

Sunfab By-Pass / SBP is an unloading valve for the SAP/SCP pump providing remote switching between idling and operation.

The By-Pass valve is used in installations where the power take off is not disengaged during transport. These are usually found on vehicles fitted with hydraulic equipment that needs to be maneuvered while on the move, for example, road maintenance vehicles, concrete mixers, refuse collection trucks, etc.

The By-Pass valve is controlled from the driver's cab and makes it possible to provide oil to the vehicle's hydraulic equipment when necessary. The valve is normally open with an open connection between the pressure line and suction line directly by the pump, which is then unloaded. Only a small amount of oil circulates via the existing system to cool the pump. When a closed-centre valve or a valve with a high circulation pressure is used, a separate cooling line must be installed.

Other advantages of the Sunfab By-Pass valve

- Compact design for direct mounting on the pump's connection cover for small installation dimensions
- Equipped with Deutsch connector which conforms to high protection class (IP 69).
- Can be regulated at 0-400 bar working pressure in the hydraulic system
- Symmetrical design supports installation of the valve in different directions, and use on both right and left-hand rotating pumps
- Small power losses due to low pressure drop



Versions, main data

Example

SBP	-	1	-	M	-	24V
1		2		3		4

1. Type

SBP Sunfab By-Pass

2. Size

1	SAP 012-064 DIN, SCP 012-064 DIN/SAE, SAPT 090 DIN, SCPT 090 DIN
2	SAP 084-108 DIN, SCP 084-108 DIN/SAE, SAPT 130 DIN, SCPT 130 DIN

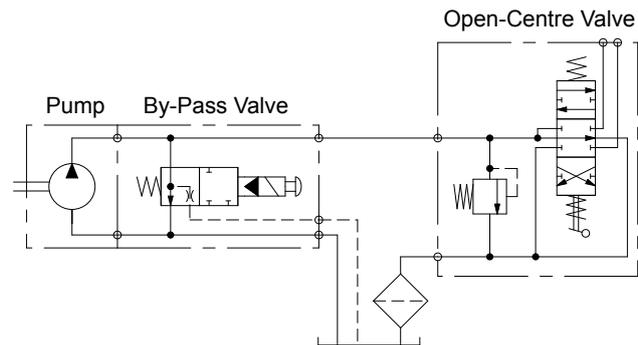
3. Manual Override

M Screw to lock

4. Pilot Valve Voltage

12V	12 VDC
24V	24 VDC

If the flow through the system in by-pass mode is less than 10% of the theoretical pump flow, caused by high pressure drop in the system, or if the system is equipped with a closed-centre valve, an external cooling line must be installed from the drain port directly to tank.



A 2.5m cable with mating Deutsch connector can be ordered as an option (part number 91078).



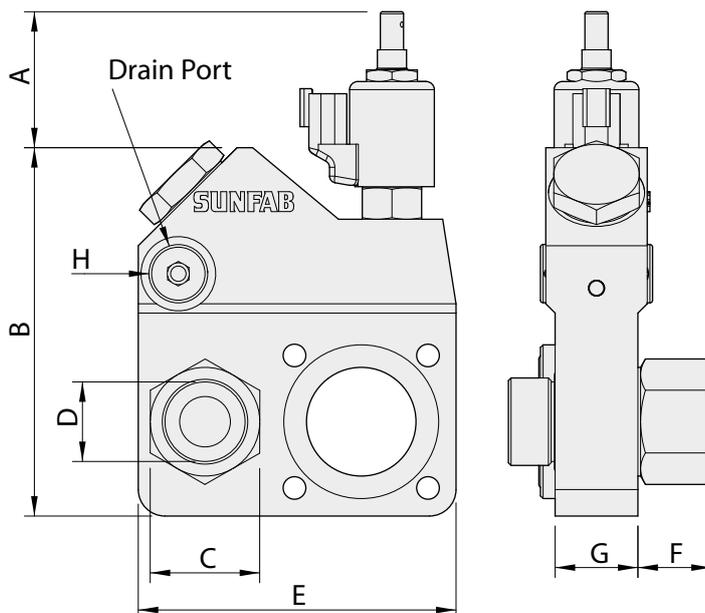
Sunfab reserves the right to make changes in design and dimensions without notice. Printing and typesetting errors reserved.



Specifications

	SBP-1-M		SBP-2-M	
Max pressure	400 bar			
Max intermittent pump speed in By-Pass Mode (short circuited pump) for SAP pumps	3000 rpm		2600 rpm	
Function	Normally open			
Nominal voltage	12VDC	24VDC	12VDC	24VDC
Max current	1,67 A	0,83 A	1,67 A	0,83 A
Max power	23 W	23 W	23 W	23 W
Coil duty rating	100% ED			
Protection class	IP69K			
Connector	Deutsch DT04-2P			
Mating connector (not included)	Deutsch DT06-2S			

Model		SBP-1-M	SBP-2-M
Weight (kg)		2,95	3,35
Dimensions (mm)	A	63	51
	B	126	139
	C	36	41
	D	G 3/4"	G 1"
	E	103	119
	F	25	27,5
	G	31	31
	H	G 1/4"	G 3/8"





When the pump is running:

1. Do not touch the pressure hose
2. Watch out for rotating parts
3. The pump and hoses may be hot

© Copyright 2015 Sunfab Hydraulics AB. All Rights Reserved.