

MMC

S E R I E S

ELECTROMAGNETIC CLUTCH

Torque Range: 37 ~ 1475 ft-lbs

Torque Range: 50 ~ 2000 N-m



FEATURES

HEAVY DUTY DESIGN

The MMC series utilize a special plate spring that resists engine vibration and shock.

EASY MOUNTING

Mounting is a snap on these stationary coil type clutches. The coil is supported by a ball bearing. Alignment and maintenance are not required.

ROTATION FLEXIBILITY

Rotation may be clockwise or counterclockwise.

LONGEVITY

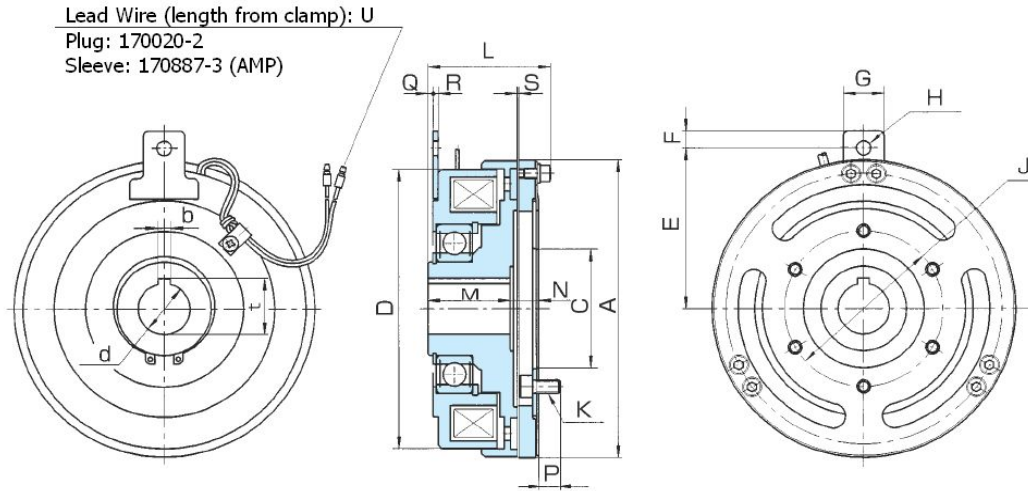
Efficient heat dissipation allows long life even in heavy duty applications. Clutch surface is tempered to provide effective rust protection.

COMPACT AND HIGH TORQUE

The compact design of the MMC series requires minimal space while providing high torque.



MMC



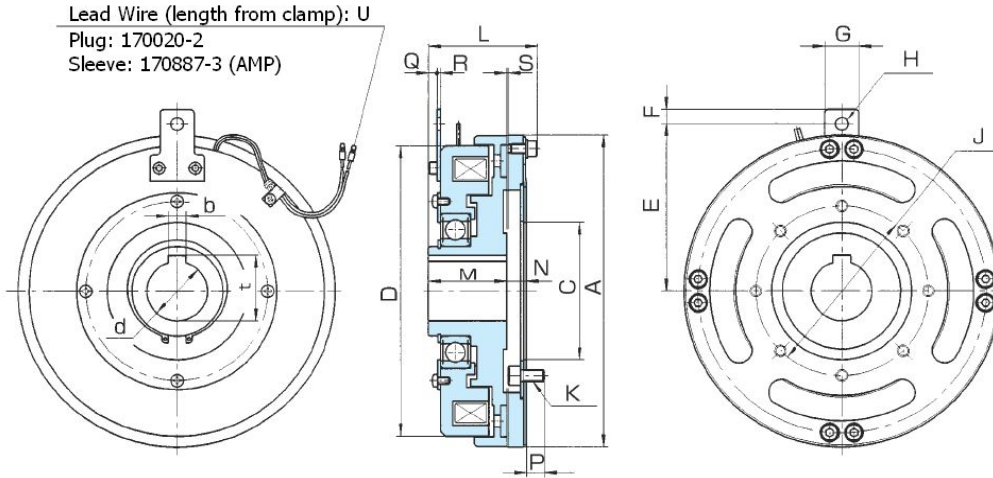
MMC		5E	5G	10E	10G	20E	20G	40E	40G
Static Torque [ft-lbs / N-m]		37 / 50		74 / 100		148 / 200		295 / 400	
Coil (20°C)	Voltage [DC-V]	12	24	12	24	12	24	12	24
	Current [A]	2.5	1.26	2.92	1.46	4.17	2.09	5.41	2.7
	Resistance [Ω]	4.8	19	4.11	16.4	2.88	11.5	2.22	8.9
	Wattage [W]	30		35		50		65	
Armature	Pull-In Time [ms]	50		70		80		120	
	Release Time [ms]	90		150		140		160	
Max Allowable Speed [rpm]		4000		3600		3000		3000	
Moment of Inertia (J) [kg-cm ²]	Rotor	22		73		221		550	
	Armature	18		59		143		380	
Max Air Gap Until Adjustment [mm]		1.3		1.3		1.3		1.3	
Total Energy Until Adjustment [J]		13 x 10 ⁷		20 x 10 ⁷		28 x 10 ⁷		40 x 10 ⁷	
Total Energy Until Life [J]		33 x 10 ⁷		50 x 10 ⁷		71 x 10 ⁷		100 x 10 ⁷	
Bore [mm]	dH7	25		30		40		50	
Key Way [mm]	bE9	7		7		10		15	
	t+0.25/-0	28		33		43.5		55	
Dimensions [mm]	A	141		176		221		261	
	CH9	52		70		92		115	
	D	133		165		207.2		243	
	E	80		95		120		140	
	F	6		10		10		12	
	G	16		24		24		28	
	H	5.5		8.5		8.5		10.5	
	J	70		92		118		142	
	K	6xM6-12		6xM8-16		6xM10-20		8xM10-20	
	L	56.1		71.3		79.8		90.2	
	M	35		48		53		65	
	N	15.5		16.5		18		16.2	
	P	9.2		12.3		15.3		15.1	
	Q	2		3.1		3.1		6.8	
	R	2		2.9		2.9		3.2	
S	0.3~0.5		0.3~0.5		0.4~0.6		0.5~0.7		
U	400		370		410		380		
Weight [lbs / kg]		7.5 / 3.4		15.0 / 6.8		26.0 / 11.8		43.0 / 19.5	

