	6,0		90,0	37,0	0,03
963.1523	7,0		95,0	43,0	0,05
963.1524	8,0		100,0	44,0	0,07
963.1525	9,0		105,0	44,0	0,09
963.1526	10,0		115,0	45,0	0,10
963.1527	11,0		119,0	48,0	0,13
963.1528	12,0		125,0	52,0	0,17
963.1529	13,0		132,0	54,0	0,20
963.1530	14,0		140,0	58,0	0,25
963.1531	17,0		160,0	65,0	0,41
963.1532	18,0		170,0	69,0	0,50
963.1533	19,0		180,0	72,0	0,57
963.1534	22,0		200,0	77,0	0,95
963.1535	24,0		224,0	82,0	1,25
963.1536	27,0		250,0	93,0	1,80
963.1537	30,0		280,0	105,0	2,50
963.1538	32,0		315,0	116,0	3,10
963.1539	36,0		355,0	128,0	4,50
963.1540	41,0		400,0	140,0	5,30
962.0420		3/64"	55,0	13,0	0,01
962.0421		1/16"	55,0	13,0	0,01
962.0422		5/64"	55,0	13,0	0,01
962.0423		3/32"	55,0	13,0	0,01
962.0424		1/8"	60,0	24,0	0,01
962.0425		5/32"	70,0	30,0	0,01
963.1541		3/16"	80,0	31,0	0,02
963.1542		7/32"	80,0	37,0	0,02
963.1543		1/4"	90,0	37,0	0,03
963.1544		5/16"	100,0	44,0	0,07
963.1545		3/8"	120,0	45,0	0,10
963.1546		7/16"	119,0	48,0	0,13
963.1547		1/2"	125,0	55,0	0,17
963.1548		9/16"	140,0	58,0	0,25
963.1549		5/8"	140,0	63,0	0,27
963.1550		11/16"	160,0	65,0	0,41
963.1551		3/4"	180,0	73,0	0,57
963.1552		7/8"	200,0	77,0	0,95
963.1553		1"	224,0	85,0	1,25
963.1554		1.1/16"	216,0	93,0	3,08
963.1555		1.1/8"	230,0	95,0	3,30
963.1556		1.1/4"	230,0	116,0	3,30
963.1557		1.5/16"	235,0	116,0	3,52
963.1558		1.3/8"	235,0	128,0	3,52
963.1559		1.7/16"	241,0	128,0	3,74
963.1560		1.1/2"	241,0	128,0	3,74
963.1561		1.5/8"	241,0	140,0	3,74



BRONZEplus Hexagon key wrench set in a folding holder, short

- 6 point
- Short version
- In accordance to DIN ISO 2936
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	pcs	mm	g
963.1512	8 pcs	2 - 2,5 - 3 - 4 - 5 - 6 - 8 - 10 mm	245
963.1513	9 pcs	1,5 - 2 - 2,5 - 3 - 4 - 5 - 6 - 8 - 10 mm	205
963.1514	10 pcs	1/16" - 5/64" - 3/32" - 1/8" - 5/32" - 3/16" - 7/32" - 1/4" - 5/16" - 3/8"	178

BRONZEplus key wrench for hexagon socket screws, extra long

- 6 point
- Extra long version
- In accordance to DIN ISO 2936
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	L1 mm	L2 mm	g
963.1562	3,0	126,0	25,0	6
963.1563	4,0	142,0	30,0	12
963.1564	5,0	160,0	32,0	18
963.1565	6,0	180,0	37,0	30
963.1566	8,0	200,0	44,0	70
963.1567	10,0	205,0	45,0	120
963.1568	12,0	250,0	52,0	190
963.1569	14,0	280,0	58,0	300
963.1570	17,0	320,0	65,0	380
963.1571	19,0	360,0	72,0	490

BRONZEplus Hexagon key wrench set in a folding holder, extra long

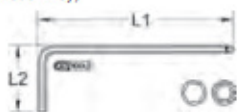
- 6 point
- Long version
- In accordance to DIN ISO 2936
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	pcs	mm	g
963.1515	8 pcs	2 - 2,5 - 3 - 4 - 5 - 6 - 8 - 10 mm	400
963.1516	9 pcs	1,5 - 2 - 2,5 - 3 - 4 - 5 - 6 - 8 - 10 mm	464

BERYLLIUMplus key wrench for hexagon socket screws with ball end, short

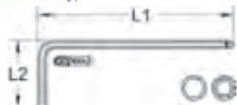
- 6 point
- Short version
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	mm	L1 mm	L2 mm	mm
962.0440	1,5	45,0	13,0	4
962.0441	2,0	50,0	16,0	3
962.0442	2,5	55,0	18,0	5
962.0443	3,0	63,0	20,0	7
962.0444	4,0	70,0	25,0	12
962.0445	5,0	80,0	28,0	20
962.0446	6,0	90,0	32,0	32
962.0447	7,0	95,0	34,0	42
962.0448	8,0	100,0	36,0	60
962.0449	10,0	115,0	40,0	106
962.0450	12,0	130,0	45,0	205
962.0451	14,0	140,0	48,0	255

BERYLLIUMplus key wrench for hexagon socket screws with ball end, extra long

- 6 point
- Extra long version
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	mm	L1 mm	L2 mm	mm
962.0460	3,0	126,0	20,0	8
962.0461	4,0	140,0	25,0	18
962.0462	5,0	160,0	28,0	31
962.0463	6,0	180,0	32,0	51
962.0464	7,0	190,0	34,0	75
962.0465	8,0	200,0	36,0	101
962.0466	10,0	224,0	40,0	176
962.0467	12,0	250,0	45,0	292
962.0468	14,0	290,0	48,0	370

