

# DOPAG Material pressure regulator







#### Material pressure regulators for a reduced and continuous material pressure for all metering and dispensing applications

#### Material pressure regulators

DOPAG material pressure regulators are used to reduce the feed pressure down to the required operating pressure.

As well as accurately regulating material pressure, these valves will also compensate for pulsations that occur as a result of the reciprocating action of piston pumps.

Pulsations cause a brief decrease in pressure that could lead to a slight reduction in the flow of material.

These regulators can be used on materials with viscosities from 5,000 to 500,000 mPa s.

DOPAG material pressure regulators are manufactured with two different types of construction:

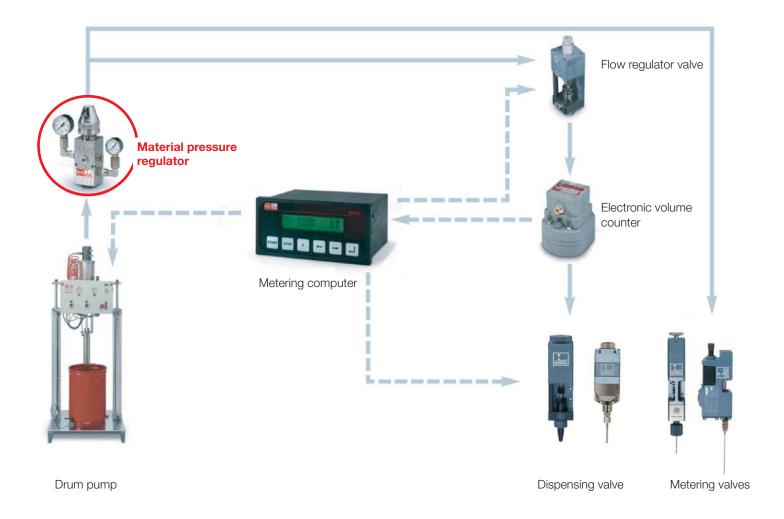
- Regulators with piston
- Regulators with membrane

Optionally, a remote control is available for valves with membrane to regulate the operating pressure in place of manual adjustment.

Optionally, twin pressure gauges display the material input pressure as well as the material outlet pressure.

Optionally, material input filters are available to prevent contamination and possible blockages within the system.

#### Detailed structure of a single component metering system



All equipment components specified here are available from the Hilger u. Kern / Dopag Group.

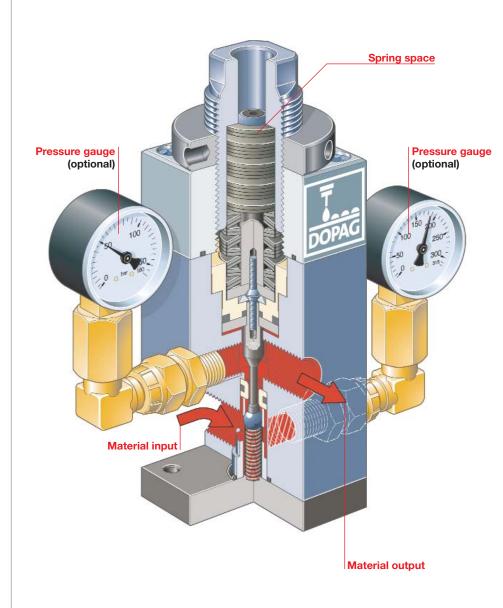
## Material pressure regulator with piston

### Material pressure regulator with piston

This type of material pressure regulator is especially suitable for the processing of self-lubricating materials such as greases and oils as well as single and plural component silicones.

The sealing of the spring space takes place via a slide ring seal





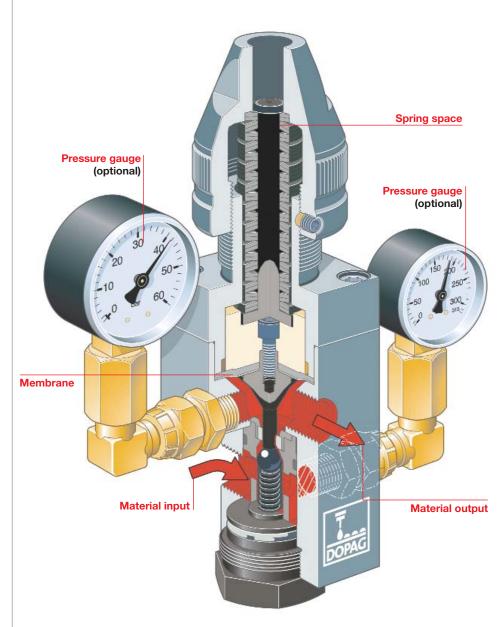
## Material pressure regulator with membrane

### Material pressure regulator with membrane

This type of material pressure regulator is most suitable for use with reactive, moisture-sensitive and – because the ball and seat are manufactured from tungsten carbide – also abrasive media, such as, epoxy resins, polyurethanes and many other materials.

The sealing of the spring space takes place via the membrane.





