



 **paladon**  
AMERICAS



**QUARTER-TURN ELECTRIC ACTUATORS**

## PRODUCT FEATURES & BENEFITS

### Sizes: QTE-1.5 / QTE-3.0 / QTE-6.0

- Motor — split-phase, capacitor driven; 25% Duty cycle 24/115/230VAC, 80% Duty Cycle 12/24 VDC
- Gearing — hardened steel, machine cut spur gears
- Enclosure — Nema 4/4X
- Manual Operation — wrench operated drive shaft, or optional handwheel
- Limit Switches — 1 each, SPDT at each end of travel
- **Common Options:**
  - Positioning controls (4-20mA)
  - Anti-condensation or low temperature heaters
  - 2 additional limit switches
  - Other options available — consult your Paladon sales representative

### Sizes: QTE-10 thru QTE-300

- Motor — squirrel cage induction motor with embedded thermostat
- Main Power — Single phase 110/220V; Three phase 220/440/460/480V
- Housing — durable, compact and corrosion-resistant Aluminum alloy.
- Enclosure — standard rating to IP68 (submergence to 25 feet for 72 hours)
- Position Indication — continuous (0-100%) dial-type indicator; optional LCD display with integral control unit
- Limit Switches — 2 each, N.O./N.C., easily screwdriver adjustable
- Torque Switches — for Open and Close directions
- Manual Operation — side-mounted handwheel with automatic declutch lever for ease of operation
- Anti-condensation space heater — THERMISTOR type
- **Common Options:**
  - Integral control unit with non-intrusive push buttons, LED lamps, mechanically and electrically interlocked reversing contactor, phase discriminator, monitor relay and double-sealed terminal block
  - Automatic phase correction also available
  - Explosion Proof Enclosure to Class 1 / Div. 1 / Group C or D (Exd IIBT4)
  - Actuators meet AWWA requirements for Electric Motor Operators
  - Modulating analog and digital available
  - Other options available — consult your Paladon sales representative

## AT A GLANCE

- Light, compact and corrosion resistant aluminum alloy enclosure.
- Double sealed with V-shape ring and gasket to ensure IP68, 25 FT, 72 hours.
- Optional Explosion proof: Exd IIB, T4-IEC-60079-0,1.
- Optional Integral Control Module
- Optional Communication Standard: Modbus RTU, PROFIBUS-DP, Foundation Fieldbus, HART (Integral Control Module required)

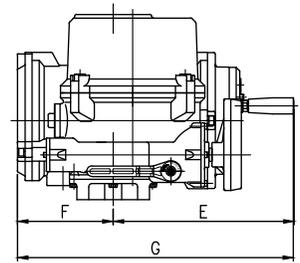
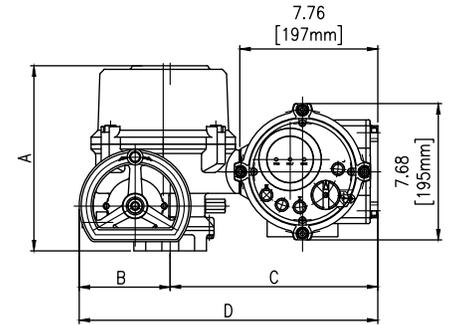


# DIMENSIONS

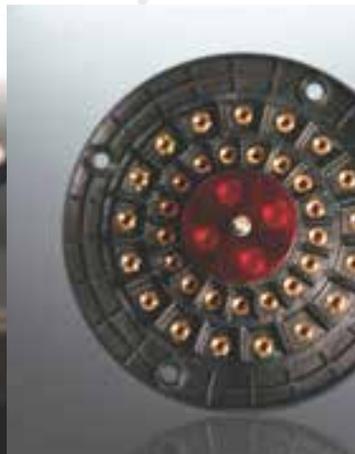
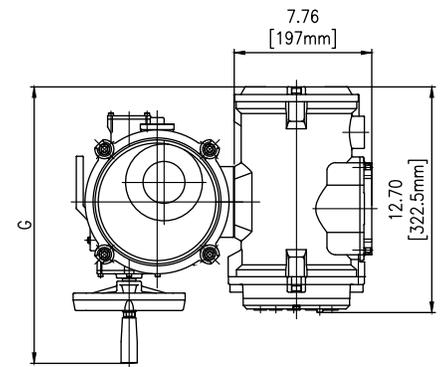
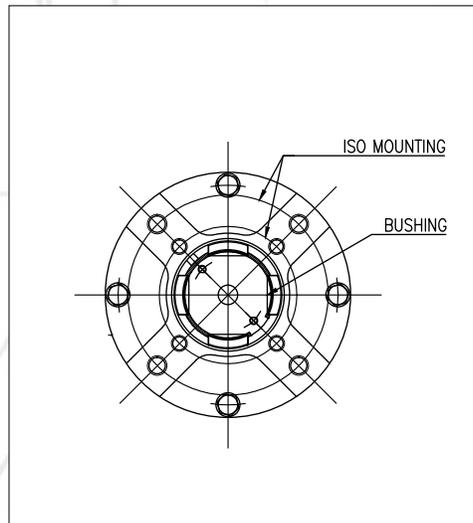
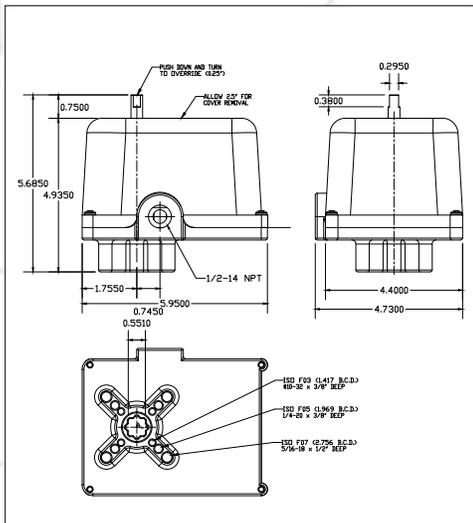
## Models QTE-10 to QTE-300

