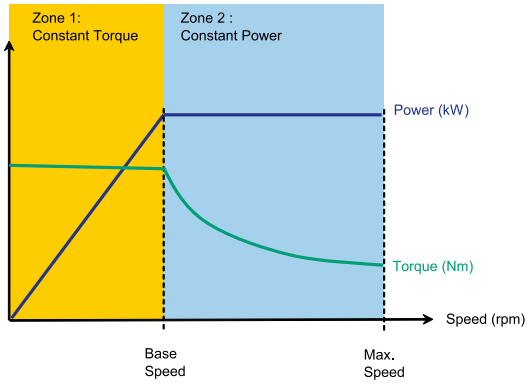
Watercooled frameless spindle AC brushless

HKW series

up to 230 kW





Description

HKW motors are high performances permanent magnet synchronous servomotors for spindle applications up to 230 kW.

Delivered as separate components to be integrated into the mechanical structure of the machine, HKW motors take benefit from field weakening technique, in order to achieve both high torque at slow speed, and very high maximum speed at constant power.

Features and Benefits

Kit solution leading to simplified mechanical designs

Very high speed capabilities - up to 50 000 rpm

Constant power operation up to 10 x base speed : no oversizing of the drive

High dynamic performances and power density : increased productivity and compactness compared to induction motors

Cold permanent magnets technology : reduced heating in the bearings compared to induction motors, no dilatation effect

Compatibility with third-party drives : Siemens, Fanuc

General Technical Characteristics	
Motor type	Permanent magnets synchronous motors
Type of construction	Individual components : rotor, stator and feedback sensor
Power supply	3ph - 400 VAC
Power range	up to 230 kW
Speed range	up to 50 000 rpm
Insulation of stator winding according to CEI 60034-1	Class F
Ambiant temperature	40°C maxi
Altitude	< 1000 m
Cooling	- Water cooling (standard) - Natural convection on request
Stator design variants	- Stator without housing (standard) - Stator housing on request, with or without water cooling circuit
Rotor design variants	- Rotor without hub (standard) - Rotor with hub on request
Connections	2m flying cables without connectors

Applications

- Milling
- Turning
- Grinding

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Technical specifications HKW series - 540V DC voltage supply

