



**AEROSPACE**  
GLOBAL SOLUTIONS



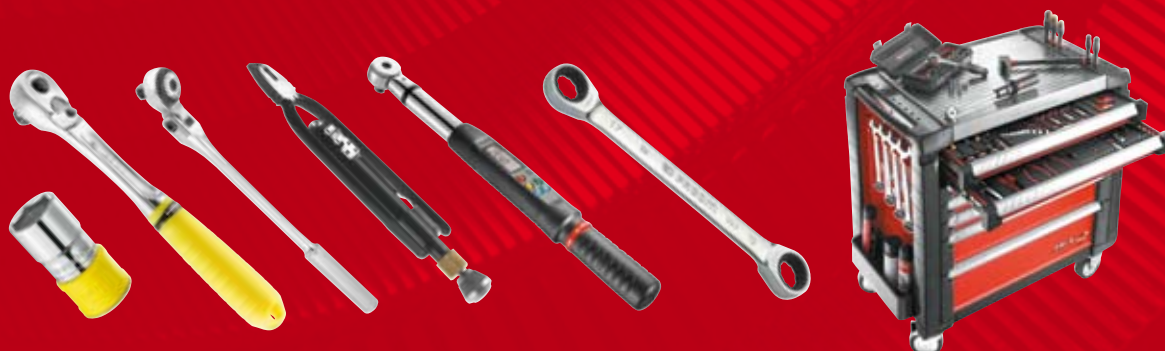
# DESIGNING SOLUTIONS

## DEDICATED TO AEROSPACE

ALMOST **100 YEARS OF INNOVATION**  
**IN AEROSPACE SAFETY**

Facom has been investing in aerospace safety and technological evolution since 1918.

FACOM teams up with the aerospace industry to develop the FOD solutions of tomorrow, including breakthrough tool detection systems.







## AEROSPACE EXPERTISE CONTINUALLY EVOLVING.

As part of the **Industrial & Automotive Repair** division of the **Stanley Black & Decker group**, Facom relies on an organisation offering comprehensive and competitive solutions, with the same level of quality and service everywhere in the World.

- The Facom aerospace catalogue now includes US dimension hand tools by PROTO, a US leader in aerospace maintenance.
- Storage or power tool solutions from other group brands are also part of this offer.

**PROTO**



# ADVANCED SOLUTIONS FOR AEROSPACE

Whether for manufacturers or maintenance services, safety has always been paramount in the aerospace field, where control over Foreign Object Debris (FOD) has become an unavoidable aspect.

The annual financial impact of FODs on the aerospace industry is about \$13 billion, indirect costs amounting to ten times the direct costs when considering the delays, aircraft replacements, fuel costs, and unplanned maintenance that FODs generate.



## FACOM TOOL CONTROL SYSTEM

A quintessential visual aid for instant tool inventory and missing tool identification.







## FACOM.FLUO RANGE

Detectable with a UV lamp, tools from the Fluo range are a simple and unique solution in the market thanks to the many tools available.



## FACOM • RFID TECHNOLOGY

- Tools instantly detectable by their RFID chip.
- RFID Facom-Cribmaster technologies for automated tool management and inventory.

RFID  
TECHNOLOGY  
BY FACOM



For more information on the RFID technology, refer to the dedicated catalogue or visit [www.facom.com](http://www.facom.com)



Over the last **95 years**, FACOM has imposed an **unrivaled quality standard**. This **search for excellence** is what drives FACOM teams.



### **TRAINING:**

FACOM offers training adapted to the specifics and expectations of employees and distributors.

### **TECHNICAL SUPPORT:**

Whatever your question is, our advisors search through comprehensive data to ensure you are provided with a reliable and precise answer, either directly or within a maximum of 24hrs.

### **CONTROL LABORATORY:**



FACOM has a control laboratory on its Morangis site. This laboratory offers different levels of services within its Cofrac #2-1934 torque measurement accreditation.



# FACOM SERVICES FOR AEROSPACE

## MADE TO ORDER



- **Your workshop with your colour scheme.**
- **Tool storage modules** adapted per product selection.
- **Roller cabinets** with specific drawer set.
- **Special bits** for torque wrenches.
- Specific product **finish** and marking.
- Material **change**.
- **On request**, safety lines integrated into tools for working at height.





# MEETING YOUR NEEDS, ALL OVER THE WORLD

Wherever you deploy your business, our international distribution network and partners provide you with access to the best tools and FACOM services you need.

## OUR **EXISTING CLIENTS**

INCLUDE:

AIR FRANCE INDUSTRIE,  
EADS, DAHER SOCATA,  
ALTRAN, EMBRAER,  
SAFRAN, THALES,  
LATECOERE, SABENA  
TECNICS, HELI UNION,  
GOODRICH, ZODIAC,  
SIGMA AERO SEAT, AIA,  
ARMÉE DE L'AIR  
(FRENCH AIR FORCE),  
HELICAP, DASSAULT,  
EAS, EMIRATES.







<b>A E R O S P A C E</b>	▶ <b>1</b>	<b>Storage</b>		<b>10</b>	
	▶ <b>2</b>	<b>Fixed and variable opening wrenches</b>		<b>14</b>	
	▶ <b>3</b>	<b>Spline profile tools</b>		<b>19</b>	
	▶ <b>4</b>	<b>Crowfoot bits</b>		<b>21</b>	
	▶ <b>5</b>	<b>Tools for aerospace fasteners</b>		<b>25</b>	
	▶ <b>6</b>	<b>Locking-wire pliers</b>		<b>26</b>	
	▶ <b>7</b>	<b>Ratchets - Sockets</b>		<b>27</b>	
	▶ <b>8</b>	<b>Torque control</b>		<b>36</b>	
	▶ <b>9</b>	<b>Screwdrivers - Keys - Bits</b>		<b>42</b>	
	▶ <b>10</b>	<b>Lighting</b>		<b>45</b>	
	▶ <b>11</b>	<b>Aerospace toolkits</b>		<b>48</b>	



Mobile storage

# New range **JET+**



## The choice is yours



**JET+<sup>3</sup>**

3 modules per drawer

1 | 2 | 3



20 to 35 kg per drawer - 15 to 65 litres per drawer



**JET+<sup>4</sup>**

4 modules per drawer

1 | 2 | 3 | 4



25 to 45 kg per drawer - 20 to 85 litres per drawer



**JET+<sup>5</sup>**

5 modules per drawer

1 | 2 | 3 | 4 | 5



35 to 60 kg per drawer - 25 to 110 litres per drawer





**SAFETY ROLLER CABINETS**

**SAFETY LOCK SYSTEM**

- ✦ 3 modules per drawer
- ✦ 12 to 27 modules distributed in 60 and 130 mm high drawers (200 and 270 mm drawers can also be fitted with modules)
- ✦ 140 to 170 kg total acceptable load in the drawers according to drawer composition
- ✦ 155 litres effective volume
- ✦ 0.22m<sup>2</sup> effective working surface (440 X 496 mm)
- ✦ 4 wheels diameter 125mm, 2 fixed, 2 castors, one with brake

**TECHNICAL DATA**

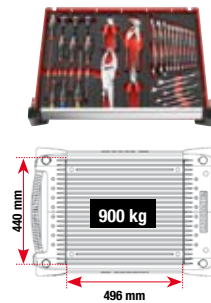
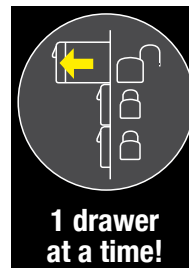
Overall dimensions (including wheels and worktop): L774 x D546 x H971 mm.  
Effective drawer dimensions: L569 x D421 x H60 / 130 / 200 / 270 mm.

**LOAD PER DRAWER**

- drawer 60 mm high: 20 kg
- drawer 130 mm high: 25 kg
- drawer 200 mm high: 30 kg
- drawer 270 mm high: 35 kg

**EFFECTIVE VOLUME PER DRAWER**

- drawer 60 mm high: 15 l
- drawer 130 mm high: 30 l
- drawer 200 mm high: 50 l
- drawer 270 mm high: 65 l



**Safety roller cabinets**

**JET.6GM3S JET+ 6-drawer roller cabinets - 3 modules per drawer - safety range**



- Supplied with the SAFETY LOCK SYSTEM preventing simultaneous opening of several drawers:
  - 1 drawer at a time.
  - Prevents the roller cabinet from tipping over.
- 6 drawers = 15 modules distributed in the 60 and 130 mm wall drawers:
  - 4 drawers 60 mm wall = 12 modules.
  - 1 drawer 130 mm wall = 3 modules.
  - 1 drawer 270 mm wall.
- The 130 and 270 mm drawers can also be fitted with modules.
- Supplied with 6 partitions for 60 mm drawers and 2 partitions for 130 mm drawers.
- Total load in the drawers: 140 kg.
- Wall storage capacity: 155 litres.
- Overall dimensions (including wheels and worktop): L.774 x D.546 x H.971 mm.
- Drawer useful size: L.569 x D.421 x H.60 / 130 / 210 / 270 mm.
- 4 wheels 125 mm diameter: 2 fixed, 2 castors, one with brake.
- Colour: Black 9004.
- Weight: 75,50 kg.



**JET.8GM3S JET+ 8-drawer roller cabinets - 3 modules per drawer - safety range**

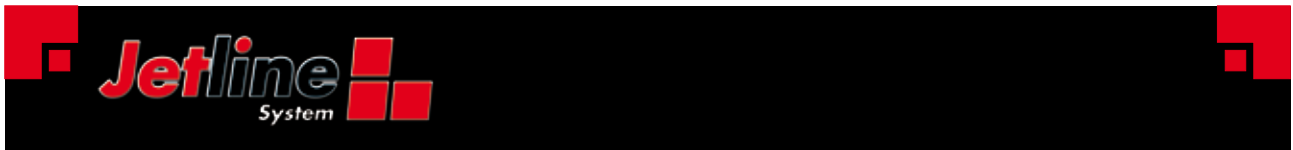


- Supplied with the SAFETY LOCK SYSTEM preventing simultaneous opening of several drawers:
  - 1 drawer at a time.
  - Prevents the roller cabinet from tipping over.
- 8 drawers = 24 modules distributed in the 60 and 130 mm wall drawers:
  - 6 drawers 60 mm wall = 18 modules.
  - 2 drawers 130 mm wall = 6 modules.
- Total load in the drawers: 170 kg.
- Wall storage capacity: 150 litres.
- 4 wheels 125 mm diameter: 2 fixed, 2 castors, one with brake.
- Overall dimensions (including wheels and worktop): L.774 x D.546 x H.971 mm.
- Drawer useful size: L.569 x D.421 x H.60 / 130 / 210 / 270 mm.
- Supplied with 10 partitions for drawers 60 mm wall.
- Colour: Black 9004.
- Weight: 79,50 kg.





# Workshop furniture JETLINE System



## BE THE ARCHITECT OF YOUR WORKSHOP...



**Customise the organisation of your workstation!**



**Gain space!**



**No wall fastening required!**



**40 components**  
A comprehensive solution for all arrangement needs.



**Specialised brochure**  
Download it on [www.facom.com](http://www.facom.com)



**Configurator**  
Create your JETLINE work space in 3D.  
Download it on the [www.facom.com](http://www.facom.com) site

### Easy assembly

- The units are designed "ready to be installed" and completely factory-assembled.
- No specialist skills required, assembly is fast and easy.

### FACOM quality

- Acknowledged manufacturing quality meeting the needs of the most demanding users.
- 5-year guarantee.

### Doors

- The doors are tested for 10,000 open/close cycles.

### Steel sheet

- All units are manufactured in epoxy painted steel sheet (thickness 12/10<sup>th</sup>).

### Drawers

- The sliders have a 100% opening.
- They are tested for 50,000 open/close cycles i.e. 10 years use.



**Glazed doors**



**Swing doors**



**Steel sheet**



**Doors up-and-in doors**



**Sliding doors**



**Drawers**

# FOAM MODULES



## FACOM CONTROL SYSTEM

- **SAFETY:** A separate space for each tool prevents them being left in sensitive areas.
- **PRODUCTIVITY:** Tools quickly located and immediately returned after use. Avoiding loss.
- **SPEED:** Missing tools identified at a glance.



**Two-coloured modular system of foam tool modules designed to resist a wide range of hydrocarbons, hydraulic fluids and cleaning products.**

Modules compatible with JET+, JET.XL, CHRONO.XL and CHRONO + roller cabinets.  
Dimensions: 418 x 188 x 45 mm.



Find the complete range of foam modules in the new brochure Facom JET+



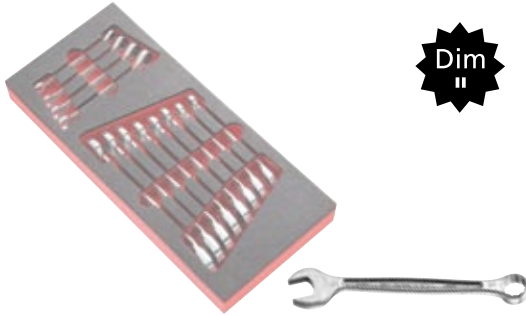




## Combination wrench

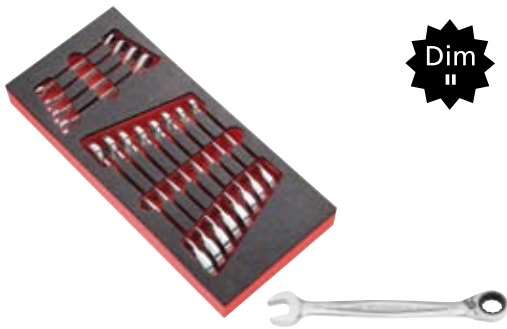
### Combination series

#### MODM.440-4 Inch combination wrench set in foam module



- Contains: 13 combination wrenches in inches: 1/4 - 5/16 - 11/32 - 3/8 - 7/16 - 1/2 - 9/16 - 5/8 - 11/16 - 3/4 - 13/16 - 7/8 - 15/16".
- Foam tray: PM.MOD440-4
- Weight: 1.650 kg.

#### MODM.467JU12 Inch ratchet combination wrench set in foam module



- Contains : 12 ratchet combination wrenches in inches: 1/4 - 5/16 - 11/32 - 3/8 - 7/16 - 1/2 - 9/16 - 5/8 - 11/16 - 3/4 - 7/8 - 15/16".
- Foam tray: PM.MOD467JU12
- Weight: 2.040 kg.

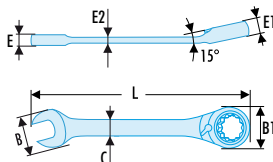
#### 467.JP8U Inch ratchet combination wrench set in sleeve



##### ASME B107.100

- Productivity and safety = easy to organise, easy to spot, always with you.
- Dimensions in inches: 5/16 - 3/8 - 7/16 - 1/2 - 9/16 - 5/8 - 11/16 - 3/4".
- Resistant to chemicals and impacts.
- Portable case: CK.467J1U.
- Weight: 1.380 kg.

#### 467 - Inch standard ratchet combination wrenches



##### ASME B107.100

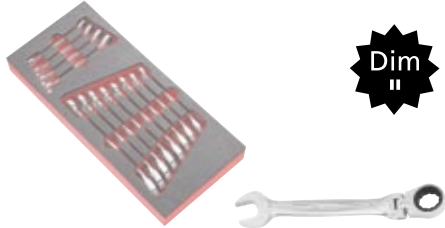
- Standard ratchet combination wrenches: for all current applications.
- Compact ratchet mechanism and reversible by lever.
- Increment 5° (7.5° for dimension 1/4" ; 6° for dimensions 5/16" and 11/32").
- Ring head angled at 15°.
- Open end head angled at 15°.
- Inch sizes: 1/4" to 15/16".
- Presentation: satin chrome finish.

➡	A ["]	B [mm]	B1 [mm]	C [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	ΔΔ [g]
<b>467.1/4</b>	1/4	14,5	14	9,5	4	6,3	2,2	128	30
<b>467.5/16</b>	5/16	16,7	17	9,7	4,3	6,5	2,5	140	30
<b>467.11/32</b>	11/32	18,7	18,6	10,3	4,5	6,9	2,5	149	40
<b>467.3/8</b>	3/8	20,8	20,2	11,3	5	7,3	2,9	158	50
<b>467.7/16</b>	7/16	23	22	12,2	5,3	7,7	3,2	165	60
<b>467.1/2</b>	1/2	26,8	25,5	14,5	6,1	8,6	3,5	178	90

➡	A ["]	B [mm]	B1 [mm]	C [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	ΔΔ [g]
<b>467.9/16</b>	9/16	29	26,9	15,1	6,5	9	3,8	190	110
<b>467.5/8</b>	5/8	33	29,8	17,3	7,1	9,9	4,2	208	140
<b>467.11/16</b>	11/16	35,5	31,8	18,2	7,5	10,3	4,5	225	170
<b>467.3/4</b>	3/4	39,4	34	20,4	8,6	11,2	4,6	247	230
<b>467.7/8</b>	7/8	45,8	40,1	23,9	9	13	5,1	287,8	340
<b>467.15/16</b>	15/16	51,8	46,5	26,4	10	14,5	5,6	321	480

### Angled combination ratchet series

#### MODM.467FJU8 Inch hinged ratchet combination wrench set in foam module



- Contains:  
8 hinged ratchet combination wrenches in inches:  
5/16 - 3/8 - 7/16 - 1/2 - 9/16 - 5/8 - 11/16 - 3/4".
- Foam tray: PM.MOD467FJU8
- Weight: 1.175 kg.



#### 467FJP8U Inch hinged ratchet combination wrench set in sleeve

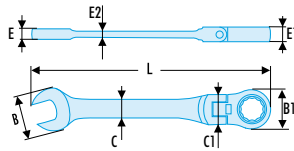
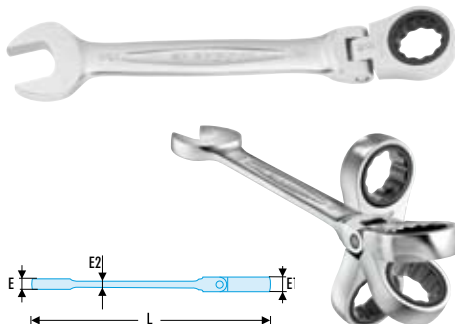


##### ASME B107.100

- Productivity and safety = easy to organise, easy to spot, always with you.
- Dimensions in inches: 5/16 - 3/8 - 7/16 - 1/2 - 9/16 - 5/8 - 11/16 - 3/4".
- Resistant to chemicals and impacts.
- Portable case: CK.467FJ1U.
- Weight: 1.200 kg.



