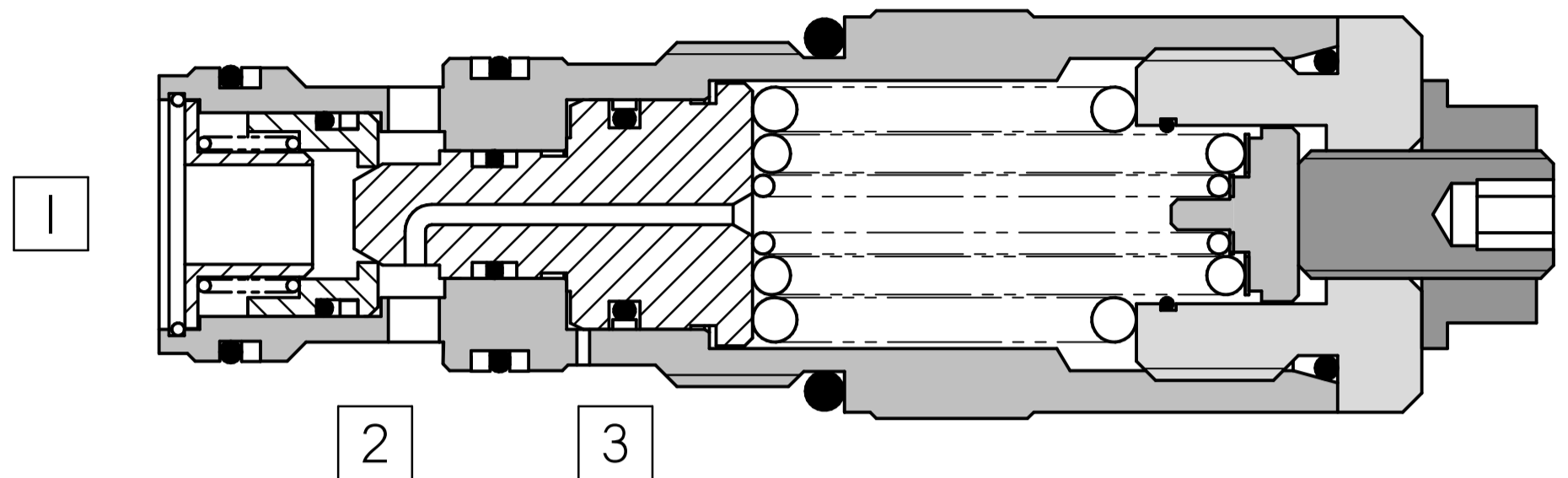
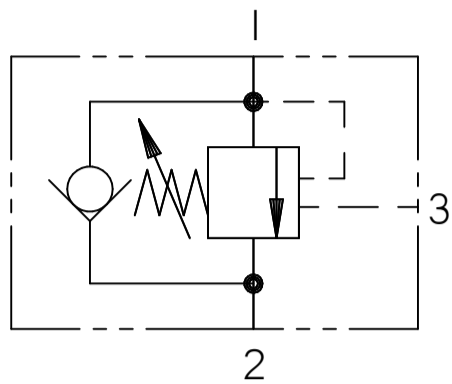
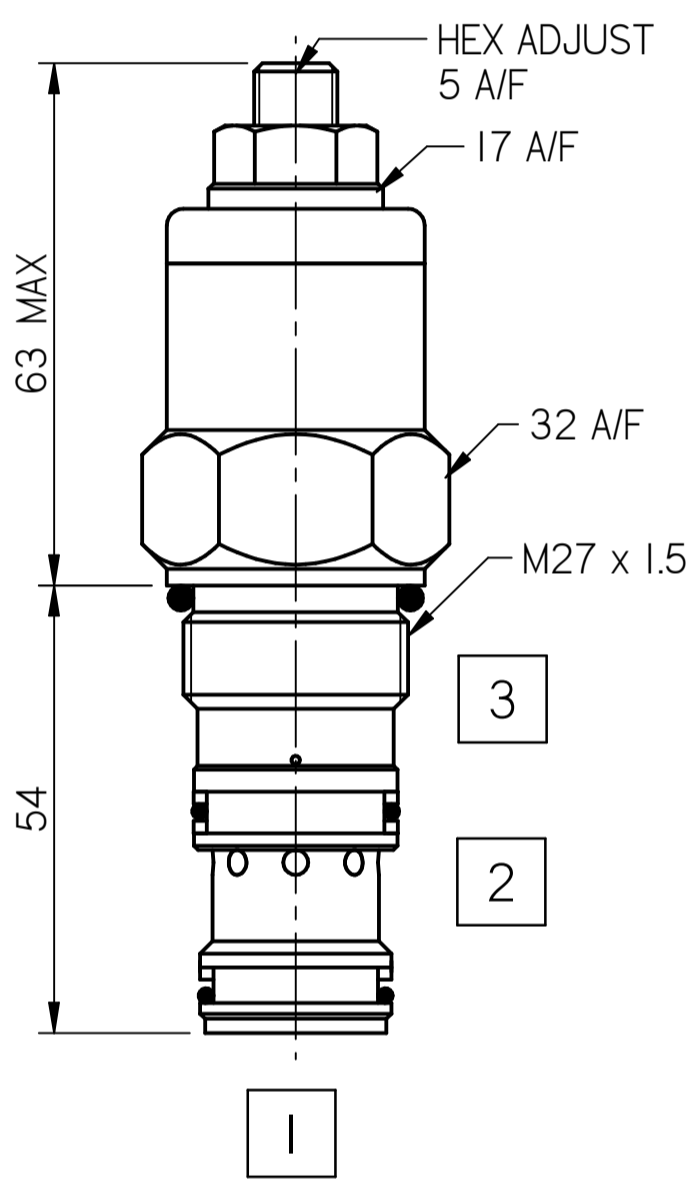


