



HYDRAULIC DRIVE SPECIFICATION

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Rev.01

INSTALLATION

Motor

The direction of rotation of single-rotation motors must match circuit connections. Check that the coupling flange correctly aligns the transmission shaft and the motor shaft.

Tank

Tank capacity must be sufficient for the system's operating conditions (~ 3 times the amount of oil in circulation) to avoid overheating of the fluid. A heat exchanger should be installed if necessary. The intake and return lines in the tank must be spaced apart (by inserting a vertical divider) to prevent the return-line oil from being taken up again immediately.

Lines

The lines must have a major diameter which is at least as large as the diameter of pump or motor ports, and must be perfectly sealed. To reduce loss of power, the lines should be as short as possible, reducing the sources of hydraulic resistance (elbow, throttling, gate valves, etc.) to a minimum. A length of flexible tubing is recommended to reduce the transmission of vibrations.

All return lines must end below the minimum oil level, to prevent foaming. Before connecting the lines, remove any plugs and make sure that the lines are perfectly clean.

Filters

We recommend filtering the entire system flow. Filters on suction and return line must be fitted in according to the contamination class.

Hydraulic fluid

Use hydraulic fluid conforming to ISO/DIN standards.

Avoid using mixtures of different oils which could result in decomposition and reduction of the oil's lubricating power.

Starting up

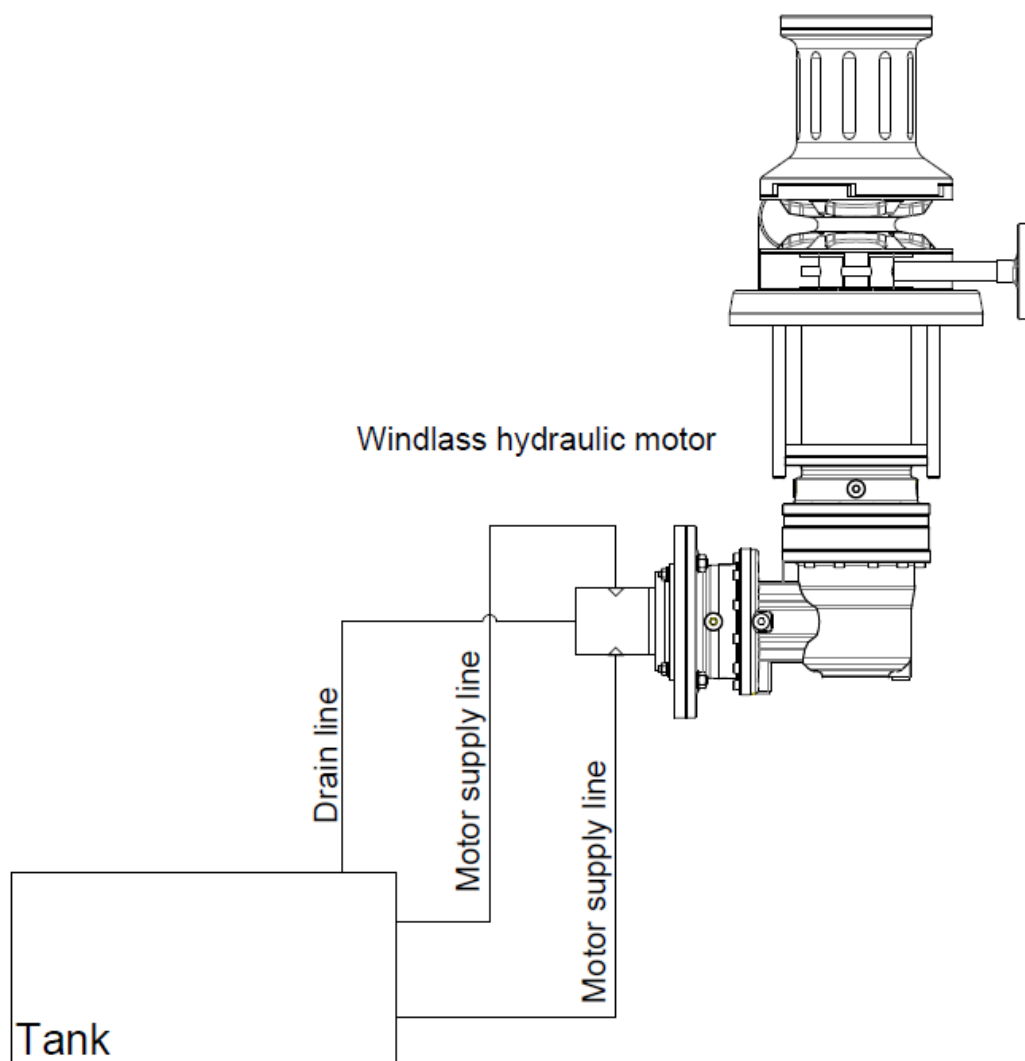
Check that all circuit connections are tight and that the entire system is completely clean. Insert the oil in the tank, using a filter. Bleed the circuit to assist in filling. Set the pressure relief valves to the lowest possible setting. Turn on the system for a few moments at minimum speed, then bleed the circuit again and check the level of oil in the tank. In the difference between pump or motor temperature and fluid temperature exceeds 50°F (10 °C), rapidly switch the system on and off to heat it up gradually. Then gradually increase the pressure and speed of rotation until the pre-set operating levels

