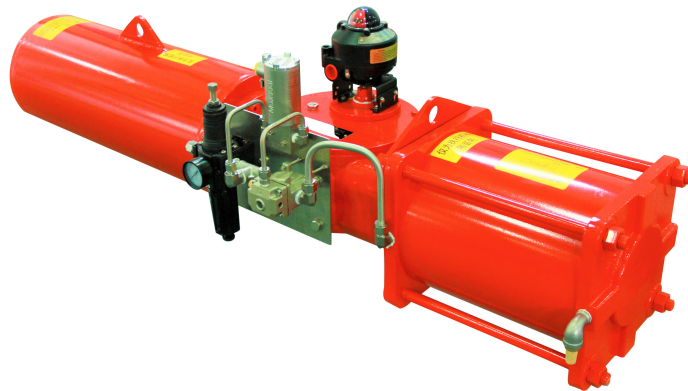


SP Series Pneumatic Scotch Yoke Actuator



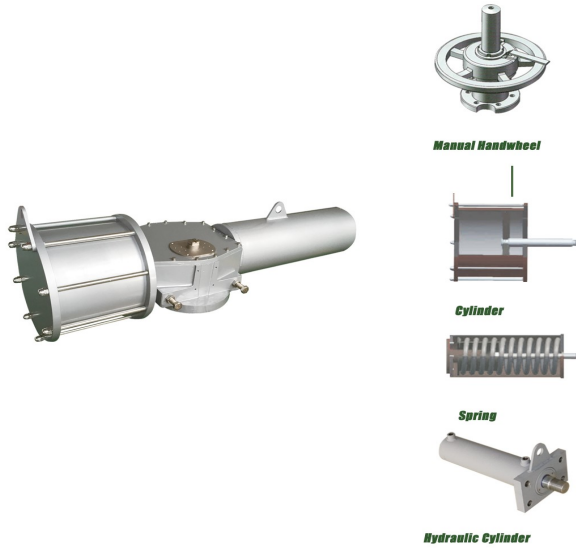
Coretech Flow America

Pneumatic Scotch Yoke

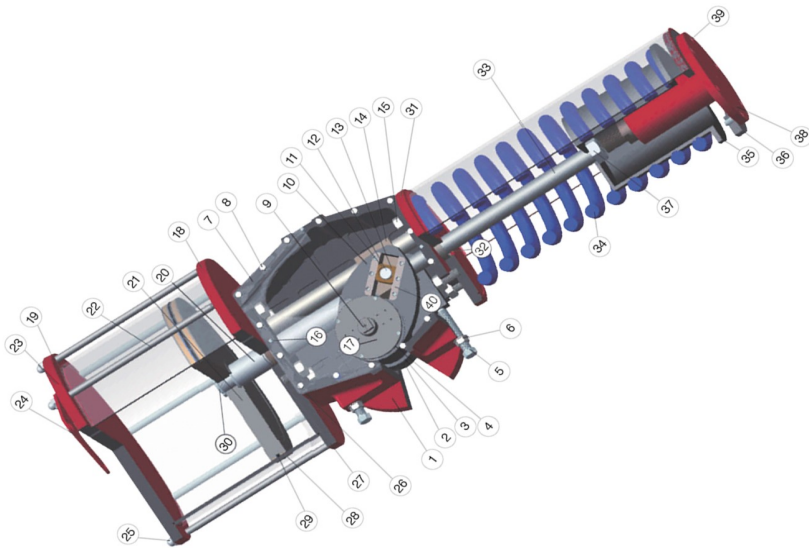
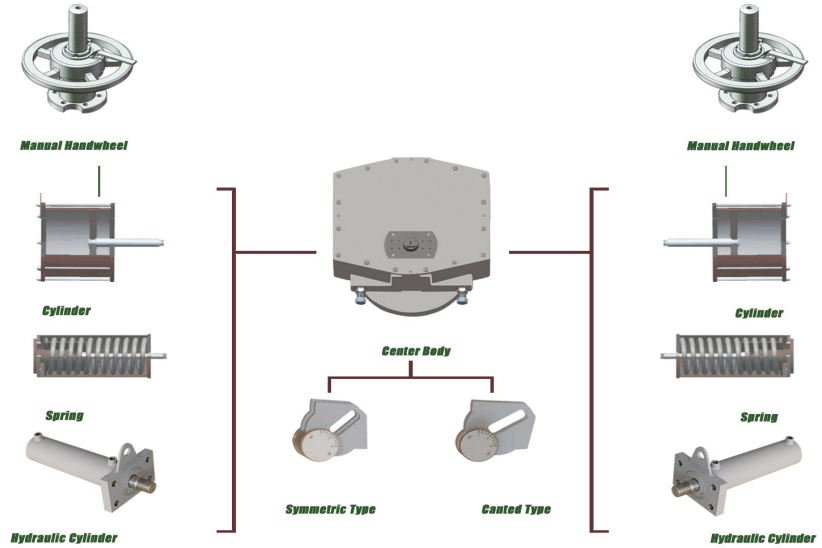


