

# 11. Sawing, cutting, drilling

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*Safety for professional applications***Advantages**

- **UTILITY KNIFE 844.S18**

- ▶ Ergonomic handle
- ▶ Stainless steel blade guide
- ▶ 6-blade loader for automatic blade change



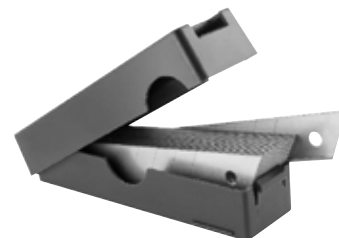
- **SAFETY KNIFE 844.D**

- ▶ Maximum safety: blade automatically retracts after use
- ▶ Used with trapezoid blades



- **SNAP-OFF BLADES**

- ▶ 7 to 12 segments
- ▶ Ideal for all everyday cutting tasks



- **TRAPEZOID BLADES**

- ▶ High strength
- ▶ Clean cut
- ▶ Intensive use



*For an effortless, clean cut*

### Advantages

- ▶ Precision blades
- ▶ 2 opening positions to adjust to the size of your hand
- ▶ Locks in closed position
- ▶ Comfortable bi-material handle



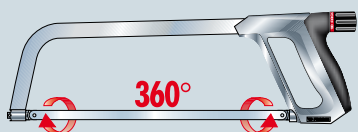
N 510

## ► Hacksaw frame

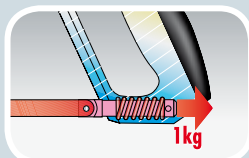


### Workshop hacksaw frame 603E

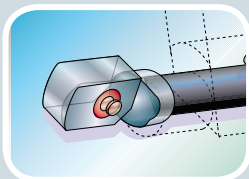
#### OPTIMUM BLADE USAGE



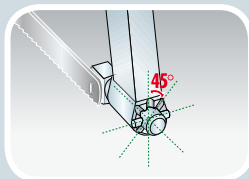
Blade rotation through 360° without removal.



Spring pre-tensioning for easy blade fitting and adjustment.



Machined and shouldered pins for secure blade retention.



45° cutting angle increments.



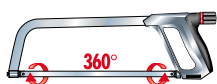
### Hacksaw frame

#### 603E

► DIN 6473, NF E 73-073.

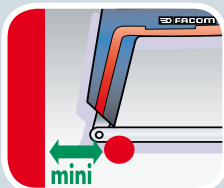
- Tension : in excess of 100 kg ; 20, 000 PSI.
- Metal bow takes 300 mm blade
- 429 x 137 mm.

ΔΔ : 760 g.

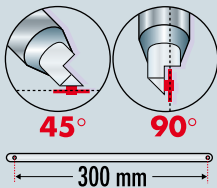


### "Travelling" hacksaw frame 601

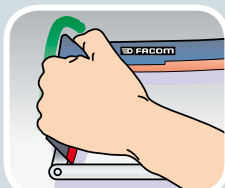
#### PRACTICAL AND COMPACT



Minimum clearance to start cutting.



2 blade positions on machined and shouldered pins.



Left-hand rest.



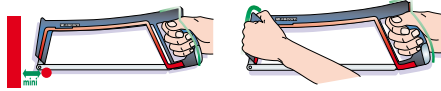
Compact: stored in a 5-compartment box and in roller-cabinet modules.



## Hacksaw frame

### 601

- Impact-resistant steel/resin construction.
- Blade tension 80 kg
- 385 x 145 mm.
- ΔΔ : 590 g.



## Saw, tape measure and files module

### MOD.601

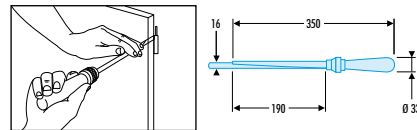
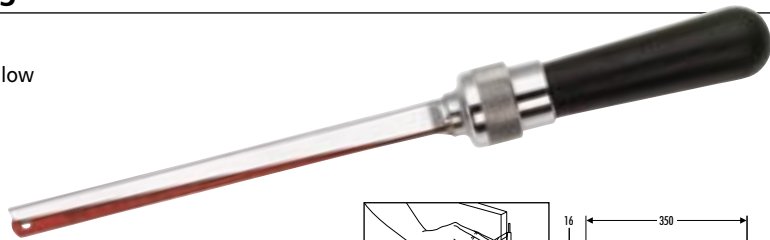
- Comprising :
  - 601 : Hacksaw frame
  - 660A.10 : 10 hacksaw blades.
  - 234.5 : Scriber
  - 803-300M : Rule.
  - 5 files with handle : PAM.B300EM; DRD.MD250EM; CAR.MD200EM; TRI.MD200EM; RD.M200EM.
  - 1712 : Tape measure.
- Tray PL.335 (complete drawer).
- ΔΔ : 2.3 kg.



## Straight frame with blade backing

### 606A

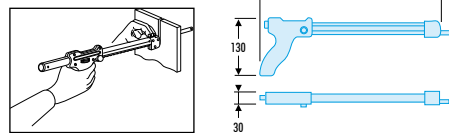
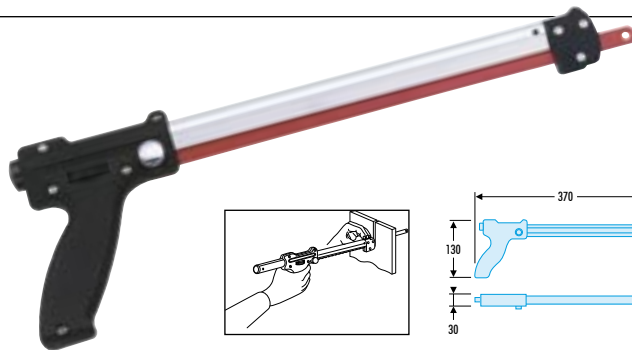
- Blade can be set to protrude beyond the backing to allow insertion into narrow gaps.
- ΔΔ : 410 g.



## Revolver frame with sliding blade-guide

### 605.B

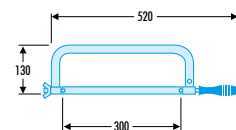
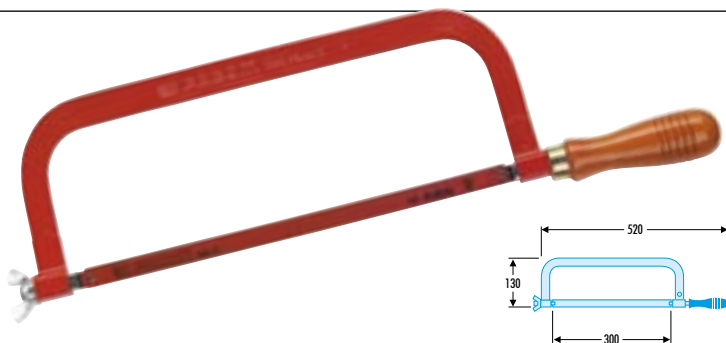
- Sliding guide steadies blade throughout cutting stroke.
- A thumbscrew can lock the guide to keep blade end clear.
- Takes 300 mm blade.
- ΔΔ : 780 g.



## Hacksaw frame

### 599

- ▷ NF E 73-073, DIN 6473.
- Flat bow.
- Wood handle.
- Takes 300 mm blade.
- ΔΔ : 600 g.



## ► Hacksaw blades

### 660A. Bimetal blades

► ISO 2336-1, DIN 6494, NF 73-072.

• High-alloy HSS teeth with spring-steel back. Flexibility and tooth hardness combine to ensure long service in a variety of applications and where difficult access prevents steadying the workpiece.

• Blade length 300 mm.

• Available in multiples of 10 blades. E.g. : 20 x 660A. 10 = 20 blades.

ΔΔ : 2.5 kg.

	Teeth/cm	Teeth/inch
<b>660A.8</b>	8	18
<b>660A.10</b>	10	24
<b>660A.12</b>	12	32



### 666A Super HSS blades

► ISO 2336-1, DIN 6494, NF 73-072.

• Recommended for a wide range of heavy-duty applications such as die, tool and stainless steel.

• Blade length 300 mm.

• Available in multiples of 10.

E.g. : 20 x 666A. 10 = 20 blades.

ΔΔ : 2.5 kg.

	Teeth/cm	Teeth/inch
<b>666A.8</b>	8	18
<b>666A.10</b>	10	24
<b>666A.12</b>	12	32



## Files



### File selection guide

#### FACOM technical specifications.

- Made from high carbon-content steels.
- Optimum heat treatment for each application.
  - 64 to 66 HRC for engineers files.
  - 53 to 56 HRC for rasps.
  - 65 to 67 HRC for sharpening files.

#### File selection recommendations.

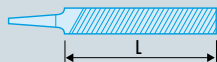
Four criteria apply :

1. Shape or cross-section.
2. Pattern according to material.
3. Grade according to operation.

- Standard files :
  - B Bastard cut for rough filing,
  - MD Second cut for general purpose,
  - D Smooth cut for finishing.
- Precision files :
  - T0 Bastard cut for rough filing,
  - T2 for normal smooth filing
  - T4 for finishing.

4. File length.

- Lengths quoted are always without tang.



#### MAIN SHAPES

FLAT PAM 	HALF ROUND DRD 	ROUND RD 
KNIFE CT 	THREE-SQUARE TRI 	SQUARE CAR 



PATTERN SELECTION ACCORDING TO MATERIAL		Steel	Cast Iron	Brass	Hard plastics, wood etc.	Aluminium and soft materials
Double cut for steel and metals.		●	●	●	●	
Single cut for good surface finish, sharpening saws, lathe filing and fitters' requirements.		●				
Dreadnaught, for soft materials, sheet metal, etc. Leaves a smooth finish.		●		●	●	●
Rasp for soft materials and wood. Produces a rough surface.					●	●

## Handles for files and rasps

MAN : Varnished wood handles with nickel-plated steel ferrule.

Supplied in boxes of 12.

MP : Plastic handles. Supplied singly.



