# HYDRAULIC ACCUMULATORS TYPE ELM

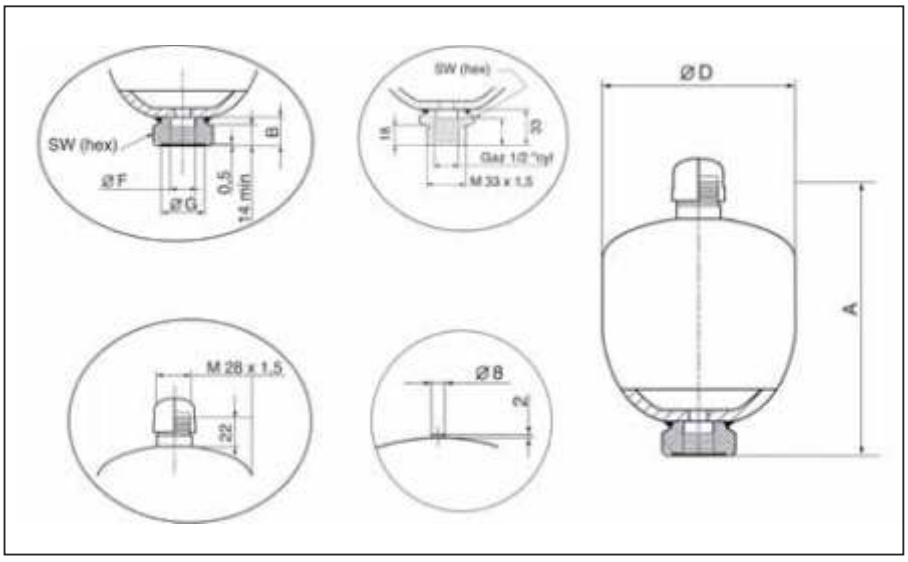
Rev. 02/2018

| Type | Effective Gas Vol. Litres | Work pressure bar | Execution form | Max Precharce pressure bar | bar ratio P2/P0 | Max Pressure amplitude P2/P1 | Weight in kg | Dimensions in mm | | | | | Oil Connection | | | Lock nut type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | A max | B | SW | D | G | F | H | Clamp | |
| ELM 0.075-250/00/AF* | 0.075 | 250 | AF | 130 | 8 | 210 | 0.7 | 112 | 20 | 32 | 64 | 29 | G½ | - | - | - |
| ELM 0.16-250/00/AF* | 0.16 | 250 | AF | 130 | 6 | 210 | 1 | 120 | 20 | 32 | 75 | 29 | G½ | - | - | - |
| ELM 0.32-210/85/AF* | 0.32 | 210 | AF | 130 | 8 | 140 | 1.4 | 135 | 20 | 32 | 92 | 29 | G½ | - | E95 | - |
| ELM 0.50-210/85/AF* | 0.50 | 210 | AF | 130 | 8 | 175 | 2 | 153 | 22 | 41 | 107 | 34 | G½ | - | E106 | - |
| ELM 0.50-210/85/CF* | 0.50 | 210 | CF | 130 | 8 | 175 | 2 | 164 | 33 | 41 | 107 | - | G½ | M33x1.5 | E106 | M33 |
| ELM 0.75-210/85/AF* | 0.75 | 210 | AF | 130 | 8 | 175 | 2.6 | 167 | 22 | 41 | 122 | 34 | G½ | - | E114 | - |
| ELM 0.75-210/85/CF* | 0.75 | 210 | CF | 130 | 8 | 175 | 2.6 | 178 | 33 | 41 | 122 | - | G½ | M33x1.5 | E114 | M33 |
| ELM 0.75-350/85/AF* | 0.75 | 350 | AF | 130 | 8 | 150 | 4 | 174 | 22 | 41 | 128 | 34 | G½ | - | E136 | - |
| ELM 0.75-350/85/CF* | 0.75 | 350 | CF | 130 | 8 | 150 | 4 | 185 | 33 | 41 | 128 | - | G½ | M33x1.5 | E136 | M33 |
| ELM 1-210/85AF* | 1 | 210 | AF | 130 | 8 | 170 | 3.5 | 182 | 22 | 41 | 136 | 34 | G½ | - | E136 | - |
| ELM 1-210/85/CF* | 1 | 210 | CF | 130 | 8 | 170 | 3.5 | 192 | 33 | 41 | 136 | - | G½ | M33x1.5 | E136 | M33 |
| ELM 1.4-140/90/AF | 1.40 | 140 | AF | 130 | 8 | 120 | 4.1 | 192 | 22 | 41 | 147 | 34 | G½ | - | E155 | - |
| ELM 1.4-140/90/CF | 1.40 | 140 | CF | 130 | 8 | 120 | 4.1 | 203 | 33 | 41 | 147 | - | G½ | M33x1.5 | E155 | M33 |
