

200 PSI Butterfly Valves

Ductile Iron Body • Extended Neck • Geometric Drive • Molded-In Seat Liner
• Lug and Wafer Style

Sizes 2" through 12"

Install between Std. ASME Class 125/150 flanges.
Lug Style 200 PSI bi-directional dead end service rating without a downstream flange required.

THIRD PARTY CERTIFIED BY QAI TO MEET MSS SP-67 STANDARD •
U.S. COAST GUARD "CATEGORY A" • CERTIFIED LEAD-FREE* BY
TRUESDAIL LABS TO NSF/ANSI 61-8 COMMERCIAL HOT 180°F
AND NSF/ANSI 61 AND 372

MATERIAL LIST

PART	SPECIFICATION
1. Stem	Stainless Steel ASTM A582 Type 416
2. Collar Bushing	Brass ASTM B16
3. Stem Seal	EPDM Rubber
4. Body Seal	EPDM Rubber
5. Nameplate	Aluminum
6. Upper Bushing	Copper CDA 122
7. Liner	EPDM Rubber
8. Disc	Alum. Brz. ASTM B148 Alloy 955
9. Lower Bushing	Copper CDA 122
10. Body Wafer	Ductile Iron ASTM A536
11. Body Lug	Ductile Iron ASTM A536

DIMENSIONS — WEIGHTS

Size	In.	mm.	A	B	C	D	E	F	G Flat	Metal H	Rubber I	J Square	N Dia.
2	50	2.53	4.00	1.25	5.38	2.88	.38	.312	1.688	1.812	1.938	3.25	.500
2½	65	2.90	4.69	1.25	5.88	3.27	.38	.370	1.812	1.938	2.188	3.25	.562
3	80	3.15	5.12	1.25	6.12	3.40	.38	.370	1.812	1.938	2.312	3.25	.562
4	100	4.09	6.12	1.25	6.88	4.00	.38	.403	2.062	2.188	2.312	3.25	.625
5	125	5.13	7.25	1.25	7.38	4.75	.38	.496	2.188	2.312	2.312	3.25	.750
6	150	6.13	8.25	1.25	8.00	5.29	.38	.496	2.188	2.312	2.312	3.25	.750
8	200	8.13	10.41	1.25	9.25	6.50	.50	.560	2.375	2.500	2.500	3.25	.875
10	250	10.13	12.52	1.25	10.50	8.00	.50	.686	2.688	2.812	2.812	4.75	1.125
12	300	12.13	15.00	1.25	12.00	9.25	.50	.748	3.000	3.125	3.125	4.75	1.250

Capscrew/Stud Data

Size	In.	mm.	O B.C.	P Dia.	R Dia.	K No.	L Dia.	Wafer Length	Lug Length	M B.C.	Lug Weight Lbs. Kg.	Wafer Weight Lbs. Kg.
2	50	3.25	.437	.437	4	5/8-11unc				4 3/4	7 3.2	5.5 2.5
2½	65	3.25	.437	.500	4	5/8-11unc				5 1/2	9 4.1	7.5 3.4
3	80	3.25	.437	.500	4	5/8-11unc				6	9.5 4.3	8 3.6
4	100	3.25	.437	.562	8	5/8-11unc				7 1/2	15 6.8	11 5.0
5	125	3.25	.437	.656	8	3/4-10unc				8 1/2	21 9.5	15 6.8
6	150	3.25	.437	.656	8	3/4-10unc				9 1/2	24 10.9	18 8.2
8	200	3.25	.437	.781	8	3/4-10unc				11 3/4	34 15.4	28 12.7
10	250	5.00	.562	1.000	12	7/8-9unc				14 1/4	62 28.1	45.5 20.7
12	300	5.00	.562	1.062	12	7/8-9unc				17	90 40.9	70 31.8

For actuated service where a lower torque is required use NIBCO Fig. No. WDLXXX-0 or LDLXXX-0 series, sizes 2" thru 12" only. Maximum pressure rating of 100 PSI for wet application and 50 PSI for dry application.

Visit our website for the most current information.

