**HYDRAULIC JACKS AND PUMPS** 

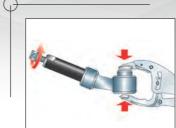
### U.33A/U.66A HYDRAULIC JACKS

# **Hydraulically-assisted** pulling action

Used in conjunction with mechanical pullers, hydraulic jacks help separate the fittings to be removed.



- Place the jack between the component and the puller's screw.
- · Centre the loads.
- · Apply pressure axially.



### **Plunger** retraction

- · Back off screw to release pressure.
- · Use pliers or clamp to push back plunger.



- Hold the puller while tightening the screw to allow the plunger to extend.
- The bearing is removed





- During screw tightening, a safety pin will shear if the maximum allowable torque is exceeded.
- When using both puller and jack, make sure generated forces are compatible.
- Never use pneumatic tools.

### Mechanical screw 30-tonne jack



- Piston travel: 5 mm.
- Pin shearing at 110 N.m.
- Supplied with 3 spare pins, and 2 shims 25 and 50 mm high (Ø 40 mm).
- Set of 3 spare pins. U.33GJ3.
- Set of 2 spare blocks: U.33-EMB.
- Piston Ø: 33 mm.
- Length: 260 mm; head height: 35 mm.
- Power: 30 tonnes; 300 kN.
- 6-point screw size 19 mm.

<b>=</b>	L [mm]	∆\\[kg]
U.33A	260	2.0

### **Mechanical screw 120-tonne jack**



- Piston travel: 15 mm.
- Pin shearing at 550 N.m.
- Piston Ø: 80 mm; borehole Ø: 47 mm.
- Length: 500 mm; head height: 105 mm.
- Power: 120 tonnes; 1200 kN.
- 6-point screw size 36 mm.
- . Supplied with 3 spare pins.
- Set of 3 spare pins: U.66A03J3.

<b>=</b> 0	L [mm]	Δ7∆ [kg]
U.66A	500	9.0







### **REVERSIBLE UNIVERSAL 2-LEG PULLERS**

# **U.32T LOCKABLE 2-LEG PULLER**

**SAFETY FIRST** 

# **High performance**

For inside and outside puller applications. Inside and outside puller spread in millimeters.



### **Rotation prevention**

- Tightening the lock-nut with a wrench.
- Passing a rod through holes in the beam.



# **Pins**

 Leg-mounting pins ensure easy and safe fixing to beam. Pins are treated to withstand pulling stresses.



• Beam end-stop prevents legs sliding off.

### **Knurled locknut**

• Leg assembly locks in any position by hand-tightening the knurled locknut.



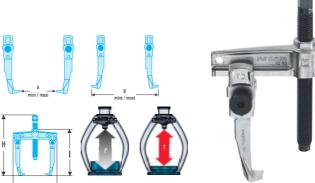




 Long-leg sets are easily fitted to the beam using a unique system of attachment. They increase the reach up to 470 mm.

### U.32T - Lockable 2-leg sliding-leg pullers

- Versatile: conversion possible in inside or outside grip with the same meg.
- Safety: knurled locking button.



<b>=</b>	A mini - maxi [mm]	B mini - maxi [mm]	H [mm]	I [mm]	L [mm]	P maxi [mm]	Puller	Tonnes [t]	T [kN]	Screw Size	Screw Size[mm]	∆ [kg]
U.32T2-8	20 - 80	90 - 140	170	150	142	105	21	2	20	U.32T2-1	13	1.1
U.32T2-12	20 - 120	90 - 180	170	150	182	105	21	2	20	U.32T2-1	13	1.2
U.32T6-16	20 - 160	130 - 250	255	215	230	150	32	6	60	U.32T6-1	24	2.9
U.32T6-20	20 - 200	130 - 290	255	215	277	150	32	6	60	U.32T6-1	24	3.2
U.32T15-25	25 - 250	180 - 380	360	305	364	170	41	15	150	U.32T15-1	35	8.6
U.32T15-35	25 - 350	180 - 480	470	405	464	270	41	15	150	U.32T15-2	35	10.8
U.32T15-50	25 - 470	180 - 530	470	405	614	270	41	15	150	U.32T15-2	35	17.1

















































### **REVERSIBLE UNIVERSAL 2-LEG PULLERS**

### U.32TGA - Spare legs for U.32T



- For your safety, we recommend that all the legs are replaced in the event of a problem.
- Leg supplied per unit, without leg holder.
- Leg holder supplied per unit.



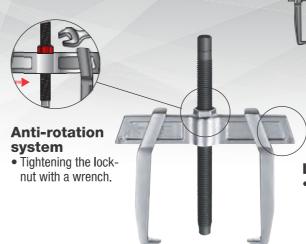
<b>=</b>	A [mm]	E [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	P [mm]	Legs	Mounting Pins	For	∆7∆ [kg]
U.32T2GA10	8,5	2,5	130	105	18	10	18,0	110	U.32T2-8 - U.32T2-14	U.32T2DG	U.32T2	0.6
U.32T2GA20	2,5	2,5	225	185	18	10	18,0	185	Option	U.32T2DG	U.32T2	0.8
U.32T2GA25	2,5	2,5	275	235	18	10	18,0	235	Option	U.32T2DG	U.32T2	0.9
U.32T6GA15	4	4,0	180	150	24	15	28,5	150	U.32T6-16 -U.32T6-22	U.32T6DG	U.32T6	1.4
U.32T6GA30	4	4,0	335	280	24	15	28,5	280	Option	U.32T6DG	U.32T6	2.0
U.32T15GA20	5	5,0	250	170	34	20	36,0	170	U.32T15-25	U.32T15DG	U.32T15	3.4
U.32T15GA30	4	5,0	315	270	34	20	36,0	270	U.32T15-35 - U.32T15-50	U.32T15DG	U.32T15	4.2
U.32T15GA40	5	5,0	445	370	34	20	36,0	370	Option	U.32T15DG	U.32T15	5.0
U.32T15GA50	5	5,0	545	470	34	20	36,0	470	Option	U.31T15DG	U.32T15	5.8

### U.232 2-LEG PULLER



# **Strength and simplicity!**

2-leg puller, inside or outside grip



### Leg reversal

 Legs changed from inside grip to outside grip configurations simply by pressing the pin. No need for tools.

### **SAFETY FIRST**

### Leg retainer

A spring-loaded pin at the end of the beam prevents the legs from sliding off.

### Leg locking

The legs are designed to cantilever during pulling, blocking them in place and preventing them from sliding along the beam.







# U.232 - 2-leg sliding-leg pullers

- Versatile: conversion possible in inside or outside grip with the same leg.
- Safety:
  - Stops to prevent legs from falling.
  - Under pressure, the legs are set to overhang to avoid sliding.











(In )				
(In )				
		7	1000	1

<b>3</b>	[mm]	[mm]	H [mm]	I [mm]	L [mm]	P maxi [mm]	Puller	Legs	Tonnes [t]	T [kN]	Screw Size	Size[mm]	∆∏∆ [kg]
U.232-65	30 - 60	65 - 90	133	105	115	65	16	U.232G1	1,5	15	U.35P01	13	0.4
U.232-90	60 - 81	86 - 95	182	155	146	100	21	U.232G2	3,0	30	U.35SE1	17	0.9
U.232-130	60 - 122	86 - 136	182	155	186	100	21	U.232G2	3,0	30	U.35SE1	17	1
U.232-160	86 - 153	127 - 171	283	233	247	145	27	U.232G3	4,0	40	U.53S2A07	17	2.8
U.232-210	86 - 203	127 - 222	283	233	297	145	27	U.232G3	4,0	40	U.53S2A07	17	3
U.232-270	100 - 255	148 - 276	345	303	379	190	36	U.232G4	5,0	50	U.53S3-07	32	7.5
U.232-340	100 - 325	148 - 346	345	303	449	190	36	U.232G4	5,0	50	U.53S3-07	32	8.2

### **SLIM-PROFILE 2-LEG PULLERS**

### U.14 - Self-gripping outside pullers with slim legs

- · Access: 2 slim leg puller.
- Comfort: self-gripping legs by return spring. The puller stays in rolling position even when not in tension.
- Example of use = battery terminals.



C mini - maxi [mm] H [mm]



I [mm] L [mm] P maxi [mm]



Tonnes [t]



T [kN]

Screw Size

U.14A04



Screw Size ATA [kg]

0.38

Spindle















FLUO

### U.301 - Self-gripping outside pullers with slim legs

• Access: 2 slim leg puller.

U.14A

**U.14L** 

- Comfort: self-gripping legs by return spring. The puller stays in rolling position even when not in tension.
- Adaptable puller accessory: slide hammer U.49AM.
- Per tip U.301E1 (U.301 and U.301-150).
- Per tip U.301E2 (U.301-200).







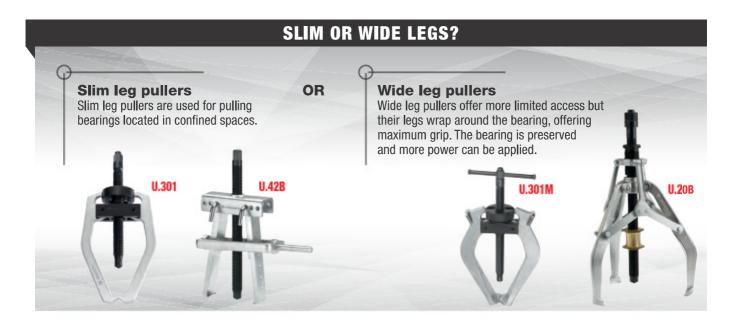


<b>=</b> 0	C mini - maxi [mm]	H [mm]	I [mm]	L [mm]	P maxi [mm]	Legs	Tonnes [t]	T [kN]	Screw Size	Screw Size[mm]	_∆\\\ [kg]
U.301	10 - 80	153	130	83	90	U.301G	0,9	9	U.301-04	10	0.5
U.301-150	15 - 150	222	206	90	150	-	0,9	9	U.301-04-150	10	0.7
U,301-200	15 - 200	300	268	120	200	-	1.3	13	U.301-04-200	13	1.1











# A compact puller with two "wrap around" legs for a better grip!



Effective and easy to use. Self-gripping, self-centring "body and spring" system.

- 1 Force-limiting safety rod.
- 2 Ergonomic finger grips and one-hand installation option.
- 3 Shear pin.
- 4 "Wrap-around" legs to grip the part firmly without scratching.
- 5 "Positive" leg angle for optimum grip even under maximum pulling force. Spread: 50, 100, 110 mm.



### **SAFETY FIRST**

The rod (1) then the shear pin (3) fail in stages before the yield point of the legs is reached.

### **WIDE 2-LEG PULLERS**

### U.301 - Self-gripping outside pullers with wide legs

- Comfort: self-gripping legs by return spring. The puller stays in position on the bearing even when not in tension.
- Safety: a power restrictor pin is pressed when the force applied is too strong.
- Adaptable puller accessory: slide hammer U.49AM.
- Per tip U.301E1 (U.301P and U.301M).
- Per tip U.301E2 (U.301L).



<b>3</b>	C mini - maxi [mm]	H [mm]	l [mm]	L [mm]	P maxi [mm]	Tonnes [t]	T [kN]	Screw Size	∆\\\ [kg]
U.301P	15 - 50	147	120	75	70	0,9	9	U.301P04	0.5
U.301M	15 - 100	222	206	90	100	0,9	9	U,301M04	8.0
U.301L	15 - 110	300	268	120	130	1,3	13	U.301L04	0.9























































# U.35 - Pullers with outside wide legs

- Safety: use in "uncrossed legs" configuration doubles capacity, but the "cross-legged" configuration should be used preferably.
- Adaptable puller accessory: slide hammer U.306M for U.35 and U.35L.
- Set of 2 spare pins:
  - U.42-5J2 for U.35P.
  - U.35-5J2 for U.35 and U.35L.



<b>=</b>	C mini - maxi [mm]	H [mm]	l [mm]	L [mm]	P maxi [mm]	Legs	Tonnes [t]	T [kN]	Screw Size	Screw Size [mm]	∆\\\ [kg]
U.35P	10 - 55	140	110	65	75	U.35D (x 2)	1	10	U.35P01	13	0.4
U.35	15 - 75	183	160	68	90	U.35C (x 2)	4	40	U.35SE1	17	1
U.35L	15 - 75	225	188	90	130	U.35B (x 2)	3	30	U.35SE1 + U.35SE3	17	1.2















# High-capacity wide leg outside puller

- Safety: use in "uncrossed legs" configuration doubles capacity, but the "cross-legged" configuration should be used preferably.
- Adaptable puller accessory: slide hammer U.2.



<b>3</b>	C mini - maxi [mm]		l [mm]	L [mm]	P maxi [mm]	Legs	Tonnes [t]	T [kN]	Screw Size	Screw Size [mm]	∆\\\ [kg
U.34	40 - 180	370	315	215	245	U.34G (x2)	7	70	U.20B1	24	4.4



### **U-BOLT 2-LEG PULLERS**

# U.42 - Pullers with yoke



- The U.42 and U.42B models have legs designed specifically for gearbox bearings.
- Spare yoke for U.42 and U.42B: U.42SE2.
- Set of 2 spare pins for U.42 and U.42B: U.42-5J2.











<b>3</b>	C mini - maxi [mm]		[mm]	L [mm]	P maxi [mm]	Legs	Tonnes [t]	T [kN]	Screw Size	Screw Size [mm]	∆∏∆ [kg]	
U.42	10 - 85	235	165	160	120	U.42-3	1,5	15	U.42-1	13	1.3	
U.42B	10 - 85	240	225	160	180	U.42B3	1,5	15	U.42-1	13	1.6	

# U.52 - Pullers with yoke



- Spare yoke for U.52 = U.52SE2.
- Set of 2 spare pins for U.52: U.35-5J2.











<b>=</b>	C mini - maxi [mm]	H [mm]	l [mm]	L [mm]	P maxi [mm]	Legs	Tonnes [t]	T [kN]	Screw Size	Screw Size [mm]	∆\\\ [kg]
U.52	10 - 150	250	200	220	160	U.52-3	6	60	U.52-1	17	1.7

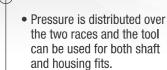




**TIP-TYPE PULLERS, CAGE GRIP** 

### **U.23 TIP TYPE PULLERS, CAGE GRIP**

The design of this puller is particularly suited to cage-type ball bearings.



 Depending on the ball diameter, different pairs of spherical tips should be selected from of three sets available.



### Positioning tips in bearings

- 1 Drill 2 diametrically opposed holes.
- 2 Bend back cage ends.
- 3 Insert appropriately sized tips into race. Turn through 90 degrees to lock.
- 4 Screw beam rods into tips.













### <sup>∖</sup>■ Micro-engineering puller kit

- Comprising:
  - 3 pairs of tips: Ø 5.5 6 7.5 mm.
  - Beam U.23K1A.
- Spread: Ø 25 to 95 mm.
- For ISO bearings: 6004 to 6010; 6200 to 6205; 6300 to 6302.
- Supplied in plastic case BP.102 with tray PL.392A.

⇒	∆7∆ [kg]
U.23J1A	0.8





























### $^{ee}$ Light engineering puller kit

- Comprising:
- 3 pairs of tips: Ø 9 11 12.5 mm.
- Beam U.53K1.
- Spread: Ø 40 to 110 mm.
- For ISO bearings: 6206 to 6211; 6303 to 6307; 6403 to 6404.
- Supplied in plastic case BP.115 with tray PL.71A.

<b>=</b> 0	∆\\\\ [kg]
U.23J2	1.8

### $^{ee}$ General engineering puller kit

- Comprising:
  - 6 pairs of tips: Ø 16 19 22 25 28 32 mm.
  - Beam U.53K2
- Spread: Ø 70 to 190 mm.
- For ISO bearings: 6212 to 6222; 6308 to 6319; 6405 to 6414.
- Supplied in plastic case BP.109 with tray PL.104A.

=0	∆\(\Delta\) [kg]
U.23J3	7.3



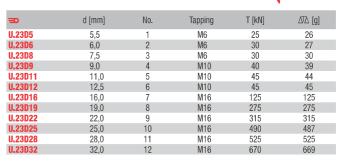
### **TIP-TYPE PULLERS, CAGE GRIP**

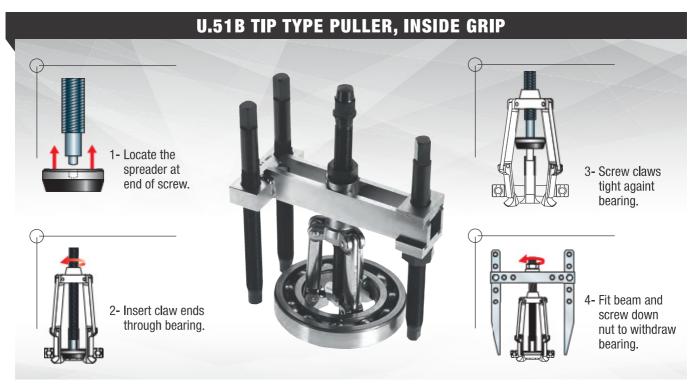
### U.23D - Set of 2 tips











### **TIP-TYPE PULLERS, INSIDE GRIP**

### Tip-type pullers, inside grip



- Capacity: Ø 32 to 70 mm.
- Adaptable puller accessories: beam U.40 or beam U.30.
- Supplied with 15 tips.
- Set of 15 spare tips: U.51BJ15.
- Spare nut + bush: U.51B-1.
- Supplied in plastic case BP109 with tray PL 710.



<b>3</b> 0	∆ī∆ [kg]	
U.51B	3.4	





### Tip-type pullers, large spread inside grip

- Capacity: Ø 70 to 160 mm.
- · Allocation of "separator" tip discs:
- Tip disc no.1: capacity 70 100 mm.
- Tip disc no.2: capacity 100 136 mm.
- Tip disc no.3: capacity 130 160 mm.
- Adaptable puller accessory: beam U.30.
- Set of 3 spare separator tips: U.28J3
- Spare nut + bush: U.28-1.

<del>ਤ</del> 0	Δ''Δ [kg]
U.28	3.3















### $^{ee}$ Separator and beam for inside grip set

• Comprising:

U.28J1

U.30

- 1 separator U.28.
- 1 beam U.30.
- Spread: Ø 70 to 160 mm.
- Supplied in a steel case BT.111 (396 x 224 x 82 mm) with tray PL.168.

I [mm]

L [mm]

396

△□△ [kg]

9.5

















### $^{ee}$ Beam for pullers U.28 and U.51B

Beam for pullers U.51B and U.306

H [mm]

• Use with pullers U.28 and U.51B.































# • Use with pullers U.51B and U.306. Using the beam U.40 with the separator U.306 requires using the bush and nut U.306A1 (to be ordered separately).

∆∏∆ [kg]

4.6





### SPREADER-TYPE PULLERS, INSIDE GRIP

### U.49P - Clamps for inside grip







- High impact and screwing / unscrewing resistance.
- Multiple flexible blades and hardly sensitive to distortion.
- Easy to use.



<b>⇒</b>	d mini [mm]	d maxi [mm]	d mini - maxi [mm]	d1 [mm]	d2 [mm]	L maxi [mm]	L [mm]	∆ī∆ [g]
U.49P1	6,5	8	6.5 - 8.0	M8	12	76	76	25
U.49P2	8,5	10	8,5 - 10,0	M8	12	76	76	30
U.49P3	10,5	13	10,5 - 13,0	M8	12	88	88	45
U.49P4	13	18	13,0 - 18,0	M8	12	100	100	70
U.49P5	18	22,5	18,0 - 22,5	1/2"	17	112	112	140
U.49P6	22,5	30	22,5 - 30,0	1/2"	17	139	139	300
U.49P7	30	38	30,0 - 38,0	1/2"	22	158	158	545
U.49P8	38	50	38,0 - 50,0	1/2"	1-1/4"	190	190	1200
U.49P9	50	60	50.0 - 60.0	1/2"	1-1/4"	190	190	1400

# Maintenance kit



- To pull bearings Ø 8.5 to 38 mm.
- Comprising:
- 6 pliers U.49P2 to U.49P7.
- 2 beams U.53KL0 and U.53KL2.
- Adapter bit U.49BR1.
- Supplied in plastic case BP.109 with tray PL.711.



### U.49PJ1 3.5

# Light engineering puller kit



- $\bullet$  To pull bearings Ø 18 to 50 mm.
- Comprising:
  - 4 pliers U.49P5 to U.49P8.
- 1 slide hammer U.49AM.
- Supplied in plastic case BP.109 with tray PL.712.



<b>=</b>	∆7∆ [kg]	
II.49P.12	5	

∆™∆ [kg]





### General engineering puller kit

- To pull bearings Ø 6.5 to 18 mm.
- · Comprising:
  - 4 pliers U.49P1 to U.49P4.
  - 1 slide hammer U.49L.
- Supplied in plastic case BP.115 with tray PL.445.















### <sup>∖</sup>■ Heavy engineering puller kit

- To pull bearings Ø 30 to 60 mm.
- Comprising:

U.49PJ3

- 3 pliers U.49P7 to U.49P9.
- 1 beam U.53KL2.
- Tip U.49BR1.

U.49PJ4

• Supplied in plastic case BP109 with tray PL 713.

















### $^{ee}$ Adaptor tip for clamps U.49P5 to P9 on slide hammer or beam

∆ [kg]

5.3

∆7∆ [kg]

1.4

- Female thread: M16 x 2.0.
- Male thread: 1/2" 20 UNF.
- Used to connect the slide hammer U.306M or beam U.53KL2 to the clamps U.49P5 to U.49P9.

















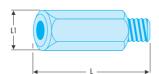














### $^{lack}$ Adaptor tips for separators U.301 / U.302 on slide hammer U.49AM

- U.301E1 tip for pullers U.301, U.302, U.301-150, U.302-150.
- Female thread: 1/2" 20 UNF.
- Male thread: M12 x 1.75.
- U.301E2 tip for pullers U.301-200 and U.302-200.
  - Female thread: 1/2" 20 UNF.
  - Male thread: M16 x 2.00.
- Locks the legs in Pullers position.

<b>型</b>	d [mm]	L [mm]	L1 (mm)	Δ1∆ [g]
U.301E1	25	62	22	200
U.301E2	25	62	22	300







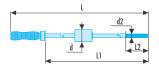
### **SLIDE HAMMERS**

# Slide hammer 0.2 kg



- For fitting on low spread clamps U.49P1 to U.49P4.
- · Allows to extract bearings with an inner diameter Ø 6.5 to 18 mm.





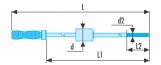
<b>=</b> 0	d [mm]	d2 [mm]	L [mm]	L1 [mm]	L2 [mm]	∆7∆ [g]
U.49L	30	M8x1,25	302	212	14	500

### <sup>∖</sup>■ Slide hammer 1 kg



- For fitting on high spread clamps U.49P5 to U.49P9.
- Allows to extract bearings with an inner diameter Ø 18 to 60 mm.
- Use of threaded tips U.53E4 to U.53E14 with the adaptor tip U.53H3.



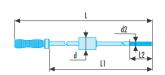


<b>=</b>	d [mm]	d2 [mm]	L [mm]	L1 [mm]	L2 [mm]	∆7∆ [kg]
U.49AM	45	1/2"-200NF	452	325	25	1.6

# Slide hammer 2 kg









- Adapts to pullers U.306, U.42, U.42B, U.32T2-8, U.32T2-12, U.35, U.35L.
- · Adaptable accessories:
- Clamps U.49P5 to U.49P9 with adaptor tip U.49BR1.
- Threaded tips U.53E4 to U.53E14 with the adaptor tip U.53H2.

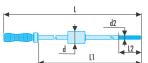
<b>=</b> 0	d [mm]	d2 [mm]	L [mm]	L1 [mm]	L2 [mm]	∆\\(\text{L}\) [kg]
U.306M	60	M16x2,0	654	537	228	2.8

# Slide hammer 7 kg





• Adapts to pullers U.20, U.20B, U.310, U.32T6-16, U.32T6-20 and tray U.9.



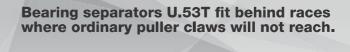
<b>玉</b>	d [mm]	d2 [mm]	L [mm]	L1 [mm]	L2 [mm]	∆™∆ [kg]
U.2	92 / 171	M22x2,0	761	615	70	8.7
U.2A	92 / 171	M22x2,0	761	615	70	8.7

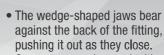


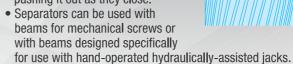


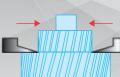
### **PULLER KITS**

### **U.53 SEPARATORS, FLUSH GRIP**











Separator and beam with hand-operated hydraulic system.





Only hand-operated hydraulic systems are to be used in conjunction with separator and beam combinations.



### Separator and beam with mechanical screw.

- Beam used with hydraulic press U.33A
- Only to be used with beams U.53K4 and U.53S4A.

### $^{igvee_{f B}}$ 60 mm separator and beam puller kit

- 1 separator U.53T1 = spread: Ø 5 to 60 mm.
- 1 beam U.53K1 = spread: Ø 40 to 110 mm.
- Max reach: 180 mm.
- 4 pairs of U.53E threaded tips M4 M5 M6 M8.
- 2 adaptors U.53H1.
- Supplied in plastic case BP.112 with tray PL.296A.

<del>=</del> 0	Δ''Δ [kg]
U.53J1	3.4









FLUO







### **PULLER KITS**

### 110 mm separator and beam puller kit



· Comprising:

U,53J2

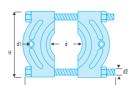
- 1 separator U.53T2 = spread: Ø 15 to 110 mm.
- 1 beam U.53K2 = spread: Ø 70 to 200 mm.
- Max reach: 240 mm.
- 4 pairs of U.53E threaded tips M8 M10 M12 M14.
- 2 adaptors U.53H2.
- Supplied in plastic case BP.109 with tray PL.297A.



