



Features

- High forces, fast actuating speeds
- Fulfills explosion proof requirements/ SIL 2 capable according to IEC 61508
- Operating mode: single acting or double acting
- Mechanical stroke indicator
- Model for use with oxygen / BAM

Technical Data

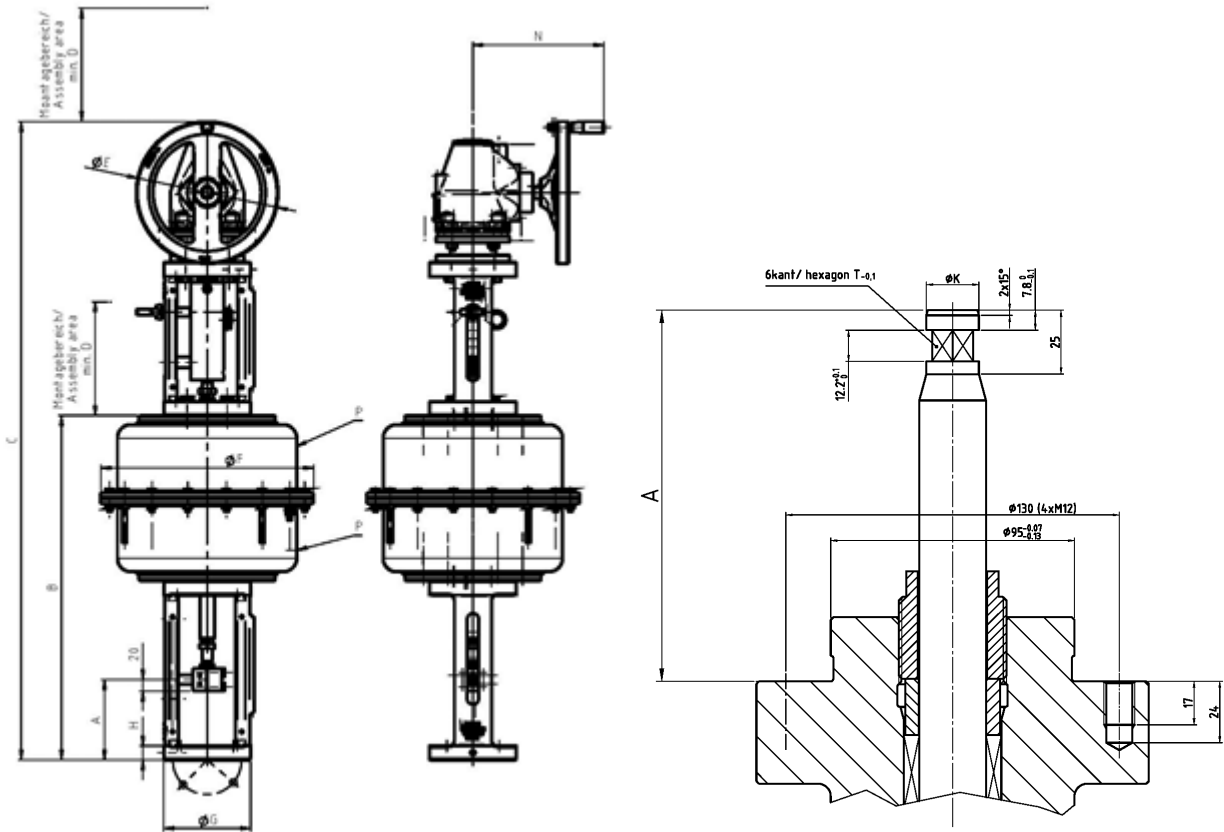
Type	PPA-300						PPA-600			PPA-1200			PPA-2400		
Diaphragm area [cm ²]	300						600			1200			2400		
Operating pressure, max. [barg]	6						6			6			6		
Spring range [barg] (1)	0,8-2,7	1,2-4,0	1,4-4,7	0,7-2,7	1,0-4,0	1,2-4,7	0,8-1,9	1,3-2,9	1,5-3,4	0,9-2,1	1,3-3,1	1,6-3,7	0,9-2,1	1,3-3,1	1,6-3,7
Actuating force / Spring [kN]	2,4-8,0	3,6-12,0	4,2-14,0	2,0-8,0	3,0-12,0	3,5-14,0	5,0-11,6	7,5-17,5	8,8-20,4	10,9-24,6	16,4-37,0	19,2-43,2	21,8-49,2	32,8-74,0	38,4-86,4
Stroke [mm]	35			50			75			100			100		
Stroke volume [ltr.]	1,37			2,15			5,30			12,88			25,76		
Air connection	¼" NPT						¾" NPT			1" NPT			2 x 1" NPT		
Weight without hand wheel [kg]	28			32			63			123			263		
Weight with hand wheel [kg]	47			51			82			155			315		

