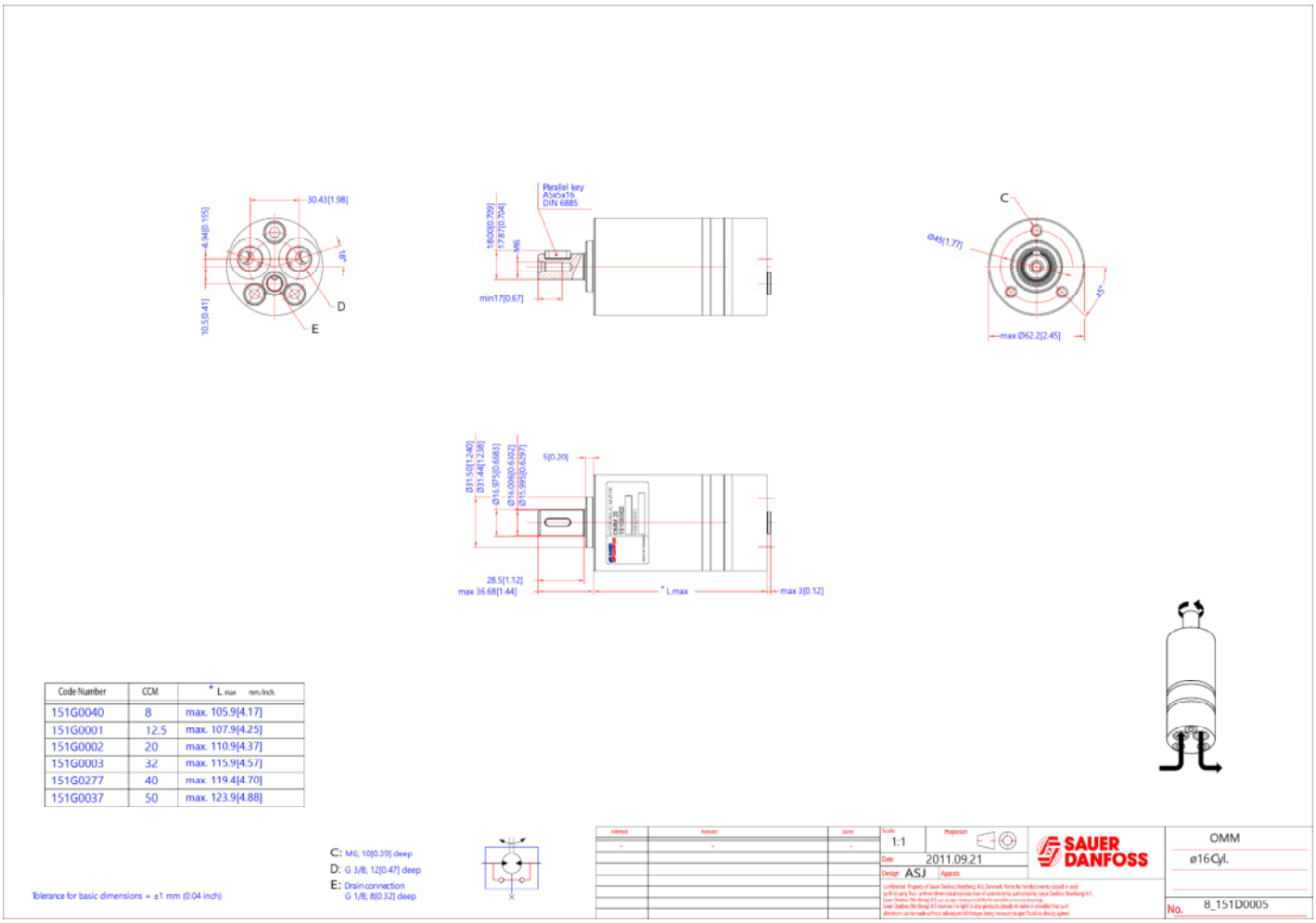
Category	151G0002
List Price	unknown
Material Number	151G0002
Model Code	None
Motor Series	O-Series
Basic Motor	OMM
Displacement	20
Design Number	3
Active	Yes
Replaced By	None
Mounting Flange	Standard
Mounting Thread Dimension	M6
Shaft Style	Cylindrical
Shaft Size	16 mm ; M6 x 1 tap
Shaft Key	A5 x 5 x 16 mm (DIN 6885)
Port Style	End port
Port Dimension	G 3/8
Drain Port Style	Standard
Drain Port Dimension	G 1/8
Brake Release Port	None
Brake Release Port Dimension	None
Painted	None
Special Features External 1	None
Special Features External 2	None
Special Features External 3	None
Dust Seal	Standard
Shaft Seal	NBR - Standard
Seal Kit	151G0202
Front Bearing	Journal bearing
Rear Bearing	Journal bearing
Gear Wheel Set	Standard
Check Valve	Yes
Valve Function	None
Special Features Internal 1	None
Special Features Internal 2	None
Packing	Single pack
Option Type	Standard

