

# Ratings and Specifications of Motor with Gear Reducer

## ● Table of Motor Specifications

Model	MUMA with gear reducer												
	Motor	MUMA with gear reducer											
	Output	Reduction ratio	Output	Rated speed	Max. speed	Rated torque	Peak max. torque	Moment of inertia (motor + reducer/converted to motor shaft)		Mass		Permissible radial load	Permissible thrust load
								w/o brake	w/ brake	w/o brake	w/ brake		
(W)		(W)	(r/min)	(r/min)	(N · m)	(N · m)	J (x 10 <sup>-4</sup> kg·m <sup>2</sup> )		(kg)		(N)	(N)	
MUMA01□P□1N	100	1/5	75	600	1000	1.18	3.72	0.072	0.076	1.05	1.25	490	245
MUMA01□P□2N		1/9	80	333	555	2.25	6.86	0.0663	0.0703	1.05	1.25	588	294
MUMA01□P□4N		1/25	80	120	200	6.27	19.0	0.0645	0.0685	2.20	2.40	1670	833
MUMA02□P□1N	200	1/5	170	600	1000	2.65	8.04	0.218	0.248	1.68	2.08	490	245
MUMA02□P□2N		1/9	132	333	555	3.72	11.3	0.368	0.398	2.66	3.06	1180	588
MUMA02□P□4N		1/25	140	120	200	11.1	33.3	0.388	0.418	2.66	3.06	1670	833
MUMA04□P□1N	400	1/5	340	600	1000	5.39	16.2	0.533	0.563	3.2	3.6	980	490
MUMA04□P□2N		1/9	332	333	555	9.51	28.5	0.438	0.468	3.2	3.6	1180	588
MUMA04□P□4N		1/25	332	120	200	26.4	79.2	0.470	0.500	4.7	5.1	2060	1030

For dimensions, refer to page, E19.

## ● The Combination of the Driver and the Motor

Combination with driver		100V		200V		
Encoder	Motor output	Part No. of motor with reducer	Single phase, 100V	Part No. of motor with reducer	3-phase, 200V	Single phase, 200V
			Part No. of driver		Part No. of driver	Part No. of driver
2500P/r Incremental	100W	MUMA011P□□N	MKDET1110P	MUMA012P□□N	MKDET1505P	MKDET1505P
	200W	MUMA021P□□N	MLDET2110P	MUMA022P□□N	MKDET1310P	MLDET2210P
	400W	—	—	MUMA042P□□N	MLDET2510P	MLDET2510P
				MLDET2310P		

For dimensions, refer to page E23

## Torque Characteristics of Motor with Gear Reducer

● For high precision (MUMA Series 100W to 400W)

Supply voltage to driver	Reduction ratio		1/5	1/9	1/25
	Motor output				
100V	100W		<b>MUMA011P□1N</b> 	<b>MUMA011P□2N</b> 	<b>MUMA011P□4N</b> 
			<b>MUMA021P□1N</b> 	<b>MUMA021P□2N</b> 	<b>MUMA021P□4N</b> 
			<b>MUMA012P□1N</b> 	<b>MUMA012P□2N</b> 	<b>MUMA012P□4N</b> 
200V	200W		<b>MUMA022P□1N</b> 	<b>MUMA022P□2N</b> 	<b>MUMA022P□4N</b> 
			<b>MUMA042P□1N</b> 	<b>MUMA042P□2N</b> 	<b>MUMA042P□4N</b> 
			<b>MUMA012P□1N</b> 	<b>MUMA012P□2N</b> 	<b>MUMA012P□4N</b> 

Dotted line represents the torque at 10% less supply voltage.