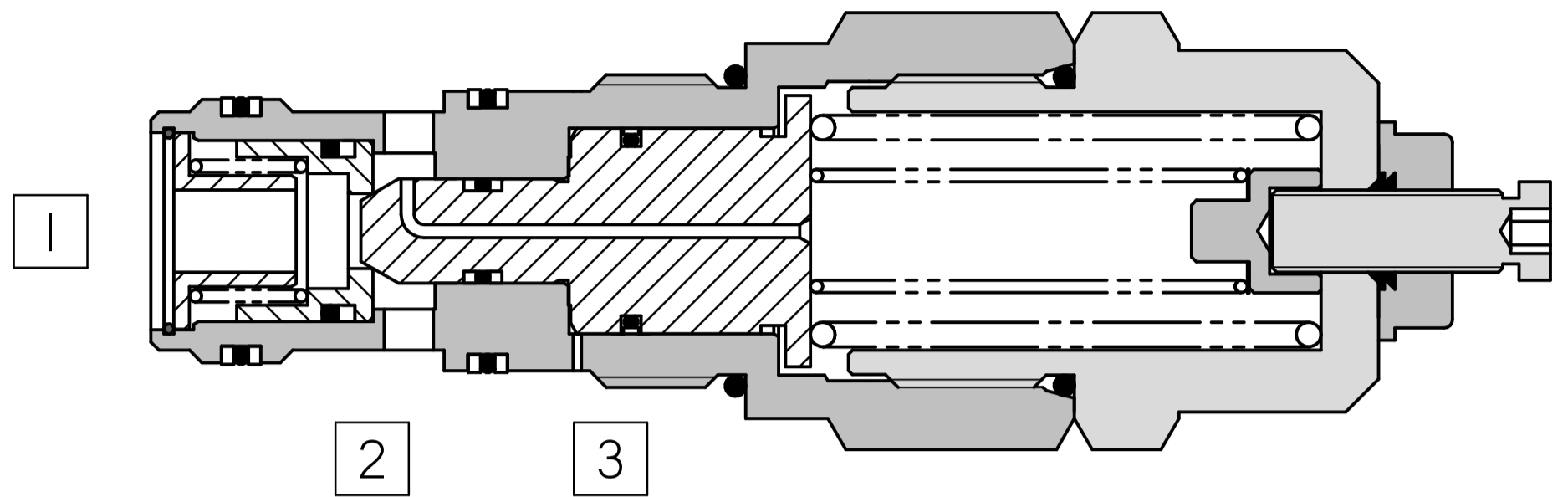
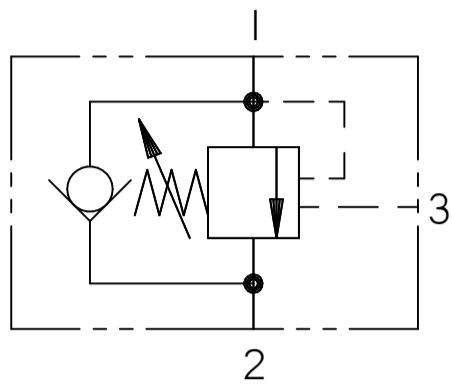
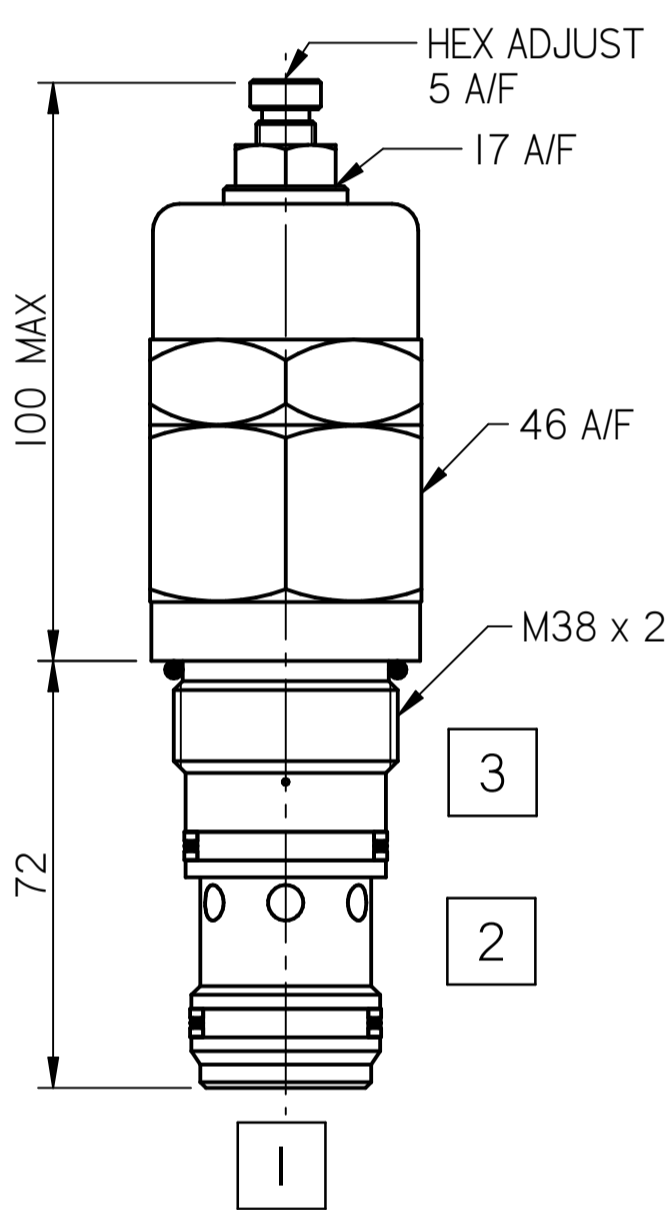


