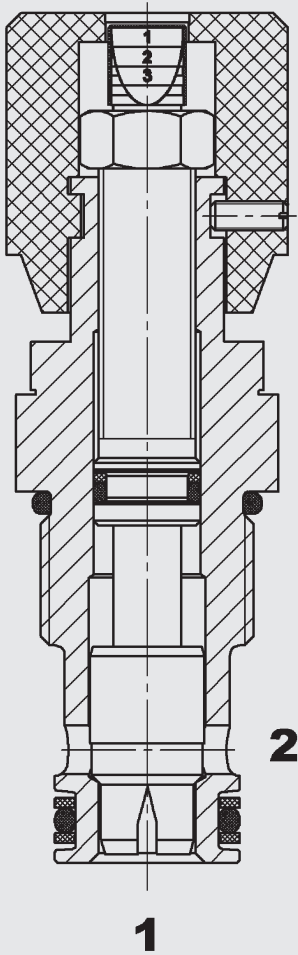


Up to 80 l/min
Up to 350 bar

Needle Valve Direct-Acting Metric Cartridge – 350 bar SD10120

FUNCTION



The SD10120 is a flow control valve which controls the flow rate by adjusting the cross section. The flow rate depends on the pressure differential and the 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. The scale and coloured rings on the top of the control knob enable accurate repeat setting.

FEATURES

- For regulating the speed of loads
- For fine adjustment and shut-off of the flow
- For system-related damping in hydraulic circuits
- An Allen set-screw locks the setting of the knob
- 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:	80 l/min	
Media operating temperature range:	min. -20 °C to max. +80 °C	
Ambient temperature range:	min. -20 °C to max. +80 °C	
Operating fluid:	Hydraulic oil to DIN 51524 Part 1 and 2	
Viscosity range:	min. 2.8 mm ² /s to max. 800 mm ² /s	
Filtration:	Class 21/19/16 according to ISO 4406 or cleaner	
MTTF _d :	150 years (see "Conditions and instructions for valves" in brochure 5.300)	
Installation:	No orientation restrictions, preferably horizontal	
Materials:	Valve body:	steel
	Piston:	steel
	Seals:	FKM (standard) NBR (optional, media temperature range -30 °C to +100 °C)
	Back-up rings:	PTFE
Cavity:	10120	
Weight:	0.17 kg	

MODEL CODE

SD10120 - 01 X

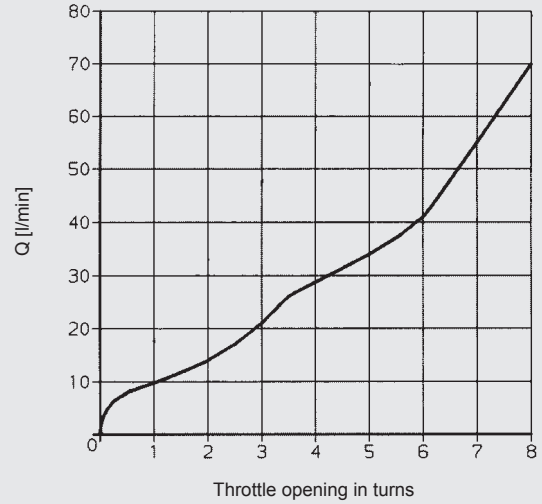
Basic model _____
Needle valve, metric

Type _____
01 = standard (phosphated, seals FKM and PTFE)

Series _____
(determined by manufacturer)

PERFORMANCE

Opening characteristics



$\Delta p = 10 \text{ bar} = \text{constant}$

Standard models

Model code	Part No.
SD10120-01X	710390

Other models on request

Standard in-line bodies

Code	Part No.	Material	Ports	Pressure
R10120-01X-01	395234	Steel, zinc-plated	G1/2	420 bar
R10120-01X-02	395235	Steel, zinc-plated	M22 x 1.5	420 bar

Seal kits

Code	Part No.
SEAL KIT 10120-NBR	3382346
SEAL KIT 10120-FKM	3178281

PRESSURE DROP, DEPENDENT ON FLOW RATE

Measured at $v = 36 \text{ mm}^2/\text{s}$
 $T_{\text{oi}} = 45 \text{ }^\circ\text{C}$

