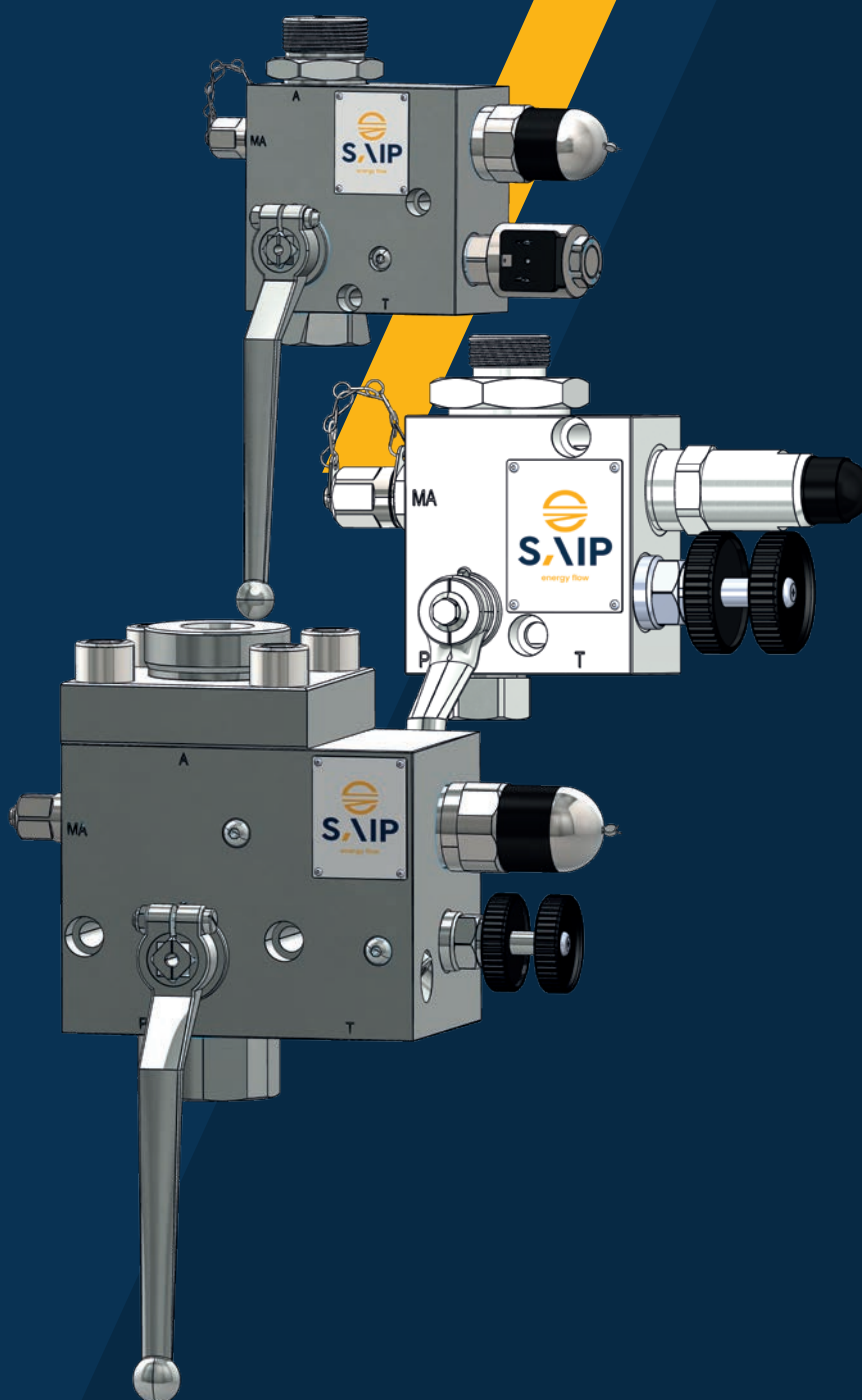


saip.it



BSF Type

Safety
blocks

Safety blocks

General information

The BSF series blocks combine in a compact construction those devices which facilitate the connection of the accumulator to a hydraulic circuit and its protection against overpressure.

