

# Exlar I Series Linear Actuator

Exlar I Series™ actuators present a new range of alternatives for linear motion solutions. The I Series actuators offer all of the benefits of Exlar's planetary roller screw technology, along with extreme flexibility in actuator mounting style, and the type of motor used to drive the actuator.

Exlar's roller screw technology has been the integral component in creating the most reliable, long lasting electromechanical actuators on the market. Over the last 15 years, Exlar's inverted roller screw actuators have provided a long-life, all-electric replacement for hydraulic cylinders in thousands of applications.

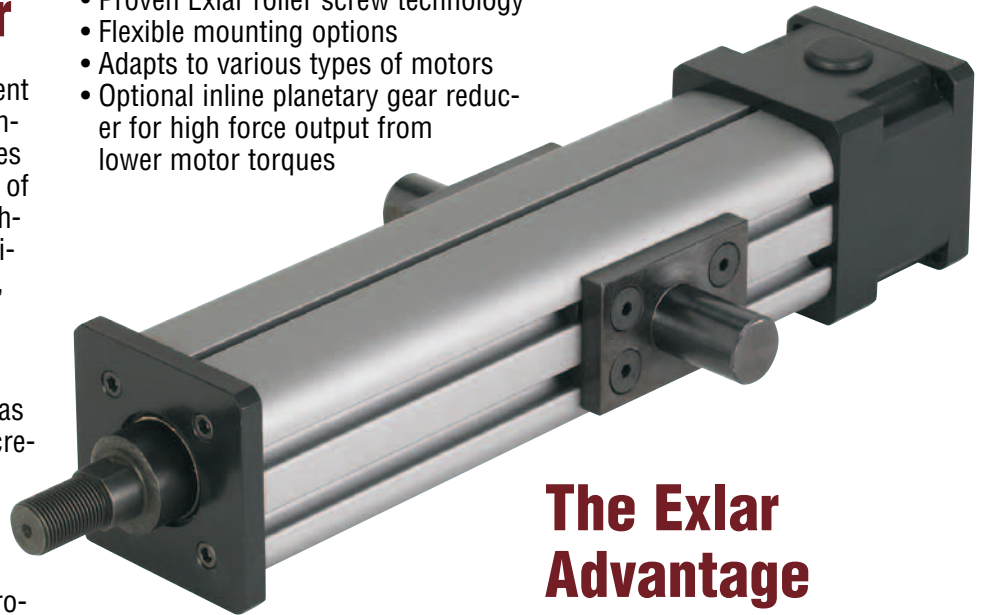
The I Series actuators offer this same technology in a series of actuators that are economical and allow the use of lower cost motor technology.

## Two Models to Fit Your Needs

Two product performance levels are available, so you can choose which option best suits your application and budgetary requirements. The IM Series offers Exlar's standard capacity inverted roller screw in actuators with up to 5 times the travel life of ball screw actuators. The IX Series offers the same load carrying capacity as the IM Series but offers up to 15 times the life of an equivalent ball screw.

## I Series™ Features

- Proven Exlar roller screw technology
- Flexible mounting options
- Adapts to various types of motors
- Optional inline planetary gear reducer for high force output from lower motor torques



## The Exlar Advantage

### Motor Flexibility

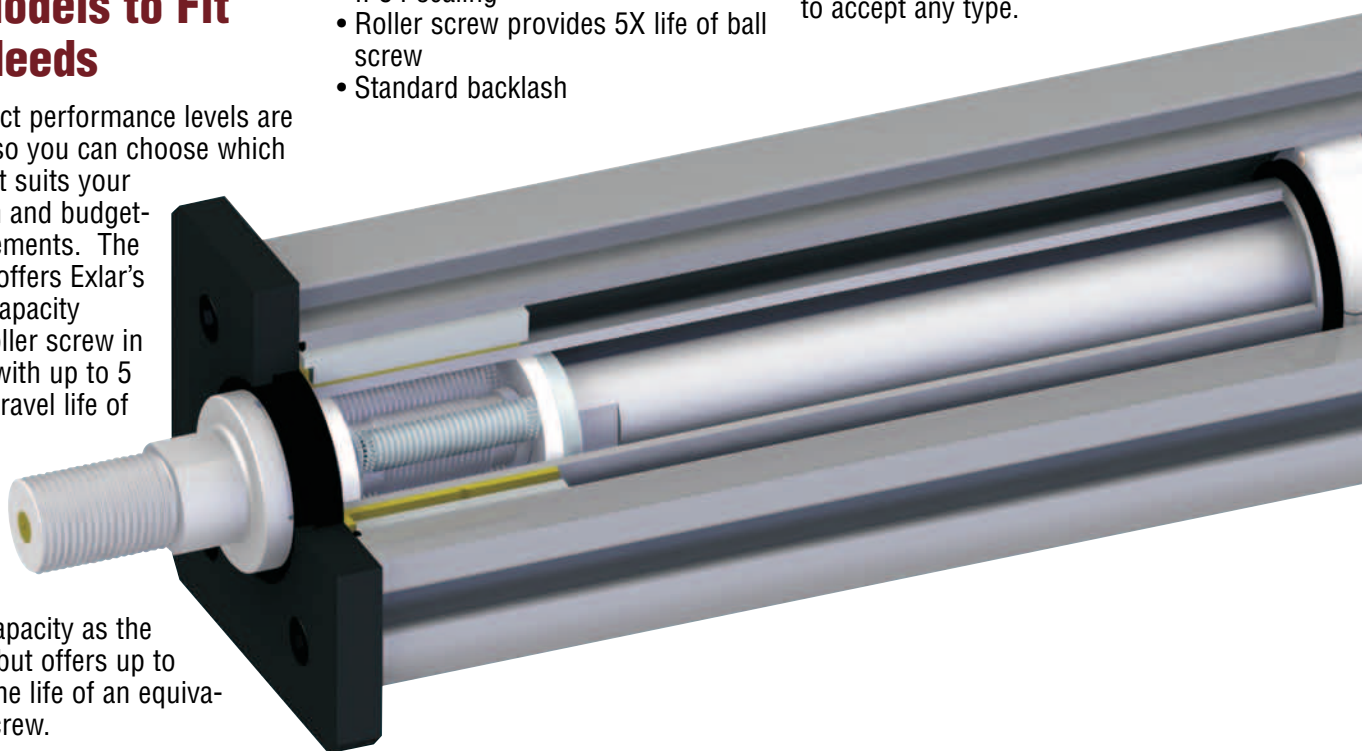
The I Series actuators can be ordered to accept the motor type of your choice. Whether a brushed type DC motor or stepper motor for lower performance applications, or a high performance brushless motor like Exlar's SLM Series, the I Series actuators offer complete flexibility in ordering to accept any type.

## IX Series™ Features

- IP65 sealing
- Roller screw provides 15X life of ball screw
- Low backlash

## IM Series™ Features

- IP54 sealing
- Roller screw provides 5X life of ball screw
- Standard backlash



## Integral Planetary Gearing

The I Series actuators offer economical planetary gearing as an input reduction option. Compared to the low performance spur gears provided by most ball screw actuators, the I Series' planetary gears offer an extended life, high input speed and output torque and quiet operation. The performance of the actuator is not limited by the gearing. Standard available ratios of 5:1 and 10:1 allow you to utilize smaller, lower torque motors to drive the I Series actuators, while still achieving the desired output force from the actuator.

## Sealed Actuator Body

The base unit of the IX Series actuators is offered with a standard IP65 rating. The in-line motor

mounting adapters and parallel motor mounting adapters can be ordered as IP65 if required for the application.

The base unit of the IM Series actuators is offered with a standard IP54 rating. An optional IP65 sealed base unit is available.

The in-line motor mounting adapters and parallel motor mounting adapters can be ordered with IP65 if required for the application.

## Wear and Corrosion Resistant Output Rod

The standard actuator main extending rods for the I Series actuators are provided with a surface treatment that provides equivalent corrosion resistance and superior wear resistance to chrome plated rods. The thermo-chemical process creates a surface that is a microstructural zone of iron nitrides, integral with the base material.

The resultant surface not only has superior wear qualities compared to chrome, and equivalent corrosion resistance, but also eliminates the flaking issues of

an electro-chemically applied process such as chrome plating.

## Large Diameter Output Rod

The I Series actuators provide a large diameter output rod and excellent internal bushing support which offers you long life in resistance to side loading.

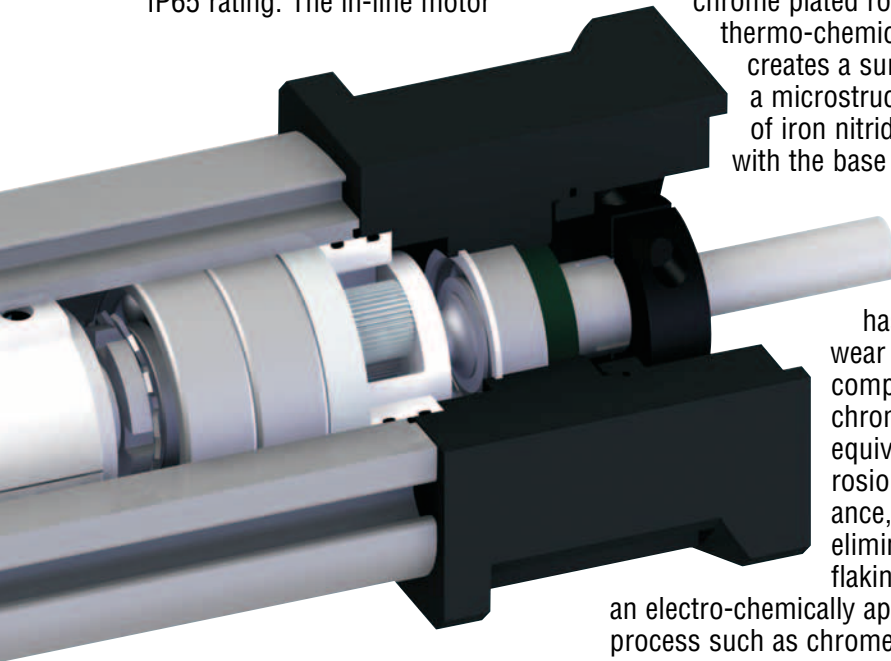
## Actuator Materials and Coating

The standard IM and IX Series actuators provide case materials made of aluminum with clear and black anodized coatings. These materials offer a durable and corrosion resistant package. The standard mounting hardware for the actuators are manufactured from black oxide-coated mild steel.

