

The SCPD 70/36 DIN provides 69.2 and 36.4 cm³/rev. and supports a maximum intermittent working pressure of 400 bar. It is speed optimized and therefore delivered in execution with the left (L) or right (R) direction of rotation.

New material properties give the pump increased durability during continuous operation with high pressure.

Together with the By-Pass valve, the SCPD 70/36 DIN is suitable for combination vehicles that require different flows and where the equipment must be able to be operated while traveling. The pump is primarily intended for motor-mounted power take-off.

The constant connection is made possible by the By-Pass valve, which immediately relieves the pump and power take-off when no oil flow is required. The By-Pass valve has a very low pressure drop, which makes the function energy efficient.

Other advantages:

- Long life due to high demands on material selection, such as bearings, seals, etc.
- O-rings on all contact surfaces as well as double shaft seals eliminate oil leakage from the pump and power takeoff.
- Compact design of the By-Pass valve for direct mounting on the pump's connection cover for small installation dimensions.
- The By-Pass valve is equipped with Deutsch connector which conforms to high protection class (IP 69).

Versions, main data

Example

SC	PD	-	70/36	L	-	V	-	DL4	-	L35	-	S0	S	-	2	00
Line	1		2	3		4		5		6		7	8		9	10

Line	
SC	Sunfab Compact, bent-axis design

7.	
S0	Sunfab standard

1. Type	
PD	Dual flow pump

8. Connections	
S	Sunfab standard

2. Displacement	
	70/36

9. Additional	
2	Optimised

3. Direction of rotation	
L	Left
R	Right

10. Accessories	
00	No accessories available

Double by-pass valve SBPD-2-M-24V Art. no 91170 is ordered seperately.

Double by-pass valve SBPD-2-M-12V Art. no 91171 is ordered seperately.

4. Sealing	
V	FPM

5. Mounting flange	
DL4	DIN 4-h (ISO 7653-D)

6. Shaft	
L35	DIN 5462/ISO14

Pump SCPD 70/36 DIN

Theoretical oil flow A+B at pump speed	rpm	l/min		
	500	34.6 + 18.2 = 52.8		
	1000	69.2 + 36.4 = 105.6		
	1500	103.8 + 54.6 = 158.4		
	1800	124.6 + 65.5 = 190.1		
Displacement A+B	cm ³ /rev	69.2 + 36.4		
Min pump speed A+B	rpm	500		
Max pump speed A+B	rpm	1800		
Max pump speed A	rpm	1800		
Max pump speed B ¹⁾	rpm	2100		
Max pump speed, relieved	rpm	2550		
Max working pressure ²⁾				
Continuous	bar	350		
Intermittent ³⁾	bar	400		
Max system oil temperature	°C	70		
Max inlet pressure (housing pressure)	bar	2.0		
Weight without valve	kg	22.4		
Weight with valve	kg	27.3		
Tare-weight torque without valve	Nm	32.6		
Tare-weight torque with valve	Nm	46.0		
Theoretical power at pressure and pump speed	rpm	200 bar	350 bar	400 bar
	500	11.5 + 6.1 = 17.6 kW	20.2 + 10.6 = 30.8 kW	23.1 + 12.1 = 35.2 kW
	1000	23.1 + 12.1 = 35.2 kW	40.4 + 21.2 = 61.6 kW	46.1 + 24.3 = 70.4 kW
	1500	34.6 + 18.2 = 52.8 kW	60.5 + 31.9 = 92.4 kW	69.2 + 36.4 = 105.6 kW
	1800	41.5 + 21.8 = 63.3 kW	72.7 + 38.2 = 110.9 kW	83.0 + 43.7 = 126.7 kW
Theoretical torque on pump shaft at different pressures		200 bar	350 bar	400 bar
		220 + 116 = 336 Nm	385 + 203 = 588 Nm	441 + 232 = 673 Nm
Direction of rotation	Left (L) or Right (R)			

1) Port A relieved.

