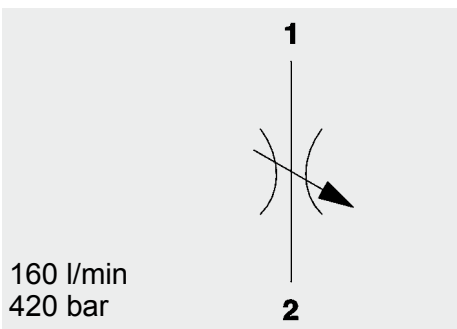


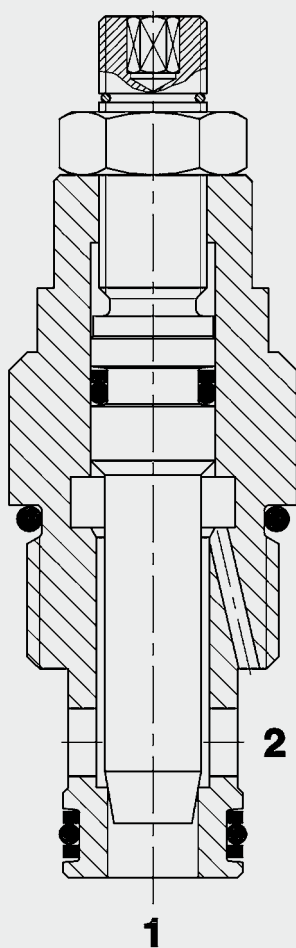
Needle Valve SAE-10 Cartridge – 420 bar

UNF

SD10-01



FUNCTION



The SD10 is a flow control valve which controls the flow rate by adjusting the cross section. The flow rate is therefore dependent on the pressure differential and viscosity. Starting with the throttle spindle in the fully closed position, the flow rate increases in accordance with the appropriate curve as the control knob is turned. The flow is controlled in both directions.

Control knob option: The coloured rings on the top of the control knob enable accurate repeat setting.

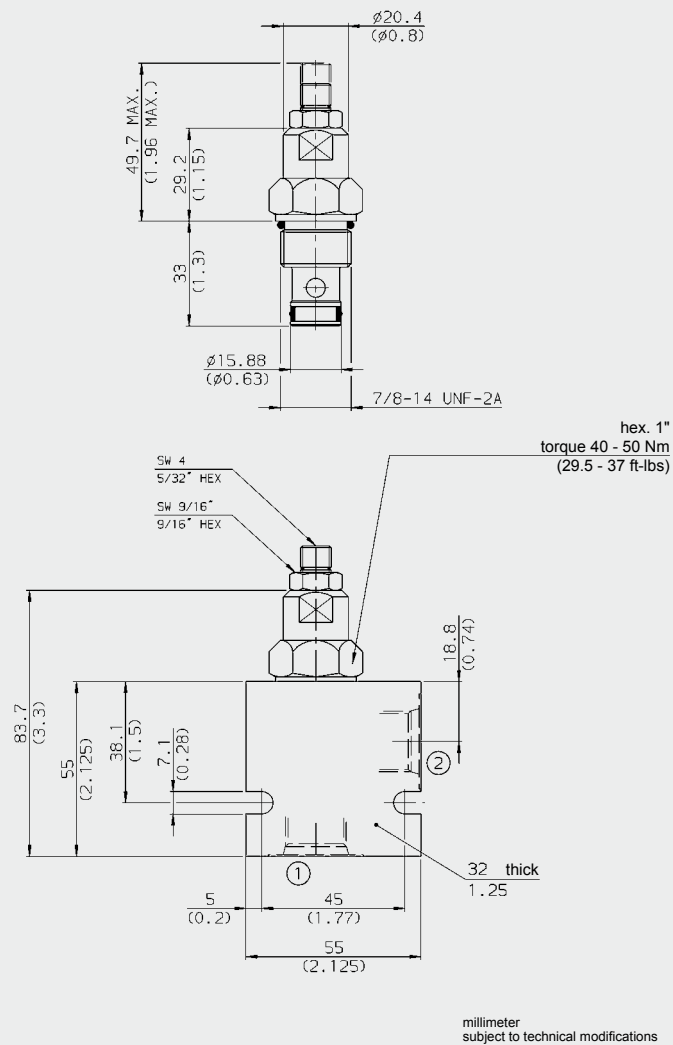
FEATURES

- For regulating the speed of loads
- External surfaces zinc-plated and corrosion-proof
- Flow adjustable from full flow to complete shut-off
- Compact design

