

ORMEC's KMD Series Electromechanical Actuators provide a powerful and efficient alternative to hydraulic or roller screw actuator applications.

Excellent Maximum Force and Dynamic Load ratings are superior to other similarly sized and configured electro-mechanical actuators.

Extremely durable construction including world class ball screw technology and heavy-duty ball bearing assembly providing quieter and higher performance efficiencies.

Increased life expectancy and side load capacity exceeding that found in correspondingly sized actuators.

Features

- Maximum Force range 18,000 to 30,000 lbf (80 to 133kN)
- Dynamic Load Rating range from 40,000 to 69,400 lbf (178 to 309 kN)
- Side Load Capacity of 1,000 lbf (4.45 kN)
- High Maximum Linear Speeds up to 23.6 in/Sec
- 3-Belt Ratios
- Optional Male or Female Output Connection



ORMEC's KMD-Series Electromechanical Actuator with ORMEC Motor

- Multiple Mounting Options
- Standard Oil Lubricated Ball Screw with Oil Level sight gage.
- Multiple Rod Mounting arrangement
- Equal Extend/Retract Performance
- Internal end of travel cushions.
- Forthcoming Overtravel and Home Switches
- Configure with ORMEC Standard Motors or 3rd Party Motors.

Performance

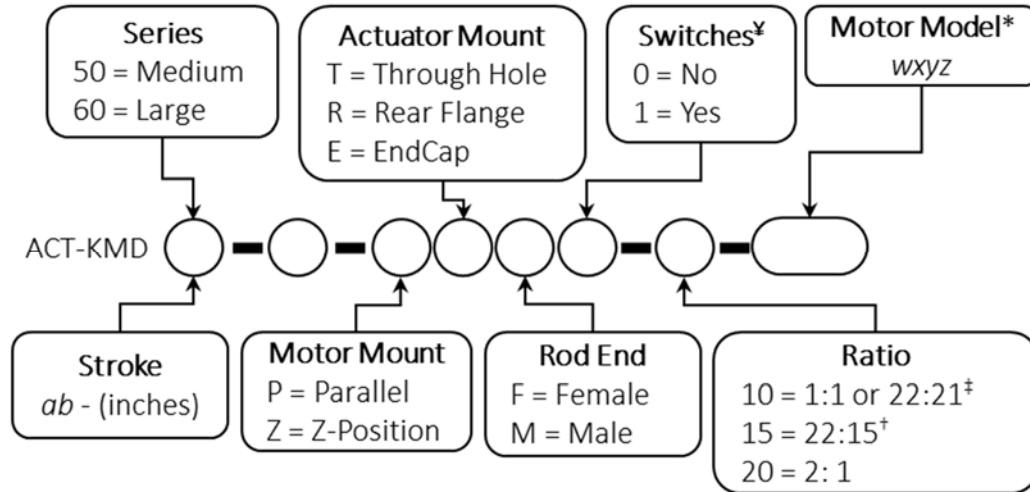
The performance parameters of the KMD Electromechanical actuators are a direct function Servo/Servo Amplifier Combination.

The performance specifications provided are based upon the combination of the KMD-Series Electromechanical Actuators with ORMEC motors.

Consult with your ORMEC Sales/Application Group to determine requirements and Performance Specifications with motors not listed.

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Actuator Part Number



KMD Electromechanical Actuators Model Tree.

[¥] Future Feature release

* Contact ORMEC directly for 3rd Party Motors and the resulting Actuator Part Number

[‡] 22:21 Ratio is only available in the KMD60

[†] 22:15 Ratio is only available in the KMD50

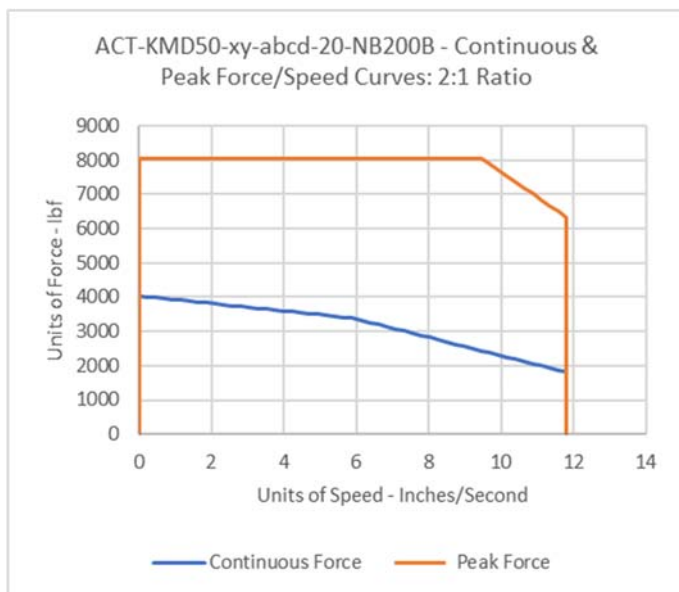
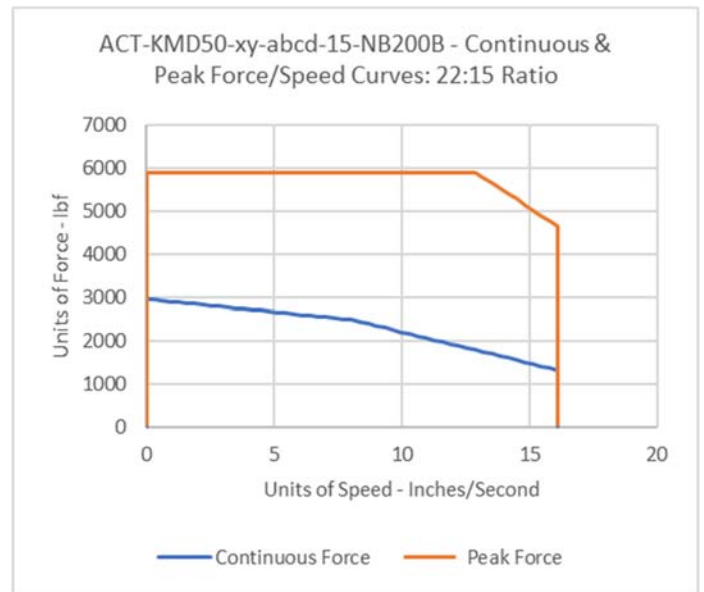
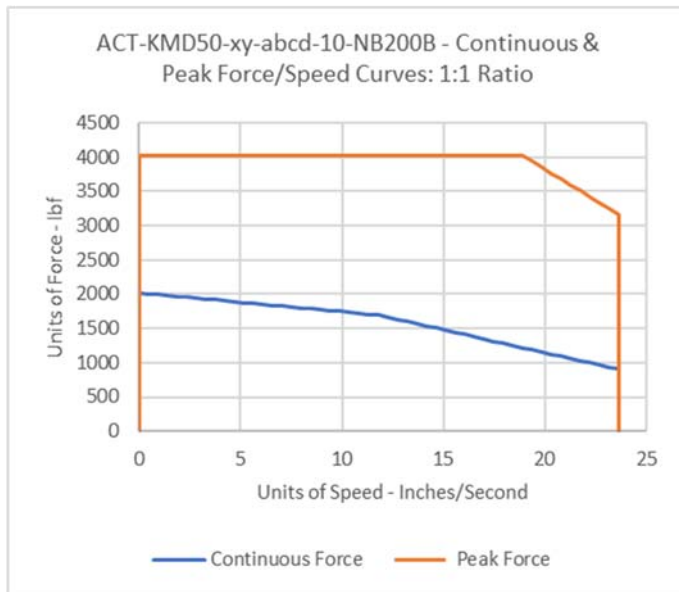
Actuator Performance Specification

	KMD-50				KMD-60			
	Metric	US		Metric	US			
Maximum Force:	80	kN	18,000	lbf	133	kN	30,000	lbf
Dynamic Load Rating:	178	kN	40,000	lbf	309	kN	69,400	lbf
Side Load Capacity:	4.45	kN	1,000	lbf	4.45	kN	1,000	lbf
Screw Lead:	12	mm	0.472	Inch	14	mm	0.551	Inch
Maximum Screw Speed:	3,000	rpm	3,000	rpm	2,400	rpm	2,400	rpm
Maximum Linear Speed:	600	mm/Sec	23.6	in/Sec	560	mm/Sec	22	in/Sec
Standard Strokes:	152, 203	mm	6, 8	in	203, 254	mm	8, 10	in
Life at:	44.48	kN	10,000	lbf	89	kN	20,000	lbf
	768.1 X 10 ⁶	mm	30.24 X 10 ⁶	in	585 X 10 ⁶	mm	23 X 10 ⁶	in
Operating Efficiency:	85%				85%			
Weight:	49.9	kg	110	lbm	90	kg	185	lbm