FLUID POWER SYMBOL



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:

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

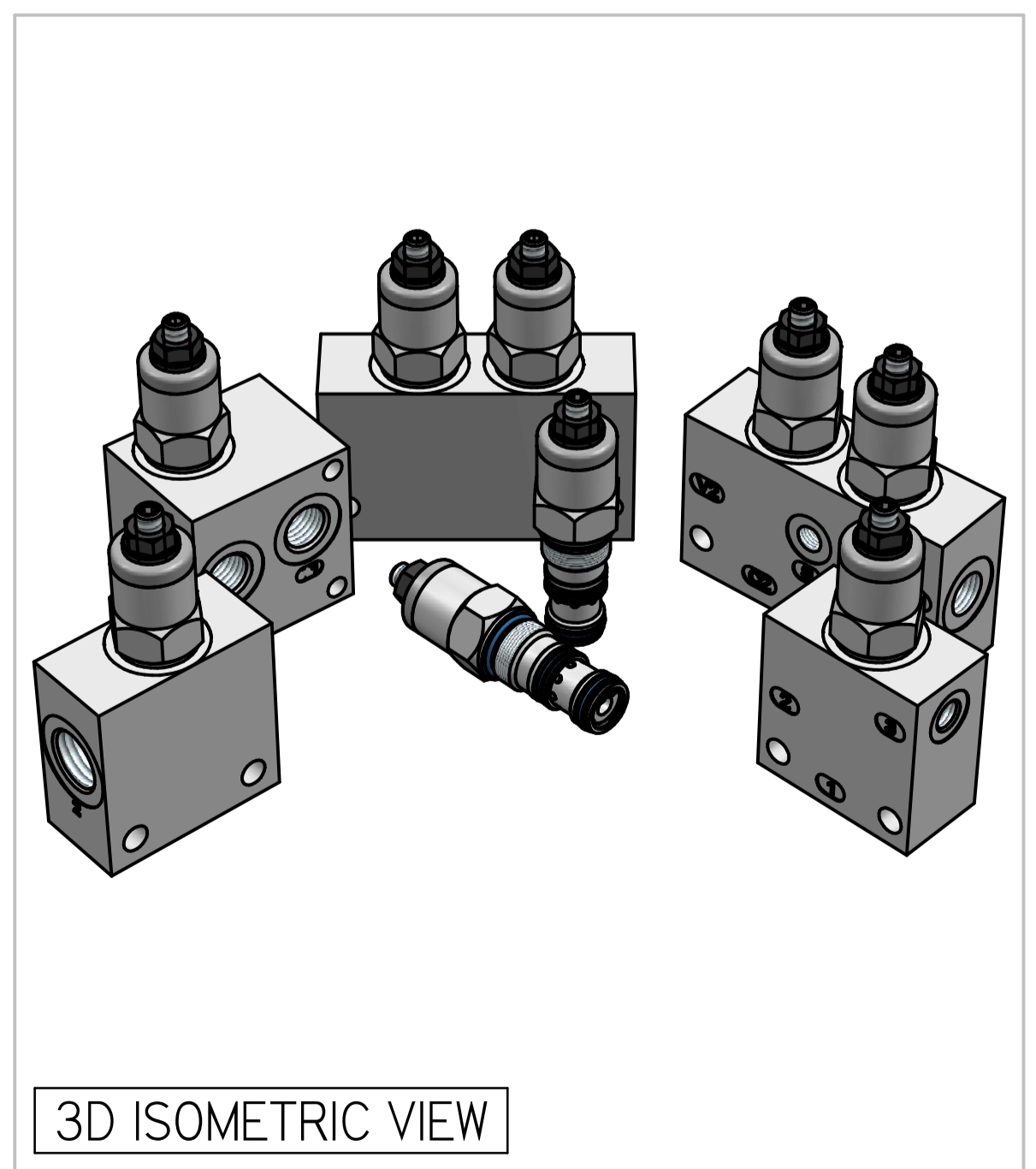
Pilot Ratio

4:1 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

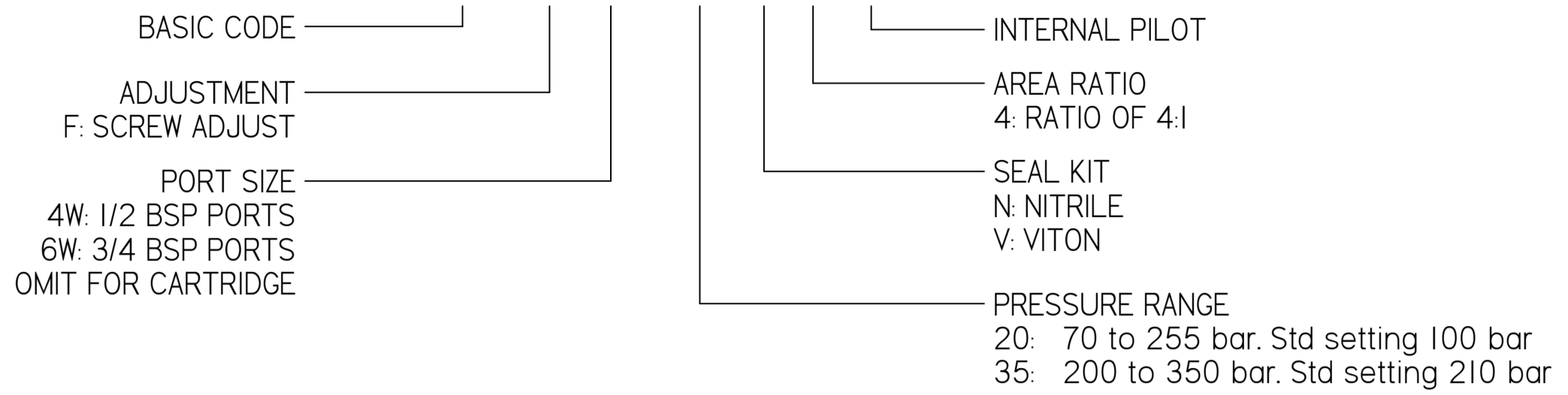
| | |
|-------------------------|---|
| Rated Flow | 100 lpm |
| Max Setting | Load Induced Pressure : 270 bar Relief Setting : 350 bar |
| Cartridge Material | Working parts : Hardened, ground steel External surfaces : Zinc plated |