Features

- A** System connection
- B** Shut-off valve
- C** Tank drain
- D** Manual drain valve
- E** Safety valve
- F** Accumulator connection
- G** Mini plug
- H** Nameplate

General Features

Sizes: DN10, DN20, DN25 and DN32

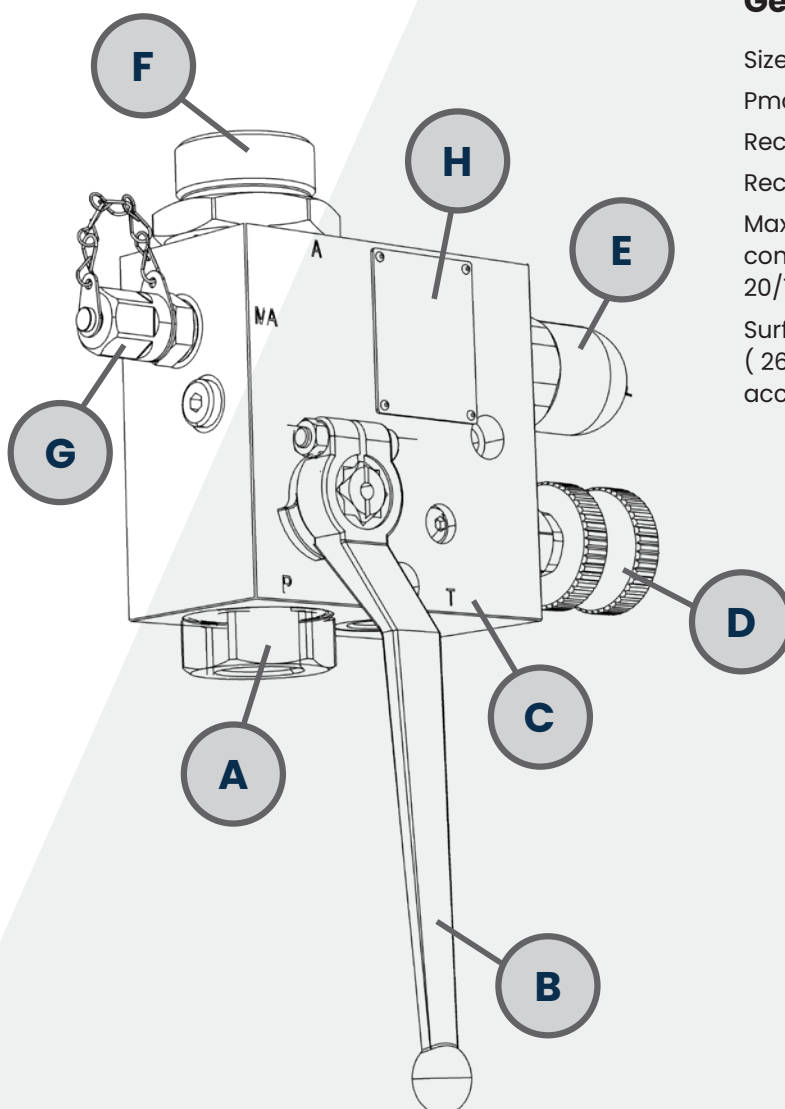
Pmax = 350 barg

Recommended fluids: mineral oil

Recommended viscosity: 10 ÷ 500 cSt

Maximum accepted level of contamination according to ISO 4406: 20/18/15 (NAS 9)

Surface treatment: zinc plating
(260 hours resistance in salt spray according to ISO 9227)

