



PROMATION ENGINEERING

Precision Actuation for Industry

Data Sheet

UL(C-F) Series

On/Off/Jog/Proportional/Modbus
 Hazardous Location Class 1 Division II
 5211 F07/F10 8P27mm Driv

Multiple Field Selectable Control Configurations

- 2 wire On/Off/Jog
- Single wire On/Off
- Three Position
- Proportional
 - 4-20mA
 - 2-10VDC
 - 1-5VDC
- MODBUS RTU/TCP



Front Panel LED Status Display

Universal Line Power Input

Supercapacitor for Loss of Power Failsafe Positioning

Torque Range from 600 to 5000 in lbs (68 to 565 Nm)

Hazardous Location Certified
 Class 1 Division II
 Groups A, B, C, D



Specifications	ULC		ULD		ULE		ULF	
Torque "lb/Nm	600"lbs/68Nm		1200"lbs/136Nm		2500"lbs/282Nm		5000"lbs/565Nm	
Supply Voltage	24vac/vdc	100 - 240vac	24vac/vdc	100 - 240vac	24vac/vdc	100 - 240vac	24vac/vdc	100 - 240vac
Max Run Current	3.3A	0.65A	3.3A	0.65A	3.3A	0.65A	3.3A	0.65A
Standby Current Draw	0.47A	0.14A	0.47A	0.14A	0.47A	0.14A	0.47A	0.14A
Motor	Fully Enclosed Stepper Motor							
Runtime (90°)	3-10 sec		7-20 sec		12-36 sec		27-85 sec	
Duty Cycle	100%							
Motor Starts	6000 per hour with +/- 0.5 deg in 360 deg (0.14% Resolution)							
Weight (lbs/kg)	26 / 11.8		26 / 11.8		27 / 12.3		28 / 12.7	
Mechanical Connections	ISO5211 F07 F10, 27 double square female drive							
Electrical Entry	1/2" NPT							
Line Terminations	12-16ga							
Environmental Rating	Hazardous Location Class 1 Division II Groups A, B, C, D - NEMA 4							
Control (Field Selectable)	2 wire On/Off/Jog, Single wire On/Off, Three Position, Proportional, MODBUS RTU/TCP							
Loss of Power	Field Programmable to Drive Motor Drive to Failsafe Position							
Actuator Case Material	Aluminum Alloy, Powder coated							
Multiturn	Multiturn Capability							
Ambient Temperature Operating Range	-40°F to +140°F -40°C to +60°C							

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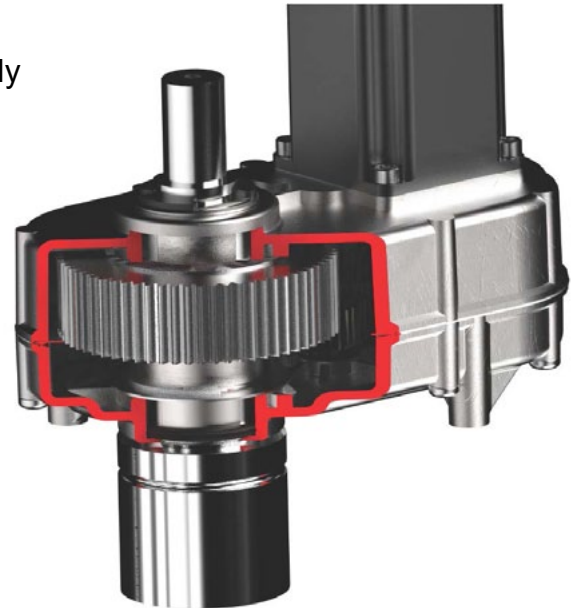


Advanced Electronic Design

- Easy digital end of travel set up for CW and CCW end points
- Set motor speed and cycle time
- Set loss of power and loss of signal position
- Dry Contacts for end of travel and error condition
- Valve status, power backup status, system faults, and service advisories available from main screen