MMC

EM Clutch

Types: 70, 100, 200

[EM: Electromagnet]

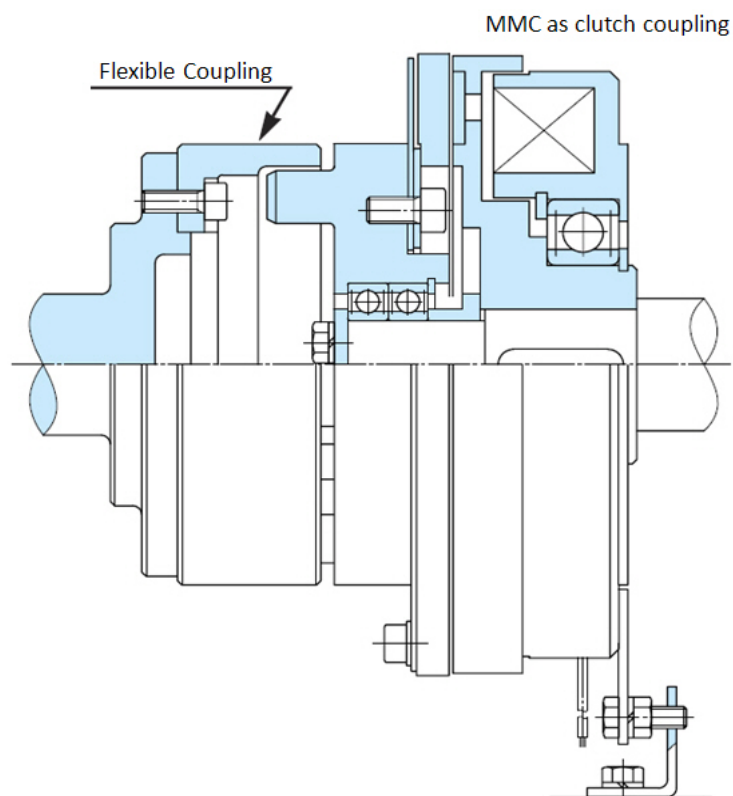
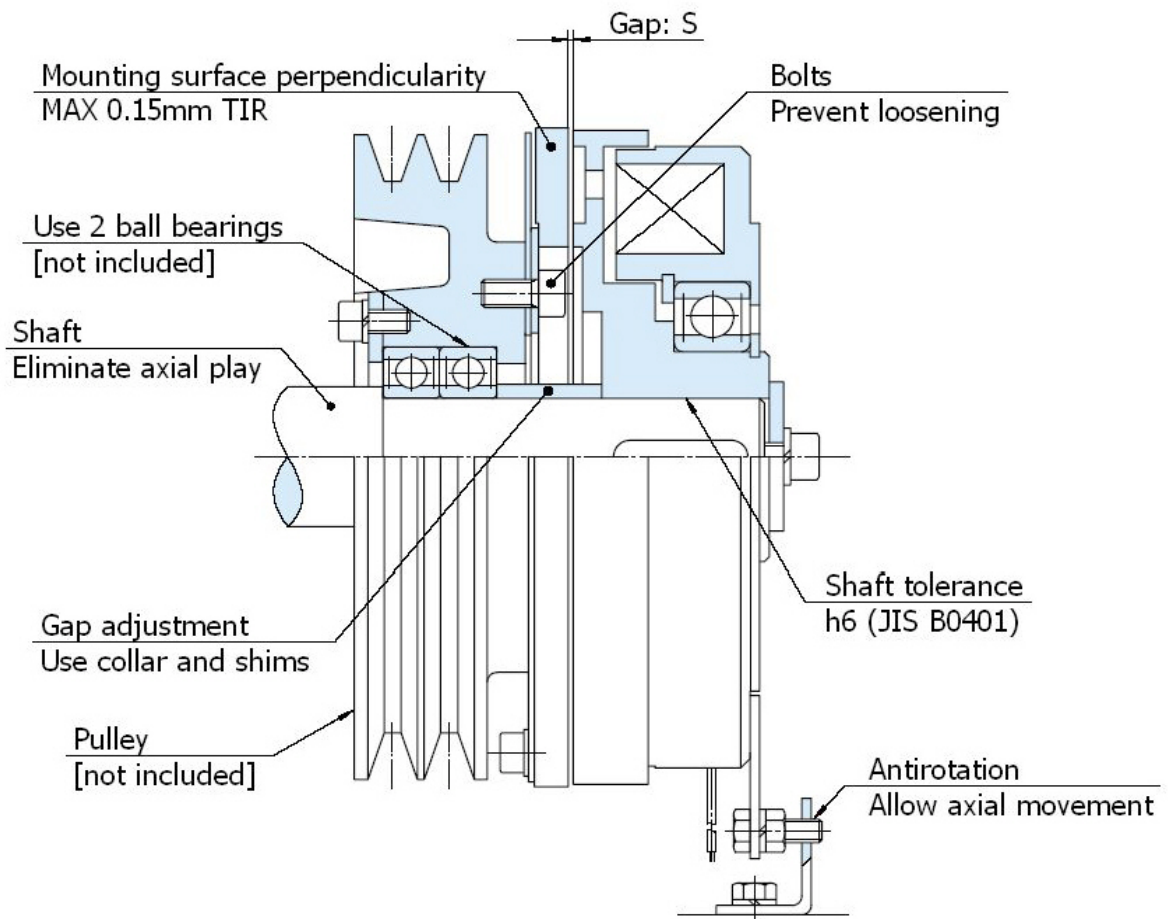


