

Water Cooled Rewindable Series
2-Pole/4-Pole, 50/60 Hz



KOMAX



**SUBMERSIBLE
ELECTRIC
MOTORS**

KM6-KM8-KM10-KM12

FOR 6, 8, 10 & 12-INCH BORE HOLE



Comapny Profile

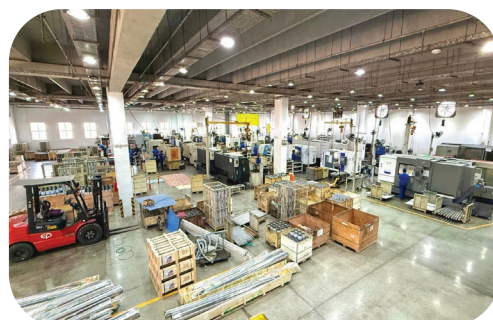
KOMAX (Private) Limited, Pakistan, is an ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 and CE-certified manufacturer, and the first company in Pakistan to produce 6", 8", 10", and 12" NEMA submersible motors and pumps. Our purpose built manufacturing facility in Sundar Industrial Estate, Lahore, spans 110,000 sq. ft. and features advanced CNC machining systems along with fully automated European winding insertion and assembly lines, ensuring precision, repeatability, and consistent quality. The plant has an annual production capacity of 30,000 units.

KOMAX submersible motors and pump systems are engineered in compliance with IEC 60034-1 and certified by CE, NSF, and PSQCA (PS/IEC/86/60034-1/2012). Our design approach emphasizes reliability, energy efficiency, and long service life in demanding operating conditions.

The KM6, KM8, KM10, and KM12 series from our core NEMA product range, developed for deep-well applications requiring durable mechanical construction and stable hydraulic performance. These motors serve agriculture, industrial processes, commercial infrastructure, municipal water supply, and oil & gas sectors.

To meet diverse operating environments, KOMAX offers modular configurations in Cast Iron (CI GG25), Stainless Steel 304 (SS304), and Stainless Steel 316 (SS316), ensuring optimum performance under varying corrosion, salinity, and water quality conditions. Both 2-pole and 4-pole versions are available, with splined and keyway shaft options for compatibility with a broad range of pump hydraulics and international coupling standards.

KOMAX products are supplied worldwide, with a growing presence in the Middle East, North America, South America, Europe, Australia, Africa, and the Far East. Through continuous R&D focused on engineering excellence, manufacturing precision, and application-driven innovation, KOMAX has become a trusted OEM partner in the global submersible motor industry.





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KM6

Single Flange
6" Borehole
Submersible Electric
Water Cooled
Rewindable Motors

Models Range

Standard: Single Flange

Power Range

From: 5,5 HP (4 kW)

To: 50 HP (37 kW)

Voltage Range

380 ~ 415 Volts, 50 Hertz

230 Volts - 60 Hertz

380 Volts - 60 Hertz

460 Volts - 60 Hertz

Speed Range

2 Poles, 2900 RPM

2 Poles, 3600 RPM

Construction Material

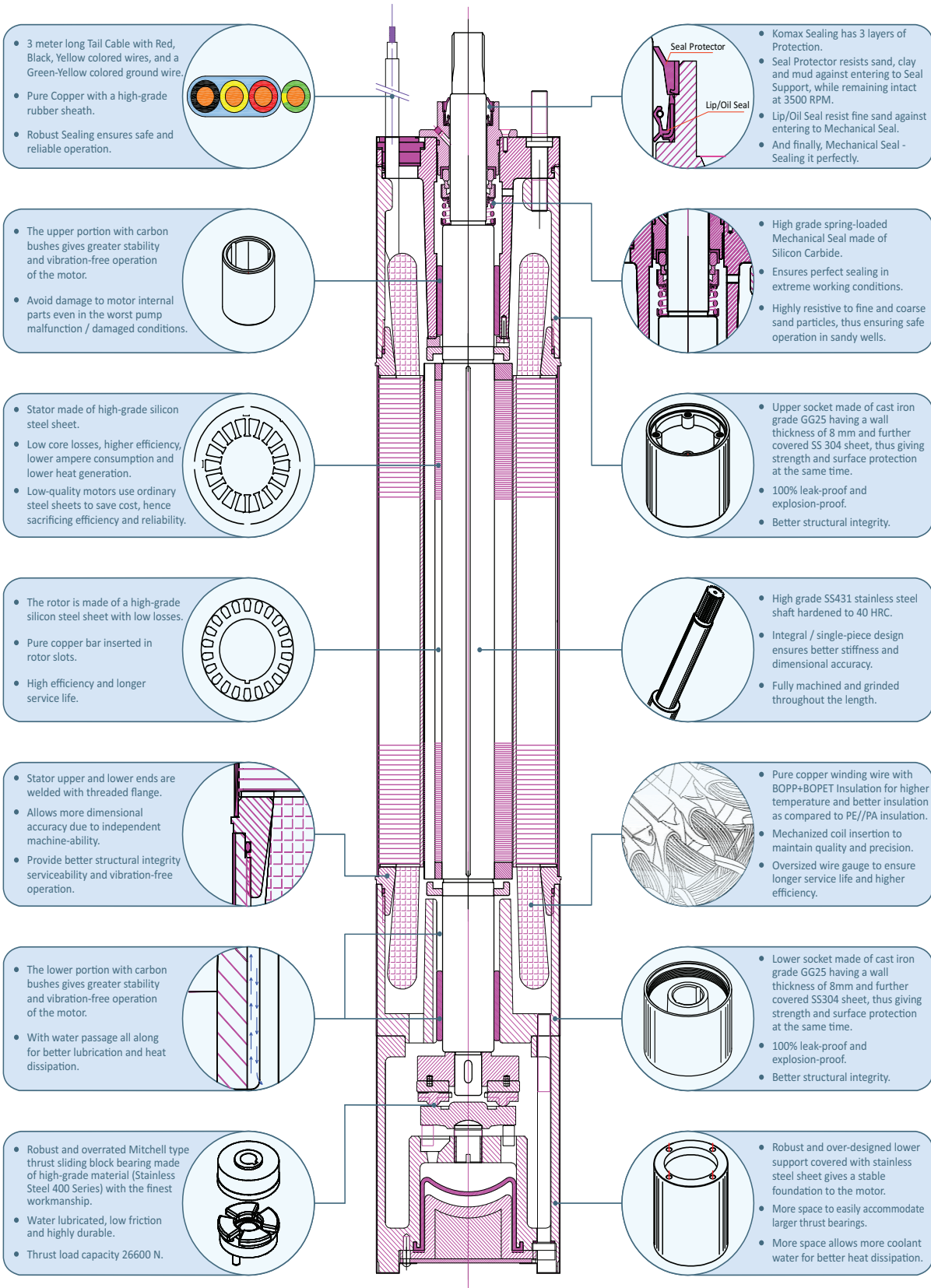
Cast Iron with Stainless Steel Cover





X-Sectional View with Specification

KM6 Single Flange





Salient Features

KM6 6" water-filled submersible electric motors have asynchronous three-phase rewindable stator and squirrel cage rotor.

The new improved series of 6" submersible electric motors KM6 has been designed to achieve compatibility with VFD outputs making it the first choice for solar and other high efficiency applications. In this optional design and material selection all efforts have been made to offer an energy efficient product to our customers which stand for reliability, excellent quality, long and trouble-free life.

- Wet Stator Design
- High Grade Material
- Easy Maintenance
- Long Service Life
- High Thermal Capacity
- High Efficiency
- High Sand Resistance
- Re-windable
- Eco Friendly
- Industrial, Commercial, Agriculture and Irrigation Purpose



Technical Specification

IP68	degree of protection
A / B	insulation class
50 °C	ambient temperature
+6% / -10%	voltage tolerance
Vertical*	mounting position
16 cm/sec	min. cooling flow rate speed
150 m	max. immersion depth
20	max. starts per hour
Rotation	CCW facing shaft end
Wooden case	packing

* Double carbon bush bearings in lower & upper supports for horizontal/inclined installation are available on request.



Specifications

Winding:

Made of pure electrolytic copper wire sheathed with BOPP+BOPET insulation for high temperature. Robust winding having extra copper than standard version to lower the current density and the electric resistance resulting in reduced winding losses.

Stator:

Increased length with M800 low-losses electrical magnetic sheet fixed in a stainless steel casing.

Rotor:

Increased length with M800 low-losses electrical magnetic sheet fixed with high-grade copper bars.

Spline Shaft:

AISI 431 stainless steel induction hardened and grinded, flange dimensions according to 6" NEMA standard, oversize designed to ensure stiffness in severe conditions.

Shaft Bearing/Bush:

Super finished water-lubricated guide bearing/ bush made of high-grade carbon, are fixed in upper and lower brackets.

Thrust Bearings:

Super grade thrust sliding block bearings, self-aligning Mitchell type, available with an axial load capacity of 26600 N.

Mechanical Seal with Lip/Oil Seal:

Tungsten carbide mechanical seal for normal and sandy wells and new added Lip/Oil seal resist fine sand against entering to Mechanical Seal.

Pressure Equalizing System:

Consists of rubber diaphragm located at the lower end providing compensative volume for internal pressure developed during operation.

Brackets:

High resistance cast iron upper & lower bracket supports are dressed in stainless steel jackets.

Filler Fluid:

Water mixed with non-toxic antifreeze provide cooling and lubrication, also protect and prevent inside parts from corrosion.

Connection:

Connected through rubber sheathed cable Available in Delta & WYE (Star) configuration.

Note: All specifications are subject to change without any prior notice.



Electrical DATA - 50 Hz

Electrical Data - Three Phase - 2 Pole - 380 ~ 415 Volt @ 50 Hz													
Motor Type	Motor Size		RPM	Full Load Current (Amp.)	Starting Current (Amp.)	Efficiency at % Load			Cos. Φ at % Load			Service Factor	
	HP	kW				50	75	100	50	75	100		
380 - 415V @ 50 HZ	KM6 055T	5,5	4	2815	10,0	50	73,3	76,0	75,6	0,61	0,72	0,79	1
	KM6 075T	7,5	5,5	2810	13,2	57	73,2	76,7	76,4	0,60	0,73	0,80	1
	KM6 100T	10	7,5	2830	16,9	70	75,8	78,6	78,3	0,61	0,74	0,81	1
	KM6 125T	12,5	9,3	2840	20,8	84	78,2	80,9	80,2	0,60	0,73	0,81	1
	KM6 150T	15	11	2830	24,5	100	78,6	81,3	80,8	0,61	0,74	0,82	1
	KM6 175T	17,5	13	2845	28,4	131	80,4	82,4	81,4	0,61	0,74	0,81	1
	KM6 200T	20	15	2845	31,2	147	81,0	82,8	82,7	0,63	0,76	0,83	1
	KM6 250T	25	18,5	2845	39,4	177	82,9	83,7	83,2	0,62	0,75	0,82	1
	KM6 300T	30	22	2835	47,4	232	82,0	83,9	83,3	0,62	0,75	0,82	1
	KM6 350T	35	26	2855	56,0	297	84,1	85,4	84,4	0,59	0,72	0,80	1
	KM6 400T	40	30	2850	63,9	342	84,1	85,2	84,2	0,59	0,72	0,80	1
	KM6 500T	50	37	2820	80,2	433	83,8	84,1	82,7	0,61	0,74	0,81	1

Electrical DATA - 60 Hz

Electrical Data - Three Phase - 2 Pole - 230 Volts @ 60 Hz													
Motor Type	Motor Size		RPM	Full Load Current (Amp.)	Safety Load Current (Amp.)	Starting Current (Amp.)	Efficiency at % Load			Cos. Φ at % Load			Service Factor
	HP	kW					50	75	100	50	75	100	
KM6 055T	5,5	4,0	3455	18	19,9	98	73,8	76,7	77,3	0,52	0,65	0,74	1,15
KM6 075T	7,5	5,5	3450	23,7	26,3	111	74,8	78,3	78,8	0,53	0,66	0,75	1,15
KM6 100T	10	7,5	3460	31,0	34,3	140	76,0	79,1	79,8	0,54	0,67	0,76	1,15
KM6 125T	12,5	9,3	3465	37,5	42,1	167	77,5	80,2	80,9	0,57	0,70	0,77	1,15
KM6 150T	15	11	3460	44,7	50,2	202	77,3	79,8	80,7	0,58	0,70	0,78	1,15
KM6 175T	17,5	13,0	3465	50,7	56,7	255	79,5	83,1	83,0	0,57	0,69	0,78	1,15
KM6 200T	20	15	3460	57,2	64,0	295	80,0	83,0	83,0	0,58	0,70	0,79	1,15
KM6 250T	25	18,5	3460	71,0	79,5	351	81,0	83,9	83,3	0,59	0,71	0,79	1,15
KM6 300T	30	22	3470	84,1	94,3	453	81,6	83,4	83,7	0,60	0,73	0,80	1,15



Electrical DATA - 60 Hz

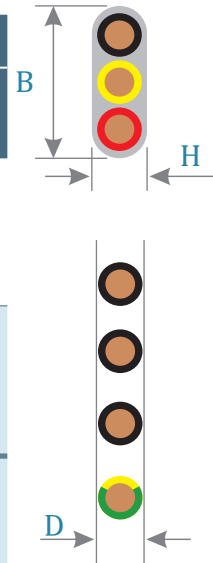
	Electrical Data - Three Phase - 2 Pole - 380 Volts & 460 Volt @ 60 Hz													
	Motor Type	Motor Size		RPM	Full Load Current (Amp.)	Safety Load Current (Amp.)	Starting Current (Amp.)	Efficiency at % Load			Cos. Φ at % Load			Service Factor
		HP	kW					50	75	100	50	75	100	
380V @ 60 Hz	KM6 055T	5,5	4,0	3445	10,6	11,9	60	70,3	74,5	75,3	0,60	0,71	0,78	1,15
	KM6 075T	7,5	5,5	3440	14,0	15,5	67	71,2	75,1	76,3	0,59	0,72	0,80	1,15
	KM6 100T	10	7,5	3450	18,0	20,3	84	74,2	79,3	78,8	0,59	0,72	0,80	1,15
	KM6 125T	12,5	9,3	3460	21,8	24,6	99	78,3	81,1	81,3	0,61	0,73	0,80	1,15
	KM6 150T	15	11	3450	26,0	29,3	120	77,9	80,8	81,1	0,61	0,73	0,81	1,15
	KM6 175T	17,5	13,0	3455	29,7	33,3	153	79,1	82,0	82,0	0,62	0,74	0,81	1,15
	KM6 200T	20	15	3450	33,4	37,9	178	79,5	82,2	82,2	0,63	0,75	0,83	1,15
	KM6 250T	25	18,5	3450	41,8	47,1	212	81,0	83,5	83,4	0,62	0,75	0,81	1,15
	KM6 300T	30	22	3460	50,3	56,5	277	82,4	83,8	84,2	0,62	0,75	0,80	1,15
	KM6 350T	35	26	3465	58,0	65,2	346	83,3	85,4	85,8	0,60	0,72	0,80	1,15
	KM6 400T	40	30	3460	65,8	74,4	398	83,7	85,5	85,7	0,60	0,73	0,80	1,15
	KM6 500T	50	37	3440	83,2	94,0	508	83,5	84,8	83,8	0,61	0,74	0,81	1,15
460V @ 60 Hz	KM6 055T	5,5	4,0	3445	8,8	9,9	50	70,5	74,7	75,4	0,59	0,71	0,77	1,15
	KM6 075T	7,5	5,5	3440	11,7	13,1	56	71,4	75,2	76,4	0,60	0,72	0,79	1,15
	KM6 100T	10	7,5	3450	15,1	17,0	71	74,5	79,5	78,9	0,58	0,71	0,79	1,15
	KM6 125T	12,5	9,3	3460	18,2	20,5	83	78,5	81,2	81,4	0,60	0,72	0,79	1,15
	KM6 150T	15	11	3450	21,7	24,5	100	78,1	81,0	81,2	0,60	0,72	0,80	1,15
	KM6 175T	17,5	13,0	3455	24,9	27,9	128	79,3	82,2	82,1	0,61	0,73	0,80	1,15
	KM6 200T	20	15	3450	27,8	31,6	149	79,8	82,4	82,3	0,62	0,75	0,82	1,15
	KM6 250T	25	18,5	3450	34,9	39,3	177	81,2	83,7	83,4	0,62	0,74	0,80	1,15
	KM6 300T	30	22	3460	42,0	47,2	231	82,6	84,0	84,4	0,61	0,74	0,79	1,15
	KM6 350T	35	26	3465	48,5	54,6	289	83,5	85,6	85,9	0,59	0,71	0,79	1,15
	KM6 400T	40	30	3460	55,1	62,2	333	83,9	85,7	85,8	0,59	0,72	0,79	1,15
	KM6 500T	50	37	3440	69,7	78,9	426	83,7	85,0	83,9	0,60	0,73	0,80	1,15



Technical DATA

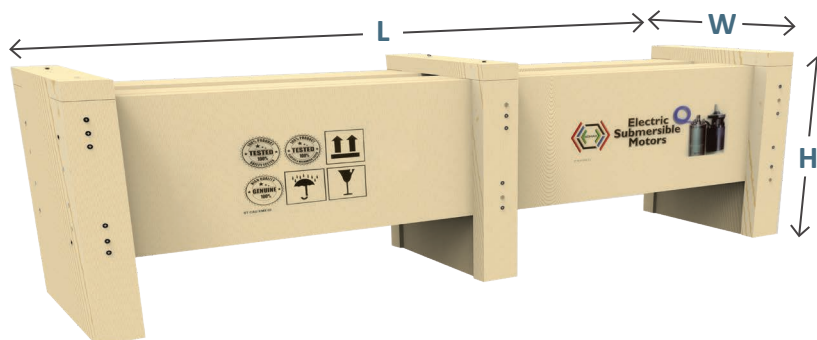
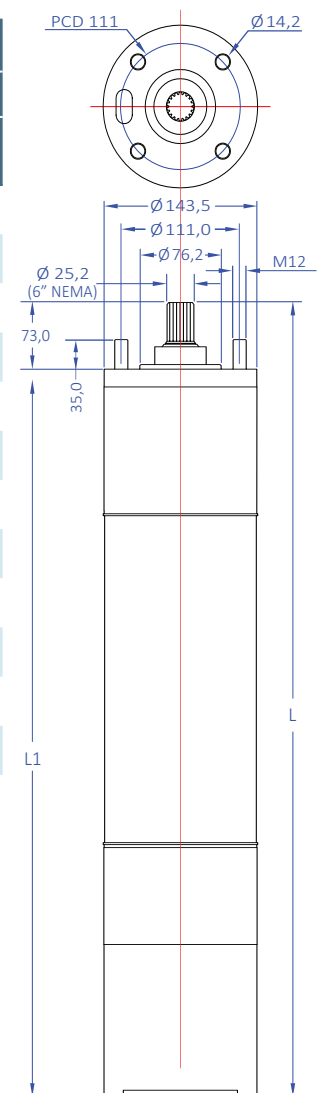
Size & Dimensions Motor Tail Cable - Three Phase - 50 Hz / 60 Hz

Sr. No.	Volts	Motor Size		Cable Size Nos. x Cross Section (mm ²)	Dimension B x H (mm)	Cable Length (mtr)	Qty (Nr.)
		HP	kW				
DOL	1	230	5,5 ~ 15	4 ~ 11	19 x 8 D = 6,86	3 3	1 1
	2	380 ~ 415	5,5 ~ 30	4 ~ 22			
	3	460	5,5 ~ 30	4 ~ 22			
	4	230	20 ~ 30	15 ~ 22	24 x 9 D = 6,86	3 3	1 1
	5	380 ~ 415	35 ~ 50	26 ~ 37			
	6	460	35 ~ 50	26 ~ 37			
SD	7	230	5,5 ~ 30	4 ~ 22	19 x 8 D = 6,86	3 3	2 1
	8	380 ~ 415	5,5 ~ 50	4 ~ 37			
	9	460	5,5 ~ 50	4 ~ 37			



