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Tubular Actuators

In-stock Model	PA-06	PA-ST1
Voltage (VDC)	12	12
Stroke (inch)	2 to 24	1 to 24
Dynamic Force (lbs)	22; 180	56
Static Force	33; 360	225
Speed - No Load (inch/sec)	1.38; 0.47	5.9
Speed - Full Load (inch/sec)	1.18; 0.27	4.72
Current - No Load (A)	0.6	1.8
Current - Full Load (A)	2.5; 3.7	9.5
Additional Features	✖	✖
Feedback	✖	✖
Duty Cycle	10%	15%
Weather Protection	IP67M	IP66
Overload Protection	✖	✖
Operational Temperature (°C)	-20 to 60	-20 to 60
Operating Noise	<60 dBA	60 dB
Limit Switch	Built-in (Non-adjustable)	Built-in (Non-adjustable)
Cable Length (inch)	59	59
Connector	Molex Mini-Fit Jr 2-Pin	Molex Mini-Fit Jr 2-Pin
Front Mounting Hole Size (inch)	0.47	0.31
Rear Mounting Hole Size (inch)	0.39	0.31
Actuator Type	Tubular	Tubular
Motor Type	Brushed DC Motor	Brushed DC Motor
Screw Type	Trapezoid	ACME
Stroke Rod Material	Stainless Steel 304	Stainless Steel 304
Housing Material	Aluminum 6063	Aluminum 6063
Gear Material	Polyformaldehyde	Powder Metallurgy, No. 45 Steel
Certifications	CE	CE
Compatible Mounting Brackets	BRK-06, BRK-16	BRK-09

Micro Actuators

In-stock Model	PA-07	PA-12-R	PA-12-T	PA-MC1
Voltage (VDC)	12	12	7.4; 12	12
Stroke (inch)	0.5 to 12	1.06; 2.2	1.06	0.5 to 8
Dynamic Force (lbs)	5	3.82; 4.5; 17.5; 22.48	1.37; 2.69	8; 11; 17; 39
Static Force	6.5	1.57; 17.5; 22.48	0.67; 2.69	8; 15; 24; 56
Speed - No Load (inch/sec)	0.59	3.15; 0.3	1.42; 0.47	1.85; 1.18; 0.71; 0.31
Speed - Full Load (inch/sec)	0.55	2.67; 0.26; 0.25	0.94; 0.35; 0.99; 0.41	1.18; 0.75; 0.51; 0.24
Current - No Load (A)	0.1	0.03	0.03	≤ 0.2
Current - Full Load (A)	0.2	2.3	0.46; 0.33	≤ 0.7; ≤ 0.55; ≤ 0.5; ≤ 0.6
Additional Features	✗	RS-485 Communication	TTL or PWM Communication	✗
Feedback	✗	✓	✓	✗
Duty Cycle	10% to 20%	50%	50%	20%
Weather Protection	IP66	IP54	IP54	IP65
Overload Protection	Yes (7 lbs - may vary on application or control)	LED Indication	LED Indication	Yes
Operational Temperature (°C)	0 to 50	-10 to 60	-10 to 60	-10 to 50
Operating Noise	<45 dBA	<50 dBA	<50 dBA	<60 dBA
Limit Switch	✗	✗	✗	Built-in (Non-adjustable)
Cable Length (inch)	8	9	9	12
Connector	Tinned Wire Leads	Molex Micro-Latch 4-Pin	Molex Mini-SPOX 3-Pin	2.54mm 2-Pin Female Connector (Standard)
Front Mounting Hole Size (inch)	0.16	0.14	0.14	0.32
Rear Mounting Hole Size (inch)	0.16	0.15	0.15	0.32
Actuator Type	Micro	Micro	Micro	Micro
Motor Type	Brushed DC Motor	Coreless DC Motor	Cored DC Motor	Brushed DC Motor
Screw Type	ACME	Metric Coarse Thread	Metric Coarse Thread	ACME
Stroke Rod Material	Stainless Steel 301	Stainless Steel	Stainless Steel	Stainless Steel