Motor	S1 / S6 Power PS1 (kW)	Low speed torque Mo (Nm)	Low speed S6 torque Mo S6 (Nm)	Base speed Nb (rpm)	Max speed N (rpm)	Permanent current at low speed Io (Arms)	S6 current at low speed Io S6 (Arms)	Rotor inertia J (kg.m²)	Thermal time constant Tth (min)	Motor mass M (kg)	Cooling water flow (Tmax 25°C) water flow (l/min)	Back emf constant at 1000 rpm Ke (Vrms)	Frequency at max speed
HKW085_066BAU	2,3	4,9	7,3	4480	50000	6,8	13,5	0,00	1	3,9	2	45,20	1667
HKW085_066BAP	4,9	4,5	7,3	10400	50000	12,2	27,0	0,00	1	3,9	2	22,60	1667
HKW085_066BAK	10,2	4,2	7,3	23200	50000	22,4	54,0	0,00	1	3,9	2	11,30	1667
HKW085_099BAQ	4,7	7,4	11	6070	50000	12,6	25,1	0,00	1	5,2	3	36,50	1667
HKW085_099BAL	10	7,3	11	13100	50000	24,7	50,2	0,00	1	5,2	3	18,30	1667
HKW085_099BAI	15,6	6,8	11	21900	50000	35,0	78,1	0,00	1	5,2	3	11,70	1667
HKW108_080CAN	4,9	10	15	4680	30000	10,6	16,2	0,00	1,5	6,5	3	55,20	1500
HKW108_080CAI	10,4	10	15	9930	30000	21,3	32,4	0,00	1,5	6,5	3	27,60	1500
HKW108_080CAF	16	10	15	15300	30000	31,9	48,6	0,00	1,5	6,5	3	18,40	1500
HKW108_140CAI	10,2	20	30	4870	30000	24,4	37,4	0,00	1,5	11	5	48,40	1500
HKW108_140CAF	15,6	20	30	7450	30000	36,6	56,1	0,00	1,5	11	5	32,20	1500
HKW108_140CAD	25	20	30	11900	30000	54,8	84,2	0,00	1,5	11	5	21,50	1500
HKW108_200CAJ	9	30	45	2870	30000	23,1	35,6	0,00	1,5	14	5	76,80	1500
HKW108_200CAF	15,5	30	45	4940	30000	38,4	59,3	0,00	1,5	14	7	46,10	1500
HKW108_200CAD	25	30	45	7960	30000	57,7	88,9	0,00	1,5	14	7	30,70	1500
HKW155_080CRR	8,8	22	33	3820	24000	18,2	27,6	0,01	2,4	8	5	72,20	1200
HKW155_080CRP	14	22	33	6080	24000	28,5	43,1	0,01	2,4	8	5	46,20	1200
HKW155_080CAR	10,3	28	42	3510	18000	19,0	29,4	0,01	2,4	8	5	88,40	900
HKW155_080CAP	16	28	42	5500	18000	29,6	46,0	0,01	2,4	8	5	56,60	900
HKW155_120CAR	10	48	75	1990	24000	21,8	36,3	0,01	2,4	12	5	133,00	1200
HKW155_120CAK	23	48	75	4600	24000	49,5	82,5	0,01	2,4	12	8	58,30	1200
HKW155_120CAH	32	46	75	6640	24000	65,1	113,0	0,01	2,4	12	8	42,40	1200
HKW155_120CAF	43	44	75	9330	24000	82,9	151,0	0,01	2,4	12	8	31,80	1200
HKW155_160CAR	10	68	100	1410	24000	23,2	36,3	0,01	2,4	16	5	177,00	1200
HKW155_160CAP	16	68	100	2250	24000	36,3	56,7	0,01	2,4	16	6	113,00	1200
HKW155_160CAH	32	68	100	4500	24000	72,6	113,0	0,01	2,4	16	10	56,60	1200
HKW155_160CAF	44	66	100	6370	24000	93,8	151,0	0,01	2,4	16	10	42,40	1200
HKW155_160CAD	63	58	100	10300	24000	123,0	227,0	0,01	2,4	16	10	28,30	1200
HKW195_120CAV	7,2	80	120	860	18000	19,4	35,1	0,02	3,2	23	7	261,00	900
HKW195_120CAP	16	80	120	1910	20000	42,1	76,0	0,02	3,2	23	7	120,00	1000
HKW195_120CAI	34	80	120	4050	20000	84,1	152,0	0,02	3,2	23	7	60,10	1000
HKW195_120CAF	52	75	120	6620	20000	117,0	228,0	0,02	3,2	23	7	40,10	1000
HKW195_120CAE	62	75	120	7900	20000	140,0	274,0	0,02	3,2	23	7	33,40	1000
HKW195_180CAT	10	120	180	795	16000	26,1	47,2	0,03	3,2	35	10	291,00	800
