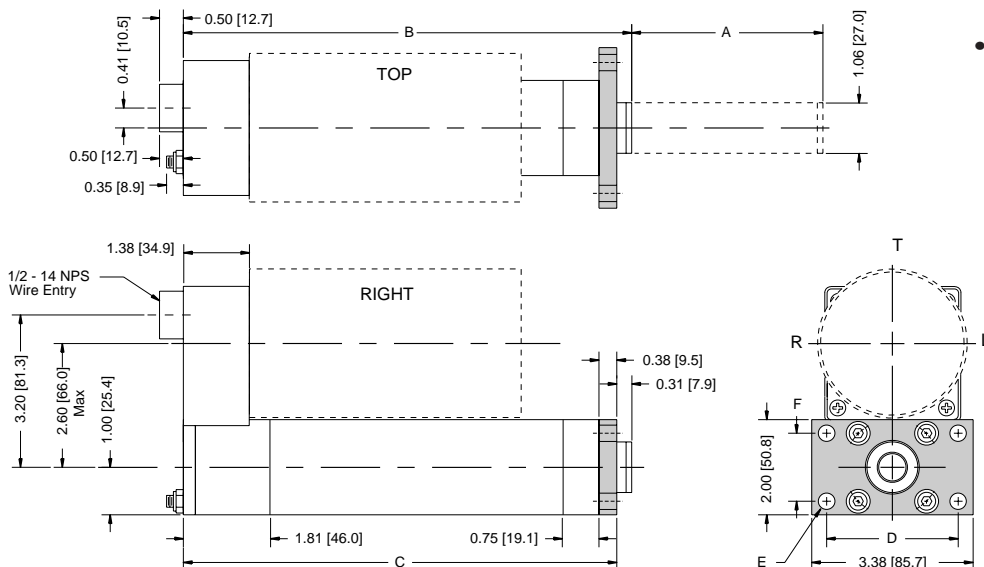




## MF1 HEAD RECTANGULAR FLANGE MOUNTING PARALLEL

- AutoCAD® DXF drawings available on diskette
- Include motor dimensions; see pages B36-B39
- Include rod end dimensions; see B40

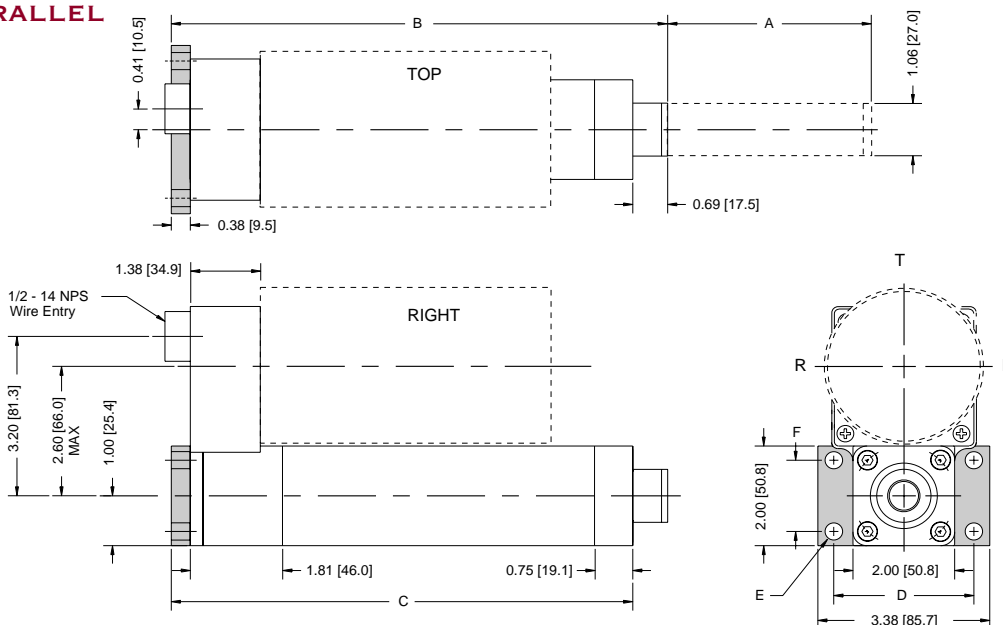


	English Option MF1 (inches)	Metric Option MF1M (mm)
D	2.75	72*
E	0.34	9*
F	1.43	36*

\* Meets ISO 40mm bore standard

	Inches	(mm)			
<b>A Strokes</b>	2.00	(50.8)	8.00	(203.2)	24.00 (609.6)
	4.00	(101.6)	12.00	(304.8)	
	6.00	(152.4)	18.00	(457.2)	
<b>B Retract</b>	stroke +		5.37	(136.4)	
<b>C Mounting</b>	stroke +		5.06	(128.5)	