Pneumatic Scotch Yoke

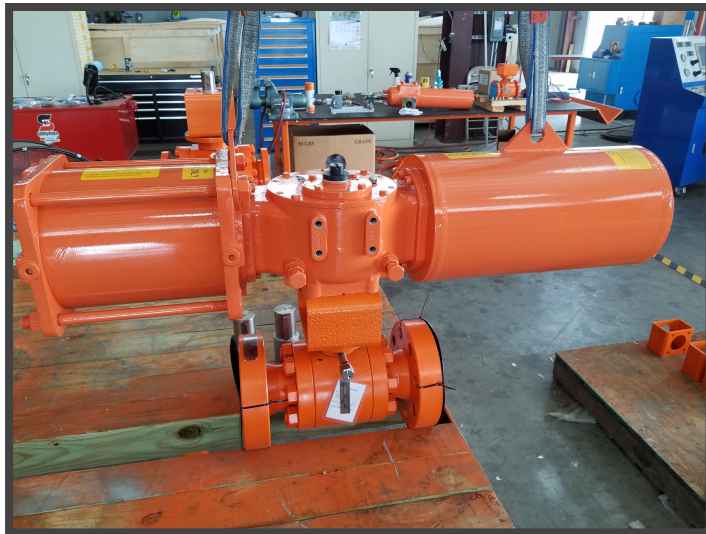
Structural Features



Performance Features



Automated Ball Valve



Design and Innovation

The technical features incorporated in SP Series pneumatic actuators, permits to have many benefit and versatility for an easier valve automation.

Range and options

The **SP Series** pneumatic actuators are available in:

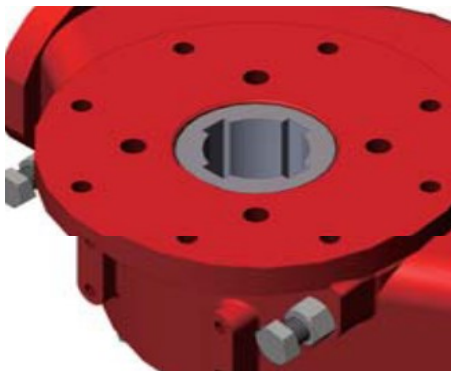
- PED 97/23/EC compliant to meet the stringent requirements of pressure mounting vessels
- Spring return and double acting version
- Torque range up to 256,000 Nm / 2,273,500 Lb-In
- Operating pressure: pneumatic—30 to 220 PSI
- Low and high temperature constructions

