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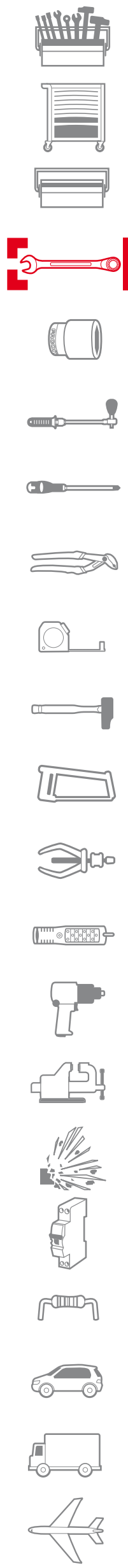
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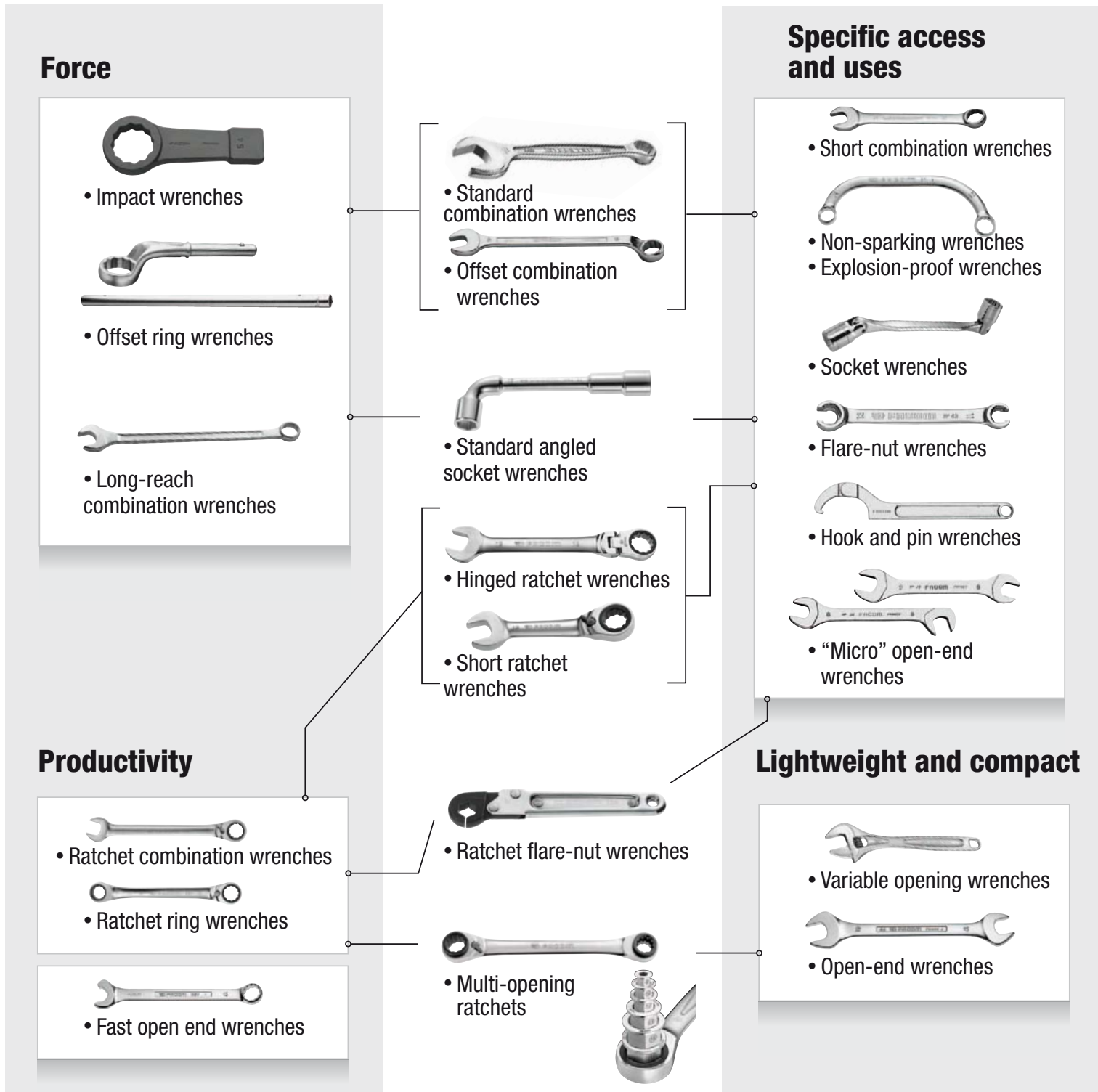
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# FACOM WRENCHES

## A WIDE RANGE FOR ALL APPLICATIONS



**FACOM exclusive safety and productivity**

JP portable clip set for quick identification of the right wrench.

The safety accessory for impact wrenches.

Wrenches VSE insulated for work on live parts.

OGV® profile for more powerful tightening without damaging nuts.



# SLEEVE SETS

## A USEFUL INNOVATION!

### PRACTICAL: SAVE TIME

- Immediately find the right wrench.
- No more loose wrenches in your tool box.
- Easy wrench selection.

### SAFE

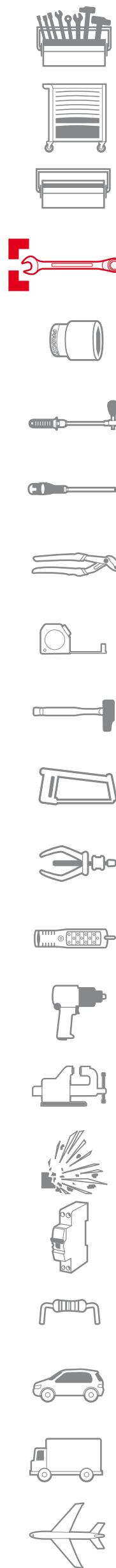
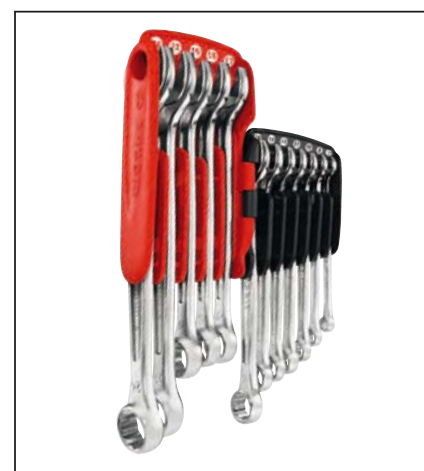
- No more tools left on site at the end of the job.
- Missing wrenches clearly identified.
- Compatible with the FOD concept (Foreign Object Damage).

### OPTIMISED STORAGE

- Compact and organised wrench set in the sleeve hence saving space.
- Easy to store in any Facom roller cabinet drawer and tool box compartment.

### AVAILABLE FOR ALL WRENCH FAMILIES

- Standard and short combination wrenches.
- Standard and short reversible ratchet wrenches.
- Hinged ratchet wrenches.
- Ratchet ring wrenches.





**440** | **COMBINATION WRENCH**  
"NEW GENERATION"

**THE COMBINATION WRENCH  
REINVENTED FOR YOU**

**More control**

During pre-tightening:

- More stable.
- Easier to guide.
- Wrench does not turn in the hand.



**More comfort**

- Variable handle cross section doubles the surface in contact with the hand.

**Painless torque application**



**Better ring head accessibility**

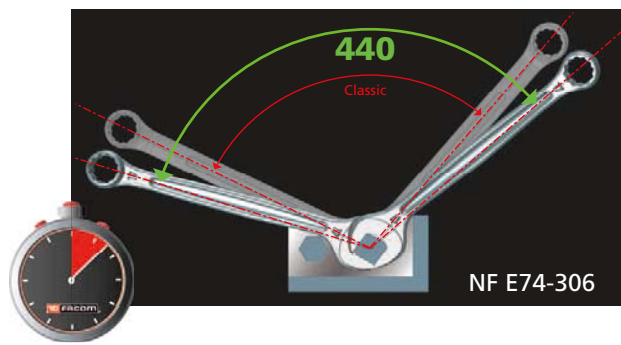
- Ring head provides better clearance for reaching recessed or closely spaced nuts.



**More efficient open-end**

The open-end / handle geometry:

- Saves 20% time.
- Save 15% space in highly confined zones.



**More power, delivered safely**

The combination wrench 440 was designed to combine compactness with strength:

- Dimensions meet the requirements of tooling standards NF ISO 1711-1 and aerospace standard SAE AS 954G.
- Tightening torques guaranteed significantly above specifications of high strength tooling and bolting standards ISO 898-1 (quality class 12.9).
- Combination wrench 440 was also designed to ensure maximum user safety. When critical tightening torques are reached, the wrench is distorted gradually. No brutal breaking likely to injure the user.

ISO 898-1\* Bolting standards

ISO 1711-1 Standard tooling standard

SAE AS 954G Aerospace tooling standard

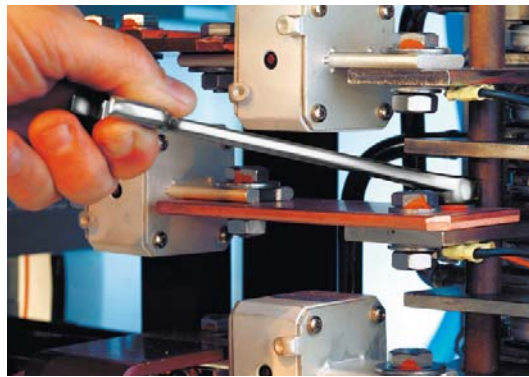
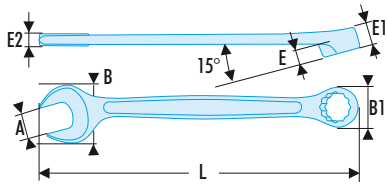
**440** FACOM combination wrench



Maximum performance



### 440 - Metric combination wrenches



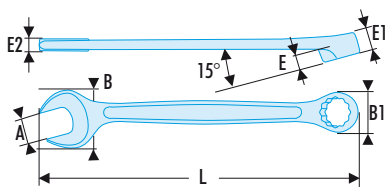
NF ISO 691, NF ISO 7738, NF ISO 3318, NF ISO 1711-1, E74-306, ISO 691, ISO 7738, ISO 3318, ISO 1711-1, DIN ISO 691, DIN 1711-1, DIN 3113, ASME B107.100

- Standard wrench for all current applications.
- High mechanical strength combined with compact size meeting aeronautical standards.
- Ring head:
  - Ring open end (size E) designed for better access to series or embedded screws.
  - OGV® profile with 12-point ring for powerful tightening while protecting the nut. H suffix = 6-point ring.
  - Ring head angled at 15°.
- Open end head:
  - Open end angled at 15°.
  - Open end head-handle geometry optimised for increased access.
- Metric sizes: 4 to 41 mm.
- Presentation: satin chrome finish.

➤	A [mm]	B [mm]	B1 [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	ΔΔ [g]
<b>440.4H</b>	4	10,0	7,8	2,1	3,5	3,0	106	10
<b>440.5H</b>	5	13,3	9,2	3,1	6,0	3,6	115	16
<b>440.5,5H</b>	5,5	13,3	9,2	3,1	6,0	3,8	115	15
<b>440.6</b>	6	14,1	10,0	3,1	6,0	3,8	115	20
<b>440.7</b>	7	17,2	11,2	3,4	6,2	3,9	122	20
<b>440.8</b>	8	19,2	12,8	3,5	6,7	4,7	133	30
<b>440.9</b>	9	21,2	14,2	3,9	7,1	4,7	138	35
<b>440.10</b>	10	23,0	15,0	4,2	7,6	5,2	145	40
<b>440.11</b>	11	24,5	16,9	4,6	8,1	5,5	155	50
<b>440.12</b>	12	27,0	18,0	4,4	8,4	5,8	162	60
<b>440.13</b>	13	28,7	19,3	4,8	8,6	6,1	170	70
<b>440.14</b>	14	31,0	21,1	5,7	9,5	6,4	180	85
<b>440.15</b>	15	32,6	22,2	5,9	10,0	6,8	185	95
<b>440.16</b>	16	35,6	23,9	6,4	10,5	7,3	195	115
<b>440.17</b>	17	37,0	25,3	6,5	10,9	7,6	202	130
<b>440.18</b>	18	38,7	26,0	7,2	11,4	8,1	208	150
<b>440.19</b>	19	41,2	27,8	7,2	11,9	8,3	216	170
<b>440.20</b>	20	43,1	29,5	6,3	12,3	8,6	224	185

➤	A [mm]	B [mm]	B1 [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	ΔΔ [g]
<b>440.21</b>	21	45,4	30,9	7,8	12,8	8,8	233	205
<b>440.22</b>	22	46,9	32,3	8,3	13,3	9,0	248	230
<b>440.23</b>	23	49,0	33,6	8,7	13,8	9,3	257	255
<b>440.24</b>	24	51,0	35,0	8,9	14,2	9,7	267	290
<b>440.25</b>	25	53,0	36,4	9,4	14,7	9,9	274	315
<b>440.26</b>	26	55,5	37,8	9,8	15,1	10,1	285	345
<b>440.27</b>	27	58,0	39,2	8,9	15,6	10,4	295	375
<b>440.28</b>	28	60,7	40,6	10,6	16,1	10,7	305	415
<b>440.29</b>	29	63,0	42,0	10,8	16,6	11,2	320	475
<b>440.30</b>	30	65,0	43,5	11,2	17,1	11,5	340	530
<b>440.32</b>	32	68,0	46,1	11,5	18,0	12,5	355	640
<b>440.33</b>	33	69,8	47,0	11,8	18,5	12,8	380	715
<b>440.34</b>	34	72,0	48,9	12,8	19,0	13,0	390	745
<b>440.35</b>	35	74,3	51,0	12,8	19,5	13,5	430	890
<b>440.36</b>	36	76,0	53,0	13,2	20,0	14,0	440	945
<b>440.38</b>	38	80,0	56,0	14,1	22,0	15,2	450	1130
<b>440.41</b>	41	85,0	58,3	14,7	23,0	16,0	460	1290

### 440 - Inch combination wrenches



ASME B107.100, SAE AS954G

- Standard wrench for all current applications.
- High mechanical strength combined with compact size meeting aeronautical standards.
- Ring head:
  - Ring open end (size E) designed for better access to series or embedded screws.
  - OGV® profile with 12-point ring for powerful tightening while protecting the nut. H suffix = 6-point ring.
  - Ring head angled at 15°.
- Open end head:
  - Open end angled at 15°.
  - Open end head-handle geometry optimised for increased access.
- Dimensions in inches: from 1/4" to 1 1/2".
- Presentation: satin chrome finish.

➤	A ["]	B [mm]	B1 [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	ΔΔ [g]
<b>440.1/4</b>	1/4	14,1	10,0	3,1	6,0	3,8	115	20
<b>440.5/16</b>	5/16	19,2	12,8	3,5	6,7	4,7	133	30
<b>440.11/32</b>	11/32	21,2	14,2	3,9	7,1	4,7	138	35
<b>440.3/8</b>	3/8	23,0	15,0	4,2	7,6	5,2	145	45
<b>440.7/16</b>	7/16	24,5	16,9	4,6	8,1	5,5	155	50
<b>440.1/2</b>	1/2	28,7	19,3	4,8	8,6	6,1	170	70
<b>440.9/16</b>	9/16	31,0	21,1	5,7	9,5	6,4	180	85
<b>440.5/8</b>	5/8	35,6	23,9	6,4	10,5	7,3	195	115
<b>440.11/16</b>	11/16	37,0	25,3	6,5	10,9	7,6	202	130
<b>440.3/4</b>	3/4	41,2	27,8	7,2	11,9	8,3	216	170
<b>440.13/16</b>	13/16	43,1	29,5	6,3	12,3	8,6	224	185

➤	A ["]	B [mm]	B1 [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	ΔΔ [g]
<b>440.7/8</b>	7/8	46,9	32,3	8,3	13,3	9,0	248	230
<b>440.15/16</b>	15/16	51,0	35,0	8,9	14,2	9,7	267	290
<b>440.1'</b>	1	53,0	36,4	9,4	14,7	9,9	274	315
<b>440.1'1/16</b>	1'1/16	58,0	39,2	8,9	15,6	10,4	295	375
<b>440.1'1/8</b>	1'1/8	60,7	40,6	10,6	16,1	10,7	305	415
<b>440.1'1/4</b>	1'1/4	68,0	46,1	11,5	18,0	12,5	355	640
<b>440.1'5/16</b>	1'5/16	69,8	47,0	11,8	18,5	12,8	380	715
<b>440.1'3/8</b>	1'3/8	74,3	51,0	12,8	19,5	13,5	430	890
<b>440.1'7/16</b>	1'7/16	76,0	53,0	13,2	20,0	14,0	440	945
<b>440.1'1/2</b>	1'1/2	80,0	56,0	14,1	22,0	15,2	450	1130





# Combination wrenches

## 440 - Metric offset combination wrench sets in portable case

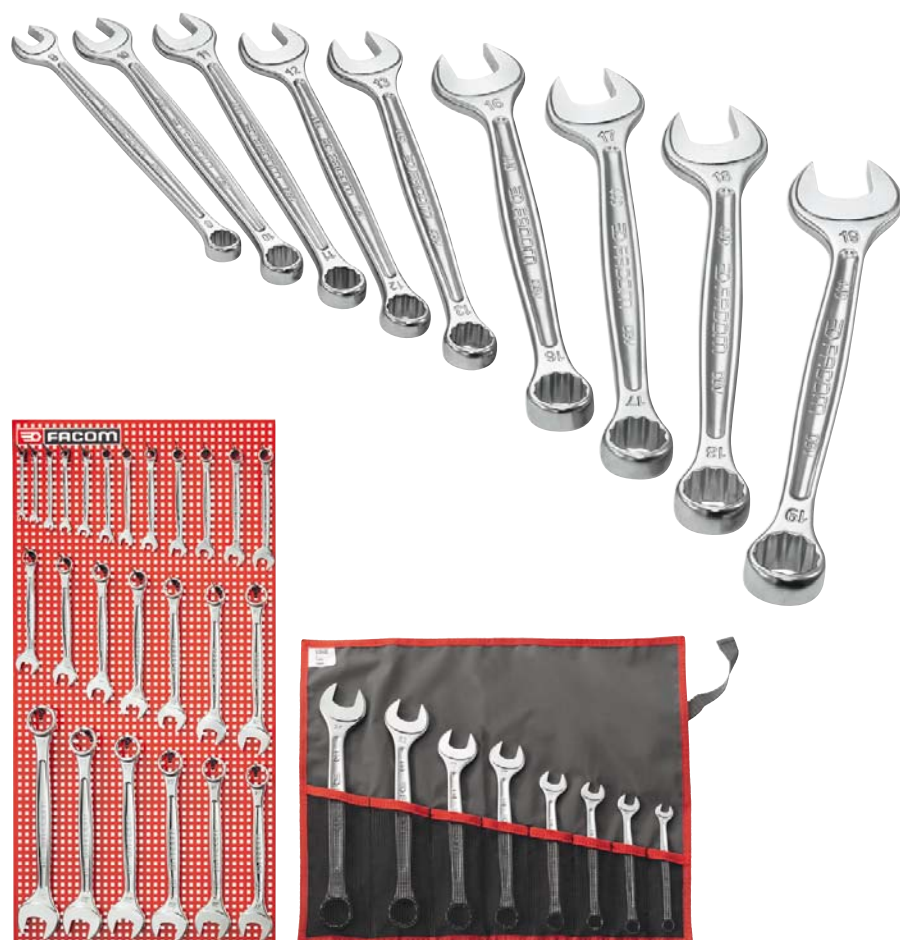


NF ISO 691, NF ISO 7738, NF ISO 3318, NF ISO 1711-1, E74-306, ISO 691, ISO 7738, ISO 3318, ISO 1711-1, DIN ISO 691, DIN 1711-1, DIN 3113, ASME B107.100

- Productivity and safety = easy to organise, easy to spot, always with you.
- Resistant to chemicals and impacts.

➤	A [mm]	Contents	ΔΔ [kg]
<b>440.JP9</b>	8 - 10 - 11 - 12 - 13 - 16 - 17 - 18 - 19	Etui : CK.440J1	0,940
<b>440.JP12</b>	7 - 8 - 10 - 11 - 12 - 13 - 16 - 17 - 18 - 19 - 22 - 24	Etui : CK.440J2	1,550
<b>440.JP14</b>	7 - 8 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 22 - 24	Etui : CK.440J3	1,680

## 440 - Metric combination wrench sets



NF ISO 691, NF ISO 7738, NF ISO 3318, NF ISO 1711-1, E74-306, ISO 691, ISO 7738, ISO 3318, ISO 1711-1, DIN ISO 691, DIN 1711-1, DIN 3113, ASME B107.100

- Presentation: supplied as box, roll or panel sets.

➤	A [mm]	Contents	ΔΔ [kg]
<b>440.JN8</b>	8 - 10 - 11 - 13 - 17 - 19 - 22 - 24	Box	1,010
<b>440.JN8T</b>	8 - 10 - 11 - 13 - 17 - 19 - 22 - 24	Roll: N.38A-8C	1,135
<b>440.JE9</b>	8 - 9 - 10 - 11 - 12 - 13 - 14 - 17 - 19	Box	0,660
<b>440.JE11</b>	7 - 8 - 10 - 11 - 12 - 13 - 14 - 16 - 17 - 18 - 19	Box	0,900
<b>440.JE16</b>	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24	Box	1,990
<b>440.JE16T</b>	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24	Roll: N.38A-17A	2,165
<b>440.JE18</b>	6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24	Box	1,990
<b>440.JE25</b>	6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24 - 26 - 27 - 28 - 29 - 30 - 32 - 34	Box	5,950
<b>440.JE29</b>	7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24 - 26 - 27 - 28 - 29 - 30 - 32 - 33 - 34 - 35 - 36 - 38 - 41	Box	11,150
<b>440.P25M</b>	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24	Panel: PK.1	8,345

## 440 - Inch combination wrench sets



ASME B107.100, SAE AS954G

- Presentation: supplied as box or roll sets.





➤	A ["]	Contents	ΔΔ [kg]
<b>440.JU9</b>	1/4 - 5/16 - 3/8 - 7/16 - 1/2 - 9/16 - 5/8 - 11/16 - 3/4	Box	0,700
<b>440.JU12</b>	1/4 - 5/16 - 3/8 - 7/16 - 1/2 - 9/16 - 5/8 - 11/16 - 3/4 - 13/16 - 7/8 - 15/16	Box	1,540
<b>440.JU21</b>	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 - 1" - 1"1/16 - 1"1/8 - 1"1/4 - 1"5/16 - 1"3/8 - 1"7/16 - 1"1/2	Box	7,250
<b>440.JU6T</b>	3/8 - 7/16 - 1/2 - 9/16 - 5/8 - 11/16	Roll: N.38A-6B	0,605
<b>440.JU17T</b>	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 - 1" - 1 1/16" - 1 1/8" - 1 1/4"	Roll: N.38A-17A	3,350



## MOD.440 - Combination wrench sets in heat formed tray





- Compatible with the Facom modular storage system:
  - MOD.440-1XL and MOD.440-2XL: compatible with CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.
  - MOD.440-1, MOD.440-2 and MOD.440-4: compatible with CHRONO, JET, CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

Icon	A [mm]	A ["]	Contents	ΔΔ [kg]
	6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 24	-	Tray: PL.313	1,940
	27 - 29 - 30 - 32 - 34	-	Tray: PL.671	3,200
	6 - 7 - 8 - 9 - 10 - 11 - 12 13 - 14 - 15 - 16 - 17 - 18 - 19 - 22 - 24	-	Tray: PL.670	1,890
	27 - 29 - 30 - 32	-	Tray: PL.314A	2,400
	-	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	Tray: PL.673	1,595

## MODM.440 - Combination wrench sets in foam tray



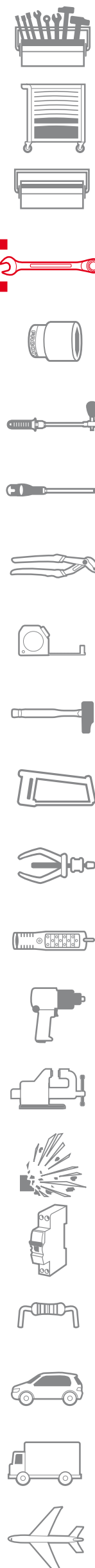
- Compatible with the FACOM modular storage system: compatible with CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

Icon	A [mm]	Contents	ΔΔ [kg]
	6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 24	Tray: PM.MOD440-1	1,910
	27 - 29 - 30 - 32 - 34	Tray: PM.MOD440-2	2,144

## HIGH PRODUCTIVITY WRENCHES

**GAIN TIME FOR REPETITIVE TIGHTENING OR IN DIFFICULT ACCESS ZONES.**

 For ratchet wrenches refer to p.179



## Fast series

### RATCHET EFFECT OPEN END COMBINATION WRENCH

## TWICE AS FAST

#### ❶ Ratchet effect

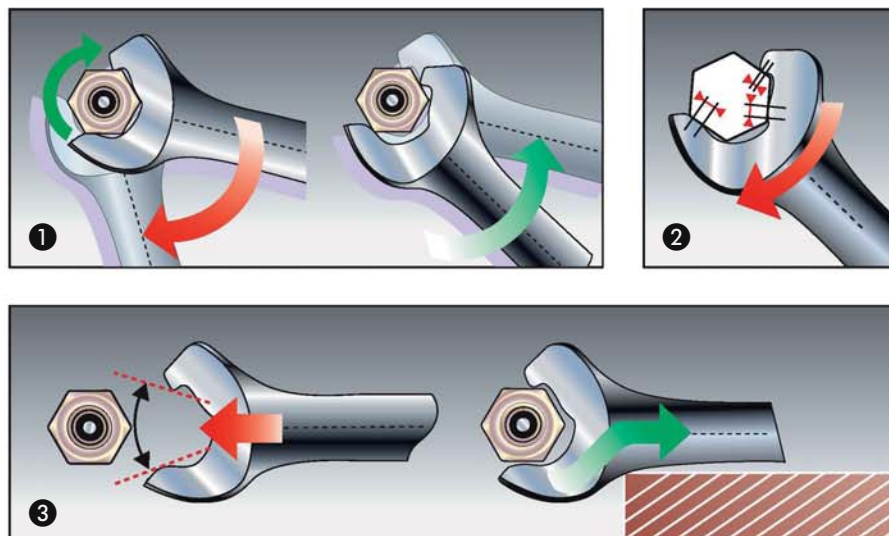
- Firm pressure on fastener flats.
- Rewind action without removing the tool.