Category	151G0002	Units
Type	OMM	
Motor size	20	
Geometric displacement	19,9 [1.22]	
Max speed cont	1000	
Max speed int	1250	
Max torque cont	25 [220]	
Max torque int	35 [310]	
Max output power cont	2,4 [3,2]	
Max output power int	3,2 [4.3]	
Max pressure drop cont	100 [1450]	
Max pressure drop int	140 [2030]	
Max pressure drop peak	200 [2900]	
Max oil flow cont	20 [5.3]	
Max oil flow int	25 [6.6]	
Max starting pressure with unloaded shaft	4 [60]	
Min starting torque at max press drop cont	21 [185]	
Min starting torque at max press drop int	29 [255]	
Max inlet pressure cont	140 [2030]	
Max inlet pressure int	175 [2540]	
Max inlet pressure peak	225 [3260]	
Max return pressure with drain line cont	140 [2030]	
Max return pressure with drain line int	175 [2540]	
Max return pressure with drain line peak	225 [3260]	
Holding torque		
Min brake release pressure		
Max pressure in brake line		
Max pressure in drain line		

Reset | Download 3D Model



Code Number	CCM	* L max mm./inch.
151G0040	8	max. 105.9[4.17]
151G0001	12.5	max. 107.9[4.25]
151G0002	20	max. 110.9[4.37]
151G0003	32	max. 115.9[4.57]
151G0277	40	max. 119.4[4.70]
151G0037	50	max. 123.9[4.88]

C: M6; 10[0.39] deep
D: G 3/8; 12[0.47] deep
E: Drain connection G 1/8; 8[0.32] deep

Tolerance for basic dimensions = ±1 mm (0.04 inch)

Scale 1:1 | Projection | Date 2011.09.21 | Design ASJ | Approb.