Robust Mechanical Design

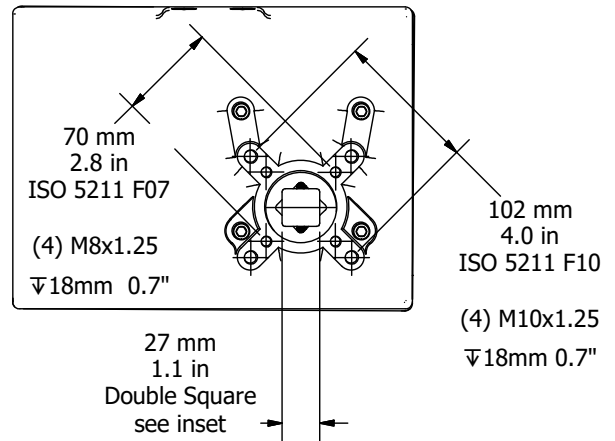
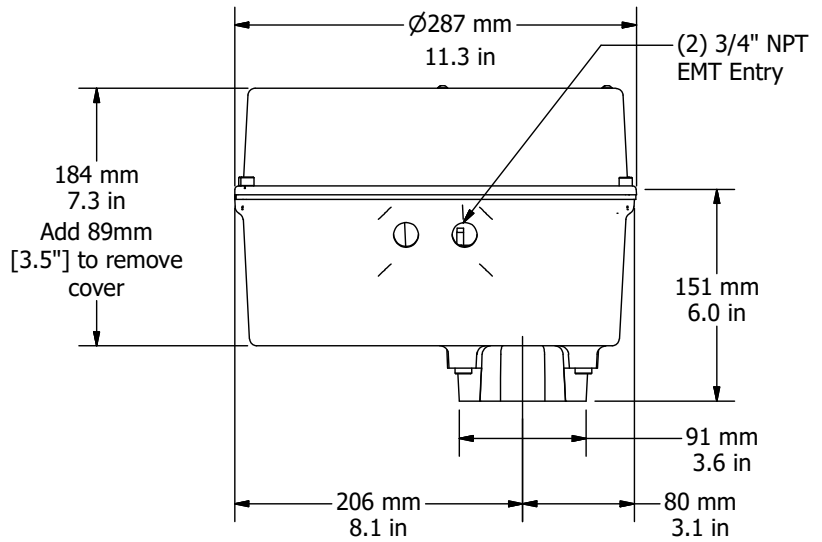
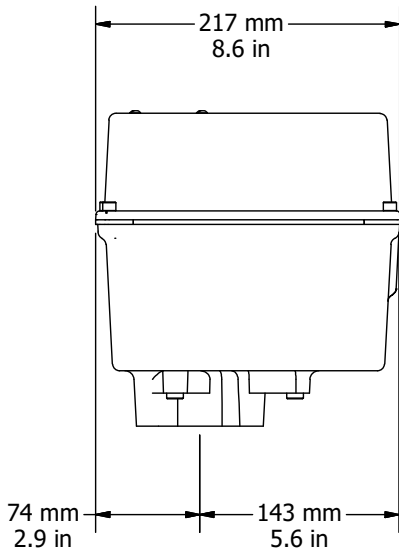
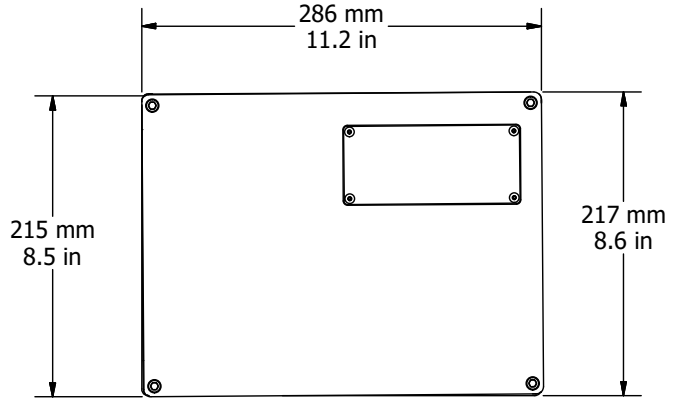
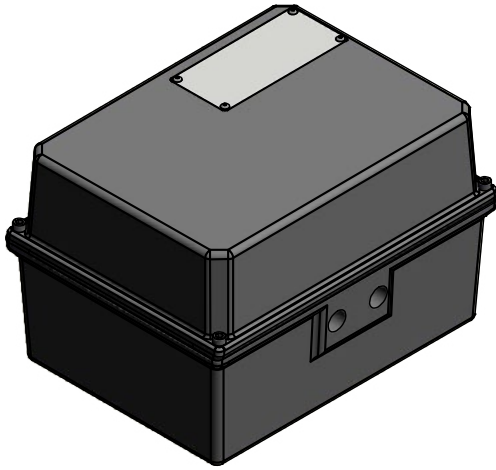
- Permanently lubricated sealed motor and gear assembly
- ± 0.5 Degree Accuracy in 360 degrees rotation (0.14% resolution)
- 100% Duty Cycle and 6000 starts per hour
- Multiturn or 0-270 rotation
- Non-contact position sensing - No mechanical switches or contacts
- NEMA 4 enclosure
- 27mm double square drive with ISO5211 F07 / F10 mounting pattern