| Weight (Cartridge only) | OSI95: 0.290 kg |
| Cavity Number | TH12336 (Refer Cavities Section) |
| Manifold Material | Aluminium (upto 250 bar) Add Suffix '729' for SG Iron (350 bar) |
| Torque into Cavity | 60 Nm |
| Mounting | Line |
| Seal Kit Number | SKOSI95 (Nitrile) SKOSI95 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 |



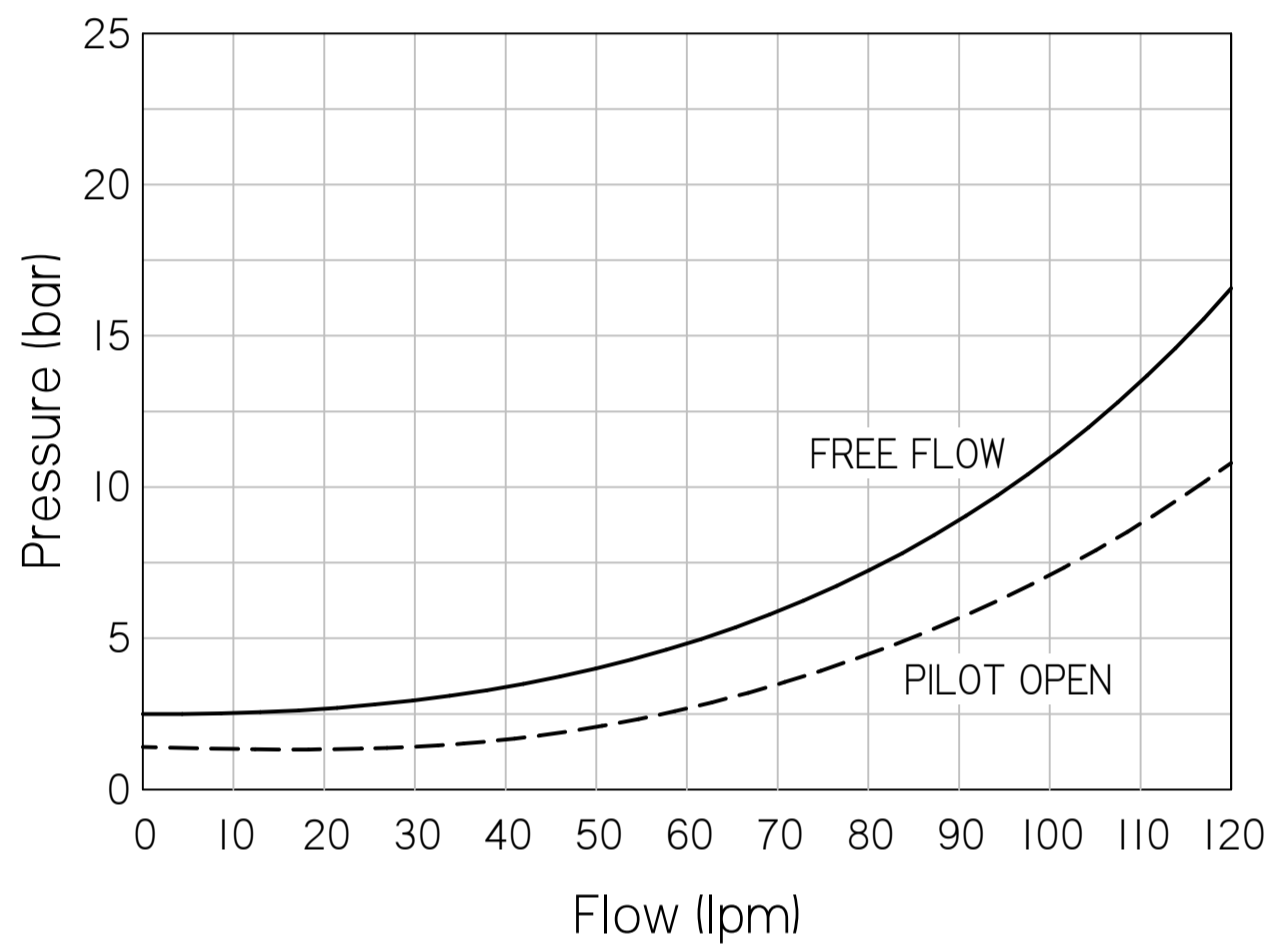
Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

