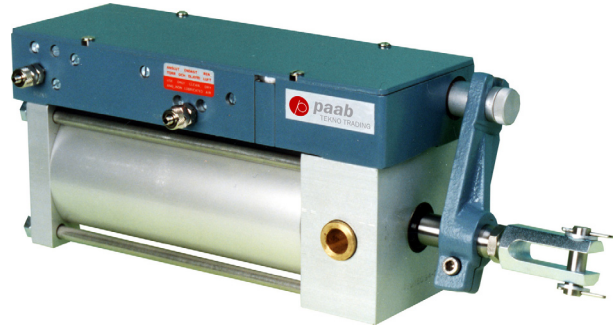




PI-Air type WV-111 Pneumatic Cylinder Actuator with positioner



Applications

The pneumatic Cylinder is used for operating Windboxes, Inlet Guiding Vanes, Dampers, Valves and Throttles etc. and generally where air is used as acting force and the control signal is air.

Features

It is a powerful, compact built unit with Zero adjustments easy accessible on the outside of the positioner. Different mounting arrangements are available through a wide selection of consoles.

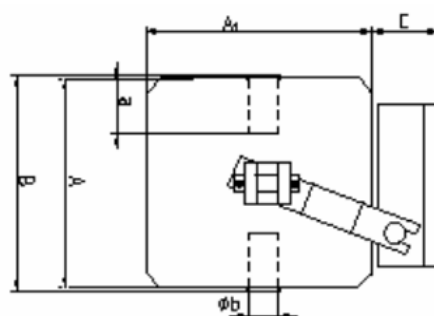
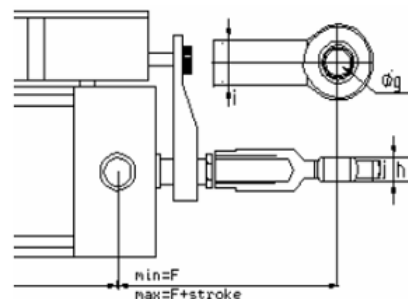
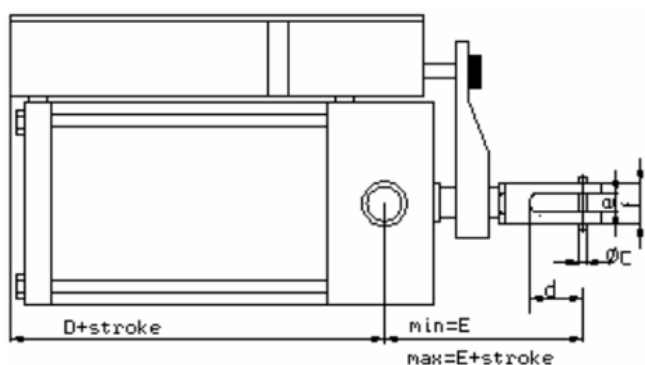
Working principle

Actuator and positioner are built together to one unit. The signal from a pneumatic controller is compared to the position of the cylinder rod and by means of a pilot valve the pressure in the cylinder is changed so that a balance position is gained between signal and cylinder rod. The actuator is working in both directions, so that all available pressure is used for actuating force.

Technical specification

Cylinder diameter	80 mm	100 mm	140 mm
Piston speed	26 mm/s	17 mm/s	8 mm/s
Actuating force at 7 kp/cm²	300 kp	500 kp	1000 kp
Piston rod diameter	18 mm	22 mm	30 mm
Stroke length	Min. stroke 150 mm Max. stroke 700 mm		
Air supply	5 - 7 kp/cm ²		
Air consumption	8 l/min.		
Signal range	20 - 100 kPa (3-15 psi) Split range (Option)		
Function, Linear:	Increased signal gives an outgoing rod movement		
Function, Inverted:	Increased signal gives an ingoing rod movement (Option)		
Hysteresis	Better than 0,5 %		
Working temperature	-20 ... +70 °C -20 ... + 100 °C (Option)		
Air connection	R1/8" internal thread		
Mounting	Pivots at front		
Rod end connection	Fork or Ball coupling		
Material, Cylinder housing	Anodised aluminium		
Material, Guiding lining	Self lubricating brass		
Material, Piston	Nitril. Viton (Option)		
Material, Stuffing	Nitril. Viton (Option)		
Material, Rod	Acid resistant steel		

Technical specification



Cylinder diameter

Cylinder diameter	A	A ₁	B	C	D	E	F	a	b	c	d	e	f	g	h	i	j
Ø 80	90	90	96	43	85	140	135	30	14	10	35	11	25	17	14	25	11,5
Ø 100	110	110	114	43	90	140	135	30	14	10	35	11	25	17	14	25	11,5
Ø 140	152	164	156	43	116	150	180	30	18	18	50	15	35	30	22	42	19,5