

☐ May be used as accumulator charging valve.

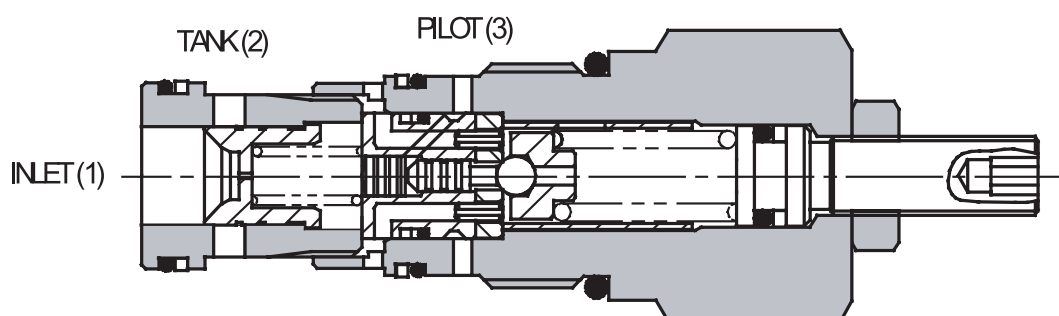
☐ For unloading a high flow – low pressure pump to tank.



Functional Description

Inlet pressure is seen on the nose of the valve and system pressure (downstream of the system check valve) operates on the system pilot port. When pressure rises to the valve setting, the relief section opens and the system pressure acts on the pilot piston to hold the valve in the open position. The ratio between the pilot piston diameter and the seat diameter to the relief valve pilot section ensures that the valve will be maintained in the fully open position until the system pressure drops to approxi-

mately 85% of the unload pressure. Valves are available as cartridges for installation into special line bodies or into custom designed Hydraulic Integrated Circuits. (NOTE: Provision must be made for a system check valve and a pilot line to signal the system pressure). Valve assemblies can be supplied complete in a line body for use in accumulator circuits. Bodied valves include a check valve and the required connection from the system to the valve pilot port.



Ordering code

SU6A-U3/I



Pilot operated unloading valve

NBR

No designation

Adjustable pressure

40 - 100 bar	10
70 - 200 bar	20
150 - 350 bar	35

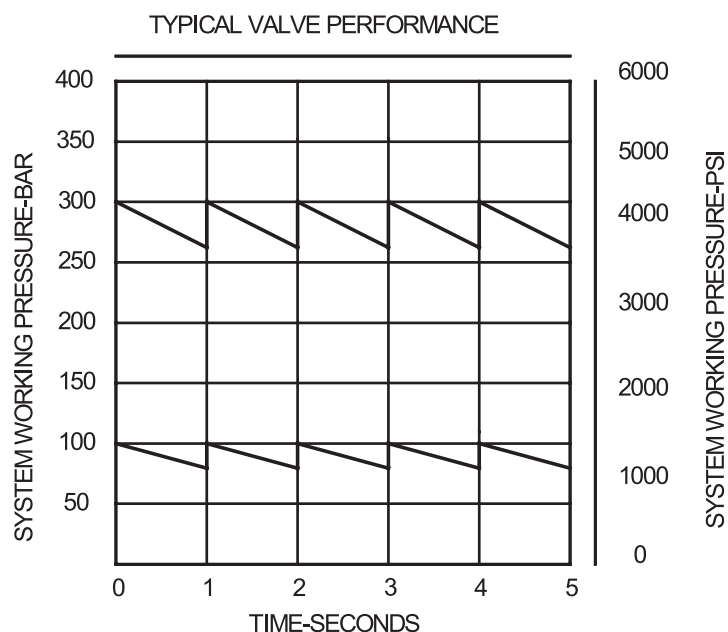
Technical Data

Figures based on: Oil Temp = 40 °C / Viscosity = 40 mm²/s

Cavity		1-1/8-12 UNF-2A
Maximum flow	l/min	60
Max pressure	bar	350
Differential unload/reload	%	10 - 15
Hydraulic fluid		Hydraulic oil (HM, HV) according to DIN 51254
Fluid temperature range	°C	- 20 °C to + 80 °C
Ambient temperature	°C	- 20 °C to + 80 °C
Viscosity	mm ² /s	10 to 500
Maximum degree of fluid contamination		according to ISO 4406 (1999), Class 21/18/15
Weight	kg	0,46
Maximum valve tightening torque in valve body or in control block		75 ⁺² Nm
Mounting position		any

