

Frameless "Kit" Motors



- Kit Motors allow for direct integration with a mechanical transmission device, eliminating parts that add size and compliance.
- Use of Frameless Kit Motors results in a smaller, more reliable motor package.

MPR series - SYNCHRONOUS PERMANENT MAGNET SERVOMOTORS - FRAMELESS

Product name	Size	D - Exterior diameter [mm]	L - Length (including end windings) [mm]	Lp - Stack length [mm]	d [mm]	l1 [mm]	l2 [mm]	de [mm]	di [mm]	Magnetic poles
MPR 0010 - 4/0 - 3	0,1	46 +0.059/+0.043	39	15	11	12	12	42	26	6
MPR 0030 - 4/0 - 3	0,2	46 +0.059/+0.043	64	40	11	12	12	42	26	6
MPR 0045 - 4/0 - 3	0,3	46 +0.059/+0.043	84	60	11	12	12	42	26	6
MPR 0045 - 4/0 - 6	0,3	46 +0.059/+0.043	84	60	11	12	12	42	26	6
MPR 0070 - 4/0 - 3	0,4	46 +0.059/+0.043	104	80	11	12	12	42	26	6
MPR 0070 - 4/0 - 6	0,4	46 +0.059/+0.043	104	80	11	12	12	42	26	6
MPR 0130 - 4/0 - 3	0,5	46 +0.059/+0.043	174	150	11	12	12	42	26	6
MPR 0130 - 4/0 - 6	0,5	46 +0.059/+0.043	174	150	11	12	12	42	26	6
MPR 0055 - 4/1 - 3	1,1	78 +0.062/+0.043	56	20	25	18	22	68	42	6
MPR 0055 - 4/1 - 6	1,1	78 +0.062/+0.043	56	20	25	18	22	68	42	6
MPR 0090 - 4/1 - 3	1,2	78 +0.062/+0.043	76	40	25	18	22	68	42	6
MPR 0090 - 4/1 - 6	1,2	78 +0.062/+0.043	76	40	25	18	22	68	42	6
MPR 0150 - 4/1 - 3	1,3	78 +0.062/+0.043	96	60	25	18	22	68	42	6
MPR 0150 - 4/1 - 6	1,3	78 +0.062/+0.043	96	60	25	18	22	68	42	6
MPR 0220 - 4/1 - 3	1,4	78 +0.062/+0.043	116	80	25	18	22	68	42	6
MPR 0220 - 4/1 - 6	1,4	78 +0.062/+0.043	116	80	25	18	22	68	42	6
MPR 0320 - 4/2 - 3	2,1	90.9 +0.073/+0.051	114	70	30	20	25	84	43	6
MPR 0320 - 4/2 - 6	2,1	90.9 +0.073/+0.051	114	70	30	20	25	84	43	6
MPR 0480 - 4/2 - 3	2,2	90.9 +0.073/+0.051	144	100	30	20	25	84	43	6
MPR 0480 - 4/2 - 6	2,2	90.9 +0.073/+0.051	144	100	30	20	25	84	43	6
MPR 0650 - 4/2 - 3	2,3	90.9 +0.073/+0.051	164	120	30	20	25	84	43	6
MPR 0650 - 4/2 - 6	2,3	90.9 +0.073/+0.051	164	120	30	20	25	84	43	6

Product name	Size	D - Exterior diameter [mm]	L - Length (including end windings) [mm]	Lp - Stack length [mm]	d [mm]	l1 [mm]	l2 [mm]	de [mm]	di [mm]	Magnetic poles
MPR 0700 - 3/3 - 6	3,1	118 +0.076/+0.054	150	90	32	28	28	110	53	6
MPR 0960 - 4/3 - 6	3,2	118 +0.076/+0.054	180	120	32	28	28	110	53	6
MPR 1200 - 4/3 - 6	3,3	118 +0.076/+0.054	220	160	32	28	28	110	53	6
MPR 2000 - 4/3 - 6	3,4	118 +0.076/+0.054	340	280	32	28	28	110	53	6
MPR 0400 - 0.3/4	4	168.5 +0.04/-0.04	30	15	101	7	8	156	135	38
MPR 6400 - 1.5/5	5	284 +0.13/+0.01	100	55	197	20	25	270	240	12