## Alternative Materials and Coatings

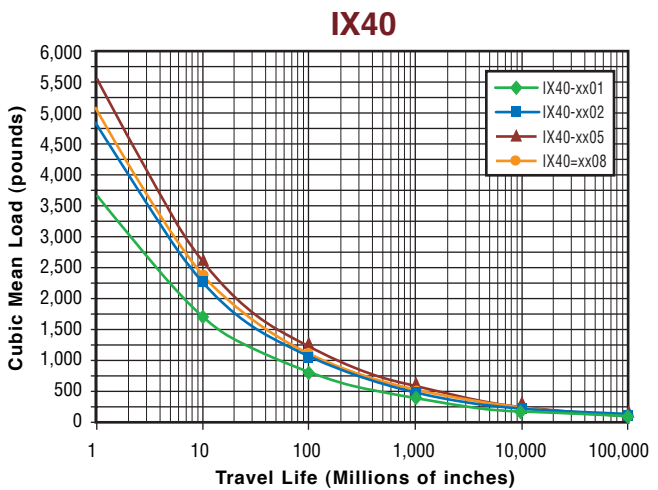
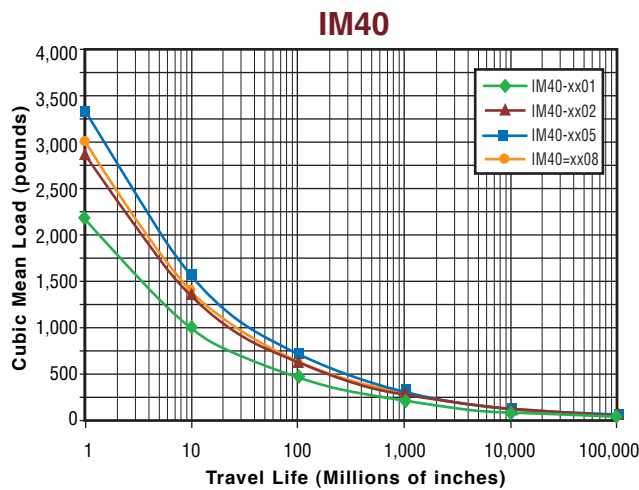
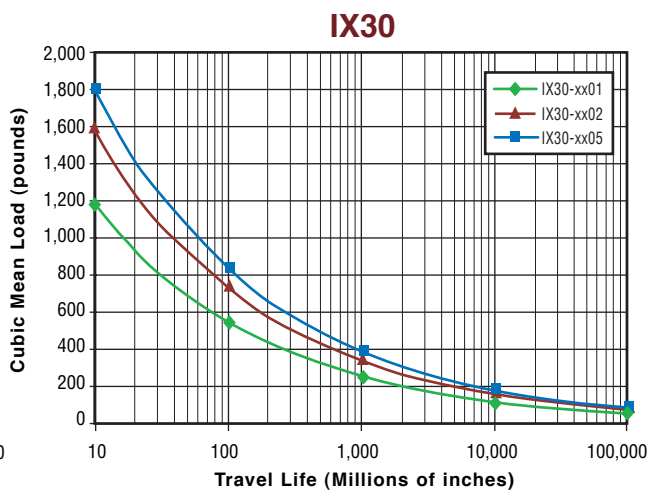
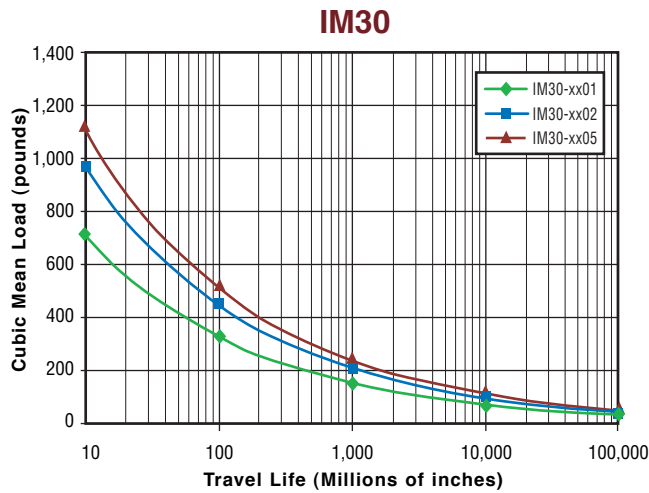
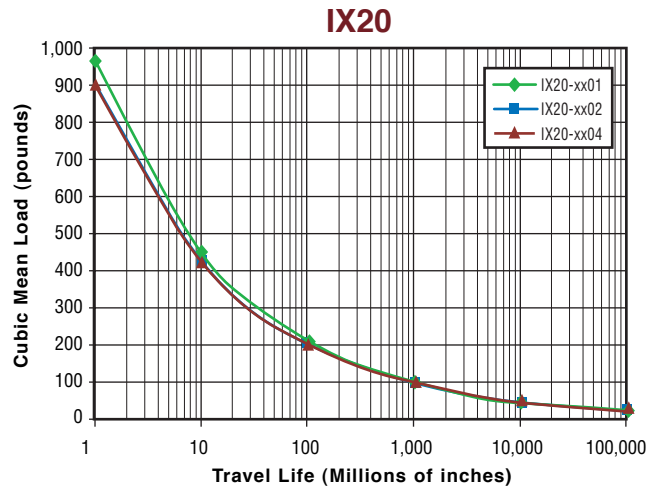
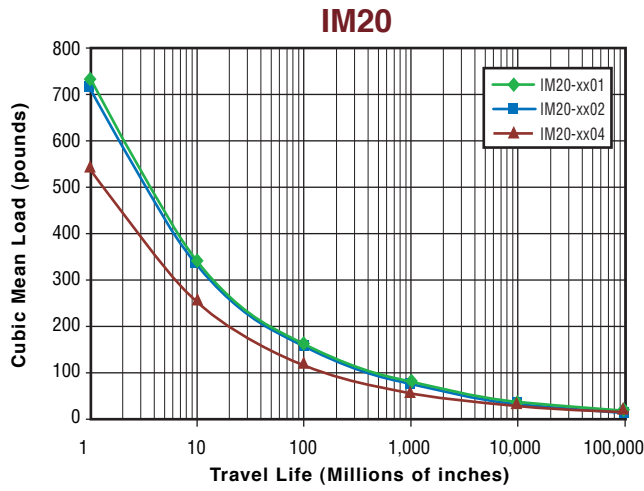
The I Series actuators offer several options to the standard construction for applications requiring further corrosion resistance. The actuator's case parts can be ordered as electroless nickel coated and white powder coat epoxy. Alternatively, the entire case can be constructed from stainless steel using materials you select.

The mounting hardware for the I Series actuators can be ordered in two varieties offering more corrosion resistance than the standard components. These include the "corrosion resistant" mounting accessories which are constructed of mild steel and provided with the same surface preparation as the output rod. Also offered are mounting accessories manufactured from stainless steel.



Ultimate Flexibility

# I Series Lifetime Curves



# I Series Performance Specifications

Product	Approx Frame Size Size in (mm)	Continuous Force* lbf (Nm)	Speed at Max Rated RPM in/sec (mm/sec)	Life at Rated load in x 10 <sup>6</sup> (mm x 10 <sup>6</sup> )	Screw Lead in (mm)	Allowable Continuous Input Torque* lbf-in (Nm)	Max Rated Input RPM
IM20-xx01	2 (51)	578 (2571)	8.33 (212)	2.93 (74.4)	0.1 (2.54)	11.5 (1.3)	5000 5000
IM20-xx02	2 (51)	289 (1286)	16.67 (423)	13 (332.7)	0.2 (5.08)	11.5 (1.3)	5000 5000
IM20-xx04	2 (51)	145 (645)	33.33 (847)	44.4 (1123.6)	0.4 (10.16)	11.5 (1.3)	5000 5000
IX20-xx01	2 (51)	578 (2571)	8.33 (212)	7.8 (198.2)	0.1 (2.54)	11.5 (1.3)	5000 5000
IX20-xx02	2 (51)	385 (1713)	16.67 (423)	52.8 (1341.4)	0.2 (5.08)	15.3 (1.73)	5000 5000
IX20-xx04	2 (51)	192 (854)	33.33 (847)	141 (3587)	0.4 (10.16)	15.3 (1.73)	5000 5000
IM30-xx01	3 (76)	1347 (5992)	6.67 (169)	2.06 (52.5)	0.1 (2.54)	26.8 (3.03)	4000 4000
IM30-xx02	3 (76)	674 (2998)	13.33 (338)	7.0 (177.6)	0.2 (5.08)	26.8 (3.03)	4000 4000
IM30-xx05	3 (76)	269 (1197)	33.33 (846)	347.6 (88.29)	0.5 (12.7)	26.8 (3.03)	4000 4000
IX30-xx01	3 (76)	1347 (5992)	6.67 (169)	5.5 (139.8)	0.1 (2.54)	26.8 (3.03)	4000 4000
IX30-xx02	3 (76)	905 (4026)	13.33 (338)	21.4 (544.9)	0.2 (5.08)	36.0 (4.07)	4000 4000
IX30-xx05	3 (76)	362 (1610)	33.33 (846)	1059 (26900)	0.5 (12.7)	36.0 (4.07)	4000 4000
IM40-xx01	4 (102)	3966 (17642)	5 (127)	0.37 (9.35)	0.1 (2.54)	78. (8.91)	3000 3000
IM40-xx02	4 (102)	1983 (8821)	10 (254)	2.11 (53.73)	0.2 (5.08)	78.9 (8.91)	3000 3000
IM40-xx05	4 (102)	793 (3527)	25 (635)	32.6 (829)	0.5 (12.7)	78.9 (8.91)	3000 3000
IM40-xx08	4 (102)	528 (2351)	37.5 (952)	187.8 (4770)	0.75 (19.05)	78.9 (8.91)	3000 3000
IX40-xx01	4 (102)	3966 (17642)	5 (127)	1.0 (25.4)	0.1 (2.54)	78.9 (8.91)	3000 3000
IX40-xx02	4 (102)	2692 (11975)	10 (254)	6.28 (159.46)	0.2 (5.08)	107.1 (12.1)	3000 3000
IX40-xx05	4 (102)	1077 (4791)	25 (635)	96.7 (2458)	0.5 (12.7)	107.1 (12.1)	3000 3000
IX40-xx08	4 (102)	718 (3193)	37.5 (952)	515 (13084)	0.75 (19.05)	107.1 (12.1)	3000 3000

\*The continuous force rating is achieved at the allowable continuous input torque level.