QTE-Series	Mounting Flange	Tap	A	B	C	D	E	F	G
	ISO/SAE	Depth	mm/in.	mm/in.	mm/in.	mm/in.	mm/in.	mm/in.	mm/in.
10	F05/F07	M6/M8	217 mm	117 mm	n/a	n/a	236 mm	n/a	n/a
	Ø1.969/Ø2.756	10/12	8.54"	4.61"	n/a	n/a	9.29"	n/a	n/a
20	F07/F10	M8/M10	265 mm	130 mm	296 mm	426 mm	258 mm	137 mm	395 mm
	Ø2.756/Ø4.016	12/15	10.43"	5.12"	11.65"	16.77"	10.16"	5.39"	15.55"
40	F10/F12	M10/M12	287 mm	175 mm	288 mm	463 mm	272 mm	136 mm	408 mm
	Ø4.016/Ø4.921	15/18	11.30"	6.89"	11.34"	18.22"	10.71"	5.35"	16.06"
60	F10/F12	M10/M12	287 mm	175 mm	288 mm	463 mm	272 mm	136 mm	408 mm
	Ø4.016/Ø4.921	15/18	11.30"	6.89"	11.34"	18.22"	10.71"	5.35"	16.06"
80	F12/F14	M12/M16	321 mm	200 mm	293 mm	493 mm	319 mm	155 mm	474 mm
	Ø4.921/Ø5.512	18/24	12.64"	7.87"	11.54"	19.41"	12.56"	6.1"	18.66"
120	F12/F14	M12/M16	321 mm	200 mm	293 mm	493 mm	319 mm	155 mm	474 mm
	Ø4.921/Ø5.512	18/24	12.64"	7.87"	11.54"	19.41"	12.56"	6.1"	18.66"
200	F16	M20	555.5mm	200mm	293mm	493 mm	319 mm	155 mm	474 mm
	Ø6.496	30	21.87"	10.344	11.54"	19.41	12.56"	6.10"	18.63"
300	F16	M20	555.5mm	200mm	293mm	493 mm	319 mm	155 mm	474 mm
	Ø6.496	30	21.87"	10.344	11.54"	19.41	12.56"	6.10"	18.63"

## Models QTE-10 to QTE-300



## Models QTE-1.5 to QTE-6.0



## PERFORMANCE DATA

### Models QTE-1.5 to QTE-6.0 Data Chart

QTE-Series	Max. Output Torque	Operating Time (90°)	Output Drive	VA Rating		Rated Current (A) 1 Phase		Weight lbs.
	in./lbs.	60 Hz		115V	230V	110V	220V	
1.5	150	5 sec	.55"sq./14mm	70 VA	115 VA	0.37	0.87	6
3	300	9 sec	.55"sq./14mm	70 VA	115 VA	0.37	0.87	6
6	600	16 sec	.55"sq./14mm	70 VA	115 VA	0.37	0.87	6

