

# HSB 20

## SAFETY BLOCK

### 1 – GENERAL FEATURES

The HSB20 safety block combines in a compact unit all the necessary components for an easy connection of the accumulator in a hydraulic circuit and its protection from overpressure. It also allows a quick disassembly of the accumulator or a verification of precharge pressure when the system is operating. The HSB20 series is suited for accumulators from **1 to 50 litres**.

### 3 – CONSTRUCTION FEATURES

The standard version includes:

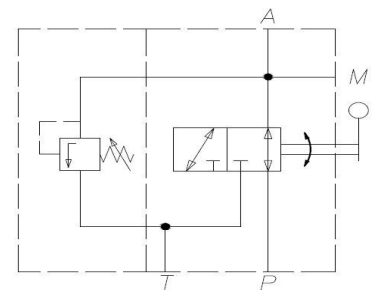
- Body in carbon steel.
- Sphere three-way valve, in chrome steel, that connects the accumulator to charging and discharging.
- Place for assembly of release valve.
- Connection on installation side, female parallel thread BSP ISO 228.
- Connection on accumulator side, male parallel thread BSP ISO 228.
- Joints for mineral oil (nitrile).
- HAG pressure valve is included.

On request, it can be supplied with:

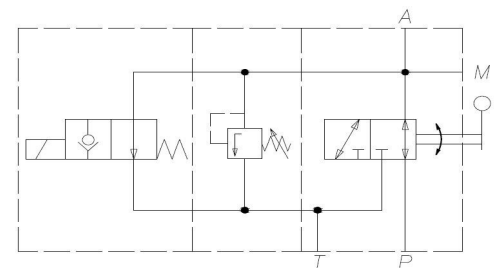
- Body with nickel coating or in stainless steel.
- Two-way solenoid valve for electrical discharge, “usually open”. Technical features (voltage, frequency, etc.) or “usually closed” version must be specified.
- Joints in Viton®.

### 2 – HYDRAULIC SYMBOL

HSB20M



HSB20E



### 4 – TECHNICAL FEATURES

<b>Input diameter</b>	Ø20 mm
<b>Nominal flow rate a ~ 10 m/s</b>	190 L/min
<b>Maximum working pressure</b>	360 bar
<b>Temperature range</b>	-20 to +80°C standard (70°C with electrovalve) -20 to +150°C (Viton gaskets)
<b>Release valve</b>	Øflow = 10 mm Adjustable from 5 to 360 bar
<b>Solenoid valve</b>	Input voltage = DC 24V – 110V – 220V AC 110V – 220V – (60 Hz) Energy consumption = 25W Protection = IP65

## 5 – IDENTIFICATION

**HSB20** | **B** | **360** | **G** | **-** | **10**

Type

**Discharge:**  
M = Only manual  
E = Electrical and manual

**Release valve:**  
B = HAG type valve  
(not adjusted)

**Pressure class (bar)**

**Accumulator side connection:**  
G = 2" BSP (standard)  
G1 = 1" 1/4 BSP  
G3 = 3/4" BSP

**Serial number:**  
Unchanged dimensions and features from 10 to 19

**Coil voltage (only for discharge E):**  
24 D = 24 VDC  
110 D = 110 VDC  
220 D = 220 VDC  
110 = 110 VCA 60 Hz  
220 = 220 VCA 60 Hz

**Block material:**  
- = Carbon steel (standard)  
N = Carbon steel with nickel 25µ  
X = Stainless steel

**Joint material:**  
P = Nitrile  
V = Viton

## 6 – SPARE PARTS

Besides the spare part number, specify the complete block designation or its serial number, specially for the non-standard versions.

Type	Accumulator side connection ØA				Sphere of shut-off valve with joints	HAG release valve not-adjustable (without testing)	Gasket kit
	BSP		NPT				
	1.1/4"	2"	1.1/4"	2"			
HSB 20	H10470	H10471	H10472	H10473	H2133	H2105 <sup>(bar)*</sup>	H2141

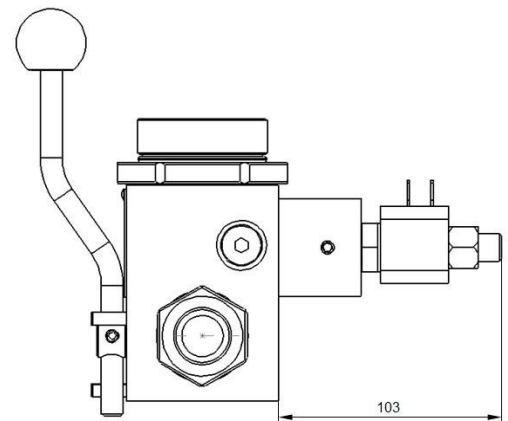
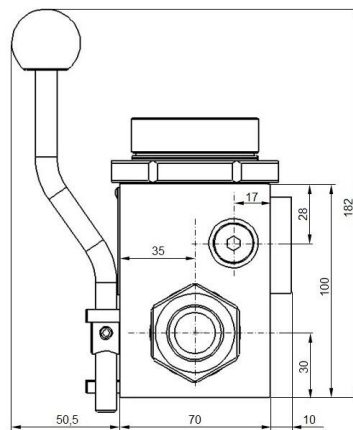
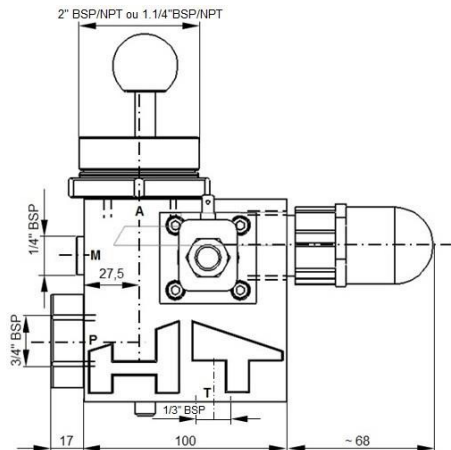
\*Choose, between the limits of regulation range, the value higher than the service pressure.

## 7 – DIMENSIONS

WITH HAG RELEASE VALVE

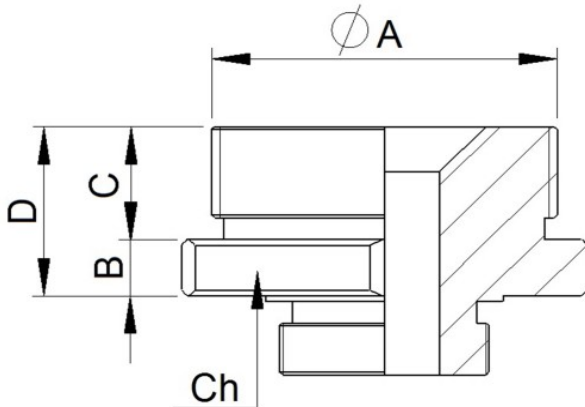
WITHOUT ELECTRIC DRIVE

WITH ELECTRIC DRIVE



**Nipple**

Accumulator-block connection



Number	Type	$\phi A$		B	C	D	Ch
H10470	HSB 20	BSP	1.1/4"	10	16	26	50
H10471			2"		20	30	70
H10472		NPT	1.1/4"		25	35	50
H10473			2"		26	36	70

- 1 – HT reserves the right to change information of this catalog without previous warning.
- 2 – Copy is forbidden.
- 3 – Dimensions in millimeters.