HKW195_180CAP	16	120	180	1280	20000	42,1	76,0	0,03	3,2	35	10	180,00	1000
HKW195_180CAM	23	120	180	1830	20000	58,2	105,0	0,03	3,2	35	10	130,00	1000
HKW195_180CAJ	31	120	180	2470	20000	75,7	137,0	0,03	3,2	35	10	100,00	1000
HKW195_180CAF	52	120	180	4140	20000	126,0	228,0	0,03	3,2	35	10	60,10	1000
HKW195_180CAC	101	110	180	8770	20000	227,0	456,0	0,03	3,2	35	10	30,10	1000
HKW195_300CAM	23	200	300	1100	20000	58,2	105,0	0,06	3,2	58	16	217,00	1000
HKW195_300CAJ	30	200	300	1440	20000	75,7	137,0	0,06	3,2	58	16	167,00	1000
HKW195_300CAF	52	200	300	2490	20000	126,0	228,0	0,06	3,2	58	16	100,00	1000
HKW195_300CAE	63	200	300	3010	20000	151,0	274,0	0,06	3,2	58	16	83,50	1000
HKW195_300CAC	105	200	300	5010	20000	252,0	456,0	0,06	3,2	58	16	50,10	1000
HKW195_300CAX	175	200	300	8350	20000	454,0	821,0	0,06	3,2	58	16	27,80	1000
HKW242_225DAN	15	280	360	510	11000	37,2	49,9	0,14	4	70	18	489,00	733
HKW242_225DAF	33	280	360	1130	13000	74,4	99,7	0,14	4	70	18	244,00	867
HKW242_225DAD	50	280	360	1710	13000	112,0	150,0	0,14	4	70	18	163,00	867
HKW242_225DAC	67	275	360	2330	13000	146,0	199,0	0,14	4	70	18	122,00	867
HKW242_225DAB	101	260	360	3710	13000	206,0	299,0	0,14	4	70	18	81,50	867
HKW242_375DAF	30	480	600	600	13000	76,8	99,7	0,24	4	120	25	407,00	867
HKW242_375DAD	49	480	600	975	13000	115,0	150,0	0,24	4	120	25	272,00	867
HKW242_375DAC	67	480	600	1330	13000	154,0	199,0	0,24	4	120	25	204,00	867
HKW242_375DAB	101	480	600	2010	13000	230,0	299,0	0,24	4	120	25	136,00	867
HKW242_375DAA	200	460	600	4150	13000	439,0	598,0	0,24	4	120	25	67,90	867
HKW310_200HAJ	37	600	900	590	8000	87,1	141,0	0,35	5	120	15	431,00	1067
HKW310_200HAH	46	580	900	760	8000	105,0	177,0	0,35	5	120	15	345,00	1067
HKW310_200HAE	77	575	900	1280	8000	166,0	282,0	0,35	5	120	15	215,00	1067
HKW310_200HAD	95	565	900	1610	8000	204,0	353,0	0,35	5	120	15	172,00	1067
HKW310_200HAC	115	550	900	2000	8000	265,0	471,0	0,35	5	120	15	129,00	1067
HKW310_300HAJ	35,4	940	1350	360	8000	91,2	141,0	0,49	5	170	20	646,00	1067
HKW310_300HAH	45	940	1350	460	8000	114,0	177,0	0,49	5	170	20	517,00	1067
HKW310_300HAE	76	930	1350	780	8000	180,0	282,0	0,49	5	170	20	323,00	1067
HKW310_300HAD	95	920	1350	990	8000	223,0	353,0	0,49	5	170	20	258,00	1067
HKW310_300HAC	120	900	1350	1270	8000	290,0	471,0	0,49	5	170	20	194,00	1067
HKW310_400HAJ	34	1250	1800	260	6000	91,0	141,0	0,64	5	220	21	861,00	800
HKW310_400HAH	44,5	1250	1800	340	8000	114,0	177,0	0,64	5	220	25	689,00	1067
HKW310_400HAF	62	1250	1800	475	8000	152,0	235,0	0,64	5	220	25	517,00	1067
HKW310_400HAE	75	1250	1800	575	8000	182,0	282,0	0,64	5	220	25	431,00	1067
HKW310_400HAD	94	1250	1800	720	8000	227,0	353,0	0,64	5	220	25	345,00	1067
HKW310_400HAC	120	1250	1800	910	8000	303,0	471,0	0,64	5	220	25	258,00	1067
HKW310_400HAY	230	1080	1800	2030	8000	520,0	942,0	0,64	5	220	30	129,00	1067