#### ❷ 3 drive surfaces

- Less wear.
- Less risk of tool slippage.

#### ❸ Easier positioning and withdrawal

▶ For our complete range see p. 174

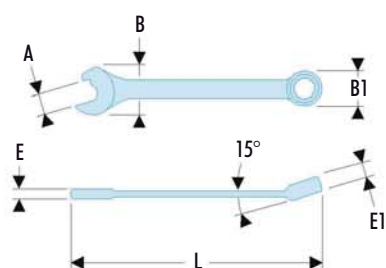


### 40R - Metric fast-action open end combination wrenches



NF ISO 691, NF ISO 7738, NF ISO 1711-1, ISO 691, ISO 7738, ISO 1711-1, DIN ISO 691, DIN 1711-1, DIN 3113

- Fast action open end wrench to gain time when the ring can no longer be used (piping...).
- OGV® 12-point ring head angled at 15°.
- Metric dimensions from 8 to 24 mm.
- Presentation: satin chrome finish.



40R	A [mm]	B x B1 [mm]	E [mm]	E1 [mm]	L [mm]	ΔΔ [g]
40R.8	8	18,5 x 12,9	4,3	6	126	25
40R.9	9	20,5 x 14	4,3	6,1	133	30
40R.10	10	22,9 x 15,9	4,8	6,6	141	40
40R.11	11	24,9 x 17	5,1	7	148	45
40R.12	12	26,8 x 18,4	5,3	7,5	157	55
40R.13	13	28,8 x 19,8	5,6	8	165	60
40R.14	14	30,6 x 21,2	6	8,5	172	75
40R.15	15	32 x 22,4	6,6	9,2	179	80
40R.16	16	34,8 x 23,8	6,9	9,8	187	95
40R.17	17	36,7 x 25	7	10,3	193	115
40R.18	18	38,5 x 26,4	7,4	10,9	201	120
40R.19	19	40,9 x 29,4	7,6	11,3	209	140
40R.20	20	42,5 x 29,4	8	11,6	217	165
40R.21	21	45 x 30,7	8,1	11,9	223	180
40R.22	22	47 x 32	8,2	12,3	240	205
40R.23	23	48,5 x 33,4	8,4	12,6	250	235
40R.24	24	50,5 x 34,7	8,5	12,9	260	260

### 40R - Metric fast-action open end combination wrenches sets



NF ISO 691, NF ISO 7738, NF ISO 1711-1, ISO 691, ISO 7738, ISO 1711-1, DIN ISO 691, DIN 1711-1, DIN 3113

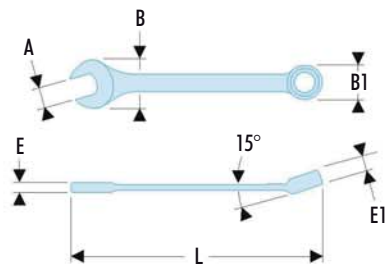
- Presentation: supplied as box, roll or tray.

40R	A [mm]	Contents	ΔΔ [kg]
40R.JE9	8 - 9 - 10 - 11 - 12 - 13 - 14 - 17 - 19	Box	0,610
40R.JE17	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22 - 23 - 24	Box	1,950
40R.JE9T	8 - 9 - 10 - 11 - 12 - 13 - 14 - 17 - 19	Roll: N.38A-9E	0,740
MOD.40R	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 22 - 24	Tray: PL.352A	1,640



### Short series

#### 39 - Metric short-reach combination wrenches

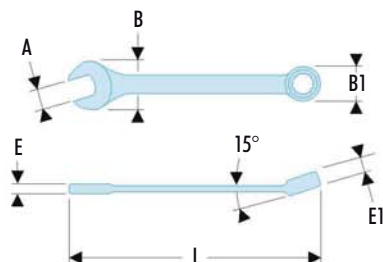


NF ISO 691, NF ISO 7738, NF ISO 3318, NF ISO 1711-1, E74-306, ISO 691, ISO 7738, ISO 3318, ISO 1711-1, DIN ISO 691, DIN 1711-1, ASME B107.100

- Short combination wrenches: the short handle and compact head allow for high handiness. Ideal for confined access.
- OGV® profile with 12-point ring for powerful tightening while protecting the nut. H suffix = 6-point ring.
- Ring head angled at 15°.
- Open end head angled at 15°.
- Metric sizes: 3.2 to 17 mm.
- Presentation: satin chrome finish.

➤	A [mm]	B x B1 [mm]	E [mm]	E1 [mm]	⚙ [mm]	L [mm]	ΔΔ [g]
<b>39.3,2H</b>	3,2	10,0 x 7,0	3,1	3,1	6	77	10
<b>39.4H</b>	4	10,0 x 8,0	3,1	3,1	6	77	10
<b>39.5H</b>	5	11,8 x 9,0	3,5	4,0	6	82	10
<b>39.5,5H</b>	5,5	11,8 x 9,5	3,5	4,0	6	84	10
<b>39.6</b>	6	15,0 x 10,4	4,1	5,0	12	90	15
<b>39.7</b>	7	15,0 x 11,5	4,1	5,0	12	90	15
<b>39.8</b>	8	17,2 x 12,5	4,5	5,8	12	94	20
<b>39.9</b>	9	19,4 x 14,0	4,8	6,0	12	98	25
<b>39.10</b>	10	21,5 x 15,3	5,1	6,4	12	103	30
<b>39.11</b>	11	23,7 x 16,8	5,3	6,8	12	109	35
<b>39.12</b>	12	26,0 x 18,0	5,5	7,5	12	127	50
<b>39.13</b>	13	28,0 x 19,5	5,8	8,0	12	141	55
<b>39.14</b>	14	30,2 x 20,8	6,0	8,5	12	147	70
<b>39.15</b>	15	32,3 x 22,1	6,4	9,0	12	152	80
<b>39.16</b>	16	34,4 x 23,6	6,7	9,6	12	158	90
<b>39.17</b>	17	36,5 x 25,0	6,9	10,0	12	165	100

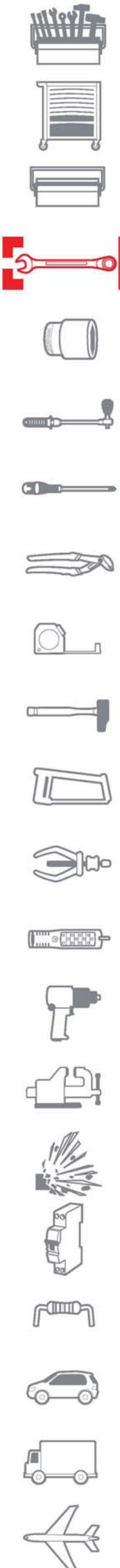
#### 39 - Inch short-reach combination wrenches



ASME B107.100

- Short combination wrenches: the short handle and compact head allow for high handiness. Ideal for confined access.
- OGV® profile with 12-point ring for powerful tightening while protecting the nut. H suffix = 6-point ring.
- Ring head angled at 15°.
- Open end head angled at 15°.
- Dimensions in inches: from 1/8" to 11"16.
- Presentation: satin chrome finish.

➤	A ["]	B x B1 [mm]	E [mm]	E1 [mm]	⚙ [mm]	L [mm]	ΔΔ [g]
<b>39.1/8H</b>	1/8	10,0 x 7,0	3,1	3,1	6	77	10
<b>39.5/32H</b>	5/32	10,0 x 8,0	3,1	3,1	6	77	10
<b>39.3/16H</b>	3/16	11,8 x 9,0	3,5	4,0	6	82	10
<b>39.7/32H</b>	7/32	11,8 x 9,5	3,5	4,0	6	84	10
<b>39.1/4</b>	1/4	15,0 x 10,4	4,1	5,0	6	90	15
<b>39.9/32</b>	9/32	15,0 x 11,5	4,1	5,0	6	90	15
<b>39.5/16</b>	5/16	17,2 x 12,5	4,5	5,8	6	94	20
<b>39.11/32</b>	11/32	19,4 x 14,0	4,8	6,0	6	98	25
<b>39.3/8</b>	3/8	21,5 x 15,3	5,1	6,4	6	103	30
<b>39.7/16</b>	7/16	23,7 x 16,8	5,3	6,8	6	109	35
<b>39.1/2</b>	1/2	28,0 x 19,5	5,8	8,0	12	141	50
<b>39.9/16</b>	9/16	30,2 x 20,8	6,0	8,5	12	147	70
<b>39.5/8</b>	5/8	34,4 x 23,6	6,7	9,6	12	158	90
<b>39.11/16</b>	11/16	36,5 x 25,0	6,9	10,0	12	165	100





# Combination wrenches

## 39 - Metric short-reach combination wrench sets



NF ISO 691, NF ISO 7738, NF ISO 3318, NF ISO 1711-1, E74-306, ISO 691, ISO 7738, ISO 3318, ISO 1711-1, DIN ISO 1711-1, DIN ISO 691, ASME B107.100

• Presentation: supplied as box or roll sets.

➤	A [mm]	Contents	ΔΔ [kg]
<b>39.JP6</b>	8 - 10 - 11 - 12 - 13 - 14	Case: CKS.67SJ1	0,285
<b>39.JE9T</b>	7 - 8 - 10 - 11 - 12 - 13 - 14 - 16 - 17	Roll: N.38A-9E	0,580
<b>39.JE10</b>	3,2 - 4 - 5 - 5,5 - 6 - 7 - 8 - 9 - 10 - 11	Box BP.39VA + Tray PL.206	1,700
<b>39.JE10T</b>	3,2 - 4 - 5 - 5,5 - 6 - 7 - 8 - 9 - 10 - 11	Roll: N.38A-10A	0,250
<b>39.JE16T</b>	3,2 - 4 - 5 - 5,5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17	Roll: N.38A-16A	0,700

## 39 - Inch short-reach combination wrench sets



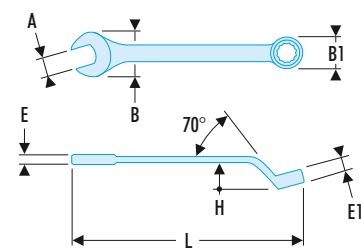
ASME B107.100

• Presentation: supplied in roll.

➤	A ["]	Contents	ΔΔ [kg]
<b>39.JU10T</b>	1/8 - 5/32 - 3/16 - 7/32 - 1/4 - 9/32 - 5/16 - 11/32 - 3/8 - 7/16	Roll: N.38A-10A	0,250
<b>39.JU14T</b>	1/8 - 5/32 - 3/16 - 7/32 - 1/4 - 9/32 - 5/16 - 11/32 - 3/8 - 7/16 - 1/2 - 9/16 - 5/8 - 11/16	Roll: N.38A-16A	0,560

## Offset series

### 41 - Metric offset combination wrenches



NF ISO 7738, ISO 7738, DIN 3113

- Offset combination wrenches: ring offset to clear fingers or obstacles. Ideal for series of nuts.
- OGV® profile with 12-point ring for powerful tightening while protecting the nut.
- Open end head angled at 15°.
- Metric sizes: 6 to 32 mm.
- Presentation: satin chrome finish.

➤	A [mm]	B x B1 [mm]	E [mm]	E1 [mm]	H [mm]	L [mm]	ΔΔ [g]
<b>41.6</b>	6	14,5 x 11,0	4,0	6,0	12,5	113	30
<b>41.7</b>	7	18,5 x 13,0	4,5	7,0	15,0	127	35
<b>41.8</b>	8	18,5 x 13,0	4,5	7,0	15,0	127	35
<b>41.9</b>	9	23,5 x 15,5	5,0	8,0	16,5	142	50
<b>41.10</b>	10	23,5 x 15,5	5,0	8,0	16,5	142	50
<b>41.11</b>	11	27,5 x 18,5	5,5	8,6	18,5	160	75
<b>41.12</b>	12	27,5 x 18,5	5,5	8,6	18,5	160	75
<b>41.13</b>	13	31,5 x 21,5	5,5	9,0	18,5	180	100
<b>41.14</b>	14	31,5 x 21,5	5,5	9,0	18,5	180	100
<b>41.15</b>	15	36,5 x 24,5	6,6	10,3	20,5	200	130
<b>41.16</b>	16	36,5 x 24,5	6,6	10,3	20,5	200	130
<b>41.17</b>	17	40,5 x 27,0	7,3	11,2	22,0	224	195

➤	A [mm]	B x B1 [mm]	E [mm]	E1 [mm]	H [mm]	L [mm]	ΔΔ [g]
<b>41.18</b>	18	40,0 x 27,0	7,3	11,2	22,0	224	195
<b>41.19</b>	19	43,0 x 30,0	7,8	12,6	24,0	248	250
<b>41.21</b>	21	48,0 x 33,0	8,2	13,0	26,5	275	320
<b>41.22</b>	22	48,0 x 33,0	8,2	13,0	26,5	275	320
<b>41.23</b>	23	53,0 x 36,0	9,0	14,0	28,5	302	415
<b>41.24</b>	24	53,0 x 36,0	9,0	14,0	28,5	302	415
<b>41.26</b>	26	59,0 x 40,0	9,5	15,0	31,5	332	605
<b>41.27</b>	27	59,0 x 40,0	9,5	15,0	31,5	332	605
<b>41.28</b>	28	63,0 x 43,5	10,0	15,6	33,5	364	700
<b>41.29</b>	29	63,0 x 43,5	10,0	15,6	33,5	364	700
<b>41.30</b>	30	68,0 x 46,5	10,5	16,5	35,5	398	850
<b>41.32</b>	32	68,0 x 46,5	10,5	16,5	35,5	398	850

### 41 - Metric offset combination wrench sets



NF ISO 7738, ISO 7738, DIN 3113

- Presentation: supplied as box, roll or panel sets.

Code	A [mm]	Contents	ΔΔ [kg]
<b>41.JE9</b>	8 - 9 - 10 - 11 - 12 - 13 - 14 - 17 - 19	Box	0,930
<b>41.JE18</b>	6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24	Box	3,020
<b>41.JE9T</b>	8 - 9 - 10 - 11 - 12 - 13 - 14 - 17 - 19	Roll: N.38A-9B	1,050
<b>41.JE12T</b>	8 - 10 - 11 - 12 - 13 - 14 - 16 - 17 - 18 - 19 - 21 - 22	Roll: N.38A-12B	2,095
<b>41.P24M</b>	6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24 - 26 - 27 - 28 - 29 - 30 - 32	Panel: PK.1	9,380

### Power series

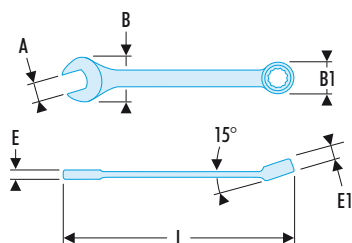
### 40 .LA- Metric long-reach combination wrenches



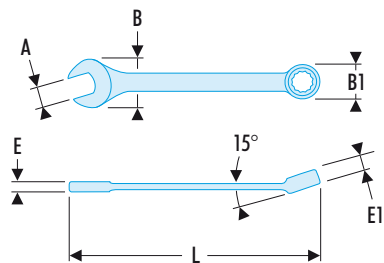
NF ISO 1711-1, NF ISO 3318, NF ISO 7738, ISO 1711-1, ISO 3318, ISO 7738, DIN ISO 691, DIN ISO 1711-1, DIN 3113, ASME B107.100

- Long combination wrenches: the extra-long handle passes high torque with minimum effort.
- OGV® profile with 12-point ring for powerful tightening while protecting the nut.
- Ring head angled at 15°.
- Open end head angled at 15°.
- Metric sizes: 19 to 50 mm.
- Presentation: satin chrome finish.

Code	A [mm]	B x B1 [mm]	E [mm]	E1 [mm]	L [mm]	ΔΔ [g]
<b>40.19LA</b>	19	45,0 x 29,6	8,7	12,0	329	240
<b>40.21LA</b>	21	49,0 x 32,3	9,5	13,0	355	305
<b>40.22LA</b>	22	51,0 x 33,8	9,9	14,0	368	360
<b>40.23LA</b>	23	53,0 x 35,4	10,3	14,5	381	370
<b>40.24LA</b>	24	55,0 x 36,9	10,7	15,0	394	455
<b>40.26LA</b>	26	59,0 x 39,4	11,5	15,5	420	520
<b>40.27LA</b>	27	61,0 x 40,6	11,9	16,0	433	590
<b>40.28LA</b>	28	62,4 x 42,2	12,3	16,5	446	600
<b>40.29LA</b>	29	62,4 x 42,2	12,3	16,5	446	600
<b>40.30LA</b>	30	65,0 x 45,2	13,1	17,0	472	800
<b>40.32LA</b>	32	69,5 x 47,8	13,2	18,0	498	850
<b>40.33LA</b>	33	49,0 x 32,3	9,5	13,0	498	850
<b>40.34LA</b>	34	51,0 x 33,8	9,9	14,0	524	1040
<b>40.35LA</b>	35	53,0 x 35,4	10,3	14,5	524	1040
<b>40.36LA</b>	36	55,0 x 36,9	10,7	15,0	550	1200
<b>40.38LA</b>	38	59,0 x 39,4	11,5	15,5	576	1435
<b>40.41LA</b>	41	61,0 x 40,6	11,9	16,0	615	1720
<b>40.42LA</b>	42	62,4 x 42,2	12,3	16,5	615	1720
<b>40.46LA</b>	46	62,4 x 42,2	12,3	16,5	680	2435
<b>40.50LA</b>	50	65,0 x 45,2	13,1	17,0	732	3500



## 40.LA- Inch long-reach combination wrenches



### ASME B107.100

- Long combination wrenches: the extra-long handle passes high torque with minimum effort.
- OGV® profile with 12-point ring for powerful tightening while protecting the nut.
- Ring head angled at 15°.
- Open end head angled at 15°.
- Dimensions in inches: from 3/4" to 2".
- Presentation: satin chrome finish.

➤	A ["]	B x B1 [mm]	E [mm]	E1 [mm]	L [mm]	ΔΔ [g]
<b>40.3/4LA</b>	3/4	45,0 x 29,6	8,7	12,0	329	240
<b>40.13/16LA</b>	13/16	49,0 x 32,3	9,5	13,0	355	305
<b>40.7/8LA</b>	7/8	51,0 x 33,8	9,9	14,0	368	360
<b>40.15/16LA</b>	15/16	53,0 x 35,4	10,3	14,5	381	370
<b>40.1'LA</b>	1'	59,0 x 39,4	11,5	15,5	420	520
<b>40.1'1/16LA</b>	1'1/16	61,0 x 40,6	11,9	16,0	433	590
<b>40.1'1/8LA</b>	1'1/8	62,4 x 42,2	12,3	16,5	446	600
<b>40.1'1/4LA</b>	1'1/4	65,0 x 45,2	13,1	17,0	472	800
<b>40.1'5/16LA</b>	1'5/16	69,5 x 47,8	13,9	18,0	498	850
<b>40.1'3/8LA</b>	1'3/8	72,7 x 50,7	14,7	19,0	524	1040
<b>40.1'7/16LA</b>	1'7/16	76,0 x 53,6	15,5	20,0	550	1200
<b>40.1'1/2LA</b>	1'1/2	80,0 x 56,0	16,3	22,0	576	1435
<b>40.1'5/8LA</b>	1'5/8	86,0 x 59,2	17,5	23,0	615	1720
<b>40.1'13/16LA</b>	1'13/16	95,0 x 65,85	19,5	25,0	680	2435
<b>40.2'LA</b>	2'	103,0 x 71,0	21,1	30,0	732	3500

## 40.LA- Metric standard and long-reach combination wrenches set

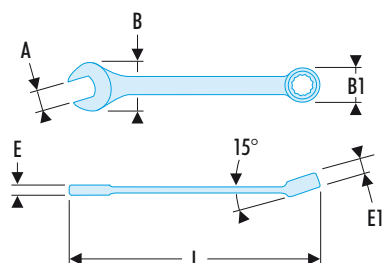


### NF ISO 1711-1, NF ISO 3318, NF ISO 7738, ISO 1711-1, ISO 3318, ISO 7738, DIN ISO 691, DIN ISO 1711-1, DIN 3113, ASME B107.100

- Presentation: in box.

➤	A [mm]	ΔΔ [kg]
<b>40LA.JE17</b>	19 - 21 - 22 - 23 - 24 - 26 - 27 - 28 - 29 - 30 - 32 - 33 - 35 - 36 - 38 - 41 - 42	13,800

## 41.L - Long-reach metric offset combination wrenches



### NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691

- Long-reach offset combination wrenches: the extra-long handle passes high torque with minimum effort.
- Ring offset to clear fingers or obstacles. Ideal for series of nuts.
- OGV® profile with 12-point ring for powerful tightening while protecting the nut.
- Open end head angled at 15°.
- Metric sizes: 46 to 65 mm.
- Presentation: burnt.

➤	A [mm]	B x B1 [mm]	E [mm]	E1 [mm]	L [mm]	ΔΔ [g]
<b>41.46L</b>	46	95,0 x 69,0	15,0	24,0	520	1300
<b>41.50L</b>	50	103,0 x 75,0	16,5	26,0	560	1450
<b>41.55L</b>	55	113,0 x 84,5	18,0	28,0	610	1580
<b>41.60L</b>	60	123,0 x 90,0	20,0	31,0	660	2300
<b>41.65L</b>	65	133,0 x 98,0	22,0	31,0	710	2650



Combination ratchet series

# FACOM RATCHET WRENCHES



## INCREASE PRODUCTIVITY

**FACOM offers a broad range of ratchet wrenches suited to all your needs: standard combination wrenches, short combination wrenches, hinged combination wrenches, straight ring wrenches, offset ring and multi-opening wrenches.**

### SAVE TIME

- The ratchet mechanism increases productivity as you no longer have to reposition the wrench.

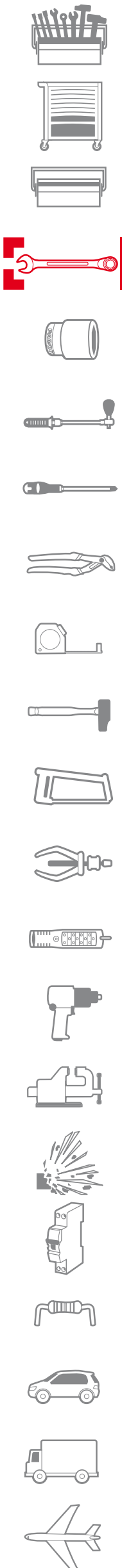
### MAXIMUM ACCESSIBILITY

- The 5° increment (6° for the 8 and 9 mm dimensions) allow working in awkward spaces.
- Extremely compact mechanism.
- FACOM offers accessories optimising accessibility.

### PERFORMANCE AND SAFETY

- FACOM guarantees very high performance for its ratchet wrenches: ISO 1711-1 + 50% guaranteed.
- Integral reversing lever avoiding accidental reversing.

To help you, use our selection guide in the next pages.



**SELECTION GUIDE** | **COMBINATION WRENCHES**  
RATCHET



**3 MODELS OF RATCHET COMBINATION WRENCHES FOR THE ULTIMATE VERSATILITY IN ANY APPLICATION**



**Short combination wrenches**  
Productivity & accessibility

- Ultra-compact:**
- 40% more compact than the standard ratchet combination wrench.



**Hinged combination wrenches**  
Productivity & manoeuvrability

- Ultra-manoeuverable: overcomes the problems of tightening and loosening in applications where the operator must work "blind".
- The hinged head offers unique accessibility as more compact than the ratchet-joint-socket association.



**Standard combination wrenches**  
Productivity & versatility

- Ultra-versatile:**
- Ring head: ratchet mechanism with 5° increment, with 15° angle.
  - Open end oriented at 15°.



SELECTION GUIDE: RATCHET RING WRENCHES

2 TYPES OF RATCHET RING WRENCHES FOR SAFE TIGHTENING WITH THE RING

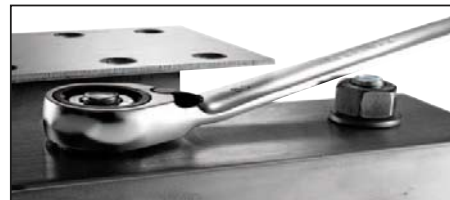
Use ratchet ring wrenches straight or angled by 15° according to accessibility requirements:

- Straight when height is limited.
- Angled by 15° when the nut is not clear.

SERIES 64



SERIES 65



SELECTION GUIDE: ALL-IN-ONE RATCHET WRENCHES

THE ALL IN 1 SOLUTION FOR TRAVELLING MAINTENANCE

64 QUATTRO and 464.J1

- The all in 1 wrench can be used in any application and eliminates the need for many wrenches.