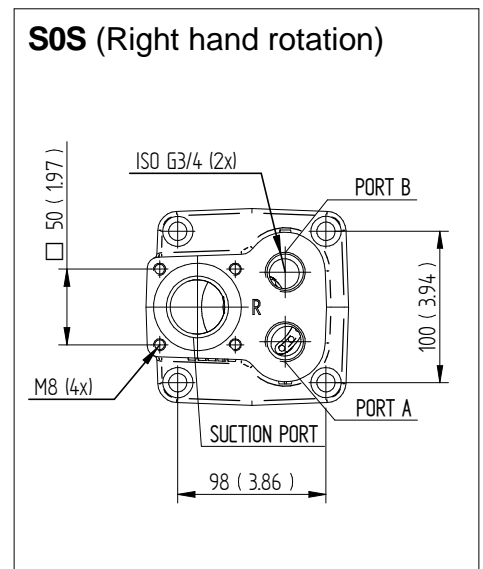
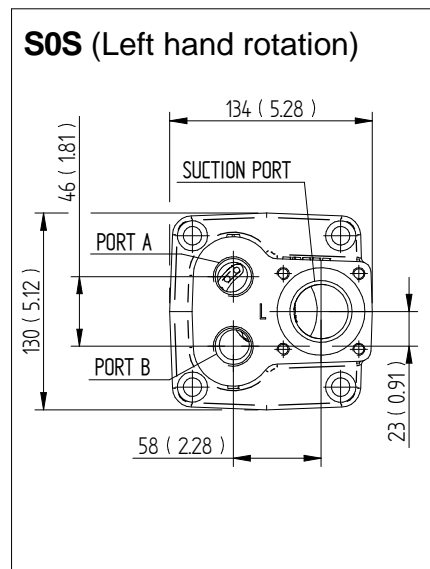
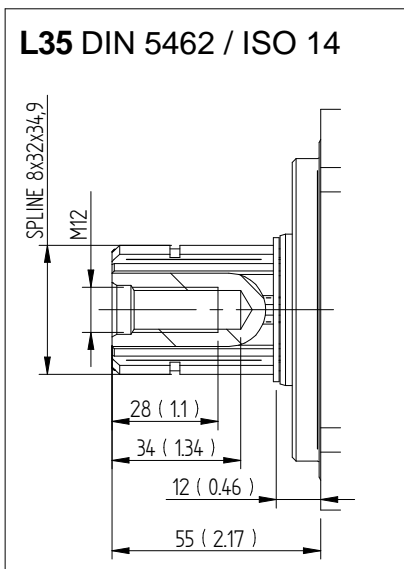
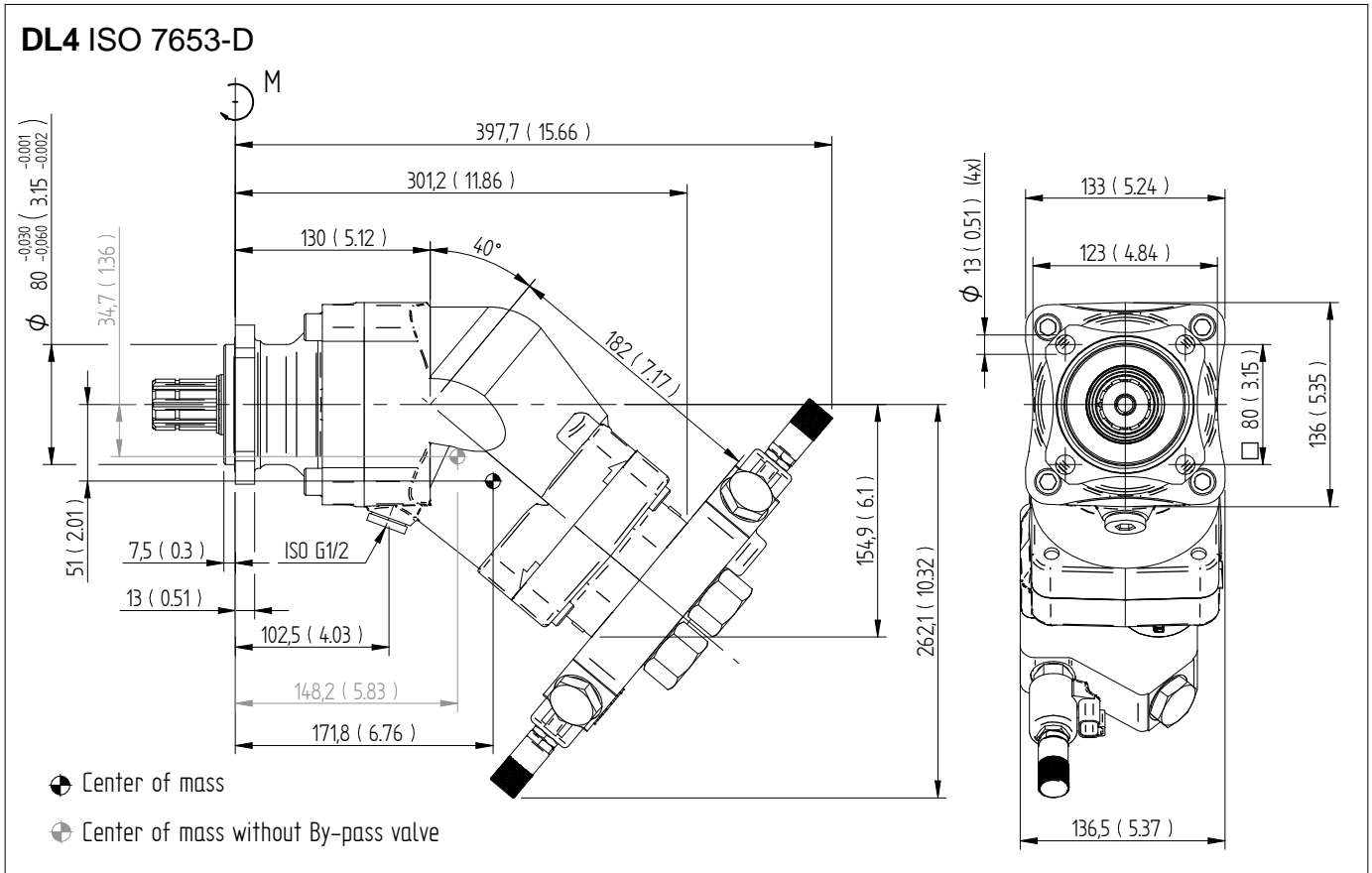
2) Do not only relieve port B if the pressure level of both ports is at the same time > 250 bar.