BRONZEplus Hexagon key wrench set in a folding holder, with ball end, long

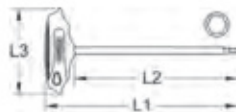
- 6 point
- Long execution
- In accordance to DIN ISO 2936
- With ball head on the long end
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



		mm
963.1517	8 pcs	2 - 2,5 - 3 - 4 - 5 - 6 - 8 - 10 mm
963.1518	9 pcs	1,5 - 2 - 2,5 - 3 - 4 - 5 - 6 - 8 - 10 mm

BRONZEplus T-handle hexagon key wrench

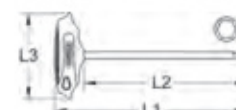
- 6 point
- One component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	L1 mm	L2 mm	L3 mm	mm
963.1572	3,0	143,0	100,0	75,0	31
963.1573	4,0	143,0	100,0	75,0	38
963.1574	5,0	155,0	100,0	91,0	61
963.1575	6,0	155,0	100,0	91,0	71
963.1576	8,0	155,0	100,0	91,0	97
963.1577	10,0	155,0	100,0	91,0	157
963.1578	12,0	155,0	100,0	91,0	198
963.1579	14,0	155,0	100,0	91,0	246

BRONZEplus T-handle hexagon key wrench, long

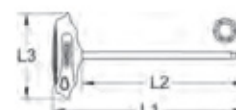
- 6 point
- Extra long execution
- One component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	L1 mm	L2 mm	L3 mm	mm
963.1580	3,0	195,0	150,0	75,0	34
963.1581	4,0	195,0	150,0	75,0	43
963.1582	5,0	205,0	150,0	91,0	69
963.1583	6,0	205,0	150,0	91,0	83
963.1584	8,0	205,0	150,0	91,0	118
963.1585	10,0	205,0	150,0	91,0	191
963.1586	12,0	205,0	150,0	91,0	247
963.1587	14,0	205,0	150,0	91,0	312

BERYLLIUMplus T-handle hexagon key wrench with ball end

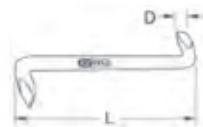
- 6 point
- One component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	mm	L1 mm	L2 mm	L3 mm	mm
962.0960	3,0	145,0	100,0	75,0	31
962.0961	4,0	145,0	100,0	75,0	38
962.0962	5,0	205,0	150,0	91,0	69
962.0963	6,0	205,0	150,0	91,0	83
962.0964	8,0	205,0	150,0	91,0	118
962.0965	10,0	255,0	200,0	91,0	225
962.0966	12,0	255,0	200,0	91,0	295
962.0967	14,0	255,0	200,0	91,0	380

BRONZEplus Key wrench

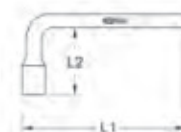
- Slotted
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	D mm	L mm	mm
963.1588	4,0	125,0	25
963.1589	6,0	130,0	35
963.1590	10,0	140,0	90
963.1591	13,0	190,0	240

BRONZEplus offset screwdriver for square head screws

- 4 point
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



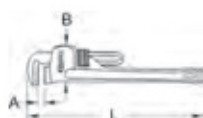
	mm	L1 mm	L2 mm	mm
963.1592	10	200,0	37,0	0,20
963.1593	11	200,0	37,0	0,20
963.1594	12	200,0	42,0	0,20
963.1595	13	200,0	45,0	0,20
963.1596	14	220,0	45,0	0,40
963.1597	15	220,0	48,0	0,40
963.1598	16	220,0	48,0	0,40
963.1599	17	250,0	51,0	0,60
963.1600	18	250,0	53,0	0,60
963.1601	19	250,0	55,0	0,60
963.1602	20	300,0	57,0	1,00
963.1603	21	300,0	57,0	1,00
963.1604	22	300,0	59,0	1,00
963.1605	24	360,0	63,0	1,60
963.1606	25	360,0	63,0	1,60
963.1607	27	360,0	69,0	1,60
963.1608	28	440,0	69,0	3,20
963.1609	30	440,0	75,0	3,20
963.1610	32	440,0	81,0	3,20



NON SPARKING PLIERS

BRONZEplus one handed pipe wrench

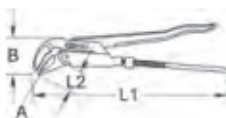
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	A mm	B mm	L mm	Wt kg
963.1705	38.0	50.0	240.0	0.42
963.1706	45.0	50.0	240.0	0.47
963.1707	48.0	53.0	290.0	0.78
963.1708	58.0	64.0	350.0	1.00
963.1709	65.0	64.0	350.0	1.20
963.1710	70.0	75.0	425.0	1.60
963.1711	80.0	80.0	500.0	2.20
963.1712	105.0	90.0	575.0	3.70

BERYLLIUMplus swedish pipe wrench

- In accordance to DIN 5234
- 45° angled
- S-shaped jaw
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	A	B mm	L1 mm	L2 mm	Wt kg
962.4005	1"	60.0	200.0	38.0	0.82
962.4006	1.1/2"	70.0	300.0	50.0	1.57
962.4007	2"	72.0	350.0	65.0	3.20
962.4008	3"	100.0	600.0	75.0	4.10
962.4009	4"	122.0	900.0	100.0	6.20