467S.BOX

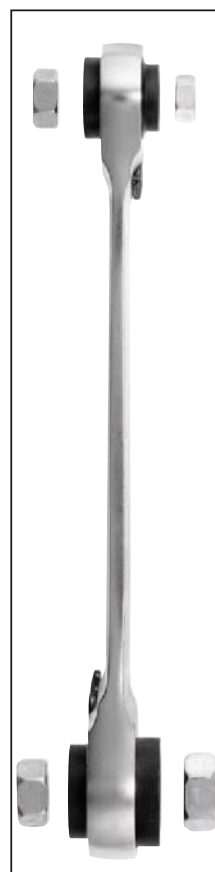
- The solution meeting all your needs: flat ratchet tightening, socket tightening, screwing.



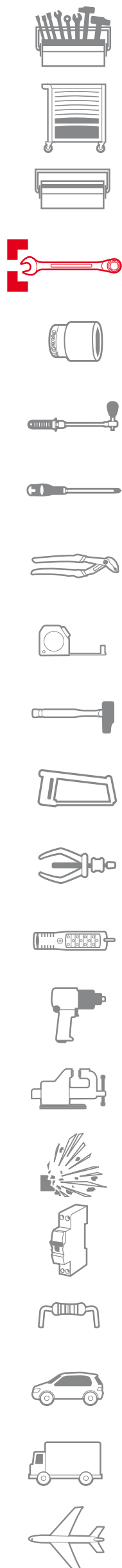
464.J1 ▲



467S.BOX ▼




▲ 64 QUATTRO





## SELECTION GUIDE: RATCHET WRENCH SETS AND MODULES

### Productivity solution: ratchet wrench sets and modules for all your uses

	Characteristic	Reference	Page
<b>Interventions on sites</b> FOD prevention. Machine/operator safety. Max productivity 	<b>Versatile:</b> All flat tightening uses.	<b>467.JP10</b>	183
	<b>Ultra-compact / ultra-handy:</b> specific accessibility.	<b>467S.JP6 / 467F.JP10</b>	184 186
	<b>Ring</b> maximum safety thanks to ring tightening.	<b>65.JP6</b>	188
<b>General maintenance</b> 	<b>Ring / versatile:</b> All flat tightening uses. Basic sets.	<b>64.JE6T / 64.JU6T / 65.JU6T / 467.J7</b>	187 189 183
	 Inches		
<b>Ultra Light maintenance</b> 	<b>11 in 1 / Quattro:</b> Lightweight gain - extra flat head - complete set - compact diameter - access to embedded screws	<b>464.J1 / 64C.J2</b>	192 191
	<b>Multi-service</b> All compact ratchet tightening solutions with maximum weight gain.	<b>467.SBOX</b>	185
<b>Workshop maintenance</b> 	<b>Versatile:</b> All flat tightening uses.	<b>MOD.467J12 / MOD.467J13</b>	184
	<b>Ultra-handy:</b> Specific accessibility. Fitted for socket tightening.	<b>MOD.467XL / MOD.467FJ12</b>	186
	<b>Ring:</b> Maximum safety thanks to ring tightening.	<b>MOD.64J7 / MOD.65J7</b>	187 189
	15° angle when required by access.		



## SELECTION GUIDE: 467S.BOX

### COMBINE THE BENEFITS OF FLAT TIGHTENING WITH SOCKET TIGHTENING:

3 adapters for sockets or bits:

- Wrenches 10 mm ↔ Bit  $\square$  1/4" - 6.35 mm.
- Wrenches 10 mm ↔ Socket  $\square$  1/4".
- Wrenches 19 mm ↔ Socket  $\square$  1/2".



➔ **467S.BOX. See p. 185**

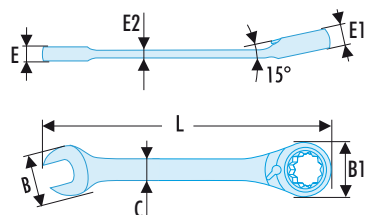
### 467 - Metric standard ratchet combination wrenches



NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691

- Standard ratchet combination wrenches: for all current applications.
- Compact ratchet mechanism and reversible by lever.
- Increment 5° (7.5° for dimension 6 mm ; 6° for dimensions 7, 8 and 9 mm).
- Ring head angled at 15°.
- Open end head angled at 15°.
- Metric sizes: 6 to 32 mm.
- Presentation: satin chrome finish.

➤	A [mm]	B [mm]	B1 [mm]	C [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	ΔΔ [g]
467.6	6	15,0	14,0	9,7	4,0	6,9	2,5	128	30
467.7	7	16,7	17,0	9,7	4,3	6,5	2,5	140	30
467.8	8	16,7	17,0	9,7	4,3	6,5	2,5	140	30
467.9	9	18,7	18,6	10,3	4,5	6,9	2,5	149	40
467.10	10	20,8	20,2	11,3	5,0	7,3	2,9	158	50
467.11	11	23,0	22,0	12,2	5,3	7,7	3,2	165	60
467.12	12	24,6	23,4	13,0	5,5	8,2	3,3	171	70
467.13	13	26,8	25,5	14,5	6,1	8,6	3,5	178	90
467.14	14	29,0	26,9	15,1	6,5	9,0	3,8	190	110
467.15	15	31,0	28,3	16,1	6,8	9,4	4,0	199	130
467.16	16	33,0	29,8	17,3	7,1	9,9	4,2	208	140
467.17	17	35,5	31,8	18,2	7,5	10,3	4,5	225	170
467.18	18	37,5	32,7	19,6	8,1	10,7	4,6	236	200
467.19	19	39,4	34,0	20,4	8,6	11,2	4,6	247	230
467.21	21	45,8	40,1	23,9	9,0	13,0	5,1	287,8	340
467.22	22	45,8	40,1	23,9	9,0	13,0	5,1	287,8	340
467.24	24	51,8	46,5	26,4	10,0	14,5	5,6	321	480
467.27	27	56,4	52,4	29,2	10,8	15,5	6,3	356,6	660
467.30	30	62,7	58,1	31,7	11,5	17,0	6,8	400,7	870
467.32	32	66,4	61,9	33,7	12,4	17,5	7,3	423,5	1080



### 467.JP10 Metric ratchet combination wrench sets in portable case



NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691, ASME B107.100

- Productivity and safety = easy to organise, easy to spot, always with you.
- 6-piece set of standard ratchet combination wrenches: - 467.8 - 10 - 11 - 12 - 13 - 14 - 16 - 17 - 18 - 19 mm.
- Resistant to chemicals and impacts.
- Portable case: CK.467J1.
- Weight: 1.380 kg.

### 467 - Metric standard ratchet combination wrench set



NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691, ASME B107.100

- Presentation: in box.

➤	A [mm]	ΔΔ [kg]
467.J7	8 - 10 - 12 - 13 - 14 - 17 - 19	0,860





## MOD.467 - Standard metric ratchet combination wrench sets in heat formed tray

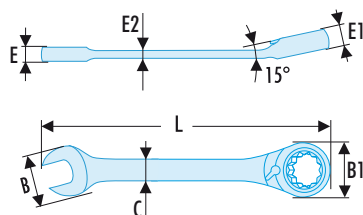


- Compatible with the FACOM modular storage system:
  - MOD.467J12 and MOD.467J13: compatible with CHRONO, JET, CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.
  - MOD.467XL: compatible with CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

➤	A [mm]	Contents	ΔΔ [kg]
<b>MOD.467J12</b>	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19	Tray: PL.652	1,675
<b>MOD.467XL</b>	21 - 22 - 24 - 27 - 30 - 32	Tray: PL.653	4,220
<b>MOD.467J13</b>	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 + Adapter for 10 mm wrench to 1/4" + Adapter for 19 mm wrench to 1/2"	Tray: PL.682	1,700
<b>MODM.467J12</b>	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19	Tray: PM.467J12	1,550

## Short combination ratchet series

### 467S - Short metric ratchet combination wrenches



NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691, ASME B107.100

- Extra-short handle ratchet combination wrenches: ideal in highly dense zones.
- Compact ratchet mechanism and reversible by lever.
- Increment 5° (6° for dimension 7, 8 and 9 mm).
- Ring head angled at 15°.
- Open end head angled at 15°.
- Metric sizes: 7 to 17 mm.
- Presentation: satin chrome finish.

➤	A [mm]	B [mm]	B1 [mm]	C [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	ΔΔ [g]
<b>467S.7</b>	7	16,7	17,0	6,5	4,0	6,5	2,8	90	25
<b>467S.8</b>	8	16,7	17,0	6,5	4,0	6,5	2,8	90	25
<b>467S.9</b>	9	18,7	18,6	6,9	4,4	6,9	3,0	93	30
<b>467S.10</b>	10	20,8	20,2	7,3	4,8	7,3	3,4	95	35
<b>467S.11</b>	11	23,0	22,0	7,7	5,2	7,7	3,7	103	50
<b>467S.12</b>	12	24,6	23,4	8,2	5,5	8,2	4,0	106	55
<b>467S.13</b>	13	26,8	25,5	8,6	5,8	8,6	4,0	108	65
<b>467S.14</b>	14	29,0	26,9	9,0	6,2	9,0	4,3	115	80
<b>467S.15</b>	15	31,0	28,3	9,4	6,5	9,4	4,5	119	90
<b>467S.16</b>	16	33,0	29,8	9,9	6,8	9,9	4,7	123	100
<b>467S.17</b>	17	35,5	31,8	10,3	7,2	10,3	5,0	127	115

### 467S.JP6 Short ratchet combination wrench sets in portable case



NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691, ASME B107.100

- Productivity and safety = easy to organise, easy to spot, always with you.
- 6-piece set of short ratchet combination wrenches: 467S.8 - 10 - 11 - 12 - 13 - 14 mm.
- Resistant to chemicals and impacts.
- Portable case: CK.67SJ1.
- Weight: 0.420 kg.



ULTRA COMPACT MULTI-TIGHTENING SET

Maximum access thanks to the short ratchet wrench / socket / bit adapter system.

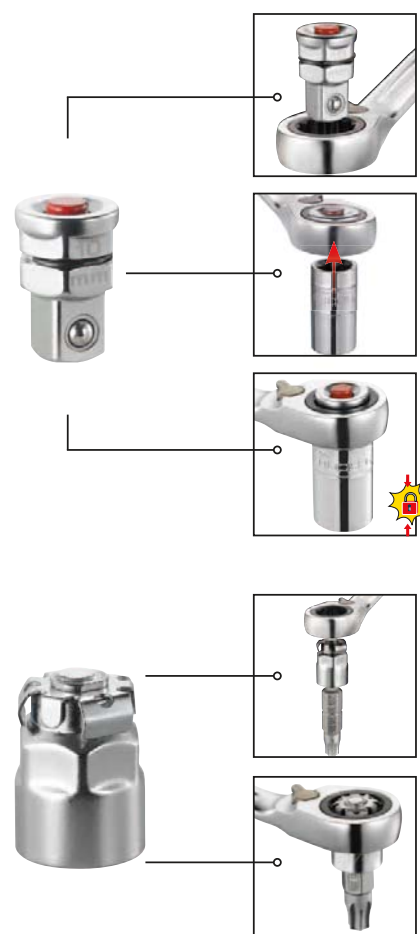
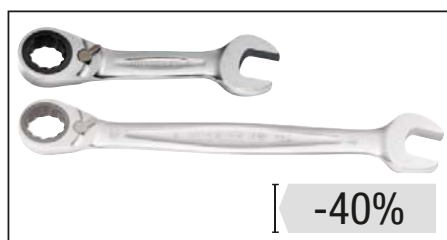
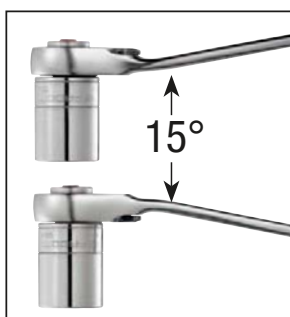
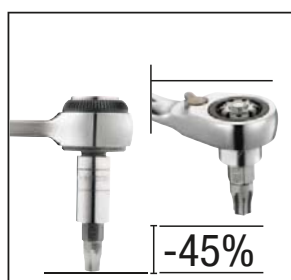
Ultra-compact  
Ultra-accessible  
Multi-tightening

- All compact ratchet tightening solutions for applications where access is limited.
- Using adapters, change the wrench into an ultra-compact ratchet for sockets and bits.



Access everywhere

- 72-teeth mechanism = 5° increments.



467S.BOX Ultra compact metric wrench, socket and bit set



- The flat tightening / socket tightening / versatile and ultra-compact screwing solution.
- Comprising:
  - 7 short ratchet combination wrenches: 467S.7 - 8 - 10 - 11 - 12 - 13 - 14 mm.
  - 10 1/4" sockets: R.5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 mm.
  - 1 1/4" extension 55 mm long: R.209.
  - 2 10mm socket adaptors with 1/4" socket and 10 mm wrench with 1/4" 6-point bits: 467. ADAPT10MM.
  - 20 bits:
    - For slotted screw: ES 4.5 - 6.5 - 8 mm.
    - For Phillips® screw: EP 1 - 2 - 3.
    - For Pozidriv® screw: ED 1 - 2 - 3.
    - For Torx® and Resistorx® screw: EXR 10 - 15 - 20 - 25 - 30 - 40.
    - For hex 6-point screw: EH 3 - 4 - 5 - 6 - 7 mm.
  - Plastic box: BP.102.
  - Foam tray: PM.467SBOX.
  - Weight: 0.890 kg.



## Angled combination ratchet series

### 467F - Metric hinged jointed combination wrenches



NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691

- Hinged head ratchet combination wrenches: to reach difficult access nuts.
- Compact ratchet mechanism and reversible by flipping the wrench.
- Increment 5° (6° for dimensions 8 and 9 mm).
- Ring head hinged at 180°.
- Open end head angled at 15°.
- Metric sizes: 8 to 19 mm.
- Presentation: satin chrome finish.

➤	A [mm]	B [mm]	B1 [mm]	C [mm]	E [mm]	E1 [mm]	E2 [mm]	E3 [mm]	L [mm]	ΔΔ [g]
<b>467F.8</b>	8	16,2	16,7	9,0	4,3	6,5	2,7	13,0	127,5	45
<b>467F.9</b>	9	18,2	18,6	10,0	4,6	6,9	2,9	14,6	132,0	50
<b>467F.10</b>	10	20,3	20,1	10,8	5,0	7,3	3,2	16,0	136,5	60
<b>467F.11</b>	11	22,5	21,8	11,8	5,4	7,7	3,6	17,0	141,5	65
<b>467F.12</b>	12	24,8	23,0	12,8	5,8	8,2	3,8	18,0	148,0	80
<b>467F.13</b>	13	26,8	25,2	13,6	6,1	8,6	3,9	19,0	155,0	95
<b>467F.14</b>	14	28,7	26,8	14,2	6,4	9,0	4,2	20,0	161,0	110
<b>467F.15</b>	15	30,5	28,3	15,4	6,9	9,4	4,4	21,0	170,0	130
<b>467F.16</b>	16	32,9	29,8	16,0	7,2	9,9	4,6	22,0	180,0	155
<b>467F.17</b>	17	34,5	31,8	16,9	7,6	10,3	4,9	23,0	191,0	175
<b>467F.18</b>	18	37,0	32,8	18,0	8,0	10,7	5,1	24,0	204,0	200
<b>467F.19</b>	19	39,2	33,9	19,5	8,6	11,2	5,4	25,0	216,0	230

### 467F.JP10 Metric hinged ratchet combination wrench set in portable case



NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691

- Productivity and safety = easy to organise, easy to spot, always with you.
- 10-piece set of hinged ratchet combination wrenches:  
- 467F.8 - 10 - 11 - 12 - 13 - 14 - 16 - 17 - 18 - 19 mm.
- Resistant to chemicals and impacts.
- Portable case: CK.467FJ1.
- Weight: 1.450 kg.

### MOD.467F - Hinged metric ratchet combination wrench sets in heat formed tray



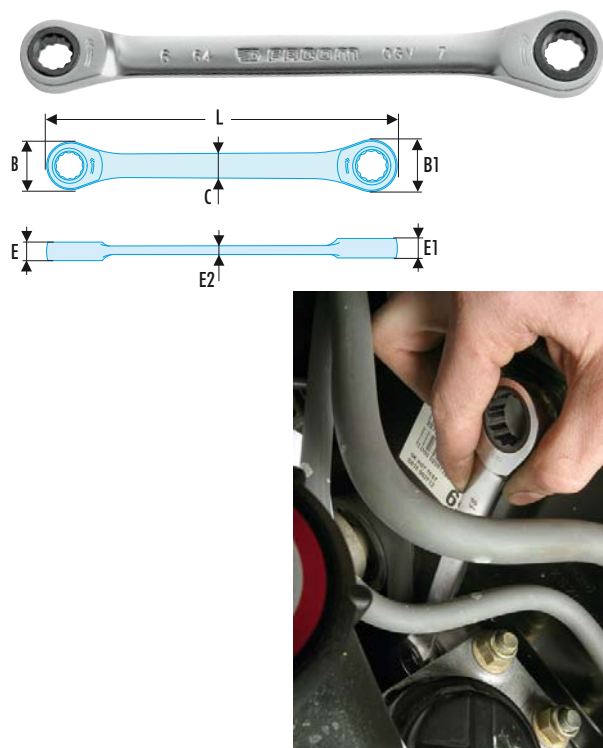
- Compatible with the FACOM modular storage system: compatible with CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

➤	A [mm]	Contents	ΔΔ [kg]
<b>MOD.467FJ12</b>	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19	Tray : PL.680	1,670
<b>MODM.467FJ12</b>	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19	Tray : PM.MOD467J12	1,710



### Ring ratchet series

#### 64 - Metric straight ratchet ring wrenches

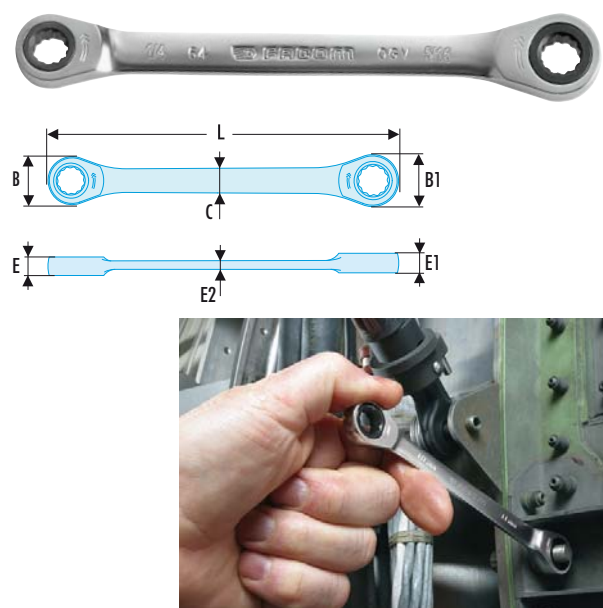


NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691, ASME B107.100

- Straight ratchet ring wrenches: to reach the nut flat.
- Compact ratchet mechanism and reversible by flipping the wrench.
- Increment 5° (7.5° for dimension 6 mm; 6° for dimensions 7, 8 and 9 mm).
- Metric sizes: 6 to 24 mm.
- Presentation: satin chrome finish.

⇒	A [mm]	B1 [mm]	C [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	ΔΔ [g]
<b>64.6X7</b>	6x7	17,2	8,0	6,3	6,5	3,0	115	35
<b>64.8X9</b>	8x9	20,2	8,3	6,5	6,9	3,2	128	45
<b>64.10X11</b>	10x11	21,8	9,1	7,3	7,7	3,6	150	60
<b>64.12X13</b>	12x13	24,8	11,3	8,2	8,6	4,2	170	80
<b>64.14X15</b>	14x15	29,5	13,1	9,0	9,4	4,7	190	130
<b>64.16X18</b>	16x18	33,5	14,8	9,9	10,7	5,4	210	185
<b>64.17X19</b>	17x19	33,5	15,2	10,3	11,2	5,4	230	190
<b>64.21X23</b>	21x23	46,0	15,2	13,0	14,5	5,4	260	480
<b>64.22X24</b>	22x24	46,0	15,2	13,0	14,5	5,4	260	480

#### 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 5"16.
- Presentation: satin chrome finish.

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

#### 64 - Sets of metric and inch straight ratchet ring wrenches



NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691, ASME B107.100

- Presentation: supplied as box or roll sets.

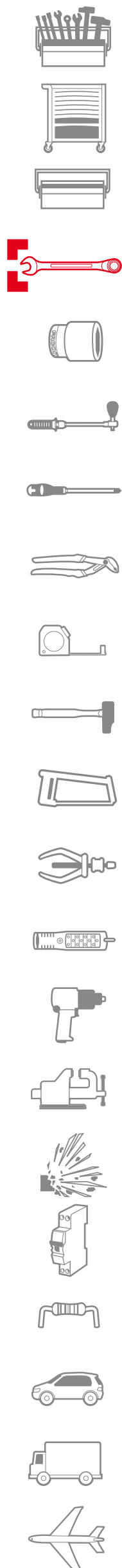
⇒	A [mm]	A ["]	Contents	ΔΔ [kg]
<b>64.J4</b>	10x11 - 12x13 - 16x18 - 17x19	-	Box	0,535
<b>64.JE6T</b>	8x9 - 10x11 - 12x13 - 14x15 - 16x18 - 17x19	-	Roll: N.38A-6B	0,825
<b>64.JU6T</b>	-	1/4x5/16 - 3/8x7/16 - 1/2x9/16 - 5/8x11/16 - 3/4x13/16 - 7/8x15/16	Roll: N.38A-6B	1,315

#### MOD.64 - Metric straight ratchet ring wrench sets in heat formed tray



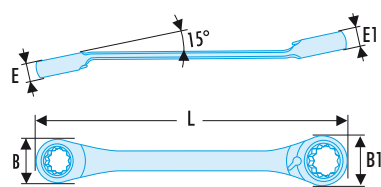
- Compatible with the FACOM modular storage system: compatible with CHRONO, JET, CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

⇒	A [mm]	Contents	ΔΔ [g]
<b>MOD.64J7</b>	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x18 - 17x19	Tray: PL.608A	



## Ring ratchet 15° head series

### 65 - Metric 15° hinged ratchet ring wrenches

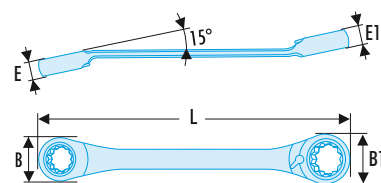


NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691, ASME B107.100

- 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 6 mm; 6° for dimensions 7, 8 and 9 mm).
- Ring head angled at 15°.
- Metric sizes: 6 to 24 mm.
- Presentation: satin chrome finish.

65	A [mm]	B [mm]	B1 [mm]	E [mm]	E1 [mm]	L [mm]	ΔΔ [g]
65.6X7	6x7	14,0	17,0	6,3	6,5	115	30
65.8X9	8x9	17,0	20,2	6,5	6,9	128	45
65.10X11	10x11	20,2	22,0	7,3	7,7	150	65
65.12X13	12x13	23,4	25,5	8,2	8,6	170	90
65.14X15	14x15	26,9	29,8	9,0	9,4	190	130
65.16X18	16x18	29,8	34,0	9,9	10,7	210	190
65.17X19	17x19	31,8	34,0	10,3	11,2	230	210
65.21X23	21x23	40,1	46,0	13,0	14,5	260	430
65.22X24	22x24	40,1	46,5	13,0	14,5	260	425

### 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]	ΔΔ [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	13,0	14,5	260	420

### 65 - Metric 15° hinged ratchet combination wrenches set in portable case



NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, ASME B107.100

- Productivity and safety = easy to organise, easy to spot, always with you.
- 6-piece set of 15° hinged ratchet combination wrenches: 8x9 - 10x11 - 12x13 - 14x15 - 16x18 - 17x19 mm.
- Resistant to chemicals and impacts.
- Portable case: CK.65J1
- Weight: 0.880 kg.

65	A [mm]	ΔΔ [kg]
65.JP6	8x9 - 10x11 - 12x13 - 14x15 - 16x18 - 17x19	0,830



### ▣ Inch 15° hinged ratchet ring wrenches set



NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, ASME B107.100

- Presentation: supplied in roll.

➤	A ["]	Contents	ΔΔ [kg]
<b>65.JU6T</b>	1/4x5/16 - 3/8x7/16 - 1/2x9/16 - 5/8x11/16 - 3/4x13/16 - 7/8x15/16	Roll: N.38A-6B	1,315

### ▣ Metric 15° hinged ratchet ring wrench sets in heat formed tray



- Compatible with the FACOM modular storage system: compatible with CHRONO, JET, CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

➤	A [mm]	Contents	ΔΔ [kg]
<b>MOD.65J7</b>	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x18 - 17x19	Tray: PL.608A	1,153

### ▣ 467.ADAPT10MM Set of 2 adaptors for 10 mm wrenches to 1/4" drive



- 2 adaptors to use your 10 mm ratchet wrench with 1/4" drive sockets and 1/4" 6-point bits.

### ▣ 467.ADAPT10-19 Set of 2 adaptors for 10 mm wrenches to 1/4" drive and for 19 mm wrenches to 1/2" drive



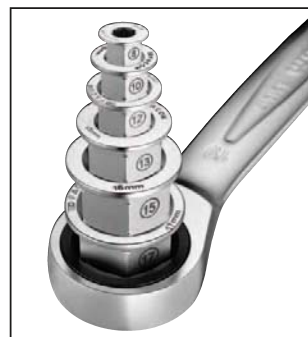
- 1 adaptor to use your 10 mm ratchet wrench with 1/4" drive sockets and 1/4" 6-point bits.
- 1 adaptor to use your 19 mm ratchet wrench with 1/2" drive sockets.

## Ring ratchet multiple opening straight series

### SPECIAL SOLUTIONS FOR TRAVELLING MAINTENANCE

#### QUATTRO CONCEPT & "11 IN 1" concept

- Ideal for interventions out of site, in high locations or requiring tool bags or boxes to be winched.
- The 2 FACOM all-in-1 wrench concepts meet weight constraints and facilitate travel.