## MF2 CAP RECTANGULAR FLANGE MOUNTING PARALLEL



	English Option MF2 (inches)	Metric Option MF2M (mm)
D	2.75	72*
E	0.34	9*
F	1.43	36*

\* Meets ISO 40mm bore standard

	Inches	(mm)			
<b>A Strokes</b>	2.00	(50.8)	8.00	(203.2)	24.00 (609.6)
	4.00	(101.6)	12.00	(304.8)	
	6.00	(152.4)	18.00	(457.2)	
<b>B Retract</b>	stroke +		5.75	(146.1)	
<b>C Mounting</b>	stroke +		5.06	(128.5)	



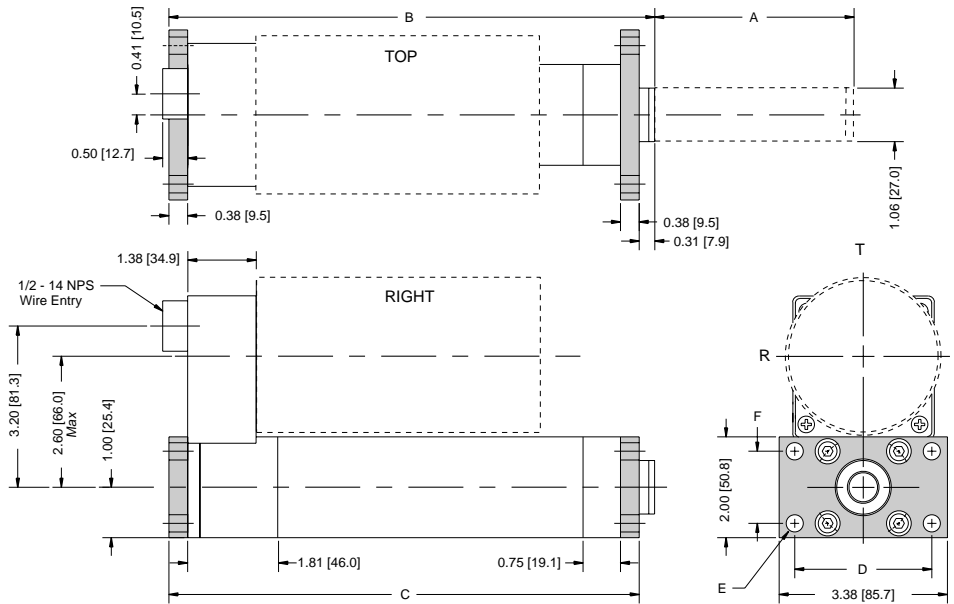


# CYLINDER DIMENSIONS



## MF3 RECTANGULAR MOUNTING FLANGES PARALLEL

- AutoCAD® DXF drawings available on diskette
- Include motor dimensions; see pages B36-B39
- Include rod end dimensions, see page B40



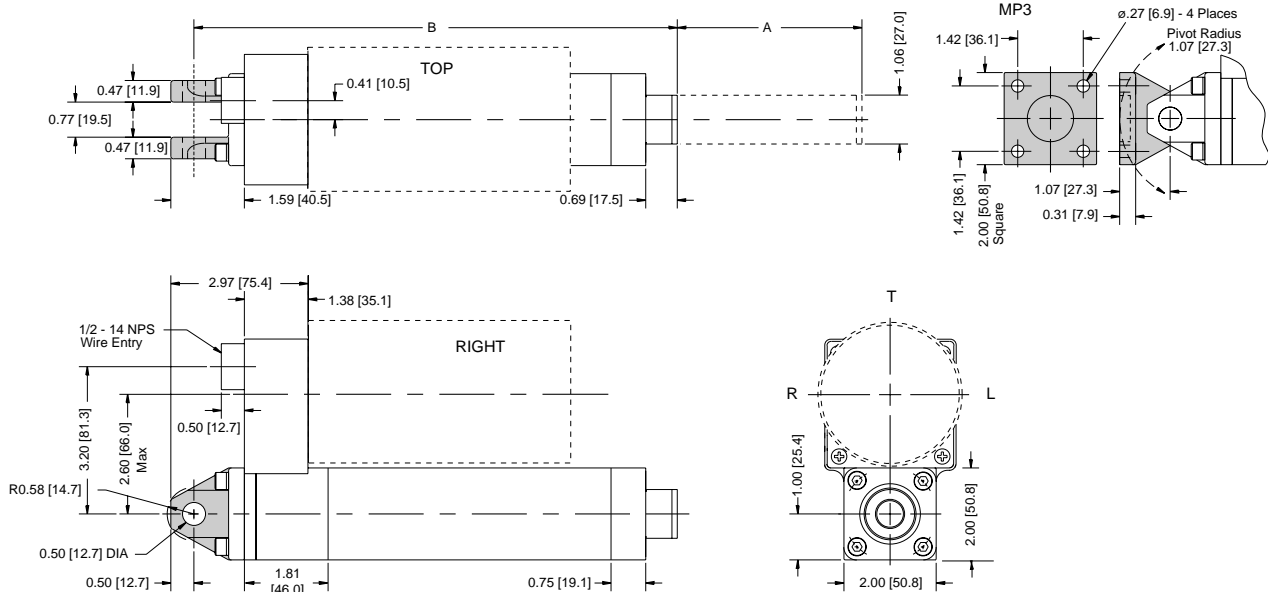
	English Option MF3 (inches)	Metric Option MF3M (mm)
D	2.75	72*
E	0.34	9*
F	1.43	36*