NOT RECOMMENDED
FOR STEAM SERVICE

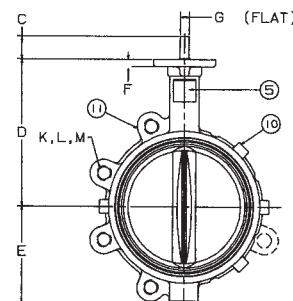
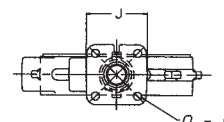
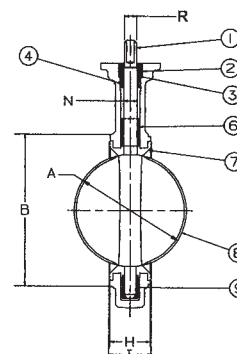
*Weighted average lead content ≤ 0.25%



WD-2000
Wafer Style
EPDM Liner
and Aluminum
Bronze Disc



LD-2000
Lug Style
EPDM Liner
and Aluminum
Bronze Disc



WE Series Weatherproof
CSA Approved TYPE 4 & 4X
350-80,000 In-lbs. torque

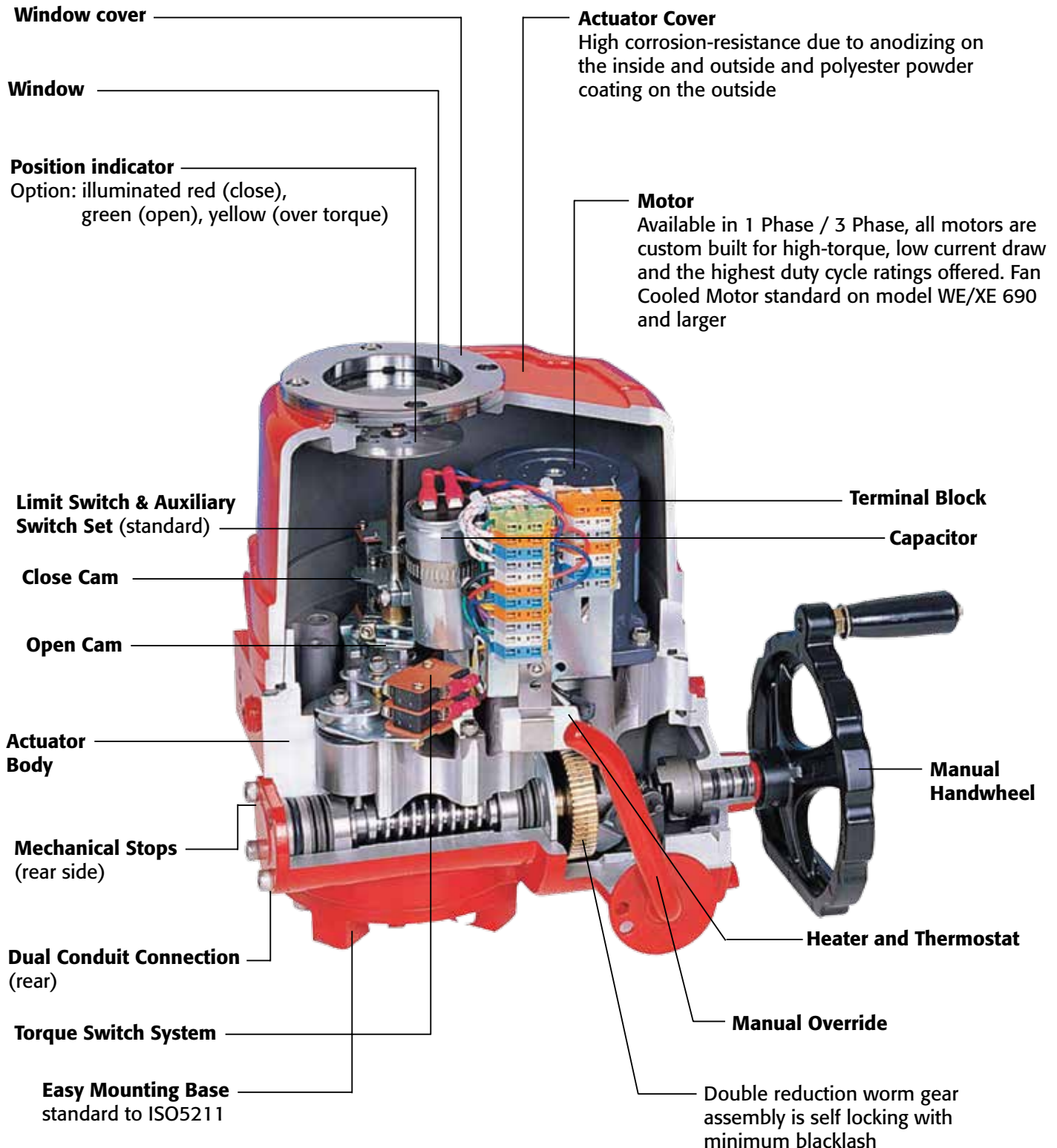
XE Series Explosion Proof
ATEX Certified E Ex d IIB T4
690-25,900 In-lbs. torque