## ALL-IN-1 SOLUTIONS: "QUATTRO" concept

### All-in-1 ratchet ring wrenches for minimum weight

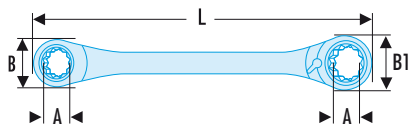


#### Each head has 2 dimensions 1 wrench = 4 dimensions

- 72-teeth mechanism = 5° increments
- FACOM guarantees very high performance for its ratchet wrenches: ISO 1711-1 + 50% guaranteed.
- Integral reversing lever avoids any risk of accidental reversal.
- Compact head.
- 8 sizes available: 8-10-12-13-16-17-18-19 mm.



### 64C - Metric multi-opening straight ratchet ring wrenches



#### NF ISO 1711-1, ISO 1711-1, DIN ISO 1711-1

- Straight multi-opening ratchet ring wrenches: highly versatile wrenches = 4 dimensions per wrench. Saves weight: 1 single wrench in the tool box instead of 4.
- 4 metric dimensions per wrench:
  - 64C.S1: 8x10 - 12x13 mm.
  - 64C.S2: 16x17 - 18x19 mm.
- Compact ratchet mechanism and reversible by lever.
- Increment 5°.
- Presentation: satin chrome finish.

	A [mm]	B [mm]	L [mm]	ΔΔ [g]
<b>64C.S1</b>	8x10 - 12x13	20,2	150	105
<b>64C.S2</b>	16x17 - 18x19	31,8	230	270

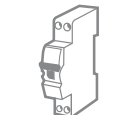
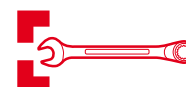


### 64C.J2 Metric multi-opening straight ratchet ring wrenches set



NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, ASME B107.100

- Set of 2 multi-opening straight ratchet ring wrenches (8 dimensions):
  - 64C.S1: 8x10 - 12x13 mm.
  - 64C.S2: 16x17 - 18x19 mm.
- Compact ratchet mechanism and reversible by lever.
- Increment 5°.
- Presentation: satin chrome finish.
- Supplied in cardboard box.
- Weight: 0.400 kg.



## "11 IN 1" ratchet wrench set = 1 RATCHET RING WRENCH + 9 RINGS

**Travelling maintenance special: save 60% weight compared with a set of 6 ratchet ring wrenches**

### Save time

- Ratchet mechanisms avoiding unproductive repositioning.
- Easy fitting of adapter rings: **1 click is enough.**
- No time wasted trying to find the right dimension: **clear marking.**



### Maximum accessibility:

- 72-teeth mechanism = 5° increments.
- Extra-slim head: 3 times more compact than the ratchet-socket system.
- Through ratchet function for long threads.



### Performance and safety:

- FACOM guarantees very high performance for its ratchet wrenches: ISO1711-1 + 50% guaranteed.
- No more tools left on site at the end of the job thanks to instant checking system for missing tools.
- Single-handed effective locking system: no ring ejection thanks to the ring locking and release system.
- The rings stay in their foam compartments even when the box is tipped or dropped.
- Box and foam resistant to impact and chemical agents.



**Dimensions / openings: 8-9-10-11-12-13-14-15-16-17-19 mm.**

## 464.J1 Flat tightening case "11 in 1"



Ultra-light "11 in 1" set: 1 wrench + 9 bushes = 11 dimensions.

- Ideal for spaces with low access in height. The extra-flat wrench is 3 times slimmer than a traditional ratchet + socket system.
  - Compact ratchet mechanism and reversible by lever.
  - Increment 5°.
  - Dimensions of the 2 ratchet heads without bush: 14 and 19 mm.
  - 9 reducer bushes. Dimensions: 8 - 9 - 10 - 11 - 12 - 13 - 15 - 16 and 17 mm.
  - Plastic box: BP.102.
  - Foam tray: PM.464J1.
- Weight: 0.530 kg.

## 464.M14X19 Straight ratchet ring wrench opening 14 and 19 mm



NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, ASME B107.100

- Ideal for spaces with low access in height. The extra-flat wrench is 3 times slimmer than a traditional ratchet + socket system.
- Compact ratchet mechanism and reversible by flipping the wrench.
- Increment 5°.
- Dimensions of the 2 ratchet heads without bush: 14 and 19 mm.
- Presentation: satin chrome finish.

	A [mm]	ΔΔ [g]
<b>464.M14X19</b>	14 x 19	170

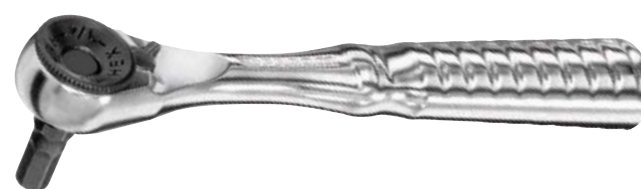
## 464.MKIT Set of 9 reduction bushes for ratchet ring wrench 464.M14X19



- Set comprising the dimensions: 8 - 9 - 10 - 11 - 12 - 13 - 15 - 16 and 17 mm.
- Weight: 100 g.

## RATCHET TIGHTENING OF FEMALE HEAD SCREWS / NUTS

➤ **RATCHETS FOR BITS.  
SEE P. 233**



### Standard series

## OPEN-END WRENCH

### THE "DOUBLE-ENDED" WRENCH

#### 2 sizes per wrench

- Reduces the number and weight of tools.

#### Power and precision

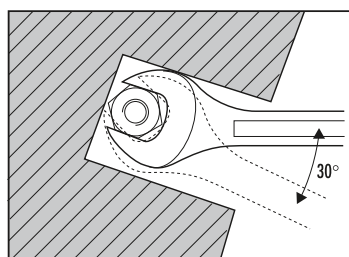
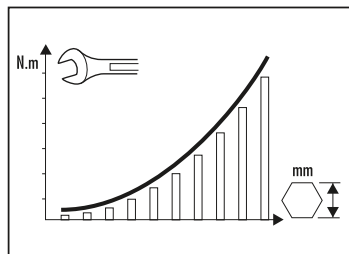
- FACOM guarantees very high performance for its open end wrenches: ISO 1711-1 + 30% guaranteed.
- Tight tolerances for a perfect fit on fasteners.

#### Slim profile and comfort

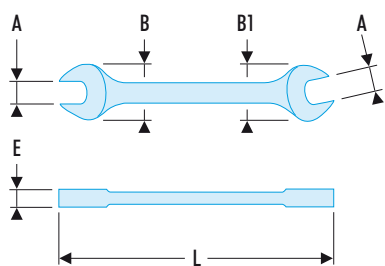
- Smaller shape and volume for better accessibility.
- Streamlined heads.
- 30° increments by flipping the wrench.



+



### 44 - Metric open end wrenches



NF ISO 10102, NF ISO 3318, NF ISO 1711-1, NF ISO 691, ISO 10102, ISO 3318, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691, DIN 3110

- 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°.
- Metric sizes: 3.2 to 42 mm.
- Presentation: satin chrome finish.

44	A [mm]	B x B1 [mm]	E [mm]	L [mm]	ΔΔ [g]
44.3,2X5,5	3,2x5,5	11,0 x 13,5	3,0	90	10
44.4X5	4x5	11,0 x 13,5	3,0	90	10
44.6X7	6x7	15,0 x 17,5	3,5	120	20
44.8X9	8x9	18,5 x 21,0	3,8	137	30
44.8X10	8x10	19,0 x 23,0	4,2	143	40
44.10X11	10x11	23,0 x 25,0	4,7	152	50
44.10X13	10x13	23,0 x 29,0	5,1	162	60
44.11X13	24x26	25,5 x 29,0	5,1	167	65
44.12X13	12x13	25,5 x 29,0	5,1	167	65
44.12X14	19x22	29,0 x 33,5	5,5	177	80
44.14X15	14x15	31,0 x 33,0	5,5	182	90
44.13X17	13x17	31,0 x 37,0	6,3	192	120
44.16X17	16x17	35,5 x 37,0	6,3	200	120
44.16X18	41x46	37,0 x 42,0	6,8	210	145
44.17X19	17x19	37,0 x 42,0	6,8	210	145
44.18X19	18x19	39,0 x 42,0	7,3	220	160
44.20X22	20x22	43,0 x 48,5	7,5	240	200
44.21X23	21x23	47,0 x 50,5	8,3	242	220
44.22X24	22x24	47,5 x 52,0	8,8	261	260
44.24X27	24x27	51,0 x 58,0	8,8	270	325
44.25X28	25x28	56,0 x 61,6	8,8	282	360
44.26X28	26x28	56,0 x 61,6	8,8	282	360
44.27X29	27x29	59,0 x 64,0	9,5	301	450
44.27X30	27x30	59,0 x 64,0	9,5	301	450
44.27X32	27x32	63,0 x 70,0	9,8	318	515
44.30X32	30x32	63,0 x 70,0	9,8	318	515
44.33X35	33x35	71,0 x 75,0	11,5	342	720
44.34X36	34x36	71,0 x 75,0	11,5	342	720
44.36X41	36x41	78,0 x 87,0	12,0	381	945
44.38X42	38x42	78,0 x 87,0	12,0	381	945

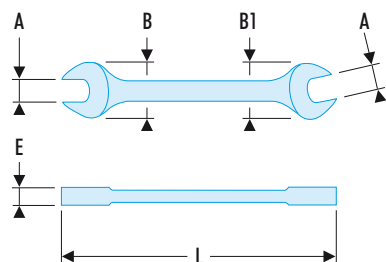




## 44 - Inch open end wrenches



- 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.



⇒	A ["]	B x B1 [mm]	E [mm]	L [mm]	ΔΔ [g]
<b>44.1/4X5/16</b>	1/4x5/16	15,0 x 17,5	3,5	120	20
<b>44.11/32X13/32</b>	11/32x13/32	19,0 x 23,0	4,2	143	40
<b>44.3/8X7/16</b>	3/8x7/16	23,0 x 25,0	4,7	152	50
<b>44.1/2X9/16</b>	1/2x9/16	29,0 x 33,5	5,5	177	80
<b>44.5/8X11/16</b>	5/8x11/16	37,0 x 42,0	6,8	210	145
<b>44.11/16X3/4</b>	11/16x3/4	37,0 x 42,0	6,8	210	145
<b>44.3/4X13/16</b>	3/4x13/16	43,0 x 48,5	7,5	240	200
<b>44.7/8X15/16</b>	7/8x15/16	47,5 x 52,0	8,3	251	260
<b>44.1'X1'1/16</b>	1'X1'1/16	56,0 x 61,6	8,8	282	360
<b>44.1'1/8X1'1/4</b>	1'1/8X1'1/4	63,0 x 70,0	9,8	318	515
<b>44.1'3/16X1'5/16</b>	1'3/16X1'5/16	63,0 x 70,0	9,8	318	515
<b>44.1'3/8X1'1/2</b>	1'3/8X1'1/2	78,0 x 87,0	12,0	381	945
<b>44.1'7/16X1'5/8</b>	1'7/16X1'5/8	78,0 x 87,0	12,0	381	945

## 44 - Metric open ring wrench sets

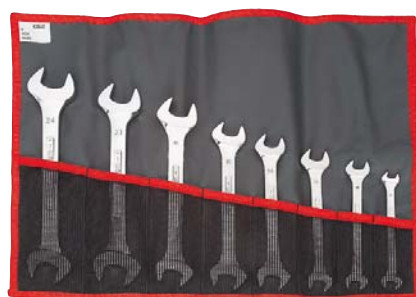


NF ISO 10102, NF ISO 3318, NF ISO 1711-1, NF ISO 691, ISO 10102, ISO 3318, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691, DIN 3110

- Presentation: supplied as box, roll or panel sets.

⇒	A [mm]	Contents	ΔΔ [kg]
<b>44.JE9</b>	3,2x5,5 - 4x5 - 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19	Box	0,550
<b>44.JE8</b>	8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 21x23 - 22x24	Box	0,980
<b>44.JE12</b>	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 21x23 - 22x24 - 26x28 - 27x29 - 30x32	Box	2,290
<b>44.JE17</b>	3,2x5,5 - 4x5 - 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 21x23 - 22x24 - 26x28 - 27x29 - 30x32 - 33x35 - 36x41 - 38x42	Box	4,930
<b>44.JE8T</b>	8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 21x23 - 22x24	Roll: N.38A-8C	1,050
<b>44.JE9T</b>	3,2x5,5 - 4x5 - 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19	Roll: N.38A-9E	0,580
<b>44.P17E</b>	3,2x5,5 - 4x5 - 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 21x23 - 22x24 - 26x28 - 27x29 - 30x32 - 33x35 - 36x41 - 38x42	Panel: PK.1	7,480

## 44 - Inch open ring wrench sets



ASME B107.100

- Presentation: supplied as box or roll sets.

⇒	A ["]	Contents	ΔΔ [kg]
<b>44.JU6</b>	1/4x5/16 - 3/8x7/16 - 1/2x9/16 - 5/8x11/16 - 3/4x13/16 - 7/8x15/16	Box	0,650
<b>44.JU8T</b>	1/4x5/16 - 3/8x7/16 - 1/2x9/16 - 5/8x11/16 - 3/4x13/16 - 7/8x15/16 - 1"X1"1/16 - 1"1/8X1"1/4	Roll: N.38A-8B	1,560

## MOD.44 - Metric open ring wrench sets



- Compatible with the FACOM modular storage system: compatible with CHRONO, JET, CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

⇒	A [mm]	Contents	ΔΔ [kg]
<b>MOD.44-1</b>	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 21x23 - 22x24	Tray: PL.315	1,315
<b>MOD.44-2</b>	26x28 - 27x29 - 30x32	Tray: PL.316	1,580

### "Extra-slim" profile series

#### EXTRA-SLIM OPEN END WRENCHES

##### EXTRA-SLIM OPEN END WRENCHES

- 30% slimmer than classical open ends.
- Ideal for tightening extra-slim lock nuts or nuts.

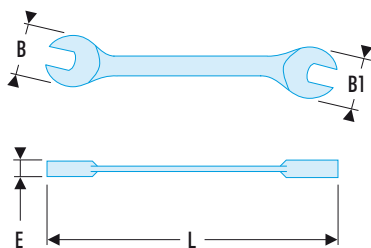


#### 31 - Metric "extra-slim" end wrenches



NF ISO 3318, NF ISO 691, ISO 3318, ISO 691, DIN ISO 691

- Metric "extra-slim" open end wrenches: 30 % slimmer than a classical open end wrench = maximum accessibility.
- Indispensable for confined access and locknuts.
- Heads hinged at 15°.
- Metric sizes: 6 to 24 mm.
- Presentation: satin chrome finish.



➤	A [mm]	B x B1 [mm]	E [mm]	L [mm]	ΔΔ [g]
<b>31.6X7</b>	6x7	16,6 x 19,6	2,2	147	20
<b>31.8X9</b>	8x9	20,5 x 24,5	2,6	176	30
<b>31.10X11</b>	10x11	20,5 x 24,5	2,6	176	30
<b>31.12X13</b>	12x13	29,0 x 33,5	3,6	209,5	70
<b>31.14X15</b>	14x15	29,0 x 33,5	3,6	209,5	70
<b>31.16X17</b>	16x17	38,0 x 42,5	4,6	250	140
<b>31.18X19</b>	18x19	38,0 x 42,5	4,6	250	140
<b>31.22X24</b>	22x24	48,0 x 52,0	5,6	290	270

#### 31 - Metric "extra-slim" open-end wrench sets



NF ISO 3318, NF ISO 691, ISO 3318, ISO 691, DIN ISO 691

- Presentation: supplied in roll.

➤	A [mm]	Contents	ΔΔ [kg]
<b>31.JE6T</b>	8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19	Roll: N.38A-6B	0,680
<b>31.JE8T</b>	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 22x24	Roll: N.38A-8B	0,990

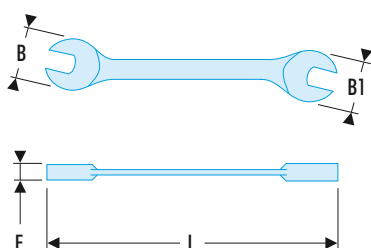
### Micro-engineering series

#### 22 - Metric 15° hinged "midget" open end wrenches



NF ISO 3318, NF ISO 691, ISO 3318, ISO 691, DIN ISO 691

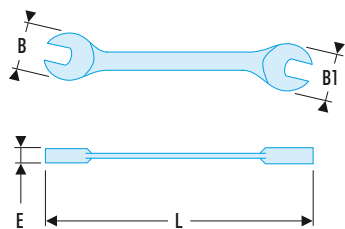
- "Midget" open end wrenches: short shank and slim heads for manoeuvrability in confined spaces.
- Heads hinged at 15°.
- Metric sizes: 3.2 to 13 mm.
- Presentation: satin chrome finish.



➤	A [mm]	B x B1 [mm]	E [mm]	L [mm]	ΔΔ [g]
<b>22.3,2X5,5</b>	3,2x5,5	10 x 13	2,4	70	10
<b>22.4X5</b>	4x5	10 x 13	2,4	70	10
<b>22.6X7</b>	6x7	14 x 16	2,7	80	10
<b>22.8X9</b>	8x9	18 x 20	3,0	90	20
<b>22.10X11</b>	10x11	21 x 23	3,0	100	25
<b>22.12X13</b>	12x13	26 x 28	3,5	110	35



## 22 - Inch 15° hinged "midget" open end wrenches



- "Midget" open end wrenches: short shank and slim heads for manoeuvrability in confined spaces.
- Heads hinged at 15°.
- Dimensions in inches: from 3/16" to 9/16".
- Presentation: satin chrome finish.

➤	A ["]	B x B1 [mm]	E [mm]	L [mm]	ΔΔ [g]
<b>22.3/16X1/4</b>	3/16x1/4	14 x 16	2,7	80	10
<b>22.7/32X9/32</b>	7/32x9/32	14 x 16	2,7	80	10
<b>22.5/16X3/8</b>	5/16x3/8	18 x 20	3,0	90	20
<b>22.11/32X7/16</b>	11/32x7/16	21 x 23	3,0	100	25
<b>22.1/2X9/16</b>	1/2x9/16	26 x 28	3,5	110	35

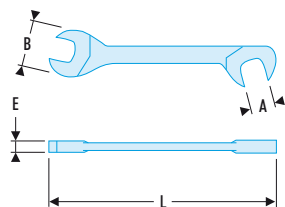
## 22 - Metric and inch 15° hinged "midget" open end wrench sets



- Presentation: supplied in roll.

➤	A [mm]	A ["]	Contents	ΔΔ [kg]
<b>22.JE6T</b>	3,2x5,5 - 4x5 - 6x7 - 8x9 - 10x11 - 12x13	-	Roll: N.38A-6A	0,140
<b>22.JU5T</b>	-	3/16x1/4 - 7/32x9/32 - 5/16x3/8 - 11/32x7/16 - 1/2x9/16	Roll: N.38A-5C	0,130

## 34 - Metric 15° and 75° hinged "midget" open end wrenches

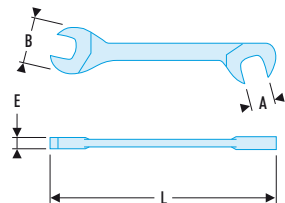


NF ISO 3318, NF ISO 691, ISO 3318, ISO 691, DIN ISO 691

- "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.
- Metric sizes: 3.2 to 17 mm.
- Presentation: satin chrome finish.

➤	A [mm]	B [mm]	E [mm]	L [mm]	ΔΔ [g]	➤	A [mm]	B [mm]	E [mm]	L [mm]	ΔΔ [g]
<b>34.3,2</b>	3,2	10	2,4	70	10	<b>34.10</b>	10	22	3,0	100	25
<b>34.4</b>	4	10	2,4	70	10	<b>34.11</b>	11	22	3,0	100	25
<b>34.5</b>	5	13	2,4	75	10	<b>34.12</b>	12	27	3,5	120	35
<b>34.5,5</b>	5,5	13	2,4	75	10	<b>34.13</b>	13	27	3,5	120	35
<b>34.6</b>	6	15	2,7	80	15	<b>34.14</b>	14	27	3,5	120	40
<b>34.7</b>	7	15	2,7	80	15	<b>34.15</b>	15	33	4,5	140	70
<b>34.8</b>	8	18,5	3,0	90	20	<b>34.16</b>	16	33	4,5	140	70
<b>34.9</b>	9	18,5	3,0	90	20	<b>34.17</b>	17	33	4,5	140	70

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

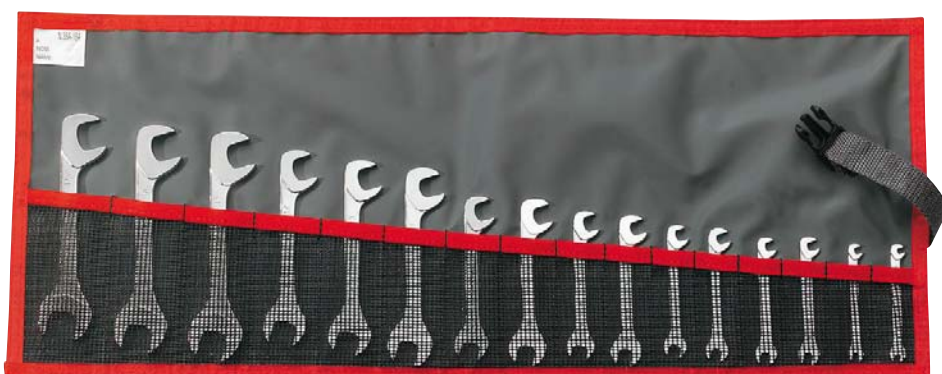


- "Midget" open end wrenches: short shank and slim heads for manoeuvrability in confined spaces.
- Heads hinged at 15° and 75° allow to intervene on nuts inaccessible with a standard wrench.
- Dimensions in inches: from 3/16" to 11/16".
- Presentation: satin chrome finish.

➤	A ["]	B [mm]	E [mm]	L [mm]	ΔΔ [g]	➤	A ["]	B [mm]	E [mm]	L [mm]	ΔΔ [g]
<b>34.3/16</b>	3/16	13	2,4	75	10	<b>34.13/32</b>	13/32	22	3,0	100	30
<b>34.7/32</b>	7/32	13	2,4	75	10	<b>34.7/16</b>	7/16	22	3,0	100	30
<b>34.1/4</b>	1/4	15	2,7	80	15	<b>34.1/2</b>	1/2	27	3,5	120	35
<b>34.9/32</b>	9/32	15	2,7	80	15	<b>34.9/16</b>	9/16	27	3,5	120	40
<b>34.5/16</b>	5/16	18,5	3,0	90	20	<b>34.5/8</b>	5/8	33	4,5	140	70
<b>34.11/32</b>	11/32	18,5	3,0	90	20	<b>34.11/16</b>	11/16	33	4,5	140	70
<b>34.3/8</b>	3/8	22	3,0	100	25						



### 34 - Metric and inch "midget" open-end wrench sets in rolls



NF ISO 3318, NF ISO 691, ISO 3318, ISO 691, DIN ISO 691

• Presentation: supplied in roll.

Ref	A [mm]	A ["]	Contents	ΔΔ [kg]
<b>34.JL16T</b>	3,2 - 4 - 5 - 5,5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17	-	Roll: N.38A-6A	0,560
<b>34.JU13T</b>	-	3/16 - 7/32 - 1/4 - 9/32 - 5/16 - 11/32 - 3/8 - 13/32 - 7/16 - 1/2 - 9/16 - 5/8 - 11/16	Roll: N.38A-5C	0,430

### 34.JT8 Metric "midget" open ring wrench sets

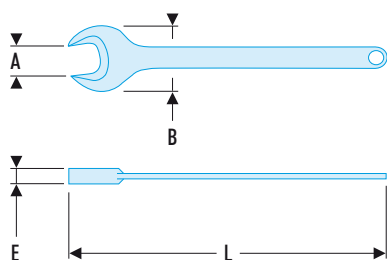


NF ISO 3318, NF ISO 691, ISO 3318, ISO 691, DIN ISO 691

- Comprising:
  - 8 ultra-slim midget forged wrenches: 3.2 - 4 - 4.5 - 5 - 5.5 - 6 - 7 - 8 mm.
  - 1 feeler gauge 5/10°.
  - 1 screwdriver for slotted head screw.
- Presentation: satin chrome finish.
- Supplied in a storage roll.
- Weight: 110 g.

## Power series

### 45 - Open end wrenches



NF ISO 4229, NF ISO 1711-1, NF ISO 691, ISO 4229, ISO 1711-1, ISO 691, DIN 894, DIN ISO 691, DIN ISO 1711-1

- Single open end wrenches: the open end is thicker for very high tightening torques. Examples: public works, rail worksites, naval construction, agriculture, oil platforms, metallic constructions.
- Hanging hole at end of handle: wrenches stored on panel or hung to avoid loss or fall.
- Open end angled at 15°.
- Metric sizes: 30 to 75 mm.
- Presentation: burnt.

Ref	A [mm]	B [mm]	E [mm]	L [mm]	ΔΔ [g]
<b>45.30</b>	30	66,0	12,0	240	320
<b>45.32</b>	32	71,5	13,0	270	410
<b>45.34</b>	34	71,5	13,0	270	570
<b>45.36</b>	36	79,5	14,5	296	590
<b>45.38</b>	38	79,5	14,5	296	610
<b>45.41</b>	41	90,5	17,5	335	860
<b>45.46</b>	46	95,5	18,0	370	1050
<b>45.50</b>	50	106,5	19,5	410	1750
<b>45.55</b>	55	106,5	19,5	410	1950
<b>45.60</b>	60	121,5	21,5	488	2460
<b>45.65</b>	65	121,5	21,5	488	2310
<b>45.70</b>	70	153,0	24,0	595	3280
<b>45.75</b>	75	153,0	24,0	595	3350

## Standard series

### RING WRENCHES – 12-POINT RING

#### 12-point OGV® ring

- 30° increments.
- Powerful tightening and less fastener wear.

