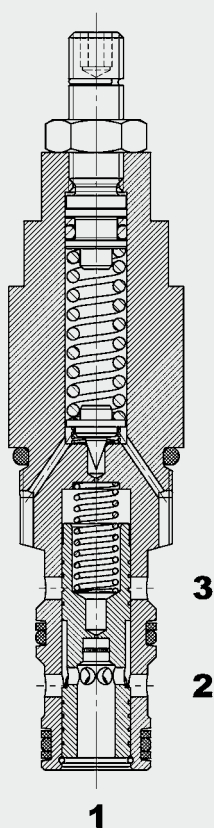


FUNCTION



The DR10P is a pilot-operated, spring-loaded, spool type pressure reducing valve.

If the pressure across port 1 exceeds the pre-set spring tension, the pilot-stage opens and oil flows from behind the main spool to the tank port 3. The resulting pressure differential causes the main spool to move against the reset-spring and allows oil to flow from port 2 to port 1. This continues until the system pressure is equal to the spring tension and the valve closes again.

If the pressure at port 1 suddenly rises due to external force the valve is relieved to tank port 3 (maximum pressure relief).

Any pressure at port 3 is additive to the valve pressure setting.

Pressure Reducing Valve Spool Type, Pilot-Operated SAE-10 Cartridge – 350 bar DR10P-01

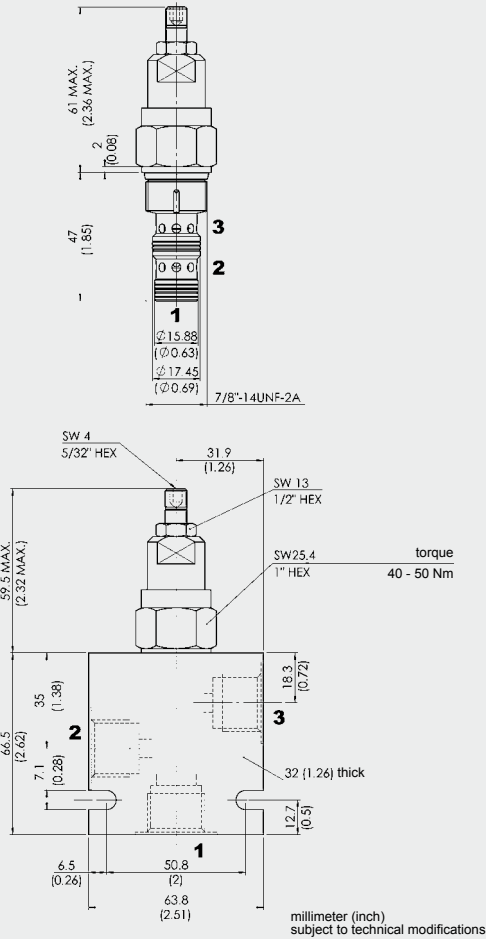
FEATURES

- External surfaces zinc-plated and corrosion-proof
- Hardened and ground internal valve components to ensure minimal wear and extended service life
- Excellent stability across the whole flow range
- Screen-protected metering orifice enhances safety
- Optional pressure ranges up to 345 bar
- Quick response
- Compact design

SPECIFICATIONS

Operating pressure:	max. 350 bar
Nominal flow:	max. 100 l/min
Operating pressure ranges:	up to 35 bar up to 62 bar up to 124 bar up to 228 bar up to 345 bar
Internal leakage:	< 0.5 l/min at 350 bar
Media operating temperature range:	min. -30 °C to max. +120 °C
Ambient temperature range:	min. -30 °C to max. +60 °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 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) Back-up rings: PTFE
Cavity:	FC10-3
Weight:	0.2 kg

DIMENSIONS



MODEL CODE

DR10P-01 - C - N - 180 V 100

Basic model _____
Pressure reducing valve, UNF

Body and ports* _____
C = cartridge only
SB4 = G1/2 ports, steel body
AB4 = G1/2 ports, aluminium body

Seals _____
N = NBR (standard)
V = FKM

Pressure range _____
050 = to 35 bar
090 = to 62 bar
180 = to 124 bar
330 = to 228 bar
500 = to 345 bar
Other pressure ranges on request