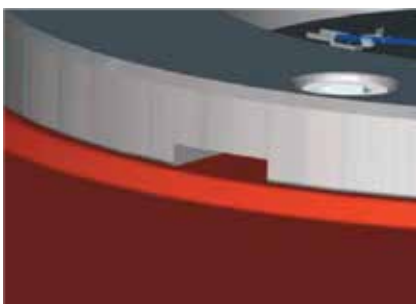
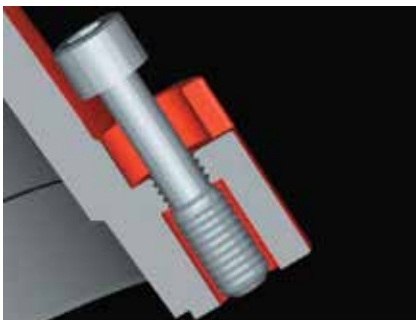
AWWA
C540-93





Electric Actuators WE/XE



ELECTRIC ACTUATORS**WE-690 - 25900*****Terminal block***

- Extra terminals for customer's convenience
- Spring Loaded Terminal Strip Provides Secure Connection

Heater

- Ceramic housing with thermostat to eliminate condensation (7-10 watt Standard).
- Optional High Wattage Heater for Low Temp applications to -40°

Captive cover bolt

- Cover bolts are specially designed to prevent loosening during maintenance or installation
- All external bolts are stainless steel for rust prevention

Indicator sustained by spring

- Direction of visual indicator is set by factory
- To change its direction simply grip the indicator plate and rotate to the new position
- Spring beneath indicator plate sustains the set position
- No need to loosen screw and tighten it again

Slot on window cover for draining water

- A drain slot is provided to eliminate water buildup on window



WE/XE Series



Acutator Model	Output Torque	90° Cycle Time (sec)	Motor Size	Full Load Amps					Locked Rotor Amps					Handwheel Turns	Weight
				AC/DC	1 Phase	3 Phase		AC/DC	1 Phase		3 Phase				
WE / XE	In-Lbs.	60 / 50 Hz	Watts	24V	110V/60Hz	220V/60Hz	380V	440V	24V	110V/60Hz	220V/60Hz	380V	440V	N	Lbs.
-690	690	13 / 16	15	5	1.2	0.6	N/A	N/A	12.8	1.4	0.7	N/A	N/A	10	16.4
-1350	1350	21 / 25	40	6	2	1	0.28	0.36	16.9	2.5	1.2	0.75	0.66	11	36.7
-1700	1700	21 / 25	40	7.4	2.3	1.1	0.28	0.36	16.9	2.5	1.2	0.75	0.66	11	36.7
-2640	2640	26 / 31	40	8.9	2.3	1.3	0.27	0.34	30.8	2.9	1.4	1	0.87	13.5	48.6
-4400	4400	26 / 31	90	N/A	4.5	1.9	0.42	0.47	N/A	5	2.4	1.73	1.5	13.5	50.8
-5200	5200	26 / 31	90	N/A	4.5	2	0.42	0.47	N/A	5	2.4	1.73	1.5	13.5	50.8
-6900	6900	31 / 37	180	N/A	5.1	2.4	0.61	0.67	N/A	7.3	3.8	2.73	2.38	16.5	64
-10500	10500	31 / 37	180	N/A	5.4	3.4	0.61	0.67	N/A	7.3	3.8	2.73	2.38	16.5	64
-17500	17500	95 / 112	180	N/A	5.8	2.4	0.61	0.67	N/A	7.3	3.8	2.73	2.38	49.5	167
-25900	25900	95 / 112	180	N/A	6.3	3.4	0.61	0.67	N/A	7.3	3.8	2.73	2.38	49.5	167

