

Fail Safe Electric Actuators [Spring Return Type]



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The new high-performance Fail Safe Electric Actuators [Spring Return Type]

from i-Tork Controls has been developed for a wide range of applications with many years of experience with Fail Safe Electric Actuators [Battery Back Up type] used in various Valve Automation Field and to service reliable performance, long trouble free operation, more flexibility and maximized ability to integrate fully into sophisticated Fail Safe control system.

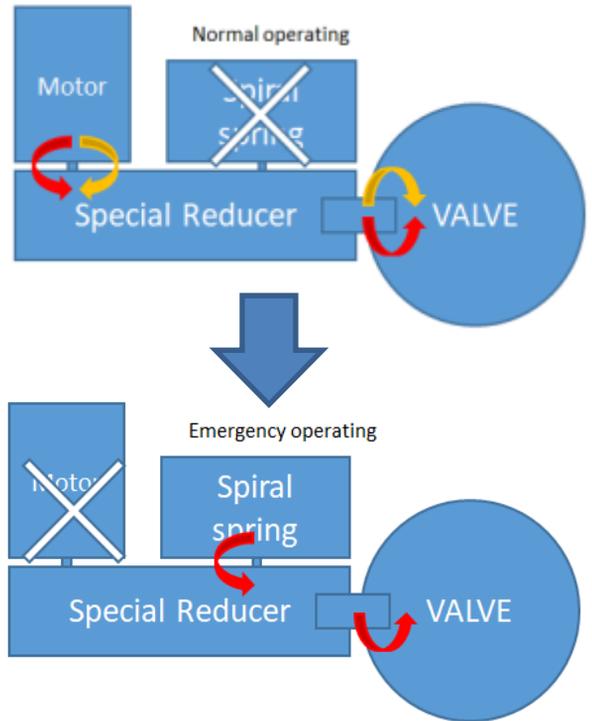
What is different ?

1) Independent Spring Structure

The most of existing Spring Return Actuators, the motor rotates the reducer and spring together to operate the valves.

Since the motor operates both the reducer and spring together, the load factor of the motor and reducer increase and also has the disadvantage in size & weight.

In the independent spring structure of i-Tork as shown pictures, the motor rotates only the reducer to operate the valve for normal operating and the spring just operate the valve for emergency operating.

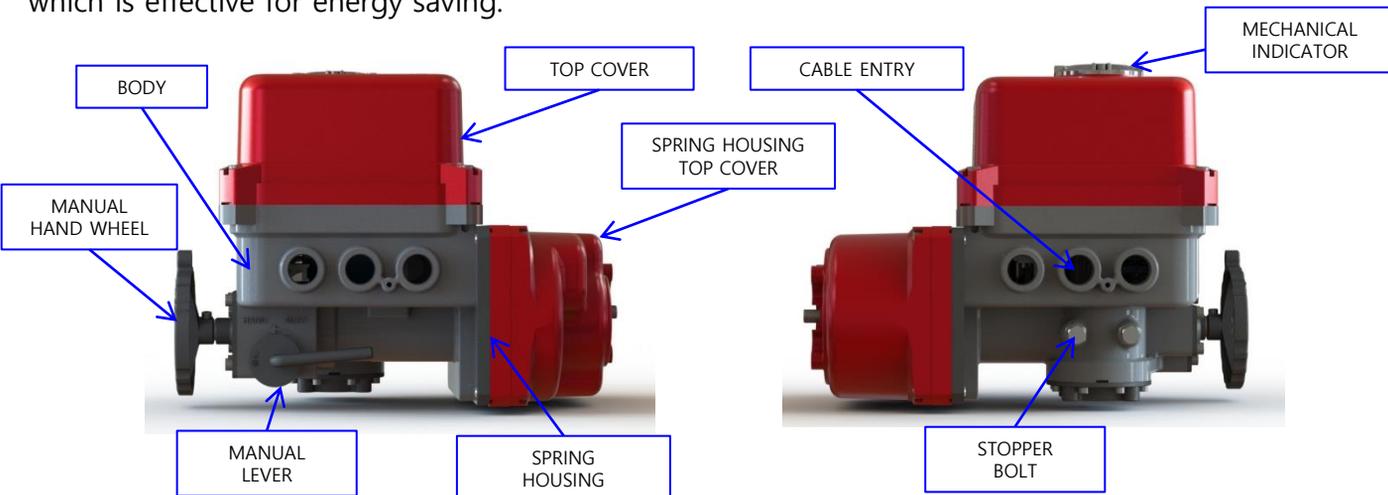


2) Compact size and reduced weight

The independent spring structure makes the motor and reducer smaller, so it has a compact size and reduced weight compared to other competitor's products.