TO ORDER

OSI95 F 4W 35 N 4 INI



PRESSURE CHARACTERISTICS

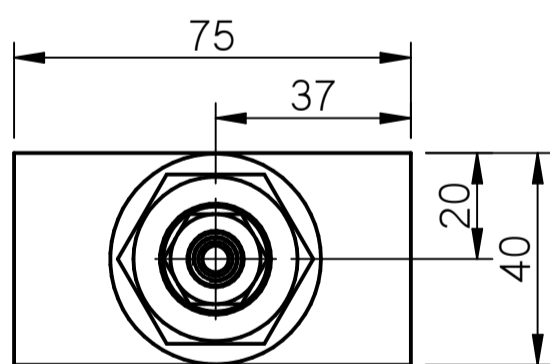
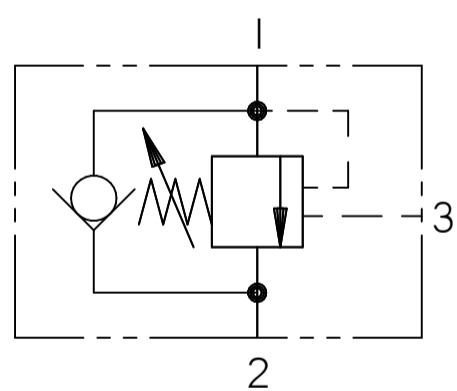


COMPLETE VALVE 1/2" 3/4" BSP PORTS

BASIC CODE: OSI95 4W / OSI95 6W

ONLY Body Part Numbers (BSP)

| Aluminium | | SG Iron | |
|-----------|--------|---------|---------|
| 1/2" | Z10359 | 1/2" | Z10359S |
| 3/4" | Z10436 | 3/4" | Z10436S |