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up to 230 kW



Associated drives for HKW series - 540V DC voltage supply

Motor	Winding resistance line-line (25°C) Rb (Ohms)	Winding inductance line-line Ld (mH)	Winding inductance line-line Lq (mH)	Number of poles	Short-circuit current Icc (Arms)	PARKER drive DIGIVEX	DIGIVEX Speed limit due to the B.E.M.F or the frequency DIGIVEX (rpm)	Low speed torque Mo (Nm)	Low speed torque S6 Mo S6 (Nm)	PARKER Drive AC890SD	AC890 Speed limit due to the B.E.M.F or the frequency Nmax AC890 (rpm)	Low speed torque Mo (Nm)	Low speed torque S6 Mo S6 (Nm)
HKW085_066BAU	5,37	52,20	45,5	4	5,5	DIGIVEX 32/64	45000	4,9	7,3	890SD-532100B	11283	4,3	4,3
HKW085_066BAP	1,35	13,00	11,4	4	10,9	DIGIVEX 32/64	45000	4,5	6,1	890SD-53216SB	22566	4,5	4,5
HKW085_066BAK	0,337	3,26	2,84	4	21,9	DIGIVEX 50/80	45000	4,2	4,8	890SD-532300C	30000	4,1	4,1
HKW085_099BAQ	2,16	22,70	19,8	4	10,2	DIGIVEX 32/64	45000	7,4	9,9	890SD-53216SB	13973	7,4	7,4
HKW085_099BAL	0,541	5,68	4,96	4	20,3	DIGIVEX 32/64	45000	6,7	6,7	890SD-532300C	27869	6,5	6,5
HKW085_099BAI	0,205	2,35	2,05	4	31,5	DIGIVEX 50/80	45000	6,8	6,8	890SD-532450D	30000	6,6	6,6
HKW108_080CAN	2,78	22,40	19,7	6	10,3	DIGIVEX 32/64	30000	10,0	15,0	890SD-53216SB	9239	10,0	13,0
HKW108_080CAI	0,694	5,61	4,92	6	20,6	DIGIVEX 50/80	30000	10,0	15,0	890SD-532300C	18478	10,0	10,2
HKW108_080CAF	0,309	2,49	2,19	6	30,9	DIGIVEX 50/80	30000	10,0	10,9	890SD-532450D	20000	10,0	10,5
HKW108_140CAI	0,96	9,79	8,6	6	20,7	DIGIVEX 50/80	30000	20,0	28,4	890SD-532300C	10537	18,0	18,0
HKW108_140CAF	0,427	4,35	3,82	6	31,0	DIGIVEX 50/80	30000	19,3	19,3	890SD-532450D	15839	18,6	18,6
HKW108_140CAD	0,189	1,93	1,7	6	46,5	DIGIVEX 100/120	30000	20,0	25,2	890SD-532240C	6641	26,0	26,0
HKW108_200CAJ	1,5	17,30	15,2	6	18,6	DIGIVEX 32/64	30000	29,4	29,4	890SD-532450D	11063	26,6	26,6
HKW108_200CAF	0,545	6,21	5,46	6	31,0	DIGIVEX 50/80	30000	27,6	27,6	890SD-432730E	10000	30,0	38,5
HKW108_200CAD	0,241	2,76	2,43	6	46,4	DIGIVEX 100/120	30000	30,0	35,8				
HKW155_080CRR	1,45	18,80	15,6	6	17,0	DIGIVEX 32/64	24000	22,0	27,1	890SD-532240C	7064	22,0	23,9
HKW155_080CRP	0,575	7,68	6,4	6	26,5	DIGIVEX 50/80	24000	22,0	27,1	890SD-53230SC	11039	21,6	21,6
HKW155_080CAR	1,45	18,80	15,6	6	20,8	DIGIVEX 50/80	24000	28,0	42,0	890SD-532300C	5769	28,0	31,4
HKW155_080CAP	0,575	7,68	6,4	6	32,5	DIGIVEX 100/120	24000	28,0	42,0	890SD-532450D	9011	28,0	31,0
HKW155_120CAR	1,76	28,10	23,4	6	20,9	DIGIVEX 50/80	24000	48,0	73,1	890SD-532300C	3835	48,0	48,0
HKW155_120CAK	0,32	5,45	4,54	6	47,2	DIGIVEX 100/120	24000	48,0	64,3	890SD-432730E	8748	48,0	69,1
HKW155_120CAH	0,177	2,88	2,4	6	64,9	DIGIVEX 150	24000	46,0	70,4	890SD-432730E	10000	46,0	50,4
HKW155_120CAF	0,0994	1,62	1,35	6	86,6	DIGIVEX 300	24000	44,0	75,0	890SD-432870E	10000	44,0	44,7
HKW155_160CAR	2,07	37,50	31,3	6	20,8	DIGIVEX 50/80	24000	68,0	97,4	890SD-532300C	2881	64,5	64,5
HKW155_160CAP	0,823	15,40	12,8	6	32,4	DIGIVEX 100/120	24000	68,0	100,0	890SD-532450D	4513	63,7	63,7
HKW155_160CAH	0,209	3,84	3,2	6	65,0	DIGIVEX 150	24000	68,0	93,9	890SD-432730E	9011	68,0	68,0
