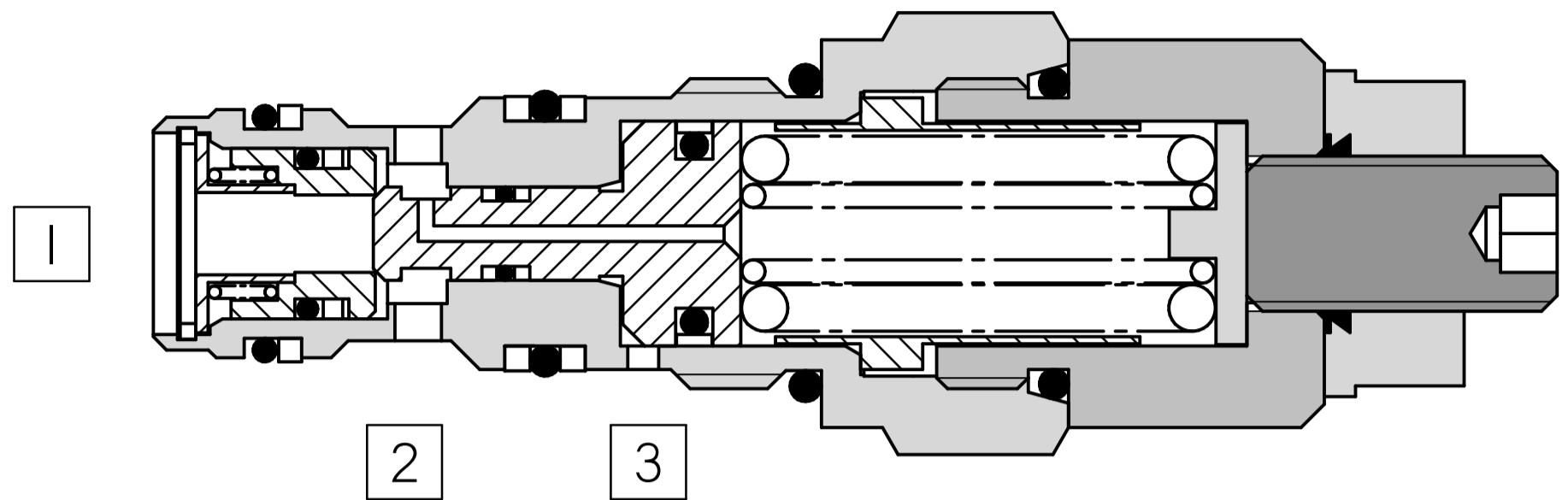
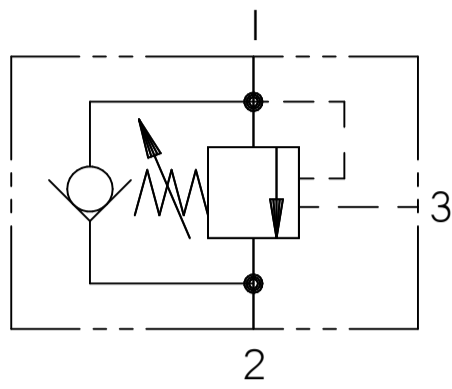
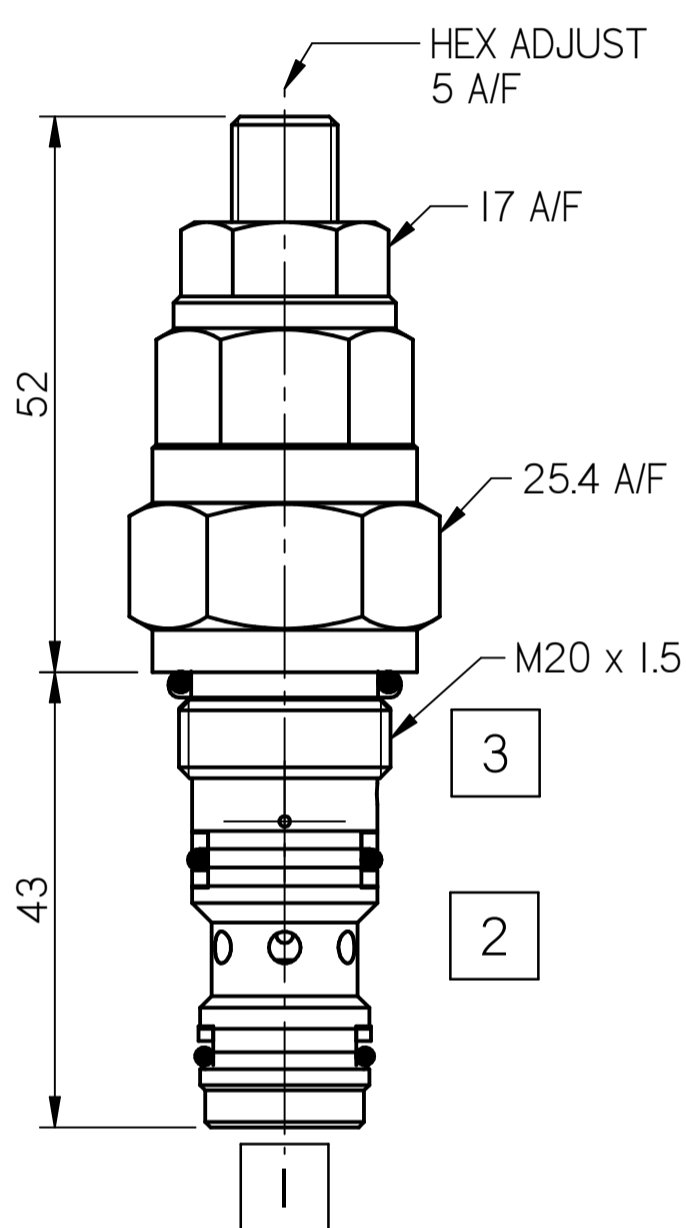


### FLUID POWER SYMBOL



4



### Application

Overcentre valves give static and dynamic control of loads by regulating flow into and out of hydraulic actuators. The Overcentre valve will stop the load from running away in the event of a hose burst. If open center directional control valves are used, they will allow the thermal expansion relief of the hydraulic fluid. These valves provide excellent hose burst protection.

