# **Exhaust air flow control valves**

# **FESTO**



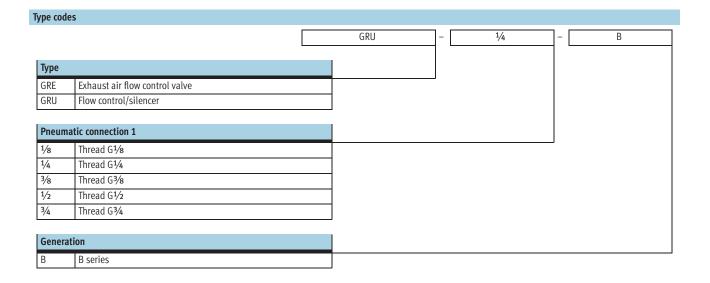
# **Exhaust air flow control valves**

**FESTO** 

Product range overview and type codes

| Version       | Valve function   | Version  | Туре | Connection direction | connection 1           | qnN <sup>1)</sup><br>[l/min] | Adjustment component | → Page/<br>Internet |
|---------------|------------------|----------|------|----------------------|------------------------|------------------------------|----------------------|---------------------|
| Exhaust air   | Metal            |          |      |                      |                        |                              |                      |                     |
| flow control  | Flow             | <u></u>  | GRE  | Inline               | G1/8, G1/4, G3/8, G1/2 | 520 3,600                    | Slotted head screw   | 3                   |
| valve         | control/silencer |          |      |                      |                        |                              |                      |                     |
|               | function         |          |      |                      |                        |                              |                      |                     |
|               |                  |          |      |                      |                        |                              |                      |                     |
| Flow          | Dalumar          |          |      |                      |                        |                              |                      |                     |
|               | Polymer          | <b>.</b> |      |                      |                        |                              |                      |                     |
| control/silen | Flow             |          | GRU  | Inline               | G½, G¼, G3/8,          | 1,000 8,000                  | Slotted head screw   | 5                   |
| cer           | control/silencer |          |      |                      | G½, G¾                 |                              |                      |                     |
|               | function         |          |      |                      |                        |                              |                      |                     |
|               |                  |          |      |                      |                        |                              |                      |                     |

<sup>1)</sup> Standard nominal flow rate in direction of flow control.



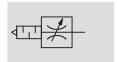
# **Exhaust air flow control valves GRE**



3

Technical data

Function



Flow rate

520 ... 3,600 l/min Temperature range

−10 ... +70 °C

Pressure

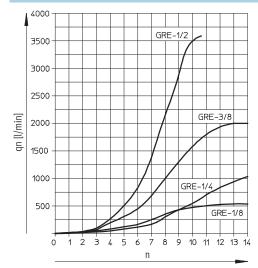
0 ... 10 bar



| General technical data    |    |                                |                               |      |                               |  |  |
|---------------------------|----|--------------------------------|-------------------------------|------|-------------------------------|--|--|
| Valve function            |    | Flow control/silencer function |                               |      |                               |  |  |
| Pneumatic connection 1    |    | G1/8                           | G <sup>1</sup> / <sub>4</sub> | G3/8 | G <sup>1</sup> / <sub>2</sub> |  |  |
| Adjustment component      |    | Slotted head screw             |                               |      |                               |  |  |
| Type of mounting          |    | Screw-in                       |                               |      |                               |  |  |
| Mounting position         |    | Any                            |                               |      |                               |  |  |
| Max. tightening torque [N | m] | _                              | _                             | 15   | _                             |  |  |