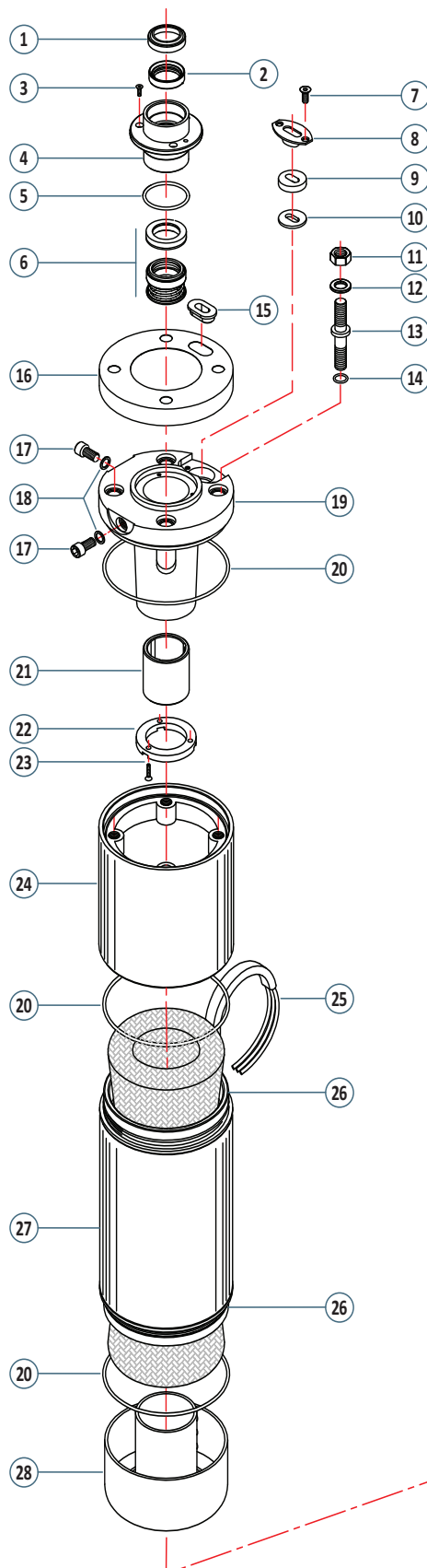
Motor Dimensions and Weights KM6 Single Flange

Motor Type	Motor Size		Thrust Load (N)	L Motor Length (mm)	L1 Motor Length (mm)	Packing Dimension W x H x L (mm)	Weight (Kg)	
	HP	kW					Without Packing	With Packing
KM6 055T	5,5	4,0	26600	723	650	245 x 330 x 845	52	62
KM6 075T	7,5	5,5	26600	723	650	245 x 330 x 845	52	62
KM6 100T	10	7,5	26600	773	700	245 x 330 x 845	56	67
KM6 125T	12,5	9,3	26600	858	785	245 x 330 x 1010	65	77
KM6 150T	15	11	26600	858	785	245 x 330 x 1010	65	77
KM6 175T	17,5	13,0	26600	948	875	245 x 330 x 1010	75	87
KM6 200T	20	15	26600	948	875	245 x 330 x 1010	75	87
KM6 250T	25	18,5	26600	1038	965	245 x 330 x 1212	84	96
KM6 300T	30	22	26600	1123	1050	245 x 330 x 1212	93	106
KM6 350T	35	26	26600	1218	1145	245 x 330 x 1352	104	116
KM6 400T	40	30	26600	1258	1185	245 x 330 x 1352	108	122
KM6 500T	50	37	26600	1258	1185	245 x 330 x 1352	108	122

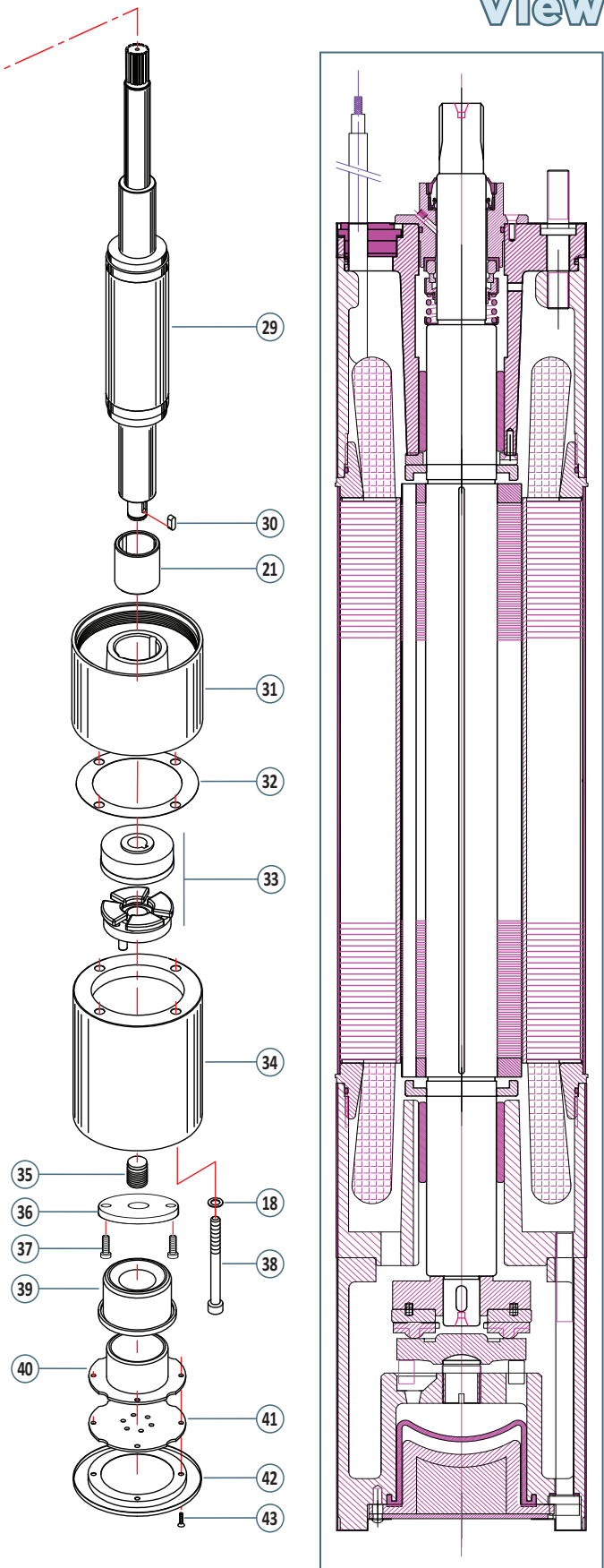


All dimensions are in mm

Exploded View



Cross-Sectional View



**Parts LIST** with Material & Quantity

Pos.	Item Code	Part Name	Material	Qty	Unit
1	60101480	Wiper Seal	NBR + Stainless Steel	1	Nr
2	60101475	Lip Seal / Oil Seal	NBR + Stainless Steel	1	Nr
3	60101075	Allen Bolt (Seal Support)	Stainless Steel AISI 304/316	3	Nr
4	60101090	Seal Support KM6	Stainless Steel AISI 431/316	1	Nr
5	60101095	O. Ring (Seal Support)	NBR	1	Nr
6	60101080	Mechanical Seal	Tungsten Carbide WC + NBR + Stainless Steel	1	Nr
7	60101077	Screw (Tail Cable)	Stainless Steel AISI 304/316	2	Nr
8	60101137	Cable Top Plate (Tail Cable)	Stainless Steel AISI 304/316	1	Nr
9	60101125	Gasket Rubber (Tail Cable)	NBR	1	Nr
10	60101130	Cable Washer (Tail Cable)	Stainless Steel AISI 304	1	Nr
11	60101117	Hex: M12 Nut	Stainless Steel AISI 304/316	4	Nr
12	60101120	Spring Washer for M12	Stainless Steel AISI 304/316	4	Nr
13	60101115	Bolt M12	Stainless Steel AISI 304	4	Nr
14	60101156	Washer Bonded / Dowty Seal	NBR + Stainless Steel AISI 316	4	Nr
15	60101122	Gasket for Top Cover (Tail Cable)	NBR	1	Nr
16	60101039	Top Cover KM6 (Top Piece)	Stainless Steel AISI 304	1	Nr
17	60101068	Allen Bolt (Top Piece)	Stainless Steel AISI 304/316	2	Nr
18	60101157	Dowty Washer	NBR + Stainless Steel AISI 316	6	Nr
19	60101002	Upper Support / Top Piece	Cast Iron	1	Nr
20	60101065	O. Ring 3500	NBR	3	Nr
21	60101055	Carbon Bush Large (Lower & Upper)	Carbon	2	Nr
22	60101087	Upper Thrust Bearing	Brass	1	Nr
23	60101142	Screw (Upper Thrust)	Stainless Steel AISI 304	3	Nr
24	60101010	Upper Threaded Socket	Cast Iron	1	Nr
25	60101170	Motor Tail Cable (03 Core)	CU + XLPE + PVC	3	Mtr
26	60101465	Flange	AISI 304/316	1	Set
27	601013XX	Stator Stack (Assembly)	Silicon Steel (B50-A800)	1	Set
28	60101202	Winding Protection Cover (Lower)	LDPE	1	Nr
29	60101350	Rotor Lamination (Assembly)	Silicon Steel (B50-A800)	1	Set
30	60101145	Key for Rotor Shaft	Stainless Steel AISI 304	1	Nr
31	60101013	Lower Support	Cast Iron	1	Nr
32	60101212	Gasket	Tesnit BA50	1	Nr
33	60101025	Thrust Bearing	Stainless Steel + Carbon	1	Nr
34	60101018	Thrust Support	Cast Iron	1	Nr
35	60101030	Adjustment Bolt (Thrust Bearing)	Stainless Steel AISI 304	1	Nr
36	60101233	Thrust Washer MS for Adjustment Bolt	Mild Steel	1	Nr
37	60161252	Bolt Allen M6x20	Stainless Steel AISI 304/316	2	Nr
38	60101071	Bolt Allen M10x170	Stainless Steel AISI 304/316	4	Nr
39	60101045	Diaphragm Rubber	NBR	1	Nr
40	60101216	Diaphragm Support	Polycarbonate	1	Nr
41	60101050	End Cover of Diaphragm	Stainless Steel AISI 304	1	Nr
42	60101052	Cover for Thrust Support	Stainless Steel AISI 304	1	Nr
43	60101143	Allen Bolt (Lower Thrust Plate)	Stainless Steel AISI 304	4	Nr

KM6

Double Flange 6" Borehole Submersible Electric Water Cooled Rewindable Motors

Models Range

Optional: Double Flange

Power Range

From: 5,5 HP (4 kW)
To: 75 HP (55 kW)

Voltage Range

380 ~ 415 Volts, 50 Hertz
230 Volts - 60 Hertz
380 Volts - 60 Hertz
460 Volts - 60 Hertz

Speed Range

2 Poles, 2900 RPM
2 Poles, 3600 RPM

Construction Material

Standard:

Cast Iron with Stainless Steel Cover

Optional:

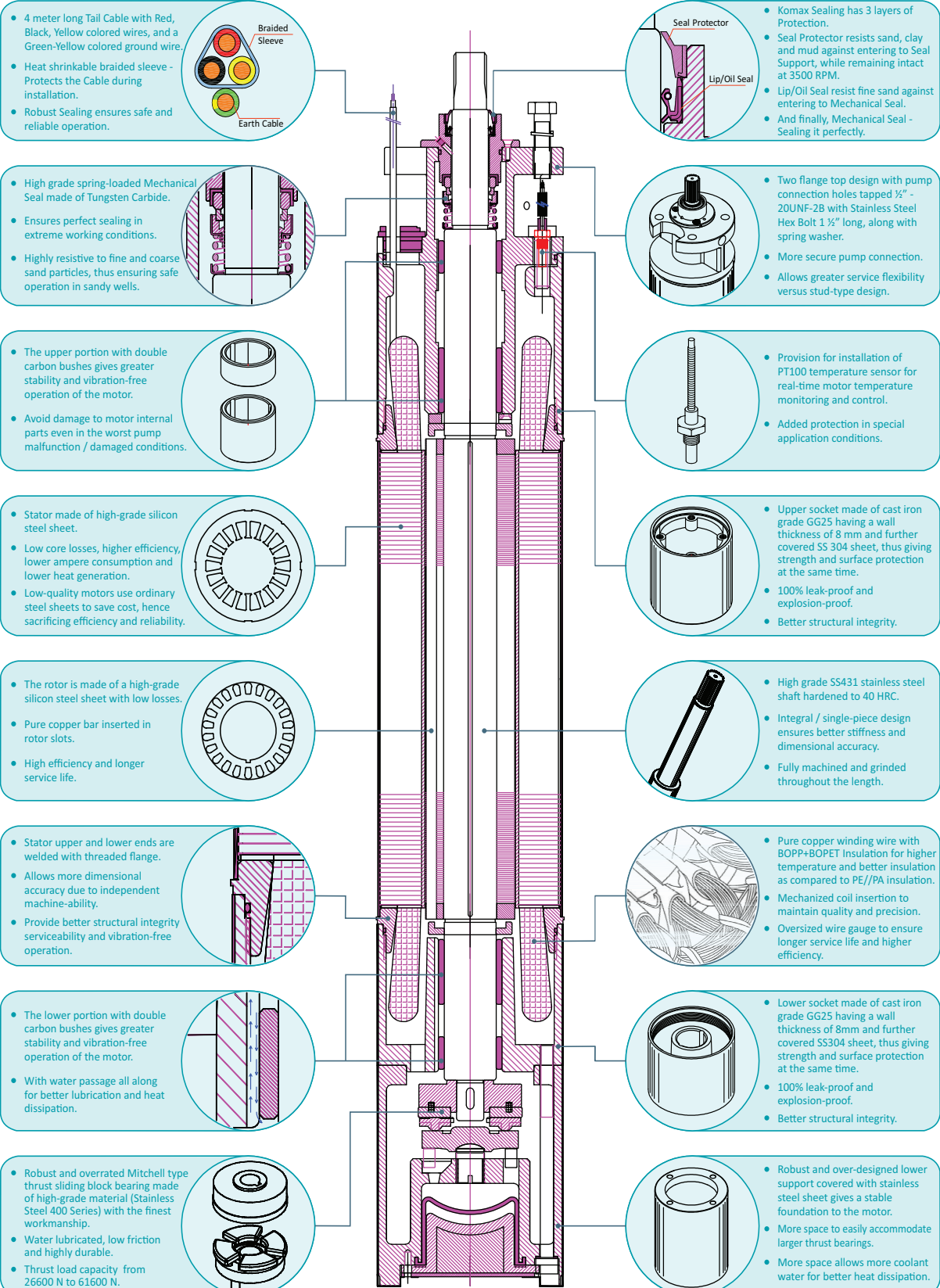
Complete 316L Stainless Steel





X-Sectional View with Specification

KM6 Double Flange





Salient Features

KM6 6" water-filled submersible electric motors have asynchronous three-phase rewindable stator and squirrel cage rotor.

The new improved double flange series of 6" submersible electric motors KM6 has been designed to achieve compatibility with VFD outputs making it the first choice for solar and other high efficiency applications. In this optional design and material selection all efforts have been made to offer an energy efficient product to our customers which stand for reliability, excellent quality, long and trouble-free life.

- Wet Stator Design
- High Grade Material
- Easy Maintenance
- Long Service Life
- High Thermal Capacity
- High Efficiency
- High Sand Resistance
- Re-windable
- Eco Friendly
- Industrial, Commercial, Agriculture and Irrigation Purpose



Technical Specification

IP68	degree of protection
A / B	insulation class
50 °C	ambient temperature
+6% / -10%	voltage tolerance
Vertical*	mounting position
16 cm/sec	min. cooling flow rate speed
150 m	max. immersion depth
20	max. starts per hour
Rotation	CCW facing shaft end
Wooden case	packing



Specifications

Winding:

Electrolytic Solid Copper wire wrapped in BOPET+BOPP Insulation rated for temperatures over 100 °C that allows more copper in the current slots. This technology allows the motor to run much cooler and achieve higher than normal horsepower ratings in standard frame sizes.

Stator:

All motors include an increased Stator stack length and combined M800 low-loss electrical magnetic sheet for a cooler running motor.

Rotor:

Increased stack length with M800 low-loss electrical magnetic sheet assembled and designed with the newest technology and high-grade copper bars.

Spline Shaft:

AISI 431 stainless steel induction hardened and ground to operate in severe conditions. Dimensions according to international 6" NEMA standards.

Shaft Bearing/Bush:

Dual Water lubricated guide bearings made of high-grade carbon, are fixed in upper and lower brackets for optimal operation in sandy wells and pump vibration control.

Thrust Bearings:

All Komax submersible motors have Kingsbury type thrust bearing. The thrust assembly consists of a high-quality carbon disc with hardened stainless steel shoes to handle necessary pump thrust loads. Available with an axial load capacity of 26600 N (upto 50 HP) and 61600 N (60 to 75 HP).

Seal Configuration:

Komax offers a triple seal configuration that consists of two outer back to back lip seals in NBR with an inner Tungsten Carbide Seal for optimum protection in sandy wells.

Pressure Equalizing System:

Pressure compensation is managed by using a suitably sized NBR bellow to allow for expansion of the internal water as it heats up- or- from external pressure due to the depth of submergence.

Brackets:

High resistance cast iron upper & lower bearing housing are dressed in stainless steel cover.

Filler Fluid:

Water mixed with non-toxic antifreeze provide cooling and lubrication, also protect and prevent inside parts from corrosion.

Connection:

Connected through rubber sheathed cable Available in Delta & WYE (Star) configuration.

Note: All specifications are subject to change without any prior notice.