### **SEPARATORS**

# U.53T - Separators





- Separators spread Ø 5 to 250 mm.
- Fit behind races where ordinary puller claws will not reach.
- They can be used with beams assisted by screws or jacks.

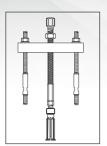


<b>≅</b> 0	d mini - maxi [mm]	d1 [mm]	d2 [mm]	H [mm]	[mm]	For	For use on	Screw Size	∆\∆ [kg]
U.53T1	5 - 60	M10	M12	91	140	U.53K1	-	U.53T1-02	0.6
U.53T2	15 - 110	M16	M16	153	215	U.53K2 - U.53S2A	U.53S2A	U.53T2-02	2.1
U.53T3	15 - 150	M20	M20	204	290	U.53K3	-	U.53T3-02	4.6
U.53T4	20 - 180	M22	M22	289	360	U.53K4 - U.53S4A	U.53S4A	U.53T4-02	8.2
U.53T5	25 -250	M22	M22	316	430	U.53K4 - U.53S4A	U.53S4A	U.53T5-02	11.2

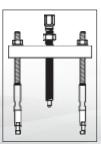
∆∏∆ [kg]

# U.23/U.53 BEAM PULLERS

# Beams can be used with different types of pullers:



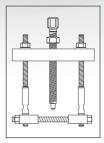
• Expansion bearing puller U.49P.



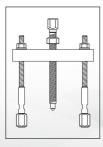
 Spherical or threaded tip pullers U.23.



Separator U.53.



• Extraction via beam alone.

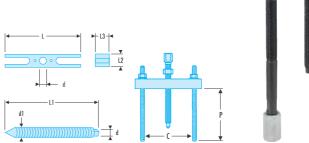




### **BEAM PULLERS**

# U.23K-U.53K - Tapped beams

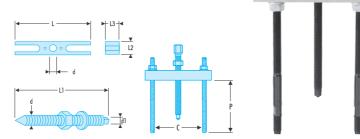
- Tapped beams are used in mechanical pulling with separators, spherical or threaded tips.
- Spread: Ø 25 to 400 mm.



<b>=</b>	C mini - maxi [mm]	d [mm]	d1 [mm]	L [mm]	L1 (mm)	L2 [mm]	L3 [mm]	P maxi [mm]	Tie-rods	Tonnes [t]	T [kN]	Screw Size	∆∏∆ [kg]
U.23K1A	25 - 95	M10	8	110	155	20	20	100	U.23K1A-03	1	10	U.23K1A-02	0.4
U.53K1	40 - 110	M16	11	135	215	25	25	180	U.53R1L	3	30	U.51K1-07	0.9
U.53K2	70 - 200	M16	11	220	280	30	30	240	U.53R2L	3	30	U.53K2-07	2.3
U.53K3	75 - 280	M27	21	320	340	45	35	300	U.53R3L	4	40	U.53S3-07	5.3
U.53K4	145 - 400	M33	25	450	420	50	50	350	U.53R4LA	5	50	U.53S4-07	10.7

# U.53KL - Non-tapped beams

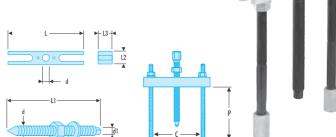
- Non tapped beams allow to use clamps U.49P1 to U.49P9 to extract bearings by inside grip.
- U.53KL0: for clamps U.49P1 to U.49P4.
- U.53KL2: for clamps U.49P5 to U.49P9 with adaptor tip U.49BR1.



<b>型</b>	C [mm]	C mini - maxi [mm]	d [mm]	d1 [mm]	L [mm]	L1 (mm)	L2 [mm]	L3 [mm]	P [mm]	P maxi [mm]	Tie-rods	Tonnes [t]	T [kN]	Screw Size	Δ1∆ [kg]
U.53KL0	25 - 100	25 - 100	M8	6	110	155	20	20	125	125	U.53KL0-02	1	10	U.53KL0-02	0.4
U.53KL2	70 - 200	70 - 200	M16	11	220	280	30	30	240	240	U.53R2L	3	30	U.53K2-07	2.4

# U.53S - Jack beams

 These 2 non tapped beams with mechanical specifications exceeding U.53K (dimensions, steel and thermal treatment) are designed to withstand the high loads generated by the power of jacks used.



<b>=</b>	C mini - maxi [mm]	d [mm]	d1 [mm]	L [mm]	L1 (mm)	L2 [mm]	L3 [mm]	P maxi [mm]	Rating [kN]	Tie-rods	Tonnes [t]	T [kN]	Screw Size	∆ [kg]
U.53S2A	120 - 200	280	M20	220	280	35	35	235	100	U.53R2L	10	100	U.53S2A07	3.0
U.53S4A	170 - 400	420	M33	450	420	60	60	340	300	U.53R4LA	30	300	U.53S4-07	15.5













































### **BEAM PULLERS**

# U.23K-U.53RL - Spare tie rods for beam



• Tie rods supplied by 2 with chrome-plated tips, nuts and washers.



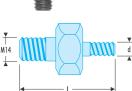
*

<b>⇒</b>	d [mm]	L [mm]	Beams	For use on	∆7∆ [g]
U.23K1A-03	M8 x 1,25	95	-	-	50
U.53KL0-02	M8 x 1,25	155	-	-	50
U.53R1L	M10 x 1,50	205	U.53K1	U.53K1	200
U.53R2L	M16 x 2,00	275	U.53K2 - U.53KL2 -U.53S2A	U.53K2, U.53KL2	500
U.53R3L	M20 x 2,50	350	U.53K3	U.53K3	1200
U.53R4LA	M22 x 2,50	420	U.53K4 - U.53S4A	U.53K4, U.53S4A	1700

### **ACCESSORIES FOR BEAM PULLERS**

### U.53E - Threaded tips



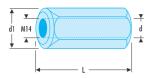


U.23K1A-03	M8 x 1,25	95	-	-	50
U.53KL0-02	M8 x 1,25	155	-	-	50
U.53R1L	M10 x 1,50	205	U.53K1	U.53K1	200
U,53R2L	M16 x 2,00	275	U.53K2 - U.53KL2 -U.53S2A	U.53K2, U.53KL2	500
U.53R3L	M20 x 2,50	350	U.53K3	U.53K3	1200
U.53R4LA	M22 x 2,50	420	U.53K4 - U.53S4A	U.53K4, U.53S4A	1700

### ∆ [g] d [mm] L [mm] U.53E4 U.53E5 U.53E6 U.53E8 U.53E10 U.53E12 U.53E14 33,5 33,5 50 36,5 50 39,5 42,5 46,6 48,5 55 60 10 12 14

# U.53H - Adaptors for threaded tips







<b>3</b>	d [mm]	d1 [mm]	L [mm]	∆7∆ [g]
U.53H1	M10 x 1,5	23	50	130
U.53H3	1/2" - 20 UNF	23	50	120
U.53H2	M16 x 2,0	23	50	110

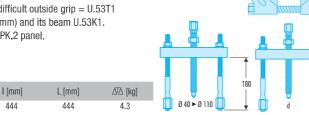




### **WORKSHOP BOARDS**

### Light engineering puller kit

- · Comprising:
  - 2 slim leg pullers for outside grip = U.301 and U.302 (spread 10 to 80 mm).
  - 4 clamps for inside grip = U.49P1 to U.49P4 (spread 6.5 to 18 mm).
  - 1 slide hammer U.49L.
  - 1 separator for difficult outside grip = U.53T1(spread 5 to 60 mm) and its beam U.53K1.
- . Presented on the PK.2 panel.





FACOM















































# 4-Tonne kit

• Comprising:

Π ΙΔ1

U.J2

· Comprising:

- 1 clamp puller for outside grip = U.306A140 (spread 7 to 140 mm).
- 2 sets of 3 long legs for outside grip = U.306G10 (spread 10 to 180 mm) and U.306G15 (spread 20 to 260 mm).
- 2 sets of 3 legs for inside grip = U.306G2 (spread 23 to 130 mm) and U.306G20 (spread 60 to 170 mm).
- 1 long screw with tip U.306-3.

I [mm]

888

 $^{ee}$  General engineering puller kit

inside grip (spread 130 to 290 mm).

- 1 jack U.33A (capacity 30 tonnes). • Presented on the PK.1 panel.

- 4 clamps U.49P5 to U.49P8 (spread 18 to 50 mm).

- 1 slide hammer U.306M with adaptor tip U.49BR1.

- 1 beam U.40 (attached using ring and nut U.306A1, supplied with the kit).

L [mm]

444

- 1 sliding leg puller = U.32T6-20 outside grip (spread 20 to 200 mm) /

- 1 separator U.53T2 (spread 15 to 110 mm) and the beam U.53K2.

- 1 slide hammer U.306M.
- Presented on the PK.1 panel.









∆∏∆ [kg]

12.4

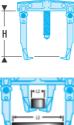


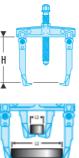












<b>⇒</b>	I [mm]	L [mm]	∆™ [kg]
U.JA3	888	444	15.5

### **CASE KITS**

### $^{ee}$ Light engineering puller kit





- 1 leg puller U.301 for outside grip pulling (spread 10 to 80 mm).
- 4 clamps U.49P1 to U.49P4 (spread 6.5 to 18 mm).
- 1 beam U.53 KLO.
- Supplied in plastic case BP.112 with tray PL.182B.

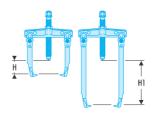
<b>=</b> 0	H [mm]	I [mm]	L [mm]	∆™∆ [kg]
U.301BJ1	66	164	389	2.1

# General engineering puller kit





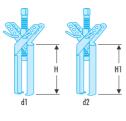
- U.32T2-8: 2-tonne sliding-leg puller and set of long legs; reach P1: 105 mm, P2: 185 mm.
- U.32T6-20: 6-tonne sliding-leg puller and set of long legs; reach P1: 150 mm, P2: 280 mm.
- U.53T2: separator (spread 15 to 110 mm).
- U.33A: 30 tonne jack.
- Supplied in metal case. BT.108 with tray PL.287 (removable tray) and PL 288 (box bottom tray).



<b>⇒</b>	H [mm]	I [mm]	L [mm]	∆T∆ [kg]
U.102T	110	270	450	14.5

# Medium power engineering puller kit







- This complete set offering normal pulling power for all general engineering applications.
- Comprising:
- U.35L (spread 15 to 75 mm) and U.34 (spread 40 to 180 mm): wide leg pullers for outside grip pulling.
- U.51B: bearing inside puller (spread: 32 to 70 mm).
- U.40: beam.
- U.33A: 30 tonne jack.
- Supplied in a steel case BT.108 with tray PL.195A.

<b>=</b> 0	H [mm]	I [mm]	L [mm]	∆\\\\ [kg]
U.103A	111	286	452	13.3







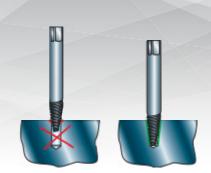
STUD PULLERS

### **285 STUD EXTRACTORS**

# For removing sheared right-hand thread studs

- 285 stud extractors are designed exclusively for use on right-hand thread struts (99% of cases).
- The extractors' tapered shape requires the use of cone bits. Using traditional cylindrical bits reduces the contact surface between the extractor and the stud, greatly increasing the risk of extractor breaking in the stud.







· Choose the extractor and corresponding drill bit according to the diameter of the stud to be removed.



. Drill with a 285.F cone bit.



· Push in then unscrew using the corresponding stud extractor.



• The stud is removed.



### 285.J - Set of stud pullers, right-hand pitch

- 285.J10: Set of 5 stud pullers + 5 appropriate tapered and tap wrench 831.1 (use with the 4 small pullers only).
- 285, JS10: Set of 5 stud pullers and 5 adapted tapered drill-bits, supplied on stand.
- 285.JS5: Set of 5 stud pullers, supplied on stand.
- Supplied in plastic case BP.104 and Tray PL.464.









d mini - maxi [mm] H [mm] I [mm] L [mm] Conditioning Drill Bits 285.4-5-6-8-11 - 285.F1-F2-F3-F4-F5 285.4-5-6-8-11 - 285.F1-F2-F3-F4-F5 BP 102 + Pl 464 285...110 3 - 18 52 122 204 1, 2, 3, 4, 5 0.47 285.JS10 3 - 18 3 - 18 52 CKS.25A x 2 122 204 0.29 285.JS5 CKS.25A 122 204 285.4-5-6-8-11

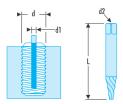


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### STUD PULLERS

### 285 - Unit stud pullers, right-hand pitch





. These helical pullers allow pulling after drilling a pre-hole using specific tapered drill-bits 285.F.



<b>宝</b> )	d [mm]	d1 [mm]	d2 [mm]	L [mm]	Dri <b>ll</b> Bits	∆7∆ [g]
285.4	3 - 6	2,2 - 3,4	3,0	55	285.F1	5
285.5	6 - 8	3,7 - 4,3	4,0	60	285.F2	10
285.6	8 - 11	4,5 - 5,3	4,5	65	285.F3	15
285.8	11 - 14	6,2 - 7,1	6,0	75	285.F4	25
285,11	14 - 18	8,6 - 9,8	8,5	85	285.F5	50
285.14	18 - 24	11,0 - 12,5	10,0	90	-	85
285.18	24 - 33	14,5 - 16,0	14,0	105	-	165
285.25	33 - 50	20,0 - 22,5	18,0	120	-	350

285.F - Single tapered drill bits for pullers 285



• These tapered drill-bits allow for drilling suited to tapered stud pullers 285.



<b>=</b> 0	d [mm]	L [mm]	Puller	For use on	∆7∆ [g]
285.F1	3,5	57	285.4	285.4	5
285.F2	4,0	63	285.5	285.5	10
285.F3	5,5	67	285.6	285.6	10
285.F4	7,5	80	285.8	285.8	25
285 F5	10.0	86	285 11	285 11	45

### 885 STUD EXTRACTORS

# For removing sheared right-hand, or left-hand thread studs

- 885 stud extractors are designed exclusively for use on right-hand thread.
- The splined rod has a cylindrical shape and can be drilled using standard (cylindrical) drill bits.





· Choose the extractor and corresponding drill bit according to the diameter of the stud to be removed.



• Drill with a standard 222A.T bit. Insert the splined bit using a mallet 216.40.



 Install the hexagonal shoulder.Loosen with a wrench.



The stud is removed

### Set of stud pullers, right or left-hand pitch



- Pulling by drilling and inserting a fluted rod driven by a 6-point.
- Spread: studs Ø 6 to 14 mm.
- · Right or left-hand pitch.



<b>=</b> 0	H [mm]	I [mm]	L [mm]	∆™ [g]
885	25	130	165	540





# 885 - Drill bits and pullers for stud pulling

885.F: Drill bits. 885.EH: Pullers.



<b>=</b>	d ["]	d [mm]	L [mm]	∆\\(\D\) [g]
885.F1	1/8	3,2	65	5
885.F2	3/16	4,8	85	10
885.F3	1/4	6,3	100	20
885.F4	5/16	7,9	115	30
885.F5	11/32	8,7	120	40

<b>⇒</b>	d ["]	d [mm]	L [mm]	∆∏∆ [g]
885.EH1	1/4	6,3	-	15
885.EH2	5/16	7,9	-	20
885.EH3	3/8	9,5	-	35
885.EH4	7/16	11,1	-	45
885,EH5	1/2	12.7	-	60





### STUD PULLERS

### 286A - Roller-type stud drivers - Multi-diameter

• Choose the hole suited to the stud diameter.

• Tighten or untighten: thanks to its eccentric shaft, the knob grips the stud, for tightening or untightening.



∆∏∆ [g] 400

950

Dimension [mm] 52 x 54

72 x 66



























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# 287B - Roller-type stud drivers - Single-diameter

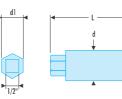
15 - 27

- Capacity: Ø 6 to 16 mm.
- Turned by means of the hexagonal drive or a 1/2" 12.7 mm ratchet. Except model 287B.16, which has a through-hole for a bar.
- Allows to tighten or untighten the studs.

15 - 27

<b>3</b> 0	A maxi [mm]	d [mm]	d1 [mm]	L [mm]	Capacity [mm]	△□△ [g]
287B.6	6	25	22	65	6	165
287B.7	7	25	22	65	7	170
287B.8	8	25	22	65	8	170
287B.9	9	29	22	75	9	245
287B.10	10	29	22	75	10	240
287B.12	12	29	22	75	12	240
287B.14	14	34	27	75	14	310
287B.16	16	34	27	75	16	340



















### STUD PULLERS

# Set of roller-type stud drivers



- Set of 5 stud drivers to screw and unscrew the M6, M7, M8, M9 and M10 studs (287B.6 to 287B.10).
- Presentation on stand (CKS.73A).



<b>=</b>	H [mm]	I [mm]	L [mm]	Δ¹∆ [kg]
287B.JS5	35	175	155	1.1

### **NUT SPLITTER**

### <sup>∖</sup>■ 289.M - Nut splitter



• For splitting a worn or jammed nut without damaging the screw thread.



	<b>⇒ FRCOM</b> ③	
		THE COLUMN TWO
d1 d2		

<b>=</b> 0	d [mm]	d mini - maxi [mm]	d1 [mm]	d2 [mm]	L [mm]	∆7∆ [g]
289.M8	19	12 - 16	29	9,5	100	170
289.M18	32	16 - 22	45	13	128	350
289.M22	39	22 - 27	56,5	16	148	600
289.M24	46	27 - 36	67	17	170	950

# Set of 2 nut splitters



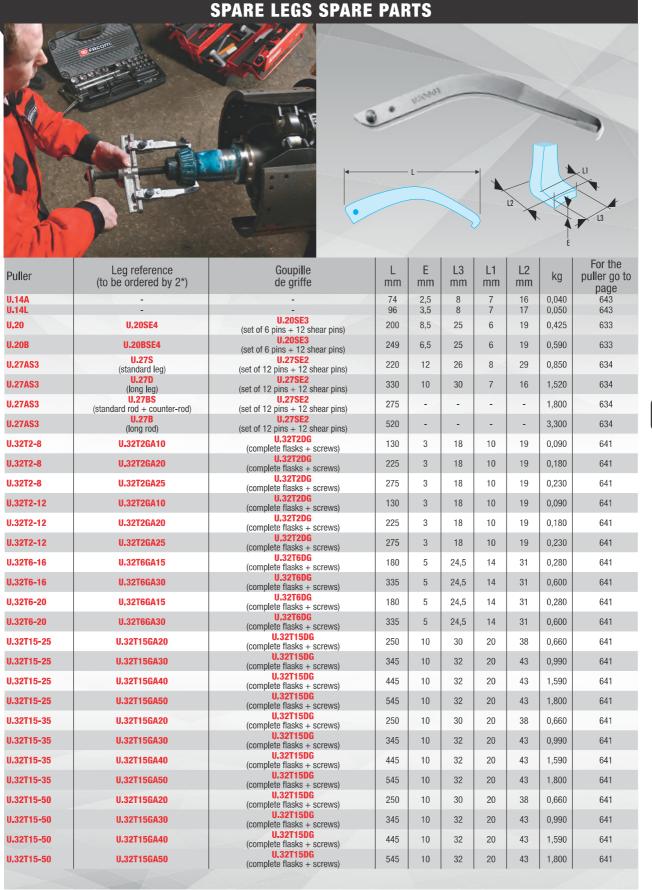
- Comprising:
- 289.M8.
- 289.M18.
- Supplied in plastic box BP.102 with plastic tray PL.489.



<b>=</b> 0	ΔTΔ [g]	
28911	750	

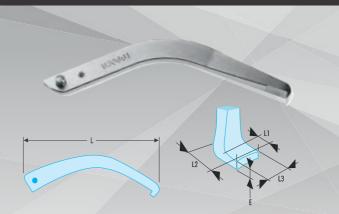








# SPARE LEGS SPARE PARTS



Puller	Leg reference (to be ordered by 2*)	Leg pin	Lmm	Tmm	L3mm	L1mm	L2mm	kg	For the puller go to page
U.34	<b>U.34G</b> (set of 2 legs)	M10 screw x 1.5 x 75 mm head H 17 mm, class 8.8	300	5,5	36	6	15,5	1,750	645
U.35	<b>U.35C</b> (set of 2 legs)	<b>U.35-5J2</b> (set of 2 shear pins)	155	4	22	3,5	14,5	0,545	645
U.35L	<b>U.35B</b> (set of 2 legs)	<b>U.35-5J2</b> (set of 2 shear pins)	188	4	22	3,5	14,5	0,705	645
U.35P	<b>U.35D</b> (set of 2 legs)	U.42-5J2 (set of 2 shear pins)	110	2,5	15	3	8,5	0,200	645
U.42	U.42-3	U.42-5J2 (set of 2 shear pins)	145	3	24	3	8	0,220	646
U.42B	U.42B3	U.42-5J2 (set of 2 shear pins)	194	3	24	3	8	0,290	646
U.52	U.52-3	U.35-5J2 (set of 2 shear pins)	198	4,5	25	4	21	0,380	646
U.232-65	U.232G1	-	100	4	8,5	10	16	0,080	643
U.232-90	U.232G2	-	155	5	10	15	24	0,190	643
U.232-130	U.232G2	-	155	5	10	15	24	0,190	643
U.232-160	U.232G3	-	225	8	15	22	33	0.580	643
U,232-210	U,232G3	-	225	8	15	22	33	0,580	643
U,232-270	U,232G4	_	303	11	17,5	25	43	1,550	643
U.232-340	U.232G4	_	303	11	17,5	25	43	1,550	643
		-							
U.301	U.301G	-	130	5	8	7	16	0,100	643
U.301-150	-	-	205	6	8	7	17	0,170	643
U.301-200	-	-	270	6	8	7	18	0,280	643
U.301L	-	-	180	4,5	21	7	18	0,220	645
U.301M	-	-	145	4	21	7	18,5	0,160	645
U.301P	-	-	120	4	17	5	12,5	0,120	645
U,302	U,301G	-	130	5	8	7	16	0,100	632
U,302-150	-	-	205	6	8	7	17	0,170	632
U.302-200	-	_	270	6	8	7	18	0,280	632
U.306-170N	U,306G20	_	230	6,5	8	4	12	0,190	630
U.306-180	U.306G10	-	250	5	14	4	13		630
		-			14			0,320	
U.306-260	U.306G15	-	310	6,5		4	13	0,450	630
U.306A130N	U.306G2	-	170	4,5	8	3,5	9,5	0,120	630
U.306A140	U.306G1	-	185	4,5	14	4	13	0,210	630
U.310-170	U.310G1	-	230	6	26	5	19	0,560	630
U.310-230N	U.310G3	-	260	10	15	5,5	15	0,360	630
U.310-250	U.310G2	-	310	7	26	5,5	19	0,760	631
U.312H	U.312G110	<b>U.312-04-02</b> (set of 3 screws + nuts)	150	7	25	15	33	0,400	636
U.312H	U.312G160	<b>U.312-04-02</b> (set of 3 screws + nuts)	190	7	25	15	36	0,540	636
U.312H	U.312G210	<b>U.312-04-02</b> (set of 3 screws + nuts)	240	7	25	12	36	0,720	636
U.312H	U.312G260	<b>U.312-04-02</b> (set of 3 screws + nuts)	285	7	25	12	38	0,980	636
U.320	U.320-13A	U.320GP1 (set of 3 shear pins)	505	5	35,6	16	45	3,100	635
U.320H	U.320-13A	U.320GP1 (set of 3 shear pins)	505	5	35,6	16	45	3,100	638
U.330	U.330-08	U.320GP1 (set of 3 shear pins)	690	8,5	37,5	15,5	45	6,300	635
U.330H	U.330-08	U.320GP1 (set of 3 shear pins)	690	8,5	37,5	15,5	45	6,300	638

<sup>\*</sup> except U.35B, U.35C, U.35D and U.34: set containing the inside leg and outside leg.



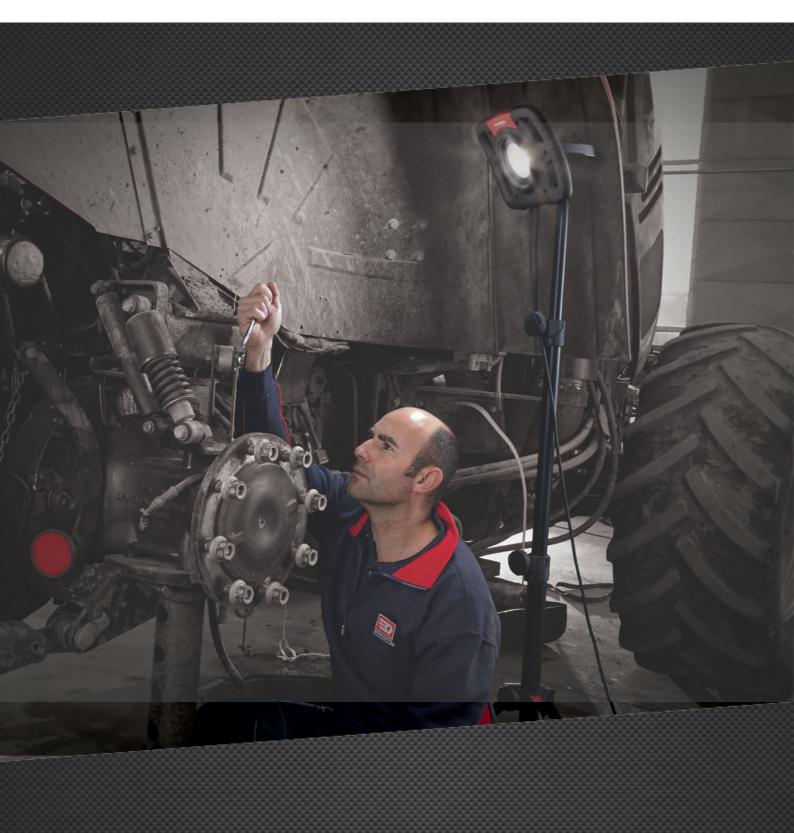
- For your safety, we recommend that all the legs are replaced in the event of a problem.
- Do not modify nor grind the puller legs. Modifications can be very dangerous for the user and invalidates the guarantee. Wherever possible, select a 3-leg puller for optimum load distribution.











