

### Features

- Quarter turn (90°) operation with mechanical travel stops
- Type 4X/IP67 weatherproof aluminum alloy enclosure
- Highly visual dome style valve position indicator
- Manual override
- ISO5211 multi-flange valve mounting
- Heavy duty motors with overload protection
- Thermostatically controlled anti-condensation heater
- Two auxiliary limit switches included with on-off units
- Self-locking all metal gear train, no additional brake required
- EPS- Electronic Positioner models available
- Approvals - CSA listed per UL429 and CSA C22.2

### Applications

Industrial quality electric actuators typically used to automate quarter turn (90°) ball valves, butterfly valves and dampers. The 5618 series actuator is quick and easy to install with standard ISO5211 multi-flange mounting and a double square drive.

### Operation

Electric actuator uses power-to-open and power-to-close, stays in the last known position with loss of power. On receipt of a continuous voltage signal, the motor runs and via a rugged all metal gear system rotates 90°. The motor is automatically stopped by internal cams striking limit switches. On receipt of a reversing continuous signal, the motor turns in the opposite direction reversing the output drive position. Actuators with EPS positioner use an analog input signal to control the drive output position. Rugged self-locking all metal gear train eliminates the need for additional braking.

### Construction

<b>Enclosure</b>	Anti-corrosive durable painted aluminum alloy, Type 4X/ IP67
<b>Output Drive</b>	ISO5211 aluminum alloy, female double square
<b>Visual Position Indicator</b>	Yellow with transparent clear dome cover
<b>Gears</b>	Heat treated steel and aluminum bronze, self locking
<b>Fasteners</b>	Stainless Steel
<b>Electrical Connections</b>	Terminal strip, cable connectors, optional 1/2" NPT adapters
<b>Manual Override</b>	Standard hex wrench (included) with protective cover
<b>EPS Positioner Models</b>	Fully potted control module



### Description

Excellent power to size, performance packed electric actuators take the valve automation industry to the next level. Features include rugged motor integral to actuator housing, all metal gears, manual override for emergency hand operation, visual valve position indicator and Type 4X/IP67 weatherproof enclosure. Actuators are certified by CSA per rigorous UL and CSA standards, and also comply with the CE marking. On-Off units include two auxiliary dry contact limit switches used to confirm valve position. Anti-condensation heater is standard and will help protect against condensation build-up inside the actuator.

### Approvals



- CSA Listed per UL429 and CSA C22.2 No. 139-13
- CE conformance
- Weatherproof actuator enclosures are Type 4X and IP67

## Construction Features

Auxiliary Limit Switches(2)  
for confirming valve position  
standard in on-off units

Heavy duty integral motor  
design significantly reduces  
physical size of actuator

Rugged durable painted  
aluminum Type 4X/ IP67  
weatherproof enclosure

ISO5211 International  
standard multi-flange valve  
mounting pad



Visual Dome Style Valve  
Position Indicator

Anti-Condensation Heater

Terminal Box, wire directly to  
terminal strip via supplied  
cable connectors or use  
optional 1/2" NPT conduit  
adapters

Manual Override with  
protective cover

Self-locking all metal gear  
drive, no additional brake  
required

## Typical Applications



## Selection Guide

Stock Number	Torque		Voltage AC (50/60Hz) or DC	Current F.L. Amps	Cycle Time /90° (seconds)	Duty Cycle	Valve Mounting ISO5211	Output Drive (mm)	Enclosure Type	Data Sheets Page No.
	Nm	in lbs								
<b>ELECTRIC ACTUATORS</b>										
561825A	30	265	110 VAC	0.27	10/8	70	F03, F05, F07	14	4X / IP67	4
561850A	50	442	110 VAC	0.27	20/17	70	F03, F05, F07	14	4X / IP67	5
561851A	50	442	24 VDC	1.28	20	70	F03, F05, F07	14	4X / IP67	6
561862A	100	885	110 VAC	0.64	30/25	70	F05, F07	14	4X / IP67	7
561865A	100	885	24 VDC	2.03	30	70	F05, F07	14	4X / IP67	8
561870A	200	1770	110 VAC	0.73	30/25	70	F07, F10	22	4X / IP67	9
561871A	200	1770	24 VDC	3.57	30	70	F07, F10	22	4X / IP67	10
<b>ELECTRIC ACTUATORS with EPS POSITIONER, 4-20mA INPUT</b>										
561856A	50	442	110 VAC	0.27	20/17	70	F03, F05, F07	14	4X / IP67	11
561857A	50	442	24 VDC	1.00	30	70	F05, F07	14	4X / IP67	12
561876A	200	1770	110 VAC	0.73	30/25	70	F07, F10	22	4X / IP67	13
561877A	200	1770	24 VDC	1.70	30	70	F07, F10	22	4X / IP67	14

### Electric Actuators

Valworx quarter turn electric actuators use power-to-open and power-to-close, stays in the last known position with loss of power. The actuator will rotate the output drive 90° to open or close ball valves, butterfly valves or other valves requiring a quarter turn function. Limit switches automatically stop the motor drive in either the open or closed position as required.

### EPS - Electronic Positioning System

Valworx electric actuators with EPS Electronic Positioning Systems provide an accurate valve positioning function whereby the movement of the actuator is controlled by a 4-20mA input control signal. Any change in the control input signal results in a corresponding and proportional change in the position of the actuator.

This is achieved with a unique built in electronic positioning module. The module is fully potted to help protect the electronics from vibration and moisture resistance.

An internal microprocessor on the EPS circuit board continuously monitors the analog input and output signals and compares them to the physical position via a precision potentiometer feedback system, moving the actuator output as required to balance the signals.