#### 467F - Inch hinged jointed combination wrenches



##### ASME B107.100

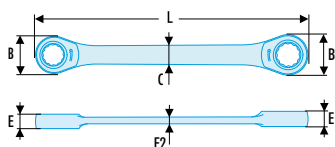
- Hinged head ratchet combination wrenches: to reach difficult access nuts.
- Compact ratchet mechanism and reversible by flipping the wrench.
- Increment 5° (6° for dimensions 5/16" and 3/8").
- Ring head hinged at 180°.
- Open end head angled at 15°.
- Inch sizes: 5/16" to 3/4".
- Presentation: satin chrome finish.

≡	A ["]	B [mm]	B1 [mm]	C [mm]	E [mm]	E1 [mm]	E2 [mm]	E3 [mm]	L [mm]	ΔΔ [g]
467F.5/16	5/16	16,2	16,7	9	4,3	6,5	2,7	13	127,5	45
467F.3/8	3/8	20,3	20,1	10,8	5	7,3	3,2	16	136,5	60
467F.7/16	7/16	22,5	21,8	11,8	5,4	7,7	3,6	17	141,5	65
467F.1/2	1/2	26,8	25,2	13,6	6,1	8,6	3,9	19	155	95
467F.9/16	9/16	28,7	26,8	14,2	6,4	9	4,2	20	161	110
467F.5/8	5/8	32,9	29,8	16	7,2	9,9	4,6	22	180	155
467F.11/16	11/16	34,5	31,8	16,9	7,6	10,3	4,9	23	191	175
467F.3/4	3/4	39,2	33,9	19,5	8,6	11,2	5,4	25	216	230



### Ring ratchet series

#### 64 - Inch straight ratchet ring wrenches



##### ASME B107.100

- Straight ratchet ring wrenches: to reach the nut flat.
- Compact ratchet mechanism and reversible by flipping the wrench.
- Increment 5° (7.5° for dimension 1/4" mm; 6° for dimensions 5/16" and 11/32").
- Dimensions in inches: from 1/4" to 15/16".
- Presentation: satin chrome finish.

≡	A ["]	B [mm]	B1 [mm]	C [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	ΔΔ [g]
64.1/4X5/16	1/4x5/16	14,2	17,2	8,0	6,3	6,5	3,0	115	40
64.5/16X11/32	5/16x11/32	16,8	20,2	8,3	6,5	6,9	3,2	128	45
64.3/8X7/16	3/8x7/16	20,2	21,8	9,1	7,3	7,7	3,6	150	60
64.1/2X9/16	1/2x9/16	23	24,8	11,3	8,6	9,0	4,2	180	115
64.5/8X11/16	5/8x11/16	29,5	33,5	14,8	9,9	10,7	5,4	210	185
64.3/4X13/16	3/4x13/16	33,5	40,0	15,2	11,2	13,0	5,4	245	310
64.7/8X15/16	7/8x15/16	40	46,0	15,2	13	14,5	5,4	260	480







Ratchet wrenches

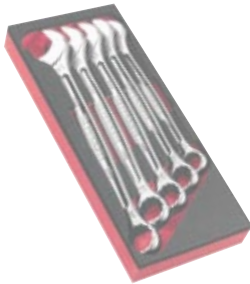
64.JU6T Inch straight ratchet ring wrenches set



ASME B107.100

- Set of 6 straight ratchet ring wrenches.
- Dimensions in inches: 1/4x5/16 - 3/8x7/16 - 1/2x9/16 - 5/8x11/16 - 3/4x13/16 - 7/8x15/16".
- Wallet : N.38A-6B.
- Weight: 1,315 kg.

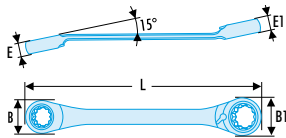
MODM.64JU6 Inch straight ratchet ring wrenches in foam module



Contains:

- 6 inch wrenches 64: 1/4X5/16, 3/8X7/16, 1/2X9/16, 5/8X11/16, 3/4X13/16, 64.7/8X15/16".

65 - Inch 15° hinged ratchet ring wrenches



ASME B107.100

- 15° hinged ratchet ring wrenches: ring offset to clear fingers or obstacles.
- Compact ratchet mechanism and reversible by lever.
- Increment 5° (7.5° for dimension 1/4"; 6° for dimensions 5/16" and 11/32").
- Ring head angled at 15°.
- Dimensions in inches: from 1/4" to 15/16".
- Presentation: satin chrome finish.

65	A [°]	B [mm]	B1 [mm]	E [mm]	E1 [mm]	L [mm]	Δ [g]
65.1/4X5/16	1/4x5/16	14,0	17,0	6,3	6,5	115	30
65.5/16X11/32	5/16x11/32	17,0	20,2	6,5	6,9	128	45
65.3/8X7/16	3/8x7/16	20,2	22,0	7,3	7,7	150	65
65.1/2X9/16	1/2x9/16	25,5	26,9	8,6	9,0	180	110
65.5/8X11/16	5/8x11/16	29,8	31,8	9,9	10,3	200	170
65.3/4X13/16	3/4x13/16	34,0	40,1	11,2	13,0	245	290
65.7/8X15/16	7/8x15/16	40,1	46,5	13	14,5	260	420

65.JU6T Inch straight ratchet ring wrenches set



ASME B107.100

- Set of 6 straight ratchet ring wrenches.
- Dimensions in inches: 1/4x5/16 - 3/8x7/16 - 1/2x9/16 - 5/8x11/16 - 3/4x13/16 - 7/8x15/16".
- Wallet : N.38A-6B.
- Weight: 1,315 kg.

## MODM.65JU6 1/2 Inch straight ratchet ring wrenches in foam module



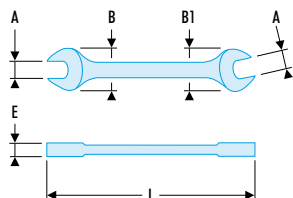
Contains:

- 6 inch wrenches 65: 1/4X5/16, 3/8X7/16, 1/2X9/16, 5/8X11/16, 3/4X13/16, 64.7/8X15/16".



## Standard series

### 44 - 1/2 Inch open end wrenches



### ASME B107.100

- Open end wrenches = the open ends are slimmer than a standard combination wrench for better thickness accessibility. Examples: brake calipers, hydraulic hose locknuts.
- Heads hinged at 15°.
- Dimensions in inches: from 1/4" to 1"5/8.
- Presentation: satin chrome finish.

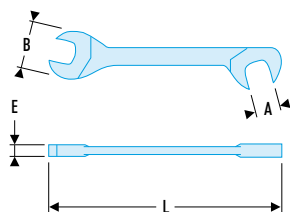


Icon	A ["]	B x B1 [mm]	E [mm]	L [mm]	ΔΔ [g]
	44.1/4X5/16	15,0 x 17,5	3,5	120	20
	44.11/32X13/32	19,0 x 23,0	4,2	143	40
	44.3/8X7/16	23,0 x 25,0	4,7	152	50
	44.1/2X9/16	29,0 x 33,5	5,5	177	80
	44.5/8X11/16	37,0 x 42,0	6,8	210	145
	44.11/16X3/4	37,0 x 42,0	6,8	210	145
	44.3/4X13/16	43,0 x 48,5	7,5	240	200

Icon	A ["]	B x B1 [mm]	E [mm]	L [mm]	ΔΔ [g]
	44.7/8X15/16	47,5 x 52,0	8,3	251	260
	44.1'X1'1/16	56,0 x 61,6	8,8	282	360
	44.1'1/8X1'1/4	63,0 x 70,0	9,8	318	515
	44.1'3/16X1'5/16	63,0 x 70,0	9,8	318	515
	44.1'3/8X1'1/2	78,0 x 87,0	12	381	945
	44.1'7/16X1'5/8	78,0 x 87,0	12	381	945



### 34 - 1/2 Inch 15° and 75° hinged "midget" open end wrenches



### ASME B107.100

- "Midget" open end wrenches: short shank and slim heads for manoeuvrability in confined spaces.
- Heads hinged at 15° and 75° allow to intervene on nuts inaccessible with a standard wrench.
- Dimensions in inches: from 5/32" to 11/16".
- Presentation: satin chrome finish.

Icon	A ["]	B x B1 [mm]	E [mm]	L [mm]	ΔΔ [g]
	34.5/32	10	2,4	70	10
	34.3/16	13	2,4	75	10
	34.7/32	13	2,4	75	10
	34.15/64	15	2,7	80	15
	34.1/4	15	2,7	80	15
	34.9/32	15	2,7	80	15
	34.5/16	18,5	3,0	90	20
	34.11/32	18,5	3,0	90	20

Icon	A ["]	B x B1 [mm]	E [mm]	L [mm]	ΔΔ [g]
	34.3/8	22	3,0	100	25
	34.13/32	22	3,0	100	30
	34.7/16	22	3	100	30
	34.1/2	27	3,5	120	35
	34.9/16	27	3,5	120	40
	34.5/8	33	4,5	140	70
	34.11/16	33	4,5	140	70



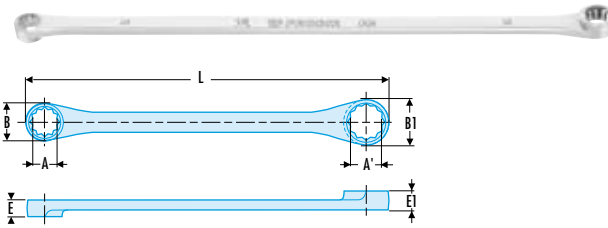




## Ring wrenches

### Long ring wrenches series

#### 59L - Metric long double ended ring wrenches

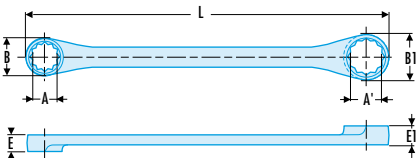


#### AS 955

- Offset box end for manoeuvrability in confined spaces.
- Metric dimensions: from 6 mm to 19 mm.
- Presentation: satin chrome finish.

⇒	A ["]	B [mm]	B1 [mm]	E [mm]	E1 [mm]	L [mm]
<b>59L.6X7</b>	6X7	10,2	11,6	6,3	7,3	200
<b>59L.8X9</b>	8X9	11,8	13,3	6,5	7,5	240
<b>59L.10X11</b>	10X11	14,6	16	7,5	8,7	288
<b>59L.12X13</b>	12X13	17,3	18,8	10,4	11,3	330
<b>59L.14X15</b>	14X15	20	21,5	12	13,7	364
<b>59L.14X17</b>	14X17	20	23,9	12	13,7	364
<b>59L.18X19</b>	18X19	25,3	26,5	14	15,1	405

#### 59L - Inch long double ended ring wrenches



#### AS 954

- Offset box end for manoeuvrability in confined spaces.
- Dimensions in inches: from 1/4" to 13/16".
- Presentation: satin chrome finish.

⇒	A ["]	B [mm]	B1 [mm]	E [mm]	E1 [mm]	L [mm]
<b>59L.1/4X5/16</b>	1/4x5/16	10,2	11,6	6,3	7,3	200
<b>59L.3/8X7/16</b>	3/8x7/16	14,6	17,2	7,5	8,8	288
<b>59L.1/2X9/16</b>	1/2x9/16	18,8	20	12	13,7	364
<b>59L.5/8X3/4</b>	5/8x3/4	22,8	26,5	14	15,1	405
<b>59L.11/16X13/16</b>	11/16x13/16	25,4	30	17	18	410

#### Long-reach ring wrenches



#### ASME B107.100

- 12-pin for more secure nut tightening, improving speed and grip.
- Dimensions in inches: from 1'1/16 to 1'11/16.
- Presentation: bright finish.

⇒	A ["]	L [mm]	ΔΔ [g]
<b>J1151</b>	1'1/16x1-1/4	464	826
<b>J1155</b>	1'1/4x1-5/16	489	894
<b>J1160</b>	1'1/4x1-3/8	514	1007
<b>J1162</b>	1'7/16x1-1/2	565	1352
<b>J1164</b>	1'5/8x1-11/16	616	1696

### ▣ Spline profile ring wrenches



#### ASME B107.100

- ASME B107.100: ring and performance specification.
- MS33787: spline profile specification.
- Presentation: bright finish.

▣	A ["]	L [mm]	ΔΔ [g]
<b>J1118SPL</b>	1/4x5/16	184	54
<b>J1122SPL</b>	3/8x7/16	229	82
<b>J1126SPL</b>	1/2x9/16	229	154
<b>J1130SPL</b>	9/16x5/8	248	181
<b>J1135SPL</b>	11/16x3/4	279	340
<b>J1142SPL</b>	13/16x15/16	324	467
<b>J1144SPL</b>	7/8x1	337	490

### ▣ Spline profile combination wrenches



#### ASME B107.100

- Open end: anti-slip design.
- ASME B107.100: ring and performance specification.
- MS33787: spline profile specification.
- Presentation: bright finish.
- Total head height: 18 mm.

▣	N° Spline	A ["]	L [mm]	ΔΔ [g]
<b>J1208SPL</b>	8	1/4	125	27
<b>J1209SPL</b>	9	9/32	131	32
<b>J1210SPL</b>	10	5/16	138	36
<b>J1211SPL</b>	11	11/32	144	41
<b>J1212SPL</b>	12	3/8	150	45
<b>J1214SPL</b>	14	7/16	176	64
<b>J1216SPL</b>	16	1/2	201	91
<b>J1218SPL</b>	18	9/16	224	118
<b>J1220SPL</b>	20	5/8	242	154
<b>J1222SPL</b>	22	11/16	261	191
<b>J1224SPL</b>	24	3/4	280	227
<b>J1226SPL</b>	26	13/16	300	268
<b>J1228SPL</b>	28	7/8	318	331
<b>J1230SPL</b>	30	15/16	338	408
<b>J1232SPL</b>	32	1	357	499

### ▣ SBV - Spline profile head ratchet ring wrenches



- Profile suited to "high strength" spline fasteners.
- Compatible with 12-point and 6-point inch fasteners.
- Heads tilted by 15°.
- 5° increments.
- High performance level.
- High head capacity.
- Finish: black chromium.



▣	A ["]	L [mm]	ΔΔ [g]
<b>SBV0709</b>	7/32x9/32	114	36
<b>SBV0810</b>	1/4x5/16	114	36
<b>SBV1214</b>	3/8x7/16	151	54
<b>SBV1618</b>	1/2x9/16	179	104
<b>SBV2022</b>	5/8x11/16	200	159
<b>SBV2428</b>	3/4x7/8	245	269
<b>SBV2630</b>	13/16x15/16	260	381
<b>SBV3236</b>	1x11/8	330	431





## Spline profile tools

### 1/4" spline profile sockets



- Profile suited to "high strength" spline fasteners.
- Compatible with 12-point and 6-point inch fasteners.
- Thin walls.
- High performance level.
- Finish: chromed.

⇒	N° Spline	A ["]	L [mm]	ΔΔ [g]
<b>J4706SPL</b>	6	3/16	23	9
<b>4707SPL</b>	7	7/32	23	9
<b>4708SPL</b>	8	1/4	23	9
<b>4709SPL</b>	9	9/32	23	9
<b>4710SPL</b>	10	5/16	23	14
<b>4712SPL</b>	12	3/8	23	18
<b>4714SPL</b>	14	7/16	26	23

### 1/4" long-reach spline profile sockets



- Profile suited to "high strength" spline fasteners.
- Compatible with 12-point and 6-point inch fasteners.
- Thin walls.
- High performance level.
- Finish: chromed.

⇒	N° Spline	A ["]	L [mm]	ΔΔ [g]
<b>J4706DPL</b>	6	3/16	51	14
<b>J4707DPL</b>	7	7/32	51	18
<b>4708DPL</b>	8	1/4	51	18
<b>J4709DPL</b>	9	9/32	51	23
<b>4710DPL</b>	10	5/16	51	27
<b>J4712DPL</b>	12	3/8	51	36
<b>J4714DPL</b>	14	7/16	51	41

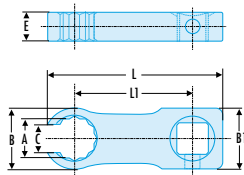
### 3/8" long-reach spline profile sockets



- Profile suited to "high strength" spline fasteners.
- Compatible with 12-point and 6-point inch fasteners.
- Thin walls.
- High performance level.
- Finish: chromed.

⇒	N° Spline	A ["]	d1 [mm]	d2 [mm]	L [mm]	ΔΔ [g]
<b>5012DPL</b>	12	3/8	13,8	16,8	53,4	36
<b>5014DPL</b>	14	7/16	16	17,2	53,6	43
<b>5016DPL</b>	16	1/2	18,3	18,3	59,9	54
<b>5018DPL</b>	18	9/16	20,9	20,9	60,3	83
<b>5020DPL</b>	20	5/8	22,6	22,6	60,4	96

## Inch 1/4" drive torque adapters - 12 point

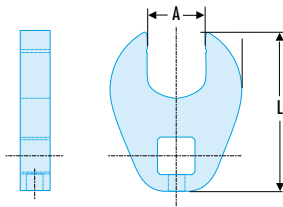


### AS 954

- Thin walls 12 point end.
- Max. torque : 8.5 N.m.
- Designed specifically for aerospace applications.
- Finish: chromed.
- 1/4" drive.
- Dimensions in inches: from 1/4" to 3/8".
- Respect torque standards specifications.

Part No.	A ["]	E [mm]	B [mm]	C [mm]	L1 [mm]
J4708FLA	1/4	6,3	10,3	3,9	34,9
J4710FLA	5/16	6,3	12,7	4,8	36,1
J4712FLA	3/8	6,3	15,1	6,3	37,0

## Metric 1/4" crowfoot open end bits

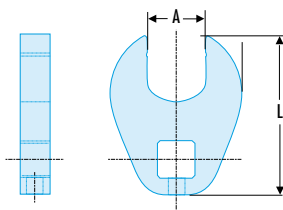


### ASME B107.21

- Open end: anti-slip design ensuring proper fitting of the crowfoot on the bolt.
- 1/4" square drive bit.
- Metric dimensions: from 7 mm to 14 mm.
- Finish: chromed.

Part No.	A mm	L [mm]	ΔΔ [g]
J4707MCF	7	23,6	9,1
J4708MCF	8	24,9	9,1
J4709MCF	9	25,8	10,5
J4710MCF	10	26,8	13,6
J4711MCF	11	28,6	18,1
J4712MCF	12	29,7	22,7
J4713MCF	13	30,3	22,7
J4714MCF	14	32,1	22,7

## Inch 1/4" crowfoot open end bits



### ASME B107.21

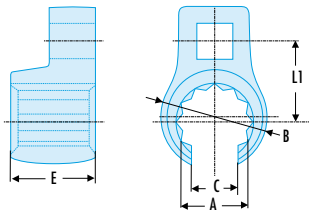
- Open end: anti-slip design ensuring proper fitting of the crowfoot on the bolt.
- 1/4" square drive bit.
- Dimensions in inches: from 1/4" to 9/16".
- Finish: chromed.

