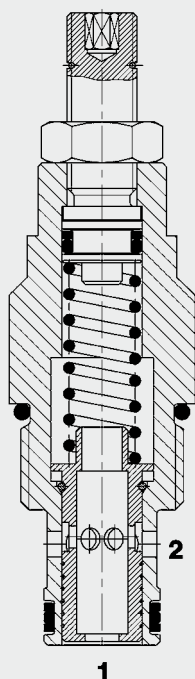




38 l/min  
350 bar

## FUNCTION



The SR10 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 metering orifice determines the setting range for the flow rate and can be adjusted within a limited range. If oil is flowing from 1 to 2, a pressure drop occurs at the metering 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 (increasing 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 throttle valve.

## 2-Way Flow Regulator Pressure Compensated Restrictive Style, SAE-10 Cartridge – 350 bar SR10-01

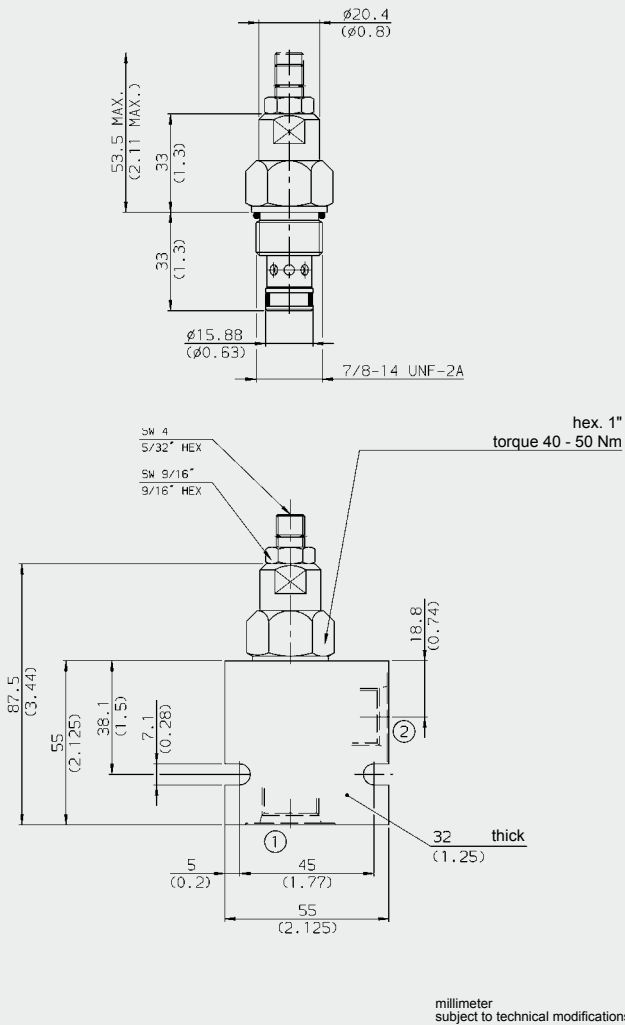
### FEATURES

- Excellent stability throughout the entire flow range
- External surfaces zinc-plated and corrosion-proof
- Hardened and ground internal valve components to ensure minimal wear and extended service life
- Low pressure drop due to CFD optimized flow path
- Optional flow ranges up to 38 l/min
- The flow rate can still be adjusted within a limited range.

### SPECIFICATIONS

Operating pressure:	max. 350 bar (210 bar from port 2 to 1)
Nominal flow:	max. 38 l/min
Flow ranges and accuracy:	4.0 – 13.0 l/min ±10% 13.0 – 38.0 l/min ±10%
Media operating temperature range:	min. -30 °C to max. +120 °C
Operating fluid:	Hydraulic oil to DIN 51524 Part 1 and 2
Viscosity:	min. 7.4 mm <sup>2</sup> /s to max. 420 mm <sup>2</sup> /s
Filtration:	Class 21/19/16 to ISO 4406 or cleaner
MTTF <sub>d</sub> :	150 years (see "Conditions and instructions for valves" in brochure 5.300)
Material	Valve body: free-cutting steel Spool: hardened and ground steel Seals: NBR (standard) FKM (optional, media temperature range -20 °C to +120 °C)
Cavity:	FC10-2
Weight:	0.16 kg

