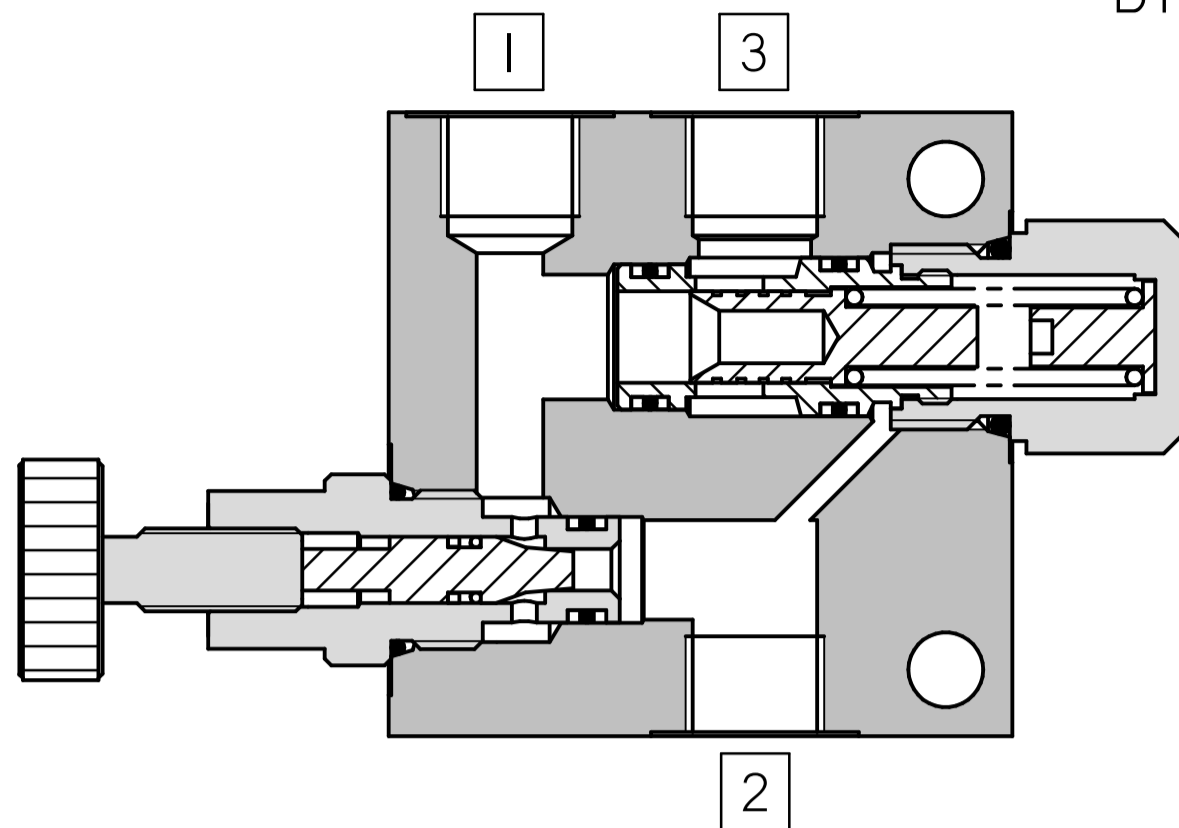
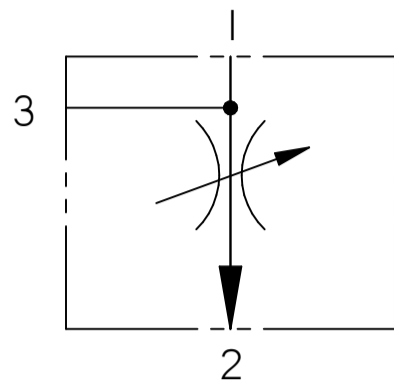


# FB PRESSURE COMPENSATED FLOW CONTROL VALVE

BYPASS TYPE

## FLUID POWER SYMBOL



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## Application

FB valves are bypass flow regulators. The flow (and actuator speed) will be largely independent of the load and the pressure conditions.