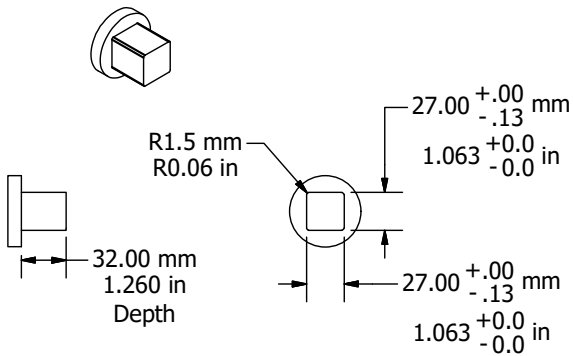
Applications

- Hydrogen / LNG Service
- Heat Exchanger Control and Isolation
- Holding Tank Level Control and Isolation
- LACT Skids
- Oil/Gas Burner Control
- Compressor Intake Control
- Three Phase Separators - Oil, Gas and Water level control valves.
- MultiTurn Valves
- Flare Line Control and Isolation
- High Accuracy Chemical Injection
- Emergency Tunnel Ventilation
- Clean Room HVAC Control and Isolation
- Data Center Backup Fuel Control

Mechanical Drawings

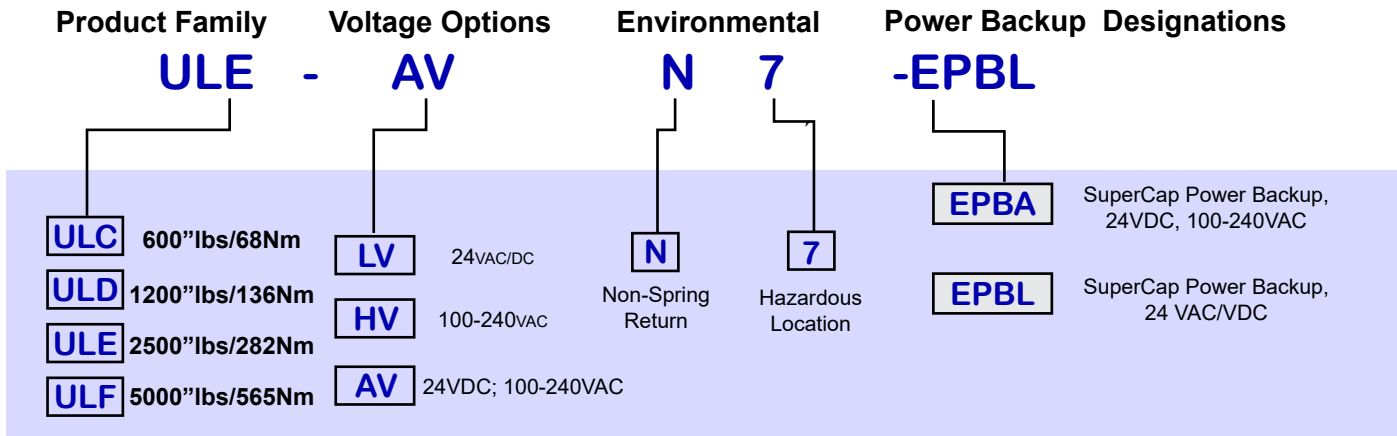


Drive Coupling Fabrication Data



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Product Nomenclature and Descriptions



Note: Not all combinations are possible. Please consult factory.