FLUID POWER SYMBOL



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:

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

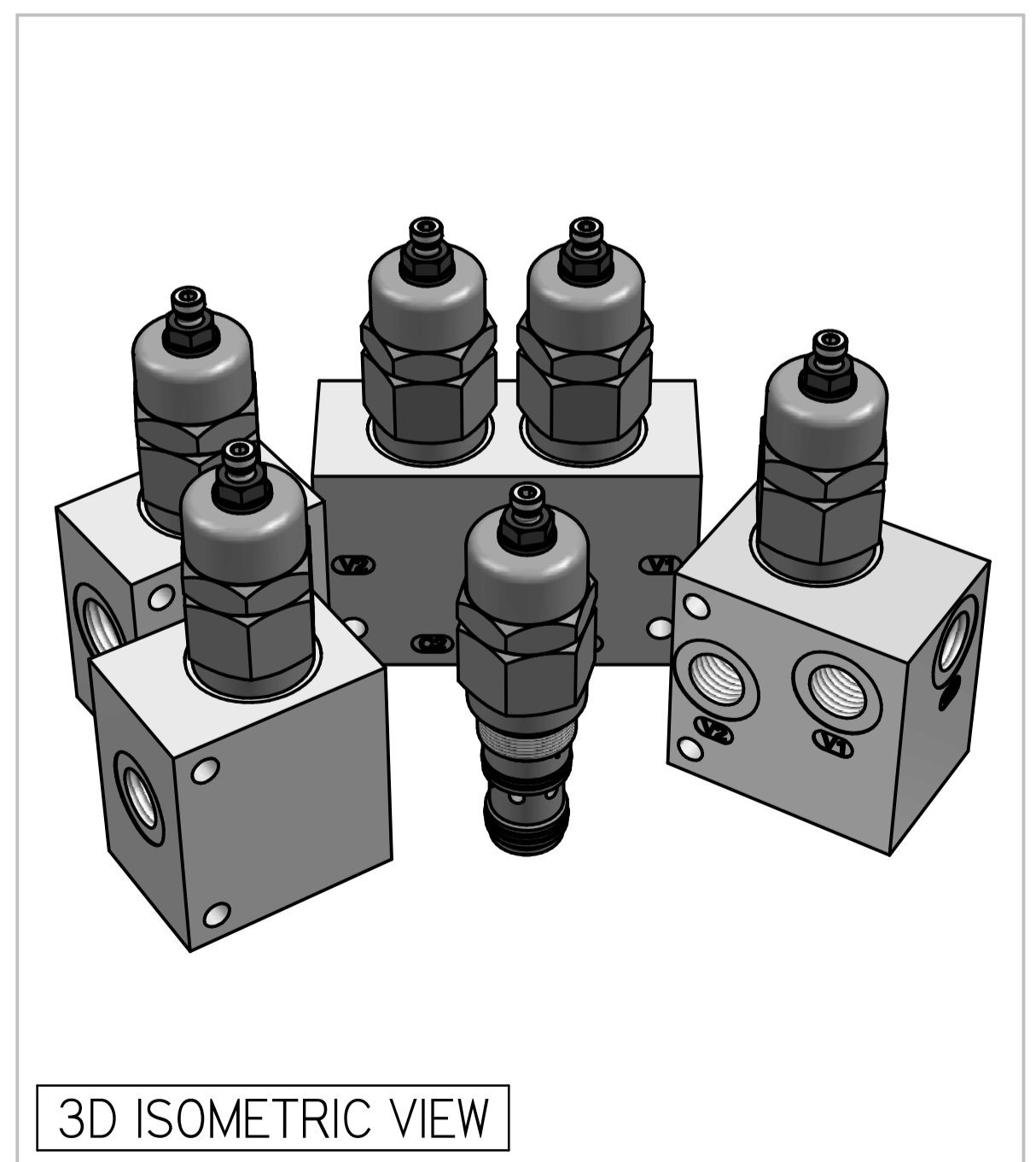
Pilot Ratio

5:1 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

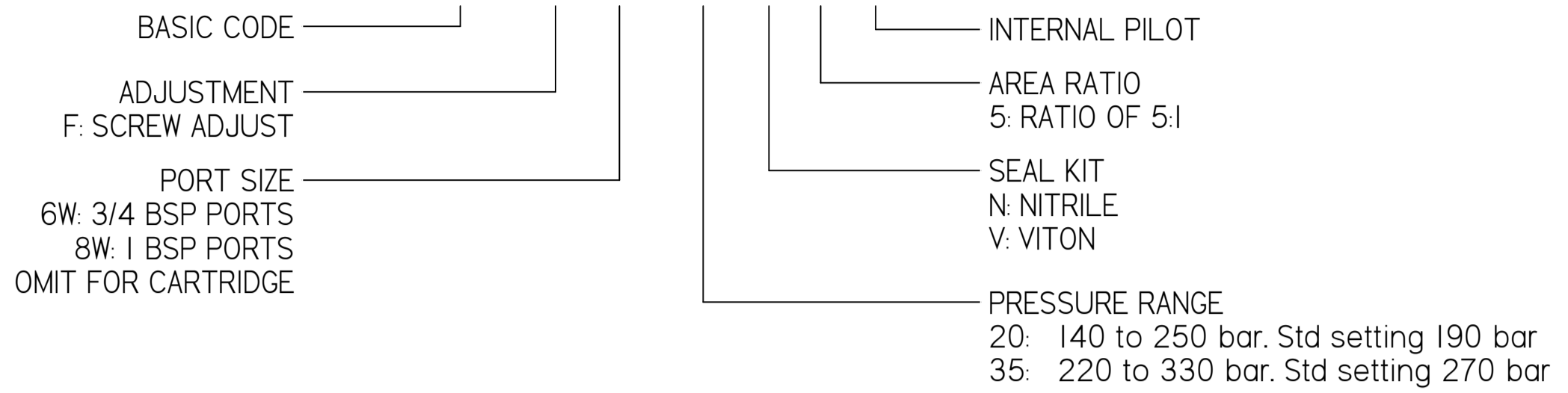
Max Flow	180 lpm
Max Setting	Load Induced Pressure : 270 bar Relief Setting : 350 bar
Cartridge Material	Working parts : Hardened, ground steel External surfaces : Zinc plated
Weight (Cartridge only)	OSII45: 1.200 kg
Cavity Number	TH2008I (Refer Cavities Section)
Manifold Material	Aluminium (upto 250 bar) Add Suffix '729' for SG Iron (350 bar)
Torque into Cavity	150 Nm
Mounting	Line
Seal Kit Number	SKOSII45 (Nitrile) SKOSII45 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