Performance Specification for the KMD-Series Actuators

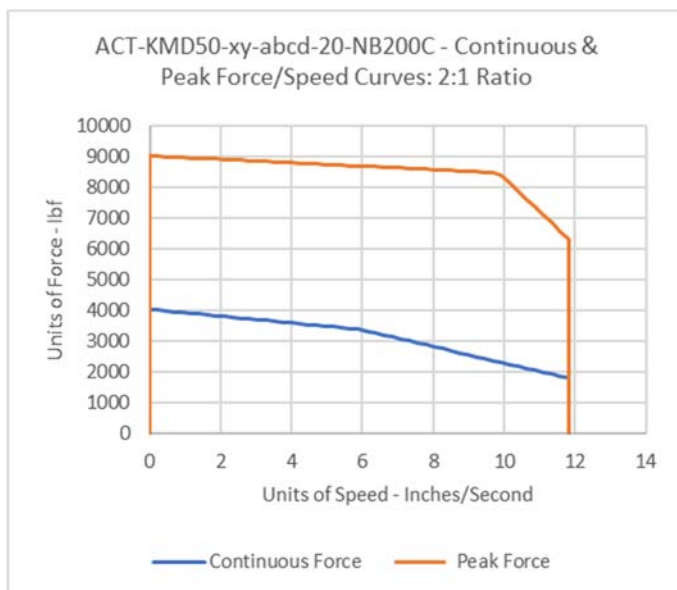
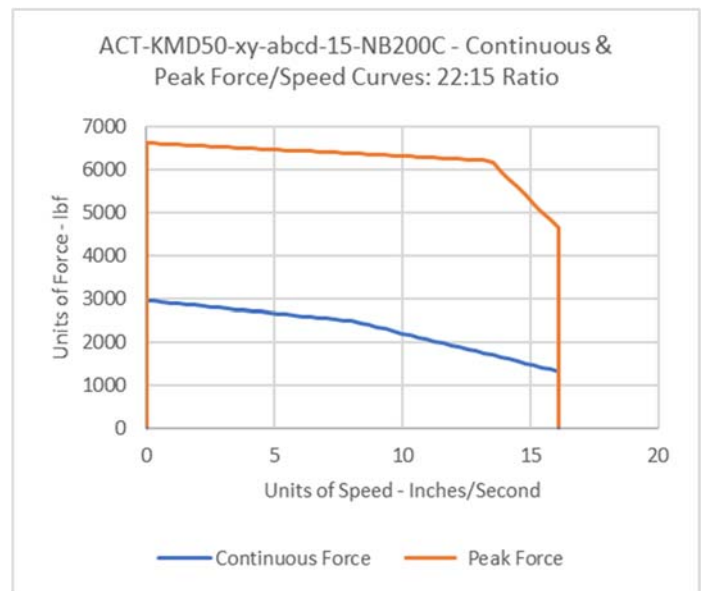
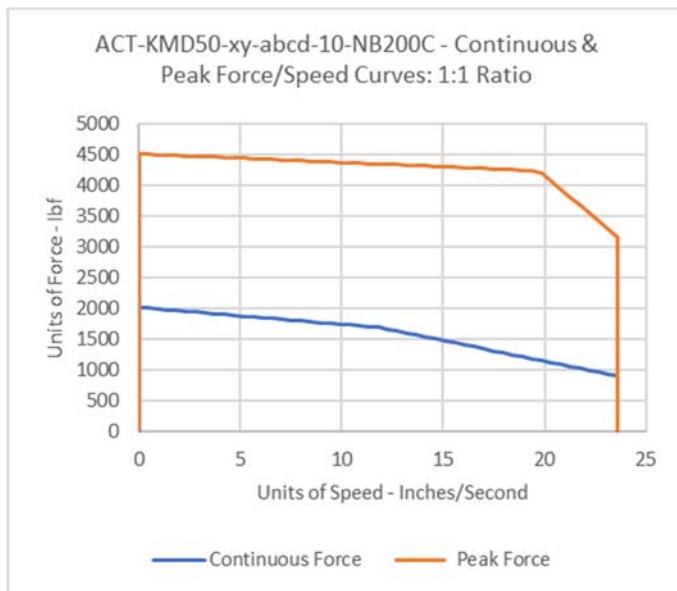
Actuator & ORMEC Motor Force Speed Curves

Performance Specifications		Units	ACT-KMD50		
ORMEC Motor Model:			NB200B	NB200B	NB200B
Pulley Ratio:			1:1	22:15	2:1
Rated Force:	lbf		2,021	2,964	4,042
	kN		9	13	18
Peak Force:	lbf		4,029	5,909	8,058
	kN		18	26	36
Maximum Speed:	Inches/Sec		23.6	16.11	11.8
	mm/Sec		600	409	300



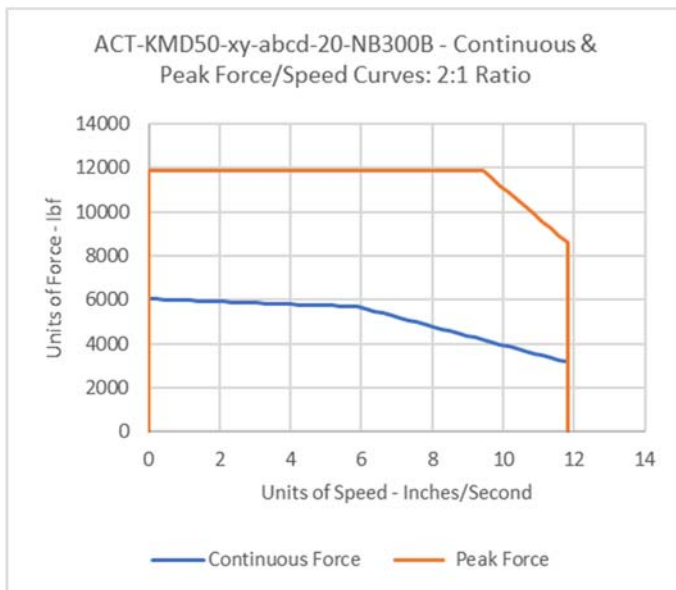
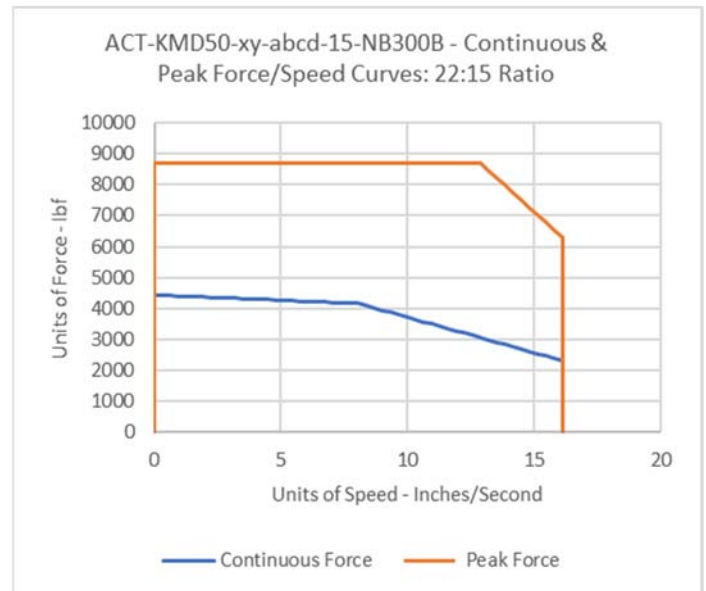
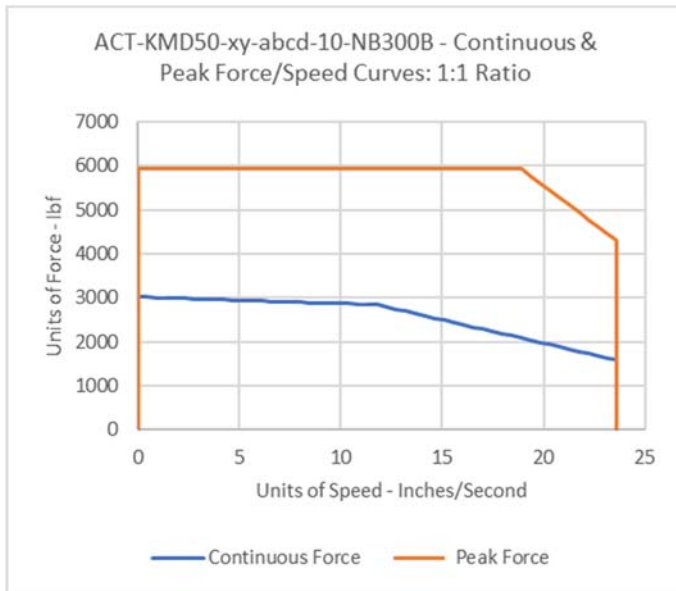
Actuator & ORMEC Motor Force Speed Curves

Performance Specifications	Units	ACT-KMD50		
ORMEC Motor Model:		NB200C	NB200C	NB200C
Pulley Ratio:		1:1	22:15	2:1
Rated Force:	lbf	2,021	2,964	4,042
	kN	9	13	18
Peak Force:	lbf	4,513	6,619	9,026
	kN	20	29	40
Maximum Speed:	Inches/Sec	23.62	16.11	11.81
	mm/Sec	600	409	300