#### 3 configurations according to accessibility constraints:

- 1 Straight ring wrenches.
- 2 Offset ring wrenches.
- 3 Half-moon ring wrenches.

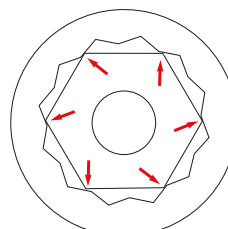


### FACOM OGV® PROFILE

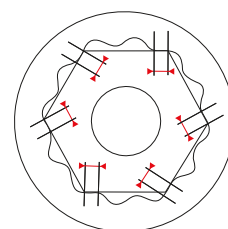
#### HIGHER POWER WITHOUT DAMAGING FASTENERS!

- More powerful tightening: socket/nut contact surface extended reducing stress.
- Reduced wear: the nut is driven on the faces, not the angles.
- Increased durability: the sharp angles of the wrench, concentrating stress, are removed.

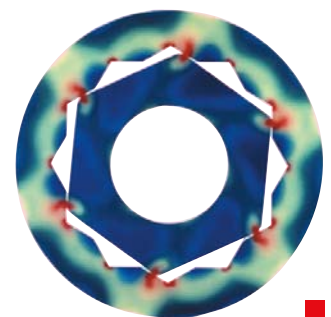
#### Standard profile FACOM OGV® profile



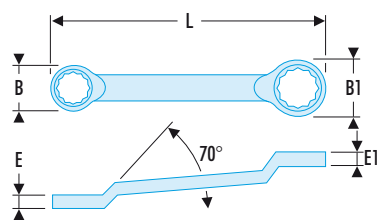
Stress applied to edges



Bears against the side faces



### 55A - Metric offset-ring wrenches



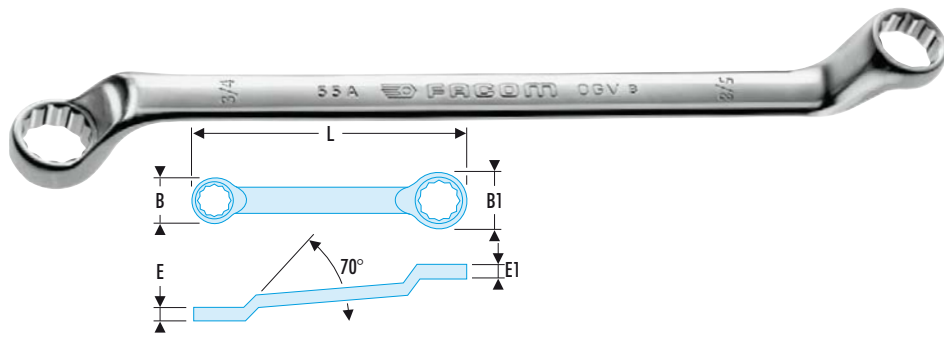
NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN 838, DIN ISO 1711-1, DIN ISO 691

- Offset-ring wrenches: ring offset to clear fingers or obstacles. Ideal for series of nuts.
- OGV® profile with 12-point profile for powerful tightening while protecting the nut.
- Metric sizes: 6 to 50 mm.
- Presentation: satin chrome finish.

55A	A [mm]	B x B1 [mm]	E x E1 [mm]	L [mm]	ΔΔ [g]
55A.6X7	6x7	10,7 x 12,2	5,5 x 6,2	167	40
55A.7X8	7x8	12,0 x 14,0	5,5 x 6,5	172	45
55A.8X9	8x9	13,7 x 15,5	6,5 x 7,2	182	60
55A.8X10	8x10	13,7 x 15,5	6,5 x 7,2	182	65
55A.10X11	10x11	16,5 x 18,0	7,5 x 17,0	197	85
55A.11X13	11x13	18,0 x 21,0	8,9 x 9,2	217	110
55A.12X13	12x13	19,5 x 21,5	8,9 x 9,2	218	120
55A.13X15	13x15	21,5 x 23,5	9,2 x 9,7	238	150
55A.14X15	14x15	22,0 x 23,5	9,2 x 9,7	238	135
55A.13X16	13x16	21,5 x 26,0	9,4 x 10,7	245	155
55A.13X17	13x17	21,0 x 26,0	9,4 x 10,7	245	150
55A.16X17	16x17	25,7 x 27,0	10,7 x 11,2	258	200
55A.16X18	16x18	25,7 x 27,2	10,7 x 11,2	258	195
55A.17X19	17x19	27,0 x 29,7	11,2 x 12,2	290	265
55A.18X19	18x19	27,0 x 29,7	11,2 x 12,2	290	260
55A.18X21	18x21	29,0 x 33,0	11,7 x 12,7	296	290
55A.19X22	19x22	29,0 x 33,7	11,7 x 12,7	296	285

55A	A [mm]	B x B1 [mm]	E x E1 [mm]	L [mm]	ΔΔ [g]
55A.20X22	20x22	32,0 x 35,0	12,2 x 13,2	316	365
55A.21X23	21x23	32,0 x 35,0	12,2 x 13,2	316	360
55A.22X24	22x24	33,7 x 36,7	12,2 x 13,2	324	390
55A.24X26	24x26	37,2 x 41,0	12,7 x 14,3	328	470
55A.24X27	24x27	37,2 x 41,2	12,7 x 14,3	328	465
55A.25X28	25x28	39,7 x 43,0	13,7 x 14,7	345	515
55A.26X28	26x28	39,7 x 43,0	13,7 x 14,7	345	510
55A.27X29	27x29	41,5 x 46,0	14,3 x 15,7	353	575
55A.27X30	27x30	41,5 x 46,0	14,3 x 15,7	353	570
55A.27X32	27x32	41,5 x 46,2	14,3 x 15,7	353	575
55A.30X32	30x32	45,3 x 48,7	15,2 x 16,7	360	640
55A.30X34	30x34	46,0 x 52,0	17,2 x 19,2	402	820
55A.34X36	34x36	52,0 x 55,0	18,2 x 20,2	440	1075
55A.36X41	36x41	53,7 x 61,7	18,2 x 20,2	440	1080
55A.38X42	38x42	41,5 x 46,0	14,3 x 15,7	455	1070
55A.46X50	46x50	70,7 x 76,7	20,7 x 21,7	510	1890

## 55A - Inch offset-ring wrenches



- Offset-ring wrenches: ring offset to clear fingers or obstacles. Ideal for series of nuts.
- OGV® profile with 12-point profile for powerful tightening while protecting the nut.
- Dimensions in inches: from 1/4" to 1"1/4.
- Presentation: satin chrome finish.

➤	A ["]	B x B1 [mm]	E x E1 [mm]	L [mm]	ΔΔ [g]
<b>55A.1/4X5/16</b>	1/4X5/16	11,0 x 14,0	5,5 x 6,5	172	45
<b>55A.11/32X13/32</b>	11/32X13/32	15,5 x 18,0	7,5 x 8,7	197	80
<b>55A.3/8X7/16</b>	3/8X7/16	16,5 x 18,0	7,5 x 17,0	197	85
<b>55A.7/16X1/2</b>	7/16X1/2	18,0 x 21,0	8,9 x 9,2	217	110
<b>55A.1/2X9/16</b>	1/2X9/16	21,5 x 23,0	9,2 x 9,7	238	145
<b>55A.9/16X5/8</b>	9/16X5/8	22,0 x 23,5	9,2 x 9,7	238	135
<b>55A.5/8X11/16</b>	5/8X11/16	25,7 x 27,0	10,7 x 11,2	258	200
<b>55A.19/32X25/32</b>	19/32x25/32	25,7 x 27,2	10,7 x 11,2	258	195
<b>55A.5/8X3/4</b>	5/8X3/4	25,7 x 27,2	10,7 x 11,2	258	265
<b>55A.11/16X3/4</b>	11/16X3/4	27,0 x 29,7	11,2 x 12,2	290	260

➤	A ["]	B x B1 [mm]	E x E1 [mm]	L [mm]	ΔΔ [g]
<b>55A.3/4X13/16</b>	3/4X13/16	29,0 x 33,0	11,7 x 12,7	296	290
<b>55A.13/16X7/8</b>	13/16X7/8	32,0 x 35,0	12,2 x 13,2	316	365
<b>55A.7/8X15/16</b>	7/8X15/16	33,7 x 36,7	12,2 x 13,2	324	390
<b>55A.15/16X1"</b>	15/16X1"	37,2 x 41,0	12,7 x 14,3	328	470
<b>55A.1"X1"1/16</b>	1"X1"1/16	39,7 x 42,0	13,7 x 14,7	345	475
<b>55A.1"1/16X1"1/8</b>	1"1/16X1"1/8	41,5 x 46,0	14,3 x 15,7	353	575
<b>55A.1"1/8X1"1/4</b>	1"1/8 x 1"1/4	45,3 x 48,7	15,2 x 16,7	360	640

## 55A - Metric offset-ring wrench sets



NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN 838, DIN ISO 1711-1, DIN ISO 691

- Presentation: supplied as box, roll or panel sets.

➤	A [mm]	Contents	ΔΔ [kg]
<b>55A.JN6</b>	8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19	Box	0,740
<b>55A.JD8</b>	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22	Box	1,030
<b>55A.JE8</b>	8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 21x23 - 24 x 26	Box	1,420
<b>55A.JD10</b>	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22 - 24x27 - 30x32	Box	2,030
<b>55A.JE12</b>	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 21x23 - 24x26 - 26x28 - 27x29 - 30x32	Box	3,290
<b>55A.JD12</b>	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22 - 21x23 - 24x26 - 25x28 - 27x32	Box	3,080
<b>55A.JD12A</b>	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22 - 21x23 - 24x27 - 25x28 - 30x32	Box	3,120

➤	A [mm]	Contents	ΔΔ [kg]
<b>55A.JE14</b>	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 21x23 - 22x24 - 26x28 - 27x29 - 30x32 - 36x41 - 38x42	Box	6,180
<b>55A.JN6T</b>	8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19	Roll: N.38A-6B	0,830
<b>55A.JD8T</b>	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22	Roll: N.38A-8B	1,120
<b>55A.JE8T</b>	8 x 9 - 10 x 11 - 12 x 13 - 14 x 15 - 16 x 17 - 18 x 19 - 21 x 23 - 24 x 26	Roll: N.38A-8B	1,510
<b>55A.P14E</b>	6 x 7 - 8 x 9 - 10 x 11 - 12 x 13 - 14 x 15 - 16 x 17 - 18 x 19 - 21 x 23 - 22 x 24 - 26 x 28 - 27 x 29 - 30 x 32 - 36 x 41 - 38 x 42	Panel: PK.1	8,550

## 55A - Inch offset-ring wrench sets



➤	A ["]	Contents	ΔΔ [kg]
<b>55A.JU6AT</b>	1/4x5/16 - 3/8x7/16 - 1/2x9/16 - 5/8x11/16 - 3/4x13/16 - 7/8x15/16	Roll: N.38A-6B	1,080
<b>55A.JU8T</b>	1/4x5/16 - 11/32x13/32 - 3/8x7/16 - 1/2x9/16 - 5/8x11/16 - 19/32x25/32 - 3/4x13/16 - 7/8x15/16	Roll: N.38A-8B	1,360
<b>55A.JU8AT</b>	1/4x5/16 - 3/8x7/16 - 1/2x9/16 - 2/8x11/16 - 3/4x13/16 - 7/8x15/16 - 1"x1"1/16 - 1"1/8"x1"1/4"	Roll: N.38A-8B	1,220
<b>55A.JU6A</b>	1/4x5/16 - 3/8x7/16 - 1/2x9/16 - 5/8x11/16 - 3/4x13/16 - 7/8x15/16	Box	0,990
<b>55A.JU8</b>	1/4x5/16 - 11/32x13/32 - 3/8x7/16 - 1/2x9/16 - 5/8x11/16 - 19/32x25/32 - 3/4x13/16 - 7/8x15/16	Box	1,270
<b>55A.JU10</b>	1/4x5/16 - 11/32x13/32 - 3/8x7/16 - 1/2x9/16 - 5/8x11/16 - 19/32x25/32 - 3/4x13/16 - 7/8x15/16 - 1"x1"1/16 - 1"1/8"x1"1/4"	Box	2,400





## MOD.55 - Metric and inch offset-ring wrenches set in heat formed tray

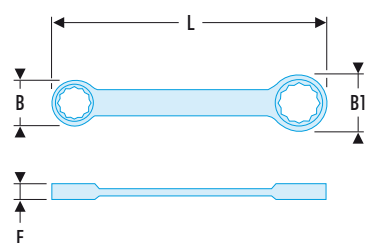


- Compatible with the FACOM modular storage system: compatible with CHRONO, JET, CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

➤	A [mm]	A ["]	Contents	ΔΔ [kg]
<b>MOD.55-1</b>	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19	-	Tray: PL.317A	0,920
<b>MOD.55-2</b>	21x23 - 22x24 - 26x28	-	Tray: PL.318	1,450
<b>MOD.55-3</b>	-	1/4x5/16 - 11/32x13/32 - 3/8x7/16 - 1/2x9/16 - 5/8x11/16 - 19/32x25/32 - 3/4x13/16	Tray: PL.600	1,020

## Straight series

### 59 - Metric straight offset-ring wrenches



NF ISO 10103, NF ISO 1711-1, NF ISO 691, ISO 10103, ISO 1711-1, ISO 691, DIN 837, DIN ISO 1711-1, DIN ISO 691

- Straight offset-ring wrenches: the slim heads and short shank allows to work in dense mechanical assemblies.
- OGV® profile with 12-point ring for powerful tightening while protecting the nut.
- Metric sizes: 6 to 32 mm.
- Presentation: satin chrome finish.

➤	A [mm]	B x B1 [mm]	E [mm]	L [mm]	ΔΔ [g]
<b>59.6X7</b>	6X7	10,8 x 12,0	5,0	120	10
<b>59.8X9</b>	8X9	13,2 x 14,5	5,5	135	16
<b>59.10X11</b>	10X11	15,8 x 17,2	6,4	150	28
<b>59.12X13</b>	12X13	19,8 x 21,2	7,2	165	40
<b>59.14X15</b>	14X15	21,2 x 24,4	7,9	185	50
<b>59.16X17</b>	16X17	24,2 x 26,5	8,5	210	65
<b>59.18X19</b>	18X19	27,0 x 28,6	9,2	225	80
<b>59.21X23</b>	21X23	30,5 x 33,6	9,9	240	130
<b>59.22X24</b>	22X24	32,0 x 35,2	10,6	255	130
<b>59.26X28</b>	26X28	36,5 x 39,2	11,3	270	230
<b>59.27X29</b>	27X29	39,2 x 43,6	12,6	315	270
<b>59.30X32</b>	30X32	45,0 x 48,0	13,8	335	280

### 59 - Metric straight offset-ring wrenches sets

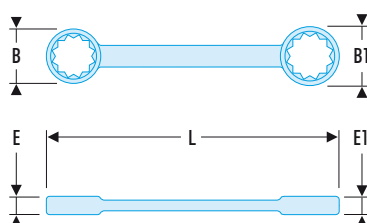


NF ISO 10103, NF ISO 1711-1, NF ISO 691, ISO 10103, ISO 1711-1, ISO 691, DIN 837, DIN ISO 1711-1, DIN ISO 691

- Presentation: supplied as box or roll sets.

➤	A [mm]	Contents	ΔΔ [kg]
<b>59.JN6</b>	8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19	Box	0,280
<b>59.JE12</b>	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 21x23 - 22x24 - 26x28 - 27x29 - 30x32	Box	1,330
<b>59.JN8T</b>	8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 21x23 - 22x24	Roll: N.38A-8C	0,570

### 59TX - Straight ring wrenches with Torx® profile



- Straight ring wrenches with Torx® profile: ideal in locations where access in height is limited and/or impossible with a ratchet + socket.
- 30° increment by flipping the wrench thanks to special broaching.
- Torx dimensions: from E6 to E24.
- Presentation: satin chrome finish.

➤	A [mm]	B x B1 [mm]	E x E1 [mm]	L [mm]	ΔΔ [g]
<b>59TX.6X8</b>	E6XE8	9,1 x 11,1	5,2 x 6,3	113	15
<b>59TX.10X12</b>	E10XE12	12,7 x 14,8	7,0 x 8,2	141	35
<b>59TX.14X18</b>	E14XE18	17,3 x 21,8	8,0 x 9,5	181	65
<b>59TX.20X24</b>	E20XE24	24,6 x 28,7	11,0 x 13,5	224	190

### 59TX.J4 Set of 4 straight ring wrenches with Torx® profile

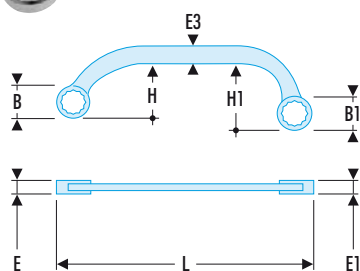
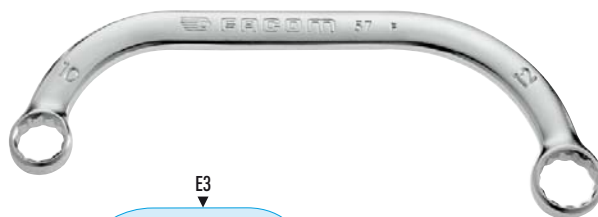


- Straight ring wrenches with Torx® profile: ideal in locations where access in height is limited and/or impossible with a ratchet + socket.
- 30° increment by flipping the wrench thanks to special broaching.
- Set of 4 wrenches: E6xE8 - E10xE12 - E14x18 - E20xE24.
- Presentation: satin chrome finish.
- Weight: 0.315 kg.



### Half-moon series

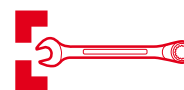
#### 57 - Metric half-moon offset-ring wrenches



NF ISO 3318, NF ISO 1711-1, NF ISO 691, ISO 3318, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691

- Half-moon offset-ring wrenches: the half-moon shape allows to manoeuvre nuts inaccessible with a classical tool.
- OGV® profile with 12-point ring for powerful tightening while protecting the nut.
- Metric sizes: 10 to 22 mm.
- Presentation: satin chrome finish.

	A [mm]	B x B1 [mm]	E3 [mm]	E x E1 [mm]	H x H1 [mm]	L [mm]	ΔΔ [g]
<b>57.10X12</b>	10X12	15,2 x 18,0	9,7	6,4 x 6,7	33,0 x 44,2	142	85
<b>57.11X13</b>	11X13	18,2 x 21,1	11,3	7,9 x 8,4	43,8 x 55,3	165	85
<b>57.13X15</b>	13X15	22,0 x 25,0	13,3	8,1 x 9,2	54,5 x 66,0	191	100
<b>57.14X16</b>	14X16	22,0 x 25,0	13,3	8,1 x 9,2	54,5 x 66,0	191	180
<b>57.14X17</b>	14X17	22,0 x 25,0	13,3	8,1 x 9,2	54,5 x 66,0	191	180
<b>57.15X17</b>	15X17	25,2 x 27,8	13,8	9,0 x 10,0	56,0 x 67,2	220	180
<b>57.16X18</b>	16X18	25,2 x 27,8	13,8	9,0 x 10,0	56,0 x 67,2	220	215
<b>57.19X22</b>	19X22	28,2 x 32,2	15,5	9,9 x 11,3	66,5 x 78,5	255	280

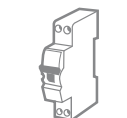


#### 57.JE5 Set of 5 metric half-moon offset-ring wrenches



NF ISO 3318, NF ISO 1711-1, NF ISO 691, ISO 3318, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691

- Half-moon offset-ring wrenches: the half-moon shape allows to manoeuvre nuts inaccessible with a classical tool.
- OGV® profile with 12-point ring for powerful tightening while protecting the nut.
- Set of 5 wrenches: 10 x 12 - 11 x 13 - 14 x 17 - 16 x 18 - 19 x 22 mm.
- Presentation: satin chrome finish.
- Weight: 0.850 kg.



## RATCHET RING WRENCHES

SAVE TIME

▶ For ratchet ring wrenches, see p. 187



SERIES 64



SERIES 65





## Power series

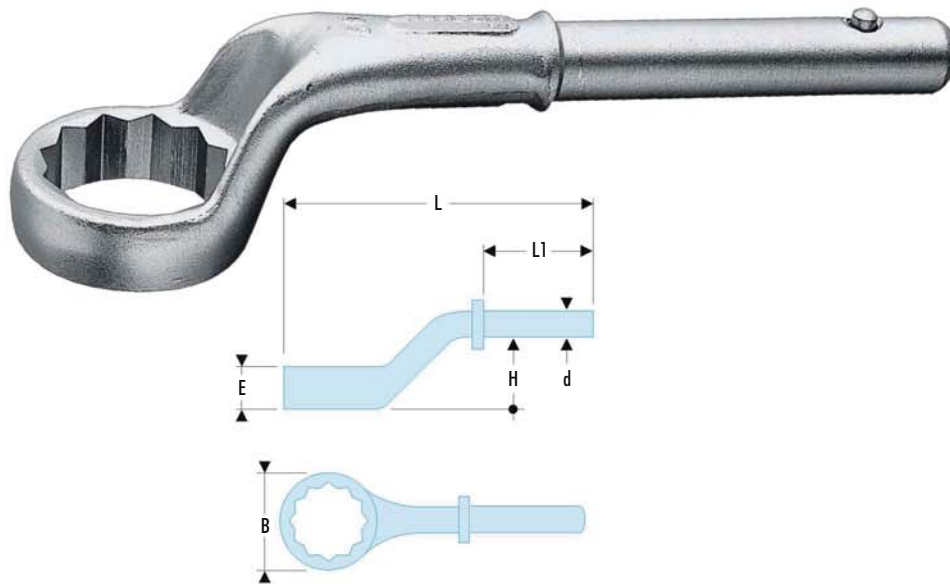
### "HEAVY-DUTY" OFFSET RING WRENCHES

**For powerful tightening with the extra-long handle**

- Recess under the handle to clear fingers or obstacles.
- Ideal for series of fasteners.



### 54A - Metric "heavy-duty" offset-ring wrenches



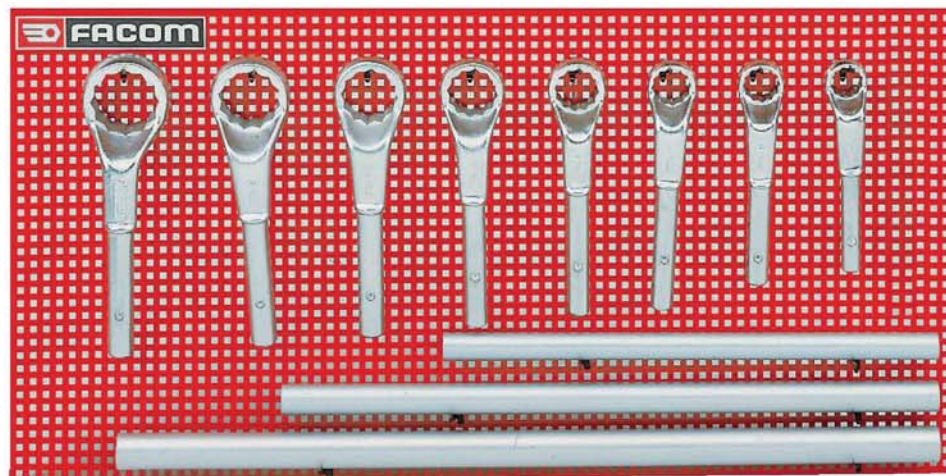
<p>54A.24 - 54A.30 54.M1B L2 (54A.24 + 54.M1B) = 555 mm L2 (54A.30 + 54.M1B) = 565 mm</p>	<p>54A.46 - 54A.50 - 54A.55 54.M3B L2 (54A.46 + 54.M3B) = 910 mm L2 (54A.50 + 54.M3B) = 920 mm L2 (54A.55 + 54.M3B) = 925 mm</p>
<p>54A.32 - 54A.36 - 54A.41 54.M2B L2 (54A.32 + 54.M2B) = 730 mm L2 (54A.36 + 54.M2B) = 735 mm L2 (54A.41 + 54.M2B) = 748 mm</p>	<p>54A.60 - 54A.65 - 54A.70 54.M4B L2 (54A.60 + 54.M4B) = 1050 mm L2 (54A.65 + 54.M4B) = 1060 mm L2 (54A.70 + 54.M4B) = 1065 mm</p>

#### NF ISO 691, ISO 691, DIN ISO 691

- "Heavy-duty" offset-ring wrenches: wrenches for tight (unlocking, thanks to high strength of the polygonal head and long adaptable handle (to be ordered separately).
- Ring offset to clear fingers or obstacles. Ideal for series of nuts.
- Handle to use: 54.M1B for the dimensions 24 and 30 mm; 54.M2B for the dimensions 32 to 41 mm; 54.M3B for the dimensions 46 to 55 mm; 54.M4B for the dimensions 60 to 70 mm.
- Metric sizes: 24 to 70 mm.
- Presentation: satin chrome finish.

