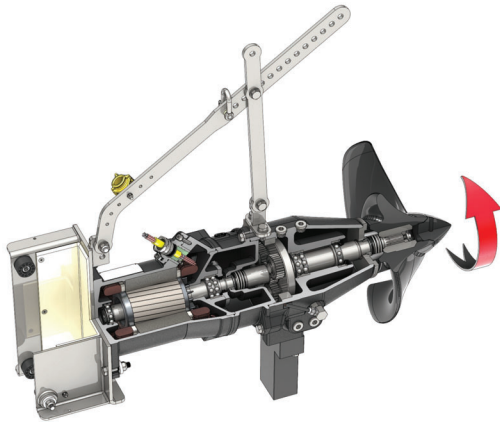


Data sheet

Wilo-EMU TR 50-2.40-4/8V

Design / Direction of rotation



Technical data

Unit

Power Consumed $P_{1.1}$	4.6 hp
Max. thrust F	196 lbf
Weight of unit m	224.9 lbs
Max. weight* m	308.6 lbs
Protection class	IP 68
Explosion protection	FM, CSA
Ex classification FM	CLASS I, DIV. 1, GROUPS C, D; CLASS II, DIV. 1, GROUPS E, F, G; CLASS III

* = maximum weight including accessories

Propeller

Propeller model	3-blade propeller with self-cleaning hub; backward-curved as a result clogging- and entwining-free
Nominal propeller diameter	19.7 in
Propeller speed n	400 rpm
Transmission ratio	4.25

Fill quantities and types

Filling prechamber	CLP transmission oil, ISO VG 220
Filling volume prechamber V	0.3 gal (US)
Filling gear chamber	CLP transmission oil, ISO VG 220
Fill quantity gear chamber V	0.1 gal (US)
Filling sealing chamber	White oil
Fill level sealing chamber V	0.3 gal (US)

Motor data

Type of motor	T 17-4/8V (Ex)
Motor type	Submersible motor according to DIN/VDE 0530 (IEC 34)
Power connection	3-460 V, 60 Hz
Full load amps I_N	6.7 A
Starting current - direct I_A	33 A
Starting current - star-delta I_A	11 A
Maximum power consumption P_1	6.2 hp
Rated motor power P_2	4.4 hp
Rated speed n	1680 rpm
Motor Efficiency Level	-
Efficiency η_M	72.0 %
Power factor $\cos \varphi$	0.86
Fluid temperature T	37 ... 104 °F
Max. submersion	66 ft
Insulation class	H
Max. switching frequency t	15 /h
min. switching break t	3 min
Starting torque M	42 Nm
Moment of inertia	0.0073 kg/m ²
Motor bearings	1 grooved ball bearing, 1 two-row inclined ball bearing

Materials

Motor housing	ASTM A48 Class 35/40B
Motor shaft	1.4021
Gear housing	ASTM A48 Class 35/40B
Planetary gear	1.7131
Hollow gear	1.5216
Sun gear	1.7131
Output shaft	1.4462
Static seal	FPM
Mechanical seal	SiC/SiC
Seal, gear chamber/prechamber	FPM
Seal, gear/sealing chamber	SiC/SiC
Sealing on motor side	FPM
Propeller	PUR

Gear

Gear construction type	m 2.0 as per DIN 780/P10 (ISO 54); Sun and planetary gears case hardened and sanded, internal gear butt-jointed
Gear bearings	Three needle roller bearing (planetary), one two-row inclined ball bearing and one grooved ball bearing (output shaft)
Service life L_{h10}	> 100000 operating hours, ISO 281