BETTIS™

TorqPlus™

Electric Valve
Actuators
and Controls

EMERSON™

EMERSON. CONSIDER IT SOLVED.™

MODEL EM-SR5

Torque 300 IN/LB – 1,600 IN/LB

The Engineered Solution

Bettis TorqPlus has taken the lead in offering compact, cost effective Spring Return Electric Actuator Packages. Three models offer a variety of solutions when one needs to protect a system upon loss of power. These actuators have been designed for dampers, small butterfly, ball and plug valves.

The Model EM-SR5 Series is designed for use in environments where automatic closing/opening is required upon loss of power, with a rugged versatility that is hard to beat.

When power is available, the device operates like a normal quarter turn, open/close or modulating actuator. Under powered operation, the spring pack travels with the movement of the actuator. Under powered stopped conditions, the actuator and spring are held in position via the electric mechanical brake. Upon loss of power, the spring is released and drives the actuator to the predesignated failsafe position. The failsafe positioning can be provided for either the CCW limit or to the CW limit.

STANDARD FEATURES

Two year warranty
Heater and thermostat
Case hardened steel spur gear train is permanently lubricated
Operating temperatures:
-40° F, with standard heater activated, to +140° F
Thermally protected permanent split capacitor motor
Electromechanical brake
CW or CCW spring return
Dual 1/2-inch NPT conduit entrances
Captive hex bolts on enclosure
Operational in any mounting orientation
Limit switches with independent end of travel cams
Male output drive on all models or female DIN/ISO F04 or F05 output drive on 10, 15 and 30 second models
Adjustable mechanical stop at the fail safe position
Visual position indicator
Enclosure certified to weatherproof C.S.A. specifications that conform to NEMA type 1, 2, 3, 3R, 4, 4X and 12

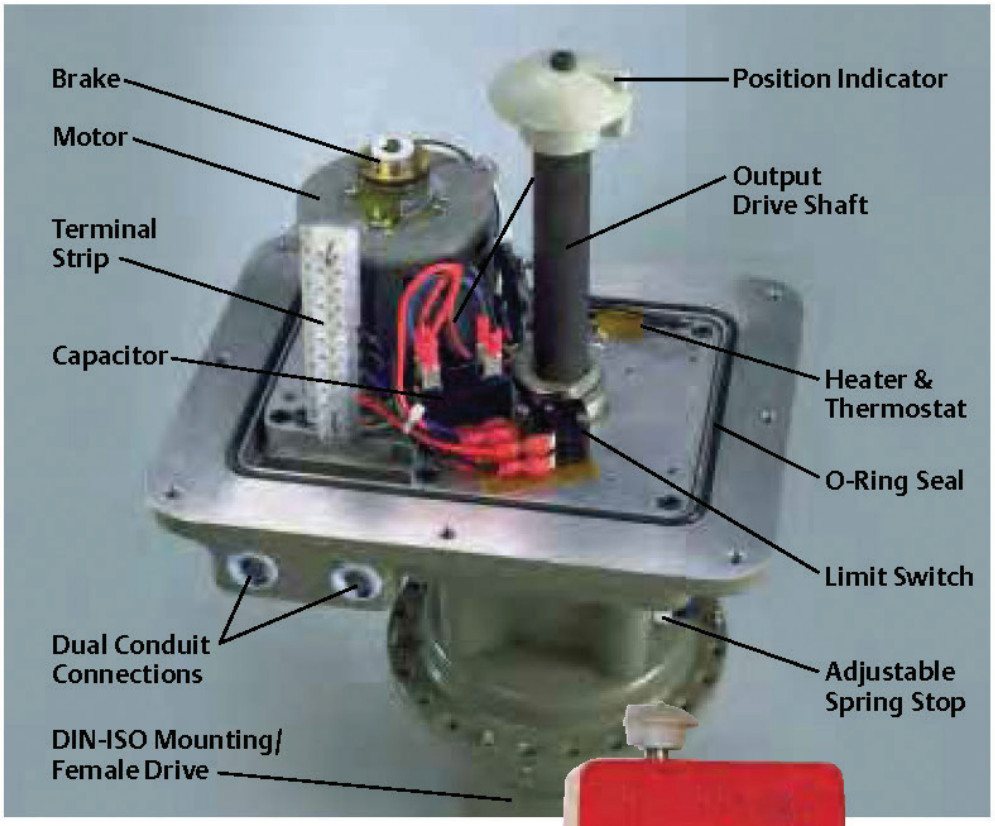
OPTIONAL FEATURES

Modulating service (separate enclosure)
Standard 1KΩ potentiometer, other ranges provided upon request
Optional 220 VAC 50/60 Hz motor
Up to four auxiliary switches with adjustable cams
Canadian Standard 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