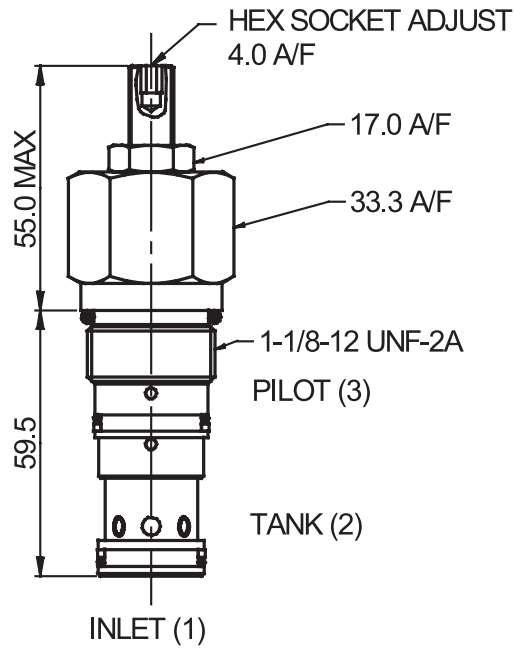
Δp-Q Curves

characteristics determined at v = 35 mm²/s and t = 40 °C



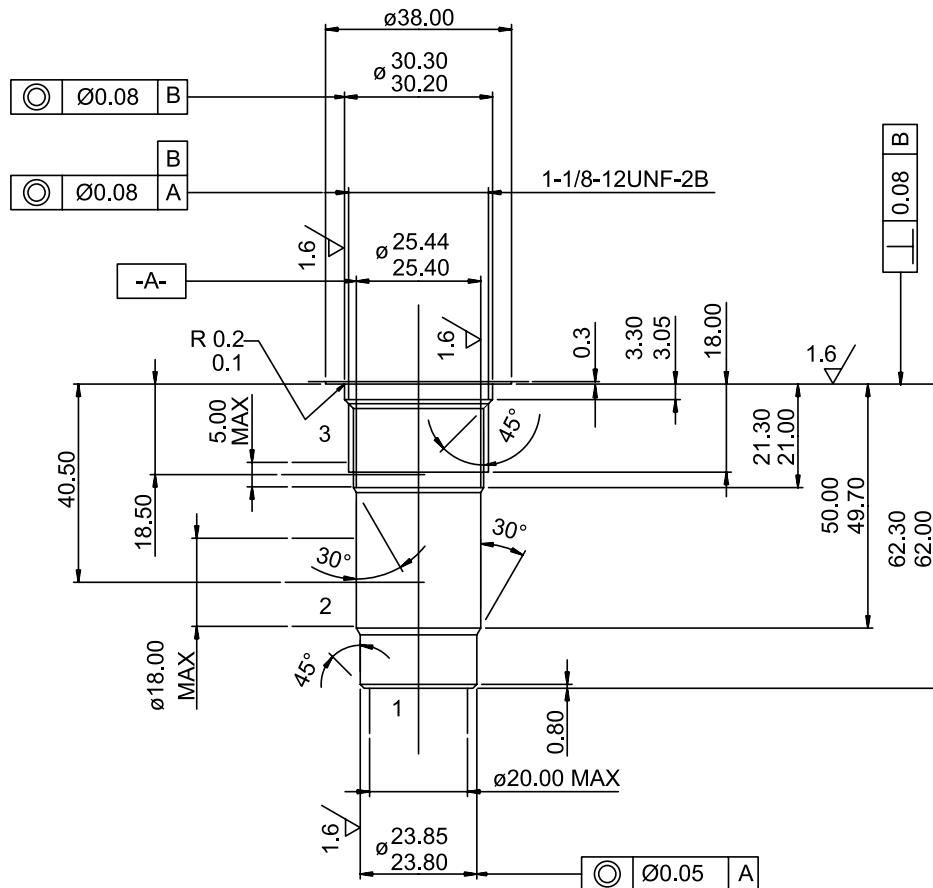
Dimensions

Measurements in mm

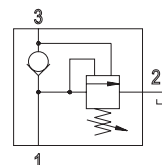
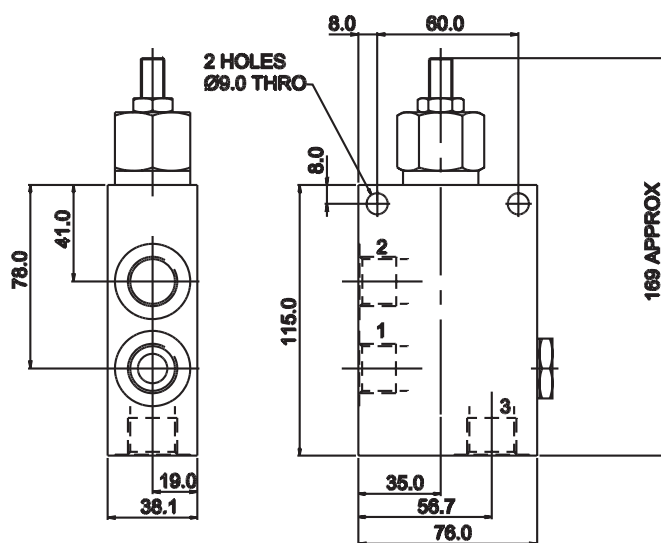


Cavity

Measurements in mm



Bodie Valves



Body without valve			
Material	Ports	Port size	Type code
Aluminium	1 ; 2 ; 3	G1/2	SB-U3-0105AL
	1 ; 2 ; 3	SAE 10 , 7/8-14	SB-U3-0106AL
Steel	1 ; 2 ; 3	G1/2	SB-U3-0105ST
	1 ; 2 ; 3	SAE 10 , 7/8-14	SB-U3-0106ST

The use of aluminium bodies is limited to a maximum operating pressure of 210 bar.

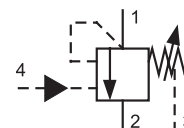
