



# Servo *motors*

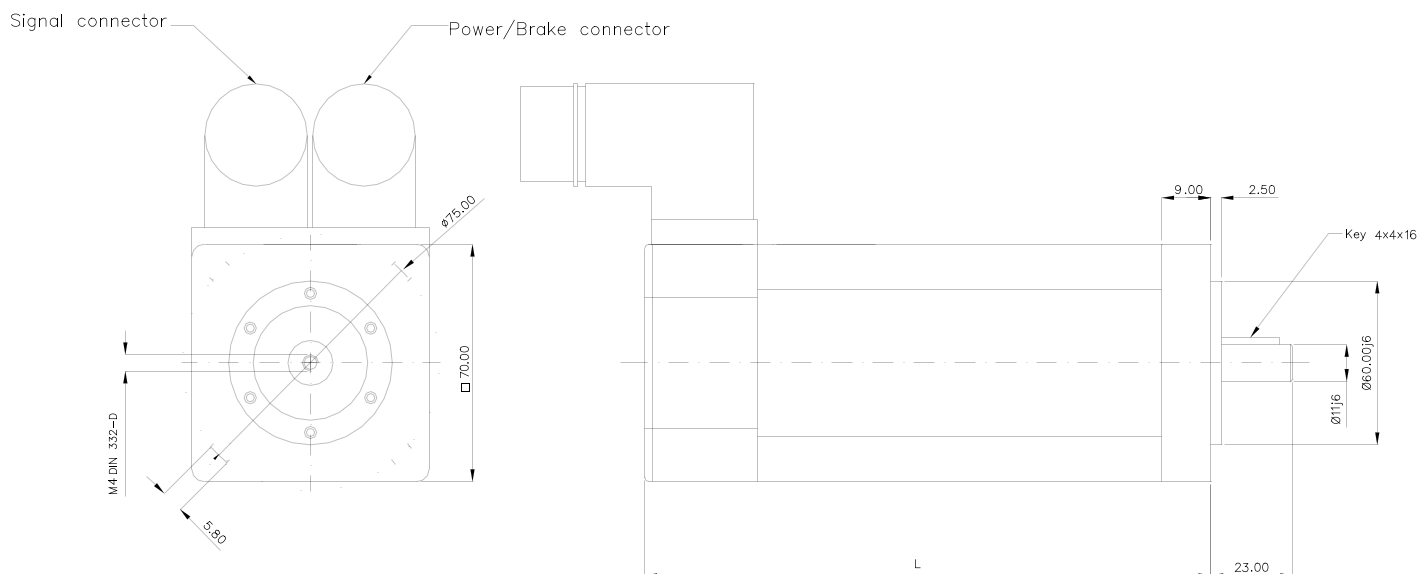
Intelligence Production Movement



# B36P Series

## Sinusoidal 8 Poles - H(400V)

Available torque: from 0,70 Nm to 2,30 Nm



### Electrical Data

TYPE	Stall torque ( $\Delta T = 105^\circ\text{C}$ ) $M_0$ (Nm)	Rated Speed $n$ (rpm)	Output at rated speed $P_n$ (kW)	Rated torque $M_n$ (Nm)	Peak torque $M_{pk}$ (Nm)	Maximum speed $n_{max}$ (rpm)	Moment of Inertia $J$ ( $10^{-4}\text{kgm}^2$ )	Peak torque acceleration $a_{pk}$ ( $\text{rad}/\text{sec}^2$ )	Thermal time constant $T_{th}$ (min)	Thermal protection threshold ( $^\circ\text{C}$ )	Voltage constant $k_e$ (Vs)	Torque constant $k_t$ (Nm/A)	BEEMF at rated speed $E_n$ (V)	Phase to phase resistance $R$ ( $\Omega$ )	Phase to phase inductance $L$ (mH)	Stall current $I_0$ (Arms)	Rated current $I_n$ (Arms)
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#### Voltage H (400 Volt) - 3000 Min-1- connection Y

