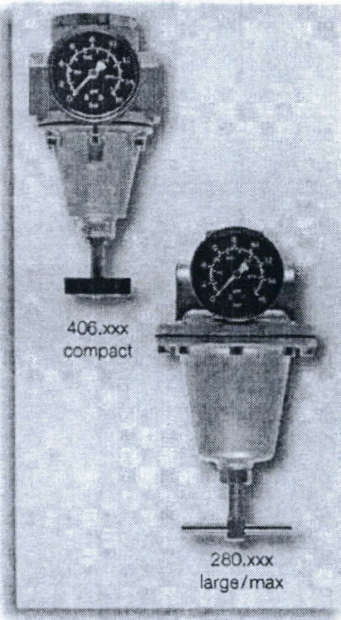


Pressure regulators - G^{3/4} - G1^{1/2}



406.xxx
compact

280.xxx
large/max

Note: Gauge added loosely

Pressure regulators regulate the system pressure (p_1) in a compressed air system to the working pressure (p_2) and keep this pressure, regardless of pressure fluctuations and air consumption, largely constant. The excess pressure valve (secondary venting) allows a reduction of the secondary pressure (p_2) (= exhaust) without air extraction. At the same time compressed air escapes into the atmosphere when the pressure on the secondary side exceeds the set value. Working pressure ranges from 0,5 - 3/6/10/16 and 25 bar. Operation by means of a toggle or handwheel (size large + max for 16 and 25 bar with hexagon screw AF19). Special models (for example, without secondary air exhaust) upon request. Gauge can be mounted on either side. Panel or bracket mounting if desired. Port sizes G^{3/4} to G1^{1/2}. **Note:** To avoid losses an air filter should be installed upstream. **Also suitable for use with neutral and non-toxic gases!**

Standard versions:

Control range 0,5- 10bar, with gauge

| Size | Order No. | | | |
|---------|--------------------|---------|---------------------|-------------------|
| | Connection threads | | | |
| | G ^{3/4} * | G1 | G1 ^{1/4} * | G1 ^{1/2} |
| compact | 406.283* | 406.293 | - | - |
| large | 280.383* | 280.393 | - | - |
| max | - | - | 280.3103* | 280.3113 |

* inlet and outlet reduced (reductions added loosely, see page 50)

Order key for all variants:

Size compact

406.xxx

406.281

- 1 - 0,5- 3bar
 - 2 - 0,5- 6bar
 - 3 - 0,5- 10bar
 - 4 - 0,5- 16bar
- control range (p_2)
- 8 - G^{3/4}*
 - 9 - G1
- connection threads
- 2 - handwheel with gauge (up to 10bar)
 - 3 - toggle with gauge
 - 4 - handwheel without gauge (up to 10bar)
 - 6 - toggle without gauge

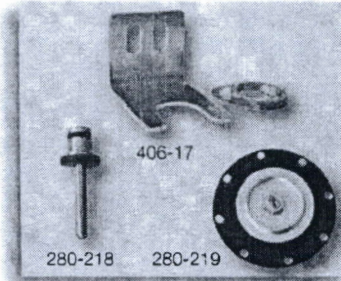
Size large / max

280.xxxx

- 1 - 0,5- 3bar
 - 2 - 0,5- 6bar
 - 3 - 0,5- 10bar
 - 4 - 0,5- 16bar
 - 5 - 0,5- 25bar
- control range (p_2)
- 8 - G^{3/4}*
 - 9 - G1
 - 10 - G1^{1/4}*
 - 11 - G1^{1/2}
- connection threads
- 3 - toggle*** with gauge
 - 5 - toggle*** without gauge

for example:

280.3113 - without gauge and 0,5-25bar = 280.5115



Spare parts and accessories

Bracket mounting for fixing on lid/attachment to the cover fixing screws

Panel mounting panel thread M28x1,5

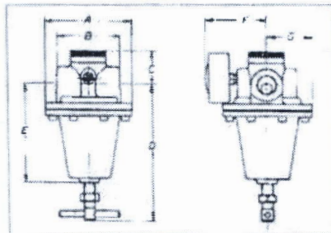
| Gauge horizontal, $\varnothing 63$ | Display range: | compact | large | max |
|------------------------------------|-----------------------------------|---------|-------|-----|
| | 0- 6bar (for p_2 up to 3 bar) | 213 | 213 | 213 |
| | 0- 10bar (for p_2 up to 6 bar) | 214 | 214 | 214 |
| | 0- 16bar (for p_2 up to 10 bar) | 215 | 215 | 215 |
| | 0- 25bar (for p_2 up to 16 bar) | 216 | 216 | 216 |
| | 0- 40bar (for p_2 up to 25 bar) | - | 217 | 217 |

Seal cone complete

Diaphragm complete

Gauges see chapter 11

| | Order No. | | |
|----------------------|-----------|---------|---------|
| | compact | large | max |
| Bracket mounting | 406-17 | 280-239 | 280-239 |
| Panel mounting panel | 406-18 | - | - |



Dimensions [mm]

| Size | compact G ^{3/4} , G1 | | large G ^{3/4} , G1 | | max G1 ^{1/4} , G1 ^{1/2} | |
|------|----------------------------------|-----|--------------------------------|-----|--|-----|
| A | - | - | 116 | 116 | 116 | 116 |
| B | 96 | 90 | 95 | 83 | 128 | 114 |
| C | 47 | 47 | 41 | 41 | 50 | 50 |
| D | 139 | 139 | 175 | 175 | 190 | 190 |
| E | 89 | 89 | - | - | - | - |
| F | 77 | 77 | 80 | 80 | 80 | 80 |
| G | 39 | 39 | 58 | 58 | 58 | 58 |

*inlet and outlet reduced (reductions added loosely)

Fasteners and connecting elements see page 49

Technical data

| | Size compact | Size large | Size max |
|-----------------------------------|--|---------------------|---------------|
| Nominal rates of flow** | 5330 NI/min | 7830 NI/min | 12160 NI/min |
| Max. operating pressure (p_1) | 25 bar (PN25) | 40 bar (PN40) | 40 bar (PN40) |
| Max. secondary pressure (p_2) | 10bar (optionally 3, 6, 16 bar) | | |
| Operating temperature | -10 °C up to +90 °C | | |
| Mounting position | any | | |
| Direction of flow | see arrow | | |
| Nominal width | DN20 | DN20 | DN25 |
| Dependence upon supply pressure | < 3% | < 1,5% | < 1,5% |
| Reversing control hysteresis | ~ 1 bar | | |
| Weight | 2050g | 3480g | 5260g |
| Material | - diaphragm - seals - housing/spring cover | NBR NBR brass | brass |

** measured at $p_1 = 8$ bar, $p_2 = 6$ bar and $\Delta p = 1$ bar

Rates of flow $p_1 = p_2 + 2$ bar