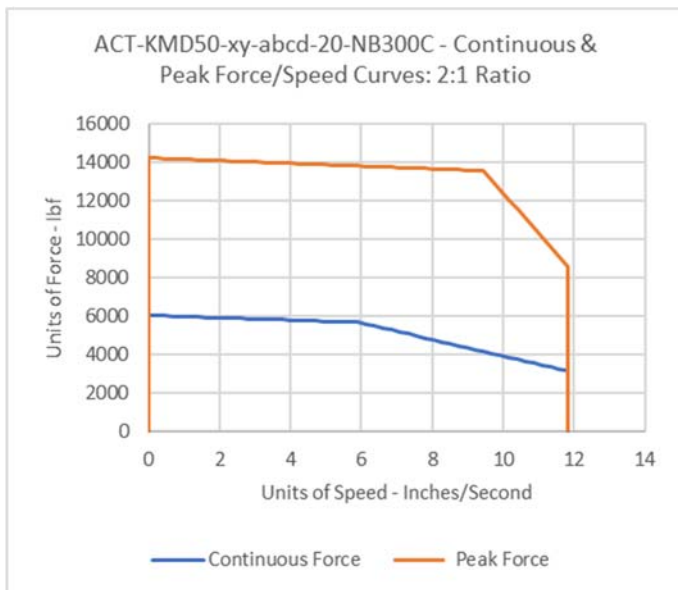
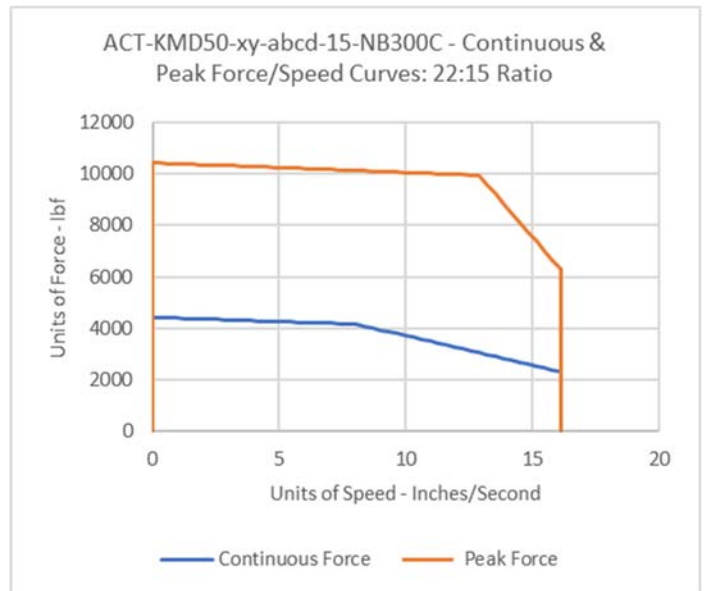
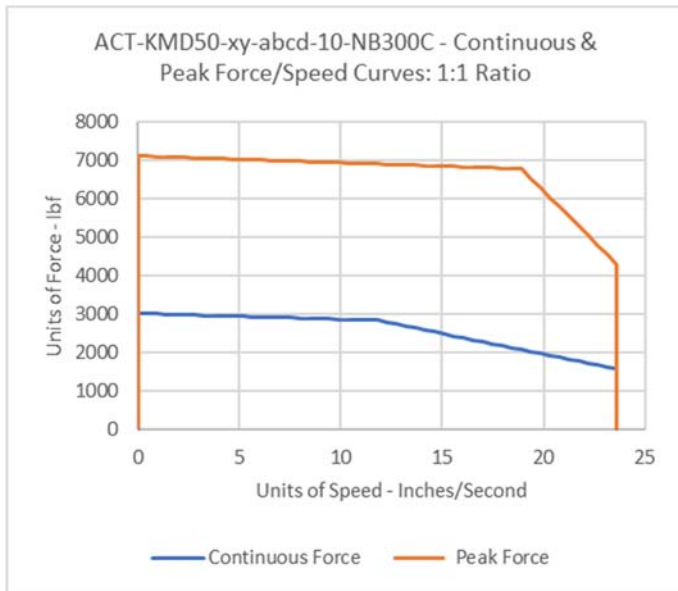
Actuator & ORMEC Motor Force Speed Curves

Performance Specifications	Units	ACT-KMD50		
ORMEC Motor Model:		NB300B	NB300B	NB300B
Pulley Ratio:		1:1	22:15	2:1
Rated Force:	lbf	3,022	4,432	6,043
	kN	13	20	27
Peak Force:	lbf	5,928	8,695	11,856
	kN	26	39	53
Maximum Speed:	Inches/Sec	23.62	16.11	11.81
	mm/Sec	600	409	300



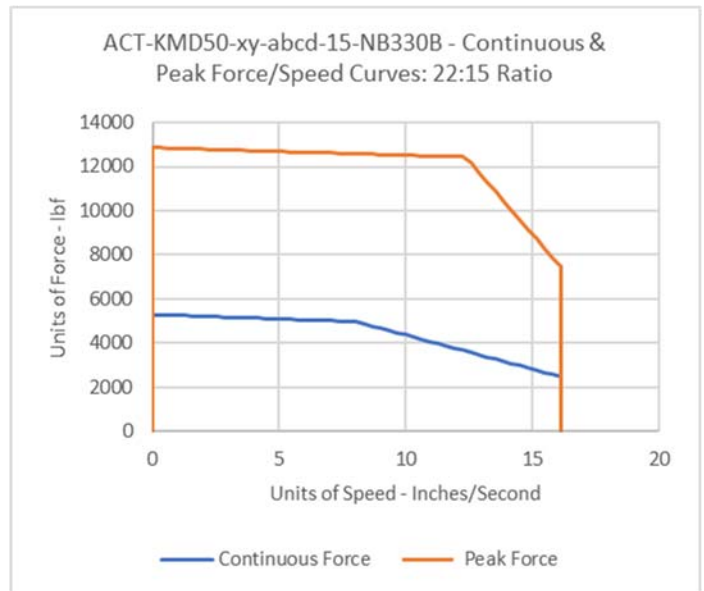
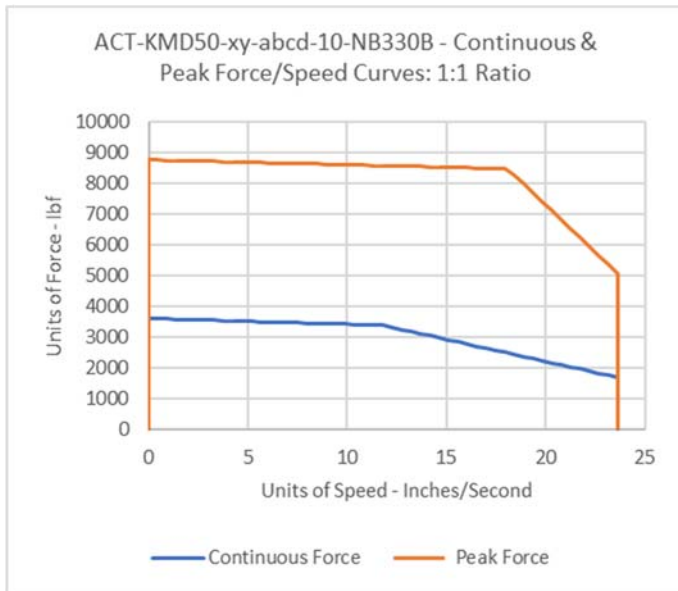
Actuator & ORMEC Motor Force Speed Curves

Performance Specifications	Units	ACT-KMD50		
ORMEC Motor Model:		NB300C	NB300C	NB300C
Pulley Ratio:		1:1	22:15	2:1
Rated Force:	lbf	3,022	4,432	6,043
	kN	13	20	27
Peak Force:	lbf	7,114	10,434	14,228
	kN	32	46	63
Maximum Speed:	Inches/Sec	23.62	16.11	11.81
	mm/Sec	600	409	300