\* Meets ISO 40mm bore standard

	Inches	(mm)			
<b>A Strokes</b>	2.00	(50.8)	8.00	(203.2)	24.00 (609.6)
	4.00	(101.6)	12.00	(304.8)	
	6.00	(152.4)	18.00	(457.2)	
<b>B Retract</b>	stroke +	5.75	(146.1)		
<b>C Mounting</b>	stroke +	5.44	(138.2)		

## MP2 CAP DOUBLE CLEVIS MOUNTING PARALLEL

## MP3 PIVOT BASE AND MP2

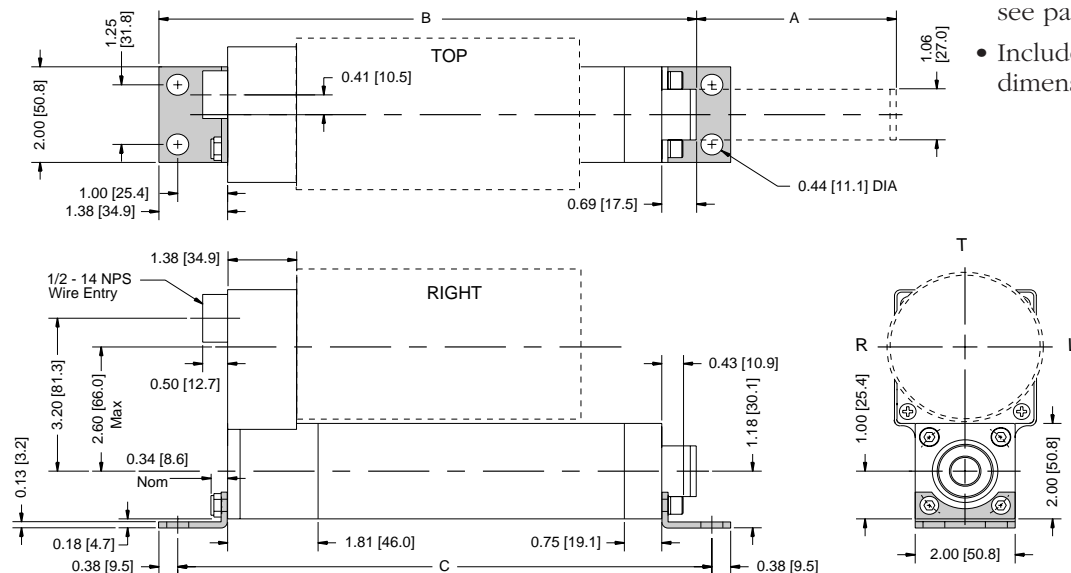


	Inches	(Metric)			
<b>A Strokes</b>	2.00	(50.8)	8.00	(203.2)	24.00 (609.6)
	4.00	(101.6)	12.00	(304.8)	
	6.00	(152.4)	18.00	(457.2)	
<b>B Retract</b>	stroke +	6.47	(164.3)		



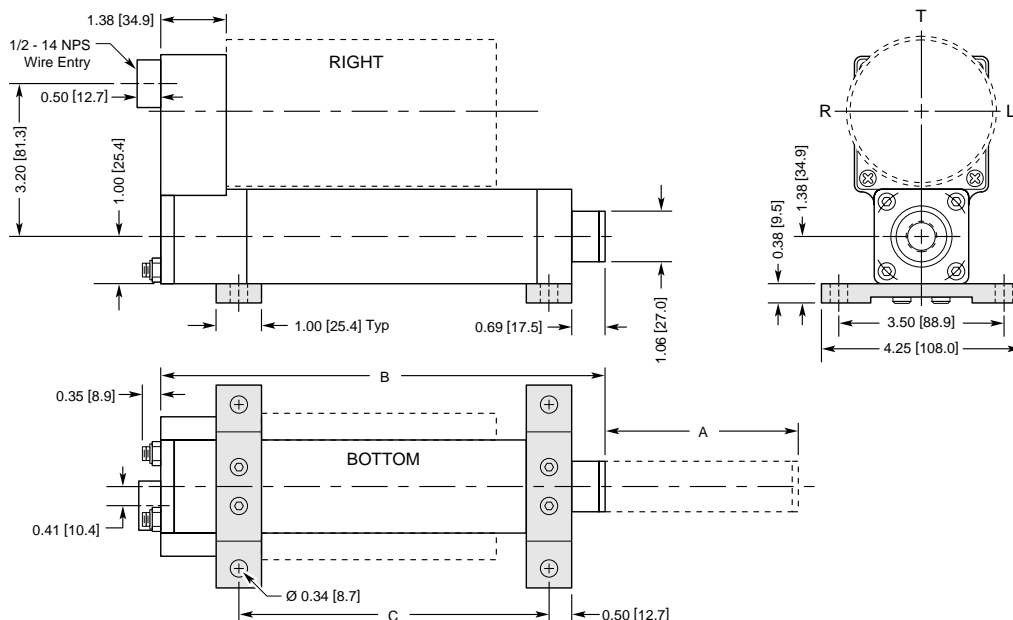
## MS1 SIDE END ANGLES MOUNTING PARALLEL