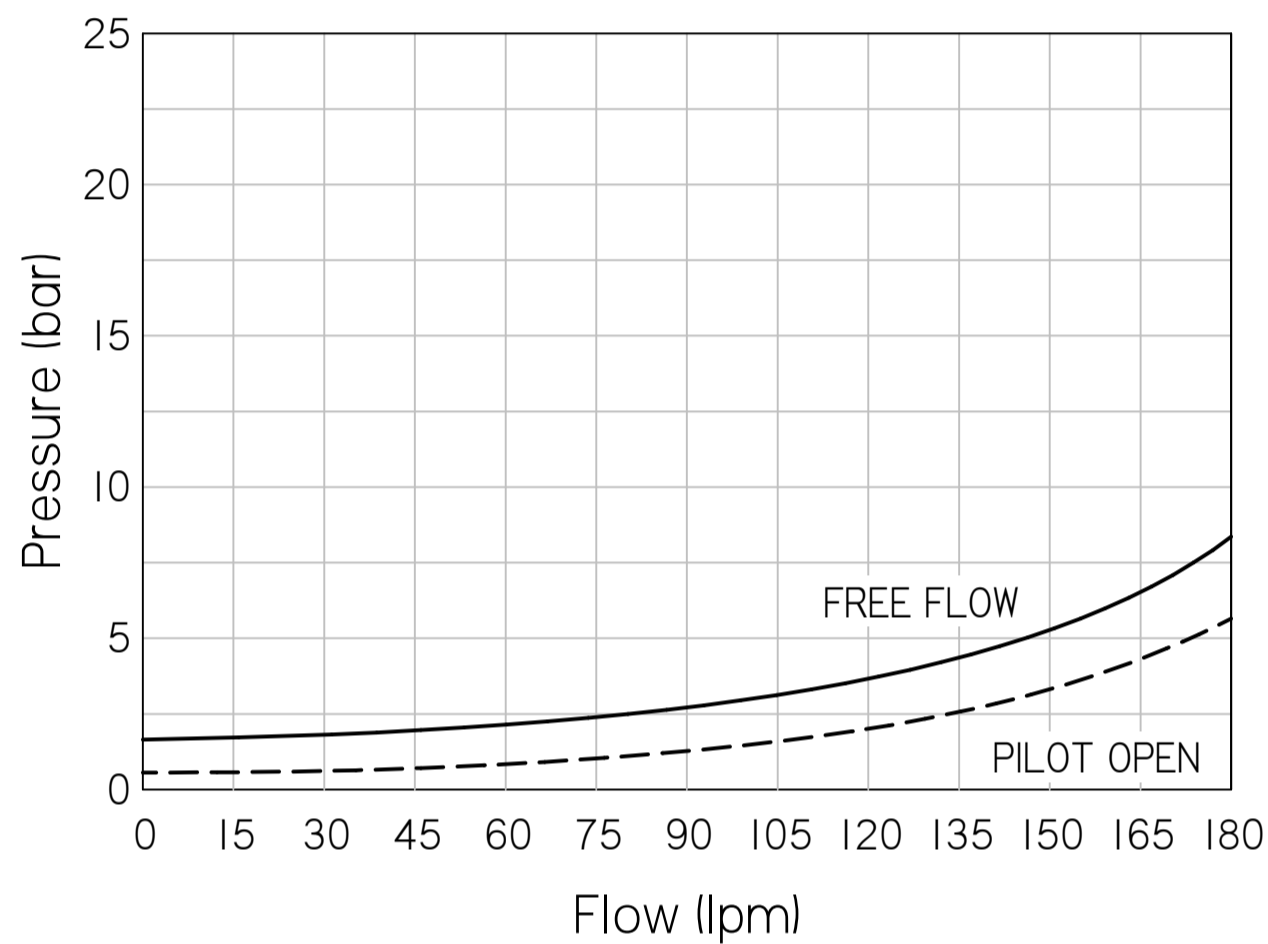
Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

TO ORDER

OSII45 F 6W 35 N 5 INI



