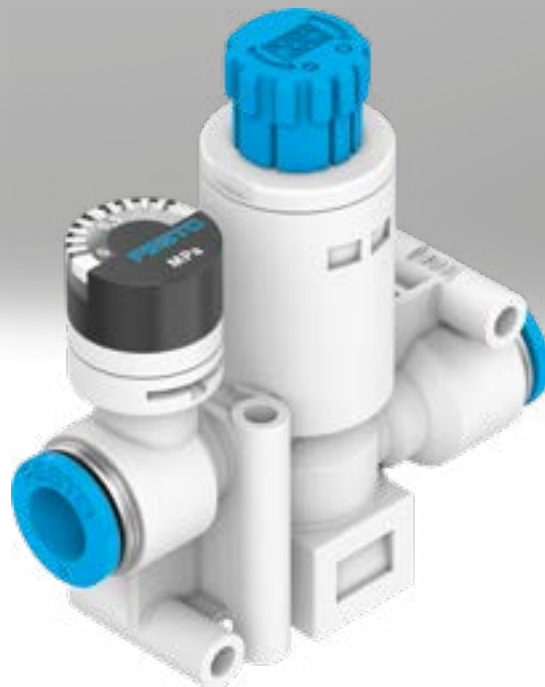


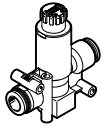
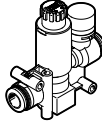
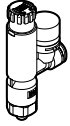
Pressure regulator VRPA

FESTO



Product range overview and type codes

Product range overview

| Design | Version | Type | Pneumatic connection | | Standard nominal flow rate [l/min] |
|---------|---|---------|----------------------|------|---------------------------------------|
| | | | 1 | 2 | |
| Inline | Without pressure gauge | | | | |
| |  | VRPA-C | QS-4 | QS-4 | 80 |
| | | | QS-6 | QS-6 | 90 |
| | | | QS-8 | QS-8 | 130 |
| | With pressure gauge, pressure gauge scale in MPa | | | | |
| |  | VRPA-CM | QS-4 | QS-4 | 80 |
| QS-6 | | | QS-6 | 90 | |
| QS-8 | | | QS-8 | 125 | |
| L-shape | With pressure gauge, pressure gauge scale in MPa | | | | |
| |  | VRPA-LM | M5 | QS-4 | 80 |
| | | | | QS-6 | 90 |
| | | | R1/8 | QS-4 | 90 |
| | | | | QS-6 | 100 |
| | | | | QS-8 | 110 |
| | | | R1/4 | QS-6 | 115 |
| QS-8 | | | | 130 | |

Type codes

| 001 | Series |
|------|--------------------|
| VRPA | Pressure regulator |

| 002 | Design |
|-----|---------|
| C | Inline |
| L | L-shape |

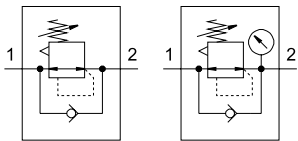
| 003 | Pressure indication |
|-----|------------------------|
| | Without pressure gauge |
| M | With pressure gauge |


| 004 | Pneumatic connection 1 |
|-----|------------------------|
| Q4 | Push-in connector 4 mm |
| Q6 | Push-in connector 6 mm |
| Q8 | Push-in connector 8 mm |
| M5 | M5 |
| R18 | R1/8 |
| R14 | R1/4 |

| 005 | Pneumatic connection 2 |
|-----|---------------------------|
| Q4 | Push-in connector 4 mm |
| Q6 | Push-in connector 6 mm |
| Q8 | Push-in connector 8 mm |
| E | Same size as connection 1 |

