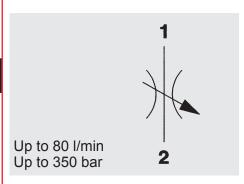


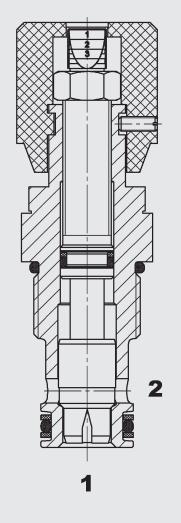
# YDAC INTERNATIONAL



# **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:	min20 °C to max. +80 °C		
Ambient temperature range:	min20 °C to max. +80 °C		
Operating fluid:	Hydraulic oil to DIN 51524 Part 1 and 2		
Viscosity range:	min. 2.8 mm²/s to max. 800 mm²/s		
Filtration:	Class 21/19/16 according 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, 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

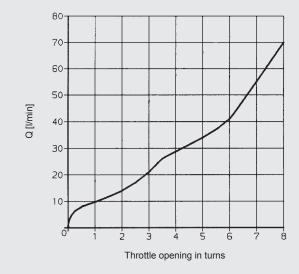
**Type** — 01 = standard (phosphated, seals FKM and PTFE)

Series

(determined by manufacturer)

## **Opening characteristics**

**PERFORMANCE** 



 $\Delta p$  = 10 bar = constant

#### Standard models

Model code	Part No.
SD10120-01X	710390

Other models on request

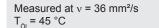
#### Standard in-line bodies

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

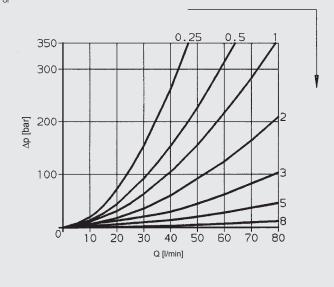
#### Seal kits

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

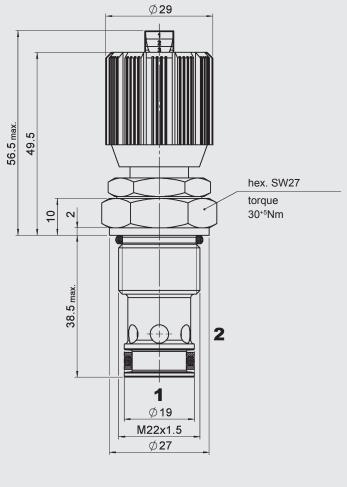
#### PRESSURE DROP, **DEPENDENT ON FLOW RATE**



Throttle opening in turns

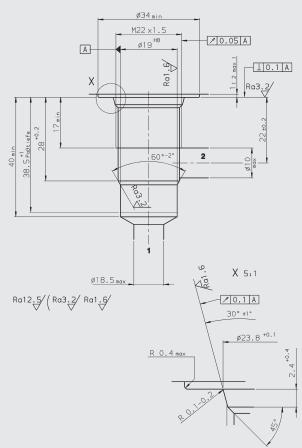


# **DIMENSIONS** Ø29



### **CAVITY**

10120



#### Form tools

millimeter (inch) subject to technical modifications

Tool	Part No.
Countersink	170418
Reamer	1014206
Тар	1002627
Plug gauge	169394

millimeter (inch) subject to technical modifications

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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