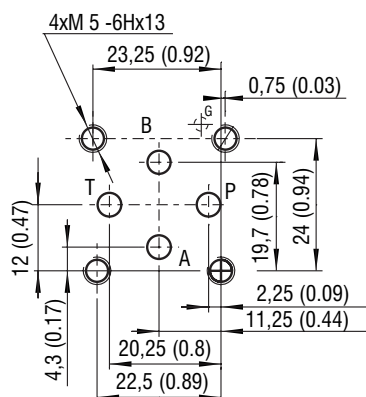


**Technical Features**

- › Pressure reducing - relieving valve, spool type, direct acting, with mounting interface acc. to ISO 4401, DIN 24340 (CETOP 02)
- › Excellent stability throughout flow range with rapid response to dynamic pressure changes
- › Low hysteresis, accurate pressure control and low pressure drop
- › Wide pressure range up to 320 bar
- › Hardened precision parts
- › Pressure reduction function in ports P, A, or B
- › Adjustable by allen key or hand screw
- › Good adjustment sensitivity with reduced drainage flow
- › In the standard version the valve body is phosphated. The steel parts are zinc coated (240 h corrosion protection in NSS acc. to ISO 9227)

ISO 4401-02-01-0-05



Ports P, A, B, T - max.  $\varnothing$  4.5 mm (0.18 in)

**Technical Data**

Valve size	04 (D02)			
Max. flow	l/min (GPM)			
Max. operating pressure (ports P, A, B)	bar (PSI)			
Max. operating pressure (port T)	bar (PSI)			
Reduced pressure range (at Q = 5 l/min)	bar	10-25	20-63	30-160
	(PSI)	(150-360)	(290-910)	(440-2320)
Fluid temperature range (NBR)	°C (°F)			
Fluid temperature range (FPM)	°C (°F)			
Weight - model "A"	kg (lbs)			
	- model "B", "P"			
Datasheet		Type		
General information	GI_0060	Products and operating conditions		
Mounting interface	SMT_0019	ISO 4401-02-01-0-05 DIN 24340 (CETOP 02)		
Spare parts	SP_8010			

**Functional Description**

The pressure valves VRP2 are directly operated reducing-relieving valves for vertical stacking assemblies designed as 3 way valves, which means it includes pressure protection of the secondary circuit. The valve consists of the valve body, control spool, spring, and adjustment element. The body includes a port M with thread G 1/4 for attachment of a pressure measuring device or a by-pass free flow check valve.

**Model A**

In model A, the fluid enters the valve body from the primary circuit through port A1 and passes through the metering edge, where its pressure is reduced. The flow is passed to the output port A2 and on to the user. The reverse free flow from port A2 to port A1 passes through a check valve which is connected in parallel to the metering edge of the control spool.

**Model B**

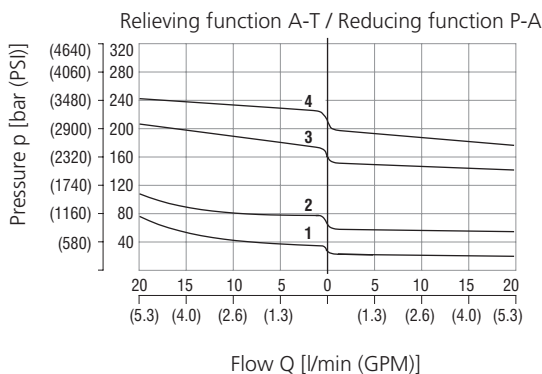
In model B, the pressure reduction occurs from port P2 to port P1, but only if the flow in port B passes towards the user (not opposite). The protection of the secondary circuit is therefore ensured for one flow direction only.

**Model P**

In model P, the pressure reduction occurs from port P2 to port P1, and is effective in both flow directions through the directional valve. Therefore, the protection of the secondary circuit is ensured for both flow directions.

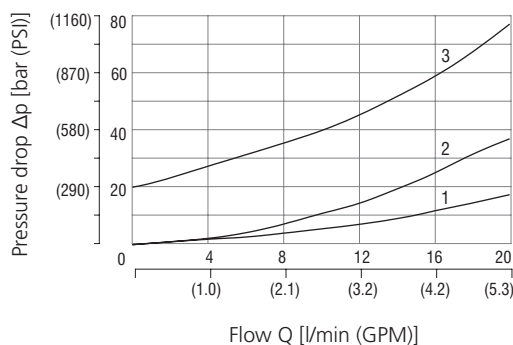
**Characteristics** measured at  $v = 32 \text{ mm}^2/\text{s}$  (156 SUS)

