

Actuators and Controls




The Trusted, Passionate and focused Partner in Valve Automation

At VTM, The founding principle of VTM is simple: to Listen our customers needs first, to develop the innovative valve actuators solutions , to meet the unique needs of our customers, Along the way, To help our customers to solve the problems in Valve Automation. We are growing our brand in Pneumatic and Electric Actuators, Accessories..



WHY WE ARE DIFFERENT

We offer a complete valve automation solution by the applications experience and customization capabilities, with an experienced support team to guide you in selection, installation, and project support. In addition we maintain an extensive supply of product inventory on hand so that we can quickly fulfill orders and reduce wait times. Our sales and support staff are readily available and accessible so that customers get the answers they need quickly.

-  Experienced team
-  Large inventory
-  Convenient consultation

THE TARGET WE ARE PURSUING



- To built A strong Reputation in Providing Quality, Cost Effective , Reliable And Robust Performance Solutions for Valve Automation,
- Included Pneumatic Actuators, Electrically Actuators, Actuated Valves.

COMMITMENT TO QUALITY

At VTM means performance, All products manufactured by VTM are warranted against defects in material and workmanship for a period of 18 months from the day of startup. Each of our products are tested at the factory. we are confident that our products meet or exceed all applicable standards before they ever leave our facility. We are an ISO 9001-2015 certified company. Our Valve Actuators Has Applied for CE, Explosion-proof Certificate, IP67 Weather proof etc....



Electric Actuator Quarter-Turn Design

Description

I & IM Series Quarter-Turn Electric Actuator is used for controlling 0270 degree Rotation valves and other similar products, such as butterfly valve, ball valve, damper, flapper valve, cock valve etc...It widely applies to petroleum, chemical, water treatment, shipping, peper, making, power plant and other industries.

Driven by 380V/220V/110VAC OR 24V/110VDC Power,Inputs 4e-20mA Or 0.40 VDC control signal,Moves valve to the right position, and achieve to automatic control.The Maximum output toque is 2000 N.m

Main Product features

Designed for small quarter-turn applications.

Protection class to IP67, NEMA4 and 6

The Actuator can automate the valves requiring up to 270 degree rotation.To help protect the components and extend the actuator's life, an anti-condensation A thermal protector is provided to protect the motor from over heating.

Performance features

| | |
|-----------------------|--|
| Function | On/Off or Modulating |
| Material | |
| Housing | Aluminum alloy, epoxy powder coated |
| Gear | Steel / aluminum bronze |
| Screws | Stainless steel |
| Indicator Cover | Polycarbonate |
| Shaft / Adaptor | Alloy steel |
| Seal | NBR |
| Lubrication | Aluminum based grease |
| Technical Data | |
| Power Supply | 24VDC, 110VAC, 220VAC |
| Motor | Squirrel cage asynchronous motor |
| Limit Switch | SPDT, 250VAC10A, each for Open and Close positions |
| Rotation | 90o (± 10o) other rotation on request |
| Manual Operation | Mechanical handle standard |
| Conduit Entry | 2 x M18 |
| Operating Temp | -20oC to +70oC |
| Ambient Humidity | Max. 90% RH |
| Vibration Tested | XYZ10g, 0.2~34Hz, 30 minutes |
| Mounting | ISO5211 |
| Torque Output | 30 Nm to 1000 Nm (2000 Nm on request) |
| Self-locking device | Self-locking by worm and worm gear |