### Operation

The check section allows free flow into the actuator (from 2 to 1) then holds and locks the load against movement (from 1 to 2). The pilot pressure in the pilot port (3) will give a controlled movement to piston when the pressure is applied. The

pressure required to open the valve and allow movement depends on the pilot ratio of the valve. The pressure required to open the valve and start actuator movement can be calculated as follows:

$$\text{Pilot Pressure} = \frac{\text{Relief Setting} - \text{Load Pressure}}{\text{Pilot Ratio}}$$

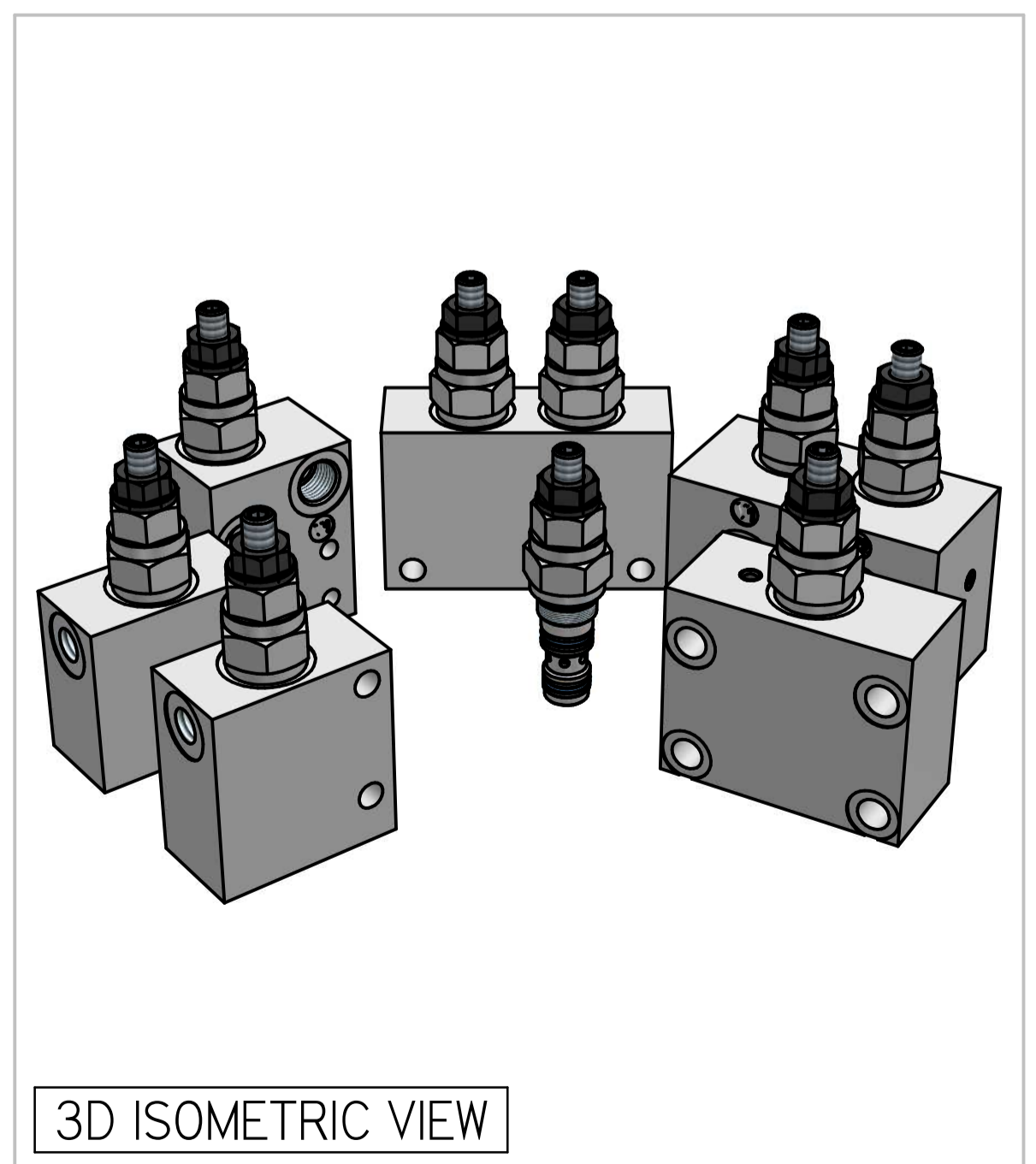
### Pilot Ratio

7:1 Best suited for applications where the load varies and machine structure can induce instability. Other ratios can be made available upon request.

