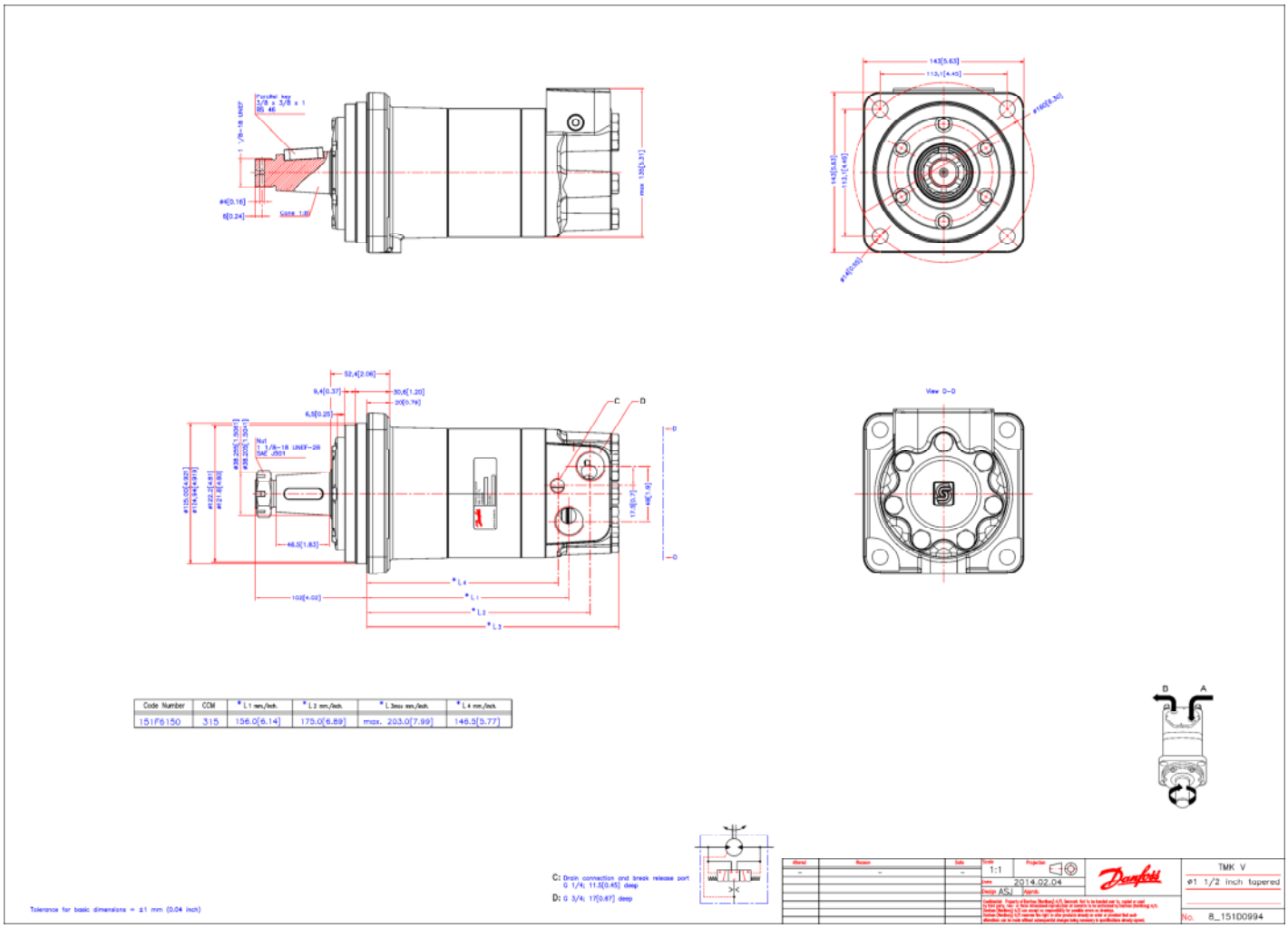
Category	151F6150
List Price	unknown
Material Number	151F6150
Model Code	None
Motor Series	T-Series
Basic Motor	TMK V
Displacement	315
Design Number	0
Active	Yes
Replaced By	None
Mounting Flange	4 Bolt - Square
Mounting Thread Dimension	Pilot dia. 125 x 10 [4,92 x 0,39] - B.C. dia. 160 [6,30] ; Dia. 14 [0,55]
Shaft Style	Tapered - Cone 1:8
Shaft Size	Dia. 1-1/2 inch - 1 1/8 -18 UNEF tap
Shaft Key	3/8 x 3/8 x 1 inch (B.S. 46)
Port Style	Side ported - offset
Port Dimension	G 3/4
Drain Port Style	Standard - End cover
Drain Port Dimension	G 1/4
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	151F0141
Front Bearing	Tapered roller bearing