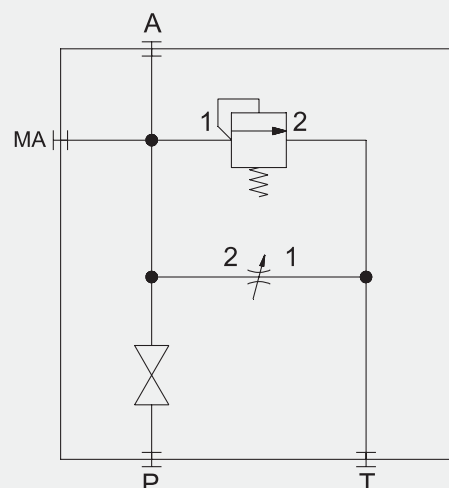


Technical characteristics

- For flow rates from pump to accumulator and vice versa, see pressure drop graphic ($\Delta p - Q$)
- Zinc-plated steel casing (260 h resistance in salt spray before the formation of red corrosion according to ISO 9227).
- PED-certified anti-tamper safety valve, available in various settings. DN10 safety blocks mount a 60 L/min nominal safety valve @32 cSt. DN20, DN25 and DN32 sizes mount a 150 L/min nominal safety valve @32 cSt.
- Two-way shut-off ball valve to allow the accumulator to be shut off without having to drain the accumulator.
- Manual needle valve for gradual draining of the accumulator. The valve includes a comfortable locking wheel to prevent unintentional opening.
- The needle valve can be replaced with a solenoid valve to enable automatic draining. There is also a predisposition for the installation of a grub screw to allow controlled discharge. For the version with automatic discharge via solenoid valve, the available voltages are: 24 Vdc and 110 Vac (96 Vdc solenoid to be used with DIN connector including wave rectifier)
Power consumption = 20W
- Mini plug connection for pressure measurement downstream of the ball valve.
- Accumulator-side connection in various sizes.
- Mounting can be done in all directions via the corresponding mounting holes.
- Operating temperatures
-15 TO +80 °C NBR
-10 TO +150 °C FKM