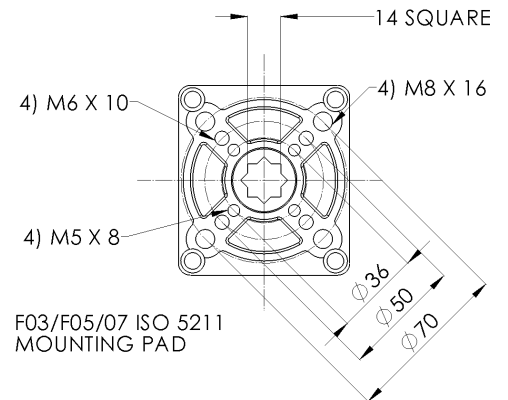
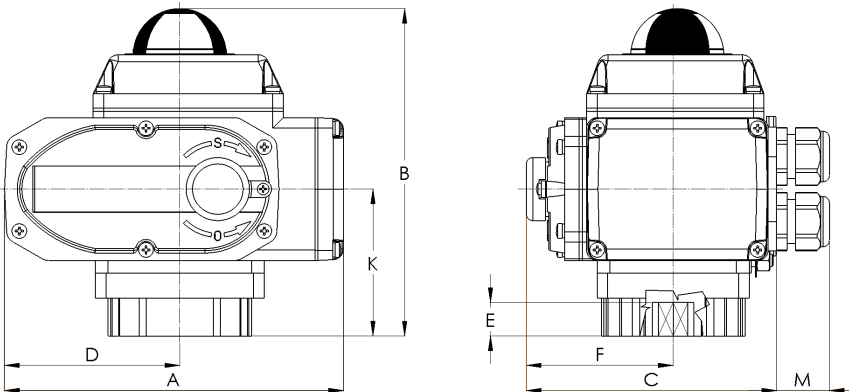
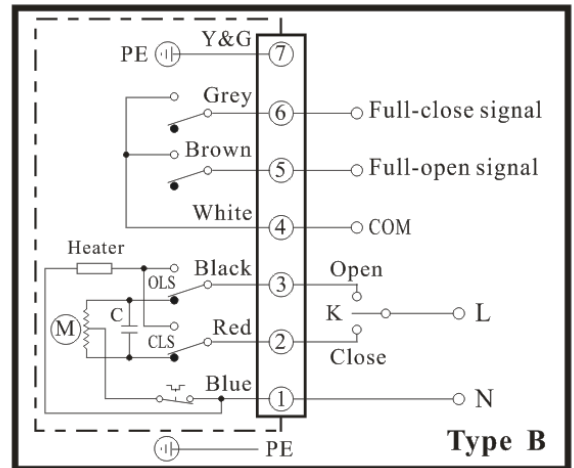
The EPS system is self-calibrating which virtually eliminates "hunting" and provides a 4-20mA output monitoring signal as standard. The following features are standard on the EPS module:

- Adjustable forward or reversing action. Ex: standard 4mA close/20mA open or selectable 4mA open/20mA close
- Deadband adjustment from 0.5%-5.0%
- Selectable fail mode: fail closed, fail open or stop in place. This is not for loss of power, but for loss of input command signal.
- Electric manual control on control module
- Fault LED lights indicate valve jam or signal loss
- Power on LED

Specifications	Stock Number <b>561825A</b>
Type Operation	On-Off
Max Torque	30Nm/ 265 in lbs
Voltage	110 VAC 50/60Hz +/- 10%
Current - Full Load Amps	0.27 A
Working Time (0-90°/no load)	10/8 sec
Duty Cycle	70%
Enclosure	Painted aluminum alloy
Enclosure Protection	Type 4X/ IP67 weatherproof
Electrical Connections (2)	Cable connector (optional 1/2 NPT)
Working Angle Std°	90°
Temperature Range	-22 to +140 °F (-30 to +60 °C)
Motor Protection	Thermal overload
Motor Limit Switches	2 x SPDT
Auxiliary Limit Switches (2)	3A@125/250VAC, 30VDC resistive
Anti-condensation Heater	4 watts
Manual Override	Hex wrench
Valve Mounting per ISO5211	F03, F05, F07
Output Drive DIN3337	14mm (female double square)
Weight	6.0 lbs (2.7 kg)



CSA Listed to UL429  
and CSA C22.2 No.139

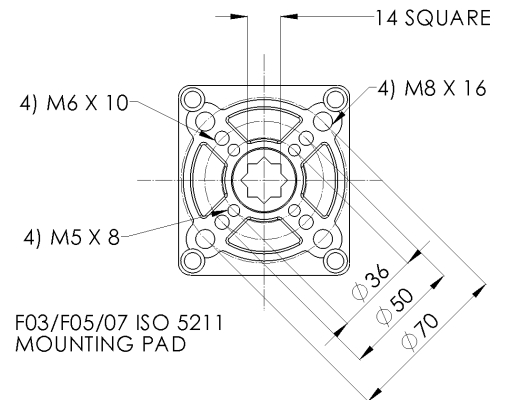
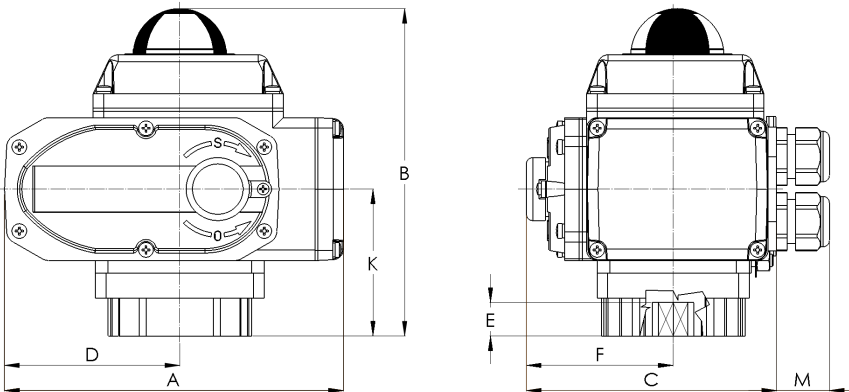
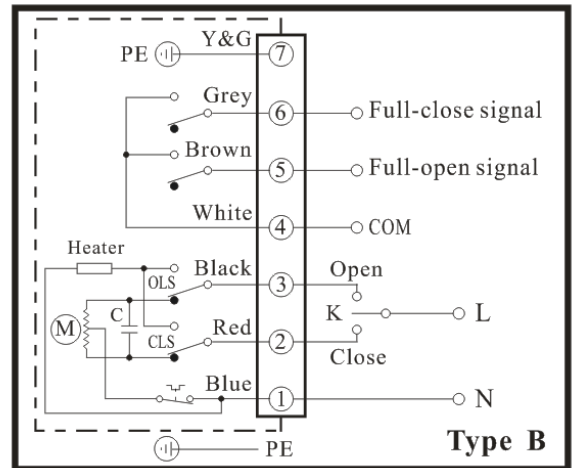