	Files	Length files mm
<b>MAN.0</b>	Flat, half-round, round	300
	Three square straight	175
	Three square straight	200
<b>MAN.1</b>	Flat, half-round, flat warding, cant, pillar, three-square straight	250
	Square, three-square	300
	Flat warding, cant, pillar, knife, three-point square	150
<b>MAN.2</b>	Three-square tapered	175
	Flat, half-round, three-square, flat warding, cant, pillar, knife	200
	Round	250
<b>MAN.3</b>	Flat, half-round, flat warding, cant, pillar, knife	100
	Flat, half-round, three-square	150
	Square, round	200
<b>MAN.4</b>	Square, round three-square tapered	100
	Round, three-square tapered	125
	Round, three-square tapered	150
<b>MP.0</b>	Three square straight	250
	Flat half-round aluminium, flat, half-round, square, round, three-square, Milled, turners	300
<b>MP.1</b>	Three square, three-square straight	200
	Flat, half-round, round, flat warding, cant, pillar, knife, Turners	250
<b>MP.2</b>	Three square straight	175
	Flat, half-round, flat warding, cant, pillar, knife	200
<b>MP.3</b>	Flat, half-round, three-square, flat warding, cant, pillar, knife, three-square straight	150
	Square, round	200
<b>MP.4</b>	Flat, half-round, flat warding, cant, pillar, knife	100
	Round, Round for chainsaws	150
	Round for chainsaws	200

## File card

### 270.A

- For cleaning electrodes and threads.
- Integral thickness gauge (5/10mm).
- 185 x 30 x 25 mm.

ΔΔ : 42 g.

	Description
<b>270.C</b>	Spare card



## File sets

### Set of 5 files

#### STG

- Set of 5 files with varnished wood handles, for general engineering and automotive applications.
- Comprising :
  - PAM.B 300.
  - DRD.MD 250.
  - CAR.MD 200.
  - TRI.MD 200.
  - RD.MD 200.
- Supplied in grey hammer-finish wall-rack CKS.35A.

ΔΔ : 1.265 kg.



## Set of 9 files

### STU

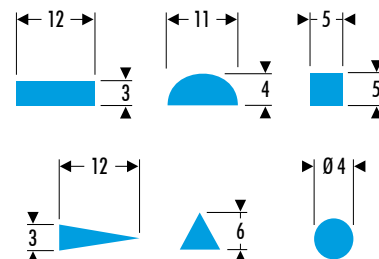
- Set of 9 files and rasps for engineering and industrial maintenance.
- Comprising :
  - PAM.B300.
  - PAM.MD200.
  - DRD.B300.
  - DRD.MD200.
  - RD.MD200.
  - CAR.MD200.
  - TRI.MD150.
  - PDE.MD125.
  - RAB.DRDMD250.
- Supplied in grey hammer-finish wall-rack CKS.35A.
- ΔΔ : 2.146 kg.



## CLE Sets of 6 locksmiths files

### CLE

- ▷ NFE 75-001, NFE 75-002
- Geneva pattern with wooden handle.
- Available in 3 different cuts.
  - CLE.BAM100 (6 bastard cut files).
  - CLE.MDAM100 (6 second cut files).
  - CLE.DAM100 (6 smooth cut files).
- In plastic wallet : 200 x 105 x 11 mm.
- ΔΔ : 205 g.



## AS.RI Set of rifflers

- ▷ NFE 75-001, NFE 75-002
- Ideal for mould makers and jewellers.

	Number of rifflers	Cut	Length mm	ΔΔ g
AS.12RI180T0	12	0	180	341
AS.12RI180T2	12	2	180	338
AS.6RI180T0	6	0	180	182
AS.6RI180T2	6	2	180	170



## Module of 5 files 200 mm long with handle

### MOD.LIMPB

- Flat, half-round, round, square, three-square.
- PAM.B200EM flat.
- DRD.MD200EM half-round.
- CAR.MD200EM square.
- TRI.MD200EM three-square.
- RD.MD200EM round.
- Tray PL.606.
- ΔΔ : 950 g.

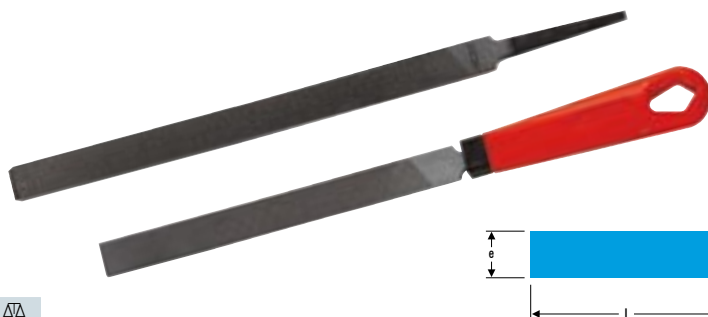


## ► Engineers files

### PAM - PAM.EM Flat files

► NFE 75-001, NFE 75-002

- PAM : Flat files.
- PAM.EM : Flat files with handle.
- 1 safe edge.
- 1 single-cut edge.



	File type	l x e mm	Length mm		ΔΔ g
<b>PAM.MD100</b>	Second cut	12 x 3	100	12	29
<b>PAM.MD200</b>	Second cut	20 x 5	200	12	163
<b>PAM.MD300</b>	Second cut	30 x 7	300	6	454
<b>PAM.MD150EM</b>	Second cut	15 x 3,5	150	6	118
<b>PAM.MD200EM</b>	Second cut	20 x 5	200	6	209
<b>PAM.MD250EM</b>	Second cut	25 x 6	250	6	351
<b>PAM.D100</b>	Smooth cut	12 x 3	100	12	29
<b>PAM.D200</b>	Smooth cut	20 x 5	200	12	163
<b>PAM.D300</b>	Smooth cut	30 x 7	300	6	454
<b>PAM.D200EM</b>	Smooth cut	20 x 5	200	6	209

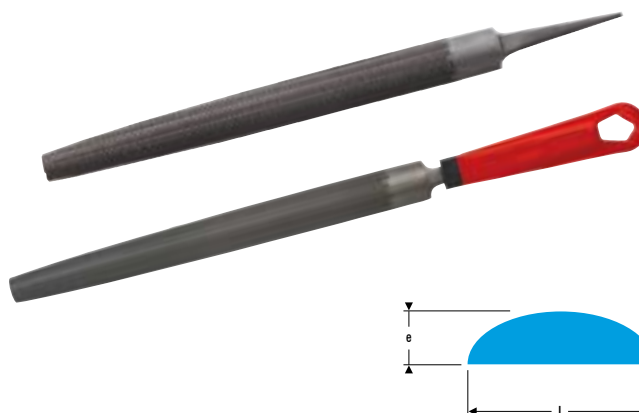
	File type	l x e mm	Length mm		ΔΔ g
<b>PAM.B100</b>	Bastard cut	12 x 3	100	12	29
<b>PAM.B200</b>	Bastard cut	20 x 5	200	12	163
<b>PAM.B300</b>	Bastard cut	30 x 7	300	6	454
<b>PAM.B200EM</b>	Bastard cut	20 x 5	200	6	209
<b>PAM.B250EM</b>	Bastard cut	25 x 6	250	6	351
<b>PAM.B300EM</b>	Bastard cut	30 x 7	300	6	528

### DRD - DRD.EM Half-round files

► NFE 75-001, NFE 75-002

- DRD : Half-round files.
- DRD.EM : Half-round files with handle.

	File type	l x e mm	Length mm		ΔΔ g
<b>DRD.B200</b>	Bastard cut	21 x 6	200	12	133
<b>DRD.B300</b>	Bastard cut	30 x 8,5	300	6	445
<b>DRD.B200EM</b>	Bastard cut	21 x 6	200	6	186
<b>DRD.B300EM</b>	Bastard cut	30 x 8,5	300	6	466
<b>DRD.MD100</b>	Second cut	11 x 3,5	100	12	26
<b>DRD.MD200</b>	Second cut	21 x 6	200	12	133
<b>DRD.MD300</b>	Second cut	30 x 8,5	300	6	445
<b>DRD.MD200EM</b>	Second cut	21 x 6	200	6	186
<b>DRD.MD250EM</b>	Second cut	25 x 7	250	6	293
<b>DRD.D200</b>	Smooth cut	21 x 6	200	12	133
<b>DRD.D300</b>	Smooth cut	30 x 8,5	300	6	445

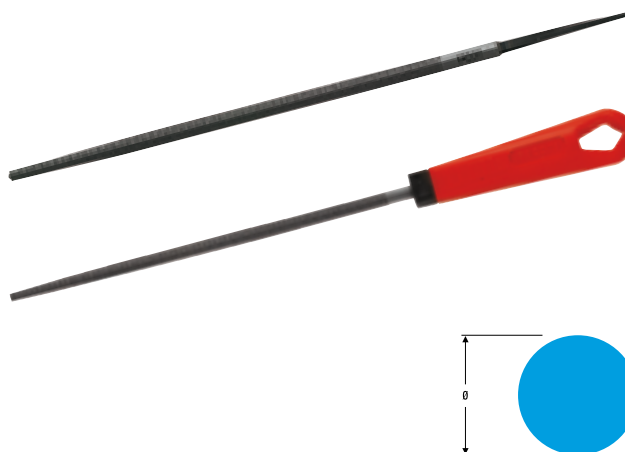


### RD - RD.EM Round files

► NFE 75-001, NFE 75-002

- RD : Round files.
- RD.EM : Round files with handle.



	File type	Length mm	Ø mm		ΔΔ g
<b>RD.B100</b>	Bastard cut	100	4	12	11
<b>RD.B125</b>	Bastard cut	125	5	12	20
<b>RD.B200</b>	Bastard cut	200	8	12	62
<b>RD.B250</b>	Bastard cut	250	10	12	143
<b>RD.B300</b>	Bastard cut	300	12	6	231
<b>RD.B250EM</b>	Bastard cut	250	10	6	156
<b>RD.MD100</b>	Second cut	100	4	12	11
<b>RD.MD125</b>	Second cut	125	5	12	20
<b>RD.MD200</b>	Second cut	200	8	12	62
<b>RD.MD300</b>	Second cut	300	12	6	231
<b>RD.MD150EM</b>	Second cut	150	6	6	56
<b>RD.MD200EM</b>	Second cut	200	8	6	101
<b>RD.D100</b>	Smooth cut	100	4	12	11
<b>RD.D200</b>	Smooth cut	200	8	12	62

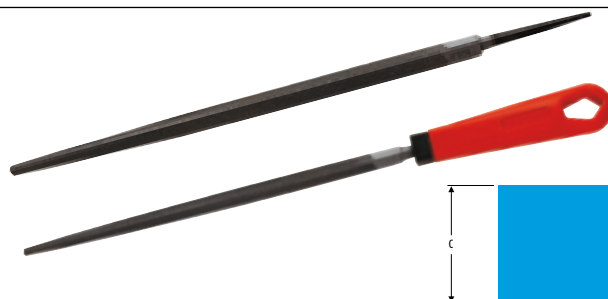


## CAR - CAR.EM Square files

▷ NFE 75-001, NFE 75-002

- CAR : Square files.
- CAR.EM : Square files with handle.