Spare Parts

Seal kits on request.

Note

- The packing foil is recyclable.
- The technical information regarding the product presented in this catalogue is for descriptive purposes only. It should not be construed in any case as a guaranteed representation of the product properties in the sense of the law.

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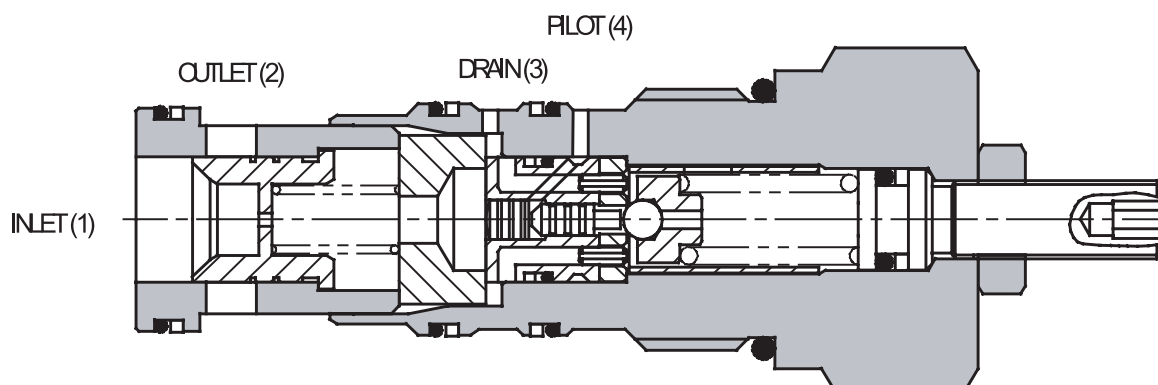
- ☐ May be used as accumulator charging valve.
- ☐ For unloading a high flow – low pressure pump to tank.
- ☐ May be used as priority circuit for steering and braking circuits.
- ☐ Unloads to a secondary system.