Category	151F6150	Units
Type	TMK	
Motor size	315	
Geometric displacement	315,3 [19.23]	
Max speed cont	255	
Max speed int	315	
Max torque cont	1050 [9295]	
Max torque int	1310 [11595]	
Max output power cont	20,0 [27.0]	
Max output power int	23,0 [31.5]	
Max pressure drop cont	250 [3630]	
Max pressure drop int	300 [4350]	
Max pressure drop peak		
Max oil flow cont	80 [21.1]	
Max oil flow int	100 [26.4]	
Max starting pressure with unloaded shaft	7 [100]	
Min starting torque at max press drop cont	790 [6990]	
Min starting torque at max press drop int	985 [8720]	
Max inlet pressure cont	250 [3625]	
Max inlet pressure int	350 [5075]	
Max inlet pressure peak	420 [6090]	
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	210 [3050]	
Holding torque		
Min brake release pressure		
Max pressure in brake line		
Max pressure in drain line		

Orbital Motor
Drawing

Reset

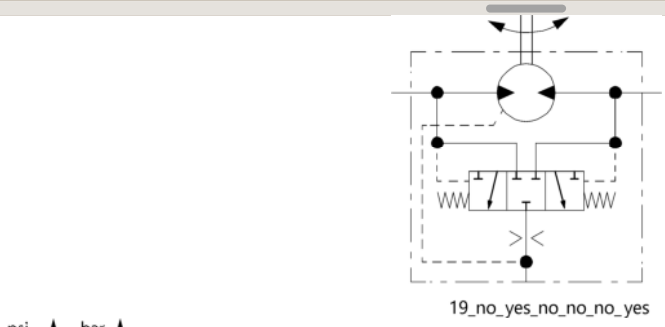


Motor without check valves and without use of drain connection:
The shaft seal pressure equals the average of input pressure and return pressure.

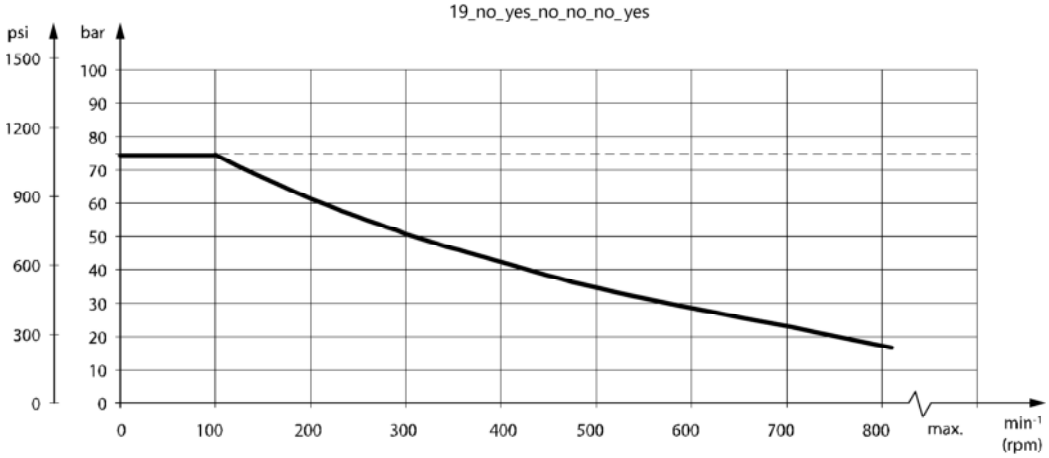
Pseal = (Pin + Pout) / 2

Motor without 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.