Housing Material	Polyamide 66	Polyformaldehyde	Polyformaldehyde	PA66-GF35
Gear Material	Powder Metallurgy Steel Alloy	Polyketone	Polyketone	N/A
Certifications	UL	CE	CE	N/A
Compatible Mounting Brackets	BRK-07	BRK-12 (1.06" Stroke Only)	BRK-12 (1.06" Stroke Only)	BRK-MC1

Industrial Actuators

In-stock Model	PA-09	PA-09-HALL	PA-10	PA-10-HALL	PA-13	PA-17	PA-17P	PA-HD1	PA-HD1-HALL	PA-HD2	PA-HD2-HALL
Voltage (VDC)	12; 24	12; 24	12; 24	12; 24	12	12; 24	12; 24	12; 24	24	12; 24	24
Stroke (inch)	2 to 40	2 to 40	2 to 36	2 to 24	4 to 40	1 to 40	1 to 24	4 to 40	4 to 40	4 to 40	4 to 40
Dynamic Force (lbs)	330	330	450	450	719; 3000	850; 2000	2000	450; 899; 1574	1574	450; 899; 2023	2023
Static Force	330	330	450	450	899; 3372	1700; 4000	4000	899; 1574; 2248	2248	899; 1349; 2698	2698
Speed - No Load (inch/sec)	0.39	0.39	0.28	0.28; 0.56	0.24; 1.46	0.66; 0.33	0.33	1.37; 0.66; 0.33	0.33	1.75; 0.79; 0.26	0.26
Speed - Full Load (inch/sec)	0.27	0.27	0.16	0.16; 0.33	0.16; 0.91	0.55; 0.27	0.27	1.11; 0.55; 0.27	0.27	1.5; 0.71; 0.24	0.24
Current - No Load (A)	1.5, 0.6	1.5, 0.6	1.5	1.5	4	3.5; 1.8	3.5; 1.8	3.5; 1.8	1.8	2.5; 2.0; 1.5, 1.0	14
Current - Full Load (A)	4; 3	4; 3	6	6; 4	20	20; 10	20; 10	20; 10	10	18, 17, 14; 9, 8.5, 7	7
Additional Features	✗	Hall Effect Sensors	400-hour Salt Spray Rating (Salt Spray Rating Unit Only)	Hall Effect Sensors	Manual Override	✗	Potentiometer Feedback	None	Hall Effect Sensors	None	Hall Effect Sensors
Feedback	✗	✓	✗	✓	✗	✗	✓	✗	✓	✗	✓
Duty Cycle	25%	25%	20%	20%	20%	25%	25%	10%	10%	20%	20%
Weather Protection	IP66	IP66	IP66	IP66	IP66	IP65	IP65	IP65	IP65	IP67	IP67
Overload Protection	✗	✗	✗	✗	Built-in Shutoff	Mechanical Slip Clutch	Mechanical Slip Clutch	Mechanical Slip Clutch	Mechanical Slip Clutch	Mechanical Slip Clutch	Mechanical Slip Clutch
Operational Temperature (°C)	-20 to 65	-20 to 65	-20 to 70	-20 to 70	-40 to 60	-25 to 65	-25 to 65	-25 to 65	-25 to 65	-10 to 65	-10 to 65
Operating Noise	<45 dBA	<45 dBA	<45 dBA	<45 dBA	<90 dBA	<45 dBA	<45 dBA	65 dBA	65 dBA	65 dBA	65 dBA
Limit Switch	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)
Cable Length (inch)	40	40	60	60	40	40	40	40	40	39.37	39.37
Connector	Molex Mini-Fit Jr 2-Pin	Molex Mini-Fit Jr 6-Pin	Molex Mini-Fit Jr 2-Pin	Molex Mini-Fit Jr 6-Pin	TE Universal Mate-N-Lok 2-Pin	Molex Mini-Fit Jr 2-Pin	Tinned Wire Leads	Molex Mini-Fit Jr 2-Pin	Molex Mini-Fit Jr 6-Pin	Molex Mega-Fit 2-Pin Receptacle	Molex Mega-Fit 2-Pin Receptacle & Molex Mini-Fit Jr 4-Pin Receptacle
Front Mounting Hole Size (inch)	0.32	0.32	0.32	0.32	0.5	0.5	0.5	0.52	0.52	0.52	0.52