Product Quality, Technology and material

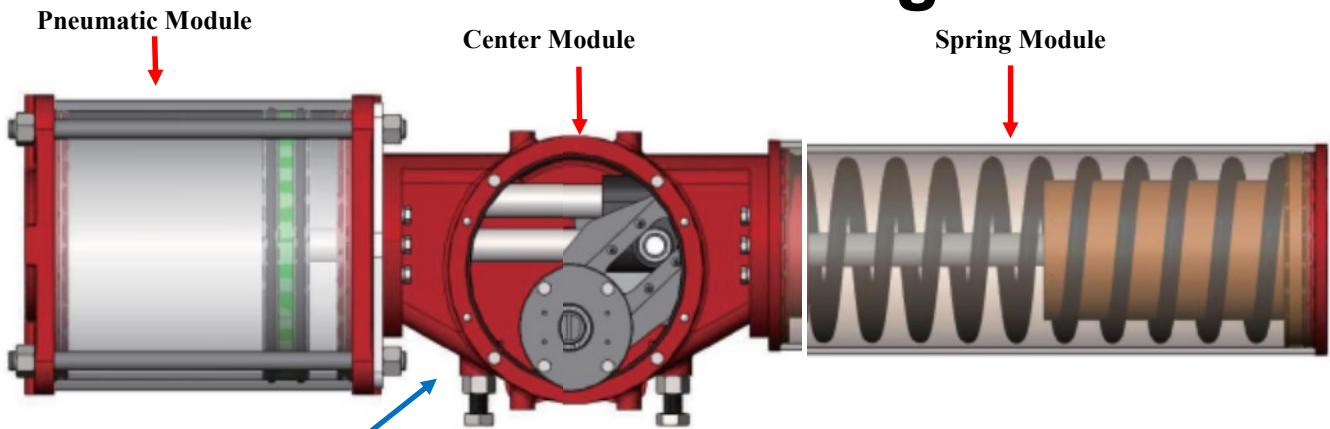
The **SP Series** pneumatic actuators, have been designed and tested to obtain the highest cycling life and the most reliable performance with very reduced maintenance and service. The actuators are manufactured with the highest material quality, the most accurate material selections and the latest production technologies.

International Standards

The **SP Series** pneumatic actuators, have been designed, manufactured and tested in full compliance with all the applicable International standards.