HKW155_160CAF	0,117	2,16	1,8	6	86,6	DIGIVEX 300	24000	66,0	100,0	890SD-432870E	10000	63,3	63,3
HKW155_160CAD	0,0522	0,96	0,8	6	130,0	DIGIVEX 300	24000	58,0	93,5				
HKW195_120CAV	2,38	67,50	60,8	6	15,8	DIGIVEX 32/64	17200	80,0	80,0	890SD-532240C	1954	80,0	80,0
HKW195_120CAP	0,492	14,40	13	6	33,9	DIGIVEX 100/120	20000	80,0	111,7	890SD-532590D	4250	80,0	80,0
HKW195_120CAI	0,122	3,60	3,24	6	68,2	DIGIVEX 150	20000	80,0	83,7	890SD-432730E	8486	72,3	72,3
HKW195_120CAF	0,0563	1,60	1,44	6	102,4	DIGIVEX 300	20000	75,0	111,7	890SD-433105F	10000	69,2	69,2
HKW195_120CAE	0,0381	1,11	1	6	122,8	DIGIVEX 300	20000	75,0	92,9	890SD-433145F	10000	72,3	72,3
HKW195_180CAT	1,66	54,60	50,5	6	21,2	DIGIVEX 50/80	15900	120,0	134,9	890SD-532300C	1753	101,1	101,1
HKW195_180CAP	0,617	21,00	19,4	6	34,1	DIGIVEX 100/120	20000	120,0	167,5	890SD-532590D	2833	120,0	120,0
HKW195_180CAM	0,332	11,00	10,1	6	47,3	DIGIVEX 100/120	20000	120,0	121,2	890SD-432730E	3923	120,0	130,3
HKW195_180CAJ	0,191	6,49	6	6	61,3	DIGIVEX 100/120	20000	112,1	112,1	890SD-432730E	5100	120,0	120,0
HKW195_180CAF	0,0706	2,34	2,16	6	102,3	DIGIVEX 300	20000	120,0	167,5	890SD-433105F	8486	102,9	102,9
HKW195_180CAC	0,017	0,58	0,54	6	204,9	DIGIVEX 100/120	20000	200,0	202,1	890SD-433216G	10000	101,8	101,8
HKW195_300CAM	0,466	17,90	16,9	6	47,2	DIGIVEX 100/120	20000	186,8	186,8	890SD-432730E	2350	200,0	217,1
HKW195_300CAJ	0,269	10,60	10	6	61,4	DIGIVEX 300	20000	200,0	279,2	890SD-432730E	3054	200,0	200,0
HKW195_300CAF	0,0993	3,82	3,6	6	102,1	DIGIVEX 300	20000	200,0	232,3	890SD-433105F	5100	171,4	171,4
HKW195_300CAE	0,0672	2,65	2,5	6	122,8					890SD-433145F	6108	178,8	178,8
HKW195_300CAC	0,0239	0,95	0,9	6	204,6					890SD-433216G	10000	166,7	166,7
HKW195_300CAX	0,00747	0,29	0,278	6	367,6					890SD-433420H	10000	168,7	168,7
HKW242_225DAN	1,52	41,90	41,5	8	32,5	DIGIVEX 100/120	10200	280,0	360,0	890SD-532450D	1043	255,9	255,9
HKW242_225DAF	0,381	10,50	10,4	8	64,7	DIGIVEX 150	13000	280,0	360,0	890SD-432730E	2090	280,0	280,0
HKW242_225DAD	0,169	4,66	4,61	8	97,5	DIGIVEX 300	13000	280,0	360,0	890SD-433105F	3129	270,0	270,0
HKW242_225DAC	0,0952	2,62	2,59	8	129,8	DIGIVEX 300	13000	275,0	360,0	890SD-433145F	4180	254,3	254,3
HKW242_225DAB	0,0424	1,16	1,15	8	195,4					890SD-433216G	6258	260,0	260,0
HKW242_375DAF	0,566	17,40	17,3	8	64,9	DIGIVEX 150	12000	480,0	600,0	890SD-432730E	1253	475,0	475,0
HKW242_375DAD	0,251	7,74	7,68	8	97,6	DIGIVEX 300	13000	480,0	600,0	890SD-433105F	1875	450,8	450,8
HKW242_375DAC	0,141	4,36	4,32	8	130,2	DIGIVEX 300	13000	480,0	600,0	890SD-433145F	2500	420,8	420,8
HKW242_375DAB	0,063	1,94	1,92	8	195,3					890SD-433216G	3750	438,3	438,3
HKW242_375DAA	0,0157	0,48	0,476	8	393,2					890SD-433480H	7500	448,5	448,5
HKW310_200HAJ	0,392	9,25	7,8	16	76,2	DIGIVEX 150	8000	600,0	677,1	890SD-432870E	1183	600,0	600,0
HKW310_200HAH	0,235	5,92	4,99	16	95,3	DIGIVEX 300	8000	580,0	900,0	890SD-433105F	1478	580,0	580,0
HKW310_200HAE	0,0929	2,31	1,95	16	152,0	DIGIVEX 300	8000	575,0	677,1	890SD-433156F	2372	533,4	533,4
HKW310_200HAD	0,0588	1,48	1,25	16	189,7	DIGIVEX 300	3314	565,0	565,0	890SD-433216G	2965	565,0	565,0