- AutoCAD® DXF drawings available on diskette
- Include motor dimensions; see pages B36-B39
- Include rod end dimensions; see page B40



	Inches	(mm)			
<b>A Strokes</b>	2.00	(50.8)	8.00	(203.2)	24.00 (609.6)
	4.00	(101.6)	12.00	(304.8)	
	6.00	(152.4)	18.00	(457.2)	
<b>B Retract</b>	stroke +	6.75	(171.5)		
<b>C Mounting</b>	stroke +	6.69	(169.9)		

## MS2 SIDE LUGS PARALLEL



	Inches	(mm)			
<b>A Strokes</b>	2.00	(50.8)	8.00	(203.2)	24.00 (609.6)
	4.00	(101.6)	12.00	(304.8)	
	6.00	(152.4)	18.00	(457.2)	
<b>B Retract</b>	stroke +	5.37	(136.4)		
<b>C Mounting</b>	stroke +	2.56	(65.0)		



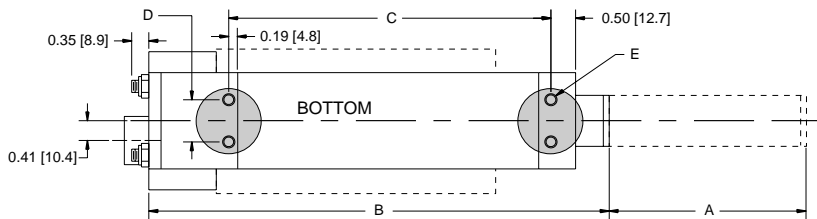
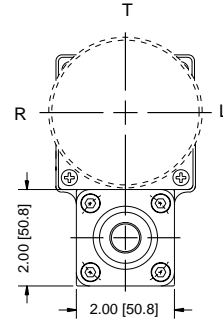
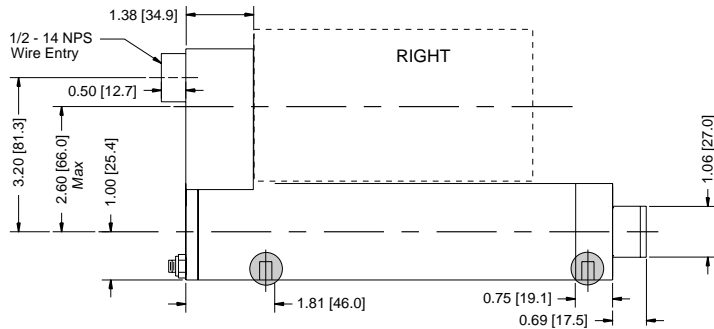