Part No.	A ["]	L [mm]	ΔΔ [g]
J4708CF	1/4	23,1	9,1
J4710CF	5/16	24,7	13,6
J4712CF	3/8	26,4	13,6
J4714CF	7/16	28,0	18,1
J4716CF	1/2	29,6	22,7
J4718CF	9/16	31,2	22,7



## 3/8" crowfoot bits

### 3/8" 12-point crowfoot flare bit

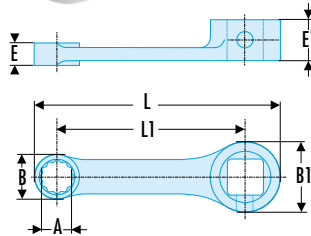


#### ASME B107.21

- Thin wall 12-point high head.
- Built to aeronautical specifications.
- Drive square: 3/8".
- Dimensions: 5/8" --> 1 1/16".
- Finish: chromed.

⇒	A ["]	B [mm]	C [mm]	E [mm]	L [mm]	L1 [mm]	ΔΔ [g]
<b>4920FL</b>	5/8	18,3	24,2	24,2	19,0	11,2	40
<b>4922FL</b>	11/16	18,3	26,3	26,3	20,2	12,5	44
<b>4924FL</b>	3/4	18,3	29,2	29,2	21,4	14,0	53
<b>4926FL</b>	13/16	18,9	31,1	31,1	22,6	15,4	56
<b>4928FL</b>	7/8	19,3	33,8	33,8	25,0	16,7	67
<b>4930FL</b>	15/16	19,0	35,9	35,9	24,2	17,3	68
<b>4932FL</b>	1	19,8	37,7	37,7	26,2	19,0	77
<b>4934FL</b>	1 1/16	20,0	39,5	39,5	27,0	18,1	84

### 12-point 3/8" drive adaptors



#### AS 954

- Length 2" between the centre of the square and the centre of the ring.
- Ring profile design guaranteeing mechanical strength while allowing use in confined spaces.
- Drive square: 3/8".
- Adjust to torque standards.
- Finish: chromed.

⇒	A ["]	B [mm]	E [mm]	E1 [mm]	L [mm]	L1 [mm]
<b>J5108</b>	1/4	10,40	6,09	11,1	65,15	50,8
<b>J5110</b>	5/16	12,06	6,09	11,1	66,29	50,8

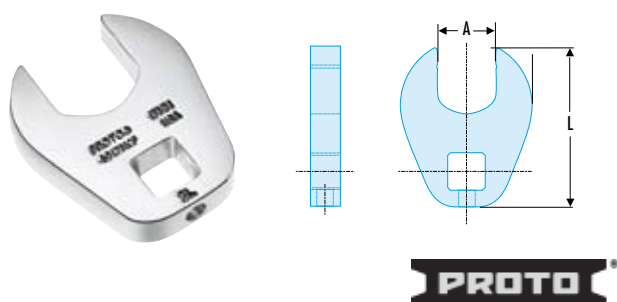
### J5100 9-piece set of 12-point 3/8" drive adaptors



- Length 2" between the centre of the square and the centre of the ring.
- Ring profile design guaranteeing mechanical strength while allowing use in confined spaces.
- Dimensions: 3/8" - 7/16" - 1/2" - 9/16" - 5/8" - 11/16" - 3/4" - 13/16" - 7/8".
- Adjust to torque standards.
- Finish: chromed.



## Metric 3/8" crowfoot open end bits



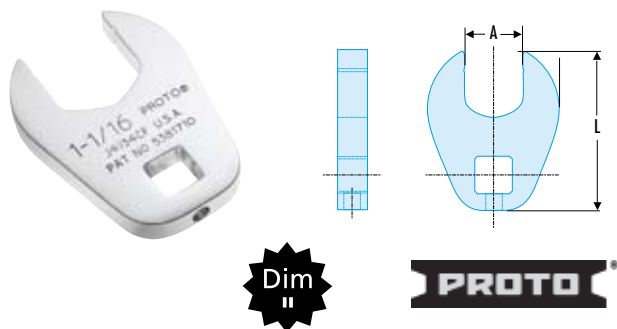
### ASME B107.21

- Open end: anti-slip design ensuring proper fitting of the crowfoot on the bolt.
- 3/8" square drive bit.
- Metric dimensions: from 9 mm to 24 mm.
- Finish: chromed.

Item	A [mm]	L [mm]	ΔΔ [g]
J4909MCF	9	33,6	22,6
J4910MCF	10	34,2	22,7
J4911MCF	11	34,7	31,7
J4912MCF	12	37,4	31,7
J4913MCF	13	37,9	27,2
J4914MCF	14	38,5	31,7
J4915MCF	15	41,1	45,4
J4916MCF	16	42,2	40,8

Item	A [mm]	L [mm]	ΔΔ [g]
J4917MCF	17	43,6	45,4
J4918MCF	18	48,9	58,9
J4919MCF	19	49,5	58,9
J4920MCF	20	52,6	58,9
J4921MCF	21	53,4	63,5
J4922MCF	22	56,3	68,0
J4923MCF	23	59,4	86,2
J4924MCF	24	60,7	86,2

## Inch 3/8" crowfoot open end bits



### ASME B107.21

- Open end: anti-slip design ensuring proper fitting of the crowfoot on the bolt.
- 3/8" square drive bit.
- Dimensions in inches: from 3/8" to 3".
- Finish: chromed.

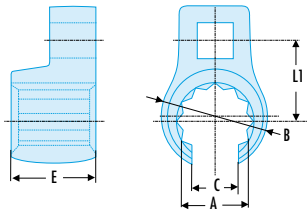
Item	A ["]	L [mm]	ΔΔ [g]
J4912CF	3/8	32,6	27,2
J4914CF	7/16	33,4	27,2
J4916CF	1/2	36,2	31,7
J4918CF	9/16	40,3	31,7
J4920CF	5/8	42,5	40,8
J4922CF	11/16	47,8	40,8
J4924CF	3/4	48,9	49,9
J4926CF	13/16	50,5	49,9
J4928CF	7/8	51,7	54,4
J4930CF	15/16	53,3	58,9
J4932CF	1"	54,6	58,9
J4934CF	1 1/16	55,8	108,9
J4936CF	1 1/8	56,7	108,9
J4938CF	1 3/16	58,3	108,9
J4940CF	1 1/4	60,3	95,2
J4942CF	1 5/16	62,7	113,4
J4944CF	1 3/8	64,2	131,5
J4946CF	1 7/16	66,1	131,5
J4948CF	1 1/2	68,5	149,7
J4950CF	1 9/16	70,1	154,2
J4952CF	1 5/8	71,9	172,4
J4954CF	1 11/16	74,4	163,3

Item	A ["]	L [mm]	ΔΔ [g]
J4956CF	1 3/4	75,3	176,9
J4958CF	1 13/16	77,7	181,4
J4960CF	1 7/8	78,6	204,1
J4962CF	1 15/16	81,8	222,2
J4964CF	2"	85,7	331,1
J4966CF	2 1/16	87,5	322,0
J4968CF	2 1/8	90,7	335,6
J4970CF	2 3/16	92,4	353,8
J4972CF	2 1/4	94,0	403,7
J4974CF	2 5/16	95,7	408,2
J4976CF	2 3/8	100,6	458,1
J4978CF	2 7/16	104,8	467,2
J4980CF	2 1/2	108,0	498,9
J4982CF	2 9/16	109,7	503,5
J4984CF	2 5/8	113,6	576,0
J4986CF	2 11/16	115,5	607,8
J4988CF	2 3/4	118,7	621,4
J4990CF	2 13/16	122,7	625,9
J4992CF	2 7/8	124,3	689,4
J4994CF	2 15/16	125,9	716,7
J4996CF	3"	126,9	703,0



# 1/2" crowfoot bits

## 1/2" 12-point crowfoot flare bit



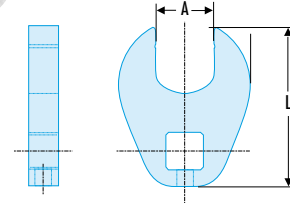
### ASME B107.21

- Thin wall 12-point high head.
- Built to aeronautical specifications.
- Drive square: 1/2".
- Dimensions: 1"1/8 --> 2".
- Finish: chromed.

➤	A ["]	B [mm]	C [mm]	E [mm]	L [mm]	ΔΔ [g]
J5336FL	1-1/8	42,9	19,2	23,8	29,1	86,2
J5338FL	1-3/16	44,4	20,6	23,8	29,9	86,2
J5340FL	1-1/4	46,8	22,6	23,8	31,1	86,2
J5342FL	1-5/16	48,4	23,3	23,8	31,9	86,2
J5344FL	1-3/8	50,6	25,8	25,4	33,1	113,4
J5346FL	1-7/16	52,4	25,8	25,4	33,9	113,4
J5348FL	1-1/2	53,9	25,8	25,4	34,7	113,4
J5350FL	1-9/16	55,6	27,0	25,4	35,9	140,6

➤	A ["]	B [mm]	C [mm]	E [mm]	L [mm]	ΔΔ [g]
J5352FL	1-5/8	57,9	28,7	25,4	36,7	140,6
J5354FL	1-11/16	60,3	32,1	26,9	38,3	140,6
J5356FL	1-3/4	61,9	32,1	26,9	39,0	172,4
J5358FL	1-13/16	64,2	32,1	26,9	40,2	172,4
J5360FL	1-7/8	66,7	32,1	28,5	41,4	204,1
J5362FL	1-15/16	68,3	32,1	28,5	42,2	226,8
J5364FL	2	70,6	38,5	28,5	43,4	226,8

## 1/2" crowfoot open end bits



- Open end: anti-slip design ensuring proper fitting of the crowfoot on the bolt.
- 1/2" square drive bit.
- Dimensions in inches: from 1"11/16 to 2".
- Finish: chromed.

➤	A ["]	L [mm]	ΔΔ [g]
J5334CF	1"11/16	73	231
J5336CF	1"1/8	76	245
J5338CF	1"3/16	76	263
J5340CF	1"1/4	84	299
J5342CF	1"5/16	84	299
J5344CF	1"3/8	86	327
J5346CF	1"7/16	86	340
J5348CF	1"1/2	87	349

➤	A ["]	L [mm]	ΔΔ [g]
J5350CF	1"9/16	89	363
J5352CF	1"5/8	89	376
J5354CF	1"11/16	97	431
J5356CF	1"3/4	97	445
J5358CF	1"13/16	98	458
J5360CF	1"7/8	98	478
J5364CF	2"	100	499

TOOLS FOR AEROSPACE FASTENERS

**1/4" AND 3/8" RATCHETS FOR INSTALLING AIRCRAFT FASTENERS**

Used with "standard" 1/4" and 3/8" square drive sockets.

- The sockets are locked onto square drive by a metal clip.

The ratchet head includes a hole for inserting a key

- To prevent rotation of the fastener during tightening.



4749XLHS 1/4" ratchet for aerospace fasteners



NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10, AS 4283

- Hole in 1/4" head and drive bit for passing keys.
- Smaller shape and volume for better accessibility.
- Increment: 8°.
- Head diameter: 21.5 mm.
- Total head height: 18 mm.
- Length: 144 mm.
- Weight: 115 g.



5249XLHS 3/8" ratchet for aerospace fasteners



NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10, AS 4283

- Hole in 3/8" head and drive bit for passing keys.
- Smaller shape and volume for better accessibility.
- Increment: 8°.
- Head diameter: 33 mm.
- Total head height: 27 mm.
- Length: 215 mm.
- Weight: 400 g.





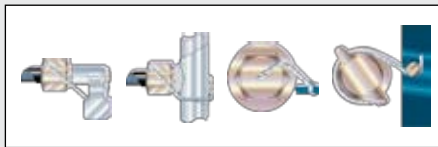


# Locking-wire pliers

## FACOM LOCKING-WIRE PLIERS

### Fast twist in lock-wire securing assemblies subject to vibration.

- For stainless and inconel wire Ø 1 mm.
- Side wire cutter.
- Slim nose-tip for optimum manoeuvrability.
- 10" model: 3 turns, 125 mm travel.
- 8" model: 2.5 turns, 95 mm travel.

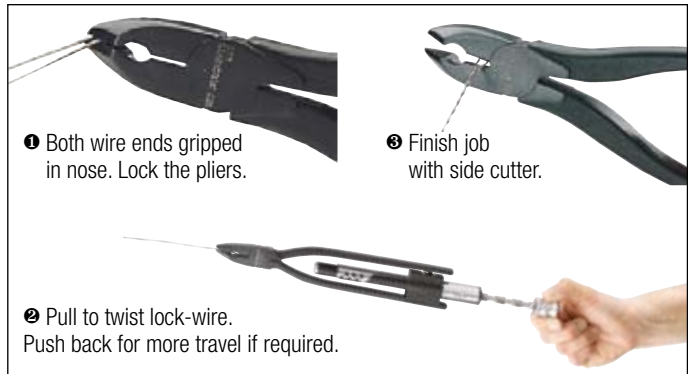


#### Automatic model

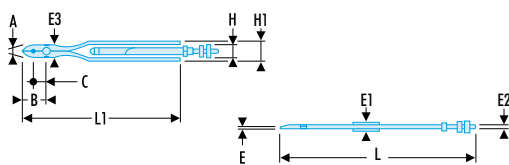
- Automatic-reset model for simplicity and time-saving.

#### Reversible model.

- Allows the operator to reverse rotation.



### Short locking-wire pliers 8"

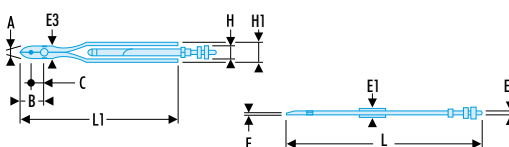
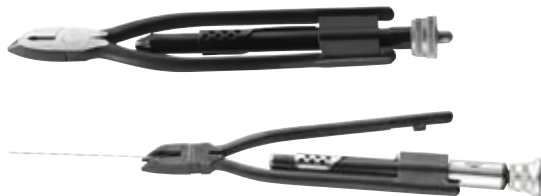


#### ASME B107.500

- 445.8R = "automatic" model.
- 445.8DS = "reversible" model.
- Side wire-cutter: stainless steel diameter 1 mm.
- 2.5 turns: 95 mm length.

	A [mm]	B [mm]	C [mm]	E [mm]	E1 [mm]	E2 [mm]	E3 [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	ΔΔ [g]
445.8R	3	20	7	2,5	15	10,5	15	22	37	215	170	245
445.8DS	3	22	9	2,2	15	29,8	14	30	41	284	170	320

### Locking-wire pliers 10"



#### ASME B107.500

- 445.10R = "automatic" model.
- 445.10DS = "reversible" model.
- Side wire-cutter: stainless steel diameter 1 mm.
- 3 turns: 125 mm length.

	A [mm]	B [mm]	C [mm]	E [mm]	E1 [mm]	E2 [mm]	E3 [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	ΔΔ [g]
445.10R	3	30	11	2,5	15,5	11,5	19	25	40	360	230	400
445.10DS	3	30	11	2,2	15,5	29,8	19	30	45	360	230	450

# 1/4" NANO SETS

## INCH DIMENSIONS

		RL.NANO-U1	RL.NANO-U112	RL.NANO-U2	R.360NANO-U1	R.360NANO-U112
	RL.161	RL.161	RL.161	R.360	R.360	
	1/4"	1/4"	1/4"	1/4"	1/4"	
	7/32	•	•	•	•	
	1/4	•	•	•	•	
	9/32	•	•	•	•	
	5/16	•	•	•	•	
	11/32	•	•	•	•	
	3/8	•	•	•	•	
	13/32	•	•	•	•	
	7/16	•	•	•	•	
	1/2	•	•	•	•	
	9/16	•	•	•	•	
	EP 1	•	•	•	•	
	2	•	•	•	•	
	3	•	•	•	•	
	EH 1/4	•	•	•	•	
	1/8	•	•	•	•	
	3/16	•	•	•	•	
	mm 5/32	•	•	•	•	
	7/32	•	•	•	•	
	ED 1	•	•	•	•	
	2	•	•	•	•	
	3	•	•	•	•	
	ES 4,5	•	•	•	•	
	6,5	•	•	•	•	
	8	•	•	•	•	
	TORX® 8	•	•	•	•	
	EXR 10	•	•	•	•	
	15	•	•	•	•	
	20	•	•	•	•	
	25	•	•	•	•	
	27	•	•	•	•	
	30	•	•	•	•	
	40	•	•	•	•	
	R.209	•	•	•	•	
	R.210	•	•	•	•	
	R.240A	•	•	•	•	
	R.235	•	•	•	•	
	R.236C	•	•	•	•	
	ECR	•	•	•	•	
	BV.RNANO-U					
	152 x 48 x 92 mm					
	0,81 Kg	0,745 Kg	0,81 Kg	0,90 Kg	0,85 Kg	



RL.NANO-U1



RL.NANO-U112



RL.NANO-U2



R.360NANO-U1



R.360NANO-U112





## Radio 1/4" range

### Ratchets 1/4"

#### 1/4" locking ratchet - inch sockets in foam module

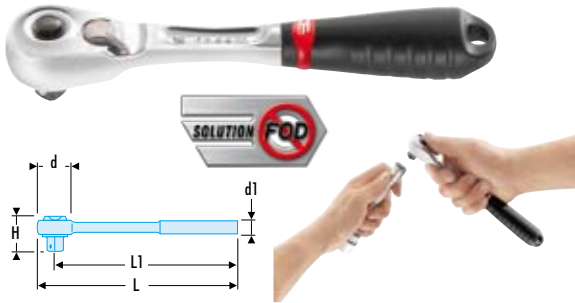


MODM.RL1U

MODM.RL2U

- **MODM.RL1U** contains:
  - Ratchet RL.171 - 2 locking extensions R.210RC, R217RC.
  - 11 1/4" RE sockets: from 3/16" to 9/16".
  - 10 long 1/4" sockets: from 3/16" to 9/16".
- **MODM.RL2U** contains:
  - Ratchet RL.171 - 1 sliding tee R.120A.
  - 1 extension J4763 - 2 extensions R.209, R215.
  - 11 1/4" RE sockets: from 3/16" to 9/16".
  - 1 hexagon keys folding set 83SH.JP8AU - 1 spinner R.236A.
  - Bits: 3 x ED.1T (101 --> 103) - 3 x EP.1T (101 --> 103).
  - 2 x ES.1T (134,5T - 136,5T) - 5 embouts EH.1 (103 --> 107).
  - 5x EX.1 (115 - 120 - 125 - 130 - 140).
  - 1 universal joint R.240A - 1 bit holder R.235.