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up to 230 kW



Motor	Winding resis-tance line-line (25°C) Rb (Ohms)	Winding inductance line-line Ld (mH)	Winding inductance line-line Lq (mH)	Number of poles	Short-circuit current Icc (Arms)	PARKER drive DIGIVEX	DIGIVEX Speed limit due to the B.E.M.F or the frequency DIGIVEX (rpm)	Low speed torque Mo (Nm)	Low speed torque S6 Mo S6 (Nm)	PARKER Drive AC890SD	AC890 Speed limit due to the B.E.M.F or the frequency Nmax AC890 (rpm)	Low speed torque Mo (Nm)	Low speed torque S6 Mo S6 (Nm)
HKW310_200HAC	0,0331	0,83	0,702	16	253,3					890SD-433316G	3750	550,0	550,0
HKW310_300HAJ	0,525	13,90	11,7	16	76,1	DIGIVEX 150	7200	940,0	1015,7	890SD-432870E	789	927,6	927,6
HKW310_300HAH HKW310_300HAE	0,315 0,124	8,88 3,47	7,49 2,93	16 16	95,1 151,9	DIGIVEX 300 DIGIVEX 300	8000 8000	940,0 930,0	1350,0 1015,7	890SD-433105F 890SD-433156F	986 1579	890,5 795,7	890,5 795,7
HKW310_300HAD	0,0788	2,22	1,87	16	190,2	DIGIVEX 300	2209	875,3	875,3	890SD-433216G	1977	866,4	866,4
HKW310_300HAC	0,0443	1,25	1,05	16	254,7					890SD-433316G	2629	887,6	887,6
HKW310_400HAJ	0,658	18,50	15,6	16	76,1	DIGIVEX 150	5200	1250,0	1354,2	890SD-432870E	592	1236,3	1236,3
HKW310_400HAH	0,395	11,80	9,98	16	95,2	DIGIVEX 300	6800	1250,0	1800,0	890SD-433105F	740	1184,2	1184,2
HKW310_400HAF HKW310_400HAE	0,222 0,156	6,66 4,62	5,62 3,9	16 16	126,8 152,3	DIGIVEX 300 DIGIVEX 300	8000 8000	1250,0 1250,0	1625,1 1354,2	890SD-433145F 890SD-433156F	986 1183	1110,2 1057,7	1110,2 1057,7
HKW310_400HAD	0,0987	2,96	2,5	16	190,2	DIGIVEX 300	1652	1168,3	1168,3	890SD-433216G	1478	1156,4	1156,4
HKW310_400HAC	0,0555	1,66	1,4	16	254,0					890SD-433316G	1977	1179,9	1179,9
HKW310_400HAY	0,0139	0,42	0,351	16	506,6					890PX/0580/ B/00/A	3750	1080,0	1080,0