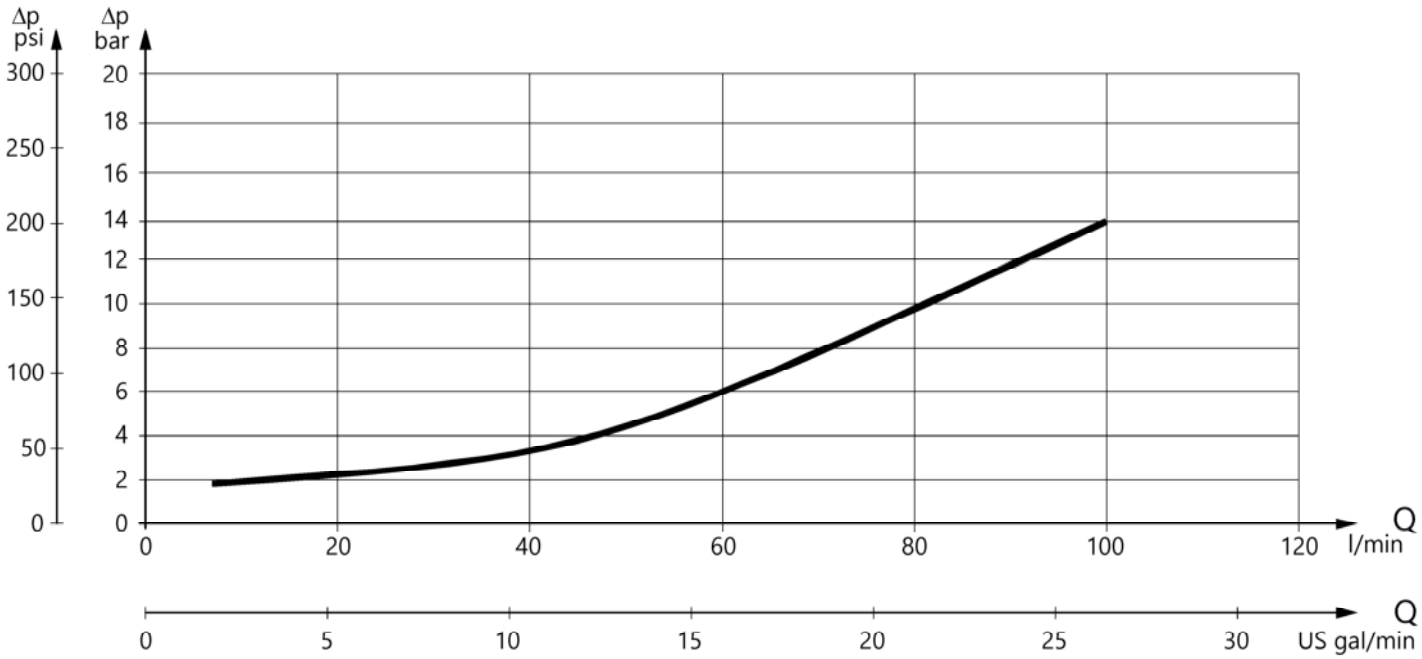
19_no_yes_no_no_no_yes



151-1674.10
2_oms omt tmk_std_140_35 45

Reset

Reset



151-1957.11
4_tmk_160 470_0

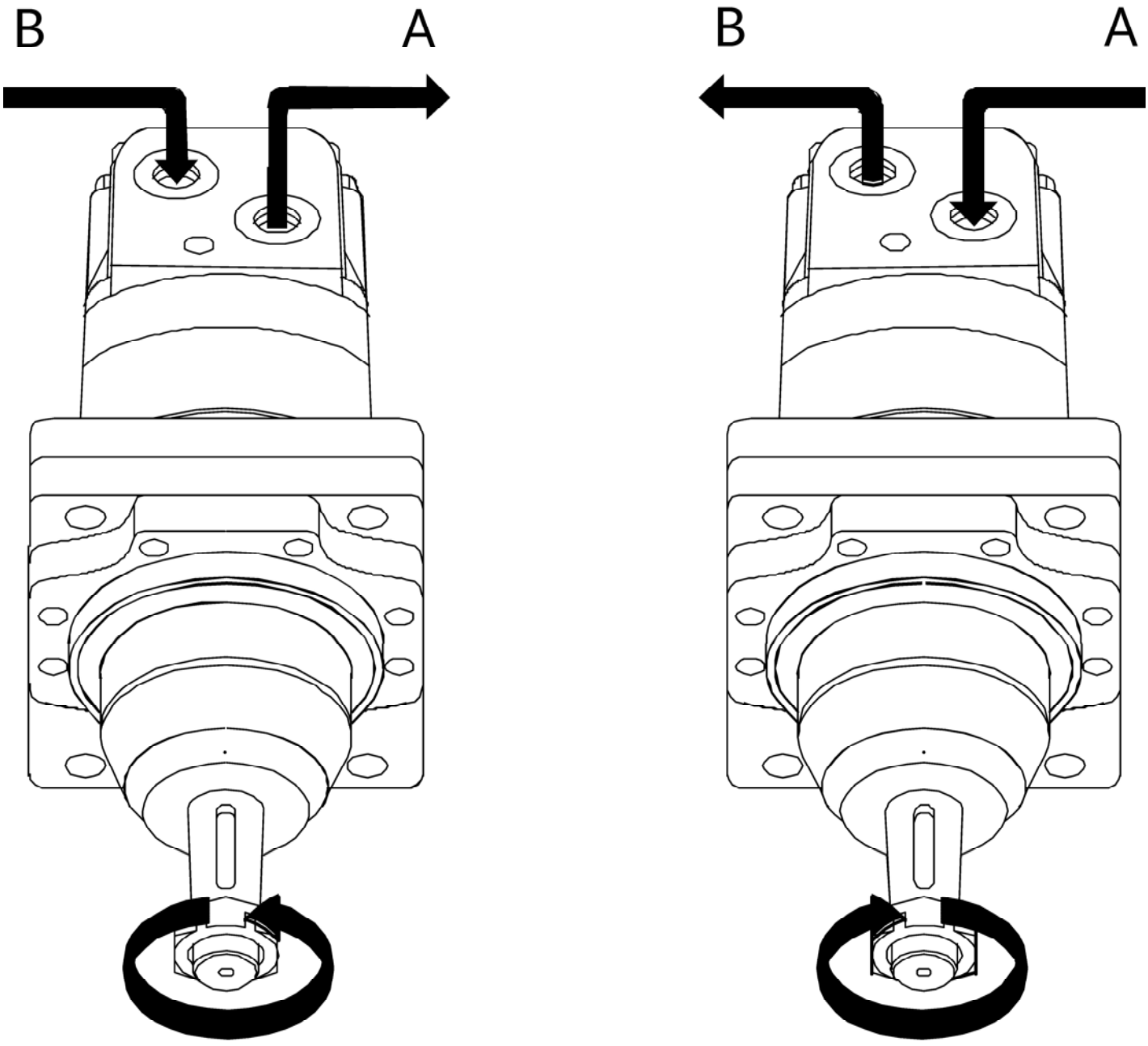
Reset

Pressure drop Bar [psi]	Viscosity mm^2/s [SUS]	Oil flow in drain line l/min [US gal/min]
160 [2320]	20 [100]	1.7 [0.45]
	35 [165]	1.2 [0.32]
325 [4715]	20 [100]	3.5 [0.92]
	35 [165]	2.5 [0.66]