MM B36.D7S	0,70	3000	210	0,67	3,0	12000	0,38	78947	15	140	0,84	1,45	264	78,8	54,4	0,48	0,46
MM B36.E3P	1,30	3000	390	1,24	6,0	12000	0,78	76923	18	140	0,84	1,45	264	36,8	32,8	0,89	0,85
MM B36.E8P	1,80	3000	537	0,71	8,0	12000	1,08	74074	20	140	0,84	1,45	264	20,4	22,0	1,24	1,18
MM B36.F3P	2,30	3000	688	2,19	11,0	12000	1,43	76923	23	140	0,84	1,45	264	14,4	16,4	1,58	1,51

#### Voltage H (400 Volt) - 6000 Min-1- connection Y

MM B36.D7S	0,70	6000	371	0,59	3,0	12000	0,38	78947	15	140	0,42	0,73	264	19,70	13,60	0,96	0,81
MM B36.E3P	1,30	6000	685	1,09	6,0	12000	0,78	76923	18	140	0,42	0,73	264	9,20	8,20	1,79	1,50
MM B36.E8P	1,80	6000	949	1,51	8,0	12000	1,08	74074	20	140	0,42	0,73	264	5,10	5,50	2,47	2,08
MM B36.F3P	2,30	6000	1213	1,93	11,0	12000	0,43	76923	23	140	0,42	0,73	264	3,60	4,10	3,16	2,65

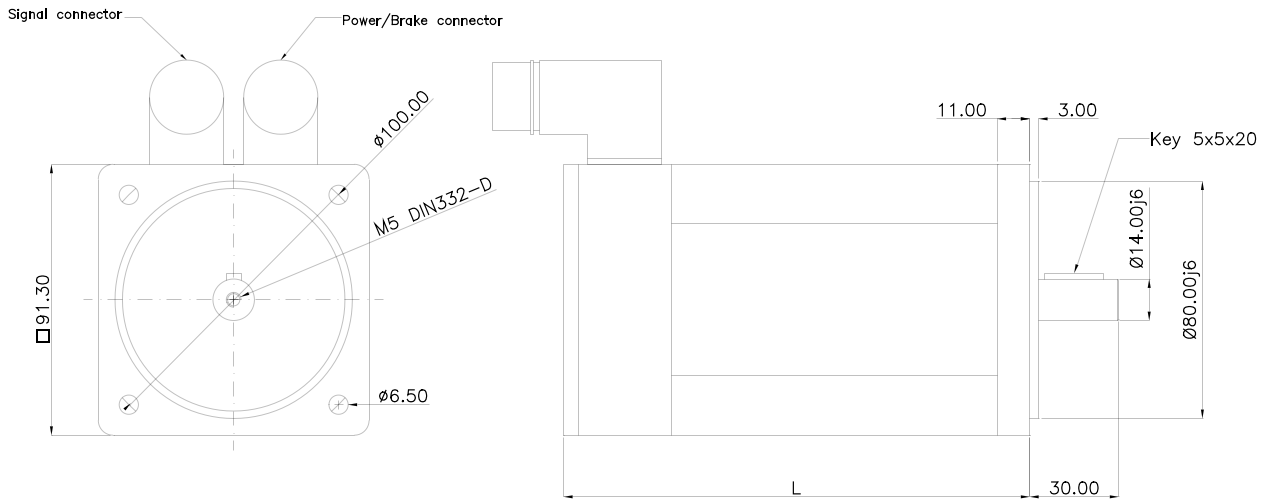
### Mechanical dimension

TYPE	Stall Torque Nm	Length with RESOLVER		Length with ENCODER		Weight (Kg)	
		without brake	with brake	without brake	with brake	without brake	with brake
MM B36.D7S	0,70	116	152	123	159	1,6	2,2
MM B36.E3P	1,30	141	177	148	184	2,1	2,7
MM B36.E8P	1,80	166	202	173	209	2,6	3,2
MM B36.F3P	2,30	191	227	198	234	3,1	3,7

