

KBM Series Frameless Brushless Motor

The KBM frameless motor series is our newest direct drive technology.

KBM frameless brushless motor models are engineered to provide the high-performance, long life and simple installation that today's design engineers demand. Optional latching digital Hall effect sensors are pre-aligned and factory installed with added axial rotor length to achieve proper triggering. Choice of insulation allows operation over a wide range of line input voltage. Our detailed selection guide provides a variety of pre-engineered options and configurations that are currently available.



Custom Application Solutions

For customized features, contact Kollmorgen to help us understand exactly what you need and how we can further optimize any KBM or engineer a new custom motor solution for the unique requirements of your application. We are experts in providing optimized solutions such as special winding configurations, tailored mounting features, diameter and stack length dimensional adjustments, or material variations.

The Benefits of KBM Frameless Motors

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- Industry-Leading Frameless Motor Performance
 - Advanced electromagnetic designs deliver maximum torque density which minimizes required motor space envelope
 - Extremely smooth rotation with minimal cogging and low total harmonic distortion (THD)
 - Broad operating speed range and rapid acceleration
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- Quality Construction Ensures Reliability and Safe Operation
 - Redundant magnet attachment to rotor on high-speed models – adhesive bonding and high-strength banding
 - 155°C motor winding temperature rating with integral thermistor allows continuous safe operation for demanding applications
 - Designed with UL-recommended insulation systems to simplify system regulatory approval
 - RoHS compliant material selection
 - Compliant with Harmonized Type C Standards EN60034- 1:2010 (rotating electrical machines) and where appropriate in accordance to the Low Voltage Directive 2014/35/EC
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- Highly Configurable Design Minimizes Time to Solution
 - 14 frame sizes with multiple stack lengths
 - Standard sensor feedback using Hall effect sensors
 - Standard high and low voltage insulation
 - Multiple standard windings with custom windings available upon request
 - Mechanical interface changes easily accommodated

KBM Series Overview

Quality Construction

- Fully encapsulated stator windings
- 155°C internal winding temperature continuous capability
- PTC thermistor (avalanche-type) overload protection
- High performance magnets
- Fail-safe bands over rotor magnets
- RoHS compliant

Available Options

(No engineering fees apply)

Sensor Feedback (KBMS models)

Latching digital hall effect sensors are pre-aligned and factory installed on the lead end of the stator. Wiring instructions and electrical timing diagrams are included in this selection guide. KBMS models include added axial rotor length to achieve proper sensor triggering.

Insulation System

S (standard) – acceptable for applications up to 240 V AC drive amplifier supply.

H (high voltage) – required for applications >240 V AC and up to 480 V AC drive amplifier supply.

Allowed Modifications

(Engineering fees apply)

Consult Kollmorgen Customer Support for guidance or to obtain a quotation. Unit price increase may apply, depending upon extent of modification.)

Special Windings

Motor windings may be optimized to provide desired speed and torque performance according to the unique voltage and current requirements of a customer's application. Kollmorgen engineers must confirm electrical feasibility and manufacturability of each special winding arrangement prior to quotation.

Special Rotor Hub Dimensions

Rotor hubs may be provided with special customer-designated hole patterns, mounting features or smaller inner bore diameters. Standard KBM(S) models shown within this selection guide include the largest available inner rotor bore diameter.

Rotor Hub Material

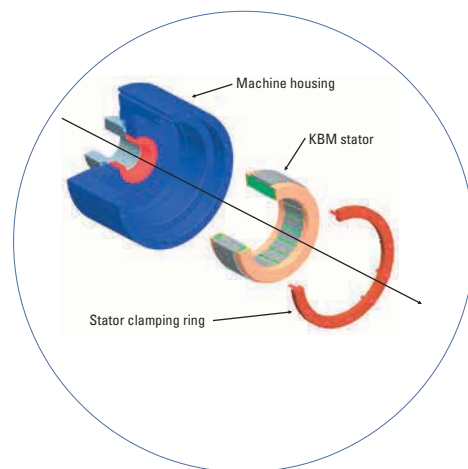
Standard configuration KBM(S) rotor hubs are constructed from non-plated cold rolled steel. If special plating, coating, cleaning or alternate material is desired, Kollmorgen engineers must confirm feasibility and pricing adjustment prior to quotation.

Stator Sleeve Material

Standard configuration KBM(S)-10, 14, 17, 25, 35, 45, 163 and 260 size stators are designed with uncoated aluminum sleeves around the stator lamination stack. If special coating or plating is desired for the aluminum stator sleeve, Kollmorgen engineers must confirm feasibility and pricing adjustment prior to quotation. Stator sleeves are only utilized for the sizes listed above.