	File type	c x c mm	Length mm		$\Delta\Delta$ g
CAR.B200	Bastard cut	8 x 8	200	12	87
CAR.B300	Bastard cut	12 x 12	300	6	318
CAR.MD200	Second cut	8 x 8	200	12	87
CAR.MD300	Second cut	12 x 12	300	6	318
CAR.MD200EM	Second cut	8 x 8	200	6	129
CAR.D200	Smooth cut	8 x 8	200	12	87

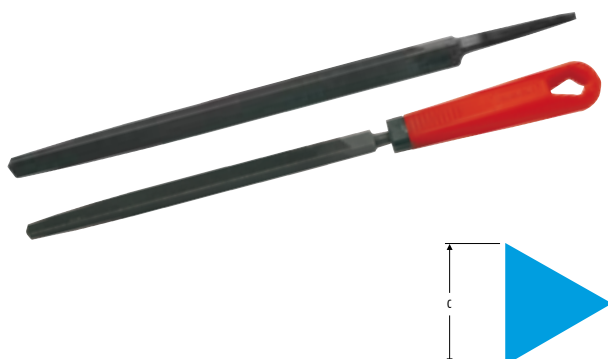


## TRI - TRI.EM Three-square files

▷ NFE 75-001, NFE 75-002.

- TRI : Three-square files.
- TRI.EM : Three-square files with handle.

	File type	Length mm	c mm		$\Delta\Delta$ g
<b>TRI.B150</b>	Bastard cut	150	11	12	78
<b>TRI.B200</b>	Bastard cut	200	15	12	159
<b>TRI.B300</b>	Bastard cut	300	21	6	431
<b>TRI.MD150</b>	Second cut	150	11	12	78
<b>TRI.MD200</b>	Second cut	200	15	12	159
<b>TRI.MD300</b>	Second cut	300	21	6	431
<b>TRI.MD150EM</b>	Second cut	150	11	6	114
<b>TRI.MD200EM</b>	Second cut	200	15	6	208
<b>TRI.D150</b>	Smooth cut	150	11	12	78
<b>TRI.D200</b>	Smooth cut	200	15	12	159





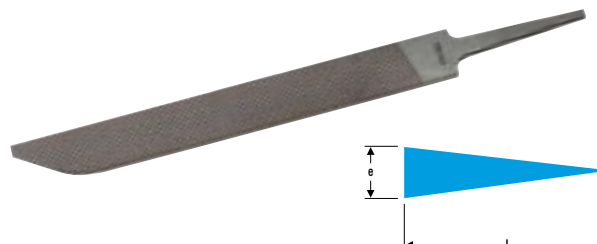
## Knife file

### CT.MD250

▷ NFE 75-001, NFE 75-002

- Single-cut knife edge.
- Safe edge.

	File type	l x e mm	L mm		$\Delta\Delta$ g
CT.MD250	Second cut	26 x 6	250	12	186





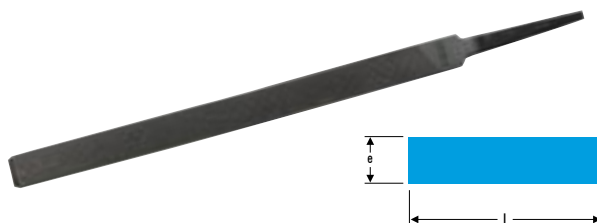
## Pillar file

### PIL.MD200

▷ NFE 75-001, NFE 75-002

- 1 safe edge.
- 1 single-cut edge.



	File type	l x e mm	L mm		$\Delta\Delta$ g
<b>PIL.MD200</b>	Second cut	14 x 7	200	12	150

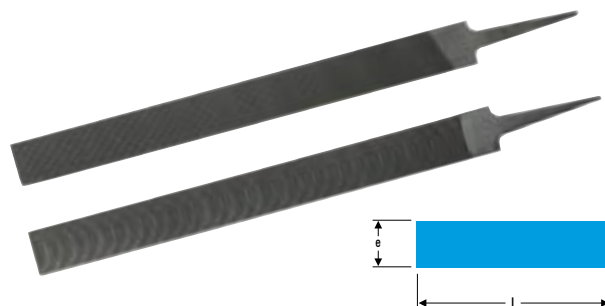


## Milled files

### FR Milled files

- FR.C : Rigid dreadnought files.
- FR.O : Rigid millenicut files.
- Designed for non-ferrous metals, bronze, brass, laminates and plastics.
- 2 safe edge.

	File type	l x e mm	Teeth per cm	Length mm		$\Delta\Delta$ g
<b>FRC.B300</b>	Bastard cut	30 x 7,5	3,5	300	6	377
<b>FRC.MD300</b>	Second cut	30 x 7,5	4,7	300	6	393
<b>FRO.B300</b>	Bastard cut	30 x 7,5	3,5	300	6	375
<b>FRO.MD300</b>	Second cut	30 x 7,5	4,7	300	6	382



## ► Saw files

### Round file for chainsaws with handle

#### TRO.5,6EM

► NFE 75-001, NFE 75-002.

- Double-cut.

	File type	Length mm	Ø mm	Ø mm	g	ΔΔ g
TRO.5,6EM	Smooth cut	200	7/32	5,6	6	69



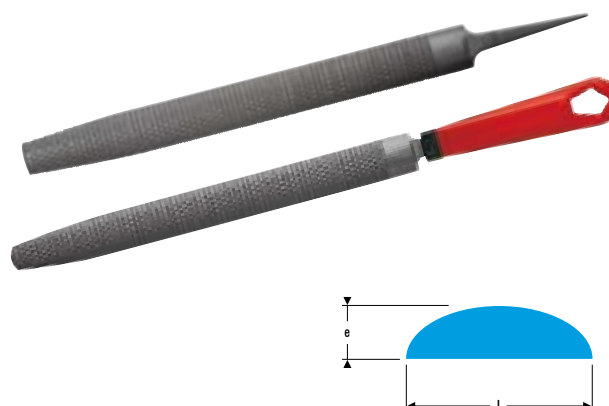
## ► Wood rasps

### RAB.DRD - RAB.DRDEM Half-round rasps

► NFE 75-001, NFE 75-002

- RAB.DRD : Half-round rasps.
- RAB.DRDEM : Half-round rasps with handle.

	File type	l x e mm	Length mm	g	ΔΔ g
RAB.DRDB250	Bastard cut	25 x 7	250	12	256
RAB.DRDB300EM	Bastard cut	30 x 8,5	300	6	480
RAB.DRDMD250	Second cut	25 x 7	250	12	256
RAB.DRDMD300	Second cut	30 x 8,5	300	6	447
RAB.DRDMD250EM	Second cut	25 x 7	250	6	315
RAB.DRDD250	Smooth cut	25 x 7	250	12	256



### RAB.RD - RAB.RDEM Round rasps

- RAB.RD : round rasp.
- RAB.RDEM : round rasp with handle.

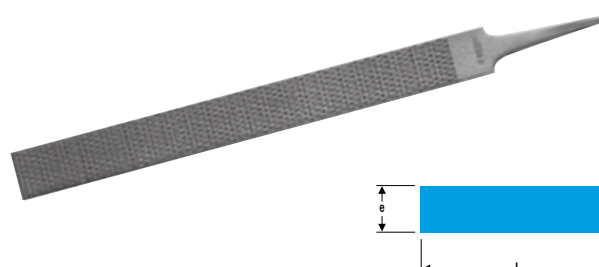
	Length mm	Ø mm	g	ΔΔ g
RAB.RD250	250	10	12	168
RAB.RD250EM	250	10	6	204



### RAB.P Flat rasps

► NFE 75-001, NFE 75-002

	File type	l x e mm	Length mm	g	ΔΔ g
RAB.PB250	Bastard cut	25 x 6	250	12	316
RAB.PB300	Bastard cut	30 x 7	300	6	503
RAB.PMD250	Second cut	25 x 6	250	12	316
RAB.PMD300	Second cut	30 x 7	300	6	503



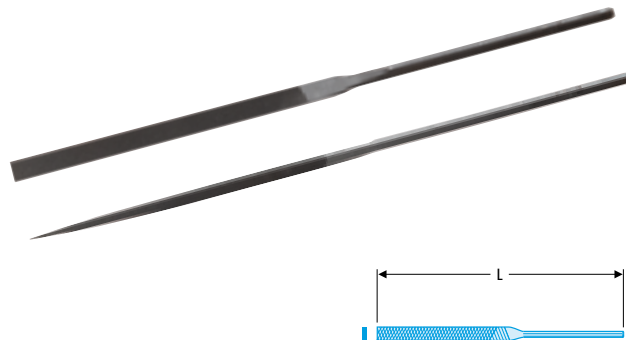
## Precision files

### AIG Round shank needle files

▷ NFE 75-001, NFE 75-002

- 3 styles.
- Available with T2 cut for precision work.
- Choice of 3 lengths : 140, 160, 180 mm.
- In boxes of 12.

File type	File type	Length mm	$\Delta\Delta$ g
<b>AIG.RD160T2</b>	Round	160	90
<b>AIG.RD180T2</b>	Round	180	135
<b>AIG.PAM140T2</b>	Square	140	90
<b>AIG.PAM160T2</b>	Square	160	110
<b>AIG.PAM180T2</b>	Square	180	147
<b>AIG.TRI180T2</b>	Three-square	180	147



### Selections of needle files

▷ NFE 75-001, NFE 75-002

- AS.6L : 6 needle files (RD.DRD.DPE.CAR.TRI.PAM).
- AS.12L : 12 needle files (RD, DED, PDE, FS, CT, CAR, TRI, PAM, BAR, PAMBR, CRO, OV).
- T0 for rough filing, T2 for precision filing, T4 for finishing.
- Packaging : BC : cardboard box; BP : plastic box; TP : plastic wallet.

File type	File type	Packaging	Length mm	$\Delta\Delta$ g
<b>AS.12LBC100T0</b>	T0	BC	100	41
<b>AS.12LBC100T2</b>	T2	BC	100	42
<b>AS.12LBP140T0</b>	T0	BP	140	114
<b>AS.12LBP140T2</b>	T2	BP	140	108
<b>AS.12LBP140T4</b>	T4	BP	140	109
<b>AS.6L140T0</b>	T0	TP	140	86
<b>AS.6L140T2</b>	T2	TP	140	85
<b>AS.12LBP160T0</b>	T0	BP	160	136
<b>AS.12LBP160T2</b>	T2	BP	160	135
<b>AS.12LBP160T4</b>	T4	BP	160	134
<b>AS.6L160T0</b>	T0	TP	160	99
<b>AS.6L160T2</b>	T2	TP	160	98
<b>AS.12LTP180T0</b>	T0	TP	180	236
<b>AS.12LTP180T2</b>	T2	TP	180	233
<b>AS.12LTP180T4</b>	T4	TP	180	232
<b>AS.6L180T2</b>	T2	TP	180	115

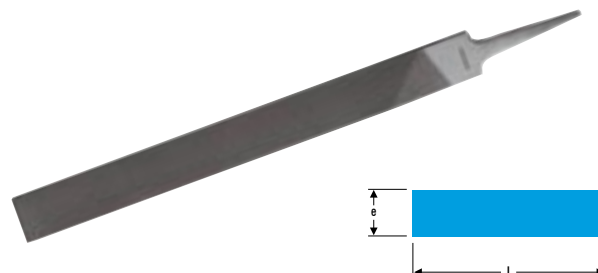


### ALP and ALDRD Second-cut files for aluminium

▷ NFE 75-001, NFE 75-002

- 2 double-cut faces :
- 1 double-cut edge.
- 1 safe edge.