# B56S Series

## Sinusoidal 8 Poles - H(400V) e M(220V)

Available torque: 1,2 Nm, 2,4 Nm and 3,4 Nm



### Electrical Data

TYPE	Stall torque ( $\Delta t = 10^5$ °C) $M_0$ (Nm)	Rated Speed $n$ (rpm)	Output at rated speed $P_n$ (kW)	Rated torque $M_n$ (Nm)	Peak torque $M_{pk}$ (Nm)	Maximum speed $n_{max}$ (rpm)	Moment of Inertia $J$ ( $10^{-4}$ kgm <sup>2</sup> )	Peak torque acceleration $a_{pk}$ (rad/sec <sup>2</sup> )	Thermal time constant $T_{th}$ (min)	Thermal protection threshold (°C)	Voltage constant $k_e$ (Vs)	Torque constant $k_t$ (Nm/A)	BEMF at rated speed $E_n$ (V)	Phase to phase resistance $R$ ( $\Omega$ )	Phase to phase inductance $L$ (mH)	Stall Current $I_0$ (Arms)	Rated current $I_n$ (Arms)
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#### Voltage H (400 Volt) - 3000 Min-1

MM B56.E2S 3H	1,20	3000	0,314	1,00	4,20	6000	0,73	57534	32	140	0,86	1,48	269	36,0	38,0	0,81	0,68
MM B56.F4S 3H	2,40	3000	0,628	2,00	8,50	6000	1,40	60714	35	140	0,86	1,48	269	15,2	26,2	1,62	1,35
MM B56.G4S 3H	3,40	3000	0,816	2,60	10,50	6000	1,84	57065	38	140	0,86	1,48	269	9,5	16,0	2,30	1,76

#### Voltage H (400 Volt) - 4500 Min-1

MM B56.E2S DH	1,20	4500	0,330	0,70	4,20	6000	0,73	57534	32	140	0,57	0,99	269	16,0	16,9	1,22	0,71
MM B56.F4S DH	2,40	4500	0,659	1,40	8,50	6000	1,40	60714	35	140	0,57	0,99	269	6,8	11,6	2,43	1,42
MM B56.G4S DH	3,40	4500	0,857	1,82	10,50	6000	1,84	57065	38	140	0,57	0,99	269	4,2	7,1	3,44	1,84

#### Voltage M (220 Volt) - 3000 Min-1

MM B56.E2S 3M	1,20	3000	0,314	1,00	4,20	6000	0,73	57534	32	140	0,49	0,86	155	12,0	12,7	1,40	1,17
MM B56.F4S 3M	2,40	3000	0,628	2,00	8,50	6000	1,40	60714	35	140	0,49	0,86	155	5,1	8,7	2,81	2,34
MM B56.G4S 3M	3,40	3000	0,817	2,60	10,50	6000	1,84	57065	38	140	0,49	0,86	155	3,2	5,3	3,98	3,04

#### Voltage M (220 Volt) - 4500 Min-1

MM B56.E2S DM	1,20	4500	0,330	0,70	4,20	6000	0,73	57534	32	140	0,33	0,57	155	5,3	5,6	2,11	1,23
MM B56.F4S DM	2,40	4500	0,660	1,40	8,50	6000	1,40	60714	35	140	0,33	0,57	155	2,2	3,9	4,21	2,46
MM B56.G4S DM	3,40	4500	0,858	1,82	10,50	6000	1,84	57065	38	140	0,33	0,57	155	1,4	2,4	5,96	3,19