Rear Mounting Hole Size (inch)	0.32	0.32	0.32	0.32	0.5	0.5	0.5	0.52	0.52	0.52	0.52
Actuator Type	Mini, Industrial	Mini, Industrial	Mini, Industrial	Mini, Industrial	Industrial	Industrial	Industrial	Industrial	Industrial	Industrial	Industrial
Motor Type	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor
Screw Type	ACME	ACME	ACME	ACME	ACME	ACME	ACME	ACME	ACME	ACME	ACME
Stroke Rod Material	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel 304	Stainless Steel	Stainless Steel (SUS304)	Stainless Steel (SUS304)	Stainless Steel (SUS304)	Stainless Steel (SUS304)
Housing Material	Aluminum 6062	Aluminum 6062	Anodic Oxidation (Standard), Porcelain Plating (Salt Spray Rating)	Anodic Oxidation	Aluminum 6062	Stainless Steel	Stainless Steel	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy
Gear Material	Polyformaldehyde	Polyformaldehyde	Polyoxymethylene	Polyoxymethylene	Powder Metallurgy Steel Alloy	Powder Metallurgy Steel Alloy	Powder Metallurgy Steel Alloy	Powder Metallurgy/ Die-Casting	Powder Metallurgy/ Die-Casting	Powder Metallurgy/ Die-Casting	Powder Metallurgy/ Die-Casting
Certifications	CE, RoHS	CE, RoHS	UL (Custom order)	UL (Custom order)	CE	CE, RoHS	CE, RoHS	CE, RoHS	CE, RoHS	CE, RoHS	CE, RoHS
Compatible Mounting Brackets	BRK-09, BRK-10	BRK-09, BRK-10	BRK-09	BRK-09	BRK-17	BRK-17	BRK-17	BRK-17	BRK-17	BRK-17	BRK-17

Mini Actuators

In-stock Model	PA-09	PA-09-HALL	PA-10	PA-10-HALL	PA-14	PA-14P	PA-01	PA-01-HALL
Voltage (VDC)	12	12	12	12; 24	12; 24	12	12; 24	12; 24
Stroke (inch)	2 to 40	2 to 40	2 to 36	2 to 24	1 to 40	2 to 40	1 to 40	1 to 40
Dynamic Force (lbs)	330	330	450	450	35; 50; 150	35; 50; 150	16; 28; 56; 112; 169; 225	16; 56; 169; 225
Static Force	330	330	450	450	35; 50; 150	35; 50; 150	16; 28; 56; 112; 169; 225	16; 56; 169; 225
Speed - No Load (inch/sec)	0.39	0.39	0.28	0.28; 0.56	2; 1.14; 0.37	2; 1.14; 0.37	3.54; 1.89; 1.38; 0.94; 0.39; 0.28	3.54; 1.38; 0.39; 0.28
Speed - Full Load (inch/sec)	0.27	0.27	0.16	0.16; 0.33	1.38; 0.83; 0.28	1.38; 0.83; 0.28	2.66; 1.38; 1.02; 0.67; 0.30; 0.20	2.66; 1.02; 0.30; 0.20
Current - No Load (A)	1.5; 0.6	1.5; 0.6	1.5	1.5	1; 0.5	1	≤ 1.5; ≤ 0.8	≤ 1.5; ≤ 0.8
Current - Full Load (A)	4; 3	4; 3	6	6; 4	5; 2.5	5	≤ 4; ≤ 2	≤ 4; ≤ 2
Additional Features	✗	Hall Effect Sensors	400-hour Salt Spray Rating (Salt Spray Rating Unit Only)	Hall Effect Sensors	✗	Potentiometer Feedback	✗	Hall Effect Sensors
Feedback	✗	✓	✗	✓	✗	✓	✗	✓
Duty Cycle	25%	25%	20%	20%	25%	25%	25%	25%
Weather Protection	IP66	IP66	IP66	IP66	IP54	IP54	IP65	IP65
Overload Protection	✗	✗	✗	✗	✗	✗	✗	✗