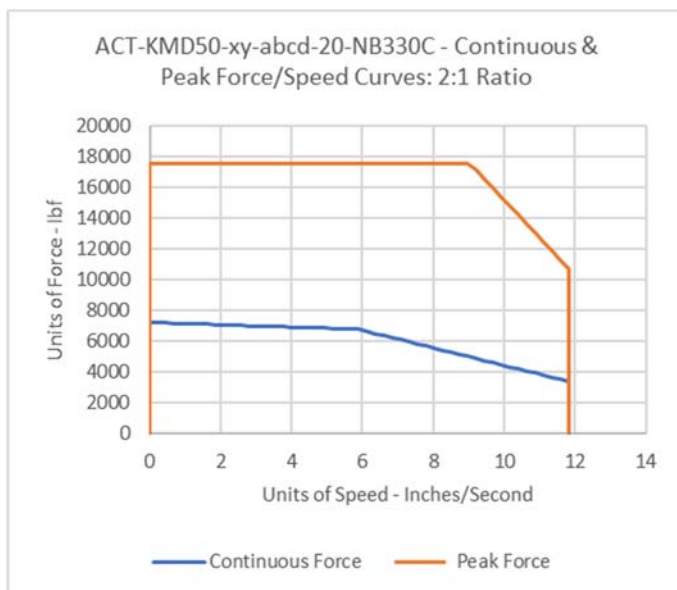
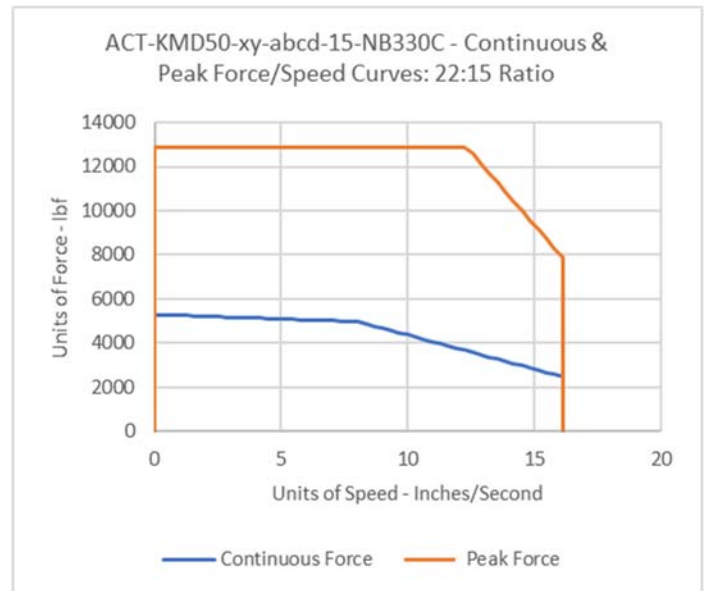
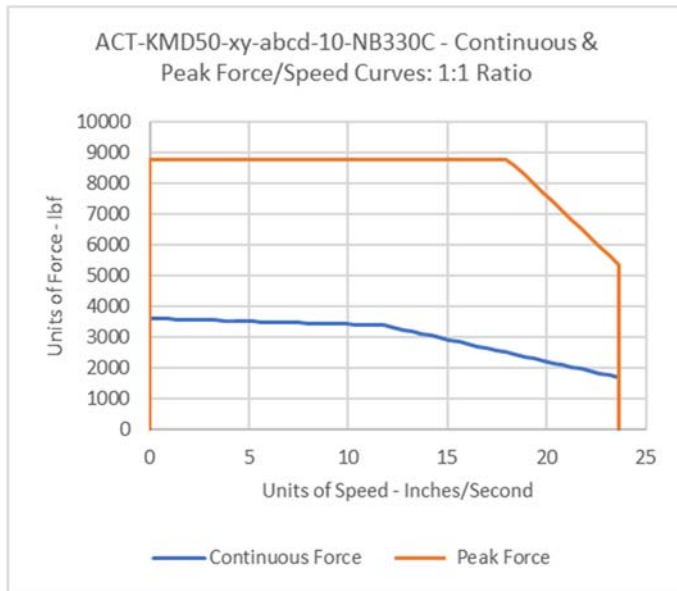
Actuator & ORMEC Motor Force Speed Curves

Performance Specifications		Units	ACT-KMD50		
ORMEC Motor Model:			NB330B	NB330B	NB330B
Pulley Ratio:			1:1	22:15	2:1
Rated Force:	lbf		3,612	5,297	7,224
	kN		16	24	32
Peak Force:	lbf		8,764	12,854	17,529
	kN		39	57	78
Maximum Speed:	Inches/Sec		23.62	16.11	11.81
	mm/Sec		600	409	300



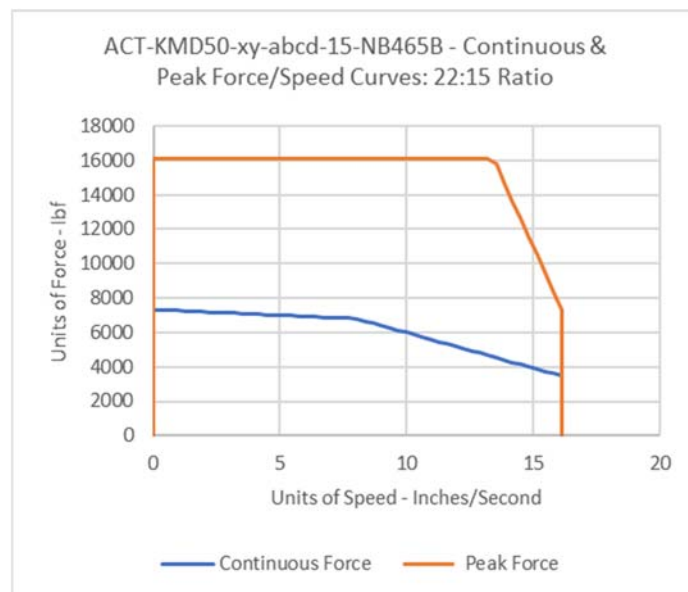
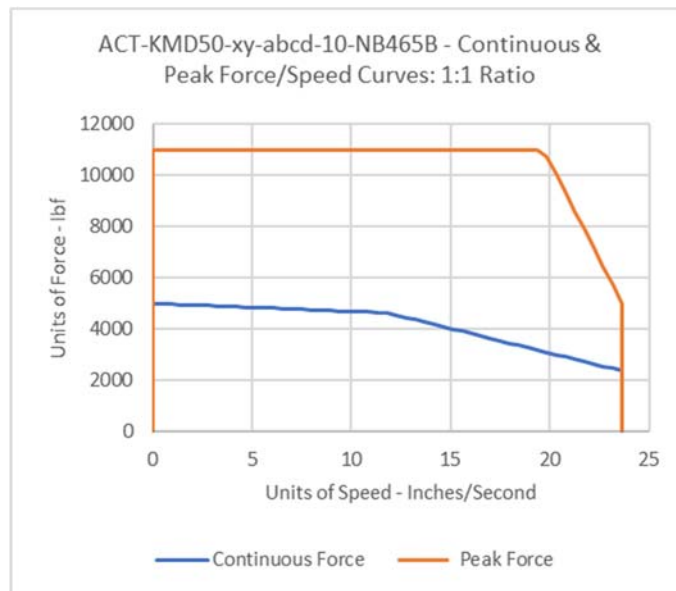
Actuator & ORMEC Motor Force Speed Curves

Performance Specifications	Units	ACT-KMD50		
ORMEC Motor Model:		NB330C	NB330C	NB330C
Pulley Ratio:		1:1	22:15	2:1
Rated Force:	lbf	3,612	5,297	7,224
	kN	16	24	32
Peak Force:	lbf	8,764	12,854	17,529
	kN	39	57	78
Maximum Speed:	Inches/Sec	23.62	16.11	11.81
	mm/Sec	600	409	300



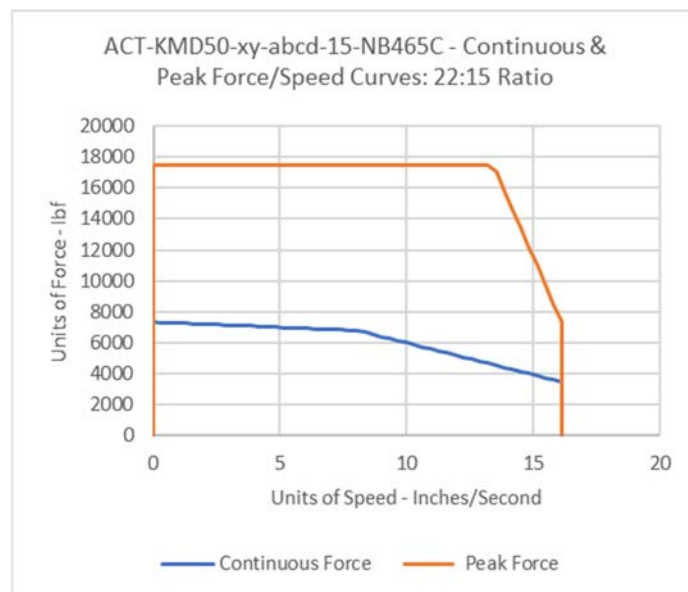
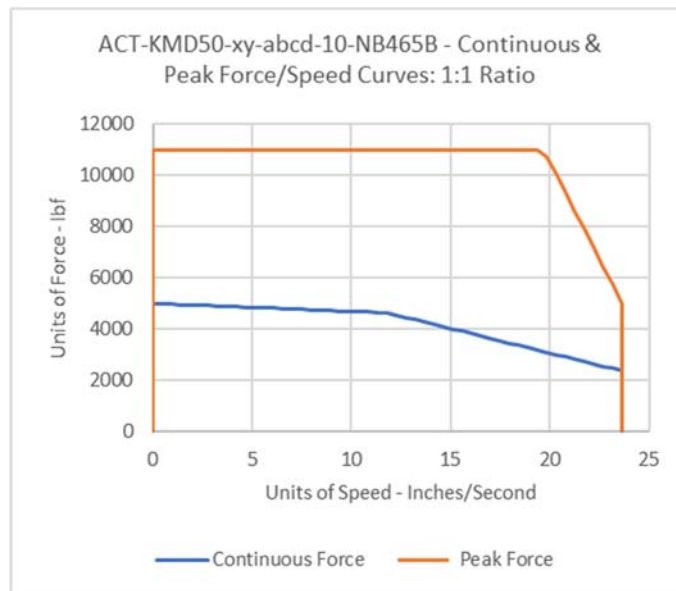
Actuator & ORMEC Motor Force Speed Curves