Type of adjustment _____
V = Allen head (hex. 5/32")
H = Knob adjustment
F = Factory preset, non adjustable
K = Allen head (hex. 5/32") with protective cap

Cracking pressure setting _____
No details = no setting
100 = 100 PSI customer-specific cracking pressure, on request

Standard models

Model code	Part No.
DR10P-01-C-N-050V	3024308
DR10P-01-C-N-090V	3024309
DR10P-01-C-N-180V	3024310
DR10P-01-C-N-330V	3024311
DR10P-01-C-N-500V	3024333

*Standard in-line bodies

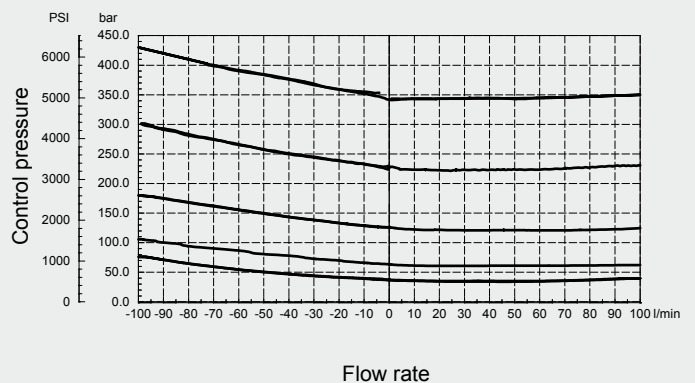
Code	Part No.	Material	Ports	Pressure
FH103-SB4	3037697	Steel, zinc-plated	G1/2	420 bar
FH103-AB4	3038092	Aluminium, anodized	G1/2	210 bar

Seal kits

Code	Material	Part No.
FS103-N SEAL KIT	NBR	3071274
FS103-V SEAL KIT	FKM	3049443

PERFORMANCE

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



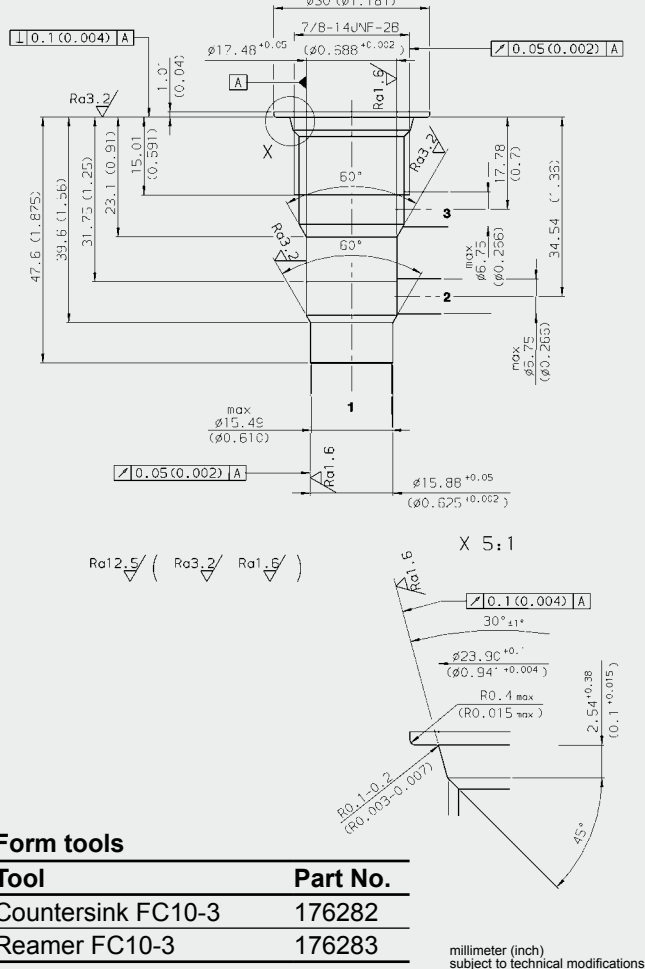
NOTE

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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CAVITY

FC10-3



Form tools

Tool	Part No.
Countersink FC10-3	176282
Reamer FC10-3	176283