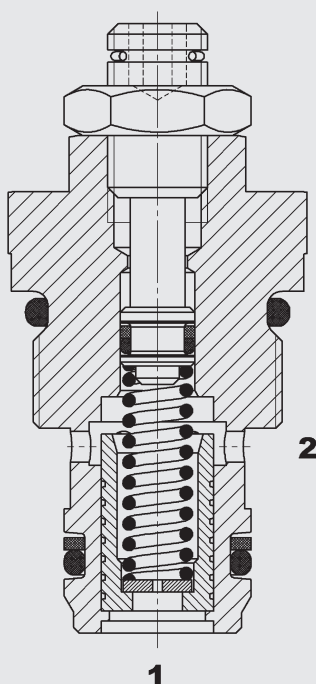


Up to 20 l/min  
Up to 350 bar

## FUNCTION



The SR5E is a pressure compensated flow control valve which maintains a constant outlet flow by means of a control function. The flow rate is largely independent of the pressure and viscosity.

The valve has a fixed orifice with pressure compensator spool. The measuring orifice determines the setting range for the flow rate which can be adjusted over a small range. If oil is flowing from 1 to 2, a pressure drop occurs at the measuring orifice. The pressure compensator moves into the control position which corresponds to the force equilibrium. This is created by the pressure drop acting on the control piston area overcoming the spring force.

As the flow rate increases (greater pressure drop), the diameter of the control orifice is reduced until the forces are equal again. A constant flow rate is therefore achieved. In the reverse direction there is free flow through the valve.

Important: if the required control pressure differential is not reached, the valve operates as a non-compensated flow control valve.

## 2-Way Flow Regulator, Pressure Compensated Direct-Acting Metric Cartridge – 350 bar SR5E

### FEATURES

- For regulating the speed of loads independently of the pressure
- For limiting the max. speed of lifting gear (in compliance with accident prevention regulations)
- For limiting the flow rate for control oil circuits in the main circuit and offline
- Hardened and ground valve components to ensure minimal wear and extended service life
- Optional zinc-plated version available

### SPECIFICATIONS

Operating pressure:	max. 350 bar	
Nominal flow:	max. 20 l/min	
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. 380 mm <sup>2</sup> /s	
Filtration:	Class 21/19/16 according to ISO 4406 or cleaner	
MTTF <sub>d</sub> :	150 years (see "Conditions and instructions for valves" in brochure 5.300)	
Installation:	No orientation restrictions, preferably horizontal	
Materials:	Valve body:	free-cutting 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:	0.07 kg	

## MODEL CODE

SR5E - 01 X / 2.5 - 2.8

### Basic model

Flow regulator, metric

### Type

01 = standard (phosphated, seals FKM)

### Series

(determined by manufacturer)

### Flow rate code

(see separate flow rate table)

### Flow rate setting value

no details = valve is not set

(but the flow rate is within the setting range)

2.8 = setting value as per customer requirements

Other settings on request

### Flow rate and operating pressure ranges

Flow rate code (VK)	Flow rate setting range (l/min)	Required control pressure differential $Dp = p_1 - p_2$ (bar)
0.5	0.5 – 0.6	10 – 15
1.0	1.0 – 1.2	10 – 18
1.6	1.6 – 2.1	10 – 18
2.5	2.5 – 3.2	10 – 18
4.0	4.0 – 5.2	10 – 18
6.5	6.5 – 7.8	10 – 18
10	10.0 – 12.5	12 – 20
16	16.0 – 20.0	12 – 20

### Important:

- if the required control pressure differential is not reached, the valve operates as a non-compensated throttle valve.
- different settings are available as an option (standard manufacturer's setting at  $\Delta p = 100$  bar)

### Standard models

Model code	Part No.
SR5E-01X/0.3	Q=0.3-0.4 710335
SR5E-01X/0.5	Q=0.5-0.6 710321
SR5E-01X/0.7	Q=0.7-0.9 710347
SR5E-01X/1	Q=1.0-1.2 710337
SR5E-01X/1.6	Q=1.6-2.1 710338
SR5E-01X/2.5	Q=2.5-3.2 710339
SR5E-01X/3.5	Q=3.5-3.9 717832
SR5E-01X/4	Q=4.0-5.2 710340
SR5E-01X/6.5	Q=6.5-7.8 710341
SR5E-01X/7.9	Q=7.9-8.9 710342
SR5E-01X/10	Q=10.0-12.5 710343
SR5E-01X/12.6	Q=12.6-15.9 710313
SR5E-01X/16	Q=16.0-20.0 710344

Other models on request

### Standard in-line bodies

Code	Part No.	Material	Ports	Pressure
R06020-01X-01	275266	Steel, zinc-plated	G3/8	420 bar
R06020-10X-01	276842	Steel, zinc-plated	G3/8	420 bar

### Seal kits

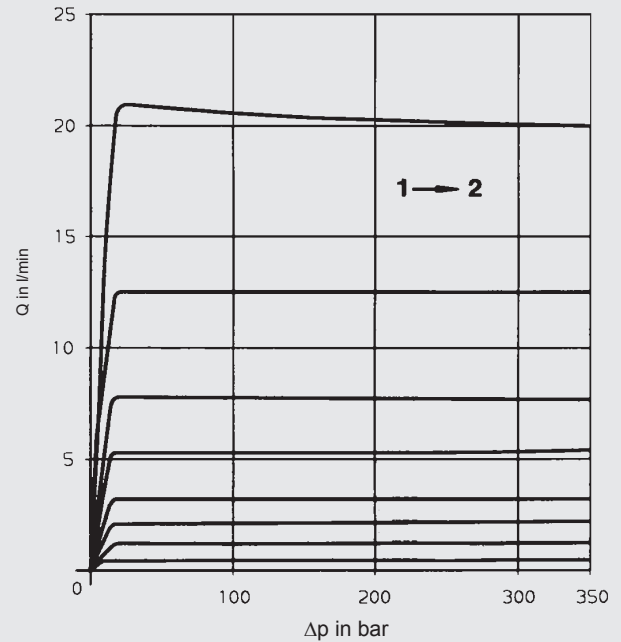
Code	Part No.
SEAL KIT 06020-NBR	3119017
SEAL KIT 06020-FKM	3262477

