

TR6

6" SUBMERSIBLE MOTOR



TECHNICAL DATA

Flanging: NEMA 6".

Protection class: IP68.

Cooling flow speed: 0,5 m/s.

Power supply tolerance: + 6 % / - 10 %.

Max. starts: 15/h.

Max operating depth: 300 m.

Max operating temperature: 60 bar.

Horizontal operation: 7,5 HP - 50 HP.

GENERAL DATA

Rewindable 6" submersible asynchronous two-pole electric motor available in standard version with casing in AISI 304 stainless steel and supports in cast iron. The thrust block and bushes are cooled and lubricated with a mixture of water and glycol. The rotor is mounted on a Mitchell self-centring thrust block designed to withstand significant axial loads. The motor is also available in a version entirely in AISI 316 stainless steel and a version in AISI 904. There is also a version suitable for use with variable frequency drive (30 Hz - 50/60 Hz). The motor is equipped with a single-core cable of 5 m or 8 m (depending on the power) connected directly to the winding and earth cable, and is available in DOL or STAR-DELTA configuration. ACS, WRAS and KTW certified cable. The electrical protection must be provided by the user.

On request: cables of a different length, different voltage supply, PT100 and PTC temperature probes and a special shaft terminal.

CONSTRUCTION FEATURES



The rewindable stator is protected by an AISI 304 stainless steel jacket (AISI 316 or 904 on request). In the standard version the rotor is wound with PVC coated wire (60 HP in PE2+PA). On request, we can supply a version with a PE2+PA winding that makes the motor compatible with special applications and with the use of a variable frequency drive.

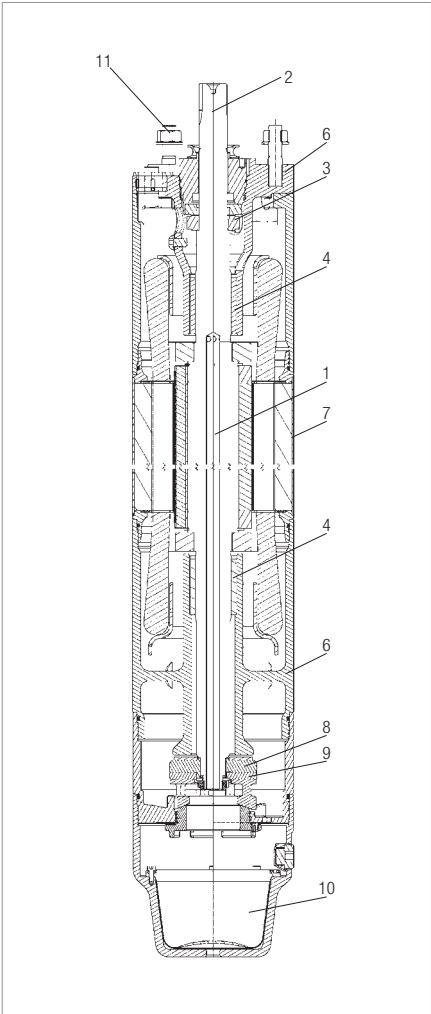


Mitchell type thrust bearings with lapped pads in stainless steel and graphite clearance ring.
from 5 HP to 20 HP: 15000 N
from 25 HP to 50 HP: 27500 N
Counter-thrust load: 6000 N



Rotor shaft in stainless steel with shaft extension to NEMA 6" standards. The rotor is made of die cast aluminium up to 20 HP and in copper for all other sizes. In the standard version the motor is supplied with a ceramic/carbon mechanical seal and is also equipped with a lip seal (IP 68). A silicon carbide (SiC/SiC) mechanical seal is available on request.

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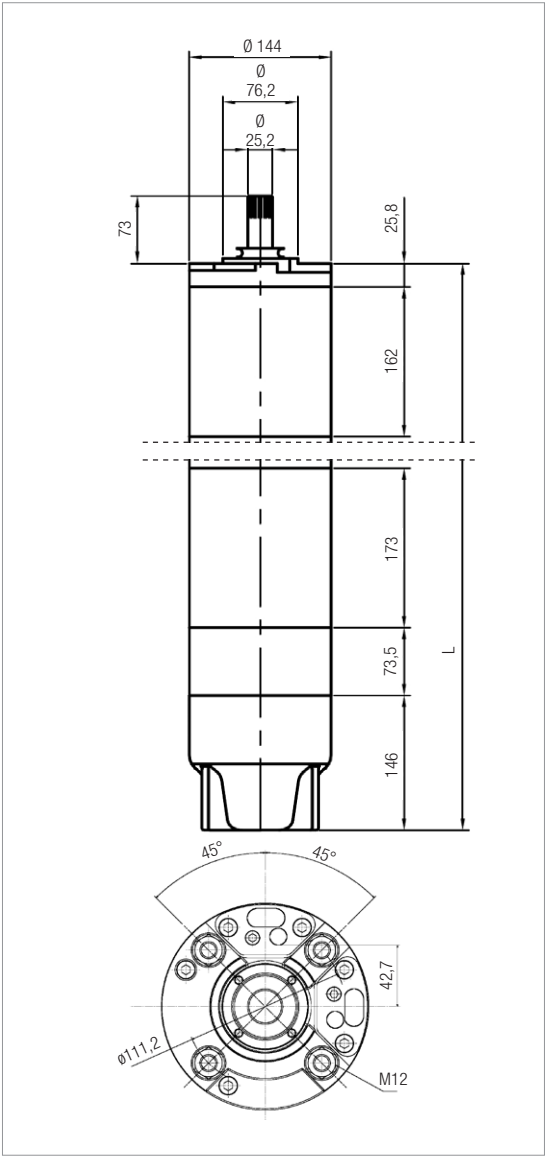