\*\*Allowable peak input torque is 2X the Allowable continuous input torque. Input torque applies to torque at the actuators drive shaft. Any motor torque values must be multiplied by any belt or gear ratio to determine acceptable input torque levels.

Specifications subject to change without notice.

## I Series Mechanical Specifications

		IM20 / IX20	IM30 / IX30	IM40 / IX40
Nominal Backlash	in (mm)	.008 (.2) / .004 (.1)	.008 (.2) / .004 (.1)	.008 (.2) / .004 (.1)
Lead Accuracy	in/ft (mm/300 mm)	.001 (.025)	.001 (.025)	.001 (.025)
Maximum Radial Load	lb (N)	25 (111)	35 (155)	45 (200)
Environmental Rating: Standard		IP54 / IP65	IP54 / IP65	IP54 / IP65
<b>Weights</b>				
Base Unit - Zero Stroke		2.32	5.29	14.6
Adder per inch of stroke		0.33	0.63	1.31
Adder for inline (excluding motor)		0.73	0.98	0.2*
Adder for gearset		1.63	3.32	9.91
Adder for front flange		0.44	1.74	2.6
Adder for parallel drive (excluding motor)		2.53	2.51	11.7**
Adder for 2 trunnions		2.12	2.12	2
Adder for 2 side mounts		1.75	1.75	2.69
Adder for 2 adjustable flanges		1.46	2.24	4.28
*For Nema motor size matching actuator size				
**For Nema motor size matching actuator size (I40 adder for Nema 34 = 7.3)				

## I Series Input Torque and Output Force Ratings

		Input Torque				Output Force			
		Continuous		Peak		Continuous		Peak	
Direct Drive Inline or 1:1 Belt Drive		lbf-in	N-m	lbf-in	N-m	lbf	N	lbf	N
<b>I20 Actuator</b>	0.1 inch lead	11	1.2	22	2.4	553	2460	1106	4920
	0.2 inch lead	15	1.7	30	3.4	377	1677	754	3354
	0.4 inch lead	15	1.7	30	3.4	188	838	376	1676
<b>I30 Actuator</b>	0.1 inch lead	26	2.9	52	5.8	1307	5813	2614	11626
	0.2 inch lead	40	4.5	80	9	1105	4472	2210	8944
	0.5 inch lead	40	4.5	80	9	402	1789	804	3578
<b>I40 Actuator</b>	0.1 inch lead	75	8.5	150	17	3770	16769	7540	33538
	0.2 inch lead	105	11.9	210	23.8	2639	11739	5278	23478
	0.5 inch lead	105	11.9	210	23.8	1056	4695	2112	9390
	0.75 inch lead	105	11.9	210	23.8	704	3120	1408	6240

For configurations that use an input ratio, the input torque rating must be divided by the ratio. The output force ratings remain the same.

For the 2:1 parallel belt ratio the input torque ratings must be divided by 2 for allowable motor torque.

For the 5:1 internal planetary gearing option the input torque ratings must be divided by 5 for allowable motor torque.

For the 10:1 internal planetary gearing option the input torque ratings must be divided by 10 for allowable motor torque.

For any custom belt ratio or externally mounted gearing, the input torque ratings must be divided by that ratio for the allowable motor torque.

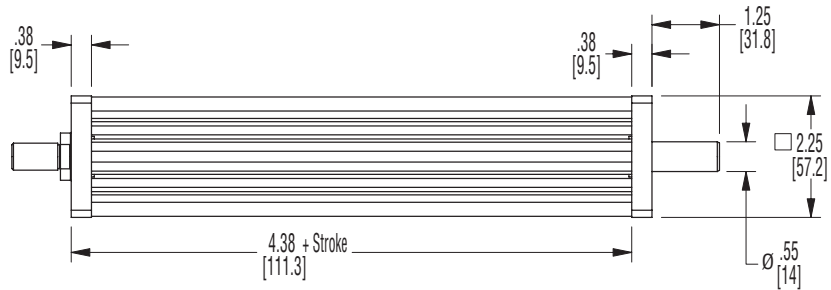
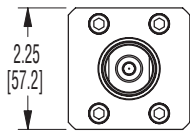
Specifications subject to change without notice.

# I Series Inertia

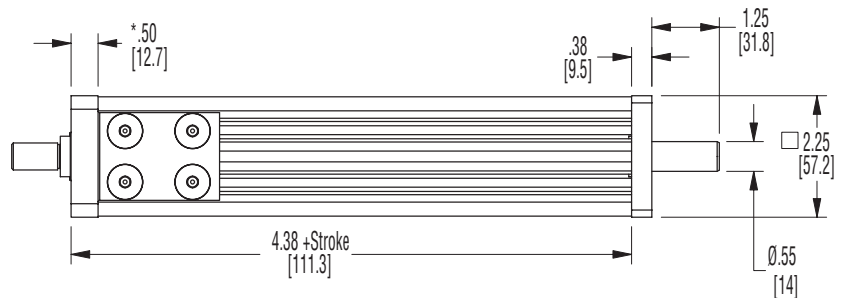
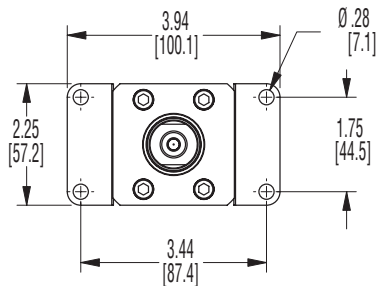
		<b>lbf-in-sec<sup>2</sup> (kg-m<sup>2</sup>)</b>
<b>I20 Actuator</b>	Base Unit - Input Drive Shaft Only	0.0001 + 0.0000047/in (0.011 + 0.00053/in)
	Inline Unit - w/Motor Collar Clamp	0.00013 + 0.0000047/in (0.014 + 0.00053/in)
	5:1 Gearhead - w/Motor Collar Clamp	0.000062 + 0.00000019/in (0.007 + 0.000021/in)
	10:1 Gearhead - w/Motor Collar Clamp	0.000056 + 0.00000047/in (0.0063 + 0.000053/in)
	1:1 Reduction Parallel Drive	0.00046 + 0.0000047/in (0.052 + 0.00053/in)
	2:1 Reduction Parallel Drive	0.00048 + 0.0000012/in (0.054 + 0.00013/in)
	1:2 Speed Up Ratio Parallel Drive	0.0015 + 0.000019/in (0.17 + 0.0021/in)
	<b>I30 Actuator</b>	Base Unit - Input Drive Shaft Only
Inline Unit - w/Motor Collar Clamp		0.00053+ 0.000023/in (0.0596 + 0.00256/in)
5:1 Gearhead - w/Motor Collar Clamp		0.00023+ 0.000001/in (0.0254 + 0.0001/in)
10:1 Gearhead - w/Motor Collar Clamp		0.00020+ 0.0000003/in (0.027 + 0.000026/in)
1:1 Reduction Parallel Drive		0.00075+ 0.000023/in (0.0845 + 0.00256/in)
2:1 Reduction Parallel Drive		0.00046+ 0.0000057/in (0.0845 + 0.00256/in)
1:2 Speed Up Ratio Parallel Drive		0.003+ 0.000091/in (0.34 + 0.01/in)
<b>I40 Actuator</b>		Base Unit - Input Drive Shaft Only
	Inline Unit - w/Motor Collar Clamp	0.002+ 0.000073/in (0.215 + 0.00823/in)
	5:1 Gearhead - w/Motor Collar Clamp	0.0045+ 0.000003/in (0.0511 + 0.000329/in)
	10:1 Gearhead - w/Motor Collar Clamp	0.0034+ 0.0000007/in (0.0387 + 0.0000823/in)
	1:1 Reduction Parallel Drive, 3 Inch Motor	0.0023 + 0.000073/in (0.267 + 0.0082/in)
	2:1 Reduction Parallel Drive, 3 Inch Motor	0.00073 + 0.000018/in (0.083 + 0.002/in)
	1:2 Speed Up Ratio Parallel Drive, 3 Inch Motor	0.011 + 0.00029/in (1.26 + 0.0034/in)
	1:1 Reduction Parallel Drive, 4 Inch Motor	0.021 + 0.000073/in (2.39 + 0.0082/in)
	2:1 Reduction Parallel Drive, 4 Inch Motor	0.0082 + 0.000073/in (9.27 + 0.0082/in)
	1:2 Speed Up Ratio Parallel Drive, 4 Inch Motor	0.039 + 0.000073/in (4.44 + 0.0082/in)

Specifications subject to change without notice.

