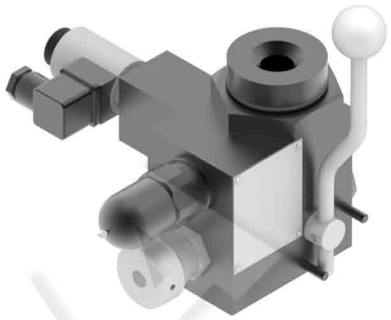
Part number:

HYDROMA HYDRAULICKÉ SYSTÉMY | HIDROMA SISTEMS UKŁADY HYDRAULICZNE | HYDROMA ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

Hydraulic accumulator cut-off and protection unit type B20

NS 20 | p_{max} 36 MPa | WK 491 810

DATA SHEET - OPERATION MANUAL



APPLICATION

Hydraulic accumulator protection and cut-off unit type **B20...** is used for connecting hydraulic accumulator to the system while meeting safety requirements.
The product is compliant with the regulations of directive **2014/35/UE.**

DESCRIPTION OF OPERATION

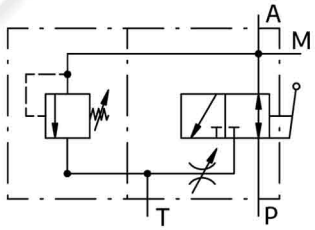
The unit consists of a housing incorporating the following subunits:

- ball cut-off valve for connecting and disconnecting the accumulator with the hydraulic system
- manual relief valve for safe unloading of accumulator after cut-off
- safety valve for system protection - with CE approval; if a unit with CE approval valve is ordered, it is set to required pressure and sealed
- electrically operated directional control valve that enables electrical unloading of the accumulator (if a version with directional valve is chosen)
- threaded flange that enables connection of the unit with the accumulator (standard flanges enable connection of EPE Italiana accumulators).

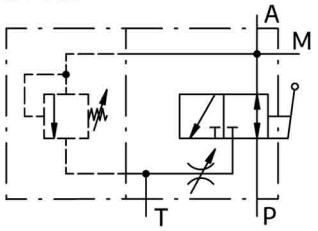
DIAGRAMS

version with manual unloading:

B20 MB...
B20 MC...

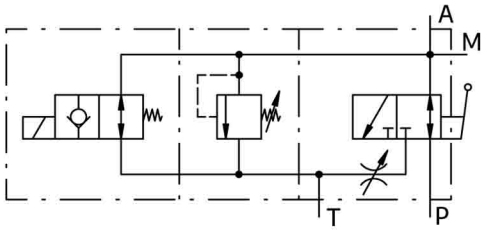


B20 MA...

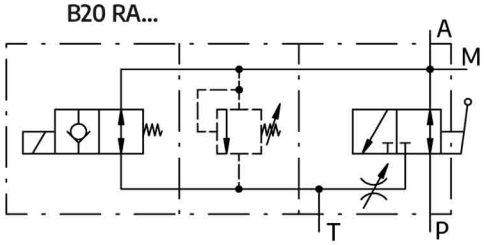


version with manual and electrical unloading:

B20 RB...
B20 RC...



B20 RA...

