

Airpot® Pneumatic Actuators Comparison Table

Model	Airpot 2KS56P	Airpot 2KS95P	Airpot 2KS160P	Airpot 2KS240P	Airpot 2KS325P	Airpot 2K444P
Piston diameter	0.22 inch 5.59 mm	0.366 inch 9.3 mm	0.627 inch 15.93 mm	0.945 inch 24 mm	1.281 inch 32.5 mm	1.75 inch 44.4 mm
Piston area	0.038 in ² 24.52 mm ²	0.105 in ² 67.88 mm ²	0.309 in ² 199.2 mm ²	0.701 in ² 452.25 mm ²	1.289 in ² 830.97 mm ²	2.405 in ² 1551.61 mm ²
Force output at max. pressure	4.75 lbs 21.1 N	10.5 lbs 46.84 N	30.9 lbs 137.45 N	70.1 lbs 312.05 N	128.8 lbs 573.37 N	240.5 lbs 1070.61 N
Min. pressure differential required for actuation	0.05 psi 345 Pa	0.05 psi 345 Pa	0.05 psi 345 Pa	0.05 psi 345 Pa	0.05 psi 345 Pa	0.05 psi 345 Pa
Max. leak rate at reference pressure 65 psi (0.45 MPa) 125 psi (0.86 MPa) 50 psi (0.34 MPa) 100 psi (0.69 MPa)	0.19 SL/min 0.57 SL/min	0.36 SL/min 1.17 SL/min	0.74 SL/min 2.78 SL/min	1.06 SL/min 5.60 SL/min	2.12 SL/min 9.60 SL/min	3.6 SL/min 15.0 SL/min
Friction coefficient	0.2	0.2	0.2	0.2	0.2	0.2
Piston friction as % of load (without side load)	0.5 - 1.5	0.5 - 1.5	0.5 - 1.5	0.5 - 1.5	0.5 - 1.5	0.5 - 1.5
Temperature range	- 55 bis + 150 °C	- 55 bis + 150 °C	- 55 bis + 150 °C	- 55 bis + 150 °C	- 55 bis + 150 °C	- 55 bis + 150 °C
Component weight of the fixed mass in g (cylinder, bottom, etc.)	1.2xstroke+6.4	2.9xstroke+8.9	6.1xstroke+13.6	11.5xstroke+40.6	17.5xstroke+60.3	25.7xstroke+82.1
Component weight of the movable mass in g (piston and rod)	0.2xstroke+1.4	0.4xstroke+2.8	0.4xstroke+4.3	1.3xstroke+8.3	6.3xstroke+13.6	6.3xstroke+31.6