#### 1/4" dustproof locking ratchet

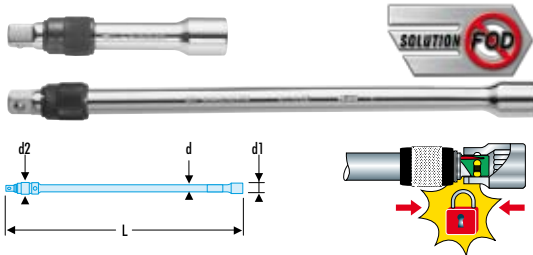


#### NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- Socket locking and quick release system.
- Dust proof, maintenance free mechanism.
- Palm control system - allows the operator to press down on the head avoiding risk of accidental reverse.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	ΔΔ [g]
<b>RL.171</b>	22	20	25	120	110	78

#### R.RC - 1/4" drive locking extensions

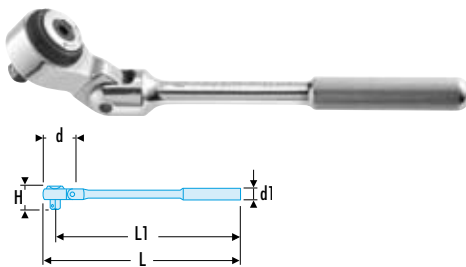


#### NF ISO 3316, ISO 3316, DIN 3123, ASME B107.10

- Locking mechanism.
- Finish: bright chrome.

	d [mm]	d1 [mm]	d2 [mm]	L [mm]	ΔΔ [g]
<b>R.210RC</b>	8,2	12	13	100	45
<b>R.215RC</b>	8,2	12	13	150	60
<b>R.217RC</b>	8,2	12	13	250	100

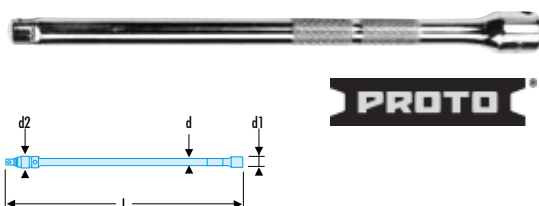
#### 1/4" long hinged metal grip ratchet



- 72 teeth mechanism for 5° increments.
- Palm control system - allows the operator to press down on the head avoiding risk of accidental reverse.
- Stiffened joint to maintain the position even with an extension and the socket engaged.
- Knurled metal grip.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	ΔΔ [g]
<b>R.158A</b>	25	11	26,5	158	126	135

#### 1/4" knurled extensions

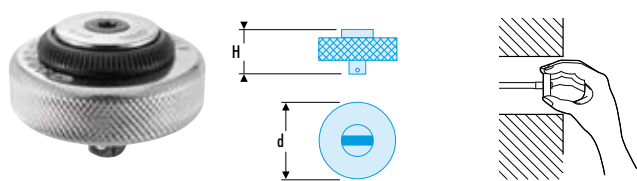


- Finish: chromed.

	d [mm]	d1 [mm]	d2 [mm]	L [mm]	ΔΔ [g]
<b>J4759</b>	8,2	12	13	51	23
<b>J4760</b>	8,2	12	13	76	36
<b>J4761</b>	152	12	13	152	68
<b>J4762</b>	-	-	-	254	109
<b>J4763</b>	-	-	-	359	136



### 1/4" finger control ratchet



- 72 teeth mechanism for 5° increments.
  - Ideal for confined deep recess spaces.
- Weight: 120 g.

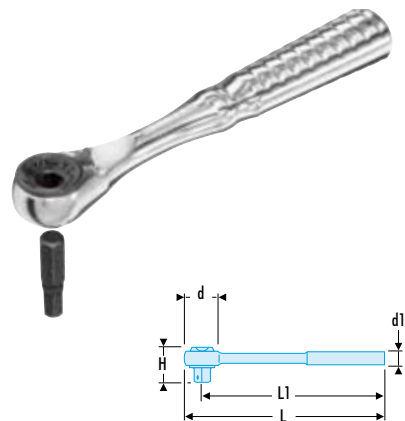
	d [mm]	H [mm]	ΔΔ [g]
<b>R.150A</b>	38,5	26,5	120

### R.PEJ31 1/4" bits-ratchet set - 31 pieces



- Contains:
- 1 bit holder ratchet 1/4" R.PE
  - 1 extension 100 mm long.
  - 28 1/4" bits: TT10-15-20-25-27-30-40
  - T 6-7-8-9 - 1,5-2-2,5-3-4-5-6-7-8 mm
  - PH N° 1-2-3 - PZ N° 1-2-3 - 4-5,5 mm
  - + adapter ECR Ø 1/4" → 1/4".
  - Ultra compact box.
- Weight: 445 g.

### Ultra compact 1/4" bit ratchet



- Exceptionally compact design when using end bits.
- Mechanism: 60 teeth.
- Use sockets with the ECR adapter.
- Supplied with magnetic extension.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	ΔΔ [g]
<b>R.PE</b>	17	16	26,5	158	126	96

### 65.PE Bit-holder ratchet wrench 1/4" - 5/16"



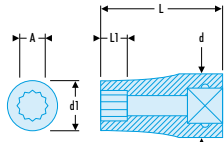
- Takes the following bits: - Series 1: hexagon 1/4".
  - Series 2: hexagon 5/16".
  - Used for installing 1/4" and 5/16" aircraft fasteners.
  - Increment: 5°.
  - Heads angled at 15°.
  - Bits held by a spring clip.
  - Knurled head for fast pre-tightening.
  - Length 150 mm.
  - Satin chrome finish.
- Weight: 74 g.



## Radio 1/4" range

### Sockets 1/4"

#### RB - 1/4" drive inch 12-point thin wall sockets



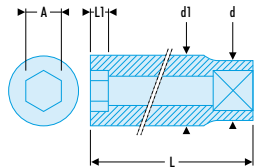
#### ASME B107.1

- OGV® profile: more powerful tightening, preserves fasteners.
- Thin-wall for better access, conform with aeronautical standards.
- Finish: bright chrome.

➤	A ["]	⚙ [mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	ΔΔ [g]
<b>RB.3/16</b>	3/16	12	11,2	7,6	22	4,8	7
<b>RB.7/32</b>	7/32	12	11,2	8,7	22	5,5	8
<b>RB.1/4</b>	1/4	12	11,2	9,7	22	6,0	8
<b>RB.9/32</b>	9/32	12	11,2	10,6	22	6,0	10
<b>RB.5/16</b>	5/16	12	11,9	11,9	22	6,5	10
<b>RB.11/32</b>	11/32	12	12,9	12,9	22	6,5	11
<b>RB.3/8</b>	3/8	12	13,7	13,7	22	7,8	14
<b>RB.7/16</b>	7/16	12	14,8	15,8	22	9,0	17
<b>RB.1/2</b>	1/2	12	16,0	16,9	22	10,0	18
<b>RB.9/16</b>	9/16	12	17,5	18,7	22	10,0	22

### Long reach sockets 1/4"

#### R.EL - 1/4" long-reach metric 12-point sockets

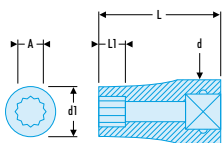


#### NF ISO 2725-1, NF ISO 1711-1, ISO 2725-1, ISO 1711-1, DIN 3124, ASME B107.5

- OGV® profile: more powerful tightening, preserves fasteners.
- Long-reach sockets for long recess or thread access.
- High performance, suitable for aircraft fasteners to AS954E.
- Thinner socket walls for better accessibility.
- Finish: bright chrome.

➤	A [mm]	⚙ [mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	ΔΔ [g]
<b>R.4EL</b>	4	12	6,7	11,2	50	4	18
<b>R.4,5EL</b>	4,5	12	7,3	11,2	50	4,5	18
<b>R.5EL</b>	5	12	7,8	11,2	50	5,5	18
<b>R.5,5EL</b>	5,5	12	8,5	11,2	50	6	18
<b>R.6EL</b>	6	12	9,2	11,2	50	7	18
<b>R.7EL</b>	7	12	10,3	11,2	50	8	27
<b>R.8EL</b>	8	12	11,2	11,7	50	9	27
<b>R.9EL</b>	9	12	13	12	50	10	32
<b>R.10EL</b>	10	12	14,3	12,9	50	11	41
<b>R.11EL</b>	11	12	15,5	14,3	50	12	54
<b>R.12EL</b>	12	12	16,8	15,5	50	13	56
<b>R.13EL</b>	13	12	18	16,4	50	14	59
<b>R.14EL</b>	14	12	19,3	17,9	50	16	68

#### R.EL - 1/4" long-reach inch 12-point sockets



#### ASME B107.1

- OGV® profile: more powerful tightening, preserves fasteners.
- Long-reach sockets for long recess or thread access.
- High performance, suitable for aircraft fasteners to AS954E.
- Thinner socket walls for better accessibility.
- Available as rack set (Ref REL.40U).
- Finish: bright chrome.

➤	A ["]	⚙ [mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	ΔΔ [g]
<b>R.3/16EL</b>	3/16	12	10,9	7,7	50	6,0	14
<b>R.7/32EL</b>	7/32	12	10,9	8,5	50	7,4	15
<b>R.1/4EL</b>	1/4	12	10,9	9,4	50	7,4	17
<b>R.9/32EL</b>	9/32	12	10,9	10,2	50	8,5	17
<b>R.5/16EL</b>	5/16	12	11,8	11,4	50	9,0	23
<b>R.11/32EL</b>	11/32	12	12,0	12,5	50	9,7	25
<b>R.3/8EL</b>	3/8	12	12,8	13,7	50	11,2	32
<b>R.7/16EL</b>	7/16	12	14,3	15,6	50	11,9	40
<b>R.1/2EL</b>	1/2	12	16,2	17,3	50	13,8	45
<b>R.9/16EL</b>	9/16	12	17,1	18,8	50	16,2	49

### REL.40U Inch 1/4" long socket set on rack



- 11 long sockets: 3/16 - 7/32 - 1/4 - 9/32 - 5/16 - 11/32 - 3/8 - 13/32 - 7/16 - 1/2 - 9/13".
- Weight: 345 g.

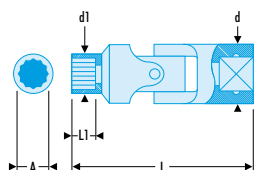


### R.F - 1/4" drive hinged 12-point sockets



#### ASME B107.1

- OGV® profile: more powerful tightening, preserves fasteners.
- Compact solution used instead of universal joint.
- Finish: bright chrome.



Part No.	Size [mm]	A [°]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	ΔΔ [g]
R.3/16F	12	3/16	13	8	31,6	5,3	35
R.7/32F	12	7/32	13	8,5	32,4	6,1	13
R.1/4F	12	1/4	13	9,8	32,8	6,5	13
R.9/32F	12	9/32	13	10,5	32,8	6,5	13
R.5/16F	12	5/16	13	12,0	33,3	7	14
R.11/32F	12	11/32	13	13,3	33,3	7	16
R.3/8F	12	3/8	13	13,7	34,6	8,3	21
R.7/16F	12	7/16	13	15,5	35,8	9,5	27
R.1/2F	12	1/2	13	18	36,8	10,5	34
R.9/16F	12	9/16	13	19,2	36,8	10,5	35







## Junior 3/8" range

### Ratchets 3/8"

#### ■ JL.DBOX - Detection Box 3/8" socket sets



**JL.DBOX500**



**JL.DBOX501**



#### • JL.DBOX500

Contains :

- 1 Ratchet JL.171. - 2 locking extensions J.210RC, J.215RC.
- 14 sockets 6 point: from 8 to 22 mm. - 1 universal joint J.240A.

#### • JL.DBOX501

Contains :

- 1 Ratchet JL.171. - 2 locking extensions J.210RC, J.215RC.
- 14 sockets 12 point: from 8 to 22 mm. - 1 universal joint J.240A.

Weight: 2.100 kg.

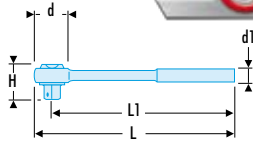
#### ■ MODM.JL2U 3/8" locking ratchet - inch sockets in foam module



Contains :

- Ratchet JL.171
- 2 locking extensions J.210RC, J.217RC.
- 13 3/8" J sockets: from 1/4" to 1".
- 10 long 3/8" JLA sockets: from 1/4" to 7/8".
- 7 inch ring wrenches from 1/4" to 15/16".
- 1 bit holder ratchet wrench 65.PE.

#### ■ 3/8" dustproof locking ratchet

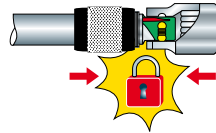
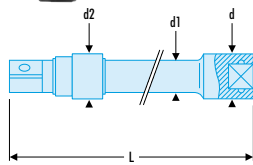


#### NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- Socket locking and quick release system.
- Dust proof, maintenance free mechanism.
- Palm control system - allows the operator to press down on the head avoiding risk of accidental reverse.

➡	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	ΔΔ [g]
<b>JL.171</b>	29	27	29	210	195	200

#### ■ J.RC - 3/8" drive locking extensions

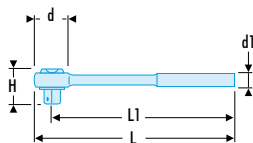


#### NF ISO 3316, ISO 3316, DIN 3123, ASME B107.10

- Total safety as lock system prevents socket loss.
- Finish: bright chrome with phosphate-hardened ring.

➡	d [mm]	d1 [mm]	d2 [mm]	L [mm]	ΔΔ [g]
<b>J.210RC</b>	18	12,5	18	125	135
<b>J.215RC</b>	18	12,5	18	250	240
<b>J.217RC</b>	18	12,5	18	500	490

#### ■ 3/8" hinged head ratchet with metal handle

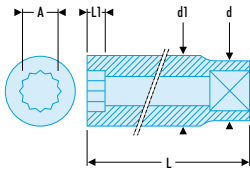


#### NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- 72 teeth mechanism for 5° increments.
- Palm control system - allows the operator to press down on the head avoiding risk of accidental reverse.
- Stiffened joint to maintain the position even with an extension and the socket engaged.
- Full metal handle with knurled grip.

➡	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	ΔΔ [g]
<b>J.158A</b>	30	16	32	273	258	350

## JB - 3/8" inch 12-point sockets

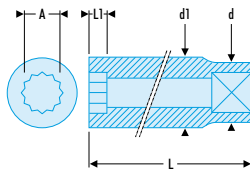


### ASME B107.1

- OGV® profile: more powerful tightening, preserves fasteners.
- Built to aeronautical specifications.
- Finish: bright chrome.

Part No.	A ["]	⚙ [mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	ΔΔ [g]
JB.1/4	1/4	12	16,7	9,7	27	6	20
JB.5/16	5/16	12	16,7	11,7	27	6,8	21
JB.11/32	11/32	12	16,7	12,7	27	6,8	22
JB.3/8	3/8	12	16,7	13,7	27	7,5	23
JB.7/16	7/16	12	16,7	15,6	27	9	24
JB.1/2	1/2	12	16,7	17,6	30	10,4	27
JB.9/16	9/16	12	18,5	19,6	30	10,5	33
JB.5/8	5/8	12	20	21,6	30	12	42
JB.11/16	11/16	12	22	23,6	32	13	50
JB.3/4	3/4	12	22,8	25,4	32	15	55
JB.13/16	13/16	12	24	27,4	32	16	68
JB.7/8	7/8	12	24	29,4	32	16	68

## J.LA - 3/8" inch 12-point sockets

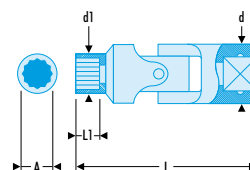


### ASME B107.1

- OGV® profile: more powerful tightening, preserves fasteners.
- Long-reach sockets for long recess or thread access.
- Finish: bright chrome.

Part No.	A ["]	⚙ [mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	ΔΔ [g]
J.1/4LA	1/4	12	17,5	10,6	44,7	4,0	36
J.5/16LA	5/16	12	17,5	12,4	44,7	4,3	36
J.3/8LA	3/8	12	17,5	14,3	44,7	4,7	41
J.7/16LA	7/16	12	17,5	16,2	44,7	6,2	45
J.1/2LA	1/2	12	18,2	18,2	44,7	7,4	50
J.9/16LA	9/16	12	20,5	20,5	48,0	9,0	72
J.5/8LA	5/8	12	22,3	22,3	63,8	10,2	104
J.11/16LA	11/16	12	23,8	23,8	63,8	10,2	113
J.3/4LA	3/4	12	25,3	25,3	63,8	11,8	127
J.13/16LA	13/16	12	27,0	27,0	63,8	12,3	140
J.7/8LA	7/8	12	30,2	30,2	63,8	12,7	181
J.15/16LA	15/16	12	31,8	31,8	63,8	12,7	185
J.1PLA	1	12	33,4	33,4	63,8	12,7	185

## J.F - 3/8" drive hinged inch 12-point sockets



### ASME B107.1

- OGV® profile: more powerful tightening, preserves fasteners.
- Compact solution used instead of universal joint.
- Finish: bright chrome.

Part No.	A ["]	⚙ [mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	ΔΔ [g]
J.3/8F	3/8	12	17,6	14,1	27	7,5	26
J.7/16F	7/16	12	17,5	16,0	27	9,0	27
J.1/2F	1/2	12	17,5	18,1	30	10,4	36
J.9/16F	9/16	12	17,7	19,5	30	10,5	34
J.5/8F	5/8	12	20,0	22,0	30	12,0	46
J.11/16F	11/16	12	21,0	24,0	33	13,0	74
J.3/4F	3/4	12	22,7	26,0	33	14,0	76



## Standard 1/2" range

### Ratchets 1/2"

#### SL.DBOX - Detection Box 1/2" socket sets



SL.DBOX500

SL.DBOX501



#### • SL.DBOX500

Contains:

- 1 ratchet SL.171 - 2 locking extensions S.210RC, S.215RC.
- 17 sockets 6 point: from 8 to 32 mm - 1 universal joint S.240A.

#### • SL.DBOX501

Contains:

- 1 ratchet SL.171 - 2 locking extensions S.210RC, S.215RC.
- 17 sockets 12 point: from 8 to 32 mm. - 1 universal joint S.240A.

Weight: 3.740 kg.

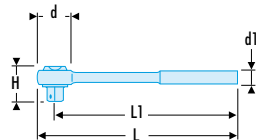
#### MODM.SL2U 1/2" locking ratchet - inch sockets in foam module



• Contains :

- 1 ratchet SL.171.
- 2 locking extensions S.210RC, S.215RC.
- 16 1/2" S sockets: from 3/8" to 1 1/4".
- 7 long 1/2" SLA sockets: from 1/2" to 7/8".