Functional Description

Inlet pressure is seen on the nose of the valve and system pressure (downstream of the system check valve) operates on the system pilot port. When pressure rises to the valve setting, the relief section opens and the system pressure acts on the pilot piston to hold the valve in the open position. The ratio between the pilot piston diameter and the seat diameter of the relief valve pilot section ensures that the valve will be maintained in the fully open position until the system pressure drops to approxi-

mately 85% of the unload pressure. Valves are available as cartridges for installation into line bodies or into custom designed Hydraulic Integrated Circuits. (NOTE: Provision must be made for a system check valve and a pilot line to signal the system pressure). Valve assemblies can be supplied complete in a line body for ready installation into a hydraulic system. Bodied valves include a check valve and the required connection from the system to the valve pilot port.



Ordering code

SUD6A-V4/I

Pilot operated priority unloading valve

Adjustable pressure

30 - 200 bar

150 - 350 bar

20

35

NBR

No designation

Technical Data

Figures based on: Oil Temp = 40 °C / Viscosity = 40 mm²/s

Cavity		1-5/16-12 UNS
Maximum flow	l/min	200
Max pressure	bar	350
Differential unload/reload	%	10 - 15
Hydraulic fluid		Hydraulic oil (HM, HV) according to DIN 51254
Fluid temperature range	°C	- 20 °C to + 80 °C
Ambient temperature	°C	- 20 °C to + 80 °C
Viscosity	mm²/s	10 to 500
Maximum degree of fluid contamination		according to ISO 4406 (1999), Class 21/18/15
Weight	kg	0,74
Maximum valve tightening torque in valve body or in control block		100 ⁺² Nm
Mounting position		any

