

Frameless torque motors

TK series

Up to 21000 Nm

2



Description

Delivered as separate rotor and stator to be integrated into the mechanical structure of the machine, TK series torque motors lead to simplified designs, reduced costs, and increased accuracy.

TK series distinguishes from existing solutions by an exceptional robustness, making them particularly adapted to harsh environments.

Benefiting from unprecedented know-how in the design and manufacture of torque motors, TK series can also be delivered as complete sub-assemblies including frame, cooling system, bearings, feedback sensor...

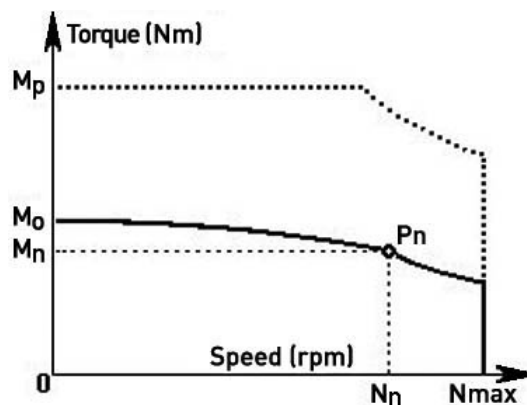
Applications

- Rotary transfer systems
- Indexing tables
- Machine-tools axis
- Mixers, Crushers...

Advantages

- Simplified mechanical designs
- Reduced sizes and weights
- Reduced maintenance
- Increased stiffness and accuracy

TK series general characteristics	
Shaft-heights	200 - 315 - 400 mm
Mounting	tapped holes on rotor and stator periphery
Power supply	400 VAC three-phased
Torque	up to 21000 Nm
Stator winding's insulation according to CEI 60034-1	Class F
Cooling method	Water cooling (standard) or natural ventilation (available with derating, consult us)
Thermal protection	PTC and KTY probes fitted into the stator winding
Feedback sensor	To be chosen taking into account mechanical conditions, accuracy required and drive's specificities : resolver, sin/cos encoder...
Electrical connections	Flying cables without connectors, 2m length



Autoryzowany dystrybutor Parker:

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Drives associations

Product code							
400V power supply							
Motor	Nominal power Pn (kW)	Nominal speed Nn (rpm)	Nominal torque Mn (Nm)	Max speed (rpm)	Low speed torque (Nm)	Low speed current Io (Arms)	Drive AC890
TKW131HL	6,7	750	85,2	935	88	14	AC890SD-532240C
TKW131HC	17,5	2500	67	2500	88	40,9	AC890SD-532590D
TKW132HL	9,8	480	194	720	198	21,3	AC890SD-532300C
TKW132HF	21,6	1120	184	1680	198	46,1	AC890SD-532590D
TKW133HN	14,4	450	305	675	311	32,3	AC890SD-532390D
TKW133HH	30	980	292	1470	311	64,5	AC890SD-432730E
TKW133HD	44,3	1550	273	2190	311	96,8	AC890SD-433145F
TKW134HN	14,9	340	419	510	425	35,1	AC890SD-532450D
TKW134HJ	27,1	630	410	945	425	59,6	AC890SD-432730E
TKW134HF	45,4	1100	393	1650	425	99,3	AC890SD-433145F
TKW135HM	27	490	526	735	540	60,6	AC890SD-432730E
TKW135HG	52,8	1000	503	1500	540	114	AC890SD-433156F
TKW136HM	30,1	450	639	675	650	67,6	AC890SD-432730E
TKW136HF	69,6	1100	603	1650	650	152	AC890SD-433216G
TKW201HF	20,6	900	219	1000	275	48,6	AC890SD-532590D
TKW201HM	10,0	365	262	540	275	21,6	AC890SD-532300C
TKW202HF	45	895	480	1040	610	108	AC890SD-433145F
TKW202HS	15,8	255	592	380	610	35,3	AC890SD-532450D
TKW203HD	57,5	670	819	940	960	133	AC890SD-433156F
TKW203HE	53,8	615	835	905	960	123	AC890SD-433156F
TKW203HR	18,2	185	936	275	960	43,2	AC890SD-532590D
TKW204HI	71,2	595	1140	890	1300	163	AC890SD-433250G
TKW204HV	18,9	140	1280	170	1300	46,5	AC890SD-532590D
TKW205HH	80,7	520	1480	780	1650	184	AC890SD-433316G
TKW205HM	51,8	315	1570	470	1650	118	AC890SD-433156F
TKW205HU	22,2	130	1630	195	1650	55,1	AC890SD-432730E
TKW206HG	92,1	485	1810	725	2000	209	AC890SD-433316G
TKW206HM	51,3	255	1920	380	2000	120	AC890SD-433156F
TKW206HS	30,9	150	1960	225	2000	76,1	AC890SD-432870E
TKW208HF	106	405	2500	605	2700	242	AC890SD-433361G
TKW208HM	51	185	2630	275	2700	121	AC890SD-433156F
TKW208HS	29,4	105	2670	135	2700	77,1	AC890SD-432870E
TKW301HB	36,1	695	497	695	680	87,6	AC890SD-433145F
TKW301HJ	14,7	215	651	320	680	31,1	AC890SD-532390D
TKW302HE	64	475	1290	605	1520	143	AC890SD-433216G
TKW302HJ	46	315	1390	470	1520	98,2	AC890SD-433145F
TKW302HP	23,2	150	1480	220	1520	50,7	AC890SD-432730E
TKW303HC	83,1	375	2120	550	2380	183	AC890SD-433316G
TKW303HJ	47,8	200	2270	295	2380	103	AC890SD-433145F
TKW303HN	30,5	125	2330	185	2380	68,4	AC890SD-432730E