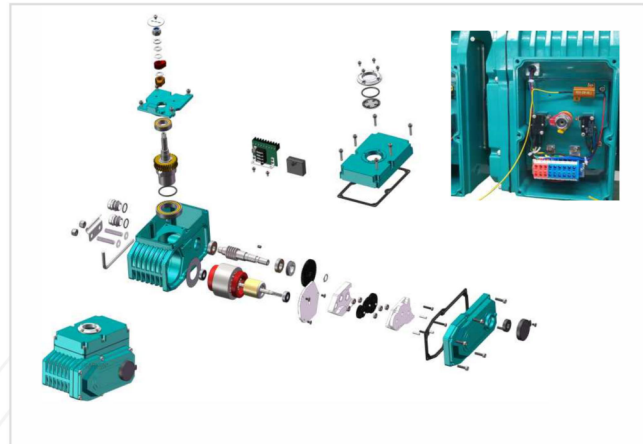
Standard & Technical datas

| | |
|-------------------|---------------------------------------|
| Indicator | Dome Type(Option: LED Light Inside) |
| Ambient Temp | -20°C~+70°C |
| Limit Switches | 2 open/close+dry contact 2 open/close |
| Manual Operation | Hex key (Option: Handwheel) |
| Space Heater | 5W(110/230VAC,24VDC) |
| Lubrication | Aluminum base grease(EP type) |
| Surface Treatment | Anodizing |



Testing For All Actuators

All actuators manufactured by VTM are individually tested, Testing is carried out to check the leakage in both internal and external,The angle of rotation and Torque values.All bodies are stamped with year,month of production,size and serial number.



Options Available

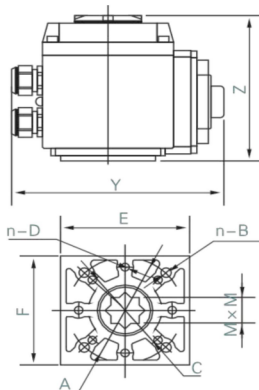
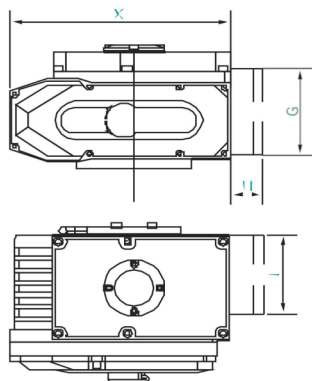
| |
|---|
| Space Heater, 7 ... 10W (110/220VAC)* |
| Stall Protection, internal overheating protection, open @ 120oC / close @ 97oC (± 5oC)* |
| Position Feedback Potentiometer (1K ... 10K)* |
| Position Feedback Sensor with Current output (4 ... 20mA)* |
| Proportional Control Unit for modulating control (input/output signal, 4 ... 20mA, 1 ... 5 VDC, 1 ... 10VDC)* |
| Field control unit (Local control open/stop/close switch, Local/remote control switch)* |
| Power Failure Self Reset |

| | |
|------------------|-----------------------------------|
| Enclosure | Waterproof Level IP67,NEMA4 and 6 |
| Power Supply | AC110/220V 1PH±10% 50/60HZ.DC24V |
| Travel Angle | 90°±5°(Extension up to 270°) |
| Self Locking | Provide self locking by worm gear |
| Conduit entries | 2PF 1/2"(Option:M20x1.5,NPT1/2") |
| External Coating | Dry powder, epoxy polyester |
| Material | Aluminum Alloy,Steel,Alloy Bronze |

Technical Parameter and Specifications (On/Off or Modulating Version)

| Model | Max Output Torque (N.M) | Operating Time 90°(Sec.) 220VAC/ 24VDC | Drive Shaft(mm) | | | | Motor (W) 220V/ 24VDC | Single-phase rated current(A) 220VAC / 24VDC | Weight (kg) | Flange Size |
|--------------|-------------------------|---|-----------------|--------------|-------------------|------|--------------------------|---|-------------|-------------|
| | | | Square | Deep | Round | Deep | | | | |
| I-03/IM-03 | 30N.m | 10/ | 9X9 11X11 | 13.5 15.5 | Ø12.6 | 26 | 8 | 0.15/ | 2.1 | F03/F05 |
| I-03/IM-05 | 50N.m | 30/15 | 11X11 14X14 | 15.5 18 | Ø12.6 | 26 | 10 | 0.25/2.2 | 3.6 | F05/F07 |
| I-08/IM-08 | 80N.m | 30/15 | 11X11 14X14 | 15.5 18 | Ø15.78 | 26 | 10 | 0.25/2.2 | 3.6 | F05/F07 |
| I-10/IM-10 | 100N.m | 30/15 | 14X14 17X17 | 18 22.5 | Ø15.78 Ø 18.95 | 28 | 15 | 0.35/3.5 | 4.6 | F05/F07 |
| I-15/IM-15 | 150N.m | 30/15 | 14X14 17X17 | 18 22.5 | Ø18.95 | 28 | 15 | 0.37/3.5 | 4.6 | F05/F07 |
| I-20/IM-20 | 200N.m | 30/15 | 22X22 | 26 | Ø22.13 | 45 | 45 | 0.3/7.2 | 8.9 | F07/F10 |
| I-40/IM-40 | 400N.m | 30/15 | 22X22 | 26 | Ø28.48 | 45 | 60 | 0.33/7.2 | 8.9 | F07/F10 |
| I-60/IM-60 | 600N.m | 30/15 | 27X27 | 32.5 | Ø31.65 | 45 | 90 | 0.33/7.2 | 9.3 | F07/F10 |
| I-80/IM-80 | 800N.m | 40/20 | 27X27 | 32.5 | Ø31.65 | 45 | 180 | 0.47/11 | 14.3 | F10/F12 |
| I-100/IM-100 | 1000N.m | 40/20 | 27X27 | 32.5 | Ø31.65 | 45 | 180 | 0.47/11 | 14.5 | F10/F12 |
| I-200/IM-200 | 2000N.m | 44/22 | 27X27 | 32.5 | Ø31.65 | 45 | 180 | 1.5/15 | 14.5 | F10/F12 |