File type	l x e mm	Length mm	$\Delta\Delta$ g
<b>ALP.300</b>	30 x 7	300	437
<b>ALDRD.300</b>	30 x 8,5	300	475

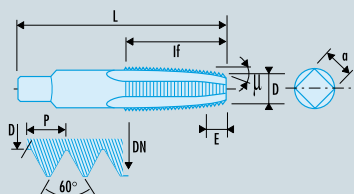


# Workshop drill bits, taps and dies

## ► Taps



### Tap selection guide



- Ground-thread backed-off taps.
- ISO metric RH thread.
- 6H machining.
- Set of 2 (ref. T2) for soft metals : 1 taper tap, 1 bottoming tap.
- Set of 3 (ref. T3) for hard metals : 1 taper tap, 1 second tap, 1 bottoming tap.

Max. hardness : 70 daN/mm<sup>2</sup> :  
 - for taps 227 and 80 daN/mm<sup>2</sup>  
 - for taps 227.S.

Types	D	E
Second	= 6 P	6°
Bottoming DN - 1.2p.	= 3.5 P	9°
Bottoming 18°	= 2 P	18°

### 227 Standard taps

► ISO 2857, ISO 529; NF ISO 529, NF EN 22857.

227.T3 Set of 3 taps : taper, second and bottoming.

227.T2 Set of 2 taps : taper and bottoming.

• HSS steel.

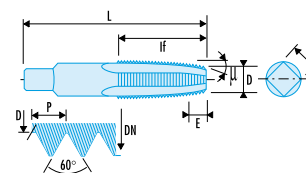
	Taps	DN mm	a mm	P mm	L mm	ΔΔ g
227.3X50T3	x3	3	2,50	0,50	48	17
227.4X70T3	x3	4	3,15	0,70	53	23
227.5X80T3	x3	5	4	0,80	58	37
227.6X100T3	x3	6	5	1	66	50
227.7X100T3	x3	7	5,6	1	66	61
227.8X125T3	x3	8	6,3	1,25	72	83
227.9X125T3	x3	9	7,1	1,25	72	98
227.10X150T3	x3	10	8	1,50	80	137
227.12X175T3	x3	12	7,1	1,75	89	147
227.14X200T3	x3	14	9	2	95	242
227.16X200T3	x3	16	10	2	102	306
227.3X50T2	x2	3	2,5	0,50	48	5
227.4X70T2	x2	4	3,15	0,70	53	8
227.5X80T2	x2	5	4	0,80	58	15
227.6X100T2	x2	6	5	1	66	23
227.8X125T2	x2	8	6,3	1,25	72	42
227.10X150T2	x2	10	8	1,50	80	72
227.12X175T2	x2	12	7,1	1,75	89	79



227.T3



227.T2



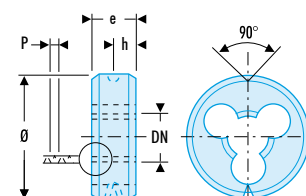
## ► Dies

### 221 Split dies

► ISO 261, DIN ISO 261, NF ISO 261.

- ISO metric RH thread.
- Chrome-vanadium HSS hardened to 62/64 HRC (234 daN/mm<sup>2</sup>).
- Tapered adjusting screw

	DN mm	e mm	P mm	Ø mm	h mm	ΔΔ g
221.4X70	4	8	0,70	25,4	3,5	27
221.5X80	5	8	0,80	25,4	3,5	29
221.6X100	6	9	1	25,4	3,5	29
221.8X125	8	9	1,25	25,4	3,5	30
221.9X125	9	9	1,25	25,4	3,5	30
221.10X150	10	13	1,50	38,1	6	79
221.12X175	12	13	1,75	38,1	6	89
221.14X200	14	13	2	38,1	6	79
221.16X200	16	13	2	38,1	6	74
221.18X250	18	15	2,50	38,1	8	75



## ► Threading and tapping tool sets

### Tap and die sets

- For threads  $\varnothing$  3 - 12 and  $\varnothing$  3 to 18 mm.
- Sets 221.227SJ1 and 221.227SJ2 include cobalt steel taps 227.S.

	mm	x					$\varnothing$ mm	$\Delta\Delta$ kg
<b>221.227J1</b>	470 x 195 x 53	9 x 2	9	2	2		M3-M12	3,1
<b>221.227SJ1</b>	470 x 195 x 53	9 x 2	9	2	2		M3-M12	3,1
<b>221.227J2</b>	540 x 284 x 58	12 x 2	12	2	3		M3-M18	5,7
<b>221.227SJ2</b>	540 x 284 x 58	12 x 2	12	2	3		M3-M18	5,7

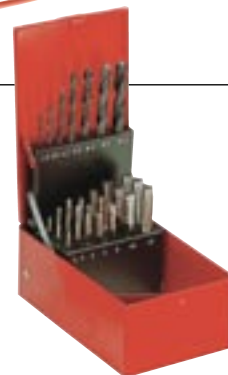


221.227J1

### Tap and drill-bit sets

- Each set includes 3 taps (taper, second, bottoming) and equivalent drill bit 222A.T.
- Set 227.SJ2A includes cobalt-steel taps 227.S.

	x	$\varnothing$	mm	mm	$\Delta\Delta$ kg
<b>227.J2A</b>	3 x 7	M3→M12	2,5-3,3,4,2-5-6,8-8,5-10,2	172 x 105 x 57	1,1
<b>227.SJ2A</b>	3 x 7	M3→M12	2,5-3,3,4,2-5-6,8-8,5-10,2	172 x 105 x 57	1,1



### Tap set

- Each set includes 3 taps (taper, second, bottoming).
- Set 227.SJ1 includes cobalt-steel taps 227.S.

	x	mm	$\varnothing$ mm	$\Delta\Delta$ g
<b>227.J1</b>	3 x 7	118 x 118 x 31	M3→M12	720
<b>227.SJ1</b>	3 x 7	118 x 118 x 31	M3→M12	720

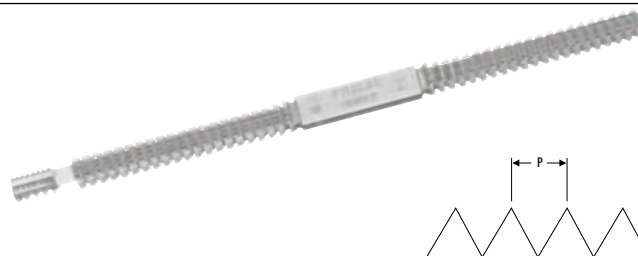


## ► Thread restoring tools

### 237 Thread restoring tools

- For female and male threads.

	P	Length mm	Thread pattern	$\Delta\Delta$ g
<b>237.A</b>	75-100-125-150-175-200-250-300	230	SI	119
<b>237.B</b>	80-100-125-150-175-200-250-300	230	ISO	123
<b>237.C</b>	10F-11F-12F-14F-16F-18F-20F-24F	230	WHITWORTH	125



## ► Tools for taps and dies

### 830A.L Long ratcheting tap wrenches

- Ideal for cutting threads in tight recesses.
- Two-way ratchet.
- Ratchet lock.
- Polished chrome finish.

	max mm		Length mm	$\Delta\Delta$ g
<b>830A.5L</b>	5	M6	250	230
<b>830A.10L</b>	8	M12	300	413





## 495




## Ground twist drills

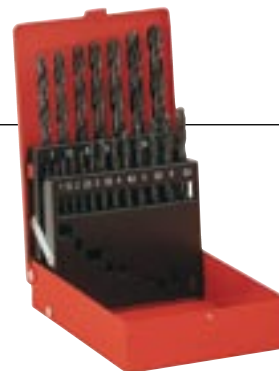
- For steel up to 700 MPa, stainless steel, grey cast-iron and aluminium alloy.
  - Available in the following sizes :  
- Ø 1 to Ø 13 mm : in 1/2 mm increments
- Ordering information : For a 6.5 mm drill bit  
quote reference 222A.T6.5.



## 222.J Drill bit sets

- Hot-rolled high-speed steel drills for steels up to 400 MPa hardness.

	x 	Ø min - max mm	x mm	 mm	ΔΔ kg
<b>222.J19</b>	19	1 - 10	0,5	165 x 110 x 68	0,73
<b>222.J25</b>	25	1 - 13	0,5	190 x 110 x 54	1,36



## Drill bits

### 222

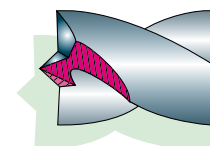
- For steel up to 400 MPa.
  - Available in the following sizes :  
- Ø 1 to Ø 13 mm : in 1/2 mm increments
- Δ Ordering information : For a drill bit. Ø 6.5 mm :  
quote reference 222.6,5.



## Set of drill bits for sheet metal

### 222.TLJ10

- Comprising :  
- 10 drill bits Ø 3-3.5-4-4.2-4.5-5-5.5-6-8-10.
  - Ground in high-speed steel.
  - For thin gauges
  - Service case 155 x 110 x 35 mm.
- ΔΔ : 150 g.



## Set of 3 reaming bits


### 229A.J3

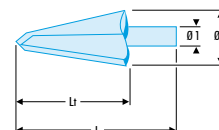
- Capacity : Ø 3 to 30.5 mm.
  - In a steel case : 120 x 100 x 38 mm.
  - Supplied with lubricant.
- ΔΔ : 555 g.



## 229A Reaming bits


- HSS for drilling, deburring and reaming thin sheet steel and non-ferrous metals.
- Max. recommended thickness 4 mm.