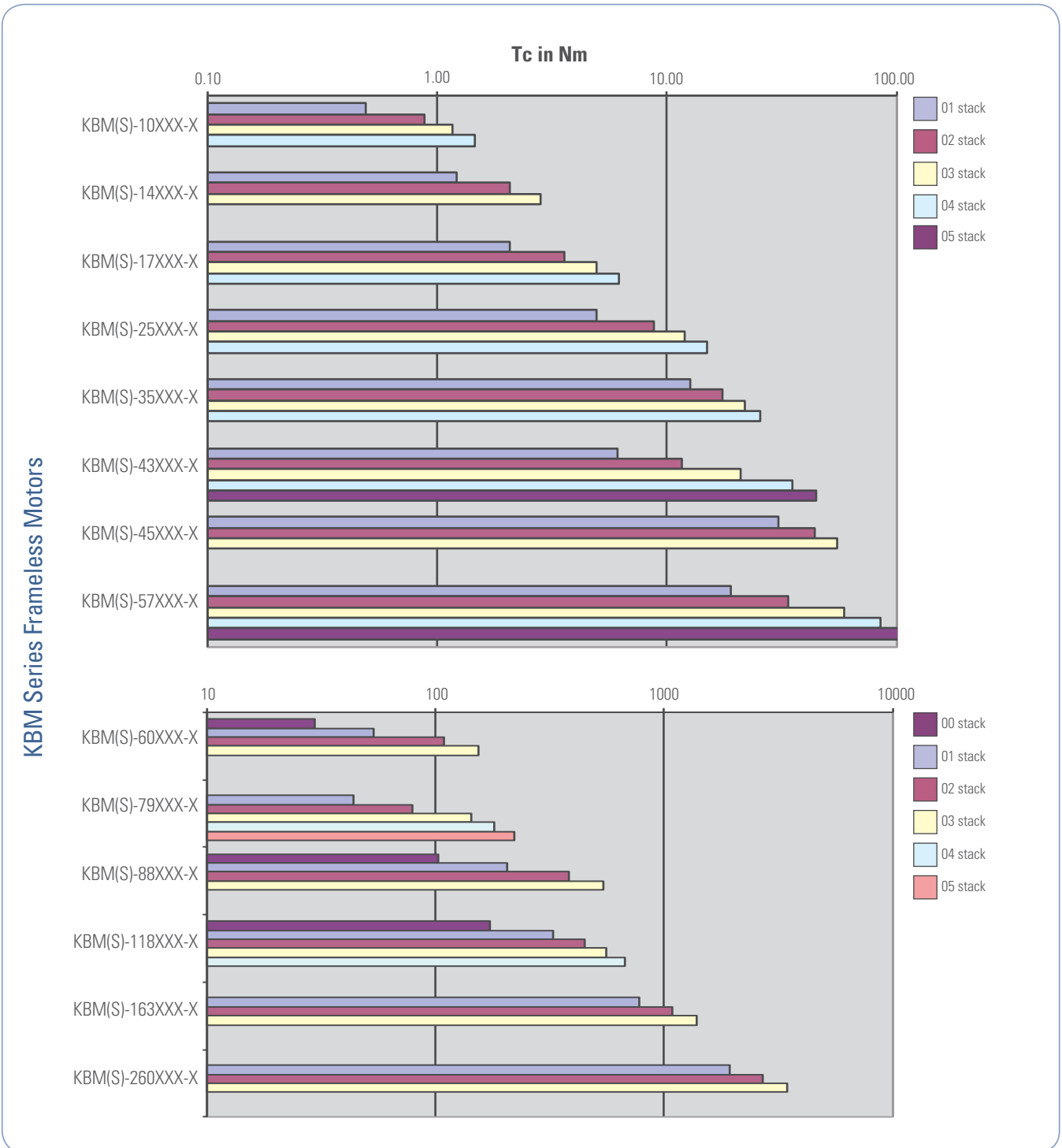
Agency UL Information

KBM(S) motors are designed to facilitate UL certification in the customer's higher-level assembly. Stator insulation systems are constructed entirely from agency-approved materials and are designed in full compliance with agency creepage and clearance dimensional guidelines. Dielectric strength between winding circuit and grounded metal stator surface is tested at agency-specified voltage level. Because a frameless motor's compliance with agency requirements is dependent upon correct installation and proper design of the surrounding enclosure by the user, KBM(S) series products are not formally labeled or agency-approved at the frameless motor level.



KBM(S) Continuous Torque Overview

Select from our wide variety of sizes and torque ranges to suit your application needs.