Stock Number		A	B	C	D	E	F	K	M	Weight
561825A	inch	6.34	6.14	4.67	3.27	0.63	2.74	2.76	0.98	6.0 lbs
	mm	161	156	118.5	83	16	69.5	70	25	2.7 kg

Specifications	Stock Number <b>561850A</b>
Type Operation	On-Off
Max Torque	50Nm/ 442 in lbs
Voltage	110 VAC 50/60Hz +/-10%
Current - Full Load Amps	0.27 A
Working Time (0-90°/no load)	20/17 sec
Duty Cycle	70%
Enclosure	Painted aluminum alloy
Enclosure Protection	Type 4X (IP67) weatherproof
Electrical Connections (2)	Cable connector (optional 1/2 NPT)
Working Angle Std°	90°
Temperature Range	-22 to +140 °F (-30 to +60 °C)
Motor Protection	Thermal overload
Motor Limit Switches	2 x SPDT
Auxiliary Limit Switches (2)	3A@125/250VAC, 30VDC resistive
Anti-condensation Heater	4 watts
Manual Override	Hex wrench
Valve Mounting per ISO5211	F03, F05, F07
Output Drive DIN3337	14mm (female double square)
Weight	6.0 lbs (2.7 kg)



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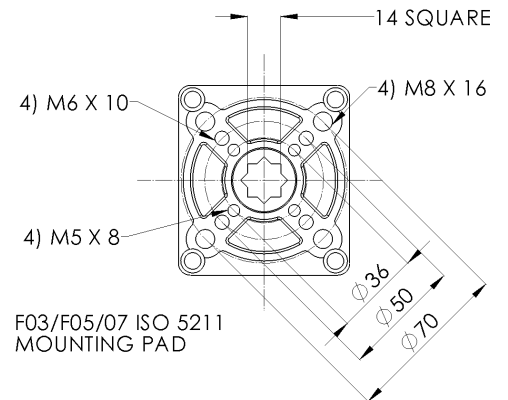
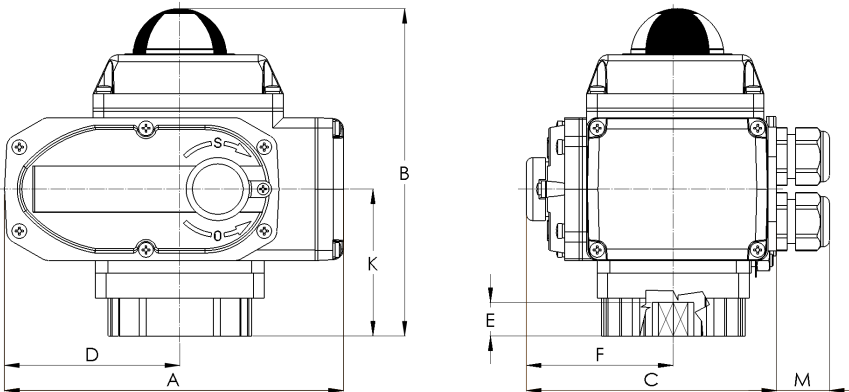
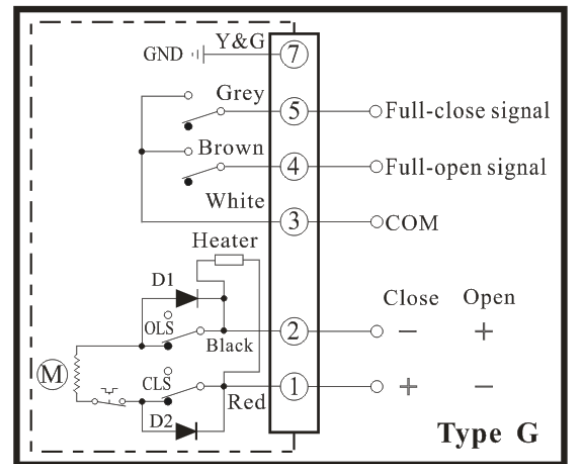


Stock Number		A	B	C	D	E	F	K	M	Weight
561850A	inch	6.34	6.14	4.67	3.27	0.63	2.74	2.76	0.98	6.0 lbs
	mm	161	156	118.5	83	16	69.5	70	25	2.7 kg

Specifications	Stock Number <b>561851A</b>
Type Operation	On-Off
Max Torque	50Nm/ 442 in lbs
Voltage	24 VDC +/-5%
Current - Full Load Amps	1.28 A
Working Time (0-90°/no load)	20 sec
Duty Cycle	70%
Enclosure	Painted aluminum alloy
Enclosure Protection	Type 4X (IP67) weatherproof
Electrical Connections (2)	Cable connector (optional 1/2 NPT)
Working Angle Std°	90°
Temperature Range	-22 to +140 °F (-30 to +60 °C)
Motor Protection	Thermal overload
Motor Limit Switches	2 x SPDT
Auxiliary Limit Switches (2)	3A@125/250VAC, 30VDC resistive
Anti-condensation Heater	4 watts
Manual Override	Hex wrench
Valve Mounting per ISO5211	F03, F05, F07
Output Drive DIN3337	14mm (female double square)
Weight	5.5 lbs (2.5 kg)