Data sheet

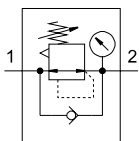
Inline, with/without pressure gauge




-  - Standard nominal flow rate
80 ... 130 l/min



L-shape, with pressure gauge



-  - Standard nominal flow rate
80 ... 130 l/min



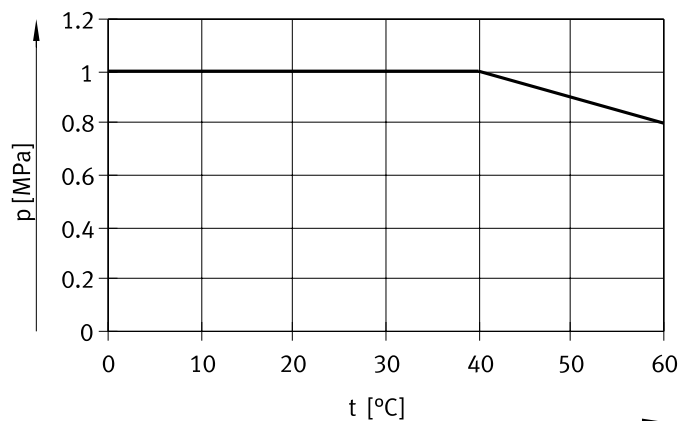
| General technical data | | | | | | |
|----------------------------------|---|------|------|--|------------------|------------|
| Pneumatic connection 1 | QS-4 | QS-6 | QS-8 | M5 | R1/8 | R1/4 |
| Pneumatic connection 2 | QS-4 | QS-6 | QS-8 | QS-4, QS-6 | QS-4, QS-6, QS-8 | QS-6, QS-8 |
| Controller function | Outlet pressure constant, with secondary venting, with return flow action | | | | | |
| Pressure regulation range [MPa] | 0.1 ... 0.8 | | | | | |
| Actuation type | Manual | | | | | |
| Mounting position | Any | | | | | |
| Adjusting element | Rotary knob with detent | | | | | |
| Pressure indicator | With/without pressure gauge | | | With pressure gauge | | |
| Type of mounting | With through-hole | | | Screw-in | | |
| Type of seal on screwed trunnion | - | | | Sealing ring | Coating | |
| Rotatability | - | | | 360°/continuous rotation not permitted | | |
| Nominal tightening torque [Nm] | - | | | 0.8 ±20% | - | |

| Operating and environmental conditions | |
|--|--|
| Operating pressure | See graph → page 5 |
| Operating medium | Compressed air to ISO 8573-1:2010 [7:4:4] |
| Note on the operating/pilot medium | Lubricated operation possible (in which case lubricated operation will always be required) |
| Ambient temperature [°C] | 0 ... +60 |

| Materials | | | | | | |
|------------------------|------------------------|------|------|---------------------|------|------|
| Pneumatic connection 1 | QS-4 | QS-6 | QS-8 | M5 | R1/8 | R1/4 |
| Housing | PBT | | | PBT | | |
| Screwed trunnion | - | | | Nickel-plated brass | | |
| Threaded seal | - | | | - | PTFE | |
| Static seals | NBR | | | | | |
| Note on materials | RoHS-compliant | | | | | |
| PWIS conformity | VDMA24364-B2-L | | | | | |
| Cleanroom class | Class 4 to ISO 14644-1 | | | | | |

Data sheet

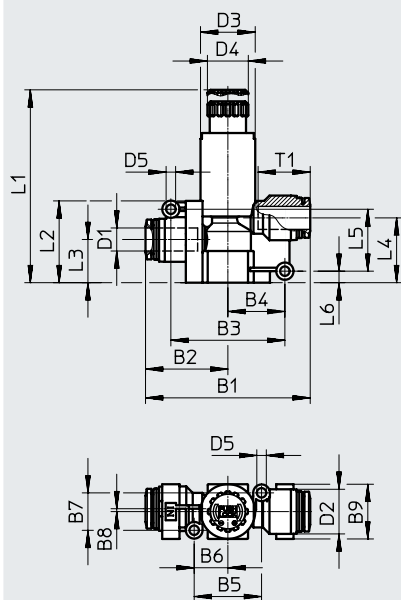
Operating pressure p as a function of temperature t