For more detailed information please visit: <http://www.kollmorgen.com/en-gb/products/motors/direct-drive/kbm-series-frameless/>

KBM Frameless Direct Drives

Performance Data

KBM(S)-	Continuous standstill torque ¹⁾ [Nm]	Continuous standstill current [A]	Peak standstill moment ²⁾ [Nm]	Peak current [A]	Rated speed [rpm ⁻¹]	Rated power ^{1),3)} [W]	Weight KBM/KBMS [kg]	Moment of inertia KBM/KBMS [kg·m ²]
10H01-A	0.487	1.73	1.17	4.33	15200	550	0.379 / 0.425	4.92E-6 / 1.03E-5
10H01-B	0.509	3.37	1.19	8.70	18500	600	0.379 / 0.425	4.92E-6 / 1.03E-5
10H01-C	0.492	5.21	1.23	13.8	18600	575	0.379 / 0.425	4.92E-6 / 1.03E-5
10H02-A	0.876	1.53	2.33	4.33	11000	740	0.658 / 0.703	1.03E-5 / 1.49E-5
10H02-B	0.899	3.00	2.48	8.65	15200	785	0.658 / 0.703	1.03E-5 / 1.49E-5
10H02-C	0.868	5.14	2.24	15.5	17000	710	0.658 / 0.703	1.03E-5 / 1.49E-5
10H03-A	1.16	1.54	3.46	4.86	8500	780	0.943 / 0.990	1.55E-5 / 2.02E-5
10H03-B	1.16	2.40	3.53	7.73	14300	740	0.943 / 0.990	1.55E-5 / 2.02E-5
10H03-C	1.19	3.10	3.58	9.72	14500	725	0.943 / 0.990	1.55E-5 / 2.02E-5
10H03-D	1.18	4.66	3.69	15.5	13000	850	0.943 / 0.990	1.55E-5 / 2.02E-5
10H04-A	1.45	1.60	4.66	5.46	7050	820	1.22 / 1.26	2.01E-5 / 2.55E-5
10H04-B	1.41	2.40	4.75	8.70	11500	860	1.22 / 1.26	2.01E-5 / 2.55E-5
10H04-C	1.44	3.10	4.80	10.9	12000	835	1.22 / 1.26	2.01E-5 / 2.55E-5
10H04-D	1.41	4.21	4.91	15.5	9500	910	1.22 / 1.26	2.01E-5 / 2.55E-5
14H01-A	1.22	1.53	3.28	4.32	7950	735	0.898 / 1.00	2.41E-5 / 3.36E-5
14H01-B	1.25	3.25	3.43	9.63	12000	700	0.898 / 1.00	2.41E-5 / 3.36E-5
14H01-C	1.21	6.25	3.59	19.4	13500	915	0.898 / 1.00	2.41E-5 / 3.36E-5
14H02-A	2.08	1.59	6.67	5.39	4900	845	1.59 / 1.68	4.88E-5 / 5.56E-5
14H02-B	2.08	2.42	6.83	8.57	7700	1000	1.59 / 1.68	4.88E-5 / 5.56E-5
14H02-C	2.11	3.10	6.98	10.9	10250 / 8000	585 / 1000	1.59 / 1.68	4.88E-5 / 5.56E-5
14H02-D	2.17	5.97	7.31	21.8	8900	975	1.59 / 1.68	4.88E-5 / 5.56E-5
14H03-A	2.82	1.64	10.1	6.12	3600	875	2.98 / 3.08	7.31E-5 / 8.81E-5
14H03-B	2.87	2.81	10.5	10.9	6500 / 5225	1215 / 1175	2.98 / 3.08	7.31E-5 / 8.81E-5
14H03-C	2.92	6.04	10.5	24.5	6600	1230	2.98 / 3.08	7.31E-5 / 8.81E-5
17H01-A	2.08	1.65	5.95	5.45	4650	810	1.05 / 1.16	5.12E-5 / 8.62E-5