	A [mm]	B [mm]	d [mm]	E [mm]	H [mm]	L [mm]	L1 [mm]	$\Delta\Delta$ [g]
<b>54A.24</b>	24	38,0	18,5	17,0	29,5	180	85	380
<b>54A.30</b>	30	48,0	18,5	18,0	33,5	200	95	550
<b>54A.32</b>	32	49,0	21,5	18,0	34,0	235	116	700
<b>54A.36</b>	36	54,0	21,5	20,0	35,5	245	120	840
<b>54A.41</b>	41	62,0	21,5	22,0	39,5	265	127	1000
<b>54A.46</b>	46	69,0	24,5	23,0	40,0	280	129	1300
<b>54A.50</b>	50	76,0	24,5	25,5	42,5	290	129	1450
<b>54A.55</b>	55	81,0	24,5	28,0	45,5	300	136	1500
<b>54A.60</b>	60	90,0	29,5	30,5	49,0	345	156	2300
<b>54A.65</b>	65	98,0	29,5	33,0	53,0	355	158	2400
<b>54A.70</b>	70	105,0	29,5	35,5	55,0	365	160	2800

### 54.P9M Metric "heavy-duty" offset-ring wrenches set



#### NF ISO 691, ISO 691, DIN ISO 691

- Dimensions: 24 - 30 - 32 - 36 - 41 - 46 - 41 - 50 - 55 mm
- Supplied without handle: 54.M1B, 54.M2B, 54.M3B.
- Presentation: on panel.
- Weight: 15.400 kg.

### Impact series

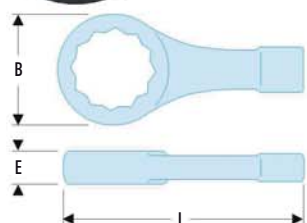
## SLOGGING WRENCHES

**For loosening on heavy equipment**

- For use with a hammer or sledge hammer.



### 50 - Metric impact offset-ring wrenches

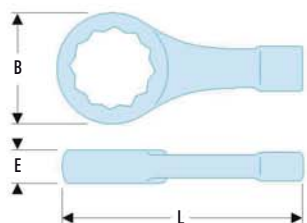


- Impact offset-ring wrenches use with a mallet or air hammer for heavy duty unlocking.
- Wrenches forged in high resilience steel to resist impact.
- Metric sizes: 24 to 120 mm.
- Presentation: burnt.

50	A [mm]	A ["]	B [mm]	E [mm]	L [mm]	ΔΔ [g]
50.24	24	-	50	18	170	550
50.27	27	-	50	18	170	530
50.30	30	-	50	18	170	500
50.32	32	-	62	21	190	880
50.34	34	-	62	21	190	870
50.35	35	-	62	21	190	850
50.36	36	-	62	21	190	820
50.38	38	-	62	21	190	800
50.40	40	-	72	24	209	1450
50.41-1'5/8	41	1'5/8	72	24	209	1420
50.42	42	-	72	24	209	1270
50.43-1'11/16	43	1'11/16	72	24	209	1320
50.44	44	-	72	24	209	1270
50.45	45	-	72	24	209	1280
50.46-1'13/16	46	1'13/16	87,5	24	238	2140
50.47	47	-	87,5	24	238	2150
50.48	48	-	87,5	24	238	2190
50.50	50	-	87,5	24	238	2070
50.52	52	-	87,5	24	238	2030
50.54	54	-	86	25	267	2020
50.55	55	-	86	25	267	2970

50	A [mm]	A ["]	B [mm]	E [mm]	L [mm]	ΔΔ [g]
50.56	56	-	86	25	267	2800
50.57-2'1/4	57	2'1/4	86	25	275	2730
50.58	58	-	86	25	267	2810
50.59	59	-	93	26	283	2730
50.60-2'3/8	60	2'3/8	93	26	275	2760
50.65-2'9/16	65	2'9/16	102	28	275	2550
50.67-2'5/8	67	2'5/8	102	28	275	4350
50.70-2'3/4	70	2'3/4	110	33	275	4220
50.75-2'15/16	75	2'15/16	112	33	275	4070
50.76-3'	76	3'	112	33	275	3960
50.78	78	-	112	33	330	6440
50.80	80	-	126	36	360	6300
50.85	85	-	126	36	363	6040
50.90	90	-	142	40	388	5750
50.95-3'3/4	95	3'3/4	142	40	388	9250
50.100	100	-	155	45	420	8950
50.105-4'1/8	105	4'1/8	155	45	420	8700
50.110	110	-	170	48	450	14630
50.115	115	-	170	48	450	13940
50.120	120	-	182	51	475	13700

### 50 - Inch impact offset-ring wrenches



- Impact offset-ring wrenches use with a mallet or air hammer for heavy duty unlocking.
- Wrenches forged in high resilience steel to resist impact.
- Dimensions in inches: from 1'5/8 to 4'1/8 mm.
- Presentation: burnt.

50	A [mm]	A ["]	B [mm]	E [mm]	L [mm]	ΔΔ [g]
50.41-1'5/8	41	1'5/8	72	24	209	1420
50.43-1'11/16	43	1'11/16	72	24	209	1320
50.46-1'13/16	46	1'13/16	87,5	24	238	2140
50.57-2'1/4	57	2'1/4	86	25	275	2730
50.60-2'3/8	60	2'3/8	93	26	275	2760
50.65-2'9/16	65	2'9/16	102	28	275	2550
50.67-2'5/8	67	2'5/8	102	28	275	4350
50.70-2'3/4	70	2'3/4	110	33	275	4220
50.75-2'15/16	75	2'15/16	112	33	275	4070
50.76-3'	76	3'	112	33	275	3960
50.95-3'3/4	95	3'3/4	142	40	388	9250
50.105-4'1/8	105	4'1/8	155	45	420	8700





# HOLDING HANDLE

FACOM EXCLUSIVE

## SLOGGING WRENCH SAFETY HANDLE

Many accidents involve slogging wrenches. A survey led in large industrial sites (petrochemicals, heavy chemicals, cement plants, naval repair, metallurgy, PW and mining operations) show a high percentage of accidents.

**FACOM has designed a protection handle for slogging wrenches:**

- Fast and easy fitting for easy and stress free use.
- The FACOM handle combines maximum safety and minimum cost: adapts to all traditional slogging wrenches.

**The handle allows access with maximum safety for a minimum cost: no need to change all slogging wrenches.**

- Moves the operator's hand out of the impact zone.
- Key integral with the safety handle = no risk of wrench falling.
- Hand guard in "soft" material.
- Suited to all models:
  - Facom ring wrenches.
  - Ring wrenches by other manufacturers.
  - Open end wrenches.
- Suited to all opening dimensions from 24 mm to 75 mm.



### OTHER SAFETY ADVICE

- Wear safety goggles, gloves, shoes, hard hat.

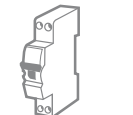
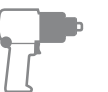




### 50.SH Safety handle for slogging wrenches



- Safety:
    - The user's hand is outside the impact zone.
    - Hand safety guard in "soft" material.
    - Safety instruction pictograms.
  - Simple and fast execution:
    - Less than 10s to position the wrench on the safety handle.
    - Locking mechanism.
    - Adapts to all sizes from 24 mm to 75 mm.
    - Adapts to all for slogging wrench models.
- Supplied with an additional strap.



## IMPACT SOCKETS AND MANUAL IMPACT WRENCHES

➤ FOR IMPACT SOCKETS AND MANUAL IMPACT WRENCHES, SEE P. 339



## Standard series

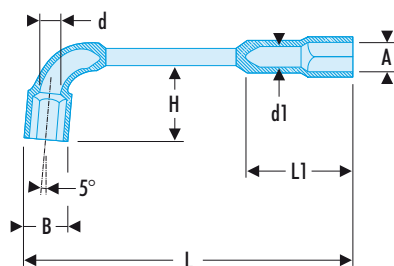
### ANGLED OPEN-SOCKET WRENCHES

#### Specific through-hole and deep recess

- Specific angle and through-hole design: accommodates threaded rods or a bar for extra leverage without affecting wrench strength.
- Deep recess at one end: tightening possible even with protruding studs.
- Ring height allows for maximum strength on "tall" nuts.



#### 75 - Forged metric 6 x 6 point angled open-socket wrenches

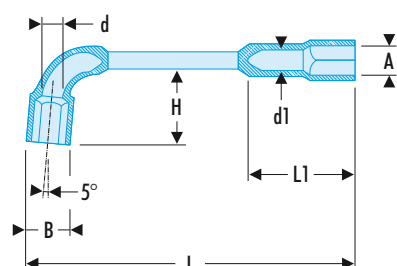


#### NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN ISO 691

- Angled socket wrenches: wrenches designed for powerful unlocking.
- Short head and long head: 6-point.
- Opening of the short head for passing threaded rods.
- Metric sizes: 6 to 38 mm.
- Presentation: satin chrome finish.

➤	A [mm]	B [mm]	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	ΔΔ [g]
75.6	6	10,0	4,5	4,5	15	102	21	30
75.7	7	11,0	4,5	4,5	17	106	22	35
75.8	8	12,5	7,0	6,0	19	114	25	60
75.9	9	13,5	7,0	6,0	20	122	26	65
75.10	10	15,0	8,0	7,0	24	129	28	95
75.11	11	16,5	8,0	7,0	25	136	30	115
75.12	12	18,0	9,0	8,0	28	144	36	155
75.13	13	19,5	9,0	8,0	30	152	38	175
75.14	14	21,0	10,5	9,0	32	160	40	205
75.15	15	22,5	10,5	10,0	34	169	42	230
75.16	16	24,0	13,0	12,0	37	178	46	285
75.17	17	25,5	13,0	12,0	39	187	48	315
75.18	18	26,5	13,0	12,0	40	195	50	365
75.19	19	28,5	15,0	12,0	41	204	51	430
75.20	20	29,5	15,0	13,0	43	212	53	440
75.21	21	30,5	15,0	14,0	46	221	55	490
75.22	22	32,0	15,0	14,0	48	230	57	535
75.23	23	33,5	18,0	15,0	51	240	64	625
75.24	24	34,5	18,0	16,0	54	250	67	660
75.25	25	36,0	20,0	17,0	56	260	69	785
75.26	26	37,0	20,0	17,0	57	270	70	795
75.27	27	38,0	22,0	19,0	58	280	73	950
75.28	28	39,5	22,0	19,0	60	290	75	950
75.29	29	41,0	22,0	19,0	62	300	76	1050
75.30	30	42,0	24,0	21,0	64	310	83	1300
75.31	31	43,5	24,0	22,6	70	320	86	1385
75.32	32	44,5	24,0	22,6	74	330	88	1400
75.33	33	46,0	27,0	24,0	79	340	92	1480
75.34	34	47,0	27,0	24,0	80	350	95	1550
75.35	35	48,5	27,0	24,0	81	360	96	1630
75.36	36	49,5	27,0	24,0	82	370	97	1700
75.38	38	52,0	28,0	25,0	85	390	99	2080

### 75 - Forged inch 6 x 6 point angled open-socket wrenches



- Angled socket wrenches: wrenches designed for powerful unlocking.
- Short head and long head: 6-point.
- Opening of the short head for passing threaded rods.
- Dimensions in inches: from 1/4" to 1".
- Presentation: satin chrome finish.

➤	A ["]	B [mm]	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	ΔΔ [g]
<b>75.1/4</b>	1/4	10,0	4,5	4,5	15	102	21	30
<b>75.5/16</b>	5/16	12,5	7,0	6,0	19	114	25	60
<b>75.3/8</b>	3/8	15,0	8,0	7,0	24	129	28	95
<b>75.7/16</b>	7/16	16,5	8,0	7,0	25	136	30	115
<b>75.1/2</b>	1/2	19,5	9,0	8,0	30	152	38	175
<b>75.9/16</b>	9/16	22,5	10,5	10,0	34	169	42	230
<b>75.5/8</b>	5/8	24,0	13,0	12,0	37	178	46	285
<b>75.11/16</b>	11/16	26,5	13,0	12,0	40	195	50	365
<b>75.3/4</b>	3/4	28,5	15,0	12,0	41	204	51	430
<b>75.13/16</b>	13/16	30,5	15,0	14,0	46	221	55	490
<b>75.7/8</b>	7/8	33,5	18,0	15,0	51	240	64	625
<b>75.15/16</b>	15/16	34,5	18,0	16,0	54	250	67	660
<b>75.1'</b>	1"	37,0	20,0	17,0	57	270	70	795

### 75 - Metric and inch angled socket wrench sets



NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN ISO 691

- Presentation: supplied as box or panel sets.

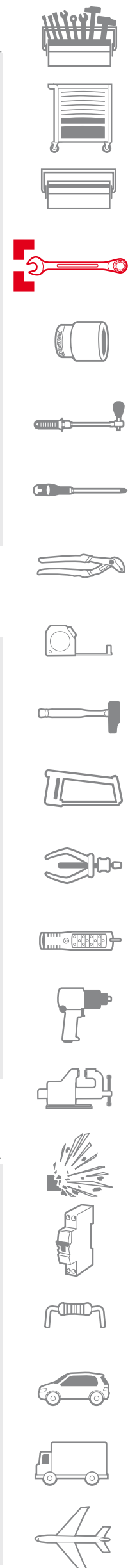
➤	A [mm]	A ["]	Contents	ΔΔ [kg]
<b>75.JN8</b>	8 - 10 - 11 - 13 - 17 - 19 - 22 - 24	-	Box	2,370
<b>75.JN10</b>	8 - 10 - 11 - 12 - 13 - 14 - 16 - 17 - 18 - 19	-	Box	2,160
<b>75.J12</b>	7 - 8 - 10 - 11 - 12 - 13 - 16 - 17 - 18 - 19 - 22 - 24	-	Box	3,390
<b>75.JE16</b>	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24	-	Box	4,700
<b>75.P22M</b>	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24 - 26 - 27 - 28 - 29 - 30 - 32	-	Panel: PK.1	13,340
<b>75.JU10</b>	-	5/16 - 3/8 - 7/16 - 1/2 - 9/16 - 5/8 - 11/16 - 3/4 - 13/16 - 7/8	Box	2,760

### Metric angled socket wrench sets in heat formed tray



- Compatible with the FACOM modular storage system: compatible with CHRONO, JET, CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

➤	A [mm]	Contents	ΔΔ [kg]
<b>MOD.75-1</b>	8 - 10 - 11 - 12 - 13 - 14 - 16 - 17 - 18 - 19	Tray: PL.625	2,500





# Angled socket wrenches

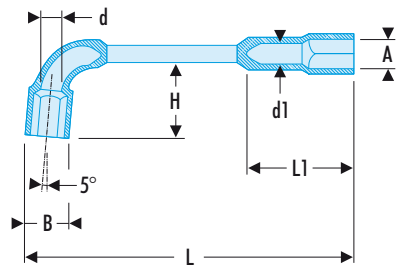
## Metric angled socket wrench sets in foam tray



- Compatible with the FACOM modular storage system: compatible with CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

➤	A [mm]	Contents	ΔΔ [kg]
<b>MODM.75</b>	7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19	Tray: PM.MOD75	2,690

## 76 - Forged metric 12 x 6 point angled open-socket wrenches



### NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN ISO 691

- Angled socket wrenches: wrenches designed for powerful unlocking.
- 12-point short head for 30° increment and 6-point long head.
- Opening of the short head for passing threaded rods.
- Metric sizes: 6 to 38 mm.
- Presentation: satin chrome finish.

➤	A [mm]	B [mm]	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	ΔΔ [g]
<b>76.6</b>	6	10,0	4,5	4,5	16	102	21	30
<b>76.7</b>	7	11,0	4,5	4,5	17	106	22	35
<b>76.8</b>	8	12,5	7,0	6,0	19	114	25	60
<b>76.9</b>	9	13,5	7,0	6,0	20	122	26	65
<b>76.10</b>	10	15,0	8,0	7,0	24	129	28	95
<b>76.11</b>	11	16,5	8,0	7,0	25	136	30	115
<b>76.12</b>	12	18,0	9,0	8,0	28	144	36	155
<b>76.13</b>	13	19,5	9,0	8,0	30	152	38	175
<b>76.14</b>	14	21,0	10,5	9,0	32	160	40	205
<b>76.15</b>	15	22,5	10,5	10,0	34	169	42	230
<b>76.16</b>	16	24,0	13,0	12,0	37	178	46	285
<b>76.17</b>	17	25,5	13,0	12,0	39	187	48	315
<b>76.18</b>	18	26,5	13,0	12,0	40	195	50	365
<b>76.19</b>	19	28,5	15,0	12,0	41	204	51	430
<b>76.20</b>	20	29,5	15,0	13,0	43	212	53	440
<b>76.21</b>	21	30,5	15,0	14,0	46	221	55	490
<b>76.22</b>	22	32,0	15,0	14,0	48	230	57	535
<b>76.23</b>	23	33,5	18,0	15,0	51	240	64	625
<b>76.24</b>	24	34,5	18,0	16,0	54	250	67	660
<b>76.25</b>	25	36,0	20,0	17,0	56	260	69	785
<b>76.26</b>	26	37,0	20,0	17,0	57	270	70	795
<b>76.27</b>	27	38,0	22,0	19,0	58	280	73	950
<b>76.28</b>	28	39,5	22,0	19,0	60	290	75	950
<b>76.29</b>	29	41,0	22,0	19,0	62	300	76	1050
<b>76.30</b>	30	42,0	24,0	21,0	64	310	83	1300
<b>76.31</b>	31	43,5	24,0	22,6	70	320	86	1385
<b>76.32</b>	32	44,5	24,0	22,6	74	330	88	1400
<b>76.33</b>	33	46,0	27,0	24,0	79	340	92	1480
<b>76.34</b>	34	47,0	27,0	24,0	80	350	95	1550
<b>76.35</b>	35	48,5	27,0	24,0	81	360	96	1630
<b>76.36</b>	36	49,5	27,0	24,0	82	370	97	1700
<b>76.38</b>	38	52,0	28,0	25,0	85	390	99	2080

## 76 - Metric angled socket wrench sets



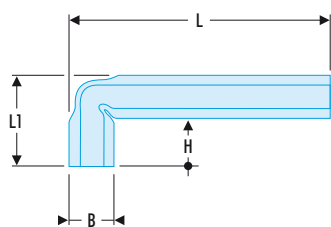
### NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN ISO 691

- Presentation: supplied as box or panel sets.

➤	A [mm]	Contents	ΔΔ [kg]
<b>76.JN8</b>	8 - 10 - 11 - 13 - 17 - 19 - 22 - 24	Box	2,370
<b>76.JN10</b>	8 - 10 - 11 - 12 - 13 - 14 - 16 - 17 - 18 - 19	Box	2,160
<b>76.JE16</b>	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24	Box	4,700
<b>76.P22M</b>	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24 - 26 - 27 - 28 - 29 - 30 - 32	Panel: PK.1	13,340

### Box series

#### 92A - Metric angled box wrenches



NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN ISO 691

- Angled box wrenches: allows to work on long threaded rods.
- Passage hole allowing to use shanks: 160A.
- Shank to use: 160A.1 for the dimensions 4 to 23 mm; 160A.2 for the dimensions 24 to 32 mm.
- Metric sizes: 4 to 32 mm.
- Presentation: satin chrome finish.

➤	A [mm]	B [mm]	H [mm]	L [mm]	L1 [mm]	ΔΔ [g]
92A.4	4	8,5	16,5	95	23,5	20
92A.5	5	9,5	16,0	95	23,5	20
92A.5,5	5,5	10,0	17,5	95	25,0	25
92A.6	6	10,5	17,5	100	26,5	30
92A.7	7	11,5	19,5	100	28,5	30
92A.8	8	13,0	20,5	109	31,5	45
92A.9	9	14,5	22,0	109	33,0	50
92A.10	10	16,0	23,0	118	36,5	65
92A.11	11	17,0	23,0	118	36,5	70
92A.12	12	19,0	27,0	127	43,0	100
92A.13	13	20,5	27,0	127	43,0	110
92A.14	14	21,5	31,0	136	49,0	155
92A.15	15	22,5	31,0	136	49,0	160
92A.16	16	24,0	35,0	145	55,0	190
92A.17	17	26,0	35,0	145	55,0	200
92A.18	18	27,5	39,0	154	61,0	225
92A.19	19	28,5	39,0	154	61,0	230
92A.20	20	29,5	41,5	163	66,5	320
92A.21	21	31,0	42,5	163	67,5	325
92A.22	22	32,0	42,5	172	68,0	350
92A.23	23	33,0	46,5	165	72,5	390
92A.24	24	34,5	45,5	175	74,5	415
92A.27	27	38,5	49,0	184	81,0	520
92A.30	30	42,5	53,5	195	86,5	640
92A.32	32	45,0	57,0	200	93,0	785

#### 92A - Metric angled box wrenches sets



NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN ISO 691

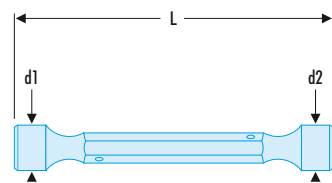
- Presentation: supplied as box or rack.

➤	A [mm]	Contents	ΔΔ [kg]
92A.JE8	8 - 10 - 11 - 13 - 17 - 19 - 22 - 24	Box	1,490
92A.P8M	8 - 10 - 11 - 13 - 17 - 19 - 22 - 24	Rack: CKS.96	1,880
92A.P16M	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24	Rack: CKS.39A	4,050



## Socket series

### 97 - Metric forged double socket wrenches



NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN 896, DIN ISO 691

- Double socket wrenches: full opening of the wrench allows passage of very long threaded rods.
- The forged hexagonal body allows tightening with a wrench.
- Passage hole allowing to use shanks: 160A.
- Shank to use: 160A.1 for the dimensions 6x7 à 21x23 mm; 160A.2 for the dimensions 24x26 to 30x32 mm.
- 6-point heads.
- 2 dimensions per wrench.
- Metric sizes: 6 to 32 mm.
- Presentation: satin chrome finish.

➤	A [mm]	d [mm]	d1 [mm]	d2 [mm]	d2 [mm]	L [mm]	ΔΔ [g]
<b>97.6X7</b>	6x7	4,0	9,5	10,7	10,7	110	35
<b>97.8X9</b>	8x9	4,0	12,5	14,0	14,0	120	50
<b>97.10X11</b>	10x11	6,0	15,0	16,0	16,0	130	65
<b>97.12X13</b>	12x13	6,0	17,5	19,0	19,0	140	110
<b>97.14X15</b>	14x15	6,5	20,0	21,5	21,5	150	140
<b>97.16X17</b>	16x17	8,2	22,7	24,0	24,0	160	190
<b>97.18X19</b>	18x19	8,2	25,2	26,5	26,5	170	240
<b>97.20X22</b>	20x22	10,2	27,7	30,2	30,2	180	260
<b>97.21X23</b>	21x23	10,2	29,0	31,2	31,2	185	295
<b>97.24X26</b>	24x26	12,5	33,0	35,5	35,5	190	415
<b>97.25X28</b>	25x28	12,5	34,5	38,0	38,0	195	440
<b>97.27X29</b>	27x29	12,5	37,0	39,5	39,5	200	505
<b>97.30X32</b>	30x32	12,5	40,5	43,0	43,0	200	630

### Metric double-ended forged socket wrench sets



NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN 896, DIN ISO 691

- Presentation: in box.

➤	A [mm]	Contents	ΔΔ [kg]
<b>97.JE6</b>	8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19	Box	0,770

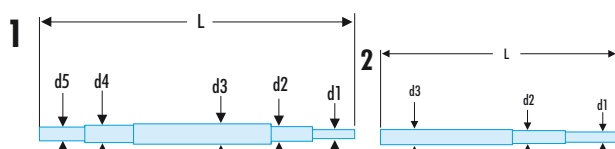
### Metric angled socket wrench set in heat formed tray



- Compatible with the FACOM modular storage system: compatible with CHRONO, JET, CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

➤	A [mm]	Contents	ΔΔ [g]
<b>MOD.97</b>	8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19	Tray: PL.359	900

### 160A - Bars for wrenches 91A, 92A and 97



- For 160A.1: Form 1.
- For 160A.2: Form 2.
- Presentation: satin chrome finish.

➤	d1 [mm]	d2 [mm]	d2 [mm]	d3 [mm]	d4 [mm]	d5 [mm]	L [mm]	ΔΔ [g]
<b>160A.1</b>	3,80	5,25	5,25	9	7,4	6,25	220	80
<b>160A.2</b>	10,75	12,25	12,25	13	-	-	300	280



### Tee handle series

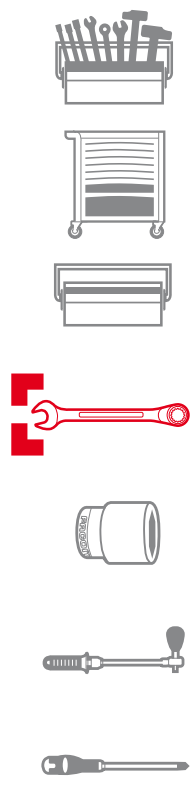
## SOCKET WRENCHES WITH SCREWDRIVER HANDLE

### SOCKET WRENCHES WITH SCREWDRIVER HANDLE

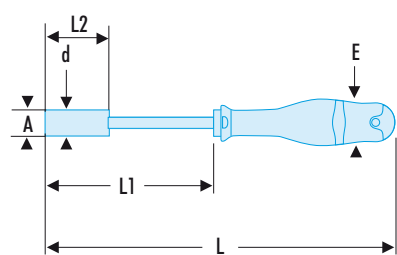
- Forged body for maximum strength.
- Hollow body allows insertion over long threaded rods.

#### PROTWIST® handle

- Natural grip and excellent ergonomics.
- Fast and effective approach.
- Comfortable force tightening.
- High torque application with lesser effort.
- Resistance to loads, impacts, abrasion and chemicals.



### 74A - Forged socket wrenches with metric screwdriver handle

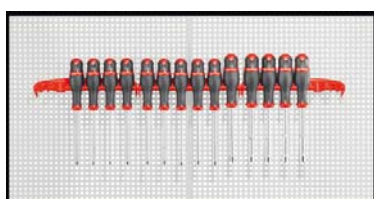


NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN 3125, DIN ISO 691

- Socket wrenches with screwdriver handle ideal for screws with limited access in height or precision mechanics.
- Protwist screwdriver handle for optimum comfort even for powerful unlocking.
- 6-point socket with deep opening for long threads.
- Forged body for maximum strength.
- Metric sizes: 3.2 to 14 mm.
- Presentation: satin chrome finish.