Rev.20130924

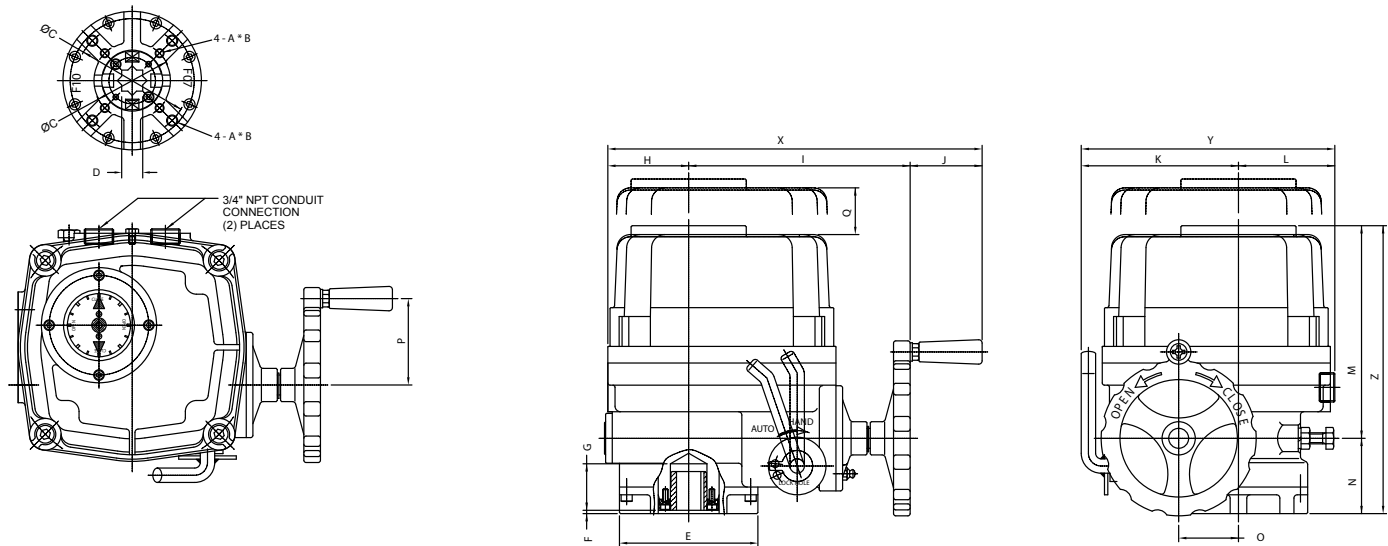
Standard Specifications

Enclosure	Weatherproof enclosure, IP67, TYPE 4, 4X, 6
AWWA	Conforms to AWWA C540-93 requirements
Power supply	110/220V AC 1PH, 220/380/440/460/480VAC, 3 Phase, 50/60Hz, ±10%
Control power supply	110/220V AC 1PH, 50/60Hz, ±10%
Duty cycle(on-off)	70% Max 1800 start/hour
Duty cycle(modulating)	70% Max 1800 start/hour
Motor	Class F Reversible Induction motor
Limit switches	Open / Close, SPDT, 16A 1/2HP 125/250VAC, 0.6A 125VDC, 0.3A 250VDC
Additional limit switches	Open / Close, SPDT, 16A 1/2HP 125/250VAC, 0.6A 125VDC, 0.3A 250VDC
Torque switches	Open / Close, SPDT, 16A 1/2HP 125/250VAC, 0.6A 125VDC, 0.3A 250VDC
Stall protection	Built-in thermal protection, Open 302°F (150°C) / Close 207°F (97°C)
Travel angle	90° ± 10°
Indicator	Continuous position indicator
Manual override	Declutching mechanism
Self locking	Provided by double worm gearing
Mechanical stopper	Open / Close (external adjustable screws)
Space heater	7-10W (110/220V AC) Anti-condensation
Cable Conduit	Two 3/4" NPT
Lubrication	Grease moly (EP type)
Terminal block	Spring loaded lever push type
Materials	Steel, Aluminium alloy, Al bronze, Polycarbonate
Ambient temperature	-4°F — 158°F (optional -40° Low Temp Kit)
Ambient humidity	90% RH Max. (non-condensing)
External coating	Anodizing treatment before Dry powder, Polyester, Munsell no. 5R 3.5/12