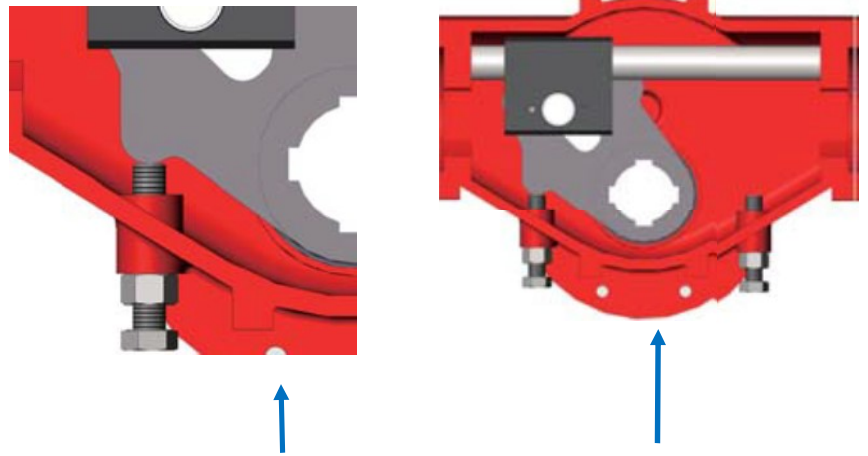


Modular Design



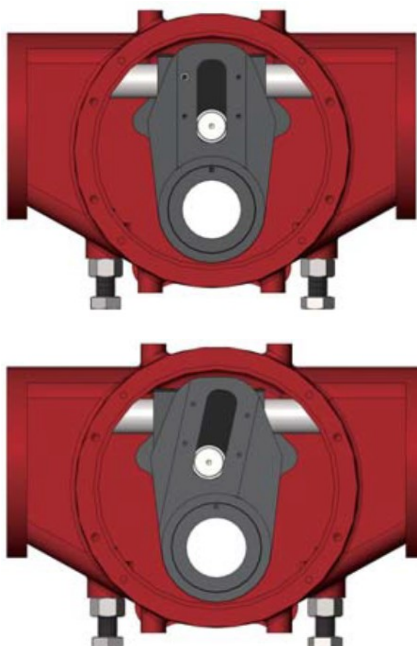
Modular Design

SP series actuators share modular construction design. The center module with 10 sizes connects to a pneumatic or hydraulic cylinder to either or both sides. Spring cartridge can be fitted to either side for ESD. Modular design and material stocking offer quick de-



Travel Stop

Integral bi-directional travel stops, adjustable from -6 degree to 96 degree of total valve travel, assist the SP actuator to achieve tight shutoff and extended seat



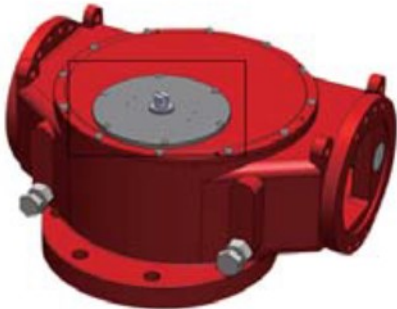
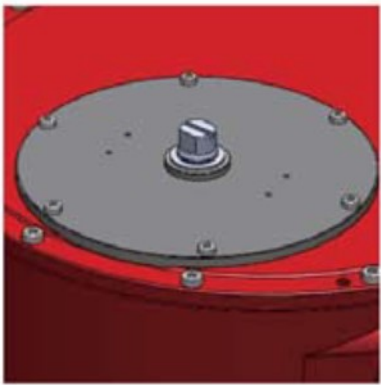
Symmetric or Canted Yoke

SP series actuators available with either symmetric or canted yokes. Traditional symmetric design provides balanced start and end torques. Canter time offers a higher break torque to

Versatility and Performance

ISO 5211 Mounting

SP series actuators complies with ISO 5211 mounting pattern for ease integration



Control Mounting

SP series actuators output shaft conforms to the latest standards of ISO 5211 mounting pattern and NAMUR for easy control

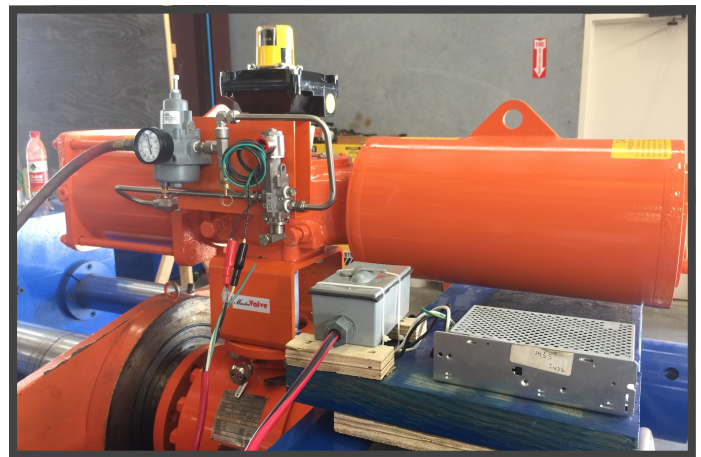
High Performance Seals

SP series actuators offer the dual-material (rubber and PFA) encapsulated O-ring with a wide range of temperature and long durability of your (emergency shut down)