Δp-Q Curves

characteristics determined at v = 35 mm²/s and t = 40 °C

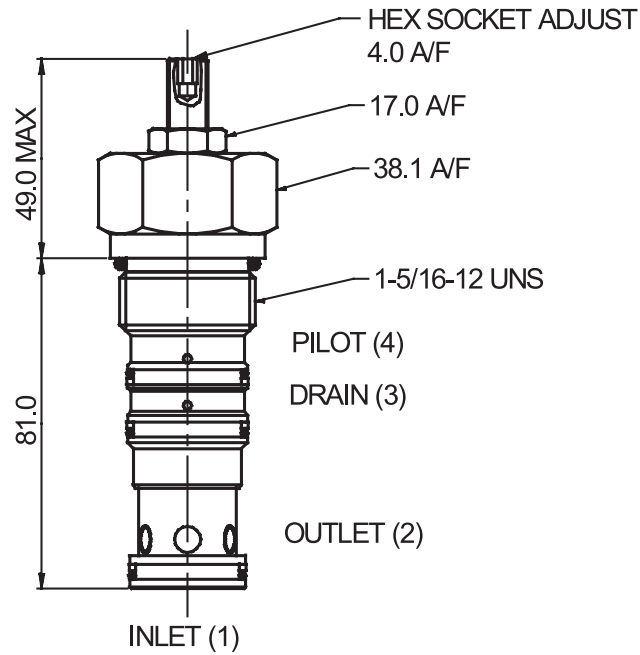
TYPICAL VALVE PERFORMANCE

TIME-SECONDS	300 BAR (4350 PSI)	100 BAR (1450 PSI)
0	300	100
1	280	90
2	260	80
3	240	70
4	220	60
5	200	50

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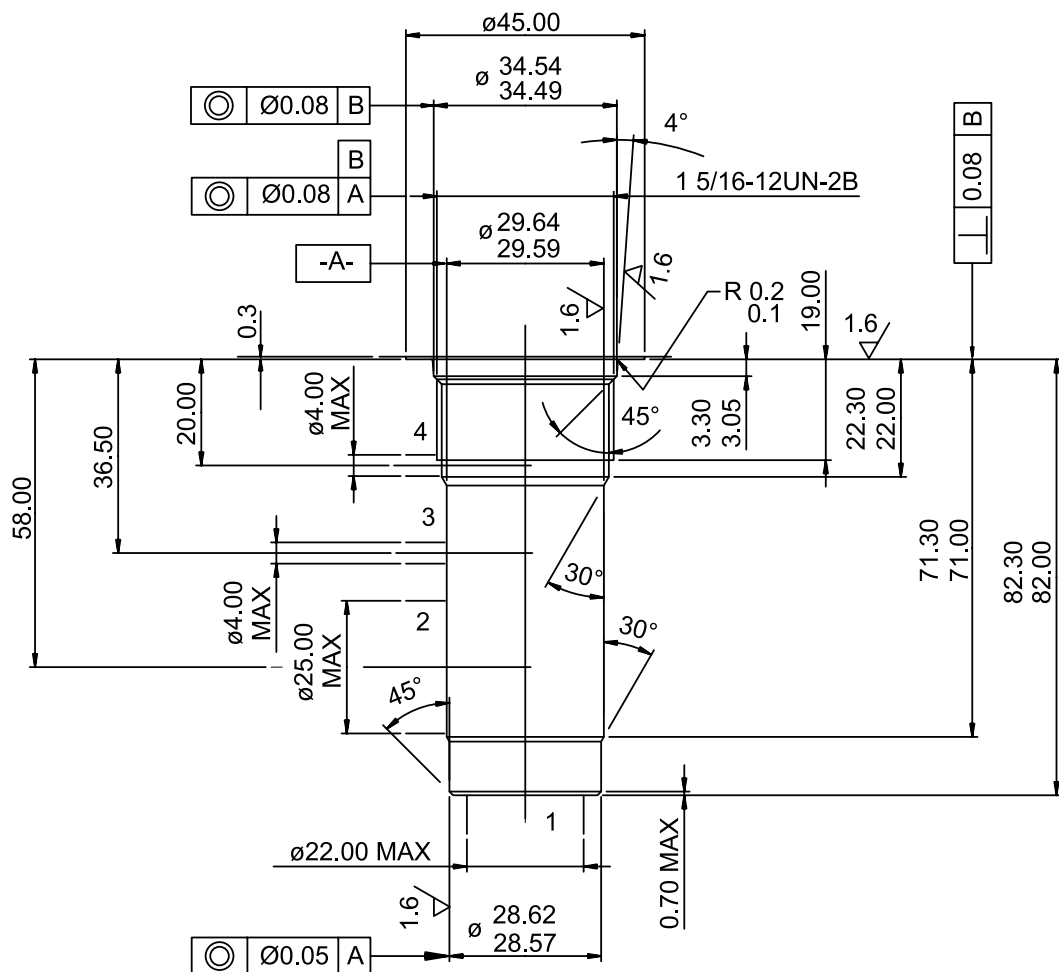
Dimensions

