

Dear Perspective Bidder,

Please see Attachments for Request for Quotation # 160061 and Specifications for Valve Actuator - City of Oak Ridge, TN.

Sealed Bid Date – October 18, 2018 at 2:15 p.m., Local Time

SPECIAL NOTICE TO BIDDERS

1. State, local and use taxes are not applicable.
2. If quoting an Equal or Substitute, provide complete product description and specifications, including manufacturer, model number, etc. and provide necessary back-up literature if applicable.
3. YOUR QUOTATION MUST INCLUDE THE FOLLOWING (see top left corner page 1):
 - **Vendor Name**
 - **Payment Terms**
 - **F.O.B.**
 - **Delivery date (delivery date may be a factor in the award process)**
 - **Quote delivered price F.O.B. Oak Ridge or notate ESTIMATED freight charges**
 - **Authorized signature**
4. Envelope must be sealed, show request number and bid date on front of the envelope and addressed to:

<u>By Regular Mail:</u>	<u>In Person or By Overnight Delivery:</u>
Attn: Lyn Majeski Finance Department City of Oak Ridge P.O. Box 1 Oak Ridge, TN 37831-0001	Attn: Lyn Majeski Finance Department City of Oak Ridge 100 Woodbury Lane Oak Ridge, TN 37830
5. The City of Oak Ridge reserves the right to reject all or any part of any quotation submitted.
6. Your bid must be in our possession no later than: 2:15 P.M. 10/18/18
7. All questions regarding this requisition must be emailed to Lyn Majeski lmajeski@oakridgetn.gov by 8:00 a.m. local time, Monday, October 15, 2018.

Vendor Name: _____
Payment Terms: _____
F.O.B.: _____
Delivery Date: _____
Ship Via: _____
Signature: _____

SHIP City of Oak Ridge - Materials Management
TO 100 Woodbury Lane / P.O. Box 1
Oak Ridge, TN 37830
(865) 425-1819 FAX (865) 482-8475
Lyn Majeski lmajeski@oakridgetn.gov

Ordered - 10/08/18
Requested - 10/18/18

Description / Supplier Item	UM	Unit Cost	Extension	Req. Dt
VALVE ACTUATOR PER ATTACHED SPECIFICATIONS	1.	EA	EA	10/08/18

Total Order

The IQM Range of 3-phase modulating electric actuators includes:

- Double-sealed watertight enclosure to BS EN IEC60529, IP68/IP66 and NEMA type 4&6.
- Three phase low inertia squirrel cage motor, class F insulation, incorporating thermostat protection.
- Syncrophase, auto phase rotation correction and lost phase protection.
- Solid state reversing starter, user selectable thyristor controlled dynamic braking available.
- Suitable for up to 1200 starts per hour.
- Integral illuminated, digital valve position indicator showing 0.1% increments in valve position with closed and open valve limit symbols, torque or other status data.
- Three LED's for local indication; red-open, yellow-intermediate, green-closed (can be reversed), blinker configurable.
- Red, padlockable Local Control/Stop/Remote Control selector, Black, Open/Close selector.
- Padlockable manual override clutch lever, clockwise to close handwheel, non-rotating during electric operation.
- Non-intrusive limit setting, commissioning and control configuration using the supplied Infra-red/Bluetooth Setting Tool.
- Adjustable electronic torque switches 40% to 100% of rated.
- Logging and display of operational events and trends including motor starts and valve torque profiles.
- Asset Management Log and display options including valve/actuator/gearbox data and configurable service alarms.
- Externally and internally sealed terminal enclosure with three threaded cable entries.
- Polyester powder coating applied by electrostatic means to 100 micron nominal thickness.
- POSITION SENSOR: Absolute encoder provides continuous high resolution position measurement which is fully maintained during manual operation and without a power supply or battery support.
- BATTERY SUPPORT - POWER OFF CONDITIONS: The battery is not required for position sensing it does however support the LCD display, operation of indication relays, commissioning and data logging functions in the absence of mains power.

The IQ Range of 3-phase electric actuators includes:

- Double-sealed watertight enclosure to BS EN IEC60529, IP68/IP66 and NEMA type 4&6.
- Three phase low inertia squirrel cage motor, class F insulation, incorporating thermostat protection.
- Syncrophase, auto phase rotation correction and lost phase protection.
- Integral electrically and mechanically interlocked reversing contactors, suitable for up to 60 starts/hour.
- Drive incorporating lost motion 'hammer-blow', for releasing sticking valves.
- Integral illuminated, digital valve position indicator showing 0.1% increments in valve position with closed and open valve limit symbols, torque or other status data.
- Three LED's for local indication; red-open, yellow-intermediate, green-closed (can be reversed), blinker configurable.
- Red, padlockable Local Control/Stop/Remote Control selector, Black, Open/Close selector.
- Padlockable manual override clutch lever, clockwise to close handwheel, non-rotating during electric operation
- Non-intrusive limit setting, commissioning and control configuration using the supplied Infra-red/Bluetooth Setting Tool.
- Adjustable electronic torque switches 40% to 100% of rated.
- Logging and display of operational events and trends including motor starts and valve torque profiles.