BERYLLIUMplus adjustable pipe wrench

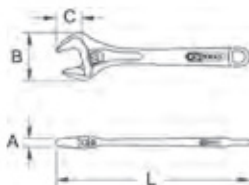
- In accordance to DIN 5234
- 90° angled
- S-shaped jaw
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	A	B mm	L1 mm	L2 mm	Wt kg
962.4015	1.1/2"	80.0	435.0	50.0	1.57
962.4016	2"	95.0	540.0	65.0	3.20

BERYLLIUMplus adjustable spanner

- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	mm	A mm	B mm	C mm	L mm	Wt kg
962.1108	18	9.0	45.0	18.0	150.0	0.10
962.1109	26	10.0	55.0	20.0	200.0	0.20
962.1110	30	11.0	65.0	30.0	250.0	0.40
962.1111	36	12.0	83.0	34.0	300.0	0.70
962.1112	46	15.0	105.0	47.0	380.0	1.40
962.1113	53	17.0	123.0	51.0	450.0	2.70
962.1114	67	19.0	145.0	62.0	600.0	5.10

BRONZEplus chain pipe wrench

- Function is similar to a ratchet
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	Ø mm	L mm	Wt kg
963.1713	50	600.0	1.70
963.1714	100	600.0	2.50
963.1715	150	600.0	3.00
963.1716	450	1600.0	8.00

BRONZEplus chain pipe wrench

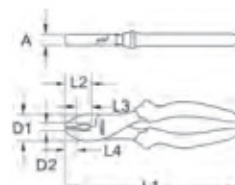
- Function is similar to a ratchet
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	Ø mm	L mm	Wt kg
963.1717	38	510.0	2.65
963.1718	65	685.0	4.50
963.1719	100	915.0	11.50
963.1720	300	1830.0	30.30

BERYLLIUMplus pipe wrench

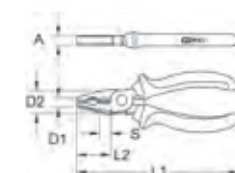
- With PVC dipped handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	A mm	D1 mm	D2 mm	L1 mm	L2 mm	L3 mm	L4 mm	Wt kg
962.0607	12.0	30.0	15.0	210.0	40.0	25.0	15.0	370

BERYLLIUMplus combination pliers

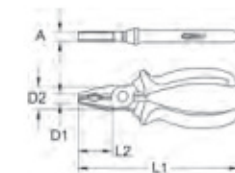
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)
- With two component handle



	A mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	Wt kg
962.0620	10.0	7.0	24.0	160.0	33.0	12.0	350
962.0621	14.0	9.0	29.0	200.0	38.0	16.0	425

BERYLLIUMplus combination pliers, adjustable

- With two component handle
- Adjustable
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)

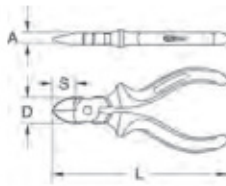


	A mm	D1 mm	D2 mm	L1 mm	L2 mm	Wt kg
962.0623	14.0	9.0	29.0	200.0	38.0	340



BERYLLIUMplus side cutters

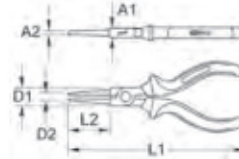
- In accordance to DIN ISO 5749
- With two component handle
- For different wire types
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	A mm	D mm	L mm	S mm	Wt g
962.0616	10.0	23.0	165.0	20.0	200

BERYLLIUMplus round nosed pliers

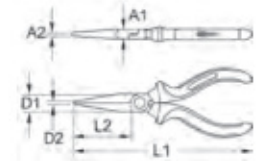
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)
- Substantial through joint
- With two component handle



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	Wt g
962.0625	3.0	10.0	20.0	3.0	160.0	36.0	90
962.0626	5.0	12.0	25.0	4.0	200.0	54.0	160

BERYLLIUMplus flat pliers

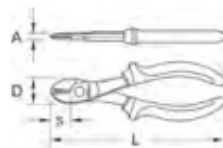
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)
- With two component handle



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	Wt g
962.0630	9.0	2.5	18.0	3.2	160.0	48.0	50
962.0631	11.0	4.0	21.0	5.0	200.0	85.0	150

BERYLLIUMplus high leverage side cutter

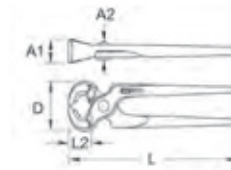
- In accordance to DIN ISO 5749
- With two component handle
- For different wire types
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	A mm	D mm	L mm	S mm	Wt g
962.0617	14.0	30.0	190.0	24.0	290

BERYLLIUMplus pinchers

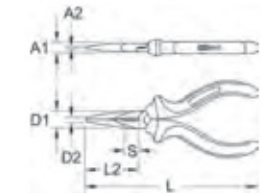
- PVC dipped handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	A1 mm	A2 mm	D mm	L1 mm	L2 mm	Wt g
962.0640	16.0	14.0	43.0	175.0	19.0	430
962.0641	20.0	18.0	53.0	200.0	23.0	520

BERYLLIUMplus telephone pliers

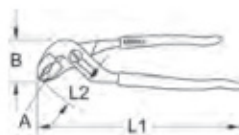
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)
- With two component handle



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	Wt g
962.0610	11.0	3.0	22.0	4.0	180.0	60.0	10.0	300