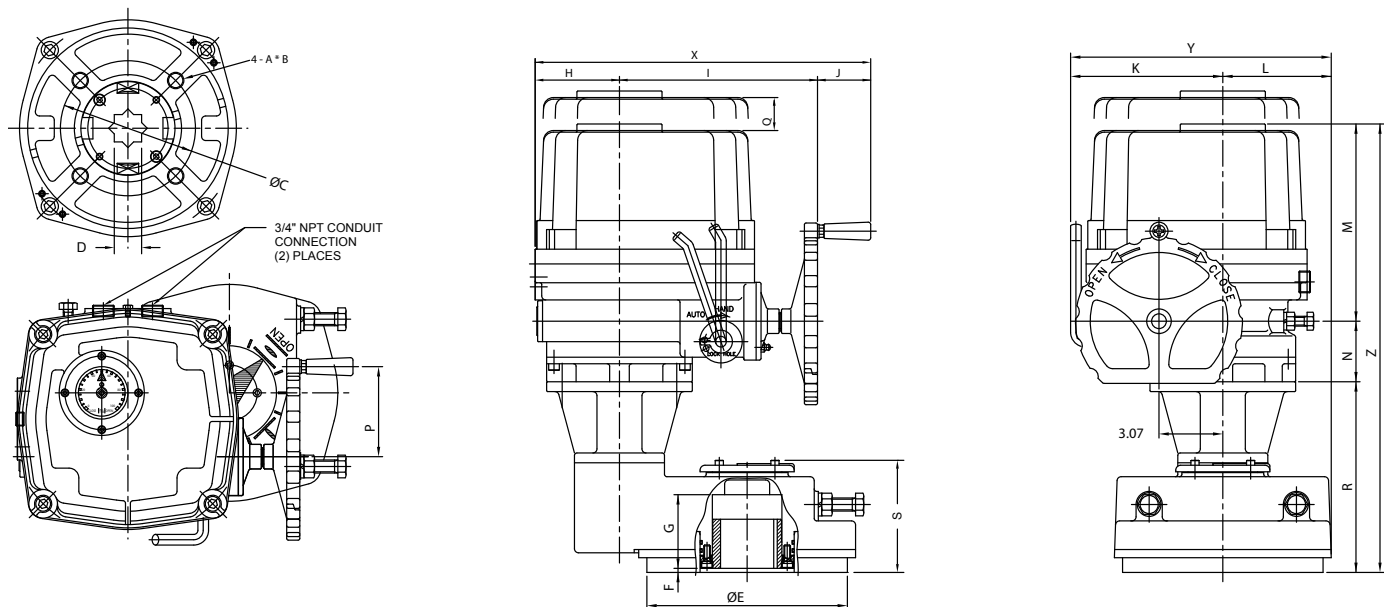


Dimensional Drawing

WE/XE-690, 1350, 1700, 2640, 4400, 5200, 6900, 10500



WE/XE-17500, 25900



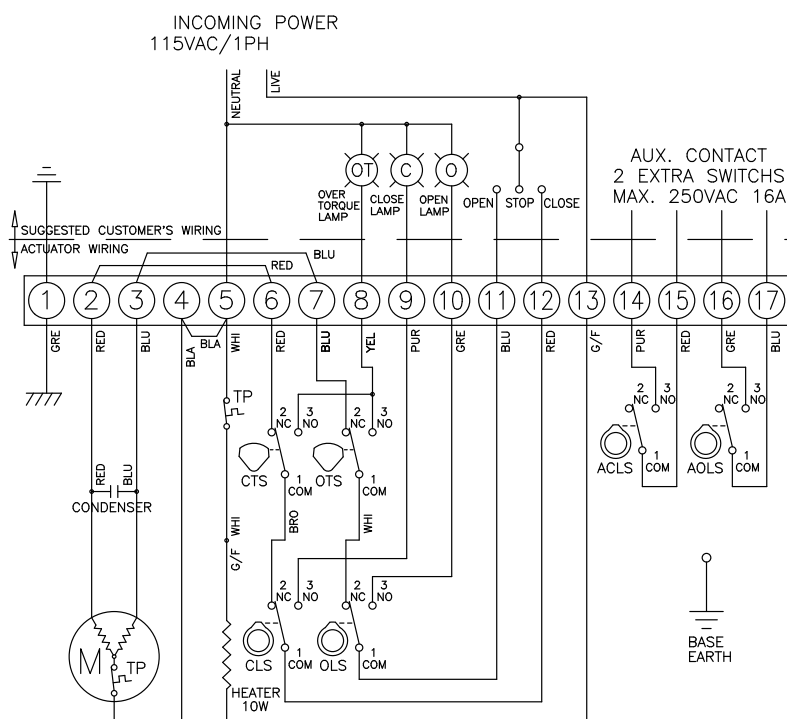
Dimensions

Units (inches)

Model WE/XE	ISO 5211	A	B	C	D sq	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	X	Y	Z
-690	F07	M8	0.47	2.756	0.669	3.46	0.12	1.26	1.97	6.18	2.01	3.94	2.76	6.57	2.09	1.57	2.36	4.72	-	-	10.16	6.69	9.25
-1350	F07/F10	M8/M10	0.47/0.59	2.756/4.016	0.748	4.92	0.12	1.65	2.87	7.87	2.56	5.59	3.43	7.56	2.68	2.13	3.07	6.30	-	-	13.31	9.02	10.55
-1700	F07/F10	M8/M10	0.47/0.59	2.756/4.016	0.748	4.92	0.12	1.65	2.87	7.87	2.56	5.59	3.43	7.56	2.68	2.13	3.07	6.30	-	-	13.31	9.02	10.55
-2640	F10/F12	M10/M12	0.59/0.71	4.016/4.921	1.063	5.83	0.12	1.93	3.23	8.70	2.56	6.30	3.90	8.70	2.72	2.56	3.07	7.09	-	-	14.49	10.20	11.42