Correspondence table between HW and HKW

HW	HKW
HW420BU	HKW085_066BAU
HW420BP	HKW085_066BAP
HW420BK	HKW085_066BAK
HW430BQ	HKW085_099BAQ
HW430BL	HKW085_099BAL
HW430BI	HKW085_099BAI
HW620CN	HKW108_080CAN
HW620CI	HKW108_080CAI
HW620CF	HKW108_080CAF
HW635CI	HKW108_140CAI
HW635CF	HKW108_140CAF
HW635CD	HKW108_140CAD
HW650CJ	HKW108_200CAJ
HW650CF	HKW108_200CAF
HW650CD	HKW108_200CAD
HW820RR	HKW155_080CRR
HW820RP	HKW155_080CRP
HW820CR	HKW155_080CAR
HW820CP	HKW155_080CAP
HW830CR	HKW155_120CAR
HW830CK	HKW155_120CAK
HW830CH	HKW155_120CAH
HW830CF	HKW155_120CAF
HW840CR	HKW155_160CAR

HW	HKW
HW840CP	HKW155_160CAP
HW840CH	HKW155_160CAH
HW840CF	HKW155_160CAF
HW840CD	HKW155_160CAD
HW920CV	HKW195_120CAV
HW920CP	HKW195_120CAP
HW920CI	HKW195_120CAI
HW920CF	HKW195_120CAF
HW920CE	HKW195_120CAE
HW930CT	HKW195_180CAT
HW930CP	HKW195_180CAP
HW930CM	HKW195_180CAM
HW930CJ	HKW195_180CAJ
HW930CF	HKW195_180CAF
HW930CC	HKW195_180CAC
HW950CM	HKW195_300CAM
HW950CJ	HKW195_300CAJ
HW950CF	HKW195_300CAF
HW950CE	HKW195_300CAE
HW950CC	HKW195_300CAC
HW950CX	HKW195_300CAX
HWA30DN	HKW242_225DAN
HWA30DF	HKW242_225DAF
HWA30DD	HKW242_225DAD

HW	HKW
HWA30DC	HKW242_225DAC
HWA30DB	HKW242_225DAB
HWA50DF	HKW242_375DAF
HWA50DD	HKW242_375DAD
HWA50DC	HKW242_375DAC
HWA50DB	HKW242_375DAB
HWA50DA	HKW242_375DAA
HWB20HJ	HKW310_200HAJ
HWB20HH	HKW310_200HAH
HWB20HE	HKW310_200HAE
HWB20HD	HKW310_200HAD
HWB20HC	HKW310_200HAC
HWB30HJ	HKW310_300HAJ
HWB30HH	HKW310_300HAH
HWB30HE	HKW310_300HAE
HWB30HD	HKW310_300HAD
HWB30HC	HKW310_300HAC
HWB40HJ	HKW310_400HAJ
HWB40HH	HKW310_400HAH
HWB40HF	HKW310_400HAF
HWB40HE	HKW310_400HAE
HWB40HD	HKW310_400HAD
HWB40HC	HKW310_400HAC
HWB40HY	HKW310_400HAY

