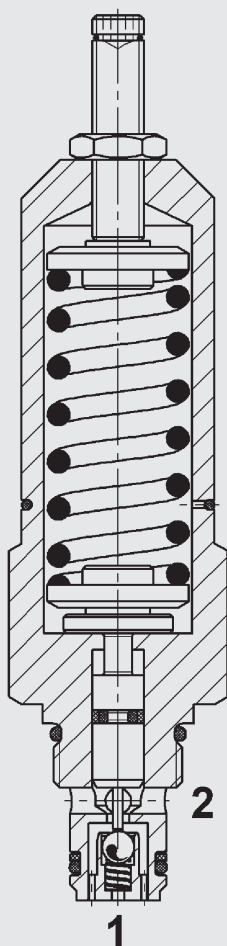


up to 15 l/min  
up to 500 bar

## FUNCTION



The overpressure protection valve DSR5E is a direct-acting, spring-loaded poppet valve. When the pressure rises above the pre-set spring tension, the valve closes and the oil flow to the consumer port 2 is blocked.

## Overpressure Protection Valve poppet type, direct-acting Metric Cartridge – 500 bar DSR5E

### FEATURES

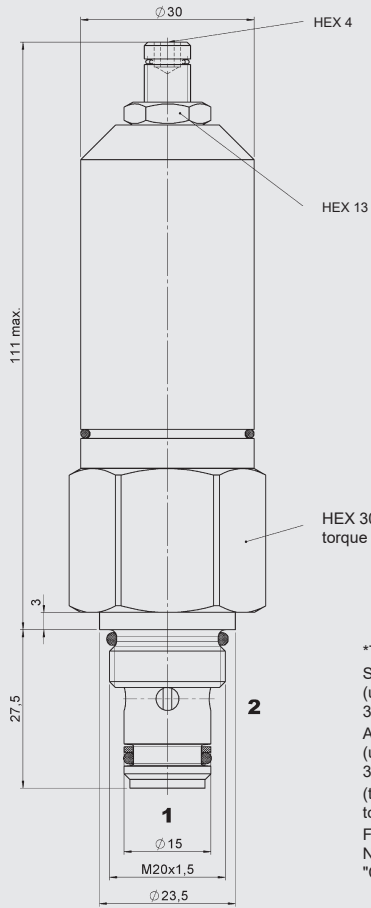
- To shut off consumers when certain pressures are reached
- Excellent dynamic performance
- Excellent stability throughout the entire flow range
- Adjustable up to 350 bar
- Various pressure ranges up to 350 bar

### SPECIFICATIONS\*

Operating pressure:	max. 500 bar, can be set up to 350 bar
Nominal flow:	max. 15 l/min
Pressure setting ranges:	100 / 250 / 350 bar
Cut-out pressure tolerance:	± 5 bar
Internal leakage:	Leakage-free (max. 5 drops $\hat{=}$ 0,25 cm <sup>3</sup> /min at 350 bar)
Media operating temperature range:	min. -20 °C to max. +120 °C
Ambient temperature range:	min. -20 °C to max. +120 °C
Operating fluid:	Hydraulic oil to DIN 51524 Part 1 and 2
Viscosity range:	min. 2.8 mm <sup>2</sup> /s to max. 800 mm <sup>2</sup> /s
Filtration:	Class 21/19/16 according to ISO 4406 or cleaner
MTTF <sub>a</sub> :	150 - 1200 years, according to DIN EN ISO 13849-1
Installation:	No orientation restrictions, preferably horizontal
Materials:	Valve body: steel Piston: hardened and ground steel Seals: FKM (standard) NBR (optional, media temperature range -30 °C to +100 °C) Back-up rings: PTFE
Cavity:	06020
Weight:	0.38 kg