# LIGHTING





676



### **INSPECTION LAMPS**

Inspection lamps 669 Inspection lamp - Bodywork 673



### **SPOT LAMP**

Spot lamp 676



### **LED PEN LAMPS AND TORCH LIGHTS**

Led pen lamps and torch lights



674

669

Fluorescent inspection lamp



(<u>''''</u>•###



678





















### **PEN TORCH**

Pen torch

675

675



### **Comfort and efficiency**

- It is essential to use light suitable for the application to avoid tired eyes and accidents at work.
- Engineering or maintenance tasks require an illumination of 300 to 500 lux.
- Inspection, finishing and painting tasks require an illumination of 750 to 1,000 lux.
- The light source must be designed and arranged to avoid uncomfortable glare.

### There are a number of lighting technologies to choose from:

TECHNOLOGY	ADVANTAGES	DISADVANTAGES	LIGHTINGPOWER	FACOM OFFER
Fluorescent and compactfluorescent lamps	Diffuse lighting, low temperature, low consumption	Average impact resistance	300 to 400 lux	777 range
LEDs	Very good impact resistance, low temperature, very low consumption, long operating life.	Cost, concentrated light beam	300 to 1,000 lux	779 range





### **SAFETY**



For your safety, the supply voltage of inspection lamps used for working inside the body of a vehicle must not exceed 50 V.

### IP rating: What does it mean? (e.g. for a 4.5 V IP 64 inspection lamp)

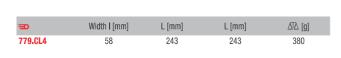
	1st figure (e.g. IP 64): Protection of live components against ingress of solid objects		nd figure (e.g. IP 64): Protection of live components painst ingress of liquid
0	No protection	0	No protection
1	Solid objects greater than 50 mm diameter cannot penetrate	1	Vertically falling drops of water
2	Solid objects greater than 12 mm diameter cannot penetrate	2	Water dripping on the enclosure tilted at 15° from its normal position
3	A steel wire of 2.5 mm diameter cannot penetrate	3	Spraying water at an angle of up to 60° from the vertical
4	A steel wire of 1 mm diameter cannot penetrate	4	Splashing water against the enclosure from any direction
5	Invisible amount of talcum powder deposited when tested in a dust chamber	5	Water projected in jets (6.3 mm) against the enclosure from any direction
6	No talcum powder deposited when tested in a dust chamber	6	Water projected in jets (12.5 mm) against the enclosure from any direction
		7	Immersion to 1 m
		8	Submersible equipment according to manufacturer's specifications

**INSPECTION LAMPS** 



### Cordless LED inspection lamp

- Wide working light beam: 350 lux at 0.5 m.
- Up to 5h operating time.
- · Wall-mounted charger.
- 360° hook and hidden magnet for hands-free use.
- · Charging time: 2h30.
- Protection against shocks IK 08.
- Environment protection IP 55.
- Operating temperature: -20 / +70 °C.
- Supplied with a mains charger (cable 2 m) 100-240 V and support base for wall- or workstation-mounting,





























































# **Hands free lighting**

### Quick and easy to attach

- To illuminate a work area, one hand is often needed to hold the lamp. The FVS Pocket leaves both hands free as it incorporates a range of options for attachment and light direction.
- · Innovating clamp hook.
- · Removable magnet.
- Flexible to turn it in all planes.
- · Compact shape for easy positioning.

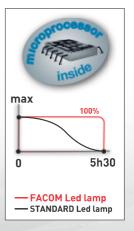


and water (IP.55).



FVS Pocket is a genuinely professional lamp, no need to change the batteries. Equipped with a rechargeable ion battery, it provides 4 hours of continuous operation and recharges in only 2 1/2 hours.





### $^{lack}$ Facom Vision System FVS POCKET





- · Cordless pocket lamp supplied by rechargeable Li-ion batteries.
- Operating time: 5h30, fast charge: 2h30.
- · Microchip-controlled charging and lighting.
- · Lighting level constant throughout the operating time.
- High power LED: 73 Lumens
- · Shock-proof case. Lamp swivels at 360°, hook, magnet.
- Supplied with: charger 230 V, power supply cable, user manual and strap.

型	H [mm]	Width I [mm]	L [mm]	∆∏∆ [g]
779.PCA	130	30	65	210





### **INSPECTION LAMPS**

### Head lamp with motion sensor

- Motion sensor: switches the lamp on and off without touching it,
- 2 brightness settings: Normal 50 lumen. Boost 200 lumen.
- Rotation around the vertical axis: 104°.
- Maximum operating time 16 hours in normal mode and 4 hours in boost mode.
- Runs on 3 AAA batteries supplied.
- · Adjustable elastic strap.

⇒	∆\[\D\ [g]
779.FRT2	128

· Additional magnetic bracket strapped with Velcro.

• Runs on 3 AAA batteries supplied.





### **LED** pen light

- · Wide and powerful lighting inspection lamp
- 36 lumens .
- 100 Lux at 1 meter.
- 8-hour continuous operating time.
- Splash-proof IP54.
- Clip to fasten the lamp to a pocket or other holder.
- · Convenient magnetic bracket.

<b>3</b> 0	Width I [mm]	L [mm]	∆\\(\( \)[g]
779.PEN	16	156	65





- . High capacity Li-ion battery.
- · Supplied with a 230V mains charger, a cigar lighter charger, a USB cable.

# **Flexible** suspension hook

# Facilitates fastening and unfastening.

# **Lighting for difficult** and confined access

**Exceptional strength** 



175 lux - 0.5 m



### 'Booster' mode

For inspection work and increased visibility.

350 lux - 0.5 m



















































### **INSPECTION LAMPS**

### Cordless LED slim inspection lamp



# Corded LED slim inspection lamp











- · Extra slim slim body.
- 2 power settings.
- Resistant to oil, solvents and other chemicals used in a workshop.
- Hook free semi rigid avoiding the pulling of the hook or cable.
- Comes with a removable magnet with screw ref. 779.MAG.
- Supplied with 220V mains charger, 12V cigarette lighter socket and USB plug.
- Point of attachment for more safety especially when working at height.
- Battery / mains power source / 12 V / USB.
- Autonomy: 8h in standard 4h in Boost.
- Charging time (Std / USB): 3h standard 6h Boost.
- Lux 0.5 m (Std / Boost): 175/350 lux.
- Brightness (Std / Boost): 120/240 lumens.
- Width (Handle / Body): 45/29 mm.
- Depth (Handle / Body): 25/12 mm.
- Operating temperature (° C): -20 / + 70.
- ∆∏∆ [g] L [mm] 779.SILR 329 160

- · Extra slim slim body.
- 2 power settings.
- Resistant to oil, solvents and other chemicals used in a workshop.
- Hook free semi rigid avoiding the pulling of the hook or cable.
- Powered by either AC outlet, 12V cigarette lighter or USB plug.
- Comes with a removable magnet with screw ref. 779.MAG.
- Delivered with 5 m Keylar cable with secure lockable connection and sustainable.
- · Point of attachment for more safety especially when working at height.
- Power source: mains / 12 V / USB.
- Lux 0.5 m (Std / Boost): 300/600 lux.
- Brightness (Std / Boost): 200/400 lumens.
- Width (Handle / Body): 45/29 mm.
- Depth (Handle / Body): 25/12 mm.
- Operating temperature (° C): -20 / + 70.

₹	L [mm]	∆™ [g]
779.SILC	329	120

### **№** Adaptable magnet for Slim lamp





Soft coating.



<b>=</b> 0	∆7∆ [g]	
779.MAG	16	





**INSPECTION LAMP - BODYWORK** 

# 779.CML BODYWORK INSPECTION LAMP 2-in-1 lamp ideal for paint and bodywork operations. Warm light (4,500K) To check light coloured surfaces. 360° **Cold light** (6,500K)Large lighting To check dark surface coloured surfaces.

6500 k





# Long Operating Time & Comfort • 3h constant lighting: 500 lumen / 190 lux at 1 m.

- . High power COB LEDs. Li-ion batteries.
- Attachment hook and magnet for more comfort.

### 💶 Inspection lamp - bodywork

- · Ideal to compare colour charts and detect imperfections on the vehicle's bodywork.
- Two lighting modes: cold 4500K hot 6500K.
- Operating time: 3 hours.
- . Charging time: 4 hours.
- 1 magnet.
- 1 removable hook.
- Supplied with mains charger and USB cable (5 V 2A).
- Beam pivots through 360°.
- · Mains or USB charging.





• Contrasted and natural lighting: colours respected (IRC 95). · Multi-position head swivelling at 360°.















































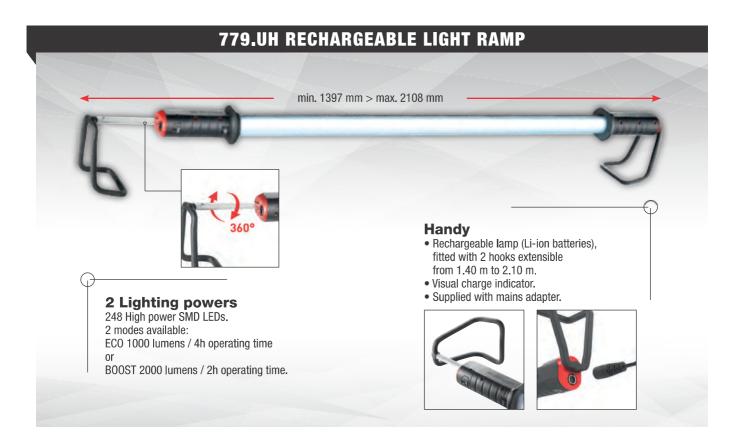


















- 2 lighting power levels:
- ECO: 1000 lumen.
- B00ST: 2000 lumen.
- . Operating time:
  - ECO: 4 hours.
  - B00ST: 2 hours.
- Operates on mains.
- Supplied with charger 220 V 50HZ.
- Hook spacing: 1397 mm to 2108 mm.

<b>=</b> 0	Δ½ [kg]	
779 IIH	1 338	

<sup>∖∖</sup>■ Pen torch





- 1 3W LED.
- 110 lumen.
- 2 304 lux at 0.5 m.
- Running time: 3.5 hours.
- Protection rating: IP65.
- Batteries: 2 x AAA.
- Supplied with: 2 AAA batteries, strap and protection pouch.

<b>=</b> 0	∆7∆ [g]	
779.PBT	58	





# Compact pen torch

- 1 3W LED.
- · Adjustable light beam.
- 43 to 309 lumen according to the beam required.
- 39 601 lux at 0.5 m in maximum aperture.
- Maximum work time: 51.5 hours.
- Protection rating: IP65.
- Supplied with: 4 AAA batteries, strap and protection pouch.











## Compact rechargeable torch

- 1 10W LED.
- Adjustable light beam.
- 175 to 814 lumen according to the beam required.
- 34 225 lux at 0.5m in maximum aperture.
- Maximum work time: 18.5 hours.
- . Charging time: 6 hours.
- · Protection rating: IP65.
- Rechargeable Li-ion battery.
- · Chargeable by USB.
- Supplied with: 230V charger, USB supply cable, strap and protection pouch.

∆7∆ [g] 176







(<u>''''</u>



















### $^{ee}$ UV torch

- 1 1W UV LED.
- 395 to 410 nm.
- . Operating time: 23 hours.
- Protection rating: IP67.
- Supplied with: 3 AAA batteries, strap and protection pouch.















#### **INSPECTION LAMP**

# RANGE OF HIGH PERFORMANCE LAMPS

	RECHARGEABLE LAMP 779.EYE	WIRED LAMP 777.SPOT	BLUETOOTH WIRED LAMP 777.SPOTBT
Constant lighting power.	ECO: 500 lumen / 170 lux at 1 m / 8 h use.  NORMAL: 1000 lumen / 340 lux at 1 m / 4 h use.  BOOST: 1500 lumen / 500 lux at 1 m / 2 h 45 use.	ECO LIGHT: 1500 lumen / 500 lux at 1 m.  NORMAL: 2500 lumen / 850 lux at 1 m.  BOOST: 5000 lumen / 1750 lux at 1 m.	At 1 m: 2000 lumen/750 lux. 4000 lumen/1500 lux. 6000 lumen/2250 lux. 8000 lumen/3000 lux. 10000 lumen/3800 lux.
Indoor use. Outdoor use. COB LED.	•	•	•
Contrasted and natural lighting: true colours (IRC83).	•	•	•
HIGH STRENGTH: IP 67 water and dust resistant IK 07 shock resistant	•	•	•
180° rotating and	•	•	•
360° tilting bracket	-	•	•
FACOM Lighting application available for download on your smartphone or tablet. Controls the on/off mode and sets the light intensity via Bluetooth (up to 5 lamps)	-	-	•
Removable magnetized base	•	•	•
Base with a 3/8" insert for use on a tripod 779.TRIPOD	•	•	•

# Tripod for SPOT lamp







- For lamps 779.EYE, 777.SPOT and 777.SPOTBT.
- Threading for lamp fastening.
- Hook for power supply cable storage.
- Height adjustable from 76.5 to 225 cm.



⇒	∆∆ [kg
779.TRIPOD	3.2





# 779.EYE – RECHARGEABLE SPOT LAMP

- Power Settings: Low / Medium / High.
- Lumens: 500 / 1000 / 1500.
- Base with powerful magnets for hands-free use.
- 180⊠ Rotation.
- Run-time: 7.0 hours on Low mode.
- Cordless & Rechargeable, Corded .
- IP Rating: IP67.
- IK Rating: IK07.
- UNIQUE DESIGN.
- CRI: 85 keep a natural color.
- Optional Tri-Pod Stand: 779.TRIPOD.



























































# 779.EYE – Rechargeable spot lamp

- Power Settings: Low / Medium / High.
- Lumens: 500 / 1000 / 1500.
- Base with powerful magnets for hands-free use.
- 180⊠ Rotation.
- 360⊠ Swivel.
- Run-time: 7.0 hours on Low mode.
- Cordless & Rechargeable, Corded.
- IP Rating: IP67.
- IK Rating: IK07.
- UNIQUE DESIGN.
- CRI: 85 keep a natural color.
- Optional Tri-Pod Stand :779.TRIPOD.

<b>=</b> 0	∆∏∆ [kg
777.SP0T	3,45

# Bluetooth corded lamp

- 5 lighting power levels: 2000, 4000, 6000, 8000, 10000 lumens.
- Base with powerful magnets for hands-free use.
- · Handles for easy transport and adjustment,
- 180° rotation.
- Swivels at 360°.
- IP 67.
- IK 07.
- Unique design.
- IRC 85: maintains natural colour.
- Bluetooth: can be controlled by an IOS or ANDROID application.
- The application can control 5 lamps.
- Tripod in option: 779.TRIPOD.
- Cable length: 5 m.

<b>型</b>	Δ <sup>†</sup> Δ [kg]
777.SPOTBT	5,8







#### **FLUORESCENT INSPECTION LAMP**









- · Durable, powerful lighting.
- Low consumption: 11W.
- Fluorescent tube 11W.
- Does not heat.
- Protection rating: IP55.
- · Anti-glare lens.
- 470 Lux at 0.5 m.
- 320 Lumens.
- H05 RN-F rubber cable: good resistance to hydrocarbons.
- · No transformer.
- No cable winder.
- · Voltage: 24 V.
- Cable length: 10 m.

Spare fluorescent tube: 777B.BULD.

Spare lens: 777B.LENS.



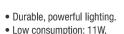
- · Durable, powerful lighting.
- Low consumption: 11W.
- Fluorescent tube 11W.
- Does not heat.
- · Protection rating: IP55.
- · Anti-glare lens.
- 470 Lux at 0.5 m.
- 320 Lumens.
- H05 RN-F rubber cable: good resistance to hydrocarbons.
- · No transformer.
- No cable winder.
- Voltage: 230 V.
- · Cable length: 10 m.

Spare fluorescent tube: 777B.BULD.

Spare lens: 777B.LENS.

<b>=</b> 0	∆\\\ [g]
777B.230F	450

#### 24V fluorescent inspection lamp with cable reel



- Fluorescent tube 11W.
- · Does not heat.
- · Protection rating: IP55.
- · Anti-glare lens.
- 400 Lux at 0.5 m.
- 320 Lumens.
- H05 RN-F rubber cable: good resistance to hydrocarbons.
- No transformer.
- No cable winder.
- Voltage: 24 V.
- Cable length: 15 m.
- · Cable reel: faster cable storage.
- · Supplied with orientable wall mounting. Spare fluorescent tube: 777B.BULD.

Spare lens: 777B.LENS.

 $\Delta \overline{\Delta}$  [kg] 777A.24F





- . Low consumption: 11W, • Fluorescent tube 11W.
- · Does not heat.
- · Protection rating: IP55.
- · Anti-glare lens.
- 470 Lux at 0.5 m.
- 320 Lumens.
- H05 RN-F rubber cable: good resistance to hydrocarbons.
- No transformer.
- · No cable winder.
- · Voltage: 230 V.
- · Cable length: 15 m.
- · Cable reel: faster cable storage.
- · Supplied with orientable wall mounting. Spare fluorescent tube: 777B.BULD.

Spare lens: 777B.LENS.

Δ¹∆ [kg] 777A.230F









































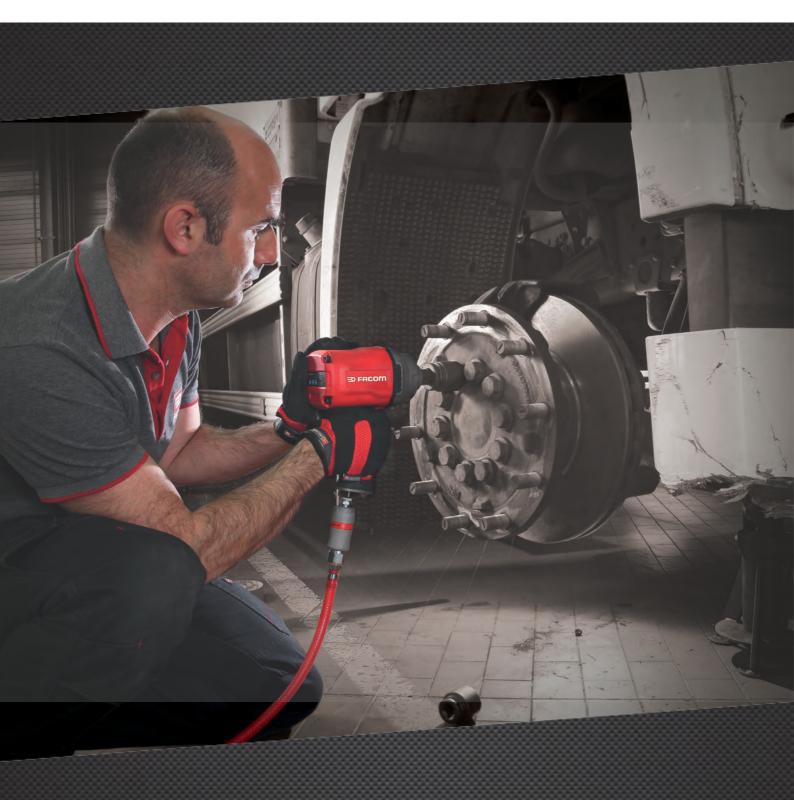












# POWER TOOLS











































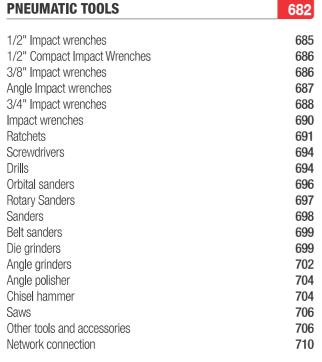














#### **POWER TOOLS - CORDLESS** 712 Power tools - Cordless 712 Brushless impact wrenches 713 Cordless drill drivers 714 Power tools - Cordless 715 Twin Pack bundles 716 Cordless accessories 717



#### **IMPACT WRENCH**

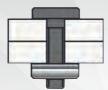
# The best unfastening tool

#### Impact wrenches are tools designed to unscrew with a hammering system

- Benefit: unfastens up to 3000 Nm without reaction torque.
- No existing standard defines the checking process for this type of tool, so we defined our own checking system, and applied it to the entire range.

#### Power of an impact wrench changes according to:

• Type of assembly: power can drop up to 50% on a flexible assembly.



Hard>+50%>Elastic



• Air line: pressure, air flow and diameter of the supply cable can lead to a 50% power drop.



- Air pressure: 6.2 Bar Min => Rotation speed
- Inner diameter of the connector (e.g. 6.5 mm for 1/2" tools)
- Air flow: Exceeds tool flow => Tool power

· Accessories: extensions, universal joints and other accessories can lead to a power drop exceeding 50%.









































FLUO















#### **PERFORMANCE**

 Specially designed to resist the stresses from impact tools. Their special steel and heat treatment ensure a very high yield strength and wear resistance.

#### **SAFETY**



· All sockets and accessories feature a groove and side-hole to UNI ISO 2725. Locking is ensured by a through-pin and retaining ring (to be ordered separately). Never fit chrome-finished manual sockets Impact tools.

<b>⇒</b> Pins	ø x L (mm)
GA.15B	2,5 x 14,8
GA.18B	2,5 x 17,8
GA.19B	2,5 x 19,0
GA.20B	3,0 x 20,0
GA.22B	3,0 x 22,0
GA.25B	3,0 x 25,0
GA.31B	4,0 x 31,0
GA.35B	4,0 x 35,0
GA.45B	5,0 x 45,0
GA.77B	5,0 x 77,0
GA.75B	6,0 x 75,0
GA.84B	6,0 x 84,0

<b>⇒</b> Rings	ø tore x ø in. (mm)
BA.15B	3,5 x 15,0
BA.18B	3,5 x 18,0
BA.19B	3,5 x 19,0
BA.20B	4,0 x 20,0
BA.22B	4,0 x 22,0
BA.25B	4,0 x 25,0
BA.30B	5,0 x 30,0
BA,36B	5,0 x 36,0
BA.45B	7,0 x 45,0
BA.76B	7,0 x 76,0
BA.74B	10,0 x 74,0
DA OAD	100,040



#### 1/2" IMPACT WRENCHES

# 1/2" high performance impact wrench

- Most powerful 1/2" Impact Wrench in the range.
- Removable & rechargable LED lighting illuminates dark areas.
- Progressive trigger for better control.
- Cold forged twin hammer impact system for greater durabillity.
- 3 forward, 1 reverse speed with single hand operation.
- Ergonomic handle provides user comfort.



<b>=</b> 0	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration Level [M/S2]	Torque N.m	Maximum RPM [mn]	∆\\\ [kg]
NS.3500G	212	162	75.3	1200	94 (K=3)	6.4 (K=2.2)	1898	6500	2.2

# 1/2" impact wrench

- High torque 1/2" Impact Wrench.
- Progressive trigger for better control.
- Cold forged twin hammer impact system for greater durabillity.
- 3 forward, 1 reverse speed with single hand operation.
- Ergonomic handle provides user comfort.





















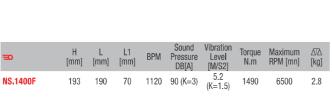




<b>=</b> 0	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration Level [M/S2]	Torque N.m	Maximum RPM [mn]	∆ \\ [kg]
NS.3100G	212	162	75.3	1300	93 (K=3)	6.2 (K=2.5)	1600	7000	2

# 1/2" aluminium impact wrench

- Improved anvil life through superior materials.
- Variable speed trigger for better control.
- Rubber handle insulates from cold.
- Forward/reverse speed control knob with single hand operation.





#### 1/2" COMPACT IMPACT WRENCHES

#### 1/2" compact high performance impact wrench



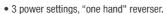


- Light weight tool reduces user fatigue
- · Compact size allows tool to fit in tight spaces
- Progressive trigger for better control
- Cold forged twin hammer impact system for greater durabillity
- 3 forward, 1 reverse speed with single hand operation

<b>=</b> 0	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration Level [M/S2]	Torque N.m	Maximum RPM [mn]	∆ \\ [kg]
NS.2500G	197	144	62.5	1400	95 (K=3)	3.9 (K=1.5)	950	10000	1.4

# 1/2" ultra compact impact wrench





- Supplied with hanging hook, reduces user fatigue.
- . Monobloc body design extending its lifetime.
- Built-in shock absorbers protecting the tool from damage.
- Ergonomic soft handle resistant to hydrocarbons and solvents
- Compact to enable access in difficult areas.
- Socket held by ball + pin.

<b>⇒</b>	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration Level [M/S2]	Torque N.m	Maximum RPM [mn]	∆\\\\\\[kg]
NS.1600F	173	111	61.5	1650	91.1 (K=3)	9.57 (K=1.44)	860	10000	1.3

# 3/8" titanium impact wrench



- Light weight titanium housing for maximum durability.
- Feather throttle for maximum operator control.
- Titanium exhaust deflector & muffler.
- Over molded comfort grip.
- One hand power & reverse adjustment.
- Innovative motor construction increases durability.

