

**Description** Piston-operated pressure regulator made of stainless steel up to pressure range of 52 bar, independent to inlet pressure.

**Note** It is recommended to select an outlet diameter at least one time larger than the main valve's diameter.

**Media** compressed air, gases, liquids or steam (R71-02 not suitable for steam)

**Supply pressure** max. 16 bar at R71-02, max. 40 bar at R71-16/-20, max. 63 bar at R71-03/-06 to -12, max. 100 bar at R71-04

**Adjustment** by wing screw at R71-02, with locknut  
by T-handle at R71-03 to -20, with locknut

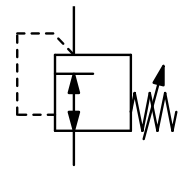
**Relieving function** non-relieving

**Gauge port** G $\frac{1}{4}$  on both sides of the body

**Temperature range** 0 °C to 140 °C / 32 °F to 284 °F, EPDM, steamable, 0 °C to 150 °C / 32 °F to 302 °F, PTFE/EPDM for steam  
0 °C to 200 °C / 32 °F to 302 °F, PTFE/AF100/EPDM, for steam

**Material** Body: stainless steel 1.4301 or 1.4571 (R71-02), optionally 1.4435  
Spring cage: stainless steel 1.4301 Diaphragm: EPDM  
Seals: EPDM, optionally PTFE O-rings: EPDM

**Mounting position** any



**0.25 ... 0.4 / 52 bar**  
up to G2 $\frac{1}{2}$ , also for food

| Dimensions |   |   | Nominal size | K <sub>v</sub> value | Flow rate   |               | Connection thread | Supply max. | Pressure range | Order number |
|------------|---|---|--------------|----------------------|-------------|---------------|-------------------|-------------|----------------|--------------|
| A          | B | C | DN           | (m <sup>3</sup> /h)  | Air l/min*1 | Water l/min*2 | G                 | bar         | bar            |              |

## SST pressure regulator

supply max. 16 / 63 / 100 bar, non-relieving for compressed air, gas, water and steam\*3