\* see "Conditions and instructions for valves" in brochure 5.300

## DIMENSIONS

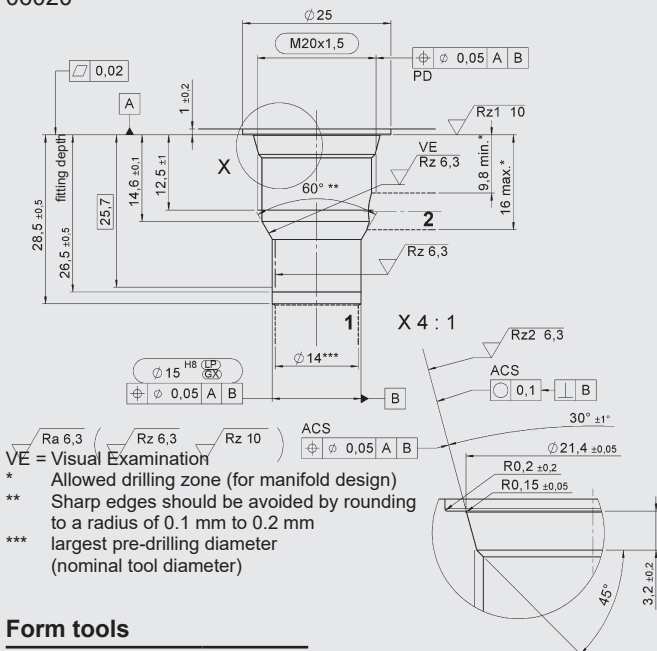


\*Torque:  
Steel manifold  
(ultimate tensile strength < 360 N/mm<sup>2</sup>):  
30 Nm  
Aluminium manifold  
(ultimate tensile strength < 330 N/mm<sup>2</sup>):  
30 Nm  
(tool acc. to DIN EN ISO 6789,  
tool type II class A or B)  
For further informations see brochure  
No. 53.000  
"Conditions and instructions for valves"

Millimeter  
Subject to technical modifications

## CAVITY

06020



VE = Visual Examination

- \* Allowed drilling zone (for manifold design)
- \*\* Sharp edges should be avoided by rounding to a radius of 0.1 mm to 0.2 mm
- \*\*\* largest pre-drilling diameter (nominal tool diameter)

### Form tools

Tool	Part No.
Countersink	170033
Reamer	1000768
Tap	1002648
Plug gauge	168840

Millimeter  
Subject to technical modifications

## MODEL CODE

DSR5 E - 01X / 250 V 110

### Basic model

Overpressure protection valve, metric

### Body and ports

E = cartridge

### Type

01 = standard

### Pressure setting range

100 = 25 bis 100 bar

250 = 80 bis 250 bar

350 = 150 bis 350 bar

### Type of adjustment

V = adjustable

### Pre-set cut-out pressure

110 = 110 bar

Other settings on request

### Standard models

Model code	Part No.
DSR5E-010/100V	710280
DSR5E-010/250V	710281
DSR5E-010/350V	710282

Other models on request

### Standard in-line bodies

Code	Part No.	Material	Ports	Pressure
R06020-01X-01	275266	Steel, zinc-plated	G3/8	350 bar
R06020-10X-01	276842	Steel, zinc-plated	G3/8	350 bar

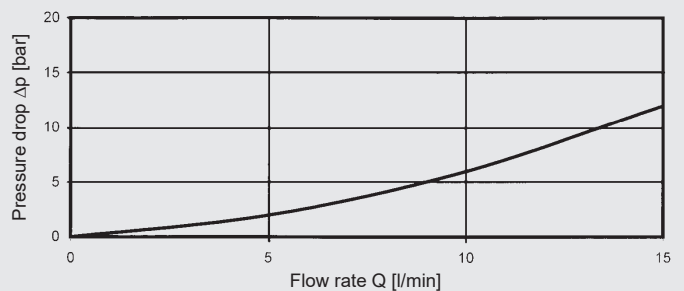
### Seal kits

Code	Part No.
SEAL KIT 06020-NBR	3119017
SEAL KIT 06020-FKM	3262477

## TYPICAL PERFORMANCE

measured at  $v = 38 \text{ mm}^2/\text{s}$ ,  $T_{\text{oil}} = 43 \text{ }^\circ\text{C}$

### $\Delta p$ -Q Performance



### NOTE

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

### HYDAC Fluidtechnik GmbH

Justus-von-Liebig-Str.  
D-66280 Sulzbach/Saar  
Tel: 0 68 97 /509-01  
Fax: 0 68 97 /509-598  
E-Mail: valves@hydac.com