Electrical DATA - 50 Hz

Electrical Data - Three Phase - 2 Pole - 380 ~ 415 Volt @ 50 Hz												
Motor Type	Motor Size		RPM	Full Load Current (Amp.)	Starting Current (Amp.)	Efficiency at % Load			Cos. Φ at % Load			Service Factor
	HP	kW				50	75	100	50	75	100	
KM6 055T	5,5	4	2815	10,0	50	73,3	76,0	75,6	0,61	0,72	0,79	1
KM6 075T	7,5	5,5	2810	13,2	57	73,2	76,7	76,4	0,60	0,73	0,80	1
KM6 100T	10	7,5	2830	16,9	70	75,8	78,6	78,3	0,61	0,74	0,81	1
KM6 125T	12,5	9,3	2840	20,8	84	78,2	80,9	80,2	0,60	0,73	0,81	1
KM6 150T	15	11	2830	24,5	100	78,6	81,3	80,8	0,61	0,74	0,82	1
KM6 175T	17,5	13	2845	28,4	131	80,4	82,4	81,4	0,61	0,74	0,81	1
KM6 200T	20	15	2845	31,2	147	81,0	82,8	82,7	0,63	0,76	0,83	1
KM6 250T	25	18,5	2845	39,4	177	82,9	83,7	83,2	0,62	0,75	0,82	1
KM6 300T	30	22	2835	47,4	232	82,0	83,9	83,3	0,62	0,75	0,82	1
KM6 350T	35	26	2855	56,0	297	84,1	85,4	84,4	0,59	0,72	0,80	1
KM6 400T	40	30	2850	63,9	342	84,1	85,2	84,2	0,59	0,72	0,80	1
KM6 500T	50	37	2820	80,2	433	83,8	84,1	82,7	0,61	0,74	0,81	1
KM6 600T	60	45	2780	96,7	527	83,9	83,1	81,2	0,62	0,76	0,82	1
KM6 700T	70	52	2780	113,0	621	83,1	82,6	80,7	0,63	0,76	0,83	1
KM6 750T	75	55	2785	122,0	683	83,4	82,9	80,6	0,62	0,75	0,82	1

380 - 415V @ 50 Hz

Electrical DATA - 60 Hz

Electrical Data - Three Phase - 2 Pole - 230 Volts @ 60 Hz														
Motor Type	Motor Size		RPM	Full Load Current (Amp.)	Safety Load Current (Amp.)	Starting Current (Amp.)	Efficiency at % Load			Cos. Φ at % Load			Service Factor	
	HP	kW					50	75	100	50	75	100		
230V @ 60 Hz	KM6 055T	5,5	4,0	3455	18,0	19,9	98	73,8	76,7	77,3	0,52	0,65	0,74	1,15
	KM6 075T	7,5	5,5	3450	23,7	26,3	111	74,8	78,3	78,8	0,53	0,66	0,75	1,15
	KM6 100T	10	7,5	3460	31,0	34,3	140	76,0	79,1	79,8	0,54	0,67	0,76	1,15
	KM6 125T	12,5	9,3	3465	37,5	42,1	167	77,5	80,2	80,9	0,57	0,70	0,77	1,15
	KM6 150T	15	11	3460	44,7	50,2	202	77,3	79,8	80,7	0,58	0,70	0,78	1,15
	KM6 175T	17,5	13,0	3465	50,7	56,7	255	79,5	83,1	83,0	0,57	0,69	0,78	1,15
	KM6 200T	20	15	3460	57,2	64,0	295	80,0	83,0	83,0	0,58	0,70	0,79	1,15
	KM6 250T	25	18,5	3460	71,0	79,5	351	81,0	83,9	83,3	0,59	0,71	0,79	1,15
	KM6 300T	30	22	3470	84,1	94,3	453	81,6	83,4	83,7	0,60	0,73	0,80	1.15

230V @ 60 Hz



Electrical DATA - 60 Hz

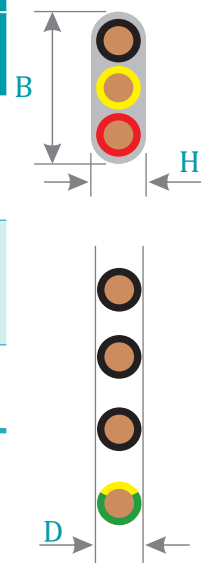
	Electrical Data - Three Phase - 2 Pole - 380 Volts & 460 Volt @ 60 Hz													
	Motor Type	Motor Size		RPM	Full Load Current (Amp.)	Safety Load Current (Amp.)	Starting Current (Amp.)	Efficiency at % Load			Cos. Φ at % Load			Service Factor
		HP	kW					50	75	100	50	75	100	
380V @ 60 Hz	KM6 055T	5,5	4,0	3445	10,6	11,9	60	70,3	74,5	75,3	0,60	0,71	0,78	1,15
	KM6 075T	7,5	5,5	3440	14,0	15,5	67	71,2	75,1	76,3	0,59	0,72	0,80	1,15
	KM6 100T	10	7,5	3450	18,0	20,3	84	74,2	79,3	78,8	0,59	0,72	0,80	1,15
	KM6 125T	12,5	9,3	3460	21,8	24,6	99	78,5	81,2	81,4	0,60	0,72	0,79	1,15
	KM6 150T	15	11	3450	26,0	29,3	120	77,9	80,8	81,1	0,61	0,73	0,81	1,15
	KM6 175T	17,5	13,0	3455	29,7	33,3	153	79,3	82,2	82,1	0,61	0,73	0,80	1,15
	KM6 200T	20	15	3450	33,4	37,9	178	79,5	82,2	82,2	0,63	0,75	0,83	1,15
	KM6 250T	25	18,5	3450	41,8	47,1	212	81,0	83,5	83,4	0,62	0,75	0,81	1,15
	KM6 300T	30	22	3460	50,3	56,5	277	82,4	83,8	84,2	0,62	0,75	0,80	1,15
	KM6 350T	35	26	3465	58,0	65,2	346	83,3	85,4	85,8	0,60	0,72	0,80	1,15
	KM6 400T	40	30	3460	65,8	74,4	398	83,7	85,5	85,7	0,60	0,73	0,80	1,15
	KM6 500T	50	37	3440	83,2	94,0	508	83,5	84,8	83,8	0,61	0,74	0,81	1,15
460V @ 60 Hz	KM6 055T	5,5	4,0	3445	8,8	9,9	50	70,5	74,7	75,4	0,59	0,71	0,77	1,15
	KM6 075T	7,5	5,5	3440	11,7	13,1	56	71,4	75,2	76,4	0,60	0,72	0,79	1,15
	KM6 100T	10	7,5	3450	15,1	17,0	71	74,5	79,5	78,9	0,58	0,71	0,79	1,15
	KM6 125T	12,5	9,3	3460	18,2	20,5	83	78,5	81,2	81,4	0,60	0,72	0,79	1,15
	KM6 150T	15	11	3450	21,7	24,5	100	78,1	81,0	81,2	0,60	0,72	0,80	1,15
	KM6 175T	17,5	13,0	3455	24,9	27,9	128	79,3	82,2	82,1	0,61	0,73	0,80	1,15
	KM6 200T	20	15	3450	27,8	31,6	149	79,8	82,4	82,3	0,62	0,75	0,82	1,15
	KM6 250T	25	18,5	3450	34,8	39,3	177	81,2	83,7	83,6	0,62	0,74	0,80	1,15
	KM6 300T	30	22	3460	42,0	47,2	231	82,6	84,0	84,4	0,61	0,74	0,79	1,15
	KM6 350T	35	26	3465	48,5	54,6	289	83,5	85,6	85,9	0,59	0,71	0,79	1,15
	KM6 400T	40	30	3460	55,1	62,2	333	83,9	85,7	85,8	0,59	0,72	0,79	1,15
	KM6 500T	50	37	3440	69,7	78,9	426	83,7	85,0	83,9	0,60	0,73	0,80	1,15
	KM6 600T	60	45	3420	83,1	94,9	517	84,4	84,9	83,2	0,62	0,74	0,81	1,15
	KM6 700T	70	52	3420	95,9	109,9	604	84,1	85,2	83,3	0,63	0,76	0,82	1,15
	KM6 750T	75	55	3415	102,6	116,3	651	85,3	86,0	84,3	0,61	0,74	0,81	1,15



Technical DATA

Size & Dimensions Motor Tail Cable - Three Phase - 50 Hz / 60 Hz

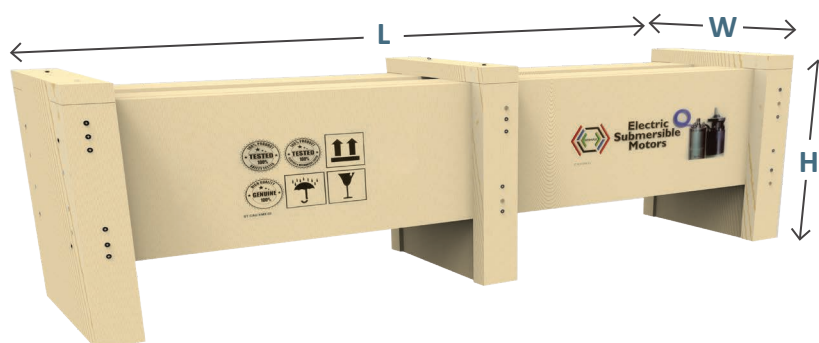
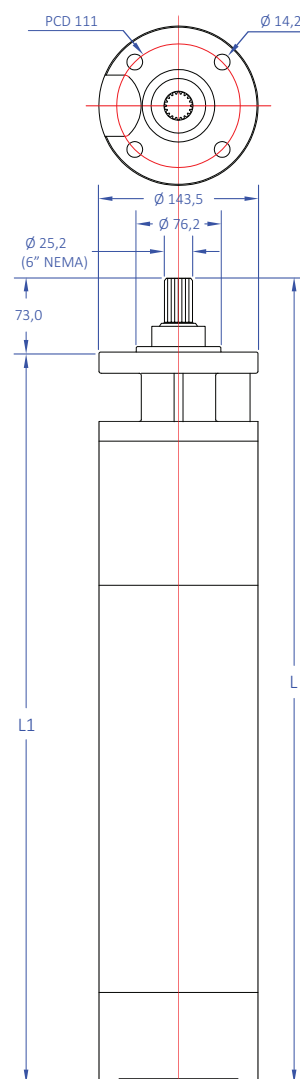
Sr. No.	Volts	Motor Size		Cable Size Nos. x Cross Section (mm ²)	Dimension B x H (mm)	Cable Length (mtr)	Qty (Nr.)
		HP	kW				
DOL	1	230	5,5 ~ 15	4 ~ 11			
	2	380 ~ 415	5,5 ~ 30	4 ~ 22	3 x 6 1 x 12	19 x 8 D = 6,86	3 3
	3	460	5,5 ~ 30	4 ~ 22			
	4	230	20 ~ 30	15 ~ 22			
	5	380 ~ 415	35 ~ 50	26 ~ 37	3 x 10 1 x 12	24 x 9 D = 6,86	3 3
	6	460	35 ~ 50	26 ~ 37			
	7	380 ~ 415	60 ~ 75	45 ~ 55	1 x 16*	D = 11,43	3
	8	460	60 ~ 75	45 ~ 55	1 x 12	D = 6,86	3
SD	9	230	5,5 ~ 30	4 ~ 22			
	10	380 ~ 415	5,5 ~ 75	4 ~ 55	3 x 6 1 x 12	19 x 8 D = 6,86	3 3
	11	460	5,5 ~ 75	4 ~ 55			



* 1 x 16 mm² as black color used for all three (3) wires.

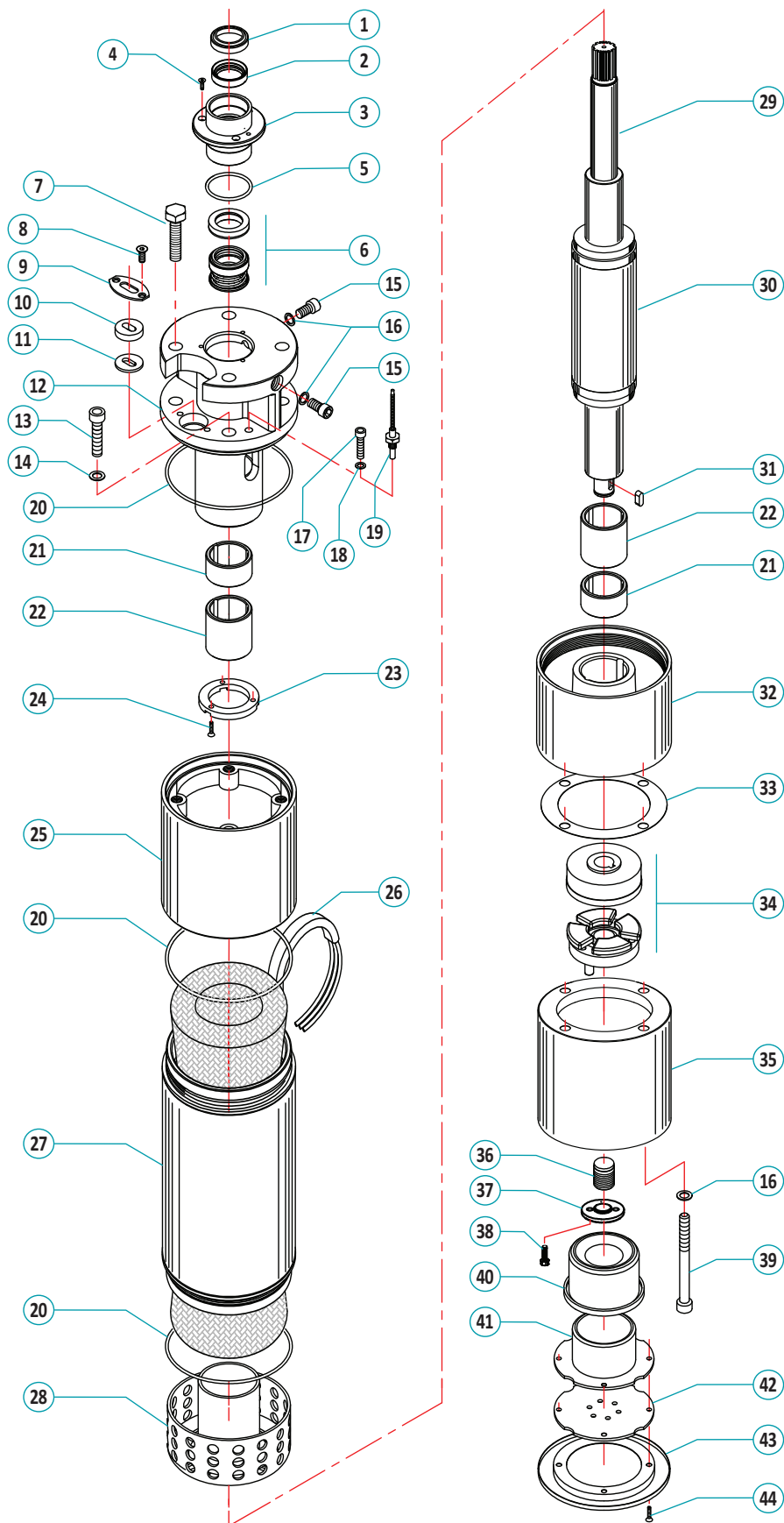
Motor Dimensions and Weights KM6 Double Flange

Motor Type	Motor Size		Thrust Load (N)	L Motor Length (mm)	L1 Motor Length (mm)	Packing Dimension W x H x L (mm)	Weight (Kg)	
	HP	kW					Without Packing	With Packing
KM6 055T	5,5	4	26600	785	712	245x330x905	55	64
KM6 075T	7,5	5,5	26600	785	712	245x330x905	55	64
KM6 100T	10	7,5	26600	835	762	245x330x905	60	70
KM6 125T	12,5	9,3	26600	920	847	245x330x1075	68	78
KM6 150T	15	11	26600	920	847	245x330x1075	68	78
KM6 175T	17,5	13	26600	1010	937	245x330x1075	77	89
KM6 200T	20	15	26600	1010	937	245x330x1075	77	89
KM6 250T	25	18,5	26600	1100	1027	245x330x1165	88	100
KM6 300T	30	22	26600	1185	1112	245x330x1275	96	110
KM6 350T	35	26	26600	1280	1207	245x330x1400	112	125
KM6 400T	40	30	26600	1320	1247	245x330x1400	112	125
KM6 500T	50	37	26600	1320	1247	245x330x1400	112	125
KM6 600T	60	45	61600	1388	1315	245x330x1465	120	135
KM6 700T	70	52	61600	1448	1375	245x330x1540	125	139
KM6 750T	75	55	61600	1508	1435	245x330x1600	130	146

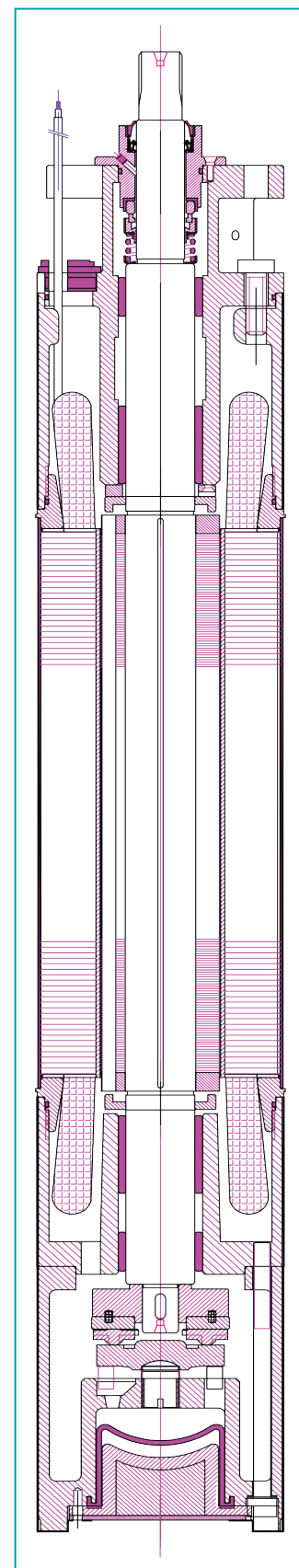


All dimensions are in mm

Exploded View



Cross-Sectional View



**Parts LIST** with Material & Quantity

Pos.	Item Code	Part Name	Material	Qty	Unit
1	60101480	Wiper Seal	NBR + Stainless Steel AISI 304	1	Nr
2	60101475	Lip Seal / Oil Seal	NBR + Stainless Steel AISI 304	1	Nr
3	60101090	Seal Support KM6	Stainless Steel AISI 304/316	1	Nr
4	60101075	Allen Bolt (Seal Support)	Stainless Steel AISI 304/316	3	Nr
5	60101095	O.Ring (Seal Support)	NBR	1	Nr
6	60101080	Mechanical Seal	Tungsten Carbide (WC) + NBR + Stainless Steel	1	Nr
7	60101110	Hex Bolt ½ Inch X 1½ Inch 20TPI	Stainless Steel AISI 304/316	4	Nr
8	60101077	Screw (Tail Cable)	Stainless Steel AISI 304/316	2	Nr
9	601011XX	Cable Top Plate (Tail Cable)	Stainless Steel AISI 304/316	1	Nr
10	601011XX	Gasket Rubber (Tail Cable)	NBR	1	Nr
11	601011XX	Cable Washer (Tail Cable)	Stainless Steel AISI 304	1	Nr
12	60101005	Upper Support / Top Piece (Double Flange)	Cast Iron / S Steel AISI 316	1	Nr
13	60161245	Allen Bolt M12 X 45	Stainless Steel AISI 304/316	4	Nr
14	60101156	Washer Bonded / Dowty Seal M12	NBR + Stainless Steel AISI 316	4	Nr
15	60101068	Allen Bolt (Top Piece)	Stainless Steel AISI 304/316	2	Nr
16	60101157	Washer Bonded / Dowty Seal M10	NBR + Stainless Steel AISI 316	6	Nr
17	60161250	Allen Bolt M8 X 20	Stainless Steel AISI 304/316	1	Nr
18	60161267	Washer Bonded / Dowty Seal M8	NBR + Stainless Steel AISI 316	1	Nr
19	60101485	PT100 Sensor (Optional)	Stainless Steel AISI 304/316	1	Nr
20	60101065	O. Ring 3500	NBR	3	Nr
21	60101058	Carbon Bush Small (Lower & Upper)	Carbon	2	Nr
22	60101055	Carbon Bush Large (Lower & Upper)	Carbon	2	Nr
23	60101087	Upper Thrust Bearing	Brass	1	Nr
24	60101142	Screw (Upper Thrust) CSK M4X10	Stainless Steel AISI 304	3	Nr
25	60101010	Upper Bearing Housing	Cast Iron / S Steel AISI 316	1	Nr
26	601011XX	Motor Tail Cable (03 Core)	CU + XLPE + PVC	4	Mtr
27	601013XX	Stator Stack (Assembly)	Silicon Steel (B50-A800)	1	Set
28	60101202	Winding Protection Cover (Lower)	LDPE	1	Nr
29	601063XX	Rotor Shaft	Stainless Steel AISI 431/316	1	Nr
30	60101350	Rotor Lamination (Assembly)	Silicon Steel (B50-A800)	1	Set
31	60101145	Key for Rotor Shaft	Stainless Steel AISI 304	1	Nr
32	60101013	Lower Bearing Housing	Cast Iron / S Steel AISI 316	1	Nr
33	60101212	Gasket	Tesnit (BA50)	1	Nr
34	601010XX	Thrust Bearing	Stainless Steel + Carbon	1	Nr
35	60101018	Thrust Support	Cast Iron / S Steel AISI 316	1	Nr
36	60101030	Adjustment Bolt (Thrust Bearing)	Stainless Steel AISI 304	1	Nr
37	60161010	Lock Washer Adj. Bolt	Mild Steel	1	Nr
38	60161252	Bolt Allen M6 x 20	Stainless Steel AISI 304/316	2	Nr
39	60101071	Bolt Allen M10x170	Stainless Steel AISI 304/316	4	Nr
40	60101045	Diaphragm Rubber	NBR	1	Nr
41	60101216	Diaphragm Support	Polycarbonate	1	Nr
42	60101050	End Cover of Diaphragm	Stainless Steel AISI 304	1	Nr
43	60101052	Cover for Thrust Support	Stainless Steel AISI 304	1	Nr
44	60101143	Allen Bolt (Lower Thrust Plate)	Stainless Steel AISI 304	4	Nr

KM8

8" Borehole Submersible Electric Water Cooled Rewindable Motors

Models Range

Standard: Double Flange

Power Range

From: 30 HP (22 kW)
To: 200 HP (150 kW)

Voltage Range

380 ~ 415 Volts, 50 Hertz
460 Volts - 60 Hertz

Speed Range

2 Poles, 2900 RPM
2 Poles, 3600 RPM

Construction Material

Standard:

Cast Iron with NSF Certified Epoxy

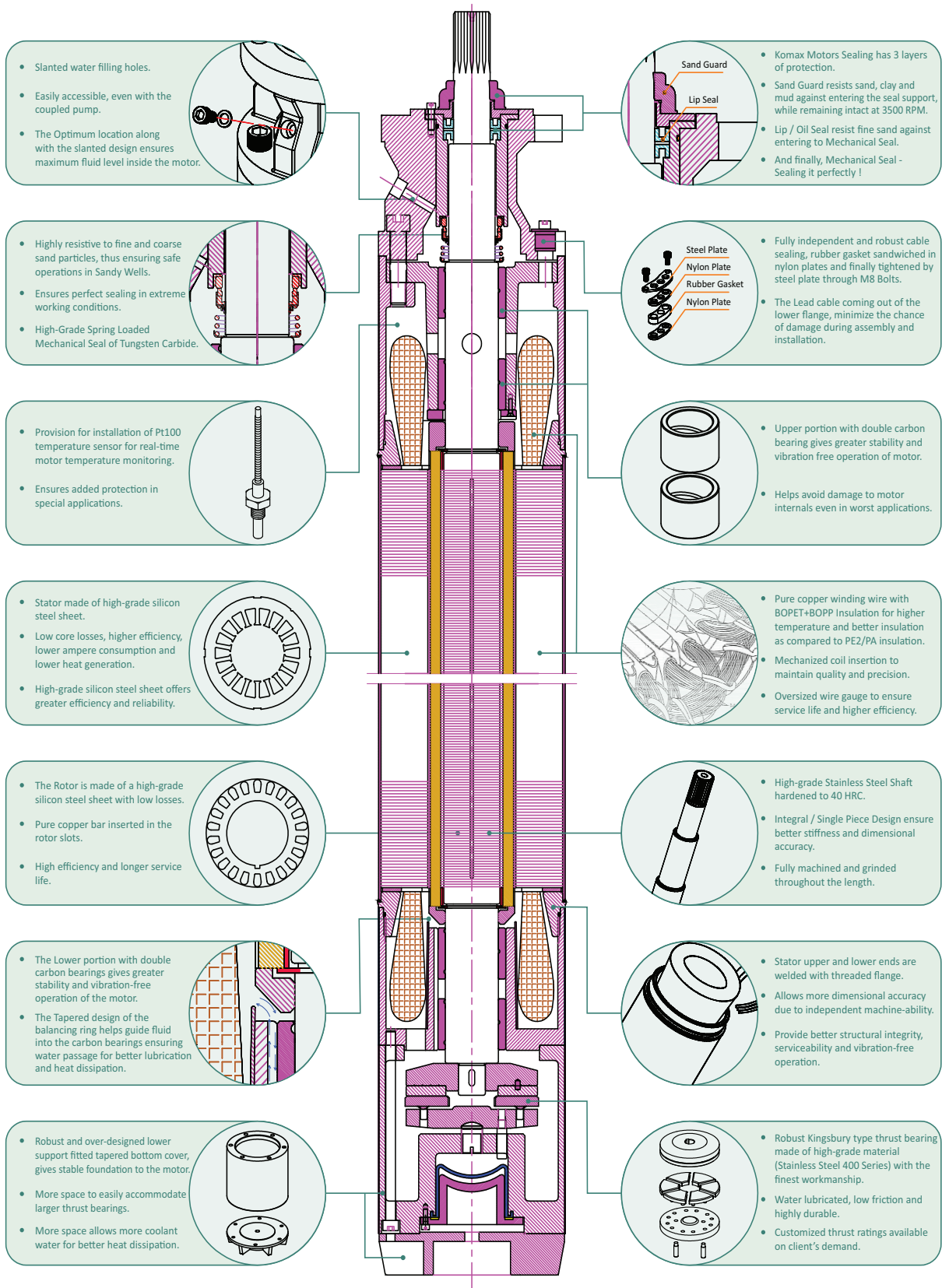
Optional:

Complete 316L Stainless Steel



X-Sectional View with Specification

KM8 Double Flange





Salient Features

KM8 8" water-filled submersible electric motors have asynchronous three-phase rewindable stator and squirrel cage rotor.

The new series of 8" submersible electric motors KM8 has been designed and produced according to the market's requirements. In design and material selection all efforts have been made to offer an energy-efficient product to our customers which stand for reliability, excellent quality, long and trouble-free life.

- Wet Stator Design
- High Grade Material
- Easy Maintenance
- Long Service Life
- High Thermal Capacity
- High Efficiency
- High Sand Resistance
- Re-windable
- Eco Friendly
- Industrial, Commercial, Agriculture and Irrigation Purpose



Technical Specification

IP68	degree of protection
A / B	insulation class
50 °C	ambient temperature
+6% / -10%	voltage tolerance
Vertical/Horizontal	mounting position
16 cm/sec	min. cooling flow rate speed
200 m	max. immersion depth
10	max. starts per hour
Rotation	CCW facing shaft end
Wooden case	packing



Specification

Winding:

Electrolytic Solid Copper wire wrapped in BOPET+BOPP Insulation rated for temperatures over 100 °C that allows more copper in the current slots. This technology allows the motor to run much cooler and achieve higher than normal horsepower ratings in standard frame sizes.

Stator:

All motors include an increased Stator stack length and combined M800 low-loss electrical magnetic sheet for a cooler running motor.

Rotor:

Increased stack length with M800 low-loss electrical magnetic sheet assembled and designed with the newest technology and high-grade copper bars.

Spline Shaft:

AISI 431 stainless steel induction hardened and ground to operate in severe conditions. Dimensions according to international 6"/8" NEMA standards.

Shaft Bearing/Bush:

Dual Water lubricated guide bearings made of high-grade carbon, are fixed in upper and lower brackets for optimal operation in sandy wells and pump vibration control.

Thrust Bearings:

All Komax submersible motors have Kingsbury type thrust bearing. The thrust assembly consists of a high-quality carbon disc with hardened stainless steel shoes to handle necessary pump thrust loads. Available with an axial load capacity of 80000 N.

Seal Configuration:

Komax offers a triple seal configuration that consists of two outer back to back lip seals in NBR with an inner Tungsten Carbide Seal for optimum protection in sandy wells.

Pressure Equalizing System:

Pressure compensation is managed by using a suitably sized NBR bellow to allow for expansion of the internal water as it heats up- or- from external pressure due to the depth of submergence.

Brackets:

High resistance cast iron upper & lower bearing housing with epoxy coating.

Filler Fluid:

Water mixed with non-toxic antifreeze provide cooling and lubrication, also protect and prevent inside parts from corrosion.

Connection:

Connected through rubber sheathed cable Available in Delta & WYE (Star) configuration.

Note: All specifications are subject to change without any prior notice.



Electrical DATA - 50 Hz & 60 Hz

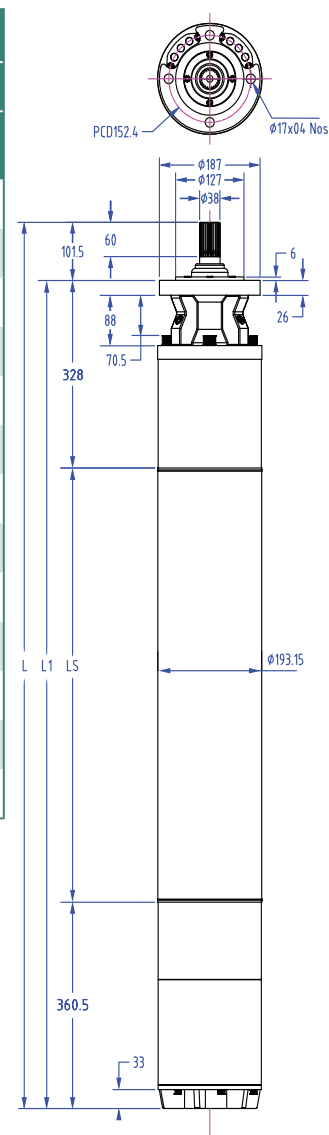
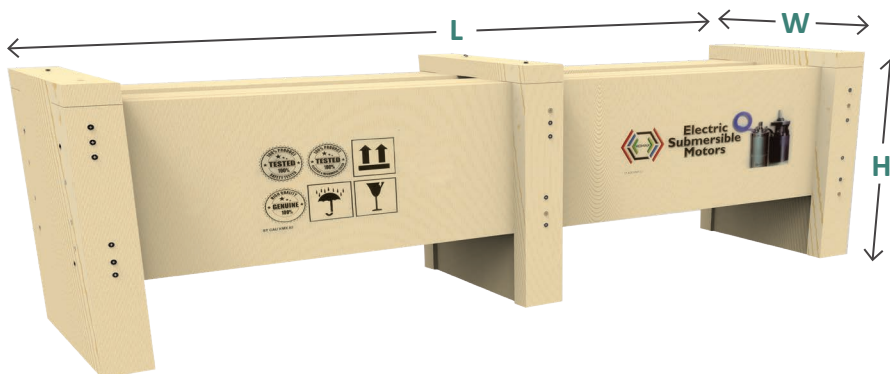
	Technical Data - Three Phase - 2 Pole - 380~415 Volt @ 50 Hz - 460 Volt @ 60 Hz													
	Motor Type	Motor Size		RPM	Full Load Current (Amp.)	Safety Load Current (Amp.)	Starting Current (Amp.)	Efficiency at % Load			Cos. Φ at % Load			Service Factor
		HP	kW					50	75	100	50	75	100	
380-415V @ 50 Hz	KM8 0300T	30	22	2880	46,4		246	78,5	84,3	83,6	0,70	0,79	0,83	1
	KM8 0400T	40	30	2875	60,9		323	79,0	84,8	84,1	0,71	0,80	0,84	1
	KM8 0500T	50	37	2870	74,7		403	80,1	85,0	84,4	0,72	0,81	0,85	1
	KM8 0600T	60	45	2875	89,7		520	80,8	85,8	84,9	0,72	0,81	0,85	1
	KM8 0750T	75	56	2870	110,8		665	82,4	86,7	85,8	0,72	0,80	0,85	1
	KM8 0800T	80	60	2875	116,9		719	82,4	86,9	86,1	0,72	0,81	0,86	1
	KM8 0900T	90	67	2880	133,5		841	82,7	86,4	85,6	0,72	0,80	0,85	1
	KM8 1000T	100	75	2875	146,1		935	82,6	86,8	86,1	0,73	0,81	0,86	1
	KM8 1100T	110	82	2880	161,5		1066	82,7	86,8	85,9	0,72	0,81	0,85	1
	KM8 1250T	125	93	2875	180,9		1230	83,9	87,0	86,3	0,73	0,82	0,86	1
	KM8 1500T	150	112	2875	215,1		1506	82,6	86,8	86,7	0,73	0,82	0,87	1
	KM8 1750T	175	130	2875	252,7		1820	83,1	86,9	86,3	0,73	0,82	0,86	1
	KM8 2000T	200	150	2860	291,1		2090	86,9	87,8	86,1	0,72	0,81	0,86	1
460V @ 60 Hz	KM8 0300T	30	22	3470	40,5	46,6	215	78,3	84,2	83,5	0,70	0,79	0,83	1,15
	KM8 0400T	40	30	3465	53,4	61,5	283	78,9	84,5	83,8	0,71	0,80	0,84	1,15
	KM8 0500T	50	37	3460	65,5	75,5	354	80,1	84,7	84,2	0,72	0,81	0,85	1,15
	KM8 0600T	60	45	3475	78,8	91,2	457	81,0	85,5	84,6	0,72	0,80	0,84	1,15
	KM8 0750T	75	56	3480	96,6	110,9	580	82,3	86,9	86,1	0,72	0,81	0,84	1,15
	KM8 0800T	80	60	3470	102,4	117,9	630	82,2	86,7	85,9	0,72	0,81	0,85	1,15
	KM8 0900T	90	67	3480	116,6	134,0	735	82,6	86,1	85,4	0,72	0,80	0,85	1,15
	KM8 1000T	100	75	3475	127,8	147,2	818	84,1	86,6	85,9	0,72	0,81	0,85	1,15
	KM8 1100T	110	82	3485	141,1	162,4	931	82,4	86,5	85,7	0,71	0,80	0,85	1,15
	KM8 1250T	125	93	3480	158,4	182,5	1077	83,8	86,8	86,1	0,73	0,81	0,86	1,15
	KM8 1500T	150	112	3475	188,5	217,2	1320	82,5	86,7	86,4	0,72	0,82	0,86	1,15
	KM8 1750T	175	130	3480	221,0	254,2	1592	82,9	86,7	86,1	0,73	0,81	0,86	1,15
	KM8 2000T	200	150	3480	249,7	284,0	2039	88,0	89,2	88,4	0,70	0,80	0,85	1,15

Technical DATA

Size & Dimensions Motor Tail Cable - Three Phase - 50 Hz / 60 Hz								
	Sr: No.	Volts	Motor Size		Cable Size Nos. x Cross Section (mm ²)	Dimension B x H (mm)	Cable Length (mtr)	Qty (Nr.)
			HP	kW				
DOL	1	380 ~ 415 460	30 ~ 50	22 ~ 37	1 x 10 / 16	6,7 / 11,4	5	3
	2		60 ~ 80	45 ~ 60	1 x 16	11,43	5	3
	3		90 ~ 125	67 ~ 93	1 x 25	13,46	5	3
	4		150 ~ 200	112 ~ 150	1 x 35	14,98	5	3
SD	5	380 ~ 415 460	30 ~ 125	22 ~ 93	1 x 16	11,43	5	6
	6		150 ~ 200	112 ~ 150	1 x 25	13,46	5	6

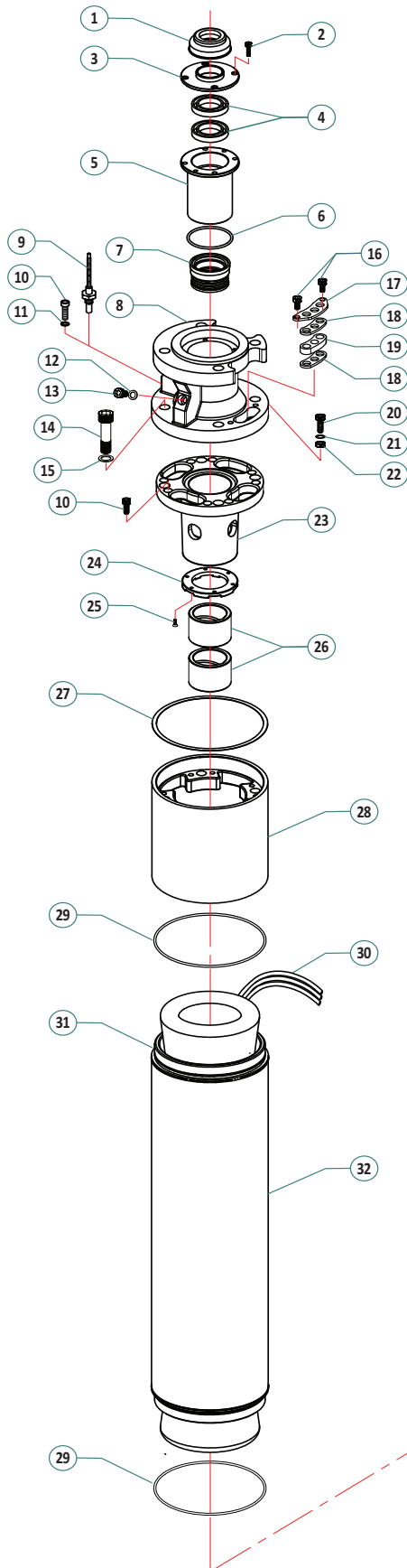
Additional core 1 x 12 mm² 5 meters for earthing.

Motor Dimensions and Weights KM8								
Motor Type	Motor Size		Thrust Load (N)	Motor Length		Packing Dimension W x H x L (mm)	Weight (Kg)	
	HP	kW		L (mm)	L1 (mm)		Without Packing	With Packing
KM8 0300T	30	22	80000	1255	1153	305x401x1392	171	184
KM8 0400T	40	30	80000	1255	1153	305x401x1392	171	184
KM8 0500T	50	37	80000	1336	1235	305x401x1491	186	200
KM8 0600T	60	45	80000	1405	1304	305x401x1572	200	220
KM8 0750T	75	56	80000	1506	1405	305x401x1791	216	235
KM8 0800T	80	60	80000	1506	1405	305x401x1791	224	244
KM8 0900T	90	67	80000	1636	1535	305x401x1981	229	250
KM8 1000T	100	75	80000	1636	1535	305x401x1981	240	262
KM8 1100T	110	82	80000	1844	1743	305x401x2080	261	281
KM8 1250T	125	93	80000	1844	1743	305x401x2080	281	306
KM8 1500T	150	112	80000	1943	1842	305x401x2182	300	326
KM8 1750T	175	130	80000	1943	1842	305x401x2291	303	328
KM8 2000T	200	150	80000	2040	1939	305x401x2401	324	350