If used to regulate flow from a fixed supply, for example a standard gear or piston pump, the valve will pass the required flow and any surplus flow will be dumped to the tank line at working pressure. The supply pressure requirement will be approximately 7 bar (100 psi) higher than the system pressure, this being the operating pressure of the valve.

## Operation

Inlet flow passes through the adjustable orifice and out of the regulated port. The pressure drop across the orifice is sensed at each end of the spool, producing a force which, at the required flow rate, overcomes the spring force. The resultant movement of the spool regulates the flow by opening the radial valve ports and dumping excess flow.

The valve will pass flow in the return direction but this is restricted by the

flow path through the control orifice. For correct valve function the pressure on the tank line **MUST** be lower than the minimum pressure on the regulated line.

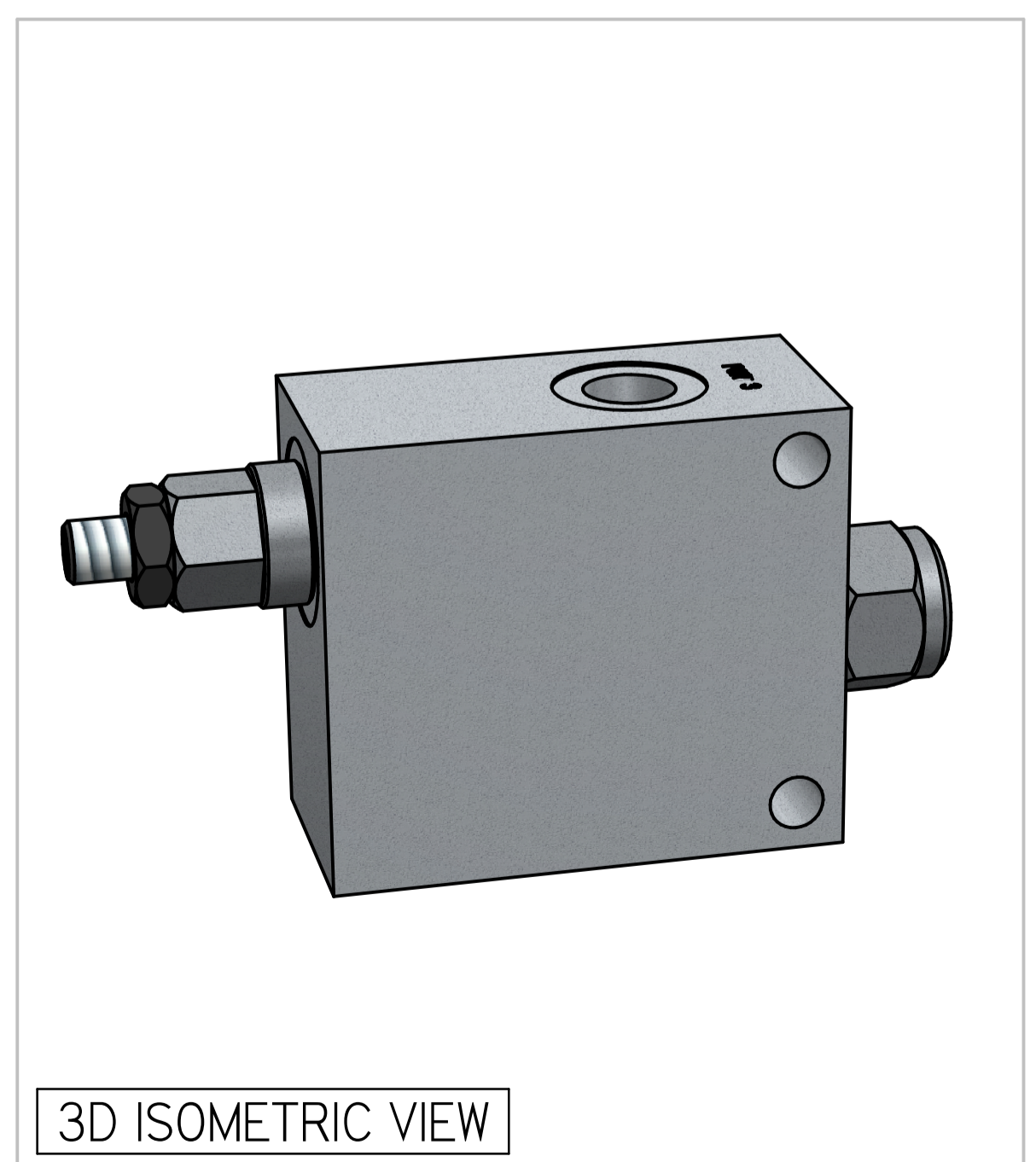
## Features

Line body construction allows direct connection into hydraulic systems. Leak-proof adjust screw gives easy, accurate adjustment to required flow setting. Hardened and ground working parts give accurate flow control and long working life.

## Specifications

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

	Inlet	Regulated
Rated Flow	FB25: 55 litres/min	30 litres/min
	FB55: 90 litres/min	55 litres/min
	FB95: 150 litres/min	95 litres/min
	FBI95: 285 litres/min	155 litres/min
Max Pressure	250 bar	
Cartridge Material	Working parts : Hardened, ground steel External surfaces : Zinc plated	
Weight	FB25	0.65 kg
	FB55	0.65 kg
	FB95	0.79 kg
	FBI95	1.43 kg
Manifold Material	Aluminium (upto 250 bar)	
Mounting	Line	
Seal Kit Number	SKFB** (Nitrile)	SKFB**V (Viton®)
Filtration Level	BS5540/4 Class 18/13 (25µ nominal)	
Operating Temp	-20°C to +90°C (Standard Seals)	
Viscosity Range	5 to 500 cSt	