3) Energy saving

Using a product with a small capacity motor has the advantage of less current than other products, which is effective for energy saving.



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Technical Data

	QS05	QS10	QS20	QS30	REMARK
TORQUE (Nm)	50	100	200	300	
OPERATING SPEED (sec)	50Hz : 21 / 60Hz : 18		50Hz : 34 / 60Hz : 30		
MAIN POWER SUPPLY	AC 110V AC 220V AC 380V AC 440V DC 24V		AC 110V AC 220V AC 380V AC 440V DC 24V		
DUTY CYCLE (ON/OFF)	S2 : 30min				
DUTY CYCLE (MODULATING)	S4 : 50%				
CONTROL SIGNAL	4~20mA (Option : 0~10VDC, 0~5VDC, 1~5VDC, 2~10VDC)				Input / Output
SPACE HEATER	2W				
LIMIT SWITCH	2ea Open, Close (SPDT 250VAC/10A rating)				
TORQUE SWITCH	2ea Open, Close (SPDT 250VAC/10A rating)				
AUX. FORCE SWITCH (Option)	2ea Open, Close (SPDT 250VAC/10A rating)				
AMBIENT TEMPERATURE	-20°C~+70°C				
AMBIENT HUMIDITY	90%RH MAX(NON-CONDENSING)				
ENCLOSURE	IP 67 (OPTION : IP68)				
EXPLOSION PROOF	Not available (Under development)				
CABLE ENTRY	6-PF1/2 TAP (OPTION : M20x1.5, NPT1/2),		6-PF3/4 TAP (OPTION : M25.1.5, NPT3/4)		
WEIGHT(kgf)	22		40		

※ All the options of ITQ series is also available in QS series.

※ Patent-Pending : 4 (four) in Korea

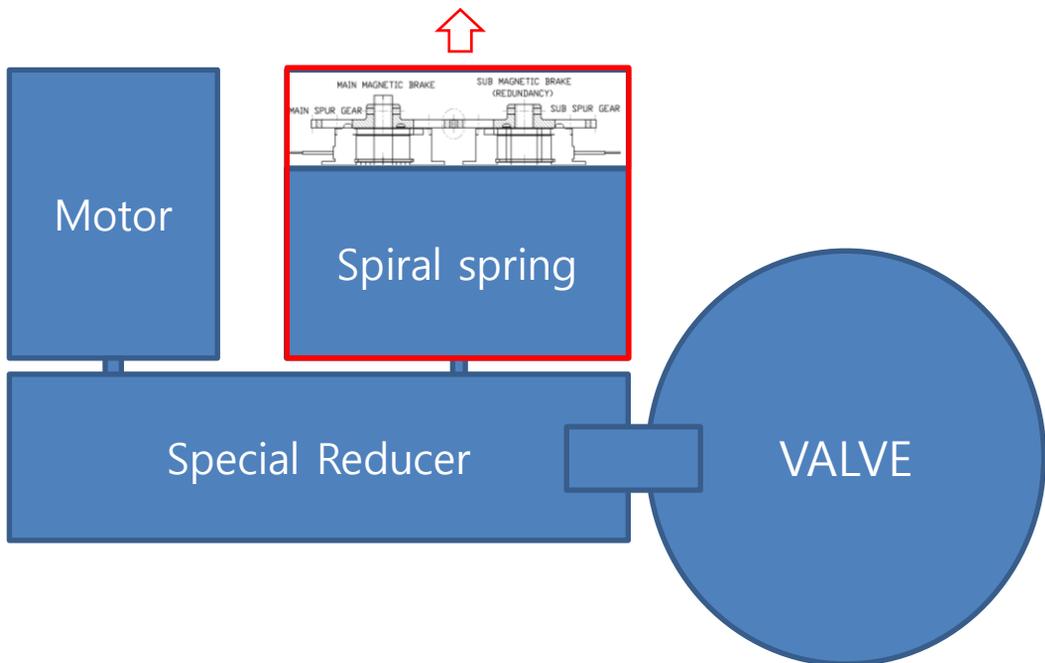
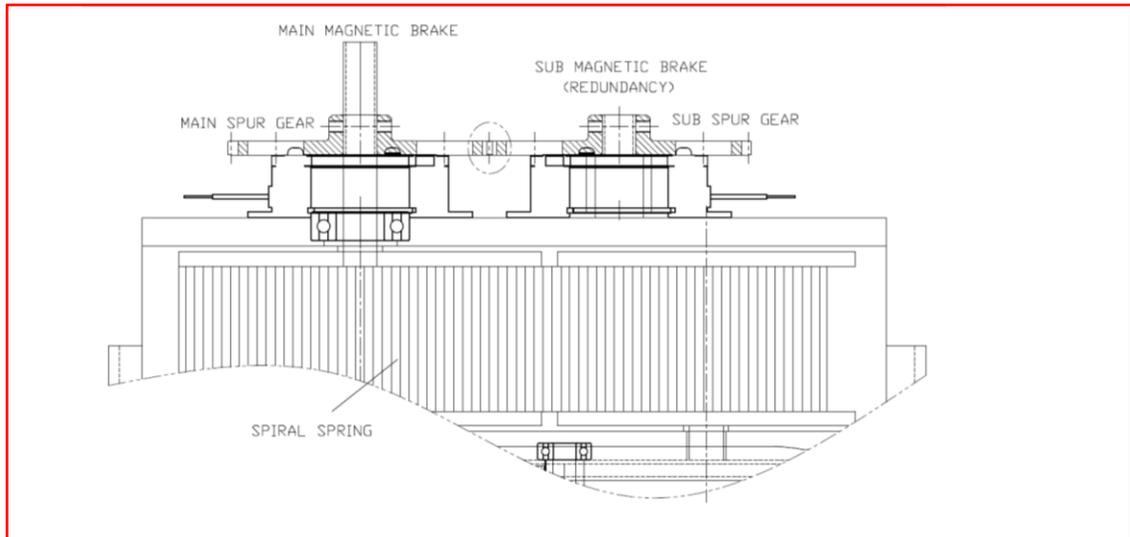
※ Applying for a Patent in PCT (Patent Cooperation Treaty) : 156 Countries