Manual version scheme

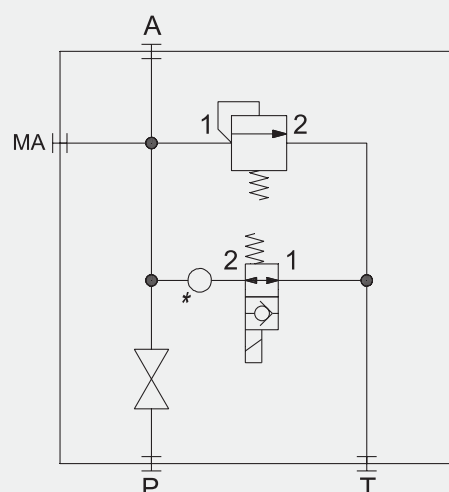
Functional scheme manual drain version



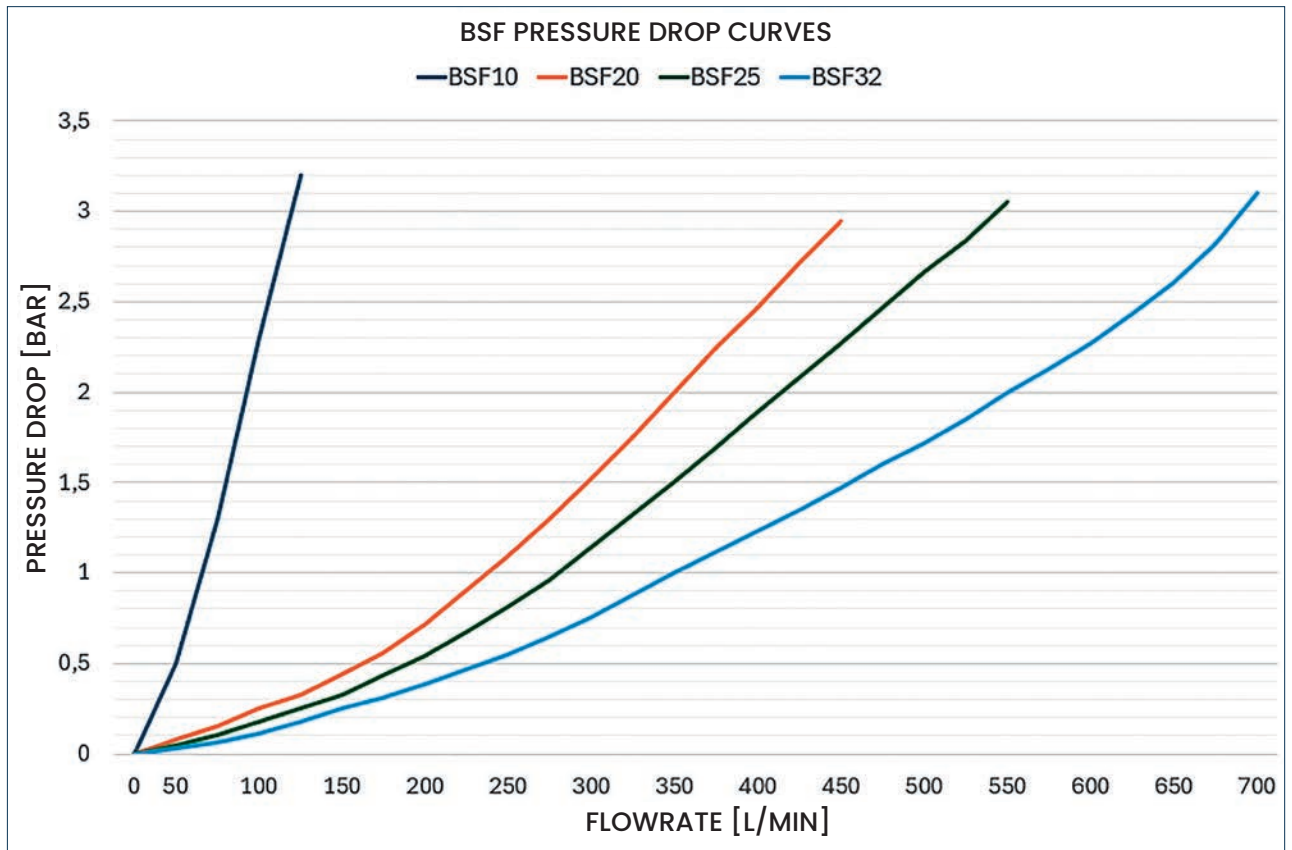
Electrical version scheme

Functional scheme electrically drained version

(*) M6 grub screw predisposition



BSF Pressure drop curves P-A



Curves refer to mineral oil ISO VG 32 @40°C

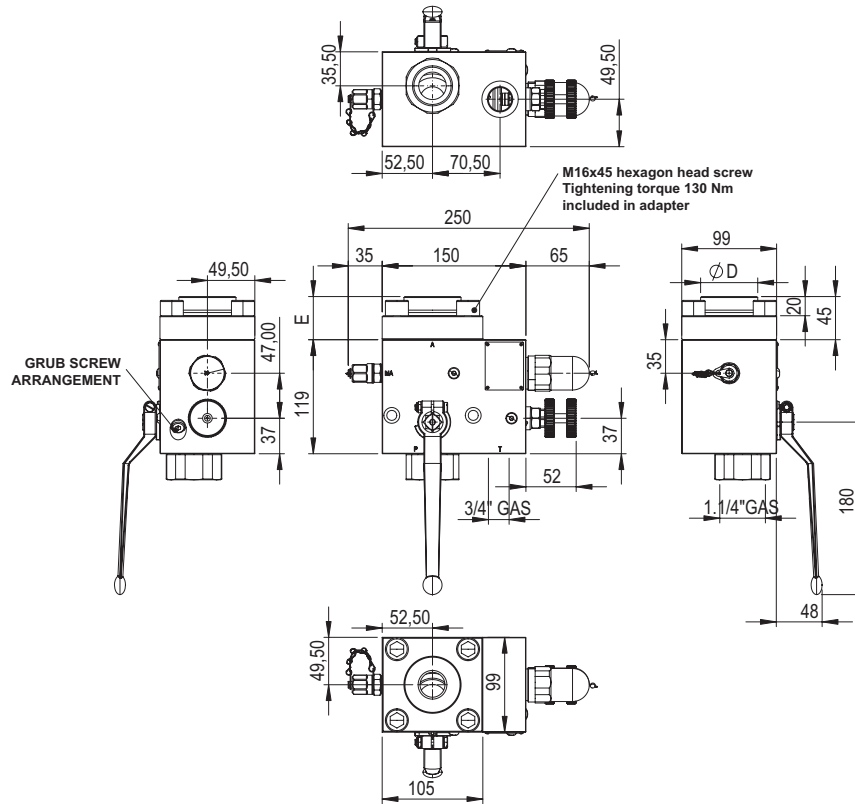
Description

Safety block type BSF 20 - Manual drain - NBR - CARBON STEEL ZINC-PLATED - Acc. conn. M. 1.1/4" BSP-P - syst. conn. F. 3/4" BSP-P - Valve DBDS10K in CARBON STEEL. CE/PED pressure set at 250 barg - Drain on system side T=1/2" BSP-P