Quality Controls

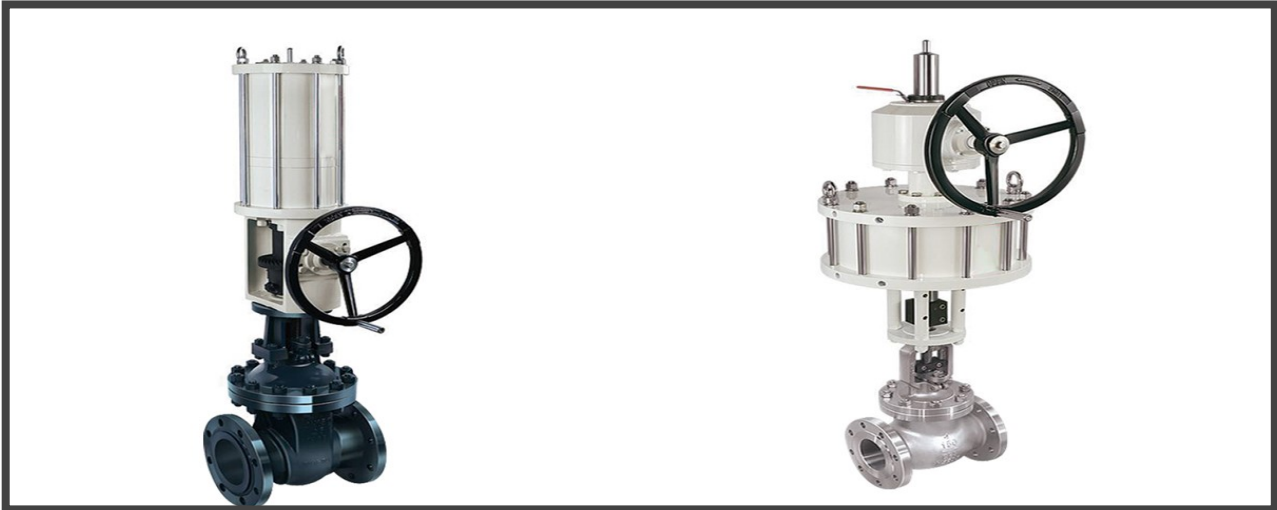
- ⇒ All manufacturing is conducted under ISO 9001 certified quality management system
- ⇒ Products are stringently manufactured in accordance with applicable industry standards and to specific Design Specifications.
- ⇒ Designs are compliant with ASME B16.34, API 608, API 600, API 6D, API 6A and MSS-SP110
- ⇒ Pressure testing is conducted to API 6D, API 6A, API 598, MSS SP-110 as applicable
- ⇒ Fire test certifications to API 607 and API 6FA as applicable
- ⇒ All valves certified to NACE meets the predefined material requirements of NACE MR-0175/ISO 15156 or NACE MR-0103
- ⇒ Material Test Reports per EN 10204-1991 3.1.B & EN10204 3.1 available for each



Production



Linear Pneumatic/Hydraulic DA/ Spring Return Actuators



Linear Actuators

Features and Benefits

Features

1 - Cylinder – High strength steel cylinder coated for enhanced performance and corrosion protection.

2 - Piston – Precision machined steel piston incorporates an anti-friction wear ring and bidirectional quad seal for long trouble-free service.

3 - Cylinder Heads (Upper and Lower) – Precision machined steel cylinder heads provide a true parallel surface for alignment

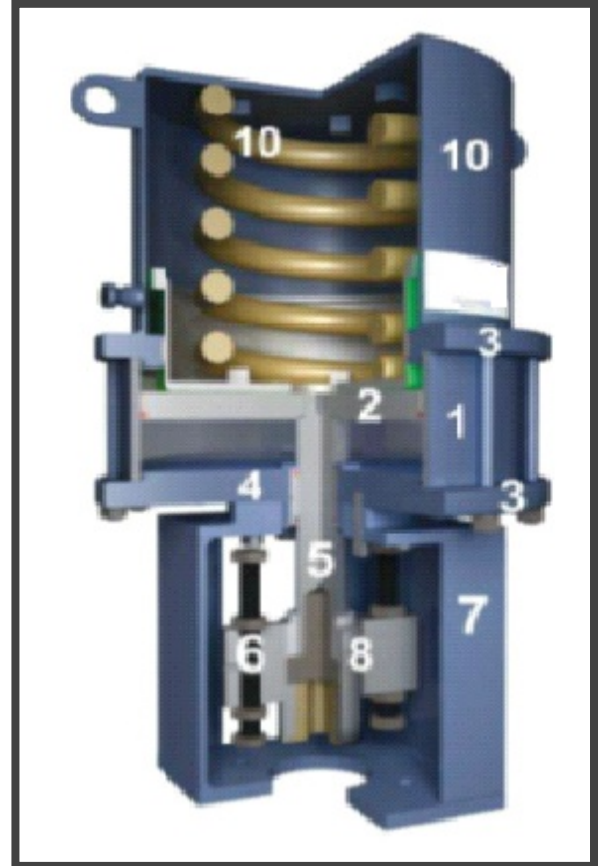
4 - Piston Rod Bearing – Heavy duty, extra-long piston rod bearing