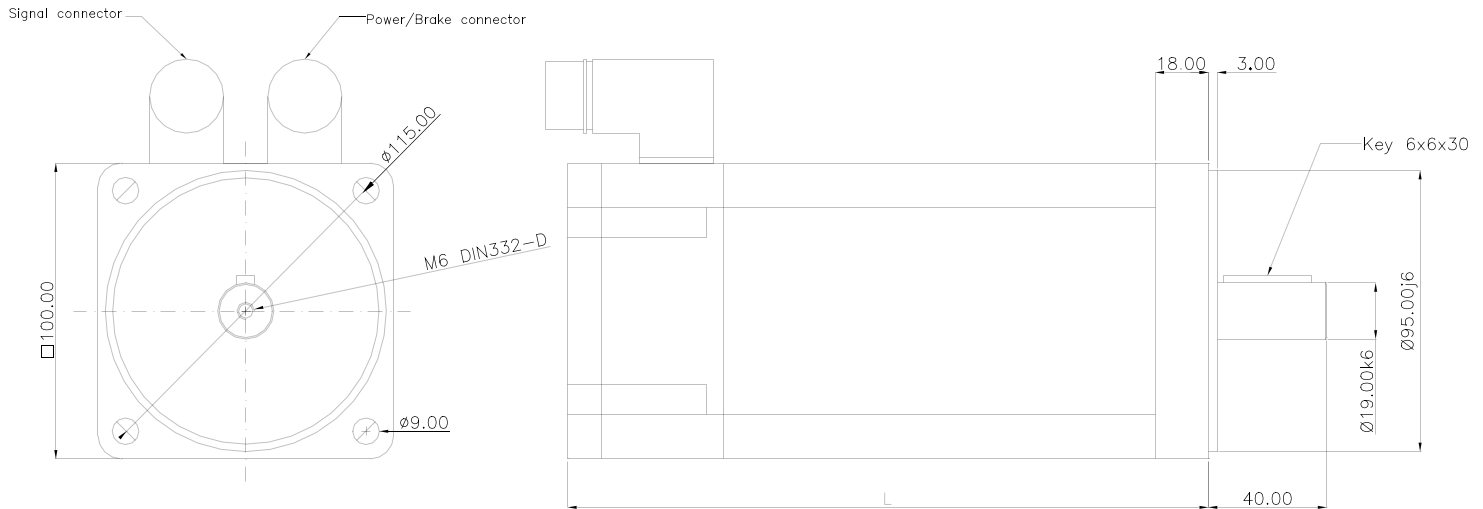
### Mechanical dimension

TYPE	Stall Torque Nm	Length with RESOLVER		Length with ENCODER		Weight (Kg)	
		without brake	with brake	without brake	with brake	without brake	with brake
MM B56.E2S	1,20	127	170	137	180	3,5	4,1
MM B56.F4S	2,40	152	195	162	205	4,4	5,0
MM B56.G4S	3,40	177	220	187	230	5,4	6,0

# B63J Series

## Sinusoidal 10 Poles - 400V

### Available torque: from 4Nm to 12Nm



TYPE	Stall torque ( $\Delta T=105^{\circ}C$ ) $M_0$ (Nm)	Rated Speed $n$ (rpm)	Output at rated speed $P_n$ (kW)	Rated torque $M_n$ (Nm)	Peak torque $M_{pk}$ (Nm)	Maximum speed $n_{max}$ (rpm)	Moment of Inertia $J$ ( $10^{-4}kgm^2$ )	Peak torque acceleration $a_{pk}$ ( $rad/sec^2$ )	Thermal time constant $T_{th}$ (min)	Thermal protection threshold ( $^{\circ}C$ )	Voltage constant $k_e$ (Vs)	Torque constant $k_t$ (Nm/A)	BEMF at rated speed $E_n$ (V)	Phase to phase resistance $R$ ( $\Omega$ )	Phase to phase inductance $L$ (mH)	Stall current $I_0$ (Arms)	Rated current $I_n$ (Arms)
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Voltage H (400 Volt) - 3000/4500 Min-1

MM B63.04J 3H	4,0	3000	0,94	3,00	10	9000	1,75	57143	25	140	0,94	1,63	296	5,43	36,5	2,5	1,8
MM B63.06J 3H	6,0	3000	1,41	4,50	15	9000	2,51	59761	30	140	0,94	1,63	296	3,45	24,0	3,7	2,8
MM B63.08J 3H	8,0	3000	1,88	6,00	20	9000	3,29	60790	30	140	0,94	1,63	296	2,49	21,8	4,9	3,7
MM B63.10J 3H	10,0	3000	2,36	7,50	25	9000	4,07	61425	35	140	0,94	1,63	296	1,92	17,4	6,1	4,6
MM B63.12J 3H	12,0	3000	2,8	9,0	30	9000	4,82	62241	40	140	0,94	1,63	296	1,58	14,5	7,4	5,5
MM B63.04J DH	4,0	4500	1,13	2,40	10	9000	1,75	57143	25	140	0,63	1,09	296	2,42	16,5	3,7	2,2
MM B63.06J DH	6,0	4500	1,70	3,60	15	9000	2,51	59761	30	140	0,63	1,09	296	1,53	10,8	5,5	3,3
MM B63.08J DH	8,0	4500	2,26	4,80	20	9000	3,29	60790	30	140	0,63	1,09	296	1,11	9,7	7,4	4,4
MM B63.10J DH	10,0	4500	2,83	6,00	25	9000	4,07	61425	35	140	0,63	1,09	296	0,90	7,8	9,2	5,5
MM B63.12J DH	12,0	4500	3,40	7,20	30	4000	4,82	62241	40	140	0,63	1,09	296	0,78	6,5	11,0	6,6

