

# Pressure relief valve

## Type DVM

NG 4 Bieri  
up to 30 l/min, up to **700 bar**

### Features

- Outstanding stability over the entire flow range
- Low hysteresis and exact pressure control
- Low pressure loss through CFD optimised geometry
- Adjustable over the whole pressure range



### Design

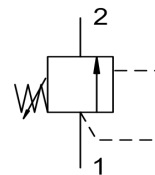
- Seated valve
- Directly operated
- Cartridge alone or in manifold
- External surface zinc-coated
- Minimum wear and long service life through hardened and ground valve parts

### Applications

The pressure relief valve is a directly operated spring loaded seated valve. It regulates the system pressure at port 1 on a certain value. The spring acts with a defined force on the closing cone to press on the valve seat. The valve opens by exceeding the spring force.

In this way the valve lets pass a flow from port 1 to port 2. The pressure at connection 1 is now limited independent to the valve flow.

Attention: The pressure at port 2 increases the limiting pressure! The valve function is out of order by interchanging the ports or pressure setting above the maximum operating pressure.



### Technical data

Hydraulic fluid	mineral oil according to DIN 51524 (other fluids on request)	
Fluid temperature range	-20 to 120 °C	
Ambient temperature range	-20 to 120 °C	
Viscosity range	7.4 to 420 mm <sup>2</sup> /s	
Porting	NG 4 according to Bieri	
Max. operating pressure port 1	700 bar	
Max. operating pressure port 2	100 bar	
Pressure setting range port 1	70 to 700 bar	
Max. flow rate	30 l/min	
Filtration (recommendation)	according to NAS 1638, ISO/DIN 4406 class 21/19/16	
Weight	See standard design	
Material/surface treatment	Cartridge body:	high tensile steel
	Cone:	hardened steel
	Supporting ring:	PTFE

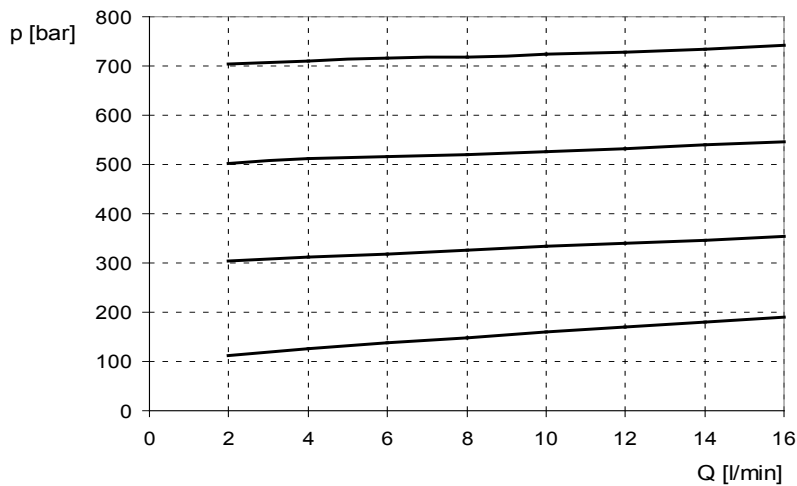
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**Ordering code**

<b>Example</b>	<b>DV</b>	<b>M</b>	-	<b>4E</b>	-	<b>X</b>	-	<b>700</b>	-	<b>V</b>	-	<b>A</b>		<b>00</b>
<b>Pressure relief valve</b>														
<b>Type</b>	500													
<b>Nominal size</b>	4													
<b>Cartridge</b>	...E													
<b>Connection Bieri</b>	...B													
<b>Connection in-line body</b>	...R													
<b>Design</b>	<p><b>X</b> Cartridge  <b>In direct connection block for valve bank (starting block)</b>  <b>G1/4VR</b> Connection size G1/4  <b>G3/8VR</b> Connection size G3/8  <b>In in-line mounting body</b>  <b>G1/4</b> Connection size G1/4  <b>G3/8</b> Connection size G3/8</p>													
<b>Max. pressure</b>	700 bar													
<b>Seals</b>	V (FPM) other seal materials on request													
<p><b>Special design</b> 01 ... 99 (00 for standard)</p> <p><b>Part index</b> Please leave blank For internal purposes</p> <p><b>Desing revision</b> For internal purposes</p>														
Intermediate plate valves on request!														