Maintenance

Keep the outside surface clean especially in the area of the drive shaft seal. In fact, abrasive powder can accelerate wear on the seal and cause leakage. Replace filters regularly to keep the fluid clean. The oil level must be checked and oil replaced periodically depending on the system's operating conditions.

Drain line

Drain line has to be provided from the motor to the tank

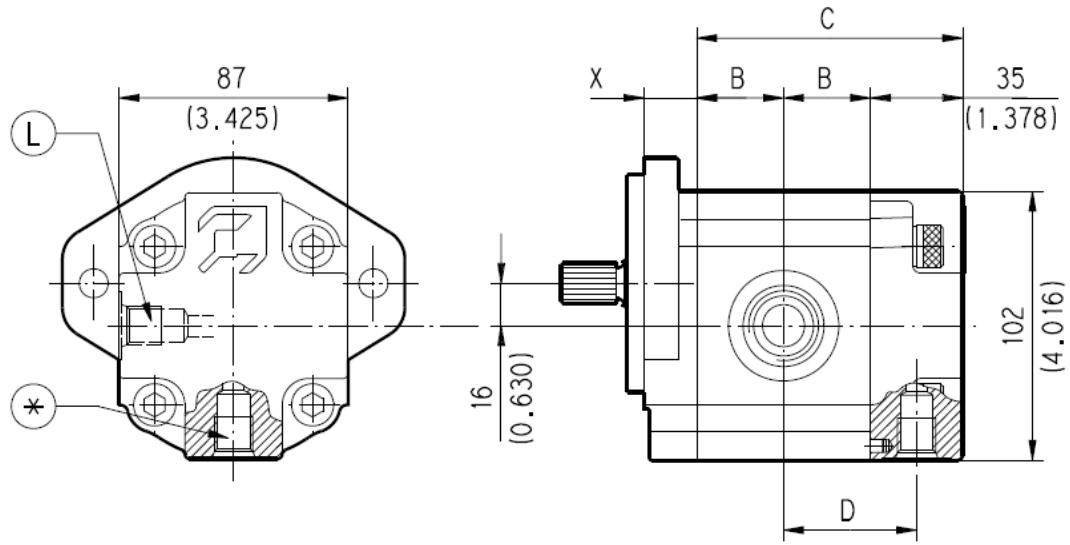


Recommended supply parameters

Family	Model	Motor Size	Flux (l/min)	Pressure (bar)	Connection	Speed (m/min)	Continuous Pull (kg)
Star	ALL	6,3cc	12	90	1/2"	12	450
Star Plus	ALL	11,2cc	19	165	1/2"	12,8	1425
Moon	ALL	11,2cc	17	185	1/2"	12,2	1400
Sun	standard	11,2cc	17	250	1/2"	12	1900
Sun	gipsy: 16mm - 17,5mm - 18mm - 20mm	20cc	23	185	1/2"	12	1900
Raja	-	6,3cc	13	120	1/2"	12,5	720
Raja	gipsy: 14 mm	6,3cc	11	140	1/2"	12,5	720
Esk	-	11,2cc	20	150	1/2"	12,9	1350
Esk	gipsy: 14 mm	11,2cc	17	170	1/2"	12,8	1350
Acheron	standard	11,2cc	28	200	1/2"	12	2750
Acheron	gipsy: 16mm STUDLINK - 17,5mm - 18mm - 20mm	11,2cc	22	250	1/2"	13	2500
Idhra	ALL	6,3cc	12	80	1/2"	12	450
Heron	ALL	6,3cc	12	80	1/2"	12	450
Aran	ALL	6,3cc	12	100	1/2"	12	580
Samos	ALL	6,3cc	11	170	1/2"	12,8	790
Milos	ALL	11,2cc	20	150	1/2"	12	1300
Milos Plus	ALL	11,2cc	20	200	1/2"	12,5	1700