#### 1/2" dustproof locking ratchet

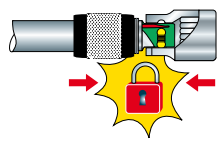
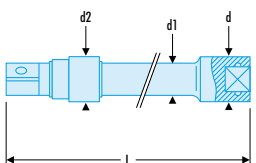


#### NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- Socket locking and quick release system.
- Dust proof, maintenance free mechanism.
- Palm control system - allows the operator to press down on the head avoiding risk of accidental reverse.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	ΔΔ [g]
<b>SL.171</b>	37	32	37	262	245	446

#### S.RC - 1/2" drive locking extensions



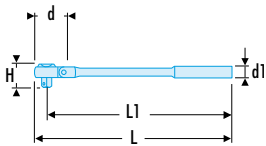
#### NF ISO 3316, ISO 3316, DIN 3123, ASME B107.10

- Total safety as lock system prevents socket loss.
- Safety and instant release, by retracting knurled ring, for total user confidence.
- Positive locking for use with sockets with internal ball notch.
- Finish: bright chrome with phosphate-hardened ring.

	d [mm]	d1 [mm]	d2 [mm]	L [mm]	ΔΔ [g]
<b>S.210RC</b>	23	16,5	23	130	250
<b>S.215RC</b>	23	16,5	23	250	450
<b>S.217RC</b>	23	16,5	23	500	860



### Long hinged metal grip 1/2" ratchet

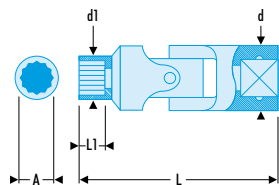


- 72 teeth mechanism for 5° increments.
- Palm control system - allows the operator to press down on the head avoiding risk of accidental reverse.
- Ring reversing.
- Extra-long handle to apply more torque without effort.
- Stiffened joint to maintain the position even with an extension and the socket engaged.
- Full metal grip.

	d [mm]	d1 [mm]	H1 [mm]	L [mm]	ΔΔ [g]
<b>S.158A</b>	42	20	40	435	940




### 1/2" hinged sockets



#### ASME B107.1, AS954G

- Angle up to 65°.
- Allows easily to turn worn, rounded, or rusted fasteners.
- Finish: chrome.

	A ["]	d [mm]	d1 [mm]	H1 [mm]	L [mm]	ΔΔ [g]
<b>J5475A</b>	1/2	23,88	18,29	63	11,43	113
<b>J5476A</b>	5/8	23,88	23,88	67	12,7	122
<b>J5477A</b>	9/16	23,88	20,57	67	12,7	118



### D.169 Set of 3 couplers



- Allows use of square drivers smaller than socket drive sizes:
    - 1/4" square drive + D.169RJ --> 3/8" socket.
    - 3/8" square drive + D.169JS --> 1/2" socket.
    - 1/2" square drive --> 3/4" socket.
  - Compactness means that fewer tools are needed for in situ maintenance operations.
  - Magnetic retainer and locking system (JS and SK).
  - Knurl allows hand tightening where access is difficult.
- Weight: 96 g.





## Torque control



**ELECTRONIC RANGE**

**WRENCHES AND ADAPTERS**

**FACOM offer an electronic range, for high productivity and accuracy. Torque range from 1.5 to 340 Nm.**

**E.306 SERIES**

• For electronic precision in torque tightening.



**E.506 SERIES**

• For occasional torque & angle tightening.



**E.316 SERIES**

• A single tool for torque & angle tightening for high productivity.



**E.406 SERIES**

• For basic angular tightening.



**In confined spaces, our wrenches and adapters provide torque or angle increments.**



- The electronic display prevents reading errors.
- Tightening is indicated by the LEDs and buzzer (in all 4 series).
- Easy to use through the same user interface on all models.

**WHY USE TORQUE/ANGLE TIGHTENING ?**

Angle tightening eliminates friction issues related with torque tightening. The movement, and hence fastener tension, is defined by the screw pitch and tightening angle.

Torque/angle tightening is performed in 2 steps:

- Pre-torquing to approach the parts and eliminate interface faults.
- Then tightening at a specific angle. Proper assembly tension prevents the fastener from loosening or breaking.







## Electronic torque wrenches

### Electronic torque wrenches and adapters

#### ■ E.306D - Electronic torque wrenches



#### NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Accuracy:  $\pm 2\%$  between 20% and 100% wrench capacity.
- Measuring mode: peak or follower.
- Measuring unit: N.m, lbf.ft, lbf.in and kg.cm.
- Bits: 9 x 12 and 14 x 18 mm.
- Numbered wrenches supplied with ISO 6789 calibration certificate.
- Presetting possible of 9 torque and/or angle values.
- Memory 250 values with PC USB link.
- Supplied in plastic case with foam interior.

⇒	Capacity [N.m]	L [mm]	$\Delta\Delta$ [kg]
<b>E.306-30D</b>	1,5 - 30	360	1,5
<b>E.306-135D</b>	6,7 - 135	375	1,5
<b>E.306-200D</b>	10 - 200	474	2,4
<b>E.306-340D</b>	17 - 340	594	2,6

#### ■ E.306A - Electronic torque wrenches with ratchet



#### NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

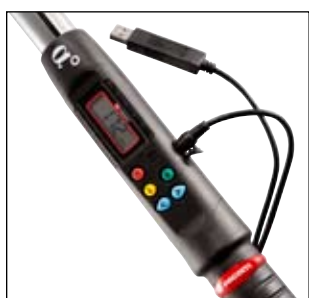
- Accuracy:  $\pm 2\%$  between 20% and 100% wrench capacity.
- Measuring mode: peak or follower.
- Measuring unit: N.m, lbf.ft, lbf.in and kg.cm.
- Bits: 9 x 12 and 14 x 18 mm.
- Numbered wrenches supplied with ISO 6789 calibration certificate.
- Presetting possible of 9 torque and/or angle values.
- Memory 250 values with PC USB link.
- Supplied in plastic case with foam interior.

⇒	Capacity [N.m]	$\square$ ["]	L [mm]	Ratchet	$\Delta\Delta$ [kg]
<b>E.306A30R</b>	1,5 - 30	1/4	390	R.372	1,6
<b>E.306A135J</b>	6,7 - 135	3/8	415	J.372V	1,7
<b>E.306A135S</b>	6,7 - 135	3/8	415	S.372V	1,7
<b>E.306A200S</b>	10 - 200	1/2	530	S.382V	2,7
<b>E.306A340S</b>	17 - 340	1/2	650	S.382V	2,9





### ■ E.316D - Electronic torque / angle wrenches



#### NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Accuracy:
  - Torque:  $\pm 2\%$  between 20% and 100% wrench capacity.
  - Angle:  $\pm 2^\circ$ .
- End fitting: 9 x 12 and 14 x 18 mm.
- Measuring mode: peak or follower.
- Locking keypad (the operator has access only to program choices and result memorising).
- Measuring unit: N.m, lbf.ft, lbf.in, kg.cm and deg.
- Presetting possible of 9 torque and/or angle values.
- Memory 250 values with PC USB link.
- Supplied with calibration certificate.
- Supplied in plastic case and foam module.

⇒	Capacity [N.m]	L [mm]	$\Delta\Delta$ [kg]
<b>E.316-30D</b>	1,5 - 30	360	1,5
<b>E.316-135D</b>	6,7 - 135	375	1,5
<b>E.316-200D</b>	10 - 200	474	2,4
<b>E.316-340D</b>	17 - 340	594	2,6



### ■ E.316A - Electronic torque / angle wrenches with ratchet



#### NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Accuracy:
  - Torque:  $\pm 2\%$  between 20% and 100% wrench capacity.
  - Angle:  $\pm 2^\circ$ .
- End fitting: 9 x 12 and 14 x 18 mm.
- Measuring mode: peak or follower.
- Locking keypad (the operator has access only to program choices and result memorising).
- Measuring unit: N.m, lbf.ft, lbf.in, kg.cm and deg.
- Presetting possible of 9 torque and/or angle values.
- Memory 250 values with PC USB link.
- Supplied with calibration certificate.
- Supplied in plastic case and foam module.

⇒	Capacity [N.m]	$\square$ [°]	L [mm]	Ratchet	$\Delta\Delta$ [kg]
<b>E.316A30R</b>	1,5 - 30,0	1/4	390	R.372	1,6
<b>E.316A135J</b>	6,7 - 135,0	3/8	415	J.372V	1,7
<b>E.316A135S</b>	6,7 - 135,0	1/2	415	S.372V	1,7
<b>E.316A200S</b>	10 - 200	1/2	530	S.382V	2,7
<b>E.316A340S</b>	17 - 340	1/2	650	S.382V	2,9





## Electronic torque wrenches

### ▣ R-J-S.306U - Click wrenches with dual lbf.in or lbf.ft and N.m graduation



#### NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Factory accuracy:  $\pm 2\%$ .
- Reliability of mechanism: 50,000 cycles.
- Click wrenches with dual lbf.in or lbf.ft and N.m graduation.
- Reversible model.
- Full metal wrenches with knurled handle.
- Numbered wrenches supplied with ISO 6789 calibration certificate.
- Supplied in plastic box with ratchet.

▣	Capacity [lbf.in]	Capacity [lbf.ft]	End Fitting	Graduation [lbf.in]	Capacity [lbf.ft]	□ [°]	L [mm]	Box	$\Delta\Delta$ [kg]
<b>R.306U</b>	40 - 200	-	9 x 12	1	-	1/4	285	BPD1	0,460
<b>J.306U</b>	200 - 1000	-	9 x 12	5	-	3/8	379	BPD2	1,050
<b>S.306U</b>	-	30 - 250	14 x 18	-	30 - 250	1/2	600	BPD3	1,630

## NEW

## TORQUE CONTROLLERS

### EASY TORQUE CONTROL FOR ALL!

#### Simple and fast

- Easy to use device with minimum settings to avoid errors.
- For testing wrenches before use.

#### Wide torque range

- 3 devices covering a wide torque range from 2 to 1000 Nm.

#### Safe

- No risk of bad reading by the operator: limit value and tolerance can be preset, indication by orange, green, red LED.
- RS232 output for traceability.



### ▣ E.2000 - Torque controllers

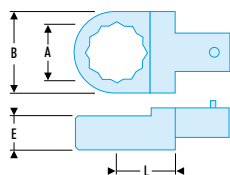


- Accuracy:  $\pm 1\%$ ,  $\pm 1$  digit.
- Measuring unit: N.m, lbf.ft, lbf.in.
- Measuring mode: monitor, edge and peak.
- Possible presetting of a limit value and tolerance with orange, green, red LED indicator.
- RS232 PC link.
- Dimensions (L. x W. x H.): 150 x 150 x 90 mm.
- Supplied with a calibration certificate.

▣	Capacity [N.m]	□ [°]	□	$\Delta\Delta$ [kg]
<b>E.2000-50</b>	2 - 50	3/8	-	2,60
<b>E.2000-350</b>	10 - 350	1/2	-	2,60
<b>E.2000-1000</b>	100 - 1000	-	27	4,60

### Inch ring ends

#### 12 - Inch ring ends - 9x12 mm end fitting



- Straight ring ends, 3/8" drive.
- Allows use in confined spaces.
- 9 dimensions available.

Ref	A ["]	B [mm]	E [mm]	L [mm]
12.1/4	1/4	20	7,9	17,5
12.5/16	5/16	20	7,9	17,5
12.3/8	3/8	20	7,9	17,5
12.7/16	7/16	20	7,9	17,5
12.1/2	1/2	20	12,1	17,5
12.9/16	9/16	23,5	12,1	17,5
12.5/8	5/8	26,5	12,9	17,5
12.11/16	11/16	30	13,1	17,5
12.3/4	3/4	31	13,1	17,5

### Welding tips

#### 14 - Welding tip



- Welding a tool onto a weld-on tip modifies the centre distance between the tool centre and the wrench. This modification changes the torque value required. Therefore, a torque controller must be used to recalibrate the torque wrench (E.2000).
- Presentation: black finish.
- Hardness: 46-50 HRC.

Ref	A [mm]	B [mm]	C [mm]	L [mm]	L1 [mm]
14.9X12	9x12	14,7	17,4	24,5	16,5
14.14X18	14x18	22	26,3	36,5	24,5





Screwdrivers

▣ **PROTWIST® ratchet blade holder screwdriver + 15 bits**



- High quality 45-teeth ratchet = fast screwing, accuracy, strength and longevity.
- 3-position bush: screwing, unscrewing and locking (hand selection).
- Storage cap for charger.
- Cap can be used as mini bit holder for use in confined spaces.
- Partially hollow handle to store more bits or screws.
- Bimaterial ergonomic handle for comfortable and reliable screwing.
- Very low blade return torque.
- Powerful magnetic adapter allowing the magnet to hold the bit and screw.
- Magnetised central storage of chargers serves as additional mini bit holder.
- Including 2 chargers:
  - 1 charger containing 7 screw bits + 1 separate:
    - ⊖ 4 - 6,5 ; ⊕ PH.1 - PH.2 ; ⊕ PZ.1 - PZ.2 ; ⊖ 4 - 6.
  - 1 transparent charger containing 7 Resistorx bits
    - ⊕ EXR.110 - EXR.115 - EXR.120 - EXR.125 - EXR.127 - EXR.130 - EXR.140.

➤	d [mm]	d1 [mm]	L [mm]	L1 [mm]
<b>ACL.1A</b>	34	10	225	120

▣ **ACL.2 PROTWIST® ratchet blade holder handle**



- High quality 45-teeth ratchet = fast screwing, accuracy, strength and longevity.
- 3-position bush: screwing, unscrewing and locking.
- Storage handle to store the additional eight bits (not supplied).
- Cap can be used as mini bit holder for use in confined spaces.
- Partially hollow handle to store more bits or screws.
- Bi-material ergonomic handle for comfortable and reliable screwing.
- Very low blade return torque.
- Hexagonal - 1/4" drive.

▣ **AMZ - Reversible blades**



- 1/4" hexagonal reversible blade.
- Length: 175 mm.
- Handle out length: 125 mm.
- Finish: chromed.

➤	Contents	ΔΔ [g]
<b>AMZ.S3-5-4</b>	slotted head: 0,6 x 3,5 - 0,8 x 4	40
<b>AMZ.S5,5-6,5</b>	slotted head: 1,0 x 5,5 - 1,2 x 6,5	40
<b>AMZ.P0-1</b>	PH0 - PH1	40
<b>AMZ.P2-3</b>	PH2 - PH3	40
<b>AMZ.P1-2</b>	PH1 - PH2	40
<b>AMZ.D0-1</b>	PZ0 - PZ1	40
<b>AMZ.D2-3</b>	PZ2 - PZ3	40
<b>AMZ.D1-2</b>	PZ1 - PZ2	40
<b>AMZ.H2,5</b>	hexagonal head: 2,5	40
<b>AMZ.H3</b>	hexagonal head: 3,0	40
<b>AMZ.H4</b>	hexagonal head: 4,0	40
<b>AMZ.H5</b>	hexagonal head: 5,0	40
<b>AMZ.H6</b>	hexagonal head: 6,0	40
<b>AMZ.X8-9</b>	T8 - T9	40
<b>AMZ.X10-15</b>	T10 - T15	40
<b>AMZ.X20-25</b>	T20 - T25	40
<b>AMZ.X30-40</b>	T30 - T40	40
<b>AMZ.XRP10-15</b>	IPR TT+ 10-15	40
<b>AMZ.XRP20-25</b>	IPR TT+ 20-25	40
<b>AMZ.XRP27-30</b>	IPR TT+ 27-30	40
<b>AMZ.E</b>	Bit-holder 1/4"	40



“EASY LOCK SYSTEM” SLEEVE

**Full access to each key**

- Access to each key regardless of the position of the others.
- Easy tool storage and selection.
- Flat sleeve-case, hinged flap.

**Constant key holding over time**

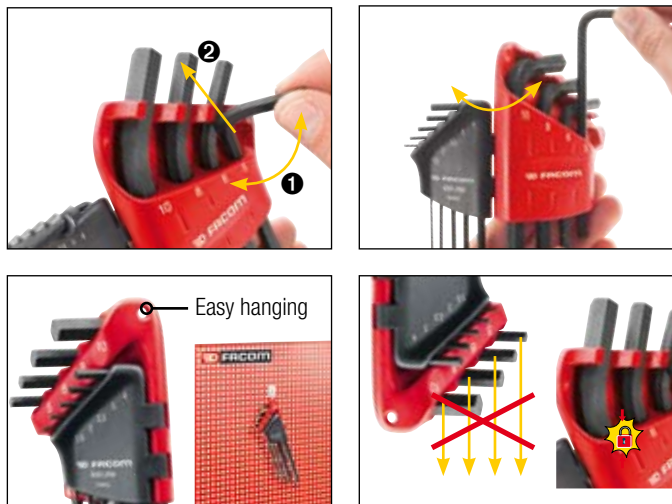
- Positive key locking even when sleeve worn.
- No risk of losing keys.

**Convenient hanging hole**

- Offset position of the fastening hole.

**Strong and durable**

- Elastomer chosen for its wear resistance, good durability, its resistance to chemicals and weather variations.



JP - Set of hexagon keys in sleeve



- Keys are packaged in a compact wallet for easy selection of the dimension required.
- Sets available in 4 types of keys:
  - 82H: Short keys.
  - 83SH: Spherical head long keys.

Σ	⌀ ["]	Clé	ΔΔ [g]
<b>82H.JP8AU</b>	3/32 - 1/8 - 5/32 - 3/16 - 7/32 - 1/4 - 5/16 - 3/8	82H	235
<b>83SH.JP6U</b>	3/32 - 1/8 - 5/32 - 3/16 - 7/32 - 1/4	83SH	300
<b>83SH.JP8AU</b>	3/32 - 1/8 - 5/32 - 3/16 - 7/32 - 1/4 - 5/16 - 3/8	83SH	365



85.JU10 Set of 10 keys for BRISTOL heads



- Set of 10 85 keys: 033 - 048 - 060 - 072 - 096 - 111 - 133 - 145 - 168 - 183.
- Supplied in roll.
- Weight: 37 g.





Screw bits

SCREW BITS BOX

**EXCLUSIVE DESIGN:  
COMPACT AND EASY TO USE**

**Polyamide case (PA66)**

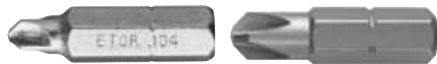
- High impact resistance.
- Bits held effectively and durably.
- Good resistance to chemicals.

- ❶ **Easy wallet type opening/closing.**
- ❷ **Effective and easy bit push-out system on the rear face.**
- ❸ **Easy selection: bits visible on the front face + pattern symbols.**



**Torq Set® - Tri-wing bits**

ETOR.1 - ETORM.1 - Standard bits for Torq Set® head screws



	Torq-set [No]	L [mm]	ΔΔ [g]
<b>ETOR.100</b>	0	25	5,5
<b>ETOR.101</b>	1	25	5,5
<b>ETORM.102</b>	2	25	6
<b>ETORM.103</b>	3	25	6
<b>ETORM.104</b>	4	25	6

**NF ISO 1173, ISO 1173**

- For manual screwing.
- Drive 1/4" - 6.35 mm.

