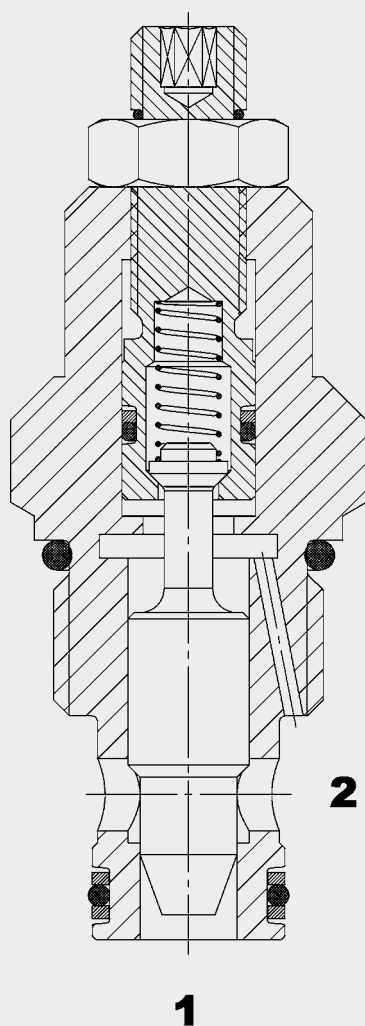


Up to 100 l/min  
Up to 350 bar

## FUNCTION



The needle valve SDR10A-11 with reverse flow check is an adjustable, hydraulically operated, spring-loaded spool valve. Depending on the throttle setting, the valve controls the flow rate from port 2 to 1. There is free flow from port 1 to 2. Flow is not pressure-compensated, i.e. the flow rate is dependent on the viscosity and the pressure drop.

The valve is used for precision flow control from 0 to 40 l/min.

## Needle Valve with Reverse Flow Check Precision Control Function SAE-10 Cartridge – 350 bar

SDR10A-11

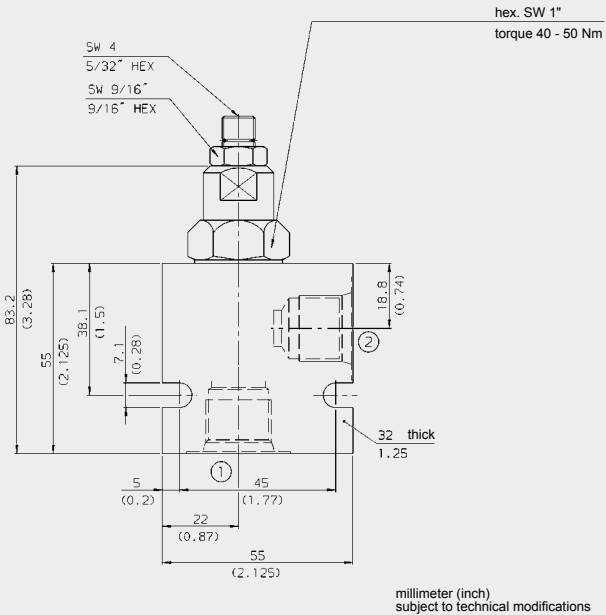
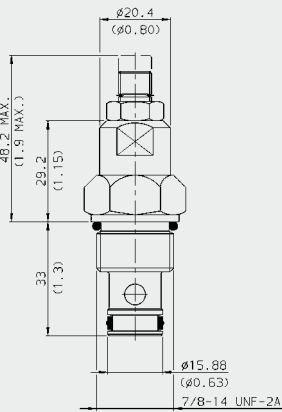
### FEATURES

- Precision flow control function up to 40 l/min from port 2 to 1
- The flow is controlled subject to the viscosity of the oil and the pressure drop
- A set-screw locks the setting
- Excellent stability across the whole flow range
- External surfaces zinc-plated and corrosion-proof
- Reverse flow possible (flushing function)