BERYLLIUMplus waterpump pliers

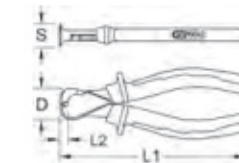
- In accordance to DIN ISO 8976
- With dipped covered handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	A mm	B mm	L1 mm	L2 mm	Wt g
962.0605	30.0	53.0	250.0	33.0	350

BERYLLIUMplus side cutter

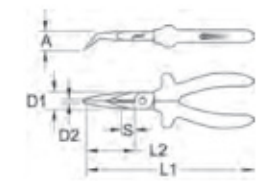
- Strong version
- PVC dipped handle
- Non-sparking
- Anti-magnetic
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	D mm	L1 mm	L2 mm	S mm	Wt g
962.0615	30.0	175.0	9.0	28	260

BERYLLIUMplus telephone pliers, offset

- 45° angled tips
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)

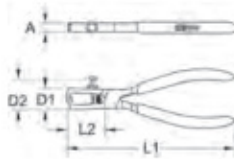


	A mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	Wt g
962.0612	9.0	20.0	4.0	180.0	50.0	9.0	290



BERYLLIUMplus wire stripper

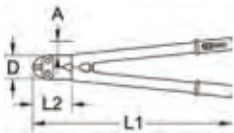
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	A mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
962.0635	10.0	25.0	28.0	170.0	40.0	260

BERYLLIUMplus Bolt cutters

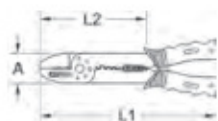
- PVC dipped handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	A mm	D mm	L1 mm	L2 mm	Weight
962.0619	62.0	78.0	620.0	140.0	3.40

BERYLLIUMplus Crimping pliers

- PVC dipped handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	L1 mm	L2 mm	A mm	Weight
962.0636	200.0	120.0	40.0	120

BERYLLIUMplus plier set

- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	Quantity	Set Name	Weight
962.0650	4 pcs	BERYLLIUMplus plier set	1.50
1 x		200 mm	
1 x		165 mm	
1 x		180 mm	
1 x		250 mm	



NON SPARKING TWEEZERS

BRONZEplus tweezers

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	L mm	Weight
963.5604	100.0	15

BRONZEplus neat tweezers

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	L mm	Weight
963.5605	150.0	30

BRONZEplus flat nose tweezers

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

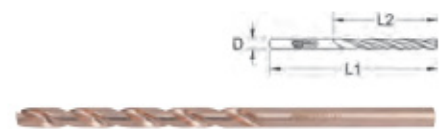


	L mm	Weight
963.5606	100.0	30

NON SPARKING DRILLS

BERYLLIUMplus twist drill

- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	D mm	L1 mm	L2 mm	Count	Weight
962.9606	6.0	100.0	60.0	1	20
962.9607	7.0	120.0	70.0	1	30
962.9608	8.0	140.0	80.0	1	50
962.9609	9.0	160.0	100.0	1	75
962.9610	10.0	180.0	120.0	1	100
962.9611	11.0	200.0	130.0	1	120
962.9612	12.0	220.0	150.0	1	170
962.9613	13.0	240.0	160.0	1	220
962.9614	14.0	260.0	180.0	1	280
962.9615	15.0	280.0	200.0	1	360
962.9616	16.0	300.0	220.0	1	440
962.9617	17.0	300.0	220.0	1	500
962.9618	18.0	320.0	230.0	1	600
962.9619	19.0	320.0	230.0	1	700
962.9620	20.0	330.0	240.0	1	800

BERYLLIUMplus twist drill set

- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	Quantity	Drill Sizes	Weight
962.9630	15 pcs	6-7-8-9-10-11-12-13-14-15-16-17-18-19-20mm	4.00

NON SPARKING SAWS

BRONZEplus hack saw frame

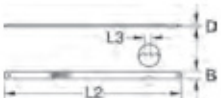
- For saw blade length 300 mm
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	L mm	H mm	Weight
963.5108	300	200	0.90

BERYLLIUMplus hack saw blade for hack saw frame

- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	L2 mm	L3 mm	B mm	D mm	Weight
962.9034	300.0	1.0-1.3	12.0	0.6	30

BERYLLIUMplus hand saw

- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	L mm	H mm	Weight
962.9035	370.0	90.0	500

BERYLLIUMplus hand saw, heavy duty

- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	L mm	H mm	Weight
962.9036	700.0	120.0	770

NON SPARKING WIRE BRUSHES

BRONZEplus tin bronze wire brush, curled

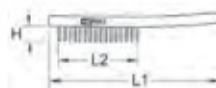
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	L mm	B mm	Weight
963.9580	180.0	70.0	300

BRONZEplus tin bronze wire brush, curled

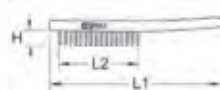
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	H mm	L1 mm	L2 mm	Weight
963.9581	3	350.0	120.0	190
963.9582	4	350.0	120.0	210
963.9583	5	350.0	120.0	190

BRONZEplus tin bronze wire handbrush, curled

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	H mm	L1 mm	L2 mm	Weight
963.9584	3	290.0	120.0	110
963.9585	4	290.0	120.0	130
963.9586	5	290.0	120.0	150

BRONZEplus tin bronze wire hand broom, curled

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	L1 mm	L2 mm	Weight
963.9587	310.0	150.0	320