SAUER DANFOSS

OMM
ø16Cyl.
No. 8_151D0005

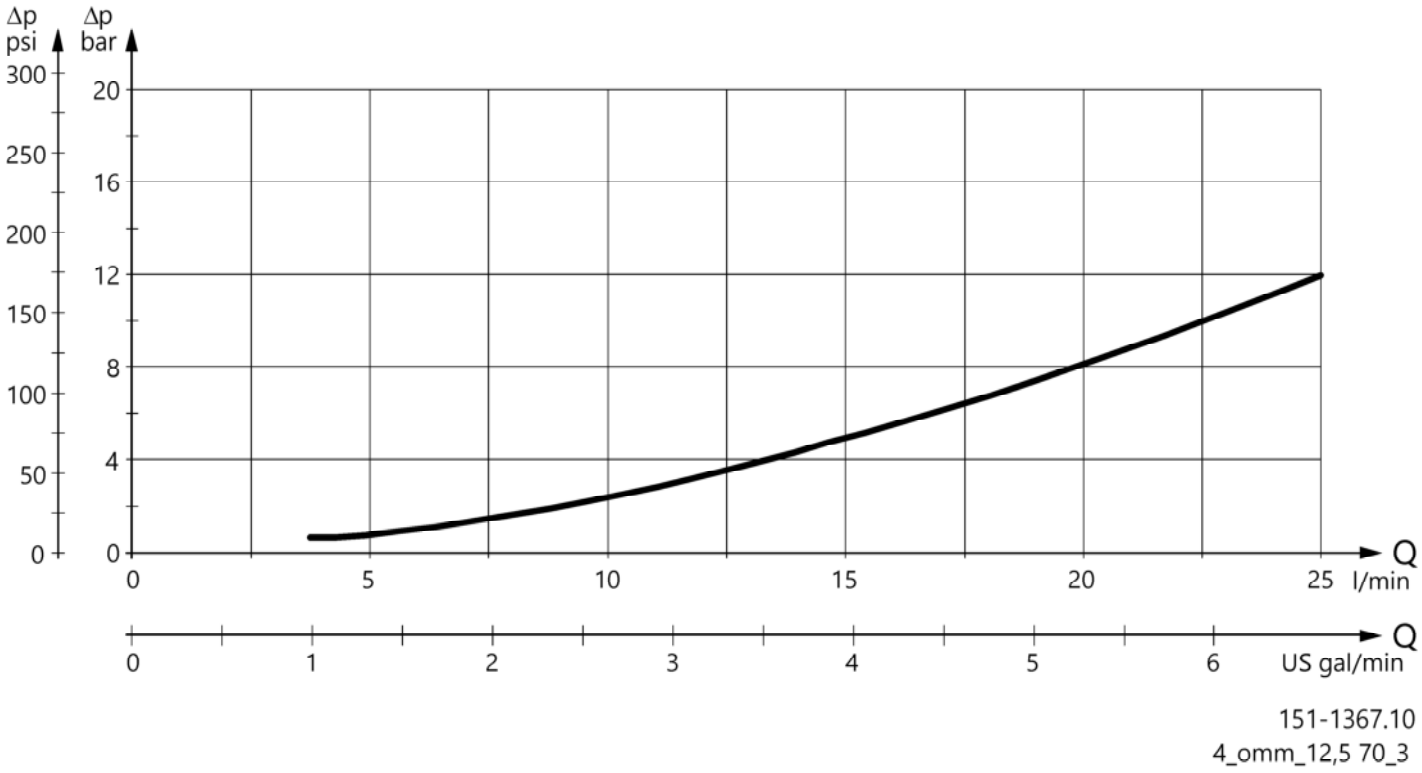
Reset

Pressure drop Bar [psi]	Viscosity mm^2/s [SUS]	Oil flow in drain line l/min [US gal/min]
70 [1020]	20 [100]	1.3 [0.34]
	35 [165]	1.0 [0.26]
140 [2030]	20 [100]	1.9 [0.50]
	35 [165]	1.5 [0.40]

The table shows the max oil flow in the drain line at a return pressure less than 5 - 10 bar [75 - 150 psi]