Performance Specifications	Units	ACT-KMD50		
ORMEC Motor Model:		NB465B	NB465B	NB465B
Pulley Ratio:		1:1	22:15	2:1
Rated Force:	lbf	5,002	7,337	Unavailable
	kN	22	33	
Peak Force:	lbf	10,990	16,119	
	kN	49	72	
Maximum Speed:	Inches/Sec	23.62	16.11	
	mm/Sec	600	409	



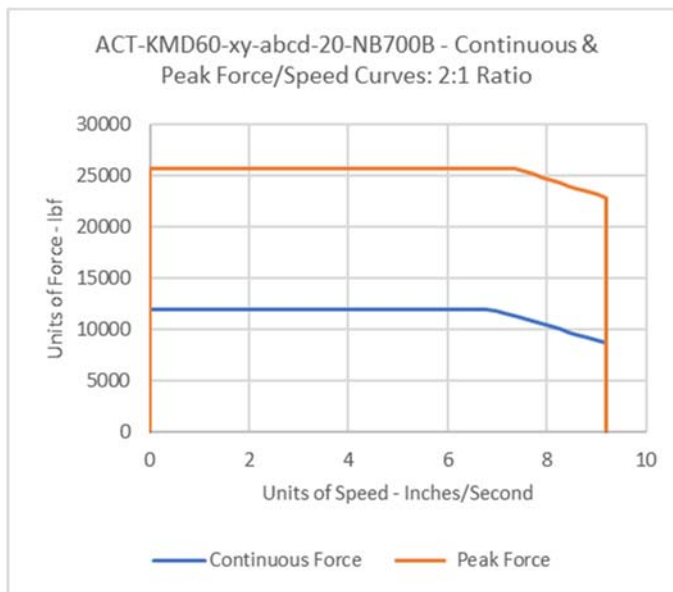
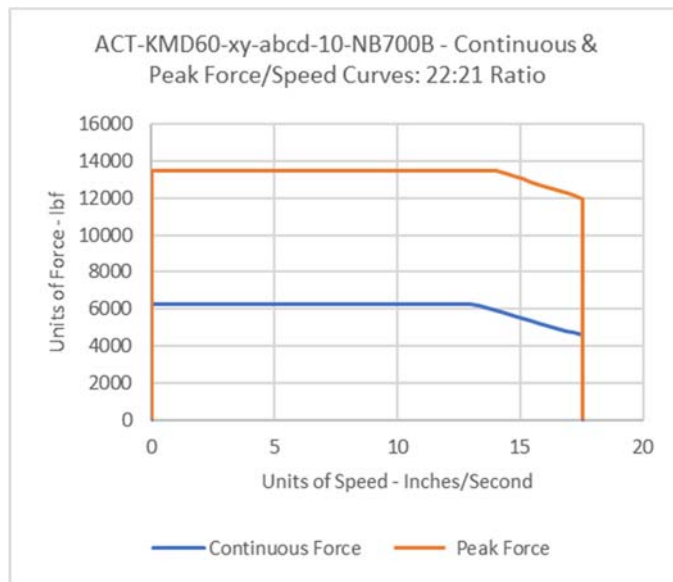
Actuator & ORMEC Motor Force Speed Curves

Performance Specifications	Units	ACT-KMD50		
ORMEC Motor Model:		NB465C	NB465C	NB465C
Pulley Ratio:		1:1	22:15	2:1
Rated Force:	lbf	5,002	7,337	Unavailable
	kN	22	33	
Peak Force:	lbf	11,906	17,462	
	kN	53	78	
Maximum Speed:	Inches/Sec	23.62	16.11	
	mm/Sec	600	409	



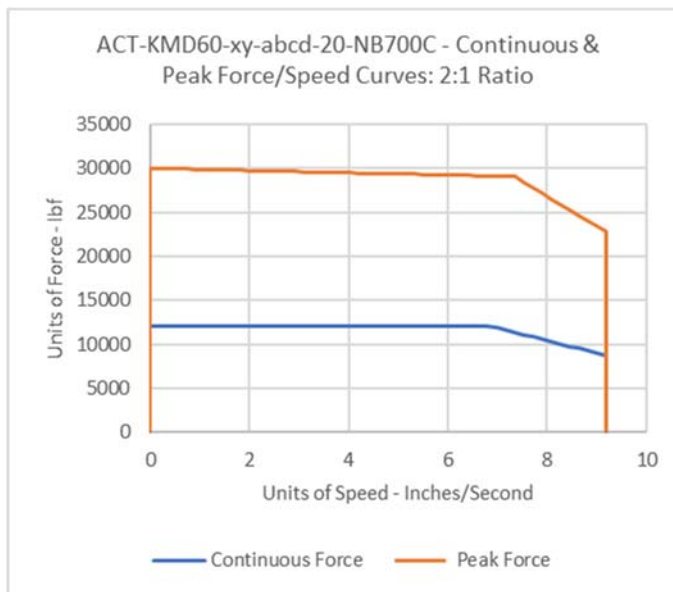
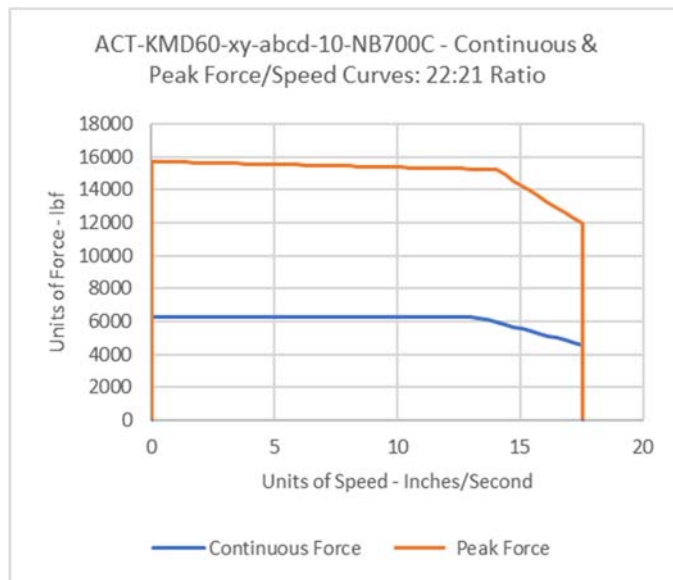
Actuator & ORMEC Motor Force Speed Curves

Performance Specifications	Units	ACT-KMD60	
ORMEC Motor Model:		NB700B	NB700B
Pulley Ratio:		22:21	2:1
Rated Force:	lbf	6,289	12,005
	kN	28	53
Peak Force:	lbf	13,476	25,728
	kN	60	114
Maximum Speed:	Inches/Sec	17.54	9.19
	mm/Sec	446	233



Actuator & ORMEC Motor Force Speed Curves

Performance Specifications	Units	ACT-KMD60	
ORMEC Motor Model:		NB700C	NB700C
Pulley Ratio:		22:21	2:1
Rated Force:	lbf	6,289	12,005
	kN	28	53
Peak Force:	lbf	15,723	30,016
	kN	70	134
Maximum Speed:	Inches/Sec	17.54	9.19
	mm/Sec	446	233