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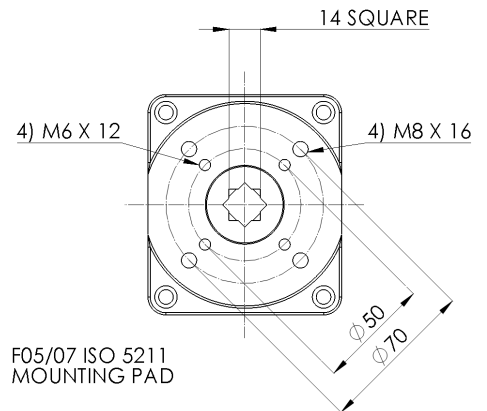
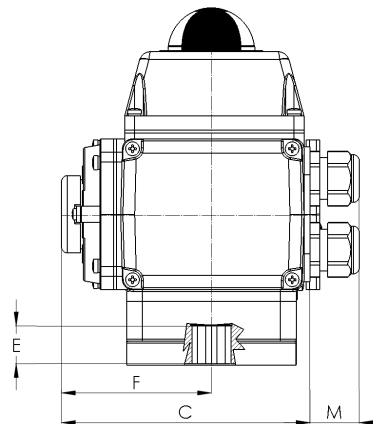
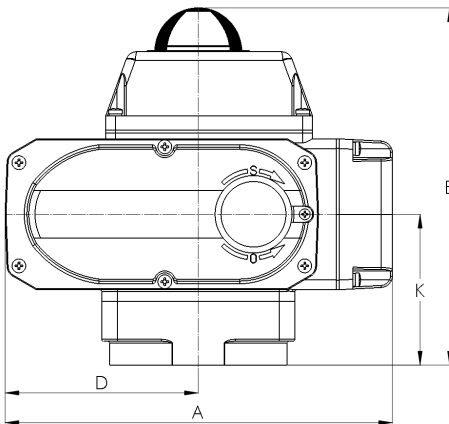
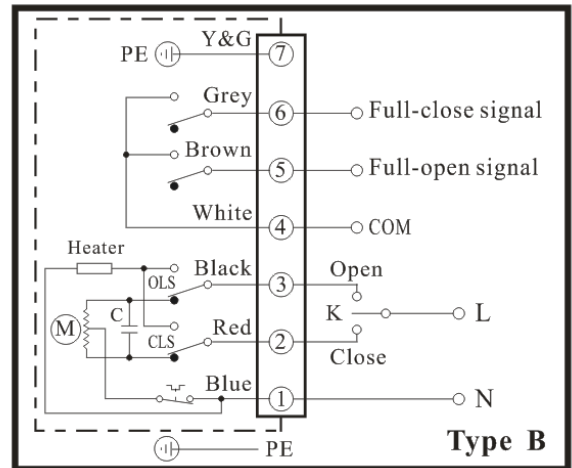


Stock Number		A	B	C	D	E	F	K	M	Weight
561851A	inch	6.34	6.14	4.67	3.27	0.63	2.74	2.76	0.98	5.5 lbs
	mm	161	156	118.5	83	16	69.5	70	25	2.5 kg

Specifications	Stock Number <b>561862A</b>
Type Operation	On-Off
Max Torque	100Nm/ 885 in lbs
Voltage	110 VAC 50/60Hz +/-10%
Current - Full Load Amps	0.64 A
Working Time (0-90°/no load)	30/25 sec
Duty Cycle	70%
Enclosure	Painted aluminum alloy
Enclosure Protection	Type 4X (IP67) weatherproof
Electrical Connections (2)	Cable connector (optional 1/2 NPT)
Working Angle Std°	90°
Temperature Range	-22 to +140 °F (-30 to +60 °C)
Motor Protection	Thermal overload
Motor Limit Switches	2 x SPDT
Auxiliary Limit Switches (2)	3A@125/250VAC, 30VDC resistive
Anti-condensation Heater	4 watts
Manual Override	Hex wrench
Valve Mounting per ISO5211	F05, F07
Output Drive DIN3337	14mm (female double square)
Weight	9.0 lbs (4.0 kg)



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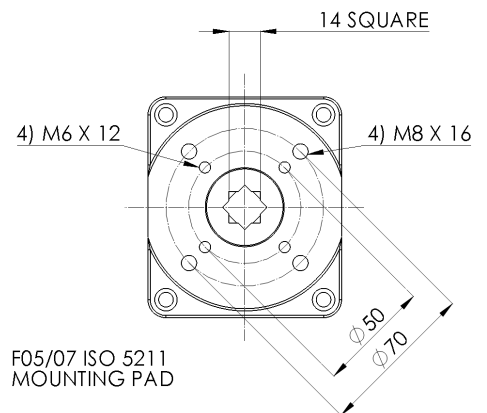
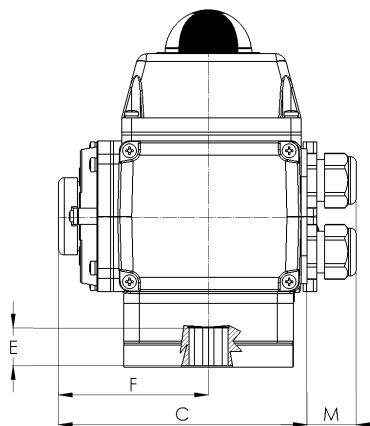
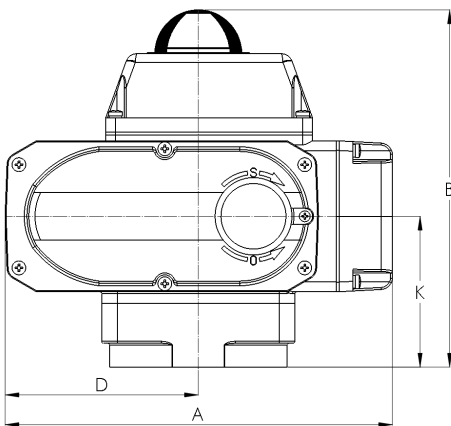
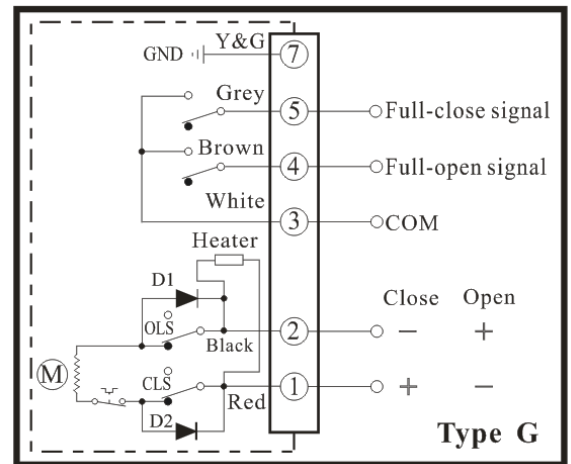


Stock Number		A	B	C	D	E	F	K	M	Weight
561862A	inch	7.74	7.09	4.96	3.86	0.75	2.99	2.99	0.98	9.0 lbs
	mm	196.5	180	126	98	19	76	76	25	4.0 kg