5 - Piston Rod – The piston rod is made from 100,000 psi minimum yield high quality strength alloy steel, honed finish and hard chrome plated.

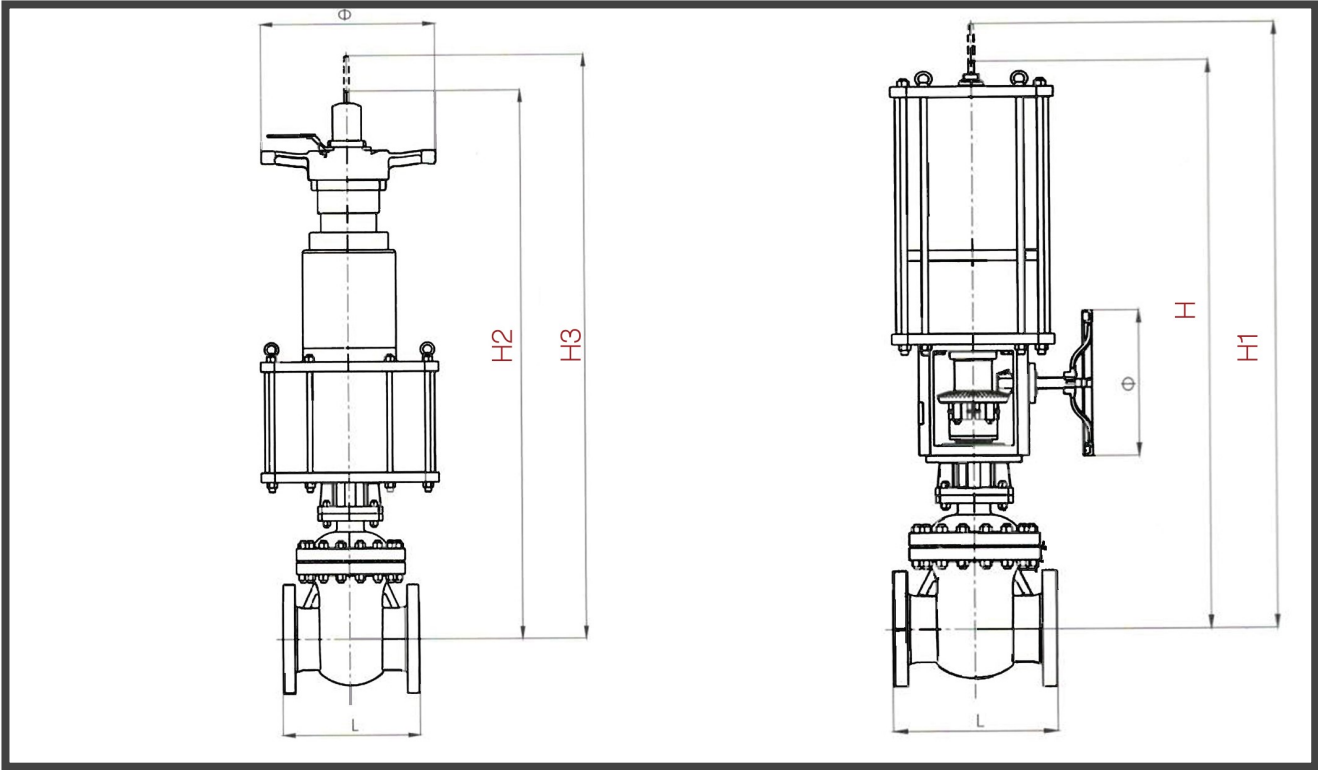
6 - Travel Stops – Externally adjustable travel stops