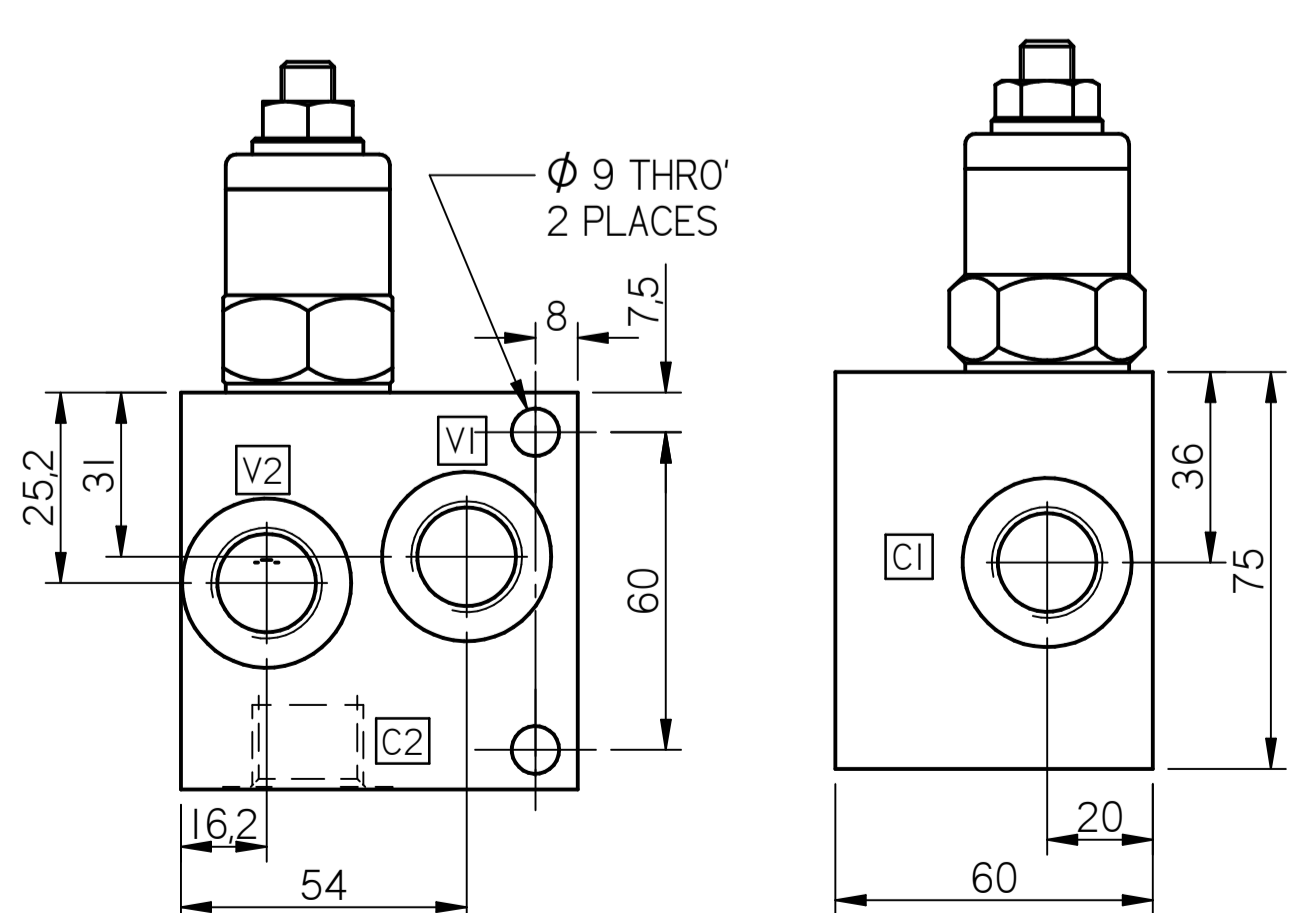
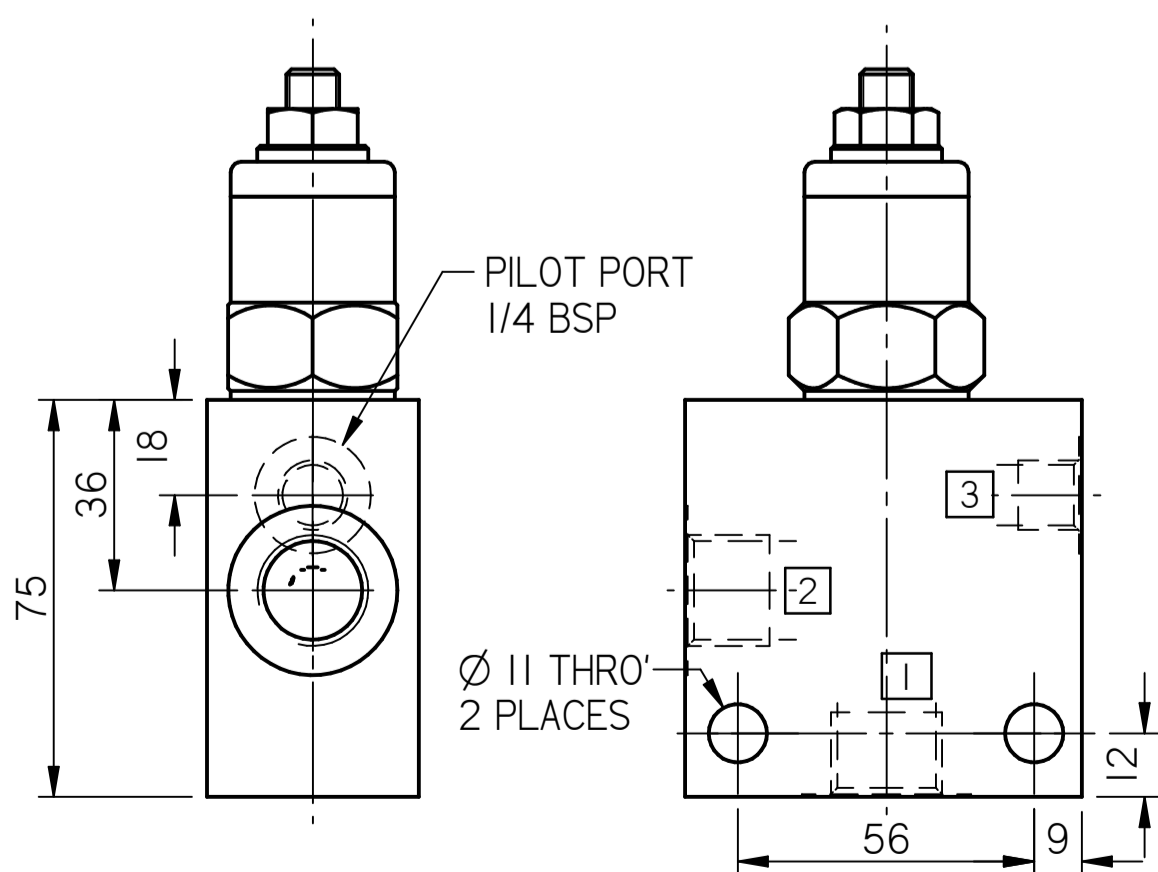