## FLOW RATE CURVES

### Flow rate, pressure-dependent

Q- $\Delta p$  curve,

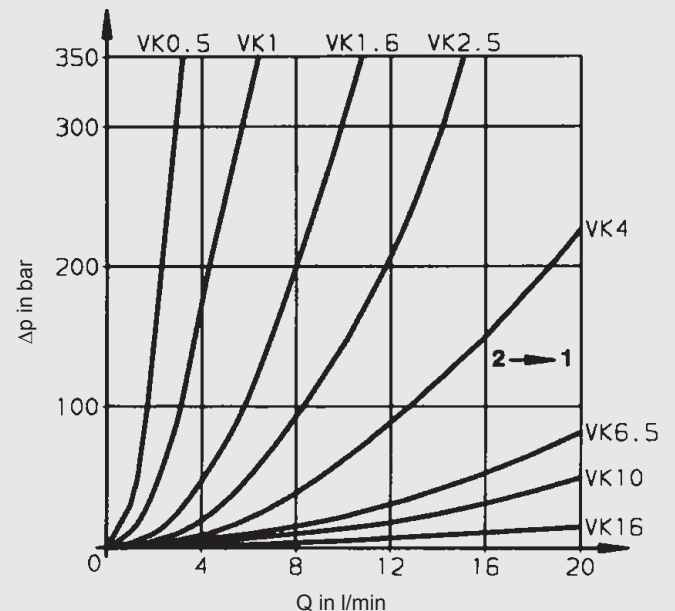
measured at  $n = 72 \text{ mm}^2/\text{s}$  and  $T_{\text{oil}} = 30^\circ\text{C}$



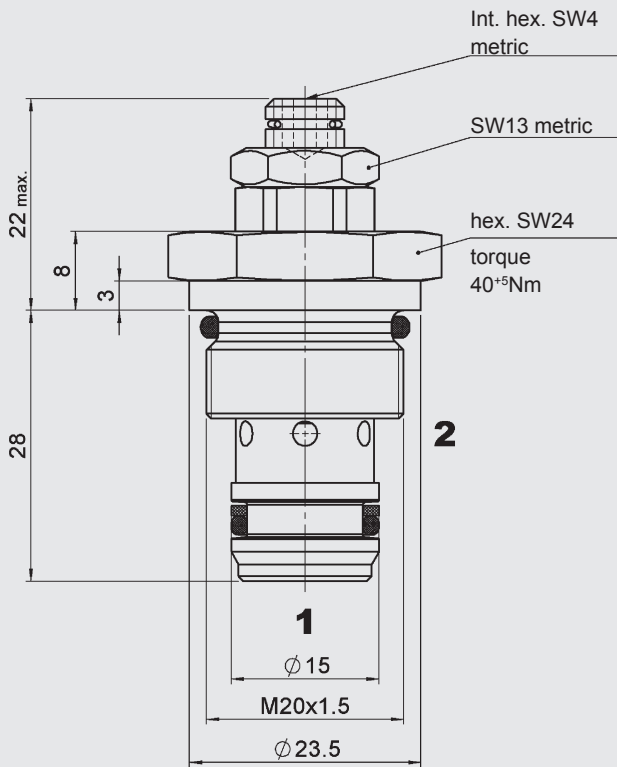
### Q- $\Delta p$ curve

Pressure differential  $\Delta p$  against flow rate  $Q$ , measured at  $v = 72 \text{ mm}^2/\text{s}$  and  $T_{\text{oil}} = 30^\circ\text{C}$

VK = Flow rate code



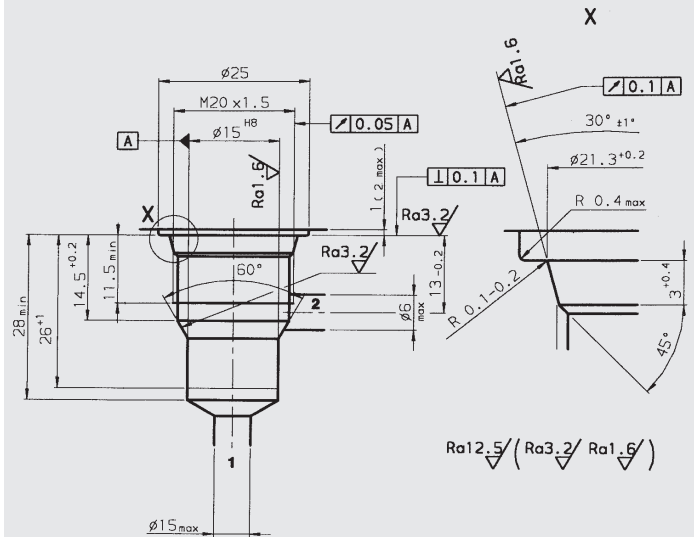
## DIMENSIONS



Millimeter  
Subject to technical modifications

## CAVITY

06020



### Form tools

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

Millimeter  
Subject to technical modifications

### 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.

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