2

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Power supply							
Motor	Nominal power Pn (kW)	Nominal speed Nn (rpm)	Nominal torque Mn (Nm)	Max speed (rpm)	Low speed torque (Nm)	Low speed current Io (Arms)	Drive AC890
TKW304HG	96,4	310	2970	465	3250	211	AC890SD-433316G
TKW304HM	51,1	155	3150	230	3250	112	AC890SD-433156F
TKW304HN	44,8	135	3160	195	3250	99,1	AC890SD-433145F
TKW305HG	99,1	245	3870	360	4100	213	AC890SD-433316G
TKW305HN	50,6	120	4030	175	4100	113	AC890SD-433156F
TKW305HO	42,4	100	4050	125	4100	100	AC890SD-433145F
TKW306HF	113	230	4710	340	4950	245	AC890SD-433361G
TKW306HM	53,9	105	4900	150	4950	122	AC890SD-433156F
TKW306HO	41,3	80	4930	120	4950	101	AC890SD-433145F
TKW308HC	141	210	6400	315	6740	309	AC890SD-433480H
TKW308HL	55,7	80	6650	115	6740	135	AC890SD-433216G
TKW308HO	39,2	56	6690	80	6740	103	AC890SD-433145F
TKW30AHD	162	190	8110	280	8450	351	AC890SD-433520H
TKW30AHL	52	59	8420	70	8450	135	AC890SD-433216G
TKW30AHO	35,4	40	8450	60	8450	103	AC890SD-433145F
TKW401HA	45,6	380	1150	415	1460	108	AC890SD-433145F
TKW401HG	24,4	170	1370	255	1460	53	AC890SD-432730E
TKW402HG	78,8	265	2840	375	3270	180	AC890SD-433316G
TKW402HI	69	225	2930	335	3270	155	AC890SD-433250G
TKW402HP	42,5	130	3110	195	3270	94,8	AC890SD-433145F
TKW403HC	106	220	4590	325	5100	237	AC890SD-433361G
TKW403HJ	66,3	130	4860	195	5100	148	AC890SD-433216G
TKW403HL	56,7	110	4910	160	5100	127	AC890SD-433156F
TKW404HI	124	185	6400	275	6900	278	AC890SD-433420H
TKW404HQ	63,7	90	6760	135	6900	151	AC890SD-433250G
TKW404HR	60,3	85	6770	125	6900	139	AC890SD-433216G
TKW405HH	134	155	8270	200	8800	308	AC890SD-433480H
TKW405HQ	65,1	72	8630	105	8800	154	AC890SD-433250G
TKW406HG	148	140	10100	210	10600	338	AC890SD-433520H
TKW406HP	71,4	65	10500	95	10600	169	AC890SD-433250G
TKW406HQ	63,9	58	10500	70	10600	155	AC890SD-433250G
TKW408HF	166	115	13800	170	14400	379	AC890SD-433590J
TKW408HN	84,8	57	14200	85	14400	211	AC890SD-433316G
TKW408HQ	59,9	40	14300	60	14400	158	AC890SD-433250G
TKW40AHE	184	100	17500	145	18100	424	AC890SD/5/0685K
TKW40AHM	88,3	47	17900	70	18100	225	AC890SD-433361G
TKW40AHQ	54,9	29	18100	40	18100	159	AC890SD-433250G
TKW40CHD	207	93	21200	135	21900	482	AC890SD/5/0798K
TKW40CHK	97,5	43	21700	60	21900	257	AC890SD-433420H