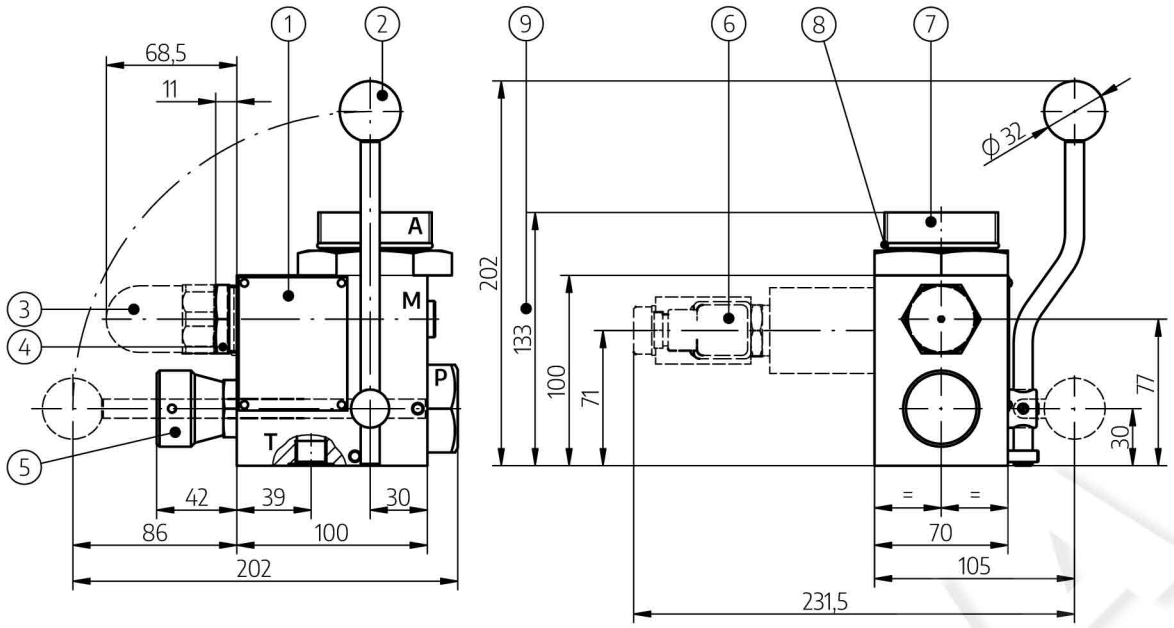


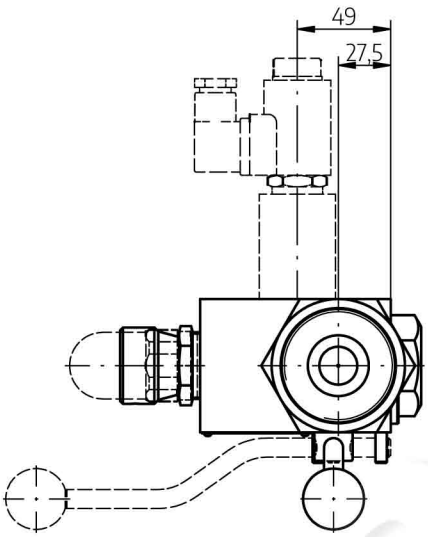
TECHNICAL PARAMETERS

hydraulic fluid	mineral oil	
required fluid cleanliness class	ISO 4406 class 20/18/15	
nominal fluid viscosity	37 mm²/s at temperature 55 °C	
viscosity range	2,8 ÷ 380 mm²/s	
fluid temperature range (in a tank)	recommended max.	40 ÷ 55 °C -20 ÷ 70 °C
ambient temp. range (version)	without solenoid with solenoid	-20 ÷ 70 °C -20 ÷ 50 °C
max. operating pressure	36 MPa	
nominal flow (at v = 6 m/s)	150 dm³/min	
housing material	steel	
type of relief valve	DBDS10K... as in data sheet WK 450 610	
type of solenoid valve	2URED6C1... as in data sheet WK 493 130	
solenoid valve voltage	12V DC; 24V DC lub 230V 50Hz	
power consumptoin	26 W	
weight	6,4 to 6,9 kg	

assembly and operation requirements at **www.operating-conditions.ponar.pl**

OVERALL AND CONNECTION DIMENSIONS





M - pressure gauge connection - **G¼**
P - pump connection - **G¾**
T - tank connection - **G⅜**
A - accumulator connection: **G1 ¼, G2**

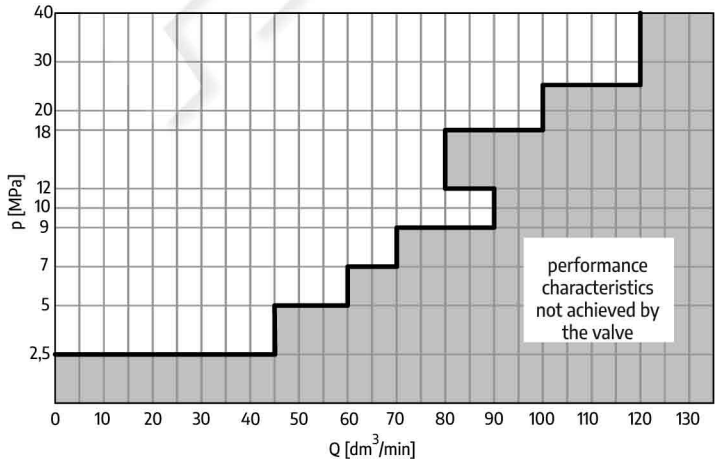
1. Housing
2. Accumulator cut-off valve
3. Safety valve type **DBD S 10 K** as in data sheet **WK 450 610**
4. Plug (for version without safety valve)
5. Manual relief valve
6. Electrically operated directional control valve **2URED6 C1** acc. to data sheet **WK 493 130** (optional for version: B20R...)
7. Accumulator connection
8. O-ring - see table below
9. Overall dimension depending on version - 133 max

accumulator connection (**A**)

size connection	G1 ¼	G2
sealing ring	37,77 x 2,62	55,25 x 2,62

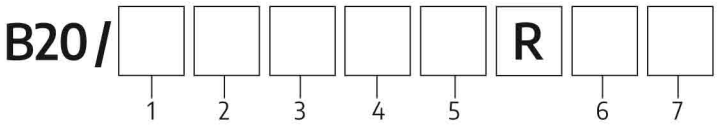
PERFORMANCE CURVES

measured at viscosity ν = 41 mm²/s and temperature t = 50 °C



performance curve **p** - **Q** for a safety valve DBDS10 (max. capacity of the valve for various pressures of adjustment - **operation area of the valve must be within the white area of the diagram**)

HOW TO ORDER



1 unloading method

manual =	**M**
manual and electrical =	R

2 control voltage for solenoids
(only for version ...R...)

12V DC =	G12
24V DC =	**G24**
230V AC 50 Hz =	**W230R**

3 type of relief valve

without valve =	A
with preset valve (without approval) =	B
with sealed valve and with CE approval =	C

4 safety valve setting

up to 2,5 MPa =	25
up to 5 MPa =	50
up to 10 MPa =	100
up to 20 MPa =	200
up to 31,5 MPa =	315
up to 33 MPa =	330
up to 36 MPa =	360

for valves with **CE** approval specify pressure setting (factory setting and sealing) **every 5 bar**

5 accumulator connections

connection G 1 ¼ =	G1
connection G 2 =	**G**

6 sealing

NBR (for fluids on mineral oil base) =	**P**
FKM (for fluids on phosphate ester base) =	V

7 further requirements = *****
(to be agreed upon with the manufacturer)

The symbols **in bold** are the preferred versions available in short delivery time.

Coding example: **B20/ M C 255 G R P**

HYDROMA