

# EL-Series Electric Actuator



### **Coretech Flow America INC**

### Capabilities



#### **Reliability**

Expertise is our business specialty. Our credo follows from the technical requirements of our products field applications. Our products are built on proven design and application knowledge. By improving our competencies and the efficiency of our processes, we enhance the quality of our products and services.

#### <u>Performance</u>

The industry experience our team possesses has shaped our expertise, our commitment to quality and to the control of your processes. By fulfilling these requirements, we undertake to make no compromise on performance.

#### Commitment to support

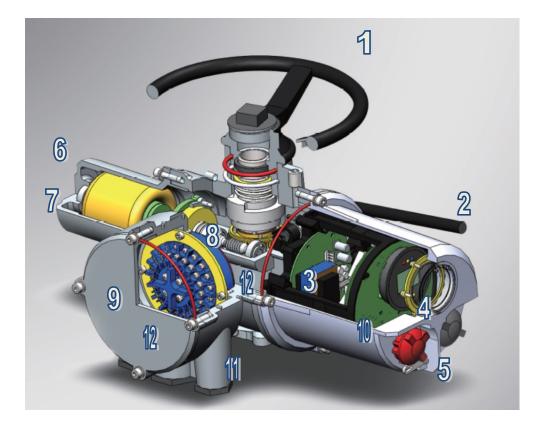
Coretech flow is an international industrial technological company acknowledged for its knowhow and expertise in the most demanding markets. Our support to our customer based before and after sales are second to none in the industry.

#### User Friendly

Our interaction with our customers reflect our philosophy of user friendly. Our product design follows the same philosophy to ensure satisfactory customer experience in the field.

### **Reliable Design**

- 1. Manual Override for Emergency
- 2. Manual/auto Declutch
- 3. Torque Sensor for Reliable Output Measurement
- 4. User Friendly LCD Display
- 5. Local/ Remote Selector
- 6. Premium Aluminum Cast Enclosure
- 7. Low inertia /High Efficiency Motor
- 8. High Precision /Proven Worm Gear
- 9. Separate Terminal Box for Better Sealing
- 10. Easy Installation Control Card
- 11. Movable Drive Sleeve for Easy Machining
- 12. Double Seal IP67 Water Ingress Protection



# **Key Design Features**



- <u>LCD Display</u> High resolution and visually contrast LCD display provides user friendly information about actuator operation status, valve position. The green/yellow/ red lights are highly visible in severe weather condition.
- 2. <u>Non-intrusive setup</u> All settings and adjustments are made using the supplied infred setting tool or via control nobs.
- 3. <u>Comprehensive Diagnostics</u> Covers obstructed valve, jammed valve, anti hammer, incorrect phase rotation, lost phase, motor overheating etc.
- <u>Reliable Data logger</u> Standard onboard data logger provides valve torque and starts profiles, operational statistics, event logs etc.
- 5. <u>Absolute Position Encoder Sensor</u> Reliable valve position sensing is critical. Using the latest absolute encoder to ensure accurate contactless position sensing mechanism.
- Password protection Local setup and configuration is password protected.
- <u>Communication protocols</u> Different bus communication and Hart available.
- 8. <u>Water ingress protection</u> Enclosure is rated for immersion to IP 68 and completely watertight and does not breathe. The double seat system ensures protection of internal components.
- <u>Remote control & Indication</u> Remote control and indication of valves for centralized control via push-button control to DCS using digital bus.
- Fireproofing enclosure—as an option, the UL-1709 compliant in tumescent coating allows 30 minutes in fire temperatures up to 1000 C.

### **Product Range**



#### Multi-turn actuators

JYF Series Range description

- Available torque range from 25 to 25 000 Nm
- Light weight and compact design
- Absolute position encoder sensing technology for accurate valve control
- Piezo pressure sensor for torque measurement
- Over-travel protection
- Over-torque protection
- Alarm function for over-torque, stuck position
- Motor over heat protection
- Electrical power lost phase protection
- Explosion proof
- IP68 (10m / 96h) water ingress protection as standard
- EN 15714-2 Duty Classification: On-Off (Class A),
- Inching/Positioning (Class B), Modulating (Class C)
- Electromechanical versions (switches) on request