**Caracteristics**

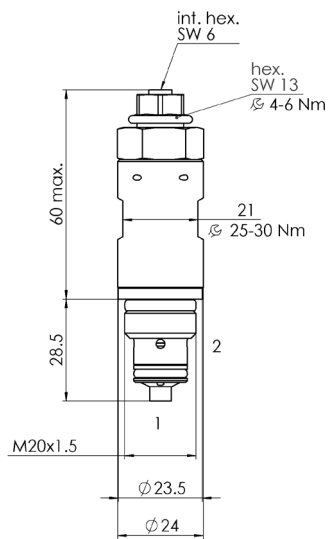


## Standard design

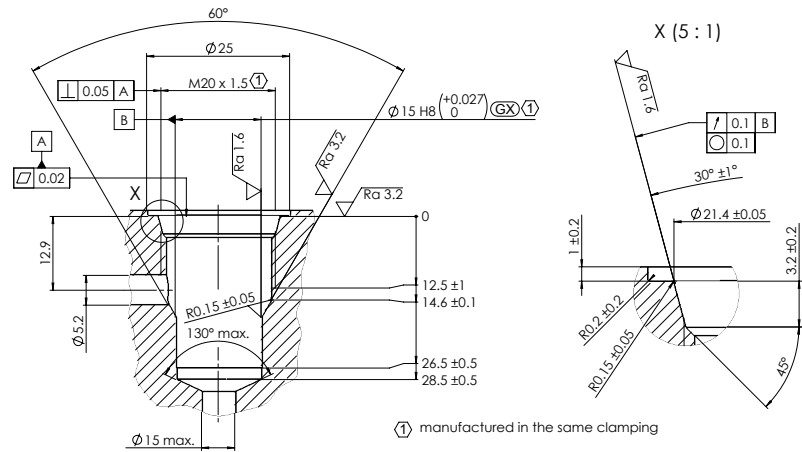
Nominal size	E		4B	
Design	X		G1/4VR	G3/8VR
Type	DVM-4E-X-700-V-A*00		DVM-4B-G1/4VR-700-V-A*00	DVM-4B-G3/8VR-700-V-A*00
Part No.	3830674		3830715	3830716
Weight	0.14 kg		1.2 kg	1.2 kg
Symbol				
Nominal size	4R			
Design	G1/4		G3/8	
Type	DVM-4R-G1/4-700-V-A*00		DVM-4R-G3/8-700-V-A*00	
Part No.	3830718		3830719	
Weight	1.2 kg		1.2 kg	
Symbol				

