

# "M" Series Sprag Clutches



Fully sealed, bearing supported, high torque  
Sprag Clutch Assemblies with Metric and Imperial Bores.

"M" series sprag clutches use precision cams made of high chrome alloy steel, hardened and honed for accurate shape. A unique finishing process ensures smooth cam surface providing uniform contact with both races for even load distribution and prolonged clutch life. High capacity bearings are used to accommodate radial and axial loads. The clutches are designed to mount directly on through shafts; the torque being transmitted by a matching key provided with each stock bore; the outer race has a precision ground diameter with tapped holes on each face to enable the fitting of gears, sprockets, pulleys, etc.

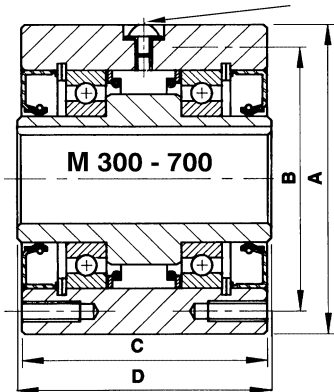
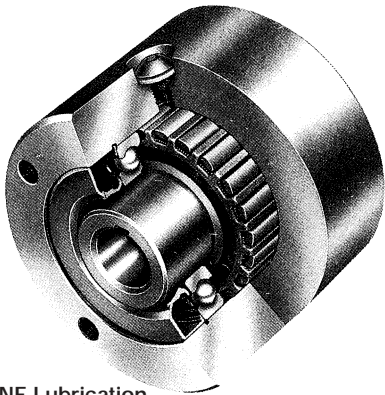
Two types of clutch are offered:

MG Series - Standard clutch for general overrunning, backstop and index applications, standard oil lubricated with option of grease.

MO Series - Fitted with labyrinth seals for minimal drag on higher speed overrun and backstop applications. Always grease lubricated.

Vertical Shafts - Clutches suitable for vertical shafting can be supplied - contact Cross & Morse sales office for technical advice.

High Speed/Temperature Operation - Clutches can be provided with a patented venting system for applications subject to high temperature variation or overrunning at high speed.



## Dimensions

Clutch Model Number	Torque Capacity Nm	Max Overrun Speed RPM		Nominal Overrun Drag Nm	Std. Bore & Key Sizes <sup>(1)</sup>				Dimensions in mm						No. <sup>(2)</sup> Tapped Holes	Thread Size U.N.F.	Usable Thread Depth mm	Approx Weight kg
		Imperial			Metric													
		Inner <sup>(4)</sup>	Outer		Bore ins <sup>(3)</sup>	Key	Bore ins <sup>(3)</sup>	Key	A	B	C	D	E	F				
MG 500	1592	2400	750	.52	1, 11/4	1/4x1/4	25mm 8x7	107.95	92.1	85.7	88.9	44.4	–	4	5/16-24	16	5.0	
MO 500		3000	750				30mm 8x7	107.90										
MG 600	3050	1800	700	.85	11/2, 13/4 2	3/8x3/8 1/2x7/16	38mm 10x8	136.53	120.7	92.9	95.3	69.8	–	6	5/16-24	16	8.6	
MO 600		2400	700				40mm 12x8	136.47										45mm 14x9
MG 700	6780	1200	400	1.76	2, 21/4 21/2, 23/4 3, 31/4	1/2x1/2 5/8x5/8 5/8x7/16	60mm 18x11	180.98	158.8	123.8	127.0	101.6	–	8	3/8-24	19	19.5	
MO 700		2000	400				65mm 18x11	180.92										
							70mm 20x12											
							75mm 20x12											
							80mm 22x 9											

(1) Std. bores clutches normally available 24 hour despatch. Other bore sizes can be supplied to order. Clutches shipped with key.(2) Mounting holes equally spaced except 700 which have 6 equi-spaced plus two 30° from equi-spaced holes 180° apart.

Note: All oil filled clutches must be lubricated prior to operation.