### Specifications

Figures based on: Oil Temp = 40°C Viscosity = 40 cSt

Rated Flow	40 lpm
Max Setting	Load Induced Pressure : 270 bar Relief Setting : 350 bar
Cartridge Material	Working parts : Hardened, ground steel External surfaces : Zinc plated
Weight (Cartridge only)	OSI35: 0.150 kg
Cavity Number	TH6610 (Refer Cavities Section)
Manifold Material	Aluminium (upto 250 bar) Add Suffix '729' for SG Iron (350 bar)
Torque into Cavity	45 Nm
Mounting	Line/Subplate
Seal Kit Number	SK0SI35 (Nitrile) SK0SI35 V (Viton®)
Filtration Level	BS5540/4 Class 18/13 (25µ nominal)
Operating Temp	-20°C to +90°C (Standard Seals)
Leakage	Less than 0.3 millilitres/min (5 dpm)
Viscosity Range	5 to 500 cSt

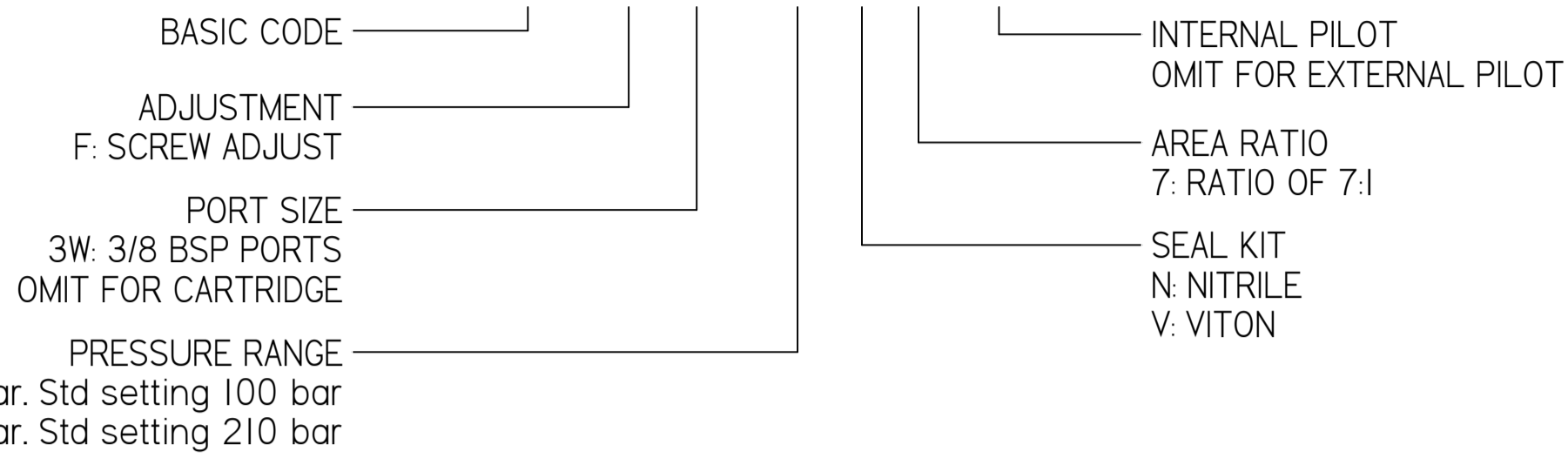


3D ISOMETRIC VIEW

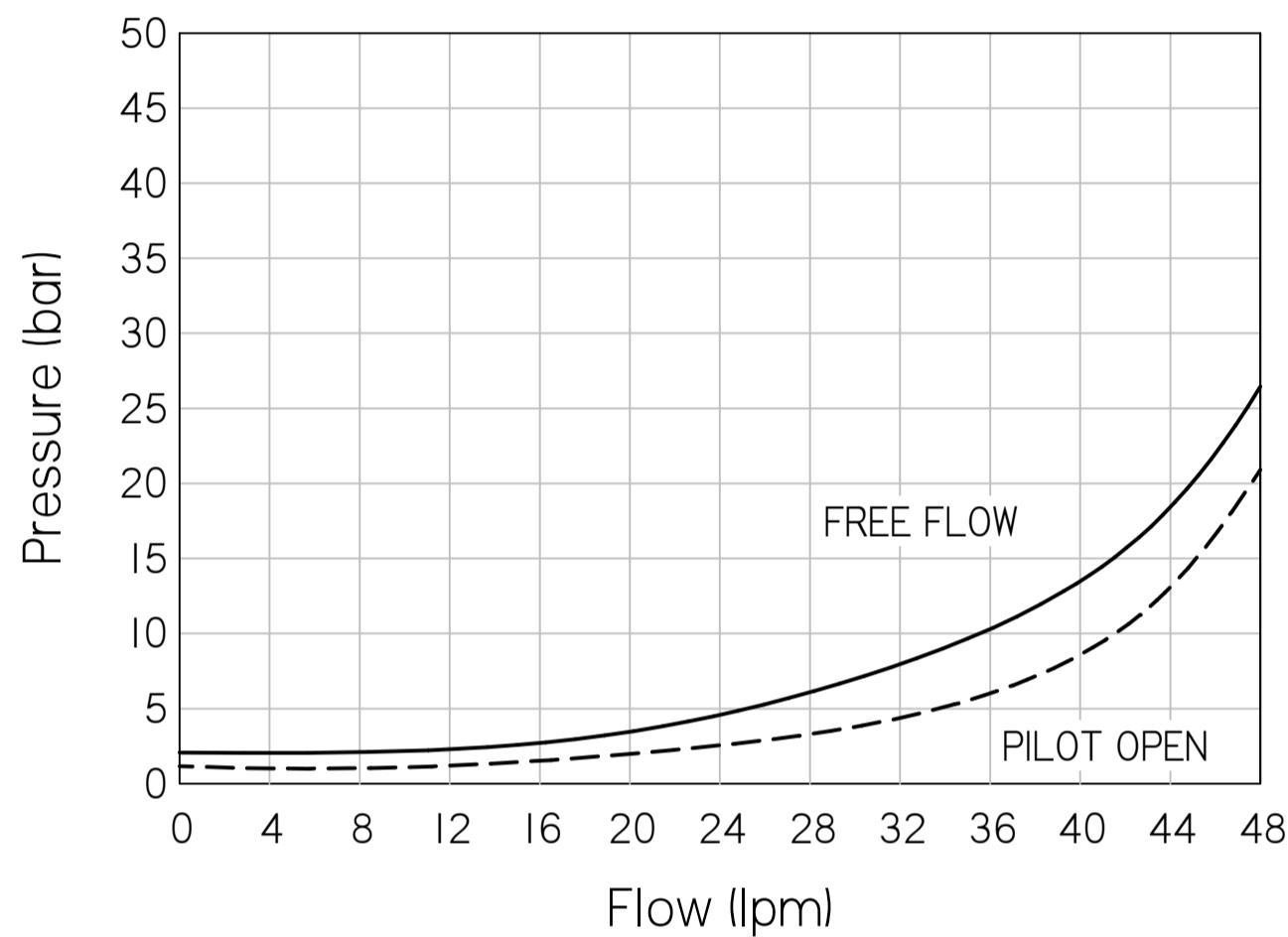
Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