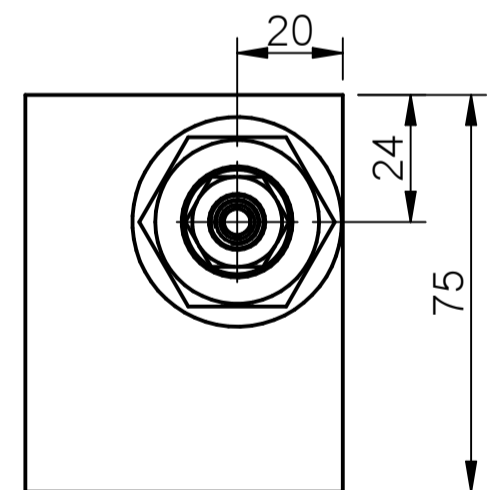
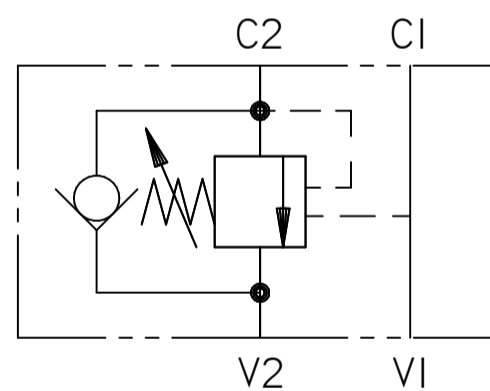