➤	A [mm]	d [mm]	E [mm]	L [mm]	L1 [mm]	L2 [mm] L3 [mm]	ΔΔ [g]
<b>74A.3,2</b>	3,2	6,0	36	245	125	20	110
<b>74A.4</b>	4,0	7,0	36	245	125	20	115
<b>74A.4,5</b>	4,5	7,5	36	245	125	25	120
<b>74A.5</b>	5,0	8,0	36	245	125	25	120
<b>74A.5,5</b>	5,5	8,0	36	245	125	30	120
<b>74A.6</b>	6,0	9,5	36	245	125	35	125
<b>74A.7</b>	7,0	9,5	36	245	125	35	130
<b>74A.8</b>	8,0	12,0	36	245	125	50	155
<b>74A.9</b>	9,0	12,0	36	245	125	50	160
<b>74A.10</b>	10,0	14,5	40	250	125	50	200
<b>74A.11</b>	11,0	16,0	40	250	125	50	210
<b>74A.12</b>	12,0	17,0	40	250	125	50	210
<b>74A.13</b>	13,0	18,5	40	250	125	55	250
<b>74A.14</b>	14,0	20,0	40	250	125	55	255

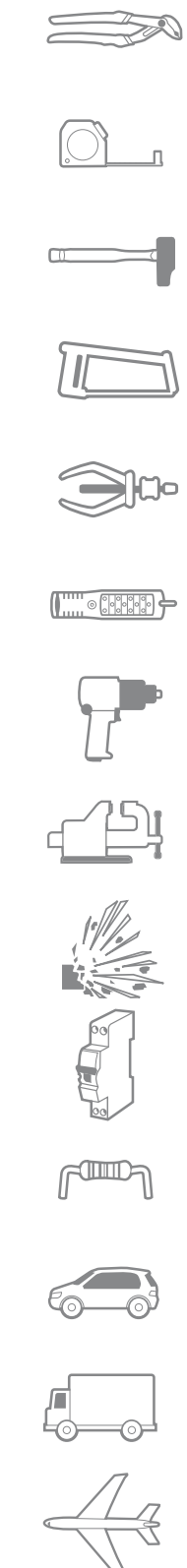
### 74A - Forged socket wrenches set with metric screwdriver handle



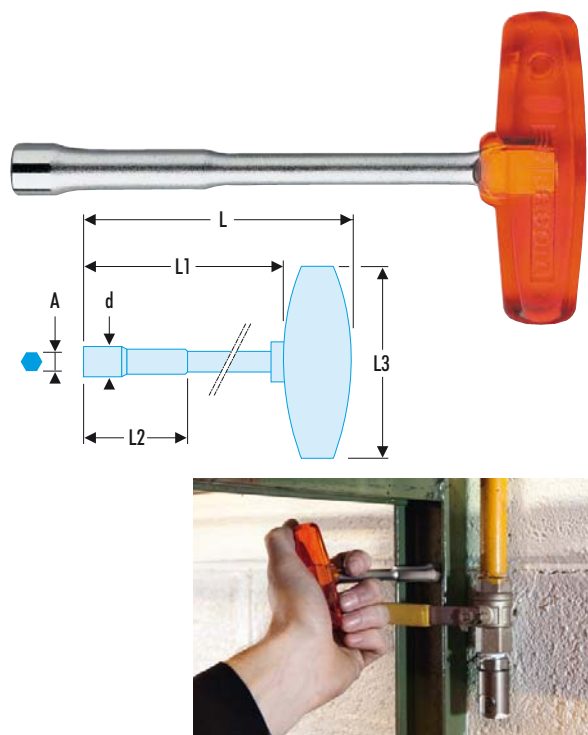
NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN 3125, DIN ISO 691

- Presentation: supplied as plastic rack or in roll.

➤	A [mm]	Contents	ΔΔ [kg]
<b>74A.JL9</b>	3,2 - 4 - 5 - 5,5 - 6 - 7 - 8 - 9 - 10	Roll: N.38A-10D	1,000
<b>74A.JL14</b>	3,2 - 4 - 4,5 - 5 - 5,5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14	Roll: N.38A-14A	1,690
<b>74A.P14E</b>	3,2 - 4 - 4,5 - 5 - 5,5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14	Rack: 3 x CKS.08	1,810



## 74T - Forged socket wrenches with metric tee handle

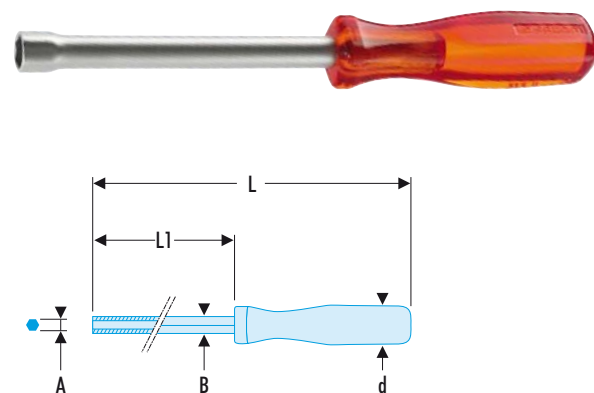


NF ISO 691, ISO 691, DIN ISO 691

- Socket wrenches with Tee handle: allows to apply more power upon unlocking.
- 6-point socket with deep opening for long threads.
- Forged body for maximum strength.
- Metric sizes: 5 to 14 mm.
- Presentation: satin chrome finish.

➤	A [mm]	d [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	ΔΔ [g]
<b>74T.5</b>	5	8	160	130	25	85	80
<b>74T.5,5</b>	5,5	9	160	130	30	85	85
<b>74T.6</b>	6	9	160	130	35	85	100
<b>74T.7</b>	7	11	160	130	35	85	115
<b>74T.8</b>	8	12	160	130	50	85	120
<b>74T.9</b>	9	13	160	130	50	85	120
<b>74T.10</b>	10	14	160	130	50	85	125
<b>74T.11</b>	11	16	160	130	50	85	130
<b>74T.12</b>	12	18	160	130	50	85	135
<b>74T.13</b>	13	19	160	130	55	85	135
<b>74T.14</b>	14	20	160	130	55	85	140

## 94A - Wrenches engaged in tube with metric screwdriver handle



- Wrenches engaged in tube with screwdriver handle: ideal for screws with limited access in height or precision mechanics.
- Tube body to allow unlocking on very long threaded rods.
- Metric sizes: 3.2 to 14 mm.
- Presentation: satin chrome finish.

➤	A [mm]	B [mm]	d [mm]	L [mm]	L1 [mm]	ΔΔ [g]
<b>94A.3,2</b>	3,2	7	25	225	125	70
<b>94A.4</b>	4	7	25	225	125	75
<b>94A.5</b>	5	7	25	225	125	80
<b>94A.5,5</b>	5,5	7	25	225	125	100
<b>94A.6</b>	6	9	28	235	125	110
<b>94A.7</b>	7	9	28	235	125	125
<b>94A.8</b>	8	11	28	235	125	150
<b>94A.9</b>	9	11	28	235	125	160
<b>94A.10</b>	10	13	32	245	125	165
<b>94A.11</b>	11	13	32	245	125	245
<b>94A.12</b>	12	16	39	260	125	260
<b>94A.13</b>	13	16	39	260	125	275
<b>94A.14</b>	14	18	39	260	125	280

## 94A - Sets of wrenches engaged on metric tube

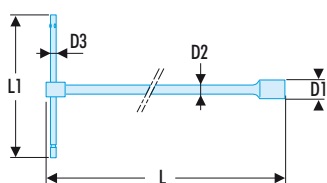


NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN 3125, DIN ISO 691

- Presentation: supplied in roll.

➤	A [mm]	Contents	ΔΔ [kg]
<b>94A.JL9</b>	3,2 - 4 - 5 - 5,5 - 6 - 7 - 8 - 9 - 10	Roll: N-38A-10D	1,150
<b>94A.JE13T</b>	3,2 - 4 - 5 - 5,5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14	Roll: N-38A-14D	2,050

### 98B - Tee socket wrenches with metric slide handle



NF ISO 2236, NF ISO 1711-1, NF ISO 691, ISO 2236, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691

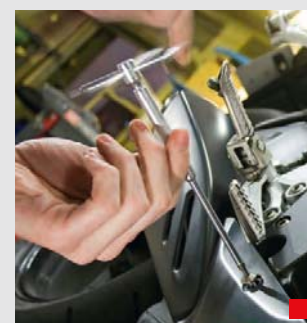
- Socket wrenches with sliding tee handle: ideal for unlocking requiring access or fast execution.
- Sliding control handle with groove:
  - the middle position locking groove allows for rapid approach by rotation between the fingers: "rolling effect".
  - the rod in the extreme position allows a "lever arm" use for powerful unlocking or for clearance in confined locations.
- Metric sizes: 6 - 8 - 10 - 12 - 13 - 14 - 17 mm.
- Presentation: satin chrome finish.

➤	A [mm]	d1 [mm]	d2 [mm]	d3 [mm]	L [mm]	L1 [mm]	ΔΔ [g]
<b>98B.6</b>	6	9,80	7	7	215	165	130
<b>98B.8</b>	8	12,50	7	7	235	165	160
<b>98B.10</b>	10	15,00	8	8	260	175	245
<b>98B.12</b>	12	17,60	9	9	260	180	305
<b>98B.13</b>	13	19,25	9	9	260	180	310
<b>98B.14</b>	14	20,50	10	10	260	200	380
<b>98B.17</b>	17	24,00	11	11	285	220	505



### 6-POINT "T" FAST KEYS

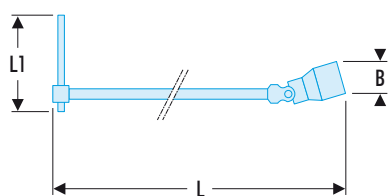
➤ FOR 6-POINT FAST "T" KEYS, SEE P. 433





## Universal joint series

### 99C - Universal joint tee socket wrenches with metric slide handle



NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN 896, DIN ISO 691

- Universal joint tee handle socket wrenches: the universal joint allows a working angle allowing better access.
- The socket is held in position thanks spring locking.
- Metric sizes: 6 to 19 mm.
- Presentation: satin chrome and polished chrome for the socket.

➤	A [mm]	B [mm]	L [mm]	L1 [mm]	ΔΔ [g]
<b>99C.6</b>	6	10,3	399	165	225
<b>99C.7</b>	7	10,3	399	165	225
<b>99C.8</b>	8	12,6	399	165	225
<b>99C.9</b>	9	13,8	399	175	225
<b>99C.10</b>	10	15,0	431	175	325
<b>99C.11</b>	11	16,5	431	175	325
<b>99C.12</b>	12	17,5	434	175	335
<b>99C.13</b>	13	19,0	466	175	415
<b>99C.14</b>	14	20,5	466	175	430
<b>99C.15</b>	15	21,7	498	180	545
<b>99C.16</b>	16	23,0	499	180	560
<b>99C.17</b>	17	24,0	499	180	560
<b>99C.18</b>	18	24,7	501	180	570
<b>99C.19</b>	19	26,0	523	220	860

### 99C - Universal joint tee socket wrenches set with metric slide handle



NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN 896, DIN ISO 691

- Presentation: supplied as box or panel sets.

➤	A [mm]	Contents	ΔΔ [kg]
<b>99C.JE8</b>	8 - 9 - 10 - 11 - 12 - 13 - 14 - 17	Box	2,840
<b>99C.JE12</b>	7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 16 - 17 - 18 - 19	Box	4,550
<b>99C.P12E</b>	7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 16 - 17 - 18 - 19	Panel: PK.1	6,850

### Metric universal joint tee socket wrench set in heat formed tray



- Compatible with the FACOM modular storage system: compatible with CHRONO, JET, CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

FACOM	A [mm]	Contents	ΔΔ [kg]
<b>MOD.99B</b>	7 - 8 - 10 - 11 - 13 - 17 - 19	Tray: PL.304	4,010

### Metric universal joint tee socket wrench set in foam tray

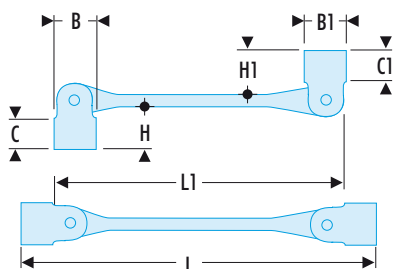


- Compatible with the FACOM modular storage system: compatible with CHRONO, JET, CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

FACOM	A [mm]	Contents	ΔΔ [kg]
<b>MODM.99B</b>	7 - 8 - 10 - 11 - 13 - 17 - 19	Tray: PM.MOD99B	3,500

## Hinged series

### 66A - Metric hinged combination wrenches



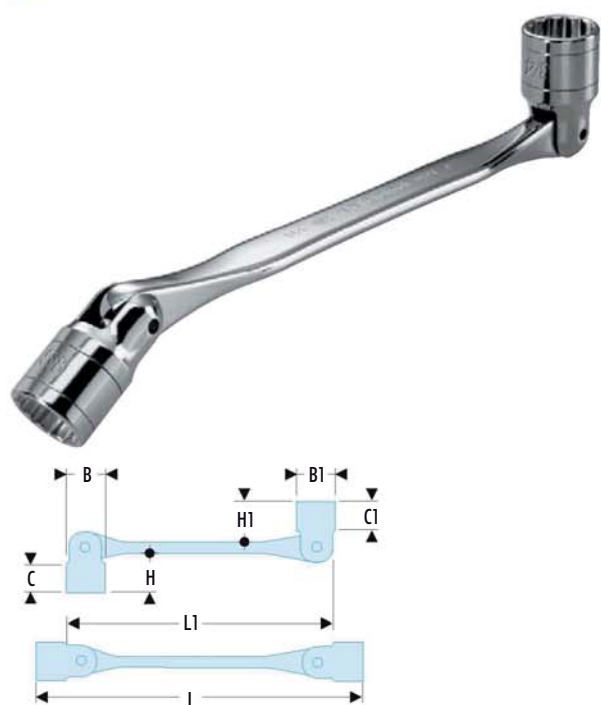
#### NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691

- Hinged socket wrenches: the socket can be turned by 180° for maximum access.
- The socket is held in position thanks spring locking.
- OGV® profile with 12-point ring for powerful tightening while protecting the nut.
- Metric sizes: 6 to 32 mm.
- Presentation: satin chrome finish.

FACOM	A [mm]	B x B1 [mm]	C x C1 [mm]	H x H1 [mm]	L [mm]	L1 [mm]	ΔΔ [g]
<b>66A.6X7</b>	6x7	10,3 x 11,5	15 x 15	23,0 x 23,0	188,5	156	95
<b>66A.8X9</b>	8x9	12,6 x 13,85	15 x 15	23,0 x 23,0	188,5	156	100
<b>66A.10X11</b>	10x11	15,0 x 16,5	18 x 18	26,0 x 26,0	194,5	156	105
<b>66A.10X13</b>	10x13	15,0 x 19,0	21 x 21	31,0 x 31,0	233,5	189,5	190
<b>66A.12X13</b>	12x13	17,5 x 19,0	21 x 21	31,0 x 31,0	233,5	189,5	195
<b>66A.14X15</b>	14x15	20,5 x 21,75	23 x 23	33,0 x 33,0	237,5	231	215
<b>66A.16X17</b>	16x17	23,0 x 24,0	23 x 23	35,0 x 35,0	280,0	231	325
<b>66A.16X18</b>	16x18	23,0 x 24,7	23 x 24	35,0 x 36,0	281,0	231	330
<b>66A.18X19</b>	18x19	24,7 x 26,0	24 x 28	36,0 x 40,0	286,0	231	345
<b>66A.20X22</b>	20x22	27,3 x 30,5	28 x 28	41,5 x 41,5	329,0	270	515
<b>66A.21X23</b>	21x23	28,6 x 31,5	28 x 30	41,5 x 43,5	331,0	270	535
<b>66A.24X27</b>	24x27	33,0 x 36,7	33 x 33	50,5 x 50,5	381,0	312	1020
<b>66A.30X32</b>	30x32	40,5 x 43,0	36 x 36	53,5 x 53,5	387,0	312	1100



## 66A - Inch hinged combination wrenches



NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691

- Hinged socket wrenches: the socket can be turned by 180° for maximum access.
- The socket is held in position thanks spring locking.
- OGV® profile with 12-point ring for powerful tightening while protecting the nut.
- Dimensions in inches: from 3/8" to 3/4".
- Presentation: satin chrome finish.

	A ["]	B x B1 [mm]	C x C1 [mm]	H x H1 [mm]	L [mm]	L1 [mm]	ΔΔ [g]
<b>66A.3/8X7/16</b>	3/8x7/16	15,0 x 16,5	18 x 18	26 x 26	164,5	156	105
<b>66A.1/2X9/16</b>	1/2x9/16	19,0 x 20,5	21 x 23	31 x 33	235,5	189,5	215
<b>66A.5/8X11/16</b>	5/8x11/16	23,0 x 24,7	23 x 24	35 x 36	281,0	231	335
<b>66A.5/8X3/4</b>	5/8x3/4	23,0 x 26,0	23 x 28	35 x 40	285,0	231	340

## 66A - Metric and inch wrench sets



NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691

- Presentation: supplied as box or roll sets.

	A [mm]	A ["]	Contents	ΔΔ [kg]
<b>66A.JE6</b>	8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19	-	Box	1,300
<b>66A.JE9</b>	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22 - 21x23	-	Box	2,450
<b>66A.JE9T</b>	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22 - 21x23	-	Roll: N.38A-9B	2,550
<b>66A.JE6T</b>	8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19	-	Roll: N.38A-6B	1,150
<b>66A.JU3</b>	-	-	3/8x7/16 - 1/2x9/16 - 5/8x3/4 Box	0,670

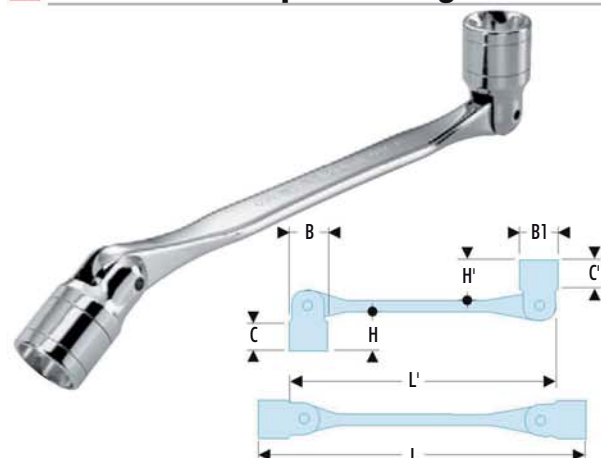
## MOD.66A - Metric hinged ratchet socket wrench sets in heat formed tray



- Compatible with the FACOM modular storage system: compatible with CHRONO, JET, CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

	A [mm]	Contents	ΔΔ [g]
<b>MOD.66A-1</b>	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17	Tray: PL.319A	940
<b>MOD.66A-2</b>	18x19 - 20x22 - 21x23	Tray: PL.320	1600

## 66TX - TORX® profile hinged socket wrenches



- Hinged socket wrenches: the socket can be turned by 180° for maximum access.
- The socket is held in position thanks spring locking.
- Torx dimensions: from E6 to E24.
- Presentation: satin chrome finish.

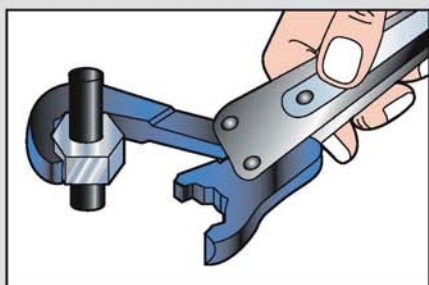
	A [mm]	B x B1 [mm]	C x C1 [mm]	H x H1 [mm]	L [mm]	L1 [mm]	ΔΔ [g]
<b>66TX.6X8</b>	6x8	8,0 x 10,0	5,0 x 7,0	22 x 22	186	156	85
<b>66TX.10X12</b>	10x12	13,0 x 15,0	7,5 x 8,0	27 x 27	224,5	189,5	175
<b>66TX.14X18</b>	14x18	17,0 x 20,5	10,0 x 12,0	32 x 34	274	231	330
<b>66TX.20X24</b>	20x24	23,5 x 28,0	13,0 x 18,0	38 x 42	323	270	530



### Ratchet series

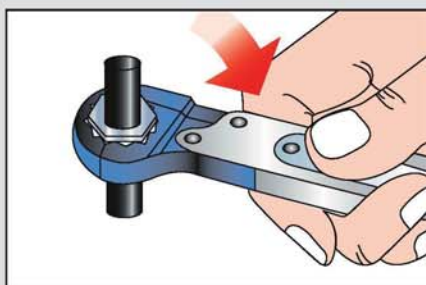
## RATCHET FLARE-NUT WRENCHES

### RATCHET EFFECT AND ACCESSIBILITY!

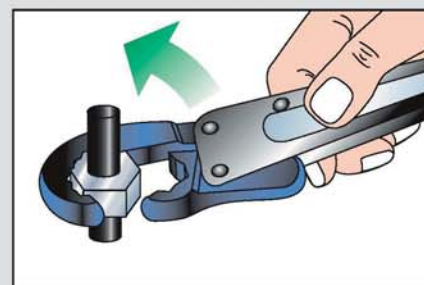


- Positioning is straight forward, even with little clearance around the pipe.

- Fast tools for pipe unions in a variety of applications such as automotive, construction, air conditioning, refrigeration, aerospace and plumbing, etc.

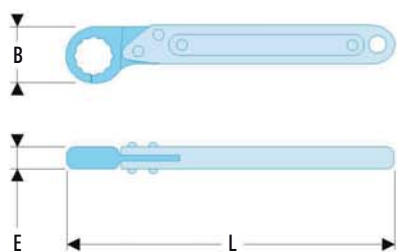


- Torque is applied over all six flats for optimum drive.



- Ratchet action without wrench removal: completes work five times faster than with a conventional tool.

### 70A - Straight flare-nut wrenches with metric web



- Flare nut ratchets: the wrench opens to pass around the pipe and closes down on the nut for optimum grip. The special shape of the wrench allows for a ratchet effect.
- Fast tightening on all piping in automotive, trucking, public works, compressors, refrigeration, aeronautics, sanitation.
- 6-point head: 7 to 10 mm - 12-point head: 11 to 32 mm.
- Hanging hole at end of handle: wrenches stored on panel or hung to avoid loss or fall.
- Metric sizes: 7 to 32 mm.
- Presentation: satin chrome handle / burnished head.

FACOM	A [mm]	B [mm]	E [mm]	L [mm]	ΔΔ [g]
<b>70A.7</b>	7	24,6	7,0	139,5	90
<b>70A.8</b>	8	24,6	7,0	139,5	90
<b>70A.9</b>	9	24,6	7,0	139,5	90
<b>70A.10</b>	10	24,6	7,0	139,5	90
<b>70A.11</b>	11	25,4	7,2	141,0	90
<b>70A.12</b>	12	27,5	7,2	141,0	85
<b>70A.13</b>	13	27,5	7,2	141,0	90
<b>70A.14</b>	14	35,7	10,0	191,0	180
<b>70A.16</b>	16	35,7	10,0	191,0	175
<b>70A.17</b>	17	35,7	10,0	191,0	175
<b>70A.18</b>	18	35,7	10,0	191,0	170
<b>70A.19</b>	19	37,0	10,0	191,0	160
<b>70A.22</b>	22	40,7	13,0	233,0	295
<b>70A.24</b>	24	43,2	13,0	235,0	300
<b>70A.27</b>	27	55,5	14,1	325,0	605
<b>70A.30</b>	30	56,4	15,9	325,0	615
<b>70A.32</b>	32	58,5	15,9	325,0	625



## 70A - Metric ratchet flare-nut wrenches sets

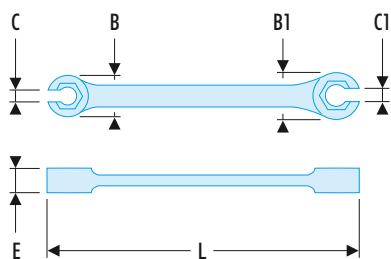


- Presentation: supplied as box or roll sets.

➤	A [mm]	Contents	ΔΔ [kg]
<b>70A.JN6</b>	8 - 10 - 11 - 13 - 17 - 19	Box	0,560
<b>70A.JE7T</b>	7 - 8 - 9 - 10 - 11 - 12 - 13	Roll: N.38A-7B	0,550
<b>70A.JE5T</b>	14 - 16 - 17 - 18 - 19	Roll: N.38A-5A	0,720

## Standard series

### 43 - Straight flare-nut wrenches with metric web



- Flare nut wrenches with web: the head is reinforced by toile allowing for powerful unlocking. Examples: brake hoses, injector nut.
- The toile also holds the wrench on the nut.
- Short handle for better handling.
- Metric sizes: 7 to 19 mm.
- Presentation: satin chrome finish.

➤	A [mm]	B x B1 [mm]	E [mm]	L [mm]	ΔΔ [g]
<b>43.7X9</b>	7X9	15,6 x 18,3	10,0	124	40
<b>43.8X10</b>	8X10	16,6 x 19,1	10,0	124	40
<b>43.10X11</b>	10X11	19,1 x 20,0	10,0	124	45
<b>43.11X13</b>	11X13	20,0 x 22,9	11,5	143	65
<b>43.12X14</b>	12X14	22,3 x 24,6	11,5	143	70
<b>43.17X19</b>	17X19	28,3 x 31,4	13,0	162	100

### Straight flare-nut wrenches set with metric web



- Presentation: supplied in roll.