# CYLINDER DIMENSIONS



## MS6 SIDE TAPPED MOUNTING PARALLEL

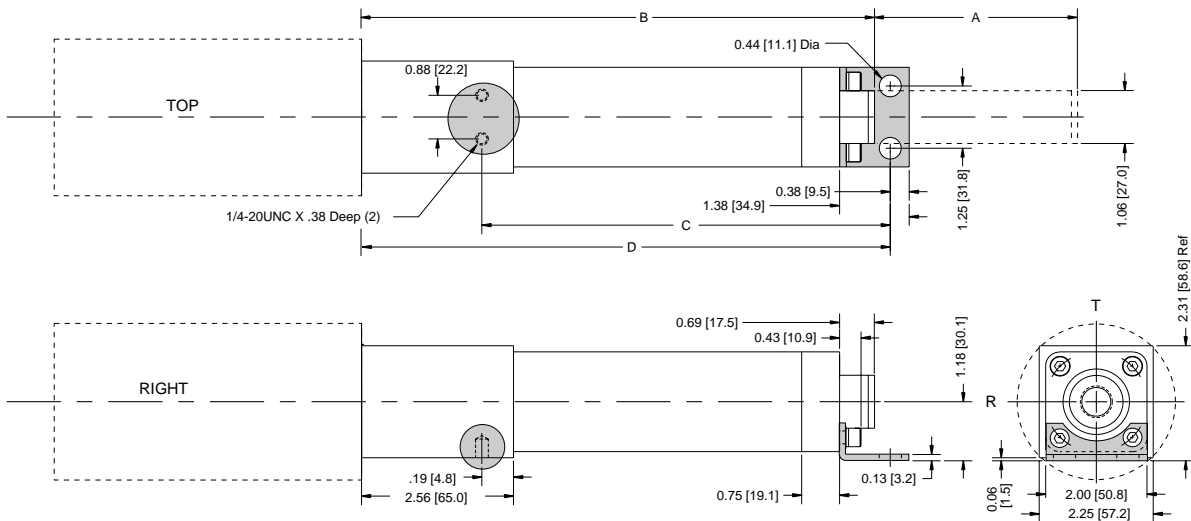
- AutoCAD® DXF drawings available on diskette
- Include motor dimensions; see pages B36-B39
- Include rod end dimensions; see page B40



	English Option	Metric Option
	MS6 (inches)	MS6M (mm)
D	0.88	16
E	1/4-20 UNC x 0.38 deep	M6 x 1 x 8 deep

	Inches	(mm)			
<b>A Strokes</b>	2.00	(50.8)	8.00	(203.2)	24.00 (609.6)
	4.00	(101.6)	12.00	(304.8)	
	6.00	(152.4)	18.00	(457.2)	
<b>B Retract</b>	stroke +	5.37	(136.4)		
<b>C Mounting</b>	stroke +	2.56	(65.0)		

## MS1 SIDE END ANGLES MOUNTING IN-LINE

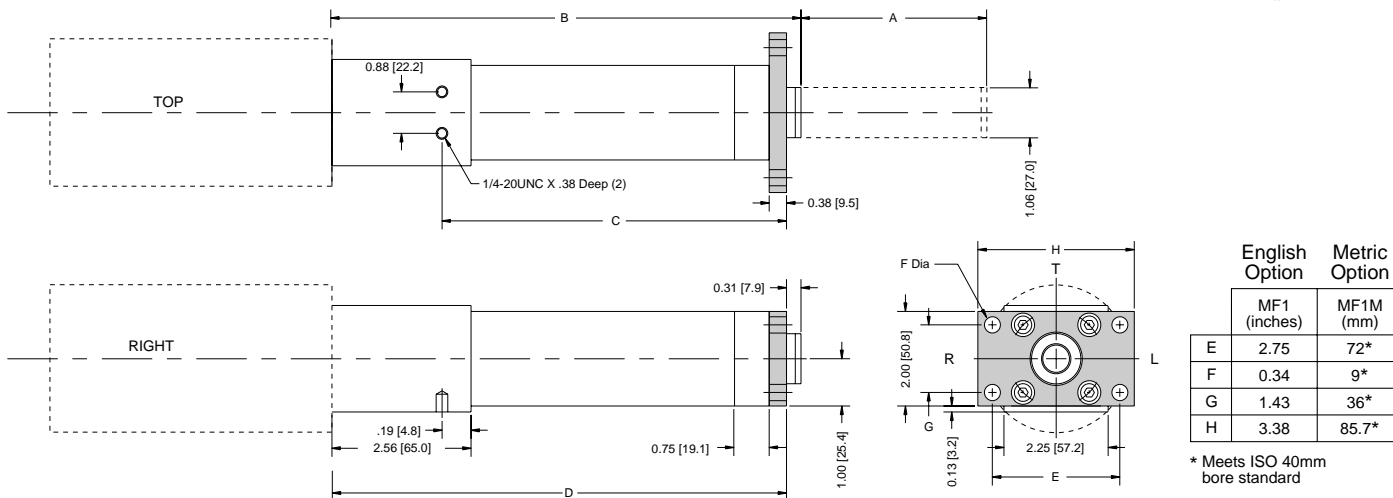


	Inches	(mm)			
<b>A Strokes</b>	2.00	(50.8)	8.00	(203.2)	24.00 (609.6)
	4.00	(101.6)	12.00	(304.8)	
	6.00	(152.4)	18.00	(457.2)	
<b>B Retract</b>	stroke +	6.12	(155.4)		
<b>C Mounting</b>	stroke +	4.06	(103.1)		
<b>D Overall</b>	stroke +	6.43	(163.2)		