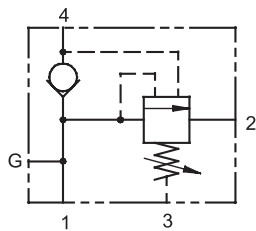
Measurements in mm



Cavity

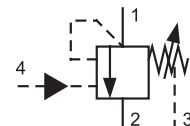
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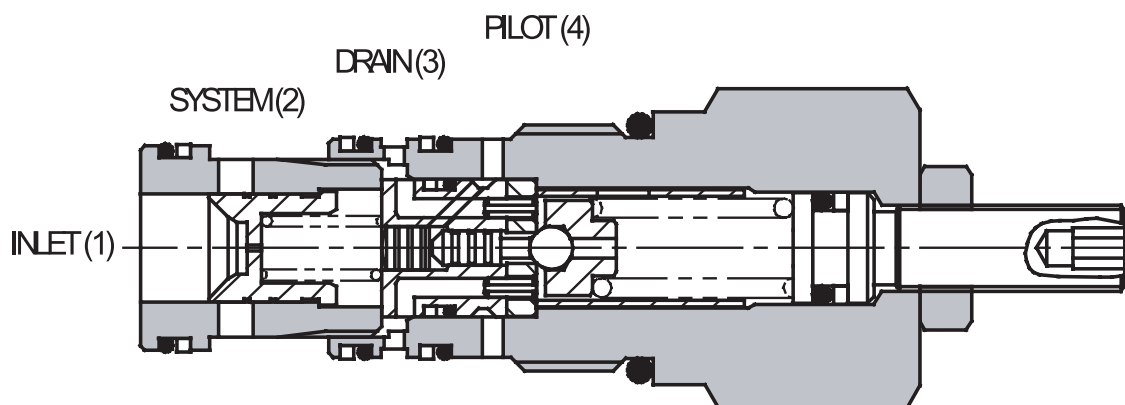
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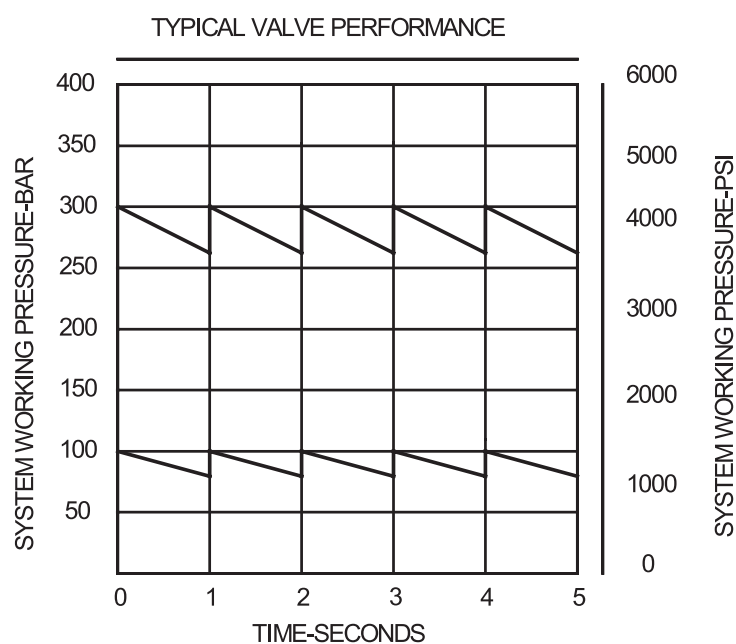
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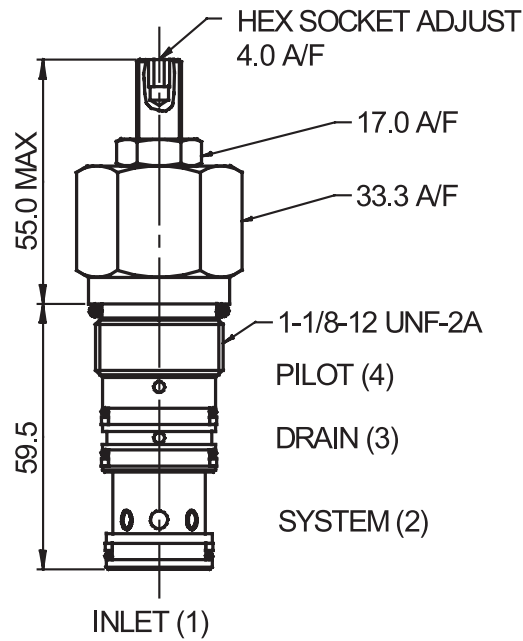
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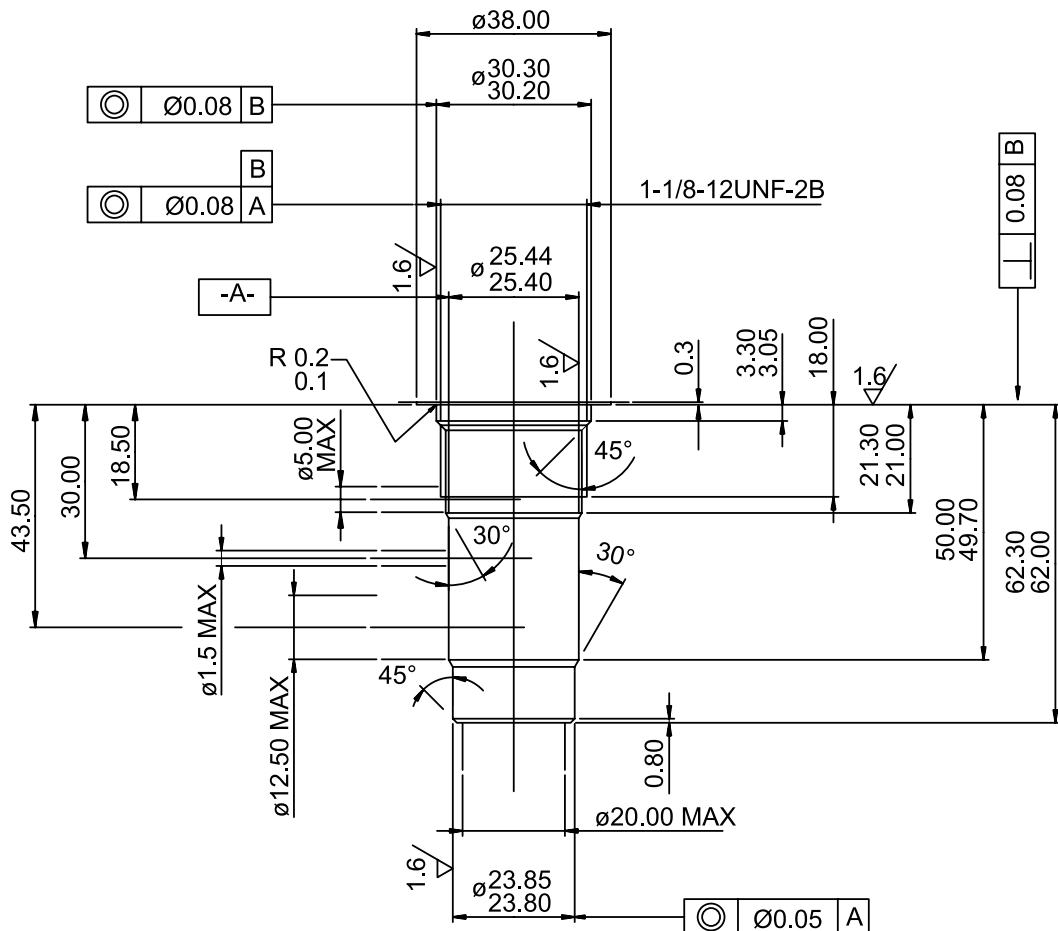
Dimensions