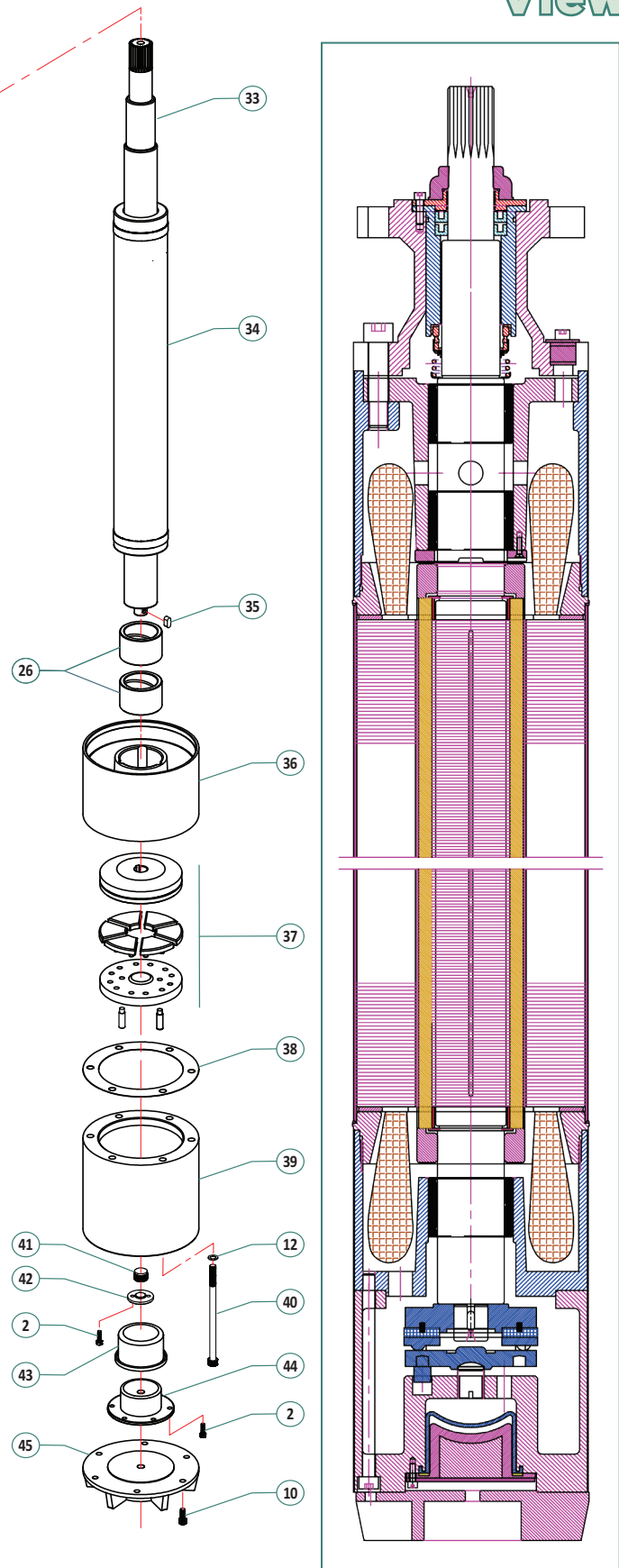


All dimensions are in mm

Exploded View



Cross-Sectional View





Parts LIST with Material & Quantity

Pos.	Item Code	Part Name	Material	Qty	Unit
1	60161050	Sand Guard	Rubber	1	Nr
2	60161252	Bolt Allen M6 x 20	Stainless Steel AISI 304/316	12	Nr
3	60161085	Mechanical Seal Cover	Stainless Steel AISI 304/316	1	Nr
4	60161127	Oil Seal 38x60x10	NBR	2	Nr
5	60161125	Bush Seal Support	Cast Iron / S Steel AISI 316	1	Nr
6	60161220	O-Ring 65x2,5	NBR	1	Nr
7	60161275	Mechanical Seal Complete	Tungsten Carbide (WC) + NBR + Stainless Steel	1	Nr
8	60161065	Top Piece / Upper Support Double Flange	Cast Iron / S Steel AISI 316	1	Nr
9	60101485	PT 100 Sensor	Stainless Steel AISI 316	1	Nr
10	60161250	Bolt Allen M8x20	Stainless Steel AISI 304/316	14	Nr
11	60161267	Washer Bonded / Dowty Seal M8	NBR + Stainless Steel AISI 316	1	Nr
12	60101157	Washer Bonded / Dowty Seal M10	NBR + Stainless Steel AISI 316	8	Nr
13	60101068	Bolt Allen M10 x 16	Stainless Steel AISI 304/316	2	Nr
14	60161255	Bolt Allen M16 x 75	Stainless Steel AISI 304/316	4	Nr
15	60161272	Washer Bonded / Dowty Seal M16	NBR + Stainless Steel AISI 316	4	Nr
16	60161253	Bolt Allen M8 x 25	Stainless Steel AISI 304/316	2	Nr
17	60161150	Cable Top Cover Plate	Stainless Steel AISI 304/316	2	Nr
18	60161092	Washer Nylon	Nylon	2	Nr
19	60161095	Gasket Rubber	NBR	1	Nr
20	60161254	Bolt Allen M8 x 35	Stainless Steel AISI 304/316	1	Nr
21	60161263	Spring Washer M8	Stainless Steel AISI 304/316	1	Nr
22	60161262	Nut Hex M8	Stainless Steel AISI 304/316	1	Nr
23	60161080	Upper Support for Carbon Bush	Cast Iron	1	Nr
24	60161105	Upper Thrust Bearing	Brass	1	Nr
25	60101142	Screw CSK M4x10	Stainless Steel AISI 304	6	Nr
26	60161020	Carbon Bush	Carbon	4	Nr
27	60161042	Gasket Top Piece	Tesnit (BA50)	1	Nr
28	60161315	Upper Threaded Socket	Cast Iron / S Steel AISI 316	1	Nr
29	60161215	O-Ring 165x2,5	NBR	2	Nr
30A	60101197	Motor Cable Tail 1 x 12 mm ² (For Earthing)	CU + XLPE + PVC	5	Mtr
30B	60161185	Motor Tail Cable 1 x 10 / 16 / 25 / 35 mm ²	Copper + Rubber	15	Mtr
31	60161594	Flange (200-140-46)	Stainless Steel AISI 304/316	2	Nr
32	601616XX	Stator Stack (Assembly)	Silicon Steel (B50-A800)	1	Set
33	601063XX	Rotor Shaft	Stainless Steel AISI 431	1	Nr
34	60161660	Rotor Lamination (Including Shaft + Copper Bars+ End Ring)	Silicon Steel (B50-A800) + Stainless Steel + Copper	1	Set
35	60101145	Key for End Shaft	Stainless Steel	1	Nr
36	60161320	Lower Bearing Housing	Cast Iron	1	Nr
37	60161280K	Thrust Bearing	Stainless Steel / Carbon	1	Set
38	60161040	Gasket Thrust Support	Tesnit (BA50)	1	Nr
39	60161070	Thrust Support	Cast Iron / S Steel AISI 316	1	Nr
40	60161260	Bolt Allen M10x190	Stainless Steel AISI 304/316	6	Nr
41	60161000	Adjustment Bolt	Stainless Steel AISI 431/316	1	Nr
42	60161010	Lock Washer Adj. Bolt	MS	1	Nr
43	60101045	Diaphragm Rubber	NBR	1	Nr
44	60161130	Diaphragm Support	Cast Iron / S Steel AISI 316	1	Nr
45	60161037	Bottom Plate	Cast Iron / S Steel AISI 316	1	Nr



KM10

10" Borehole Submersible Electric Water Cooled Rewindable Motors

Models Range

Standard: Double Flange

Power Range

2 Pole Series:

From: 75 HP (56 kW)
To: 270 HP (200 kW)

4 Pole Series:

From: 40 HP (30 kW)
To: 175 HP (130 kW)

Voltage Range

380 ~ 415 Volts @ 50 Hertz

460 Volts @ 60 Hertz

Speed Range

2 Poles, 2900 / 3600 RPM

4 Poles, 1450 / 1750 RPM

Construction Material

Standard:

Cast Iron with NSF Certified Epoxy

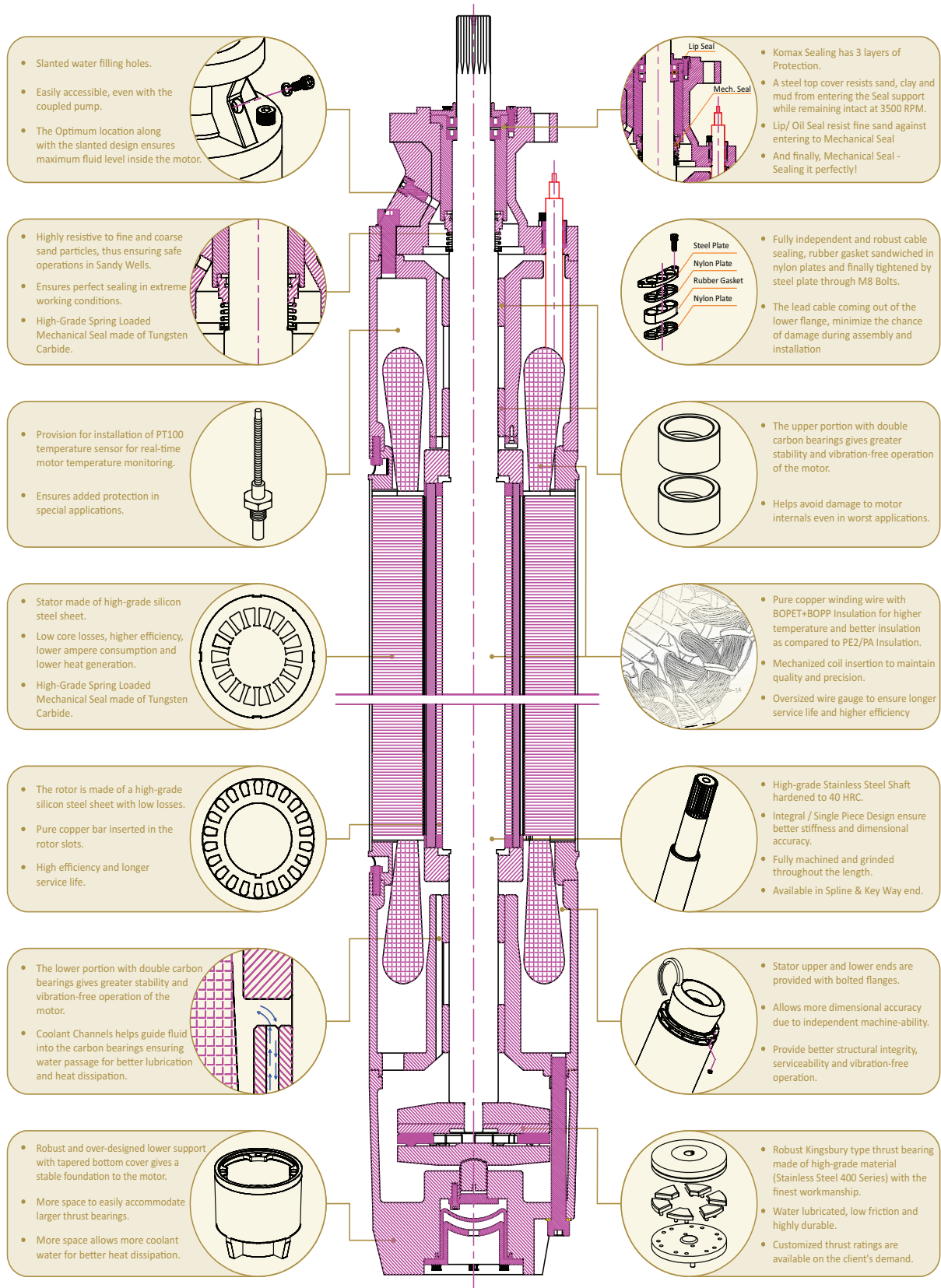
Optional:

Complete 316L Stainless Steel



X-Sectional View with Specification

KM10 Double Flange



**Salient Features**

KM10 10" water-filled submersible electric motors have asynchronous three-phase rewindable stator and squirrel cage rotor.

The new series of 10" submersible electric motors KM10 has been designed and produced according to the market's requirements. In design and material selection all efforts have been made to offer an energy-efficient product to our customers which stand for reliability, excellent quality, long and trouble-free life.

- Wet Stator Design
- High Grade Material
- Easy Maintenance
- Long Service Life
- High Thermal Capacity
- High Efficiency
- High Sand Resistance
- Re-windable
- Eco Friendly
- Industrial, Commercial, Agriculture and Irrigation Purpose

**Technical Specification**

IP68	degree of protection
A / B	insulation class
50 °C	ambient temperature
+6% / -10%	voltage tolerance
Vertical/Horizontal	mounting position
16 cm/sec	min. cooling flow rate speed
200 m	max. immersion depth
10	max. starts per hour
Rotation	CCW facing shaft end
Wooden case	packing

**Specification****Winding:**

Electrolytic Solid Copper wire wrapped in BOPET+BOPP Insulation rated for temperatures over 100 °C that allows more copper in the current slots. This technology allows the motor to run much cooler and achieve higher than normal horsepower ratings in standard frame sizes.

Stator:

All motors having interlocked M800 low-loss electrical magnetic sheet stator stack with an increased length for cooler running motor.

Rotor:

Increased interlocked stack length with M800 low-loss electrical magnetic sheet assembled and designed with the newest technology and highgrade copper bars.

Spline Shaft:

AISI 431 stainless steel induction hardened & ground to operate in severe conditions. Dimensions according to international 8"/10" NEMA standards.

Shaft Bearing/Bush:

Dual Water lubricated guide bearings made of high-grade carbon, are fixed in upper and lower brackets for optimal operation in sandy wells and pump vibration control.

Thrust Bearings:

All Komax submersible motors have Kingsbury type thrust bearing. The thrust assembly consists of a high-quality carbon disc with hardened stainless steel shoes to handle necessary pump thrust loads. Available with an axial load capacity of 120000 N.

Seal Configuration:

Komax offers a triple seal configuration that consists of two outer back to back lip seals in NBR with an inner Tungsten Carbide Seal for optimum protection in sandy wells.

Pressure Equalizing System:

Pressure compensation is managed by using a suitably sized NBR bellow to allow for expansion of the internal water as it heats up- or- from external pressure due to the depth of submergence.

Brackets:

High resistance cast iron upper & lower bearing housing with epoxy coating.

Filler Fluid:

Water mixed with non-toxic antifreeze provide cooling and lubrication, also protect and prevent inside parts from corrosion.

Connection:

Connected through rubber sheathed cable. Available in Delta & WYE (Star) configuration.

Note: All specifications are subject to change without any prior notice.

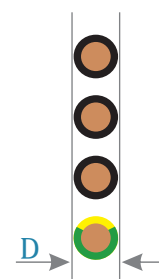


Electrical DATA - 50 Hz & 60 Hz - 2 Pole

Technical Data - Three Phase - 2 Pole - 380~415 Volt @ 50 Hz - 460 Volt @ 60 Hz														
Motor Type	Motor Size		RPM	Full Load Current (Amp.)	Safety Load Current (Amp.)	Starting Current (Amp.)	Efficiency at % Load			Cos. Φ at % Load			Service Factor	
	HP	kW					50	75	100	50	75	100		
380-415V @ 50 Hz	KM10 075T	75	56	2900	111,5		535	80,6	86,7	86,4	0,71	0,80	0,84	1
	KM10 100T	100	75	2890	146,0		701	81,5	87,4	86,9	0,72	0,81	0,85	1
	KM10 125T	125	93	2895	183,6		900	81,9	87,4	87,1	0,72	0,80	0,84	1
	KM10 150T	150	112	2905	217,0		1085	82,7	88,1	87,7	0,73	0,81	0,85	1
	KM10 175T	175	130	2910	257,6		1366	83,9	87,9	87,3	0,73	0,80	0,84	1
	KM10 200T	200	150	2900	291,9		1576	84,5	87,9	87,0	0,75	0,81	0,85	1
	KM10 250T	250	186	2905	366,3		2051	84,7	88,1	87,3	0,74	0,81	0,84	1
460V @ 60 Hz	KM10 075T	75	56	3495	97,5	112,0	468	80,3	86,5	86,2	0,70	0,79	0,84	1,15
	KM10 100T	100	75	3490	127,7	147,0	613	81,3	87,1	86,7	0,71	0,80	0,85	1,15
	KM10 125T	125	93	3500	160,9	185,3	788	81,6	87,2	86,8	0,71	0,80	0,84	1,15
	KM10 150T	150	112	3505	189,5	218,7	948	82,2	87,9	87,5	0,72	0,81	0,85	1,15
	KM10 175T	175	130	3510	225,0	259,5	1193	83,8	87,7	87,1	0,72	0,80	0,84	1,15
	KM10 200T	200	150	3500	255,1	294,0	1377	84,3	87,7	86,8	0,74	0,81	0,85	1,15
	KM10 250T	250	186	3505	320,4	370,6	1794	84,4	87,8	87,1	0,73	0,80	0,84	1,15
	KM10 270T	270	200	3500	338,7	391,6	1965	85,0	88,5	87,6	0,75	0,82	0,85	1,15

Technical DATA - 2 Pole

Size & Dimensions Motor Tail Cable - Three Phase 2 Pole - 380~415 Volt @ 50 Hz - 460 Volt @ 60 Hz							
Sr: No.	Motor Size		Cable Size Nos. x Cross Section (mm ²)	Dimension B x H (mm)	Cable Length (mtr)	Qty (Nr.)	
	HP	kW					
DOL	1	75 ~ 100	56 ~ 75	1 x 25	13,46	5	3
	2	125	93	1 x 35	14,98	5	3
	3	150 ~ 175	112 ~ 130	1 x 50	17,27	5	3
	4	200	150	1 x 70	19,55	5	3
	5	250 ~ 270	186 ~ 200	1 x 95	22,09	5	3
SD	6	75 ~ 175	56 ~ 130	1 x 25	13,46	5	6
	7	200	150	1 x 35	14,98	5	6
	8	250 ~ 270	186 ~ 200	1 x 50	17,27	5	6



Additional core 1 x 12 mm² 5 meters for earthing.



Technical DATA - 2 Pole

Motor Dimensions and Weights KM10 - 2 Poles, DOL

Motor Type	Motor Size		Thrust Load (N)	Motor Length		Packing Dimension W x H x L (mm)	Weight (Kg)	
	HP	kW		L (mm)	L1 (mm)		Without Packing	With Packing
KM10 075T	75	56	120000	1285	1184	363 x 452 x 1438	180	198
KM10 100T	100	75	120000	1537	1435	363 x 452 x 1689	296	324
KM10 125T	125	93	120000	1537	1435	363 x 452 x 1689	296	324
KM10 150T	150	112	120000	1636	1534	363 x 452 x 1788	332	360
KM10 175T	175	130	120000	1836	1735	363 x 452 x 1946	374	404
KM10 200T	200	150	120000	1836	1735	363 x 452 x 1946	374	404
KM10 250T	250	186	120000	2035	1933	363 x 452 x 2187	429	463
KM10 270T	270	200	120000	2136	2035	363 x 452 x 2289	536	567

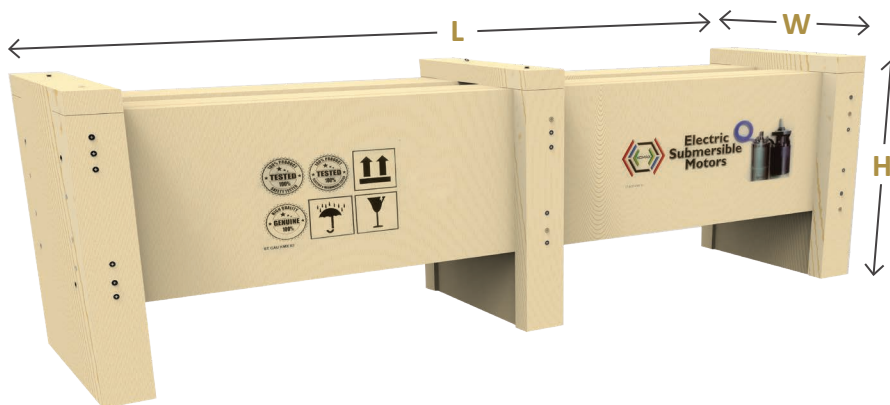
Motor Dimensions and Weights KM10 - 2 Poles, SD

Motor Type	Motor Size		Thrust Load (N)	Motor Length		Packing Dimension W x H x L (mm)	Weight (Kg)	
	HP	kW		L (mm)	L1 (mm)		Without Packing	With Packing
KM10 075T	75	56	120000	1285	1184	363 x 452 x 1438	189	211
KM10 100T	100	75	120000	1537	1435	363 x 452 x 1689	309	337
KM10 125T	125	93	120000	1537	1435	363 x 452 x 1689	309	337
KM10 150T	150	112	120000	1636	1534	363 x 452 x 1788	345	373
KM10 175T	175	130	120000	1836	1735	363 x 452 x 1946	387	417
KM10 200T	200	150	120000	1836	1735	363 x 452 x 1946	387	417
KM10 250T	250	186	120000	2035	1933	363 x 452 x 2187	442	476
KM10 270T	270	200	120000	2136	2035	363 x 452 x 2289	549	581

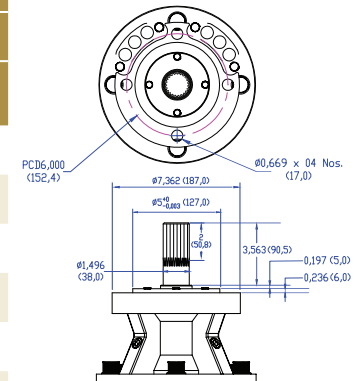
Note: For KM10 motor with 10"x10" Keyed Shaft

* = 25 mm length increased in "L".

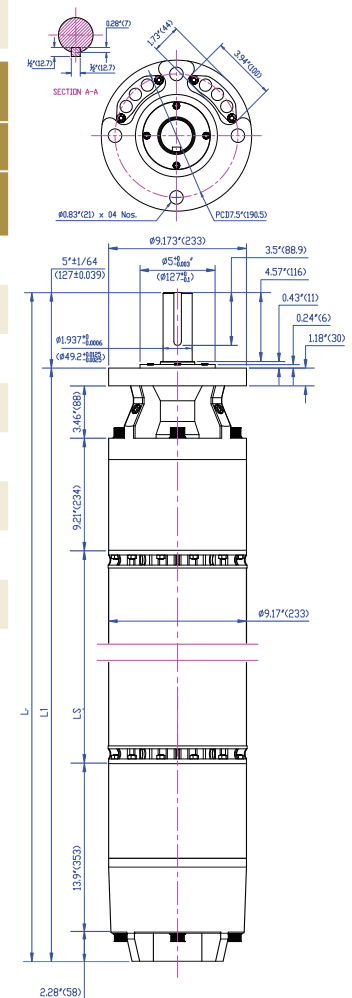
* = Both weight increased by 7.3 Kg.