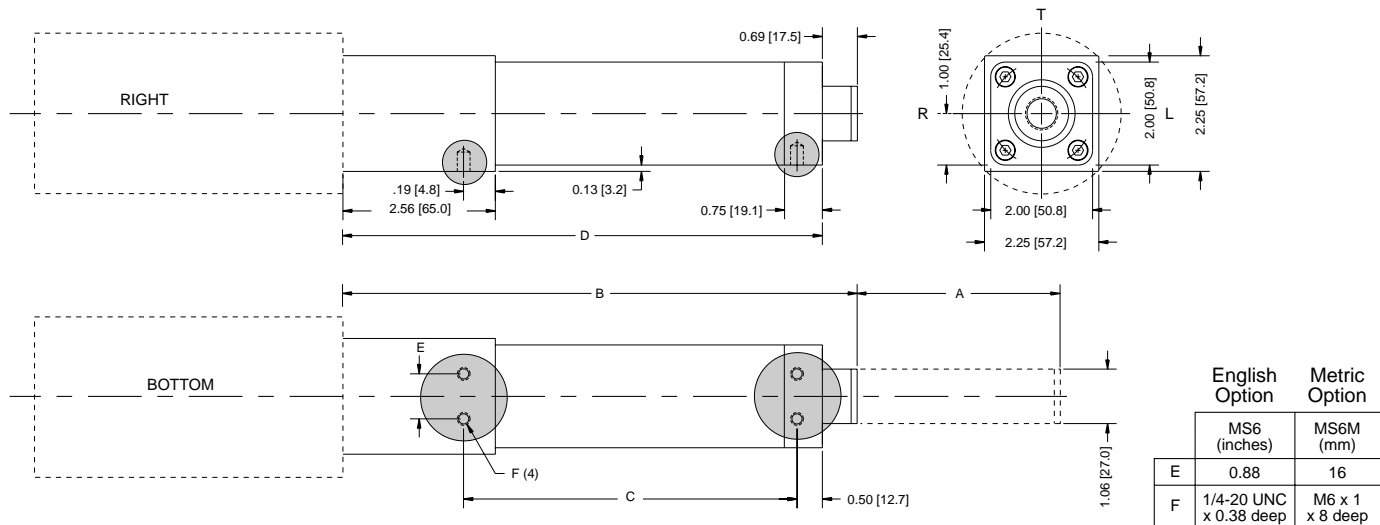
## MF1 HEAD RECTANGULAR FLANGE IN-LINE

- AutoCAD® DXF drawings available on diskette
- Include motor dimensions; see pages B36-B39
- Include rod end dimensions; see page B40



	Inches	(mm)			
<b>A Strokes</b>	2.00	(50.8)	8.00	(203.2)	24.00 (609.6)
	4.00	(101.6)	12.00	(304.8)	
	6.00	(152.4)	18.00	(457.2)	
<b>B Retract</b>	stroke +	6.12	(155.4)		
<b>C Mounting</b>	stroke +	3.44	(87.4)		
<b>D Overall</b>	stroke +	5.81	(147.5)		

## MS6 SIDE TAPPED MOUNTING IN-LINE



	Inches	(mm)			
<b>A Strokes</b>	2.00	(50.8)	8.00	(203.2)	24.00 (609.6)
	4.00	(101.6)	12.00	(304.8)	
	6.00	(152.4)	18.00	(457.2)	
<b>B Retract</b>	stroke +	6.12	(155.4)		
<b>C Mounting</b>	stroke +	2.56	(65.0)		
<b>D Overall</b>	stroke +	5.43	(137.8)		