## I20 Base Unit

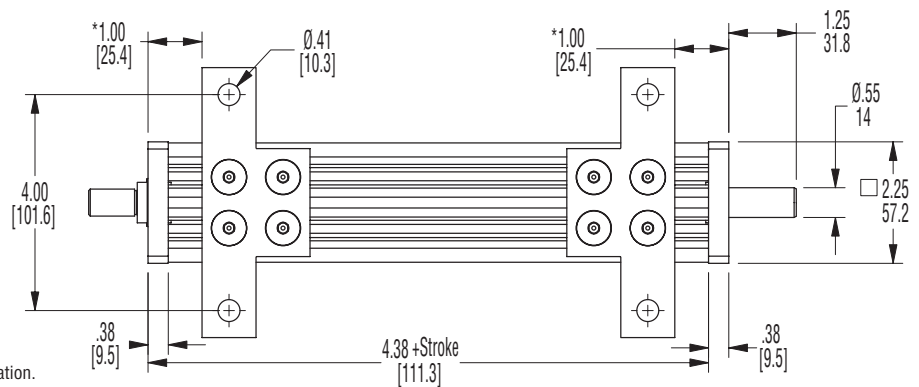
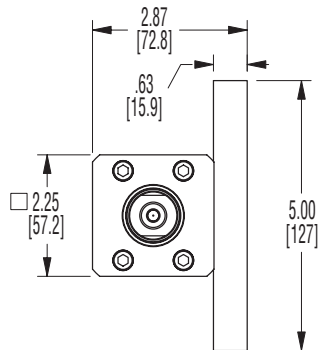


## I20 Side Flange Attachments



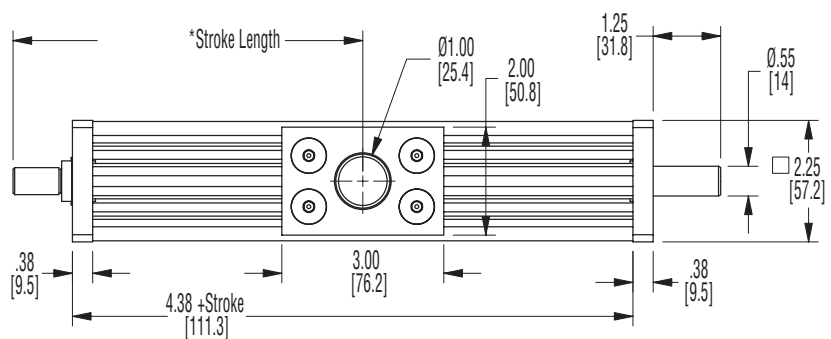
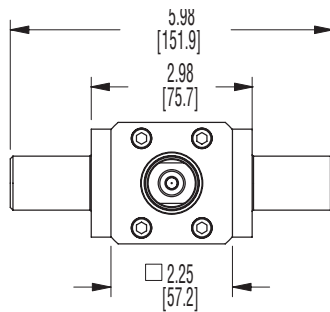
\*Note: If using integral flange this dimension is .38 [9.5]

## I20 Side Lug Attachments



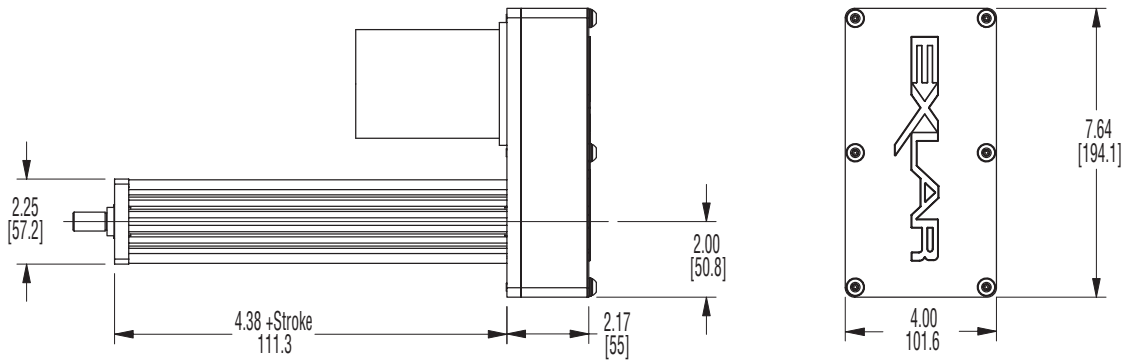
\*Note: Approximate distance for shipping. May be re-positioned by customer per application.

## I20 Side Trunnion Attachments

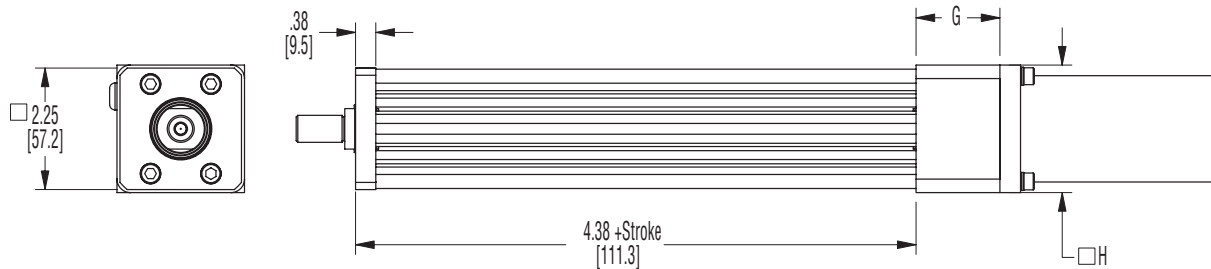


\*Note: Approximate distance for shipping. May be re-positioned by customer per application.

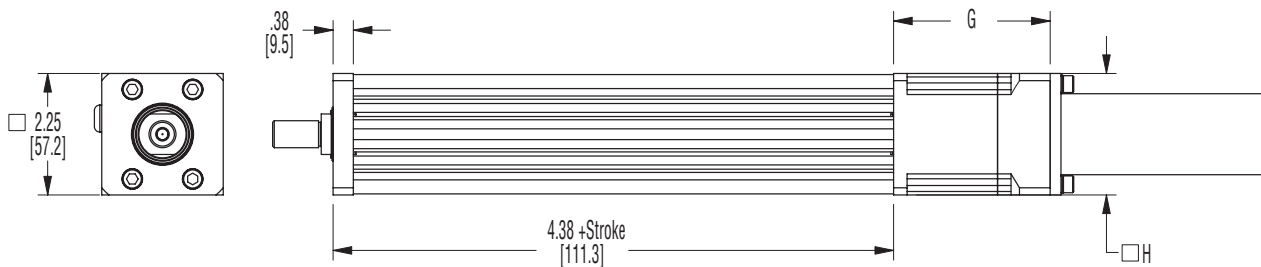
## I20 Parallel Drive



## I20 Inline integrated Coupling

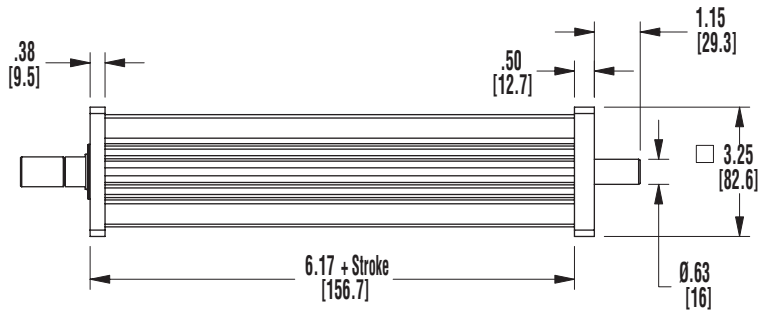
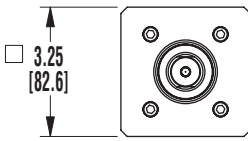


## I20 5:1, 10:1 Planetary Gearset

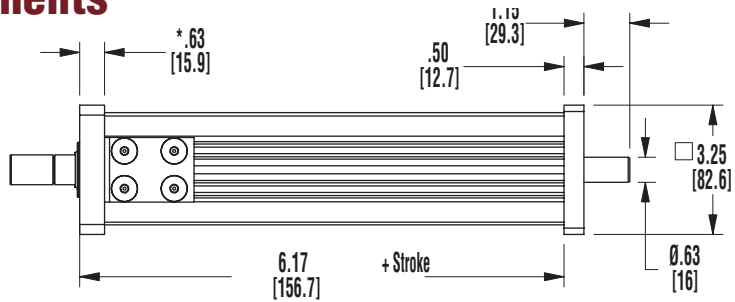
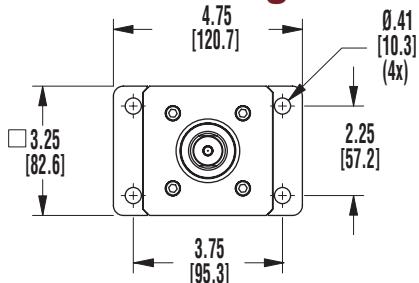


Motor Frame Size (Inline Integrated Coupling)	G	H
<b>NEMA 23</b>	1.25" (31.8 mm)	2.25" (51.2 mm)
<b>Exlar 60mm</b>	1.55" (39.4 mm)	2.36" (60.0 mm)
<b>NEMA 34</b>	1.37" (34.7 mm)	3.25" (82.6 mm)
<b>NEMA 42</b>	1.37" (34.7 mm)	4.19" (106.4 mm)
Motor Frame Size (5:1, 10:1 Planetary Gearset)		
<b>NEMA 23</b>	8.57" (217.7 mm)	11.04" (280.5 mm)
<b>NEMA 34</b>	8.57" (217.7 mm)	11.04" (280.5 mm)