BRONZEplus Hand brush

- Without handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	L mm	B mm	H mm	Weight
963.9590	245.0	60.0	50.0	480

BRONZEplus round wire broom

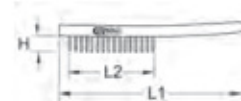
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	L mm	B mm	H mm	Weight
963.9591	300.0	70.0	100.0	1.50

BRONZEplus Brush, spark-plug cleaning, round wire

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	H mm	L1 mm	L2 mm	Weight
963.9593	15.0	225.0	80.0	40

BRONZEplus tube brush, wire curled

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	L mm	Weight
963.9594	300.0	40

BRONZEplus brush end, wire curled

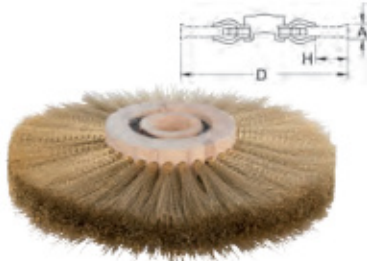
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	D1 mm	D2 mm	H mm	L mm	Wt g
963.9595	26.0	6.0	30.0	80.0	640

BRONZEplus tin bronze wire wheel brush, curled

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	A mm	D mm	H mm	Wt g
963.9596	45.0	150.0	20.0	520

BRONZEplus tin bronze wire cup brush, curled

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



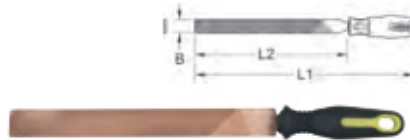
	D mm	H mm	L mm	Wt g
963.9597	85.0	20.0	35.0	700



NON SPARKING FILES

BERYLLIUMplus fl 1 fil

- In accordance to DIN 7261 Form A
- With two component handle
- With hanging hole
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	B mm	L1 mm	L2 mm	Wt g
962.7301	1	25.0	360.0	245.0
962.7302	3	25.0	360.0	245.0

BERYLLIUMplus half round fil

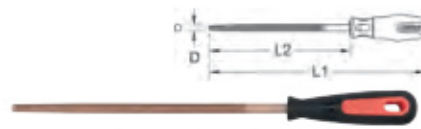
- In accordance to DIN 7261 Form E
- With two component handle
- With hanging hole
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	B mm	L1 mm	L2 mm	Wt g
962.7101	1	22.0	365.0	250.0
962.7102	3	22.0	365.0	250.0

BERYLLIUMplus round fil

- In accordance to DIN 7261 Form F
- With two component handle
- With hanging hole
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)

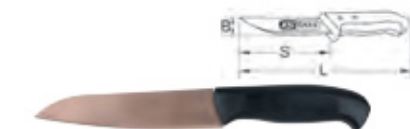


	D mm	L1 mm	L2 mm	Wt g
962.7201	1	8.0	360.0	250.0
962.7202	3	8.0	360.0	250.0

NON SPARKING KNIVES

BERYLLIUMplus cutter

- Durable and finished blade
- With plastic handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	B mm	L mm	S mm	Wt g
962.9030	30.0	180.0	90	60

BRONZEplus cutter

- Durable and finished blade
- With plastic handle
- Reinforced execution
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	B mm	L mm	S mm	Wt g
963.9510	30.0	300.0	200	300

NON SPARKING SHEARS

BERYLLIUMplus metal shears

- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	L1 mm	L2 mm	S mm	Wt g
962.9015	300.0	120.0	70.0	450

BERYLLIUMplus Ideal pattern

- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	A mm	L mm	S mm	Wt g
962.9016	35.0	280.0	50	520

BERYLLIUMplus universal shear

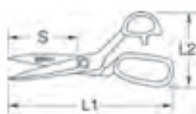
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	L1 mm	L2 mm	S mm	Wt g
962.9017	210.0	110.0	80.0	300

BERYLLIUMplus universal shear

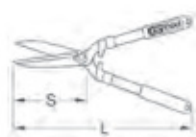
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	L1 mm	L2 mm	S mm	
962.9018	220.0	90.0	100	450

BERYLLIUMplus hedge shears

- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	L mm	S mm	
962.9033	520.0	300	1.40

NON SPARKING CUTTING TOOLS

BRONZEplus reaping hook

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	L1 mm	L2 mm	B mm	
963.9651	380.0	220.0	200.0	800

BRONZEplus draw knife

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	L mm	A mm	
963.5705	650.0	250.0	1.50

NON SPARKING SCRAPERS

BRONZEplus deck scraper

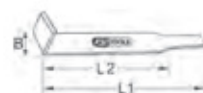
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	L mm	B mm	
963.9520	200.0	22.0	210
963.9521	255.0	40.0	480
963.9522	300.0	50.0	570

BRONZEplus deck scraper with handle

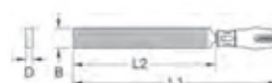
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	L1 mm	L2 mm	B mm	
963.9523	380.0	280.0	38.0	780

BRONZEplus fl t scraper

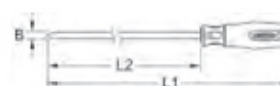
- In accordance to DIN 8350 Form A
- Work areas ground
- With two component handle
- With hanging hole
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	B mm	D mm	L1 mm	L2 mm	
963.9531	37.0	6.0	315.0	205.0	290

BRONZEplus triangular scraper

- In accordance to DIN 8350 Form C
- Work areas ground
- With two component handle
- With hanging hole
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	B mm	L1 mm	L2 mm	
963.9532	16.0	365.0	255.0	220