Watercooled frameless spindle AC brushless

HKW series

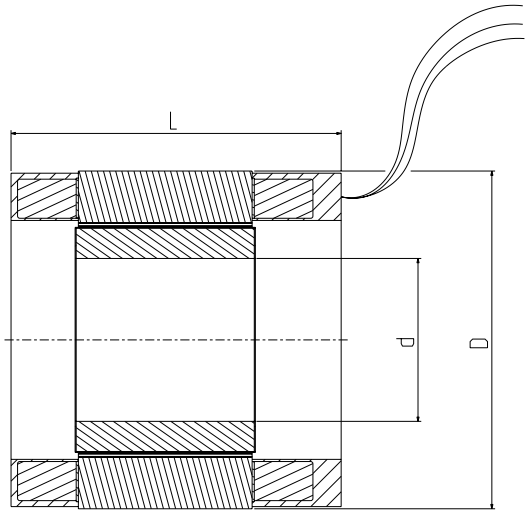
up to 230 kW



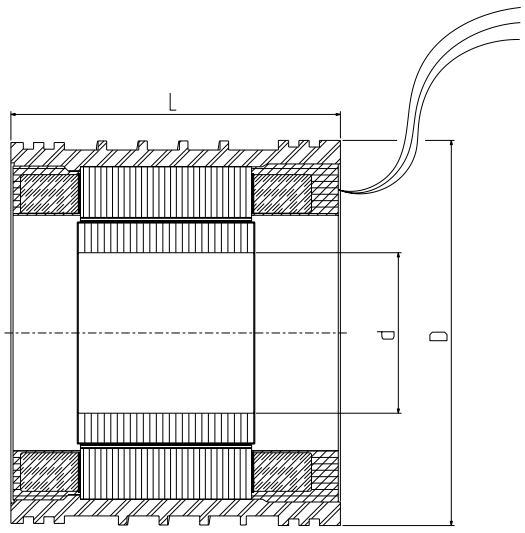
Dimensions

Dimensions	Without housing			With cooling jacket		
Product	d(mm)	D[mm]	L[mm]	d(mm)	D[mm]	L[mm]
HKW085_066	32	85	134	32	100	136
HKW085_099			167			169
HKW108_080	47	108	148	47	130	150
HKW108_140			208			210
HKW108_200			268			270
HKW155_080	75	155,5	152	75	180	154
HKW155_120			192			194
HKW155_160			232			234
HKW195_120CAx	90	195	214	90	220	216
HKW195_120CAF			223			225
HKW195_120CAE			231			233
HKW195_180CAx			274			276
HKW195_180CAF			283			285
HKW195_180CAC			291			293
HKW195_300CAM/J			394			396
HKW195_300CAF			403			405
HKW195_300CAE/C			411			413
HKW242_375DAN/F	130	242	313	130	270	315
HKW242_375DAD			322			324
HKW242_375DAC			330			332
HKW242_375DAB			333			335
HKW242_226DAF			463			465
HKW242_226DAD			472			474
HKW242_226DAC			480			482
HKW242_226DAB			477			479
HKW310_200HAJ	180	310	308	180	340	310
HKW310_200HAH			317			319
HKW310_200HAE			328			330
HKW310_200HAD			322			324
HKW310_200HAC			325			327
HKW310_300HAJ			408			410
HKW310_300HAH			417			419
HKW310_300HAE			428			430
HKW310_300HAD			422			424
HKW310_300HAC			425			427
HKW310_400HAJ			508			510
HKW310_400HAH			517			519
HKW310_400HAF			525			527
HKW310_400HAE			528			530
HKW310_400HAD			522			524
HKW310_400HAC			525			527
HKW310_400HAZ			540			542

Stator without housing



Stator with cooling jacket



Watercooled frameless spindle AC brushless

HKW series

up to 230 kW



HKW codification

Electrospindle motors HKW	Product code															
	H	**K**	**W**	**1**	**5**	**5**	**_**	**1**	**2**	**0**	**C**	**A**	**P**	**R**	**0**	**0**	**0**	**0**
PRODUCT SERIES																		
HK : Frameless permanent magnet servomotors	**H**	**K**																
COOLING METHOD																		
Water cooling (standard)			**W**															
Natural ventilation (available with derating, consult us)			A															
EXTERNAL DIAMETER																		
85 mm				0	8	5												
108 mm				1	0	8												
155 mm				1	5	5												
195 mm				1	9	5												
242 mm				2	4	2												
310 mm				3	1	0												
ELEMENT																		
Motor							_											
Stator							S											
Rotor							R											
LENGTH																		
(see motors data tables)								▪	▪	▪								
TORQUE/SPEED CHARACTERISTICS																		
(see motors data tables)											▪	▪	▪					
MECHANICAL OPTIONS																		
Without housing, without hub															0			
With housing, without hub															1			
Without housing, with hub															2			
With housing, without hub															3			
INTERFACE																		
Standard motor																0	0	0