### Models QTE-10 to QTE-300 Operating Data Chart

Model	Max Torque (In. lbs [Kgf·m])	Operating Time For 90° (sec)		Max Bore Diameter (In. [mm])	Motor		Rated Current(A)				Handwheel Turns	Weight (lbs)
		60Hz	50Hz		Power (W)	Frame	1 Phase		3 Phase			
							110V	220V	380V	440V		
QTE-010	868 [10]	17	21	0.708 [18]	15	70	1.12	0.53	N/A	N/A	10	14
QTE-020	1736 [20]	17	21	1.181 [30]	40	80	1.86	0.94	0.3	0.29	10	42
QTE-040	3472 [40]	26	31	1.575 [40]	40	90	1.92	0.99	0.31	0.3	12.5	55
QTE-060	5208 [60]	26	31	1.575 [40]	90	90	3.78	1.46	0.48	0.44	12.5	55
QTE-080	6944 [80]	34	41	1.850 [47]	90	90	3.78	1.46	0.48	0.44	14.5	77
QTE-120	10416 [120]	34	41	1.850 [47]	180	90	5.12	2.67	0.89	0.83	14.5	79
QTE-200	17359 [200]	102	123	3.071 [78]	90	90	3.78	1.46	0.48	0.44	43.5	168
QTE-300	26039 [300]	102	123	3.071 [78]	180	90	5.12	2.67	0.89	0.83	43.5	170

\* For applications in excess of 26,000 in./lbs please contact your Paladon representative.

## TOTAL VALVE CONTROL



### Rotary Actuators (Scotch Yoke)

PN & HY-Series pneumatic and hydraulic scotch-yoke actuators have been specifically designed to guarantee long cycle life in the most critical applications and extreme operating environments. A fabricated frame and all-steel construction coupled with an Ingress Protection rating of IP66 as standard result in lighter and more corrosion resistant actuators than traditional ones that employ castings. Available in double-acting (fail last) and spring-return configurations, PN & HY-Series actuators are suitable for on/off, modulating and ESD valve applications.



### Gas-over-Oil & Direct Gas Systems

Typically used for on/off valve control in gas pipelines, these systems use the pressure in the pipelines to provide the motive power for the actuators. Suitable for operation of rotary or linear valves, they are available in either double-acting or spring-return configurations. A fully manifolded control system ensures reliable operation and the modular design permits quick and inexpensive field modifications to the control system logic.



### HIPPS

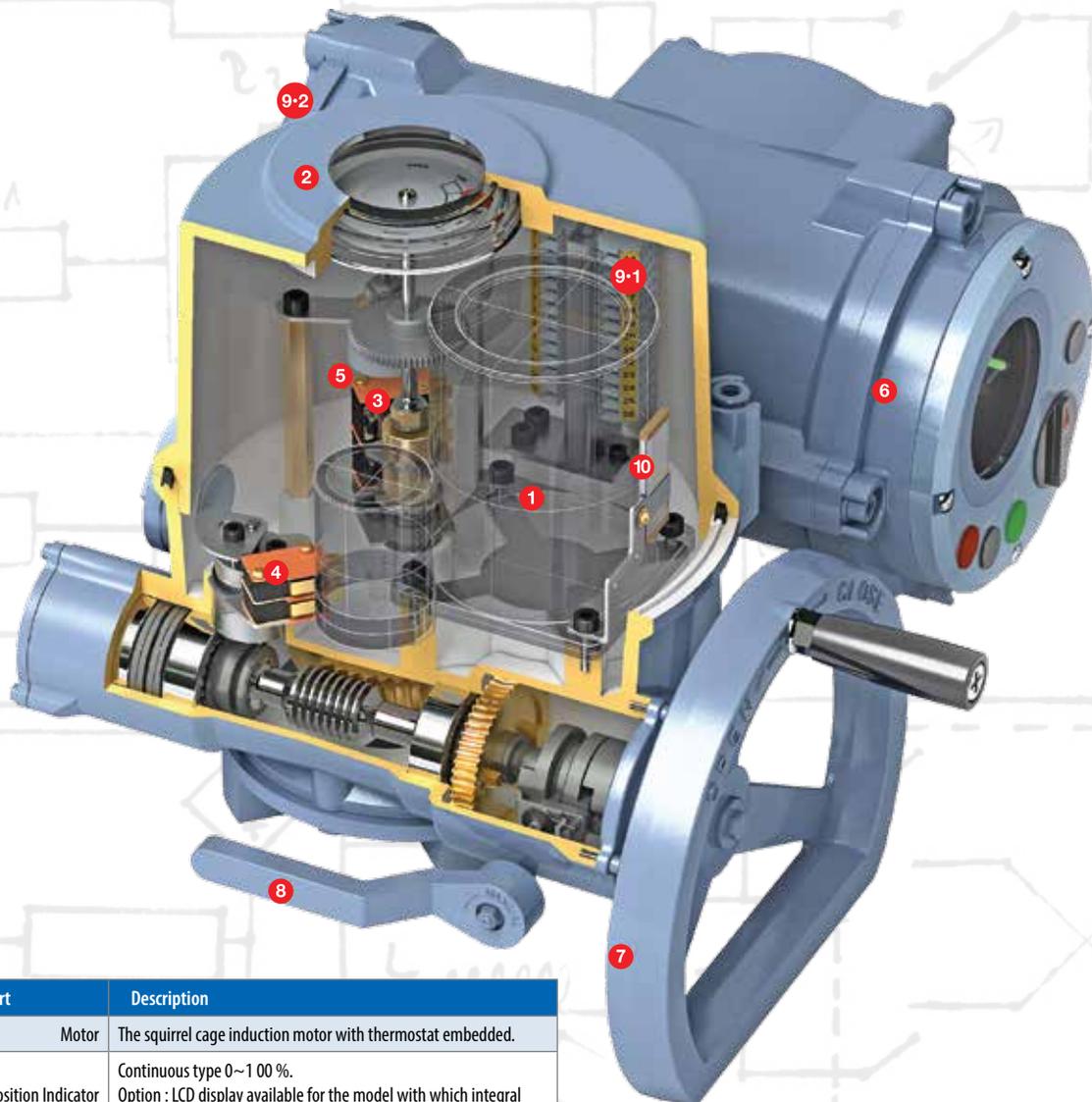
As oil and gas resources become harder to find, producers are forced to operate in environments of ever increasing severity and risk. A HIPPS is an independently instrumented protective device which acts as the last line of defense for protecting downstream operations from over pressurization. Typically certified to SIL 3, our turn-key HIPPS packages give producers the most dependable pressure protection devices available in the market today.