Operational Temperature (°C)	-20 to 65	-20 to 65	-20 to 70	-20 to 70	-25 to 65	-25 to 65	-10 to 50	-10 to 50
Operating Noise	<45 dBA	<45 dBA	<45 dBA	<45 dBA	<45 dBA	<45 dBA	<45 dBA	<45 dBA
Limit Switch	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)
Cable Length (inch)	40	40	60	60	40	40	40	40
Connector	Molex Mini-Fit Jr 2-Pin	Molex Mini-Fit Jr 6-Pin	Molex Mini-Fit Jr 2-Pin	Molex Mini-Fit Jr 6-Pin	Molex Mini-Fit Jr 2-Pin	Molex Mini-Fit Jr 6-Pin	Molex Mini-Fit Jr 2-Pin	Molex Mini-Fit Jr 6-Pin
Front Mounting Hole Size (inch)	0.32	0.32	0.32	0.32	0.25	0.25	0.25	0.25
Rear Mounting Hole Size (inch)	0.32	0.32	0.32	0.32	0.25	0.25	0.25	0.25
Actuator Type	Mini, Industrial	Mini, Industrial	Mini, Industrial	Mini, Industrial	Mini	Mini	Mini	Mini
Motor Type	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor
Screw Type	ACME	ACME	ACME	ACME	ACME	ACME	ACME	ACME
Stroke Rod Material	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Aluminum Alloy	Aluminum Alloy	Stainless Steel	Stainless Steel
Housing Material	Aluminum 6062	Aluminum 6062	Anodic Oxidation (Standard), Porcelain Plating (Salt Spray Rating)	Anodic Oxidation	Aluminum 6062	Aluminum 6062	Aluminum 6062	Aluminum 6062
Gear Material	Polyformaldehyde	Polyformaldehyde	Polyoxymethylene	Polyoxymethylene	Polyformaldehyde (35 lbs Only), Powder Metallurgy Steel Alloy	Polyformaldehyde (35 lbs Only), Powder Metallurgy Steel Alloy	Polyformaldehyde or Powder Metallurgy Steel Alloy	Polyformaldehyde or Powder Metallurgy Steel Alloy
Certifications	CE, RoHS	CE, RoHS	UL (Custom order)	UL (Custom order)	CE, RoHS	CE, RoHS	N/A	N/A
Compatible Mounting Brackets	BRK-09, BRK-10	BRK-09, BRK-10	BRK-09	BRK-09	BRK-14, BRK-03	BRK-14, BRK-03	BRK-14	BRK-14

Standard Actuators

In-stock Model	PA-03	PA-04	PA-04-HS	PA-QR1
Voltage (VDC)	12	12; 24	12; 24	12
Stroke (inch)	4 to 24	2 to 40	6 to 40	4 to 14
Dynamic Force (lbs)	200; 600	100; 400	400; 900	675
Static Force	200; 600	100; 400	400; 900	1000
Speed - No Load (inch/sec)	1.6; 0.31	2.8; 0.98	0.51; 0.26	0.3
Speed - Full Load (inch/sec)	0.86; 0.19	2.16; 0.78	0.35; 0.16	0.22
Current - No Load (A)	2	4	2.5; 1; 1.5	1.5
Current - Full Load (A)	9; 7.6	12	8; 7; 4	6
Additional Features	✗	✗	Hall Effect Sensors	Quick Release, Safety Nut and Anti-Pinching
Feedback	✗	✗	✓	✗
Duty Cycle	20%	20%	20%	10%
Weather Protection	IP43	IP66	IP66	IP66
Overload Protection	✗	✗	✗	✗
Operational Temperature (°C)	-25 to 65	-25 to 65	-25 to 65	0 to 50
Operating Noise	<45 dBA	<45 dBA	<45 dBA	<48 dBA
Limit Switch	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)
Cable Length (inch)	40	40	40	40
Connector	Molex Mini-Fit Jr 2-Pin	Molex Mini-Fit Jr 2-Pin	Molex Mini-Fit Jr 6-Pin	Molex Mini-Fit Jr 2-Pin
