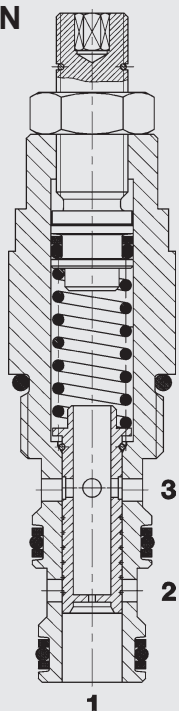


3-Way Flow Regulator pressure compensated priority style, direct-acting UNF Cartridge – 350 bar SRP08-01

FUNCTION



The flow regulator in priority style is a direct-acting 3-way spool type valve. A pressure compensator is connected downstream of a measuring orifice with a constant diameter. This keeps the pressure drop at the orifice plate and thus the output volume flow at 3 constant. The volume flow at 3 is largely independent of pressure fluctuations at the connections. The control pressure difference of the pressure compensator - and thus the controlled volume flow at 3 - can be adjusted within a defined range.

Priority flow controller: The difference between the incoming input volume flow at 1 and the outgoing controlled consumer volume flow at 3 (also called priority volume flow) is diverted as residual volume flow to port 2. Port 2 is pressure resistant. If port 3 is blocked, the valve closes port 1 and the flow rate is not diverted via the valve. If port 2 is blocked, the valve operates as a 2-way flow regulator from 1 to 3. If the required control pressure difference of the pressure compensator is not reached, the valve operates as a throttle with fixed orifice from port 1 to 3.

FEATURES

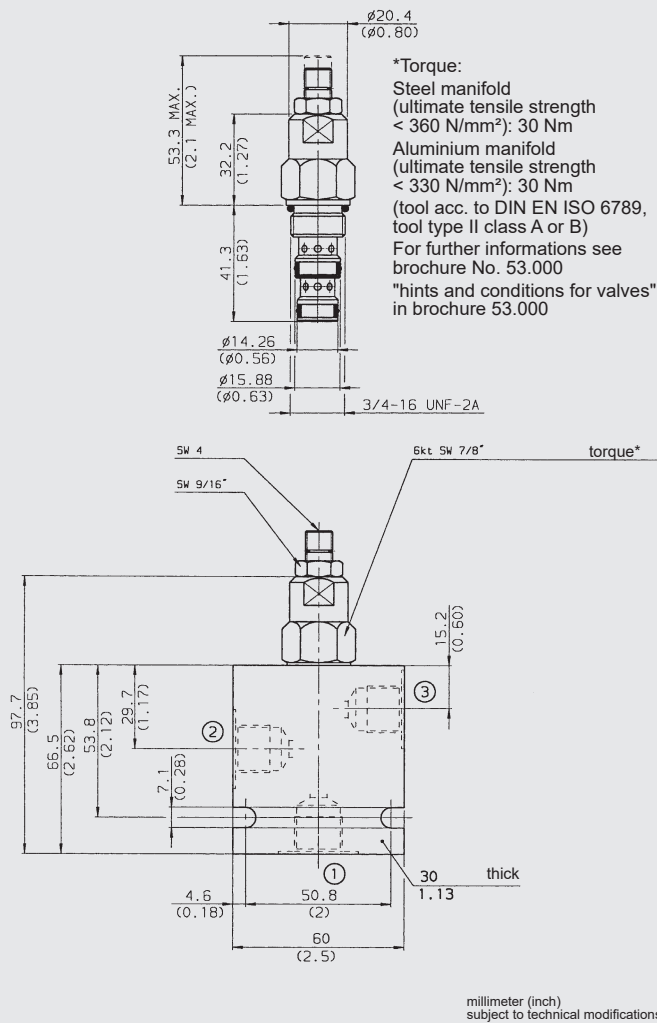
- For regulating the speed of loads independently of the pressure
- For limiting the max. speed of lifting gears (in compliance with accident prevention regulations)
- For limiting the flow rate for control oil circuits in the main circuit and offline
- For prioritized supply of actuators, such as steering and braking - the excess flow is diverted to port 2
- Exposed surfaces zinc-nickel plated for increased corrosion protection (1.000 h Salt spray test)

SPECIFICATIONS*

Operating pressure:	max. 350 bar
Inlet flow (port 1):	max. 50 l/min
Flow rate (port 3):	max. 30 l/min
Flow ranges and accuracy: (port 3)	1.3 – 1.8 l/min 1.6 – 2.5 l/min 2.0 – 3.7 l/min 3.5 – 6.5 l/min 6.0 – 12.5 l/min 8.8 – 20.8 l/min 13.5 – 30.0 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, 2 and 3
Viscosity range:	min. 10 mm ² /s to max. 420 mm ² /s
Filtration:	Class 21/19/16 according to ISO 4406 or cleaner
MTTF _d :	150 - 1200 Jahre, according to DIN EN ISO 13849-1
Installation:	No orientation restrictions
Materials:	Valve body: steel Piston: hardened and ground steel Seals: NBR (standard) FKM (optional, media temperature range -20 °C to +120 °C) Back-up rings: PTFE
Cavity:	FC08-3
Weight:	0.126 kg