(1) Condition with 5 mm preload and stop in the actuator

Standard material for the diaphragm: NBR
 Ambient temperature range: -40 ... +80°C
 -50 bis +80°C Low temperature version
 -20 bis +80°C oxygen version/ BAM
 Painting: KTL, black (nearly RAL 9005)

Actuator accessories

- Hand wheel
- Mounting of accessories acc. to NAMUR
- Mounting brackets for mechanical limit switches
- Mounting brackets for proximity switches
- More accessories upon request



Actuator

Connections:

Dimensions:

Type PPA	Operating mode	Stroke	A ¹⁾	B	C	E	F	H	N	K ²⁾	T	P	D	G
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm		mm	mm
300	Spring closes	35	120	420	990	250	272	25	235	14,5	SW11	1/4" NPT	300	153
	Spring opens		155											
	Spring closes	50	120	455	1025					20,5	SW16			
	Spring opens		170											
600	Spring closes	75	145	610	1180	315	375	20,5	30	SW16	3/4" NPT	400		
	Spring opens		220											
1200	Spring closes	100	145	660	1390	495	30	305	20,5	30	SW16	1" NPT	500	168
	Spring opens		245											

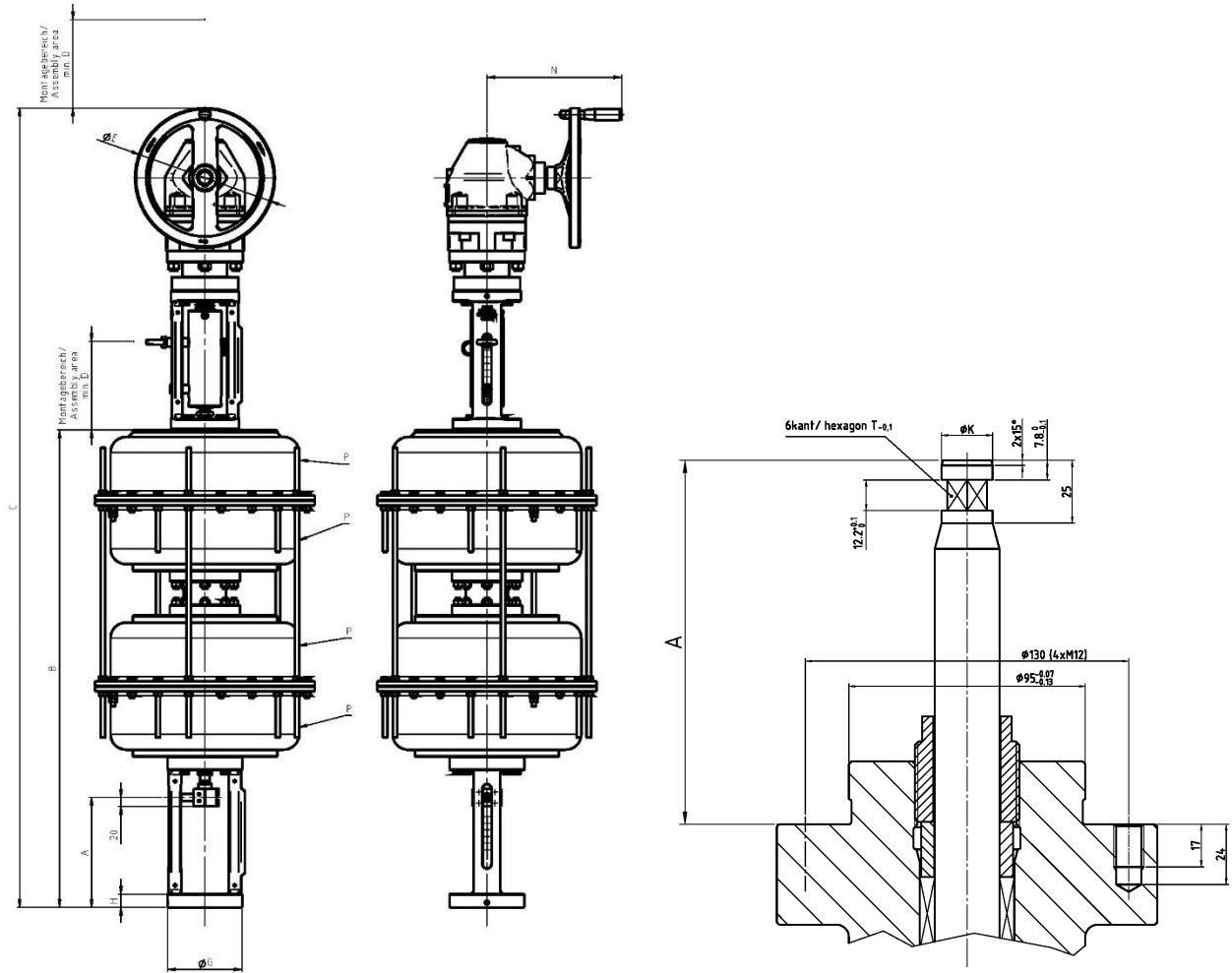
1) At spring range start

Min. allowed spindle connection at operating pressure 6 barg

Pneumatic Diaphragm Actuators

PPA 300-2400

Dimensional drawing PPA2400 with spring (single acting)



Actuator

Connections:

Dimensions:

Type PPA	Operating mode	Stroke	A ¹⁾	B	C	E	F		H	N	K ²⁾	T	P	D	G
		mm	mm	mm	mm	mm	mm		mm	mm	mm	mm		mm	mm
2400	Spring closes	100	145	1100	1870	400	495		30	350	30	SW22	2x 1" NPT	500	168
	Spring opens		245												

1) At spring range start

Min. allowed spindle connection at operating pressure 6 barg

Waldemar Pruss GmbH
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Heating Valves • Control Valves

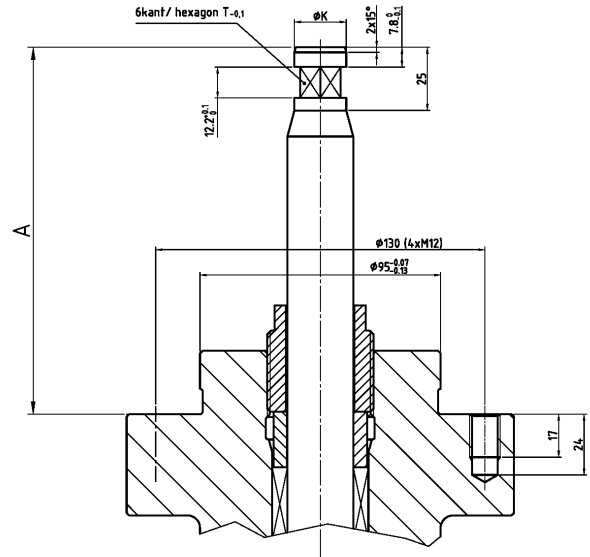
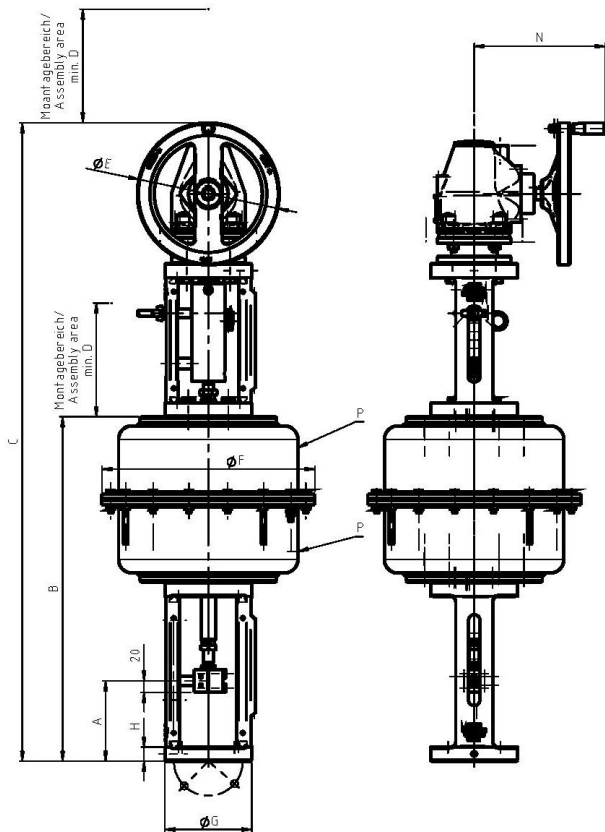
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Pneumatic Diaphragm Actuators