## Dimensional drawings

### Intermediate plate valve



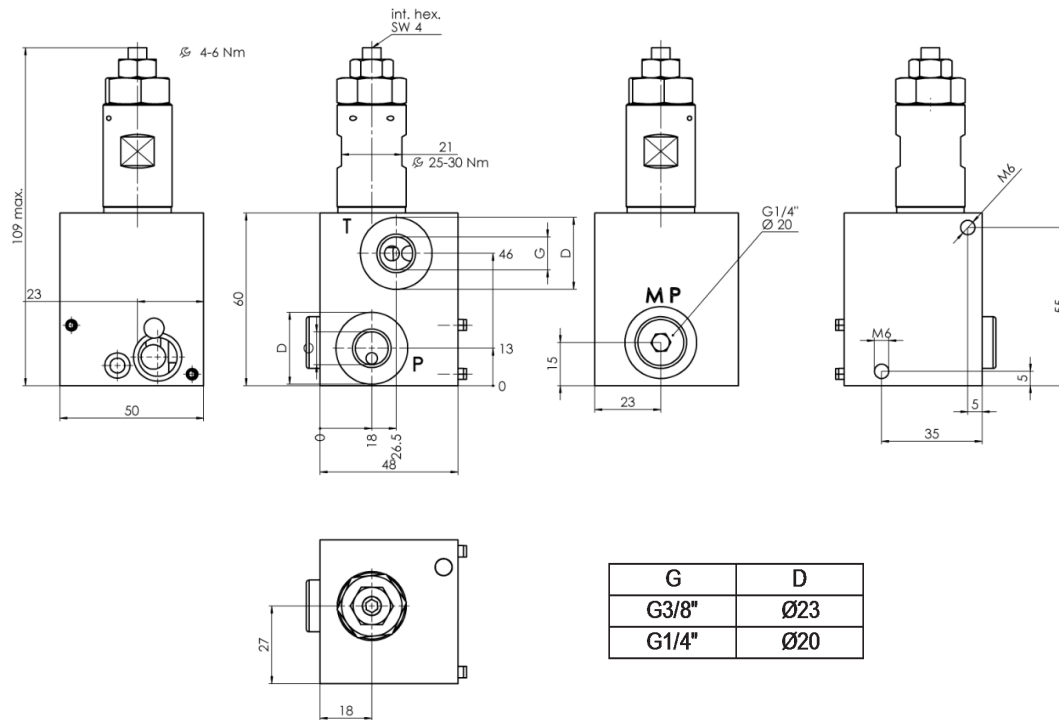
### Installation space Screw-in cartridge



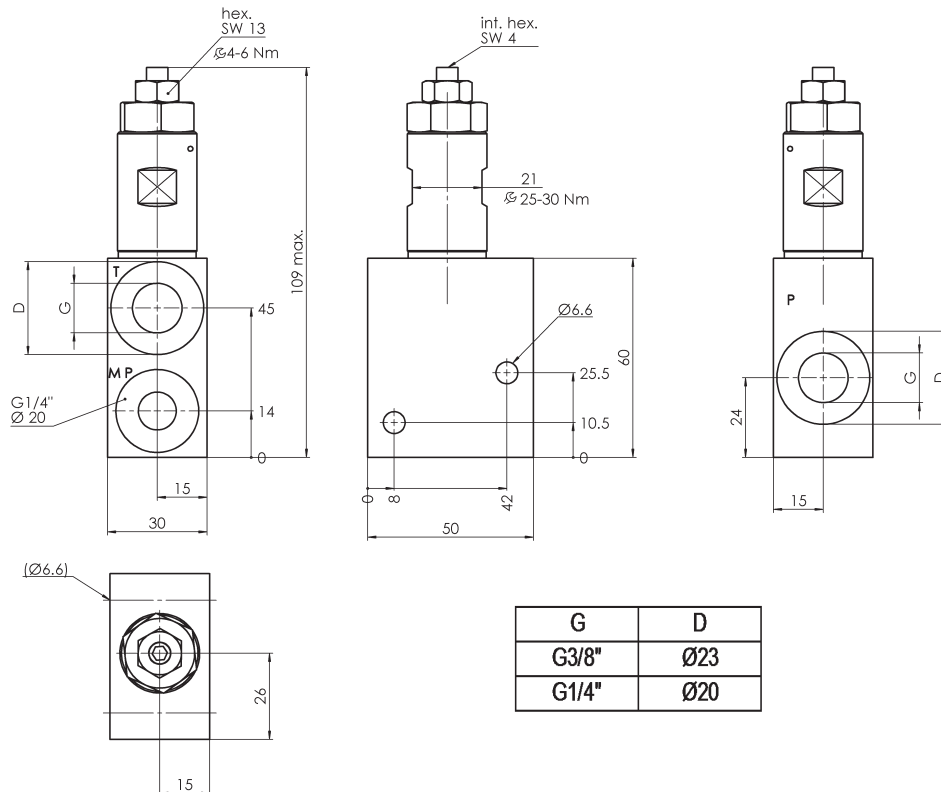
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### Starting block



### In in-line mounting body



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The information in this brochure relates to the operating conditions and applications described.  
For applications and operating conditions not described, please contact the relevant technical department.  
Subject to technical modifications.