<b>=</b> 0	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration [M/S2]	Torque N.m	Maximum RPM [mn]	∆\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
NJ.3000F	180	152	66	1750	93.8 (K=3)	3.06 (K=0.79)	710	10500	1,3

#### <sup>√</sup>■ 3/8" composite impact wrench



- . Durable twin hammer mechanism for enhanced tool life.
- Forward / reverse knob with 3 integrated power settings in forward.
- · Swivel air inlet to avoid coiling of the hose.
- · Chemical resistant casing for longer life of tool.
- Feather teasing trigger for optimal control

<b>3</b> 0	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration [M/S2]	Torque N.m	Maximum RPM [mn]	∆\\\ [kg]
NJ.2000F2	165	157	58	1290	92.7 (K=3)	4.3 (K=0.92)	475	9600	1,3



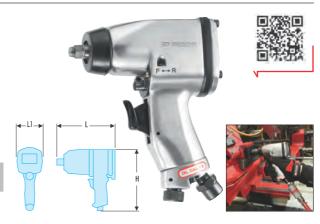




# 3/8" aluminum impact wrench

- Durable single hammer mechanism encased in a strong aluminium housing.
- Protective rubber ring for improved tool life.
- Feather teasing trigger for optimal speed regulation.
- Turnable power knob for improved control.
- One hand forward reverse rod.

<b>⇒</b>	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration Level [M/S2]	Torque N.m	Maximum RPM [mn]	∆7∆ [kg]
NJ.1300F2	167	137	49	705	94.7 (K=3)	4 (K=0.89)	180	11200	1,2



















# 3/8" butterfly impact wrench

- One-handed reverse switch operation.
- Double hammer impact mechanism, aluminium body.
- Ball retaining mechanism.
- · Jointed air inlet for awkward zones,
- 3 power settings for optimal control.

<b>=</b> 0	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration Level [M/S2]	Torque N.m	Maximum RPM [mn]	∆∏∆ [kg]
NJ.1400F2	54	140	40	660	96 (K=3)	3.06 (K=1.19)	120	12000	0,53















#### **ANGLE IMPACT WRENCHES**

# 1/2" angular impact wrenches

- Powerful and robust single hammer mechanism.
- Ergonomic "soft" grip insulates from the cold.
- Protection bumpers for long durability.
- Soft trigger for excellent speed control.
- Safe and fast socket locking by friction pin.

<b>=</b>	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration Level [M/S2]	Torque N.m	Maximum RPM [mn]	∆7∆ [kg]
NS.A1700F2	80	353	63	1700	98 (K=3)	29.96 (K=14.35)	271	7200	1,8





























- Powerful and robust single hammer mechanism.
- Ergonomic "soft" grip insulates from the cold.
- · Protection bumpers for long durability.
- · Direction reversal knob near the handle.
- Soft trigger for excellent speed control.
- . Safe and fast socket locking by friction pin.

<b>=</b> 0	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration Level [M/S2]	Torque N.m	Maximum RPM [mn]	∆7∆ [kg]
NJ.A1700F2	80	353	63	1700	96 (K=3)	46.52 (K=14.61)	230	7200	1.8



#### 3/4" IMPACT WRENCHES

# 3/4" titanium impact wrench



- Lightweight titanium housing for maximum durability.
- Feather throttle for maximum operator control.
- Titanium exhaust deflector & muffler.
- Over molded comfort grip.
- One hand power & reverse adjustment.
- . Innovative motor construction increases durability.



<b>=</b> 0	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration Level [M/S2]	Torque N.m	Maximum RPM [mn]	∆\\\\\[kg]
NK.3000F	227	227	97	950	97 (K=3)	5.06 (K=0.99)	2115	5300	3,8

# 3/4" composite impact wrench

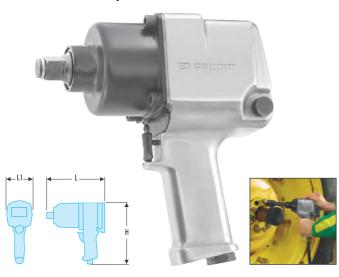


- Durable twin hammer mechanism encased in a strong aluminium housing.
- One switch integrating regulation and forward reverse.
- . Insulating and lightweight durable composite housing.
- Feather teasing trigger for optimal speed regulation.
- · Specific short design to get into confined spaces.
- Socket ring retainer for safety.

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<b>⇒</b>	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration Level [M/S2]	Torque N.m	Maximum RPM [mn]	∆\\\\\[kg]
NK.2000F2	213	221	86	850	99.10 (K=3)	10.7 (K=1.55)	1700	6360	3,9

# 3/4" aluminum impact wrench



- Durable twin hammer mechanism encased in a strong aluminium housing.
- One hand forward reverse switch with integrated regulator with 6 positions.
- Feather teasing trigger for optimal speed regulation.
- · Socket ring retainer for safety.

<b>⇒</b>	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration Level [M/S2]	Torque N.m	Maximum RPM [mn]	∆\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
NK.1000F2	233	222	93	790	98.4 (K=3)	9.1 (K=1.61)	1700	5700	5,6





#### NM SERIES - NEW RANGE OF 1" IMPACT WRENCHES

# Powerful, strong and balanced! Improve your productivity!

#### **Powerful impact system**

• Exceptional torque at 3390 N.m.

#### 2 stage trigger:

Speed control at your finger tips.

#### Lateral grip adjustable to 360°

• To stabilize and enhance grip.

#### Comfortable 'soft grip' handles

• Rubber overmolding for reduced vibrations.

#### **One-handed reverse switch operation**

2 power levels in tightening and untightening.
 Reduces the strength required to accomplish the task and increases productivity.

#### Safety

 Dual socket retainer: ring retainer hole to use a safety pin.

#### **Exhaust blows air away**

• From the operator for comfort of use.

#### **Composite bumpers**

For greater durability.

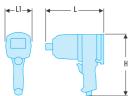
1" straight impact wrench - long anvil high performance



1" straight impact wrench - short anvil high performance



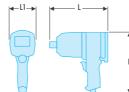




- Dual hammer mechanism for tool durability.
- 2 stage trigger for improved control.
- Two forward, two reverse speeds.
- Rubber over molded grip insulating against cold and vibrations.
- Rubber bumper protecting the motor housing.
- 360° adjustable handle for improved comfort.
- Ring retainer hole to use a safety pin.
- Exhaust blows air away from the operator for comfort of use.

<b>=</b>	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration Level [M/S2]	Torque N.m	Maximum RPM [mn]	۵۱۵ [kg]
NM.3030LF	97	493	101	1000	105 (K=3)	15.6 (K=2.05)	3390	5000	9





- Dual hammer mechanism for tool durability.
- 2 stage trigger for improved control.
- One hand forward reverse switch with two settings in both directions.
- Rubber over molded grip insulating against cold and vibrations.
- Rubber bumper protecting the motor housing.
- 360° adjustable handle for improved comfort.
- Safe: Dual socket retainer: ring retainer hole to use a safety pin.
- Exhaust blows air away from the operator for comfort of use.

<b>=</b> 0	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration Level [M/S2]	Torque N.m	Maximum RPM [mn]	∆\\\ [kg]
NM.3030F	97	346	101	1000	104.4 (K=3)	14.75 (K=1.96)	3390	5000	8





















































#### **IMPACT WRENCHES**

#### 1" gun-type impact wrench - long anvil high performance



#### $^{ee}$ 1" gun-type impact wrench - short anvil high performance







- . Dual hammer mechanism for tool durability.
- 2 stage trigger for improved control.
- One hand forward reverse switch with two settings in both directions.
- Rubber over molded grip insulating against cold and vibrations.
- Rubber bumper protecting the motor housing.
- 360° adjustable handle for improved comfort.
- Safe: Dual socket retainer: ring retainer hole to use a safety pin.
- Exhaust blows air away from the operator for comfort of use.

<b>⇒</b>	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration Level [M/S2]	Torque N.m	Maximum RPM [mn]	∆∏∆ [kg]
NM.3000LF	249	391	96	900	111.1	11.7	3390	5000	7,4

- . Dual hammer mechanism for tool durability.
- 2 stage trigger for improved control.
- One hand forward reverse switch with two settings in both directions.
- Rubber over molded grip insulating against cold and vibrations.
- Rubber bumper protecting the motor housing.
- 360° adjustable handle for improved comfort.
- Safe: Dual socket retainer: ring retainer hole to use a safety pin.
- · Exhaust blows air away from the operator for comfort of use.

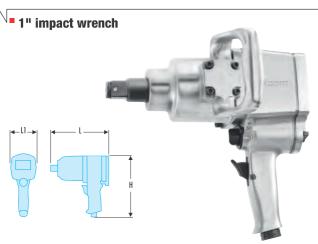
<b>=</b> 0	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration Level [M/S2]	Torque N.m	Maximum RPM [mn]	∆\\\ [kg]
NM.3000F	239	279	102	900	111.9 (K=3)	10.6 (K=1.55)	3390	5000	6,9

### Long-reach 1" impact wrench



- Durable twin hammer mechanism for tool durability.
- Feather teasing trigger for optimal speed control.
- Integrated regulator with 3 positions forward and reverse.
- · Angled exhaust to blow air away from workstation.
- · Socket ring retainer combined with thru-hole for safety.

<b>=</b> 0	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration Level [M/S2]	Torque N.m	Maximum RPM [mn]	∆\\ [kg]
NM,1010LF2	172	523	202	720	103	16.7	4068	4400	11





- Durable twin hammer mechanism for tool durability.
- Feather teasing trigger for optimal speed control.
- Integrated regulator with 3 positions forward and reverse.
- Angled exhaust to blow air away from workstation.
- · Socket ring retainer combined with thru-hole for safety.

<b>3</b> 0	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration Level [M/S2]	Torque N.m	Maximum RPM [mn]	∆ī∆ [kg]
NM.1000F2	290	300	205	720	102 (K=3)	15.2 (K=2.15)	4068	4500	10,3





#### **RATCHETS**

#### **RATCHET**

# The ultimate tool to increase your productivity!

Upgrade with a torque range from 10 to 136 N.m and rotation speeds from 240 to 280 rpm, you can increase productivity and improve your working comfort.

 A range of sealed ratchets for a longer ratchet lifetime and protecting the operator from any risk of jamming the gloves in the mechanism.













**I** 1/4" - 3/8" - 1/2"



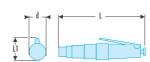
35 mm or 205 mm

- Select "palm control" versions for fastening in confined spaces and the mini or standard version when space allows. The shorter the tool, the higher the reaction torque.
- Reaction torque = force / distance
- 27 N.m = 2.74 Kg at 1 meter distance
- Reaction torque at 135 mm: 2.74 Kg/0.135 = 20.3 Kg
- Reaction torque at 205 mm: 2.74 Kg/0.205 = 13.4 Kg

#### TITANIUM 1/2" ratchet

- $\bullet$  High performance 350 rpm motor delivering 88 N.m torque.
- $\bullet$  Dust tight titanium head for increased life time.
- $\bullet$  Bimaterial composite ergonomic casing resistant to acids and solvents.
- Socket locking by push button.
- Direction reversal knob near the handle.
- Soft trigger for excellent speed control.

<b>=</b> 0	d [mm]	L [mm]	L1 [mm]	Sound Pressure DB[A]	Vibration Level [M/S2]	Torque N.m	Maximum RPM [mn]	∆7∆ [kg]
VR.SZ300F2	52	314	56	89.3	5.57 (K-1.04)	88	350	1,3









































FLUO

















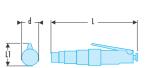
#### **RATCHETS**

#### TITANIUM 3/8" ratchet





- Dust tight titanium head for increased life time.
- Bimaterial composite ergonomic casing resistant to acids and solvents.
- Socket locking by push button.
- Direction reversal knob near the handle.
- · Soft trigger for excellent speed control.

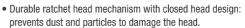




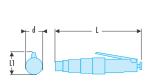
<b>=</b> 0	d [mm]	L [mm]	L1 [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Torque N.m	Maximum RPM [mn]	∆\\\ [kg]
VR.JZ300F2	52	314	56	89.3 (K=3)	5.57 (K=1.04)	88	350	1.3

#### <sup>∖</sup>■ 3/8" mini ratchet





- · Easily accessible forward reverse switch, even usable with greasy hands.
- · Accessible nipple for convenient greasing of the head and gears.
- Insulating rubber sleeve covering a lightweight aluminium housing.
- · Speed easily regulated with a screwdriver.
- Rear exhaust drives the air away from the workplace.
- Feather teasing trigger for optimal speed regulation.
- Socket ball retainer for safety.
- 30 mm slim profile head.



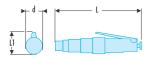


<b>=</b> 0	d [mm]	L [mm]	L1 [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Torque N.m	Maximum RPM [mn]	∆\\\ [kg]
VR.J254	52	208	36	92 (K=3)	3.5 (K=0.92)	54	250	0,7

#### <sup>∖</sup>■ 1/4" mini ratchet



- Durable ratchet head mechanism with closed head design: prevents dust and particles to damage the head.
- Easily accessible forward reverse switch, even usable with greasy hands.
- · Accessible nipple for convenient greasing of the head and gears.
- Insulating rubber sleeve covering a lightweight aluminium housing.
- · Speed easily regulated with a screwdriver.
- Rear exhaust drives the air away from the workplace.
- Feather teasing trigger for optimal speed regulation.
- · Socket ball retainer for safety.
- 30 mm slim profile head.



<b>=</b>	d [mm]	L [mm]	L1 [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Torque N.m	Maximum RPM [mn]	∆\\\ [kg]
VR.R227	52	208	36	91 (K=0.3)	1.8 (K=0.67)	27	250	1.45



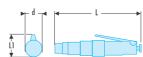


#### Standard 1/2" ratchet

- Durable ratchet head mechanism with closed head design: prevents dust and particles to damage the head.
- Easily accessible forward reverse switch, even usable with greasy hands.
- · Accessible nipple for convenient greasing of the head and gears.
- Insulating rubber sleeve covering a lightweight aluminium housing.
- Speed easily regulated with a screwdriver.
- Rear exhaust drives the air away from the workplace.
- Feather teasing trigger for optimal speed regulation.
- · Socket ball retainer for safety.
- 51 mm slim profile head.

<b>=</b>	d	L	L1	Sound Pressure	Vibration	Torque	Maximum	∆7∆
	[mm]	[mm]	[mm]	DB[A]	[M/S2]	N.m	RPM [mn]	[kg]
VR.S3136	58	261	43	99 (K=3)	9.1 (K=1.4)	136	280	1,2





#### <sup>V</sup>■ Standard 3/8" ratchet

- Durable ratchet head mechanism with closed head design: prevents dust and particles to damage the head.
- · Easily accessible forward reverse switch, even usable with greasy hands.
- · Accessible nipple for convenient greasing of the head and gears.
- Insulating rubber sleeve covering a lightweight aluminium housing.
- Speed easily regulated with a screwdriver.
- Rear exhaust drives the air away from the workplace.
- Feather teasing trigger for optimal speed regulation.
- · Socket ball retainer for safety.

3/8" palm control ratchet

• 51 mm slim profile head.

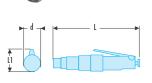
<b>=</b> 0	d [mm]	[mm]	L1 [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Torque N.m	Maximum RPM [mn]	[kg]
VR.J3108	58	261	43	98.9 (K=3)	4.64 (K=0.95)	108	280	1,2



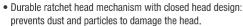
#### 1/4" palm control ratchet







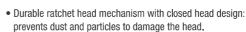




- Easily accessible forward reverse switch, even usable with greasy hands.
- Accessible nipple for convenient greasing of the head and gears.
- Insulating rubber sleeve covering a lightweight aluminium housing.
- Speed easily regulated with a screwdriver.
- Rear exhaust drives the air away from the workplace.
- Feather teasing trigger for optimal speed regulation.
- Socket ball retainer for safety.
- 29 mm slim profile head.

<b>=</b> 0	d [mm]	L [mm]		Sound Pressure DB[A]	Vibration [M/S2]		Maximum RPM [mn]	∆7∆ [kg]
VR.J154	56	136	36	92 (K=3)	3.9 (K=0.89)	54	300	0,5





- Easily accessible forward reverse switch, even usable with greasy hands.
- Accessible nipple for convenient greasing of the head and gears.
- Insulating rubber sleeve covering a lightweight aluminium housing.
- Speed easily regulated with a screwdriver.
- Rear exhaust drives the air away from the workplace.
- Feather teasing trigger for optimal speed regulation.
- Socket ball retainer for safety.
- 29 mm slim profile head.

	•							
<b>=</b> 0	d [mm]	L [mm]	L1 [mm]	Sound Pressure DB[A]	Vibration [M/S2]		Maximum RPM [mn]	∆\\\ [kg]
VR.R127	56	136	36	92 (K-3)	3.8 (K=0.88)	27	200	0,5



















































#### **SCREWDRIVERS**

#### 1/4" Reversible pistol screwdriver





- Durable roller clutch with easy external clutch adjustment.
- Convenient forward/reverse close to trigger for easy access.
- The built-in quick change chuck enables fast screw bit changing.
- · Robust housing for great durability.
- Teasing trigger gives ultimate control to the operator.

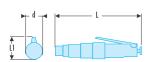
٠	<b>⇒</b>	H [mm]	L [mm]		Sound Pressure DB[A]				Maximum RPM [mn]	
1	V.620RF	163	216	44	95.3 (K=3)	4.2 (K=0.91)	300	13	1800	1,2

#### <sup>∖</sup>■1/4" reversible straight screwdriver





- Durable roller clutch with easy external clutch adjustment.
- Convenient forward/reverse close to trigger for easy access.
- The built-in quick change chuck enables fast screw bit changing.
- Hook allows the tool to be mounted on a balancer for operator comfort
- Teasing trigger gives ultimate control to the operator.





<b>=</b> 0		[mm]		Sound Pressure DB[A]				Maximum RPM [mn]	∆\∆ [kg]
V.610RF	44	270	70	93 (K=3)	12.9 (K=1.85)	250	13	1800	1,2

#### **DRILLS**

#### Drill 10 mm with self-locking chuck

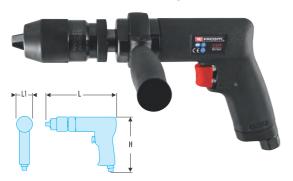




- The powerful 450 watt motor is suitable for many applications and is resistant to stalls.
- · Ergonomic grip maximises operator comfort.
- Industrial quality keyless chuck for durability.
- Teasing trigger offers maximum control for the operator.
- Rear handle exhaust blows away air from the workplace.
- · Swivel air inlet avoids coiling of the hose.

<b>=</b> 0	H [mm]	[mm]	L1 [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Power [watts]	Maximum RPM [mn]	∆7∆ [kg]
V.103MF		234	44	87.4 (K=3)	7.2 (K=1.21)	450	2800	1,48

#### $^{lacktriangle}$ Drill 13 mm with self-locking chuck



- The powerful 450 watt motor is suitable for many applications and is resistant to stalls.
- Ergonomic grip maximises operator comfort.
- Industrial quality keyless chuck for durability.
- Teasing trigger offers maximum control for the operator.
- · Rear handle exhaust blows away air from the workplace.
- Swivel air inlet avoids coiling of the hose.

<b>=</b> 0	H [mm]	L [mm]	L1 [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Power [watts]	Maximum RPM [mn]	∆™ [kg]
V.97F	145	280	182	87 (K=3)	6.9 (K=0.8)	450	1300	1,65





# Reversible pneumatic drill 6 mm

- For light work or high speed drilling: dashboard, aeronautical applications.
- · Structure: composite.

· Low noise technology. • Structure: composite. • Self-tightening chuck.

 Soft control trigger. • Rear exhaust.

• One-handed reverse switch operation.

151 195

42

- 2-speed trigger.
- One-handed reverse switch operation.
- Key chuck.
- · Rear exhaust.

<b>=</b> 0	H [mm]	-	L1 [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Power [watts]	Maximum RPM [mn]	∆∏∆ [kg]
V.D600QR	136	144	39	84 (K=3)	0.4 (K=0.24)	300	2600	0,57

• For work requiring medium torque: drilling frames or damaged bolts.

Reversible pneumatic drill 10 mm - 3/8"











































# Reversible angled pneumatic drill 10 mm - 3/8"

90 (K=3)

0.4 (K=0.24)

500

1800

- For drilling in confined spaces.
- $\bullet$  90° angle transmission for improved access.
- Reversible.

V.D100QR

- · Lightweight.
- · Key chuck.

<b>=</b> 0	. Н	. L		Sound Pressure	Vibration		Maximum	$\Delta I \Delta$
	[mm]	[mm]	[mm]	DB[A]	[M/S2]	[watts]	RPM [mn]	[kg]
V.DA100KR	119	200	44	84 (K=3)	0.5 (K=0.3)	350	1200	1,08

Reversible pneumatic drill 13 mm - 1/2"

• For heavy work or work requiring high torque: drilling studs, exhaust bolts, etc.































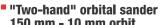


· Structure: composite. • Reversible. · Soft control trigger.

型	H [mm]	L [mm]	L1 [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Power [watts]	Maximum RPM [mn]	∆ī∆ [kg]
V.D130KR	151	195	42	87 (K=3)	4.5 (K=0.94)	360	400	1,3



#### **ORBITAL SANDERS**





- allow easy removal of dust if connected to a central vacuum system.
- Easy to access speed regulator.
- · Composite body is lightweight and insulates against cold.
- 10 mm orbit great for aggressive sanding applications.
- . Supplied with 6 hole velcro pad.

=	<b>≡</b> 0	d [mm]	H [mm]	L [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Air Consumption [I/min]	Pad Dimensions [mm]	Maximum RPM [mn]	∆7∆ [kg]
١	/.258F	150	215	272	92.7 (K=3)	14.9 (K=2.12)	115	150	9000	2,3

# "Two-hand" orbital sander 150 mm - 5 mm orbit





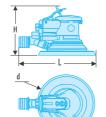
- Two hand design great for work on large and / or vertical surfaces.
- 29 mm central vacuum exhaust port to allow easy removal of dust.
- · Easy to access speed regulator.
- Composite body is lightweight and insulates against cold.
- 5 mm orbit great for general sanding applications.
- · Supplied with 6 hole velcro pad.

<b>=</b> 0	d [mm]	H [mm]	L [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Air Consumption [I/min]	Pad Dimensions [mm]	Maximum RPM [mn]	∆∏∆ [kg]
V.254F	150	110	275	91.5 (K=3)	9.1 (K=1.39)	115	150	9000	2,3

#### Orbital palm sander 150 m - 5 mm orbit







- · Central vacuum exhaust port to allow easy removal of dust if connected to a central vacuum system.
- Easy to access speed regulator just below the trigger.
- Ergonomic trigger for perfect control.
- · Productivity increased with low vibration level.
- · Composite body is lightweight and insulates against cold.

<b>3</b>	L [mm]	d [mm]	H [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Air Consumption [I/min]	Pad Dimensions [mm]	Maximum RPM [mn]	∆\\\ [kg]
V.252F	225	152	115	79.9 (K=3)	11.86 (K=1.67)	212	150	10000	0,84

### 🔍 - Orbital palm sander 152 m - 2.5 mm orbit





- · Central vacuum exhaust port to allow easy removal of dust.
- Easy to access speed regulator just below the trigger.
- Ergonomic trigger for perfect control.
- Productivity increased with low vibration level.
- · Composite body is lightweight and insulates against cold.
- 2.5 mm orbit great for fine sanding applications.
- Supplied with a 6-hole Velcro pad.

<b>=</b> 0	d [mm]	H [mm]	L [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Air Consumption [I/min]	Pad Dimensions [mm]	Maximum RPM [mn]	∆ [kg]
V.256F	152	152	221	84 (K=3)	8.9 (K=2.13)	105	152	10000	0,84

#### Jitterbug sander - 95 x 170 mm - 8 holes



- One hand forward reverse "butterfly" trigger
- Two hand design great for work on large and / or vertical surfaces.
- 29 mm central vacuum exhaust port to allow easy removal of dust.
- · Easy to access speed regulator.
- · Composite body is lightweight and insulates against cold.
- Easy to use clips for abrasive attachment.
- Supplied with 8 hole 95 x 170 mm velcro pad.
- Supplied with pad and 8-hole abrasive perforator.

<b>3</b> 0		H [mm]	L [mm]	L1 [mm]	L2 [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Air Consumption [I/min]	Pad Dimensions [mm]	Maximum RPM [mn]	∆∏∆ [kg]
V.2	60F	120	288	170	95	95.2 (K=3)	53.8 (K=5.82)	115	95x170	8500	2,1







#### **ROTARY SANDERS**

# ■ Pistol-grip 127 mm rotary disc sander

- Ideal compact tool for small jobs and difficult access areas.
- Swivel air inlet to allow freedom of movement.







































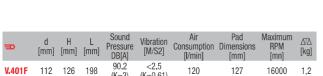


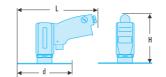






- Built in air regulator gives control to the operator.
- Feather teasing trigger for great control.

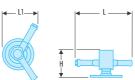




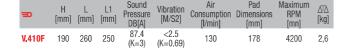
# Vertical rotary disc sander diam. 178 mm

- Muffled handle exhaust to vent air away from work surface.
- Speed control screw for use in different applications.
- Rubber grip and dead handle to maximize operator comfort.
- Feather teasing trigger for optimum control.
- Swivel air inlet to allow freedom of movement.
- Delivered with a 178 mm backing pad for efficient sanding on large surfaces.







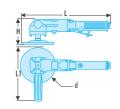


## <sup>∖</sup>■ Angle sander diameter 178 mm

- Feather teasing trigger for optimum control.
- · Speed control screw for use in different applications.
- Second handle for better grip.
- · Hardened and ground spiral bevel gears for best durability.
- Delivered with a 178 mm backing pad for efficient sanding on large surfaces.