**TO ORDER**

**OSI35 F 3W 35 N 7 INI**



**PRESSURE CHARACTERISTICS**

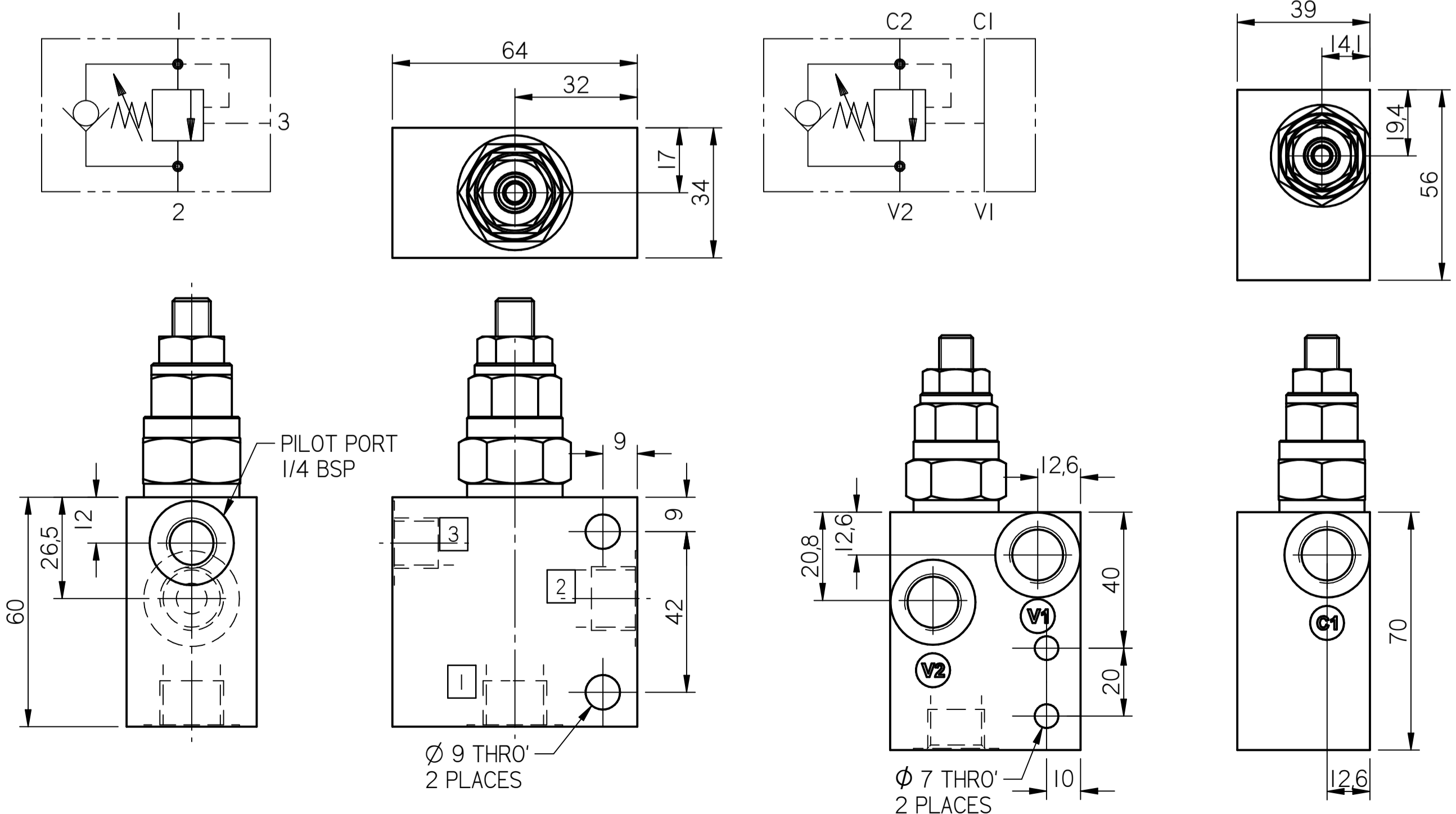


**COMPLETE VALVE** 3/8" BSP PORTS

BASIC CODE: OSI35 3W  
ONLY Body Part Numbers (BSP)  
Aluminium SG Iron  
3/8" Z10386 3/8" Z10386S

**COMPLETE VALVE** 3/8" BSP PORTS

BASIC CODE: OSI35 3W INI (INTERNAL PILOT)  
ONLY Body Part Numbers (BSP)  
Aluminium SG Iron  
3/8" Z10331 3/8" Z10331S