## R71

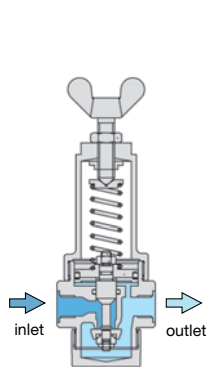
|               |                |    |    |      |     |    |                 |    |               |                |
|---------------|----------------|----|----|------|-----|----|-----------------|----|---------------|----------------|
| 58            | 185            | 36 | 8  | 0.63 | 24  | 3  | G $\frac{1}{4}$ | 16 | 1.0 ... 1.7   | <b>R71-02A</b> |
|               |                |    |    |      |     |    |                 |    | 1.7 ... 3.3   | <b>R71-02B</b> |
|               |                |    |    |      |     |    |                 |    | 2.8 ... 5.6   | <b>R71-02C</b> |
|               |                |    |    |      |     |    |                 |    | 3.5 ... 6.2   | <b>R71-02D</b> |
| 70            | 253            | 48 | 10 | 2.0  | 55  | 6  | G $\frac{3}{8}$ | *4 | 0.4 ... 0.9   | <b>R71-03A</b> |
|               |                |    |    |      |     |    |                 |    | 0.8 ... 1.7   | <b>R71-03B</b> |
|               |                |    |    |      |     |    |                 |    | 1.5 ... 3.1   | <b>R71-03C</b> |
|               |                |    |    |      |     |    |                 |    | 3.0 ... 6.1   | <b>R71-03D</b> |
|               |                |    |    |      |     |    |                 |    | 5.0 ... 9.8   | <b>R71-03E</b> |
|               |                |    |    |      |     |    |                 |    | 7.0 ... 14.4  | <b>R71-03F</b> |
| 90            | 333            | 58 | 15 | 3.0  | 120 | 15 | G $\frac{1}{2}$ | *4 | 0.5 ... 0.94  | <b>R71-04A</b> |
|               |                |    |    |      |     |    |                 |    | 1.0 ... 2.4   | <b>R71-04B</b> |
|               |                |    |    |      |     |    |                 |    | 2.6 ... 5.3   | <b>R71-04C</b> |
|               |                |    |    |      |     |    |                 |    | 4.7 ... 9.5   | <b>R71-04D</b> |
|               |                |    |    |      |     |    |                 |    | 7.5 ... 15.0  | <b>R71-04E</b> |
|               |                |    |    |      |     |    |                 |    | 13.0 ... 26.0 | <b>R71-04F</b> |
|               |                |    |    |      |     |    |                 |    | 26.0 ... 52.0 | <b>R71-04G</b> |
|               |                |    |    |      |     |    |                 |    | 0.5 ... 0.94  | <b>R71-06A</b> |
|               |                |    |    |      |     |    |                 |    | 1.0 ... 2.4   | <b>R71-06B</b> |
|               |                |    |    |      |     |    |                 |    | 2.6 ... 5.3   | <b>R71-06C</b> |
| 4.7 ... 9.5   | <b>R71-06D</b> |    |    |      |     |    |                 |    |               |                |
| 7.5 ... 15.0  | <b>R71-06E</b> |    |    |      |     |    |                 |    |               |                |
| 13.0 ... 26.0 | <b>R71-06F</b> |    |    |      |     |    |                 |    |               |                |
| 26.0 ... 52.0 | <b>R71-06G</b> |    |    |      |     |    |                 |    |               |                |
| 105           | 368            | 68 | 25 | 6.3  | 350 | 45 | G1              | *4 | 0.4 ... 0.8   | <b>R71-08A</b> |
|               |                |    |    |      |     |    |                 |    | 1.0 ... 2.0   | <b>R71-08B</b> |
|               |                |    |    |      |     |    |                 |    | 1.7 ... 3.5   | <b>R71-08C</b> |
|               |                |    |    |      |     |    |                 |    | 3.0 ... 6.1   | <b>R71-08D</b> |
|               |                |    |    |      |     |    |                 |    | 5.5 ... 11.0  | <b>R71-08E</b> |
|               |                |    |    |      |     |    |                 |    | 12.0 ... 23.0 | <b>R71-08F</b> |



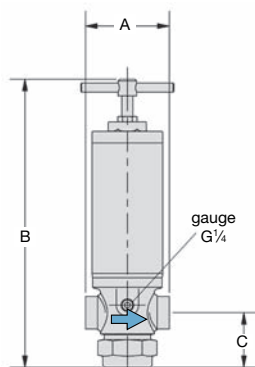
R71-02.