## I30 Base Unit

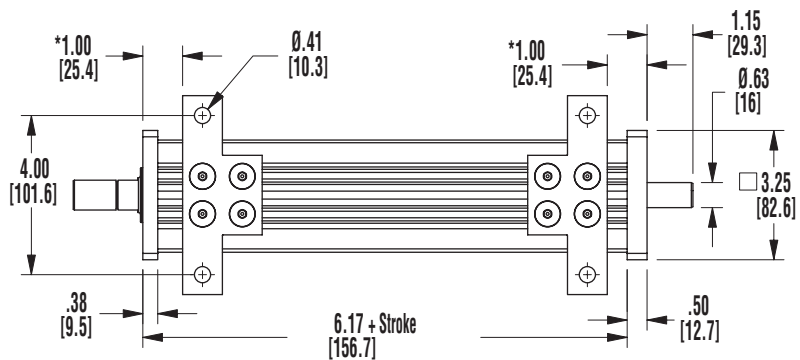
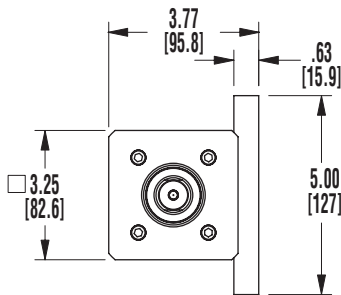


## I30 Side Flange Attachments



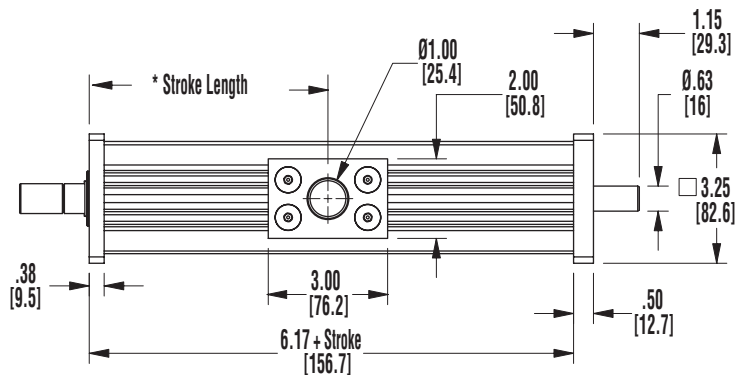
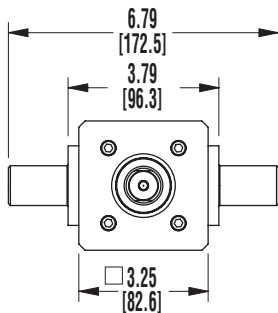
\* Note: If using integral flange this dimension is .50 [12.7]

## I30 Side Lug Attachments



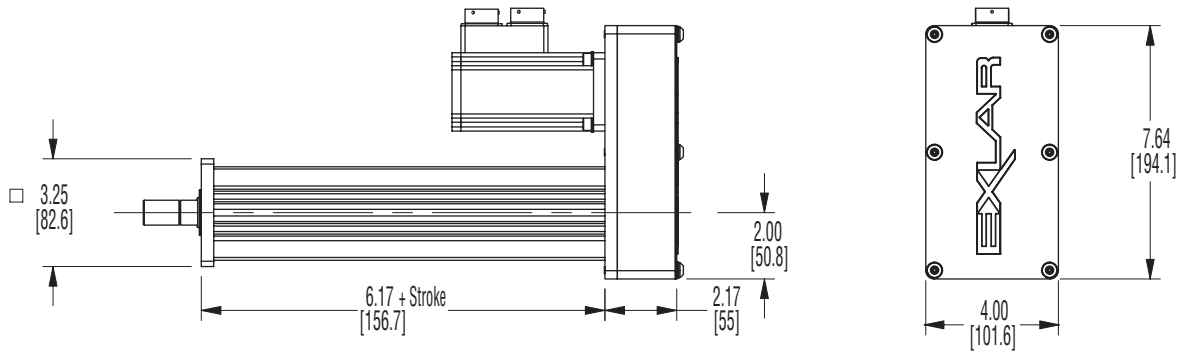
\* Note: Approximate distance for shipping.  
May be re-positioned by customer per application.

## I30 Side Trunnion Attachments

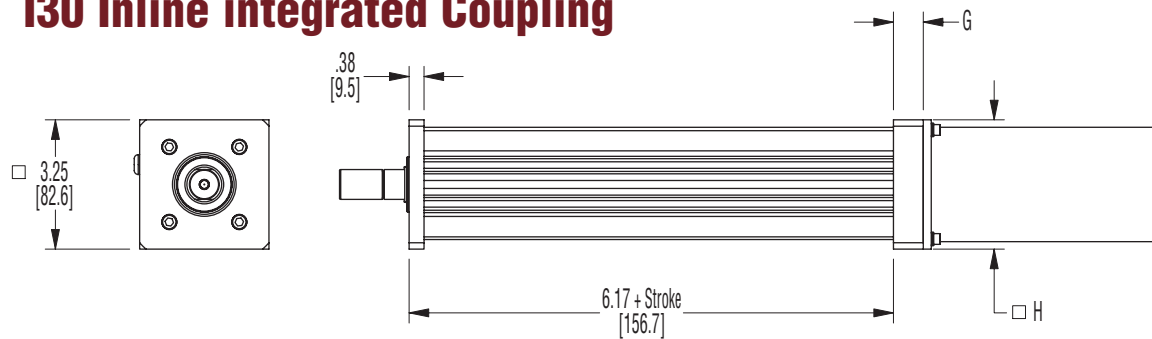


\* Note: Approximate distance for shipping.  
May be re-positioned by customer per application.

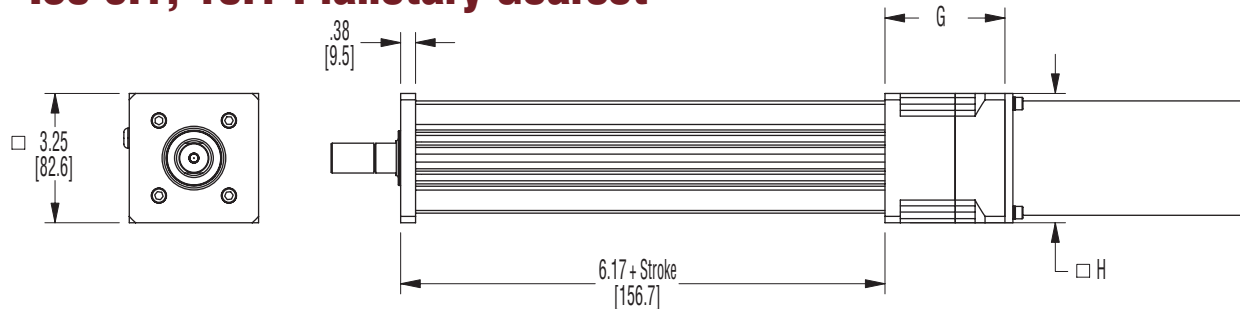
## I30 Parallel drive



## I30 Inline integrated Coupling

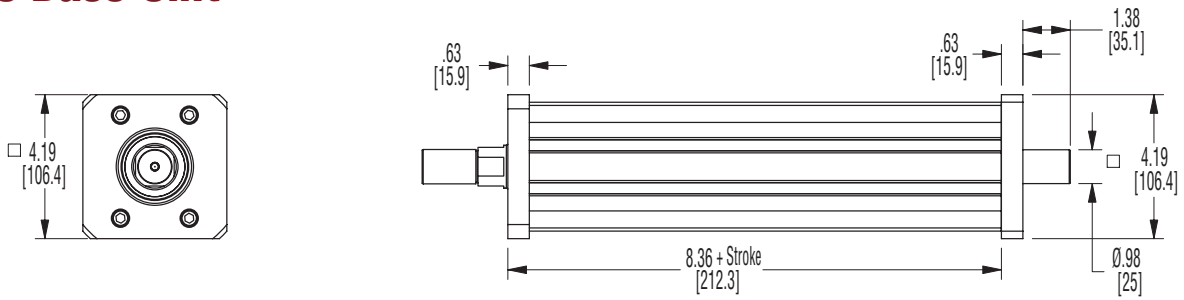


## I30 5:1, 10:1 Planetary Gearset

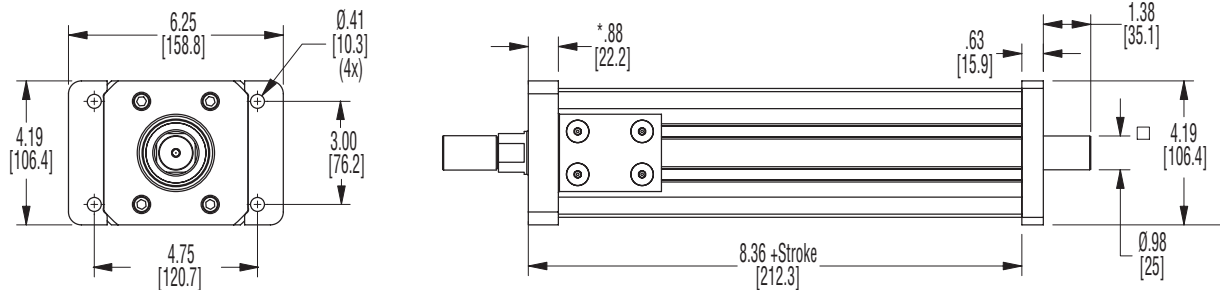


Motor Frame Size (Inline Integrated Coupling)	G	H
<b>NEMA 23</b>	0.87" (22.1 mm)	3.25" (82.6 mm)
<b>Exlar 60mm</b>	0.87" (22.1 mm)	3.25" (82.6 mm)
<b>NEMA 34</b>	0.75" (19.1 mm)	3.25" (82.6 mm)
<b>NEMA 42</b>	0.75" (19.1 mm)	4.19" (106.4 mm)
Motor Frame Size (5:1, 10:1 Planetary Gearset)		
<b>NEMA 23</b>	3.02" (76.7 mm)	3.25" (82.6 mm)
<b>Exlar 60mm</b>	3.02" (76.7 mm)	3.25" (82.6 mm)
<b>NEMA 34</b>	3.02" (76.7 mm)	3.25" (82.6 mm)
<b>Exlar 90mm</b>	3.36" (85.3 mm)	3.52" (89.4 mm)
<b>NEMA 42</b>	3.02" (76.7 mm)	4.19" (106.4 mm)