| ELM 1.4-210/90/AF | 1.40 | 210 | AF | 130 | 8 | 120 | 4.2 | 192 | 22 | 41 | 148 | 34 | G½ | - | E155 | - |
| ELM 1.4-210/90/CF | 1.40 | 210 | CF | 130 | 8 | 120 | 4.2 | 202 | 33 | 41 | 148 | - | G½ | M33x1.5 | E155 | M33 |
| ELM 1.4-250/90/AF | 1.40 | 250 | AF | 130 | 8 | 140 | 5.5 | 196 | 22 | 41 | 152 | 34 | G½ | - | E155 | - |
| ELM 1.4-250/90/CF | 1.40 | 250 | CF | 130 | 8 | 140 | 5.5 | 207 | 33 | 41 | 152 | - | G½ | M33x1.5 | E155 | M33 |
| ELM 1.4-350/90/AF | 1.40 | 350 | AF | 130 | 8 | 150 | 7 | 199 | 22 | 41 | 156 | 34 | G½ | - | E155 | - |
| ELM 1.4-350/90/CF | 1.40 | 350 | CF | 130 | 8 | 150 | 7 | 221 | 44 | 44 | 156 | - | G½ | M33x1.5 | E155 | M33 |
| ELM 2-100/90/AF | 2 | 100 | AF | 90 | 8 | 80 | 3.5 | 241 | 22 | 41 | 145 | 34 | G½ | - | E155 | - |
| ELM 2-250/90/AF | 2 | 250 | AF | 130 | 8 | 140 | 9.5 | 252 | 22 | 41 | 156 | 33 | G¾ | - | E155 | - |
| ELM 2-350/90/AF | 2 | 350 | AF | 130 | 8 | 200 | 9.5 | 252 | 22 | 41 | 156 | 33 | G¾ | - | E180 | - |
| ELM 2-350/90/CF | 2 | 350 | CF | 130 | 8 | 200 | 9.5 | 270 | 40 | 50 | 156 | - | G¾ | M45x1.5 | E180 | M45 |
| ELM 2.8-250/90/AF | 2.80 | 250 | AF | 130 | 6 | 140 | 10 | 269 | 20 | 41 | 168 | 33 | G¾ | - | E180 | - |
| ELM 2.8-350/90/AF | 2.80 | 350 | AF | 130 | 6 | 200 | 14.3 | 265 | 23 | 55 | 180 | 34 | G¾ | - | E180 | - |
| ELM 2.8-350/90/CF | 2.80 | 350 | CF | 130 | 6 | 200 | 14.3 | 286 | 21 | 55 | 180 | - | G¾ | M45x1.5 | E180 | M45 |
| ELM 3.5-250/90/AF | 3.50 | 250 | AF | 130 | 4 | 140 | 11 | 314 | 20 | 41 | 168 | 33 | G¾ | - | E180 | - |
| ELM 3.5-350/90/AF | 3.50 | 350 | AF | 130 | 4 | 200 | 16 | 305 | 23 | 55 | 180 | 34 | G¾ | - | E180 | - |
| ELM 3.5-350/90/CF | 3.50 | 350 | CF | 130 | 4 | 200 | 16 | 326 | 26 | 55 | 180 | - | G¾ | M45x1.5 | E180 | M45 |

* According to PED, article 3.3

(1) Stainless steel version

Dimensions are in mm and subject to manifacture tolerance.