PRESSURE CHARACTERISTICS



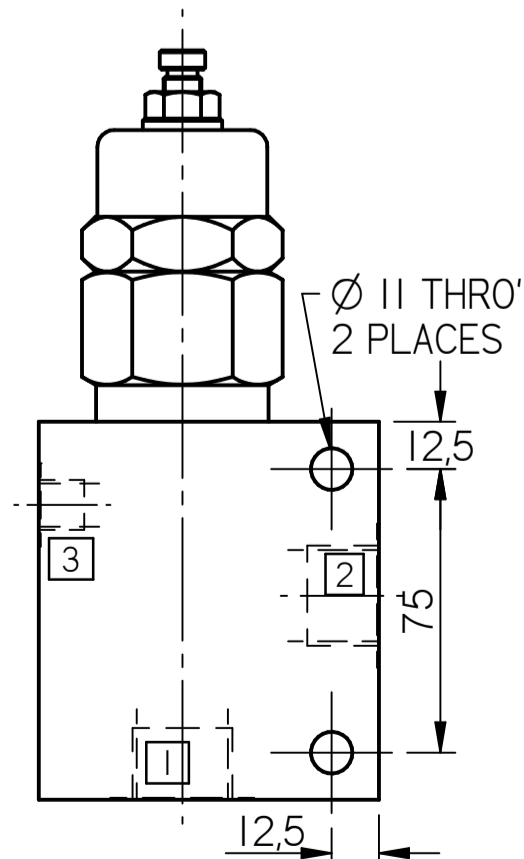
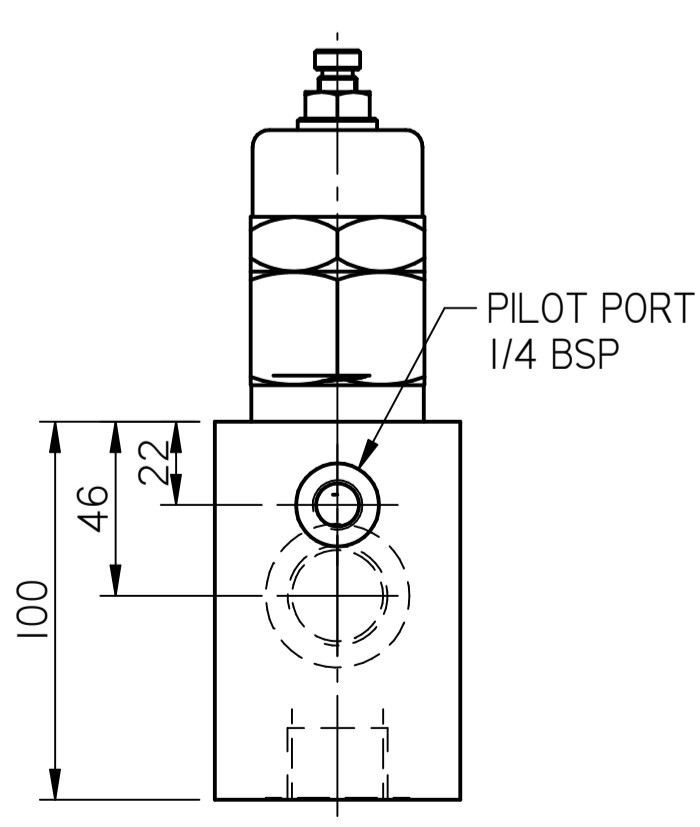
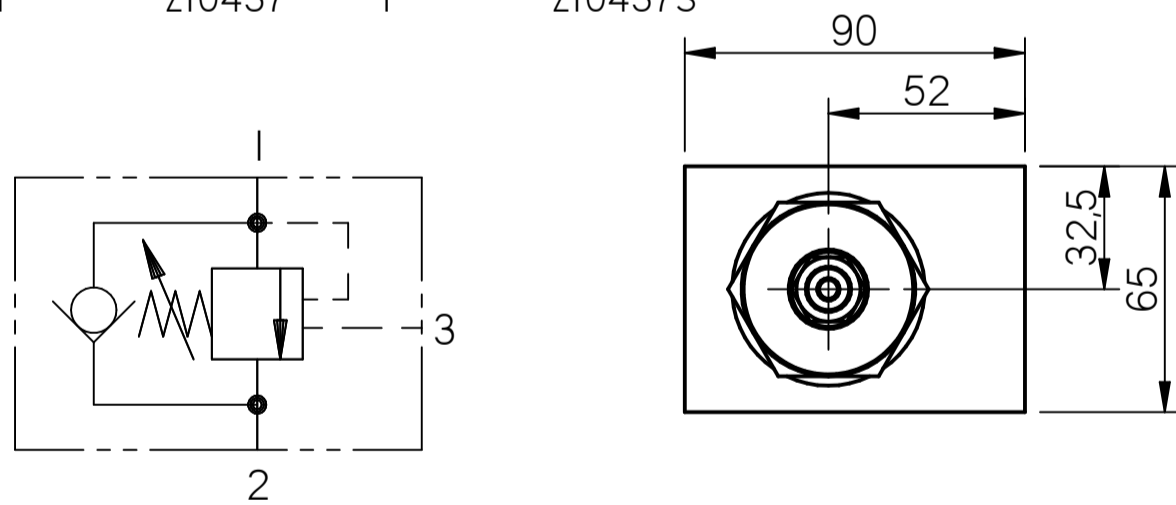
4