MATERIALS

N.	PARTS	STD VERSION	VERSION 316 SS	VERSION 904 SS
1	SHAFT	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL
2	SHAFT TERMINAL	AISI 304 STAINLESS STEEL	AISI 316 STAINLESS STEEL	AISI 904 STAINLESS STEEL
3	MECHANICAL SEAL	CERAMIC/CARBON	SIC/SIC	SIC/SIC
4	BUSHES	GRAPHITE	GRAPHITE	GRAPHITE
5	CABLE	EPDM	EPDM	EPDM
6	STRUCTURAL PARTS	CAST IRON	AISI 316 STAINLESS STEEL	AISI 904 STAINLESS STEEL
7	JACKET	AISI 304 STAINLESS STEEL	AISI 316 STAINLESS STEEL	AISI 904 STAINLESS STEEL
8	CLEARANCE RING	GRAPHITE	GRAPHITE	GRAPHITE
9	THRUST	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL
10	DIAPHRAGM	EPDM	EPDM	EPDM
11	SCREWS	AISI 304 STAINLESS STEEL	AISI 316 STAINLESS STEEL	AISI 904 STAINLESS STEEL

DIMENSIONS - THREE-PHASE MOTORS

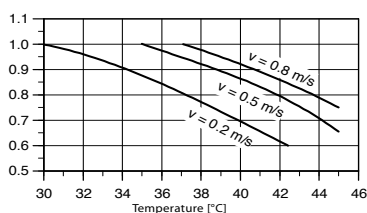
TYPE	P2		LENGTH mm	WEIGHT kg	AXIAL THRUST N
	hp	kW			
50 Hz	7,5	5,5	807	50	15000
	10	7,5	837	53	15000
	12,5	9,2	867	55	15000
	15	11	897	60	15000
	17,5	13	927	65	15000
	20	15	997	77	15000
	25	18,5	1057	83	27500
	30	22	1087	95	27500
	35	26	1157	105	27500
	40	30	1212	110	27500
	50	37	1312	120	27500
	60	45	1457	135	27500



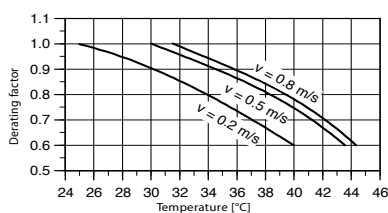
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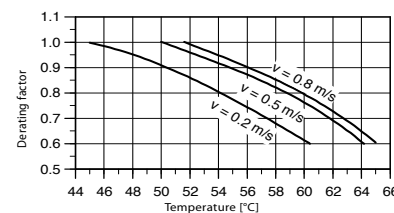
DOWNGRADING



PVC windings of 5,5 to 30 kW



PVC windings of 37 kW



PE2/PA windings of 5,5 to 37 kW

ELECTRICAL DATA - THREE-PHASE MOTORS - DOL

MODEL	P2		POWER INPUT 50 Hz	In A	Is/In	P1 W	N min ⁻¹	Cos φ	η %	CABLE	
	hp	kW								Ø mm ²	LC m
TR6 - 5,5 kW - 400 V - T	7,5	5,5	400	13	3,7	7432	2870	0,81	74	3x6 + 1x6	5
TR6 - 7,5 kW - 400 V - T	10	7,5	400	18	3,7	9740	2870	0,80	77	3x6 + 1x6	5
TR6 - 9,2 kW - 400 V - T	12,5	9,2	400	21	3,6	11948	2860	0,81	77	3x6 + 1x6	5
TR6 - 11 kW - 400 V - T	15	11	400	25	3,7	14103	2860	0,82	78	3x6 + 1x6	5
TR6 - 13 kW - 400 V - T	17,5	13	400	29	3,8	16250	2870	0,82	80	3x6 + 1x6	5
TR6 - 15 kW - 400 V - T	20	15	400	32	3,8	18519	2860	0,83	81	3x6 + 1x6	5
TR6 - 18,5 kW - 400 V - T	25	18,5	400	39	5,3	22024	2890	0,83	84	3x6 + 1x6	5
TR6 - 22 kW - 400 V - T	30	22	400	49	5,5	26506	2880	0,79	83	3x6 + 1x6	5
TR6 - 26 kW - 400 V - T	35	26	400	58	5,7	31325	2880	0,79	83	3x10 + 1 x10	5
TR6 - 30 kW - 400 V - T	40	30	400	65	5,0	35714	2870	0,81	84	3x10 + 1 x10	8
TR6 - 37 kW - 400 V - T	50	37	400	80	5,0	44578	2860	0,81	83	3x10 + 1 x10	8
TR6 - 45 kW - 400 V - T	60	45	400	93,1	5,1	54127	2825	0,85	83	3x10 + 1 x10	8

P2: Nominal power
V: Nominal voltage
In: Nominal current
Is/In: Starting current/Nominal current
P1: Absorbed power

N: Rotations per minute - R.p.m
Cos φ: Power factor
η: Yield
Ø: Cable cross section
LC: Cable length