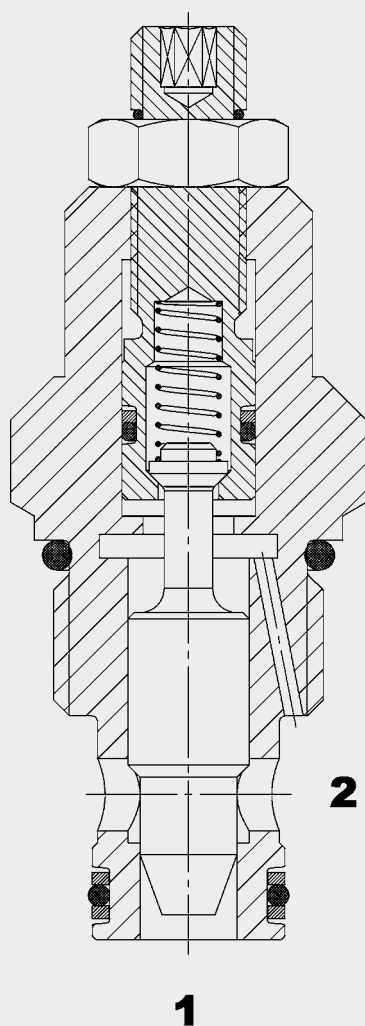


Up to 100 l/min
Up to 350 bar

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

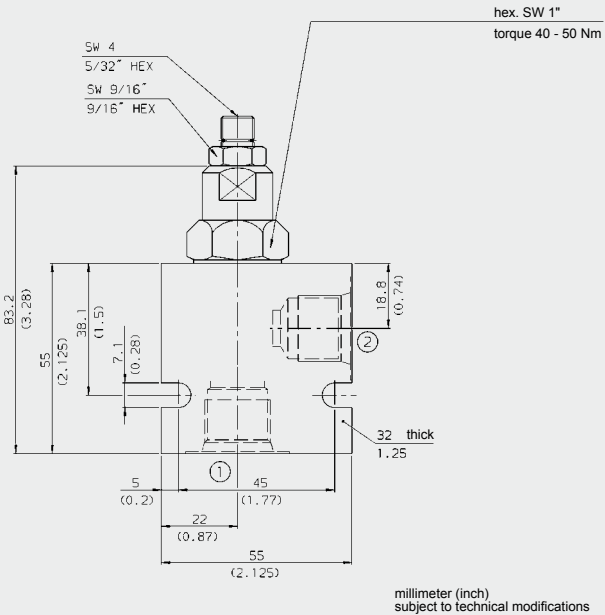
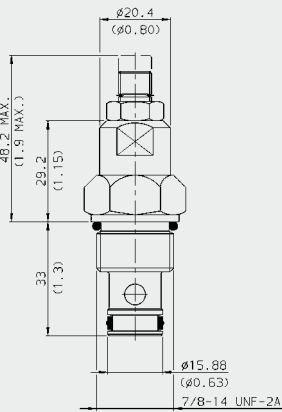
FEATURES

- 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 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: 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

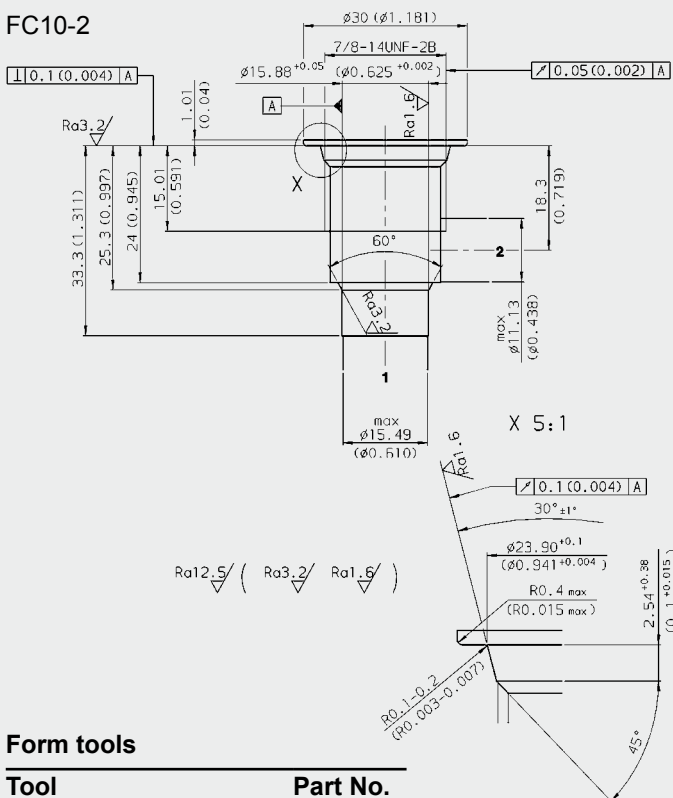
DIMENSIONS



millimeter (inch)
subject to technical modifications

CAVITY

FC10-2



millimeter (inch)
subject to technical modifications

Form tools

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

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

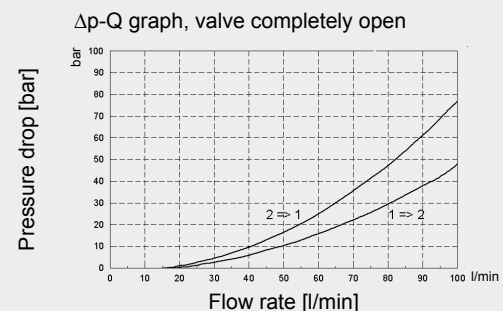
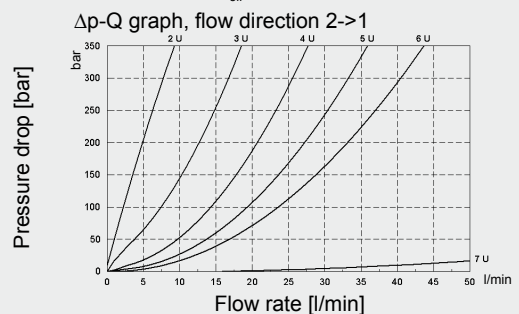
Code	Part No.	Material	Ports	Pressure
FH102-SB4	3037594	Steel, zinc-plated	G1/2	420 bar
FH102-AB4	3037777	Aluminium, anodized	G1/2	210 bar

Seal kits

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

PERFORMANCE

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



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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