Item	Torque	Line Power	Power Back-up	Description
ULC-LVN7	600 in lbs (68Nm)	12VDC, 24VDC, 24VAC		U Series Electric Actuator, 600 in lbs/ 68Nm Torque, 3-10 secs 90° rotation, F07/F10 ISO 5211 mount, 27mm double square drive, weight 26lbs/11.8kg, 24VDC or 24VAC line, 3.3A max, On/off or modulating, dry contact end of travel switches, Class I Div 2 Hazardous Location rated
ULC-HVN7	600 in lbs (68Nm)	110-240 VAC		U Series Electric Actuator, 600 in lbs/ 68Nm Torque, 3-10 secs 90° rotation, F07/F10 ISO 5211 mount, 27mm double square drive, weight 26lbs/11.8kg, 110 to 230VAC line, 0.65A Max, On/off or modulating, dry contact end of travel switches, Class I Div 2 Hazardous Location rated
ULC-LVN7-EPBL	600 in lbs (68Nm)	12VDC, 24VDC, 24VAC	Yes	U Series Electric Actuator, 600 in lbs/ 68Nm Torque, 3-10 secs 90° rotation, F07/F10 ISO 5211 mount, 27mm double square drive, weight 26lbs/11.8kg, Drive to safe position on power loss, 24VDC or 24VAC line, 3.3A max, On/off or modulating, dry contact end of travel switches, Class I Div 2 Hazardous Location rated
ULC-AVN7-EPBA	600 in lbs (68Nm)	24VDC/ AC , 110-240VAC	Yes	U Series Electric Actuator, 600 in lbs/ 68Nm Torque, 3-10 secs 90° rotation, F07/F10 ISO 5211 mount, 27mm double square drive, weight 26lbs/11.8kg, Drive to safe position on power loss, 24VDC or 24VAC line, 3.3A max, or 110 to 230VAC line, 0.65A Max, On/off or modulating, dry contact end of travel switches, Class I Div 2 Hazardous Location rated
ULD-LVN7	1200 in lbs (136Nm)	12VDC, 24VDC, 24VAC		U Series Electric Actuator, 1200 in lbs/ 136Nm Torque, 7-20 secs 90° rotation, F07/F10 ISO 5211 mount, 27mm double square drive, weight 26lbs/11.8kg, 24VDC or 24VAC line, 3.3A max, On/off or modulating, dry contact end of travel switches, Class I Div 2 Hazardous Location rated
ULD-HVN7	1200 in lbs (136Nm)	110-240 VAC		U Series Electric Actuator, 1200 in lbs/ 136Nm Torque, 7-20 secs 90° rotation, F07/F10 ISO 5211 mount, 27mm double square drive, weight 26lbs/11.8kg, 110 to 230VAC line, 0.65A Max, On/off or modulating, dry contact end of travel switches, Class I Div 2 Hazardous Location rated
ULD-LVN7-EPBL	1200 in lbs (136Nm)	12VDC, 24VDC, 24VAC	Yes	U Series Electric Actuator, 1200 in lbs/ 136Nm Torque, 7-20 secs 90° rotation, F07/F10 ISO 5211 mount, 27mm double square drive, weight 26lbs/11.8kg, Drive to safe position on power loss, 24VDC or 24VAC line, 3.3A max, On/off or modulating, dry contact end of travel switches, Class I Div 2 Hazardous Location rated
ULD-AVN7-EPBA	1200 in lbs (136Nm)	24VDC/ AC , 110-240VAC	Yes	U Series Electric Actuator, 1200 in lbs/ 136Nm Torque, 7-20 secs 90° rotation, F07/F10 ISO 5211 mount, 27mm double square drive, weight 26lbs/11.8kg, Drive to safe position on power loss, 24VDC or 24VAC line, 3.3A max, or 110 to 230VAC line, 0.65A Max, On/off or modulating, dry contact end of travel switches, Class I Div 2 Hazardous Location rated