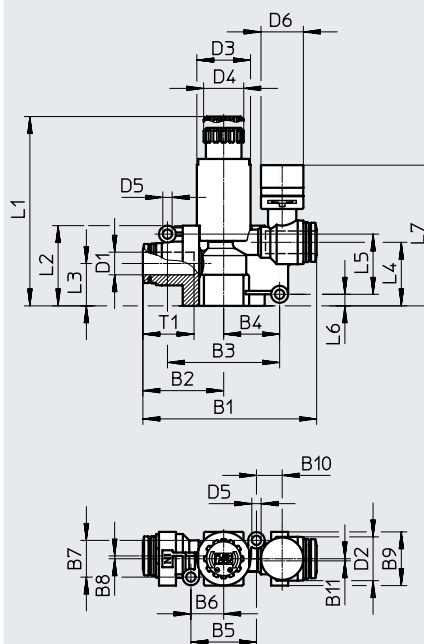
Dimensions – Inline

Download CAD data → www.festo.com

VRPA-C, without pressure gauge



VRPA-CM, with pressure gauge



| Type | B1 | B2 | B3 | B4 | B5 | B6 | B7 | B8 | B9 | B10 | B11 | D1 ∅ | D2 ∅ |
|--------------|------|------|------|------|------|------|----|----|----|------|-----|---------|---------|
| VRPA-C-Q4-E | 44.4 | 22.2 | 30 | 15 | 20.6 | 10.3 | 9 | 1 | 15 | - | - | 4 | 11.5 |
| VRPA-C-Q6-E | 44.6 | 22.3 | 30 | 15 | 20.6 | 10.3 | 9 | 1 | 15 | - | - | 6 | 11.5 |
| VRPA-C-Q8-E | 57.2 | 28.6 | 39.6 | 19.8 | 23.4 | 11.7 | 13 | 1 | 19 | - | - | 8 | 15.5 |
| VRPA-CM-Q4-E | 53.4 | 22.2 | 30 | 15 | 20.2 | 10.1 | 9 | 1 | 15 | 10.2 | 1 | 4 | 11.5 |
| VRPA-CM-Q6-E | 53.6 | 22.3 | 30 | 15 | 20.2 | 10.1 | 9 | 1 | 15 | 10.2 | 1 | 6 | 11.5 |
| VRPA-CM-Q8-E | 61.5 | 28.6 | 39.7 | 19.9 | 23.2 | 11.6 | 13 | 1 | 19 | 9.1 | 0 | 8 | 15.5 |

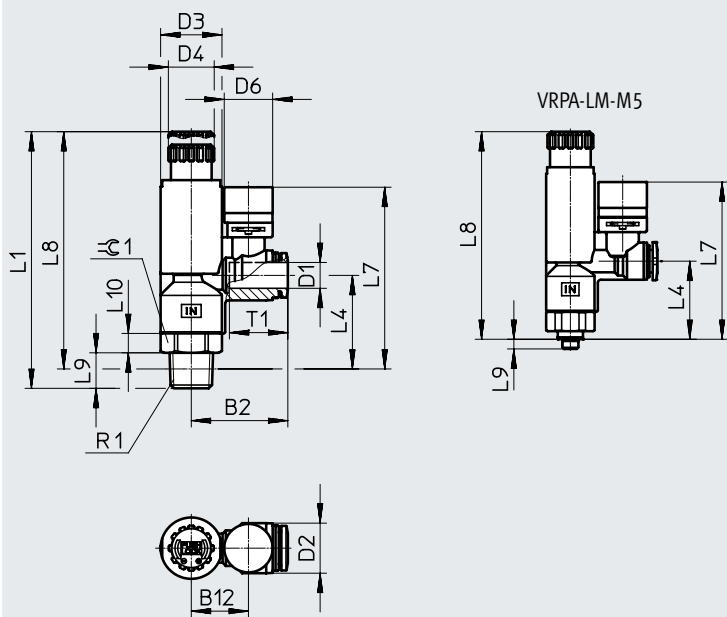
| Type | D3 ∅ | D4 ∅ | D5 ∅ | D6 ∅ | L1 | | L2 | L3 | L4 | L5 | L6 | L7 | T1 |
|--------------|---------|---------|---------|---------|----------|--------|------|----|------|------|-----|------|------|
| | | | | | Unlocked | Locked | | | | | | | |
| VRPA-C-Q4-E | 15 | 14.2 | 3.3 | - | 61.6 | 58.9 | 24.5 | 13 | 18.8 | 17 | 4.2 | - | 11.6 |
| VRPA-C-Q6-E | 15 | 14.2 | 3.3 | - | 61.6 | 58.9 | 24.5 | 13 | 18.8 | 17 | 4.2 | - | 11.9 |
| VRPA-C-Q8-E | 19 | 14.2 | 3.3 | - | 65.7 | 63 | 28.4 | 15 | 22.5 | 21.5 | 4 | - | 18.1 |
| VRPA-CM-Q4-E | 15 | 14.2 | 3.3 | 15 | 61.6 | 58.9 | 24.5 | 13 | 18.8 | 17 | 4.2 | 43.3 | 11.6 |
| VRPA-CM-Q6-E | 15 | 14.2 | 3.3 | 15 | 61.6 | 58.9 | 24.5 | 13 | 18.8 | 17 | 4.2 | 43.3 | 11.9 |
| VRPA-CM-Q8-E | 19 | 14.2 | 3.3 | 15 | 65.7 | 63 | 28.4 | 15 | 22.5 | 21.3 | 4.1 | 49.8 | 18.1 |