3D ISOMETRIC VIEW

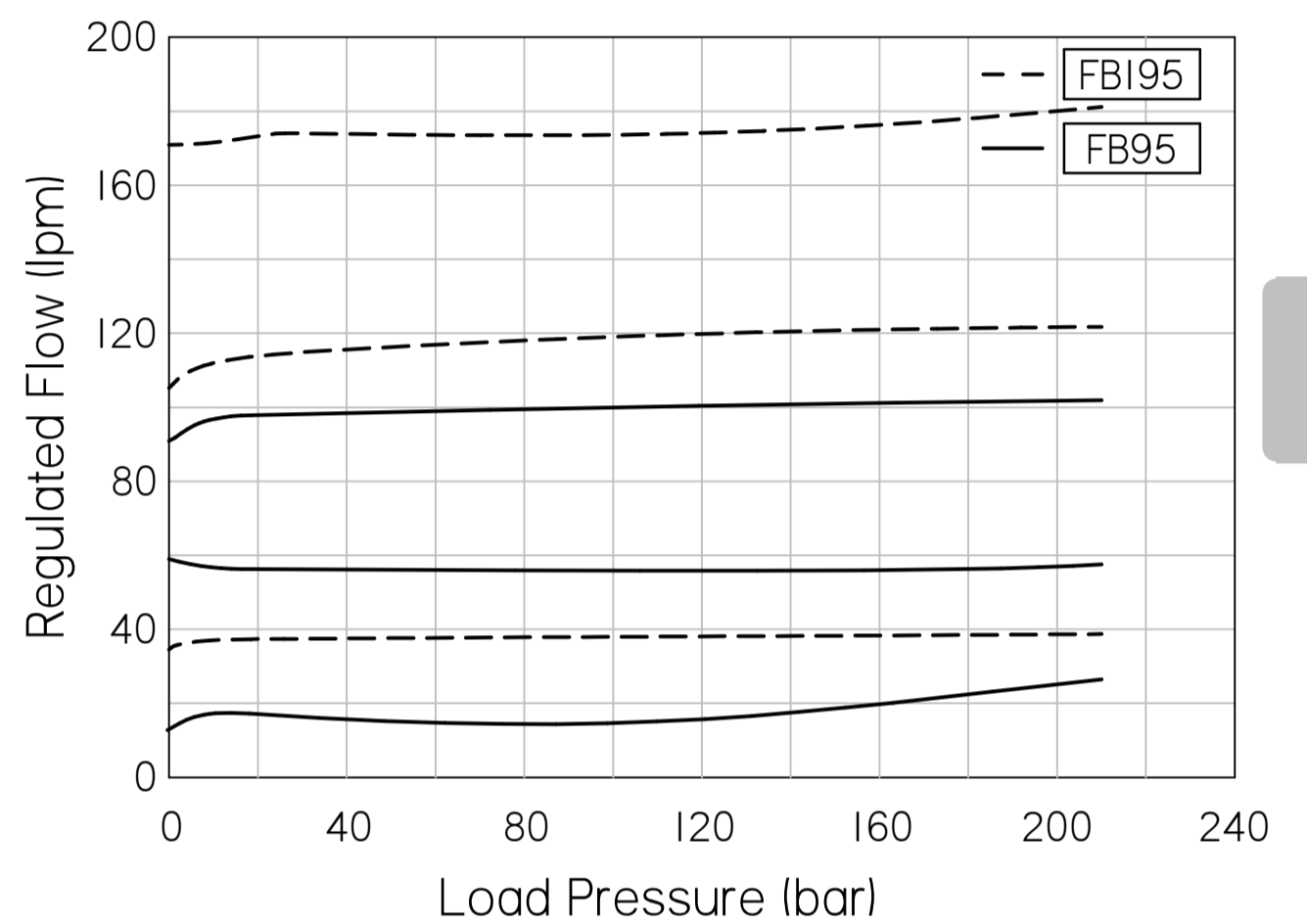