Specifications	Stock Number <b>561865A</b>
Type Operation	On-Off
Max Torque	100Nm/ 885 in lbs
Voltage	24 VDC +/-5%
Current - Full Load Amps	2.03 A
Working Time (0-90°/no load)	30 sec
Duty Cycle	70%
Enclosure	Painted aluminum alloy
Enclosure Protection	Type 4X (IP67) weatherproof
Electrical Connections (2)	Cable connector (optional 1/2 NPT)
Working Angle Std°	90°
Temperature Range	-22 to +140 °F (-30 to +60 °C)
Motor Protection	Thermal overload
Motor Limit Switches	2 x SPDT
Anti-condensation Heater	4 watts
Manual Override	Hex wrench
Valve Mounting per ISO5211	F05, F07
Output Drive DIN3337	14mm (female double square)
Weight	9.0 lbs (4.0 kg)



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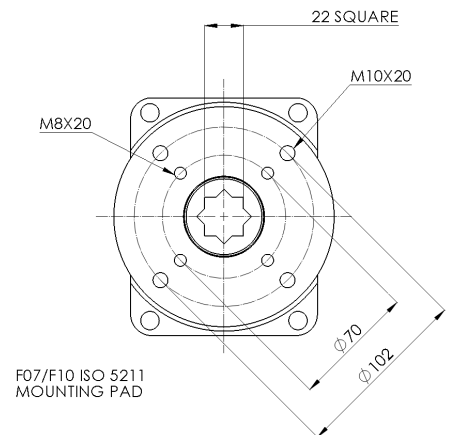
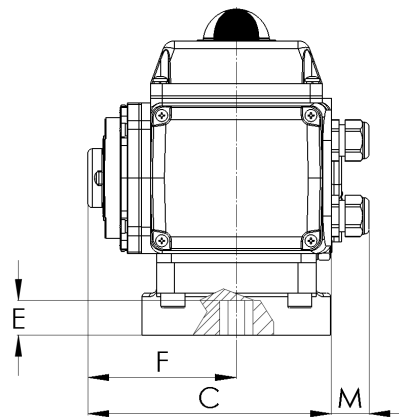
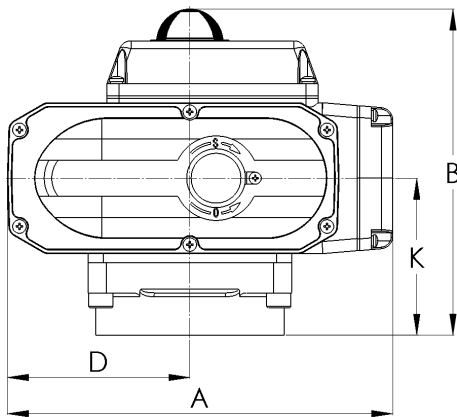
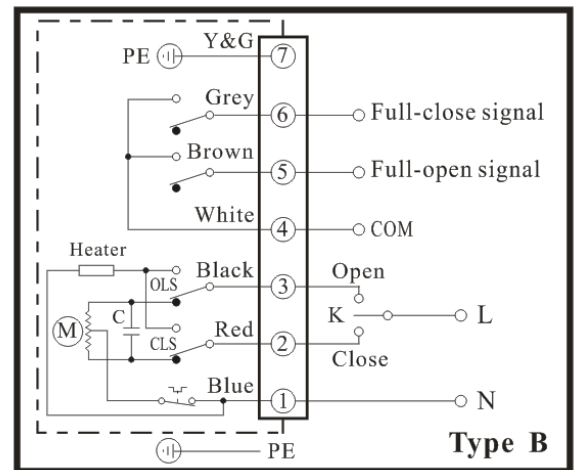
Stock Number		A	B	C	D	E	F	K	M	Weight
<b>561865A</b>	inch	7.74	7.09	4.96	3.86	0.75	2.99	2.99	0.98	9.0 lbs
	mm	196.5	180	126	98	19	76	76	25	4.0 kg



Specifications	Stock Number <b>561870A</b>
Type Operation	On-Off
Max Torque	200Nm/ 1770 in lbs
Voltage	110 VAC 50/60Hz +/-10%
Current - Full Load Amps	0.73 A
Working Time (0-90°/no load)	30/25 sec
Duty Cycle	70%
Enclosure	Painted aluminum alloy
Enclosure Protection	Type 4X (IP67) weatherproof
Electrical Connections (2)	Cable connector (optional 1/2 NPT)
Working Angle Std°	90°
Temperature Range	-22 to +140 °F (-30 to +60 °C)
Motor Protection	Thermal overload
Motor Limit Switches	2 x SPDT
Auxiliary Limit Switches (2)	3A@125/250VAC, 30VDC resistive
Anti-condensation Heater	4 watts
Manual Override	Hex wrench
Valve Mounting per ISO5211	F07, F10
Output Drive DIN3337	22mm (female double square)
Weight	20.0 lbs (9.0 kg)



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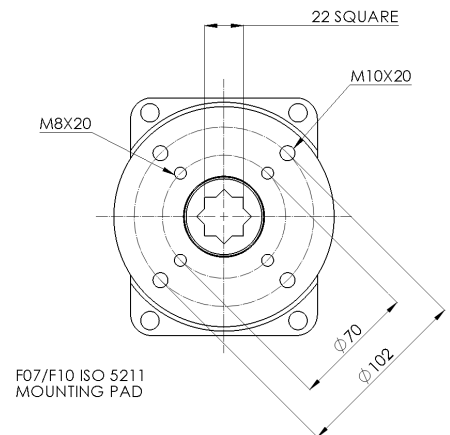
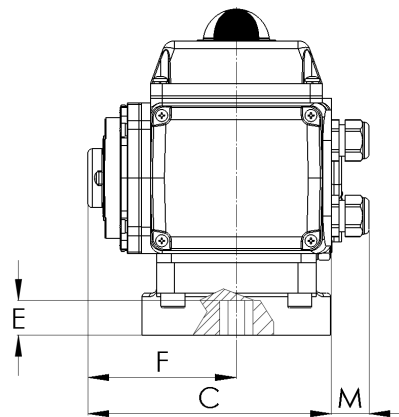
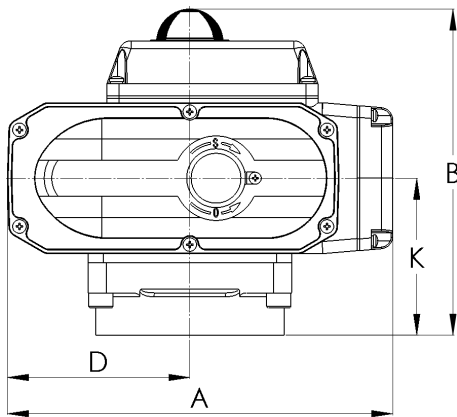
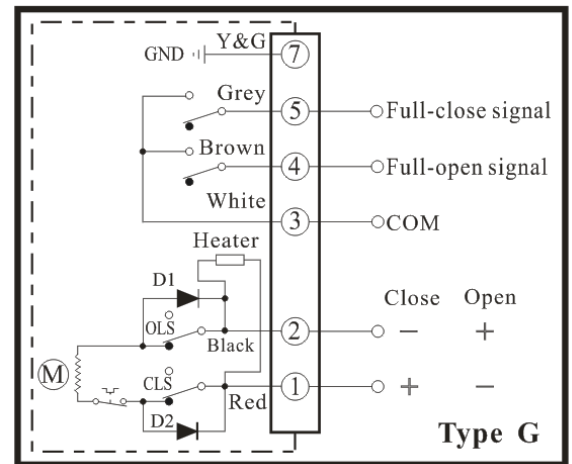