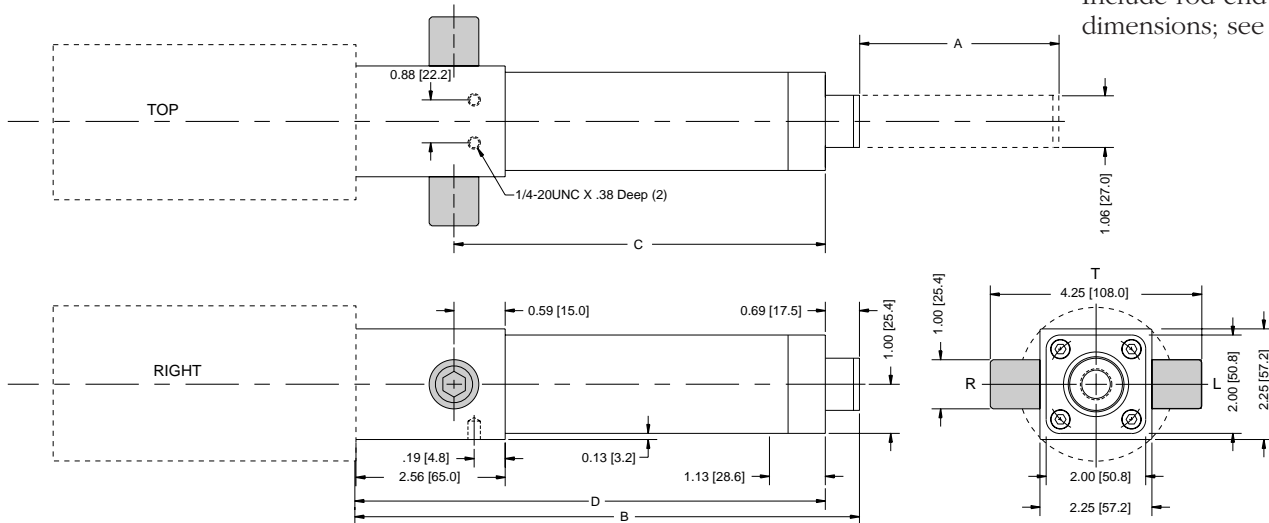


# CYLINDER DIMENSIONS



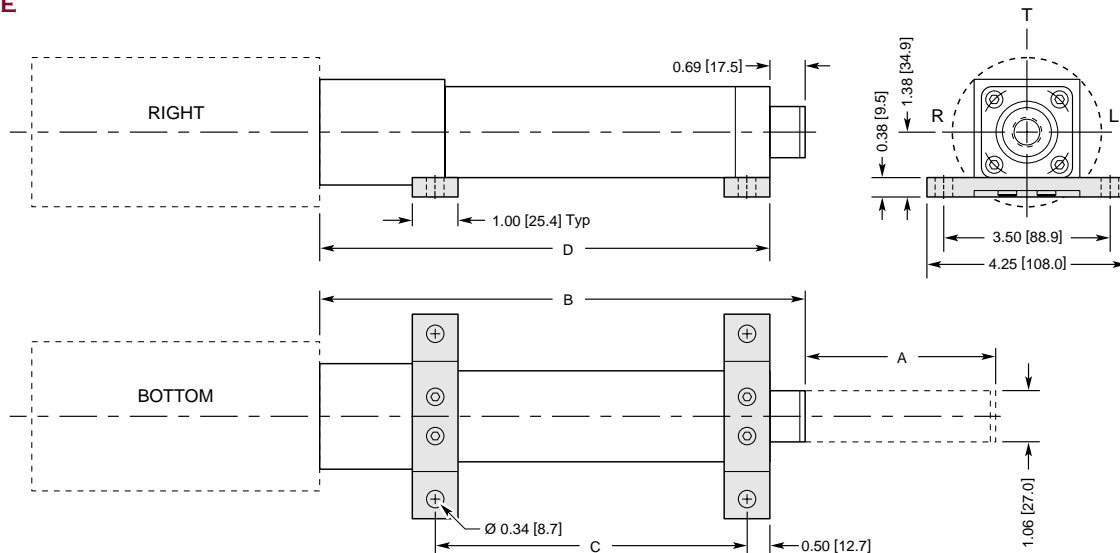
## MT2 TRUNNION MOUNTING IN-LINE

- AutoCAD® DXF drawings available on diskette
- Include motor dimensions; see pages B36-B39
- Include rod end dimensions; see page B40



	Inches	(mm)				
<b>A Strokes</b>	2.00	(50.8)	8.00	(203.2)	24.00	(609.6)
	4.00	(101.6)	12.00	(304.8)		
	6.00	(152.4)	18.00	(457.2)		
<b>B Retract</b>	stroke +	6.12	(155.4)			
<b>C Mounting</b>	stroke +	3.47	(88.1)			
<b>D Overall</b>	stroke +	5.43	(137.8)			

## MS2 SIDE FOOT MOUNTING IN-LINE



	Inches	(mm)				
<b>A Strokes</b>	2.00	(50.8)	8.00	(203.2)	24.00	(609.6)
	4.00	(101.6)	12.00	(304.8)		
	6.00	(152.4)	18.00	(457.2)		
<b>B Retract</b>	stroke +	6.12	(155.4)			
<b>C Mounting</b>	stroke +	2.56	(65.0)			
<b>D Overall</b>	stroke +	5.43	(137.9)			

## MOTOR SPECIFICATIONS

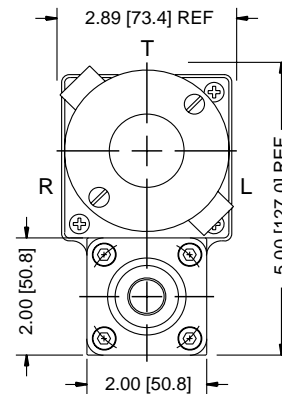
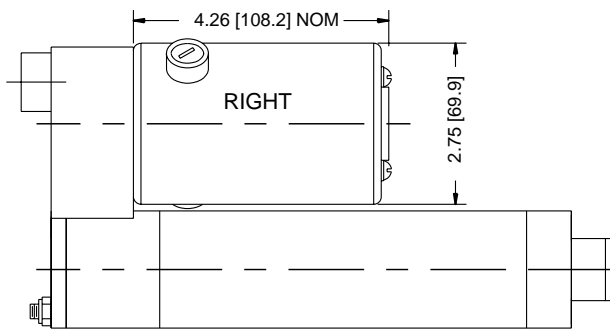
### ND SERIES

