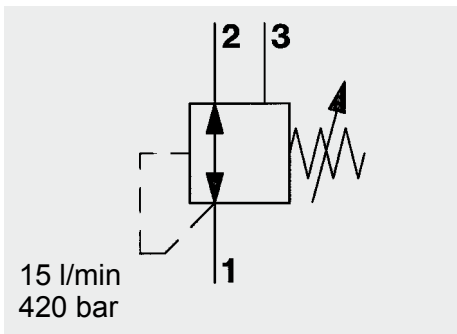
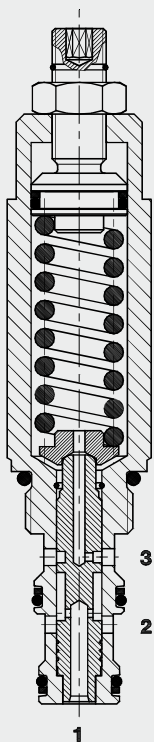


Pressure Reducing Valve Spool Type, Direct Acting SAE-8 Cartridge – 420 bar DR08-01



FUNCTION



The DR08 is a direct-acting, spring-loaded, spool type pressure reducing valve. Its function is to maintain a constant pressure at the consumer. In the normal position, the pressure port 2 is connected to the consumer port 1. The pressure building at the consumer acts on the face of the control spool and moves it upwards against the set spring force. Therefore the flow at port 2 is restricted enough to satisfy the consumer's demand without increasing the pressure. In addition the valve has a pressure relieving function: If the pressure across consumer port 1 rises above the control pressure due to external force, the control piston is pushed further against the spring and relieves the consumer to tank port 3.

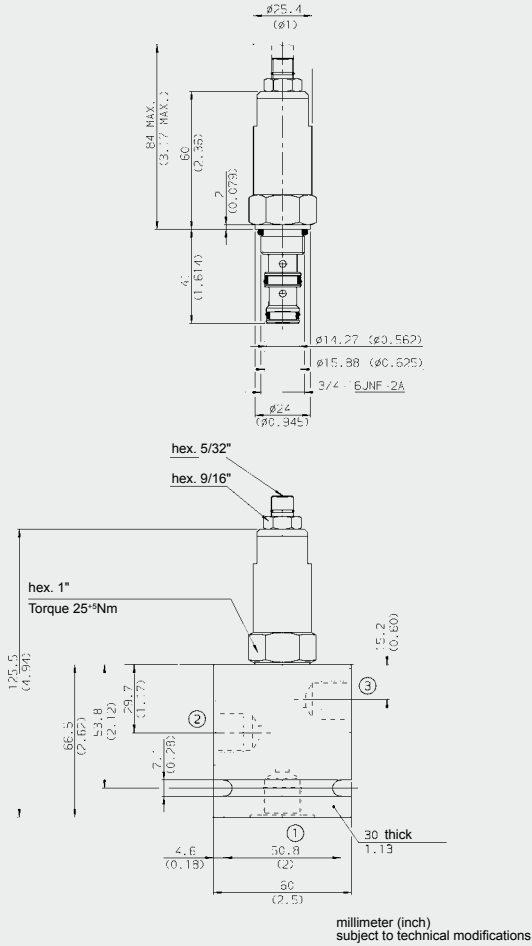
FEATURES

- External surfaces zinc-plated and corrosion-proof with integral maximum stroke limitation
- Adjustable throughout flow range
- Hydrodynamic damping
- Optional spring ranges up to 207 bar
- Quick response
- Compact design
- Hardened and ground internal valve components to ensure minimal wear and extended service life

SPECIFICATIONS

Operating pressure:	max. 420 bar
Nominal flow:	max. 15 l/min
Operating pressure ranges:	to 35 bar to 83 bar to 152 bar to 207 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. 7.4 mm ² /s to max. 420 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
Material	Valve body: free-cutting steel Spool: hardened and ground steel Seals: NBR (standard) FKM (optional, media temperature range -20 °C to 120 °C)
Cavity:	FC08-3
Weight:	0.24 kg

DIMENSIONS



MODEL CODE

DR08-01 - C - N - 220 V 180

Basic model _____
Pressure reducing valve UNF

Body and ports* _____
C = cartridge only
SB3 = G3/8 ports, steel body
AB3 = G3/8 ports, aluminium body