#### Quarter-turn actuators

JFT Range description

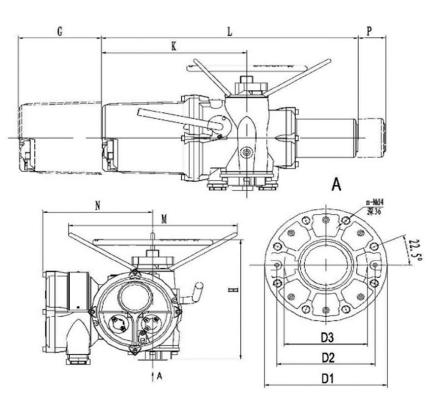
- Available torque range from 200 to 500 000 Nm
- Light weight and compact design
- Absolute position encoder sensing technology for accurate valve control
- Piezo pressure sensor for torque measurement
- Over-travel protection
- Over-torque protection
- Alarm function for over-torque, stuck position
- Motor over heat protection
- Explosion proof enclosure
- IP68 (10m / 96h) water ingress protection as standard
- EN 15714-2 Duty Classification: On-Off (Class A),
- Inching/Positioning (Class B), Modulating (Class C)

# **Quality Control**



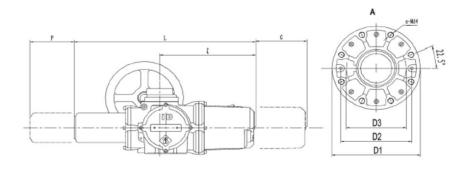
- All manufacturing is conducted under ISO 9001 certified quality management system
- Actuators comply with standards EN15714-2 Industrial Valves-Actuators-Part 2
- Products are stringently manufactured in accordance with applicable industry standards and to specific design specifications.
- All actuators meet IP67 water ingress protection requirements
- Motors are low inertia and high efficiency squirrel cage design
- Explosion proof as required
- Proven high precision worm gear drive train as the standard for JYF series

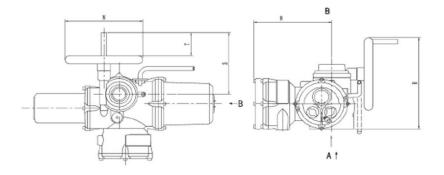




### EL-JYF 10/12/18/20/25/35/40

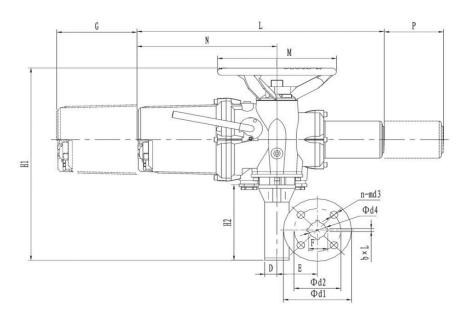
	Unit: mm													
Actuator Model	G	Н	K	L	M	Ν	Р	D1	D2	D3	N- Md4			
EL-JYF/ JYT														
10/12/18	180	320	320	560	Ø300	265	180	Ø125	Ø102	Ø70	4-M10			
EL-JYF/														
<b>JYT 20</b>	180	380	340	678	Ø508	280	220	Ø176	Ø140	Ø100	4-M16			
EL-JYF/	100	200	240	(70	0500	200	220	0170	Q140	Ø100	4.2416			
JYT 25	180	380	340	678	Ø508	280	220	Ø1/6	Ø140	Ø100	4-M16			
EL-JYF/														
<b>JYT 35</b>	180	420	365	715	Ø762	302	226	Ø215	Ø165	Ø130	4-M20			
EL-JYF/														
<b>JYT 40</b>	180	460	450	900	Ø830	358	282	Ø300	Ø254	Ø200	8-M16			



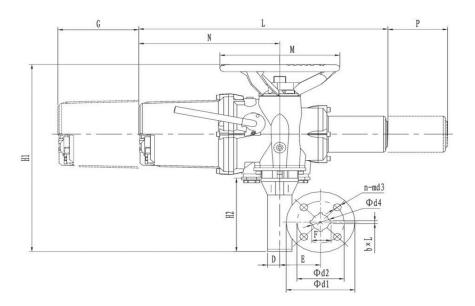


EL-JYF 70/80/91/95

	Unit: mm														
Actua- tor Model	G	Н	K	L	Μ	N	Р	S	Т	D1	D2	D3	N-Md4		
EL- JYF 70	230	577	503	1024	Ø43 2	358	335	438	116	Ø30 0	Ø25 4	Ø2 00	8-M16		
EL- JYF 91	230	577	503	1048	Ø43 2	358	480	438	116	Ø30 0	Ø25 4	Ø2 00	8-M16		
EL- JYF 90/95	230	577	503	1024	Ø43 2	358	335	438	116	Ø35 0	Ø29 8	Ø2 30	8-M20		