## I40 Base Unit

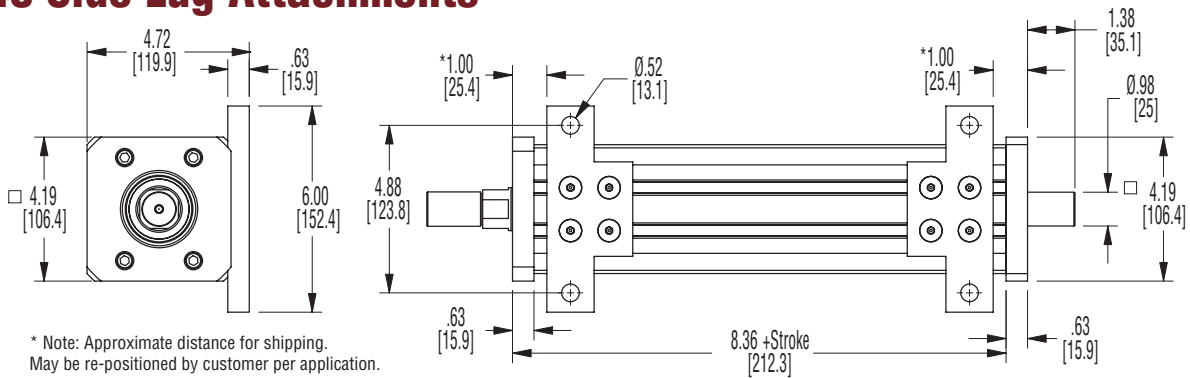


## I40 Side Flange Attachments



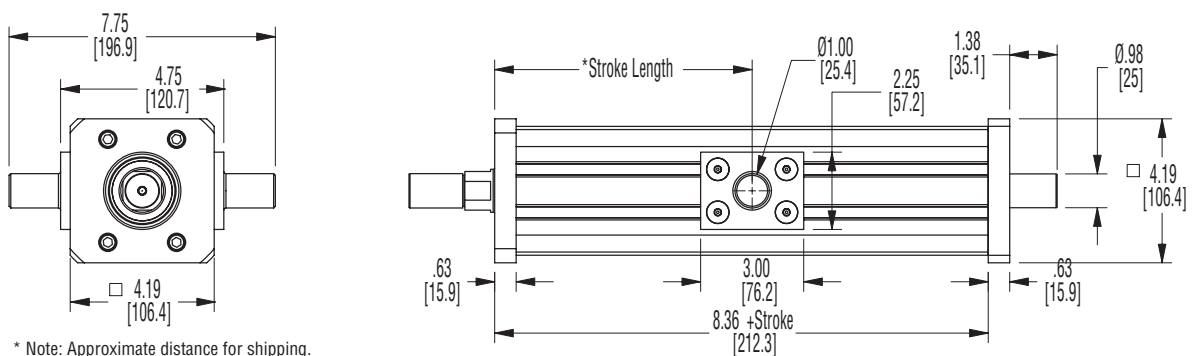
\* Note: If using integral flange this dimension is .63 [15.9]

## I40 Side Lug Attachments



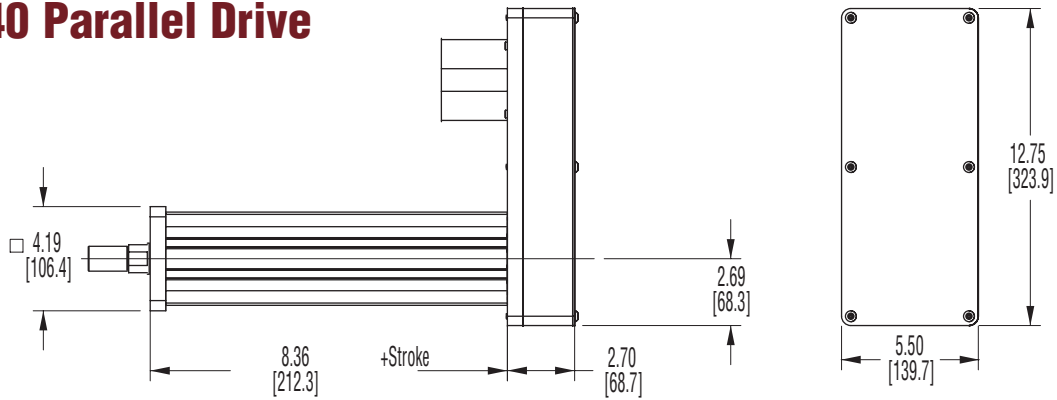
\* Note: Approximate distance for shipping. May be re-positioned by customer per application.

## I40 Side Trunnion Attachments

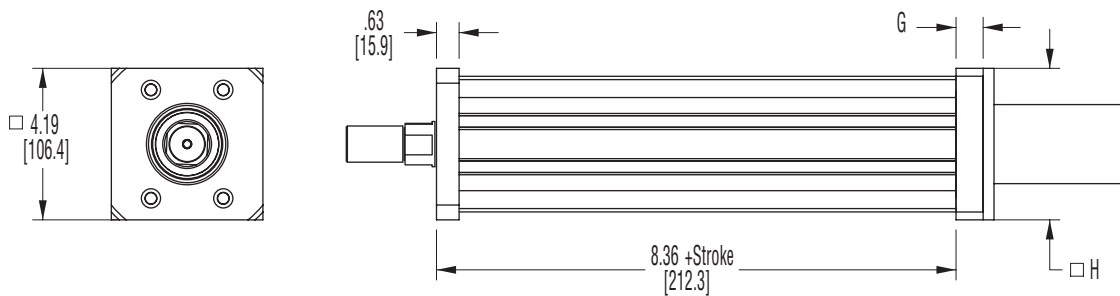


\* Note: Approximate distance for shipping. May be re-positioned by customer per application.

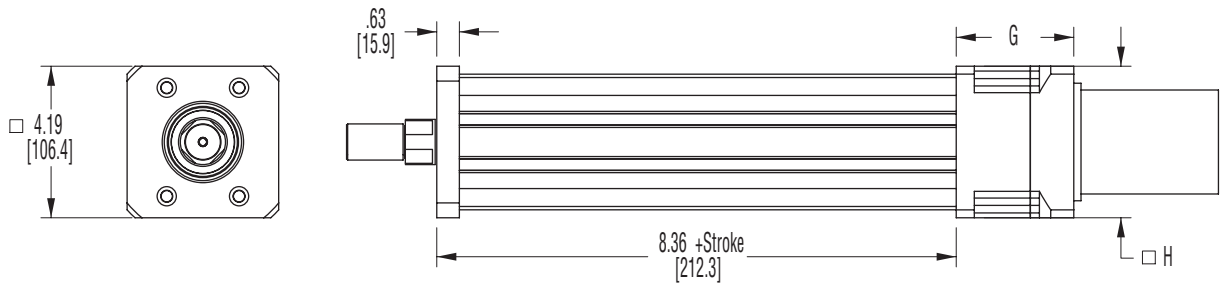
## I40 Parallel Drive



## I40 Inline integrated Coupling

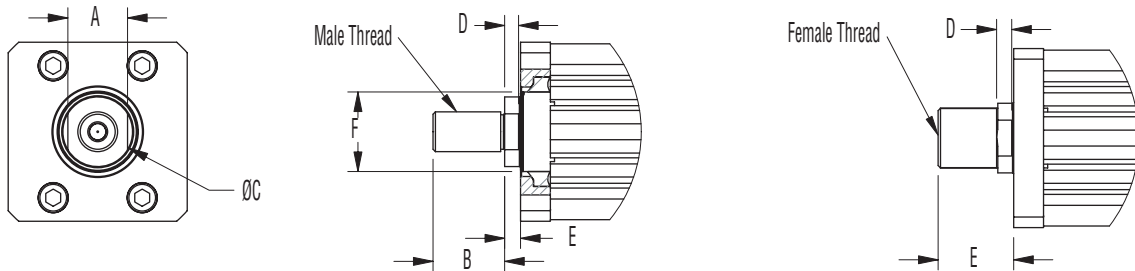


## I40 5:1, 10:1 Planetary Gearset



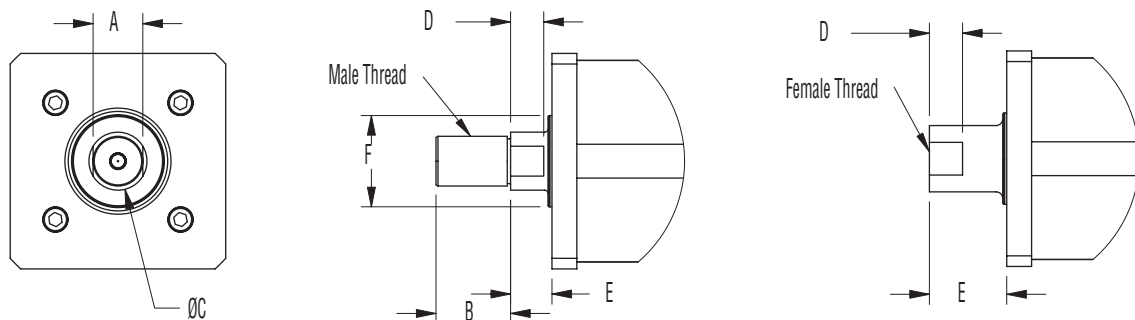
Motor Frame Size (Inline Integrated Coupling)	G	H
<b>NEMA 34</b>	0.75" (19.1 mm)	4.19" (106.4 mm)
<b>Exlar 90mm</b>	1.00" (25.4 mm)	4.19" (106.4 mm)
<b>NEMA 42</b>	0.75" (19.1 mm)	4.19" (106.4 mm)
<b>Exlar 115mm</b>	1.25" (31.75 mm)	4.19" (106.4 mm)
Motor Frame Size (5:1, 10:1 Planetary Gearset)		
<b>NEMA 34</b>	3.25" (82.6 mm)	4.19" (106.4 mm)
<b>Exlar 90mm</b>	3.45" (87.6 mm)	4.19" (106.4 mm)
<b>NEMA 42</b>	3.25" (82.6 mm)	4.19" (106.4 mm)