17H01-B	2.06	3.11	6.14	10.9	9600 / 8125	715 / 955	1.05 / 1.16	5.12E-5 / 8.62E-5
17H01-C	2.07	6.10	6.35	21.8	9050	855	1.05 / 1.16	5.12E-5 / 8.62E-5
17H02-A	3.58	1.59	12.2	6.08	2600	835	1.87 / 1.97	9.45E-5 / 1.28E-4
17H02-B	3.52	3.00	12.3	12.2	5450	1270	1.87 / 1.97	9.45E-5 / 1.28E-4
17H02-C	3.57	5.27	12.7	21.9	7560	790	1.87 / 1.97	9.45E-5 / 1.28E-4
17H02-D	3.58	6.25	12.8	24.5	5600	1290	1.87 / 1.97	9.45E-5 / 1.28E-4
17H03-A	4.89	3.06	18.5	13.8	3950	1440	2.65 / 2.76	1.42E-4 / 1.75E-4
17H03-B	4.90	5.32	18.8	24.4	6500	890	2.65 / 2.76	1.42E-4 / 1.75E-4
17H03-C	5.00	6.14	18.8	27.2	6480	965	2.65 / 2.76	1.42E-4 / 1.75E-4
17H03-D	5.00	10.4	19.0	48.0	6100	1275	2.65 / 2.76	1.42E-4 / 1.75E-4
17H04-A	6.20	3.26	23.7	14.5	3350	1520	3.62 / 3.72	2.03E-4 / 2.40E-4
17H04-B	6.12	5.53	23.7	25.0	5700	1075	3.62 / 3.72	2.03E-4 / 2.40E-4
17H04-C	5.90	6.20	23.7	28.1	5775	975	3.62 / 3.72	2.03E-4 / 2.40E-4
17H04-D	5.90	9.56	24.0	44.0	5000	1550	3.62 / 3.72	2.03E-4 / 2.40E-4
25H01-A	4.90	3.10	14.4	10.9	3800	1110	1.79 / 2.02	2.66E-4 / 4.34E-4
25H01-B	4.96	5.34	14.6	19.3	4900	730	1.79 / 2.02	2.66E-4 / 4.34E-4
25H01-C	4.85	6.45	15.0	27.6	4225	1025	1.79 / 2.02	2.66E-4 / 4.34E-4
25H01-D	4.75	7.95	14.9	34.3	4000	1100	1.79 / 2.02	2.66E-4 / 4.34E-4
25H02-A	8.70	3.33	29.4	13.9	2300	1765	3.27 / 3.50	5.15E-4 / 6.78E-4
25H02-B	8.75	5.18	29.7	22.0	4000	2545	3.27 / 3.50	5.15E-4 / 6.78E-4
25H02-C	8.75	6.50	29.7	27.8	5000	2535	3.27 / 3.50	5.15E-4 / 6.78E-4
25H02-D	8.62	8.00	29.8	35.1	6000	1790	3.27 / 3.50	5.15E-4 / 6.78E-4
25H02-E	8.85	10.20	29.8	43.3	6000	1850	3.27 / 3.50	5.15E-4 / 6.78E-4
25H03-A	11.6	5.30	42.2	23.9	2900	2700	4.72 / 4.90	7.66E-4 / 9.31E-4
25H03-B	11.9	7.27	42.3	33.0	4150	2890	4.72 / 4.90	7.66E-4 / 9.31E-4
25H03-C	11.9	8.20	42.4	37.0	4725	2585	4.72 / 4.90	7.66E-4 / 9.31E-4
25H03-D	11.9	10.2	42.6	47.0	2700	2605	4.72 / 4.90	7.66E-4 / 9.31E-4
25H04-A	14.8	5.50	54.4	25.0	2400	2865	6.17 / 6.35	1.02E-3 / 1.18E-3
25H04-B	14.9	6.25	53.8	27.5	2700	3090	6.17 / 6.35	1.02E-3 / 1.18E-3
25H04-C	15.0	8.70	54.4	38.5	3850	3255	6.17 / 6.35	1.02E-3 / 1.18E-3
25H04-D	14.9	10.7	54.8	48.5	4700	1990	6.17 / 6.35	1.02E-3 / 1.18E-3
25H04-E	14.6	13.8	53.8	62.5	4700	1940	6.17 / 6.35	1.02E-3 / 1.18E-3