*see "Conditions and instructions for valves" in brochure 53.000

DIMENSIONS



MODEL CODE

SRP08-01 - C - N - 0.9 V 0.9

Basic model

Flow regulator, UNF

Body and ports*

C = cartridge only

Seals

N = NBR (standard)

V = FKM

Flow rate code and flow range

0.4 = 1.3 – 1.8 l/min

0.5 = 1.6 – 2.5 l/min

0.9 = 2.0 – 3.7 l/min

1.6 = 3.5 – 6.5 l/min

3.0 = 6.0 – 12.5 l/min

5.5 = 8.8 – 20.8 l/min

7.9 = 13.5 – 30.0 l/min

Type of adjustment

V = Allen head

H = knob adjustment

Other adjustment types on request

Setting

0.9 = 0,9 Gpm (approx. 3,4 l/min)

No details = set to lowest value of flow range

Standard models

Model code	Part No.
SRP08-01-C-N-0.5V	3020780
SRP08-01-C-N-0.9V	3020781
SRP08-01-C-N-3.0V	3020823
SRP08-01-C-N-5.5V	3020824

Other models on request

Standard in-line bodies

Code	Part No.	Material	Ports	Pressure
FH083-SB3	560922	Steel, zinc-plated	G3/8"	350 bar
FH083-AB3	3011427	Aluminium, clear anodized	G3/8"	210 bar

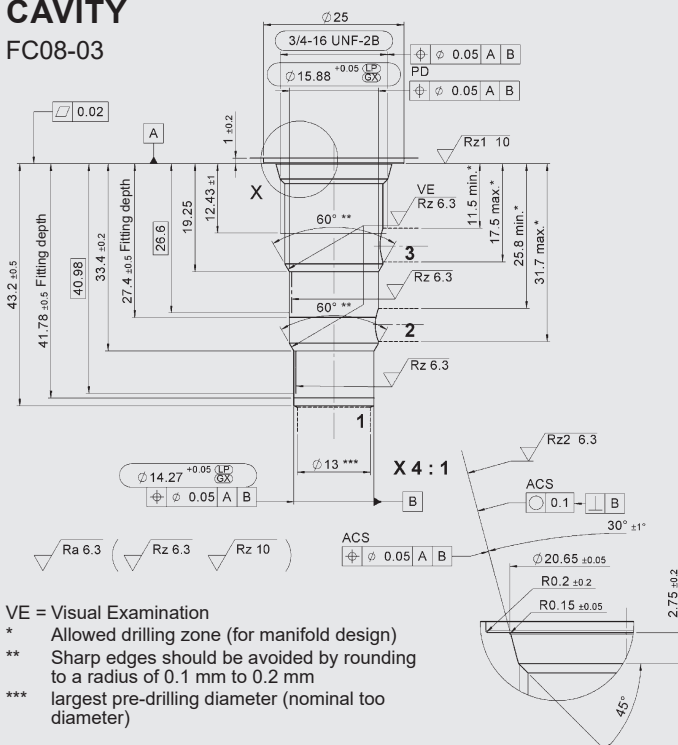
Other housings on request

Seal kits

Code	Material	Part No.
FS UNF 08/N	NBR	3651385
FS UNF 08/V	FKM	3651356

CAVITY

FC08-03



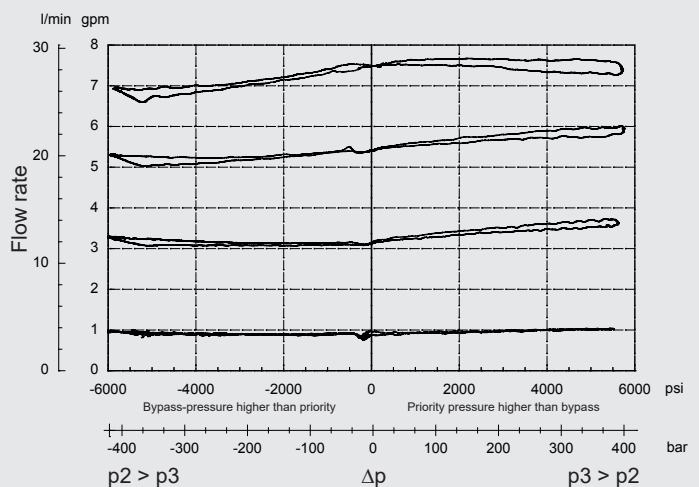
Form tools

Tool	Part No.
Countersink	175644
Reamer	175645

millimeter (inch)
 subject to technical modifications

TYPICAL 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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