Data sheet

Dimensions – L-shape

Download CAD data → www.festo.com

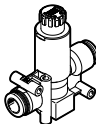
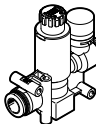
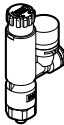
VRPA-LM, with pressure gauge



| Type | B2 | B12 | D1 ∅ | D2 ∅ | D3 ∅ | D4 ∅ | D6 ∅ |
|----------------|------|------|---------|---------|---------|---------|---------|
| VRPA-LM-M5-Q4 | 26.9 | 16.2 | 4 | 11.5 | 15 | 14.2 | 15 |
| VRPA-LM-M5-Q6 | 27 | 16.2 | 6 | 11.5 | 15 | 14.2 | 15 |
| VRPA-LM-R18-Q4 | 26.9 | 16.2 | 4 | 11.5 | 15 | 14.2 | 15 |
| VRPA-LM-R18-Q6 | 27 | 16.2 | 6 | 11.5 | 15 | 14.2 | 15 |
| VRPA-LM-R18-Q8 | 28.4 | 16.2 | 8 | 15.5 | 15 | 14.2 | 15 |
| VRPA-LM-R14-Q6 | 30 | 17.7 | 6 | 15.5 | 19 | 14.2 | 15 |
| VRPA-LM-R14-Q8 | 29.9 | 17.7 | 8 | 15.5 | 19 | 14.2 | 15 |

| Type | L1 | | L4 | L7 | L8 | | L9 | L10 | R1 | T1 | ≈ 1 |
|----------------|----------|--------|------|------|----------|--------|----|-----|--------|------|-----|
| | Unlocked | Locked | | | Unlocked | Locked | | | | | |
| VRPA-LM-M5-Q4 | 70 | 67.3 | 24.2 | 48.7 | 66.8 | 64.3 | 3 | 6 | M5x0.8 | 11.6 | 14 |
| VRPA-LM-M5-Q6 | 70 | 67.3 | 24.2 | 48.7 | 66.8 | 64.3 | 3 | 6 | M5x0.8 | 11.9 | 14 |
| VRPA-LM-R18-Q4 | 71.5 | 68.8 | 24.7 | 49.2 | 67.3 | 64.8 | 8 | 5 | R1/8 | 11.6 | 14 |
| VRPA-LM-R18-Q6 | 71.5 | 68.8 | 24.7 | 49.2 | 67.3 | 64.8 | 8 | 5 | R1/8 | 11.9 | 14 |
| VRPA-LM-R18-Q8 | 71.5 | 68.8 | 24.7 | 52 | 67.3 | 64.8 | 8 | 5 | R1/8 | 18.1 | 14 |
| VRPA-LM-R14-Q6 | 78.2 | 75.5 | 29 | 56.3 | 72 | 69.5 | 11 | 6 | R1/4 | 17 | 17 |
| VRPA-LM-R14-Q8 | 78.2 | 75.5 | 29 | 56.3 | 72 | 69.5 | 11 | 6 | R1/4 | 18.1 | 17 |

Data sheet

| Ordering data | | | | | | |
|---|----------------------|------|---------------------------------------|---------------|----------|----------------|
| | Pneumatic connection | | Standard nominal flow rate [l/min] | Weight [g] | Part no. | Type |
| | 1 | 2 | | | | |
| Inline, without pressure gauge | | | | | | |
|  | QS-4 | QS-4 | 80 | 19 | 8086000 | VRPA-C-Q4-E |
| | QS-6 | QS-6 | 90 | 20 | 8086001 | VRPA-C-Q6-E |
| | QS-8 | QS-8 | 130 | 33 | 8086002 | VRPA-C-Q8-E |
| Inline, with pressure gauge, pressure gauge scale in MPa | | | | | | |
|  | QS-4 | QS-4 | 80 | 23 | 8086003 | VRPA-CM-Q4-E |
| | QS-6 | QS-6 | 90 | 23 | 8086004 | VRPA-CM-Q6-E |
| | QS-8 | QS-8 | 125 | 36 | 8086005 | VRPA-CM-Q8-E |
| L-shape, with pressure gauge, pressure gauge scale in MPa | | | | | | |
|  | M5 | QS-4 | 80 | 29 | 8086007 | VRPA-LM-M5-Q4 |
| | | QS-6 | 90 | 29 | 8086008 | VRPA-LM-M5-Q6 |
| | R1/8 | QS-4 | 90 | 29 | 8086009 | VRPA-LM-R18-Q4 |
| | | QS-6 | 100 | 29 | 8086010 | VRPA-LM-R18-Q6 |
| | | QS-8 | 110 | 31 | 8086011 | VRPA-LM-R18-Q8 |
| | R1/4 | QS-6 | 115 | 49 | 8086012 | VRPA-LM-R14-Q6 |
| | | QS-8 | 130 | 49 | 8086013 | VRPA-LM-R14-Q8 |