3_OMM_3.wmf

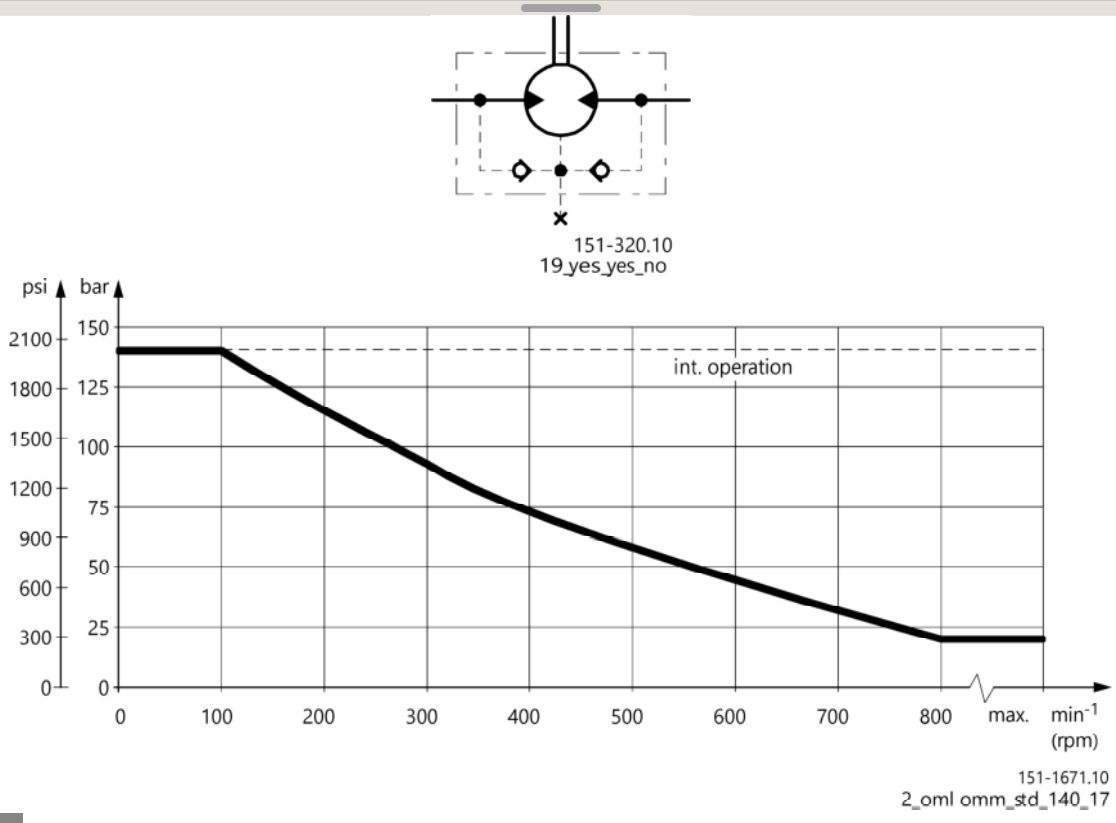
Reset


Δp
psi
Δp
bar
300
250
200
150
100
50
0
20
16
12
8
4
0
0
5
10
15
20
25
l/min
Q
0
1
2
3
4
5
6
US gal/min
Q
151-1367.10
4_omm_12,5 70_3

Motor with check valves and without use of drain connection:
The pressure on the shaft seal never exceeds the pressure in the return line.

Motor with check valves and with drain connection:
The shaft seal pressure equals the pressure on the drain line.

Max return pressure (max. pressure on shaft seal) is shown below.



Reset

Permissible radial and axial shaft load

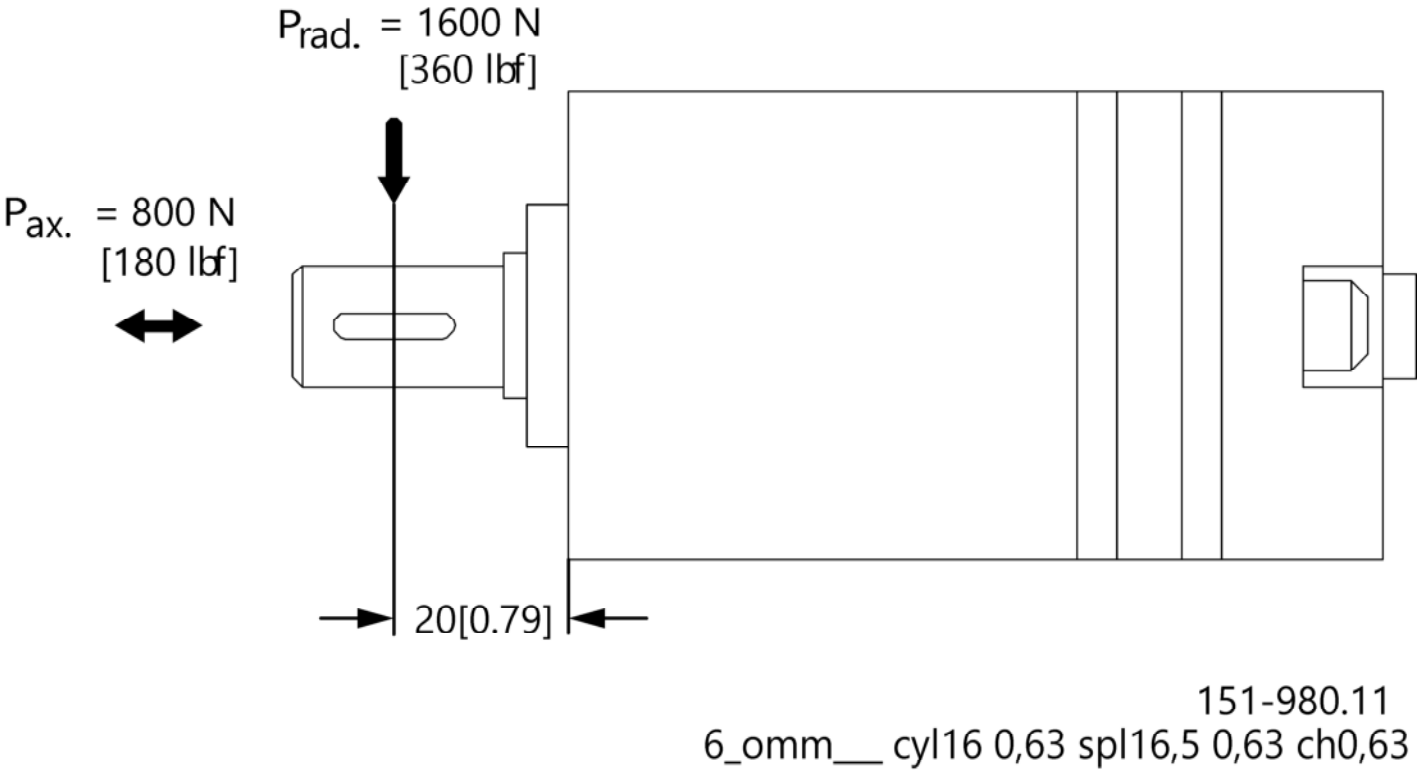
The permissible radial shaft load (Prad) is calculated from the distance (l) between the point of load and the mounting surface:

Prad = 130400/(61.5+l) [N] ; (l in mm ; l < 80)

Prad = 1155/(2.42+l) [lbf] ; (l in inch ; l < 3.15)

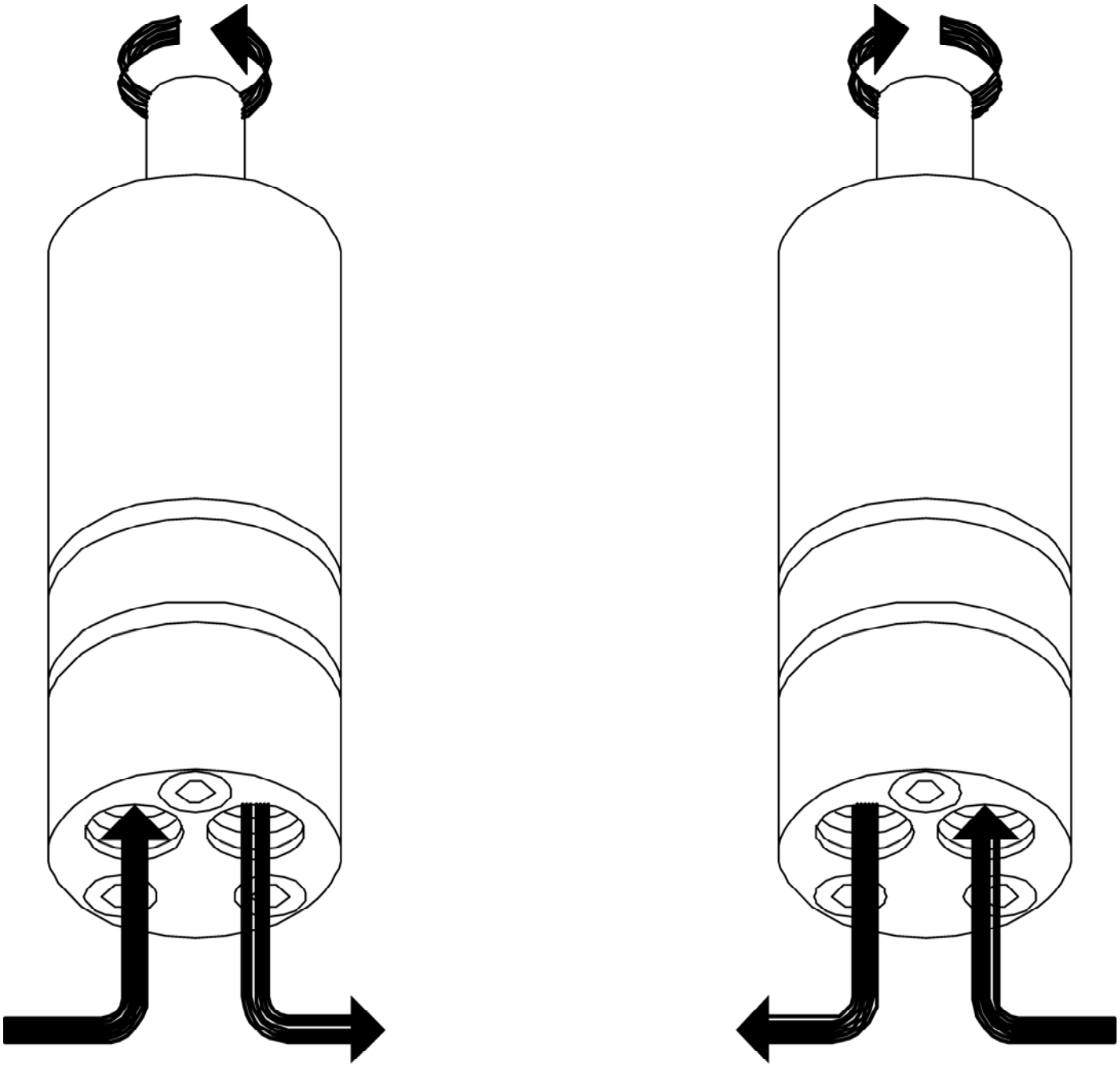
The drawing shows the permissible radial load when l = 20 mm (0.79 in).

The calculated shaft load should never exceed the permissible value.



Reset

Reset



151-1309.10
5_oml_omm_right_ccw cw