COMPLETE VALVE 1/2" BSP PORTS

BASIC CODE: OSI95 4W INI (INTERNAL PILOT)

ONLY Body Part Numbers (BSP)

| Aluminium | | SG Iron | |
|-----------|--------|---------|---------|
| 1/2" | Z10372 | 1/2" | Z10372S |



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

TO ORDER

OSI2 95 F 4W 35 N 4

BASIC CODE
 OSI2 95: DUAL OVERCENTRE VALVE
 OSI2SH95: SHUTTLE DUAL OVERCENTRE VALVE

ADJUSTMENT
 F: SCREW ADJUST

PORT SIZE
 4W: 1/2 BSP PORTS
 FOR OSI2SH SHUTTLE PORT 1/4 BSP

AREA RATIO
 4: RATIO OF 4:1

SEAL KIT
 N: NITRILE
 V: VITON

PRESSURE RANGE
 20: 70 to 255 bar. Std setting 100 bar
 35: 200 to 350 bar. Std setting 210 bar

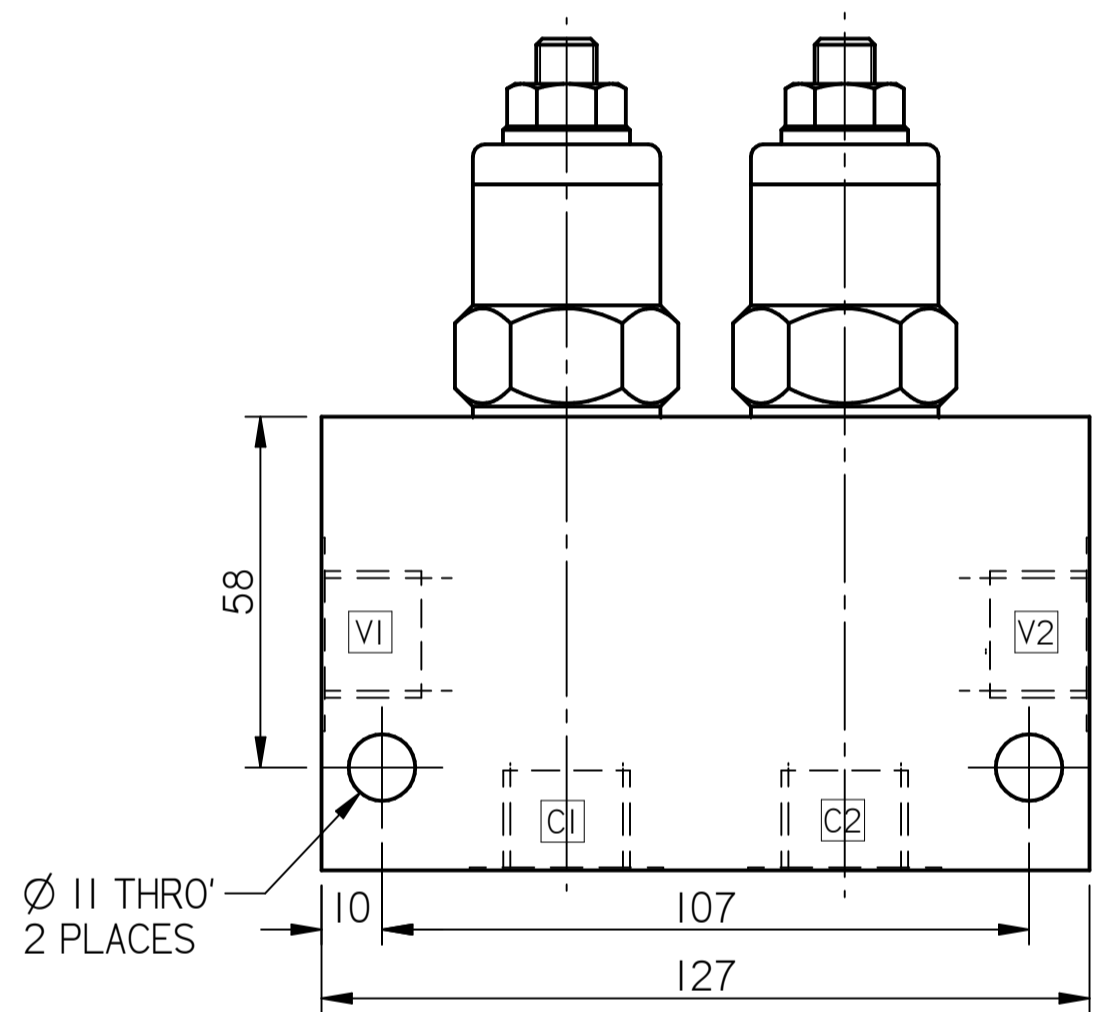
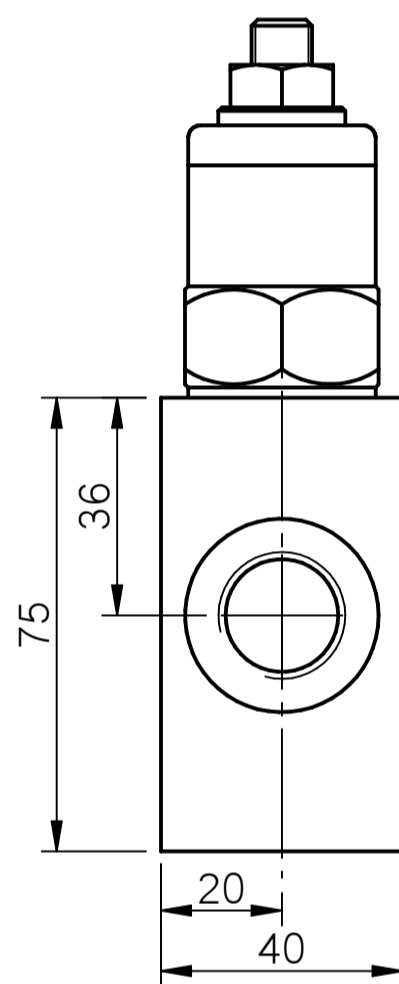
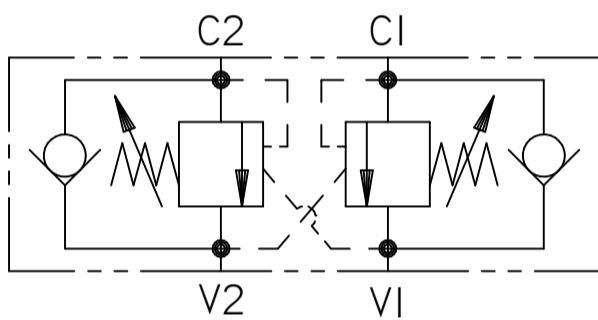
4

COMPLETE VALVE 1/2" BSP PORTS

BASIC CODE: OSI2 95 4W

ONLY Body Part Numbers (BSP)

| | |
|-------------|--------------|
| Aluminium | SG Iron |
| 1/2" Z10394 | 1/2" Z10394S |