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

TO ORDER

OSI2 35 F 3W 35 N 7

BASIC CODE  
 OSI2 35: DUAL OVERCENTRE VALVE  
 OSIG35: SUBPLATE OVERCENTRE VALVE

ADJUSTMENT  
 F: SCREW ADJUST

PORT SIZE  
 3W: 3/8 BSP PORTS  
 OMIT FOR SUBPLATE

AREA RATIO  
 7: RATIO OF 7:1

SEAL KIT  
 N: NITRILE  
 V: VITON

PRESSURE RANGE  
 20: 10 to 200 bar. Std setting 100 bar  
 35: 30 to 350 bar. Std setting 280 bar

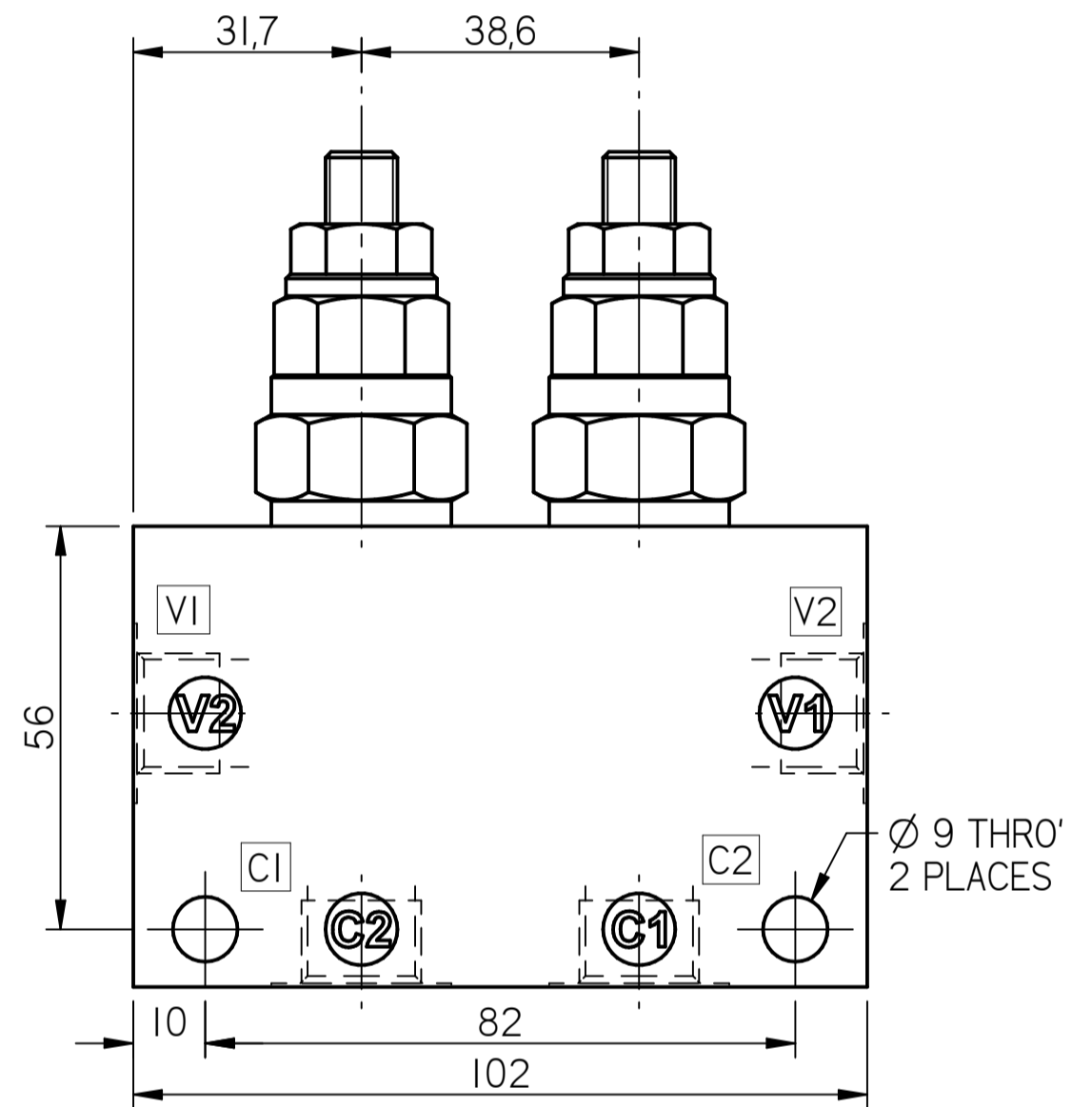
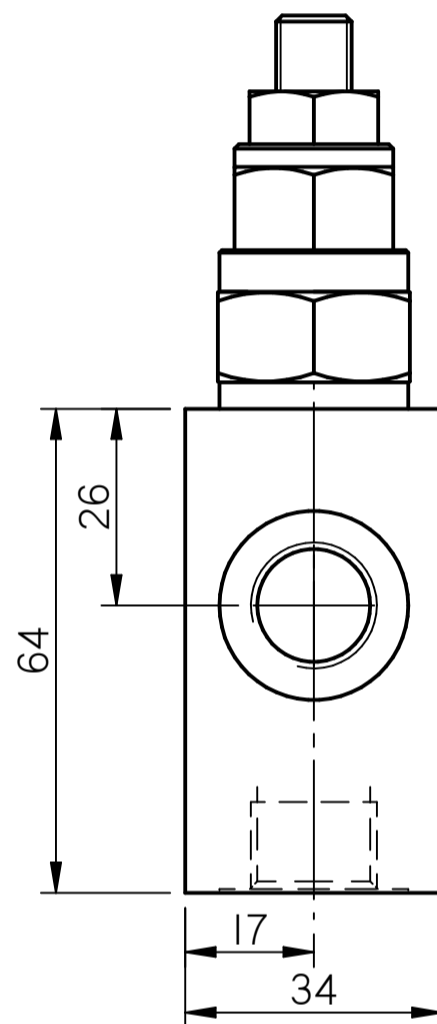
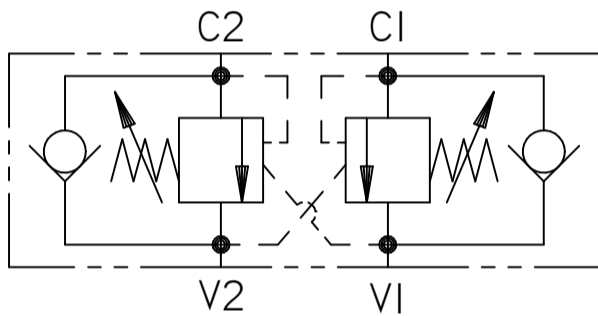
4