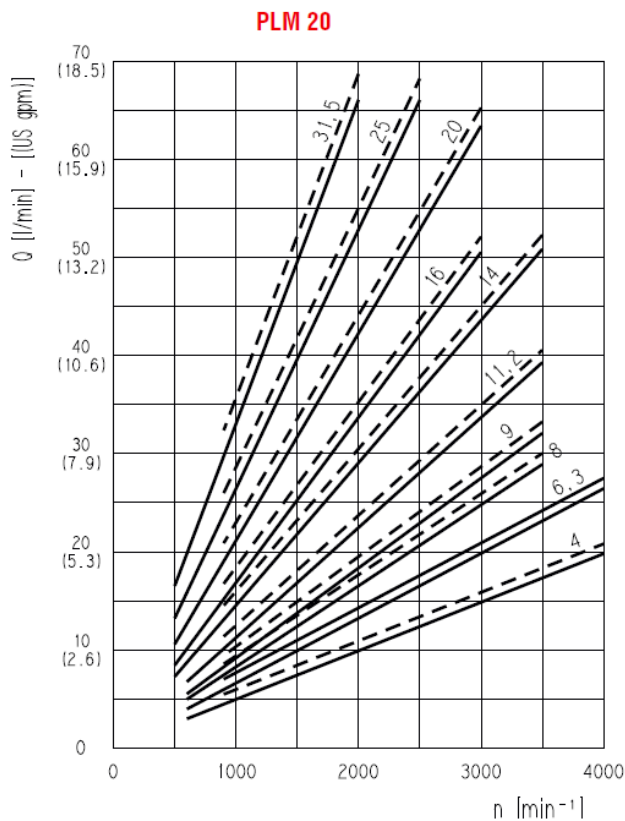
This chart refers to Italwinch “standard builds”. Alternate flow and pressure can be accommodated. Please contact Italwinch for different specifications.

Dimensions



Motor type	A	B	C	D
	mm (inch)	mm (inch)	mm (inch)	mm (inch)
PL. 20•6,3	77,5 (3.0512)	27 (1.0630)	89 (3.5039)	44,5 (1.7520)
PL. 20•11,2	84,5 (3.3268)	30,5 (1.2008)	96 (3.7795)	48 (1.8898)
PL. 20•20	99,5 (3.9173)	38 (1.4961)	111 (4.3701)	55,5 (2.1850)

Motor Performance Curves

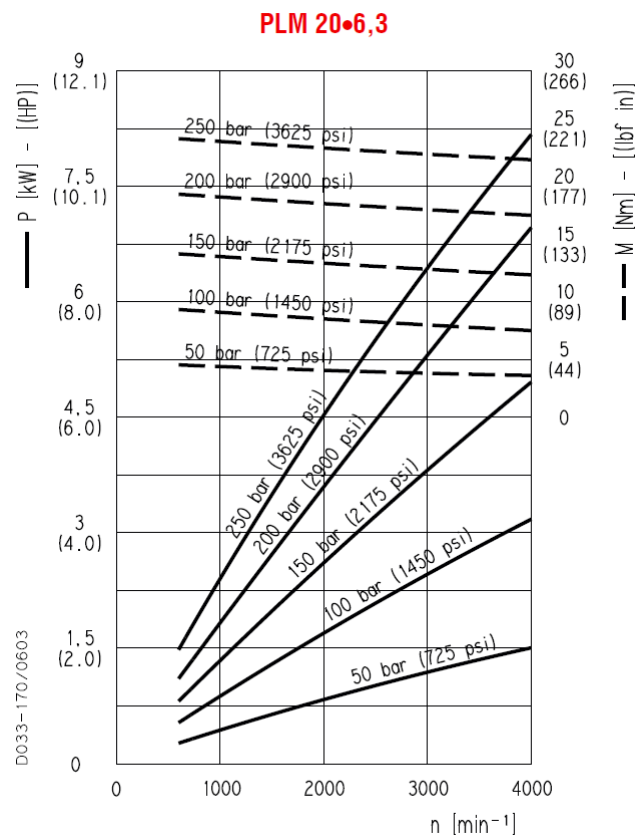


Each curve has been obtained at 122 °F (50°C), using oil with viscosity 168 SSU (36 cSt) at 104 °F (40°C) and at these pressures.