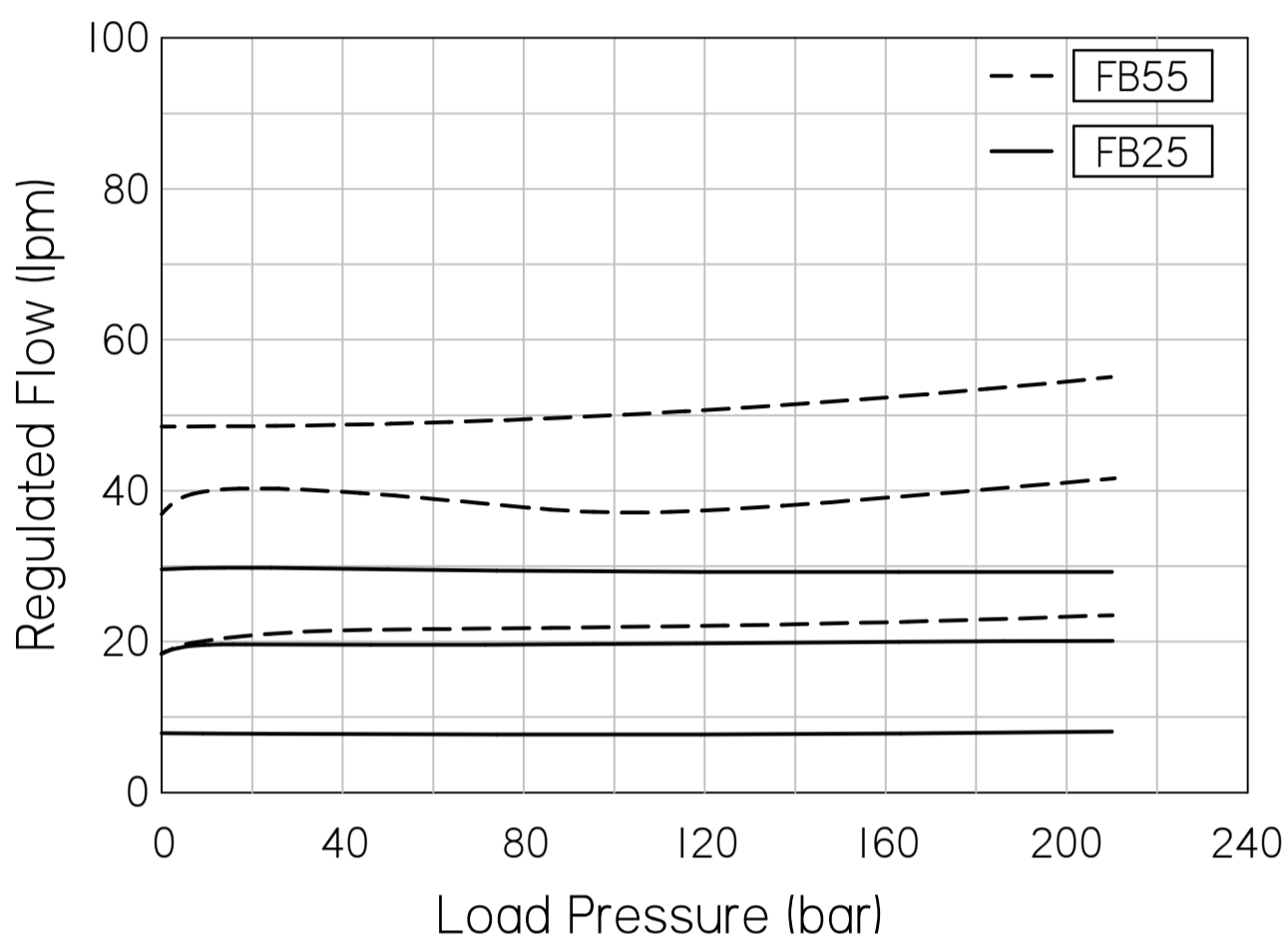
Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

