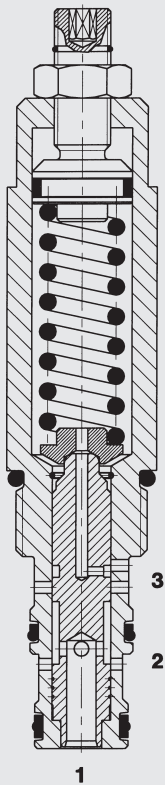


60 l/min  
420 bar

### FUNCTION



The pressure reducing valve DR10 is a direct-acting, spring-loaded spool valve. It maintains a constant pressure at port 1 regardless of pressure changes at port 2.

In standard position the pressure at port 2 is connected to the actuator port 1.

If the pressure across port 1 rises above the setting, the control spool moves upwards against the set spring and therefore the flow at port 2 is restricted to satisfy the load's demand without increasing the pressure.

In addition the valve has a pressure relieving function: If the pressure across port 1 rises above the setting due to a sudden external force, the spool is pushed further against the spring and relieves the load to tank port 3.

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

### FEATURES

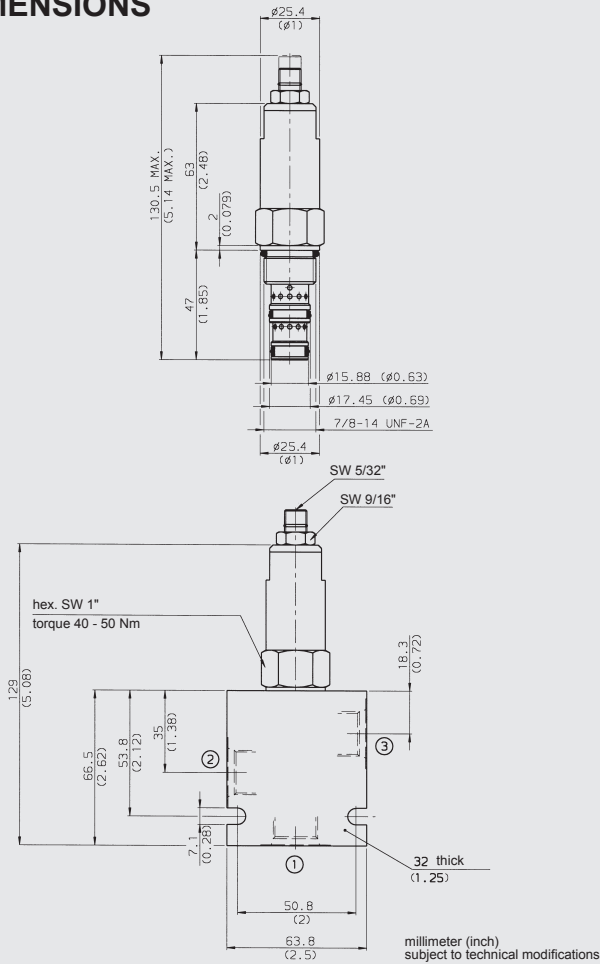
- Exposed surfaces zinc-nickel plated for increased corrosion protection (1.000 h Salt spray test)
- Excellent stability throughout the entire flow range
- Hardened and ground valve components to ensure minimal wear and extended service life
- Low pressure drop due to CFD optimized flow path
- Max. stroke limitation
- Hydrodynamic damping
- Quick response
- Optional spring ranges up to 131 bar

### SPECIFICATIONS\*

Operating pressure:	max. 420 bar	
Nominal flow:	max. 60 l/min	
Operating pressure ranges:	Up to 20 bar Up to 48 bar Up to 96 bar Up to 131 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 to 3	
Viscosity range:	min. 7.4 mm <sup>2</sup> /s to max. 420 mm <sup>2</sup> /s	
Filtration:	Class 21/19/16 to ISO 4406 or cleaner	
MTTF <sub>d</sub> :	150 years	
Installation:	No orientation restrictions	
Material	Valve body:	high tensile steel
	Spool:	hardened and ground steel
	Seals:	NBR (standard) FKM (optional, media temperature range -20 °C to +120 °C)
	Support rings	PTFE
Cavity:	FC10-3	
Weight:	0.26 kg	