Product name	Size	M _N [Nm]	P _N [kW]	n _n [rpm]	M ₀ [Nm]
MPR 0400 - 0.3/4	4	4	0,13	300	4,6
MPR 6400 - 1.5/5	5	64	10,05	1500	70

nn = 4000 rpm

Size	Dim.	P _N (kW)	M _N (Nm)	Mo[Nm]	Mom[Nm]	In[A]	Io[A]	J [kgcm ²]	m[kg]	m+BR[kg]	R[Ohm]	L[mH]	k _E [V]	k _T [Nm/A]
MPR 0010 - 4/0 - 3	0.1	0.04	0.1	0.125	0.5	0.2	0.3	0.05	0.83	1.2	122	66.5	30	0.50
MPR 0030 - 4/0 - 3	0.2	0.13	0.3	0.3	1.2	0.7	0.7	0.1	1.3	1.6	18,3	13	26	0.43
MPR 0045 - 4/0 - 3	0.3	0.19	0.45	0.5	2	1.0	1.1	0.15	1.6	1.8	11.9	14.3	28	0.46
MPR 0045 - 4/0 - 6	0.3	0.19	0.45	0.5	2	0.6	0.6	0.15	1.6	1.8	32	28	47	0.78
MPR 0070 - 4/0 - 3	0.4	0.29	0.7	0.8	3.2	1.5	1.7	0.2	1.9	2.2	8.9	9.3	28	0.46
MPR 0070 - 4/0 - 6	0.4	0.29	0.7	0.8	3.2	0.8	1.0	0.2	1.9	2.2	28	23	50	0.83
MPR 0130 - 4/0 - 3	0.5	0.54	1.3	1.5	6	2.8	3.2	0.33	2.8	3.1	3.8	4.6	28	0.46
MPR 0130 - 4/0 - 6	0.5	0.54	1.3	1.5	6	1.5	1.8	0.33	2.8	3.1	13.7	13.9	51	0.84
MPR 0055 - 4/1 - 3	1.1	0.23	0.55	0.8	3.2	1.3	1.9	0.3	2	2.8	6.3	14.3	26	0.43
MPR 0055 - 4/1 - 6	1.1	0.23	0.55	0.8	3.2	0.8	1.1	0.3	2	2.8	18.4	39	44	0.73
MPR 0090 - 4/1 - 3	1.2	0.38	0.9	1.5	6	1.8	3.0	0.68	2.9	3.7	3.3	9.2	30	0.50
MPR 0090 - 4/1 - 6	1.2	0.38	0.9	1.5	6	1.1	1.8	0.68	2.9	3.7	7.7	24	50	0.83
MPR 0150 - 4/1 - 3	1.3	0.63	1.5	2.5	10	3.0	5.0	1	3.7	4.5	1.7	6	30	0.50
MPR 0150 - 4/1 - 6	1.3	0.63	1.5	2.5	10	1.5	2.6	1	3.7	4.5	5.2	16.7	59	0.98
MPR 0220 - 4/1 - 3	1.4	0.92	2.2	3	12	4.0	5.4	1.4	4.3	5.5	1.1	4.3	33.5	0.55
MPR 0220 - 4/1 - 6	1.4	0.92	2.2	3	12	2.6	3.5	1.4	4.3	5.5	2.8	10.8	52	0.86
MPR 0290 - 4/1 - 3	1.5	1.21	2.9	4	16	5.3	7.3	1.8	5.4	6.7	0.8	3.2	33	0.55
MPR 0290 - 4/1 - 6	1.5	1.21	2.9	4	16	3.2	4.4	1.8	5.4	6.7	2.4	9.3	55	0.91
MPR 0320 - 4/2 - 3	2.1	1.34	3.2	4	16	5.5	6.9	2.4	6	6.9	1	5.5	35	0.58
MPR 0320 - 4/2 - 6	2.1	1.34	3.2	4	16	3.2	4.0	2.4	6	6.9	2.8	13.6	60	0.99
MPR 0480 - 4/2 - 3	2.2	2.01	4.8	7	28	9.7	14.1	3.2	7.6	9.5	0.4	2.3	30	0.50
MPR 0480 - 4/2 - 6	2.2	2.01	4.8	7	28	4.3	6.2	3.2	7.6	9.5	2	11.3	68	1.12
MPR 0650 - 4/2 - 3	2.3	2.72	6.5	9	36	11.9	16.5	3.6	8.5	11.4	0.47	1.9	33	0.55
MPR 0650 - 4/2 - 6	2.3	2.72	6.5	9	36	6.5	9.1	3.6	8.5	11.4	1.5	8.4	60	0.99
MPR 0830 - 4/2 - 6	2.4	3.48	8.3	11	44	9.3	12.3	4.5	16	19	0.8	4.4	54	0.89
MPR 0700 - 3/3 - 6	3.1	2.93	7	9	36	5.0	6.4	4.2	11		2.5	25	85	1.41
MPR 0960 - 4/3 - 6	3.2	4.02	9.6	16	64	10.0	16.7	5.3	19.5	24	0.6	6.1	58	0.96
MPR 1200 - 4/3 - 6	3.3	5.03	12	21	84	15.1	26.5	6.7	22	28	0.3	3.2	48	0.79
MPR 2000 - 4/3 - 6	3.4	8.38	20	34	136	18.6	31,6	11.2	30	34	0.3	3.8	65	1.08