7 - Adaption Bracket – One piece open adapter allows for access to travel stops, limit switch adjustment, valve packing adjustment, and actuator removal.

8 - Coupling Block – Unique piston rod to valve stem coupling block allows easy installation and removal of the actuator.



Linear Actuator Dimension



Linear Actuator Dimensional Data

Valve Size	150 LB									
	L		mm						L	
	RF	RJ	H	H1	H2	H3	?	Weight (Kg)	RF	RJ
1"	130	143	870	895			180	25	168	181
1-1/2"	168	181	910	950			180	40	193	206
2"	181	194	905	955	785	835	200	35	219	235
3"	206	219	1060	1140	885	965	250	65	286	301
4"	232	244	1225	1325	1055	1155	300	90	308	324
6"	270	282	1525	1675	1245	1395	400	180	406	422
8"	295	308	1885	2085	1525	1725	450	380	422	438
10"	333	346	2255	2505	1705	1955	450	500	460	476
12"	359	371	2435	2735	1935	2235	500	600	505	521
14"	384	397			2165	2515	500	880	765	781
16"	409	422			2335	2735	500	1200	841	857
18"	435	448			2545	2995	550	1480	917	933
20"	460	473			2755	3255	550	1875	994	1013

How To Order

Scotch Yoke Actuator

Product Series	Yoke	Action	Drive Module	Cylinder	Fail Mode	Manual Override	
SP-RT Pneumatic	01- Symmetric	D- Double acting	02	20	FO	Jack Screw	
	02- Canted	S- Spring return	03	25	FC	Gear	
			04	30		Hydraulic manual	
				05	35		
				06	43		
				07	48		
				08	53		
					63		
					68		
					73		
					80		
					90		
					100		

Linear Actuator

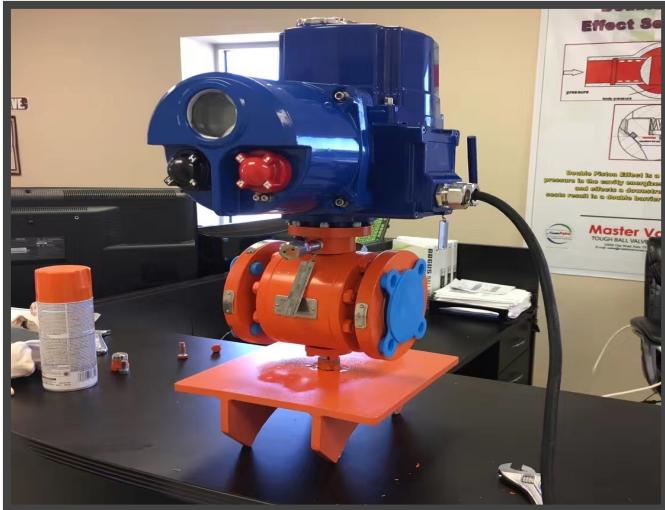
Product Series	Cylinder Size	Action	Spring Range	# of Pistons	Fail Mode	Manual Override
LN-ZT Pneumatic	160	DA- Double acting	K4	1P	FO	TM
	180	SR- Spring return	K5	2P	FC	Screw
	200		K6	3P		Hydraulic
	250		None			Gear
	300					None
	350					
	380					
	430					
	480					
	530					
	580					
	600					

Other Actuator Product

Gas Over Oil and Direct Gas Pipeline Actuator



Electric Actuators



Electrohydraulic Actuators



Coretech

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