MMC		70E	70G	100E	100G	200G
Static Torque [ft-lbs / N-m]		516 / 700		738 / 1000		1475 / 2000
Coil (20°C)	Voltage [DC-V]	12	24	12	24	24
	Current [A]	7.5	3.75	8.33	4.14	6.15
	Resistance [Ω]	1.6	6.4	1.44	5.8	3.9
	Wattage [W]	90		100		150
Armature	Pull-In Time [ms]	180		200		400
	Release Time [ms]	180		200		400
Max Allowable Speed [rpm]		2500		1800		1600
Moment of Inertia (J) [kg-cm ²]	Rotor	1030		2800		6300
	Armature	980		2100		3800
Max Air Gap Until Adjustment [mm]		1.3		1.6		1.6
Total Energy Until Adjustment [J]		58 x 10 ⁷		80 x 10 ⁷		88 x 10 ⁷
Total Energy Until Life [J]		140 x 10 ⁷		200 x 10 ⁷		220 x 10 ⁷
Bore [mm]	dH7	60		70		80
Key Way [mm]	bE9	15		18		20
	t+0.25/-0	65		76		86
		65		76		86
Dimensions [mm]	A	316		381		400
	CH9	150		185		185
	D	293		360		375
	E	170		210		220
	F	13		13		13
	G	30		30		40
	H	13		13		13
	J	180		220		220
	K	8xM10-20		8xM12-25		8xM16-30
	L	100.4		111.3		144.1
	M	70		80		102
	N	19		20		28.8
	P	14.8		19.8		26
	Q	2.8		14.8		5
	R	3.2		3.2		5
S	0.6~0.8		0.7~0.9		0.7~0.9	
U	370		340		300	
Weight [lbs / kg]		71 / 32		104 / 47		174 / 79

[Included parts & accessories : bolts, plug 170021-2, sleeve 170889-2 (AMP), surge protector]

[1" = 25.4mm]

MMC: TYPICAL INSTALLATION



MMC: TORQUE CHARACTERISTIC & MAX WORK RATE