	Torq-set [No]	L [mm]	ΔΔ [g]
<b>ETORM.105</b>	5	25	6
<b>ETORM.106</b>	6	25	6
<b>ETORM.108</b>	8	25	6
<b>ETORM.110</b>	10	25	6
<b>ETORM.101/4</b>	1/4	32	13

ETORM.6 - Standard bits series 6 for Torq set® head screws



	Torq-set [No]	L [mm]	ΔΔ [g]
<b>ETORM.602</b>	2	50	12
<b>ETORM.603</b>	3	50	12
<b>ETORM.604</b>	4	50	12
<b>ETORM.605</b>	5	50	12

**NF ISO 1173, ISO 1173**

- Drive 1/4" - 6.35 mm with groove.

	Torq-set [No]	L [mm]	ΔΔ [g]
<b>ETORM.606</b>	6	50	12
<b>ETORM.608</b>	8	50	12
<b>ETORM.610</b>	10	50	12
<b>ETORM.601/4</b>	1/4	50	12

ETORM.2 - Standard bits series 2 for Torq Set® head screw



	Torq-set [No]	L [mm]	ΔΔ [g]
<b>ETORM.208</b>	32	8	14
<b>ETORM.210</b>	32	10	14
<b>ETORM.201/4</b>	32	1/4	14

**NF ISO 1173, ISO 1173**

- For manual screwing.
- Drive 5/16" - 7.94 mm.

	Torq-set [No]	L [mm]	ΔΔ [g]
<b>ETORM.205/16</b>	32	5/16	14
<b>ETORM.203/8</b>	32	3/8	14

ETRI.1 - Standard bits series 1 for Tri-wing head screws



	Tri-wing [No]	L [mm]	ΔΔ [g]
<b>ETRI.101</b>	1	25	5,5
<b>ETRI.102</b>	2	25	5,5
<b>ETRI.103</b>	3	25	5,5

**NF ISO 1173, ISO 1173**

- For manual screwing.
- Drive 1/4" - 6.35 mm.

	Tri-wing [No]	L [mm]	ΔΔ [g]
<b>ETRI.104</b>	4	25	5,5
<b>ETRI.105</b>	5	25	5,5

## 779.CL3 CORDLESS LED INSPECTION LAMP

### Dual function light

- Powerful directive torch light for inspecting.
- Soft permanent lighting on the front to light a work zone.

### High performance

- Very long lasting LEDs.
- Neutral white torch light.
- White fluorescent panel lighting with diffusing glass.

### Extended use

- 8h torch lighting or 5h panel lighting.
- Charges in 2h30.
- High capacity Lithium-Ion battery without memory effect.

### Proven resistance

- Shock-proof structure (IK08) and drop resistant.
- Watertight construction (IP55).
- Resists workshop solvents and common chemicals.

### Safety – Comfort

- Low operating temperature -> does not burn.
- Compact design -> for better accessibility.
- Magnet fastener or notched 360° swivel hook.
- Wall or worktop charger.
- 2 m mains cable.
- Blinks 15 min before lamp discharges.



## 779.CL3 Cordless LED Inspection lamp



- Wide light diffusion on work area for productivity in every kind of work place.
  - Battery charger EURO 100-240V.
  - 360 lumen.
  - Extended use: up to 8 hours.
  - 100 % "hands free" : magnet fastener or notched 360° swivel hook.
  - Shock-proof structure.
  - Short press: soft permanent lighting on the front to light a work zone.
  - Long press: powerful directive torch light for inspecting.
  - 779.CL3FLUK: Same model as 779.CL3FL but equipped with an UK plug.
- Weight: 380 g.





# Inspection lamps

## 779.PC "POCKET" LED LIGHT

### 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.

#### Long autonomous operation

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

#### Professional quality

Designed to the same specifications as the 779.CL2, it provides 4 hours of constant illumination and is very resistant to impact, workshop solvents and water (IP.55: see table on page 1055).



### 779.PC Cordless "POCKET" LED lamp



- Wireless pocket lamp supplied by Lithium-ion rechargeable battery.
  - Autonomy: 4h fast charge: 2h30.
  - Microchip-controlled charging and lighting.
  - Lighting level constant throughout the operating time.
  - High power 1W LED.
  - 2 levels of power:
    - Economic mode 300 lux at 50 cm.
    - "Booster" mode 400 lux at 50 cm.
  - Impact-resistant casing.
  - Sealing rating: IP.55.
  - Supplied with: 230V charger, supply cable, user manual and wrist-strap.
  - Dimensions: 130 x 65 x 30 mm.
  - 779.PCUK: Same model as 779.PC but equipped with an UK plug.
- Weight: 210 g.



### 779.FRT LED headlamp



- With 4 bright LEDs.
- Washable removable strap.
- 2 levels of lighting power to adapt power and operating time: normal and booster (50 and 100%).
- Orientable 180°.
- With fastening clip for hard hat or belt 20 x 3 mm.
- Autonomy: about 50 hours in normal position, 20 hours in booster position.
- Supplied on card with 3 AA alkaline batteries and interchangeable strap 779.FRT01.

Weight: 91 g.



### 779.PEN LED pen light



- Wide and powerful lighting inspection lamp with 6 LEDs.
- 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.
- Additional magnetic bracket strapped with velcro.
- Runs on 3 AAA batteries supplied.
- Dimensions L = 156mm x W 16 mm.

Weight: 65g.

### 836 Pen light



- Body in aluminum tube.
- LED light.
- Length: 137 mm.
- Tube diameter: 14 mm.
- Runs on two AAA LR03 (1.5 volt) batteries not supplied.
- Supplied with wrist strap.

Weight: 29 g.



### 834B.RT Inspection mirror



- Mirror in scratch resistant glass, available as spare parts.
- Metallic strapping around the glass for better protection.
- Join easily adjustable, or even locked, by screw.
- Solvent resistant plastic handle: Skydroll, gasoil.
- Max length 850 mm.
- Mirror diameter 55 mm.

Weight: 80 g.

- 834B.RT01: spare mirror.





**Aerospace toolkits**

**CU.AE50 152-piece engine mechanics set**

- Set designed for complete in-hangar overhauls as well as servicing work between overhauls on wide-body aircraft fitted with SNECMA, GE, PW or RR engines :
    - AIRBUS A3xx, BOEING 7xx, Mc Donnell Douglas DCxx.
- Weight: 17,800 kg.



Code	Qty	Description
<b>RB.40AU</b>	10	Sockets 3/16" to 9/16"
<b>R.240A</b>	1	1/4" universal joint
<b>R.232</b>	1	Coupler 1/4" - 3/8"
<b>R.236A</b>	1	Short-reach spinner handle
<b>R.215</b>	1	1/4" extension 150 mm long
<b>R.210</b>	1	1/4" extension 100 mm long
<b>R.155A</b>	1	1/4" metal-grip "palm-control" ratchet
<b>JL.40U</b>	10	"Junior" long-reach sockets 1/2" to 9/16"
<b>J.F</b>	7	Hinged sockets 1/2" - 11/16" - 3/4" - 3/8" - 5/8" - 7/16" - 9/16"
<b>JB.41AU</b>	5	Sockets 5/8" to 7/8"
<b>JB.40AU</b>	6	Sockets 1/4" to 9/16"
<b>J.240A</b>	1	3/8" universal joint
<b>J.230</b>	1	Coupler 3/8" - 1/4"
<b>J.215</b>	1	"Junior" extension 250 mm
<b>J.210</b>	1	"Junior" extension 125 mm
<b>J.155A</b>	1	3/8" metal-grip "palm-control" ratchet
<b>J.145</b>	1	Metal-grip hinged handle
<b>J.120A</b>	1	Sliding tee
<b>J.115</b>	1	Metal-grip speed brace
<b>CLE.MDAM100</b>	6	Second cut locksmiths files
<b>ARZ.5,5</b>	1	Round blade offset screwdriver
<b>APZ.A</b>	1	Dual-size offset screwdriver
<b>APZ.B</b>	1	Dual-size offset screwdriver
<b>ANP</b>	2	Stubby screwdrivers for Phillips® heads 1X35 mm and 2X35 mm
<b>AWP</b>	4	Phillips® screwdrivers PH 1x100 - 2x125 - 3x150 - 4x200
<b>AW</b>	4	Forged hexagonal blade screwdrivers for slotted heads 4X100 - 5,5X150 - 6,5X150 - 8X200 mm
<b>AN6.5X35</b>	1	Stubby screwdriver for slotted heads
<b>AN</b>	3	Round blade screwdrivers for slotted heads de 2.5x75 - 3.5x75 - 4x100 mm
<b>86H.JU7</b>	7	Folding set of hexagon keys 1/16" to 1/4"

Code	Qty	Description
<b>86H.JU6</b>	6	Folding set of hexagon keys 5/32" to 3/8"
<b>834.R2</b>	1	Inspection mirror 55 mm
<b>803.300M</b>	1	Flexible stainless 2-sided rule
<b>64.3/8X7/16</b>	1	12-point ring wrench
<b>55A.JU10</b>	10	Offset ring wrenches 1/4" to 1 1/4".
<b>445.10R</b>	1	Locking-wire pliers
<b>410.S</b>	1	Connector pliers
<b>440.JU17T</b>	17	1/4" to 1 1/4" combination wrench wallet set
<b>192.16CPE</b>	1	"Piano wire" diagonal cutters
<b>256.2,5</b>	1	Precision centre punch
<b>251A.JS9</b>	9	Precision sleeved drift punches 1 to 6 mm
<b>208A.40CBA</b>	1	Heavyweight series adaptable tip mallet
<b>195.20CPE</b>	1	Sheathed angled half-round nose pliers
<b>193.16CPE</b>	1	Sheathed straight half-round nose "telephone" pliers
<b>189.17CPE</b>	1	Sheathed round-nose pliers
<b>187.18CPE</b>	1	Sheathed universal pliers
<b>1830.1</b>	1	Extra-soft silk brush
<b>181A.25CPE</b>	1	Locking twin slip-joint multitrip pliers
<b>804</b>	1	19 blade feeler gauge
<b>603F</b>	1	Hacksaw frame
<b>234</b>	1	Scriber
<b>231</b>	1	Three-square scraper
<b>34</b>	6	Midget open-end wrenches 1/4" - 11/32" - 3/8" - 5/16" - 7/16" - 9/32"
<b>CKS.91</b>	1	Socket rack set
<b>JB.11/32</b>	1	Sockets 11/32"
<b>200C.26</b>	1	Graphite handle riveting hammer
<b>200C.30</b>	1	Graphite handle riveting hammer

## JETGXL.UAE50 CU.AE50 set supplied in foam modules and JET.8GXLS

- Engine mechanics selection CU.AE50 supplied in foam modules in roller cabinet JET.8GXLS.



## CU.AE51 118-piece electricians set

- Major and minor in-hanger overhaul and servicing of electrical equipment including control looms, supply systems, interconnections and relays, lighting and audiovisual3.
- Weight: 6,880 kg.



Icon	Qty	Description
	<b>R.EL</b>	5 Long 6 point sockets 1/4" - 5/16" - 3/8" - 7/16" - 1/2"
	<b>RB.40AU</b>	10 Sockets 3/16" to 9/16"
	<b>R.240A</b>	1 1/4" universal joint
	<b>R.236A</b>	1 Short-reach spinner handle
	<b>R.216</b>	1 Flexible socket extension 150 mm long
	<b>R.215</b>	1 1/4" extension 150 mm long
	<b>R.210</b>	1 1/4" extension 100 mm long
	<b>R.151</b>	1 1/4" ratchet
	<b>R.120A</b>	1 Sliding tee
	<b>AS.6L160T2A</b>	6 Needle file wallet set
	<b>ARZ.5,5</b>	1 Round blade offset screwdriver
	<b>APZ.B</b>	1 Dual-size offset screwdriver
	<b>AWP</b>	2 Screwdriver for Phillips® heads PH 1x100 - 2x125
	<b>ANPOX75</b>	1 Screwdriver for Phillips® heads PH 0
	<b>AN</b>	2 Screwdrivers for slotted heads 2,5x75 AND 3,5x75 mm
	<b>AW</b>	4 Screwdrivers for slotted heads 4x100 - 5,5x150 - 6,5x150 - 8x200 mm
	<b>85.JU10</b>	10 Wallet set of hexagonal keys 33 to 183 mm
	<b>841A.4</b>	1 "Stubby" scissors
	<b>840.1</b>	1 Electricians knife with wire stripper
	<b>839A.0</b>	1 Desoldering pump
	<b>834.R1</b>	1 Inspection mirror 36 mm
	<b>826.1</b>	1 Mechanical retriever
	<b>82H.JU10</b>	10 Wallet set of hexagonal keys 1/16" to 3/8"
	<b>445.8R</b>	1 Locking-wire pliers
	<b>410.S</b>	1 Connector pliers
	<b>405.15</b>	1 Precision diagonal cutters, axial cut
	<b>34.JU13T</b>	13 Roll set of open-end wrenches 3/16" to 11/16"

Icon	Qty	Description
	<b>256.2,5</b>	1 Precision centre punch
	<b>251A.JT9</b>	9 Precision sleeved drift punches 1 to 6 mm.
	<b>208A.32CBA</b>	1 Plastic-tip mallet
	<b>200H.26</b>	1 Graphite handle riveting hammer
	<b>193.16CPE</b>	1 Short half-round nose plier
	<b>189.17CPE</b>	1 Sheathed round-nose pliers
	<b>188.16CPE</b>	1 Sheathed flat-nose pliers
	<b>1230.30</b>	1 Extra-soft silk brush
	<b>183.20CPE</b>	1 Sheathed angled half-round nose pliers
	<b>180.CPE</b>	1 Multigrip pliers
	<b>BV.21-10</b>	1 Soldering iron stand
	<b>113A.8C</b>	1 10" adjustable wrench
	<b>1830.1</b>	1 Extra-soft silk brush
	<b>836</b>	1 Pen light
	<b>804</b>	1 19 blade feeler gauge
	<b>803.300M</b>	1 Flexible stainless 2-sided rule
	<b>234</b>	1 Scriber
	<b>163</b>	1 Wire stripper and cutter
	<b>144</b>	1 Ultra-flat straight tweezers
	<b>R.235</b>	5 1/4" drive bit holder
	<b>ES.148T</b>	1 1/4" bit for slotted head 8 mm
	<b>ES.136,5T</b>	1 1/4" bit for slotted head 6,5 mm
	<b>ES.134T</b>	1 1/4" bit for slotted head 4 mm
	<b>EP.102T</b>	1 1/4" bit for Phillips® head n°2
	<b>EP.101T</b>	1 1/4" bit for Phillips® head n°1
	<b>APB.1X40</b>	1 Stubby screwdriver for Phillips® head n°1







**Aerospace toolkits**

**CU.AE52 86-piece flight instruments set**

- In-hanger inspection and servicing of console instrumentation, electrical, electro-mechanical and electronic modules and systems function indicators.
- Weight: 3,490 kg.



ED	Qty	Description
<b>RB.40AU</b>	10	Sockets 3/16" to 9/16"
<b>R.240A</b>	1	1/4" universal joint
<b>R.236A</b>	1	Short-reach spinner handle
<b>R.215</b>	1	1/4" extension 150 mm long
<b>R.210</b>	1	1/4" extension 100 mm long
<b>R.151</b>	1	1/4" ratchet
<b>R.150A</b>	1	Finger-control ratchet
<b>AVE</b>	3	Screwdrivers for slotted heads 3,5x100 - 4x100 - 5,5x150 mm
<b>AS.6L160T2A</b>	6	Needle file wallet set
<b>AEF.J3</b>	8	"Micro-Tech®" screwdrivers with case
<b>AWP</b>	2	Screwdriver for Phillips® heads PH 1x100 - 2x125
<b>85.JU10</b>	10	Wallet set of hexagon keys 33 to 183 mm
<b>841.1</b>	1	Very short pointed scissors
<b>840.1</b>	1	Electricians knife with wire stripper
<b>839A.0</b>	1	Desoldering pump
<b>835A</b>	1	Spring hook
<b>826.0</b>	1	Mechanical retriever
<b>82H.JU10</b>	10	Wallet set of hexagonal keys 1/16" to 3/8"

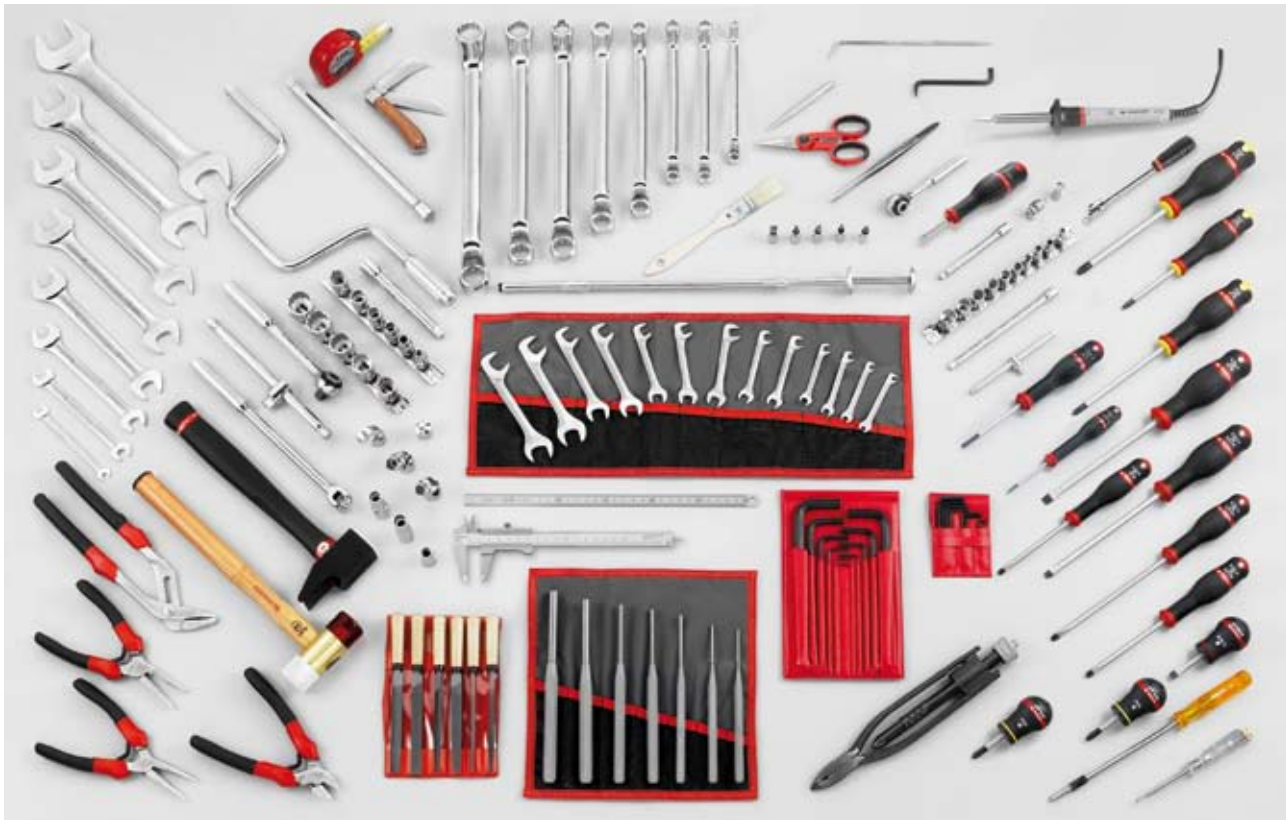
ED	Qty	Description
<b>803.300M</b>	1	Flexible stainless 2-sided rule
<b>405.10</b>	1	"Electronics" coaxial cutting pliers
<b>251A</b>	5	Drift punches 1 - 1.5 - 2 - 2.5 - 3 mm
<b>200H.26</b>	1	Graphite handle riveting hammer
<b>22.JU5T</b>	5	Roll set of miniature open-end wrenches 3/16" to 9/16"
<b>194.12</b>	1	Fine-wire strippers
<b>1830.1</b>	1	Extra-soft silk brush
<b>176A.CPY</b>	1	Sheathed multigrip pliers
<b>142.2</b>	1	15" angle-nose tweezers
<b>1230.30</b>	1	Soldering iron 30W
<b>836</b>	1	Pen light
<b>834</b>	1	Inspection mirror
<b>431.MT</b>	1	Microtech® narrow short-nose pliers
<b>421</b>	1	"Electronics" short sheathed flat-nose pliers
<b>403</b>	1	"Electronics" sheathed half round-nosed pliers
<b>402</b>	1	Sheathed half round-nose pliers
<b>144</b>	1	Ultra-flat straight tweezers
<b>139</b>	1	End-cutting tweezers





