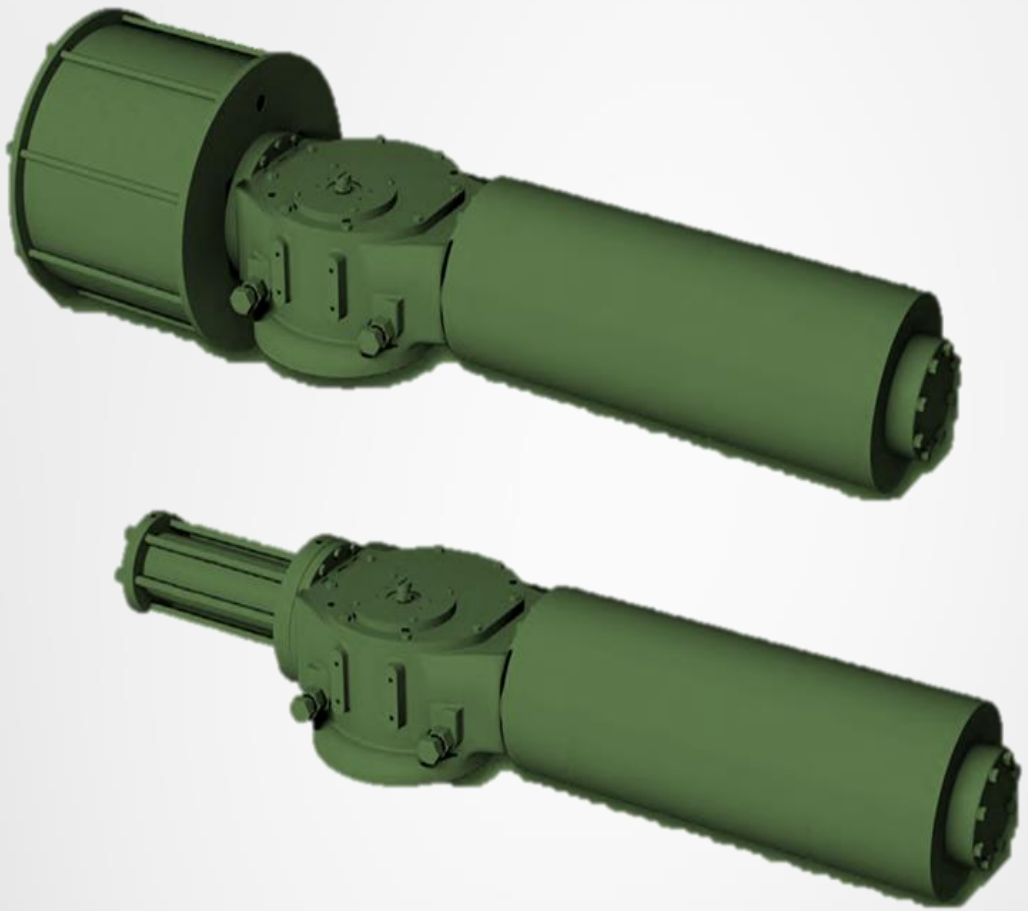


Pishro Sanat Amal Scotch Yoke Actuators

SPRING RETURN • DOUBLE ACTING



Pishro Sanat Amal(PESA), has been offering a wide variety of engineered products. Primary amongst the targeted market segments are the following:

- Oil and Gas
- Chemical and Petrochemical
- HVAC
- Marine
- Mining
- Pulp and Paper
- Water and Wastewater
- Food and Beverage

AVAILABLE OPTIONS

Automated Packages

Pishro Sanat has the capability to integrate our actuators in a complete pneumatic and hydraulic control system to cover all the needs that valve automation requirements. Our engineers have a deep knowledge of controls and pneumatic and hydraulic systems.

Passive Fire Protection

Passive fire protection is a key issue in the safety of hydrocarbon process plants. It is considered a reliable method to reduce plant fire risks. For this matter, Pishro Sanat actuators can be customized to withstand exposure to fire and very high temperatures. A full range of fire proof systems are available, including protective jackets, intumescent coatings and stainless steel enclosure systems.