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

## DIMENSIONS



## MODEL CODE

**DR10-01 - C - N - 070 V 050**

### 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

V = FKM

### Pressure setting range

030 = up to 20 bar (300 PSI)

070 = up to 48 bar (700 PSI)

140 = up to 96 bar (1400 PSI)

190 = up to 131 bar (1900 PSI)

### Type of adjustment

V = Allen head (hex. 5/32")

H = Handwheel

F = Factory preset, non adjustable

### Pressure setting

No details = no setting, spring relaxed

Pressure value = setting specified by customer

## Standard models

Model code	Part No.
DR10-01-C-N-030V	3140403
DR10-01-C-N-070V	3026815
DR10-01-C-N-140V	3026816
DR10-01-C-N-190V	3026817

## \*Standard in-line bodies

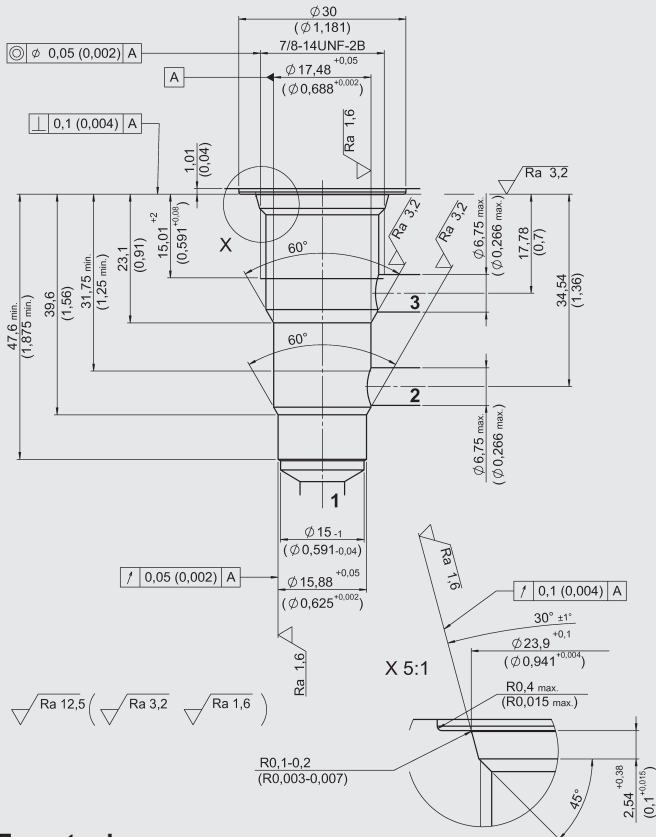
Code	Part No.	Material	Ports	Pressure
FH103-SB4	3037697	Steel, zinc-plated	G1/2	420 bar
FH103-AB4	3038092	Aluminium, anodized	G1/2	210 bar

## Seal kits

Code	Material	Part No.
FS UNF 10/N	NBR	3651557
FS UNF 10/V SEAL KIT	FKM	3651559

## CAVITY

### FC10-3



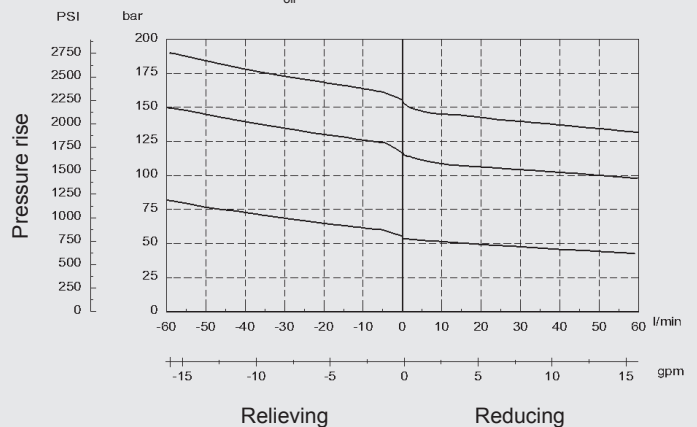
## Form tools

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

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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