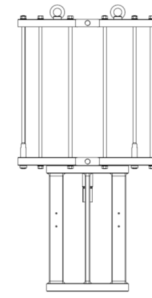


Technical Data Sheet

pneum. Piston Actuator



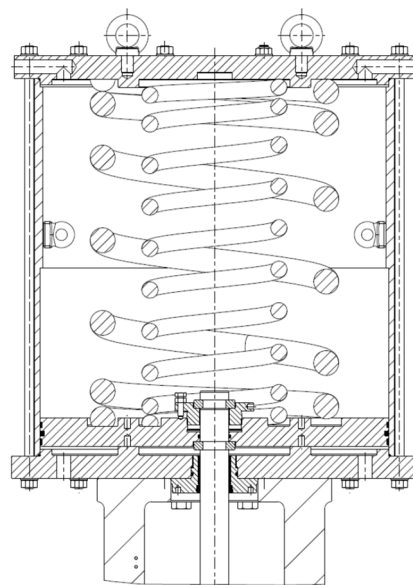
TD_814

Technical Data

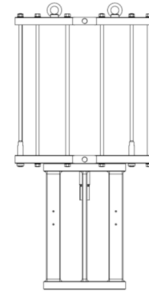
Series	814
Diaphragm effective area	2.825 cm ²
Stroke	180-250 mm
Control signal	6 bar max.
Setting time at 5 bar air supply stroke 200 mm	close = 5,5 sec with 3 volume booster, open 2 sec, open via solenoid valve 1,2 sec
Materials	Steel 1.0425 (optional 1.0566) Piston 1.0425 nickel-plated Yoke 1.0619 (optional 1.6220) Spindle WN 1.4122 micro-finished Springs 51 Cr V4, 52 Cr Mo V4 Sealing elements: EPDM resp. special polyurethane Guiding elements: TURCITE, GLYCODUR F
Ambient temperature	-20 to +80°C (Optional -40 to + 80°C)
No. of springs	
ATO	1-2
ATC	1-2
Control force spring max.	22 kN
Control force air max.	149 kN

Functional description

The ARCA piston actuator type 814 is used to actuate linear valves. The actuator spindle is connected with the valve spindle by the coupling qualified as stroke indicator. It is solidly led in the sliding bearing and sealed with a special thick element with a scraper. The piston with integrated sealing element and leadership tapes is connected with the actuator spindle and divides the actuator housing into pressure and spring chamber. If the strength of the air pressure set signal exceeds the opposing spring force, the actuator spindle moves and operates the valve.



Technical Data Sheet pneum. Piston Actuator



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Control forces and control ranges

Opening function (air to open - spring to close)

Stroke (mm)	Diaphragm surface (cm ²)	Type	No. of springs	Control range		Control force (kN)
				from (bar)	to (bar)	
180	2.825	814	1	0,6	1,3	15
			2	0,8	2,0	22
200			1	0,5	1,3	12
			2	0,7	2,0	19
250			1	0,5	1,6	12
			2	0,7	2,4	19

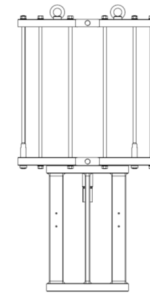
Closing function (air to close - spring to open)

Stroke (mm)	Diaphragm surface (cm ²)	Type	No. of springs	Control pressure min. bar	Control force (kN) depending on control pressure				
					2,0 bar	3,0 bar	4,0 bar	5,0 bar	6,0 bar
180	2.825	814	1	2,0	19	48	76	104	149
			2	2,5	-	28	56	84	113
200			1	2,0	19	48	76	104	149
			2	2,5	-	28	56	84	113
250			1	2,0	11	39	67	96	124
			2	3,0	-	16	45	73	101

Caution: The actuator forces and spring ranges listed above are for actuator without valve at nominal stroke only

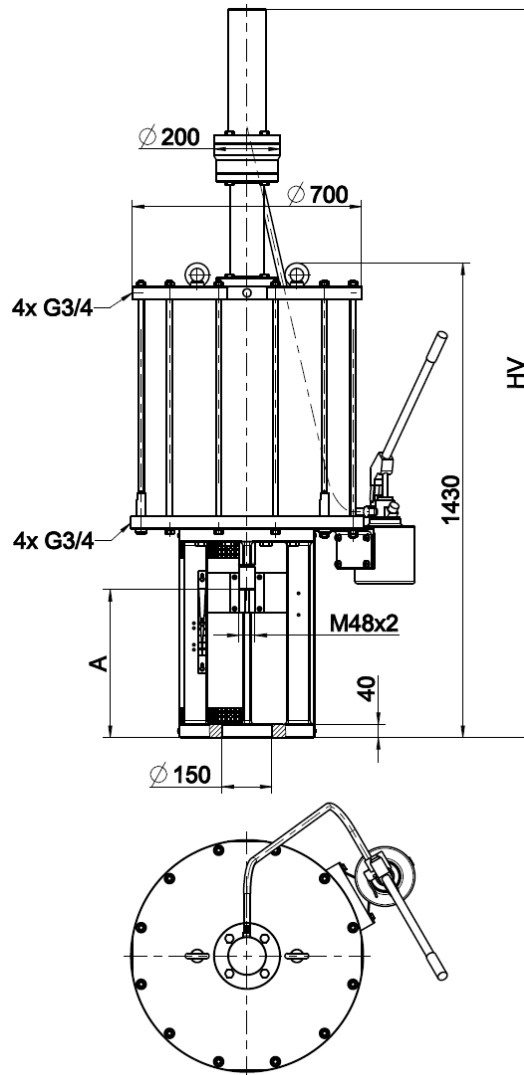
Technical Data Sheet

pneum. Piston Actuator



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Dimensions and weights



Stroke (mm)	A (mm)	Hydr. hand lever	HV (mm)	Weight (kg)
180	430	○	-	750
		●	2200	800
200	430	○	-	750
		●	2200	800
250	475	○	-	750
		●	2200	800