Front Mounting Hole Size (inch)	0.4	0.4	0.4	0.4
Rear Mounting Hole Size (inch)	0.4	0.4	0.4	0.4
Actuator Type	Mid-size	Mid-size	Mid-size	Mid-size
Motor Type	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor
Screw Type	ACME	ACME	ACME	ACME
Stroke Rod Material	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy	304 Stainless Steel
Housing Material	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy	PA66 + 33GF
Gear Material	Polyformaldehyde	Polyformaldehyde	Polyformaldehyde	Polyoxymethylene
Certifications	CE, RoHS	CE, RoHS	CE, RoHS	CE, IEC
Compatible Mounting Brackets	BRK-02 (Motor end only) BRK-01 (Motor end only, models up to 400 lbs)	BRK-01, BRK-02	BRK-01, BRK-02	BRK-02

Track Actuators

In-stock Model	PA-18
Voltage (VDC)	12
Stroke (inch)	2 to 60
Dynamic Force (lbs)	150
Static Force	100
Speed - No Load (inch/sec)	1.5
Speed - Full Load (inch/sec)	0.98
Current - No Load (A)	2.5
Current - Full Load (A)	8
Additional Features	✖
Feedback	✖
Duty Cycle	20%
Weather Protection	IP20
Overload Protection	✖
Operational Temperature (°C)	-25 to 65
Operating Noise	<48 dBA
Limit Switch	Built-in (Non-adjustable)
Cable Length (inch)	60
Connector	Molex Mini-Fit Jr 2-Pin
Front Mounting Hole Size (inch)	0.26
Rear Mounting Hole Size (inch)	0.4
Actuator Type	Track
Motor Type	Brushed DC Motor
Screw Type	ACME
Stroke Rod Material	None
Housing Material	Aluminum Alloy
Gear Material	Polyformaldehyde
Certifications	CE, RoHS
Compatible Mounting Brackets	BRK-19, BRK-01

Telescopic Actuators

In-stock Model	PA-TS1
Voltage (VDC)	24
Stroke (inch)	12 to 24
Dynamic Force (lbs)	270
Static Force	270
Speed - No Load (inch/sec)	0.59
Speed - Full Load (inch/sec)	0.39
Current - No Load (A)	1
Current - Full Load (A)	4.5
Additional Features	3 Stage Telecsopic Configurations, HALL Effect Sensors
Feedback	✓
Duty Cycle	10%
Weather Protection	IP43
Overload Protection	✗
Operational Temperature (°C)	5 to 40
Operating Noise	<45 dBA
Limit Switch	Built-in (Non-adjustable)
Cable Length (inch)	60
Connector	Molex Mini-Fit Jr 6-Pin
Front Mounting Hole Size (inch)	0.39
Rear Mounting Hole Size (inch)	0.39
Actuator Type	Telescopic
Motor Type	Brushed DC Motor
Screw Type	ACME
Stroke Rod Material	Steel
Housing Material	Steel
Gear Material	Polyoxymethylene (POM)
Certifications	CE, RoHS
Compatible Mounting Brackets	BRK-02, BRK-01

In-stock Model	PA-01	PA-01-HALL	PA-03	PA-04	PA-04-HS	PA-06	PA-07	PA-09	PA-09-HALL	PA-10	PA-10-HALL	PA-12-R	PA-12-T	PA-13	PA-14	PA-14P	PA-17	PA-17P	PA-18	PA-HD1	PA-HD1-HALL	PA-HD2	PA-HD2-HALL	PA-QR1	PA-TS1	PA-MC1	PA-ST1