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Spring Speed

	QS05	QS10	QS20	QS30
SPRING TORQUE (Nm)	50	100	200	300
SPRING SPEED (sec)	1.8		1.8	
OPTION(sec)	2 3 4		2 3 4	

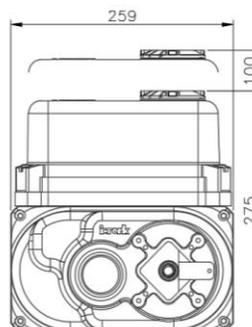
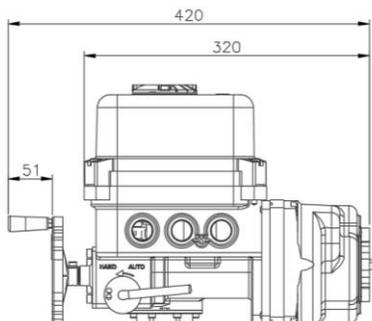
Structure of the Magnetic Brakes & Spiral spring



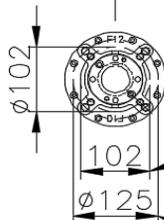
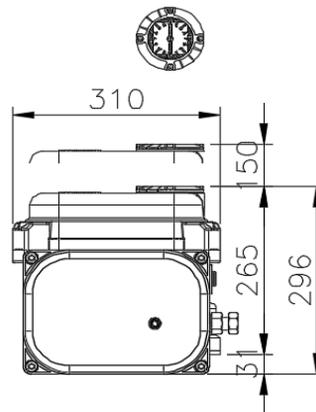
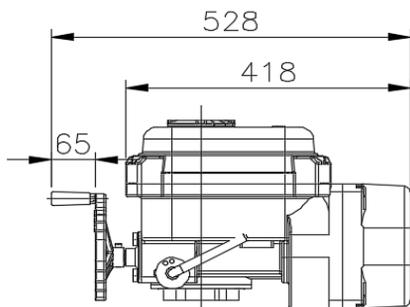
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Dimensions(mm) [are subject to change]

QS05/10



QS20/30



4-M10TAP DP17
 Ø8.5DRILL DP21
 (ISO 5211 F10)
 4-M12TAP DP21
 Ø10.2DRILL DP26
 (ISO 5211 F12)

CERTIFICATION

Quality Management System



RANGE OF PRODUCTS

Fail Safe with Rechargeable Battery back up type
for ITQ (Rotary) & IQL (Linear)



The details of this catalog are subject to change without prior notification,
without our responsibility.

i-tork[®]