3) Max. 6 seconds per minute.

Dimensions SCPD 70/36 DIN BY-PASS

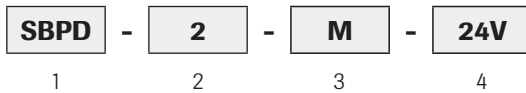
Flange, shaft & connection cover

Millimeter (inch)



Double By-Pass SBPD

Example



1. Type

SBPD	Sunfab Double By-Pass
-------------	-----------------------

2. Size

2	SCPD 70/36 DIN
----------	----------------

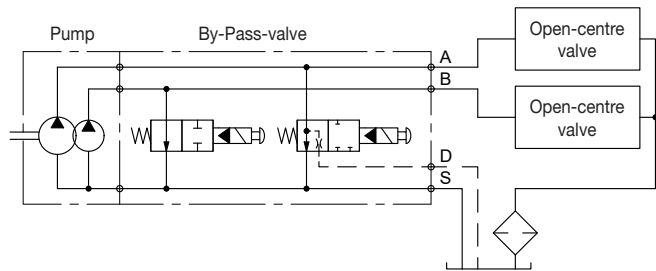
3. Manual Override

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.



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

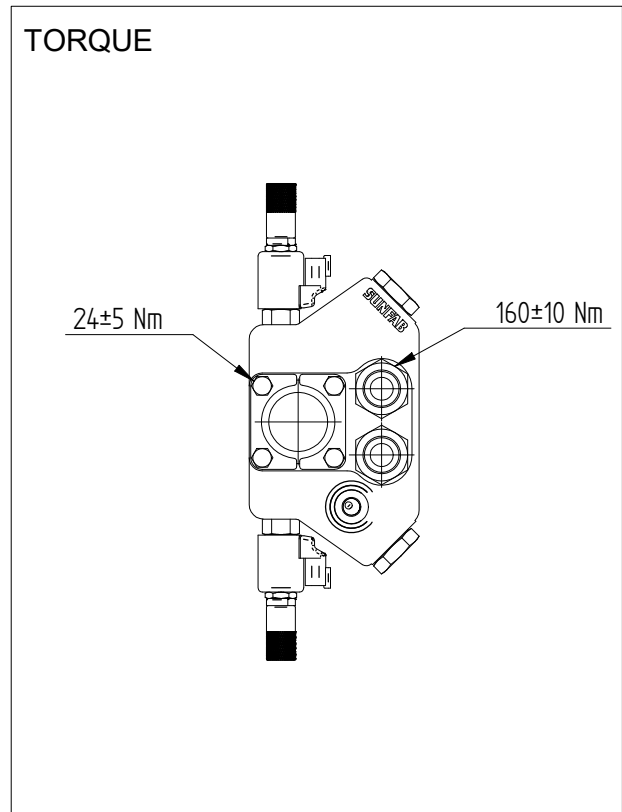
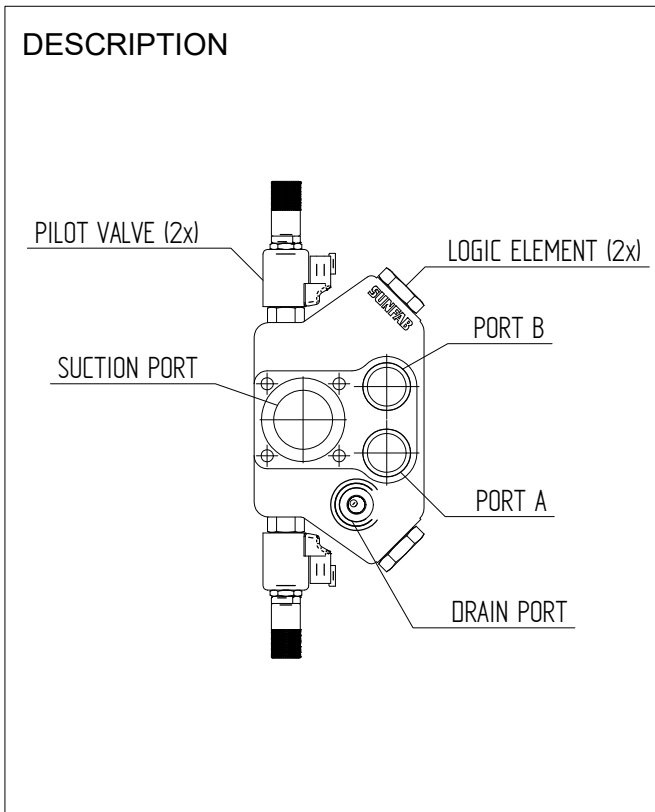
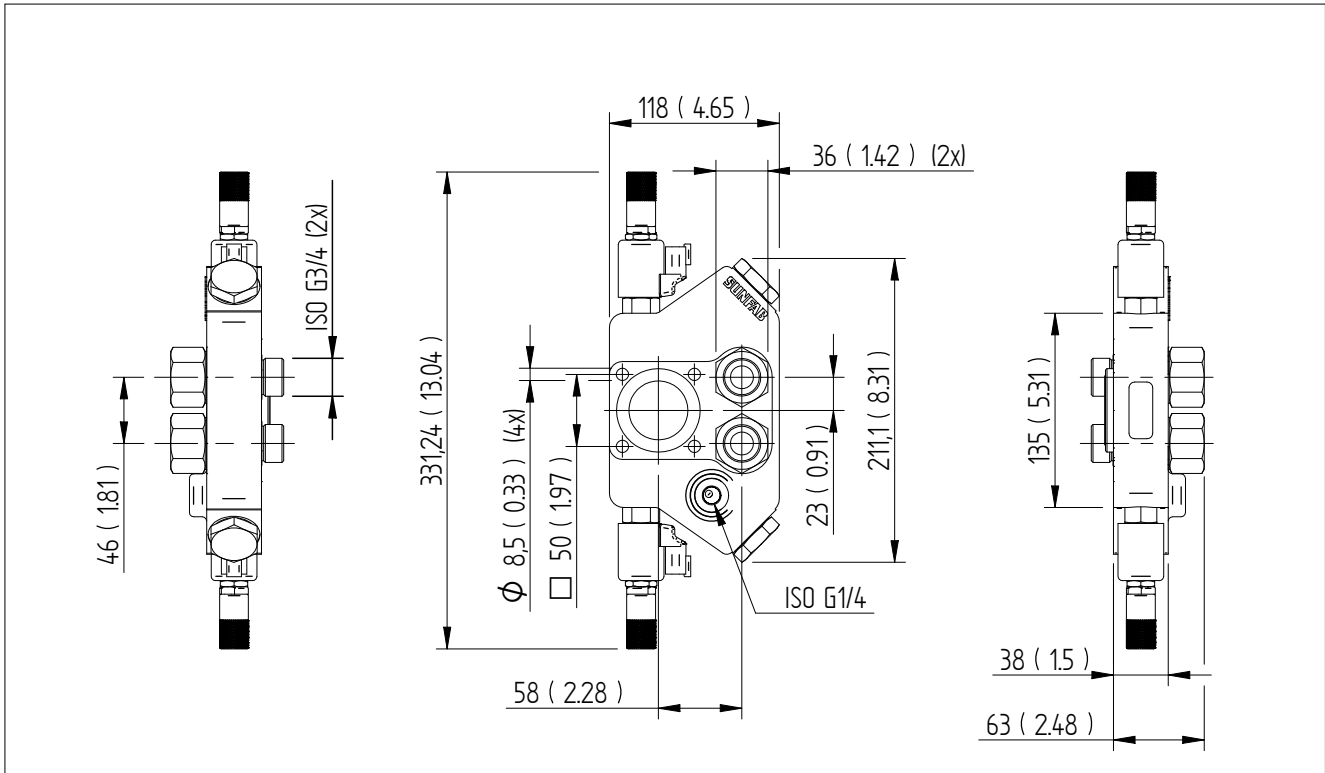


Specifications

	SBPD-2-M	
Max pressure	400 bar	
Max intermittent pump speed in By-Pass Mode (short circuited pump)	2550 rpm	
Function	Normally open	
Nominal voltage	12 V DC	24 V DC
Max current	1,67 A	0,83 A
Max power	23 W	23 W
Coil duty rating	100 % ED	
Protection class	IP69K	
Connector	Deutsch DT04-2P	
Mating connector (not included)	Deutsch DT06-2S	
Weight (kg)	4,9	

Dimensions Double By-Pass valve SBPD-2-M

Millimeter (inch)



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



WARNING!

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

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

© Copyright 2018 Sunfab Hydraulics AB. All Rights Reserved.