

BETTIS™

TorqPlus™

Electric Valve
Actuators
and Controls



EMERSON™
Process Management

EMERSON. CONSIDER IT SOLVED.™



Torque 150 IN/LB – 600 IN/LB

The Engineered Solution

Bettis TorqPlus quality line of electric actuators are designed for quarter turn applications — ball, butterfly and plug valves; dampers; vents and similar uses. TorqPlus actuators are manufactured in a wide range of **guaranteed** output torques and operating speeds to fit your specific requirements.

The Model EM-300 actuators combine compactness with manual override capability and an extensive array of available options for a broad spectrum of applications.



STANDARD FEATURES

- Two year warranty
- Heater and thermostat installed in all actuators
- Case hardened steel spur gear train is permanently lubricated
- Hardened steel drive shaft
- Female DIN/ISO F04 output drive and bolt pattern or male output drive

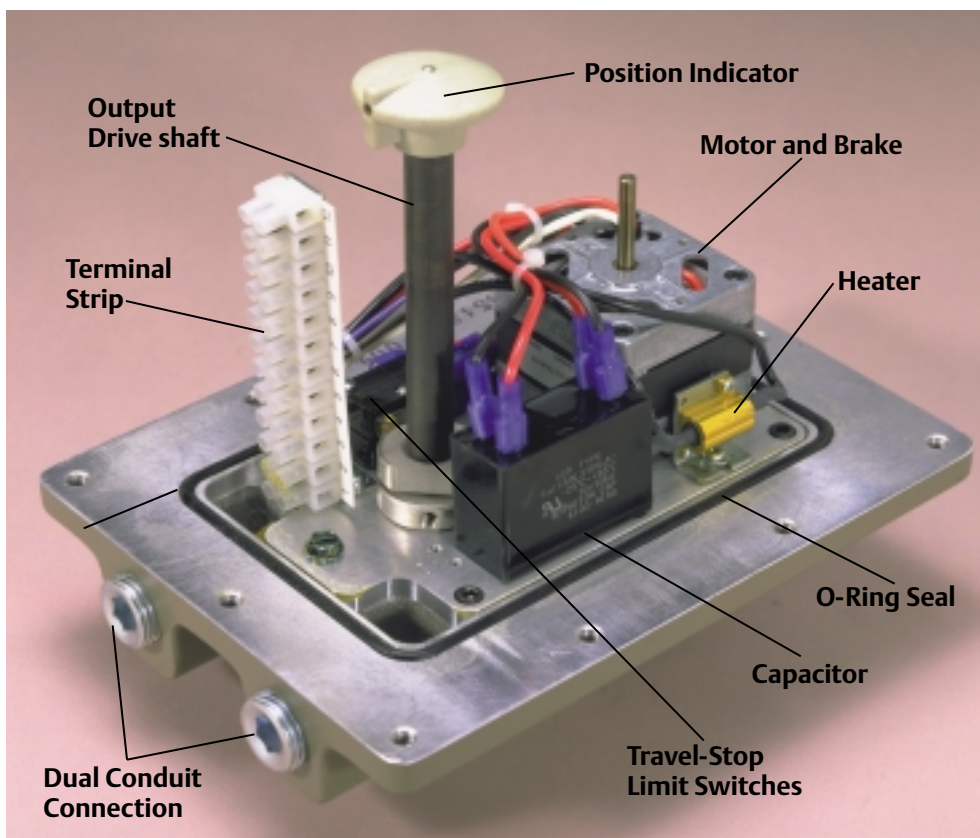
- Operating temperatures:
 - 40° F with standard heater activated to +140° F
- Single phase capacitor run motor with thermal overload protection
- Internal motor brake on 4 and 10 second units
- Enclosure certified to weatherproof C.S.A. specifications that conform to NEMA type 1, 2, 3, 3R, 4, 4X & 12
- Two single pole double throw travel-stop limit switches with adjustable cams
- Declutchable manual override with position indicator
- Dual 1/2-inch NPT conduit entrance
- Operational in any mounting orientation.
- Weight: 11 to 12 lbs

OPTIONAL FEATURES

- 75% or 100% extended duty cycle motors
- Electromechanical brake for 15 second and 30 second units
- Standard 1KΩ potentiometer. Other ranges provided upon request.
- Relay control
- Electronic proportional positioner for 4-20 mA, 1-5 VDC, or 0-10 VDC control input and 4-20mA output signal
- Optional voltages
 - 230 VAC 50/60 Hz single phase
 - 12/24 VDC
 - 24 VAC
- Maximum of four additional auxiliary single pole double throw auxiliary limit switches with adjustable cams.
- Handwheel
- Canadian Standards Association general purpose for electrical certification available under file #LR90062
- Dual purpose weatherproof and explosion-proof enclosures are certified by Canadian Standards Association for services: Class I Groups C,D, Division I; Class II Groups E,F,G Division I that conform to NEMA type 7 and 9