PERFORMANCE SPECIFICATIONS

Maximum Allowable Working Pressure

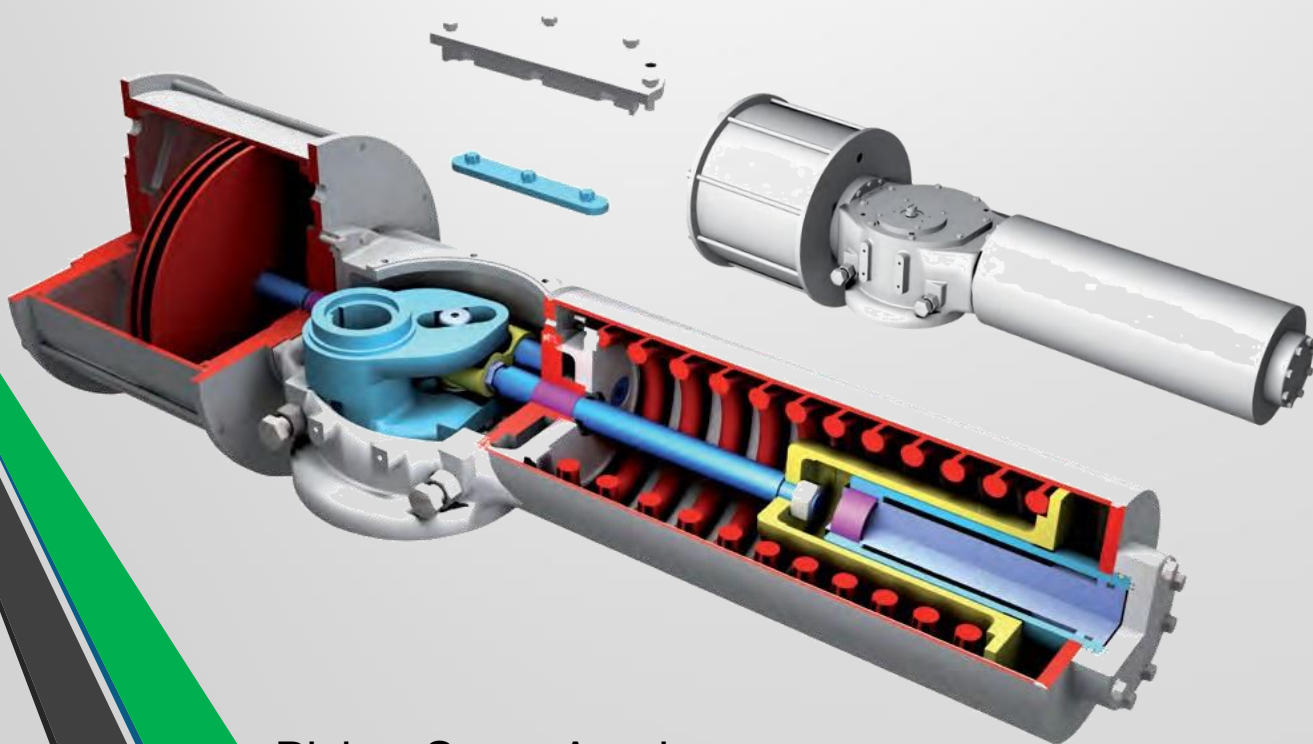
- Hydraulic Pressure: Up to 2,900 psi (200 bar/19,995 kPa)
- Pneumatic Pressure: Up to 120 psi (8 bar/827 kPa)
- Design Pressure: 175 psi (12 bar/1,206 kPa)

Torque Output

- Double Acting (DA): Up to 2.2 million in-lb (250,000 Nm)
- Spring Return (SA): Up to 628,000 in-lb (71,046 Nm) Spring End

Working Temperatures

- Standard Construction: -4°F to 176°F (-20°C to 80°C)



Pishro Sanat Amal co.

SPRING RETURN ACTUATOR - SA5

Dimensions and Weights - Metric Units (mm, kg)

Body Size	Cylinder Size	Spring Return Actuator SA5 - Dimensions and Weights (mm, kg)										
		L1	L2	H1	H2	ØD	ØDO	A	m1	m2	m3	Weight
F12	170	390	515	105	85	231	219	50	73	79	166	100
	200	390	515	105	85	256	219	50	73	79	178	112
F14	200	442	619	114	87	256	273	60	89	68	188	140
	250	439	619	114	87	310	273	60	89	95	215	159
	300	439	619	114	87	365	325	60	89	122.5	242.5	195
F16	250	507	775	119	98	310	273	75	105	80	230	194
	300	507	775	119	98	365	325	75	105	107.5	257.5	232
	350	507	775	119	98	415	325	75	105	132.5	282.5	278

SPRING RETURN ACTUATOR - SA6

Torque Output - Metric Units (Nm)

Flange	Cylinder Size	Spring Return Actuator SA6 - Torque Output in Newton Meters (Nm)					
		Torque Output Air Pressure 6 barg			Torque Output Springs		
		Air Break	Air Running	Air End	Spring Break	Spring Running	Spring End
F10	150	325	160	209	360	182	245
	170	436	214	276	460	228	300
F12	170	547	268	343	560	274	355
	200	768	382	506	770	383	509
F14	200	1,027	513	627	1,018	507	617
	250	1,632	848	1,107	1,462	744	939
	300	2,257	1,144	1,433	2,268	1,150	1,443
F16	250	1,998	1,033	1,335	1,877	958	1,215
	300	3,014	1,572	2,056	2,569	1,297	1,613
	350	3,875	2,081	2,477	3,819	1,934	2,422