| Operating and environmental conditions | Operating and environmental conditions   |                               |                         |                         |  |  |  |  |  |
|--|--|-------------------------------|-------------------------|-------------------------|--|--|--|--|--|
| Pneumatic connection 1                 | G <sup>1</sup> / <sub>8</sub>  | G <sup>1</sup> / <sub>4</sub> | G3/8                    | G½                      |  |  |  |  |  |
| Operating pressure [bar]               | 0 10   |                               |                         |                         |  |  |  |  |  |
| Operating medium                       | Compressed air in  | Compressed air in             | Compressed air in       | Compressed air in       |  |  |  |  |  |
|  | accordance with  | accordance with               | accordance with         | accordance with         |  |  |  |  |  |
|  | ISO 8573-1:2010 [7:-:-]  | ISO 8573-1:2010 [7:-:-]       | ISO 8573-1:2010 [7:4:4] | ISO 8573-1:2010 [7:-:-] |  |  |  |  |  |
| Note on operating/pilot medium         | Operation with lubricated medium possible (in which case lubricated operation will always be required) |                               |                         |                         |  |  |  |  |  |
| Ambient temperature [°C]               | Ambient temperature [°C] -10 +70   |                               |                         |                         |  |  |  |  |  |
| Temperature of medium [°C]             | -10 +70  | -10 +70                       |                         |                         |  |  |  |  |  |

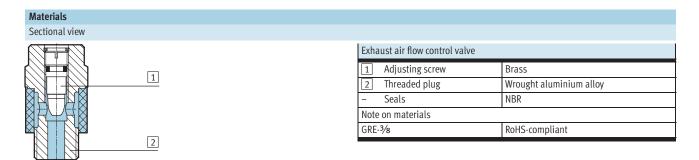
# Standard nominal flow rate qnN at 6 bar $\longrightarrow$ 5 bar as a function of spindle rotations n

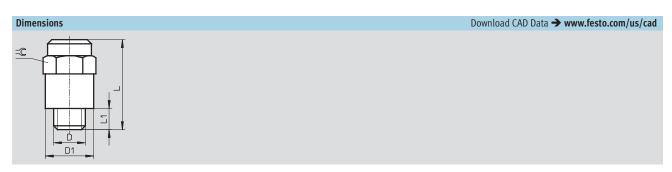


# **Exhaust air flow control valves GRE**



Technical data





| Туре    | Connection<br>D               | D1<br>∅ | L    | L1  | =© |
|---------|-------------------------------|---------|------|-----|----|
| GRE-1/8 | G1/8                          | 15      | 28.5 | 6.5 | 14 |
| GRE-1/4 | G1/4                          | 18.2    | 34   | 8   | 17 |
| GRE-3/8 | G3/8                          | 25      | 42   | 8   | 22 |
| GRE-1/2 | G <sup>1</sup> / <sub>2</sub> | 27      | 48   | 12  | 24 |

| Ordering data | Ordering data                 |                                |                              |        |          |         |  |  |  |
|---------------|-------------------------------|--------------------------------|------------------------------|--------|----------|---------|--|--|--|
|               | Pneumatic                     | Standard nominal flow rate qnN | Standard flow rate qn        | Weight | Part No. | Туре    |  |  |  |
|               | connection 1                  | at 6 bar 5 bar                 | at 6 bar 0 bar               |        |          |         |  |  |  |
|               |                               | in direction of flow control   | in direction of flow control |        |          |         |  |  |  |
|               |                               | [l/min]                        | [l/min]                      | [g]    |          |         |  |  |  |
| <b>(2)</b>    | G1/8                          | 520                            | 0 520                        | 15     | 10351    | GRE-1/8 |  |  |  |
| 9             | G1/4                          | 996                            | 0 996                        | 25     | 10352    | GRE-1/4 |  |  |  |
|               | G3/8                          | 2,000                          | 3 2,000                      | 50     | 35310    | GRE-3/8 |  |  |  |
|               | G <sup>1</sup> / <sub>2</sub> | 3,600                          | 0 3,600                      | 75     | 10353    | GRE-1/2 |  |  |  |