10"x 8" NEMA Spline Shaft



10"x10" Key way Shaft



All dimensions are in mm

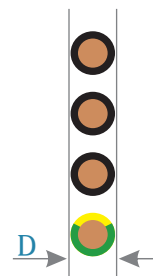


Electrical DATA - 50 Hz & 60 Hz - 4 Pole

	Technical Data - Three Phase - 4 Pole - 380~415 Volt @ 50 Hz - 460 Volt @ 60 Hz													
	Motor Type	Motor Size		RPM	Full Load Current (Amp.)	Safety Load Current (Amp.)	Starting Current (Amp.)	Efficiency at % Load			Cos. Φ at % Load			Service Factor
		HP	kW					50	75	100	50	75	100	
380-415V @ 50 Hz	KM10 040-4	40	30	1420	63,2		297	84,5	85,3	84,9	0.58	0.72	0.80	1
	KM10 050-4	50	37	1420	77,5		387	84,9	85,5	85,0	0.62	0.75	0.82	1
	KM10 060-4	60	45	1425	92,6		500	85,5	86,1	85.3	0.62	0.75	0.82	1
	KM10 075-4	75	56	1425	115,6		624	86,1	86,9	85.4	0.65	0.76	0.82	1
	KM10 100-4	100	75	1420	155,9		857	88,0	86,9	85.4	0.63	0.75	0.81	1
	KM10 125-4	125	93	1425	191,9		1056	87,6	86,9	85.2	0.64	0.76	0.82	1
	KM10 150-4	150	112	1425	212,4		1253	86,4	88,5	87.7	0.74	0.83	0.87	1
	KM10 175-4	175	130	1415	265,7		1461	86,1	87,3	85.8	0.66	0.77	0.83	1
460V @ 60 Hz	KM10 040-4	40	30	1715	54.2	60.7	285	85.6	86,5	86.0	0.61	0.74	0.80	1,15
	KM10 050-4	50	37	1720	68.5	76.9	385	85.9	86.7	86.5	0.59	0.72	0.79	1,15
	KM10 060-4	60	45	1725	81.2	91.6	495	86.3	87.1	86.9	0.6	0.73	0.80	1,15
	KM10 075-4	75	56	1730	102.3	115.6	624	86.3	87.7	87.0	0.59	0.72	0.79	1,15
	KM10 100-4	100	75	1725	134.2	153.8	846	88.5	88.3	87.1	0.63	0.74	0.80	1,15
	KM10 125-4	125	93	1730	167.7	192.4	1058	86.7	88.3	87.4	0.63	0.74	0.80	1,15
	KM10 150-4	150	112	1725	185.5	210.9	1170	87.7	90.0	89.7	0.70	0.80	0.84	1,15
	KM10 175-4	175	130	1715	229	261.7	1439	86.3	88.5	87.6	0.65	0.76	0.82	1,15

Technical DATA - 4 Pole

Size & Dimensions Motor Tail Cable - Three Phase 4 Pole - 380~415 Volt @ 50 Hz - 460 Volt @ 60 Hz						
Sr: No.	Motor Size		Cable Size Nos. x Cross Section (mm ²)	Dimension B x H (mm)	Cable Length (mtr)	Qty (Nr.)
	HP	kW				
DOL	1	40 ~ 100	30 ~ 75	1 x 25	13,46	3
	2	125	93	1 x 35	14,98	3
	3	150 ~ 175	112 ~ 130	1 x 50	17,27	3
SD	4	40 ~ 175	30 ~ 130	1 x 25	13,46	6



Additional core 1 x 12 mm² 5 meters for earthing.



Technical DATA - 4 Pole

Motor Dimensions and Weights KM10 - 4 Poles, DOL

Motor Type	Motor Size		Thrust Load (N)	Motor Length		Packing Dimension W x H x L (mm)	Weight (Kg)	
	HP	kW		L (mm)	L1 (mm)		Without Packing	With Packing
KM10 040-4	40	30	120000	1285	1184	368 x 455 x 1371	223	246
KM10 050-4	50	37	120000	1362	1260	368 x 455 x 1463	246	273
KM10 060-4	60	45	120000	1483	1382	368 x 455 x 1595	277	304
KM10 075-4	75	56	120000	1583	1481	368 x 455 x 1704	308	337
KM10 100-4	100	75	120000	1783	1681	368 x 455 x 1900	357	391
KM10 125-4	125	93	120000	1982	1880	368 x 455 x 2103	415	449
KM10 150-4	150	112	120000	2084	1982	368 x 455 x 2205	452	489
KM10 175-4	175	130	120000	2184	2083	368 x 455 x 2306	495	536

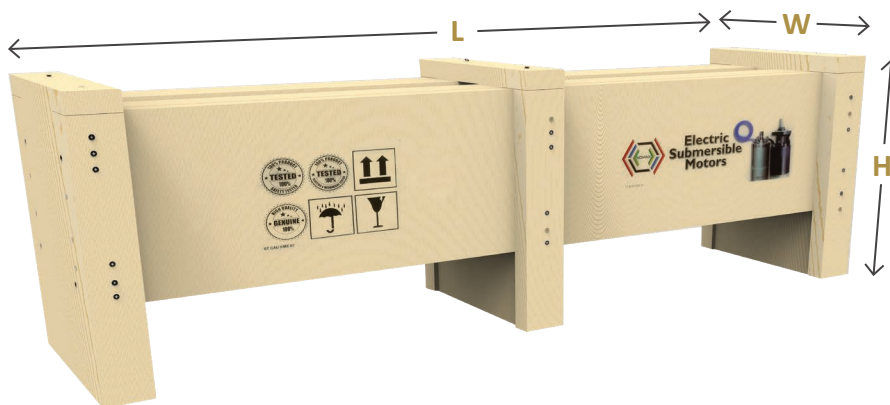
Motor Dimensions and Weights KM10 - 4 Poles, SD

Motor Type	Motor Size		Thrust Load (N)	Motor Length		Packing Dimension W x H x L (mm)	Weight (Kg)	
	HP	kW		L (mm)	L1 (mm)		Without Packing	With Packing
KM10 040-4	40	30	120000	1285	1184	368 x 455 x 1371	230	253
KM10 050-4	50	37	120000	1362	1260	368 x 455 x 1463	252	279
KM10 060-4	60	45	120000	1483	1382	368 x 455 x 1595	284	311
KM10 075-4	75	56	120000	1583	1481	368 x 455 x 1704	314	343
KM10 100-4	100	75	120000	1783	1681	368 x 455 x 1900	364	397
KM10 125-4	125	93	120000	1982	1880	368 x 455 x 2103	423	457
KM10 150-4	150	112	120000	2084	1982	368 x 455 x 2205	463	499
KM10 175-4	175	130	120000	2184	2083	368 x 455 x 2306	506	547

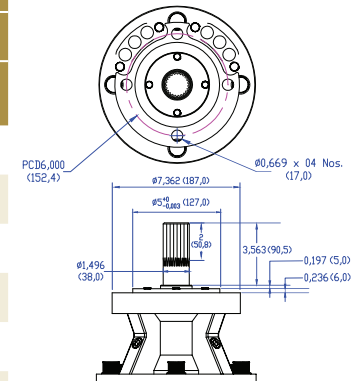
Note: For KM10 motor with 10"x10" Keyed Shaft

* = 25 mm length increased in "L".

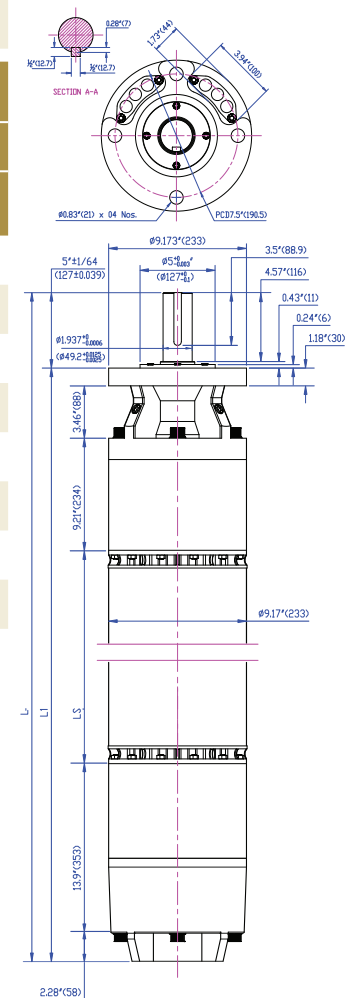
* = Both weight increased by 7.3 Kg.



10"x 8" NEMA Spline Shaft

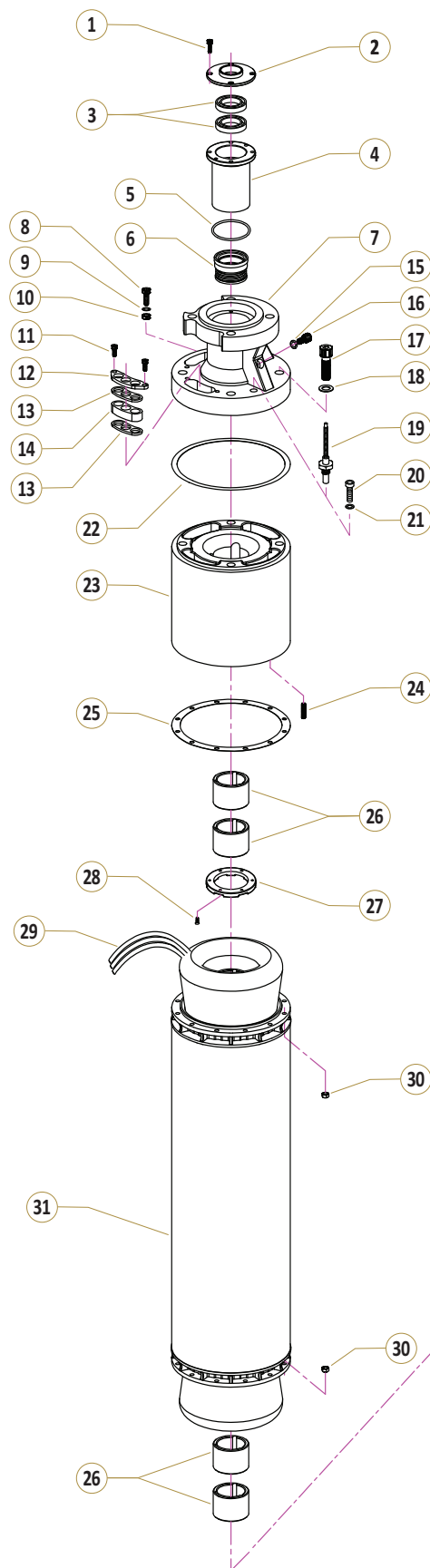


10"x10" Key way Shaft

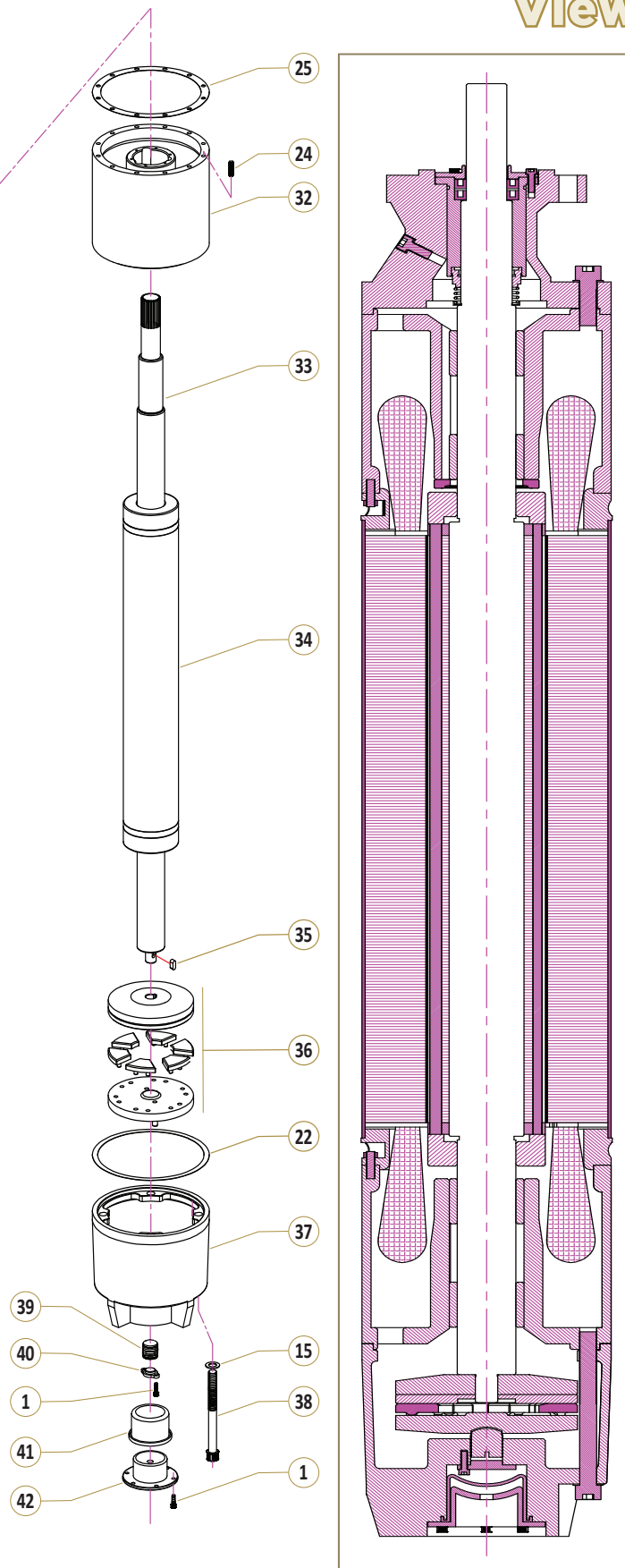


All dimensions are in mm

Exploded View



Cross-Sectional View



**Parts LIST** with Material & Quantity

Pos.	Item Code	Part Name	Material	Qty	Unit
1	60161252	Bolt Allen M6 x 20	Stainless Steel AISI 304/316	12	Nr
2	60161085	Mechanical Seal Cover	S Steel AISI 431/316/Bronze	1	Nr
3	60161127	Oil Seal 38x60x10	NBR	2	Nr
4	60161125	Bush Seal Support	Cast Iron / S Steel AISI 316	1	Nr
5	60161115	O-Ring 65x2,5	NBR	1	Nr
6	60161275	Mechanical Seal Complete	Silicon Tungsten Carbide (WC) + NBR + Stainless Steel	1	Nr
7	60271000	Top Piece / Upper Support Double Flange	Cast Iron / S Steel AISI 316	1	Nr
8	60161254	Bolt Allen M8 x 35	Stainless Steel AISI 304/316	1	Nr
9	60161263	Spring Washer M8	Stainless Steel AISI 304/316	1	Nr
10	60161262	Nut Hex M8	Stainless Steel AISI 304/316	1	Nr
11	60161253	Bolt Allen M8 x 25	Stainless Steel AISI 304/316	2	Nr
12	60161150	Cable Top Cover Plate	Carbon Steel / S Steel AISI 316	2	Nr
13	60271165	Washer Nylon	Nylon	2	Nr
14	60271180	Gasket Rubber	NBR	1	Nr
15	60101157	Washer Bonded / Dowty Seal M10	NBR + Stainless Steel AISI 316	2	Nr
16	60101068	Bolt Allen M10 x 16	Stainless Steel AISI 304/316	2	Nr
17	60161255	Bolt Allen M16 x 75	Stainless Steel AISI 304/316	4	Nr
18	60161272	Washer Bonded / Dowty Seal M16	NBR + Stainless Steel AISI 316	8	Nr
19	60101485	PT 100 Sensor	Stainless Steel AISI 304/316	1	Nr
20	60161250	Bolt Allen M8x20	Stainless Steel AISI 304/316	9	Nr
21	60161267	Washer Bonded / Dowty Seal M8	NBR + Stainless Steel AISI 316	2	Nr
22	60271150	Gasket Upper & Lower	Tesnit (BA50)	2	Nr
23	60161080	Upper Bearing Housing	Cast Iron	1	Nr
24	60271170	Setscrew / Stud Bolt M8x35	Stainless Steel AISI 304/316	24	Nr
25	60271152	Gasket Stator	Tesnit (BA50)	2	Nr
26	60271100	Carbon Bush	Carbon	4	Nr
27	60271030	Upper Thrust Bearing	Brass	1	Nr
28	60101142	Screw CSK M4x10	Stainless Steel AISI 304	6	Nr
29A	601011XX	Motor Tail Cable (1 x 25/35/50/70/95 mm ²)	Copper + Rubber	48	Ft
29B	60101185	Motor Tail Cable 1 x 12 mm ² (For Earthing)	CU + XLPE + PVC	16	Ft
30	60161262	Nut Hex M8	Stainless Steel AISI 304/316	24	Nr
31	602712XX	Stator Stack (Assembly)	Silicon Steel (B50-A800)	1	Set
32	60271040	Lower Bearing Housing	Cast Iron / S Steel AISI 316	1	Nr
33	602713XX	Rotor Shaft	Stainless Steel AISI 431/316	1	Nr
34	60271330	Rotor Lamination (Including Shaft + Copper Bars + End Ring)	Silicon Steel (B50-A800) + Stainless Steel + Copper	1	Set
35	60101145	Key for End Shaft	Stainless Steel AISI 304	1	Nr
36	60271050	Thrust Bearing Complete	Stainless Steel / Carbon	1	Set
37	60271020	Thrust Support	Cast Iron / S Steel AISI 316	1	Nr
38	60271142	Bolt Allen M16x180	Stainless Steel AISI 304/316	4	Nr
39	60271140	Adjustment Bolt	Stainless Steel AISI 431	1	Nr
40	60161010	Lock Washer Adj. Bolt	MS	1	Nr
41	60271130	Diaphragm Rubber	NBR	1	Nr
42	60271135	Diaphragm Support	Cast Iron / S Steel AISI 316	1	Nr

KM12

12" Borehole Submersible Electric Water Cooled Rewindable Motors

Models Range

Standard: Double Flange

Power Range

4 Pole Series:

From: 100 HP (75 kW)

To: 300 HP (220 kW)

Voltage Range

380 ~ 415 Volts @ 50 Hertz

460 Volts @ 60 Hertz

Speed Range

4 Poles, 1450 / 1750 RPM

Construction Material

Standard:

Cast Iron with NSF Certified Epoxy

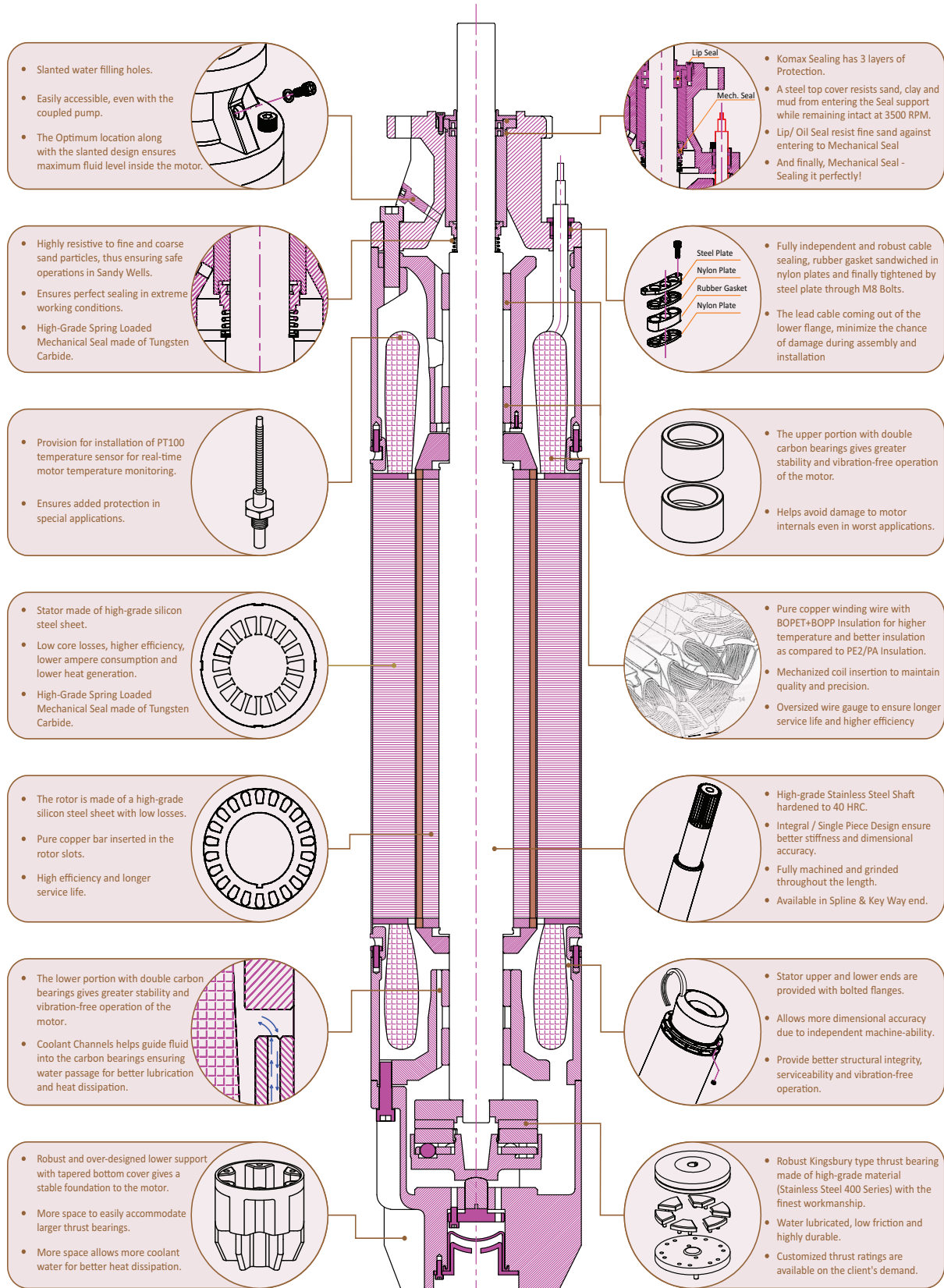
Optional:

Complete 316L Stainless Steel



X-Sectional View with Specification

KM12 Double Flange





Salient Features

KM12 12" water-filled submersible electric motors have asynchronous three-phase rewindable stator and squirrel cage rotor.