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

3_TMK_0.wmf

Reset



151-2006.11
5_tmk_sideport_right_ccw cw

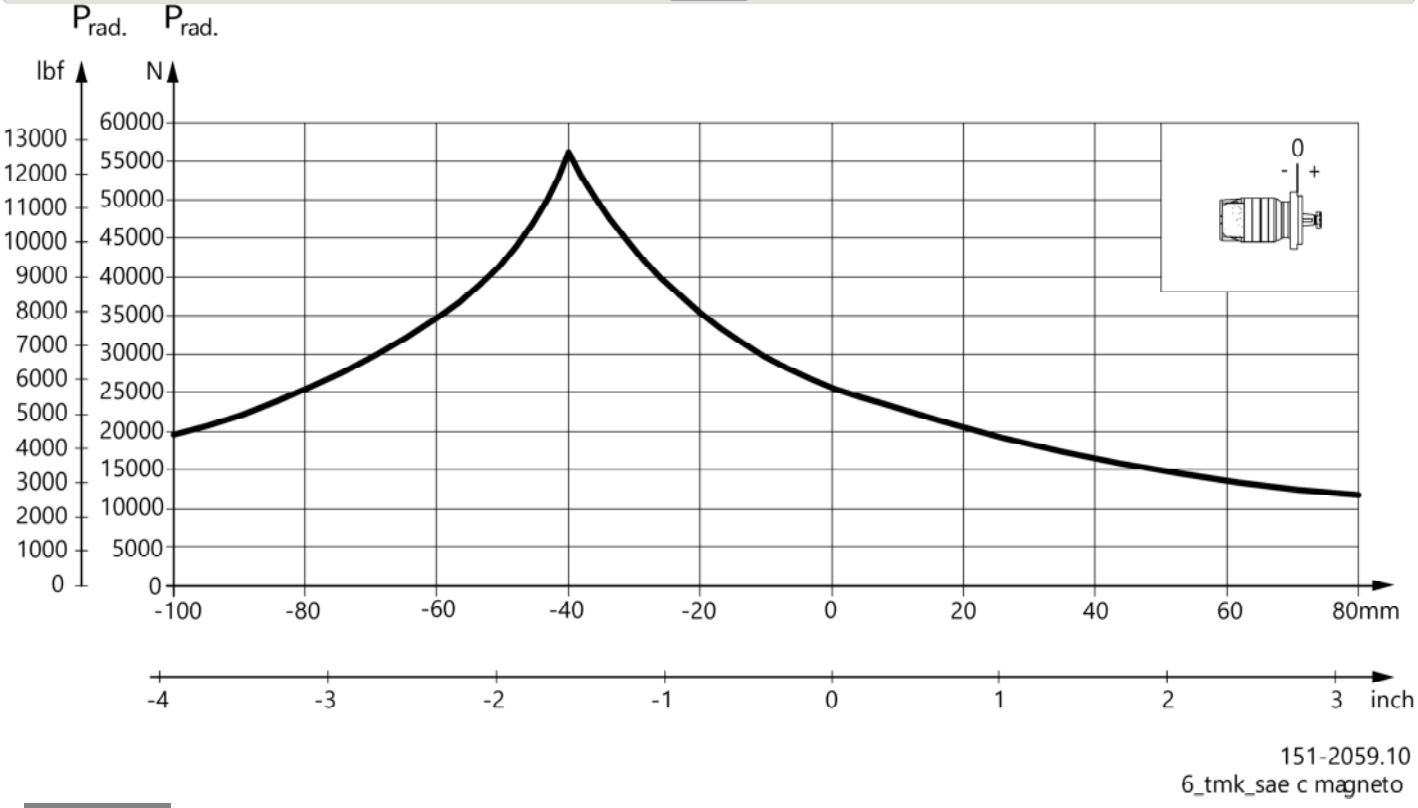
Permissible radial and axial shaft load

The output shaft runs in tapered roller bearings that permit high axial and radial forces.

The permissible radial load on the shaft is shown for an axial load of 0 N as a function of the distance from the mounting flange to the point of load application.

The curve is based on B10 Bearing life (2000 hours or 12,000,000 shaft revolutions at 100 min-1) at rated output torque, when mineral-based hydraulic oil with a sufficient content of anti-wear additives, is used.

The dash curve shows max. radial shaft load. Any shaft load exceeding the values shown in the curve will involve a risk of breakage.



Reset