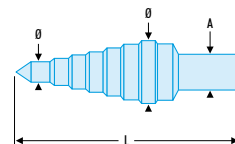
	Ø 2 min - max mm	Ø1 mm	Lt mm	L mm	ΔΔ g
<b>229A.1</b>	3 - 14	6	37	59	21
<b>229A.2</b>	5 - 20	8	41	71	45
<b>229A.3</b>	16 - 30,5	9	48	76	131



- Complies with the standards.
- For precision-drilling straight bores in all materials.
- Split point : no pilot hole required.
- More aggressive cut for easier drilling and no burrs.
- Better shaving removal.
- Less vibration, quieter operation.
- Parallel shank with 3 flats for positive rotation.
- Laser-engraved diameter markings in a groove.
- 678006 : Special ISO gland.
- 678014 : PG size step drill.
- Shank diameter 10 mm.



	Ø min - max mm	A mm	L mm	ΔΔ g
<b>229A.ST0</b>	4-5-6-7-8-9-10-11-12	6	65	25
<b>229A.ST1</b>	4-6-8-10-12-14-16-18-20	8	75	65
<b>229A.ST2</b>	4-6-9-12-15-18-21-24-27-30-33-36-39	10	107	315
<b>229A.ST3</b>	6-9-13-16-19-21-23-26-29-32-35-38	10	100	320
<b>678006</b>	6,5-8,5-10,5-12,5-16,5-20,5-25,5-29-32,5-36,5-40,5	10	96	310
<b>678014</b>	6-9-12-5-15-2-18-6-20-4-22-5-26-28-3-30-5-34-37	10	100	300



## ► Bits for impact machinery

**223.MHJ7**

- SDS plus shank profile.
  - Tungsten carbide tip insert.
  - Comprising :
    - 3 drills : 110 mm long, Ø 5 - 6 - 8 mm.
    - 4 drills : 160 mm long, Ø 6 - 8 - 10 - 12 mm
  - In a steel case : 185 x 100 x 25 mm.
- ΔΔ : 507 q.




## 223.MJ6

- For carbide-chuck machinery Ø 13 mm.
  - Machined bit with ground spiral and sharpened carbide insert
  - Ø 4 - 5 - 6 - 7- 8 - 10 mm.
  - In a plastic case : 140 x 70 x 20 mm.
- △△ : 175 q.



## ► Bits for hammer drills

**223.SJ7**

- Sharpened carbide tip inserts.
  - Ground from stock with L-groove.
  - Ø 4 - 5 - 6 - 7 - 8 - 10 - 12 mm.
  - In a steel case : 155 x 100 x 30 mm.
-  : 355 g.

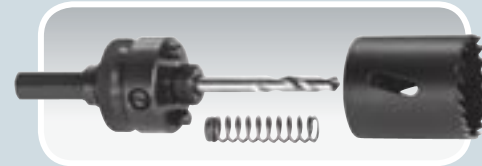




## Bimetal HSS holesaw

For cutting holes through standard materials and metals used in mechanical engineering, sheet-metalworking and plumbing.

- High-speed steel teeth, hardness > 63 HRC.
- Holesaw back in thick sheet steel to minimise vibration.
- Side slots and holes for chip removal.
- Spring helps eject cut-out pieces.



Quick assembly : chuck, pilot drill, spring, blade.

## Variable pitch holesaw

### 609A Variable pitch holesaw

- Variable pitch 4 to 6 mm (4/6T).
- Softer cut and reduced vibration. Cutting depth 34 mm.

Ø	mm	L mm	ΔΔ g
609A.16	16	51	27
609A.19	19	51	31
609A.22	22	51	43
609A.24	24	51	52
609A.25	25	51	57
609A.27	27	51	66
609A.29	29	51	77
609A.32	32	51	92
609A.35	35	51	100
609A.38	38	51	74
609A.40	40	45	82
609A.44	44	45	102
609A.51	51	45	125
609A.54	54	45	140
609A.57	57	45	152
609A.60	60	45	167
609A.64	64	45	185
609A.65	65	45	192
609A.67	67	45	195
609A.68	68	45	205



Ø	mm	L mm	ΔΔ g
609A.70	70	45	217
609A.76	76	45	250
609A.79	79	45	267
609A.80	80	45	270
609A.83	83	45	291
609A.86	86	45	300
609A.102	102	45	419

Ø	Description
609A.M1	Chuck and drill for holesaws → 22 to 29 mm
609A.M2	Chuck and drill for holesaws → > 29 mm

## Holesaw sets

### 609A Set of variable-pitch holesaws with chucks

Ø	mm	Ø mm	ΔΔ kg
609A.J1	322 x 136 x 53	22 - 29 - 35 - 44 - 51 - 64	1,8
609A.J3	322 x 136 x 53	19 - 22 - 29 - 35 - 38 - 44 - 51 - 57 - 64	2,1



### Case set of 5 holesaws

#### 693898


- Comprising :
  - Holesaws Ø 38, 40, 65, 67 and 68 mm.
  - 1 chuck fitted with a pilot drill.
  - 1 spring.
- Supplied in a shockproof polypropylene case BP.115 and tray PL.643.
- Case dimensions : 325 x 135 x 55 mm.
- Special electricians set (Recess boxes, etc.).



# Mills, scrapers

## VFA Cutters

- Tungsten carbide.
- Right-hand spiral.

	no.	Ø x H mm	max rpm	ΔΔ g
VFA.600	1	6 x 18	50000	24
VFA.602	2	6 x 18	50000	24
VFA.604	3	6 x 18	50000	24
VFA.606	4	6 x 18	50000	22
VFA.608	5	6 x 18	50000	20
VFA.610	6	6 x 15	50000	20
VFA.1200	1	12 x 25	20000	52
VFA.1202	2	12 x 25	20000	52
VFA.1204	3	12 x 25	20000	50
VFA.1206	4	12 x 25	20000	30
VFA.1208	5	12 x 25	20000	35
VFA.1210	6	12 x 20	20000	38



## Set of 90° cone bits


### 229.TTJ4

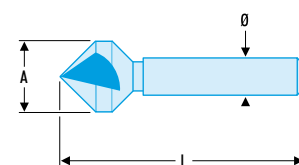
- Comprising :  
- 4 bits 229.TT2 to 229.TT5 and lubricant.
  - In a steel case 120 x 100 x 38 mm.
- ΔΔ : 450 g.



## 229.TT 90° cone bits

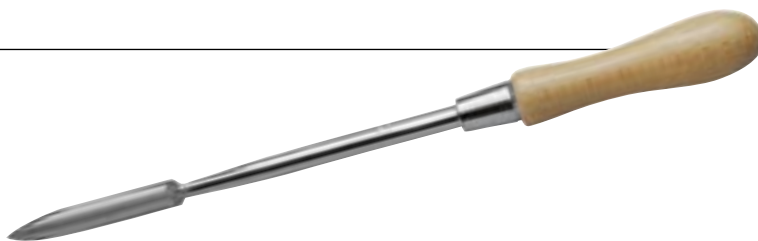
- 3 HSS cutting edges for countersunk screw holes.

	A mm	Ø mm	L mm	ΔΔ g
229.TT2	10,4	6	50	11
229.TT3	16,5	10	60	30
229.TT4	20,5	10	63	48
229.TT5	25,0	10	67	66



**Three-square scraper****231**

- High quality steel blade, polished chrome finish.
  - Varnished wood handle.
  - Shank length : 200 mm.
- ΔΔ : 180 g.

**Half-round curved scraper****232**

- Polished chrome blade.
  - Varnished wood handle.
  - Blade length 200 mm.
- ΔΔ : 180 g.

**Flat scraper****329**

- Polished chrome blade.
  - Varnished wood handle.
  - Blade length 200 mm.
- ΔΔ : 185 g.

**Set of 3 stainless steel scrapers****235.J1**

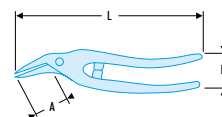
- Dimensions :
- Length : 215mm.  
Width : 32mm straight, 32mm angled and 50mm straight.  
Weight of set 427 g.

**Set of 3 flexible spatulas****237.J1**

- Dimensions :
- Length : 215mm.  
Width : 32mm, 50mm and 75mm.  
Weight of set 273 g.

**Metal shears****883 Scroll shears**

- Specially-shaped nose for accurately following detailed patterns.
  - Steel end stops.
- 883B.G Left-cut scroll shears.  
883B Right-cut scroll shears.  
883.32 Right cut large-capacity scroll shears.  
• Epoxy paint finish.

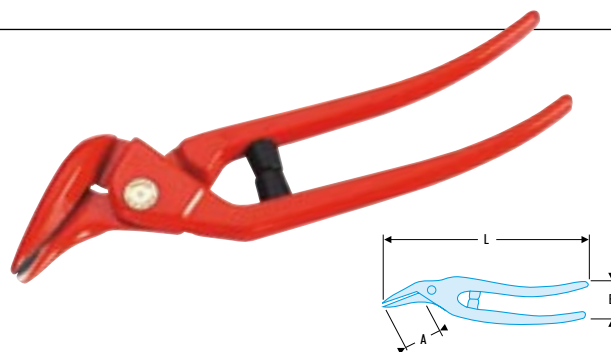


	Capacity in mm Stainless 80 kg/mm <sup>2</sup>	Capacity in mm	L mm	A mm	B min - max mm	ΔΔ g
<b>883B.G</b>	0,8	1	260	46	43 - 170	535
<b>883B</b>	0,8	1	260	50	43 - 170	527
<b>883.32</b>	0,9	1,2	320	73	47 - 170	763

## 884 Panel shears

- The bottom-blade clearance makes these shears ideal for continuous straight cuts in large panels, leaving clean edges.
- End stop.
- Epoxy paint finish.

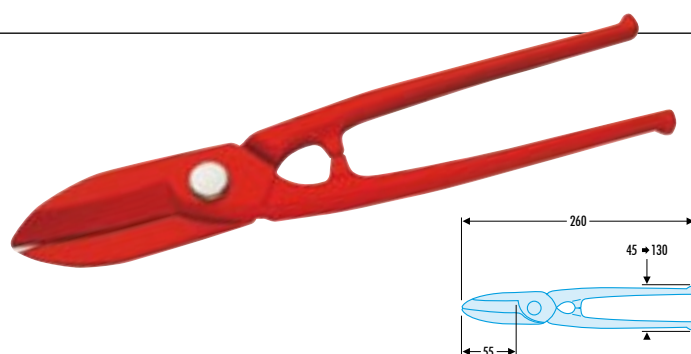
	Capacity in mm Stainless 80 kg/mm <sup>2</sup>	Capacity in mm	L mm	A mm	B min - max mm	ΔΔ g
<b>884B</b>	0,8	1	260	40	43 - 130	670
<b>884.30</b>	0,9	1,2	300	52	45 - 150	840



## General-purpose shears

### 880

- 2 wide blades.
  - Capacity :  
- Stainless 80 kg/mm<sup>2</sup> : 0.5 mm.
  - Semi-hard steel : 0.8 mm.
  - Forged steel end stop.
  - Epoxy paint finish.
- ΔΔ : 520 g.