1) Winding temperature = 155°C in continuous standstill and rated power and as per the power curves 2) With winding temperature at 25°C 3) With ambient temperature at 25°C

Performance Data

KBM(S)-	Continuous standstill torque ¹⁾ [Nm]	Continuous standstill current [A]	Peak standstill moment ²⁾ [Nm]	Peak current [A]	Rated speed [rpm ⁻¹]	Rated power ^{1),3)} [W]	Weight KBM/KBMS [kg]	Moment of inertia KBM/KBMS [kg•m ²]
35H01-A	12.6	5.41	40.9	21.9	2700	2970	4.68/5.17	1.52E-3/2.17E-3
35H01-B	12.7	6.10	40.8	24.5	2900	3100	4.68/5.17	1.52E-3/2.17E-3
35H01-C	12.4	8.32	41.1	34.7	4200	3885	4.68/5.17	1.52E-3/2.17E-3
35H01-D	12.7	10.6	41.2	43.5	5800	3750	4.68/5.17	1.52E-3/2.17E-3
35H01-E	12.2	12.9	41.1	55.4	6125	3200	4.68/5.17	1.52E-3/2.17E-3
35H02-A	17.3	4.97	58.8	22.5	1750	2750	6.76/7.21	2.28E-3/2.94E-3
35H02-B	17.6	6.30	58.8	28.0	2200	3415	6.76/7.21	2.28E-3/2.94E-3
35H02-C	17.5	8.70	59.2	39.2	3200	4395	6.76/7.21	2.28E-3/2.94E-3
35H02-D	17.5	10.9	59.4	49.5	4300	4750	6.76/7.21	2.28E-3/2.94E-3
35H02-E	17.1	12.1	59.4	55.4	3765	4610	6.76/7.21	2.28E-3/2.94E-3
35H03-A	21.8	10.2	76.1	46.1	3100	5025	8.80/9.34	3.04E-3/3.70E-3
35H03-B	21.7	14.0	76.6	64.0	4800	5160	8.80/9.34	3.04E-3/3.70E-3
35H03-C	20.7	20.2	75.2	93.1	5000	2985	8.80/9.34	3.04E-3/3.70E-3
35H03-D	20.0	21.5	75.7	104	3400	4735	8.80/9.34	3.04E-3/3.70E-3
35H04-A	25.6	10.9	92.3	49.0	2800	5400	10.9/11.3	3.81E-3/4.46E-3
35H04-B	25.9	13.3	93.0	61.0	3400	5750	10.9/11.3	3.81E-3/4.46E-3
35H04-C	25.3	14.7	93.0	68.0	4150	4870	10.9/11.3	3.81E-3/4.46E-3
35H04-D	24.7	19.2	91.5	89.0	4250	4500	10.9/11.3	3.81E-3/4.46E-3
43H01-A	6.11	5.10	18.0	18.0	4750	1230	2.26/2.66	1.94E-3/2.85E-3
43H01-B	6.24	8.60	18.0	32.2	4750	1230	2.26/2.66	1.94E-3/2.85E-3
43H01-C	6.11	18.4	18.0	64.6	4750	1230	2.26/2.66	1.94E-3/2.85E-3
43H02-A	11.6	5.10	34.6	18.0	3000	2160	3.49/3.89	2.85E-3/3.73E-3
43H02-B	11.6	18.3	34.6	64.6	2650	2160	3.49/3.89	2.85E-3/3.73E-3
43H02-C	11.9	6.10	34.6	22.8	3000	2160	3.49/3.89	2.85E-3/3.73E-3
43H02-D	11.9	10.2	34.6	36.2	3000	2160	3.49/3.89	2.85E-3/3.73E-3
43H03-A	21.0	4.78	64.5	18.0	1500	2520	5.96/6.35	4.75E-3/5.69E-3
43H03-B	20.7	13.8	64.5	51.2	2275	2875	5.96/6.35	4.75E-3/5.69E-3
43H03-C	20.9	5.73	64.5	22.8	1500	2520	5.96/6.35	4.75E-3/5.69E-3
43H03-D	20.9	19.2	64.5	72.5	1500	2520	5.96/6.35	4.75E-3/5.69E-3
43H04-A	35.1	4.78	113	18.0	830	2600	8.85/9.25	6.44E-3/6.85E-3
43H04-B	35.1	5.60	113	22.8	830	2600	8.85/9.25	6.44E-3/6.85E-3
43H04-C	35.1	9.20	113	36.2	830	2600	8.85/9.25	6.44E-3/6.85E-3
43H05-A	44.2	4.50	153	18.0	620	3500	11.80/12.20	8.54E-3/9.44E-3
43H05-B	44.2	4.50	153	22.8	620	2550	11.80/12.20	8.54E-3/9.44E-3
43H05-C	44.2	4.50	153	36.2	620	2500	11.80/12.20	8.54E-3/9.44E-3
45H01-A	30.7	10.2	119	46.5	2100	5200	12.2/13.2	6.10E-3/8.35E-3
45H01-B	30.2	12.5	119	57.5	2650	5750	12.2/13.2	6.10E-3/8.35E-3
45H01-C	31.3	14.3	119	65.0	3100	6045	12.2/13.2	6.10E-3/8.35E-3
45H01-D	29.7	20.2	118	93.5	3700	4930	17.5/18.5	9.22E-3/1.15E-2
45H02-A	43.7	13.3	170	60.5	1950	6655	17.5/18.5	9.22E-3/1.15E-2
45H02-B	43.5	14.9	171	68.0	2350	7200	17.5/18.5	9.22E-3/1.15E-2
45H02-C	41.9	21.1	168	97.2	3500/2830	4525/6500	23.1/24.2	1.22E-2/1.45E-2
45H03-A	54.6	14.1	218	64.5	1700	7270	23.1/24.2	1.22E-2/1.45E-2
45H02-B	53.0	19.9	215	92.5	2600/2050	7580/7670	23.1/24.2	1.22E-2/1.45E-2
57H01-A	18.8	5.68	60.0	23.4	2050	2310	4.54/5.31	6.56E-3/9.49E-3
57H01-B	18.8	6.90	60.0	27.9	2050	2310	4.54/5.31	6.56E-3/9.49E-3
57H01-C	18.8	11.4	60.0	47.0	2050	2310	4.54/5.31	6.56E-3/9.49E-3
57H02-A	33.5	5.23	115	23.4	1015	2660	7.89/8.62	1.18E-2/1.49E-2
57H02-B	33.5	6.24	115	27.9	1015	2660	7.89/8.62	1.18E-2/1.49E-2
57H02-C	33.5	11.0	115	47.0	1015	2660	7.89/8.62	1.18E-2/1.49E-2
57H03-A	60.0	5.47	2108	26.1	580	3000	14.5/15.4	2.21E-2/2.52E-2
57H03-B	60.0	6.70	218	32.9	580	3000	14.5/15.4	2.21E-2/2.52E-2
57H03-C	60.0	11.0	218	52.4	580	3000	14.5/15.4	2.21E-2/2.52E-2
57H04-A	85.3	5.20	332	26.1	375	2880	22.0/22.9	3.44E-2/3.78E-2
57H04-B	85.3	6.50	332	32.9	375	2880	22.0/22.9	3.44E-2/3.78E-2
57H04-C	85.3	10.6	332	52.4	375	2880	22.0/22.9	3.44E-2/3.78E-2