### PERMANENT MAGNET 2-POLE, 24 VOLT DC MOTOR

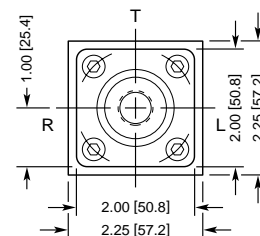
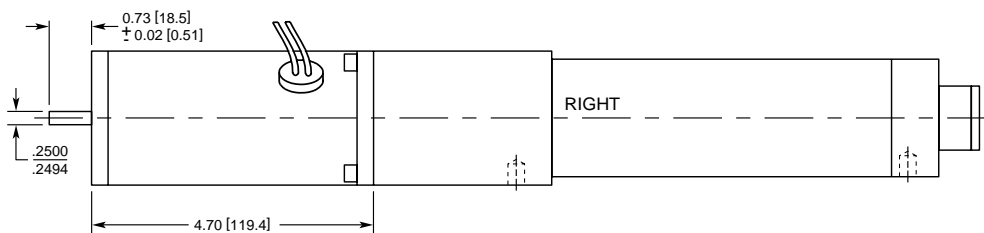
Inductance	1.8 mH
HIPOT breakdown	500 VAC
Current	
Continuous	4.5 A max
Peak	12 A max
Torque Constant ( $K_T$ )	8.8 oz-in/Amp
Voltage Constant ( $K_E$ )	6.5 V/Krpm
No Load Speed	3,600 rpm
Connections	2 leads, 12 inch [300 mm] length -Q Quick Disconnect option: 3 contact receptacle in anodized aluminum shell, includes 12 ft [3.7 m] cable with molded plug (except in-line models)
Anticipated life of brushes	1,000,000 cycles. Replaceable.
Temperature	180°F [82°C] maximum allowable motor case temperature Actual motor case temperature is ambient, duty cycle, speed and load dependent. Refer to speed vs. thrust performance curves for system duty ratings.

### DIMENSIONS

#### Parallel



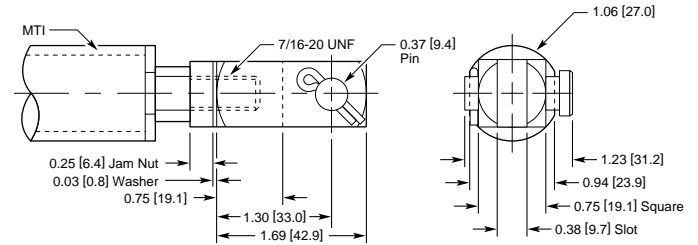
#### In-Line



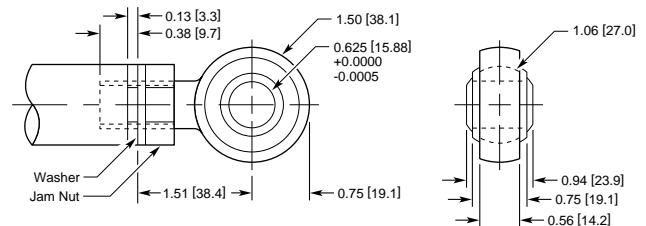


## ROD ENDS

### FC2

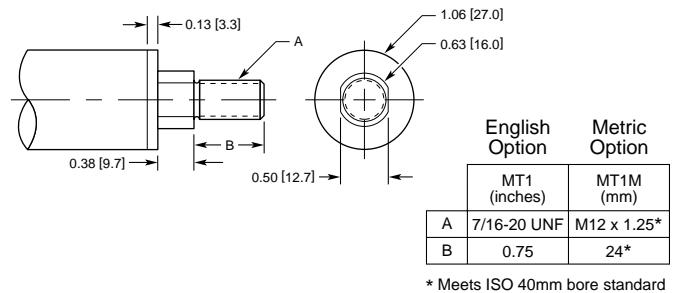


### FS2

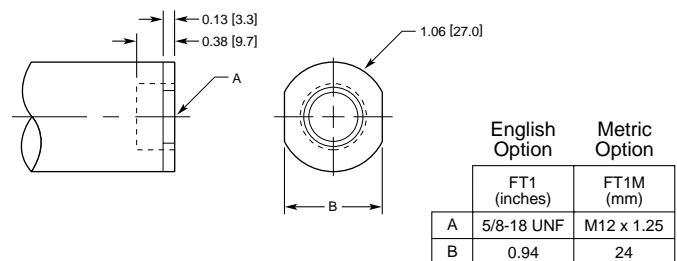


SAME PHOTO

### MT1



### FT1



### FE2