JYF Actuator with Gear Reduction Unit: mm																											
Actuator Model	D	D	D	D	D	D	D	D	D	D	D	D	E	H1	H2	G	L	М	N	Р	b x L	Ø d1	Ø d2 N-md3	N-md3	Max Allow	Secondary reduction Gear	
														Dia	Input Flange	Output Flange											
JYF 10/MOW3-40	35	76	524	204	180	560	Ø300	320	180	14 x 80	170	102	4-M10	45	F10	F14											
JYF 10/MOW3-70	35	76	524	204	180	560	Ø300	320	180	14 x 80	170	102	4-M10	45	F10	F14											
JYF 12/MOW4-40	39	102	570	250	180	560	Ø300	320	180	18 x 90	230	140	4-M16	60	F10	F14											
JYF 12/MOW4-70	39	102	570	250	180	560	Ø300	320	180	18 x 90	230	140	4-M16	60	F10	F14											
JYF 18/MOW5-70	50	136	640	320	180	560	Ø300	320	180	22 x 105	285	165	4-M20	76	F14	F16											
JYF 20/MOW5-40	50	136	700	320	180	678	Ø508	340	220	22 x 105	285	165	4-M20	76	F14	F16											
JYF 20/MOW6-70	50	178	710	330	180	678	Ø508	340	220	28 x 143	375	254	4-M16	102	F14	F25											
JYF 25/MOW7-60	70	210	845	465	180	678	Ø508	340	220	28 x 143	450	254	4-M16	127	F14	F25											
JYF 35/MOW7-60	70	210	885	465	180	715	Ø762	365	260	28 x 143	450	254	4-M16	127	F16	F25											



JYF Actuator with Gear Reduction											Unit: mm						
Actuator	D	Е	H1	H2	G	L	м	N	Р	b x L	Ø d1	Ød	N-md3	Max Allow Dia	Secondary Reduction Gear		
Model	D	15	m	112	U	Ľ	101	1	•	DXL	oui	0 42	i v-mus		Input Flange	Output Flange	
JYF 12/MOW5R-80	50	150	767	447	180	560	Ø300	320	180	22 x 105	285	165	4-M20	76	F10	F16	
JYF 12/MOW5R- 120	50	150	767	447	180	560	Ø300	320	180	22 x 105	285	165	4-M20	76	F10	F16	
JYF 18/MOW6R- 140	50	192	777	457	180	560	Ø300	320	180	28 x 143	375	254	4-M20	102	F10	F25	
JYF 20/MOW6R- 140	50	192	837	457	180	678	Ø508	320	220	28 x 143	375	254	4-M20	102	F14	F25	
JYF 20/MOW7R- 180	70	210	1035	655	180	678	Ø508	340	220	28 x 143	450	254	4-M20	127	F14	F25	
JYF 25/MOW8R- 180	87.5	245	1105	725	180	678	Ø508	340	220	40 x 120	520	254	8-M16	153	F14	F25	
JYF 35/MOW9R- 180	85	280	1320	900	180	715	Ø762	365	260	40 x 120	590	298	8-M20	178	F16	F30	
JYF 40/MOW10R- 180	100	353	1412	952	180	900	Ø830	450	320	40 x 120	725	356	8-M30	203	F25	F35	
JYF 35/MOW11R- 360	125	450	1406	986	180	715	Ø762	365	260	52 x 230	972	406	8-M30	178	F16	F40	

### How To Order Guide

Product Series	Actuator Style	Model Module	<u>RPM</u>	<u>Gear</u>	<u>Gear Model</u>	<u>Mode</u>	Power Supply	Explosion Prooft
EL Electric	JYF- Multi-turn	10	18	Worm	MOW3-40	On/off	24VDC	Yes
	JYT- Quarter turn	12	24	Bevel	MOW3-70	Modulating	110V 1 Ph	None
	JYTL-Linear	18	36		MOW4-40		220V 1 Ph	
		20	48		MOW5-40		380V 3 Ph	
		25	144		MOW5-70		480V 3 Ph	
		35			MOW6-70		Other	
		40			MOW7-60			
		70			Other			
		90						
		91						
		95						

## **Photo Gallery**





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