<b>=</b> 0	d [mm]	H [mm]	L [mm]	L1 [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Air Consumption [I/min]	Pad Dimensions [mm]	Maximum RPM [mn]	∆\\\ [kg]
V.411F	178	101	373	229	95 (K=3)	9.2 (K=1.78)	110	178	4500	2,6



#### **SANDERS**





# Multi-function brush



- Quiet air exhaust and rubber insulated housing for improved
- Additional side handle provides optimum control.
- Ergonomically developed safety teasing trigger for greater control.
- Delivered with two easy-to-mount adapters for safe attachment of brushes
- Versatile tool: combines the action of sand blasters, sticker removers, sanders, aggressive brush removing.



<b>=</b> 0	H [mm]	L [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Air Consumption [I/min]	Maximum RPM [mn]	∆ī∆ [kg]
V.500F	203	297	81 (K=3)	2.82 (k=0.77)	113	3500	1.2



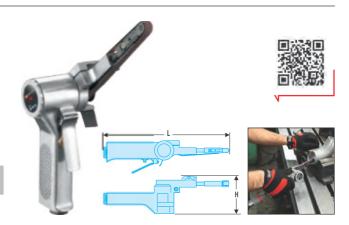


#### **BELT SANDERS**

#### Belt sander - 10 x 330 mm

- Handle rotates enabling the operator to always have the best grip.
- Easy and fast changing of belts with the quick change arm.
- Feather teasing trigger for great control.
- Starter pack with tool delivered with 3 abrasives: 2 x P120 and 1 x P80.
- Long and Narrow 10 mm arm to get in the most confined spaces.

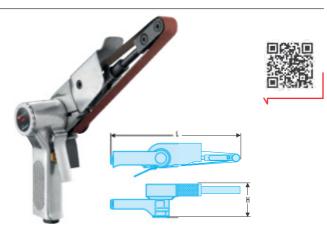
<b>3</b> 0	H [mm]	L [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Air Consumption [I/min]	Maximum RPM [mn]	∆∏∆ [kg]
V.402F	83	283	86.1 (K=3)	<2.5 (K=0.63)	110	16000	0,8



### High capacity belt sander - 20 x 520 mm

- Handle rotates enabling the operator to always have the best grip.
- Easy and fast changing of belts with the quick change arm.
- Feather teasing trigger for great control.
- Starter pack with tool delivered with 3 abrasives: 2 x P120 and 1 x P80.
- Long and Narrow 20 mm arm to get in the most confined spaces.

<del>3</del> 0	H [mm]	L [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Air Consumption [I/min]	Maximum RPM [mn]	∆7∆ [kg]
V.403F	93	350	86.2 (K=3)	<2.5 (K=0.57)	113	16000	1,2



#### **DIE GRINDERS**

#### Straight die grinder 0.5 CV with 6mm retainer

- Durable and powerful 0.5 CV motor for high productivity.
- Tough "Soft grip" over molded rubber handles insulating against cold and vibrations.
- Air blown away to avoid projections on the operator.
- Built-in silencer and air exhaust pipe connection to lower noise.
- Excellent control with progressive trigger to control speed.

<b>⇒</b>	H [mm]	L [mm]	L1 [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Air Consumption [I/min]	Maximum RPM [mn]	∆\\\ [kg]
V.DG500F	77	177	48	85.4 (K=3)	1.86 (K=0.76)	113	25000	0.675

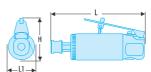


#### $^{ackslash}$ Straight die grinder 0.3 CV with extension and 6mm retainer

- Shaft extension for access in confined spaces.
- Durable and powerful 0.3 CV motor for high productivity.
- Tough "Soft grip" over molded rubber handles insulating against cold and vibrations.
- $\bullet$  Air blown away to avoid projections on the operator.
- Built-in silencer and air exhaust pipe connection to lower noise.
- Excellent control with progressive trigger to control speed.

<b>₹</b>	H [mm]	L [mm]		Sound Pressure DB[A]	Vibration [M/S2]	Air Consumption [[/min]	Maximum RPM [mn]	∆7∆ [kg]
V.DGE300F	70	255	39	83.3	2.86	76	28000	0.664

















































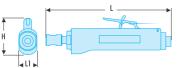




#### **DIE GRINDERS**

#### Taight die grinder - 6 mm collet front exhaust







- High power motor at 1HP gives you the best productivity.
- · Composite handle reduces weight and insulates.
- Front exhaust design blows the air on the workplace to clean it up.
- Industrial grade 6 mm collet for durability.
- · Feather teasing trigger for optimum control.

<b>=</b> 0	H [mm]	L [mm]	L1 [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Air Consumption [I/min]	Maximum RPM [mn]	∆∏∆ [kg]
V.445F	80	207	43	89 (K=3)	0.99 (K=0.59)	180	20000	0.96

#### $^{lacktree}$ Straight die grinder 0.5 CV with extension and 6mm retainer



- · Shaft extension for access in confined spaces.
- Tough "Soft grip" over molded rubber handles insulating against cold and vibrations.
- Air blown away to avoid projections on the operator.
- Built-in silencer and air exhaust pipe connection to lower noise.
- Excellent control with progressive trigger to control speed.

<b>=</b> 0	H [mm]	H1 [mm]	L [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Air Consumption [I/min]	Maximum RPM [mn]	∆\\ [kg]
V.DG515F	48	77	267	86.1 (K=3)	2.21 (K=0.71)	113	23000	1

#### $^{ackslash}$ Straight die grinder 0.3 CV with 6mm retainer



- Tough "Soft grip" over molded rubber handles insulating against cold and vibrations.
- Easy speed control to limit speed.
- Air blown away to avoid projections on the operator.
- Built-in silencer and air exhaust pipe connection to lower noise.
- Excellent control with progressive trigger to control speed.

<b>=</b>	H [mm]	L [mm]	L1 [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Air Consumption [I/min]	Maximum RPM [mn]	∆∏∆ [kg]
V.DG300F	70	160	39	84.8 (K=3)	2.42 (K=0.74)	76	30000	440

#### Straight die grinder - 6 mm collet



- Built in air regulator which can be adjusted with a screwdriver.
- Feather teasing trigger for optimum control.
- · Compact and lightweight tool designed for easy manoeuvrability.

<b>₹</b>	H [mm]	L [mm]	L1 [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Air Consumption [I/min]	Maximum RPM [mn]	∆∏∆ [kg]
V.345F	62	142	40	90.9 (K=3)	1.52 (K=0.76)	113	20000	0.56













# 90° angle die grinder 0.5 CV with 6mm retainer

- 90° angle transmission to work on vertical surfaces.
- Tough "Soft grip" over molded rubber handles insulating against cold and vibrations.
- Air blown away to avoid projections on the operator.
- Built-in silencer and air exhaust pipe connection to lower noise.
- Excellent control with progressive trigger to control speed.











































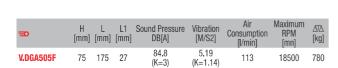


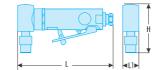












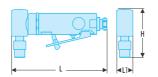
# $^ extstyle ex$

- 90° angle transmission to work on vertical surfaces.
- Tough "Soft grip" over molded rubber handles insulating against cold and vibrations.
- · Air blown away to avoid projections on the operator.
- Built-in silencer and air exhaust pipe connection to lower noise.
- Excellent control with progressive trigger to control speed.









#### $^{lacktrel{lacktree}}$ 120° angle die grinder 0.3 CV with 6mm retainer

- 120° angle transmission improving work ergonomics in certain applications.
- Tough "Soft grip" over molded rubber handles insulating against cold and vibrations.
- Air blown away to avoid projections on the operator.

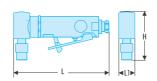
165

V.DGA305F

- Built-in silencer and air exhaust pipe connection to lower noise.
- Excellent control with progressive trigger to control speed.



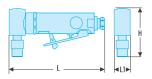
<b>=</b>	H [mm]	L [mm]	L1 [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Air Consumption [I/min]	Maximum RPM [mn]	∆∏∆ [kg]
V.DGA310F	68	189	27	84.8 (K=3)	5.22 (K=1.07)	76	24000	0.56



#### **DIE GRINDERS**

# Angle die grinder - 6 mm collet







- Built in air regulator which can be adjusted with a screwdriver.
- Compact angled head for difficult-to-reach places.
- Feather teasing trigger for optimum control.
- Rear exhaust hose blows air away from the workplace, and reduces the sound level.
- Supplied with 6 mm pliers + 2 open end wrenches.

<b>⊒</b> 0	H [mm]	L [mm]	L1 [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Air Consumption [l/min]	Maximum RPM [mn]	∆\\\ [kg]
V.347F	347	160	27	90.9 (K=3)	1.52 (K=0.53)	110	18000	0,66

d1 [mm]

32 45

30

# VM - Grinder on stand 6mm



• Definition and shapes as per ISO 293333.

28

20



Maximum RPM [mn]

17000 18000

30000

25000 54000

30000

#### **ANGLE GRINDERS**

# Angle grinderdiam. 125 mm composite



- Powerful and durable motor delivering 1 horse power.
- Protective guard protects the operator from injuries.
- Ergonomic side handle for ease of use and comfort.
- · Lightweight and insulates.

VM.600 VM.604

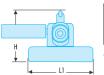
VM.606

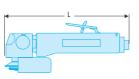
VM.610

VM.624

- Hardened spiral bevel gears for industrial durability.
- M14x2 spindle accepts 125 mm discs.
- Rear exhaust blows air away from the workplace.









<b>=</b> 0	H [mm]	L [mm]	L1 [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Air Consumption [I/min]	Maximum RPM [mn]	∆7∆ [kg]
V.582F	110	230	130	90 (K-3)	11.8 (K-3.9)	113	11000	2



# Angle grinder diam. 125 mm

- Protective guard protects the operator from injuries.
- Ergonomic side handle for ease of use and comfort.
- Robust yet lightweight housing for great durability.
- · Hardened spiral bevel gears for best durability.
- 3/8" spindle accepts 125 mm discs.

<b>=</b> 0	d [mm]	d1 [mm]	H [mm]		Sound Pressure DB[A]	Vibration [M/S2]	Air Consumption [I/min]	Maximum RPM [mn]	∆7∆ [kg]
V.472F	138	125	85	220	87 (K=3)	7.9 (K=1.16)	120	12000	2









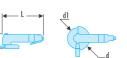


# Angle grinder diam. 100 mm

- Powerful and durable motor delivering 12000 RPM.
- Protective guard protects the operator from injuries.
- Ergonomic side handle for ease of use and comfort.
- Robust yet lightweight housing for great durability.
- · Hardened spiral bevel gears for best durability.
- 3/8" spindle accepts 100 mm discs.

<b>3</b> 0	d [mm]	d1 [mm]	H [mm]		Sound Pressure DB[A]	Vibration [M/S2]	Air Consumption [I/min]	Maximum RPM [mn]	∆1Z\ [kg]
V.462F	120	100	85	220	84 (K=3)	6.4 (K=2.11)	120	12000	1.7









# Angled pneumatic grinder 50 mm - 2"



- For light grinding: removing rust, welding preparation, body work.
- · Comfortable grip.
- · Safety lever.
- · Side exhaust.
- Trimming grinder diam. 50 mm.

<b>3</b>	H [mm]	L [mm]	L1 [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Air Consumption [I/min]	Maximum RPM [mn]	∆7∆ [kg]
V.AG50F	85	138	59	81 (K=3)	1.7 (K=1.02)	113	20000	0.55





- For light cutting applications in difficult areas.
- . Compact size for improved accessibility.
- · Low noise technology.
- · Vibration absorbing grip.
- · Secured guard.
- Rotating side exhaust.
- · Safety lever.
- Trimming grinder diam. 50 mm.

<b>3</b> 0	H [mm]	L [mm]	L1 [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Air Consumption [I/min]	Maximum RPM [mn]	∆∏∆ [kg]
V.CA50F	85	138	59	81 (K=3)	1.7 (K=1.02)	113	20000	0.54













FLUO











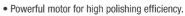




#### **ANGLE POLISHER**

#### 📜 Angle polisher diam. 178 mm





- Built in air regulator for the operator to adapt speed to the application.
- . Muffled rear exhaust blows air away from the application.
- Lightweight yet rugged housing for durability.
- Supplied with 1 velcro plate, 1 foam buffing plate, 1 wool buffing plate.



<b>3</b> 0	d [mm]	H [mm]	L [mm]	L1 [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Air Consumption [I/min]	Maximum RPM [mn]	∆∏∆ [kg]
V.902F	178	229	373	101	95.3	9 (V 2.91)	100	2500	2.3

#### **CHISEL HAMMER**

#### Air hammer with quick change holder - short barrel



- Short barrel is ideal for cutting panels, paint removal and spot weld removal.
- · Quick change holder makes changing accessories easy.
- Urethane dampers front and rear keep vibration low for comfort of use.
- Variable speed trigger for superior application control.
- · Center of gravity on trigger and handle for comfort of use.
- Kit includes 5 chisels.

<b>=</b>	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration [M/S2]	Air Consumption [I/min]	∆\\\ [kg]
V.331AH	196,6	237,7	61,7	3100	95 (K=3)	7.4 (K=1.5)	90,6	2,4

# Air hammer with quick change holder - long barrel



- Long barrel is ideal for seperating ball joints, bushing removal and shearing rivets.
- · Quick change holder makes changing accessories easy.
- Urethane dampers front and rear keep vibration low for comfort of use.
- Variable speed trigger for superior application control.
- Center of gravity on trigger and handle for comfort of use.
- Kit includes 5 chisels.

₹	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration [M/S2]	Air Consumption [I/min]	∆ī∆ [kg]
V.336AH	196,6	285,2	61,7	2400	93 (K=3)	10.4 (K=1.5)	73,6	2,8







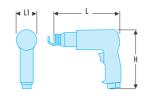
# Power chisel with hexagonal shank

- · Chisels available:
  - Straight chisel: V.320HA1.
- Punch (hexagonal shank): V.320HA2. Weld point cutter (hexagonal shank): V.320HA3.
- Sheet metal cutter (hexagonal shank): V.320HA4.
- Double-edge sheet-metal cutter (hexagonal shank): V.320HA5.
- Kit with the 5 chisels: V.321AH.



<b>=</b> 0	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration [M/S2]	Air Consumption [I/min]	∆1Z\ [kg]
V.320FH	160	171	50	3000	102.62 (K=3)	8.01 (K=1.5)	90	1,6





# Chisel hammer set

- Kit includes
  - V.320FH: 1 power chisel.
  - 1 sheet-metal cutter.
  - 1 double edge sheet-metal cutter.
  - 1 weld point cutter.
  - 1 straight chisel.
  - 1 punch.



<b>3</b> 0	H [mm]	L [mm]	BPM	Sound Pressure DB[A]	Vibration [M/S2]	Air Consumption [I/min]	P [mm]	∆7∆ [kg]
V.321AH	100	320	3000	102.62 (K=3)	8.01 (K=1.5)	90	245	6,3















































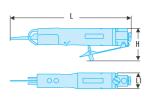




#### **SAWS**

#### Sabre saw







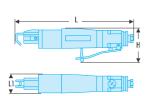
- 10000 oscillations per minute for efficient cutting.
- Adjustable guide for the saw blade.
- · Comfort rubber grip over aluminium to insulate.
- Teasing trigger for great control.
- . Air inlet swivels to avoid coiling of the
- Delivered in a starter package with 3 x10 teeth/cm and 3 x 12 teeth/cm blades.
- Blows per minute 10000 bpm.
- Working pressure 6,2 bar.
- Average air consumption 32 I/min.

- Air inlet 1/4".
- . Minimum hose diameter 10 mm - 3/8".
- Vibration 17,10 m/s<sup>2</sup>/a.
- Vibration 2,19 m/s<sup>2</sup>/K.
- Sound pressure 83,50 dB(A).
- Sound power 94,50 dB(A).
- Available as accessories:
  - Set of 6 x 12 teeth/cm blades: V.770F1.
- Set of 6 x 10 teeth/cm blades: V.770F2.



#### $^{ee}$ Production sabre saw







- Power and speed enables operator to cut through material with ease.
- · Rubber comfort grip over aluminium insulates against coldness.
- . Heavy duty construction makes it the ideal tool for intensive use.
- · Teasing trigger for best control.
- Exhaust hose muffles the sound and drives air away from the workplace and the operator.
- Delivered in a starter package with 3 x10 teeth/cm and 3 x 12 teeth/cm blades.
- . Blows per minute 5000 bpm.

- Working pressure 6,2 bar.
- Average air consumption 32 I/min.
- Air inlet 1/4".
- · Minimum hose diameter 10 mm - 3/8".
- Vibration 5,70 m/s²/a.
- Vibration 1,22 m/s²/K.
- Sound pressure 81,80 dB(A).
- Sound power 92,80 dB(A).
- Available as accessories:
- Set of 6 blades 12 teeth/cm: V.770F1.
- Set of 6 blades 10 teeth/cm: V.770F2.

<del>=</del> 0	H [mm]	L [mm]	L1 [mm]	∆∏∆ [g]
V.775F	70	880	40	960

#### **OTHER TOOLS AND ACCESSORIES**

#### <sup>∖</sup>■ Air nibbler



- · Lever throttle for precise control and low-speed start.
- Easy access to replace the punch: V.850FKR2.
- · Can produce rounded edges up to 6.5 mm radius.
- Can cut 1.8M of sheet metal per minute at a max depth of 1.2 mm.
- Durable motor design encased in a strong and robust aluminium
- Blows per minute 4300 cpm.
- · Working pressure 6,2 bar.

- · Average air consumption 280 J/min.
- · Average air consumption 9,6 cfm.
- Air inlet 1/4".
- · Minimum hose diameter 10 mm - 3/8".
- Vibration 6 m/s²/a.
- Vibration 1,09 m/s<sup>2</sup>/K.
- Sound pressure 95,90 dB(A).
- Sound power 106,90 dB(A).
- · Available as accessory:
- Punch set: V.850FKR2,

<b>型</b>	H [mm]	L [mm]	L1 [mm]	∆7∆ [kg]
V.850F	118	179	40,5	1.0



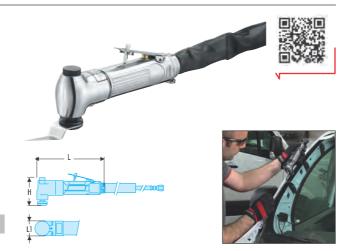


# Windshield cutter

- 20,000 oscillations per min reduces time to replace a windshield.
- Exhaust hose muffles the sound and drives air away from the workplace and the operator.
- Safety trigger protects the user from switching on the tool accidentally.
- . Durable aluminium housing.
- Oscillations per minute : 22000.
- Working pressure 6,2 bar.

- · Average air consumption 100 l/min.
- Average air consumption 3,4 cfm.
- Air inlet 1/4".
- · Minimum hose diameter 10 mm - 3/8".
- Vibration 7,30 m/s²/a.
- Vibration 1,22 m/s<sup>2</sup>/K.
- Sound pressure 82 dB(A).
- Sound power 93 dB(A).
- · Supplied with instructions, without blade.

<b>型</b>	H [mm]	L [mm]	L1 [mm]	∆7∆ [kg]
CAD,P300F	85	209	45	1.2





















































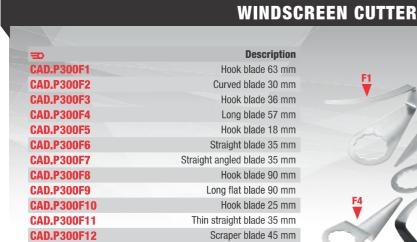




# ■ Windshield cutter blades CAD.P300F

<b>=</b> 0	L [mm]	No.
CAD.P300F1	63	F1
CAD.P300F2	30	72
CAD.P300F3	36	F3
CAD.P300F4	57	F4
CAD.P300F5	18	F5
CAD.P300F6	35	F6
CAD.P300F7	35	F7
CAD.P300F8	90	F8
CAD.P300F9	90	F9
CAD,P300F10	25	F10
CAD.P300F11	35	F11
CAD.P300F12	45	F12





Characteristics	CAD.P300F
Oscillations per minute	22000
Weight (kg)	1,21
Length (mm)	209
Air consumption (I/min)	100
Air inlet thread (")	1/4
Hose inner Ø (mm)	10
Working pressure (bar)	6,2

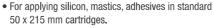




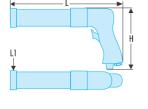
#### **OTHER TOOLS AND ACCESSORIES**

# Caulking gun - 50 x 215 mm cartridge





- Easy to use regulator to adjust the actual flow coming out.
- Automatic pressure release halting flow of mastic: When trigger is depressed flow is immediately stopped.
- 70 dB(A) sound level increases operator comfort.
- · Robust aluminium housing for high durability.
- Working pressure 6,2 bar.
- Average air consumption 85 I/min.
- Average air consumption 2,9 I/min.
- Air inlet 1/4".
- Minimum hose diameter 10 mm 3/8".
- Vibration <2,50 m/s<sup>2</sup>/a.
- Vibration 0,51 m/s2/K.
- Sound pressure 97,60 dB(A).
- Sound power 108,60 dB(A).



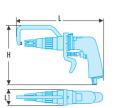
<b>=</b> 0	H [mm]	L [mm]	L1 [mm]	∆ [kg]
V.801F	168	305	62	1.1

#### $^{ackslash}$ Spot weld drill remover





- Fast drilling action at 1800 RPM to get points drilled out quickly. • Fitted with a counterarm to hold the workpiece in position.
- Depth of drilling can be easily adjusted by the operator to suit his application.
- Feather teasing trigger for optimal speed control.
- Durable and robust thanks to an aluminium casted housing.
- Delivered with one 8 mm drill point which can be ordered as an accessory.
- Milling bit diameter 8 mm.
- Available as accessory:
- Milling bit diameter 8 mm: V.781A1 (minimum order quantity: 5).
- Free speed 1800 tr/min.
- Milling bit size 8 mm.
- Working pressure 6,2 bar.
- Average air consumption 110 l/min.
- Average air consumption 3,9 cfm.
- Air inlet 1/4".
- Minimum hose diameter 10 mm 3/8".
- Vibration <250 m/s²/a.
- Vibration 0,54 m/s<sup>2</sup>/K.
- Sound pressure 90,70 dB(A).
- Sound power 101,70 dB(A).





<b>⇒</b>	H [mm]	L [mm]	L1 [mm]	Δ1∆ [kg]
V.781F	198	270	53	2.1







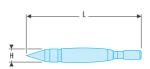
#### Scriber

- · Pen shaped engraver makes the tool easy to handle,
- . Tungsten point allows fast engraving on the hardest of materials: steel, stone, glass, ceramics at 600 impacts per second.
- · Ring shaped regulator allows the operator to set the speed to suit his applications.
- Less than 80 dB(A) of sound increases operator comfort.
- · Robust aluminium casted housing for high durability.
- Blows per minute 600 cpm.
- Working pressure 6,2 bar.

- · Average air consumption 30 I/min.
- Average air consumption 1,1 l/min.
- Air inlet 1/4".
- · Minimum hose diameter 10 mm - 3/8".
- Vibration 3,80 m/s<sup>2</sup>/a.
- Vibration 0,88 m/s<sup>2</sup>/K.
- Sound pressure 69,60 dB(A).
- Sound power 80,60 dB(A).
- · Delivered with:
  - Supply hose 1.5 m.
  - A standard tip.
- · Available as accessories:
- Standard tip: V.820A1
- Fine tip: V.820A2.

<b>=</b>	H [mm]	L [mm]	∆™∆ [g]
V.820F	17	160	220

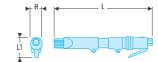




#### <sup>∖</sup>■ Pneumatic needle scaler

- Straight and compact design allows easy operation even in hard to reach areas.
- High performance motor delivers 4200 blows per minute for efficient working.
- Tool used for aggressive material removal for example to remove rust,
- . Needle action great to work on irregular surfaces providing access to cracks or slots.
- 3 mm needles available as accessory for rougher removal when needed.
- · Delivered with 27 needles diameter 2 mm with matching needle plate.
- Blows per minute 4200 cpm.
- Working pressure 6,2 bar.
- Average air consumption 24 I/min.

- Average air consumption 0,9 cfm.
- Air inlet 1/4".
- · Minimum hose diameter 10 mm - 3/8".
- Vibration 11,7 m/s<sup>2</sup>/a.
- Vibration 1,66 m/s²/K.
- Sound pressure 94 dB(A).
- Sound power 105 dB(A).
- · Available as accessories: (if changing needles, do not forget to order the needle plate accordingly)
- Set of 27 needles diameter 2 mm: V.352FA1.
- Needle plate for 2 mm needles: V.352FSAV16A.
- Set of 12 needles diameter 3 mm: V.352FA1D3.
- Needle plate for 3 mm needles: V.352FSAV16B.



#### H [mm] L1 [mm] ∆7∆ [kg] V.352F 360 75 1.7

# Pneumatic crimper and punch

- To prepare panels for overlap welding in bodywork or mechanical welding.
- Double function tool: crimping and punching.
- · Conforms with bodywork specifications.
- · Rotating head.
- Punch diameter: 8 mm.
- Punch capacity: 1 kW.
- Noise level: 81 dB(A).
- Vibration 2.1 m/s²/a.
- Vibration 0.7 m/s²/K.
- Min hose diameter. 10 mm 3/8".
- 1/4" NPT tool connection.
- Average air consumption 113 l/min.
- Planishing capacity 1.2 mm.
- Operating pressure 6.2 bar.