Voltage (VDC)	12; 24	12; 24	12	12; 24	12; 24	12	12	12; 24	12; 24	12; 24	12; 24	12	7.4; 12	12	12; 24	12	12; 24	12; 24	12	12; 24	24	12; 24	24	12	24	12	12
Stroke (inch)	1 to 40	1 to 40	4 to 24	2 to 40	6 to 40	2 to 24	0.5 to 12	2 to 40	2 to 40	2 to 36	2 to 24	1.06; 2.2	1.06	4 to 40	1 to 40	2 to 40	1 to 40	1 to 24	2 to 60	4 to 40	4 to 40	4 to 40	4 to 40	4 to 14	12 to 24	0.5 to 8	1 to 24
Dynamic Force (lbs)	16; 28; 56; 112; 169; 225	16; 56; 169; 225	200; 600	100; 400	400; 900	22; 180	5	330	330	450	450	3.82; 4.5; 17.5; 22.48	1.37; 2.69	719; 3000	35; 50; 150	35; 50; 150	850; 2000	2000	150	450; 899; 1574	1574	450; 899; 2023	2023	675	270	8; 11; 17; 39	56
Static Force	16; 28; 56; 112; 169; 225	16; 56; 169; 225	200; 600	100; 400	400; 900	33; 360	6.5	330	330	450	450	1.57; 17.5; 22.48	0.67; 2.69	899; 3372	35; 50; 150	35; 50; 150	1700; 4000	4000	100	899; 1574; 2248	2248	899; 1349; 2698	2698	1000	270	8; 15; 24; 56	225
Speed - No Load (inch/sec)	3.54; 1.89; 1.38; 0.94; 0.39; 0.28	3.54; 1.38; 0.39; 0.28	1.6; 0.31	2.8; 0.98	0.51; 0.26	1.38; 0.47	0.59	0.39	0.39	0.28	0.28, 0.56	3.15; 0.3	1.42; 0.47	0.24; 1.46	2; 1.14; 0.37	2; 1.14; 0.37	0.66; 0.33	0.33	1.5	1.37; 0.66; 0.33	0.33	1.75; 0.79; 0.26	0.26	0.3	0.59	1.85; 1.18; 0.71; 0.31	5.9
Speed - Full Load (inch/sec)	2.66; 1.38; 1.02; 0.67; 0.30; 0.20	2.66; 1.02; 0.30; 0.20	0.86; 0.19	2.16; 0.78	0.35; 0.16	1.18; 0.27	0.55	0.27	0.27	0.16	0.16, 0.33	2.67; 0.26; 0.25	0.94; 0.35; 0.99; 0.41	0.16; 0.91	1.38; 0.83; 0.28	1.38; 0.83; 0.28	0.55; 0.27	0.27	0.98	1.11; 0.55; 0.27	0.27	1.5; 0.71; 0.24	0.24	0.22	0.39	1.18; 0.75; 0.51; 0.24	4.72
Current - No Load (A)	≤ 1.5; ≤ 0.8	≤ 1.5; ≤ 0.8	2	4	2.5; 1; 1.5	0.6	0.1	1.5; 0.6	1.5; 0.6	1.5	1.5	0.03	0.03	4	1; 0.5	1	3.5; 1.8	3.5; 1.8	2.5	3.5; 1.8	1.8	2.5; 2.0; 1.5, 1.0	14	1.5	1	≤ 0.2	1.8
Current - Full Load (A)	≤ 4; ≤ 2	≤ 4; ≤ 2	9; 7.6	12	8; 7; 4	2.5; 3.7	0.2	4; 3	4; 3	6	6; 4	2.3	0.46; 0.33	20	5; 2.5	5	20; 10	20; 10	8	20; 10	10	18, 17, 14; 9, 8.5, 7	7	6	4.5	≤ 0.7; ≤ 0.55; ≤ 0.5; ≤ 0.6	9.5
Additional Features	✗	Hall Effect Sensors	✗	✗	Hall Effect Sensors	✗	✗	✗	Hall Effect Sensors	400-hour Salt Spray Rating (Salt Spray Rating Unit Only)	Hall Effect Sensors	RS-485 Communication	TTL or PWM Communication	Manual Override	✗	Potentiometer Feedback	✗	Potentiometer Feedback	✗	✗	Hall Effect Sensors	✗	Hall Effect Sensors	Quick Release, Safety Nut and Anti-Pinching	3 Stage Telescopic Configurations, HALL Effect Sensors	✗	✗
Feedback	✗	✓	✗	✗	✓	✗	✗	✗	✓	✗	✓	✓	✓	✗	✗	✓	✗	✓	✗	✗	✓	✗	✓	✗	✓	✗	✗
Duty Cycle	25%	25%	20%	20%	20%	10%	10% to 20%	25%	25%	20%	20%	50%	50%	20%	25%	25%	25%	25%	20%	10%	10%	20%	20%	10%	10%	20%	15%