## 882A-884A Two-hand shears

- Very high demultiplication.
- Forged steel end stop.
- Cutting capacity for blued sheet 120 kg/mm<sup>2</sup> : 2.0 mm (882A.65) and 2.5 mm (884A.65).
- Zinc-coated blades, tubular handles with neoprene grips.

	ΔΔ kg
<b>882A.65</b>	2,134
<b>884A.65</b>	2,406

	Description	ΔΔ kg
<b>882A.L65</b>	Spare blades	0,767
<b>884A.L65</b>	Spare blades	1,06

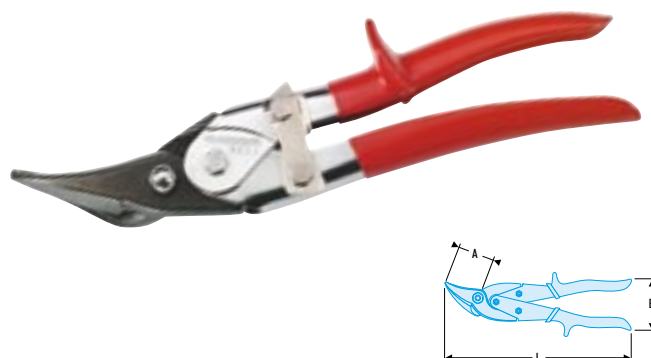


## Right-cut universal scroll shears

### 882A


- Compound joint for easy action.
- Forged, hardened and burnished blades.
- Red sheathed grips with guard.
- Inset opening spring.
- Lock-closed catch.
- Cutting capacity  
- Stainless 80 kg/mm<sup>2</sup> : 0.8 mm.
- Semi-hard steel : 0.8 mm.

	L mm	A mm	B min - max mm	ΔΔ g
<b>882A</b>	250	32	45 - 130	474



## 982 Compound scroll shears


- Comply with ASME B 107.16M - 1998.
- Panel-type shears with slightly serrated cutting edges to prevent workpiece slip.
- Good demultiplication and inset opening spring.
- Forged chrome molybdenum blades.
- Ergonomic non-slip bi-material grips.
- Colour-coded according to direction of cut.
- Red = left cut.
- Green = Right cut.
- Jaw lock catch.
- Cutting capacity.
- Stainless 80 kg/mm<sup>2</sup> : 0.8 mm.
- Semi-hard steel : 1.2 mm.

	L mm	B min - max mm	A mm	$\Delta\Delta$ g
<b>982</b>	245	65 - 190	45	378
<b>982.G</b>	245	65 - 190	45	382



## 985 "Aircraft" shears

- Forged chrome molybdenum blades.
- High demultiplication allows long runs without effort.
- Good demultiplication and inset opening spring.
- Slightly serrated cutting edges prevent workpiece slip.
- Ergonomic non-slip bi-material grips.
- Colour-coded according to direction of cut.
- Left cut = Red (985LE).
- Right cut = Green (985RI).
- Straight cut = Yellow (985ST).
- Jaw lock catch.
- Cutting capacity.
- Stainless 80 kg/mm<sup>2</sup> : 0.8 mm.
- Semi-hard steel : 1.2 mm.



	L mm	B min - max mm	A mm	$\Delta\Delta$ g
<b>985.LE</b>	255	60 - 150	55	399
<b>985.RI</b>	255	60 - 150	55	400
<b>985.ST</b>	255	65 - 165	55	390



## Nibblers

### 887A

- Inset opening spring and high demultiplication allow effortless cutting along intricate patterns, removing a strip 2.8 mm wide.
- Die and blade system severs the strip at end of run.
- Top blades cut wire up to 2 mm in semi-hard steel and 2.5 mm in mild steel.
- Lock-closed catch.
- Cutting capacity
- Stainless 80 kg/mm<sup>2</sup> : 0.8 mm.
- Semi-hard steel : 1 mm.

	L mm	B min - maxi mm	A mm	$\Delta\Delta$ g
<b>887A</b>	260	7	45 - 110	520
	Description			$\Delta\Delta$ g
<b>887A.L1</b>	Spare blade			20



# Bolt croppers and cable cutters

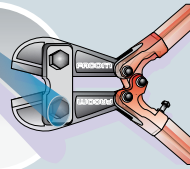


## 990.B Bolt croppers

### Powerful

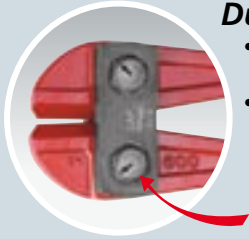
- Increased steel-cutting capacity up to 160 kg/mm<sup>2</sup>.

160 kg/mm<sup>2</sup>



### Durable

- Harder blades for a more durable cut.
- Body specially treated to reduce play to a minimum.
- High performance chrome blades.
- Eccentric screw adjustment of play between blades.



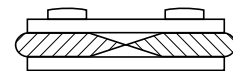
### Efficient

- Minimum cutting effort.
- Handgrip with guard for greater comfort



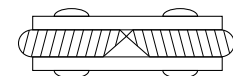
## 990.B Axial cut bolt croppers

	no.	Ø max mm		Length		160 kg/mm <sup>2</sup>	
		60 kg/mm <sup>2</sup>	140 kg/mm <sup>2</sup>	mm	"	160 kg/mm <sup>2</sup>	ΔΔ kg
990.B0	0	7	6	450	18	5,5	1,7
990.B1	1	10	8	600	24	7	2,8
990.B2	2	13	9	750	30	8	4,2
990.B3	3	16	10	900	35	9	6,4
990.B4	4	18	11	1050	41	10	8,6



## 990.RB Flush-cut bolt croppers

	no.	Ø max mm		Length		160 kg/mm <sup>2</sup>	
		60 kg/mm <sup>2</sup>	140 kg/mm <sup>2</sup>	mm	"	160 kg/mm <sup>2</sup>	ΔΔ kg
990.RB00	00	6	5	350	12	5	1
990.RB0	0	7	6	450	18	5,5	1,7



## 990.LB Replacement blades for series 990.B (with screws)

- Bolt-cropper blades are consumables and subject to normal wear. Facom guarantees their conformity to dimensional standards and suitability for recommended applications.
- Actual service life is dependent on conditions of use.

	For axial cut		ΔΔ kg
	bolt croppers	bolt croppers	
990.LB0	990.B0		0,65
990.LB1	990.B1		1,05
990.LB2	990.B2		1,65
990.LB3	990.B3		2,4
990.LB4	990.B4		3,4
990.LRB00		990.RB00	0,45
990.LRB0		990.RB0	0,65



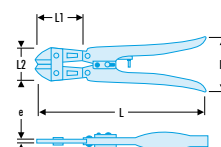
## ► Mini croppers and wire cutters

### Small bolt cropper

#### 997A.20

- Forged, hardened blades.
- Cutting capacity :
  - Max. Piano wire Ø 2mm at 200kg/mm<sup>2</sup>.
  - Soft wire Ø 4mm at 60 kg/mm<sup>2</sup>.
- Compact, lightweight tool with demultiplication system designed to cut hard and semi-hard wire, piano wire, bolts, rivets, pins and nails, etc.
- Ergonomic hardened pressed-steel handles with adjustable, shock-absorbing end stop.
- Spring-assisted opening.
- Blades lock in closed position.
- Bronzed blades, painted grips.

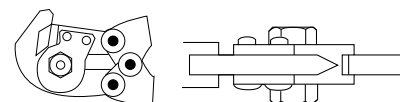
	E mm	H mm	L mm	L1 mm	L2 mm	ΔΔ g
997A.20	4,5	57	210	54,5	40	275



### "Parrot nose" steel wire cutter

#### 997A.P22

- For cutting hard wire up to 200 kg/mm<sup>2</sup> : Ø 2 mm using one hand.
- Maximum capacity : Ø 8 mm.
- Blades hardened to 240 kg/mm<sup>2</sup>.
- 235 x 80 mm.
- ΔΔ : 400 g.



## ► Copper and aluminium cable cutters

### 412 Cable cutters

412B.10 "Compact" cable cutters, capacity 10 mm.

- Integral opening spring.
- Lock closed catch.
- Cross proof design.

412.16 "Compact" cable cutters, capacity 16 mm.

- Heavy-duty head, cross proof design.
- Safety stop.

412.30-412.42 □ Heavy-duty cable cutters.

- Powerful action, cuts without crushing electric cables.
- Safety stop.

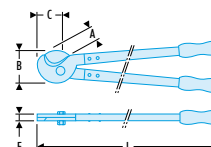
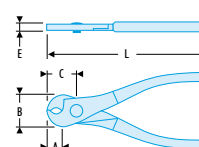
412.30



412B.10

	D min - max mm	⊖ max mm <sup>2</sup>	⊕ max mm <sup>2</sup>	E mm	L mm	A mm	B mm	C mm	Ø mm	ΔΔ g
412B.10	53 - 190	45	50	10	170	21	28	40	10	225
412.16	80 - 370	75	85	14	290	28	54	45	16	670
412.30	155 - 1000	185	210	16	600	40	70	60	32	2458
412.42	200 - 1300	400	430	16	800	70	115	90	42	3695

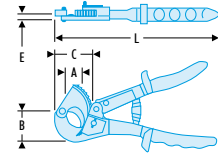
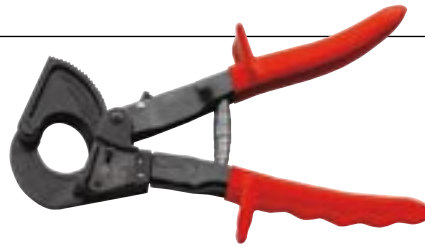
	Description
412.L30	Set of blades for 412.30
412.L42	Set of blades for 412.42



# Cable cutters

## 413 Ratchet cable cutters

- Capacities 32 and 52 mm.
- Ratchet-blade system for easy cut through thick gauge cables.
- Particularly useful in confined spaces.
- Non-slip grips with guards.