SPECIFICATIONS

Operating pressure:	max. 420 bar	
Nominal flow:	max. 160 l/min	
Media operating temperature range:	min. -30 °C to max. +100 °C	
Ambient temperature range:	min. -30 °C to max. +100 °C	
Operating fluid:	Hydraulic oil to DIN 51524 Part 1 and 2	
Viscosity range:	min. 7.4 mm ² /s to max. 420 mm ² /s	
Filtration:	Class 21/19/16 to ISO 4406 or cleaner	
MTTF _d :	150 years (see "Conditions and instructions for valves" in brochure 5.300)	
Installation:	No orientation restrictions	
Materials:	Valve body:	free-cutting steel
	Control spindle:	hardened and ground steel
	Seals:	NBR (standard) FKM (optional, media temperature range -20 °C to +120 °C)
Cavity:	FC10-2	
Weight:	0.15 kg	

DIMENSIONS



MODEL CODE

SD10-01 C - N - V

Basic model _____
Needle valve UNF

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

Seals _____
N = NBR (standard)
V = FKM

Type of adjustment _____
V = Allen head (int. hex. 5/32")
H = knob adjustment

Other adjustment types on request

Standard models

Model code	Part No.
SD10-01-C-N-V	3017145
SD10-01-C-N-H	3054472

*Standard in-line bodies

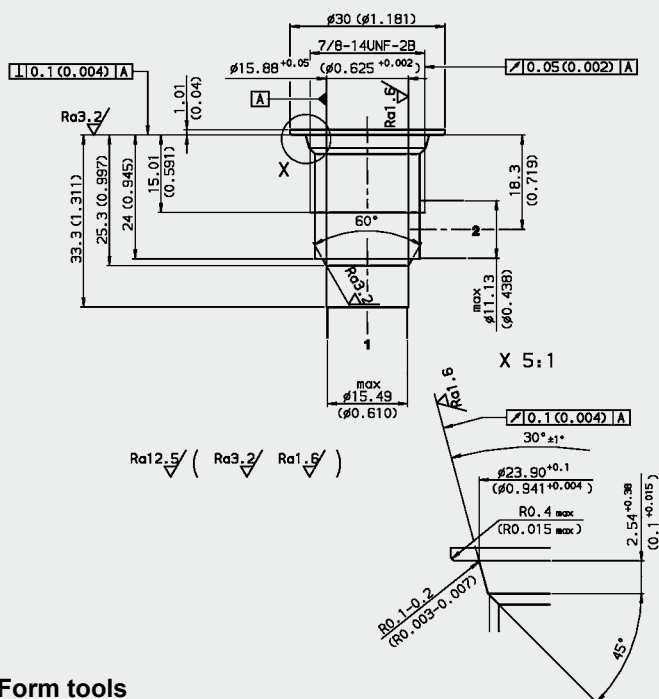
Code	Part No.	Material	Ports	Pressure
FH102-SB4	3037594	Steel, zinc-plated	G1/2	420 bar
FH102-AB4	3037777	Aluminium, clear anodized	G1/2	210 bar

Seal kits

Code	Material	Part No.
FS102-N SEAL KIT	NBR	3033872
FS102-V SEAL KIT	FKM	3051757

CAVITY

FC10-2



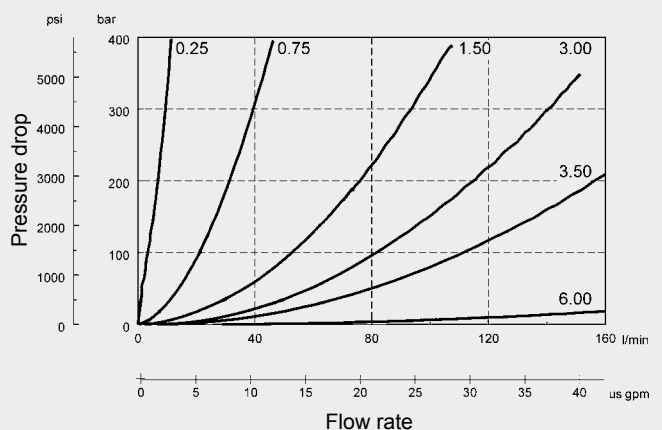
Form tools

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

millimeter subject to technical modifications

PERFORMANCE

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



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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