

# Ratings and Specifications of Motor with Gear Reducer

## ● Model No. designation

e.g.) **M S M D 0 1 1 P 3 1 N**

Symbol	Type
MSMD	Low inertia (100-750W)

Motor rated output

Symbol	Rated output
01	100W
02	200W
04	400W
08	750W

Voltage specifications

Symbol	Specifications
1	100V
2	200V

Rotary encoder specifications

Symbol	Format	Pulse counts	Resolution	Wire
P	Incremental	2500P/r	10000	5
S	Absolute/Incremental	17-bit	131072	7

Motor types with gear reducer

Symbol	Reduction ratio	Motor output (W)				Type of reducer
		100	200	400	750	
1N	1/5	●	●	●	●	For high precision
2N	1/9	●	●	●	●	
3N	1/15	●	●	●	●	
4N	1/25	●	●	●	●	

Motor structure

Symbol	Shaft	Holding brake	
	Key way	without	with
3	●	●	
4	●		●

## ● 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	Single phase, 200V	Part No. of motor with reducer	3-phase, 200V	
			Part No. of driver		Part No. of driver		Part No. of driver	
2500P/r Incremental	100W	MSMD011P□□N	MADDT1107	MSMD012P□□N	MADDT1205	-	-	
			MADDT1107F		MADDT1205F			
			MADDT1107P		MADDT1205P			
	200W	MSMD021P□□N	MBDDT2110	MSMD022P□□N	MADDT1207	-	-	
			MBDDT2110F		MADDT1207F			
			MBDDT2110P		MADDT1207P			
	400W	MSMD041P□□N	MCDDT3120	MSMD042P□□N	MBDDT2210	-	-	
			MCDDT3120F		MBDDT2210F			
			MCDDT3120P		MBDDT2210P			
	750W	-	-	MSMD082P□□N	MCDDT3520	MSMD082P□□N	-	MCDDT3520
					MCDDT3520F			MCDDT3520F
					MCDDT3520P			MCDDT3520P
17-bit Absolute	100W	MSMD011S□□N	MADDT1107	MSMD012S□□N	MADDT1205	-	-	
			MADDT1107F		MADDT1205F			
			MADDT1107P		MADDT1205P			
	200W	MSMD021S□□N	MBDDT2110	MSMD022S□□N	MADDT1207	-	-	
			MBDDT2110F		MADDT1207F			
			MBDDT2110P		MADDT1207P			
	400W	MSMD041S□□N	MCDDT3120	MSMD042S□□N	MBDDT2210	-	-	
			MCDDT3120F		MBDDT2210F			
			MCDDT3120P		MBDDT2210P			
	750W	-	-	MSMD082S□□N	MCDDT3520	MSMD082S□□N	-	MCDDT3520
					MCDDT3520F			MCDDT3520F
					MCDDT3520P			MCDDT3520P

For dimensions, refer to pages, A4-22, 23, 48, 49, 73 and 74.

\* In the driver model number, the upper row is A4 series, the middle row is A4F series and the lower is A4P series.

# Torque Characteristics of Motor with Gear Reducer

● For high precision (MSMD Series 100W - 750W)

Supply voltage to driver	Reduction ratio					
	Motor output		1/5	1/9	1/15	1/25
100V	100W	MSMD011□□1N				
	200W	MSMD021□□1N				
	400W	MSMD041□□1N				
200V	100W	MSMD012□□1N				
	200W	MSMD022□□1N				
	400W	MSMD042□□1N				
	750W	MSMD082□□1N				

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