BRONZEplus ship scraper

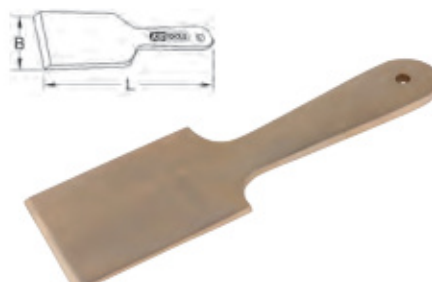
- In accordance to DIN 8350 Form C
- Work areas ground
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	L1 mm	L2 mm	B mm	
963.9533	420.0	100.0	70.0	650

BRONZEplus spray booth scraper

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	L mm	B mm	
963.9530	235.0	75.0	450



BRONZEplus scraper with handle

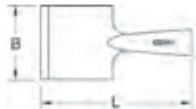
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	L mm	B mm	W
963.9534	480.0	95.0	620

BRONZEplus scraper

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	L mm	B mm	W
963.9535	220.0	75.0	0.58
963.9536	220.0	100.0	0.83
963.9537	220.0	125.0	0.88
963.9538	220.0	150.0	1.02

BRONZEplus scraper, concave

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



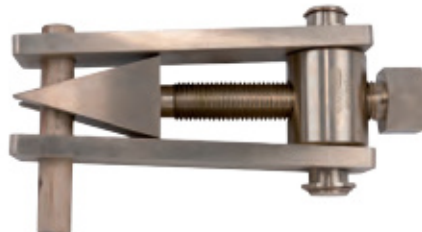
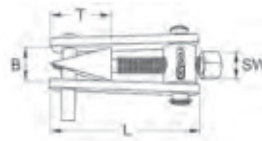
	L mm	B mm	W
963.9539	240.0	100.0	0.90
963.9540	240.0	150.0	1.35



NON SPARKING FLANGE SPREADERS

BRONZEplus flange spreader

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



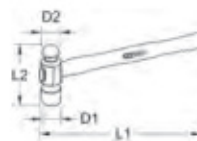
	mm	L mm	B mm	T mm	W
963.5607	46	300.0	60.0	55.0	7.20



NON SPARKING HAMMERS

BRONZEplus ball pin hammer

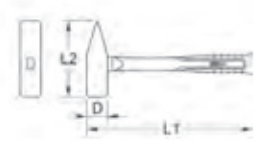
- With hickory handle
- American pattern
- Surfaces polished ground
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)



	g	D1 mm	D2 mm	L1 mm	L2 mm	W
963.2105	100	20.0	17.0	310.0	50.0	0.25
963.2106	150	24.0	20.0	310.0	55.0	0.30
963.2107	200	25.0	21.0	310.0	60.0	0.35
963.2108	300	30.0	25.0	310.0	65.0	0.45
963.2109	400	34.0	18.0	340.0	70.0	0.56
963.2110	500	36.0	30.0	340.0	75.0	0.66
963.2111	600	38.0	32.0	340.0	80.0	0.76
963.2112	700	40.0	34.0	340.0	85.0	0.86
963.2113	800	42.0	36.0	380.0	90.0	0.96
963.2114	900	44.0	38.0	380.0	95.0	1.06
963.2115	1000	45.0	40.0	380.0	100.0	1.17
963.2116	1300	50.0	42.0	400.0	110.0	1.47
963.2117	1500	52.0	44.0	400.0	120.0	1.67
963.2118	2000	54.0	46.0	400.0	130.0	2.18

BRONZEplus ball pin hammer

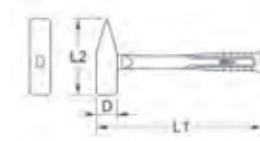
- In accordance to DIN 1041
- With hickory handle
- Head and edge areas ground
- Edges rounded off
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)



	g	D mm	L1 mm	L2 mm	W
963.2005	100	15.0	260.0	82.0	0.22
963.2006	150	16.0	260.0	87.0	0.27
963.2007	200	19.0	280.0	95.0	0.32
963.2008	300	23.0	280.0	105.0	0.42
963.2009	400	25.0	310.0	112.0	0.52
963.2010	500	27.0	310.0	115.0	0.50
963.2011	600	29.0	310.0	120.0	0.72
963.2012	700	30.0	340.0	125.0	0.82
963.2013	800	33.0	340.0	128.0	0.93
963.2014	900	34.0	360.0	133.0	1.03
963.2015	1000	35.0	360.0	136.0	1.13
963.2016	1250	40.0	380.0	140.0	1.38
963.2017	1500	42.0	400.0	145.0	1.64
963.2018	2000	45.0	400.0	155.0	2.14

BRONZEplus ball pin hammer

- In accordance to DIN 1041
- With fibre glass handle
- Head and edge areas ground
- Edges rounded off
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)



	g	D mm	L1 mm	L2 mm	W
963.2019	300	23.0	310.0	105.0	0.37
963.2020	400	25.0	310.0	112.0	0.47
963.2021	500	27.0	310.0	115.0	0.60
963.2022	800	33.0	340.0	130.0	0.90
963.2023	1000	35.0	340.0	135.0	1.13
963.2024	1500	42.0	400.0	145.0	1.63
963.2025	2000	45.0	400.0	155.0	2.15