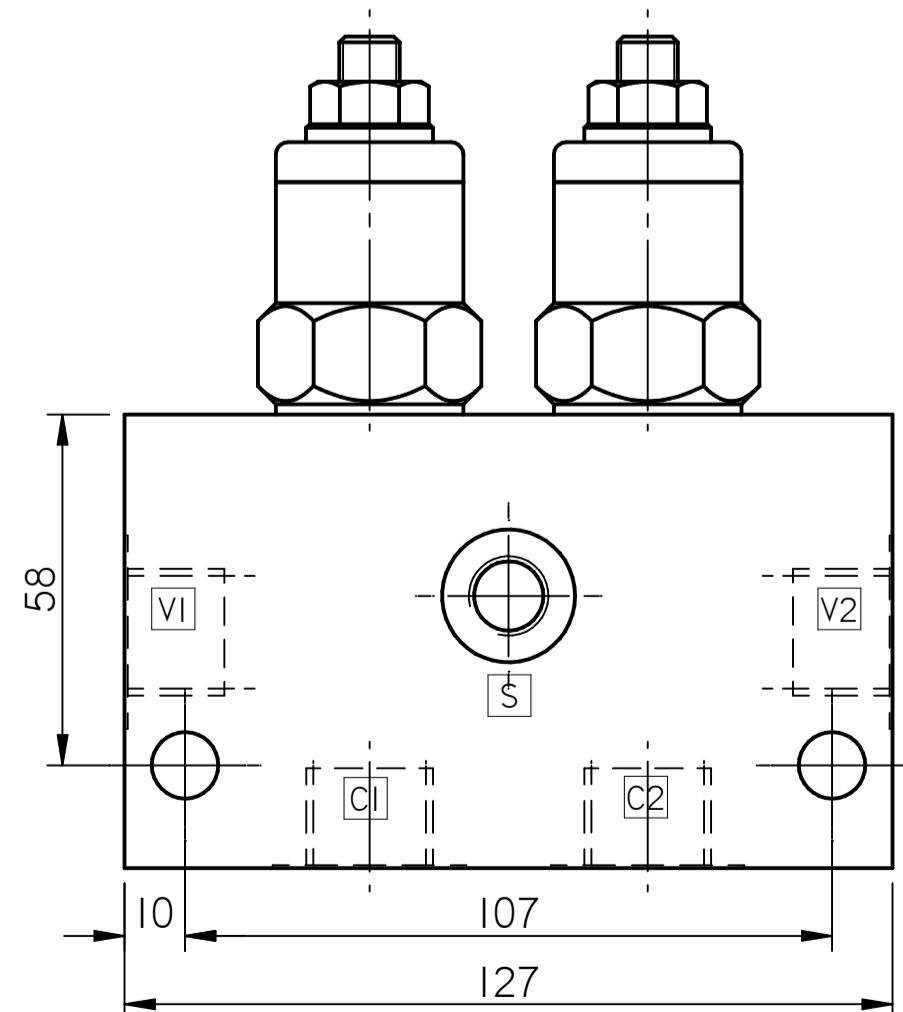
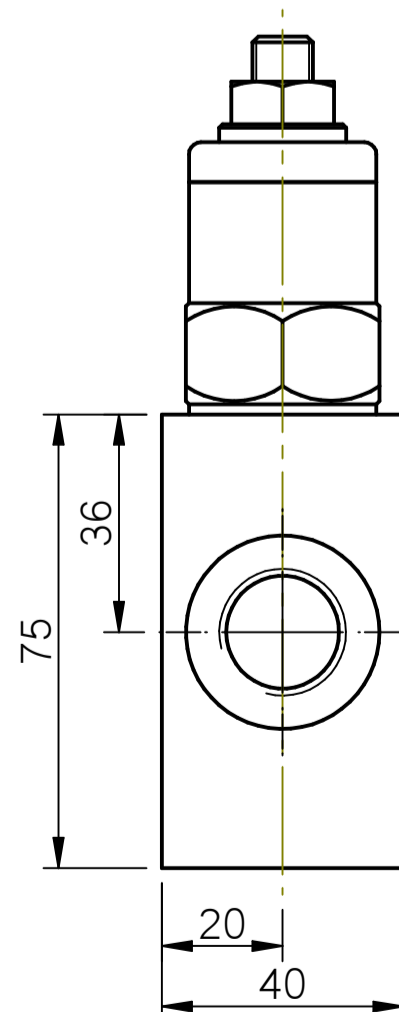
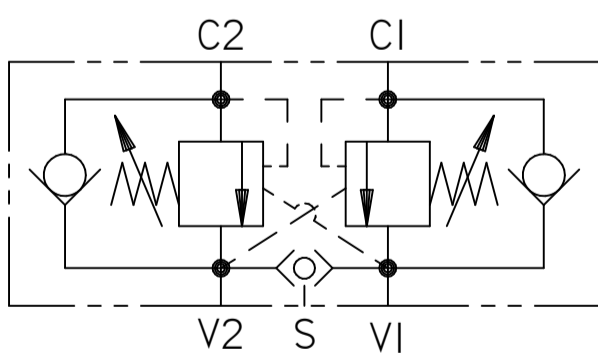


COMPLETE VALVE 1/2" BSP PORTS

BASIC CODE: OSI2SH 95 4W

ONLY Body Part Numbers (BSP)

| | |
|-------------|--------------|
| Aluminium | SG Iron |
| 1/2" Z10439 | 1/2" Z10439S |



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