MODEL EM-SR5 SERIES

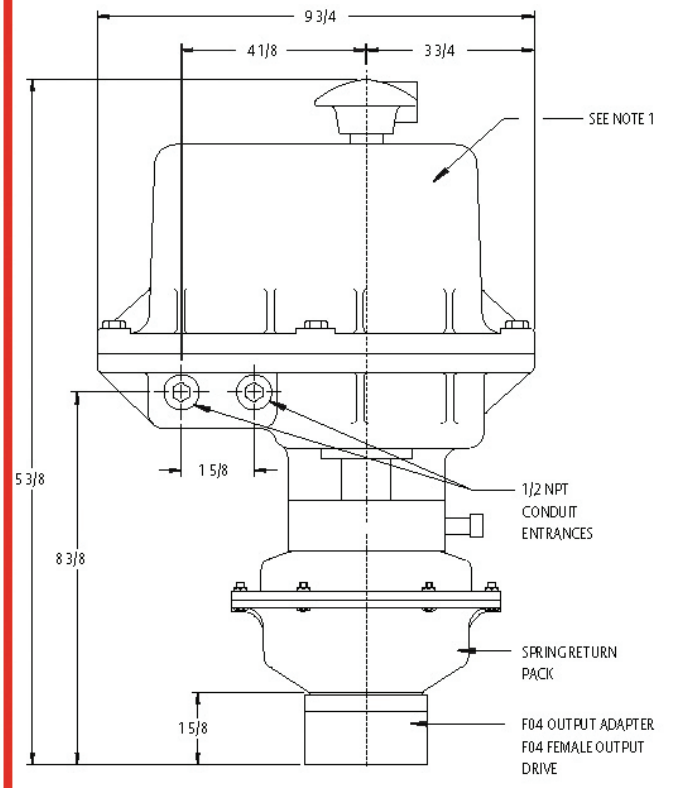
	Torque (against spring)		Torque (with spring)		Speed (sec/90°)		Motor Ratings			Weight
Model	in/lb	nm	in/lb	nm	Motor	Spring	LRA	FLA	Duty Cycle	(lbs)
SR5-10	300	34	350	40	10	4	0.69	0.34	100%	28-30
SR5-15	400	45	450	51	15	5	0.69	0.34	100%	28-30
SR5-30	600	68	700	79	30	6	0.35	0.30	100%	36-38
SR5-90	1600	181	1400	158	90	25	0.35	0.30	100%	138