BRONZEplus Sledge hammer

- In accordance to DIN 1042
- With hickory handle
- Head and edge areas ground
- Edges rounded off
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)



	g	D mm	L1 mm	L2 mm	kg
963.2030	2500	50.0	900.0	165.0	2.60
963.2031	3000	55.0	900.0	175.0	3.15
963.2032	4000	60.0	900.0	180.0	4.15
963.2033	5000	68.0	900.0	185.0	5.15
963.2034	6000	74.0	900.0	190.0	6.15
963.2035	8000	78.0	900.0	195.0	8.15
963.2036	9000	82.0	900.0	200.0	9.15
963.2037	10000	85.0	900.0	210.0	10.15
963.2038	12000	90.0	900.0	220.0	12.15
963.2039	15000	100.0	900.0	230.0	15.15

BRONZEplus club hammer

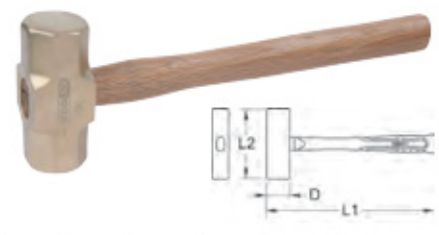
- In accordance to DIN 6475
- With hickory handle
- Surfaces polished ground
- Edges rounded off
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)



	g	D mm	L1 mm	L2 mm	kg
963.2050	1000	40.0	400.0	95.0	1.15
963.2051	1250	40.0	400.0	115.0	1.40
963.2052	1500	45.0	400.0	115.0	1.70
963.2053	2000	50.0	400.0	115.0	2.20
963.2054	2500	55.0	400.0	130.0	2.70
963.2055	3000	55.0	900.0	145.0	3.25
963.2056	4000	60.0	900.0	150.0	4.25
963.2057	5000	65.0	900.0	170.0	5.25
963.2058	6000	70.0	900.0	170.0	6.25
963.2059	8000	75.0	900.0	190.0	8.30
963.2060	10000	80.0	900.0	210.0	10.30

BRONZEplus Mining hammer

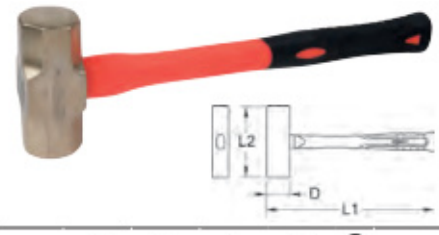
- In accordance to DIN 6475
- With hickory handle
- Surfaces polished ground
- Edges rounded off
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)



	g	D mm	L1 mm	L2 mm	kg
963.2080	1000	40.0	350.0	115.0	1.40
963.2081	1500	44.0	400.0	118.0	1.94
963.2082	2500	55.0	400.0	150.0	2.94
963.2083	3500	58.0	900.0	160.0	3.94
963.2084	5000	65.0	900.0	175.0	5.45
963.2085	8000	80.0	900.0	200.0	8.45

BRONZEplus Mining hammer

- In accordance to DIN 6475
- With fibre glass handle
- Surfaces polished ground
- Edges rounded off
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)



	g	D mm	L1 mm	L2 mm	kg
963.2086	1000	40.0	350.0	115.0	1.45
963.2087	1500	44.0	400.0	118.0	2.00
963.2088	2500	55.0	400.0	150.0	3.00
963.2089	3500	58.0	900.0	160.0	4.00
963.2090	5000	65.0	900.0	175.0	5.55
963.2091	8000	80.0	900.0	200.0	8.55

BRONZEplus Hand hammer

- In accordance to DIN 1041
- With hickory handle
- American form
- Surfaces polished ground
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	g	D mm	L1 mm	L2 mm	kg
963.2120	700	30.0	310.0	115.0	0.85
963.2121	1200	40.0	400.0	135.0	1.37
963.2122	1600	40.0	400.0	140.0	1.79



BRONZEplus Sledge hammer

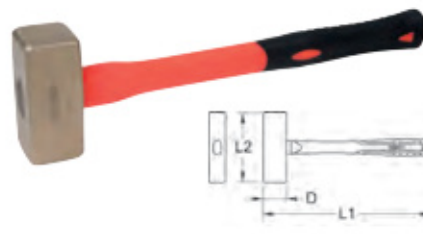
- In accordance to DIN 1041
- With fibre glass handle
- Head and edge areas ground
- Edges rounded off
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)



	g	D mm	L1 mm	L2 mm	kg
963.2040	3000	55.0	900.0	175.0	3.15
963.2041	4000	60.0	900.0	180.0	4.15
963.2042	5000	68.0	900.0	185.0	5.15
963.2043	8000	78.0	900.0	195.0	8.15
963.2044	10000	85.0	900.0	210.0	10.15

BRONZEplus club hammer

- In accordance to DIN 6475
- With fibre glass handle
- Surfaces polished ground
- Edges rounded off
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)



	g	D mm	L1 mm	L2 mm	kg
963.2061	1000	40.0	400.0	105.0	1.30
963.2062	1250	42.0	400.0	110.0	1.60
963.2063	1500	44.0	400.0	115.0	1.85
963.2064	2000	48.0	400.0	130.0	2.35
963.2065	2500	52.0	400.0	150.0	2.85
963.2066	3000	54.0	900.0	155.0	3.40
963.2067	4000	58.0	900.0	160.0	4.40
963.2068	5000	64.0	900.0	165.0	5.40
963.2069	6000	67.0	900.0	175.0	6.40
963.2070	8000	75.0	900.0	190.0	8.40
963.2071	10000	78.0	900.0	205.0	10.40