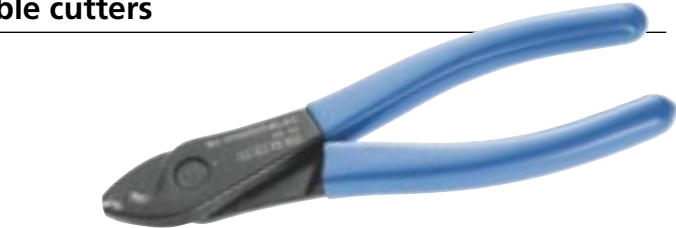



	max	E	A	B	C	Ø	L	ΔΔ
	mm <sup>2</sup>	mm	mm	mm	mm	mm	mm	g
<b>413A.32</b>	190	210	7,8	34	58	65	32	255 385
<b>413.52</b>	250	400	8,0	53	80	75	52	275 800

## Manual 10 mm dia. copper/aluminium cable cutters

### 985912

- Notched end for stripping wires
- For single and multi-strand cables.

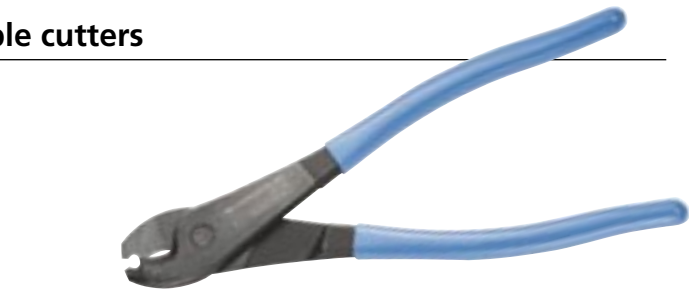


	Capacity Ø mm		Capacity Ø mm	L	ΔΔ
	Multi-strand cable	single strand	Almelec	mm	g
985912	10	8	6	165	225

## Manual 18mm dia. copper/aluminium cable cutters

### 985925

- Notched end for stripping wires
- For single and multi-strand cables.



	Multi-strand cable	Capacity Ø mm copper	Almelec	L mm	ΔΔ g
985925	18	15	10	231	350

## Steel cable cutters

### 996 Cable cutters

996.5 "Compact" cable cutters, capacity 5 mm.

- Lightweight tool with blades and cutting angle designed for cutting solid materials and multi-strand cables.
- Push catch to lock closed, simply squeeze handles to release.
- Blades hardened to 60-62 HRC.

996.8 "Standard" cable cutters, capacity 8 mm.

- Blade inserts in high-performance steel.
- Compact and powerful with ergonomic grips.

996A.12 : Capacity 12 mm.

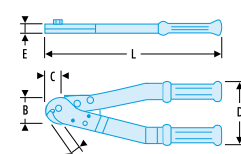
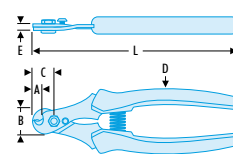
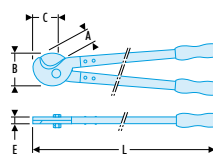
996.16 : Capacity 16 mm.

- Forged blades in high-performance steel.
- Cross proof design.



	D min - max mm	Ø Mild steel 60-100 kg/mm <sup>2</sup>	Ø Hard steel 120-150 kg/mm <sup>2</sup>	Ø Hard steel 130-160 kg/mm <sup>2</sup>	Ø Rod 60 kg/mm <sup>2</sup>	Ø Rod 60-80 kg/mm <sup>2</sup>	E mm	A mm	B mm	C mm	L mm	ΔΔ kg
<b>996.5</b>	50 - 125	5	-	4	3	-	8	7	21	12	165	0,165
<b>996.8</b>	115 - 470	8	-	7	6	-	16	12	42	21	340	0,89
<b>996A.12</b>	-	12	10	-	-	8	16	20	73	50	600	2,73
<b>996.16</b>	-	16	13	-	-	10	16	28	115	55	800	4,95

	Description
<b>996.L8</b>	Spare blades for 996.8
<b>996A.L12</b>	Spare blades for 996A.12
<b>996.L16</b>	Spare blades for 996.16



844

## The new utility knife range

A NEW RANGE OF CUTTING TOOLS, DESIGNED FOR PROFESSIONALS

## Uncompromising safety for Professional applications.

- Recommended by the Health and Safety Committees (CHSCT)..
- Avoids the risk of cuts as a result of handling the blade, or blade slippage.
- Automatic reload model.
- Blade lock feature



844.S18

## Productivity and efficiency.

- In-handle blade storage allows easy blade changes.
- Time-saving and safe.

## Especially designed for intensive and daily use.

- Stainless steel blade guide providing perfect torsion resistance.
- Ergonomic handle for a more comfortable grip.
- Soft finish to avoid slippage.

## Rigorous quality.

- Dynamic endurance tested for mechanism lifetime
- Load tested for blade-locking.
- Torsion tested to ensure blade retention.
- Tested for resistance to workshop chemicals.



844.D



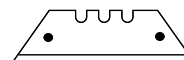
New

## Safety knife with retractable blade

## 844.D

- Safety knife.
- Blade automatically retracts after use.
- Zamak body.
- ABS cursor, front or side thumb control.
- Supplied with 3 blades (1 factory-mounted and 2 in the body).

ΔΔ : 185 g.



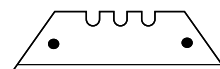
	H min - max mm	L mm	E mini maxi mm
844.D	176	40,5 - 44	21,5 - 27

## Retractable utility knife with interchangeable blades

## 844.R

- Choice of 3 blade settings.
- Moulded handle housing 5 blades :
- Zamak body.
- Zinc alloy slide-button.

ΔΔ : 190 g.

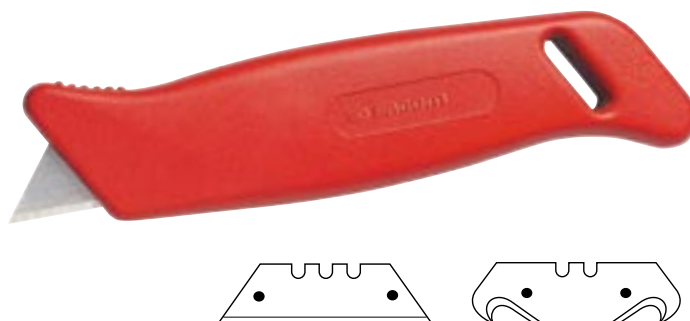


## Utility knife with interchangeable blades

### 844C

- Moulded handle housing 5 blades.
- Supplied in plastic case.
- Zamak body.

ΔΔ : 145 g.



**New**

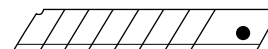
## 18 mm automatically reloading utility knife

### 844.S18

Productivity, accessibility, safety

- Automatically reloading snap-off blades.
- Ergonomic soft ABS handle.
- Stainless steel blade guide.
- Blade lock knob.
- 6-blade cartridge.

ΔΔ : 85 g.

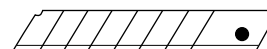


	L mm	Hauteur mm	Epaisseur mm
<b>844.SE18</b>	176	47	23

## Cutter with 18 mm snap-off blades

### 844.SE18

- Snap-off blades
- Ergonomic soft ABS handle.
- Stainless steel blade guide.
- Automatic blade lock.
- 2 spare blades.
- Integral blade snapper.



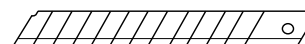
	L mm	Hauteur mm	Epaisseur mm	ΔΔ g
<b>844.SE18</b>	47	47	172	98

## Cutter with 9 mm snap-off blades

### 844.S9

- Snap-off blades
- Ergonomic soft ABS handle.
- Stainless steel blade guide.
- Automatic blade lock.
- 2 spare blades.
- Integral blade snapper.

ΔΔ : 19 g.



	L mm	Height mm	Epaisseur mm	ΔΔ g
<b>844.SE18</b>	149	47	17	47



844

## Blade selection guide

## OUR CUTTING TOOL EXPERIENCE AT THE SERVICE OF PROFESSIONALS

**A perfectly cutting blade guarantees your safety.**

- A neat, clean cut
- Does not damage the material to be cut.
- Effortless cutting without the risk of blade slippage or pull-out.
- Saves time.

**A choice of packaging**

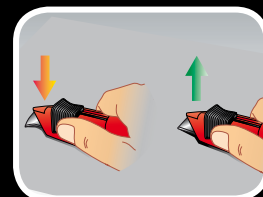
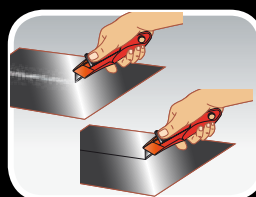
- 10 blade dispenser for roller cabinets.
- 100 blade dispenser for wall mounting.

**Choosing the right blade.**

- What material is being cut ? Material, thickness.
- On what backing surface will cutting be performed ? (Does it need protecting ? )
- Is there a risk of slipping ? (uneven surface)
- What is the working material ?
- What is the frequency of use ?
- What is the desired durability ?

**A blade is a compromise between :**

- **Hardness** : For a strong cutting section and good stress resistance.
- **Flexibility** : For stress resistance as well as allowing the blade to twist without deforming for a neat cut.
- **Cutting angle** : to guarantee an optimum cut according to the material.



New

**High strength perforated trapezoidal blade**

- High strength blade.
- Designed to produce a perfect cut in intensive applications.
- Ideal for cutting :
  - Thick cardboard. - Hoses. - Plastic. - Resilient foam. - Heat-shrinkable tubing.
  - Nylon strip. - Plastic tubes. - Seals.
- Supplied in a 10 or 100 blade dispenser.



	Length mm	Height mm	Thickness mm	ΔΔ kg
<b>844.TTL10</b>	60	19	0,65	0,05
<b>844.TTL100</b>	60	19	0,65	0,35



10 blades



100 blades

**Standard trapezoidal blade**

- Trapezoidal blade for everyday tasks.
- Designed to produce a perfect cut in normal applications.
- Ideal for cutting :
  - Thin cardboard. - Plastic film. - Heat-shrinkable tubing. - Wrapping paper.
- Supplied in a 10 or 100 blade dispenser.



	Length mm	Height mm	Thickness mm	ΔΔ kg
<b>844.TSL10</b>	50	19	0,45	0,05
<b>844.TSL100</b>	50	19	0,45	0,35



10 blades



100 blades

**New**

## High performance safety trapezoidal blade

- High performance trapezoidal blade.
- Rounded corner to avoid risk of accidental cutting.
- Designed to produce a perfect cut in intensive applications.
- Ideal for cutting :
  - Thick cardboard.
  - Hoses.
  - Plastic.
  - Resilient foam.
  - Heat-shrinkable tubing.
  - Nylon strip.
  - Plastic tubes.

	Length mm	Height mm	Thickness mm	ΔΔ kg
<b>844.TRL10</b>	60	19	0,65	0,05
<b>844.TRL100</b>	60	19	0,65	0,35



10 blades



100 blades

## High strength hook blade

- High strength hook blade.
- Specially designed to protect the backing during cutting.
- Ideal for cutting :
  - Floor finishes, e.g. carpet, lino, PVC or other laid material.
  - Straps and thick fabric.
- Supplied in a 10 or 100 blade dispenser.