## COMPLETE VALVE 3/8" BSP PORTS

BASIC CODE: OSI2 35 3W

ONLY Body Part Numbers (BSP)

Aluminium	SG Iron
3/8" Z10045	3/8" Z10045S

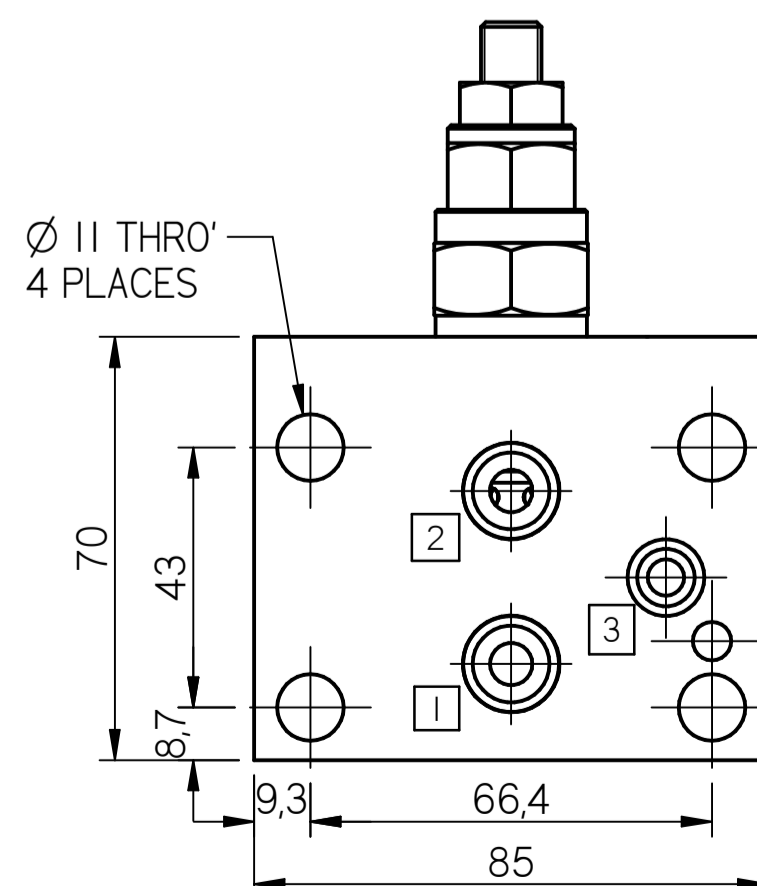
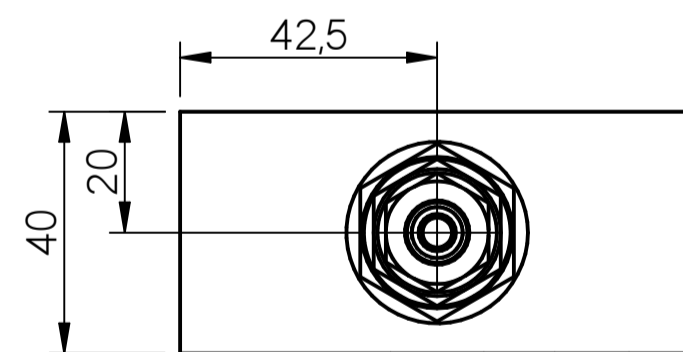
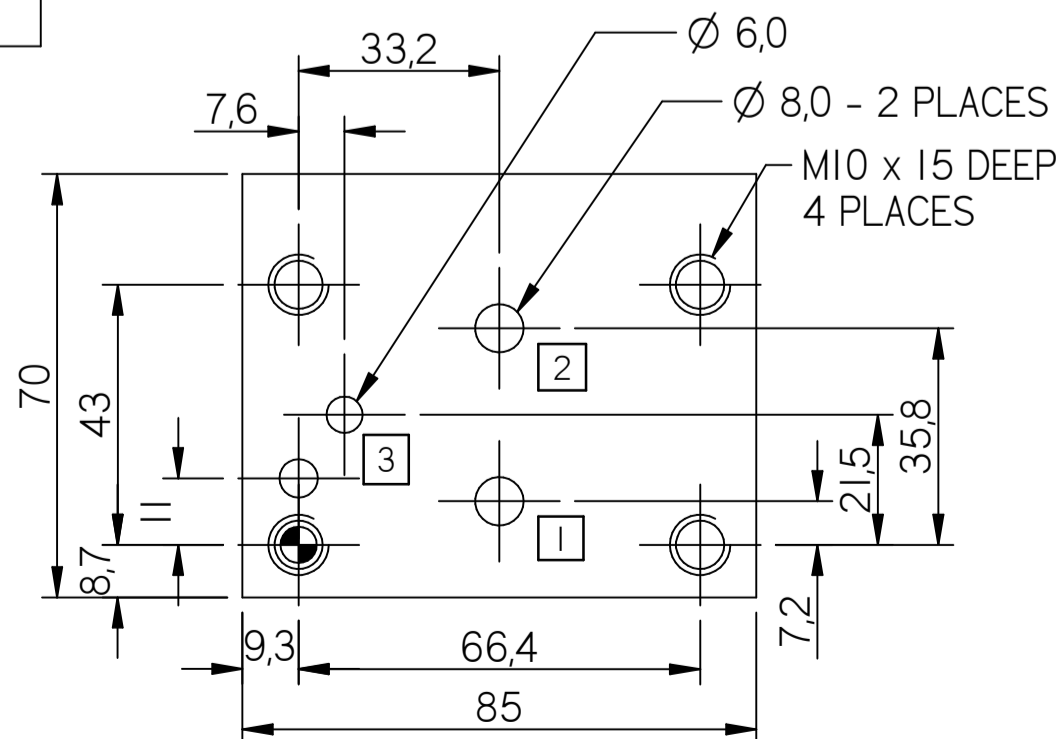
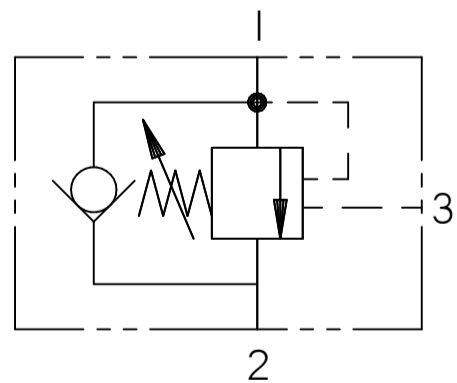