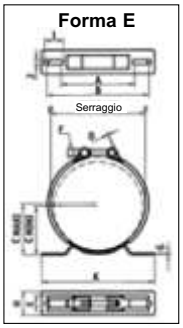


# HYDRAULIC ACCUMULATORS TYPE ELM

## Clamps

| Type | Form | Recommended Min/max Diameter | Dimensions in mm | | | | | | | | | | | | Tightening torque N/m |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | A | B | C | | D | E | F | G | H | I | J | K | |
| | | | | | Min | Max | | | | | | | | | |
| E95 | E | 87/97 | 88 | 140 | 61.5 | 66.5 | 1.5 | 28 | M8x75 | 3 | 40 | 35 | 9 | 210 | 7 |
| E106 | E | 99/109 | 88 | 140 | 68 | 73 | 1.5 | 28 | M8x75 | 3 | 40 | 35 | 9 | 210 | 7 |
| E114 | E | 112/124 | 88 | 140 | 73 | 78 | 1.5 | 28 | M8x75 | 3 | 40 | 35 | 9 | 210 | 7 |
| E136 | E | 128/138 | 88 | 140 | 80 | 85 | 1.5 | 28 | M8x75 | 3 | 40 | 35 | 9 | 210 | 7 |
| E155 | E | 146/157 | 137 | 189 | 81 | 86.5 | 1.7 | 30 | M10x80 | 3 | 45 | 35 | 9 | 210 | 10.5 |
| E168 | E | 166/176 | 137 | 189 | 92 | 96 | 1.7 | 30 | M10x80 | 3 | 45 | 35 | 9 | 210 | 10.5 |
| E180 | E | 178/184 | 137 | 189 | 97 | 100 | 2 | 35 | M10x80 | 4 | 65 | 35 | 9 | 210 | |

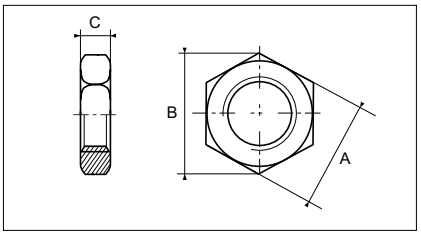
Above dimensions are in mm and are subject to manufacturing tolerances




## Lock-nut

| Type | Pitch | A | B | C |
|---|---|---|---|---|
| M33 | 1.5 | 50 | 57.5 | 10 |
| M45 | 1.5 | 70 | 80.8 | 10 |

These accessories are designed so that the accumulator can be securely attached in all configurations.




## Universal pressure checker / Pressurizer Type VGU

The VGU universal pressure checker/pressurizer is the instrument definitely needed to check nitrogen filling pressure and to fill and vent the nitrogen for all accumulators on the market up to a maximum working pressure of 340 bar. This deviced is screwed onto the accumulator valve and connected to the nitrogen source with a hose.

If the nitrogen pressure is only to be checked or reduced, this connection hose is not necessary. The unit is delivered in a standard version in a case containing:

- VGU universal pressure checker/pressurizer (M 28x1,50 outlet)
- Manometer kit 0 25 bar
- Manometer kit 0 250 bar
- Adapters for connection to a pressurization valves (7/8” - 5/8” - Vg8)
- 2,5 mt long hose, for connection to a source nitrogen
- 6 mm A/F allen wrench
- Spare seal kit
- Operating instructions in different languages

Notes: it can be supplied with the following on request: Manometer kit with a multiple-graduation scale
Adapter for foregin nitrogen cylinders (indicate country)
Flexible hose with a different length

### Technical Characteristics

Maximum working pressur 340 bar
Accumulator connection: 7/8” 14 UNF - 5/8” 18 UNF - 8V1 - M 28x1,5 - (Allen 6)
Flexible hose: Approximately 2,5 mt long fitted with a G 1/4” Cyl. Female adapter at each end for connection to the pressure source and fitted to hose.

Connection to nitrogen cylinder: Nut ø 21,7 x 1,814 SI, with a nitrogen source. Join-seal G 1/4” cyl.
Manometers: ø 63 mm (glycerin-bath type) with G1/4” cyl. Rear outlet, fitted with a direct connection adapter For connection to a minimess connector.
Two units scale 0÷25 and 0÷250 bar, with 1,6% accuracy. Other graduations on request