## I20 Rod Ends



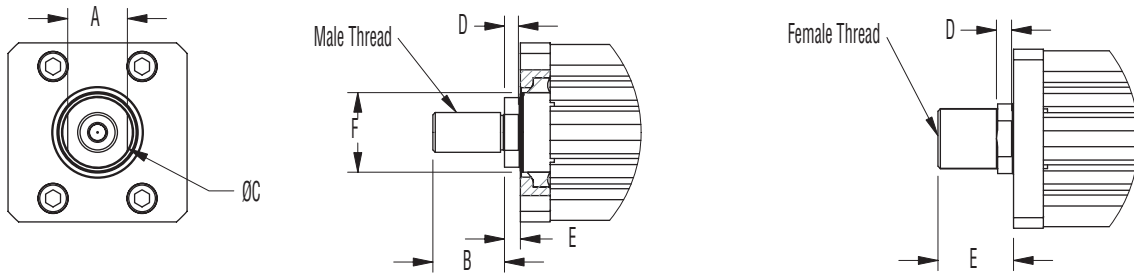
Rod End Option	Thread	A	B	C	D	E	F
<b>M</b>	U.S. Male 1/2-20 UNF-2A	0.75" (19.1 mm)	0.90" (22.9 mm)	0.88" (22.2 mm)	0.18" (4.4 mm)	0.20" (5.1 mm)	1.00" (25.4 mm)
<b>F</b>	U.S. Female 1/2-20 UNF-2B	0.75" (19.1 mm)	na na	0.88" (22.2 mm)	0.18" (4.4 mm)	0.95" (24.1 mm)	1.00" (25.4 mm)
<b>A</b>	Metric Male M12 x 15	0.75" (19.1 mm)	0.90" (22.9 mm)	0.88" (22.2 mm)	0.18" (4.4 mm)	0.20" (5.1 mm)	1.00" (25.4 mm)
<b>B</b>	Metric Female M12 x 15	0.75" (19.1 mm)	na na	0.88" (22.2 mm)	0.18" (4.4 mm)	0.95" (24.1 mm)	1.00" (25.4 mm)

## I30 Rod Ends



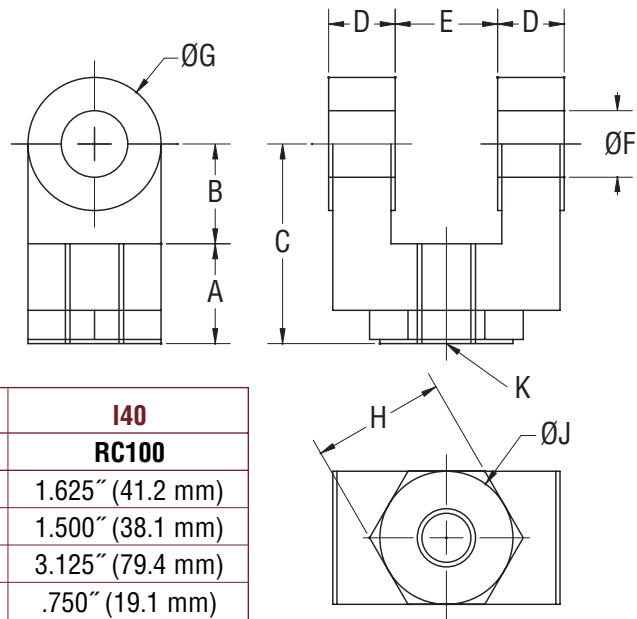
Rod End Option	Thread	A	B	C	D	E	F
<b>M</b>	U.S. Male 3/4-16 UNF	0.75" (19.1 mm)	1.13" (28.6 mm)	0.88" (22.3 mm)	0.50" (12.7 mm)	0.62" (15.8 mm)	1.38" (35.0 mm)
<b>F</b>	U.S. Female 3/4-16 UNF	0.87" (22.1 mm)	na na	1.00" (25.4 mm)	0.50" (12.7 mm)	1.17" (29.7 mm)	1.38" (35.0 mm)
<b>A</b>	Metric Male M16 x 15	0.75" (19.1 mm)	1.13" (28.6 mm)	0.88" (22.3 mm)	0.50" (12.7 mm)	0.62" (15.8 mm)	1.38" (35.0 mm)
<b>B</b>	Metric Female M16 x 15	0.87" (22.1 mm)	na na	1.00" (25.4 mm)	0.50" (12.7 mm)	1.17" (29.7 mm)	1.38" (35.0 mm)

# 140 Rod Ends



Rod End Option	Thread	A	B	C	D	E	F
<b>M</b>	U.S. Male	1.13"	1.63"	1.25"	0.75"	0.87"	1.97"
	1-14 UNS-2A	(28.6 mm)	(41.3 mm)	(37.8 mm)	(19.1 mm)	(22.1 mm)	(50.0 mm)
<b>F</b>	U.S. Female	1.13"	na	1.25"	0.63"	1.37"	1.97"
	1-14 UNS-2A	(28.6 mm)	na	(37.8 mm)	(15.9 mm)	(34.8 mm)	(50.0 mm)
<b>A</b>	Metric Male	1.13"	1.63"	1.25"	0.75"	0.87"	1.97"
	M27 x 2.0	(28.6 mm)	(41.3 mm)	(37.8 mm)	(19.1 mm)	(22.1 mm)	(50.0 mm)
<b>B</b>	Metric Female	1.13"	na	1.25"	0.63"	1.37"	1.97"
	M27 x 2.0	(28.6 mm)	na	(37.8 mm)	(15.9 mm)	(34.8 mm)	(50.0 mm)

# Rod Clevis Dimensions

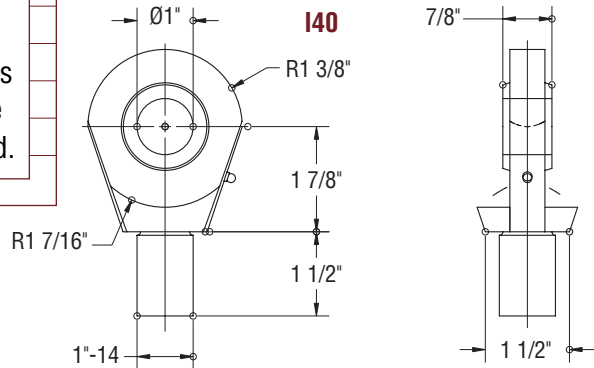
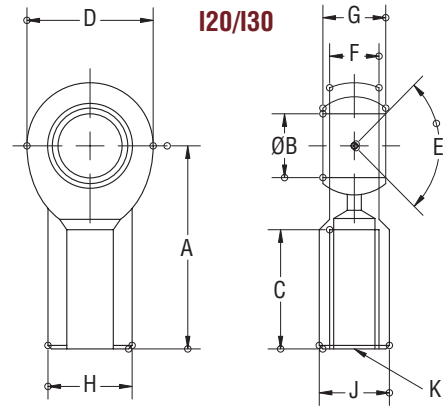


	<b>I20*</b>	<b>I30</b>	<b>I40</b>
	<b>RC050</b>	<b>RC075</b>	<b>RC100</b>
<b>A</b>	TBD	1.125" (28.58 mm)	1.625" (41.2 mm)
<b>B</b>	TBD	1.25" (31.75 mm)	1.500" (38.1 mm)
<b>C</b>	TBD	2.375" (60.3 mm)	3.125" (79.4 mm)
<b>D</b>	TBD	0.625" (15.88 mm)	.750" (19.1 mm)
<b>E</b>	TBD	1.265" (32.13 mm)	1.515" (38.5 mm)
<b>ØF</b>	TBD	0.75" (19.1 mm)	1.000" (25.4 mm)
<b>ØG</b>	TBD	1.50" (38.1 mm)	2.000" (50.8 mm)
<b>H</b>	TBD	1.25" (31.75 mm)	1.500" (38.1 mm)
<b>ØJ</b>	TBD	1.25" (31.75 mm)	1.500" (38.1 mm)
<b>K</b>	TBD	3/4-16	1-14

\*Requires 0.5 in. dia. pin CP050.