COMPLETE VALVE 3/4" 1" BSP PORTS

BASIC CODE: OSII45 6W / OSII45 8W

ONLY Body Part Numbers (BSP)

Aluminium		SG Iron	
3/4"	Z10046	3/4"	Z10046S
1"	Z10437	1"	Z10437S

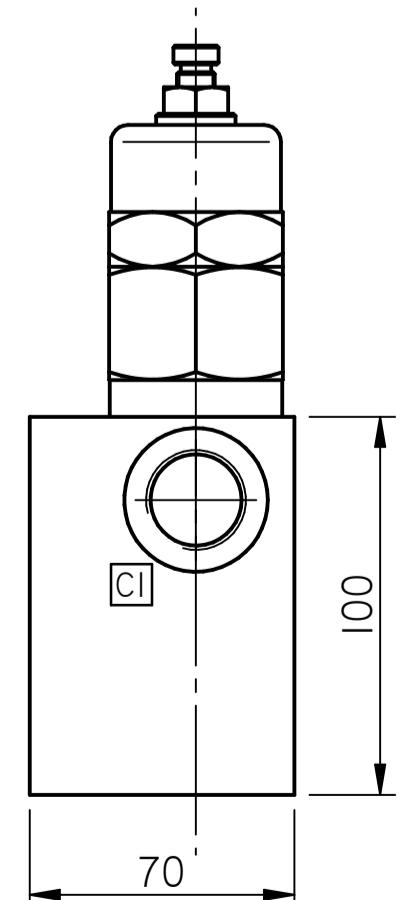
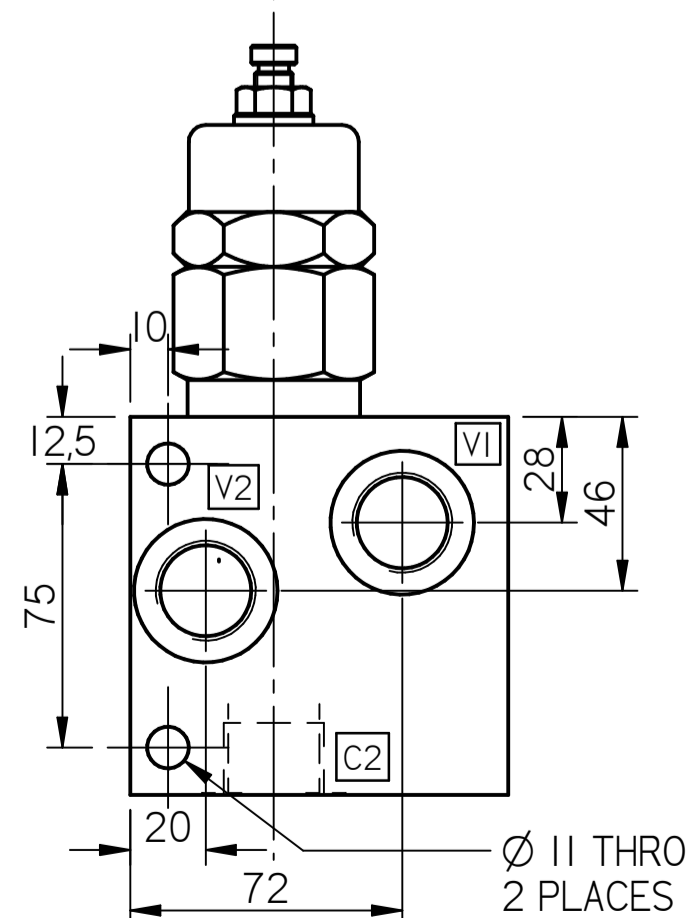
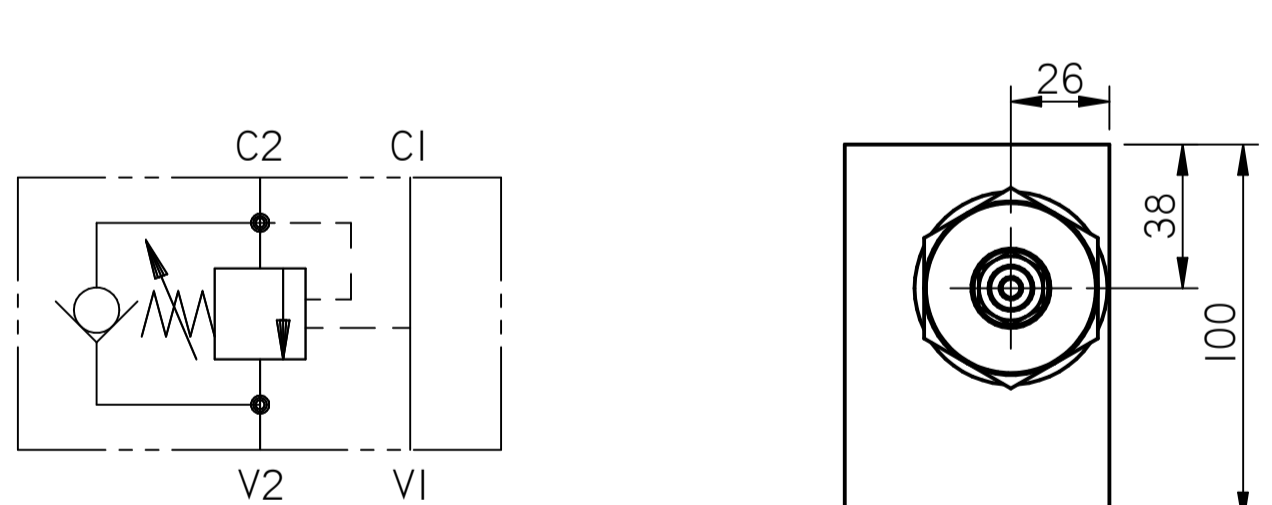


COMPLETE VALVE 3/4" BSP PORTS

BASIC CODE: OSII45 6W INI (INTERNAL PILOT)

ONLY Body Part Numbers (BSP)

Aluminium		SG Iron	
3/8"	Z10199	3/4"	Z10199S



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

TO ORDER

OSI2 I45 F 4W 35 N 5

BASIC CODE
 OSI2 I45: DUAL OVERCENTRE VALVE
 OSI2SHI45: SHUTTLE DUAL OVERCENTRE VALVE

ADJUSTMENT
 F: SCREW ADJUST

PORT SIZE
 6W: 3/4 BSP PORTS
 FOR OSISH SHUTTLE PORT 1/4 BSP

AREA RATIO
 5: RATIO OF 5:1

SEAL KIT
 N: NITRILE
 V: VITON

PRESSURE RANGE
 20: 140 to 250 bar. Std setting 190 bar
 35: 220 to 330 bar. Std setting 270 bar