The new series of 12" submersible electric motors KM12 has been designed and produced according to the market's requirements. In design and material selection all efforts have been made to offer an energy-efficient product to our customers which stand for reliability, excellent quality, long and trouble-free life.

- Wet Stator Design
- High Grade Material
- Easy Maintenance
- Long Service Life
- High Thermal Capacity
- High Efficiency
- High Sand Resistance
- Re-windable
- Eco Friendly
- Industrial, Commercial, Agriculture and Irrigation Purpose



Technical Specification

IP68	degree of protection
A / B	insulation class
50 °C	ambient temperature
+6% / -10%	voltage tolerance
Vertical/Horizontal	mounting position
16 cm/sec	min. cooling flow rate speed
200 m	max. immersion depth
8	max. starts per hour
Rotation	CCW facing shaft end
Wooden case	packing



Specification

Winding:

Electrolytic Solid Copper wire wrapped in BOPET+BOPP Insulation rated for temperatures over 100 °C that allows more copper in the current slots. This technology allows the motor to run much cooler and achieve higher than normal horsepower ratings in standard frame sizes.

Stator:

All motors having interlocked M800 low-loss electrical magnetic sheet stator stack with an increased length for cooler running motor.

Rotor:

Increased interlocked stack length with M800 low-loss electrical magnetic sheet assembled and designed with the newest technology and highgrade copper bars.

Spline Shaft:

AISI 431 stainless steel induction hardened & ground to operate in severe conditions. 8"/10" shaft dimensions according to international standards.

Shaft Bearing/Bush:

Dual Water lubricated guide bearings made of high-grade carbon, are fixed in upper and lower brackets for optimal operation in sandy wells and pump vibration control.

Thrust Bearings:

All Komax submersible motors have Kingsbury type thrust bearing. The thrust assembly consists of a high-quality carbon disc with hardened stainless steel shoes to handle necessary pump thrust loads. Available with an axial load capacity of 120000 N.

Seal Configuration:

Komax offers a triple seal configuration that consists of two outer back to back lip seals in NBR with an inner Tungsten Carbide Seal for optimum protection in sandy wells.

Pressure Equalizing System:

Pressure compensation is managed by using a suitably sized NBR bellow to allow for expansion of the internal water as it heats up- or- from external pressure due to the depth of submergence.

Brackets:

High resistance cast iron upper & lower bearing housing with epoxy coating.

Filler Fluid:

Water mixed with non-toxic antifreeze provide cooling and lubrication, also protect and prevent inside parts from corrosion.

Connection:

Connected through rubber sheathed cable. Available in Delta & WYE (Star) configuration.

Note: All specifications are subject to change without any prior notice.



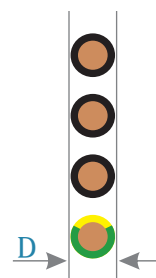
Electrical DATA - 50 Hz & 60 Hz - 4 Pole

Technical Data - Three Phase - 4 Pole - 380~415 Volt @ 50 Hz - 460 Volt @ 60 Hz														
	Motor Type	Motor Size		RPM	Full Load Current (Amp.)	Safety Load Current (Amp.)	Starting Current (Amp.)	Efficiency at % Load			Cos. Φ at % Load			Service Factor
		HP	kW					50	75	100	50	75	100	
380-415V @ 50 Hz	KM12 100-4	100	75	1435	148.4	0	816	85.0	88.0	87.7	0.66	0.77	0.83	1
	KM12 125-4	125	93	1430	178.4	0	1017	86.3	88.4	87.9	0.71	0.81	0.86	1
	KM12 150-4	150	112	1425	212.4	0	1253	86.4	88.5	87.7	0.74	0.83	0.87	1
	KM12 175-4	175	130	1430	252.4	0	1489	86.4	88.4	88.0	0.68	0.79	0.85	1
	KM12 200-4	200	150	1425	288.2	0	1729	86.4	88.9	88.4	0.69	0.8	0.85	1
	KM12 225-4	225	168	1415	314.3	0	1886	86.5	88.4	87.8	0.79	0.85	0.88	1
	KM12 250-4	250	186	1420	351.6	0	2110	86.6	88.3	87.7	0.77	0.85	0.87	1
460V @ 60 Hz	KM12 100-4	100	75	1720	122.2	139.7	753	86.9	89.8	89.4	0.73	0.82	0.86	1,15
	KM12 125-4	125	93	1720	152.4	174.8	947	87.7	89.7	89.3	0.73	0.82	0.86	1,15
	KM12 150-4	150	112	1725	185.5	210.9	1170	87.7	90.0	89.7	0.70	0.80	0.84	1,15
	KM12 175-4	175	130	1725	214.9	246.0	1379	87.8	90.1	90.0	0.71	0.81	0.85	1,15
	KM12 200-4	200	150	1720	242.5	278.3	1603	87.8	90.4	90.1	0.74	0.83	0.86	1,15
	KM12 225-4	225	168	1720	273.1	312.6	1763	87.8	90.2	89.9	0.75	0.83	0.86	1,15
	KM12 250-4	250	186	1725	304.6	347.5	1981	87.9	90.1	89.8	0.73	0.82	0.86	1,15
	KM12 270-4	270	201	1730	340.9	390.2	2261	87	90.8	90.7	0.7	0.78	0.82	1,15
	KM12 300-4	300	223	1725	372.2	424.4	2485	87.6	90.3	90.2	0.69	0.79	0.84	1,15

Technical DATA - 4 Pole

Size & Dimensions Motor Tail Cable - Three Phase 4 Pole - 380~415 Volt @ 50 Hz - 460 Volt @ 60 Hz							
Sr: No.	Motor Size		Cable Size Nos. x Cross Section (mm ²)	Dimension B x H (mm)	Cable Length (mtr)	Qty (Nr.)	
	HP	kW					
DOL	1	100 ~ 175	75 ~ 130	1 x 50	17,27	5	3
	2	200 ~ 250	150 ~ 186	1 x 70	19,55	5	3
	3	270 ~ 300	201 ~ 223	1 x 95	22,09	5	3
SD	4	100 ~ 300	75 ~ 223	1 x 50	17,27	5	6

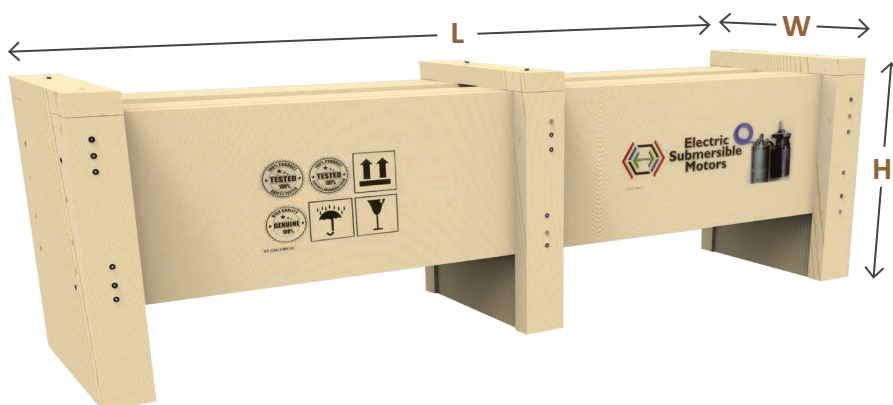
Additional core 1 x 12 mm² 5 meters for earthing.



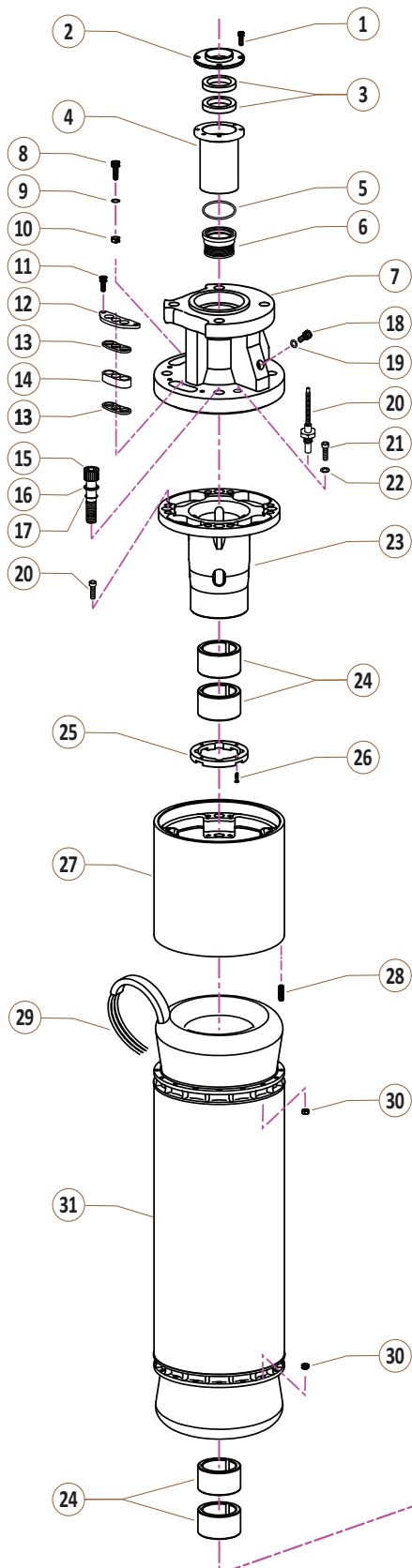
Technical DATA - 4 Pole

Motor Dimensions and Weights KM12 - 4 Poles, DOL								
Motor Type	Motor Size		Thrust Load (N)	Motor Length		Packing Dimension W x H x L (mm)	Weight (Kg)	
	HP	kW		L (mm)	L1 (mm)		Without Packing	With Packing
KM12 100-4	100	75	120000	1604	1477	420 x 530 x 1715	414	459
KM12 125-4	125	93	120000	1724	1597	420 x 530 x 1835	440	490
KM12 150-4	150	112	120000	1844	1717	420 x 530 x 1950	490	541
KM12 175-4	175	130	120000	1994	1867	420 x 530 x 2100	547	602
KM12 200-4	200	150	120000	2104	1977	420 x 530 x 2212	584	643
KM12 225-4	225	168	120000	2324	2197	420 x 530 x 2435	674	735
KM12 250-4	250	186	120000	2324	2197	420 x 530 x 2435	674	735
KM12 270-4	270	201	120000	2424	2297	420 x 530 x 2550	711	774
KM12 300-4	300	223	120000	2424	2297	420 x 530 x 2550	711	774

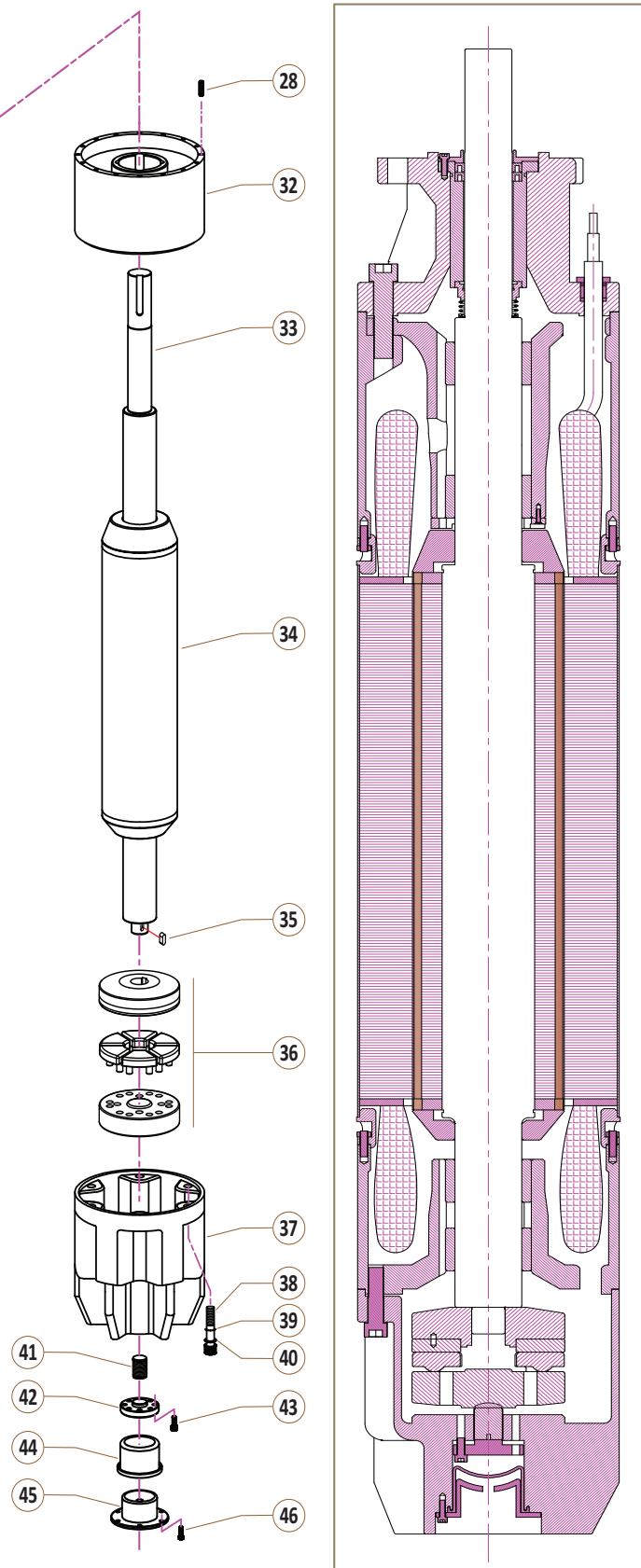
Motor Dimensions and Weights KM12 - 4 Poles, SD								
Motor Type	Motor Size		Thrust Load (N)	Motor Length		Packing Dimension W x H x L (mm)	Weight (Kg)	
	HP	kW		L (mm)	L1 (mm)		Without Packing	With Packing
KM12 100-4	100	75	120000	1604	1477	420 x 530 x 1715	424	469
KM12 125-4	125	93	120000	1724	1597	420 x 530 x 1835	451	501
KM12 150-4	150	112	120000	1844	1717	420 x 530 x 1950	501	552
KM12 175-4	175	130	120000	1994	1867	420 x 530 x 2100	557	612
KM12 200-4	200	150	120000	2104	1977	420 x 530 x 2212	595	654
KM12 225-4	225	168	120000	2324	2197	420 x 530 x 2435	681	742
KM12 250-4	250	186	120000	2324	2197	420 x 530 x 2435	681	742
KM12 270-4	270	201	120000	2424	2297	420 x 530 x 2550	713	776
KM12 300-4	300	223	120000	2424	2297	420 x 530 x 2550	713	776



Exploded View



Cross-Sectional View

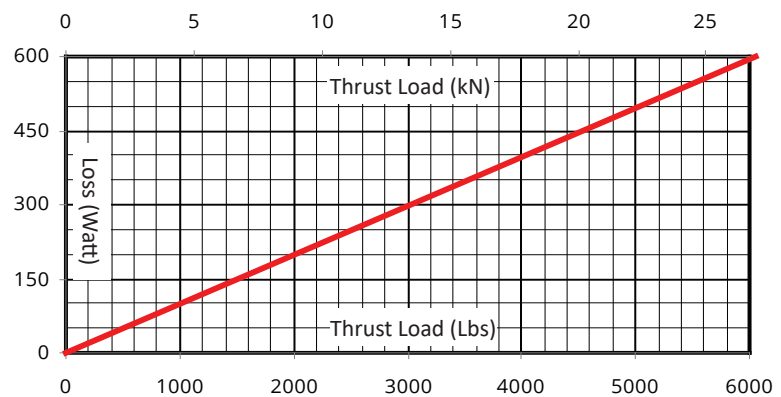
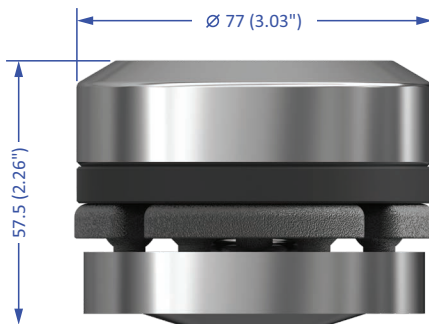
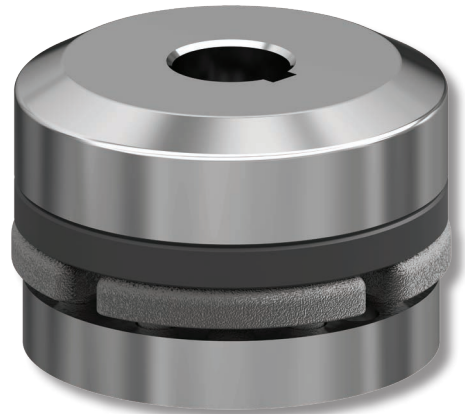