1) Winding temperature = 155°C in continuous standstill and rated power and as per the power curves 2) With winding temperature at 25°C 3) With ambient temperature at 25°C

KBM Frameless Direct Drives

Performance Data

KBM(S)-	Continuous standstill torque ¹⁾ [Nm]	Continuous standstill current [A]	Peak standstill moment ²⁾ [Nm]	Peak current [A]	Rated speed [rpm ⁻¹]	Rated power ^{1),3)} [W]	Weight KBM/KBMS [kg]	Moment of inertia KBM/KBMS [kg•m ²]
57H05-A	109	5.00	441	26.1	265	2675	29.2/30.1	4.58E-2/4.91E-2
57H05-B	109	6.20	441	32.9	265	2675	29.2/30.1	4.58E-2/4.91E-2
57H05-C	109	10.0	441	52.4	265	2675	29.2/30.1	4.58E-2/4.91E-2
60H00-A	29.4	13.7	69.1	40.0	1700	2960	8.30/10.4	9.53E-3/1.88E-2
60H00-B	29.4	16.8	69.1	50.4	1700	2960	8.30/10.4	9.53E-3/1.88E-2
60H00-C	29.4	22.5	69.1	63.6	1700	2960	8.30/10.4	9.53E-3/1.88E-2
60H01-A	53.9	13.7	127	40.0	1600	4165	13.2/15.3	1.63E-2/2.56E-2
60H01-B	53.9	16.9	127	50.4	1600	4165	13.2/15.3	1.63E-2/2.56E-2
60H01-C	53.9	22.7	127	78.0	1600	4165	13.2/15.3	1.63E-2/2.56E-2
60H02-A	108	16.3	243	50.4	885	6985	25.2/27.9	3.17E-2/4.20E-2
60H02-B	108	19.6	243	60.4	885	6985	25.2/27.9	3.17E-2/4.20E-2
60H03-A	154	18.6	393	63.3	720	8350	37.2/39.8	4.75E-2/5.29E-2
60H03-B	154	24.0	393	76.8	730	8420	37.2/39.8	4.75E-2/5.29E-2
79H01-A	43.5	4.95	152	20.8	730	2585	9.21/10.7	3.25E-2/4.45E-2
79H01-B	43.5	6.00	152	25.3	730	2585	9.21/10.7	3.25E-2/4.45E-2
79H01-C	43.5	10.0	152	41.7	730	2585	9.21/10.7	3.25E-2/4.45E-2
79H02-A	79.6	5.40	319	26.1	430	2920	16.9/18.4	5.97E-2/7.15E-2
79H02-B	79.6	6.50	319	31.4	430	2920	16.9/18.4	5.97E-2/7.15E-2
79H02-C	79.6	11.0	319	52.4	430	2920	16.9/18.4	5.97E-2/7.15E-2
79H03-A	143	6.76	637	36.7	300	3750	32.1/33.5	0.114/0.125
79H03-B	143	8.00	637	46.3	300	3750	32.1/33.5	0.114/0.125
79H03-C	143	13.2	637	73.7	290	3640	32.1/33.5	0.114/0.125
79H04-A	180	6.60	858	36.7	215	3540	44.0/45.3	0.152/0.164
79H04-B	180	7.80	858	46.3	215	3540	44.0/45.3	0.152/0.164
79H04-C	180	12.8	858	73.7	215	3540	44.0/45.3	0.152/0.164
79H05-A	222	6.30	1075	36.7	165	3330	54.9/56.2	0.191/0.202
79H05-B	222	7.50	1075	46.3	165	3330	54.9/56.2	0.191/0.202
79H05-C	222	12.1	1075	73.7	165	3330	54.9/56.2	0.191/0.202
88H00-A	102	17.0	197	40.0	1000	5460	15.7/21.0	5.26E-2/0.103
88H00-B	102	20.5	197	48.3	1000	5460	15.7/21.0	5.26E-2/0.103
88H00-C	102	34.0	197	80.2	1000	5460	15.7/21.0	5.26E-2/0.103
88H01-A	205	17.1	390	40.0	520	8250	37.6/42.6	9.84E-2/0.146
88H01-B	209	32.1	390	75.4	940	6600	37.6/42.6	9.84E-2/0.146
88H01-C	205	7.50	390	17.8	205	3870	37.6/42.6	9.84E-2/0.146
88H01-D	207	40.2	390	94.7	940	6600	37.6/42.6	9.84E-2/0.146
88H02-A	385	15.1	789	40.0	235	7950	72.6/77.6	0.198/0.247
88H02-B	385	32.1	789	75.4	550	13430	72.6/77.6	0.198/0.247
88H02-C	385	37.9	789	89.0	550	13430	72.6/77.6	0.198/0.247
88H03-A	538	18.2	1200	53.1	225	10450	106/111	0.298/0.315
88H03-B	545	35.5	1200	106	425	16000	106/111	0.298/0.315
88H03-C	545	45.2	1200	134	425	16000	106/111	0.298/0.315
118H00-A	172	21.6	498	67.0	830	7780	18.9/21.2	0.129/0.176
118H00-B	172	27.0	498	84.0	830	7780	18.9/21.2	0.129/0.176
118H00-C	172	40.2	498	135	830	7780	18.9/21.2	0.129/0.176
118H01-A	325	43.7	994	151	785	9000	37.1/39.2	0.267/0.315
118H01-B	325	76.5	994	265	785	9000	37.1/39.2	0.267/0.315
118H02-A	446	47.0	1451	171	710	10350	53.4/56.2	0.396/0.403
118H02-B	446	57.0	1451	206	710	10350	53.4/56.2	0.396/0.403
118H02-C	446	94.5	1255	343	710	10350	53.4/56.2	0.396/0.403
118H03-A	560	44.0	1932	171	535	17000	71.7/73.9	0.542/0.591
118H03-B	560	54.0	1932	206	535	17000	71.7/73.9	0.542/0.591
118H03-C	560	89.5	1661	343	535	17000	71.7/73.9	0.542/0.591
118H04-A	672	42.8	2400	171	420	19850	88.5/90.7	0.648/0.698
118H04-B	672	51.5	2400	206	420	19850	88.5/90.7	0.648/0.698
118H04-C	672	86.0	2068	343	420	19850	88.5/90.7	0.648/0.698