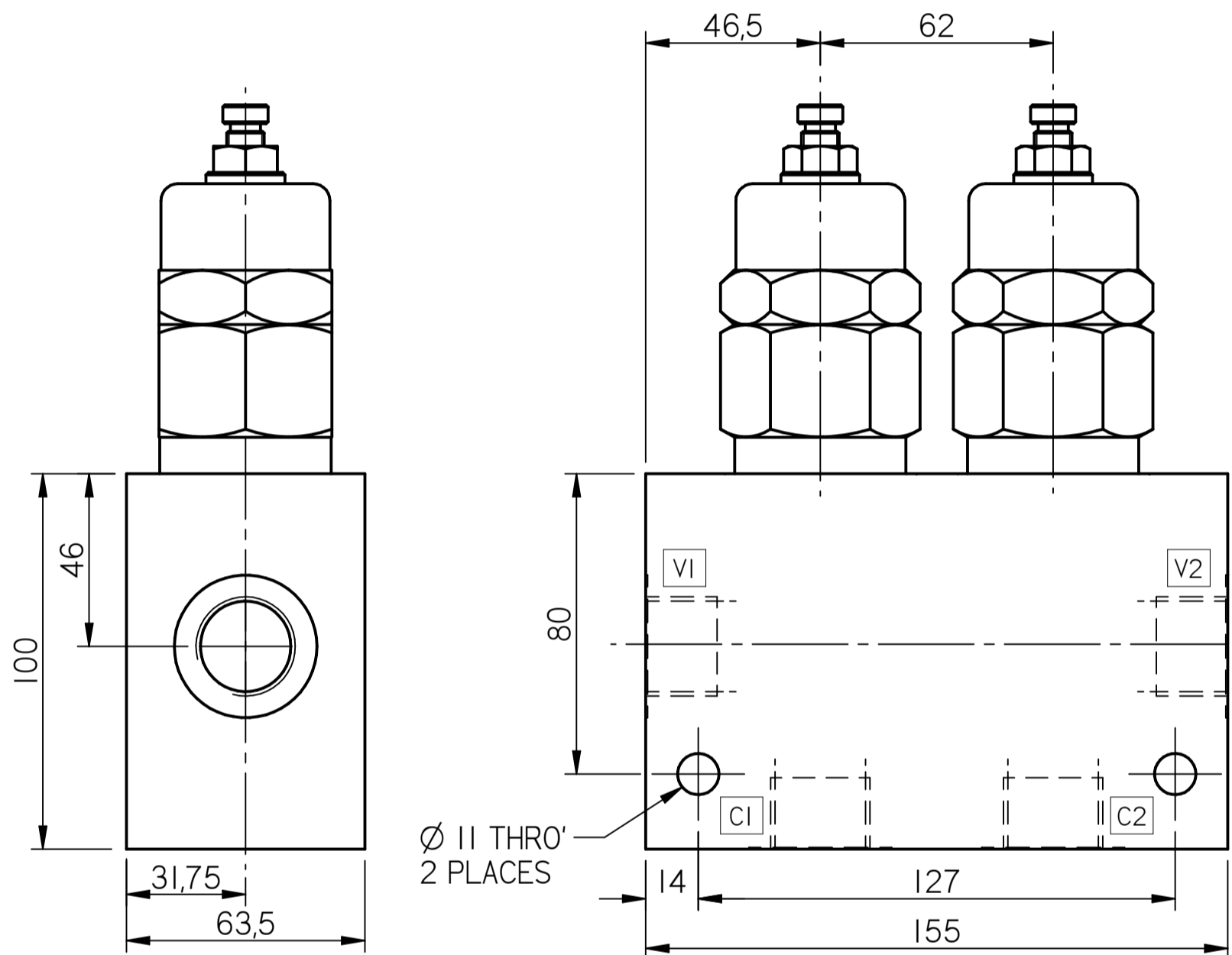
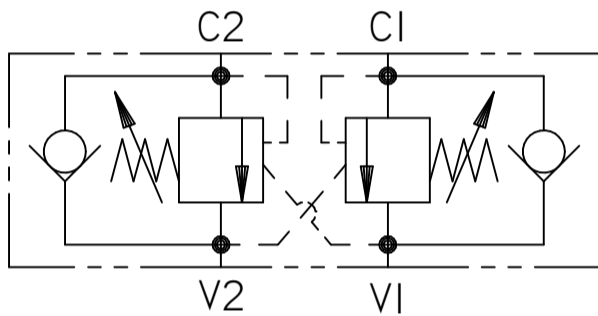
4

COMPLETE VALVE 3/4" BSP PORTS

BASIC CODE: OSI2 I45 6W

ONLY Body Part Numbers (BSP)