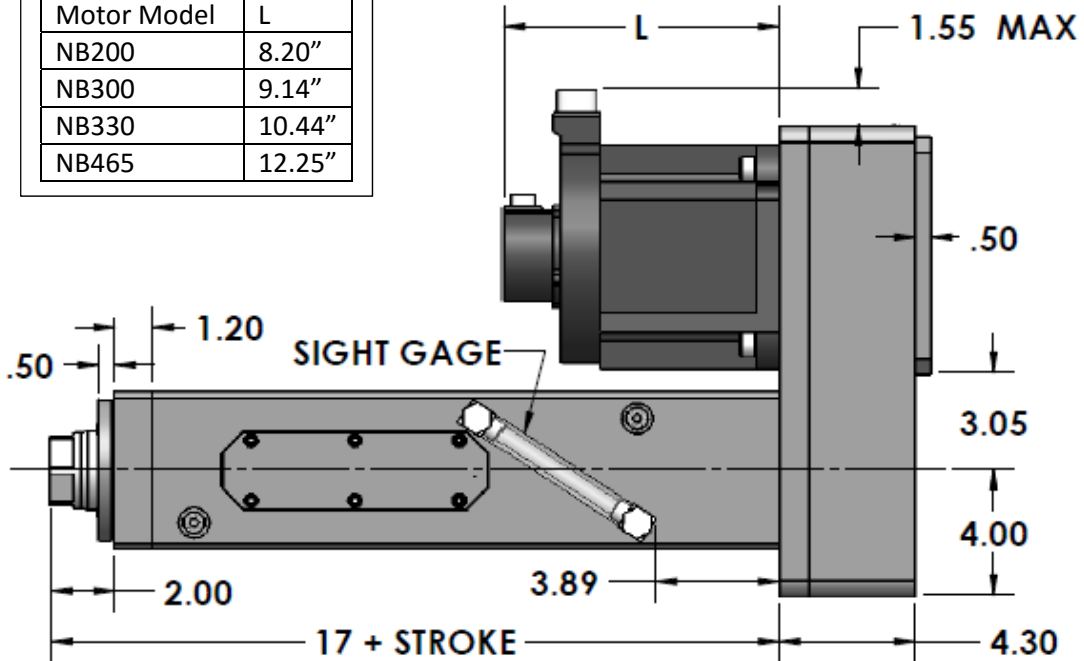


Dimensional Drawings

KMD50 – Motor Mounting Dimensions

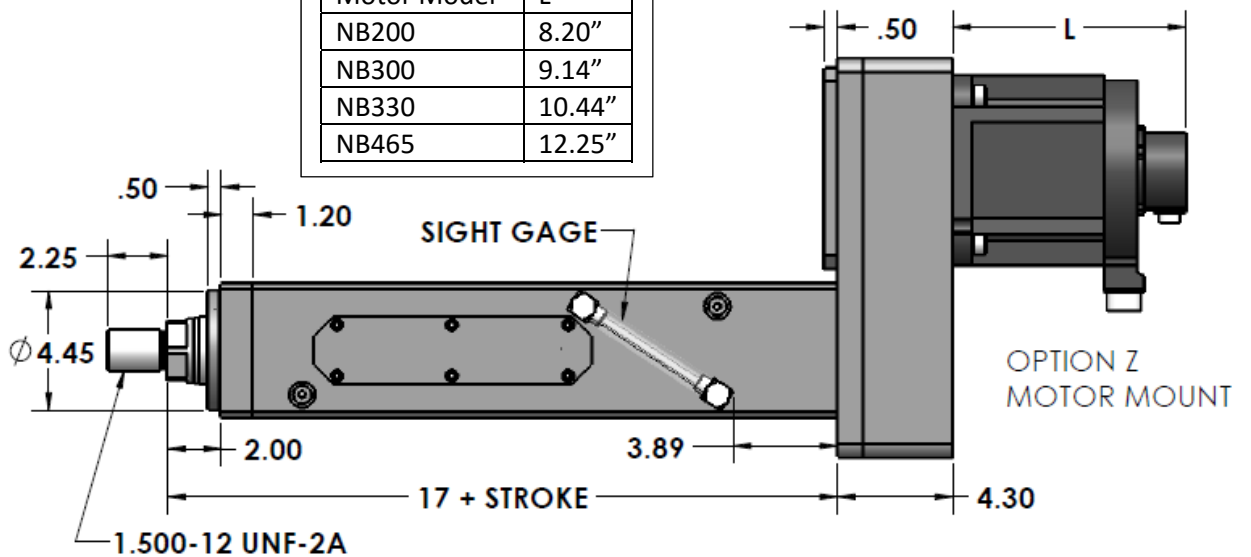
ACT-KMD50-□□-P□□□-□□-□□□□ - Parallel Motor Mount

Motor Model	L
NB200	8.20"
NB300	9.14"
NB330	10.44"
NB465	12.25"



ACT-KMD50-□□-Z□□□-□□-□□□□ - Z- Motor Mount

Motor Model	L
NB200	8.20"
NB300	9.14"
NB330	10.44"
NB465	12.25"