## CU.AE53 149-piece cell maintenance set

- Inspection and servicing of airframes : surfaces, flap actuators structures of wide-body aircraft.
- Weight: 12,880 kg



Code	Qty	Description
<b>RB.40AU</b>	10	Sockets 3/16" to 9/16"
<b>R.240A</b>	1	1/4" universal joint
<b>R.232</b>	1	Coupler 1/4" - 3/8"
<b>R.236A</b>	1	Short-reach spinner handle
<b>R.235</b>	5	Bit-holder 1/4"
<b>R.215</b>	1	1/4" extension 150 mm long
<b>R.210</b>	1	1/4" extension 100 mm long
<b>R.155A</b>	1	1/4" metal-grip "palm-control" ratchet
<b>R.140A</b>	1	Drive-hinged handle 1/4"
<b>R.120A</b>	1	Sliding tee
<b>JB.41AU</b>	5	Sockets 5/8" to 7/8"
<b>JB.40AU</b>	6	Sockets 1/4" to 9/16"
<b>J.LA</b>	2	Long-reach sockets 7/16" and 3/8"
<b>J.F</b>	2	Hinged sockets 7/16" and 3/8"
<b>JB.11/32</b>	1	Sockets
<b>J.240A</b>	1	3/8" universal joint
<b>J.230</b>	1	Coupler 3/8"-1/4"
<b>J.215</b>	1	"Junior" extension 250 mm
<b>J.210</b>	1	"Junior" extension 125 mm
<b>J.155A</b>	1	3/8" metal-grip "palm-control" ratchet
<b>J.145</b>	1	Metal-grip hinged handle
<b>J.120A</b>	1	"Junior" sliding tee
<b>J.115</b>	1	Metal-grip speed brace
<b>CLE.MDAM100</b>	6	Second cut locksmiths files
<b>AV.HT2B</b>	1	110-250 V voltage tester screwdriver
<b>ARZ.5,5</b>	1	Dual-size offset screwdriver
<b>AFU.1</b>	1	Screw starter slotted head
<b>AN</b>	2	Stubby screwdriver for Phillips heads 2,5x75 and 3x75 mm
<b>AWP</b>	3	Screwdrivers for Phillips heads PH 1x100 - 2x125 - 3x150
<b>AW</b>	4	Screwdrivers for slotted heads 4x100 - 5,5x100 - 6,5x150 - 8x200 mm
<b>AN6,5X35</b>	1	Stubby screwdriver for slotted heads 6,5 x 35 mm
<b>ANPOX75</b>	1	Screwdrivers for Phillips heads PH 0
<b>APB</b>	1	Short blade screwdriver Phillips® 1x40 - 2x 40

Code	Qty	Description
<b>85.JU10</b>	10	Wallet set of hexagon keys 33 to 183 mm
<b>83H.JU10</b>	10	Wallet set of long-reach hexagonal keys 1/16" to 3/8"
<b>826.1</b>	1	Mechanical retriever
<b>805.1</b>	1	Vernier caliper to 1/10 mm
<b>803.300M</b>	1	Flexible stainless 2-sided rule
<b>55A.JU8</b>	8	Ring wrenches 1/4" to 15/16".
<b>445.10R</b>	1	Locking-wire pliers
<b>44.JU8</b>	8	Inch combination wrenches 1/4" to 1 1/4"
<b>192.16CPE</b>	1	"Piano wire" diagonal cutters
<b>193.16CPE</b>	1	Sheathed straight half-round nose "telephone" pliers
<b>188.16CPE</b>	1	Sheathed flat-nose pliers
<b>180.CPE</b>	1	Multigrip plier
<b>BV.21-10</b>	1	Soldering iron stand
<b>1230-30</b>	1	Soldering iron (20/40W)
<b>893.316</b>	1	Case tape measure 2m
<b>843</b>	1	Twin-blade electricians knife
<b>841</b>	1	Electricians scissors
<b>234</b>	1	Scriber
<b>150</b>	1	Standard straight tweezers
<b>34.JU13T</b>	13	Roll set of open-end wrenches 3/16" to 11/16"
<b>256.2,5</b>	1	Precision centre punch
<b>248.JT7</b>	7	Long drift punches
<b>208A.32CBA</b>	1	Plastic-tip mallet
<b>200H.28</b>	1	Graphite handle riveting hammer
<b>1830.1</b>	1	Extra-soft silk brush
<b>ES.148T</b>	1	Bits for slotted heads 8 mm
<b>ES.136,5T</b>	1	Bits for slotted heads 6,5 mm
<b>ES.134T</b>	1	Bits for slotted heads 4 mm
<b>EP.102T</b>	1	Bits for Phillips heads n°2
<b>EP.101T</b>	1	Bits for Phillips heads n°1
<b>ACL.1A</b>	1	Ratchet bit-driver





**Aerospace toolkits**

**CU.AE54 130-piece equipment maintenance set**

- Cabin layout, maintenance and repairs on passenger and cargo airliners : lighting, trim, seats, and air-conditioning systems.
- Weight: 8,680 kg.

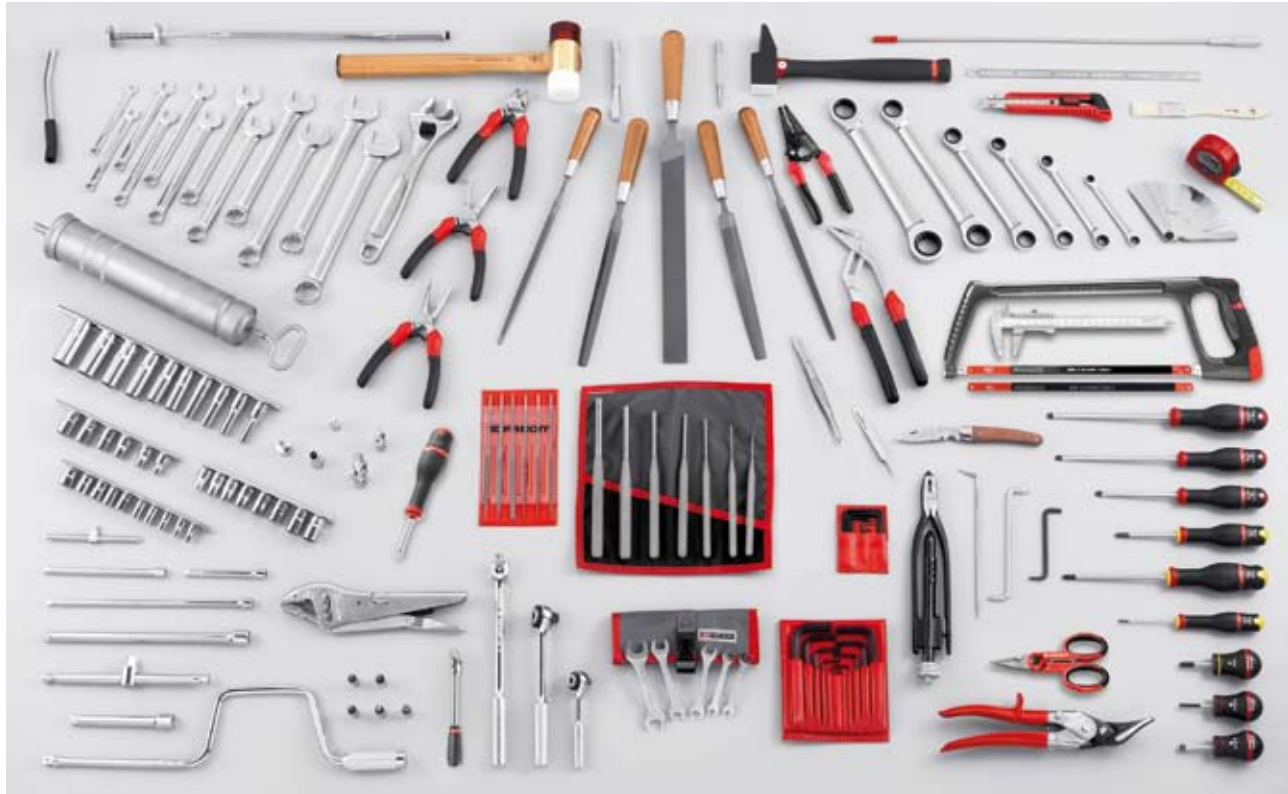


Ref	Qty	Description
<b>39.JU14T</b>	14	Short combination wrenches 1/8" to 11/16"
<b>44</b>	4	Open-end wrenches: 1/2 x 9/16 - 3/4 x 13/16 - 5/8 x 11/16 - 7/8 x 1 5/16
<b>34.JU13T</b>	13	Roll set of open-end wrenches 3/16" to 11/16"
<b>64</b>	3	12-point ratchet ring wrenches: 1/4 x 5/16 - 3/8 x 7/16 - 1/2 x 9/16
<b>R.120A</b>	1	Sliding tee
<b>R.210</b>	1	100 mm extension
<b>R.215</b>	1	150 mm extension
<b>R.240A</b>	1	1/4" universal joint
<b>R.232</b>	1	Coupler 1/4" - 3/8"
<b>J.210</b>	1	"Junior" extension 125 mm
<b>J.215</b>	1	"Junior" extension 250 mm
<b>J.240A</b>	1	3/8" universal joint
<b>J.120A</b>	1	"Junior" sliding tee
<b>J.230</b>	1	Coupler 3/8"-1/4"
<b>J.LA</b>	2	"Junior" long-reach sockets 3/8" and 7/16"
<b>AW</b>	3	Screwdrivers for slotted heads 4 x 100 - 5.5 x 150 - 6.5 x 150
<b>AN</b>	2	Screwdrivers for slotted heads 2.5 x 75 and 3.5 x 75
<b>AN4X35</b>	1	Stubby screwdriver 4 x 35
<b>ANPOX75</b>	1	Screwdriver for Phillips® heads PH 0
<b>AWP2X125</b>	3	Screwdriver for Phillips® heads PH 2
<b>ANP</b>	2	Screwdrivers 1 x 35 and 2 x 35 mm
<b>APZ.B</b>	1	Offset screwdriver
<b>A3,5X100VE</b>	1	1000 V insulated screwdriver for slotted heads 3.5 x 100
<b>ARZ,5,5</b>	1	Dual-size offset screwdriver
<b>82H.JU10</b>	10	Wallet set of hexagonal keys 1/16" to 3/8"
<b>192.16CPE</b>	1	"Piano wire" diagonal cutters
<b>R.155A</b>	1	1/4" metal-grip "palm-control" ratchet
<b>J.155A</b>	1	3/8" metal-grip "palm-control" ratchet

Ref	Qty	Description
<b>R.140A</b>	1	Drive-hinged handle 1/4"
<b>J.145</b>	1	Metal-grip hinged handle
<b>J.115</b>	1	Metal-grip speed brace
<b>RB.40AU</b>	10	Sockets 3/16" to 9/16"
<b>JB.41AU</b>	5	Sockets 5/8" to 7/8"
<b>JB.40AU</b>	6	Sockets 1/4" to 9/16"
<b>85.JU10</b>	10	Wallet set of hexagon keys 33 to 183 mm
<b>188.16CPE</b>	1	Sheathed flat-nose pliers
<b>193.16CPE</b>	1	Sheathed straight half-round nose "telephone" pliers
<b>405.12</b>	1	Precision diagonal cutters
<b>1230.30</b>	1	Dual-rating soldering iron (20/40 W)
<b>BV.21-10</b>	1	Soldering iron stand
<b>839A.0</b>	1	Desoldering pump
<b>841A.4</b>	1	Bi-material electricians scissors
<b>843</b>	1	Twin-blade electricians knife
<b>248</b>	3	Long drift punches 2 - 3 - 4 mm
<b>256.2,5</b>	1	Precision centre punch
<b>234</b>	1	Scriber
<b>803.300M</b>	1	Flexible stainless rule 300 mm
<b>836</b>	1	Pen light
<b>410.S</b>	1	Connector pliers
<b>445.8R</b>	1	Locking-wire pliers
<b>200H26</b>	1	Graphite handle riveting hammer
<b>JB.11/32</b>	1	Sockets
<b>841A.4</b>	1	Electrician scissors
<b>176A.CPY</b>	1	Multigrip plier

## CU.AE56 167-piece stop-over mechanics set

- Servicing of engine accessories, airframes, electrical equipment and circuits.
- Weight: 16,960 kg.



Code	Qty	Description
<b>STG</b>	5	File set
<b>RB.40AU</b>	10	Sockets 3/16" to 9/16"
<b>R.240A</b>	1	1/4" universal joint
<b>R.232</b>	1	Coupler 1/4" - 3/8"
<b>R.236A</b>	1	Short-reach spinner handle
<b>R.235</b>	5	Bit-holder 1/4"
<b>R.217</b>	1	1/4" extension 250 mm long
<b>R.215</b>	1	1/4" extension 150 mm long
<b>R.210</b>	1	1/4" extension 100 mm long
<b>R.155A</b>	1	1/4" metal-grip "palm-control" ratchet
<b>R.140A</b>	1	Drive-hinged handle 1/4"
<b>R.120A</b>	1	Sliding tee
<b>JL.40U</b>	10	"Junior" long-reach sockets 1/2" to 9/16"
<b>JB.41AU</b>	5	Sockets 5/8" to 7/8"
<b>JB.40AU</b>	6	Sockets 1/4" to 9/16"
<b>J.240A</b>	1	3/8" universal joint
<b>J.230</b>	1	Coupler 3/8" - 1/4"
<b>J.215</b>	1	"Junior" extension 250 mm
<b>J.210</b>	1	"Junior" extension 125 mm
<b>J.155A</b>	1	3/8" metal-grip "palm-control" ratchet
<b>J.145</b>	1	Metal-grip hinged handle
<b>J.120A</b>	1	"Junior" sliding tee
<b>J.115</b>	1	Metal-grip speed brace
<b>AS.6L160T2A</b>	6	Needle file wallet set
<b>ARZ.5,5</b>	1	Round blade offset screwdriver
<b>APZ.B</b>	1	Dual-size offset screwdriver
<b>ANP1X35</b>	1	Stubby screwdriver for Phillips® heads J 1
<b>AWP</b>	2	Screwdriver for Phillips J heads 1 - 2
<b>ANPOX75</b>	1	Screwdriver for Phillips® heads 0
<b>AW</b>	3	Screwdrivers for slotted heads 4x100 - 5.5x150 and 6.5x150
<b>AN</b>	4	Stubby screwdrivers 4x35 - 6.5x3 - 2x75 - 3x75 mm
<b>882A</b>	1	Scroll shears
<b>85-JU10</b>	10	Wallet set of hexagon keys 33 to 183 mm
<b>884.S18</b>	1	18 mm snap-off blade cutter
<b>841A.4</b>	1	Bi-material electricians scissors

Code	Qty	Description
<b>840.1</b>	1	Electricians knife with wire stripper
<b>827.1</b>	1	Ultra-slim magnetic retrievers
<b>826.1</b>	1	Mechanical retriever
<b>82H-JU10</b>	10	Wallet set of hexagonal keys 1/16" to 3/8"
<b>805.1</b>	1	Vernier caliper to 1/10 mm
<b>803.300M</b>	1	Flexible stainless 2-sided rule
<b>64</b>	6	Ring wrenches : 1/2x9/16" - 1/4x5/16" - 3/4x13/16" - 3/8x7/16" - 5/8x11/16" - 7/8x15/16"
<b>6688.12</b>	10	Pack of ten 12 teeth/cm bimetal blades
<b>445.10R</b>	1	Locking-wire pliers
<b>440-JU12</b>	12	Combination wrenches 1/4" to 15/16"
<b>192.16CPE</b>	1	"Piano wire" diagonal cutters
<b>256.4</b>	1	4 mm precision centre punch
<b>263.G19</b>	1	Chisel
<b>248.JT7</b>	7	Long drift punches 2 to 10 mm
<b>22-JU5T</b>	5	Roll set of miniature open-end wrenches 3/16" to 9/16"
<b>208A.40CBA</b>	1	Heavyweight series adaptable tip mallet
<b>200H.32</b>	1	Graphite handle riveting hammer
<b>193.16CPE</b>	1	Sheathed straight half-round nose "telephone" pliers
<b>188.16CPE</b>	1	Sheathed flat-nose pliers
<b>1830.1</b>	1	Extra-soft silk brush
<b>180.CPE</b>	1	Multigrip plier
<b>142.1</b>	1	Straight-shouldered tweezers
<b>113A.10C</b>	1	10" adjustable wrench
<b>893.316</b>	1	Case tape measure 3m
<b>804</b>	1	19 blade feeler gauge
<b>603F</b>	1	Hacksaw frame
<b>500</b>	1	Lock-grip pliers
<b>376A</b>	1	Manual oil syringe
<b>234</b>	1	Scriber
<b>163</b>	1	Wire stripper and cutter
<b>154</b>	1	Straight tweezers
<b>JB.11/32</b>	1	Sockets
<b>EST</b>	5	Bits 101 - 102 - 134 - 136,5 - 148