Weather Protection	IP65	IP65	IP43	IP66	IP66	IP67M	IP66	IP66	IP66	IP66	IP66	IP54	IP54	IP66	IP54	IP54	IP65	IP65	IP20	IP65	IP65	IP67	IP67	IP66	IP43	IP65	IP66
Overload Protection	✗	✗	✗	✗	✗	✗	Yes (7 lbs - may vary on application or control)	✗	✗	✗	✗	LED Indication	LED Indication	Built-in Shutoff	✗	✗	Mechanical Slip Clutch	Mechanical Slip Clutch	✗	Mechanical Slip Clutch	Mechanical Slip Clutch	Mechanical Slip Clutch	Mechanical Slip Clutch	✗	✗	✓	✗
Operational Temperature (°C)	-10 to 50	-10 to 50	-25 to 65	-25 to 65	-25 to 65	-20 to 60	0 to 50	-20 to 65	-20 to 65	-20 to 70	-20 to 70	-10 to 60	-10 to 60	-40 to 60	-25 to 65	-25 to 65	-25 to 65	-25 to 65	-25 to 65	-25 to 65	-25 to 65	-10 to 65	-10 to 65	0 to 50	5 to 40	-10 to 50	-20 to 60
Operating Noise	<45 dBA	<45 dBA	<45 dBA	<45 dBA	<45 dBA	<60 dBA	<45 dBA	<45 dBA	<45 dBA	<45 dBA	<45 dBA	<50 dBA	<50 dBA	<90 dBA	<45 dBA	<45 dBA	<45 dBA	<45 dBA	<48 dBA	65 dBA	65 dBA	65 dBA	65 dBA	<48 dBA	<45 dBA	<60 dBA	60 dB
Limit Switch	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	✗	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	✗	✗	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)	Built-in (Non-adjustable)
Cable Length (inch)	40	40	40	40	40	59	8	40	40	60	60	9	9	40	40	40	40	40	60	40	40	39.37	39.37	40	60	12	59
Connector	Molex Mini-Fit Jr 2-Pin	Molex Mini-Fit Jr 6-Pin	Molex Mini-Fit Jr 2-Pin	Molex Mini-Fit Jr 2-Pin	Molex Mini-Fit Jr 6-Pin	Molex Mini-Fit Jr 2-Pin	Tinned Wire Leads	Molex Mini-Fit Jr 2-Pin	Molex Mini-Fit Jr 6-Pin	Molex Mini-Fit Jr 2-Pin	Molex Mini-Fit Jr 6-Pin	Molex Micro-Latch 4-Pin	Molex Mini-SPOX 3-Pin	TE Universal Mate-N-Lok 2-Pin	Molex Mini-Fit Jr 2-Pin	Molex Mini-Fit Jr 6-Pin	Molex Mini-Fit Jr 2-Pin	Tinned Wire Leads	Molex Mini-Fit Jr 2-Pin	Molex Mini-Fit Jr 2-Pin	Molex Mini-Fit Jr 6-Pin	Molex Mega-Fit 2-Pin Receptacle	Molex Mega-Fit 2-Pin Receptacle & Molex Mini-Fit Jr 4-Pin Receptacle	Molex Mini-Fit Jr 2-Pin	Molex Mini-Fit Jr 6-Pin	2.54mm 2-Pin Female Connector (Standard)	Molex Mini-Fit Jr 2-Pin
Front Mounting Hole Size (inch)	0.25	0.25	0.4	0.4	0.4	0.47	0.16	0.32	0.32	0.32	0.32	0.14	0.14	0.5	0.25	0.25	0.5	0.5	0.26	0.52	0.52	0.52	0.52	0.4	0.39	0.32	0.31
Rear Mounting Hole Size (inch)	0.25	0.25	0.4	0.4	0.4	0.39	0.16	0.32	0.32	0.32	0.32	0.15	0.15	0.5	0.25	0.25	0.5	0.5	0.4	0.52	0.52	0.52	0.52	0.4	0.39	0.32	0.31
Actuator Type	Mini	Mini	Mid-size	Mid-size	Mid-size	Tubular	Micro	Mini, Industrial	Mini, Industrial	Mini, Industrial	Mini, Industrial	Micro	Micro	Industrial	Mini	Mini	Industrial	Industrial	Track	Industrial	Industrial	Industrial	Industrial	Mid-size	Telescopic	Micro	Tubular