Torque 150 IN/LB – 600 IN/LB



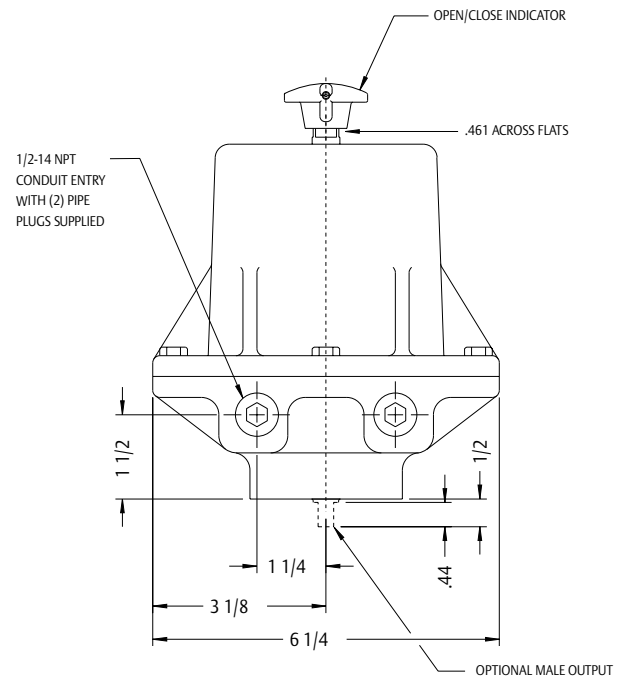
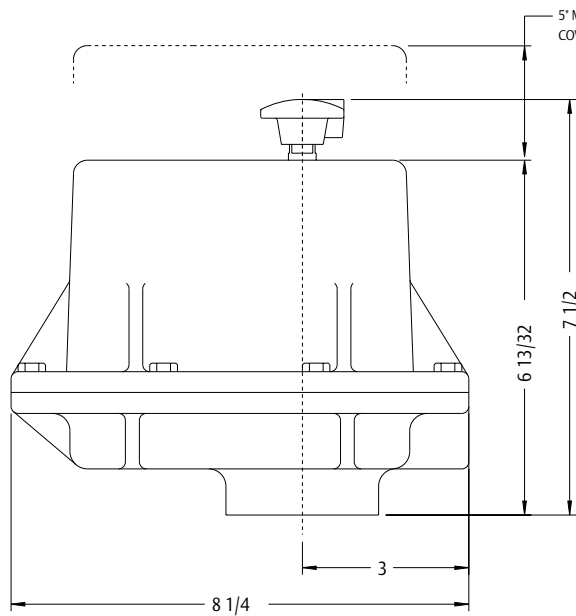
MODEL EM-300 SERIES								
TORQUE		SPEED 90°	MODEL	LOCKED ROTOR AMP				MOTOR DUTY CYCLE @ 75°F AC DC
IN/LB	NM			115VAC	230VAC	12VDC	24VDC	
150	17	4 SEC	300-04	0.57 *	0.29	1.2A	2.5A	**30% 100%
300	34	10 SEC	300-10	0.57 *	0.29	1.2A	2.5A	**30% 100%
400	45	15 SEC	300-15	0.56 *	0.25	1.2A	2.5A	**30% 100%
600	68	30 SEC	300-30	0.56 *	0.25	1.2A	2.5A	**30% 100%

* Locked rotor current for all 75% and 100% duty cycle motors is 0.50 amp

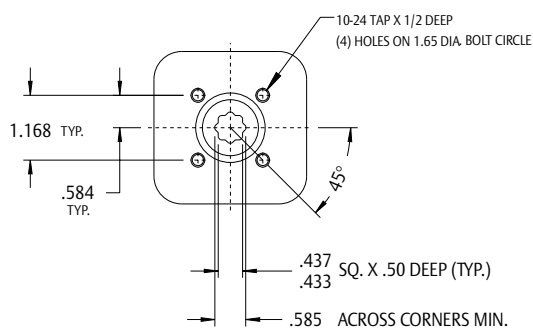
** 75% and 100% duty cycle motors are available for 115 VAC service

Bettis Electric

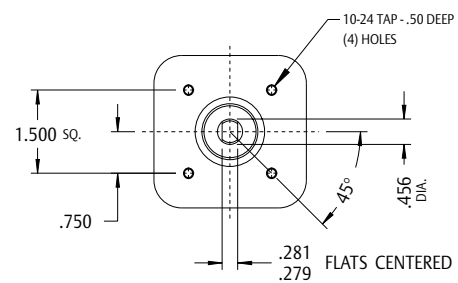
2500 Park Avenue West
Mansfield, OH 44906 U.S.A.
T 419-529-4296
F419-529-4484
Website: www.EmersonProcess.com
E-Mail: Info.Bettis@EmersonProcess.com



**DIN/ISO F04 FLANGE
F04 DIN/ISO FEMALE DRIVE**



**FLANGE DIMENSIONS
WITH MALE OUTPUT**



Bettis Electric

2500 Park Avenue West, Mansfield, OH 44906 U.S.A. T419-529-4296 F419-529-4484
Website: www.EmersonProcess.com EMail: Info.Bettis@EmersonProcess.com

Bettis Electric

2500 Park Avenue West
Mansfield, OH 44906 U.S.A.
T 419-529-4296
F 419-529-4484
Website: www.EmersonProcess.com
E-Mail: Info.Bettis@EmersonProcess.com

Bettis USA

P.O. Box 508
Waller, TX 77484 U.S.A.
T 281-463-5100
F 281-463-5103
Website: www.EmersonProcess.com
E-mail: Info.Bettis@EmersonProcess.com

Bettis UK Ltd.

3 Furze Court
114 Wickham Rd.
Fareham, Hampshire PO 16 7SH
T 44-1329-848-900
F 44-1329-848-901

Bettis Canada Ltd.

4112-91 A Street
Edmonton, Alberta T6E 5V2
Canada
T 780-450-3600
F 780-450-1400

Bettis France:

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F 331-49-797399

Bettis Int'l Sales Office:**Calgary, Canada**

Rheinberg, Germany
New Bombay, India
Singapore

Important: Due to Emerson's continuing commitment to engineered product advancement, data presented herein is subject to change.

Certified dimensional drawings and wiring diagrams are available on request. Consult factory with model designation and serial number.

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