

SAFEAir Series Large Linear Pneumatic Piston Actuators For On/Off and Control Valves



SAFEAir

SAFEAir Series Linear Pneumatic Piston Actuators

Our robust, high quality linear pneumatic piston (LPP) actuators (double acting and spring return) are suitable for on/off and control valve applications in demanding environments. The innovative design uses Sanyata's proven piston and seal design, compact carbon steel honed cylinders for trouble free operation and long life. The LPP series can be matched to the stroke requirements of most valves and are available with yoke brackets for easy mounting. The Sanyata SAFEBox series limit switch box can be integrated easily for open and close remote indication. Actuators can also be offered with integral manual override.



Features

- · Robust Carbon Steel Housings and customized materials for demanding applications
- Hydraulic or Gearbox Manual override
- Yoke bracket suitable for the valve stroke
- Provision for Limit Switch Box / Positioner Mounting
- · Visual position indicator to show the valve open/close position
- Fully enclosed alloy steel spring cartridges which enables safe disassembly of the actuator
- · Spring up and Spring down configurations are available
- Capable of short stoke for control valves and long stroke for knife gate valves
- Complies with EN60529 for IP68.

>> Technical Specification

Working Pressure Max operating pressure – 10 bar(145psig)

Working Environment

Standard: -30°C to 70°C (-58°F to 158°F) with NBR Seals High Temperature: -15°C to 160°C (5°F to 320°F) with Viton Seals Extended Temperature - 60°C to 200°C (-76°F to 392°F) with Silicone Seals Food safe version also available

Endurance Testing Designed and tested for life cycles up to 500,000 cycles.

Valve Interface Threaded Shaft and Mounting Flange as per ISO 5210 suitable for Yoke mounting.

Air Supply Ports EN ISO228 G1/2", G1", G1.1/2" based on the actuator size.

Lubrication

Gearbox manual override or Hydraulic Manual override.

Manual Override Integral handwheel or gearbox manual override

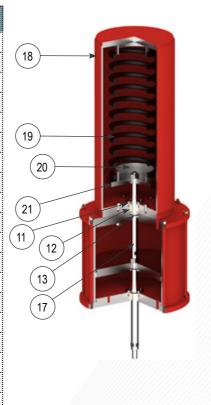
Approvals and Industry Standards: Management System in Accordance with ISO 9001:2015

Valve Flange: ISO 5210/DIN3338



2

(16)			
(16)	Item	Description	Material
	1	Cylinder	Steel
	2	Head Flange	Steel
	3	Tail Flange	Steel
	4	Piston	Steel
	5	Piston rod	Steel
	6	Tie Rod	Steel
	7	O-Ring	Rubber
9	b 1 Cylin 3 2 Head 3 Tail F 7 4 Pisto 5 Pisto 6 6 Tie R 7 0-Rir 9 Wear 10 0-Rir 12 Beari 13 0-Rir 14 0-Rir 15 Screw 16 Hexa 17 Sprin 18 Sprin 19 Sprin	O-Ring	Rubber
	9	Wear Ring	PTFE
	1CylinderSteel31CylinderSteel3Tail FlangeSteel3Tail FlangeSteel4PistonSteel5Piston rodSteel66Tie RodSteel7O-RingRubber8O-RingRubber9Wear RingPTFE10O-RingRubber211Retainer PlateStainless Steel12Bearing BushBronze13O-RingRubber14O-RingRubber15ScrewStainless Steel16Hexagon NutStainless Steel17Spring ShaftSteel18Spring CanSteel		
	11	Retainer Plate	Stainless Steel
	12	Bearing Bush	Bronze
	13	O-Ring	Rubber
(13)	14	O-Ring	Rubber
Ŭ,	15	Screw	Stainless Steel
	16	Hexagon Nut	Stainless Steel
(16)	17	Spring Shaft	Steel
\sim	18	Spring Can	Steel
	19	Spring	Steel
	20	Guide Tube	Steel



Actuator Performance Data

	Actuator Performance Data - Metric										
Model	Model Double Acting Thrust (N)							Rod Thread	Mounting Flange		
3 Bar	4 Bar	5 Bar	6 Bar	7 Bar	8 Bar	9 Bar	10 Bar		- Iango		
LPP-250	13738	18644	23550	28456	33363	38269	43175	48081	M24X2	F12	
LPP-280	17232	23387	29541	35696	41850	48004	54159	60313	M24X2	F12	
LPP-335	24667	33477	42286	51096	59906	68715	77525	86335	M24X2	F14	
LPP-385	32580	44216	55851	67487	79123	90758	102394	114029	M24X2	F14	
LPP-435	41592	56446	71300	86154	101008	115862	130717	145571	M30X2	F16	
LPP-485	51702	70168	88633	107098	125563	144028	162493	180959	M30X2	F25	
LPP-535	62912	85381	107850	130318	152787	175256	197724	220193	M30X2	F30	
LPP-585	75221	102086	128950	155815	182680	209544	236409	263274	M33X2	F30	
LPP-635	88629	120282	151935	183588	215242	246895	278548	310201	M36X2	F30	
LPP-685	103136	139970	176804	213638	250472	287306	324141	360975	M36X2	F35	
LPP-735	118741	161149	203557	245964	288372	330780	373187	415595	M52X2	F35	
LPP-785	135446	183820	232194	280567	328941	377315	425688	474062	M52X2	F35	

Spring Plate

Steel

21

- For spring Return, thrust (N) configuration is customizable. Please Contact Sanyata for details
- Stroke Range available from 50 mm to 1.2 metre. Can be suited to the valve stroke
- For dimensional details, contact Sanyata





>> Naming Scheme

	LPP	250	50	FC	4	Ν	С	8	10	S	2	X
Product Series LPP												
Bore - 250,280,335,385,435,485 585,635,685,735,785	5, 535,											
Stroke - 50,100,150,1200												
Action DA: Double Acting FC: Fail Close FO: Fail Open												
Spring Set X, 1, 2, 3, 4, 5, 6 (Use X for Doub	ole Acting)										
Manual Override Y: Yes N: No												
Material of Construction C: Carbon Steel, S: Stainless Ste	eel											
Valve Flange Interface6: F1210: F307: F1411: F358: F169: F25												
Valve Stem Interface 10: Threaded Piston Rod with Loc 20: With Flat Bracket 30: With Split Coupling	ck Nut											
Environment S: Standard Temp E Extended Temp H: High Temp F: Food Grade												
Coating 2: Epoxy coated (200+ Hours Sal 3: Duraflon PTFE coating 4: FDA Compliant Epoxy Polyeste												
Specials X-None												

Contact

4

- Sanyata Actuation and Fluid Engineering Pvt. Ltd., No: 262/1-A, Mettukuppam Road, Via Alapakkam Road, Janaki Nagar, Maduravoyal, Chennai-600095
- Cel: +91 44 29585783 | Mobile: +91 9884066783
- Email: sales@sanyata.in | Web: www.sanyata.group