Measurements in mm

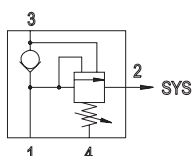
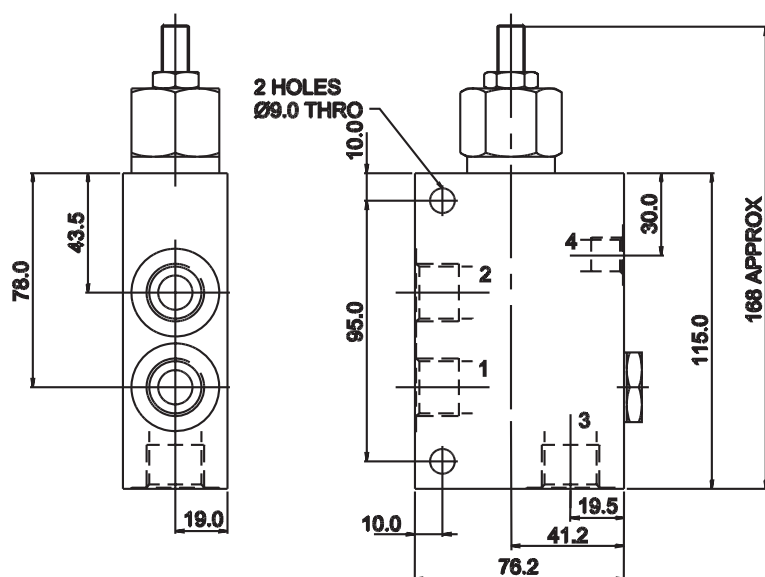


Cavity

Measurements in mm



Valve Bodies



Body without valve			
Material	Ports	Port size	Type code
Aluminium	1 ; 2 ; 3	G1/2	SB-U4-0105AL
	4	G1/4	
	1 ; 2 ; 3	SAE 10 ; 7/8-14	SB-U4-0106AL
	3	SAE 6 ; 9/6-18	
Steel	1 ; 2 ; 3	G1/2	SB-U4-0105ST
	4	G1/4	
	1 ; 2 ; 3	SAE 10 ; 7/8-14	SB-U4-0106ST
	4	SAE 6 ; 9/6-18	

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