## DIMENSIONS



## MODEL CODE

**SR10-01 - C - N - 10.5 V 9.2**

**Basic model** \_\_\_\_\_  
Flow regulator UNF

**Body and ports\*** \_\_\_\_\_  
C = cartridge only  
SB4 = G1/2 ports, steel body  
AB4 = G1/2 ports, aluminium body

**Seals** \_\_\_\_\_  
N = NBR  
V = FKM

**Flow rate code and flow range** \_\_\_\_\_  
3.5 = 4.0 - 13.0 l/min  $\pm$  10%  
10.5 = 13.0 - 38.0 l/min  $\pm$  10%

**Type of adjustment** \_\_\_\_\_  
V = Allen head (hex. 5/32")  
H = Knob adjustment  
F = Factory preset, non adjustable

**Opening flow rate setting** \_\_\_\_\_  
No details = no setting  
9.2 = 9.2 l/min customer-specific flow setting on request

## Standard models

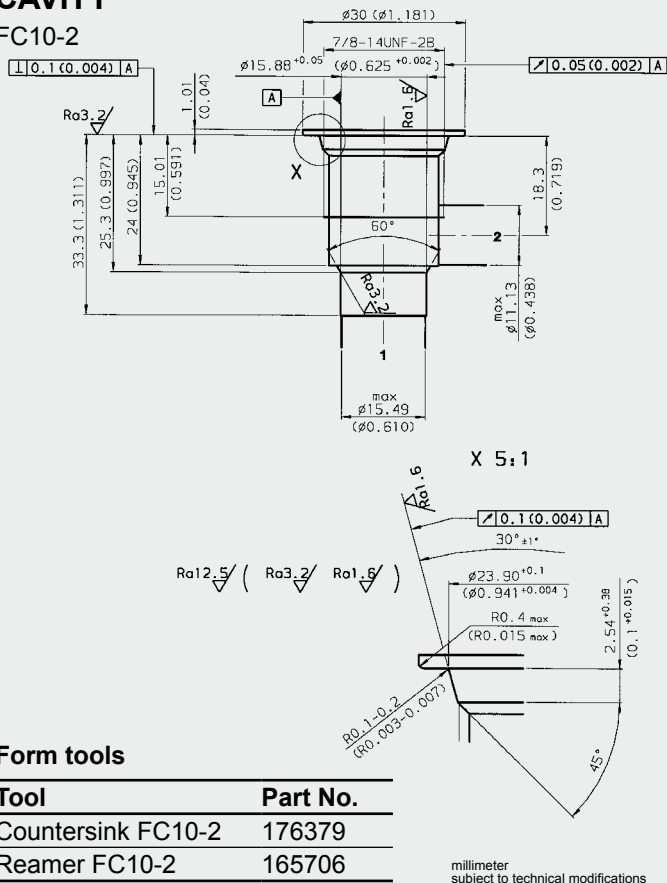
Model code	Part No.
SR10-01-C-N-3.5V	3053635
SR10-01-C-N-10.5V	3053636

## \*Standard in-line bodies

Code	Part No.	Material	Ports	Pressure
FH102-SB4	3037594	Steel, zinc-plated	G1/2	420 bar
FH102-AB4	3037777	Aluminium, clear anodized	G1/2	210 bar

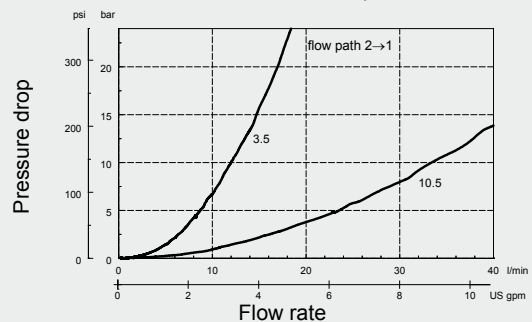
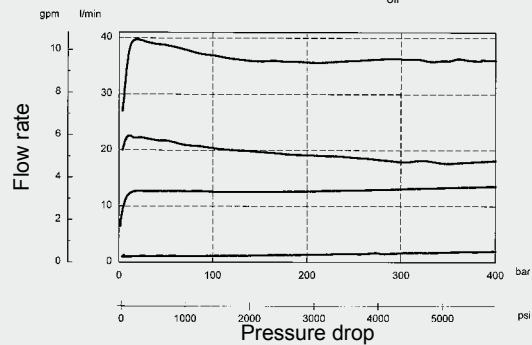
## CAVITY

### FC10-2



## PERFORMANCE

Measured at  $v = 34 \text{ mm}^2/\text{s}$ ,  $T_{\text{oil}} = 46^\circ \text{C}$



## 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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## Form tools

Tool	Part No.
Countersink FC10-2	176379
Reamer FC10-2	165706

millimeter subject to technical modifications