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Options

Frameless torque motors TKW	Product code																
	T	K	W	2	0	4	H	G	Y	C	R	2	R	1	0	0	0
PRODUCT SERIES																	
Frameless torque motors	T	K															
COOLING METHOD																	
Water cooling (standard)			W														
Natural ventilation (available with derating, consult us)			A														
SHAFT HEIGHTS																	
200 mm				2	0												
315 mm				3	0												
400 mm				4	0												
Torque/Speed characteristics																	
(see motors data tables)							▪	▪	▪								
FEEDBACK SENSOR																	
Without sensor									Y								
Direct Endat encoder									B								
TRANSPORTATION BRIDGE																	
Bridges on both sides										B							
Bridges on cables output side										C							
Bridges on cables output opposite side										D							
Without bridges (standard)										Z							
CABLES OUTPUT																	
Output towards the rear											B						
CABLE LENGTH																	
2m												2					
CONNECTIONS																	
Flying cables (3 phases + ground)																1	
Terminal box																9	
THERMAL PROTECTION																	
1 PTC 140°C + 1 PTC 150°C + 1 KTY (+1 in reserve)																0	
MECHANICAL INTERFACE																	
Standard motor																0	0

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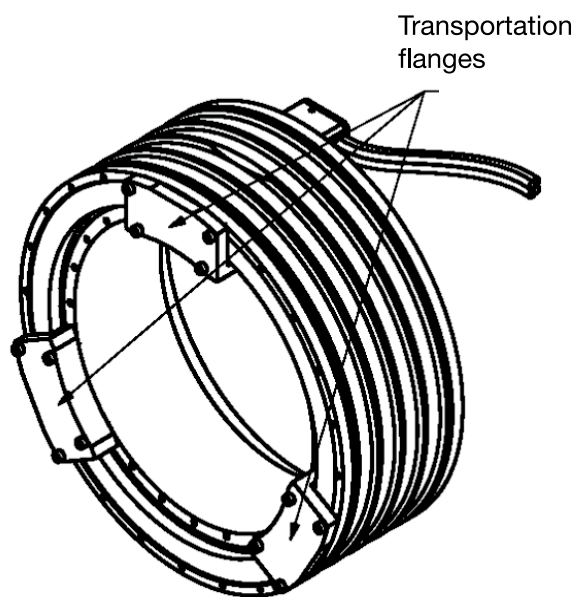
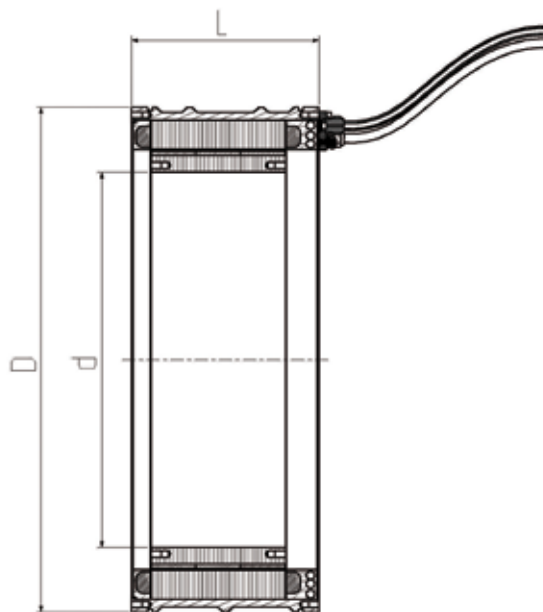
Up to 21000 Nm



Dimensions and drawings

TK series dimensions

Motor	L	d	D
TK131HL	90	132	230
TK131HC	100		
TK132HL/HN	140		
TK132HF	150		
TK133HN	190		
TK133HH	205		
TK133HD	215		
TK134HN	246		
TK134HJ	256		
TK134HF	261		
TK135HM	306		
TK135HG	311		
TK136HM	356		
TK136HF	376		
TK201	110	250	385
TK202HS	160		
TK202HF	170		
TK203HR	210		
TK203HE/HD	220		
TK204	270		
TK205	340		
TK206	390		
TK208	480	420	565
TK301	110		
TK302HP/HJ	160		
TK302HE	170		
TK303HN/HJ	210		
TK303HC	220		
TK304	275		
TK305	340		
TK306HO/HM	380		
TK306HF	395		
TK308HO/HL	485		
TK308HC	520		
TK30AHO/HL	590		
TK30AHD	650		
TK401	130	620	795
TK402	180		
TK403	230		
TK404	280		
TK405	350		
TK406	400		
TK408	500		
TK40A	605		
TK40C	710		



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