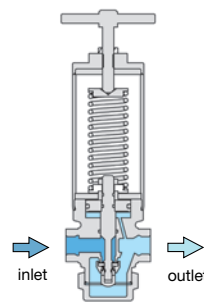
R71-03.CF1, accessory: gauge



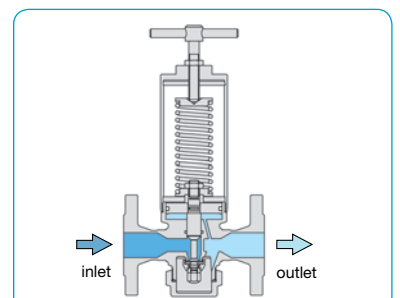
R71-02, cross section



R71-03



R71-04, cross section



R71-...F. cross section

\*1 at flow velocity 10 m/s  
\*2 at 2.5 m/s

\*3 not for R71-02  
\*4 P<sub>1</sub> max. = P<sub>2</sub> max. + 25 bar

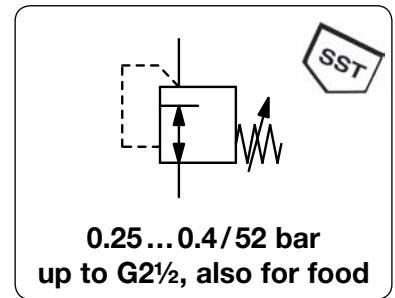


Order example:  
R71-02A

China website: www.duray-control.cn

### Pharmacy and food-safe version

|                        |  |              |                           |                |                                       |           |
|------------------------|--|--------------|---------------------------|----------------|---------------------------------------|-----------|
| <b>Description</b>     | The pharmacy version (option P) standard design is completely made of stainless steel, independent of inlet pressure, sealed at zero consumption, with EPDM and steamable up to 140 °C / 284 °F. Media contact parts have roughness of $R_a < 2.6 \mu\text{m}$ . |              |                           |                |                                       |           |
| <b>Special options</b> | Add the appropriate letter to the order number:  |              |                           |                |                                       |           |
| <b>Outer surface</b>   | Valve body: electropolished  | <b>FA</b>    | glass bead shot-peened    | <b>FC</b>      |                                       |           |
|                        | Complete valve: electropolished  | <b>FB</b>    | glass bead shot-peened    | <b>FD</b>      | ground/polished $R_a 1.2 \mu\text{m}$ | <b>FE</b> |
| <b>Inner surface</b>   | Valve body: $R_a < 2.0 \mu\text{m}$  |              | glass bead shot-peened    | <b>GA</b>      |                                       |           |
|                        | Media contact parts: $R_a < 1.6 \mu\text{m}$   | <b>GB</b>    | $R_a < 0.8 \mu\text{m}$   | <b>GC</b>      | $R_a < 0.5 \mu\text{m}$               | <b>GD</b> |
| <b>Connection</b>      | Aseptic flange as per DIN 11864-2  | <b>F(AS)</b> | as per APV                | <b>F(APV)</b>  |                                       |           |
|                        | Flange as per DIN 2633 (PN16)  | <b>F</b>     | as per ANSI B16.5 150 lbs | <b>F150lbs</b> |                                       |           |
|                        | Threaded connection as per DIN 11851   | <b>GA</b>    |                           |                |                                       |           |
|                        | Clamp fittings as per DIN 32676  | <b>CL</b>    |                           |                |                                       |           |



| Dimensions |    |    | Nominal size | $K_v$ value               | Flow rate                  |                            | Connection thread | Supply max. | Pressure range | Order number |
|------------|----|----|--------------|---------------------------|----------------------------|----------------------------|-------------------|-------------|----------------|--------------|
| A          | B  | C  | DN           | ( $\text{m}^3/\text{h}$ ) | Air                        | Water                      | G                 | bar         | bar            |              |
| mm         | mm | mm |              |                           | $\text{l}/\text{min}^{*1}$ | $\text{l}/\text{min}^{*2}$ |                   |             |                |              |

| SST pressure regulator |     |     |    |      |      |     |     |    |              | supply pressure max. 40 / 63 bar, non-relieving, without constant bleed | R71 |
|------------------------|-----|-----|----|------|------|-----|-----|----|--------------|---|-----|
| 145                    | 410 | 85  | 40 | 12.5 | 900  | 120 | G1½ | ** | 1.0 ... 2.0  | R71-12A   |     |
|                        |     |     |    |      |      |     |     |    | 1.6 ... 3.2  | R71-12B   |     |
|                        |     |     |    |      |      |     |     |    | 2.4 ... 4.8  | R71-12C   |     |
|                        |     |     |    |      |      |     |     |    | 4.8 ... 9.6  | R71-12D   |     |
|                        |     |     |    |      |      |     |     |    | 9.5 ... 19   | R71-12E   |     |
| 145                    | 410 | 85  | 50 | 13.0 | 1300 | 160 | G2  | ** | 1.0 ... 2.0  | R71-16A   |     |
|                        |     |     |    |      |      |     |     |    | 1.6 ... 3.2  | R71-16B   |     |
|                        |     |     |    |      |      |     |     |    | 2.4 ... 4.8  | R71-16C   |     |
|                        |     |     |    |      |      |     |     |    | 4.8 ... 9.6  | R71-16D   |     |
|                        |     |     |    |      |      |     |     |    | 9.5 ... 19   | R71-16E   |     |
| 220                    | 685 | 145 | 65 | 28.0 | 3200 | 420 | G2½ | ** | 0.25 ... 0.4 | R71-20A   |     |
|                        |     |     |    |      |      |     |     |    | 0.5 ... 1.1  | R71-20B   |     |
|                        |     |     |    |      |      |     |     |    | 1.3 ... 2.6  | R71-20C   |     |
|                        |     |     |    |      |      |     |     |    | 2.8 ... 5.6  | R71-20D   |     |
|                        |     |     |    |      |      |     |     |    | 6.0 ... 12   | R71-20E   |     |



