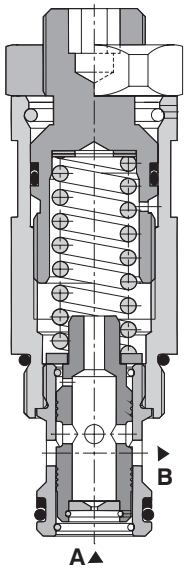
# VSS3-062/S

M22 x 1.5 • $Q_{max}$ 40 l/min (11 GPM) • $p_{max}$ 320 bar (4600 PSI)

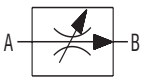



## Technical Features

- Set flow rate independent of load pressure and temperature changes
- Adjusted flow rate depends on the orifice area and set differential pressure
- Hardened precision parts
- High flow capacity
- Quiet and modulated response to load changes
- Used in meter-in, meter out, or bleed-off applications
- Wide range of flow rate options
- Adjustable by allen key or hand screw
- In the standard version, the valve is zinc-coated for 240 h protection acc. to ISO 9227

## Functional Description

This pressure compensated, hydraulic flow regulator in the form of a screw-in cartridge with fixed orifice and variable spring setting is designed to control flow rates independently of pressure and temperature, especially in systems where only small movements due to load changes are required. The flow rate stabilization is provided by a pressure compensator in the direction from A to B. The valve will maintain the set flow regardless of pressure variations on the regulated or inlet port.
In flow direction B - A, the valve works as an ordinary throttle valve without pressure compensation. The regulated flow increases with clockwise rotation of the adjustment screw and descreases with counter-clockwise rotation. The desired settings can be locked down.
The valve will maintain the set flow regardless of pressure variations on the regulated or inlet port.

| Symbol |  |
|---|---|



## Technical Data

| Valve size / Cartridge cavity | | M22x1.5 / QG2 | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Nominal flow rates | l/min | 1.6 | 2.5 | 4 | 6.3 | 10 | 16 | 20 |
| | (GPM) | (0.4) | (0.7) | (1.1) | (1.7) | (2.6) | (4.2) | (5.3) |
| Max. operating pressure | bar (PSI) | 320 (4640) | | | | | | |
| Fluid temperature range (NBR) | °C (°F) | -30 ... +80 (-22 ... +176) | | | | | | |
| Fluid temperature range (FPM) | °C (°F) | -20 ... +80 (-4 ... +176) | | | | | | |
| Mass | kg (lbs) | 0.19 (0.42) | | | | | | |

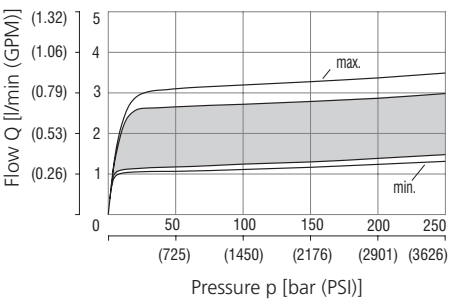
| | | Datasheet | Type |
|---|---|---|---|
| General information | | GI_0060 | Products and operating conditions |
| Valve bodies | In-line mounted | SB_0018 | SB-QG2-* |
| | Sandwich mounted | SB-04(06)_0028 | SB-*QG2* |
| Cavity details / Form tools | | SMT_0019 | SMT-QG2* |
| Spare parts | | SP_8010 | |

## Characteristics measured at ν = 32 mm²/s (156 SUS)

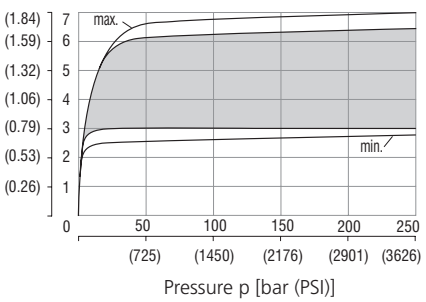
**Regulated flow related to input pressure**

Flow direction A - B (regulated flow)

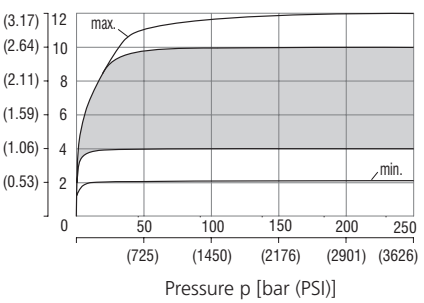
Flow rate 1.6




Flow rate 2.5




Flow rate 4

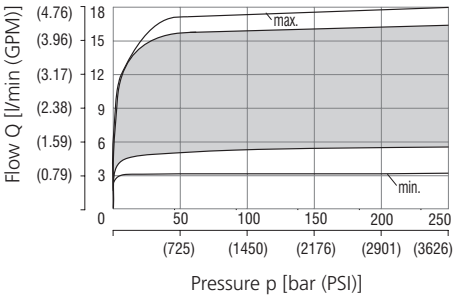


## Characteristics measured at ν = 32 mm²/s (156 SUS)

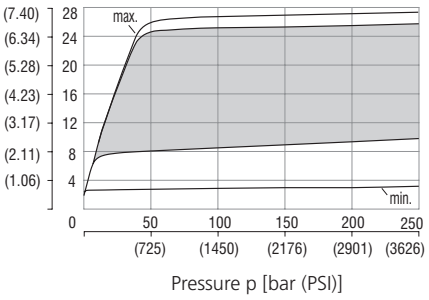
**Regulated flow related to input pressure**