Aluminium	SG Iron
3/4" Z10213	3/4" Z10213S

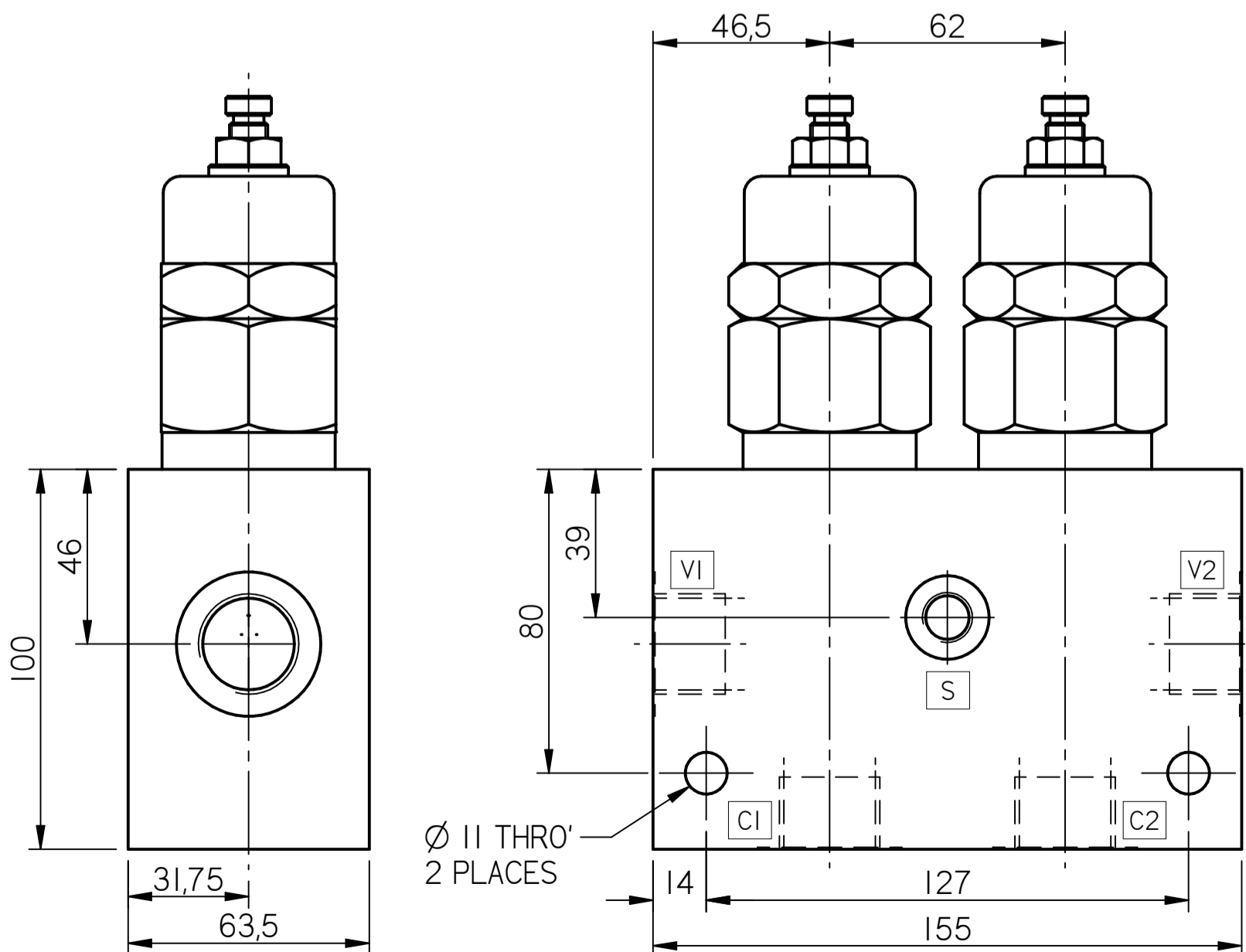
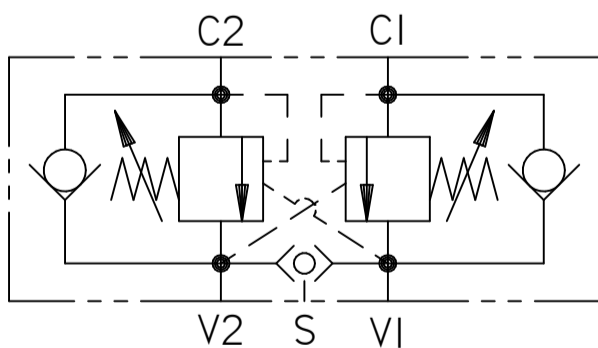


COMPLETE VALVE 3/4" BSP PORTS

BASIC CODE: OSI2SHI45 6W

ONLY Body Part Numbers (BSP)

Aluminium	SG Iron
3/4" Z10213SH	-



Application

These Dual Overcentre valves also contain a brake shuttle valve which ensures that pressure is applied to a brake release circuit regardless of whether pressure is applied to Ports V1 or V2. These multifunction valves are normally used for the static and dynamic control of systems using motors or semi rotary actuators.

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

NOTES