### Mechanical dimension

TYPE	Stall Torque $Nm$	Length with RESOLVER		Length with ENCODER		Weight (Kg)	
		without brake	with brake	without brake	with brake	without brake	with brake
MM B63.04J	4,0	160	192	195	227	4,5	5,5
MM B63.06J	6,0	180	212	215	247	5,5	6,5
MM B63.08J	8,0	204	236	269	271	6,5	7,5
MM B63.10J	10,0	224	256	259	291	7,5	8,5
MM B63.12J	12,0	244	276	279	311	9,0	10,0

# B71J Series

## Sinusoidal 8 Poles - 400V

Available torque: from 7 Nm to 23 Nm



### Electrical Data

TYPE	Stall torque ( $\Delta T=105^{\circ}\text{C}$ ) $M_0$ (Nm)	Rated Speed $n$ (rpm)	Output at rated speed $P_n$ (kW)	Rated torque $M_n$ (Nm)	Peak torque $M_{pk}$ (Nm)	Maximum speed $n_{max}$ (rpm)	Moment of Inertia $J$ ( $10^{-4}\text{kgm}^2$ )	Peak torque acceleration $a_{pk}$ ( $\text{rad}/\text{sec}^2$ )	Thermal time constant $T_{th}$ (min)	Thermal protection threshold ( $^{\circ}\text{C}$ )	Voltage constant $k_e$ (Vs)	Torque constant $k_t$ (Nm/A)	BEMF at rated speed $E_n$ (V)	Phase to phase resistance $R$ ( $\Omega$ )	Phase to phase inductance $L$ (mH)	Stall Current $I_0$ (Arms)	Rated current $I_n$ (Arms)
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#### Voltage H (400 Volt) - 3000 Min-1

MM B71.07J	7,0	3000	1,88	6,00	32	6000	6,20	51613	32	140	0,94	1,63	296	3,10	23,30	4,3	3,7
MM B71.11J	11,0	3000	2,98	9,50	46	6000	8,10	56790	35	140	0,94	1,63	296	1,60	14,0	6,7	5,8
MM B71.15J	15,0	3000	4,02	12,80	62	6000	10,00	62000	38	140	0,94	1,63	296	1,17	10,5	9,2	7,9
MM B71.17J	19,0	3000	4,96	15,80	80	6000	11,90	67227	40	140	0,94	1,63	296	0,90	8,5	11,7	9,7
MM B71.23J	23,0	3000	5,97	19,00	94	6000	13,80	68116	40	140	0,94	1,63	296	0,75	7,1	14,1	11,7

#### Voltage H (400 Volt) - 4500 Min-1

MM B71.07J	7,0	4500	2,51	5,33	32	6000	6,20	51613	32	140	0,63	1,09	296	1,32	9,0	6,4	4,9
MM B71.11J	11,0	4500	3,98	8,44	46	6000	8,10	56790	35	140	0,63	1,09	296	0,80	7,0	10,1	7,7
MM B71.15J	15,0	4500	5,36	11,38	62	6000	10,00	62000	38	140	0,63	1,09	296	0,53	5,5	13,8	10,4
MM B71.17J	19,0	4500	6,62	14,04	80	6000	11,90	67227	40	140	0,63	1,09	296	0,37	3,8	17,4	12,9
MM B71.23J	23,0	4500	7,96	16,89	94	6000	13,80	68116	40	140	0,63	1,09	296	0,27	1,6	21,1	15,5