Flow direction A - B (regulated flow)

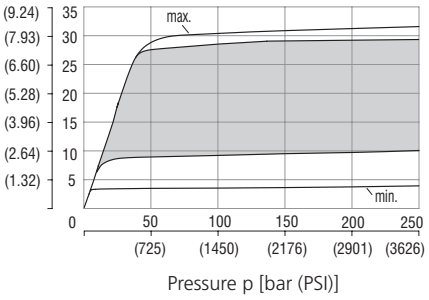
Flow rate 6.3



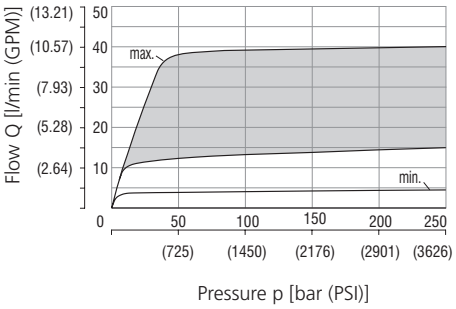

Flow rate 10




Flow rate 16

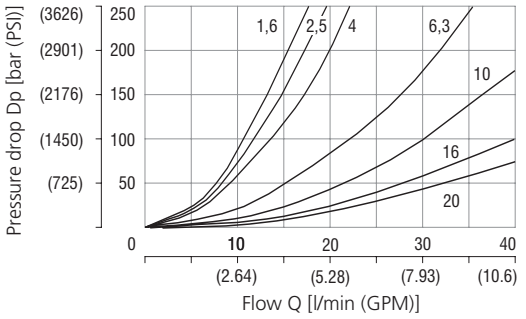



Flow rate 20



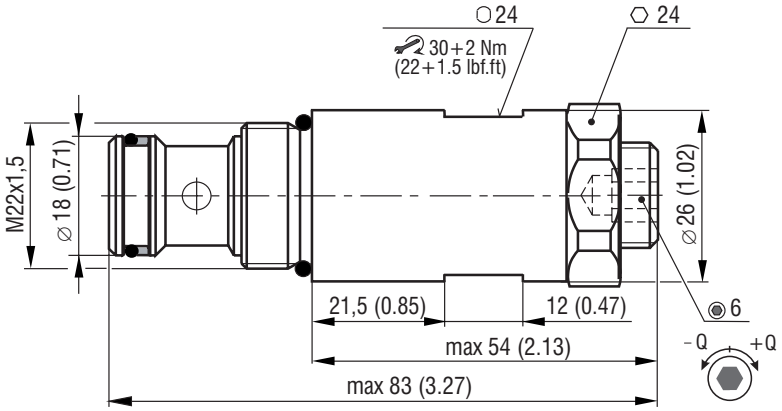

**Pressure drop related to flow rate**

Flow direction B - A
(throttling without compensation)

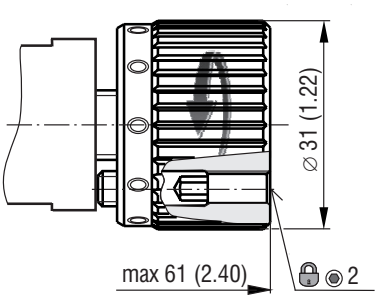



## Dimensions in millimeters (inches)

**Model S**




**Model RS**




## Ordering Code

VSS3-062/S- ☐ ☐ ☐ - ☐

**2-Way flow regulator, pressure compensated**
**M22x1.5**

**Model**
screw-in cartridge

**Flow rate**

| | | |
|---|---|---|
| 1.4 - 2.7 l/min | (0.4 - 0.7 GPM) | **1.6** |
| 3 - 6 l/min | (0.8 - 1.6 GPM) | **2.5** |
| 4 - 10 l/min | (1.1 - 2.6 GPM) | **4** |
| 5 - 16 l/min | (1.3 - 4.2 GPM) | **6.3** |
| 8 - 25 l/min | (2.1 - 6.6 GPM) | **10** |
| 9 - 28 l/min | (2.4 - 7.4 GPM) | **16** |
| 12 - 40 l/min | (3.2 - 10.6 GPM) | **20** |

**Adjustment option**

| | |
|---|---|
| **S** | allen key (hex. 6), without protective cap |
| **RS** | hand screw, metal-short |

**Seals**

| | |
|---|---|
| **No designation** | NBR |
| **V** | FPM (Viton) |

**Surface treatment**

| | |
|---|---|
| **A** | zinc-coated (ZnCr-3), ISO 9227 (240 h) |
| **B** | zinc-coated (ZnNi), ISO 9227 (520 h) |