<b>型</b>	H [mm]	L [mm]	L1 [mm]	∆™∆ [kg]
V.PF300F	150	165	55	1.1

























































#### **OTHER TOOLS AND ACCESSORIES**



- Model with air screen to prevent dust return to the operator.
- Supplied with angled nozzle V.999A10.
- Power supply: threading 1/4".
- Hose diameter: 8 mm.
- Consumption: 0.53 m³/min.
- Jet pressure: 2 bar.
- Angled nozzle 100 mm: V.999A10.
- Angled nozzle 200 mm: V.999A20.
- Straight nozzle 300 mm: V.999A30.

<b>3</b> 0	H [mm]	L [mm]	L1 [mm]	∆\\(\D\) [g]
V.999A	27	150	42	170





- Withstands up to 15 bar.
- · Suited to high air consumption tools.
- Internal diameter 10 mm.
- · Metallic return spring.
- Polyurethane hose.
- 3/8" NPT outlet.

<b>=</b> 0	Δ <sup>7</sup> Δ [kg]
N 709	7.8

#### **NETWORK CONNECTION**

# Filter-regulator-lubricator BSP Gas



- · 2-piece set.
- · Lubricator regulator filter with wall fastener and pressure gauge.

<b>=</b> 0	A ["]	d [mm]	H [mm]	L [mm]	P [mm]	∆T∆ [g]
N.580	1/4	40	172	92	86	485
N.581	3/8	40	218	123	102	880
N.582	1/2	40	275	156	118	1830

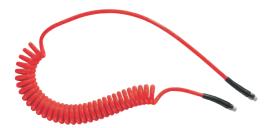
# Set of 4 hose connections



- To connect elements with different pitches.
- Comprising:
  - 1 part threading 1/4" x 3/8".
- 1 part threading 3/8" x 3/8".
- 1 part threading 3/8" x 1/2".
- 1 part threading 1/2" x 1/2".

<b>3</b> 0	∆T∆ [g]	
N.600	130	

#### Polyurethane spiral extension



- Max length: 8 m.
- Hose diameter: 8 x 12 mm.
- Rotary fitting tool side: 3/8" gas.
- Fixed fitting supply side: 3/8" gas.
- Female adapter bit 6 mm tapered 3/8" gas.

<b>=</b> 0	Δ <sup>7</sup> Δ [g]
N.644	980







#### $^{ackslash}$ Pre-tefloned tapered male threaded bit BSP Gas

- Pre-tefloned tapered male threaded bit BSP Gas
- 1/4", 3/8", 1/2"

<b>=</b> 0	L [mm]	∆™ [g]
N.633	39.5	19
N.650	44.5	37
N.651	55	69







#### $^{ee}$ Fitting for hose

- · Fitting for hose.
- 8, 10mm

<b>=</b> 0	A ["]	d [mm]	d maxi [mm]	L [mm]	∆7∆ [g]
N.631	1/4	6	8	50	19
N.632	3/8	6	10	50	19





#### <sup>∖</sup>■ Female tapped snap adapter gas BSP.

PVC hose diameter 8 x 14 mm + bits

- Female tapped snap adapter gas BSP.
- 1/2", 3/8"

<b>=</b> 0	A ["]	d [mm]	d maxi [mm]	L [mm]	∆T∆ [g]
N.630	1/4	6	30	71	37
N.820	3/8	8	35	85	69

















- Length 12.5 m.
- · Colour: red.
- · Fitted with:
  - 1 male bit passage diameter 6 mm for 8 mm diameter hose.
  - 1 3/8" threaded union for 8 mm diameter hose.
  - 2 ear ties diameter 13-15 mm.

<b>=</b> 0	Δ <sup>7</sup> Δ [g]
N.641	1.285









- · Colour: red.
- Fitted with:
- 1 male bit passage diameter 8 mm for 10 mm diameter hose.
- 1 1/2" threaded union for 10 mm diameter hose.
- 2 ear ties diameter 15-18 mm.

<b>=</b> 0	Δ <sup>1</sup> Δ [g]
N.841	1.571

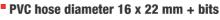






- · Colour: red.
- · Fitted with:
  - 1 male bit passage diameter 6 mm for 10 mm diameter hose.
  - 1 3/8" threaded union for 10 mm diameter hose.
  - 2 ear ties diameter 15-18 mm.

<b>⇒</b>	∆T∆ [g]
N.643	1.513





- Length 12.5 m.
- · Colour: red. • Fitted with:
- 1 male bit passage diameter 8 mm for 16 mm diameter hose.
- 1 1/2" threaded union for 16 mm diameter hose.
- 2 ear ties diameter 22-25 mm.

<b>=</b> 0	Δ7Δ [g]
N_842	2 788



















#### **POWER TOOLS - CORDLESS**

#### **CORDLESS New powerful** New 1/2" high power **New high batteries** impact wrench strenght boxes • High power: 1625 Nm. · Visible charging level. · Ultra-strong material. • 1 single charger for 3 types of batteries. Brushless motor. • IM65 sealing. DEWALT technology. · 4 retracting handles. • 3 speeds. • Long life: 10.8 V - 2 AH / 18 V - 2 for 5 AH. • Casing and battery resistant to hydrocarbons · Paglock locking. and workshop solvants. · Metal closings.

# 18V 1/2" High Torque Impact Wrench (Naked)



- Delivers a torque of 1625 N.m for heavy duty applications.
- Brushless motor offering superb runtime and durability.
- · 3 speed settings and variable trigger offer greater control.
- Super-bright LED illuminates workspace.
- · GRP casing resistant to harsh chemicals.

<b>5</b>	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration [M/S2]	Torque N.m	Maximum RPM [mn]	∆ī∆ [kg]
.3.CH18SD	229	224	85	2400	101 (K=3)	13 (K=5.9)	1625	1900	2,5

# 18V 1/2" High Torque Impact Wrench 5.0Ah Kit



- Delivers a torque of 1625 N.m for heavy duty applications.
- Brushless motor offering superb runtime and durability.
- 3 speed settings and variable trigger offer greater control.
- Super-bright LED illuminates workspace.
- GRP casing resistant to harsh chemicals.
- Includes 2x 5.0Ah batteries, a charger and ToughSystem® kitbox.

<b>⇒</b>	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration [M/S2]	Torque N.m	Maximum RPM [mn]	∆∏∆ [kg]
CL3.CH18SP2	280	224	85	2400	101 (K=3)	13 (K=5.9)	1625	1900	8.7







#### **BRUSHLESS IMPACT WRENCHES**

# 18V 1/2" Mid Torque Impact Wrench (Naked)

- Powerful impact wrench that delivers 750 N.m torque.
- Brushless motor enables high power in a small form factor.
- Variable trigger for improved speed control.
- . Composite casing for resistance to chemicals and acids.

<b>=</b> D	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration [M/S2]	Torque N.m	Maximum RPM [mn]	∆7∆ [kg]
FCF894N	212	175	71	3100	94 (K=3)	13.5 (K=4.4)	750	2000	2



# 18V 1/2" Mid Torque Impact Wrench 5.0Ah Kit

- Powerful impact wrench that delivers 750 N.m torque
- Brushless motor enables high power in a small form factor
- · Variable trigger for improved speed control
- Composite casing for resistance to chemicals and acids
- Includes 2x 5.0Ah batteries, a charger and ToughSystem® kitbox.

<b>=</b> 0	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration [M/S2]	Torque N.m	Maximum RPM [mn]	∆7∆ [kg]
FCF894P2	265	175	71	3100	94 K=3)	13.5 (K=4.4)	750	2000	8.2

# 10.8V 1/2" Compact Impact Wrench (Naked)

- Compact impact wrench delivers a torque of 270 N.m.
- Short body makes this tool easy to use in tight spaces.
- Variable speed trigger for excellent speed control.
- Compatible with any FACOM or DEWALT® 10.8V battery packs.

<b>=</b>	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration [M/S2]	Torque N.m	Maximum RPM [mn]	∆\\\ [kg]
CL3.C10SD	181	171	70	1900	(K-3)	11.1 (K=3)	270	1700	1,3



### 10.8V 1/2" Compact Impact Wrench 2.0Ah Kit

- Compact impact wrench delivers a torque of 270 N.m.
- Short body makes this tool easy to use in tight spaces.
- Variable speed trigger for excellent speed control.
- Supplied with 2x 2.0Ah batteries and a charger in a ProBag.

<b>3</b> 0	H [mm]	L [mm]	L1 [mm]	BPM	Sound Pressure DB[A]	Vibration [M/S2]	Torque N.m	Maximum RPM [mn]	∆7∆ [kg]	
CL3.C10SD2	181	171	70	1900	88 (K=3)	11.1 (K=3)	270	1700	1,3	













































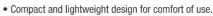




#### **CORDLESS DRILL DRIVERS**

#### $^{\lor}$ 10.8V 10mm Drill/Driver (Naked)





- 15 torque settings for consistent screw driving into a variety of materials with different screw sizes.
- Two speed settings and variable trigger for excellent speed control.
- Protection bumpers built into the machine casing.
- Compatible with any FACOM or DEWALT® 10.8V battery packs.

<b>=</b> 0	H	L	L1	Sound Pressure	Vibration	Torque	Maximum	∆ī∆
	[mm]	[mm]	[mm]	DB[A]	[M/S2]	N.m	RPM [mn]	[kg]
CL3.P10JD	175	195	50	65 (K=3)	<2.5 (K=1.5)	24	1500	0.9

#### 10.8V 10mm Drill/Driver 2.0Ah Kit





- 15 torque settings for consistent screw driving into a variety of materials with different screw sizes.
- Two speed settings and variable trigger for excellent speed control.
- Protection bumpers built into the machine casing.
- Supplied in a PROBAG with 2x2.0Ah batteries and a charger.

<b>=</b> 0	H	L	L1	Sound Pressure	Vibration	Torque	Maximum	∆\\\
	[mm]	[mm]	[mm]	DB[A]	[M/S2]	N.m	RPM [mn]	[kg]
CL3,P10JD2	200	195	50	65 (K=3)	<2.5 (K=1.5)	24	1500	3.3

#### $^{ackslash}$ 18V 13mm Drill/Driver (Naked)





- Sufficient power for heavier tasks in a compact package.
- 14 torque settings for consistent screw driving into a variety of materials with different screw sizes.
- Two speed all metal gearbox and variable speed trigger for excellent speed control and tool durability.
- · Protection bumpers built into the machine casing.
- Compatible with any FACOM or DEWALT® 18V battery packs.

<b>₹</b>	H	L	L1	Sound Pressure	Vibration	Torque	Maximum	∆∏∆
	[mm]	[mm]	[mm]	DB[A]	[M/S2]	N.m	RPM [mn]	[kg]
CL3.P18SD	188	190	80	74 (K=3)	3 (K=1.5)	60	2000	1.2

#### <sup>∖</sup>■ 18V 13mm Drill/Driver 2.0Ah Kit



- · Sufficient power for heavier tasks in a compact package.
- 14 torque settings for consistent screw driving into a variety of materials.
- Two speed all metal gearbox for improved durability.
- · Protection bumpers built into the casing.
- Supplied in a ToughSystem® kitbox with 2x2.0Ah batteries and a charger.

<b>=</b> 0	H	L	L1	Sound Pressure	Vibration	Torque	Maximum	∆\\\
	[mm]	[mm]	[mm]	DB[A]	[M/S2]	N.m	RPM [mn]	[kg]
CL3.P18SD2	218	190	80	74 (K=3)	3 (K=1.5)	60	2000	7.4











#### **POWER TOOLS - CORDLESS**

#### 10.8V 3/8" Ratchet 2.0 (Naked)

- Sealed head ratchet preventing mechanism damage by dust and particles.
- Die cast aluminium body for reduced weight, improving comfort.
- Integral LED for illuminating dark areas.
- Composite casing resistant to chemicals and grease.
- Variable speed switch with electronic brake that provides maximum user control.
- Compatible with any FACOM or DEWALT® 10.8V battery packs.

<b>⇒</b>	d [mm]	L [mm]	L1 [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Torque N.m	Maximum RPM [mn]	∆\\ [kg]
CL3.R10JD	320	93	68	78 (K=3)	1.1 (K=1.5)	54	200	0,9









#### 10.8V 3/8" Ratchet 2.0 Kit

- · Sealed head ratchet preventing mechanism damage by dust and particles.
- Die cast aluminium body for reduced weight, improving comfort.
- Integral LED for illuminating dark areas.
- · Composite casing resistant to chemicals and grease.
- Variable speed switch with electronic brake that provides maximum user control.
- 10.8V 2.0Ah batteries with DEWALT® technology offer improved runtime.
- Includes 2x 2.0Ah batteries, a charger and PROBAG.

<b>=</b> 0	d [mm]	L [mm]		Sound Pressure DB[A]	Vibration [M/S2]	Torque N.m	Maximum RPM [mn]	∆\\ [kg]
CL3.R10JD2	350	93	68	78 (K=3)	1.1 (K=1.5)	54	200	3.3





# 10.8V 1/4" Ratchet 2.0 (Naked)

- Sealed head ratchet preventing mechanism damage by dust and particles.
- Die cast aluminium body for reduced weight, improving comfort.
- Integral LED for illuminating dark areas.
- Composite casing resistant to chemicals and grease.
- · Variable speed switch with electronic brake that provides maximum user control.
- Compatible with any FACOM or DEWALT® 10.8V battery packs.

<b>=</b> 0	d [mm]	L [mm]	L1 [mm]	Sound Pressure DB[A]	Vibration [M/S2]	Torque N.m	Maximum RPM [mn]	∆\\\ [kg]
CL3.R10RD	320	93	68	74 (K=3)	0.8 (K=1.5)	47	200	0.9











#### <sup>\|</sup>■ 10.8V 1/4" Ratchet 2.0 Kit

- Sealed head ratchet preventing mechanism damage by dust and particles.
- Die cast aluminium body for reduced weight, improving comfort.
- Integral LED for illuminating dark areas.
- Composite casing resistant to chemicals and grease.
- Variable speed switch with electronic brake that provides maximum user control.
- 10.8V 2.0Ah batteries with DEWALT® technology offer improved runtime.
- Includes 2x 2.0Ah batteries, a charger and PROBAG.

<b>=</b> 0	d [mm]	L [mm]		Sound Pressure DB[A]	Vibration [M/S2]	Torque N.m	Maximum RPM [mn]	∆∏∆ [kg]
CL3.R10RD2	350	93	68	74 (K=3)	0.8 (K=1.5)	47	200	3.3



#### **TWIN PACK BUNDLES**

# 10.8V Twin Pack - 1/2" Compact Impact Wrench + 10mm Drill/Driver 2.0Ah Kit

- Supplied in a PROBAG containing:
- One 1/2" impact wrench CL3.C10SD
- One 10mm Drill/Driver CL3.P10JD
- Two 2.0Ah 10.8V batteries CL3.BA1020
- One multivoltage charger CL3.CH115





<b>⇒</b>	∆∏∆ [kg]
CL3.CP10SJD2	6.14

# ■ 18V Twin Pack - 1/2" High Torque Impact Wrench + 13mm Drill/Driver 5.0Ah Kit







<b>⇒</b>	Δ''Δ [kg]
CL3.CHP18SP2	8.71





#### **CORDLESS ACCESSORIES**

#### $^{ackslash}$ 18V 5.0Ah Li-lon battery

18V 2.0Ah Li-lon battery

important than runtime

CL3.BA1850

- New 5.0Ah Li-lon battery pack offers users 66% more applications per charge than 3.0Ah packs
- LED "State of Charge" indicator helps manage pack charging

H1 [mm] L [mm]

• New 2.0Ah Li-lon battery pack is significantly smaller and lighter than 3.0Ah or 5.0Ah packs for applications where ergonomics are more

· Glass-filled nylon plastics offer improved chemical and grease resistance

• LED "State of Charge" indicator helps manage pack charging

• Rubber over-mould on housing for abrasion resistance • Compatible with FACOM® and DEWALT® 18V tools.

H [mm] H1 [mm] L [mm]

- · Glass-filled nylon plastics offer improved chemical and grease resistance
- Rubber over-mould on housing for abrasion resistance
- Compatible with FACOM® and DEWALT® 18V tools.



0.65

∆ [kg]

Voltage\Volt

18

Voltage\Volt

18

Capacity [Ah] 5.0

Capacity [Ah]

2.0





































#### $^{ackslash}$ 10.8V 2.0Ah Li-lon battery

- New 2.0Ah Li-lon battery pack offers users 33% more applications per charge than 1.5Ah packs
- · Lightweight design offers users great ergonomics with no difference in weight from 1.5Ah pack
- · Glass-filled nylon plastics offer improved chemical and grease resistance
- Rubber over-mould on housing for abrasion resistance
- Compatible with FACOM® and DEWALT® 10.8V tools.

























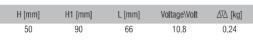






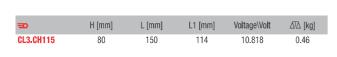






# <sup>√</sup>• 10.8V - 18V charger

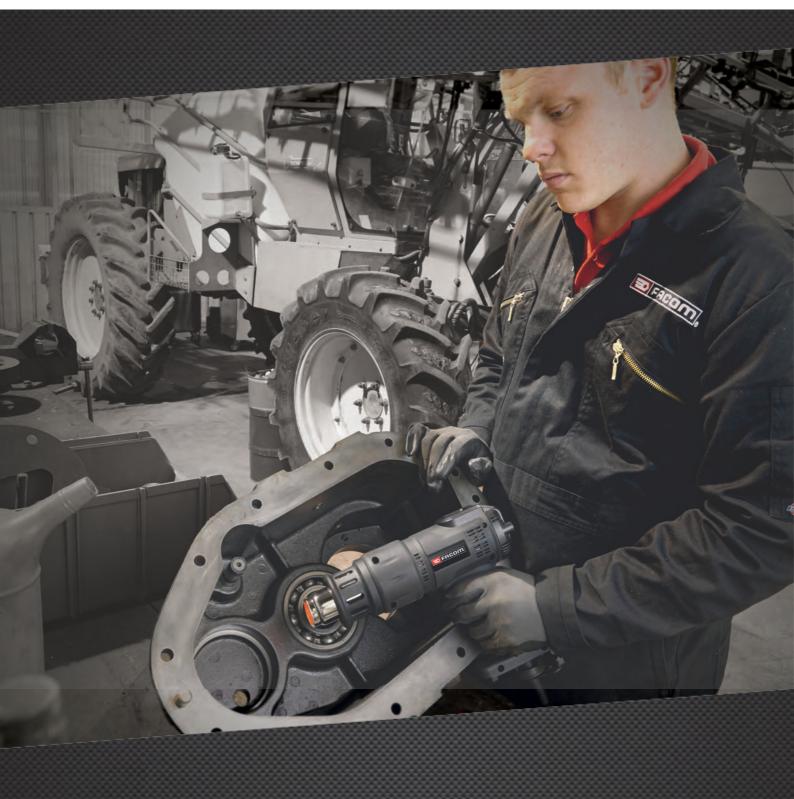
- Charges 10.8V 14.4V 18V Lithium-ion batteries.
- Charges 2.0Ah packs in 30 minutes.
- · Diagnostic LED indicator communicates battery status.
- Wall mountable.
- Compatible with FACOM® and DEWALT® batteries.











# PERSONAL EQUIPMENT -MAINTENANCE







#### PERSONAL PROTECTION EQUIPMENT

Thirtipiditial .

**VARIOUS MAINTENANCE** 

Various maintenance

Personal protection equipment



**RIVETING** 

**720** 

720

721

720

Cases and kits Riveting pliers

731

731 732

734











**LUBRICATION** 

734 Lubrication

























PIPEWORK TOOLS	724
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#### PERSONAL PROTECTION EQUIPMENT



# 1 - To protect against mechanical

hazards: abrasion, cut, tear and perforation resistant gloves: (leather gloves BC.109VSE and BC.110VSE).

#### 2 - To protect against chemical hazards:

(latex gloves BC.80VSE and BC.91VSE)

#### 3 - To protect against electrical hazards:

500 to 1,000 Volts (insulated gloves BC.VSE).

#### BC.VSE - Insulated gloves





#### NF EN 60903, EN 60903, DIN EN 60903

- Natural latex gloves, AZM classification:
  - Resistance to acid: A.
  - Resistance to ozone: Z.
  - High mechanical strength: M.
- Length: 360 mm.
- · Supplied in anti-UV opaque bag.

<b>=</b>	E [mm]	Class	Size [mm]	Voltage\Volt	∆∏∆ [g]
BC.80VSE	0,5	00	9 (B)	500	150
BC.81VSE	0,5	00	10 (C)	500	150
BC.90VSE	1,0	0	9 (B)	1000	150
BC.91VSE	1,0	0	10 (C)	1000	150

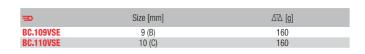
#### BC.VSE - Safety overgloves





#### NF EN 60903, EN 60903, DIN EN 60903

- Silicon coated leather gloves protecting from mechanical risks.
- Used to protect latex insulated gloves.
- Physical and mechanical grade as per standard EN 388: 2, 1, 2, 1.
  - Abrasion: 2.
  - Cuts: 1.
  - Tears: 2.
  - Perforation: 1











#### PERSONAL PROTECTION EQUIPMENT

#### BC.VSE - Insulated mats

#### NF C 18-421

- Rubber mat for insulation by cladding grounds.
- Thickness: 3.2 mm.
- · Hardness: 60 DIDC.
- Dimensions:
- BC.20VSE: 1 x 0,6 m.
- BC.21VSE: 1 x 1 m.



<b>=</b>	L x I [m]	∆™ [kg]
BC.20VSE	1 x 0,6	2.5
BC.21VSE	1 x 1,0	4.2

#### **V**■ Wrap-around protection glasses

#### NF EN 166, NF EN 168, DIN EN 166, DIN EN 168.

- Protection against projections of any nature.
- Indispensable for grinding, chiseling, etc.
- "Shell" shape able to contain glasses.



<b>3</b> 0	∆7∆ [g]
BC.5	82

#### **VARIOUS MAINTENANCE**

#### <sup>∖</sup>■ Steel wire brush





<b>型</b>	H [mm]	I [mm]	L [mm]	∆T∆ [g]
270A.MA	60	34	280	150



















































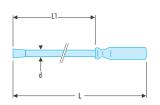


#### **VARIOUS MAINTENANCE**

# V■ D.3 - Pry bars









- Numerous uses: suspension, gear train, bodywork, etc.
- Sturdy blade minimising lever spring effect.

五	d ["]	L [mm]	L1 [mm]	∆\\(\( \) [kg]
D.3-7	3/8	292	165	0.275
D.3-12	3/8	422	305	0.345
D.3-18	1/2	635	460	0,810
D.3-24	1/2	787	610	1,030
D.3-30	5/8	915	740	1,710

# Set of 3 pry bars





- Sturdy blade minimising lever spring effect.
- Set comprising: D.3-7 D.3-12 D.3-18.
- . Supplied in thermoformed tray.

<b>=</b> 0	H [mm]	I [mm]	L [mm]	∆™∆ [kg]
D.3J3	40	145	670	1.648

# 1260 - Wrecking bars





- Forged, one flat end and one nail-claw, hardened to 45 HRc.
- Presentation: red lacquered, polished, varnished ends.

<b>宝</b> )	E [mm]	L [mm]	L1 [mm]	L2 [mm]	∆7∆ [kg]
1260.50	18	495	33	28	0.920
1260.70	23	710	39	35	1.140

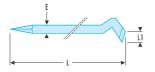
# 268 - Round crowbars with crook beak





- Forged, one spindle end and one wide and slim pallet end, hardened to 45 HRc.
- Presentation: red lacquered, polished, varnished ends.

<b>⇒</b>	E [mm]	L [mm]	L1 [mm]	∆7∆ [kg]
268,3	16	450	32	0,670
268.4	20	790	32	1,970
269	18	400	27	0,590







#### **VARIOUS MAINTENANCE**

#### <sup>∖</sup>■ Digital heat gun

- On / Off button easy to use with two modes:
  - Mode 1: 250 l/min (50°-400°).
  - Mode 2: 500 I/min (50°-600°).
- Durable and powerful 2000 Watt motor.
- Excellent control with wide LCD screen facilitating temperature configuration.
- Compact and light tool with a gun handle for easy use.
- . Overheating protection: The heating element desactivates automatically for a few seconds when overheating, period during which the tool continues producing fresh air.
- Wired tool for socket of the Europe 220-240 V / 50 Hz type.
- Ready to use: Distribution nozzle and reflector nozzle supplied with the tool.
- Max power : 2000 W.
- Power supply: 220-240 V/50 Hz.
- Air flow rate (2 speeds): 250 I/min and 500 I/min.
- Supplied with 2 nozzles: E.2002B1 E.2002B3.
- E.2002B1: Distribution nozzle, dim. (L. x h x d): 75 x 75 x 33.7 mm; weight 58 g.
- E.2002B2: Cross-flow nozzle, dim. (L. x h x d): 75 x 80 x 33.7 mm; weight 56 g.
- E.2002B3: Reflector nozzle, dim. (L. x h x d): 33 x 60 x 33.7 mm; weight 32 g.
- E.2002B4: Concentrator nozzle, dim. (L. x h x d): 20 x 52 x 33.7 mm; weight 30 g.



(C.)		
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5	100	

<b>⇒</b>	H [mm]	I [mm]	L [mm]	∆T∆ [g]
E.2015	210	72	250	980

#### <sup>∖</sup>■ Glue gun

- To glue plastic, synthetic foam, fabric, wood and laminate in the fields of construction, furniture, in assembly workshops for electrical, electronic assemblies, in the garage.
- Voltage: 110-240 V (without automatic switch).
- Maximum power: 40 W.
- Supplied in cardboard box with three versatile glue sticks.