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Product Nomenclature and Descriptions (cont)

Item	Torque	Line Power	Power Back-up	Description
ULE-LVN7	2500 in lbs (282Nm)	12VDC, 24VDC, 24VAC		U Series Electric Actuator, 2500 in lbs/ 282Nm Torque, 12-36 secs 90° rotation, F07/F10 ISO 5211 mount, 27mm double square drive, weight 27lbs/12.3kg, 24VDC or 24VAC line, 3.3A max, On/off or modulating, dry contact end of travel switches, Class I Div 2 Hazardous Location rated
ULE-HVN7	2500 in lbs (282Nm)	110-240 VAC		U Series Electric Actuator, 2500 in lbs/ 282Nm Torque, 12-36 secs 90° rotation, F07/F10 ISO 5211 mount, 27mm double square drive, weight 27lbs/12.3kg, 110 to 230VAC line, 0.65A Max, On/off or modulating, dry contact end of travel switches, Class I Div 2 Hazardous Location rated
ULE-LVN7-EPBL	2500 in lbs (282Nm)	12VDC, 24VDC, 24VAC	Yes	U Series Electric Actuator, 2500 in lbs/ 282Nm Torque, 12-36 secs 90° rotation, F07/F10 ISO 5211 mount, 27mm double square drive, weight 27lbs/12.3kg, Drive to safe position on power loss, 24VDC or 24VAC line, 3.3A max, On/off or modulating, dry contact end of travel switches, Class I Div 2 Hazardous Location rated
ULE-AVN7-EPBA	2500 in lbs (282Nm)	24VDC/ AC , 110-240VAC	Yes	U Series Electric Actuator, 2500 in lbs/ 282Nm Torque, 12-36 secs 90° rotation, F07/F10 ISO 5211 mount, 27mm double square drive, weight 27lbs/12.3kg, Drive to safe position on power loss, 24VDC or 24VAC line, 3.3A max, or 110 to 230VAC line, 0.65A Max, On/off or modulating, dry contact end of travel switches, Class I Div 2 Hazardous Location rated
ULF-LVN7	5000 in lbs (565Nm)	12VDC, 24VDC, 24VAC		U Series Electric Actuator, 5000 in lbs/ 565Nm Torque, 27-85 secs 90° rotation, F07/F10 ISO 5211 mount, 27mm double square drive, weight 28lbs/12.7kg, 24VDC or 24VAC line, 3.3A max, On/off or modulating, dry contact end of travel switches, Class I Div 2 Hazardous Location rated
ULF-HVN7	5000 in lbs (565Nm)	110-240 VAC		U Series Electric Actuator, 5000 in lbs/ 565Nm Torque, 27-85 secs 90° rotation, F07/F10 ISO 5211 mount, 27mm double square drive, weight 28lbs/12.7kg, 110 to 230VAC line, 0.65A Max, On/off or modulating, dry contact end of travel switches, Class I Div 2 Hazardous Location rated
ULF-LVN7-EPBL	5000 in lbs (565Nm)	12VDC, 24VDC, 24VAC	Yes	U Series Electric Actuator, 5000 in lbs/ 565Nm Torque, 27-85 secs 90° rotation, F07/F10 ISO 5211 mount, 27mm double square drive, weight 28lbs/12.7kg, Drive to safe position on power loss, 24VDC or 24VAC line, 3.3A max, On/off or modulating, dry contact end of travel switches, Class I Div 2 Hazardous Location rated
ULF-AVN7-EPBA	5000 in lbs (565Nm)	24VDC/ AC , 110-240VAC	Yes	U Series Electric Actuator, 5000 in lbs/ 565Nm Torque, 27-85 secs 90° rotation, F07/F10 ISO 5211 mount, 27mm double square drive, weight 28lbs/12.7kg, Drive to safe position on power loss, 24VDC or 24VAC line, 3.3A max, or 110 to 230VAC line, 0.65A Max, On/off or modulating, dry contact end of travel switches, Class I Div 2 Hazardous Location rated

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