PPA 300-2400

Dimensional drawing PPA300-1200 without springs (double acting)



Actuator

Connections:

Dimensions:

Type PPA	Operating mode	Stroke	A ¹⁾	B	C	E	F	H	N	K ²⁾	T	P	D	G	
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm		mm	mm	
300	double acting	35	120	455	1025	250	272	25	235	14,5	SW11	1/4" NPT	300	153	
			155												
600		50	120	470	1040		375	20,5	SW16	3/4" NPT	400				
			170												
1200		75	145	665	1235		495	30	305	20,5	SW16	1" NPT	500		168
			220												
1200	100	145	720	1450	315	495	30	305	20,5	SW16	1" NPT	500	168		
		245													

1) At spring range start

Min. allowed spindle connection at operating pressure 6 barg

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Type code

PPA-	□□□□-	□	□	□□	□	□	□	□	□	□
Diaphragm Area	0300									
Stroke	35		1							
	50		2							
Spring range at 35 mm Stroke	0,8 - 2,7			01						
	1,2 - 3,8			02						
	1,4 - 4,5			03						
Spring range at 50 mm Stroke	0,7 - 2,7			11						
	1,0 - 4,0			12						
	1,4 - 4,5			13						
Connection	Ø14,5 / SW 11				0					
	Ø20,5 / SW 16				1					
	without coupling				3					
Diaphragm Area	0600									
Stroke	75		3							
Spring range at 75 mm Stroke	0,8 - 2,0			21						
	1,2 - 3,0			22						
	1,4 - 3,5			23						
Connection	Ø20,5 / SW 16				1					
	Ø30 / SW 22				2					
	without coupling				3					
Diaphragm Area	1200									
Stroke	100		4							
Spring range at 100 mm Stroke	1,0 - 2,0			41						
	1,4 - 3,0			42						
	1,6 - 3,6			43						
Connection	Ø20,5 / SW 16				1					
	Ø30 / SW 22				2					
	without coupling				3					
Diaphragm Area	2400									
Stroke	100		4							
Spring range at 100 mm Stroke	1,0 - 2,0			41						
	1,4 - 3,0			42						
	1,6 - 3,6			43						
Connection	Ø30 / SW 22				2					
	without coupling				3					
Operating mode	spring closes	0								
	spring opens	1								
	without springs	2								
Hand wheel (Not available for PPA2400 double acting)	without				0					
	with				1					
Mounting brackets for mechanical limit switches	without					0				
	with					1				
Mounting brackets for proximity switches	without						0			
	with						1			
Specials	without								0	
	with								1	
	oxygen								2	
	low temperature -50°C								3	
Painting	standard									0
	specials									1

Example: PPA-0600-032220000

Diaphragm Area:	600	0600
Operating mode:	spring closes	0
Stroke:	75 mm	3
Spring range:	1,2 - 3,0 bar	22
Connection:	Ø30 / SW22	2
Hand wheel:	without	0
Brackets for mechanical limit switches:	without	0
Brackets for proximity switches:	without	0
Specials:	without	0
Painting:	standard	0