<b>=</b> 0	H [mm]	I [mm]	L [mm]	∆™ [g]
E.900B	160	30	195	303























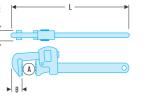




#### **PIPEWORK WRENCHES**

#### 131A - Steel Stillson models



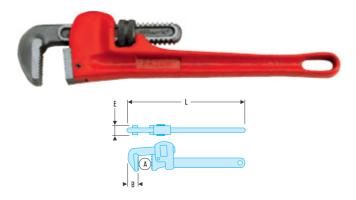




- Capacity: 0 to 102 mm; 0 to 3"1/2.
- Very robust wrench, head hardened to 55 HRc.
- Accurate approach thanks to fine machining of the threads and button, good grip.

<b>=</b> 0	A maxi [mm]	A maxi ["]	B [mm]	E [mm]	L [mm]	L ["]	∆ [kg]
131A.8	27	3/4	19,5	12,5	200	8	0,280
131A.10	34	1	25,0	16,0	250	10	0,600
131A.14	49	1'1/2	29,5	21,0	350	14	1,060
131A.18	60	2	32,0	24,0	450	18	1,800
131A.24	76	2'	41,5	27,5	600	24	3,000
131A.36	102	3'1/2	49,5	30,5	900	36	6,000

# 134A - Cast-iron American model pipe wrenches

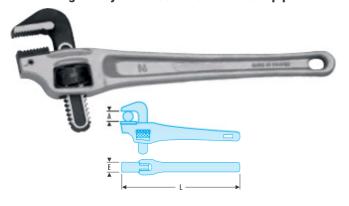




- Capacity: 0 to 140 mm; 0 to 5".
- · Cast iron body.
- Interchangeable fixed jaw hardened to 55 HRc.
- · Forged steel mobile jaw.

<b>=</b> 0	A maxi [mm]	A maxi ["]	B [mm]	E [mm]	L [mm]	L ["]	△ [kg]
134A.8	35	1	15	14,5	200	8	0,400
134A.10	54	1'1/2	20	17,5	250	10	0,780
134A.14	60	2	26	21,5	350	14	1,500
134A.18	76	2'1/2	29	26,0	450	18	2,400
134A.24	102	3'1/2	35	29,5	610	24	4,000
134A.36	140	5	35,5	43,0	920	36	9,000

# 135A - Light alloy 90° offset American model pipe wrenches



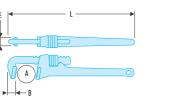


- Capacity: 0 to 76 mm; 0 to 2"1/2.
- · Light alloy body.
- Jaws in steel hardened to 55 HRc.

<b>宝</b> D	A maxi [mm]	A maxi ["]	E [mm]	L [mm]	L ["]	∆'\(\Delta\) [kg]
135A.14	49	1'1/2	34	350	14	0,940
135A.18	60	2	39	450	39	1,480
135A.24	76	2'1/2	47	600	47	2,450

# 133A - Light alloy 90° offset American model pipe wrenches







- Capacity: 0 to 140 mm; 0 to 5".
- Performance equivalent to model 134A.

<b>3</b>	A maxi [mm]	A maxi ["]	B [mm]	E [mm]	L [mm]	L ["]	∆7∆ [kg]
133A.14	60	2	26	21,5	350	14	1,000
133A.18	76	2'1/2	30	26,0	450	18	1,560
133A.24	90	3	34	29,5	600	24	2,460
133A,36	140	5	44	32,0	900	36	5,180



#### **PIPEWORK WRENCHES**

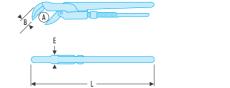
#### 120A - "Swedish" model wrench - 45°

#### **DIN 5234**

- Capacity: 10 to 60 mm; 3/8" to 2".
- High-quality forged steel body.
- Special jaw design grips pipe at three points.



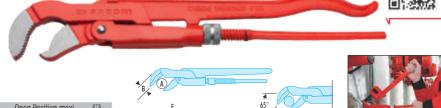
<b>=</b> 0	A maxi [mm]	A maxi ["]	B [mm]	E [mm]	L [mm]	Open Position maxi [mm]	∆\\\ [kg]
120A.1'	34	1	22	10	345	45	0.840
120A.1'1/2	49	1'1/2	26	13	450	59	1.450
120A.21	60	2	39	17	600	76	2.400



#### $^{lack}$ 121A - "Swedish" model wrench - "S" jaws - 45°

#### **DIN 5234**

- Capacity: 10 to 60 mm; 3/8" to 2".
- · High-quality forged steel body.
- Special jaw design grips pipe at three points.



								/▼	<b>A</b>
<b>3</b> 0	A maxi	A maxi	B	E	[mm]	Open Position maxi		E	65°
1018 11	[mm]		[mm]	[mm]	[mm]	[mm]	[kg]	*	
121A,11	34		~~	14	345	48	0.850	A	
121A.1'1/2	49	1'1/2	26	19	450	55	1.550		
121A.2'	60	2	39	21	600	68	2.300	L	<b>——</b>

#### **CHAIN AND STRAP WRENCHES**

#### 136A - Double effect chain wrench

- Capacity: 60 to 140 mm.
- Hardened steel chain and body.
- Twin serrations allow rotation in either direction.
- 136.D2: spare chain for model 136A.2.
- 136.D4: spare chain for model 136C.4.



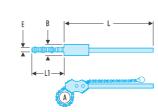


<b>=</b> 0	A [mm]	A ["]	B [mm]	C [mm]	E [mm]	L [mm]	L1 [mm]	∆∏∆ [kg]
136A.2	60 - 114	2 - 4'	20	7	7	360	460 - 18,5'	1.040
136C.4	90 - 140	3 - 5'	30	10	10	600	600 - 24'	3.100

# 137B - High power chain wrench

- Capacity: 50 to 180 mm.
- Forged steel handle.
- Serration hardened to 48 HRc.
- Jaws treated against corrosion.
- "Ratchet" system in both directions for easier trench work.
- 137B.C2P1/2: spare chain for model 137B.2P1/2.
- 137B.C4P: spare chain for high power model 137B.4P.
- 137B.C6P: spare chain for high power model 137B.6P.

<b>=</b> 0	A ["]	A [mm]	C [mm]	E [mm]	L [mm]	L1 [mm]	∆∏∆ [kg]
137B,2P1/2	2 - 3'9/16	50 - 90	20	20	550	415 - 16"	4,500
137B.4	2'3/8 - 5'1/8	60 - 130	20	20	910	560 - 24"	8,000
137B.6	3'3/16 - 7'1/8	80 - 180	32	32	690	690 - 27"	10.500









RFÎd









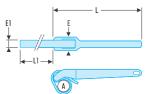
#### **CHAIN AND STRAP WRENCHES**

# 138A - Nylon strap wrenches





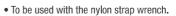
- Capacity: 0 to 165 mm.
- Body in aluminum alloy.
- High strength nylon strap.



<b>=</b>	A [mm]	A ["]	E [mm]	E1 [mm]	L [mm]	L1 [mm]	∆T∆ [g]
138A.17	60	2	42	27,5	300	450	280
138A,30	125	4	42	27,5	300	760	290
138A.48	165	6	42	27,5	300	1200	310

# 138.S - Spare strap





- 138.S17: spare strap L.430 mm for 138A.17.
- 138.S30: spare strap L.760 mm for 138A.30.
- 138.S48: spare strap L.1200 mm for 138A.48.

<b>3</b> 0	Δ∇ <u>Λ</u> [g]	
138,\$17	26	
138,S48	44	
120 020	7/	

#### **PIPE BENDERS**

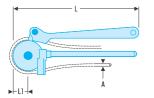
# 344B - Bending pliers





- Capacity: 8 to 18 mm.
- To shape pipes in cold drawn or annealed copper.
- Easy use on the work place without particular installation.
- Bending angle measurement (0° 180°).
- Can be carried on a tool box.
- Made in forged and machined steel.

<b>宝</b> 0	A ["]	A [mm]	L [mm]	L1 [mm]	∆7∆ [kg]
344B.8	5/16	8	208	14	0.340
344B.10	-	10	245	23	0.700
344B.12	-	12	270	30	0.900
344B.14	-	14	352	42	1,800
344B.16	5/8	16	380	54	2.640
244D 40		10	200	EE	2 000





#### **IRON-STAINLESS STEEL PIPE CUTTER**

# Iron pipe cutter



# Stainless steel pipe cutter

















FLUO

RFÎd

• Accurate guiding for right angle cutting.

• Spread: 10 to 42 mm, 1/8 to 1" 1/8.

• 338A.F5: Set of 5 spare rollers.

• Min length 255 mm - max length 310 mm.

<b>=</b> 0	I [mm]	L [mm]	∆∏∆ [kg]
338B.1	34	130	1,480

- Accurate guiding for right angle cutting.
- Fitted with a wheel cutting stainless steel pipes.
- Dimensions: 160 x 34 mm.
- Spread: 21 to 60 mm, 1/2 to 2".
- 337.F5: Set of 5 spare wheels.

<del>=</del> 0	L [mm]	∆7∆ [kg]
337A.2	160	2,700

# "High precision" stainless steel pipe cutter

- Fast adjustment button, covered in soft material for enhanced comfort.
- 4 rollers for perfect pipe guiding.
- · Folding deburrer.
- Supplied with spare wheel.
- · Very easy wheel changing without tool.
- Cuts stainless steel pipes from 3 to 35mm.
- 334.M5: set of 5 spare wheels.







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五	Δ¹\(\(\text{L}\) [kg]
334C.35NX	0.440
333C.67NX	0.944



#### **COPPER PIPE CUTTER**

# "High precision" copper pipe cutter



- Comfortable fast advance knob.
- Optimum pipe guiding. Cut to 90°.
- Grooves for flush flange cutting.
- · Folding rotary deburrer.
- · Built-in spare wheel.
- Cutting diameter: 3 35 mm; 1/4 1" 1/4.
- 238A.M5: Set of 5 spare wheels.

<b>3</b> 0	∆\\\ [kg]	
334C.35	0.944	
3330,67	0.927	
333C.67M	0.938	

# Copper-pipe mini-cutter



- 238B.16, grey
- · Very compact.
- Can be used in situ.
- Minimal working radius.
- . Set of 5 spare wheels:
  - 238B.16M5 for model 238B.16.
  - 238.M5 for old model 238.16.

<b>=</b> 0	A [mm]	A ["]	H [mm]	L [mm]	L1 [mm]	L2 [mm]	∆7∆ [g]
238B,16	3 - 16	1/8 - 5/8	35	55	38	21	120

#### **PLASTIC PIPE CUTTER**

# Ratchet pipe cutter



- Pipe cutter for PVC pipes up to 25 mm diameter: 4 x 2.5 mm max; 4 x 3/32 s. inch.
- Fast and neat cutting.
- · Automatic jaw opening.
- Ratchet advance with non-return mechanism.
- Fast advance for approach on small diameters.
- Chamfering tool built into the handle.













#### **PLASTIC PIPE CUTTER**

#### Large diameter ratchet pipe cutter

- Ratchet pipe cutter for PVC pipes up to 40 mm diameter.
- Easy cutting with the ratchet system.
- Blade returns to the rest position by opening the branches.



<b>型</b>	∆™ [kg]
335B.40	0.600



- Ratchet pipe cutter for plastic pipes up to 63 mm diameter.
- Patented "V" profile blade for perfect cut, even on the smallest pipes.
- Stainless steel cutting blade: sturdy and long life cut.
- Can cut multiple strand flexible cables up to 5 x 2.5 mm<sup>2</sup>.



五	A maxi [mm]	A maxi ["]	I [mm]	∆7∆ [kg]
335.63	63	2"1/2	430	1.100

#### **DEBURRING - CHAMFERRING**

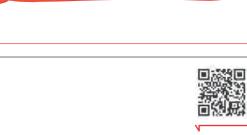
# **V**■ Deburring-chamfering case

- Selection of tools necessary for deburring and chamfering pipes in steel, aluminum, copper, brass, plastic.
- Blade holder working length: 110 mm.
- 325.01 One-piece blade deburrer for steel and aluminum.
- 325.02 Tool holder handle.
- 325.03 Blade holder extension: for blades diameter 2.6 and 3.2 mm.
- 325.05 Triangular scraper, sharpening at both ends.
- 325.L1J10 Set of 10 HSS steel blades for steel and aluminum; length 23 mm; diameter 2.6 mm.
- 325.L10J10 Set of 10 HSS steel blades for steel and aluminum; length 23 mm; diameter 3.5 mm.
- 325.L35J10 Set of 10 HSS "heavy duty" steel blades for steel and aluminum; length 47 mm; diameter 3.2 mm.































#### **COLLAR TOOLS**

#### Set for S.A.E-DIN, S.A.E-DIN flanges





- Capacity: copper and steel pipe Ø 4.75 to 12 mm", 3/16" to 1/2".
- Thickness: 0.7 to 1 mm.
- The press can be locked in a vice for more safety.
- Fast and effortless shaping.
- The set includes 11 punches and 10 dies.
- Operator instructions allow selection according to the type of flanges to produce.

<b>=</b>	H [mm]	I [mm]	L [mm]	∆ [kg]
347	82	224	396	7.900

#### Tlanging tool, metric die 6 mm - 14 mm





- Capacity: pipes diam. 6 to 14 mm.
- Allows to produce flanges tapered at 45°, at the end of copper pipes without annealing the metal.
- BP.115 dimensions: 332 x 143 x 67 mm.
- 239.MU: Inch dies: pipes Ø from 3/16" to 5/8".

<b>=</b>	H [mm]	I [mm]	L [mm]	∆ [kg]
239	67	143	332	1.520

#### <sup>∖|</sup>■ Metric kit



- Caliper and die for pipes diameter: 6 8 10 12 14 mm.
- 334C.35 pipe cutter.
- Supplied in plastic box BP.115.



332

# Metric-inch kit





240.M

• Die for pipes Ø: 6 - 8 - 10 - 12 - 14 mm.

H [mm]

67

- Die for pipes Ø: 3/16" 1/4" 5/16" 3/8" 7/16" -1/2" - 5/8".
- 334C 35 pipe cutter.
- Supplied in plastic box dimensions: 350 x 125 x 40 mm.



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#### **CASES AND KITS**

#### Maintenance kit for multi-thickness aluminum rivets





- Comprising:
  - Y.104: riveter.
  - Selection of rivets diameter 4 to 4.8 mm with standard head, 4.8 mm with wide head, in popular sizes for joint thickness 1.3 to 13 mm (approx. 450 rivets).
  - Partitioned case with contents list.

<b>=</b> 0	H [mm]	L [mm]	P [mm]	∆7∆ [kg]
Y.RIV1	60	360	300	2.700





- Comprising:
- Y.104: riveter.
- Selection of aluminum rivets with standard head 4 x 8 4 x 10 4.8 x 8 -4.8 x 10 mm and with wide head 4 x 8 et 4 x 10 mm (approx. 600 rivets).

<b>=</b>	H [mm]	L [mm]	P [mm]	∆7∆ [kg]
Y.RIV3	60	360	300	2.350

#### <sup>∖</sup> ■ Blind-nut kit









- · Comprising:
  - Y.107: blind-nut riveter.
  - Selection of steel nuts M4 M5 M6, in popular sizes for joint thickness 0.3 to 3 mm (approx. 100 nuts).
  - Partitioned case with contents list and instructions: 360 x 300 x 60 mm.

<b>=</b> 0	H [mm]	L [mm]	P [mm]	∆7∆ [kg]
Y.M46	60	360	300	2.500

- Y.104: riveter.
- 600 alu rivets.
- Standard head: 4 x 8 4 x 10 4.8 x 8 4.8 x 10.
- Black lacquered standard head: 4 x 8 4 x 10.
- Heat-formed tray PL 377.

<b>=</b> 0	H [mm]	I [mm]	L [mm]	∆T∆ [kg]
MOD.Y105	40	175	418	1.984



















































#### **RIVETING PLIERS**

# "Endurance" riveter



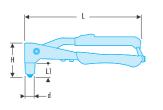
- New nose with insert for extended durability.
- Return spring.
- Supplied with 3 nosepieces and locking key.
- Capacity: Ø 5 mm aluminium Ø 4 mm steel.



<b>=</b> 0	Δ¹∆ [kg]
Y.104	0.585

# Riveting pliers







_			
Ca	na	C11	11.
υa	υa	UII	.V

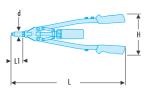
- Aluminum rivets Ø 3 3.2 4 4.8 5 mm.
- Steel rivets Ø 3 3.2 4 mm.
- Empty branches opening spring.
- 3 nosepieces with keys for diameters 3 to 3.2 mm 4 mm 4.8 to 5 mm.

<b>=</b> 0	d [mm]	H [mm]	L [mm]	L1 [mm]	∆∏∆ [kg]
Y.103B	22	84	250	26	0.632

#### $^{ee}$ Two-hand riveter



- Capacity:
  - Diameter 6.4 mm alu rivets.
  - Diameter 6 mm steel rivets.
- Absorbers cushion impact when pin snaps.
- Supplied with 4 nosepieces diameter 4 5 6 6.4 mm and spent-nail holder.



<b>=</b>	d [mm]	H [mm]	L [mm]	L1 [mm]	∆∏∆ [kg]
Y.116B	22	164	526	66	1,900



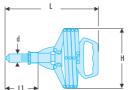


#### **RIVETING PLIERS**

# "Expander" riveting pliers

- Capacity:
  - Diameter 6.4 mm alu rivets.
  - Diameter 5 mm steel rivets.
- Model suited to heavy duty, particularly in worksites.
- Supplied with 5 nosepieces: diameters 3 to 3.2 mm 4 mm -4.8 to 5 mm - 6 mm - 6.4 mm.





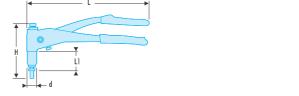
<b>=</b> 0	d [mm]	H [mm]	L [mm]	L1 [mm]	∆7∆ [kg]
Y.113B	25	184	310	90	2,150

# Blind-nut pliers

- Capacity: M6 steel; M5 stainless steel.
- Supplied with 3 steel nuts M4 M5 M6.
- Very comfortable pliers as can be used with both hands.



<b>=</b> 0	d [mm]	H [mm]	L [mm]	L1 [mm]	∆7∆ [kg]
Y.107	25	140	335	50	1,170



# Pneumatic riveter

- Light and well balanced machine in aluminum alloy.
- For 3.2 4 and 4.8 mm rivets.
- Traction strength 9.4 kN.
- Fast nose removal.
- Fast claw holder removal.
- Low activation force.
- 2-finger trigger.
- Orientable air exhaust.
- Tool travel 18 mm.
- Working pressure: 6.2 bars.



<b>⇒</b>	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	∆7∆ [kg]
Y.135F	88	20,6	304	259	79	1,310



















































#### **LUBRICATION**

# Manual oil syringe



- Capacity: 500 cm<sup>3</sup>.
- · Galvanised steel body.
- Supplied with: 376A.1 straight angled tube.



<b>3</b> 0	L [mm]	Δ¹Δ [kg]
376A	420	0.830

# Lever-operated grease gun



- Grease cartridge.
- Pressure: 400 bar. Air bleed facility.
- Use with cartridge or bulk grease.
- Capacity 500 cm<sup>3</sup>, i.e. 400 g grease.
- Hose compliant with DIN 1283 standard (static and burst pressure).
- Hose built in rubber approved by DIN 20024 standard.
- Hose diameter: 13.1 mm.
- Hose radius of curvature: 90 mm.

宣傳語	

<b>3</b> 0	L [mm]	Δ''Δ [kg]
378A.50	370	1.356

# Small grease pump 377B



#### DIN1282

- Nickel-plated body.
- Supplied with 1 lub type tip and 1 hydraulic type tip.
- Spread: 150 cm<sup>3</sup>.
- Pressure: 200 bar.
- Diameter: 43 mm.



<b>=</b> 0	L [mm]	Δ\\ [kg]
377B	345	0.410





#### **LUBRICATION**

#### Neumatic grease gun

#### **DIN 1284**

- Capacity 500 cm3 (400 g grease) flow 1 cm3 per strike.
- Air pressure 2 to 8 bar (6 bar recommended).
- Supply fitting diameter 8 mm.Filling with cartridge or bulk grease.
- Presentation: Aluminum body.
- Supplied with straight angled spout and tip: 379A.1.



<b>⇒</b>	H [mm]	L [mm]	∆∏∆ [kg]
379A	380	179	1.700

# Set of greasing tips

- Selection of rigid spouts, flexible spouts and fasteners for all types of current greasers.
- Adaptable to models 378A and 379A.
- Case dimensions: 310 x 110 x 55 mm.



<b>=</b> 0	H [mm]	I [mm]	L [mm]	∆7∆ [kg]
380	55	110	310	0.425

# 373 - Simple-action oil cans

- Pumped delivery. Steel body.
- Spout length: 130 mm.
- 3 capacities: 250, 350 and 500 cm<sup>3</sup>.

















































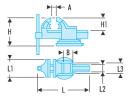


#### **VICES**

#### 1224 - Worksite-maintenance 360° swivel vices



- Vices in spheroid graphite cast iron, tensile strength 700 N/mm<sup>2</sup> minimum.
- Wide bearing base of the prism guide/mobile jaw: lack of guide flexion, vice operation preserved even under heavy loads.
- Interchangeable parallel jaws. High wear resistance, hardness 48/53 HRc.
- Removable V-shaped jaws for tightening the pipes. Hardness 40/46 HRc.
- Adjustment system by 2 complex gap compensation screws.
- Burnished control bar.

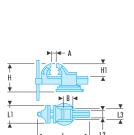


<b>=</b> 0	A maxi [mm]	B [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	∆∏∆ [kg]
1224,100	125	63	164	74	345	104	51	70	9,70
1224,125	150	75	178	83	380	127	53	76	12,84
1224.150	200	95	205	94	460	154	60	91	18,88
1224.175	235	118	241	123	532	178	68	111	26,36

# 1224.E - Worksite-maintenance fixed vices



- · Vices in spheroid graphite cast iron, tensile strength 700 N/mm<sup>2</sup> minimum.
- Wide bearing base of the prism guide/mobile jaw: lack of guide flexion, vice operation preserved even under heavy loads.
- Interchangeable parallel jaws. High wear resistance, hardness 48/53 HRc.
- Removable V-shaped jaws for tightening the pipes. Hardness 40/46 HRc.
- Adjustment system by 2 complex gap compensation screws.
- · Burnished control bar.





<b>=</b>	A maxi [mm]	B [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	∆ [kg]
1224.100E	125	63	142	74	345	104	51	70	8,67
1224.125E	150	75	156	83	380	127	53	76	11,34
1224.150E	200	95	183	94	460	154	60	91	17,26
1224.175E	235	118	216	123	532	178	68	111	24,68





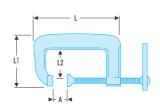
#### **FLANGE PRESSES**

# 271A - Compact G-clamp

- Capacity: 0 to 250 mm and 0 to 9"7/8.
- Presentation: galvanised burnished screw.



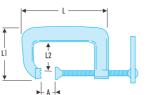
<b>=</b>	A maxi [mm]	L [mm]	L1 [mm]	L2 [mm]	∆ [kg]
271A.40	40	100	75	42	0,300
271A.60	60	130	98	57	0,510
271A.80	80	167	115	67	0,810
271A.100	100	192	131	77	1,170
271A.120	120	223	148	88	1,680
271A.150	150	262	162	98	1,980
271A.200	200	320	185	108	3,240
271A.250	250	380	202	118	3,950



# 271A.L - Deep-throat G-clamp

- Capacity: 0 to 150 mm and 0 to 5"7/8.
- Presentation: galvanised burnished screw.

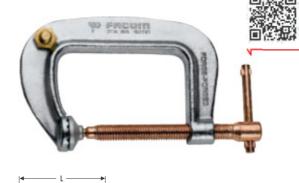


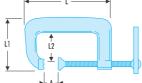


<b>=</b>	A maxi [mm]	L [mm]	L1 [mm]	L2 [mm]	∆7∆ [kg]
271A.150L	133	288	213	133	3,320

# Arc-welding G-clamp

- Capacity: 0 to 80 mm and 0 to 3"1/8.
- Copper-plated screw and brass bolt for earth connection.
- · Presentation: galvanised.





<b>=</b>	A maxi [mm]	L [mm]	L1 [mm]	L2 [mm]	∆∏∆ [g]
271A.80S	80	167	115	67	920

















































#### **G-CLAMPS**

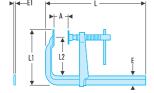
# 272A - Pump clamp





- Capacity: 0 to 1,500 mm.
- Accurate assembly by tightening the pump without rotation.
- Rail treated and notched on edges for clear locking, tilt ball joint.
- Presentation: lacquered, galvanised rail.

<b>=</b> 0	A maxi [mm]	E x E1 [mm]	L [mm]	L1 [mm]	L2 [mm]	∆7∆ [kg]
272A.300	300	30 x 8	370	150	80	1,700
272A.400	400	30 x 8	470	150	80	1,900
272A.500	500	30 x 8	600	150	80	2,100
272A.600	600	35 x 9	680	180	100	2,900
272A.800	800	35 x 9	880	180	100	3,370
272A.1000	1000	35 x 9	1100	180	100	3,840
272A.1200	1200	35 x 9	1300	180	100	4,310
272A.1500	1500	35 x 9	1600	180	100	5,000



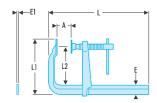
# 272L - Wide protrusion pump clamp





- Capacity: 0 to 1,000 mm.
- Protrusion: 150 mm.
- Same characteristics as model 272A with additional benefits of a deep slider and dog for gripping wide parts.