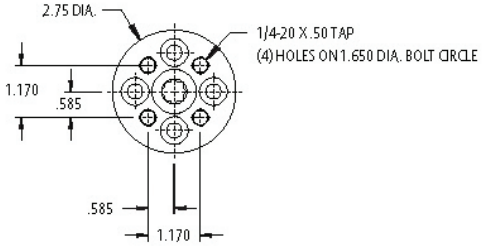
Torque 300 IN/LB – 1,400 IN/LB



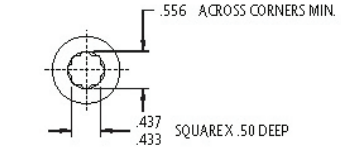
EM-SR5-90 with Gear Reduction Box

MODEL EM-SR5-10
EM-SR5-15

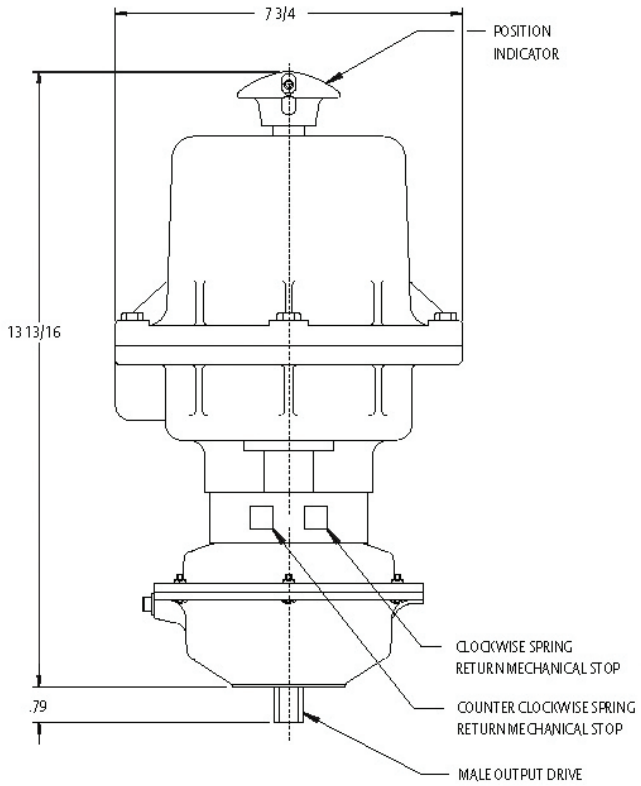


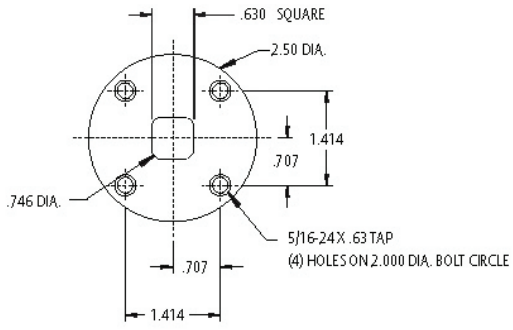


FEMALE F04 OUTPUT MOUNTING



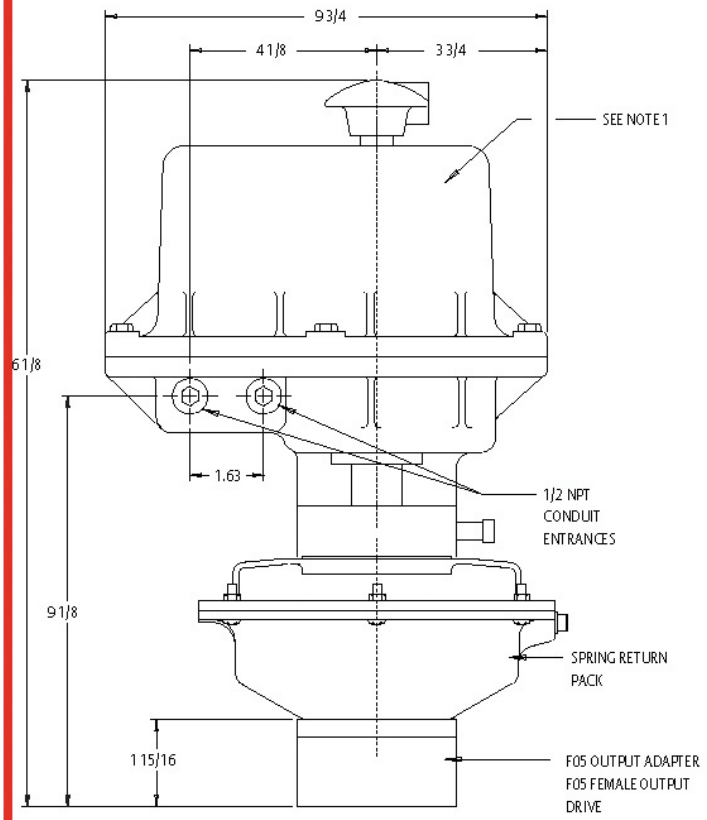
F04 OUTPUT DRIVE VIEW

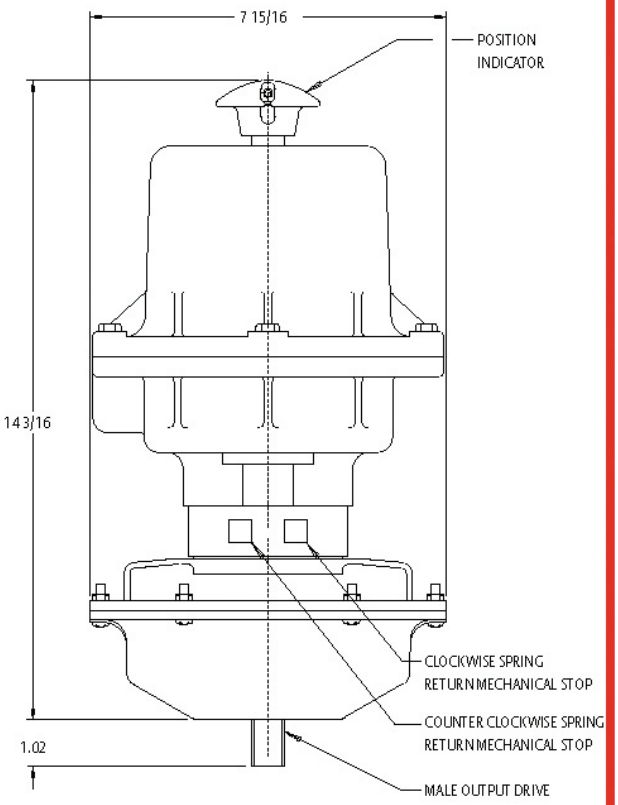


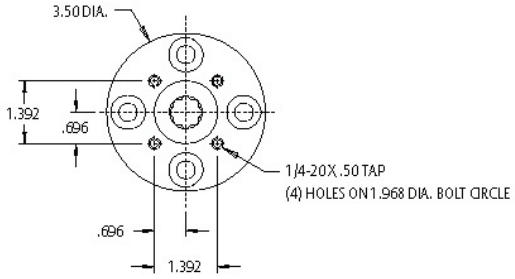


MALE OUTPUT MOUNTING

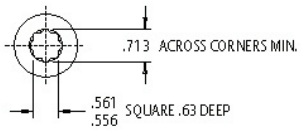
NOTE:
1) ADD 4.75 TO OVERALL DIMENSION FOR COVER REMOVAL



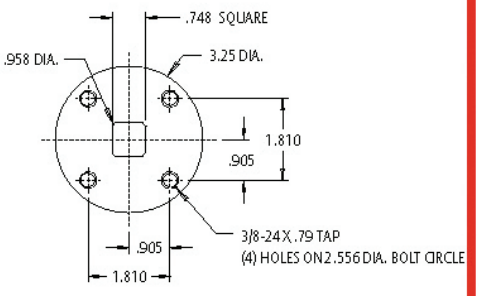




FEMALE F05 OUTPUT MOUNTING

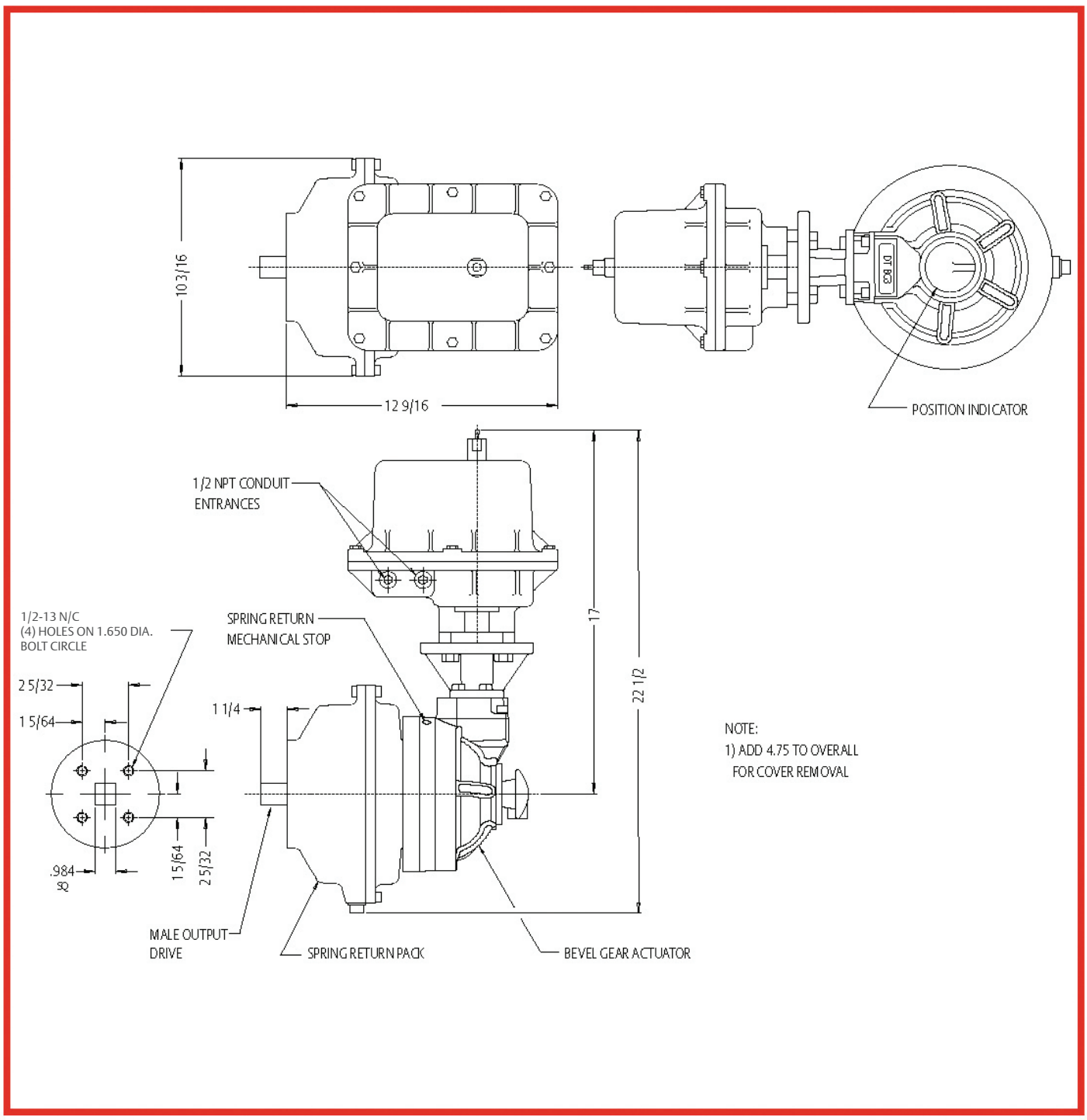


F05 OUTPUT DRIVE



MALE OUTPUT MOUNTING

NOTE:
1) ADD 4.75 TO OVERALL DIMENSION FOR COVER REMOVAL


10 3/16
12 9/16
POSITION INDICATOR
1/2 NPT CONDUIT ENTRANCES