1) Winding temperature = 155°C in continuous standstill and rated power and as per the power curves 2) With winding temperature at 25°C 3) With ambient temperature at 25°C

Performance Data

KBM(S)-	Continuous standstill torque ¹⁾ [Nm]	Continuous standstill current [A]	Peak standstill moment ²⁾ [Nm]	Peak current [A]	Rated speed [rpm ⁻¹]	Rated power ^{1),3)} [W]	Weight KBM/KBMS [kg]	Moment of inertia KBM/KBMS [kg·m ²]
163H01-A	764	41.5	1966	140	375	17300	90.7/96.2	1.06/1.23
163H01-B	764	47.0	1966	158	350	17400	90.7/96.2	1.06/1.23
163H01-C	764	74.5	1966	253	335	17300	90.7/96.2	1.06/1.23
163H02-A	1084	39.5	2915	140	245	20100	131/136	1.57/1.72
163H02-B	1084	44.0	2915	158	225	19120	131/136	1.57/1.72
163H02-C	1084	73.0	2915	253	215	18065	131/136	1.57/1.72
163H03-A	1329	38.6	3932	140	180	20100	161/166	1.68/1.83
163H03-B	1329	44.0	3932	157	165	18810	161/166	1.68/1.83
163H03-C	1329	70.0	3932	253	160	17420	161/166	1.68/1.83
260H01-A	1932	33.1	6494	147	105	18500	170/177	4.88/5.45
260H01-B	1932	39.0	6494	171	100	17675	170/177	4.88/5.45
260H01-C	1932	58.0	6494	257	90	16100	170/177	4.88/5.45
260H02-A	2706	31.0	9742	147	68	17150	249/257	7.19/7.86
260H02-B	2706	36.5	9742	171	65	16400	249/257	7.19/7.86
260H02-C	2706	54.5	9742	257	58	14715	249/257	7.19/7.86
260H03-A	3445	29.5	12812	147	50	16200	329/336	9.56/10.2
260H03-B	3445	34.5	12812	171	48	15570	329/336	9.56/10.2
260H03-C	3445	52.0	12812	262	42	13710	329/336	9.56/10.2

1) Winding temperature = 155°C in continuous standstill and rated power and as per the power curves 2) With winding temperature at 25°C 3) With ambient temperature at 25°C