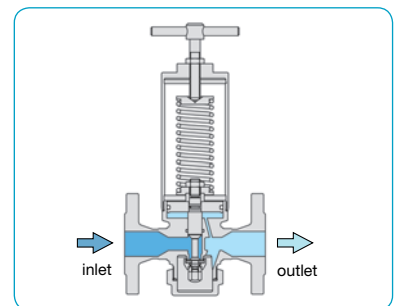
R71-08BF.



R71-16.

### Special options, add the appropriate letter

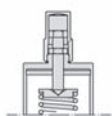
|                               |   |                              |
|-------------------------------|---|------------------------------|
| <b>NPT</b>                    | connection thread   | R 71 - ... N                 |
| <b>stainless steel 1.4435</b> | housing 1.4435, spring cage 1.4301                                | for G¾ up to G1 R 71 - ... S |
| <b>up to 150 °C / 302 °F</b>  | PTFE seals  | R 71 - ... X55               |
| <b>up to 200 °C / 392 °F</b>  | PTFE / AF100 seals  | R 71 - ... X56               |
| <b>tamper-proof cap</b>       | adjustment by spanner, height 35 mm lower                         | R 71 - ... T                 |
| <b>drainage</b>               | through bottom screw  | R 71 - ... U                 |
| <b>volume booster</b>         | pneumatic pressure setting  | R 71 - ... J                 |
| <b>other connections</b>      | DIN or ANSI flange, threaded connection or clamp fittings         | R 71 - ... F.                |
| <b>for pharmacy</b>           | forged stainless steel, $R_a < 2.6 \mu\text{m}$ , steamable, EPDM | R 71 - ... P                 |
| <b>CIP cleaning</b>           | pressure regulator sterilisable and minimal dead spots            | R 71 - ...                   |
| <b>for food industry</b>      | EPDM elastomer with FDA approval                                  | R 71 - ...                   |



R71-...F. cross section

### Accessories, enclosed

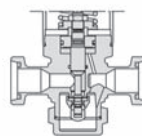
|                       |   |                         |
|-----------------------|---|-------------------------|
| <b>pressure gauge</b> | Ø 63 mm, 0 ... <sup>*3</sup> bar, G¼<br>for other requirements on request | MS6302-.. <sup>*3</sup> |
|-----------------------|---|-------------------------|



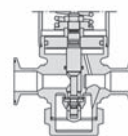
tamper-proof cap for pressure adjustment



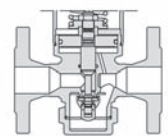
drainage through bottom screw



threaded connection e.g. DIN 11851/11864-1



clamp fittings e.g. DIN 32676



flange e.g. DIN 11864-2

\*1 at flow velocity 10 m/s  
\*2 at 2.5 m/s

\*3 02 = 0...2.5 bar, 04 = 0...4 bar, 06 = 0...6 bar, 10 = 0...10 bar, 16 = 0...16 bar, 25 = 0...25 bar, 60 = 0...60 bar  
\*4 P<sub>1</sub> max. = P<sub>2</sub> max. + 25 bar