<b>=</b> 0	A maxi [mm]	E x E1 [mm]	L [mm]	L1 [mm]	L2 [mm]	∆∏∆ [kg]
272.300L	300	40 x 9	440	215	150	3,000
272.400L	400	40 x 9	540	215	150	3,300
272,600L	600	40 x 9	740	215	150	3,900
272.1000L	1000	40 x 9	1140	215	150	5,100







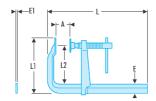
#### **FLANGE PRESSES**

# 274 - G-clamp 6500 N



- Capacity: 0 to 500 mm.
- Tightening: 6500 N max.
- Hardened profile rail, forged dog and slider, square thread screw for tight fastening.
- Ball joint angle 30°.
- · Presentation: galvanised.

₹ 1	A maxi [mm]	E x E1 [mm]	L [mm]	L1 [mm]	L2 [mm]	∆7∆ [kg]
274,200	200	19,5 x 9,5	250	150	100	0,720
274,300	300	25 x 12	360	190	140	1,600
274.400	400	25 x 12	460	170	120	1,650
274.500	500	25 x 12	560	170	120	2,000

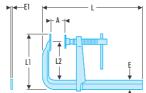


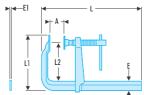
# 275 - Power G-clamp 12000 N



- Capacity: 0 to 1,000 mm.
- Tightening: 12000 N max.
- Large cross-section slider rail and screws for the most powerful tightening: up to 1.2 t between dog and slider.
- Ball joint angle 35°.
- Presentation: galvanised.

<b>⇒</b>	A maxi [mm]	E x E1 [mm]	L [mm]	L1 [mm]	L2 [mm]	∆∏∆[kg]
275.300	300	30 x 15	350	180	140	2,800
275.500	500	30 x 15	560	180	120	3,000
275.800	800	30 x 15	880	180	120	4,200
275.1000	1000	30 x 15	1100	180	120	4,800























































# NON-SPARKING TOOLS







NON SPARKING WRENCHES	743
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Non sparking combination wrenches	743
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NON SPARKING RATCHETS,

SOCKETS, ACCESSORIES	746
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NON SPARKING SCREWDRIVERS, KEYS	750
Non sparking screwdrivers	750
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NON SPARKING TUBE, MAINTENANCE	758
Non sparking pipework wrench	758

Non sparking pipework wrench	758
Non sparking valve wrench	759

















































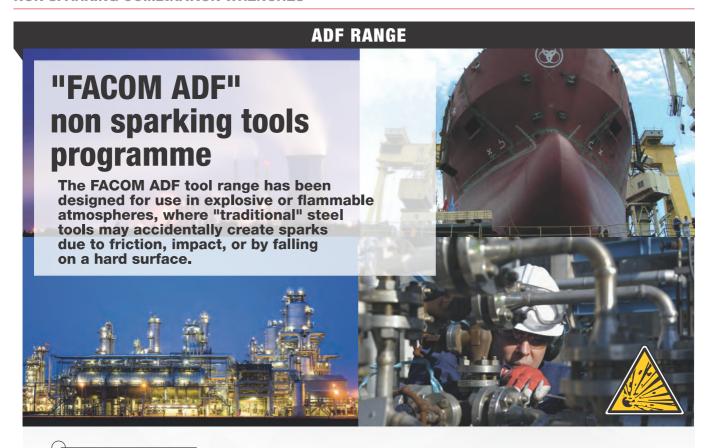








NON SPARKING COMBINATION WRENCHES



The entire FACOM ADF range is made from a special Copper - Beryllium alloy having better mechanical properties than the other alloys proposed for use in non sparking tools.

FACOM has determined the composition of the Cu-Be alloy as well as its specific treatment according to the use of each tool. In addition to its non sparking properties, the Cu-Be alloy is also anti-magnetic and highly corrosion resistant. Having a lower density, it also significantly reduces user fatigue. FACOM ADF tools have been designed in accordance with the most widely used dimensional standards (ISO, DIN,...) or adapted to perform the tool's main functions.

#### **FACOM ADF tools can be used** in a wide variety of fields, such as:

Mining, Oil and gas extraction (off-shore & on-shore), Refineries. petrochemicals Pipeline maintenance. Energy production and transport (gas, electricity, etc.). Naval shipyards Aeronautical transport, airports. Paint manufacture. Manufacture of explosives & flammable products. Arsenals, munitions and explosive products storage. Applications requiring demagnetised tools (metal shavings, etc.). Farming - Grain silos ...

The certificate TUV (n°TUV-F 09 ATEX 0005 X) have been found to comply with standard for a use in explosive atmospheres and with the Essential Health and Safety Requirements following EN 1127-1, EN 13463-1 (2007) and EN 13463-5 (2003).

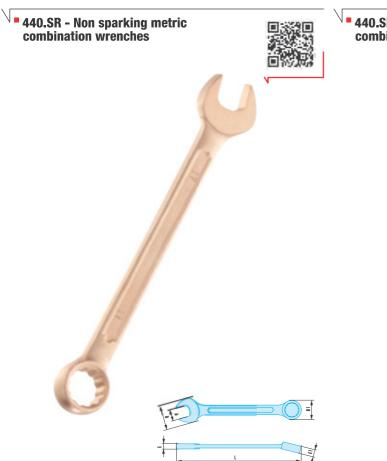
#### **SAFETY FIRST**

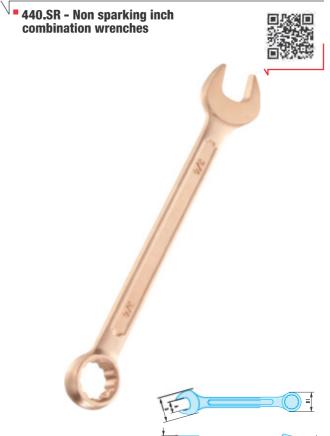


- Non sparking tools are not enough for protection from an explosion, other items adapted to the environment are necessary, such as: clothes, gloves, safety glasses and adapted materials.
- Tool's surface temperature must not be more than present gases temperature.
- Cu-Be alloy tools must not be in contact with acetylene (risk of spark).
- All Cu-Be alloy tools, in the state of finished product, presents no risk for the user. On the other hand any modification of these tools presents a risk of Cu-Be alloy particles liberation, harmful for the health.









• Special non sparking and anti-magnetic Copper-Beryllium alloy.

			_		_	_	
=0	A [mm]	B [mm]	B1 [mm]	E [mm]	E1 [mm]	L [mm]	∆∏∆ [g]
440.6SR	6	14,0	11,6	4,4	6	105	20
440.7SR	7	17,5	14,5	5,0	7	120	25
440.8SR	8	17,5	14,5	5,0	7	120	35
440.9SR	9	22,0	18,0	5,4	8	135	40
440.10SR	10	22,0	18,0	5,4	8	135	55
440.11SR	11	26,5	21,0	6,0	9	150	55
440.12SR	12	26,5	21,0	6,0	9	150	75
440.13SR	13	30,0	23,0	6,6	10	175	75
440.14SR	14	30,0	23,0	6,6	10	175	120
440.15SR	15	35,0	27,0	7,6	11	195	125
440.16SR	16	35,0	27,0	7,6	11,0	195	155
440.17SR	17	35,0	27,0	7,6	11,0	195	155
440.18SR	18	39,0	31,0	8,0	12,0	215	210
440.19SR	19	39,0	31,0	8,0	12,0	215	210
440.20SR	20	45,0	34,0	9,5	13,5	230	225
440.21SR	21	45,0	34,0	9,5	13,5	230	225
440.22SR	22	46,0	36,0	9,4	14,0	245	250
440.23SR	23	49,0	38,0	9,4	15,2	265	250
440.24SR	24	49,0	38,0	10,0	15,2	265	260
440.25SR	25	49,0	38,0	9,4	15,2	265	260
440.26SR	26	56,0	42,0	10,0	17,0	290	420
440.27SR	27	56,0	42,0	11,4	17,0	290	420
440.30SR	30	61,0	49,0	13,0	20,0	320	560
440,32SR	32	65,0	52,0	14,0	21,0	340	670
440.34SR	34	72,0	55,0	15,0	21,0	360	850
440.35SR	35	72,0	55,0	15,0	21,0	360	890
440.36SR	36	72,0	55,0	15,0	21,0	360	890
440.38SR	38	82,0	64,0	15,0	21,0	430	1400
440.41SR	41	82,0	64,0	15,0	21,0	430	1400
440.46SR	46	90,0	70,0	16,0	22,0	480	1900
440.50SR	50	98,0	77,0	17,0	23,0	520	2200
440.55SR	55	108,0	83,0	18,0	23,0	560	2800
440.60SR	60	115,0	89,0	20,0	25,0	595	3200
440.65SR	65	125,0	95,0	21,0	27,0	595	3700
440.70SR	70	142,0	112,0	24,0	29.0	630	4800

• Special non sparking and anti-magnetic Copper-Beryllium alloy.

<b>=</b> 0	A ["]	B [mm]	B1 [mm]	E [mm]	E1 [mm]	L [mm]	∆T∆ [g]
440.1/4SR	1/4"	14,0	11,6	4,4	6,0	105	20
440.5/16SR	5/16"	17,5	14,5	5,0	7,0	120	40
440.3/8SR	3/8"	22,0	18,0	5,4	8,0	135	55
440.7/16SR	7/16"	26,5	21,0	6,0	9,0	150	55
440.1/2SR	1/2"	30,0	23,0	6,6	10,0	175	75
440.9/16SR	9/16"	30,0	23,0	6,6	10,0	175	120
440.19/32SR	19/32"	35,0	27,0	7,6	11,0	195	125
440.5/8SR	5/8"	35,0	27,0	7,6	11,0	195	155
440.11/16SR	11/16"	35,0	27,0	7,6	11,0	195	155
440.3/4SR	3/4'	39,0	31,0	8,0	12,0	215	210
440.13/16SR	13/16'	45,0	34,0	9,5	13,5	230	225
440.7/8SR	7/8"	46,0	36,0	9,4	14,0	245	250
440.15/16SR	15/16"	49,0	38,0	10,0	15,2	265	260
440.1PSR	1"	56,0	42,0	11,4	17,0	290	260
440.1P1/16SR	1-1/16"	56,0	42,0	11,4	17,0	290	420
440.1P1/8SR	1-1/8"	61,0	49,0	13,0	20,0	320	560
440.1P3/16SR	1-3/16"	61,0	49,0	13,0	20,0	320	560
440.1P1/4SR	1-1/4"	65,0	52,0	14,0	21,0	340	670
440.1P5/16SR	1-5/16"	72,0	52,0	15,0	21,0	360	850
440.1P3/8SR	1-3/8"	72,0	55,0	15,0	21,0	360	890

































FLUO















#### **NON SPARKING BOX WRENCHES**

# **NON SPARKING TOOLS**

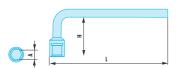
FACOM has a very comprehensive range of non sparking tools. For any non sparking tools not featured in the catalogue please contact your FACOM representative or local dealer.



# 75.SR - Non sparking metric angled socket wrenches



• Special non sparking and anti-magnetic Copper-Beryllium alloy.



<b>=</b>	A [mm]	H [mm]	L [mm]	△□△ [g]
75.10SR	10	37	168	200
75.12SR	12	42	216	220
75.13SR	13	45	240	250
75.14SR	14	45	245	300
75.15SR	15	48	250	350
75.16SR	16	48	255	500
75.17SR	17	51	260	550
75.18SR	18	53	265	550
75.19SR	19	55	270	550
75.21SR	21	57	275	750
75.22SR	22	59	278	750
75.23SR	23	60	282	800
75.24SR	24	63	286	850
75.27SR	27	69	294	900
75.30SR	30	75	302	1000
75.32SR	32	81	310	1100

#### **NON SPARKING IMPACT WRENCHES**





50.SR - Non sparking inch impact ring wrenches





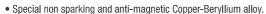












•					
<b>=</b>	A [mm]	B [mm]	E [mm]	L [mm]	∆™ [g]
50.17SR	17	32	12,0	145	210
50.19SR	19	32	12,0	145	200
50.22SR	22	42	14,0	165	245
50.24SR	24	42	14,0	165	235
50.27SR	27	46	16,0	175	350
50.30SR	30	53	16,0	185	475
50.32SR	32	53	16,0	185	465
50,34SR	34	58	19,0	205	580
50,36SR	36	58	19,0	205	580
50.38SR	38	64	20,0	225	790
50.41SR	41	64	20,0	225	755
50.46SR	46	73	22,0	235	990
50.50SR	50	78	23,0	250	1100
50.55SR	55	86	23,5	265	1400
50.60SR	60	92	25,5	274	1600
50.65SR	65	102	28,0	298	2000
50.70SR	70	108	31,5	320	2400
50.75SR	75	113	33,0	326	3000
50.80SR	80	124	34,0	350	3600
50.85SR	85	130	36,0	355	4300
50.90SR	90	142	39,0	390	5500
50.95SR	95	142	39,0	390	5400
50.100SR	100	155	43,0	420	7000
50.105SR	105	155	43,0	420	7000
50.110SR	110	168	45,0	450	9100
50.120SR	120	182	50,0	480	11000
50.130SR	130	200	57,0	520	12600
50.140SR	140	200	57,0	520	13000
50.150SR	150	220	58.0	565	14500

• Special non sparking and anti-magnetic Copper-Beryllium alloy.

<b>=</b> 0	A ["]	B [mm]	E [mm]	L [mm]	∆T∆ [g]
50.11/16SR	11/16"	32	12,0	145	210
50.3/4SR	3/4"	32	12,0	145	200
50.7/8SR	7/8"	42	14,0	165	245
50.1PSR	1"	46	16,0	175	350
50.1P1/16SR	1-1/16"	46	16,0	175	350
50.1P1/8SR	1-1/8"	53	16,0	185	455
50.1P3/16SR	1-3/16"	53	16,0	185	475
50.1P1/4SR	1-1/4"	53	16,0	185	470
50.1P3/8SR	1-3/8"	58	19,0	205	560
50.1P1/2SR	1-1/2"	64	28,0	225	790
50.1P5/8SR	1-5/8"	64	28,0	225	755
50.1P3/4SR	1-3/4"	73	22,0	235	1000
50.1P13/16SR	1-13/16"	73	22,0	235	990
50.2PSR	2"	78	23,0	250	1100
50.2P1/16SR	2-1/16"	86	23,5	265	1100
50.2P3/16SR	2-3/16"	86	23,5	265	1400
50.2P13/64SR	2-13/64"	86	23,5	265	1400
50,2P3/8SR	2-3/8"	92	25,5	274	1600
50.2P9/16SR	2-9/16"	102	30,0	298	1900
50.2P5/8SR	2-5/8"	102	30,0	298	1900
50.2P3/4SR	2-3/4"	108	31,5	320	2300
50.2P15/16SR	2-15/16"	113	33,0	326	2700
50.3PSR	3"	113	33,0	326	2700
50.3P1/8SR	3-1/8"	124	34,0	350	2800
50.3P3/8SR	3-3/8"	130	36,0	355	4000
50.3P9/16SR	3-9/16"	142	39,0	390	5300
50,3P3/4SR	3-3/4"	142	39,0	390	5300
50.3P15/16SR	3-15/16"	155	43,0	420	6700
50.4P1/8SR	4-1/8"	155	43,0	420	6700













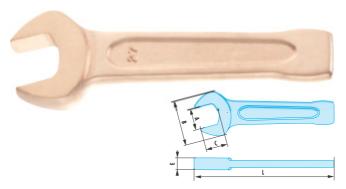






#### **NON SPARKING IMPACT WRENCHES**

# 49.SR - Non sparking metric impact open end wrenches



• Special non sparking and anti-magnetic Copper-Beryllium alloy.



<b>3</b> 0	A [mm]	B [mm]	C [mm]	E [mm]	L [mm]	∆1∆ [g]
49,17SR	17	40,5	19	11,0	125	150
49.19SR	19	40,5	19	11,0	125	150
49.22SR	22	46,0	22	12,0	135	195
49.24SR	24	50,0	24	12,0	150	245
49.27SR	27	57,0	27	15,0	175	335
49.30SR	30	64,0	30	16,0	190	435
49.32SR	32	66,0	32	16,0	190	515
49.36SR	36	75,0	36	18,0	210	725
49.41SR	41	87,0	41	18,5	230	955
49.46SR	46	98,0	46	20,0	250	1200
49.50SR	50	108,0	50	20,5	275	1300
49.55SR	55	117,0	55	23,0	305	1700

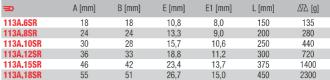
<b>型</b>	A [mm]	B [mm]	C [mm]	E [mm]	L [mm]	∆7∆ [g]
49,60SR	60	128,0	60	23,5	315	2200
49,65SR	65	141,0	65	27,5	335	2700
49.70SR	70	156,0	70	28,5	370	3300
49.75SR	75	162,0	75	29,0	375	3700
49.80SR	80	174,0	80	32,0	400	4500
49.85SR	85	174,0	85	32,0	400	5300
49.90SR	90	194,0	90	36,0	445	6700
49.95SR	95	194,0	95	36,0	445	6700
49.100SR	100	228,0	100	43,0	485	8900
49.110SR	110	238,0	110	45,0	513	11000
49.120SR	120	250,0	120	51,0	530	11000
49.130SR	130	265,0	130	53,0	560	14800

#### **NON SPARKING ADJUSTABLE WRENCHES**

#### 113A.SR - Non sparking adjustable wrenches







#### 1/2" TO 1" NON SPARKING RATCHETS

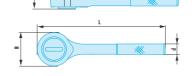
Non sparking 1/2" - 3/4" - 1" ratchets





- Special non sparking and anti-magnetic Copper-Beryllium alloy.
- The entire ratchet mechanism is made in Copper-Beryllium.

<b>型</b>	A [mm]	d [mm]	H [mm]	L [mm]	∆7∆ [g]
S.155SR	48	17	43,6	245	690
K.149SR	70	21	58,0	320	1600
M.151SR	84	26	70,0	550	3400





#### **NON SPARKING ACCESSORIES**

# SKM.120SR - Non sparking 1/2" - 3/4" - 1" sliding tee

• Special non sparking and anti-magnetic Copper-Beryllium alloy.

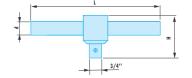








<b>=</b> 0	d [mm]	H [mm]	L [mm]	Δ¹Δ [g]
S.120SR	13	45	250	330
K.120SR	21	62	400	1300
M.120SR	21	72	400	1600



# SKM.SR - Non sparking 1/2" - 3/4" - 1" extensions

• Special non sparking and anti-magnetic Copper-Beryllium alloy.





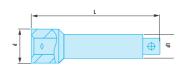






∆∏∆ [g]	
245	
260	

<b>型</b>	d [mm]	d1 [mm]	L [mm]	Δ1∆ [g]
S,208SR	24	16,5	100	245
S.210SR	24	16,5	125	260
S,212SR	24	16,5	200	485
S.215SR	24	16,5	250	510
K.210SR	35	25,0	200	960
M.210SR	45	34,0	200	1600





#### SKM.240SR - Non sparking 1/2" - 3/4" - 1" universal joints

• Special non sparking and anti-magnetic Copper-Beryllium alloy.















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<b>3</b> 0	d [mm]	L [mm]	L1 [mm]	∆7∆ [g]
S,240SR	25	80	65	185
K.240SR	38	110	90	500
M.240SR	48	133	95	1000

#### 1/2" NON SPARKING SOCKETS

# Non sparking 1/2" metric 12-point sockets



• Special non sparking and anti-magnetic Copper-Beryllium alloy.





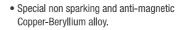
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<b>=</b> 0	A [mm]	d maxi [mm]	L [mm]	∆\\(\D\) [g]
S.6SR	6	24	40	75
S.7SR	7	24	40	80
S.8SR	8	24	40	80
S.9SR	9	24	40	80
S.10SR	10	24	40	80
S.11SR	11	24	40	80
S.12SR	12	24	40	80
S.13SR	13	24	40	80
S.14SR	14	24	40	80
S.15SR	15	25	40	85
S.16SR	16	25	40	85
S.17SR	17	25	40	90
S.18SR	18	26	42	90

<b>型</b>	A [mm]	d maxi [mm]	L [mm]	∆\[\( \) [g]
S.19SR	19	28	42	110
S.20SR	20	29	42	120
S.21SR	21	30	43	140
S.22SR	22	31	43	145
S.23SR	23	33	43	160
S.24SR	24	34	43	185
S.25SR	25	36	43	200
S.26SR	26	37	43	210
S.27SR	27	38	46	235
S.28SR	28	39	46	245
S.29SR	29	41	46	250
S.30SR	30	42	46	285
S.32SR	32	44	46	320

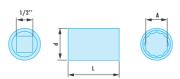
# S.SR - Non sparking 1/2" inch 12-point sockets







<b>⊕</b>	d maxi [mm]	L [mm]	∆™ [g]
S.5/16SR	24	40	78
S.3/8SR	24	40	78
S.7/16SR	24	40	79
S.1/2SR	24	40	79
S.9/16SR	24	40	80
S.5/8SR	25	40	90
S.11/16SR	26	40	95
S.3/4SR	28	42	100



<b>=</b> 0	d maxi [mm]	L [mm]	∆\\(\bar{D}\) [g]
S.13/16SR	30	43	120
S.7/8SR	32	43	140
S.15/16SR	34	43	150
S.1PSR	36	43	100
S.1P1/16SR	38	46	240
S.1P1/4SR	43	46	275
S.1P7/16SR	49	50	310

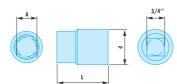
#### 3/4" NON SPARKING SOCKETS

# K.SR - Non sparking 3/4" metric 12-point sockets

• Special non sparking and anti-magnetic Copper-Beryllium alloy.











<b>3</b> 0	A [mm]	d maxi [mm]	L [mm]	∆™ [g]
K.17SR	17	38	50	246
K.19SR	19	38	50	246
K.21SR	21	38	55	268
K.22SR	22	38	55	268
K.23SR	23	40	55	306
K.24SR	24	40	55	307
K.26SR	26	40	55	307
K.27SR	27	40	55	312
K.28SR	28	41	55	339

<b>=</b> 0	A [mm]	d maxi [mm]	L [mm]	∆\\( [g]
K.29SR	29	42	55	350
K.30SR	30	43	60	410
K.32SR	32	45	60	465
K.34SR	34	48	60	480
K.36SR	36	50	60	510
K.38SR	38	53	60	555
K.41SR	41	57	65	660
K.46SR	46	63	65	830
K.50SR	50	68	70	945

#### 1" NON SPARKING SOCKETS

#### M.SR - Non sparking 1" metric 12-point sockets

• Special non sparking and anti-magnetic Copper-Beryllium alloy.









A >		1"
	L	

<b>L</b>	-

<b>=</b> 0	A [mm]	d maxi [mm]	L [mm]	∆7∆ [g]
M.30SR	30	48	60	445
M.32SR	32	48	60	480
M.34SR	34	50	60	500
M.36SR	36	52	65	505
M.41SR	41	58	70	630
M.46SR	46	64	75	785



<b>=</b> 0	A [mm]	d maxi [mm]	L [mm]	∆™ [g]
M.50SR	50	68	75	890
M.55SR	55	74	80	1100
M.60SR	60	81	85	1200
M.65SR	65	88	90	1500
M.70SR	70	95	90	1600
M.75SR	75	103	95	2200





RFÎd







#### NON SPARKING SCREWDRIVERS

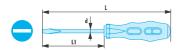
#### AN.SR - non sparking screwdriver for slotted heads





- · Special non sparking and anti-magnetic Copper-Beryllium alloy.
- For safety purposes, FACOM uses wooden handles to prevent any risk of sparks. This is not the case of certain bi-material plastic handles.

<b>3</b> 0	d [mm]	L [mm]	L1 [mm]	∆7∆ [g]
AN3X75SR	3,0	175	75	35
AN4.5X50SR	4,5	150	50	43
AN4X75SR	4,0	175	75	45
AN5X100SR	5,0	200	100	75
AN6X100SR	6,0	200	100	85
AN8X150SR	8,0	250	150	140
AN8X200SR	8,0	320	200	165
AN10X300SR	10,0	450	300	245
AN11X350SR	11,0	500	350	320
AN12X400SR	12,0	550	400	450

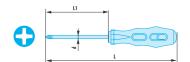


#### ANP.SR - non sparking screwdriver for Phillips® heads





- Special non sparking and anti-magnetic Copper-Beryllium alloy.
- For safety purposes, FACOM uses wooden handles to prevent any risk of sparks. This is not the case of certain bi-material plastic handles.



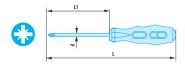
<b>⇒</b>	d [mm]	L [mm]	L1 [mm]	Phillips [No]	∆7∆ [g]
ANPOX50SR	3	150	50	PH0	35
ANP1X100SR	5	200	100	PH1	75
ANP2X100SR	6	200	100	PH2	100
ANP3X150SR	8	250	150	PH3	165
ANP4X200SR	8	320	200	PH4	185

#### $^{lack}$ AND.SR - non sparking screwdriver for Pozidrivf @ heads





- Special non sparking and anti-magnetic Copper-Beryllium alloy.
- For safety purposes, FACOM uses wood handles to prevent any risk of sparks. This is not the case of certain bi-material plastic handles.



<b>=</b> 0	d [mm]	L [mm]	L1 [mm]	Pozidriv [No]	∆7∆ [g]
ANDOX75SR	3,0	150	50	PZ.0	35
AND1X75SR	4,5	175	75	PZ.1	45
AND2X100SR	6,0	200	100	PZ.2	85
AND3X150SR	8,0	250	150	PZ.3	145
AND4X200SR	10,0	320	200	PZ.4	230