	Length mm	Height mm	Thickness mm	ΔΔ kg
<b>844.TCL10</b>	50	19	0,65	0,05
<b>844.TCL100</b>	50	19	0,65	0,35



10 blades

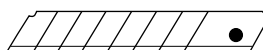


100 blades

## 844.S18L 18 mm snap-off blades

- Snap-off blade.
- Ideal for all everyday cutting applications.
- For cutting :
  - Thick cardboard - Hoses - Plastic - Resilient foam - Heat-shrinkable tubing.
  - Nylon strip - Plastic tubes - Seals.
- Warning, snap-off blades are not designed to withstand excessive torsion forces.
- Supplied in a 10 or 50 blade dispenser.

	Length mm	Height mm	Thickness mm	Number of blades	Number of segments on the blade	ΔΔ kg
<b>844.S18L10</b>	110	18	0,53	10	7	0,089
<b>844.S18L50</b>	110	18	0,53	50	7	0,365

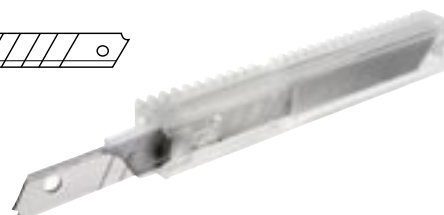
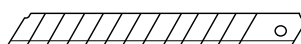


## Pack of ten 9 mm snap-off blades

### 844.S9L10

- 9 mm snap-off blade

	Length mm	Height mm	Thickness mm	Number of blades	Number of segments on the blade	ΔΔ kg
<b>844.S9L10</b>	84	9,5	0,43	10	12	0,027



980

**"Cut All" general-purpose shears****AN EFFORTLESS CLEAN CUT EVERY TIME**

Aluminium sheet (up to 1 mm thick), hard metal sheet (up to 0.5 mm), PVC, cardboard, rubber, floor coverings up to 5 mm thick. Hoses, plastic ties, small diameter pipes, electric cables (up to Ø 2.5 mm), insulating foam, wrapping paper... And many other applications.

**Precise**

- serrated blades, no risk of slipping.

**Smart**

- 2 opening positions, adapts to your hand. (26 mm / 36 mm)

**Safe**

- Locks in closed position.

**Comfortable**

- Non-slip bi-material grips.

**980C - Angled serrated shears**

- Ideal for cutting long lengths
- Keeps the hand away from the cutting operation.

**980 Universal shears**

- 980 : straight blade version.
- 980C : angled blade version.
- 2 opening positions :
  - Blade opening 29 to 36 mm.
  - Handle opening 77 to 102 mm.
- Comfortable : Non-slip bi-material grips.
- Safe : Locks in closed position..
- Accurate : Slightly serrated blade prevents any risk of slippage.
- Cardboard, rubber, PVC, leather 5 mm thick.
- Thin sheet steel 0.5 mm thick, aluminium sheet up to 1 mm thick.
- Electric cables up to 2.5 mm dia.
- Hoses, tubes, insulating foam, etc.

	L mm	B mm	C mm	ΔΔ g
<b>980</b>	205	67	49	201
<b>980C</b>	205	67	49	201



980C



980

## "Stubby" scissors

### 841.0

- Long, strong and pointed blades, with wire cutter.
- Left/right hand.
- Polished chrome finish.

	Blade length mm	Total length mm	ΔΔ g
841.0	43	125	65



## Sheathed electricians scissors

### 841.4

- Plastic moulded sheathing.
- Long blades, with wire cutter.
- Hardened setting screw.

	Blade length mm	Total length mm	ΔΔ g
841.4	56	144	90



## Electricians scissors

### 841

- Long blades, with wire cutter.
- Polished chrome finish.

	Blade length mm	Total length mm	ΔΔ g
841	33	150	94



## Heavy-duty scissors

### 841.7

- Industrial model built and sized to cut leather, rubber, carpet, fabric, etc.
- Right handed handles.
- Polished chrome finish.

	Blade length mm	Total length mm	ΔΔ g
841.7	115	255	420



## Offset scissors

### 841.6

- Strong scissors. Right hand. Offset handles.
- For leather, rubber and other materials.
- Polished chrome finish.

	Blade length mm	Total length mm	ΔΔ g
841.6	115	240	235



## Multi-purpose scissors

- Titanium coated stainless steel scissors for a perfect cut along the full blade length.
- Non-slip bi-material handle for a better grip and comfort of use.

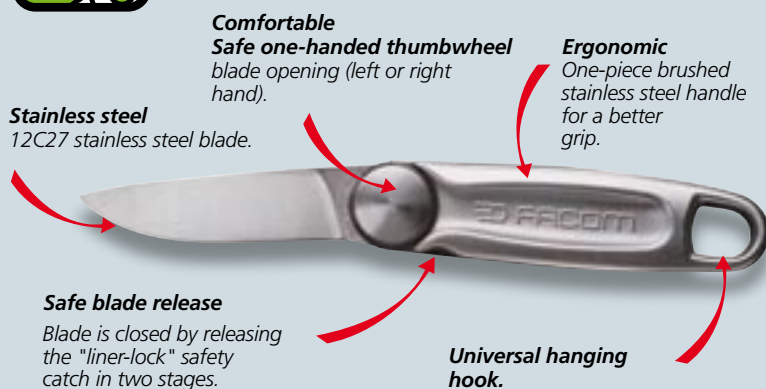
	Blade length mm	Total length mm	ΔΔ g
841.8A	92	227	119
841.9	112	232	135





## 840 LE

## THE KNIFE DESIGNED AS A TOOL



**Comes with horizontal leather case** for complete freedom of movement and compliance with the safety regulations.

## Folding knife

## 840LE

- 12C27 stainless steel construction
  - Quick one-handed opening.
  - Right/left hand.
  - Liner lock safety catch and 2 stage release.
  - Universal hanging hook.
  - Closed length 115.5 mm.
  - Total length : 189 mm, blade length : 73.5 mm, closed length : 115.5 mm.
  - Comes with horizontal leather case.
- ΔΔ : 246 g.



## Lock-back knife

## 840.4A

- Polished stainless blade.
  - Rosewood handle and nickel silver bolster.
  - Fits case 840.E.
  - Blade length 78 mm; closed length 105 mm.
- ΔΔ : 160 g.



## Case

## 840.E

- Real leather. Worn on belt.
  - Takes knives 840.3 and 840.4A.
  - Closed length 150 mm.
- ΔΔ : 53 g.



## Pocket knife

## 840.2

- Carbon-steel burnished blade.
  - Black plastic handle unscrews for maintenance.
  - Blade length 75 mm.
  - Closed length : 105 mm.
- ΔΔ : 75 g.



## Locking pocket knife

### 840.3

- Lock-back design.
- Carbon-steel burnished blade.
- Rosewood handle unscrews for maintenance. Hanging clip.
- Supplied with leather thong. Fits case 840.E.
- Blade length 95 mm; closed length 120 mm.

ΔΔ : 127 g.



## Twin-blade electricians knife

### 640180

- Ideal for all common cable cutting and stripping tasks..
- 1 straight hollow ground general-purpose blade.
- 1 short curved blade, specially designed for cable work (640180).
- 1 lock-back for each blade.

	Number of blades	L mm	ΔΔ g
640180	2	42	100



## Single-blade electricians knife

### 631013

- Ideal for all cable cutting and stripping tasks.
- 1 lock-back for each blade.
- Hollow ground blades for increased strength.
- Ergonomic handle providing a firm grip.

	Number of blades	L mm	ΔΔ g
631013	1	30	100



## Electricians knife

### 840B

- Billhook blade 65 mm.
  - Black plastic handle.
  - Closed length 100 mm.
- ΔΔ : 63 g.



## Twin-blade electricians knife

### 843

- Billhook blade 65 mm.
  - Straight 80 mm blade
  - Wood handle.
  - Closed length 100 mm.
- ΔΔ : 83 g.



## Electricians knife with wire stripper

### 840.1

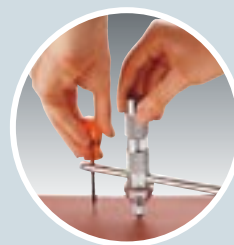
- 1 blade with half-moon notch for stripping and vee for cutting.
  - Rosewood handle.
  - Closed length : 105 mm.
- ΔΔ : 64 g.





## Punch kits

These kits are used to cut out clean and accurate circular gaskets in a variety of materials including cardboard, leather, rubber and fabric. To cut holes Ø 3 to 50 mm, use a punch 245A.T with a shank 245A. M. To cut holes Ø 44 to 420 mm, use calipers with centre-point and cutter. All components are available either separately or in kits.



### "Standard" kit

#### 245.J1

- For making round gaskets.
  - Cutting capacity : Ø 3 to 30 mm using a punch and Ø 56 to 330 mm using calipers.
  - Supplied in a plastic case BP.115 and tray PL.100A.
  - Dimensions 332 x 143 x 67 mm.
- ΔΔ : 1.8 kg.



### "Maintenance" kit

#### 245.J2

- Cutting capacity Ø 3 to 50 mm using a punch and Ø 44 to 420 mm using calipers.
  - Supplied in a plastic case BP.109 and tray PL.99A.
  - Dimensions : 472 x 195 x 53 mm.
- ΔΔ : 3.7 kg.




### Calipers

#### 245A.C


- Cutting capacity Ø 44 to 420 mm.
  - Supplied in a plastic case : 260 x 90 x 40 mm.
- ΔΔ : 590 g.



## 245A Gasket cutter for calipers

	Ø mm	245.J1	245.J2
245A.T3	3	•	•
245A.T4	4	•	•
245A.T6	6	•	•
245A.T8	8	•	•
245A.T10	10	•	•
245A.T12	12	•	•
245A.T14	14	•	•
245A.T16	16	•	•
245A.T18	18	•	•
245A.T20	20	•	•
245A.T22	22	•	•
245A.T24	24	•	•
245A.T26	26	•	•
245A.T28	28	•	•
245A.T30	30	•	•
245A.T32	32		•
245A.T34	34		•
245A.T36	36		•
245A.T38	38		•
245A.T40	40		•
245A.T42	42		•
245A.T44	44		•
245A.T46	46		•
245A.T48	48		•
245A.T50	50		•



	245.J1	245.J2	245.AC
245A.M1	•		
245A.M2	•		
245A.M3	•		
245A.M4	•	•	
245A.P1	•	•	•
245A.C1	•	•	•
245A.B1	•		
245A.B2	•	•	