-4400	F10/F12	M10/M12	0.59/0.71	4.016/4.921	1.063	5.83	0.12	1.93	3.23	8.70	2.56	6.30	3.90	8.70	2.72	2.56	3.07	7.09	-	-	14.49	10.20	11.97
-5200	F10/F12	M10/M12	0.59/0.71	4.016/4.921	1.063	5.83	0.12	1.93	3.23	8.70	2.56	6.30	3.90	8.70	2.72	2.56	3.07	7.09	-	-	14.49	10.20	11.97
-6900	F14	M16	0.95	5.512	1.417	7.01	0.12	2.24	4.06	9.53	2.56	7.32	4.37	9.49	2.91	3.07	4.33	8.27	-	-	16.14	11.69	12.99
-10500	F14	M16	0.95	5.512	1.417	7.01	0.12	2.24	4.06	9.53	2.56	7.32	4.37	9.49	2.91	3.07	4.33	8.27	-	-	16.14	11.69	12.99
-17500	F16	M20	1.18	6.496	1.417	9.65	0.20	3.54	4.06	9.53	2.56	7.32	5.24	9.49	2.91	3.07	4.33	8.27	9.17	5.24	16.14	12.56	22.17
-25900	F16	M20	1.18	6.496	1.417	9.65	0.20	3.54	4.06	9.53	2.56	7.32	5.24	9.49	2.91	3.07	4.33	8.27	9.17	5.24	16.14	12.56	22.17