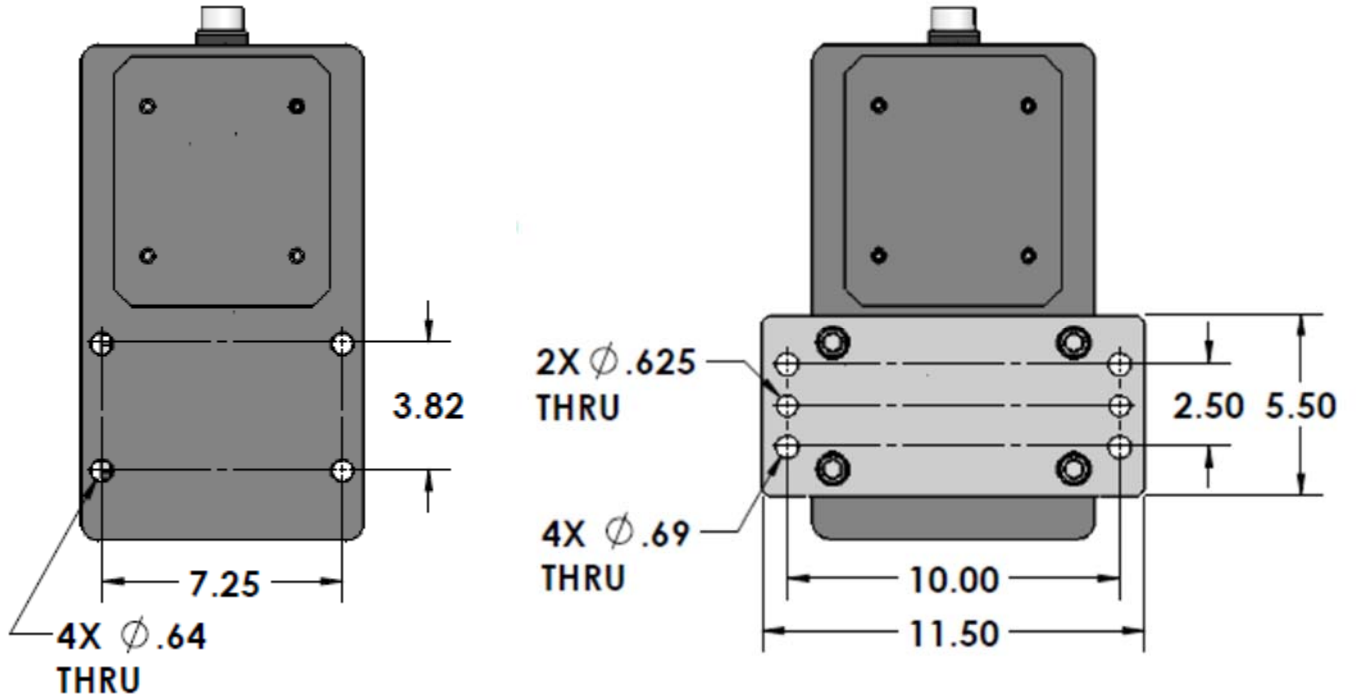


Dimensional Drawings

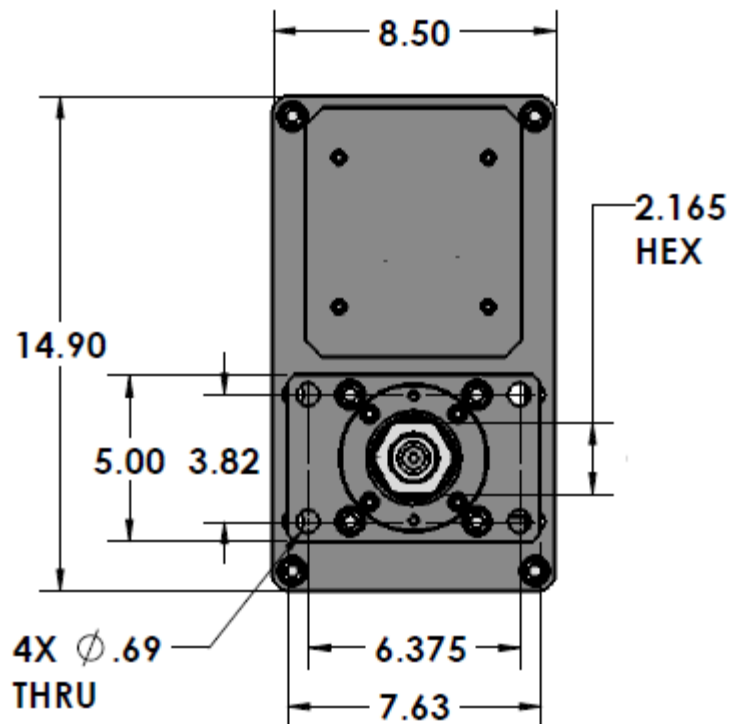
KMD50 – Actuator Mounting Dimensions

ACT-KMD50-□□-□T□□-□□-□□□□ - Through Hole

ACT-KMD50-□□-□R□□-□□-□□□□ - Rear Flange



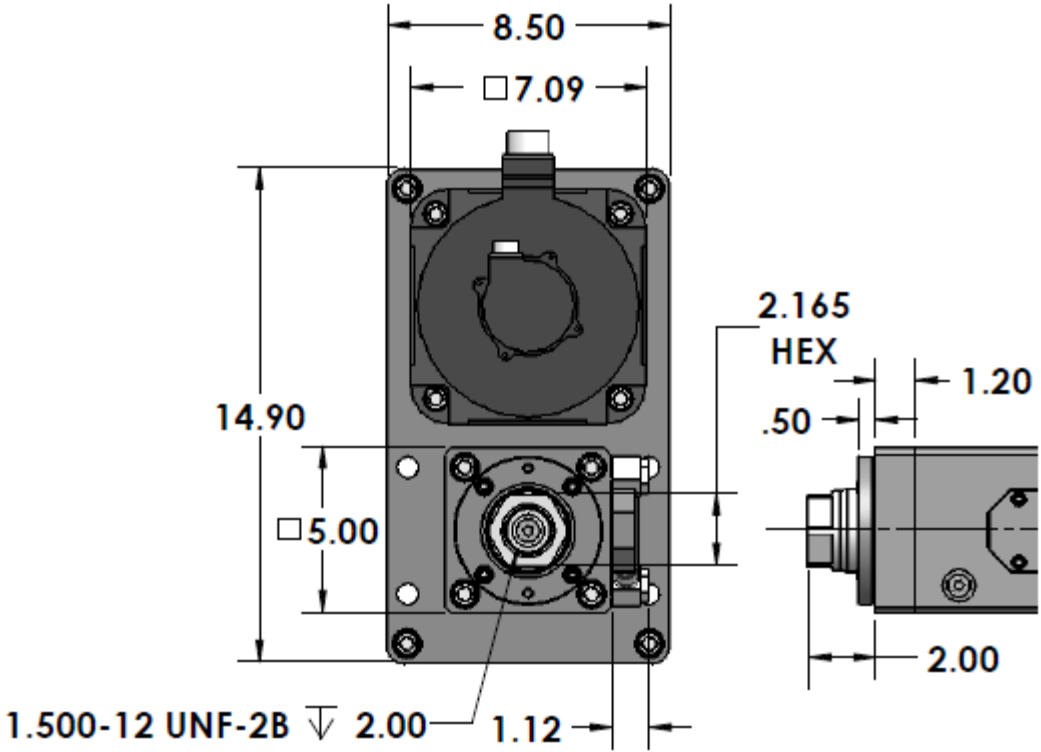
ACT-KMD50-□□-□E□□-□□-□□□□ EndCap Actuator Mounting



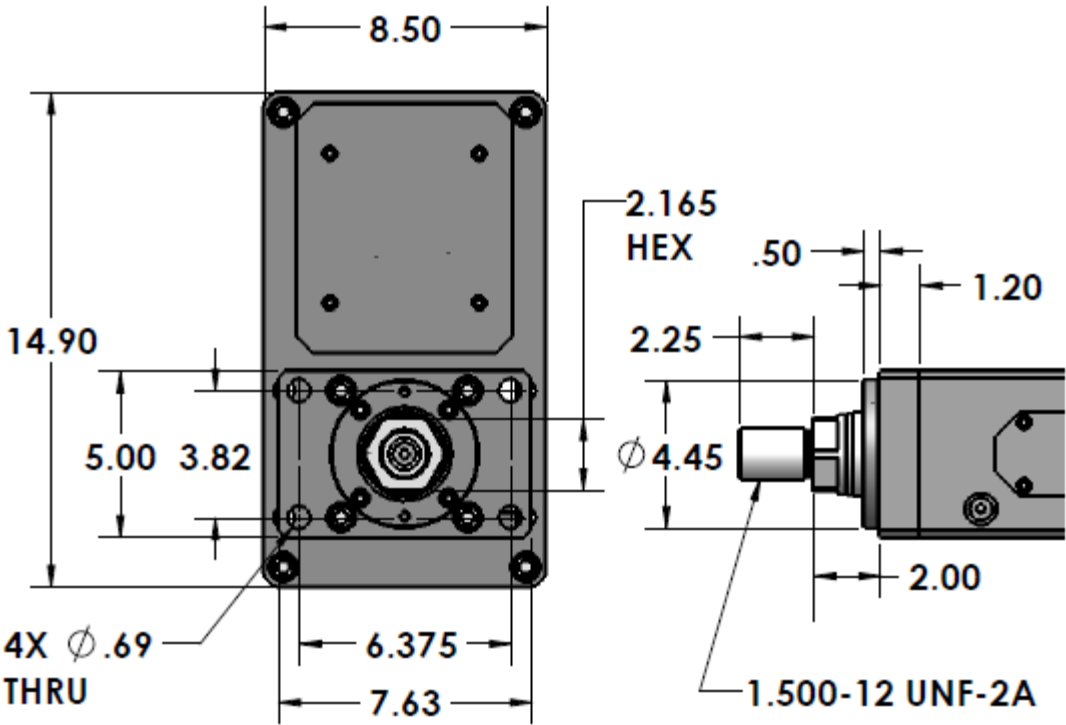
Dimensional Drawings

KMD50 – Rod End Dimensions

ACT-KMD50-□□-□□F□-□□-□□□□ - Female Rod End



ACT-KMD50-□□-□□M□-□□-□□□□ - Male Rod End

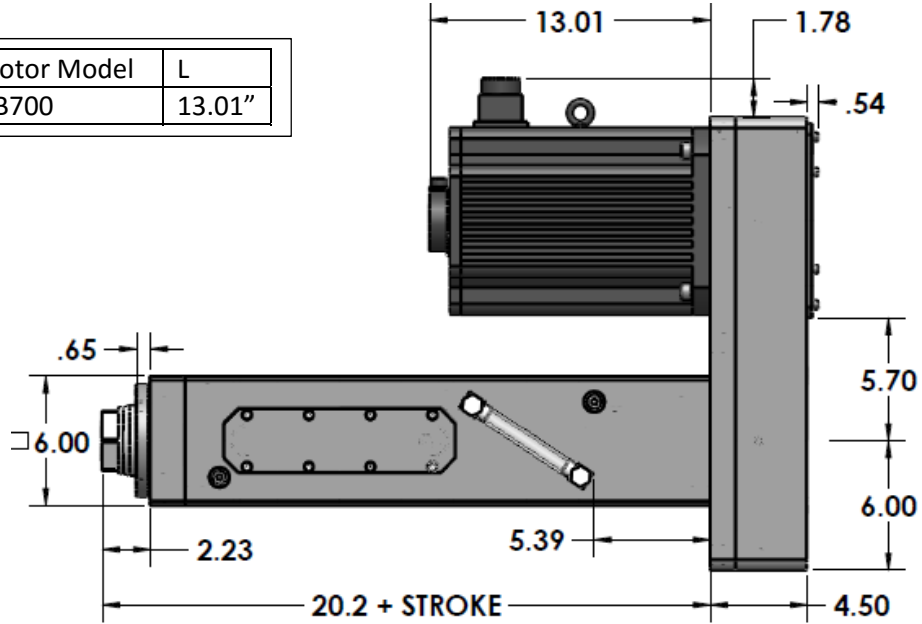


Dimensional Drawings

KMD60 – Motor Mounting Dimensions

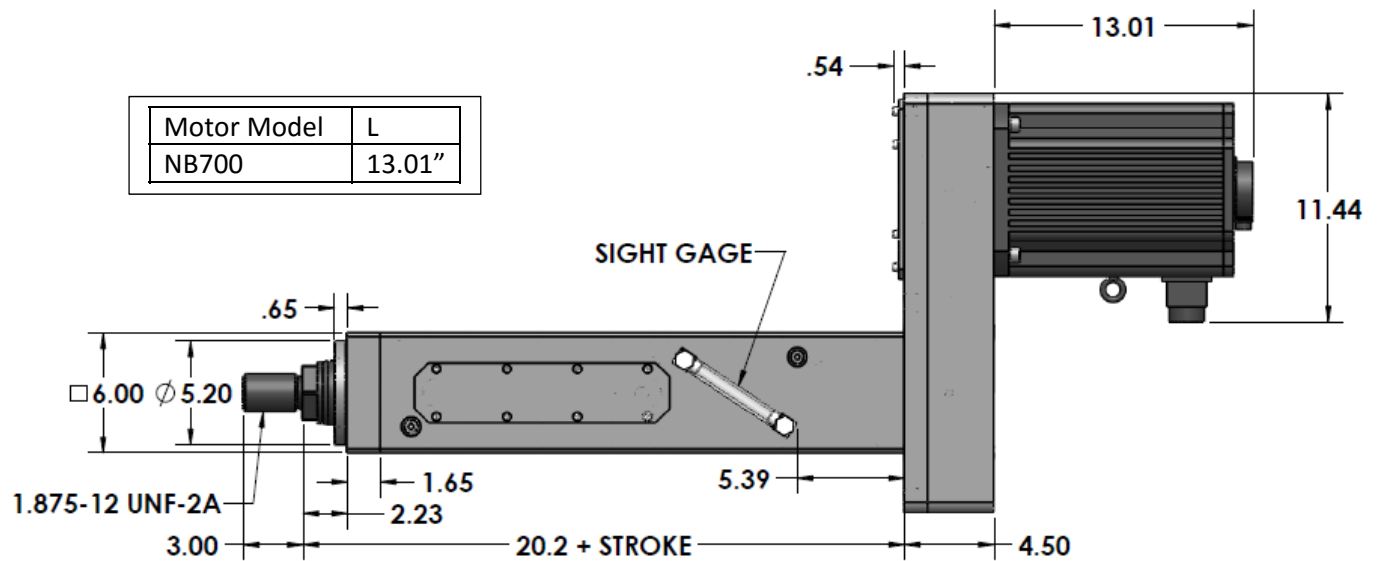
ACT-KMD60-□□-P□□□-□□-□□□□ - Parallel Motor Mount

Motor Model	L
NB700	13.01"