Dimensional drawings

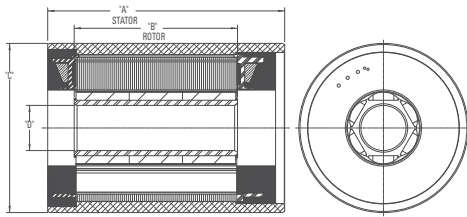


Image 1: KBM 10,14,17,25,35,45

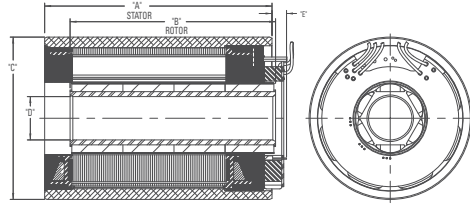


Image 2: KBMS 10,14,17,25,35,45

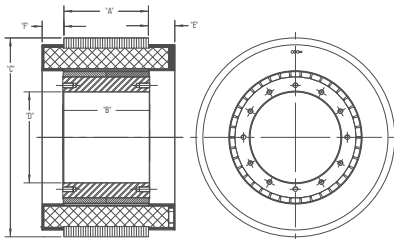


Image 3: KBM 43,57,60,88

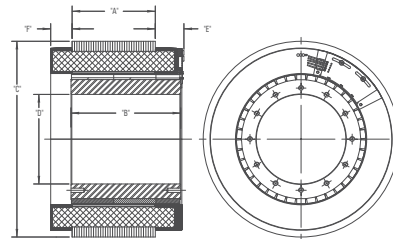


Image 4: KBMS 43,57,60,88

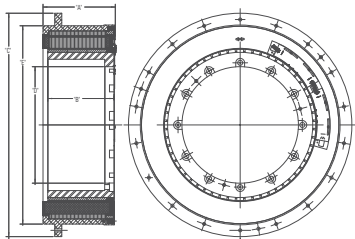


Image 5: KBM 79,118,163,260

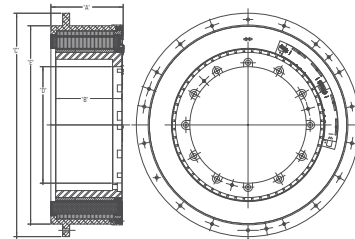


Image 6: KBMS 79,118,163,260

KBM Frameless Direct Drives

Dimensions (mm)

KBM(S)-	A	B (KBM)	B (KBMS)	C	D	E (KBM)	E (KBMS)	F	Dimensional drawing
10H01	46.00	20.14	38.17	59.97	16.01	-	5.75	-	Image 1/2
10H02	65.00	39.02	57.05						
10H03	84.00	57.89	75.92						
10H04	103.00	76.77	94.80						
14H01	58.00	32.16	50.19	74.97	20.01	-	5.75	-	Image 1/2
14H02	89.00	63.04	81.08						
14H03	120.00	93.93	111.96						
17H01	57.80	30.15	49.07						
17H02	86.30	59.03	77.95	84.93	30.01	-	5.75	-	Image 1/2
17H03	115.80	87.91	106.83						
17H04	144.80	116.79	135.71						
25H01	62.70	32.16	51.97						
25H02	93.70	63.05	82.86	109.97	50.01	-	5.75	-	Image 1/2
25H03	124.70	93.93	113.74						
25H04	155.70	124.82	144.63						
35H01	83.74	51.00	71.83						
35H02	108.74	75.87	96.70	139.97	65.01	-	5.75	-	Image 1/2
35H03	133.74	100.74	121.56						
35H04	158.74	125.60	146.43						
43H01	11.43	18.54	30.35						
43H02	22.86	29.97	41.78	159.78	76.28	20.32	12.32	12.32	Image 3/4
43H03	45.72	52.83	64.64						
43H04	80.26	87.38	99.19						
43H05	108.97	116.08	127.89						
45H01	107.06	69.04	92.41	189.96	85.02	-	5.75	-	Image 1/2
45H02	141.06	102.92	126.29						
45H03	175.05	136.81	160.17						
57H01	20.32	25.40	38.23						
57H02	40.64	45.72	58.54	202.90	104.17	12.32	20.32	12.32	Image 3/4
57H03	81.79	88.36	99.44						
57H04	123.82	129.16	141.98						
57H05	166.37	171.70	184.53						
60H00	26.62	29.39	57.53	229.85	105.05	30.48	33.65	25.15	Image 3/4
60H01	48.11	50.88	78.99						
60H02	97.71	100.48	128.78						
60H03	147.32	150.09	178.31						
79H01	31.75	38.10	52.07	259.63	152.43	13.34	21.20	13.34	Image 5/6
79H02	63.50	69.85	83.82						
79H03	127.00	133.35	147.07						
79H04	170.94	177.29	191.26						
79H05	214.89	221.49	235.46	331.46	155.01	37.59	40.64	27.43	Image 3/4
88H00	33.66	36.37	71.37						
88H01	67.56	70.36	105.41						
88H02	136.65	139.44	174.63						
88H03	205.74	208.53	243.84	361.11	225.04	21.59	26.03	22.23	Image 5/6
118H00	50.80	50.71	72.39						
118H01	101.60	104.14	123.83						
118H02	152.40	155.58	175.26						
118H03	203.20	207.26	226.70	605.00	315.50	537.08	537.08	-	Image 5/6
118H04	254.00	258.69	278.13						
163H01	142.54	106.93	126.24						
163H02	193.34	160.02	179.32						
163H03	244.14	213.11	232.41	850.00	557.85	781.81	781.81	-	Image 5/6
260H01	172.62	132.08	156.21						
260H02	237.39	196.85	220.98						
260H03	302.16	261.62	285.75						

Notes