Stock Number		A	B	C	D	E	F	K	M	Weight
561870A	inch	10.06	8.50	6.36	4.76	0.91	3.88	4.09	0.98	20.0 lbs
	mm	255.5	216	161.5	121	23	98.5	104	25	9.0 kg

Specifications	Stock Number <b>561871A</b>
Type Operation	On-Off
Max Torque	200Nm/ 1770 in lbs
Voltage	24 VDC +/-5%
Current - Full Load Amps	3.57 A
Working Time (0-90°/no load)	30 sec
Duty Cycle	70%
Enclosure	Painted aluminum alloy
Enclosure Protection	Type 4X (IP67) weatherproof
Electrical Connections (2)	Cable connector (optional 1/2 NPT)
Working Angle Std°	90°
Temperature Range	-22 to +140 °F (-30 to +60 °C)
Motor Protection	Thermal overload
Motor Limit Switches	2 x SPDT
Auxiliary Limit Switches (2)	3A@125/250VAC, 30VDC resistive
Anti-condensation Heater	4 watts
Manual Override	Hex wrench
Valve Mounting per ISO5211	F07, F10
Output Drive DIN3337	22mm (female double square)
Weight	20.0 lbs (9.0 kg)



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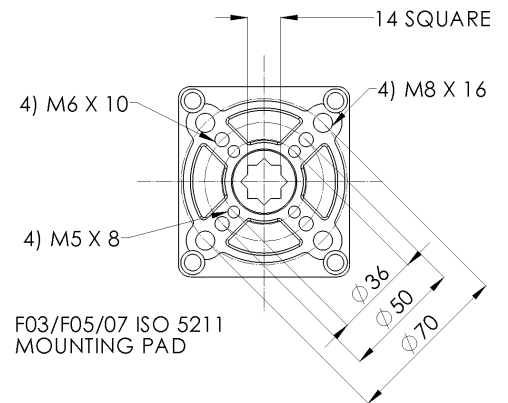
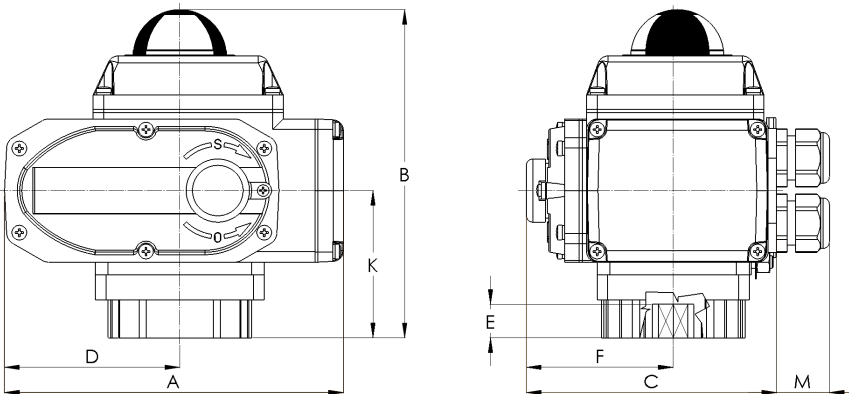
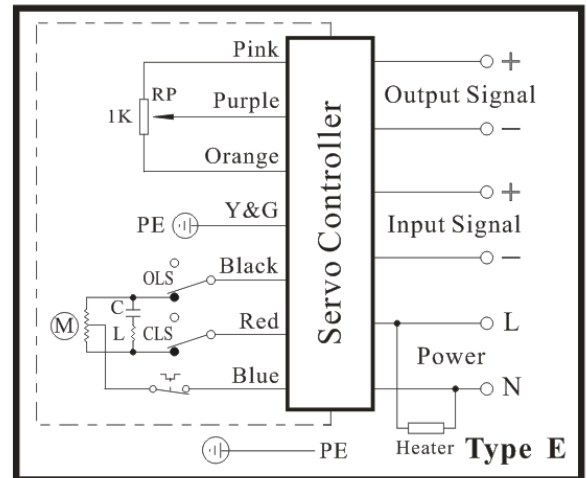


Stock Number		A	B	C	D	E	F	K	M	Weight
561871A	inch	10.06	8.50	6.36	4.76	0.91	3.88	4.09	0.98	20.0 lbs
	mm	255.5	216	161.5	121	23	98.5	104	25	9.0 kg

Specifications	Stock Number <b>561856A</b>
Type Operation	EPS - Electronic Positioning System
Max Torque	50Nm/ 442 in lbs
Voltage	110 VAC 50/60Hz +/-10%
Input Command Signal	4-20mA
Output Monitoring Signal	4-20mA
Current - Full Load Amps	0.27 A
Working Time (0-90°/no load)	20/17 sec
Duty Cycle	70%
Enclosure	Painted aluminum alloy
Enclosure Protection	Type 4X (IP67) weatherproof
Electrical Connections (2)	Cable connector (optional 1/2 NPT)
Working Angle Std°	90°
Temperature Range	-22 to +140 °F (-30 to +60 °C)
Motor Protection	Thermal overload
Motor Limit Switches	2 x SPDT
Anti-condensation Heater	4 watts
Manual Override	Hex wrench
Valve Mounting per ISO5211	F03, F05, F07
Output Drive DIN3337	14mm (female double square)
Weight	6.3 lbs (2.8 kg)