ACT-KMD60-□□-Z□□□-□□-□□□□ - Z- Motor Mount

Motor Model	L
NB700	13.01"

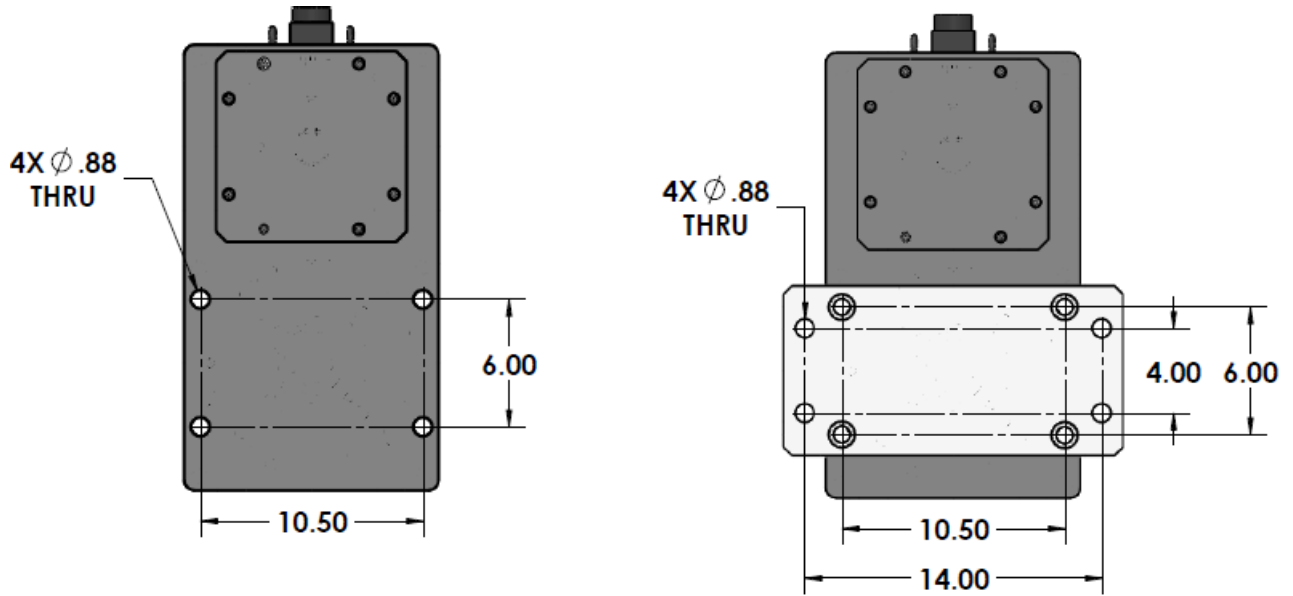


Dimensional Drawings

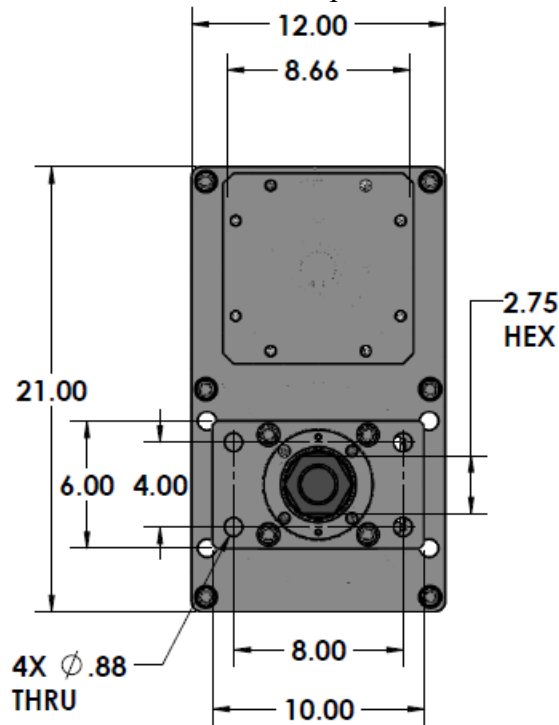
KMD60 – Actuator Mounting Dimensions

ACT-KMD60-□□-□T□□-□□-□□□□ - Through Hole

ACT-KMD60-□□-□R□□-□□-□□□□ - Rear Flange



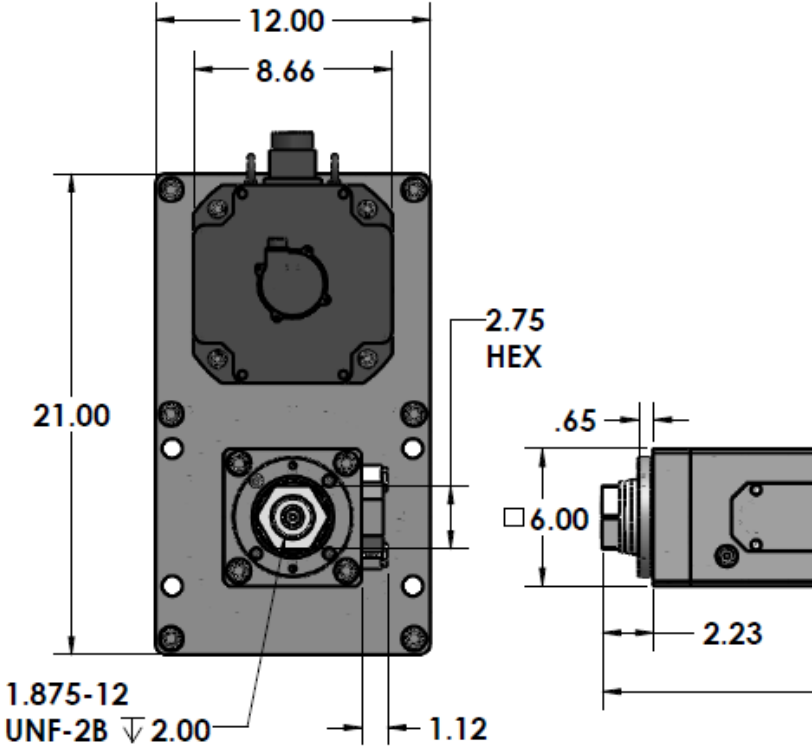
ACT-KMD60-□□-□E□□-□□-□□□□ EndCap Actuator Mounting



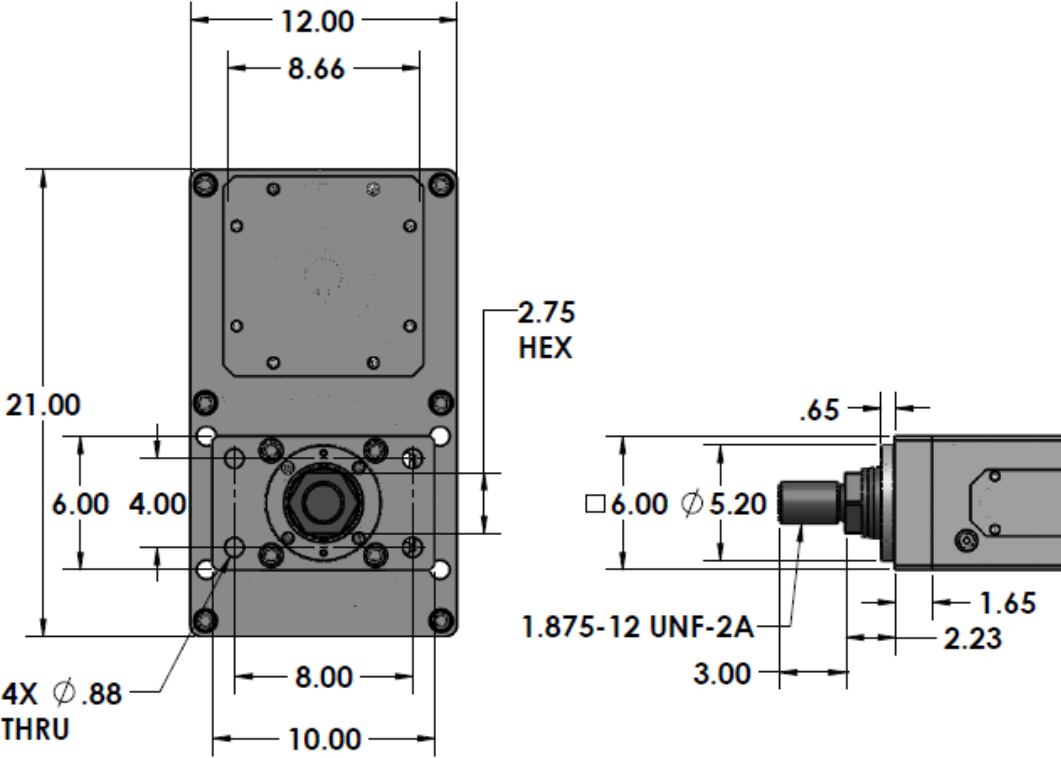
Dimensional Drawings

KMD60 – Rod End Dimensions

ACT-KMD60-□□-□□F□-□□-□□□□ - Female Rod End



ACT-KMD60-□□-□□M□-□□-□□□□ - Male Rod End



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