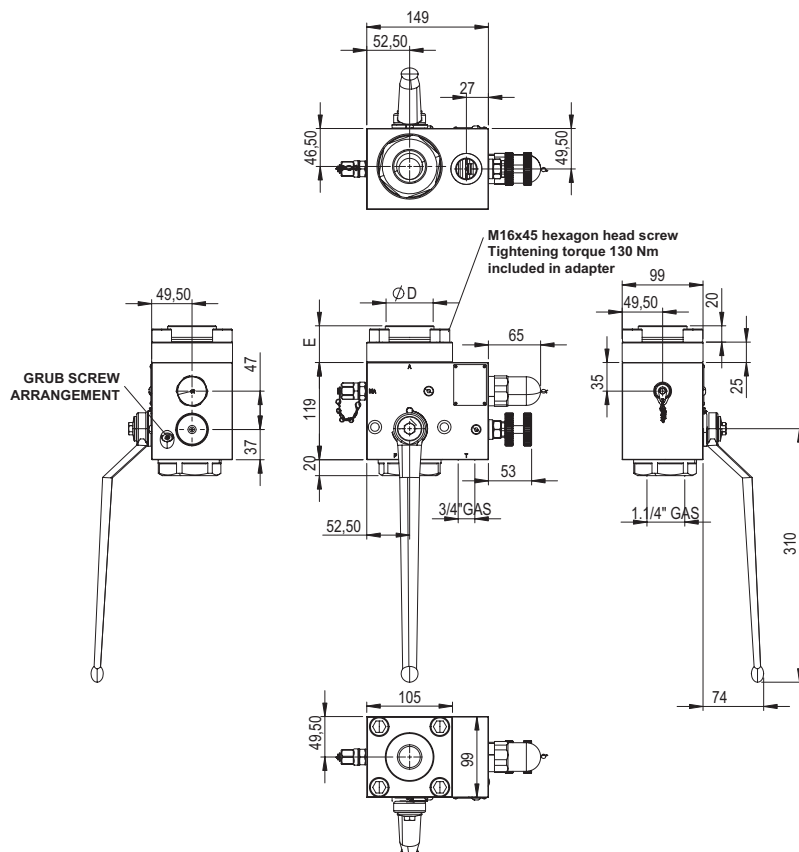
CODE EXAMPLE											
BSF	20	M	1	OZ	A7	G5	D 10	A	250	C24D	2
1	2	3	4	5	6	7	8	9	10	11	12
1. BLOCK TYPE		3. BLOCK DRAINING CONTROL		5. BODY MATERIAL				9. SAFETY VALVE CERTIFICATIONS		11. SOLENOID VALVE POWER SUPPLY VOLTAGE	
BSF		M	MANUAL	OZ	GALVANISED CARBON STEEL			A	PED CERTIFIED	A24D	24 Vdc
		E	ELECTRIC (normally open)							C110A	110 Vac (*)
		P	ELECTRIC WITH MANUAL RELEASE							12. BLOCK DRAIN POSITION	
		4. SEALS MATERIAL								2	
		1		NBR						SYSTEM-SIDE DRAIN T=1/2" GAS	
		10		FKM						3	
										SYSTEM-SIDE DRAIN T=3/4" GAS	
2. DN BLOCK		6. ACCUMULATOR SIDE CONNECTION		7. SYSTEM CONNECTION		8. SAFETY VALVE		10. SAFETY VALVE SETTING			
10		A4	M.1/2" BSP-P	G3	F.3/8" BSP-P	SR1		VALVE SR1A-B2 IN CARBON STEEL	150 250 330		
20		A5	M.3/4" BSP-P	G5	F.3/4" BSP-P						
		A4	M. 1/2" BSP-P								
		A5	M.3/4" BSP-P								
		A9	M.2" BSP-P								
		A7	M.1.1/4" BSP-P								
		A8	M.1.1/2" BSP-P								
		A9	M.2" BSP-P								
		A7	M.1.1/4" BSP-P								
		A8	M.1.1/2" BSP-P								
		A9	M.2" BSP-P								
25				G7	F.1.1/4" BSP-P	D10		VALVE DBDS10K IN CARBON STEEL	160 210 250 330		
32											



BSF 25 manual drain - weight 13 kg



BSF 32 manual drain - weight 14 kg





BSF - rev. July 2026

saip.it

SAIP S.r.l.
Hydropneumatic
Accumulator Company

Via Lambro 23/25/27
20073 Opera (MI) Italy
P.Iva 10218550159

**DOWNLOAD
DATA SHEET**