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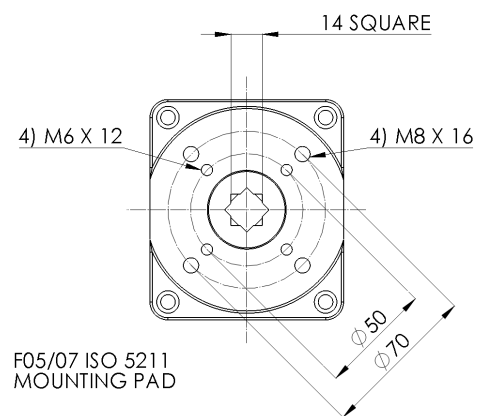
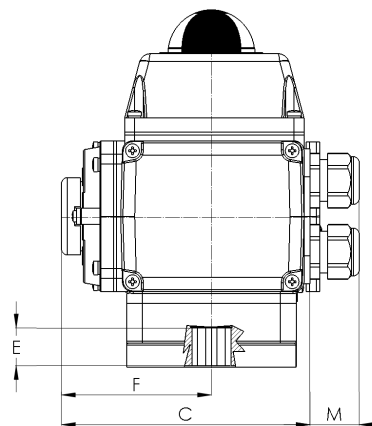
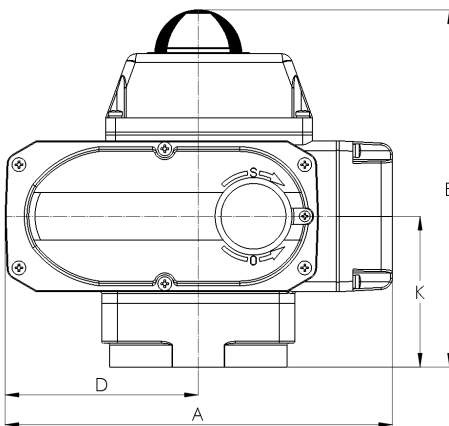
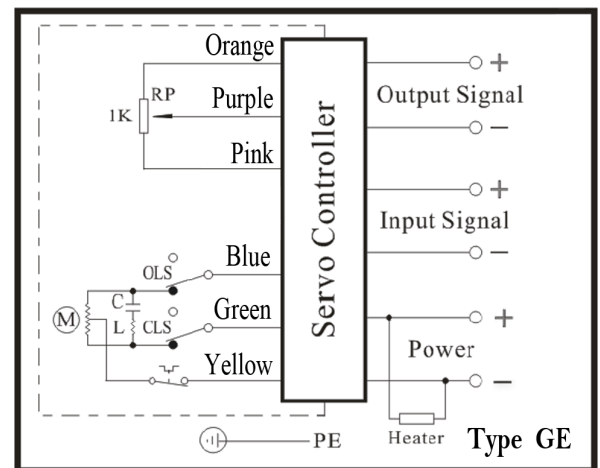


Stock Number		A	B	C	D	E	F	K	M	Weight
<b>561856A</b>	inch	6.34	6.14	4.67	3.27	0.63	2.74	2.76	0.98	6.3 lbs
	mm	161	156	118.5	83	16	69.5	70	25	2.8 kg

Specifications	Stock Number <b>561857A</b>
Type Operation	EPS - Electronic Positioning System
Max Torque	50Nm/ 442 in lbs
Voltage	24 VDC +/-5%
Input Command Signal	4-20mA
Output Monitoring Signal	4-20mA
Current - Full Load Amps	1.00 A
Working Time (0-90°/no load)	30 sec
Duty Cycle	70%
Enclosure	Painted aluminum alloy
Enclosure Protection	Type 4X (IP67) weatherproof
Electrical Connections (2)	Cable connector (optional 1/2 NPT)
Working Angle Std°	90°
Temperature Range	-22 to +140 °F (-30 to +60 °C)
Motor Protection	Thermal overload
Motor Limit Switches	2 x SPDT
Anti-condensation Heater	4 watts
Manual Override	Hex wrench
Valve Mounting per ISO5211	F05, F07
Output Drive DIN3337	14mm (female double square)
Weight	9.0 lbs (4.0 kg)



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and CSA C22.2 No.139



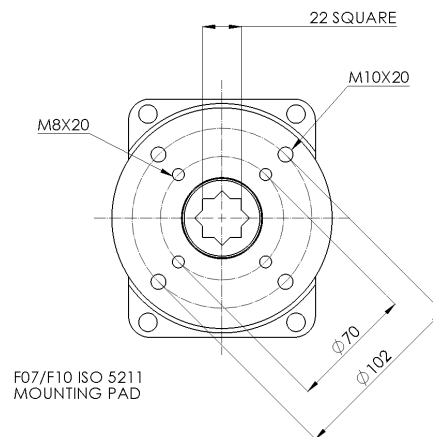
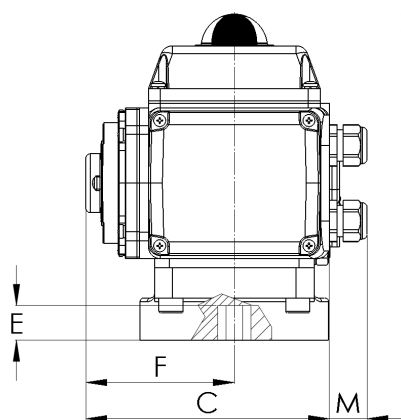
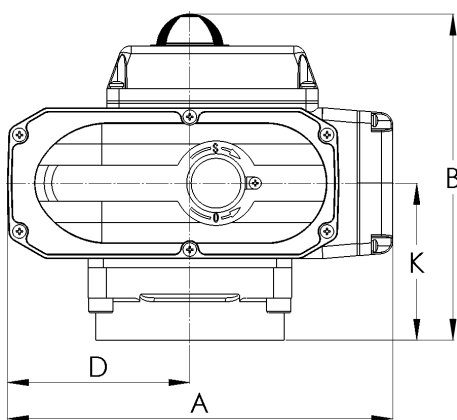
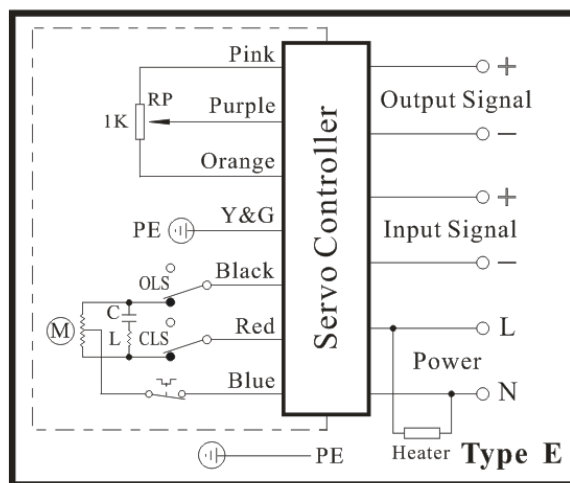
Stock Number		A	B	C	D	E	F	K	M	Weight
561857A	inch	7.74	7.09	4.96	3.86	0.75	2.99	2.99	0.98	9.0 lbs
	mm	196.5	180	126	98	19	76	76	25	4.0 kg