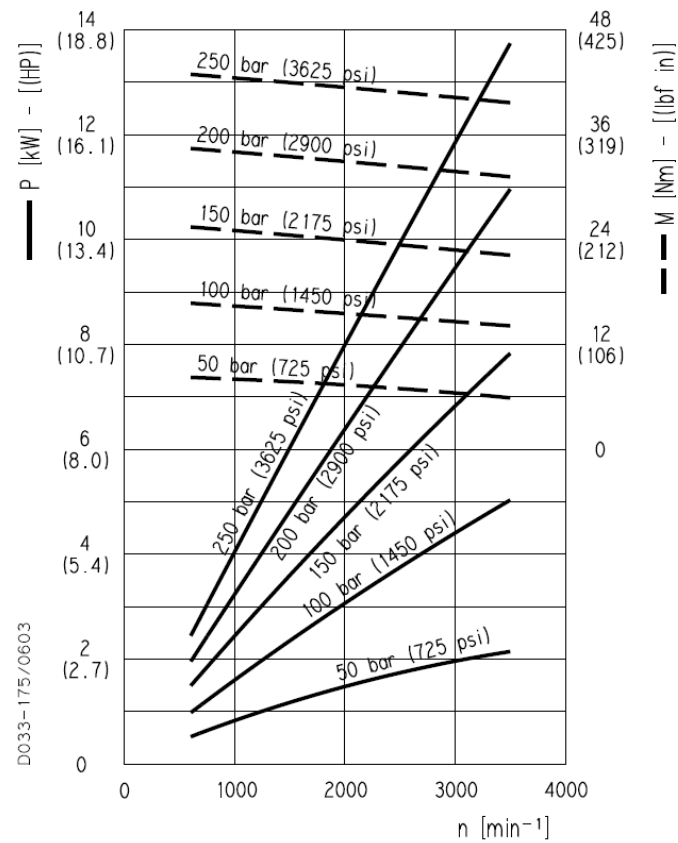
PLM 20•6,3	—	290 psi (20 bar)
	- -	3625 psi (250 bar)

PLM 20•11,2	—	290 psi (20 bar)
	- -	3625 psi (250 bar)

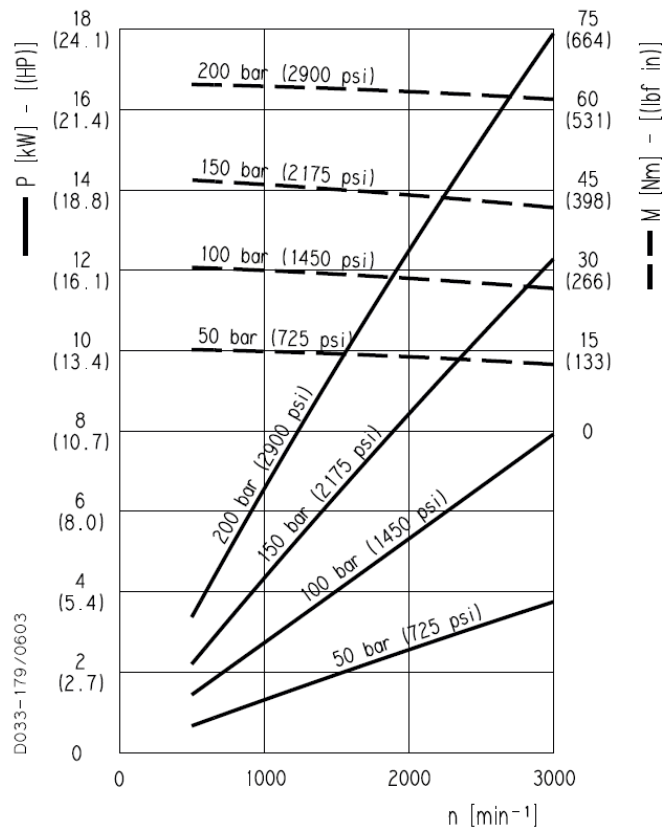
PLM 20•20	—	290 psi (20 bar)
	- -	2900 psi (200 bar)



PLM 20•11,2



PLM 20•20





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