**TO ORDER**

FB\*\* K 3W 25 N

BASIC CODE	FB**	SEAL KIT	N: NITRILE
ADJUSTMENT	K: KNOB	FLOW RANGE	25: 0-30 litres
PORT SIZE	3W: 3/8 BSP PORTS	55: 0-55 litres	95: 0-95 litres
	4W: 1/2 BSP PORTS	155: 0-155 litres	
	6W: 3/4 BSP PORTS		
	8W: 1 BSP PORTS		

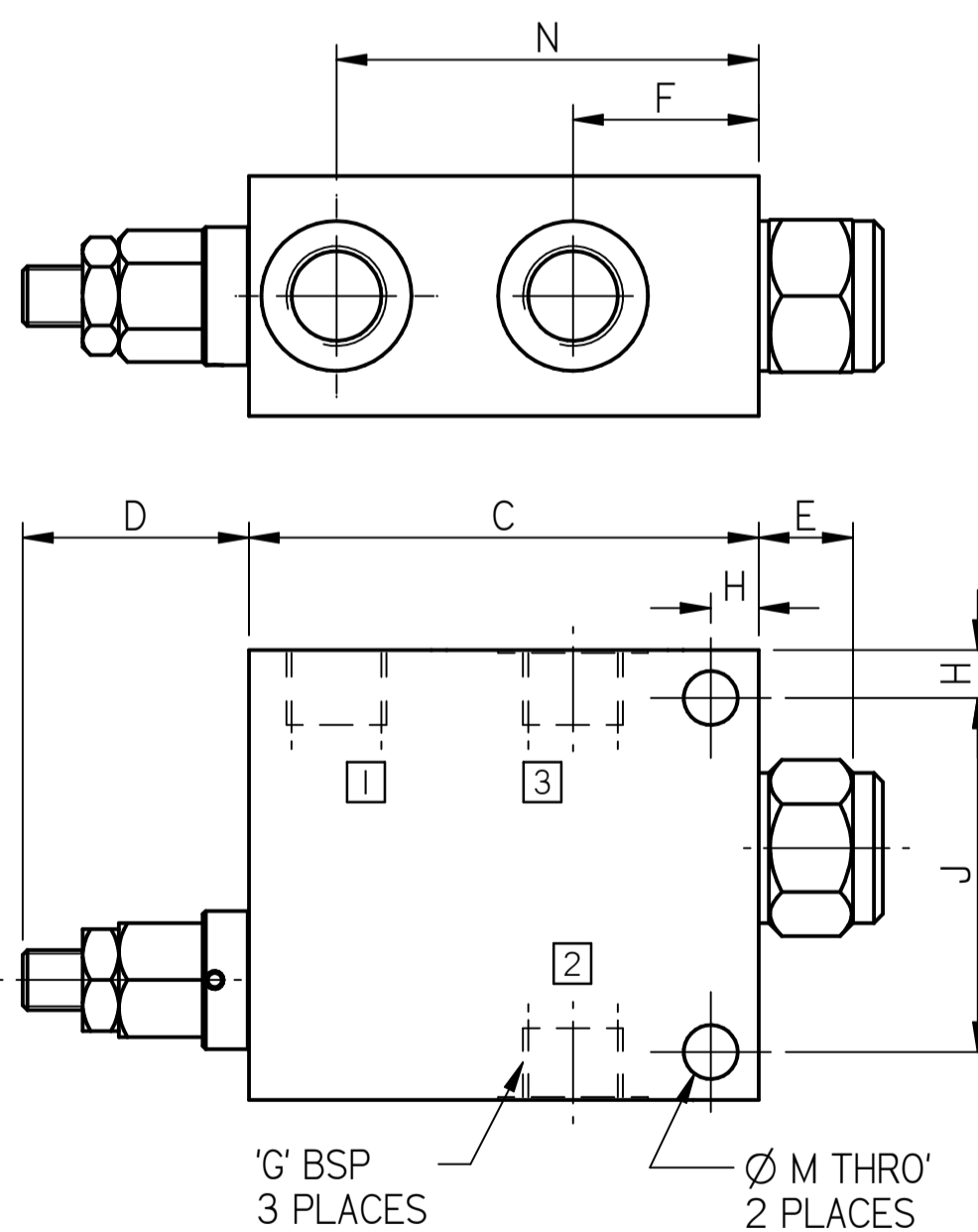
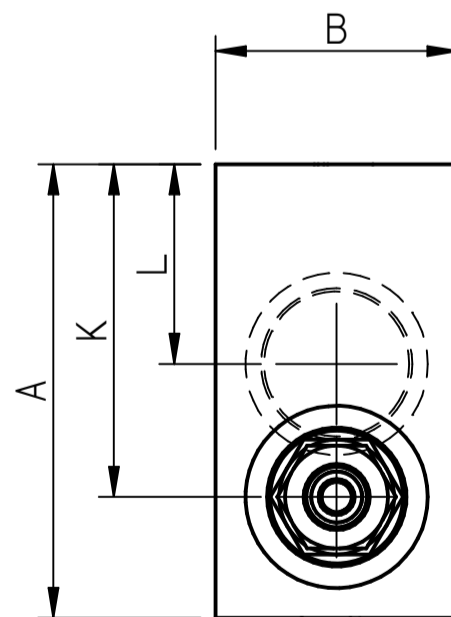
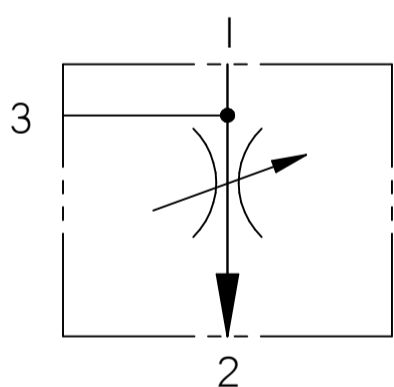
**PRESSURE CHARACTERISTICS**



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**COMPLETE VALVE** BSP PORTS

BASIC CODE: FB



Ordering Code	G	A	B	C	D	E	F	H	J	K	L	N	M	Weight
FB25	3/8"BSP	75	30	75	50	21	31	8	59	55	27	61	9	0.65 kg
FB55	1/2"BSP	75	40	85	50	21	31	8	59	55	33	67	9	0.87 kg
FB95	3/4"BSP	TBA												
FBI95	1"BSP													

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