- Asset Management Log and display options including valve/actuator/gearbox data and configurable service alarms
- Externally and internally sealed terminal enclosure with three threaded cable entries.
- Polyester powder coating applied by electrostatic means to 100 micron nominal thickness.
- POSITION SENSOR: Absolute encoder provides continuous high resolution position measurement which is fully maintained during manual operation and without a power supply or battery support.
- BATTERY SUPPORT - POWER OFF CONDITIONS: The battery is not required for position sensing it does however support the LCD display, operation of indication relays, commissioning and data logging functions in the absence of mains power.

The IQT3 Range of electric actuators includes:

- ENCLOSURE: Actuator terminal compartment is sealed internally and externally 'Double-Sealed' watertight to IEC/BS EN 60529, IP66/IP68 - 20 metres/10 days
- TEMPERATURE: -30° C to 70° C (-22° F to 158° F) subject to hazardous area certification where applicable.
- SERVICE/DUTY RATING: Class A (On/Off), Class B (Inching), nominal 60 Starts at a rate not exceeding 600 starts per hour. 15 minutes rated based on a nominal torque of 33% of rated.
- MOTOR SWITCHING & SPEED CONTROL: Solid state motor switching incorporating 25% to 100% motor speed control.
- SYNCROPHASE: Auto Phase rotation correction and lost phase protection on three phase supplies.
- Integral illuminated, digital valve position indicator showing 0.1% increments in valve position with closed and open valve limit symbols, torque or other status data.
- Three LED's for local indication; red-open, yellow-intermediate, green-closed (can be reversed), blinker configurable.
- Red, padlockable Local Control/Stop/Remote Control selector, Black, Open/Close selector.
- Padlockable manual override clutch lever, clockwise to close handwheel, non-rotating during electric operation
- BATTERY SUPPORT - POWER OFF CONDITIONS: The battery is not required for position sensing it does however support the LCD display, operation of indication relays, commissioning and data logging functions in the absence of mains power.
- POSITION SENSOR: Absolute encoder provides continuous high resolution position measurement which is fully maintained during manual operation and without a power supply or battery support.
- Externally and internally sealed terminal enclosure with two threaded cable entries.
- Non-intrusive limit setting, commissioning and control configuration using the supplied Infra-red/Bluetooth Setting Tool.
- PAINT FINISH: Polyester powder coating applied by electrostatic means to 100 micron nominal thickness. Top coat colour 00-A-05 (silver grey).

Electric actuators shall include the following:

Drive Bush Machining
Pakscan FCU

Bid Sheet

Valve Actuators:

Drum Screen	IQM12 FA10 B4 [IP68] 21RPM 480/3/60 + IB4/FA10/2:1 A2	200K2000	76	74	2.00
Drum Screen	IQ20 FA14 A [IP68] 57RPM 480/3/60	100K2000	150	60	3.00
UV	IQ12 FA10 B4 [IP68] 86RPM 480/3/60 + IB4/FA10/2:1 A2	100K2000	60	60	2.00
UV	IQ20 FA14 A [IP68] 43RPM 480/3/60	100K2000	150	60	1.00
Pipe Gallery	IQT1000 FA12 [IP68] 120/1/60	300K2000	738	30	1.00
Force Main Tie	IQ12 FA10 B4 [IP68] 43RPM 480/3/60 + IW6R/FA16/210:1	100K2000	3943	73	1.00
Pipe Gallery	IQT1000 FA12 [IP68] 120/1/60	300K2000	738	30	1.00
Pipe Gallery	IQ12 NR B4 [IP68] 57RPM 480/3/60 + IW/D6R/FA16/210:1	100K2000	3310	55	2.00
Filter	IQ10 FA10 B4 [IP68] 21RPM 480/3/60 + IW4R/FA12/210:1	100K2000	1655	146	6.00
Filter Gallery	IQ12 FA10 B4 [IP68] 57RPM 480/3/60 + IW6R/FA16/210:1	100K2000	3310	55	1.00
Filter Gallery	IQ12 FA10 B4 [IP68] 21RPM 480/3/60 + IW6R/FA16/210:1	100K2000	3943	146	4.00

USD