➤	A [mm]	Contents	ΔΔ [kg]
<b>43.JE5T</b>	7x9 - 8x10 - 11x13 - 12x14 - 17x19	Contents	0,330

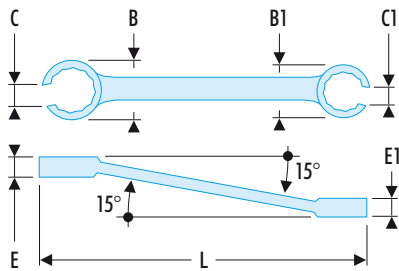
### Straight flare nut set with metric web in heat formed tray



- Compatible with the FACOM modular storage system: compatible with CHRONO, JET, CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

➤	A [mm]	Contents	ΔΔ [g]
<b>MOD.43</b>	7x9 - 8x10 - 11x13 - 12x14 - 17x19	Tray: PL.365	960

### 42 - Metric 15° hinged flare nut wrenches

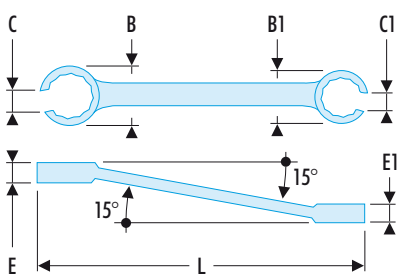


#### DIN 3118, ISO 691

- 15° hinged flare nut wrenches: facilitates access to the nuts.
- 6-point head: from 8x10 to 12x14 mm - 12-point head: from 14x17 to 36x41 mm.
- Metric sizes: 8 to 41 mm.
- Presentation: satin chrome finish.

➤	A [mm]	B x B1 [mm]	E [mm]	E1 [mm]	L [mm]	ΔΔ [g]
<b>42.8X10</b>	8X10	17,9 x 19,4	6,5	7,5	140	55
<b>42.10X11</b>	10X11	19,4 x 21,4	8,0	8,5	154	65
<b>42.10X12</b>	10X12	19,4 x 21,4	8,0	8,5	154	65
<b>42.11X13</b>	11X13	21,4 x 25,4	8,5	10,5	175	110
<b>42.12X14</b>	12X14	21,4 x 25,4	11,0	12,5	175	120
<b>42.14X17</b>	14X17	27,4 x 31,4	11,0	12,5	197	135
<b>42.17X19</b>	17X19	31,4 x 33,4	12,0	13,0	215	175
<b>42.19X22</b>	19X22	33,4 x 38,4	13,0	14,0	230	210
<b>42.22X24</b>	22X24	38,4 x 41,9	15,0	16,0	245	270
<b>42.24X27</b>	24X27	42,4 x 46,4	16,0	17,0	260	290
<b>42.30X32</b>	30X32	50,4 x 52,4	19,5	21,0	300	480
<b>42.36X41</b>	36X41	61,0 x 68,0	25,0	27,0	320	1100

### 42 - Inch 15° hinged flare nut wrenches



#### ASME B107.100

- 15° hinged flare nut wrenches: facilitates access to the nuts.
- 6-point head: 5/16x3/8 and 7/16x1/2 - 12-point head: from 9/16x5/8 to 1"x1"1/8.
- Dimensions in inches: from 5/16" to 1"1/8.
- Presentation: satin chrome finish.

➤	A ["]	B x B1 [mm]	E [mm]	E1 [mm]	L [mm]	ΔΔ [g]
<b>42.5/16X3/8</b>	5/16x3/8	17,9 x 19,4	6,5	7,5	140	55
<b>42.7/16X1/2</b>	7/16x1/2	21,4 x 25,4	8,5	10,5	175	110
<b>42.9/16X5/8</b>	9/16x5/8	27,4 x 31,4	11,0	12,5	197	135
<b>42.11/16X3/4</b>	11/16x3/4	31,4 x 33,4	12,0	13,0	215	175
<b>42.3/4X7/8</b>	3/4x7/8	33,4 x 38,4	13,0	14,0	230	210
<b>42.1'X1'1/8</b>	1'x1'1/8	50,4 x 52,4	19,5	21,0	300	290

### Set of 5 metric flare-nut wrench angled at 15°



#### DIN 3118, ASME B107.100

- Presentation: supplied in roll.

➤	A [mm]	Contents	ΔΔ [kg]
<b>42.JE5T</b>	8x10 - 11x13 - 12x14 - 17x19 - 22x24	Roll: N.38A-5A	0,770



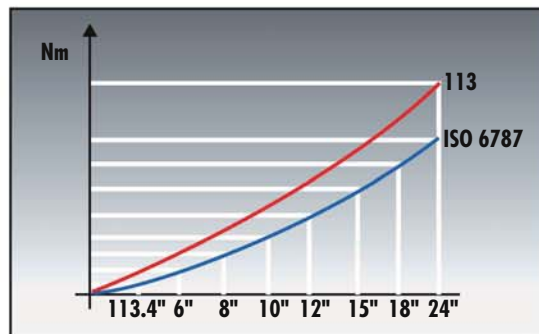


# ADJUSTABLE WRENCH

## HIGH PERFORMANCE AND MANOEUVRABILITY!

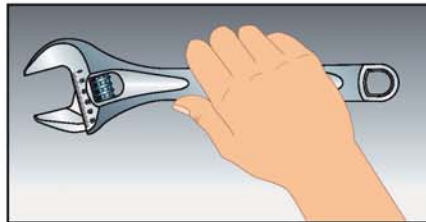
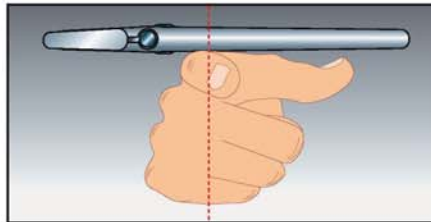
### Powerful

- Performance exceeds standard specifications.
- ISO 6787, DIN 3117 NF E 74-324.
- ASME B 107.8m-1996 (US. nat. std).



### Ergonomic

- Optimised contact surfaces for maximum user comfort.
- Contoured handle for improved handling.
- Ergonomic worm screw:
  - Optimised finger contact area.
  - Improved worm screw access.



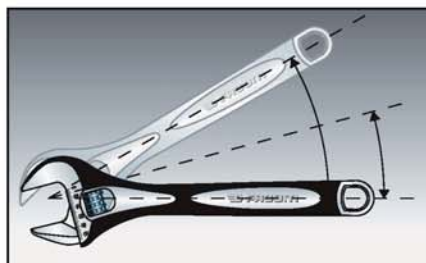
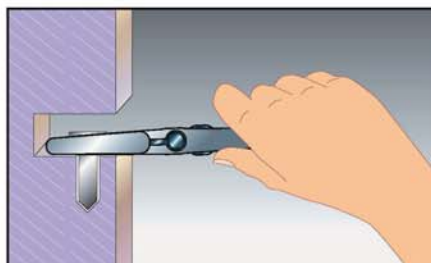
### Versatile

- Millimetre graduations:
  - Reading measurements,
  - Wrench presetting.
- Non-protruding moving jaw at maximum capacity.

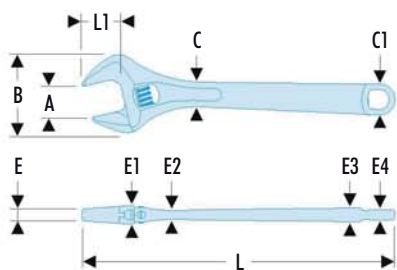


### For greater accessibility

- Head angled at 15° for easier repositioning.
- Tapered jaw tips for optimum access.



## 113A.C - Chromed adjustable wrenches

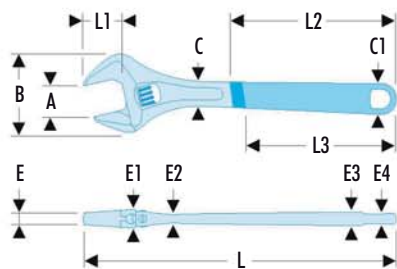


NF ISO 6787, ISO 6787, DIN 3117, ASME B107.100

- Good access to the button = easy setting.
- Non-protruding moving jaw at maximum capacity.
- Pre-adjustment of jaw opening thanks to millimetric gradation.
- Right-hand button rotation.
- Range from 4" to 24".
- Presentation: chromed body and polished head faces.

	A [mm]	B [mm]	C x C1 [mm]	E [mm]	E1 [mm]	E2 [mm]	E3 [mm]	E4 [mm]	L [mm]	L1 [mm]	ΔΔ [g]
<b>113A.4C</b>	13	34,0	11,0 x 14,0	4,5	9,5	5,0	6,5	5,0	114	13	65
<b>113A.6C</b>	20	45,0	14,8 x 18,5	5,0	11,8	6,0	8,3	5,8	155	19	125
<b>113A.8C</b>	27	61,5	18,5 x 24,0	6,5	13,5	9,0	11,0	8,5	206	24	275
<b>113A.10C</b>	30	69,5	21,5 x 28,5	9,0	15,5	9,5	12,7	10,0	255	29	480
<b>113A.12C</b>	34	80,0	25,0 x 31,0	10,0	18,0	10,2	13,0	10,0	306	34	700
<b>113A.15C</b>	44	97,0	28,0 x 35,0	13,5	20,0	12,0	14,8	11,5	380	44	1145
<b>113A.18C</b>	53	115,0	31,0 x 38,5	16,0	22,5	14,3	17,8	13,5	456	53	1790
<b>113C.24C</b>	62	132,0	42,0 x 38,0	17,0	31,0	17,0	15,0	15,0	612	61	3495

## 113A.CG - Chromed sheath adjustable wrenches

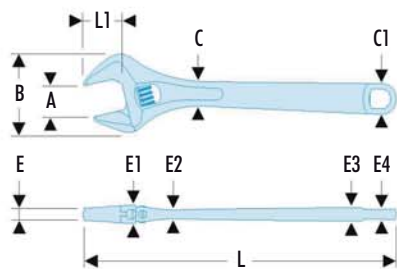


NF ISO 6787, ISO 6787, DIN 3117, ASME B107.100

- Good access to the button = easy setting.
- Non-protruding moving jaw at maximum capacity.
- Pre-adjustment of jaw opening thanks to millimetric gradation.
- Right-hand button rotation.
- Range from 4" to 12".
- Presentation: sheathed chromed body and polished head faces.

	A [mm]	B [mm]	C x C1 [mm]	E [mm]	E1 [mm]	E2 [mm]	E3 [mm]	E4 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	ΔΔ [g]
<b>113A.4CG</b>	13	34,0	14,8 x 24,0	4,5	9,5	5,0	9,5	6,0	116	13	65,5	65,0	75
<b>113A.6CG</b>	20	45,0	14,8 x 24,0	5,0	11,8	6,0	12,0	8,0	159	19	90,5	80,0	140
<b>113A.8CG</b>	27	61,5	18,5 x 31,0	6,5	13,5	9,0	14,5	10,0	209	24	123,0	109,0	310
<b>113A.10CG</b>	30	69,5	21,5 x 36,5	9,0	15,5	9,5	17,5	12,5	259	29	157,5	140,0	510
<b>113A.12CG</b>	34	80,0	25,0 x 39,5	10,1	18,0	10,2	19,5	14,0	310	34	189,5	169,5	740

## 113A.T - Phosphated adjustable wrenches



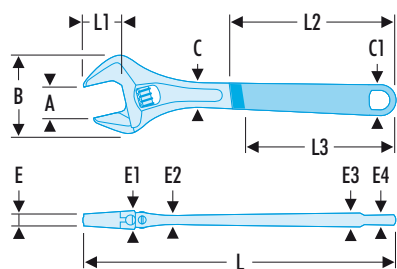
NF ISO 6787, ISO 6787, DIN 3117, ASME B107.100

- Good access to the button = easy setting.
- Non-protruding moving jaw at maximum capacity.
- Pre-adjustment of jaw opening thanks to millimetric gradation.
- Left-hand button rotation.
- Range from 4" to 24".
- Presentation: phosphated body and "fine ground" head faces.

	A [mm]	B [mm]	C x C1 [mm]	E [mm]	E1 [mm]	E2 [mm]	E3 [mm]	E4 [mm]	L [mm]	L1 [mm]	ΔΔ [g]
<b>113A.4T</b>	13	34	11,0 x 14,0	4,5	9,5	5,0	6,5	5,0	114	13	65
<b>113A.6T</b>	20	45	14,8 x 18,5	5,0	11,8	6,0	8,3	5,8	155	19	125
<b>113A.8T</b>	27	61,5	18,5 x 24	6,5	13,5	9,0	11,0	8,5	206	24	275
<b>113A.10T</b>	30	69,5	21,5 x 28,5	9,0	15,5	9,5	12,7	10,0	255	29	480
<b>113A.12T</b>	34	80	25,0 x 31,0	10,0	18,0	10,2	13,0	10,0	306	34	700
<b>113A.15T</b>	44	97	28,0 x 35,0	13,5	20,0	12,0	14,8	11,5	380	44	1145
<b>113A.18T</b>	53	115	31,0 x 38,5	16,0	22,5	14,3	17,8	13,5	456	53	1790
<b>113.24T</b>	62	132	42,0 x 38,0	17,0	31,0	17,0	15,0	15,0	612	61	3270



## 113A.TG - Sheathed phosphated adjustable wrenches



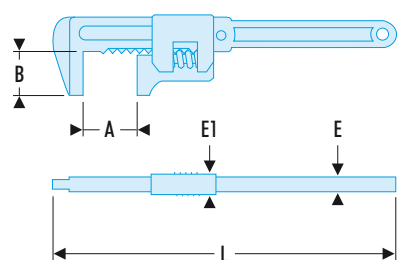
NF ISO 6787, ISO 6787, DIN 3117, ASME B107.100

- Good access to the button = easy setting.
- Non-protruding moving jaw at maximum capacity.
- Pre-adjustment of jaw opening thanks to millimetric gradation.
- Left-hand button rotation.
- Range from 4" to 12".
- Presentation: phosphated body and "fine ground" head faces.

FACOM	A [mm]	B [mm]	C x C1 [mm]	E [mm]	E1 [mm]	E2 [mm]	E3 [mm]	E4 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	ΔΔ [g]
<b>113A.4TG</b>	13	34,0	11,0 x 18,5	4,5	9,5	5,0	9,5	6,0	116	13	65,5	65,0	75
<b>113A.6TG</b>	20	45,0	14,8 x 24,0	5,0	11,8	6,0	12,0	8,0	159	19	90,5	80,0	140
<b>113A.8TG</b>	27	61,5	18,5 x 31,0	6,5	13,5	9,0	14,5	10,0	209	24	123,0	109,0	310
<b>113A.10TG</b>	30	69,5	21,5 x 36,5	9,0	15,5	9,5	17,5	12,5	259	29	157,5	140,0	510
<b>113A.12TG</b>	34	80,0	25,0 x 39,5	10,1	18,0	10,2	19,5	14,0	310	34	189,5	169,5	740

## Monkey series

### 105 - Monkey wrenches



- Large capacity robust wrenches for heavy duty work. Examples: building, farming, worksites.
- Set of 3 wrenches: maximum capacity 60 - 70 - 80 mm.
- Presentation: satin chrome finish.

FACOM	A [mm]	B [mm]	E [mm]	E1 [mm]	L [mm]	ΔΔ [g]
<b>105.230</b>	60	34	10	17	230	480
<b>105.280</b>	70	45	11	20	280	810
<b>105.375</b>	80	45	13	22	375	1440



Series for lateral notch nuts

HOOK AND PIN WRENCHES

**MORE VERSATILITY WITH FACOM HOOK AND PIN WRENCHES**

**Adjustable models = multiple opening (Hinged or with rack)**

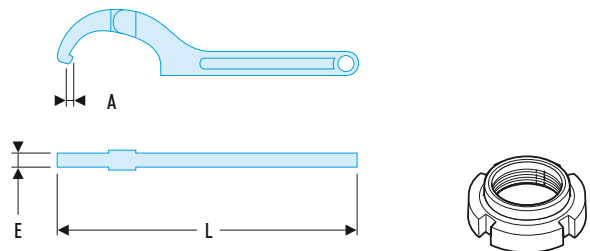
- One hinged wrench instead of several fixed wrenches.

**More choice**

- Hook and pin wrenches: side-hole nuts / transmission of tightening or removal sleeves, mandrels.
- Double hook and pin wrenches: ball joint bearing nuts,...

	Pin type	Series	
		Single pin	Double pin
For nuts with side holes	For nuts with side holes	<b>125A</b> 	<b>115A, 119</b> 
	For nuts with side holes	<b>126A</b> 	<b>116</b> 
For nuts with top holes	For nuts with top holes		<b>118.A</b> 
	For nuts with top holes		<b>117.B</b> 

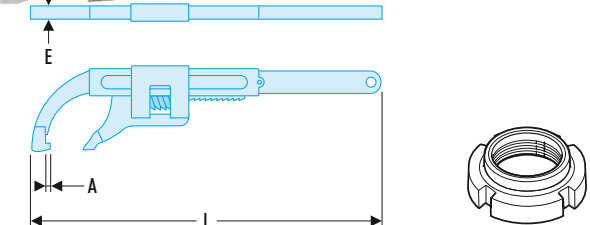
125A - Hinged models



- The hinge is fitted with a spring washer guaranteeing smooth and reliable operation.
- These 5 dimensions replace more wrenches than classical fixed models.
- Capacity: 15 to 180 mm.
- Presentation: satin chrome finish.

➤	A [mm]	d [mm]	E [mm]	L [mm]	ΔΔ [g]
<b>125A.35</b>	3,0	15 - 35	5	168	80
<b>125A.50</b>	4,0	35 - 50	6	202	170
<b>125A.80</b>	5,0	50 - 80	8	280	380
<b>125A.120</b>	5,5	80 - 120	9	345	700
<b>125A.180</b>	7,5	120 - 180	11	492	1480

115A - Monkey wrench

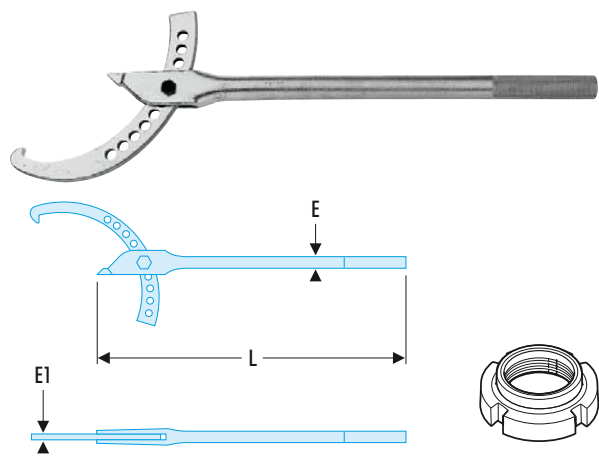


- Capacity: 10 to 200 mm.
- Presentation: satin chrome finish.

➤	A [mm]	d [mm]	E [mm]	L [mm]	ΔΔ [g]
<b>115A.50</b>	4	10 - 50	4	213	340
<b>115A.100</b>	5	20 - 100	5	347	800
<b>115A.200</b>	7	30 - 200	7	548	1860



## 119 - Heavy-duty hook and pin wrenches

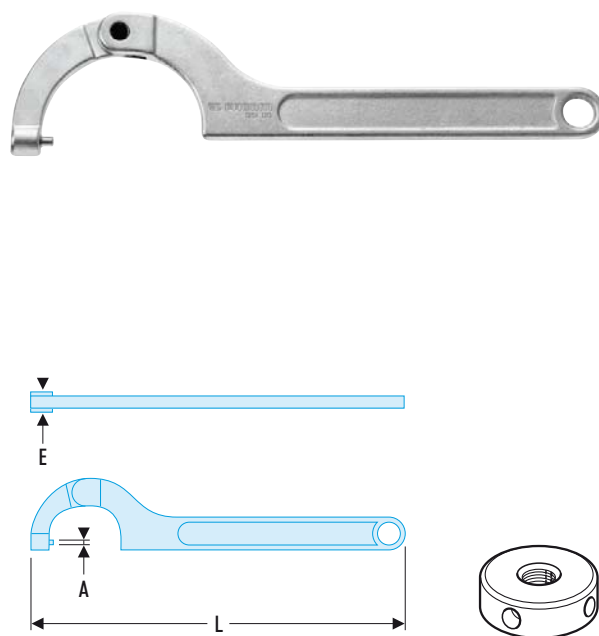


- Replaces many classical model wrenches thanks to its 11 adjustment points in opening.
- Hook: forged and treated for high hardness.
- Capacity: 120 to 324 mm.
- Presentation: satin chrome finish.

➤	d [mm]	E [mm]	E1 [mm]	L [mm]	ΔΔ [g]
<b>119.3/8</b>	120 - 224	26	9,5	610	3160
<b>119.3/4</b>	220 - 324	32	20	635	5900

## Series for lateral pin nuts

### 126A - Hinged hook and pin wrenches



- For nuts with lateral holes.
- Removable hooks.
- Same design and benefits as the "125A" wrench, but fitted with removable hooks to turn holed nuts.
- The 5 dimensions replace more wrenches than all classical fixed models.
- Hooks treated for high hardness.
- Capacity: 15 to 180 mm.
- Presentation: satin chrome finish.

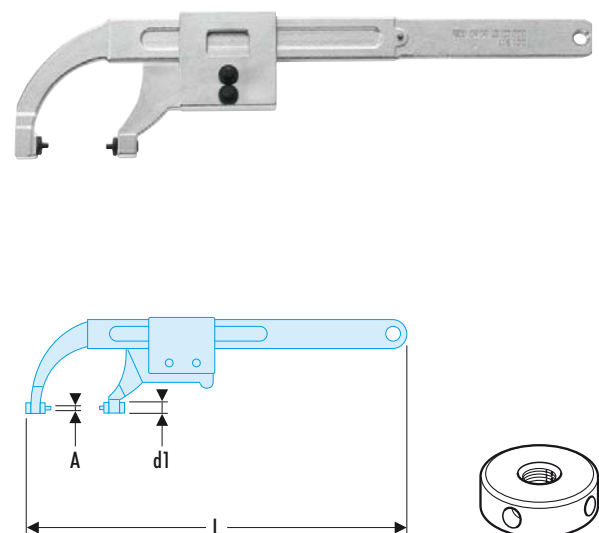
➤	A [mm]	d [mm]	E [mm]	L [mm]	ΔΔ [g]
<b>126A.35</b>	3	15 - 35	10	168	80
<b>126A.50</b>	4	35 - 50	12	202	170
<b>126A.80</b>	5	50 - 80	14	280	360
<b>126A.120</b>	6	80 - 120	18	345	700
<b>126A.180</b>	8	120 - 180	20	492	1440

### 126.E - Sets of 2 spare hooks for 136A wrenches



➤	d [mm]	Wrench	ΔΔ [g]
<b>126.E35</b>	3	126A.35	5
<b>126.E50</b>	4	126A.50	5
<b>126.E80</b>	5	126A.80	10
<b>126.E120</b>	6	126A.120	20
<b>126.E180</b>	8	126A.180	35

### 116 - Sliding-jaw hook and pin wrenches



- For nuts with lateral holes.
- Removable hooks.
- Sliding the mobile jaw is ensured by simple sliding. Locking on nut is ensured by self-tightening.
- The wrenches are fitted with 2 sets of easily interchangeable hooks.
- Capacity: 0 to 200 mm.
- Presentation: satin chrome handle body; phosphated hooks.

➤	A [mm]	d [mm]	d1 [mm]	L [mm]	ΔΔ [g]
<b>116.50</b>	2,5 - 4	0 - 50	8	213	380
<b>116.100</b>	4 - 6	0 - 100	12	345	820
<b>116.200</b>	6 - 8	35 - 200	16	546	1960

## 116E - Sets of 2 spare hooks for 116 wrenches



➤	d [mm]	Wrench	ΔΔ [g]
<b>116.50E1</b>	2,5	116.50	5
<b>116.50E2</b>	4	116.50	5
<b>116.100E1</b>	4	116.100	15
<b>116.100E2</b>	6	116.100	15
<b>116.200E1</b>	6	116.200	35
<b>116.200E2</b>	8	116.200	30

## Series for nuts with top recesses

### 117.B Wrench for nuts with holes bored on the face



- For nuts with holes bored on the face.
- The wrench is adjusted as a compass, by turning the centre screw.
- Double round removable hooks.
- Each wrench is supplied with 4 sets of 2 hooks.
- Capacity: 20 to 100 mm.
- Length: 245 mm.
- Presentation: satin chrome finish.
- Weight: 0.530 kg.

### 117.E - Sets of 2 spare hooks for 117.B wrench



- Double-ended round pins for nuts with face holes.

➤	d [mm]	d1 [mm]	ΔΔ [g]
<b>117.E1</b>	2,5	4	15
<b>117.E2</b>	6	8	25
<b>117.E3</b>	3	5	20
<b>117.E4</b>	7	9	30

### 118A Wrench for nuts with slot on the face



- For nuts with slot on the face.
- The wrench is adjusted as a compass, by turning the centre screw.
- Double square removable hooks.
- Each wrench is supplied with 4 sets of 2 hooks.
- Capacity: 20 to 100 mm.
- Length: 245 mm.
- Presentation: satin chrome finish.
- Weight: 0.530 kg.

### 118.EC - Sets of 2 spare hooks for 118A wrenches



- Double-ended square pins for slotted nuts on face.

➤	A [mm]	ΔΔ [g]
<b>118.EC4</b>	4	10
<b>118.EC5</b>	5	15
<b>118.EC6</b>	6	15
<b>118.EC8</b>	8	20