Wiring Connection

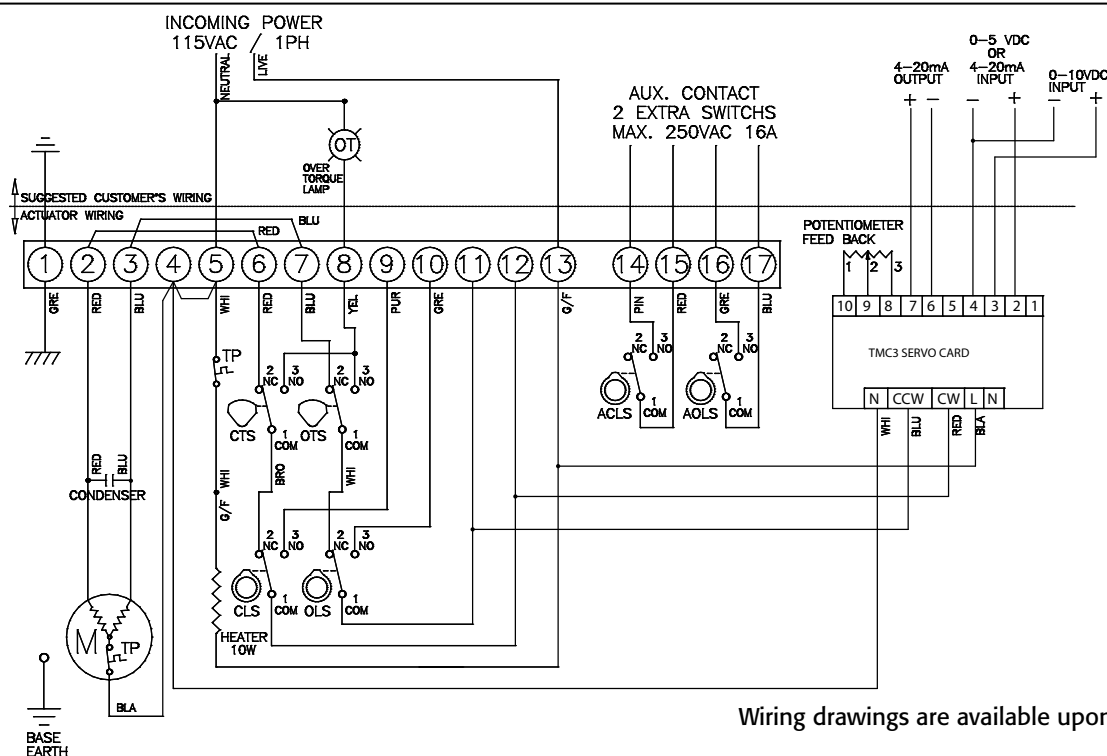
WE/XE-1350 thru 25900 Two Position 115 VAC/1 Ph SE 1080



TORQUE AND LIMIT SWITCH OPERATION		
SWITCH	CLOSE ←	INTERMEDIATE → OPEN
CLS 1-2		
CLS 1-3		
OLS 1-2		
OLS 1-3		
ACLS 1-2		
ACLS 1-3		
AOLS 1-2		
AOLS 1-3		
* CLOSING TORQUE SWITCH INTERRUPTS CONTROL IF MECHANICAL OVERLOAD OCCURS DURING CLOSING CYCLE		
* OPENING TORQUE SWITCH INTERRUPTS CONTROL IF MECHANICAL OVERLOAD OCCURS DURING OPENING CYCLE		
CTS 1-3		
OTS 1-3		
SYMBOL	DESCRIPTION	RATING
CLS	CLOSE LIMIT SWITCH	250VAC 10A
OLS	OPEN LIMIT SWITCH	250VAC 10A
CTS	CLOSE TORQUE SWITCH	250VAC 10A
OTS	OPEN TORQUE SWITCH	250VAC 10A
ACLS	AUX. CLOSE LIMIT SWITCH	250VAC 16A
AOLS	AUX. OPEN LIMIT SWITCH	250VAC 16A
TP	THERMAL PROTECTOR	250VAC 15A

*EACH ACTUATOR SHOULD BE POWERED THROUGH IT'S OWN INDIVIDUAL SWITCH OR RELAY CONTACTS TO PREVENT CROSS FEED BETWEEN TWO OR MORE ACTUATORS.