Dimension in mm



ISO5211
Mounting Interface

Basic Actuator Outline Dimension(Unit:mm)

Electric Rotary Actuator with Proportional



4-20mA Input&output

| MODEL | X | Y | Z | A | N-B | C | N-D | E | F | G | H | I | MXM |
|--------------|-----|-----|-----|------|-------|------|-------|-----|-----|-----|----|-----|----------------|
| I-03/IM-03 | 123 | 100 | 115 | Ø50 | 4-M8 | Ø36 | 4-M6 | 50 | 50 | 114 | 40 | 150 | 9X9 11X11 |
| I-03/IM-05 | 161 | 121 | 125 | Ø70 | 4-M8 | Ø50 | 4-M6 | 66 | 66 | 114 | 40 | 150 | 11X11 14X14 |
| I-08/IM-08 | 188 | 145 | 127 | Ø70 | 4-M8 | Ø50 | 4-M6 | 100 | 90 | 114 | 40 | 150 | 11X11 14X14 |
| I-10/IM-10 | 188 | 145 | 127 | Ø70 | 4-M8 | Ø50 | 4-M6 | 100 | 90 | 114 | 40 | 150 | 14X14 17X17 |
| I-15/IM-15 | 188 | 145 | 127 | Ø70 | 4-M8 | Ø50 | 4-M6 | 100 | 90 | 114 | 40 | 150 | 14X14 |
| I-20/IM-20 | 233 | 170 | 153 | Ø102 | 4-M12 | Ø70 | 4-M10 | 140 | 130 | 114 | 40 | 150 | 17X17 |
| I-40/IM-40 | 233 | 170 | 153 | Ø102 | 4-M12 | Ø70 | 4-M10 | 140 | 130 | 114 | 40 | 150 | 22X22 |
| I-60/IM-60 | 233 | 170 | 153 | Ø102 | 4-M12 | Ø70 | 4-M10 | 140 | 130 | 114 | 40 | 150 | 22X22 |
| I-80/IM-80 | 268 | 255 | 164 | Ø125 | 4-M12 | Ø102 | 4-M10 | 140 | 130 | 114 | 40 | 150 | 27X27 |
| I-100/IM-100 | 268 | 255 | 164 | Ø125 | 4-M12 | Ø102 | 4-M10 | 140 | 130 | 114 | 40 | 150 | 27X27 |

V.A. VALVES

ISO 9001:2015 CERTIFIED

Regd. Office & Works : Udyog Nagar,
Gadaipur Industrial Zone, Jalandhar - 144004

Phone : +91-181-2601540, 2601541; Fax : +91-181-2601741

E-Mail : vavalves@vtm-utam.com, info@fedreflowmeters.com

Website : www.vtm-utam.com, www.fedreflowmeters.com

Due to continuous development program, design and data in this leaflet are subject to change without prior notice.

Authorized Stockist

Our associates:



PIONEERING FLUID CONTROLS