# Flow control/silencers GRU Technical data

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Function



Flow rate

1,000 ... 8,000 l/min Temperature range

−10 ... +70 °C

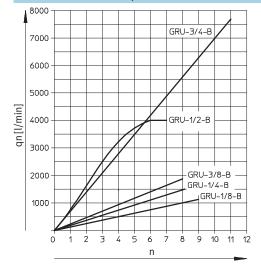
Pressure 0 ... 10 bar



| General technical data |                                |      |      |                               |      |  |
|------------------------|--------------------------------|------|------|-------------------------------|------|--|
| Valve function         | Flow control/silencer function |      |      |                               |      |  |
| Pneumatic connection 1 | G1/8                           | G1/4 | G3/8 | G <sup>1</sup> / <sub>2</sub> | G3/4 |  |
| Adjustment component   | Slotted head screw             |      |      |                               |      |  |
| Type of mounting       | mounting Screw-in              |      |      |                               |      |  |
| Mounting position      | Any                            |      |      |                               |      |  |

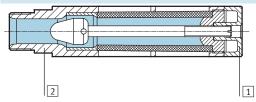
| Operating and environment | Operating and environmental conditions |   |  |  |  |  |
|---------------------------|--|---|--|--|--|--|
| Operating pressure        | [bar]                                  | 0 10  |  |  |  |  |
| Operating medium          |  | Filtered compressed air, lubricated or unlubricated |  |  |  |  |
| Ambient temperature       | [°C]                                   | -10 +70   |  |  |  |  |
| Temperature of medium     | [°C]                                   | -10 +70   |  |  |  |  |

# Standard nominal flow rate qnN at 6 bar $\longrightarrow$ 5 bar as a function of spindle rotations n

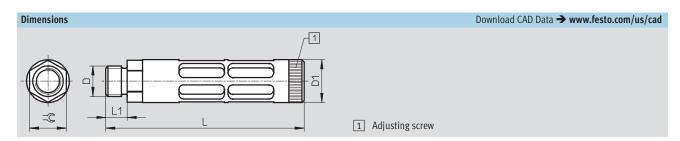


# Materials

Sectional view



| Flow control/silencer |                    |
|-----------------------|--------------------|
| Adjusting screw       | PA                 |
| 2 Threaded plug       | Die-cast aluminium |



| Туре    | Connection<br>D | D1<br>∅ | L    | L1  | =© |
|---------|-----------------|---------|------|-----|----|
| GRU-1/8 | G1/8            | 16      | 46   | 5.4 | 14 |
| GRU-1/4 | G1/4            | 19.5    | 63.3 | 6.4 | 17 |
| GRU-3/8 | G3/8            | 25      | 95.3 | 7.5 | 19 |
| GRU-1/2 | G1/2            | 28      | 130  | 14  | 24 |
| GRU-3/4 | G3/4            | 38      | 157  | 16  | 32 |

| Ordering data | Ordering data                 |                                |                              |        |          |           |  |  |  |  |
|---------------|-------------------------------|--------------------------------|------------------------------|--------|----------|-----------|--|--|--|--|
|               | Pneumatic                     | Standard nominal flow rate qnN | Standard flow rate qn        | Weight | Part No. | Туре      |  |  |  |  |
|               | connection 1                  | at 6 bar 5 bar                 | at 6 bar 0 bar               |        |          |           |  |  |  |  |
|               |                               | in direction of flow control   | in direction of flow control |        |          |           |  |  |  |  |
|               |                               | [l/min]                        | [l/min]                      | [g]    |          |           |  |  |  |  |
|               | G1/8                          | 1,000                          | 0 1,000                      | 10     | 9516     | GRU-1/8-B |  |  |  |  |
|               | G1/4                          | 1,500                          | 0 1,500                      | 25     | 9517     | GRU-1/4-B |  |  |  |  |
|               | G3/8                          | 1,700                          | 0 1,700                      | 55     | 9518     | GRU-3/8-B |  |  |  |  |
|               | G <sup>1</sup> / <sub>2</sub> | 4,000                          | 0 4,000                      | 100    | 9519     | GRU-1/2-B |  |  |  |  |
|               | G3/4                          | 8,000                          | 0 8,000                      | 170    | 9520     | GRU-3/4-B |  |  |  |  |

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