**Reducing - relieving pressure related to flow rate**



	Pressure range
4	21
3	16
2	6
1	2

**Pressure drop related to flow rate**



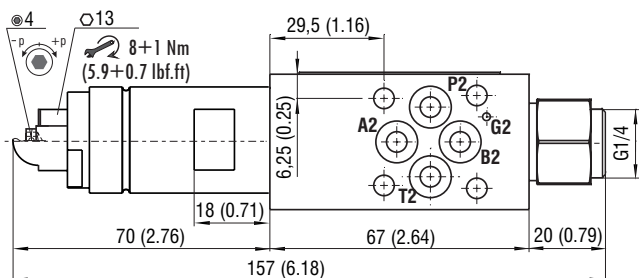
- 1 - Pressure drop of check valve
- 2 - Pressure drop of reducing valve at min. adjustable pressure range
- 3 - Pressure drop of relief valve at min. adjustable safety pressure

	Direction	
	Model A	Models P, B
3	A2-T	P1-T
2	A1-A2	P2-P1
1	A2-A1	

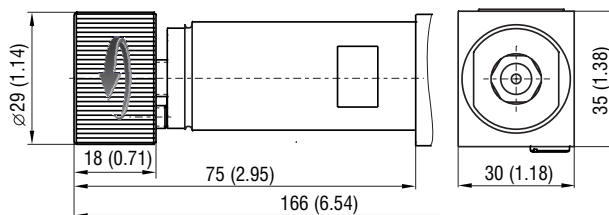
## Dimensions in millimeters (inches)

### Type „A“

#### Model S (T)

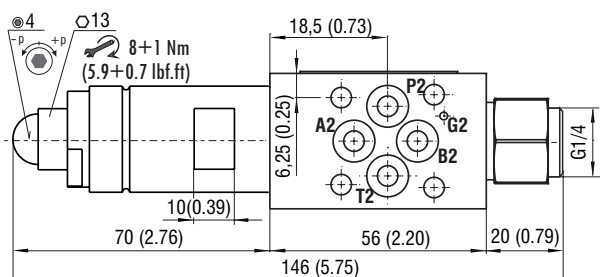


#### Model RS

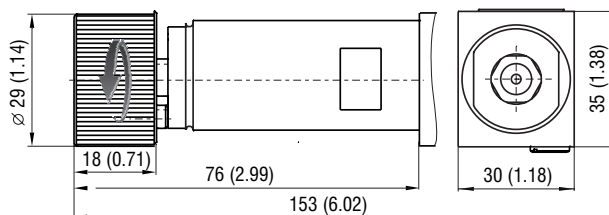


### Type „B“ and „P“

#### Model S (T)

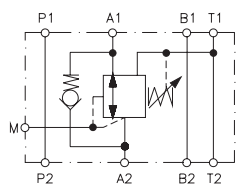


#### Model RS

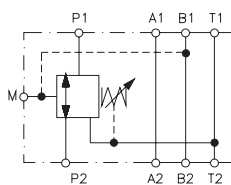


## Functional symbols

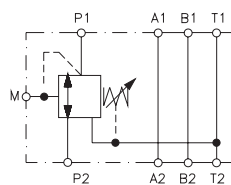
#### VRP2-04-A\*



#### VRP2-04-B\*



#### VRP2-04-P\*



① valve side

② subplate or manifold side

**Notice:** The orientation of the symbol on the name plate corresponds with the valve function.

## Ordering Code

VRP2 - 04 - [ ] [ ] / [ ] [ ] - [ ]

Pressure reducing - relieving valve, spool type, direct acting, modular

#### Valve size

ISO 4401-02-01-0-05, DIN 24340 (CETOP 02), size 04

#### Model

##### Pressure reduction

on port A2  
on port P1  
on port P1

##### Pressure sensing

at port A2  
at port B1  
at port P1

A  
B  
P

S  
T  
RS

#### No designation

zinc-coated (ZnCr-3), ISO 9227 (240 h)  
zinc-coated (ZnNi), ISO 9227 (520 h)

#### Surface treatment

standard

#### No designation

V

#### Seals

NBR  
FPM (Viton)

#### Reduced pressure range (at Q = 5 l/min)

2 10 - 25 bar (150 - 360 PSI)  
6 20 - 63 bar (290 - 910 PSI)  
16 30 - 160 bar (440 - 2320 PSI)  
21 50 - 210 bar (730 - 3050 PSI)

#### Adjustment option

allen key (hex. 4), without protective cap  
allen key (hex. 4), with protective cap  
hand screw, metal