Motor Type	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Coreless DC Motor	Cored DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor	Brushed DC Motor
Screw Type	ACME	ACME	ACME	ACME	ACME	Trapezoid	ACME	ACME	ACME	ACME	ACME	Metric Coarse Thread	Metric Coarse Thread	ACME	ACME	ACME	ACME	ACME	ACME	ACME	ACME	ACME	ACME	ACME	ACME	ACME	ACME
Stroke Rod Material	Stainless Steel	Stainless Steel	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy	Stainless Steel 304	Stainless Steel 301	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Aluminum Alloy	Aluminum Alloy	Stainless Steel 304	Stainless Steel	None	Stainless Steel (SUS304)	Stainless Steel (SUS304)	Stainless Steel (SUS304)	Stainless Steel (SUS304)	304 Stainless Steel	Steel	Stainless Steel	Stainless Steel 304
Housing Material	Aluminum Alloy 6062	Aluminum Alloy 6062	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy	Aluminum 6063	Polyamide 66	Aluminum 6062	Aluminum 6062	Anodic Oxidation (Standard), Porcelain Plating (Salt Spray Rating)	Anodic Oxidation	Polyformaldehyde	Polyformaldehyde	Aluminum 6062	Aluminum 6062	Aluminum 6062	Stainless Steel	Stainless Steel	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy	PA66 + 33GF	Steel	PA66-GF35	Aluminum 6063
Gear Material	Polyformaldehyde or Powder Metallurgy Steel Alloy	Polyformaldehyde or Powder Metallurgy Steel Alloy	Polyformaldehyde	Polyformaldehyde	Polyformaldehyde	Polyformaldehyde	Powder Metallurgy Steel Alloy	Polyformaldehyde	Polyformaldehyde	Polyoxymethylene	Polyoxymethylene	Polyketone	Polyketone	Powder Metallurgy Steel Alloy	Polyformaldehyde (35 lbs Only), Powder Metallurgy Steel Alloy	Polyformaldehyde (35 lbs Only), Powder Metallurgy Steel Alloy	Powder Metallurgy Steel Alloy	Powder Metallurgy Steel Alloy	Polyformaldehyde	Powder Metallurgy/ Die-Casting	Powder Metallurgy/ Die-Casting	Powder Metallurgy/ Die-Casting	Powder Metallurgy/ Die-Casting	Polyoxymethylene	Polyoxymethylene (POM)	N/A	Powder Metallurgy, No. 45 Steel
Certifications	N/A	N/A	CE, RoHS	CE, RoHS	CE, RoHS	CE	UL	CE, RoHS	CE, RoHS	UL (Custom order)	UL (Custom order)	CE	CE	CE	CE, RoHS	CE, RoHS	CE, RoHS	CE, RoHS	CE, RoHS	CE, RoHS	CE, RoHS	CE, RoHS	CE, RoHS	CE, IEC	CE, RoHS	N/A	CE
Compatible Mounting Brackets	BRK-14	BRK-14	BRK-02 (Motor end only) BRK-01 (Motor end only, models up to 400 lbs)	BRK-01, BRK-02	BRK-01, BRK-02	BRK-06, BRK-16	BRK-07	BRK-09, BRK-10	BRK-09, BRK-10	BRK-09	BRK-09	BRK-12 (1.06" Stroke Only)	BRK-12 (1.06" Stroke Only)	BRK-17	BRK-14, BRK-03	BRK-14, BRK-03	BRK-17	BRK-17	BRK-19, BRK-01	BRK-17	BRK-17	BRK-17	BRK-17	BRK-02	BRK-02, BRK-01	BRK-MC1	BRK-09