## Aerospace toolkits

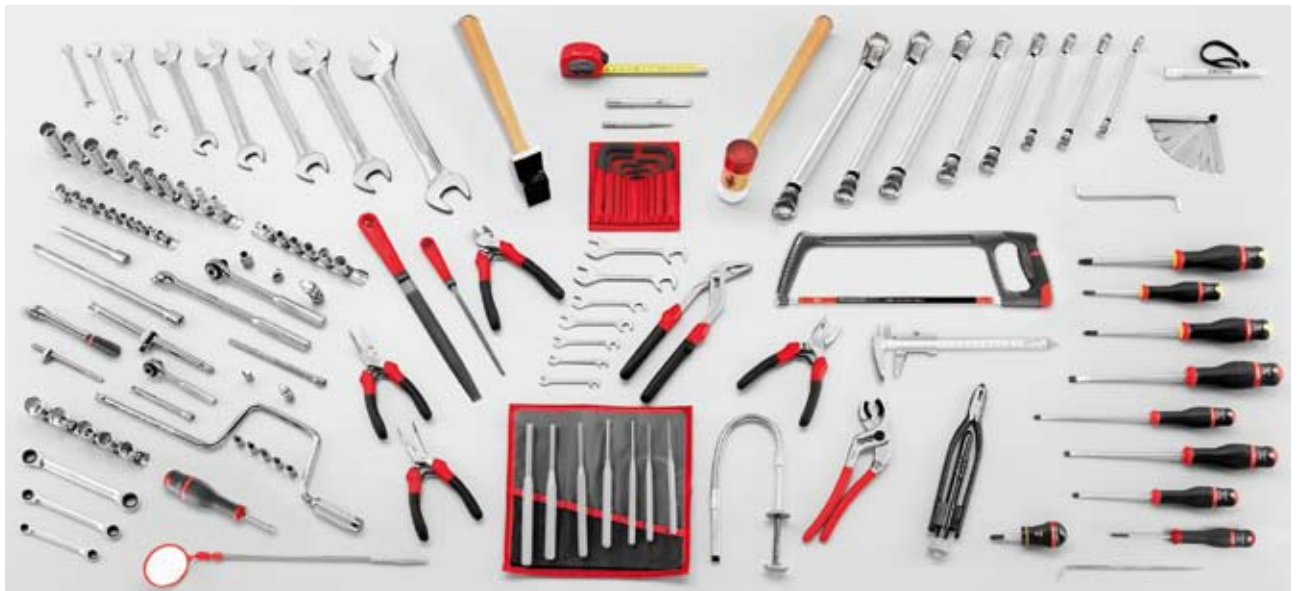
### ▣ JETGXL.UAE56 CU.AE56 set supplied in foam modules and JET.8GXLS

- CU.AE56 stopover mechanics set supplied in foam modules and JET.8GXLS



### ▣ CU.AE57 132-piece major check set

- For regular major overhauls of engines, undercarriage, airframes and hydraulic systems of wide-body aircraft : Airbus, Boeing, Mc Donnell Douglas.
- Weight: 14,430 kg.



Code	Qty	Description
<b>RB.40AU</b>	10	Sockets 3/16" to 9/16"
<b>R.155A</b>	1	"Radio" metal-grip ratchet
<b>R.140A</b>	1	Drive-hinged handle 1/4"
<b>R.120A</b>	1	Sliding tee
<b>R.236A</b>	1	Short-reach spinner handle
<b>R.240A</b>	1	1/4" universal joint
<b>R.210</b>	1	100 mm extension
<b>R.215</b>	1	150 mm extension
<b>R.232</b>	1	Coupler 1/4" - 3/8"
<b>JB.41AU</b>	5	Sockets 5/8" to 7/8"
<b>JB.40AU</b>	6	Sockets 1/4" to 9/16"
<b>JL.40U</b>	10	"Junior" long-reach sockets 1/4" to 13/16"
<b>J.155A</b>	1	"Junior" metal-grip ratchet
<b>J.115</b>	1	Metal-grip speed brace
<b>J.145</b>	1	Metal-grip hinged handle
<b>J.120A</b>	1	"Junior" sliding tee
<b>J.210</b>	1	"Junior" extension 125 mm
<b>J.215</b>	1	"Junior" extension 250 mm
<b>J.240A</b>	1	3/8" universal joint
<b>J.230</b>	1	Coupler 3/8"-1/4"
<b>44.JU8</b>	8	Open-end wrenches 1/4" to 1 1/4."
<b>34</b>	7	Open-end wrenches 1/4" - 11/16" - 3/8" - 5/16" - 5/8" - 7/16" - 9/32".
<b>55A.JU8</b>	8	Ring wrenches 1/2x9/16" to 7/8x15/16"
<b>64</b>	3	Ring wrenches 1/2 x 9/16" - 1/4 x 5/16" - 3/8 x 7/16"
<b>82H.JU10</b>	10	Wallet set of hexagonal keys 1/16" to 3/8"
<b>AWP</b>	3	Screwdriver for Phillips® heads 1 - 2 - 3
<b>AW</b>	4	Screwdrivers for slotted heads 4x100 - 5.5x150 - 6.5x150 - 8x200 mm
<b>AN3X75</b>	1	Screwdriver for slotted head 3x75

Code	Qty	Description
<b>APZ.B</b>	1	Offset screwdriver for Phillips® heads
<b>180.CPE</b>	1	Multigrip plier
<b>188.16CPE</b>	1	Sheathed flat-nose pliers
<b>193.16CPE</b>	1	Sheathed straight half-round nose "telephone" pliers
<b>187.16CPE</b>	1	Sheathed universal pliers
<b>192.16CPE</b>	1	"Piano wire" diagonal cutters
<b>410.S</b>	1	Connector pliers
<b>445.10R</b>	1	Locking-wire pliers
<b>805.1</b>	1	Vernier caliper 1/10 mm
<b>804</b>	1	19 blade feeler gauge
<b>234</b>	1	Scriber
<b>893.316</b>	1	Case tape measure 3m
<b>200H.32</b>	1	Graphite handle riveting hammer
<b>208A.40CBA</b>	1	Heavyweight series adaptable tip mallet
<b>248.JT7</b>	7	Long drift punches 2 to 10 mm
<b>256.2,5</b>	1	Precision centre punch
<b>263.619</b>	1	Chisel
<b>826.1</b>	1	Mechanical retriever
<b>834.R2</b>	1	Articulated mirror
<b>836</b>	1	Pen light
<b>DRD.MD200EMA</b>	1	Half-round second-cut file 200 mm
<b>RD.MD150EMA</b>	1	Half-round second-cut file 150 mm
<b>603F</b>	1	Hacksaw frame
<b>JB.11/32</b>	1	Sockets
<b>APB.2X40</b>	1	Short blade screwdriver Phillips® 2x40
<b>ES.T</b>	3	Bits 134 - 136,5 - 148
<b>EP.T</b>	2	Bits 101 - 102
<b>R.235</b>	5	Bit-holder 1/4"



## CU.AE10 118-piece engine cell set

Weight: 11,920 kg.



Code	Qty	Description
<b>RB.40AU</b>	10	Sockets 3/16" to 9/16"
<b>R.155A</b>	1	"Radio" metal-grip ratchet
<b>R.140A</b>	1	Drive-hinged handle 1/4"
<b>R.120A</b>	1	Sliding tee
<b>R.210</b>	1	100 mm extension
<b>R.215</b>	1	150 mm extension
<b>R.240A</b>	1	1/4" universal joint
<b>R.232</b>	1	Coupler 1/4" - 3/8"
<b>JB.41AU</b>	5	Sockets 5/8" to 7/8"
<b>JB.40AU</b>	6	Sockets 1/4" to 9/16"
<b>JB.11/32</b>	1	Sockets
<b>J.155A</b>	1	"Junior" metal-grip ratchet
<b>J.145</b>	1	Metal-grip hinged handle
<b>J.115</b>	1	Metal-grip speed brace
<b>J.120A</b>	1	"Junior" sliding tee
<b>J.210</b>	1	"Junior" extension 125 mm
<b>J.215</b>	1	"Junior" extension 250 mm
<b>J.240A</b>	1	3/8" universal joint
<b>J.230</b>	1	Coupler 3/8" - 1/4"
<b>JL.40U</b>	10	"Junior" long-reach sockets 1/2" to 9/16"
<b>440.JU17T</b>	17	1/4" to 1" 1/4 combination wrench wallet set
<b>34.JU13T</b>	13	Roll set of open-end wrenches 3/16" to 11/16"
<b>87H.JU8</b>	8	Short hexagon key ring-set
<b>AN5,5X35</b>	1	Stubby screwdriver for slotted head 5.5x35

Code	Qty	Description
<b>AWP</b>	2	Screwdriver for Phillips® heads PH 1x100 - 2x125
<b>AW</b>	4	Screwdrivers for slotted heads 4x100 - 5,5x100 - 6,5x150 - 8x200 mm
<b>AN3X75</b>	1	Screwdriver for slotted head 3x75
<b>180.CPE</b>	1	Multigrip plier
<b>188.20CPE</b>	1	Sheathed flat-nose pliers
<b>193.16CPE</b>	1	Sheathed straight half-round nose "telephone" pliers
<b>192.16CPE</b>	1	"Piano wire" diagonal cutters
<b>445.10R</b>	1	Locking-wire pliers
<b>803.300M</b>	1	Flexible stainless 2-sided rule
<b>804</b>	1	19 blade feeler gauge
<b>805.1</b>	1	Vernier caliper to 1/10 mm
<b>200.H28</b>	1	Graphite handle riveting hammer
<b>208A.32CBA</b>	1	Plastic-tip mallet
<b>256.2,5</b>	1	Precision centre punch
<b>248.JT7</b>	7	Long drift punches 2 to 10 mm
<b>234</b>	1	Scriber
<b>834.R1</b>	1	Articulated mirror
<b>827.1</b>	1	Magnetic retriever
<b>836</b>	1	Pen light
<b>APB.2X40</b>	1	Short blade screwdriver Phillips® 2x40
<b>ANPOX75</b>	1	Screwdriver Phillips® n°0
<b>ACL.1A</b>	1	Ratchet bit-driver 1/4"





**Aerospace toolkits**

**CM.AE22 115-piece maintenance mechanics set**

Weight: 13,750 kg.



Code	Qty	Description
<b>440.JE14</b>	14	Combination wrenches 7 to 24 mm
<b>55A.JE8</b>	8	Ring wrenches 8 to 26 mm
<b>113A.10C</b>	1	10" adjustable wrench
<b>R.120A</b>	1	Sliding tee
<b>R.236A</b>	1	Short-reach spinner handle 155 mm
<b>R.210</b>	1	1/4" extension 100 mm long
<b>R.215</b>	1	1/4" extension 150 mm long
<b>R.240A</b>	1	1/4" universal joint
<b>R.232</b>	1	Coupler 1/4" - 3/8"
<b>R.155A</b>	1	"Radio" metal-grip ratchet
<b>R.140A</b>	1	Drive-hinged handle 1/4"
<b>RB.40AE</b>	10	"Radio" sockets 5.5 to 14 mm
<b>J.155A</b>	1	"Junior" metal-grip ratchet
<b>J.145</b>	1	Metal-grip hinged handle
<b>J.115</b>	1	Metal-grip speed brace
<b>J.120A</b>	1	Sliding tee
<b>J.210</b>	1	3/8" extension 125 mm long
<b>J.215</b>	1	3/8" extension 250 mm long
<b>J.240A</b>	1	3/8" universal joint
<b>J.230</b>	1	Coupler 3/8"-1/4"
<b>JB.40AE</b>	8	"Junior" sockets 7 to 14 mm
<b>JB.41AE</b>	6	"Junior" sockets 15 to 21 mm
<b>AN3X75</b>	1	Screwdriver for slotted head 3x75 mm
<b>AWH</b>	4	Screwdrivers for slotted heads 6,5x150 - 8x75 mm
<b>AN</b>	2	Screwdrivers for slotted heads 4x100 - 6,5x125 mm
<b>ANP</b>	1	Short blade screwdrivers Phillips® PH 1x100 - 2x125 - 3x150mm

Code	Qty	Description
<b>AFU.1</b>	1	Screw starter for slotted heads
<b>AFUX.1</b>	1	Screw starter for cross-heads
<b>AKZ.6</b>	1	Offset screwdriver for slotted heads
<b>APZ.B</b>	1	Offset screwdriver for Phillips® heads
<b>82H.JL10</b>	10	Hexagon keys
<b>180.CPE</b>	1	Multigrip plier
<b>188.16CPE</b>	1	Sheathed flat-nose pliers
<b>193.16CPE</b>	1	Sheathed straight half-round nose "telephone" pliers
<b>192.16CPE</b>	1	"Piano wire" diagonal cutters
<b>187.16CPE</b>	1	Sheathed universal pliers
<b>507A</b>	1	Compact lock-grip pliers
<b>985.ST</b>	1	Shear
<b>603F</b>	1	Hacksaw frame
<b>CLE.MDAM100</b>	6	Second cut locksmiths files
<b>200H.28</b>	1	Graphite handle riveting hammer
<b>208A.32CBA</b>	1	Plastic-tip mallet
<b>256.2,5</b>	1	Precision centre punch
<b>262A</b>	2	Forged chisels 15 and 18 mm
<b>234</b>	1	Scriber
<b>893.316</b>	1	Case tape measure 3m
<b>803.300M</b>	1	Stainless 2-sided rule
<b>804</b>	1	19 blade feeler gauge
<b>836</b>	1	Pen light
<b>410.S</b>	1	Connector pliers
<b>445.10R</b>	1	Locking-wire pliers

## CM.AE21 97-piece instruments electrician set

- Maintenance and overhaul of electrics, optical equipment, flight controls on fighters, bombers and other aircraft.
- Weight: 6,940 kg.



Code	Qty	Description
<b>39.JE16T</b>	16	Roll set of combination wrenches 3.2 to 17 mm
<b>34</b>	6	Open-end wrenches 3.2 - 4 - 5 - 5.5 - 6 - 7 mm
<b>R.120A</b>	1	Sliding tee
<b>R.236A</b>	1	Short-reach spinner handle
<b>R.210</b>	1	100 mm extension
<b>R.215</b>	1	150 mm extension
<b>R.240A</b>	1	1/4" universal joint
<b>R.140A</b>	1	Drive-hinged handle 1/4"
<b>AN</b>	4	Screwdrivers for slotted heads 2,5x75 - 3x75 - 4x100 - 5,5x125 mm
<b>AN4X35</b>	1	Stubby screwdriver for slotted head 4x35 mm
<b>ANP</b>	2	Screwdriver for Phillips® head PH 0x75 - 1x25 - 1x100 - 2x125 mm
<b>AWH6,5X150</b>	1	Screwdrivers for slotted heads 6,5x150 mm
<b>ARZ.4</b>	1	Round blade offset screwdriver 4 mm
<b>APZ.A</b>	1	Dual-size offset screwdriver for Phillips® heads
<b>82.JL10</b>	10	Hexagon keys
<b>193.16CPE</b>	1	Sheathed straight half-round nose "telephone" pliers
<b>181A.18CPE</b>	1	Locking twin slip-joint multigrip pliers
<b>405.12</b>	1	Precision diagonal cutters
<b>431.MT</b>	1	Short-nose pliers
<b>401</b>	1	Flat-nose pliers

Code	Qty	Description
<b>402</b>	1	Sheathed half round-nose pliers
<b>403</b>	1	"Electronics" sheathed half round-nosed pliers
<b>1230.30</b>	1	Soldering iron 30W
<b>BV.21-10</b>	1	Soldering iron stand
<b>200H.26</b>	1	Graphite handle riveting hammer
<b>839A.0</b>	1	Desoldering pump
<b>841A.4</b>	1	Bi-material electricians scissors
<b>840.1</b>	1	Electricians knife with wire stripper
<b>AS.6L160T2</b>	6	Needle file wallet set
<b>803.300M</b>	1	Flexible stainless 2-sided rule
<b>804</b>	1	19 blade feeler gauge
<b>AEF.J3</b>	8	"Micro-Tech®" screwdrivers with case
<b>149</b>	1	Straight tweezers
<b>R.155A</b>	1	"Radio" metal-grip ratchet
<b>RB.40AE</b>	10	"Radio" sockets 5.5 to 14 mm
<b>834.R1</b>	1	Articulated mirror
<b>826.0</b>	1	Mechanical retriever
<b>836</b>	1	Pen light
<b>1830.1</b>	1	Extra-soft silk brush
<b>445.8R</b>	1	Locking-wire pliers





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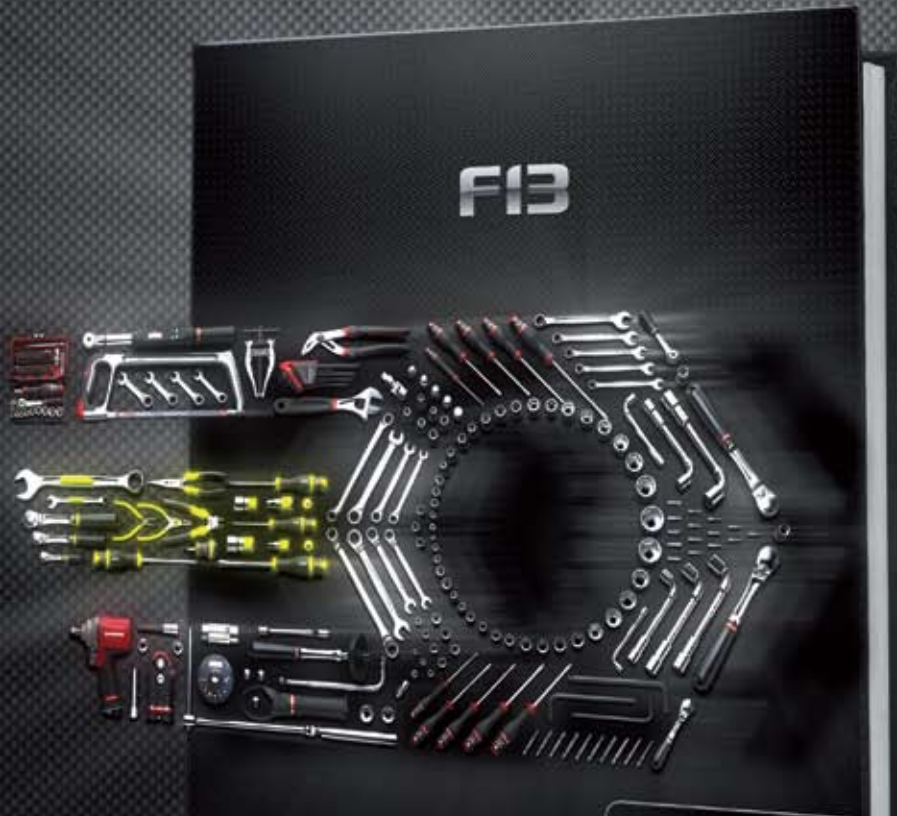




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