### Rack And Pinion Actuators

Paladon's line of rack and pinion actuators offer the most versatile actuators and actuation accessories available on the market today. With more than 16 different sizes to choose from, available in models with 90, 120, 135, 180, 240 or 270 degree rotation, Paladon's actuators can meet even the most demanding and unconventional actuation needs of its customers.

## MATERIALS OF CONSTRUCTION



#	Part	Description
1	Motor	The squirrel cage induction motor with thermostat embedded.
2	Position Indicator	Continuous type 0~1 00 %. Option : LCD display available for the model with which integral control unit is fitted.
3	Limit switch	Easy setting. Adjustable by ⊖ screw driver.
4	Torque switch	Automatically stops the motor when the torque applied to the valve shaft is bigger than the set value.
5	Potentiometer	Slip mechanism is provided for easy setting of zero point adjustment by turning the potentiometer shaft with ⊖ screw driver.
6	Integral control unit	* Non-intrusive push buttons are integrated with the actuator. * The inner circuit is isolated from the remote command signals by the opto-isolator to withstand the surge. * Once the torque switch triggers, the actuator responds to no other command signals until the reset button is pushed to protect the motorized valve.
7	Manual handle	Manual Handwheel- Side mounted for direct access allowing for ease of operation.
8	Change lever	Manual Jacking Lever- Automatic de-clutchable override.
9	Terminal block	<b>9-1</b> Basic type : located inside the actuator body. <b>9-2</b> Integral control unit type: located at the integral control unit which is double sealed with V-ring and gasket to prevent the ingress of foreign materials when the terminal cover is removed for termination. <b>9-3</b> Option for basic type : separate double sealed terminal block is available
10	Space heater	thermistor type(PTC - 5).

**Call 855-725-2366 to find out more about Paladon - Total Valve Control.**



## PALADON SYSTEMS OVERVIEW

For over 30 years Paladon Systems has been supplying valve actuators and control systems on a global basis.

Since our inception in 1981 we have continuously developed our design, engineering, organizational, quality and management capabilities. Today we design and manufacture many valve automation technologies that lead the industry in terms of operational performance, reliability and environmental responsibility.

Our vast experience with supporting the Oil, Gas and Power industries with solutions for the most critical applications has resulted in product designs that offer unsurpassed quality and reliability across all industries and applications.

Holding ISO 9001 certification for over 20 years, today we hold accreditation and approvals from almost all the major institutes, engineering companies and end users.

Headquartered in England, we also have facilities and offices in Scotland, Italy, Russia, Malaysia and the US to support our growing global client base.

With over 10,000 actuators installed across the globe and a comprehensive suite of valve automation solutions backed by a dedicated team of field service engineers, we are **Total Valve Control**.



Paladon Americas is the newest addition to the worldwide family of Paladon Systems. With our multi-million dollar inventory and knowledgeable staff, centrally located in Houston, TX we are able to service your immediate automation needs. While providing the American market with automation solutions we strive to deliver exceptional quality actuators and cutting edge technology.

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