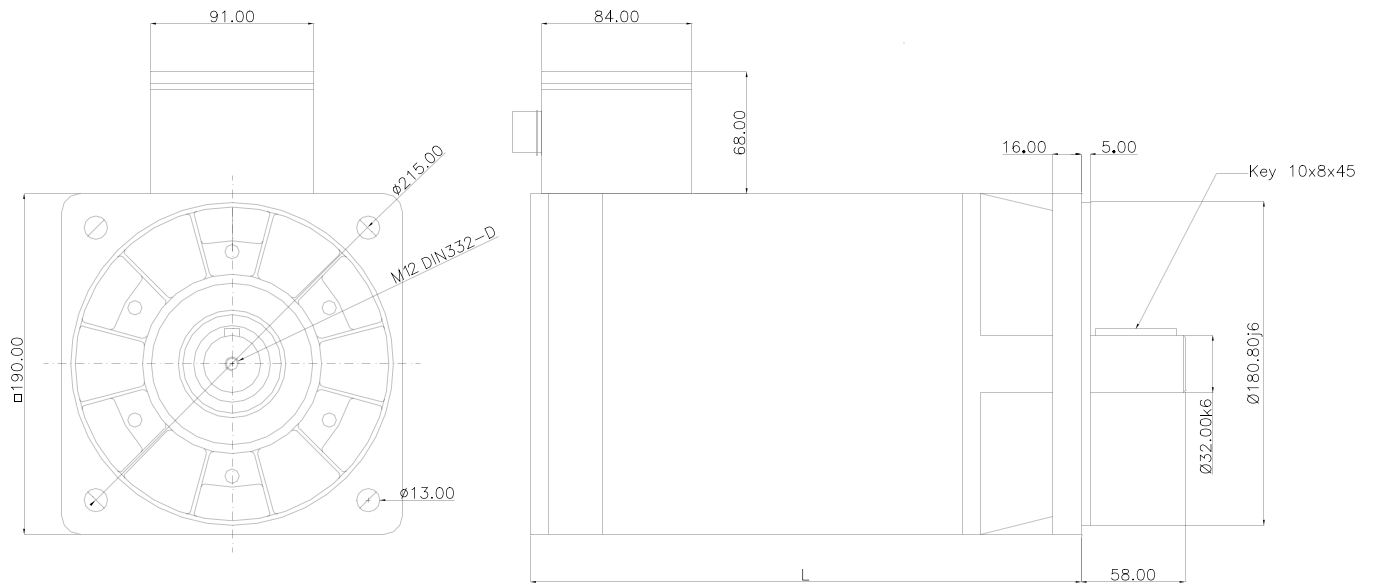
### Mechanical dimension

TYPE	Stall Torque Nm	Length with RESOLVER		Length with ENCODER		Peso (Kg)	
		without brake	with brake	without brake	with brake	without brake	with brake
MM B71.07J	7,0	198	228	228	258	10,9	12,8
MM B71.11J	11,0	223	253	253	283	13,1	15,0
MM B71.15J	15,0	248	278	278	308	15,3	17,2
MM B71.17J	19,0	273	303	303	333	17,5	19,4
MM B71.23J	23,0	298	328	328	358	19,7	21,6

# B100I Series

## Sinusoidal 6 Poles - 400V

### Available torque: from 24 Nm to 66 Nm



### Electrical Data

TYPE	Stall torque ( $\Delta T=105^{\circ}\text{C}$ ) $M_0$ (Nm)	Rated Speed $n$ (rpm)	Output at rated speed $P_n$ (kW)	Rated torque $M_n$ (Nm)	Peak torque $M_{pk}$ (Nm)	Maximum speed $n_{max}$ (rpm)	Moment of Inertia $J$ ( $10^{-4}\text{kgm}^2$ )	Peak torque acceleration $a_{pk}$ ( $\text{rad}/\text{sec}^2$ )	Thermal time constant $T_{th}$ (min)	Thermal protection threshold ( $^{\circ}\text{C}$ )	Voltage constant $k_e$ (Vs)	Torque constant $k_t$ (Nm/A)	BEMF at rated speed $E_n$ (V)	Phase to phase resistance $R$ ( $\Omega$ )	Phase to phase inductance $L$ (mH)	Stall current $I_0$ (Arms)	Rated current $I_n$ (Arms)
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#### Voltage H (400 Volt) - 2000 Min-1