### SPECIFICATIONS

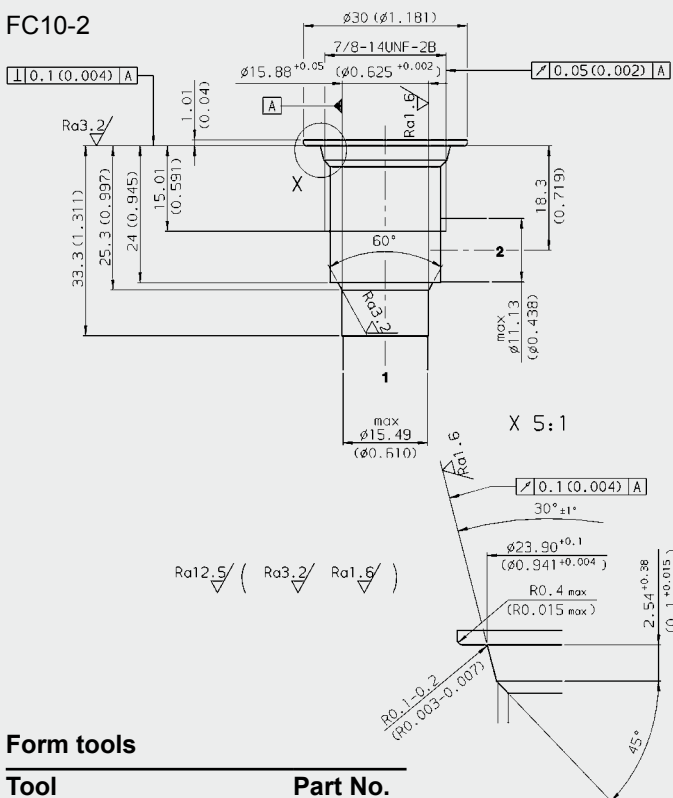
Operating pressure:	max. 350 bar
Nominal flow:	max. 100 l/min
Internal leakage:	max. 0.5 l/min at 350 bar
Media operating temperature range:	min. -30 °C to max. +100 °C
Ambient temperature range:	min. -30 °C to max. +100 °C
Operating fluid:	Hydraulic oil to DIN 51524 Part 1 and 2
Viscosity range:	min. 10 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)
Installation:	No orientation restrictions
Materials:	Valve body: steel Control spindle: hardened and ground steel Seals: NBR (standard) FKM (optional, media temperature range -20 °C to +120 °C) Back-up rings: PTFE
Cavity:	FC10-2
Weight:	0.15 kg

## DIMENSIONS



## CAVITY

FC10-2



### Form tools

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

millimeter (inch)  
subject to technical modifications

## MODEL CODE

**SDR 10A-11-C-N-15V**

**Basic model** \_\_\_\_\_  
Needle valve,  
with reverse flow check, UNF

**Cavity** \_\_\_\_\_  
FC10-2 = UNF cavity 2-way

**Type** \_\_\_\_\_  
11 = precision flow control  
(standard)

**Body and ports\*** \_\_\_\_\_  
C = cartridge only

**Seals** \_\_\_\_\_  
N = NBR (standard)  
V = FKM (optional)

**Pressure setting** \_\_\_\_\_  
15 = 1 bar (15 PSI)

**Type of adjustment** \_\_\_\_\_  
V = Allen head

### Standard models

Model code	Part No.
SDR10A-11-C-N-15V	3360939

### \*Standard in-line bodies

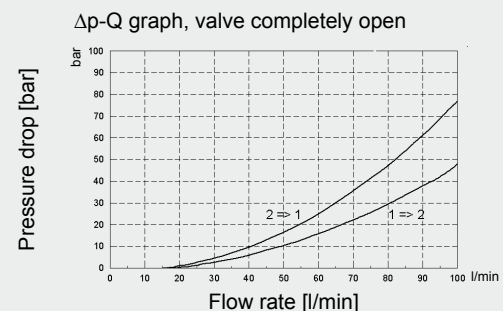
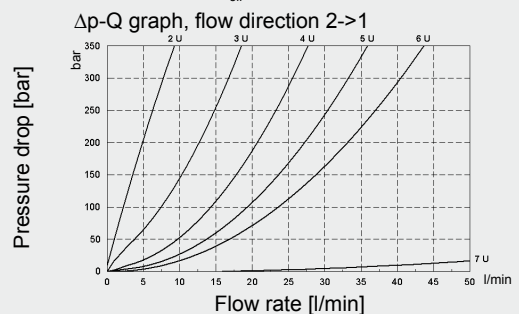
Code	Part No.	Material	Ports	Pressure
FH102-SB4	3037594	Steel, zinc-plated	G1/2	420 bar
FH102-AB4	3037777	Aluminium, anodized	G1/2	210 bar

### Seal kits

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

## 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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