BRONZEplus Set hammer

- In accordance to DIN 1041
- With hickory handle
- Head and edge areas ground
- Edges rounded off
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)



	g	D mm	L1 mm	L2 mm	kg
963.2125	1500	42.0	395.0	145.0	1.64

BRONZEplus Hole/Drift punch

- With hickory handle
- Head and edge areas ground
- Edges rounded off
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)



	g	D mm	L1 mm	L2 mm	kg
963.2130	1000	32.0	400.0	140.0	1.10
963.2131	2000	45.0	600.0	160.0	2.12
963.2132	3000	50.0	900.0	180.0	3.13
963.2133	5000	60.0	900.0	220.0	5.15

BRONZEplus machinist's hammer

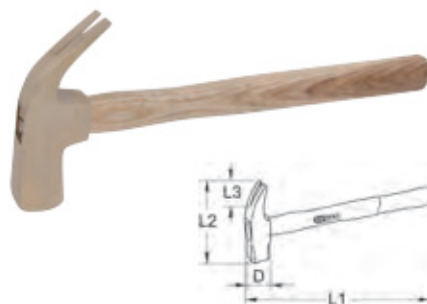
- With hickory handle
- American form
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	g	D mm	L1 mm	L2 mm	kg
963.2140	100	20.0	310.0	50.0	0.24
963.2141	300	28.0	310.0	65.0	0.44
963.2142	500	32.0	310.0	80.0	0.64
963.2143	600	33.0	340.0	90.0	0.74
963.2144	800	36.0	340.0	100.0	0.95
963.2145	900	37.0	380.0	110.0	1.05
963.2146	1100	38.0	380.0	120.0	1.25

BRONZEplus claw hammer

- With hickory handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	g	D mm	L1 mm	L2 mm	L3 mm	kg
963.2150	300	20.0	310.0	110.0	25.0	440
963.2151	400	23.0	340.0	120.0	30.0	540
963.2152	500	26.0	340.0	125.0	30.0	640
963.2153	600	28.0	340.0	135.0	30.0	740

BRONZEplus brick hammer

- In accordance to DIN 5108
- With hickory handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	g	D mm	L1 mm	L2 mm	S mm	kg
963.2160	600	27.0	310.0	120.0	40.0	0.67
963.2161	800	35.0	310.0	135.0	45.0	0.90
963.2162	1000	40.0	400.0	145.0	48.0	1.13

BRONZEplus brick hammer

- With hickory handle
- American form
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	g	D mm	L1 mm	L2 mm	S mm	kg
963.2163	700	22.0	360.0	170.0	34.0	840

BRONZEplus scaling hammer

- With hickory handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	g	L1 mm	L2 mm	S mm	kg
963.2170	200	280.0	115.0	19.0	0.25
963.2171	400	310.0	125.0	27.0	0.50
963.2172	500	310.0	140.0	30.0	0.57
963.2173	600	310.0	145.0	32.0	0.70
963.2174	800	340.0	150.0	35.0	0.95
963.2175	900	340.0	155.0	38.0	1.05
963.2176	1400	380.0	160.0	45.0	1.57

BRONZEplus mallet

- With hickory handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	g	D mm	L1 mm	L2 mm	kg
963.2180	900	45.0	380.0	75.0	1.06
963.2181	1800	60.0	380.0	85.0	1.98
963.2182	2700	70.0	720.0	90.0	2.90

BRONZEplus cutoff hammer

- With hickory handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	g	D mm	L1 mm	L2 mm	kg
963.2595	1300	40.0	400.0	140.0	1.45
963.2596	2100	45.0	400.0	155.0	2.25

BRONZEplus pin punch

- With hickory handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	g	D mm	L1 mm	L2 mm	kg
963.2405	800	8.0	340.0	140.0	1.00
963.2406	800	10.0	340.0	140.0	1.00
963.2407	1200	12.0	380.0	160.0	1.40
963.2408	1200	16.0	380.0	160.0	1.40

BRONZEplus securing for hammers

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



		kg
963.5602	up to 2 kg	80
963.5603	2 - 6 kg	140



NON SPARKING AXES

BRONZEplus hoe

- With beech handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	S mm	L mm	kg
963.9605	120.0	950.0	2.30

BRONZEplus hatchet

- With hickory handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	D mm	L1 mm	L2 mm	L3 mm	kg
963.9606	50.0	480.0	155.0	110.0	1.45
963.9607	70.0	610.0	185.0	110.0	1.50

BRONZEplus axe

- With hickory handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	D mm	L1 mm	L2 mm	L3 mm	kg
963.9608	60.0	750.0	185.0	130.0	1.60
963.9609	60.0	900.0	185.0	130.0	2.20

BRONZEplus fi eman's axe

- In accordance to DIN 14900
- With hickory handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	L1 mm	L2 mm	L3 mm	kg
963.9610	800.0	240.0	100.0	2.60

BERYLLIUMplus fi eman's hatchet

- With fiber lass handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



	A mm	L1 mm	L2 mm	L3 mm	kg
962.9032	27.0	400.0	200.0	85.0	900

BRONZEplus hand pick

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	L mm	B mm	kg
963.9611	420.0	220.0	2.00

NON SPARKING PICKS

BRONZEplus miner's pick

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	L mm	B mm	kg
963.9612	890.0	400.0	2.20