## Remote control for material pressure regulator with membrane

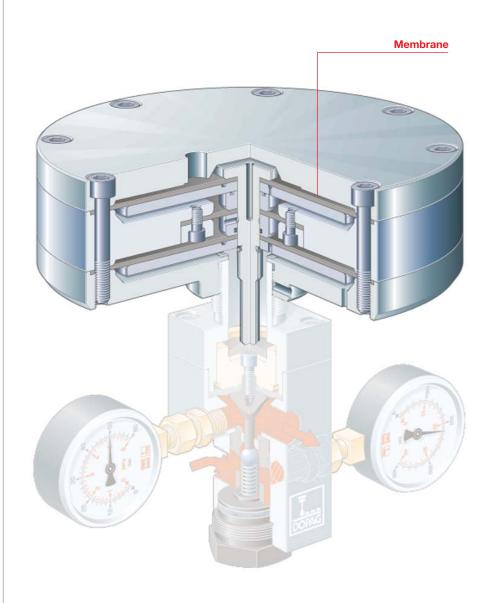
## Remote control for material pressure regulator with membrane

The remote control enables easy and accurate setting of the operating pressure, without any manual adjustment, to respond to changing production conditions or flow rates.

The change in operating pressure occurs as a result of the adjustment of the air pressure to the membrane.

This is especially useful when regulators are located in difficult to access or hard to reach areas.







#### Material pressure regulator with piston

| Part no.             |     | 400.25.93 (1)  | 400.25.94 (1)  | 400.25.92 (1)  | 400.25.91 (1)  | 400.25.95 (2)  | 402.25.80* (3) |
|----------------------|-----|----------------|----------------|----------------|----------------|----------------|----------------|
| Input pressure max.  | bar | 250            | 400            | 250            | 250            | 250            | 300            |
| Output pressure max. | bar | 50             | 150            | 50             | 50             | 150            | 150            |
| Internal diameter Ø  | mm  | 4              | 4              | 8              | 12             | 12             | 12             |
| Connection           | BSP | 1/4            | 3/8            | 3/8            | 1/2            | 1/2            | 1/2            |
| Dimensions           | mm  | 40 x 40        | 60 x 60        | 60 x 60        | 60 x 60        | 60 x 60        | SW 50/55       |
| Height max.          | mm  | 150            | 190            | 190            | 190            | 190            | 200            |
| Weight               | kg  | 1,20           | 3,30           | 3,10           | 3,00           | 3,00           | 3,20           |
| Ball seat            |     | hardened steel |

Possibilities to use material input filters (400.25.XX): (1) already integrated, (2) possible as an option, (3) not possible



#### Material pressure regulator with membrane

| Part no.             |     | 402.25.20 (2)    | 402.25.40 (2)    | 402.25.00 (2)    | 402.25.50 (2)    | 402.25.60 (2)    | 402.25.30 (2)    |
|----------------------|-----|------------------|------------------|------------------|------------------|------------------|------------------|
| Input pressure max.  | bar | 250              | 250              | 250              | 250              | 250              | 250              |
| Output pressure max. | bar | 50               | 150              | 50               | 150              | 50               | 150              |
| Internal diameter Ø  | mm  | 4                | 4                | 8                | 8                | 12               | 12               |
| Connection           | BSP | 3/8              | 3/8              | 3/8              | 3/8              | 1/2              | 1/2              |
| Dimensions           | mm  | 55 x 55          | 55 x 55          | 55 x 55          | 55 x 55          | 65 x 65          | 65 x 65          |
| Height max.          | mm  | 210              | 210              | 210              | 210              | 210              | 210              |
| Weight               | kg  | 3,30             | 3,30             | 3,30             | 3,30             | 4,50             | 4,50             |
| Ball seat            |     | tungsten carbide |

Possibilities to use material input filters (402.25.XX): (2) possible as an option



#### Remotely controlled material pressure regulator with membrane

| Part no.             |         | 402.26.41* | 402.26.01* | 402.26.31* |
|----------------------|---------|------------|------------|------------|
| Input pressure max.  | bar     | 250        | 250        | 250        |
| Output pressure max. | bar     | 150        | 150        | 150        |
|                      |         |            |            |            |
| Internal diameter Ø  | mm      | 4          | 8          | 12         |
| Pneumatic pressure   | bar     | 0-6        | 0-6        | 0-6        |
| Dimensions Ø         | mm      | 200        | 200        | 200        |
|                      | 1111111 | 200        | 200        | 200        |
| Height max.          | mm      | 210        | 210        | 243        |
| Weight               | kg      | 8,60       | 8,60       | 11         |

 $<sup>^{\</sup>star}$  All further technical data is identical to the material pressure regulator with membrane data

<sup>\*</sup> Special material pressure regulator for two component silicones

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 The Hilger u. Kern / Dopag Group, with more than 300 employees, 8 subsidiaries and 24 distributors, is one of the leading manufacturers of metering and mixing systems in the world for plural component polymers and single component media such as greases, oils and pastes. For more than 30 years the group has developed systems and components to suit your individual needs.

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