**Parts LIST** with Material & Quantity

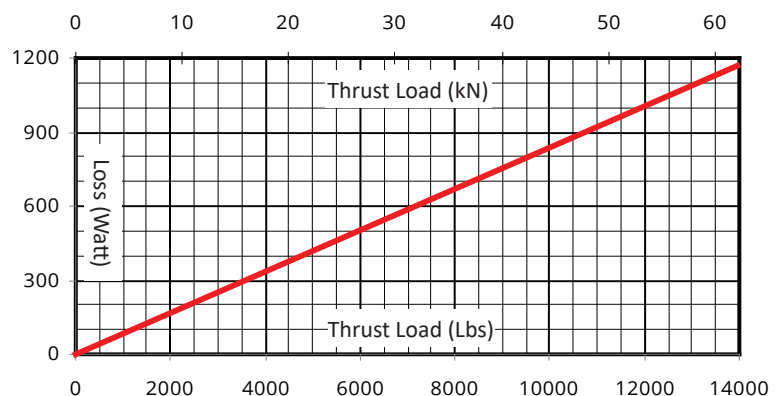
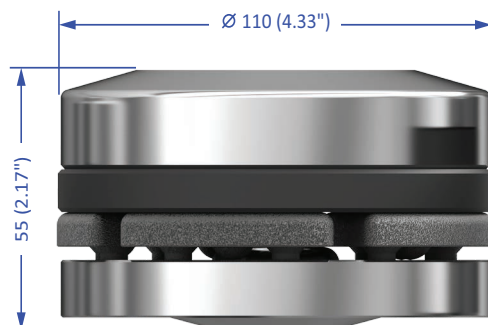
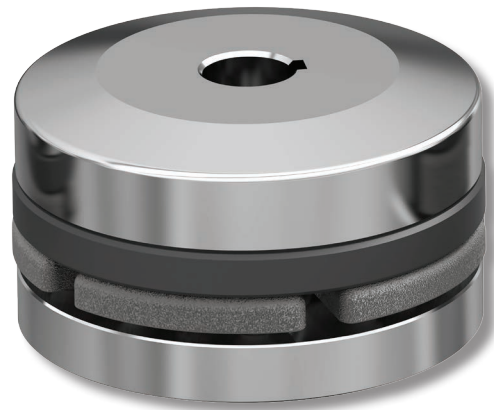
Pos.	Item Code	Part Name	Material	Qty	Unit
1	6010-11-1137	Bolt Allen M6 x 25	Stainless Steel AISI 304/316	4	Nr
2	6017-12-0120	Seal Support Cover	Stainless Steel AISI 316/Brass	1	Nr
3	60271085	Oil Seal 50x70x10	NBR	2	Nr
4	6017-12-0125	Mech. Seal Bush Support	Cast Iron / S Steel AISI 316	1	Nr
5	60271115	O-Ring Seal Support	NBR	1	Nr
6	60271095	Mechanical Seal Complete 10x10	Silicon Tungsten Carbide (WC) + NBR + Stainless Steel	1	Nr
7	6017-12-0000	Top Piece / Upper Support	Cast Iron / S Steel AISI 316	1	Nr
8	60161254	Bolt Allen M8 x 35	Stainless Steel AISI 304/316	1	Nr
9	60161263	Spring Washer M8	Stainless Steel AISI 304/316	1	Nr
10	60161262	Nut Hex M8	Stainless Steel AISI 304/316	1	Nr
11	60161253	Bolt Allen M8 x 25	Stainless Steel AISI 304/316	8	Nr
12	6017-12-0175	Cable Top Cover Plate	Carbon Steel / S Steel AISI 316	4	Nr
13	6017-12-0210	Washer Nylon Tail Cable	Nylon	4	Nr
14	6017-12-0190	Gasket Rubber Tail Cable	NBR	2	Nr
15	6000-12-0150	Bolt Allen M20 x 100	Stainless Steel AISI 304/316	4	Nr
16	6017-12-0140	Lock Washer M20	Stainless Steel AISI 304	4	Nr
17	6017-12-0245	O-Ring 18.64 x 3.5	NBR	4	Nr
18	60101068	Bolt Allen M10 x 16	Stainless Steel AISI 304/316	2	Nr
19	60101157	Washer Bonded / Dowty Seal M10	NBR / Stainless Steel AISI 316	2	Nr
20	60101485	PT 100 Sensor (Optional)	Stainless Steel AISI 304/316	1	Nr
21	60161250	Bolt Allen M8x20	Stainless Steel AISI 304/316	9	Nr
22	60161267	Washer Bonded / Dowty Seal M8	NBR / Stainless Steel AISI 316	1	Nr
23	6017-12-0015	Upper Bearing Housing	Cast Iron / S Steel AISI 316	1	Nr
24	6000-12-0050	Carbon Bush	Carbon	4	Nr
25	6017-12-0020	Upper Thrust Bearing	Bronze	1	Nr
26	60101142	Screw CSK M4x10	Stainless Steel AISI 304	4	Nr
27	6017-12-0010	Upper Support	Cast Iron / S Steel AISI 316	1	Nr
28	60271170	Stud Bolt M8x35	Stainless Steel AISI 304/316	32	Nr
29A	601611XX	Motor Tail Cable 1 x 50 / 70 / 95 mm ²	Copper + Rubber	48	Ft
29B	60101185	Motor Tail Cable 1 x 12 mm ² (For Earthing)	CU + XLPE + PVC	16	Ft
30	60161262	Nut Hex M8	Stainless Steel AISI 304/316	32	Nr
31	6000-12-XXXX	Stator Stack (Assembly) Including Sheet + Flanges	Silicon Steel (B50-A800) + Stainless Steel	1	Set
32	60271040	Lower Bearing Housing	Cast Iron / S Steel AISI 316	1	Nr
33	602713XX	Rotor Shaft	Stainless Steel AISI 431/316	1	Nr
34	60271330	Rotor Lamination (Including Shaft + Copper Bars + End Ring)	Silicon Steel (B50-A800) + Stainless Steel + Copper	1	Set
35	60101145	Key for End Shaft	Stainless Steel AISI 304	1	Nr
36	6000-12-0040	Thrust Bearing Complete	Stainless Steel + Carbon	1	Set
37	6017-12-0030	Thrust Support	Cast Iron / S Steel AISI 316	1	Nr
38	60161255	Bolt Allen M16 x 75	Stainless Steel AISI 304/316	6	Nr
39	6017-12-0240	O-Ring 15.47 x 3.5	NBR	6	Nr
40	6017-12-0142	Lock Washer M16	Stainless Steel AISI 304	6	Nr
41	6017-12-0155	Adjustment Bolt	Stainless Steel AISI 304/316	1	Nr
42	6017-12-0160	Thrust Lock Washer	Stainless Steel AISI 304/316	1	Nr
43	60161250	Bolt Allen M8 x 25	Stainless Steel AISI 304	4	Nr
44	60271130	Diaphragm Rubber	NBR	1	Nr
45	60271135	Diaphragm Support	Cast Iron / S Steel AISI 316	1	Nr
46	60161252	Bolt Allen M6 x 20	Stainless Steel AISI 304/316	6	Nr

Thrust BEARINGS

Bearing Model	TB77S4
Capacity	6000 Lbs (26.6 kN)
Application (Standard)	KM6 5.5 HP to 50 HP
No. of Segments	4 Nrs
Segment Area	550 mm ² (0.853 in ²)
Total Contact Area	2200 mm ² (3.41 in ²)
Carbon Pad OD	77 mm (3.031 in)
Carbon Pad ID	31.5 mm (1.24 in)
Bearing Height	57.5 mm (2.264 in)



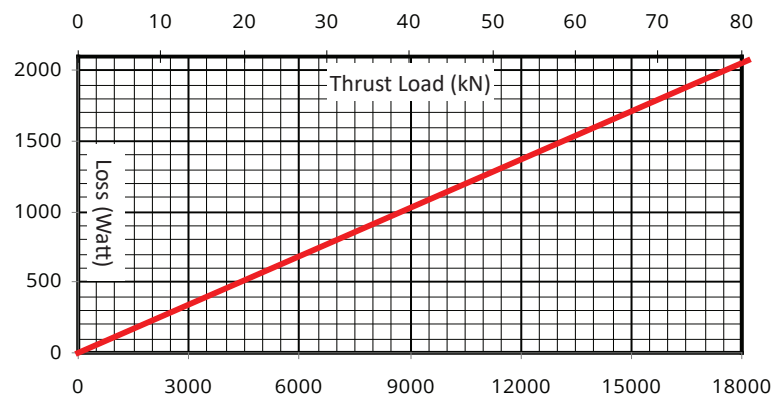
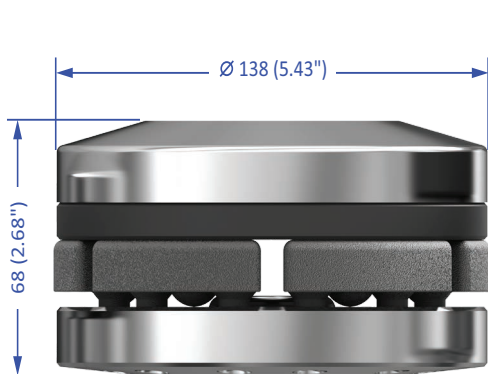
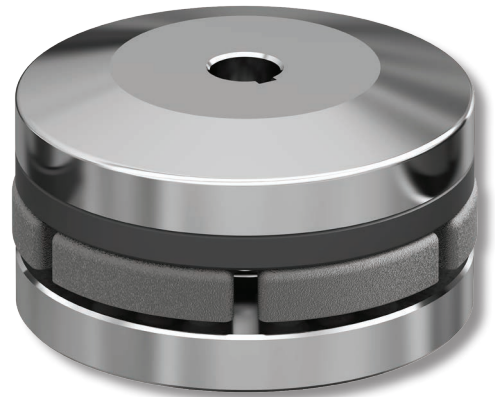
Bearing Model	TB110S5
Capacity	13849 Lbs (61.6 kN)
Application (Standard)	KM6 60 HP to 75 HP
No. of Segments	5 Nrs
Segment Area	858 mm ² (1.33 in ²)
Total Contact Area	4290 mm ² (6.65 in ²)
Carbon Pad OD	109.5 mm (4.311 in)
Carbon Pad ID	51.8 mm (2.039 in)
Bearing Height	55 mm (2.165 in)



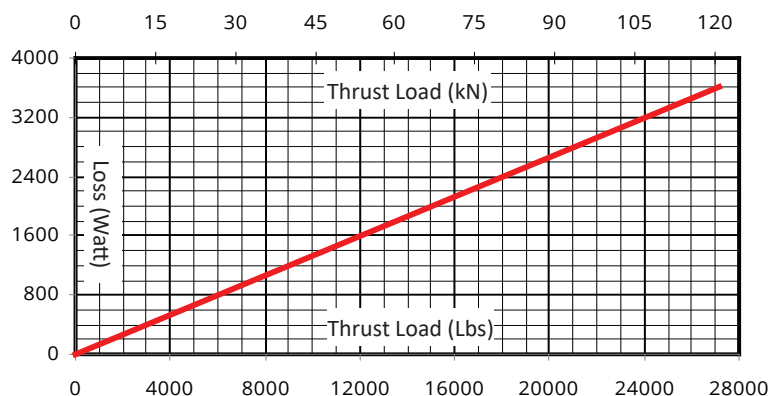
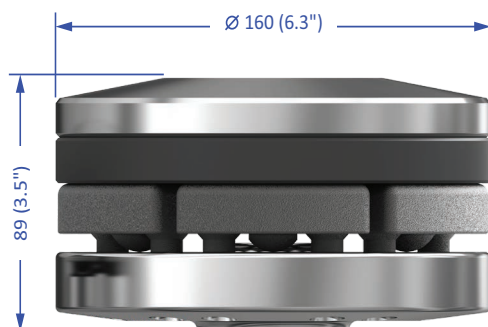
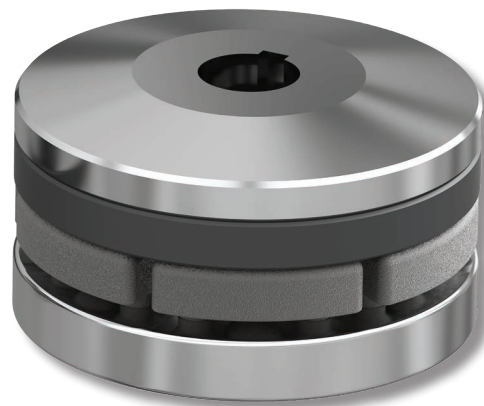


Thrust BEARINGS

Bearing Model	TB138S6
Capacity	18000 Lbs (80.1 kN)
Application (Standard)	KM8 40 HP to 200 HP
No. of Segments	6 Nrs
Segment Area	1380 mm ² (2.139 in ²)
Total Contact Area	8280 mm ² (12.834 in ²)
Carbon Pad OD	136 mm (5.354 in)
Carbon Pad ID	54 mm (2.126 in)
Bearing Height	68 mm (2.677 in)



Bearing Model	TB160S6
Capacity	27000 Lbs (120.1 kN)
Application (Standard)	KM10 75 HP to 270 HP KM12 100 HP to 300 HP
No. of Segments	6 Nrs
Segment Area	1807 mm ² (2.801 in ²)
Total Contact Area	10842 mm ² (16.805 in ²)
Carbon Pad OD	160 mm (6.299 in)
Carbon Pad ID	58 mm (2.283 in)
Bearing Height	89 mm (3.504 in)



Sensor PT100



PT100 Sensor Features

PT100s (Platinum Resistance Transducers) or RTDs (Resistance Temperature Detectors) are an economical and accurate method of measuring temperature because of the resistance of the PT100 chip changes in direct proportion to the temperature.

Komax standard PT100s are available in 3 wire configurations. The accuracy of the measured temperature increases with the number of wires, i.e. 3 wire units give a more accurate reading than 2 wire units. When PT100s are used with a suitable measuring instrument they will display the actual temperature of the sensor, wherever it is located, with a small accuracy tolerance.

Temperature Range: PT100 -50 °C to +200 °C.

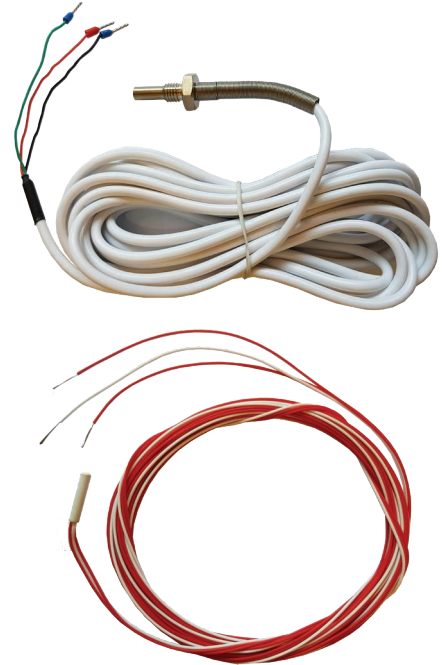
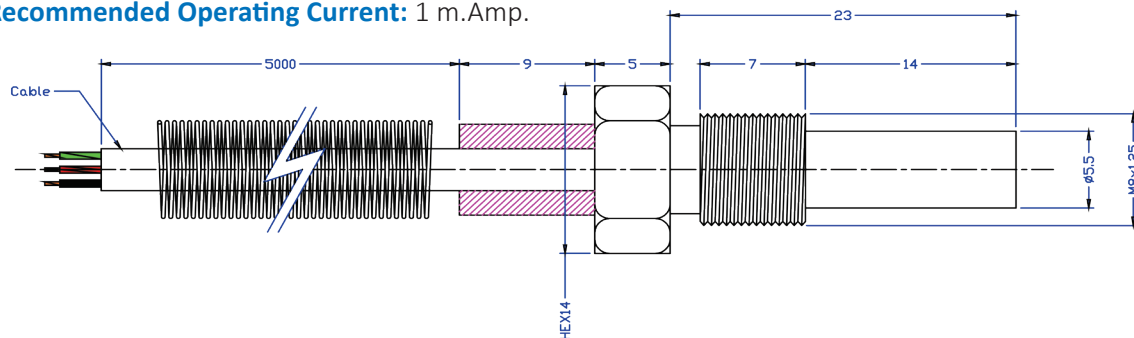
Accuracy Class: Class B

Nominal Resistance: 100 Ohms at 0 °C (The resistance will change by 0.3851 ohms of each 1 °C change in temperature, and the tolerance of a Class B Device is +/- 0.0012 ohms).

Standard Sheath Material: Ceramic with SS304 Cover Tube

Wire Temperature Rating: 250 °C

Recommended Operating Current: 1 m.Amp.



Sensor Cable Specifications

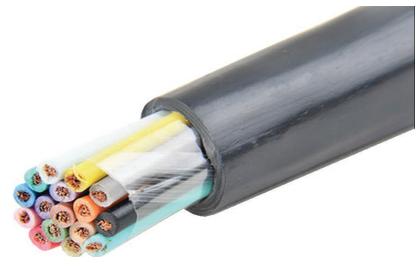
Usage: Multiwire cable specially developed for borehole submersible motor's temperature sensors.

Packing: 328 or 1640 feet coil.

Insulation: PE

Sheath: Standard Grey High Temp PVC (Other materials and colours are available upon request)

Screen: Overall Aluminum/Polyester Laminate.



Nearest AWG	No. of Cores	Conductors Nos./Dia (mm)	Insulation Thickness (mm)	Nominal Wire to Wire Capacitance (pf/m)	Nominal Dia (mm)
24	3	7/0.20 TC	0.3	80	4.7
24	6	7/0.20 TC	0.3	80	5.5
24	12	7/0.20 TC	0.3	80	7.5



Cable Selection CHART

Direct-on-Line Starting

Motor Size		Square Millimeter Wire Size, Copper Wire, Three Wire Cables (Length in Meters)															
HP	kW	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300
230V @ 60 Hz	5,5	4		40	65	98	163	261	408	571	816	1143					
	7,5	5,5			50	75	125	201	314	440	629	881	1196				
	10	7,5				56	94	151	236	330	472	660	897	1133			
	15	11					66	106	166	233	333	466	633	800	1000		
	20	15						81	126	177	253	354	481	607	759	937	
	25	18,5							101	142	203	284	386	488	610	752	976
	30	22							85	119	170	238	323	409	511	630	818 1022
380-415V @ 50 Hz / 460V @ 60 Hz	5,5	4	86	144	231	347	579	926	1447								
	7,5	5,5	66	110	176	264	440	704	1100								
	10	7,5		84	135	203	339	543	849	1189							
	12,5	9,3			111	167	279	447	699	979	1399						
	15	11			95	143	239	383	598	838	1197						
	17,5	13				123	205	329	514	720	1028	1440					
	20	15				109	181	291	454	636	909	1273					
	25	18,5					148	237	370	518	741	1037	1408				
	30	22					123	197	307	430	615	861	1169				
	35	26						168	263	368	527	737	1001	1265			
	40	30						143	224	314	449	629	854	1079	1349		
	50	37							179	251	358	502	681	861	1076	1327	
	60	45							150	210	301	421	572	722	903	1114	1445
	70	52								182	261	365	495	626	783	965	1252
	75	56								183	261	366	497	628	785	968	1256
	80	60									248	347	471	595	744	918	1191 1489
	90	67									217	304	412	521	651	803	1042 1303
	100	75									198	277	377	476	595	734	953 1191
	110	82										251	341	431	538	664	862 1077
	125	93										224	304	384	480	593	769 961
	150	112											256	323	404	498	647 809
	175	130												275	344	424	550 688
	200	150													302	372	483 604
	250	186														293	380 475
	270	200															355 444
	300	223															328 410

Cable length calculations are based on voltage drop of 5% and working temperature 60 °C.

Cable Selection CHART

Star-Delta Starting

Motor Size		Square Millimeter Wire Size, Copper Wire, Three Wire Cables (Length in Meters)															
HP	kW	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300
230V @ 60 Hz	5,5	4	60	98	147	245	392	612	857	1224							
	7,5	5,5	47	75	113	188	302	471	660	944	1322						
	10	7,5	35	56	84	141	227	354	495	708	990	1346					
	15	11			60	99	159	249	350	500	699	950	1200	1500			
	20	15			45	75	122	189	266	380	531	722	911	1139	1406		
	25	18,5				60	98	152	213	305	426	579	732	915	1128	1464	
	30	22				51	81	128	179	255	357	485	614	767	945	1227	1533
380-415V @ 50 Hz / 460V @ 60 Hz	5,5	4	129	216	347	521	869	1389									
	7,5	5,5	99	165	264	396	660	1056									
	10	7,5	75	126	203	305	509	815	1274								
	12,5	9,3	62	104	167	251	419	671	1049	1469							
	15	11		89	143	215	359	575	897	1257							
	17,5	13			123	185	308	494	771	1080							
	20	15			108	164	272	437	681	954	1364						
	25	18,5				132	222	356	555	777	1112						
	30	22				110	185	296	461	645	923	1292					
	35	26					158	252	395	552	791	1106					
	40	30					134	215	336	471	674	944	1281				
	50	37						171	269	377	537	753	1022	1292			
	60	45						144	225	315	452	632	858	1083	1355		
	70	52							195	273	392	548	743	939	1175	1448	
	75	56							195	275	392	549	746	942	1178	1452	
	80	60							186	260	372	521	707	893	1116	1377	
	90	67							162	228	326	456	618	782	977	1205	
	100	75								207	297	416	566	714	893	1101	1430
	110	82								188	269	377	512	647	807	996	1293
	125	93									240	336	456	576	720	890	1154
	150	112									201	282	384	485	606	747	971
	175	130										240	327	413	516	636	825
	200	150											287	362	453	558	725
	250	186												285	356	440	570
	270	200													333	411	533
	300	223													308	378	492

Cable length calculations are based on voltage drop of 5% and working temperature 60 °C.



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Komax Pumps Range



Stainless Steel Pumps Range

- KPS5 > 5" Submersible Pumps
- KPS6 > 6" Submersible Pumps
- KPS8 > 8" Submersible Pumps
- KPS10 > 10" Submersible Pumps
- KPS12 > 12" Submersible Pumps



Cast Iron Pumps Range

- FX8 > 8" Submersible Pumps
- FX10 > 10" Submersible Pumps
- FX12 > 12" Submersible Pumps
- FX14 > 14" Submersible Pumps





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