Seals _____
N = NBR
V = FKM

Setting pressure range _____

027 = 2 to 19 bar
050 = 3 to 35 bar
120 = 11 to 83 bar
220 = 15 to 152 bar
300 = 20 to 207 bar

Other pressure ranges on request

Adjustment option _____

V = Allen head (HEX 5/32")
H = knob adjustment
F = factory preset, non adjustable
K = with protective cap

Pressure setting _____

No details = no setting, spring relaxed
Pressure value = setting specified by customer

Standard models

Model code	Part No.
DR08-01-C-N-027V	3107709
DR08-01-C-N-050V	560752
DR08-01-C-N-120V	560456
DR08-01-C-N-220V	560454
DR08-01-C-N-300V	3022444

*Standard in-line bodies

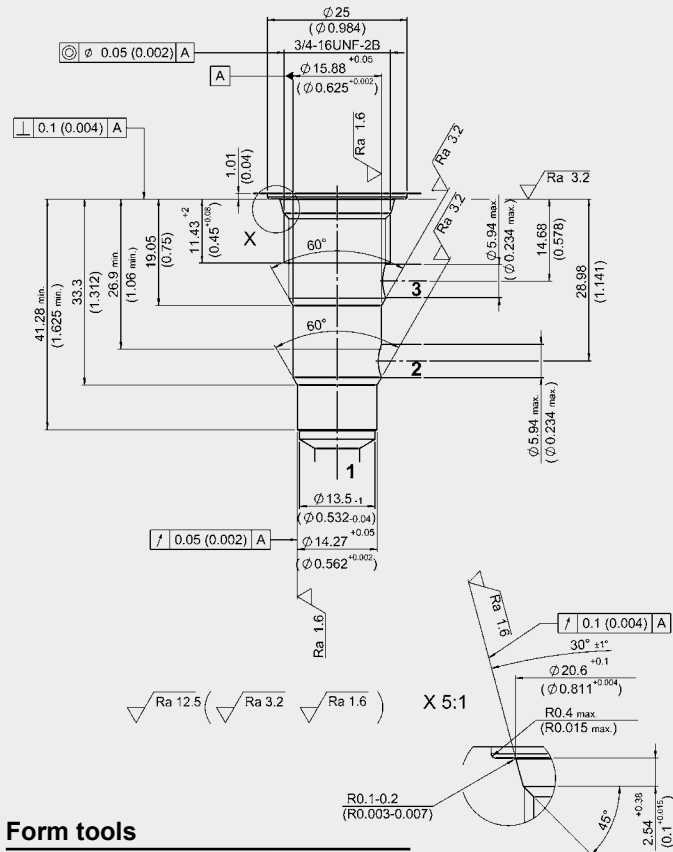
Code	Part No.	Material	Ports	Pressure
FH083-SB3	560922	Steel, zinc-plated	G3/8	420 bar
FH083-AB3	3011427	Aluminium, clear anodized	G3/8	210 bar

Seal kits

Code	Material	Part No.
FS083-N SEAL KIT	NBR	3054795
FS083-V SEAL KIT	FKM	2591059

CAVITY

FC08-3



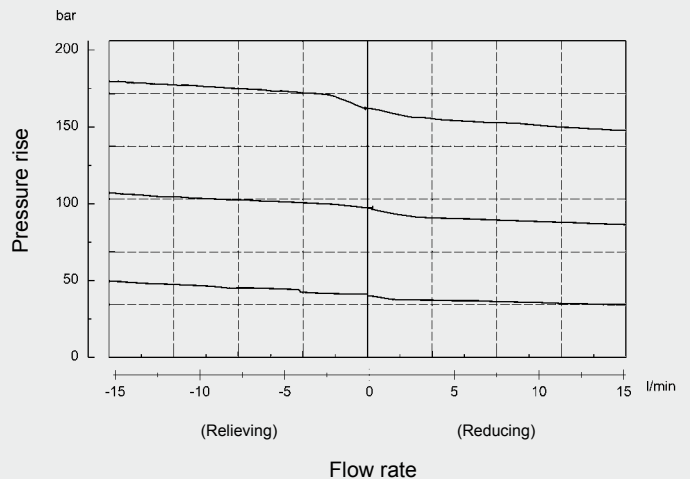
Form tools

Tool	Part No.
Countersink FC08-3	175644
Reamer FC08-3	175645

millimeter (inch)
subject to technical modifications

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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