MM B10.30I	30,0	2000	5,7	27,3	99	4000	170,0	5824	60	140	1,41	2,45	296	0,89	11,20	12,2	11,1
MM B10.43I	43,0	2000	8,2	39,1	139	4000	238,0	5840	65	140	1,41	2,45	296	0,55	7,6	17,6	16,0
MM B10.54I	54,0	2000	10,3	49,1	163	4000	300,0	5433	70	140	1,41	2,45	296	0,39	5,9	22,0	10,0
MM B10.66I	66,0	2000	12,6	60,1	199	4000	370,0	5378	70	140	1,41	2,45	296	0,31	4,7	16,9	24,5

#### Voltage H (400 Volt) - 3000 Min-1

MM B10.24I	24,0	3000	6,6	20,9	89	4000	136,0	6544	55	140	0,94	1,63	296	0,55	6,8	14,7	12,8
MM B10.30I	30,0	3000	8,2	26,2	99	4000	170,0	5824	60	140	0,94	1,63	296	0,37	5,3	18,4	16,0
MM B10.43I	43,0	3000	11,6	37,0	139	4000	238,0	5840	65	140	0,94	1,63	296	0,24	3,4	26,3	22,7
MM B10.54I	54,0	3000	14,8	47,0	163	4000	300,0	5433	70	140	0,94	1,63	296	0,18	2,6	33,1	28,8