SPRING RETURN MECHANICAL STOP
1/2-13 N/C
(4) HOLES ON 1.650 DIA.
BOLT CIRCLE
2 5/32
1 5/64
1 1/4
17
22 1/2
.984 SQ
15/64
2 5/32
MALE OUTPUT DRIVE
SPRING RETURN PACK
BEVEL GEAR ACTUATOR
NOTE:
1) ADD 4.75 TO OVERALL FOR COVER REMOVAL

World Area Configuration Centers (WACC) offer sales support, service, inventory and commissioning to our global customers. Choose the WACC or sales office nearest you:

NORTH & SOUTH AMERICA

19200 Northwest Freeway
Houston TX 77065
USA
T +1 281 477 4100
F +1 281 477 2809

Av. Hollingsworth
325 Iporanga Sorocaba
SP 18087-105
Brazil
T +55 15 3238 3788
F +55 15 3228 3300

ASIA PACIFIC

No. 9 Gul Road
#01-02 Singapore 629361
T +65 6777 8211
F +65 6268 0028

No. 1 Lai Yuan Road
Wuqing Development Area
Tianjin 301700
P. R. China
T +86 22 8212 3300
F +86 22 8212 3308

MIDDLE EAST & AFRICA

P. O. Box 17033
Dubai
United Arab Emirates
T +971 4 811 8100
F +971 4 886 5465

P. O. Box 10305
Jubail 31961
Saudi Arabia
T +966 3 340 8650
F +966 3 340 8790

24 Angus Crescent
Longmeadow Business Estate East
P.O. Box 6908 Greenstone
1616 Modderfontein Extension 5
South Africa
T +27 11 451 3700
F +27 11 451 3800

EUROPE

Berenyi u. 72- 100
Videoton Industry Park
Building #230
Székesfehérvár 8000
Hungary
T +36 22 53 09 50
F +36 22 54 37 00

For complete list of sales and manufacturing sites, please visit www.emerson.com/actuationtechnologieslocations or contact us at info.actuationtechnologies@emerson.com

©2017 Emerson. All rights reserved.

The Emerson logo is a trademark and service mark of Emerson Electric Co. Bettis™ is a mark of the Emerson family of companies. All other marks are property of their respective owners.

BETTIS™

www.emerson.com/bettis

EMERSON™

5M/06-17 Bulletin #81.30