WEM/XEM-1350 thru 25900 Proportional 115 VAC/1 Ph SE 1052



Wiring drawings are available upon request.



Triac WE / XE Series Part Number Reference

Model	
WE	Weather Proof, IP67, TYPE 4, 4X, 6
XE	Explosion Proof Design, ATEX & IECEx Ex d IIB T4, IP67
FE	Fire Proof Unit (1050°F for 50 Min)
SE	Submersible unit (IP68, 10 meters for 72 Hours)

Control	
Blank	(2) Position Control (Open / Close)
M	Standard Modulating Control Card (TMC3)
D	TDC-100 Modulating Card (Provides 450 points of resolution)
P	Profibus DP
R	Modbus (RS485)

Actuator	
Size	
-350	350 In-Lbs
-350HS	270 In-Lbs
-500	500 In-Lbs
-690	690 In-Lbs
-1350	1350 In-Lbs
-1700	1700 In-Lbs
-2640	2640 In-Lbs
-4400	4400 In-Lbs
-5200	5200 In-Lbs
-6900	6900 In-Lbs
-10500	10500 In-Lbs
-17500	17500 In-Lbs
-25900	25900 In-Lbs
-53000	53000 In-Lbs
-80000	80000 In-Lbs

Motor		
X	115VAC/1PH	Place holder only - Omit when at end of part number
A	24V AC/DC	(N/A 4400 - 25900)
B	12VDC	
C	24VDC*	(N/A 4400 - 25900)
	*Requires additional relays for customer supplied wiring	
D	24VAC/1PH	(N/A 4400 - 25900)
E	220VAC/1PH	
F	220VAC/3PH	(N/A 500, 690)
G	380VAC/3PH	(N/A 500, 690)
H	440VAC/3PH	(N/A 500, 690)
J	460VAC/3PH	(N/A 500, 690)
K	480VAC/3PH	(N/A 500, 690)

Options		
X	No options	Place holder only - Omit when at end of part number
2	ADM-100 Control Board - 24 VDC On/Off	
B	Semi-integral Control Unit	(N/A 500, 690)
C	Intelligent Digital Control Unit	(N/A 500, 690)
D	Local / Remote Control Switches	(Only 500, 690)
E	Electronic Speed Control Module - 115 VAC only	
F	2 Wire Control & Speed Control - 115 VAC only	
G	End of travel time delay (same in both directions)	
HS1/HS2	See High Speed Options	
R	2 Wire Control, Relay - 115 VAC control voltage	
S	2 Wire Control, Relay - 24 VAC control voltage	
T	2 Wire Control, Relay - 24 VDC control voltage	

Miscellaneous Options Note: Add all miscellaneous options to end of part number		
Blank	No options	
T	4-20mA Transmitter	
N	1000 Ohm Potentiometer	
O	5000 Ohm Potentiometer	
P	10K Ohm Potentiometer	
X	120° Operation	(N/A 17500 or 25900)
Y	180° Operation	(N/A 17500 or 25900)
Z	270° Operation	(N/A 17500 or 25900)
L	-40° Low Temp Kit	
I	Position Indicator Lamps (Open, Close, Torque)	(N/A 500, 690)
S	(2) additional limit switches (6 total)	(N/A 500, 690)
	Floor Drive Mounting Configuration - See Floor Drive Catalog	



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 LIT0021-C

Examples

WEM-1350

(Weather Proof Housing, Modulating Control, model size 1350, 115VAC / 1PH)

WEM-1350XXT

(Weather Proof Housing, Modulating Control, model size 1350, 115VAC / 1PH, 4-20mA Transmitter)

AT Controls reserves the right to change product designs and technical/dimensional specifications without notice.