## COMPLETE VALVE SUBPLATE MOUNTED

BASIC CODE: OSIG35

ONLY Body Part Numbers

Aluminium	SG Iron
-	Subplate Z10380



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

**TO ORDER**

**OSIG2 35 F 3W 35 N 7**

OSIG2 35: SUBPLATE DUAL OVERCENTRE VALVE

BASIC CODE  
ADJUSTMENT  
F: SCREW ADJUST  
PORT SIZE  
3W: 3/8 BSP PORTS  
OMIT FOR SUBPLATE

AREA RATIO  
7: RATIO OF 7:1

SEAL KIT  
N: NITRILE  
V: VITON

PRESSURE RANGE  
20: 10 to 200 bar. Std setting 100 bar  
35: 30 to 350 bar. Std setting 280 bar

**COMPLETE VALVE**

3/8" BSP PORTS

BASIC CODE: OSIG2 35

ONLY Body Part Numbers (BSP)

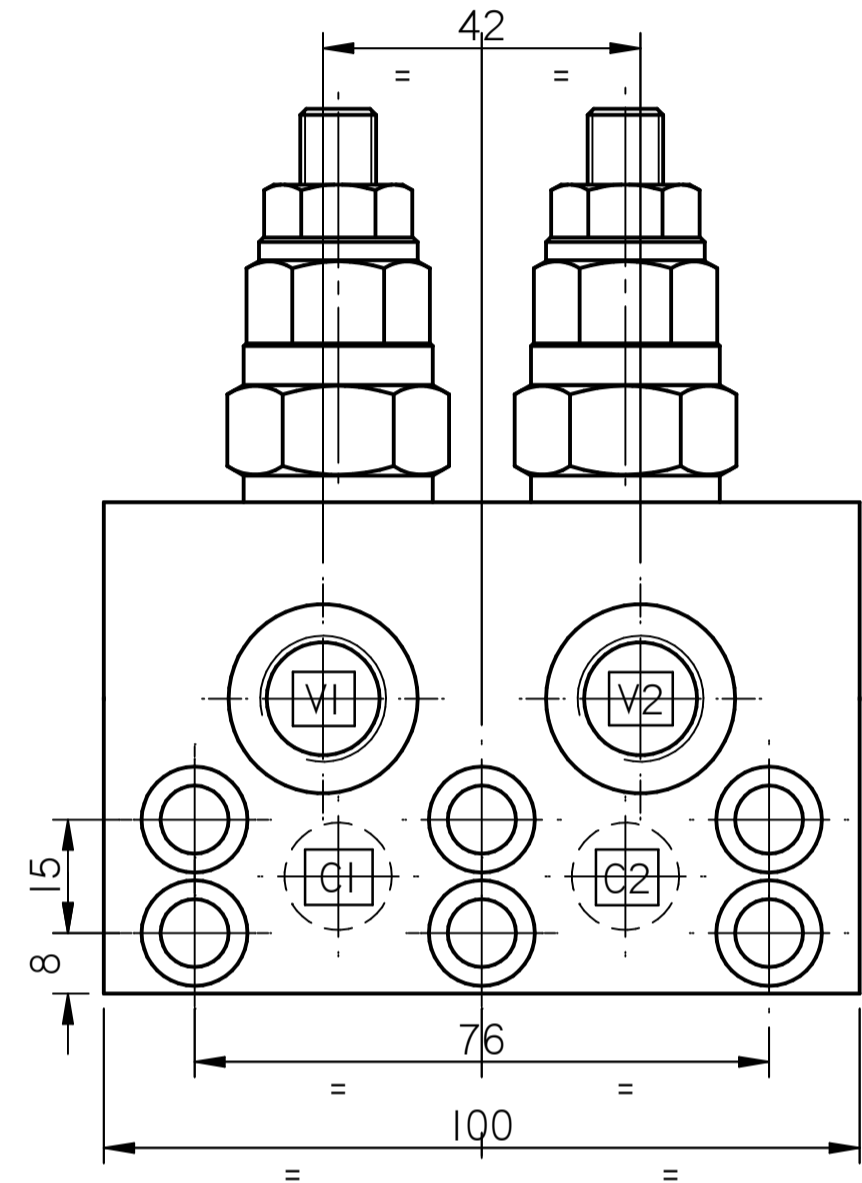
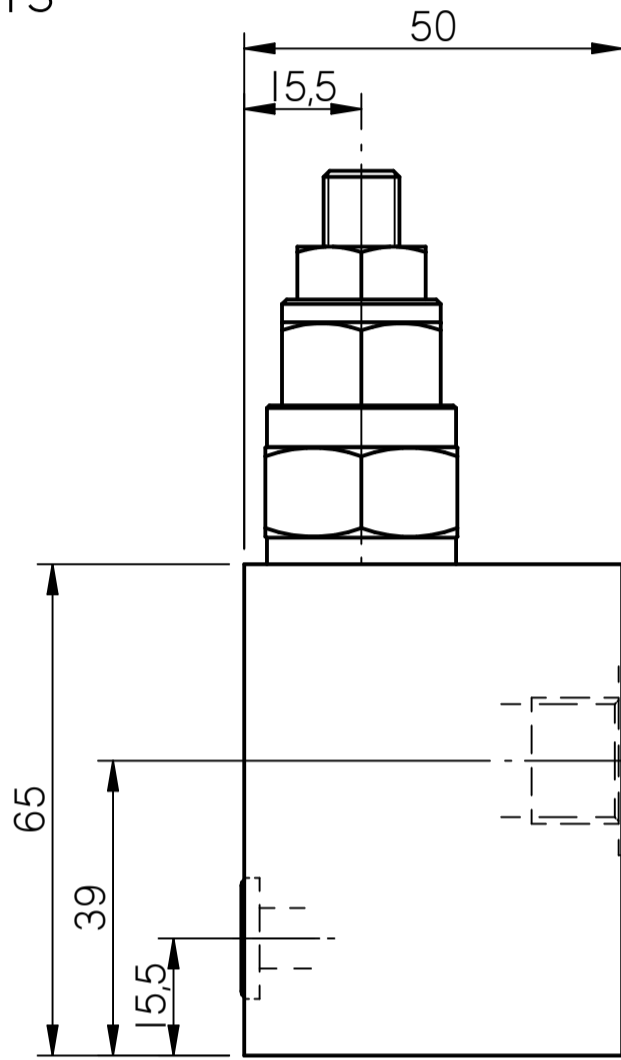
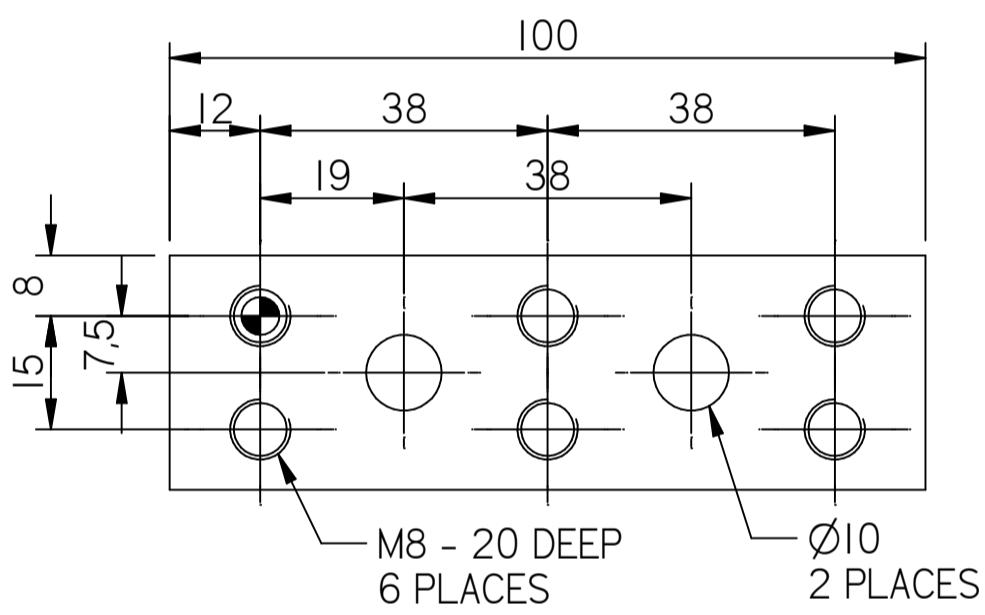
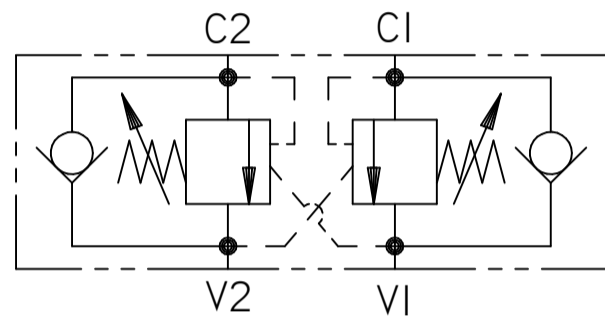
Aluminium

SG Iron

-

3/8"

XPI37AI



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