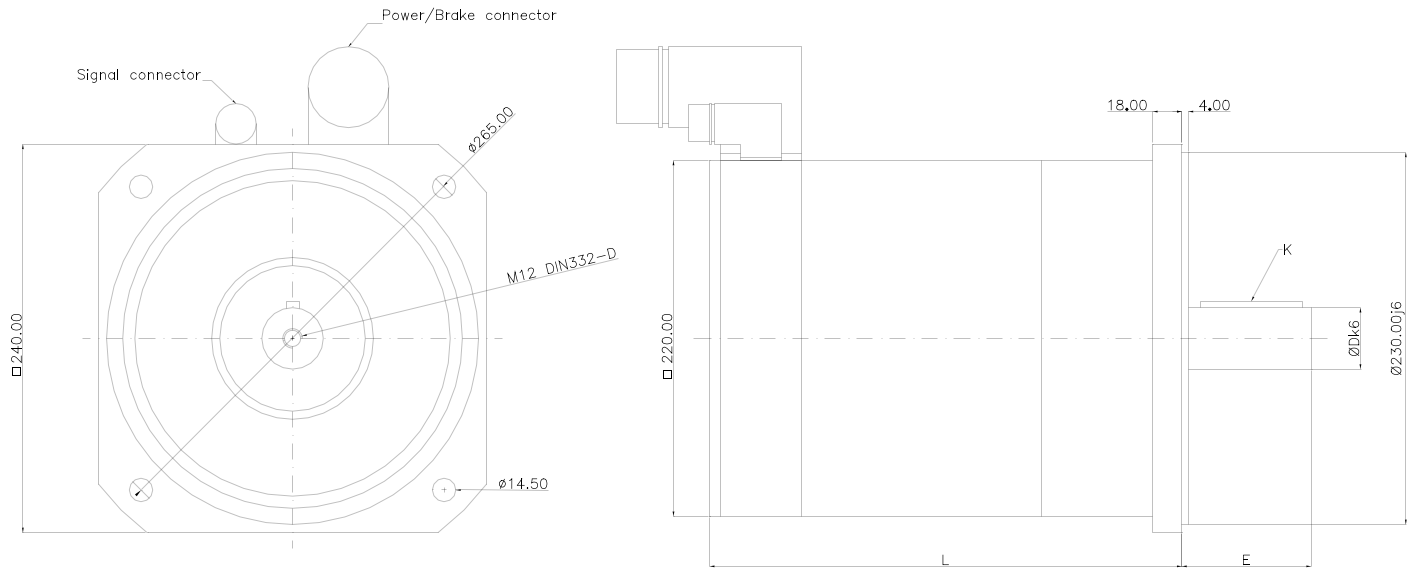
### Mechanical dimension

TYPE	Stall Torque Nm	Length with RESOLVER		Length with ENCODER		Weight (Kg)	
		without brake	with brake	without brake	with brake	without brake	with brake
MM B10.24I	24,0	301	365	328	392	25,0	31,6
MM B10.30I	30,0	326	390	353	417	29,0	35,6
MM B10.43I	43,0	376	440	403	467	37,0	43,6
MM B10.54I	54,0	426	490	453	517	45,0	53,6
MM B10.66I	66,0	476	540	503	567	53,0	62,6

# B132I Series

## Sinusoidal 6 Poles - 400V

Available torque: from 40 Nm to 115 Nm



TYPE	D	E	K	TYPE	D	E	K
B13.40	Ø38K6	80	10X8X63	B13.94	Ø42K6	110	12X8X63
B13.69	Ø38K6	80	10X8X63	B13.CB	Ø42K6	110	12X8X63

### Electrical Data

TYPE	Stall torque ( $\Delta T=105^{\circ}\text{C}$ ) $M_0$ (Nm)	Rated Speed $n$ (rpm)	Output at rated speed $P_n$ (kW)	Rated torque $M_n$ (Nm)	Peak torque $M_{pk}$ (Nm)	Maximum speed $n_{max}$ (rpm)	Moment of Inertia $J$ ( $10^{-4}\text{kgm}^2$ )	Peak torque acceleration $a_{pk}$ ( $\text{rad}/\text{sec}^2$ )	Thermal time constant $T_{th}$ (min)	Thermal protection threshold ( $^{\circ}\text{C}$ )	Voltage constant $k_e$ (Vs)	Torque constant $k_t$ (Nm/A)	BEMF at rated speed $E_n$ (V)	Phase to phase resistance $R$ ( $\Omega$ )	Phase to phase inductance $L$ (mH)	Stall current $I_0$ (A)	Rated current $I_n$ (A)
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#### Voltage H (400 Volt) - 1500 Min-1

MM B13.40	40,0	1500	5,50	35,0	99	3600	65	18462	50	140	1,88	3,26	296	0,90	16,9	12,3	10,7
MM B13.69	69,0	1500	9,11	58,0	139	3600	114	17895	65	140	1,88	3,26	296	0,45	12,5	21,2	17,8
MM B13.94	94,0	1500	12,10	77,0	163	3600	150	18667	80	140	2,00	3,46	314	0,33	9,4	27,1	22,2
MM B13.CBI	115,0	1500	14,77	94,0	199	3600	192	17969	90	140	1,80	3,13	284	0,20	6,1	36,8	30,1

#### Voltage H (400 Volt) - 2000 Min-1

MM B13.40	40,0	2000	6,70	32,0	120	3600	65	18462	55	140	1,41	2,44	296	0,53	12,7	16,4	13,1
MM B13.69	69,0	2000	11,10	53,0	204	3600	114	17895	65	140	1,41	2,44	296	0,24	7,3	28,2	21,7
MM B13.94	94,0	2000	15,8	72,0	280	3600	150	18667	80	140	1,41	2,44	296	0,17	4,9	38,5	29,5

### Mechanical dimension

TYPE	Stall Torque Nm	Length with RESOLVER		Length with ENCODER		Weight (Kg)	
		without brake	with brake	without brake	with brake	without brake	with brake
MM B13.40	40,0	293	343	321	371	42,0	49,0
MM B13.69	69,0	373	423	401	451	55,0	62,0
MM B13.94	94,0	433	483	461	511	74,0	81,0
MM B13.CB	115,0	493	543	521	571	92,0	99,0



# SISTEMI ELETTRONICI

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