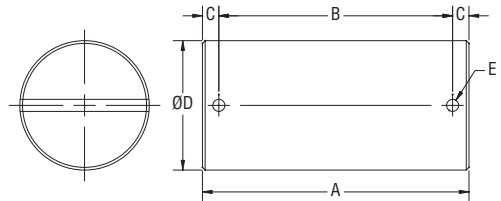
# Spherical Rod Eye Dimensions

	I20	I30	I40
	SRM050	SR075	SRF100
A	2.125" (54.0 mm)	2.88" (73.2 mm)	See Spherical Rod Eye Drawing Below.  Requires Female Rod End.
ØB	.500" (12.7 mm)	0.75" (19.1 mm)	
C	1.156" (29.4 mm)	1.72" (43.7 mm)	
D	1.312" (33.3 mm)	1.75" (44.5 mm)	
E	6 Deg	14 Deg	
F	.500" (12.7 mm)	0.69" (17.5 mm)	
G	.625" (15.9 mm)	0.88" (22.3 mm)	
H	.875" (22.2 mm)	1.13" (28.7 mm)	
J	.750" (19.1 mm)	1.00" (25.4 mm)	
K	1/2-20	3/4-16	



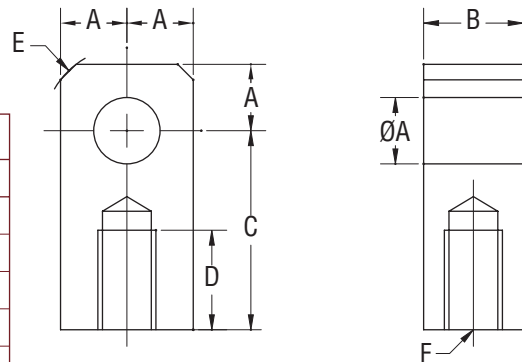
# Clevis Pin Dimensions

		A	B	C	ØD	ØE
I20	CP050	TBD	TBD	TBD	TBD	TBD
I30	CP075	3.09" (78.5 mm)	2.72" (69.1 mm)	0.19" (4.82 mm)	0.75" (19.1 mm)	0.14" (3.56 mm)
I40	CP100	3.59" (91.2 mm)	3.22" (81.8 mm)	0.19" (4.82 mm)	1.00" (25.4 mm)	0.14" (3.56 mm)



# Rod Eye Dimensions

	I20*	I30	I40
	TBD	SR075	SRF100
ØA	TBD	0.75" (19.05 mm)	1.00" (25.4 mm)
B	TBD	1.25" (31.8 mm)	1.50" (38.1 mm)
C	TBD	2.06" (52.3 mm)	2.81" (71.4 mm)
D	TBD	1.13" (28.7 mm)	1.63" (41.4 mm)
E	TBD	0.88" (22.2 mm)	1.19" (30.2 mm)
F	TBD	3/4-16	1-14



\*Requires 0.5 in. dia. pin CP050.

<b>I Series Accessories Ordering Guide</b>	
<b>I Series Mounting Attachments (include proper number of standard T nuts and screws)</b>	<b>Model Number</b>
<b>Side Flange Attachments (Black Oxide Steel)</b>	
Size 20 I Series (2)	ISFA-20
Size 30 I Series (2)	ISFA-30
Size 40 I Series (2)	ISFA-40
<b>Side Trunnion Attachments</b>	
Size 20 I Series (2)	ISTA-20
Size 30 I Series (2)	ISTA-30
Size 40 I Series (2)	ISTA-40
<b>Side Lug Attachments</b>	
Size 20 I Series (2)	ISLA-20
Size 30 I Series (2)	ISLA-30
Size 40 I Series (2)	ISLA-40
<b>Mounting Attachments, Corrosion Resistant or Stainless Steel</b>	
<b>Stainless Steel Side Flange Attachments (Stainless Steel)</b>	
Size 20 I Series	ISSF-20
Size 30 I Series	ISSF-30
Size 40 I Series	ISSF-40
<b>Corrosion Resistant Side Trunnion Attachments (Treated Hardened Steel Trunnions)</b>	
Size 20 I Series	ICRT-20
Size 30 I Series	ICRT-30
Size 40 I Series	ICRT-40
<b>Stainless Steel Side Trunnion Attachments (Hardened Stainless Steel Trunnions)</b>	
Size 20 I Series	ISST-20
Size 30 I Series	ISST-30
Size 40 I Series	ISST-40
<b>Stainless Steel Side Lug Attachments (Stainless Steel)</b>	
Size 20 I Series	ISSL-20
Size 30 I Series	ISSL-30
Size 40 I Series	ISSL-40
<b>Standard T Nuts and Screws</b>	
5/16 - 18 T nut - use with all mounts	ITNUT
5/16 - 18 x 3/4" screw - use with trunnion mounts	ISCR34
5/16 - 18 x 1" screw - use with side flange and side lug mount	ISCR10
<b>Rod End Attachments, Standard Materials (Consult Factory for Corrosion Resistant Options)</b>	
<b>Spherical Rod Eye</b>	
Size 20 I Series	SRM-050
Size 30 I Series	SRM-075
Size 40 I Series (fits standard imperial female threaded rod)	SRF-100
<b>Rod Eye</b>	
Size 20 I Series (requires 0.5" dia. Pin, CP-050)	RE-050
Size 30 I Series	RE-075
Size 40 I Series	RE-100
<b>Rod Clevis</b>	
Size 20 I Series (requires 0.5" dia. Pin, CP-050)	RC-050
Size 30 I Series	RC-075
Size 40 I Series	RC-100
<b>Clevis Pins for Rod Clevis/Rod Eye</b>	
Size 20 I Series	CP-050
Size 30 I Series	CP-075
Size 40 I Series	CP-100
<b>Clevis Pins for Spherical Rod Eye</b>	
Size 20 I Series	CP-050
Size 30 I Series	CP-075
Size 40 I Series	CP-100

Consult Exlar's Application Engineering Department regarding all special actuator components.

<h1>I Series Ordering Information</h1>	<div style="border: 1px solid black; padding: 5px; display: flex; justify-content: space-around;"> <span>IMAA</span> - <span>BBCC</span> - <span>DE</span> - <span>FFF</span> - <span>GGG</span> - <span>(XX..XX - #####)</span> </div>
<p><b>Actuator Series</b>  IM = Standard Mechanical Grade, IP54  IX = Premium Mechanical Grade, IP65</p>	<p><b>GGG = Motor Mount Provisions*</b>  A## = Alpha numeric motor call out - contact Exlar Applications Engineering Department. Motor not included.  NMT = No motor mount - keyed shaft on base unit only  N23 = Nema 23 standard dimension  N34 = Nema 34 standard dimension  N42 = Nema 42 standard dimension. Not available on I20.  N56 = Nema 56 standard demension. Not available on I20.  M60 = Metric 60mm Exlar standard dimension. Motor not included. Not available on I40.  M90 = Metric 90mm Exlar standard dimension. Motor not included.  M11 = Metric 115mm Exlar standard dimension. Motor not included. Available on I40 only.  AB3,4 = Allen Bradley 3 &amp; 4 inch motors  BD3,4 = Baldor 3 &amp; 4 inch motors  CE3,4 = Parker (Custom Servo Motors) Imperial 3 &amp; 4 inch motors  CM3,4 = Parker (Custom Servo Motors) Metric 3 &amp; 4 inch motors  EE3,4 = Emerson EMC Imperial 3 &amp; 4 inch motors  EM3,4 = Emerson CT Metric 3 &amp; 4 inch motors  EX2,3,4 = Exlar SLM/SLG motors, 60, 90,115 mm frame  FA 4 = Fanuc 4 inch motors  IN3,4 = Bosch-Rexroth (Indramat) 3 &amp; 4 inch motors  KM2,4 = Kollmorgen 2, 3 &amp; 4 inch motors  MT3,4 = Mitsubishi 3 &amp; 4 inch motors  PS3,4 = Pacific Scientific PMA/PMB Series 3 &amp; 4 inch motors  PC2,3 = Parker Compumotor 2.7, 3.6, 4.5, &amp; 5.6 inch motors  YS3,4 = Yaskawa 3 &amp; 4 inch motors  MXX = Unlisted or special motor mounting provisions to be assigned an alpha numeric code at time of order</p>
<p><b>AAActuator Frame Size</b>  20 = 2 inch nominal frame actuator  30 = 3 inch nominal frame actuator  40 = 4 inch nominal frame actuator</p>	<p><b>X..XX = Travel and Housing Options (Multiple Possible)</b>  EN = Electroless nickel plating of housing parts  HC = Hard coat anodized, acceptable for food grade  PB = Protective bellows for extending rod  L1 = One external limit switch, channel mount magnetic sensing proximity switch, N.O.  L2 = Two external limit switches, channel mount magnetic sensing proximity switch, N.C. 10-30 VDC  L3 = Three external limit switches, channel mount magnetic sensing proximity switch, 1 N.O., 2 N.C. 10-30 VDC  L# = external limit switches, channel mount magnetic sensing prox sw.  P5 = IP65 sealed housing (option for IM Series)  PF = Pre-loaded follower  XH = Special housing option  XL = Special lubrication  XT = Special travel option</p>
<p><b>BB = Stroke Length</b>  02-18 = 2 to 18 inches (12" max on I20) 2 inch increments available. 6 and 12 inch for express delivery, other strokes standard delivery</p>	<p><b>##### = 5 digit part number assigned to designate special model numbers.</b>  Optional 5 digit assigned part number to designate unique model numbers</p>
<p><b>CC = Lead</b> (linear motion per screw revolution)  01 = 0.1 inch  02 = 0.2 inch  04 = 0.4 inch  05 = 0.5 inch (I30 and I40 only)  08 = 0.75 inch (I40 only, 8" stroke max.)</p>	
<p><b>D = Mounting Options</b>  N = None, Base Unit  F = Front Flange  X = Special</p>	
<p><b>E = Rod End Options</b>  M = Male, US Standard Thread  A = Male Metric  F = Female US Standard  B = Female Metric</p>	
<p><b>F = Input Drive Provisions</b>  NMT = Drive Shaft Only, No Motor Mount  G05 = Inline Planetary Gearing, 5:1 Ratio  G10 = Inline Planetary Gearing, 10:1 Ratio  ISC = Inline, Includes Shaft Coupling  P10 = Parallel, 1:1 Ratio  P20 = Parallel, 2:1 Ratio  P## = Custom Ratio, (ex. P13 = 1.3:1 ratio)</p>	

Consult Exlar's Application Engineering Department regarding all special actuator components.

\* The width or height of the motor face may exceed the actuator cross sectional dimension by a maximum of 1 inch.