Specifications	Stock Number <b>561876A</b>
Type Operation	EPS - Electronic Positioning System
Max Torque	200Nm/ 1770 in lbs
Voltage	110 VAC 50/60Hz +/-10%
Input Command Signal	4-20mA
Output Monitoring Signal	4-20mA
Current - Full Load Amps	0.73 A
Working Time (0-90°/no load)	30/25 sec
Duty Cycle	70%
Enclosure	Painted aluminum alloy
Enclosure Protection	Type 4X (IP67) weatherproof
Electrical Connections (2)	Cable connector (optional 1/2 NPT)
Working Angle Std°	90°
Temperature Range	-22 to +140 °F (-30 to +60 °C)
Motor Protection	Thermal overload
Motor Limit Switches	2 x SPDT
Anti-condensation Heater	4 watts
Manual Override	Hex wrench
Valve Mounting per ISO5211	F07, F10
Output Drive DIN3337	22mm (female double square)
Weight	20.0 lbs (9.0 kg)



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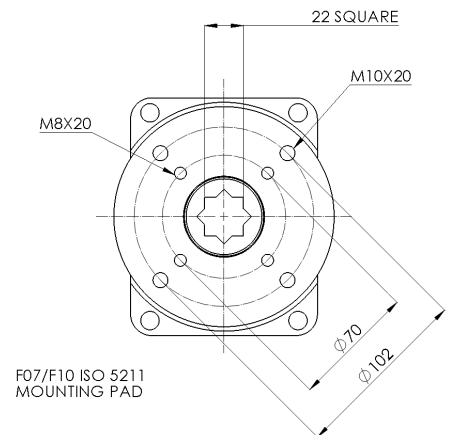
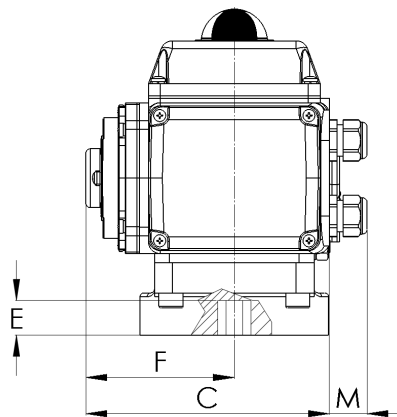
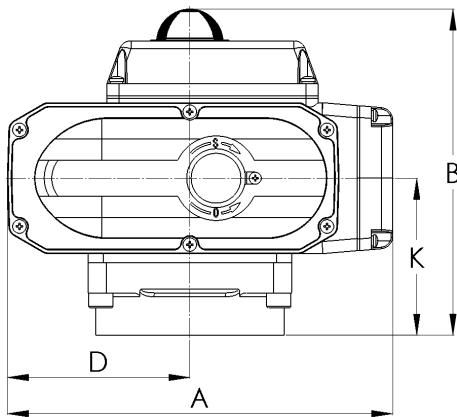
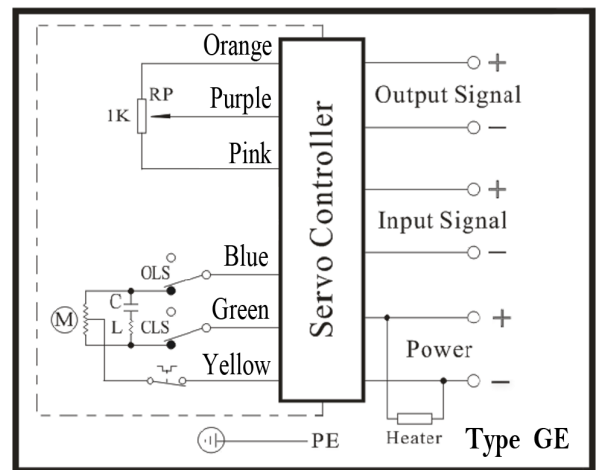


Stock Number		A	B	C	D	E	F	K	M	Weight
561876A	inch	10.06	8.50	6.36	4.76	0.91	3.88	4.09	0.98	20.0 lbs
	mm	255.5	216	161.5	121	23	98.5	104	25	9.0 kg

Specifications	Stock Number <b>561877A</b>
Type Operation	EPS - Electronic Positioning System
Max Torque	200Nm/ 1770 in lbs
Voltage	24 VDC +/-5%
Input Command Signal	4-20mA
Output Monitoring Signal	4-20mA
Current - Full Load Amps	1.70 A
Working Time (0-90°/no load)	30 sec
Duty Cycle	70%
Enclosure	Painted aluminum alloy
Enclosure Protection	Type 4X (IP67) weatherproof
Electrical Connections (2)	Cable connector (optional 1/2 NPT)
Working Angle Std°	90°
Temperature Range	-22 to +140 °F (-30 to +60 °C)
Motor Protection	Thermal overload
Motor Limit Switches	2 x SPDT
Anti-condensation Heater	4 watts
Manual Override	Hex wrench
Valve Mounting per ISO5211	F07, F10
Output Drive DIN3337	22mm (female double square)
Weight	20.0 lbs (9.0 kg)



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Stock Number		A	B	C	D	E	F	K	M	Weight
561877A	inch	10.06	8.50	6.36	4.76	0.91	3.88	4.09	0.98	20.0 lbs
	mm	255.5	216	161.5	121	23	98.5	104	25	9.0 kg