

Pinch valve pneumatically actuated Series PI03, PI04



Design type	Pinch valve, pneumatically actuated
Connection	RP1/2" ... RP2" according to ISO 7/1 on request: NPT thread, Adhesive socket PVC, Weld ends according to DIN or ISO, Tri-Clamp in inches
Materials	Housing Stainless steel 1.4408 (non-media-contacting) Connection parts Stainless steel 1.4435 or rather Adhesive socket PVC Hose NBR, FKM, EPDM, Silicone or SBR
Application range	dirty, granular, abrasive, viscous, pasty and aggressive media that do not attack the materials used
Viscosity of the medium	max. 0,001m ² /s (1000cSt, 132°E)
Medium temperature	Hose NBR -20...+80°C (higher temperatures on request) Hose FKM -10...+130°C Hose EPDM -30...+95°C (higher temperatures on request) Hose Silicone -40...+160°C Hose SBR -30...+80°C (for abrasive media (e.g. sand, cement, etc.))
Ambient temperature	-15...+60°C
Operating pressure	see table and Selection charts
Control medium	Compressed air and neutral gases (Liquids on request)
Control pressure	Function Spring return closed: see table Function spring opens: see Selection chart
Approval	FDA-Approval for hose NBR and EPDM
Accessories	Limit switch, Manual emergency override, Stroke limitation, Pilot valve

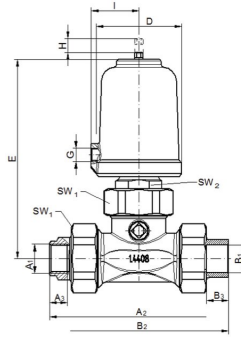


Type code

Pinch valve		PI 03	-12	-N	Z	S	-51	-S
Function	NC	03						
	NO	04						
Female thread	RP1/2"	12						
	RP3/4"	34						
	RP1"	10						
	RP1 1/4"	114						
	RP1 1/2"	112						
	RP2"	20						
NPT-Thread	NPT1/2"	12N						
	NPT3/4"	34N						
	NPT1"	10N						
	NPT1 1/4"	114N						
	NPT2"	20N						
Adhesive socket	DN15	15						
	DN20	20						
	DN25	25						
	DN32	32						
	DN40	40						
	DN50	50						
Weld ends to DIN	DN15	D15						
	DN20	D20						
	DN25	D25						
	DN32	D32						
	DN40	D40						
	DN50	D50						
Weld ends to ISO	DN15	I15						
	DN20	I20						
	DN25	I25						
	DN32	I32						
	DN40	I40						
	DN50	I50						
Hose insert	EPDM food-grade			E				
	NBR food-grade			N				
	FKM			V				
	Silicone			I				
	SBR			S				
Connection material	PVC			V				
	Stainless steel 1.4435			Z				
Body material	Stainless steel 1.4408					S		
Actuator	Piston Ø50mm 1Spring						51	
	Piston Ø50mm 2Springs						52	
	Piston Ø50mm 3Springs						53	
	Piston Ø80mm 1Spring						81	
	Piston Ø80mm 2Springs						82	
	Piston Ø80mm 3Springs						83	
	Piston Ø125mm 1Spring						1251	
	Piston Ø125mm 2Springs						1252	
	Piston Ø125mm 3Springs						1253	
Special versions	silicone-free							S
	Special version 01(Description in the text)							01



Technical specifications and Dimensions with threaded connection or Adhesive socket

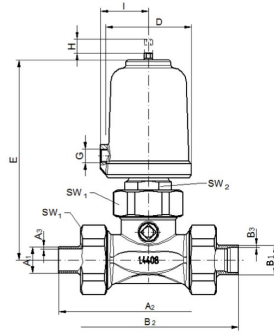


Spring return closed

Nominal size DN [mm]	Actuator	Female thread			NPT-Thread			Adhesive socket PVC			D	E	G	I	SW1	SW2	Stroke	Kvs values [m³/h]	Weight [kg]
		A1	A2	A3	A1	A2	A3	B1	B2	B3									
15	50	RP1/2"	130	13	NPT1/2"	132	14,5	20	130	16	62	144	G1/8"	35	46	27	16	12,5	1,7
15	80	RP1/2"	130	13	NPT1/2"	132	14,5	20	130	16	98	183	G1/4"	55	46	27	16	12,5	3,7
20	50	RP3/4"	132	13	NPT3/4"	132	15	25	136	19	62	144	G1/8"	35	46	27	16	12,5	2
20	80	RP3/4"	132	13	NPT3/4"	132	6	25	136	19	98	183	G1/4"	55	46	27	16	12,5	4
25	80	RP1"	184	18	NPT1"	182	17,9	32	190	22	98	215	G1/4"	55	65	30	22	24	5
32	80	RP11/4"	190	18	NPT11/4"	194	19	40	200	26	98	215	G1/4"	55	65	30	22	24	5,3
40	80	RP11/2"	246	20	NPT11/2"	246	18,4	50	256	31	98	260	G1/4"	55	88	30	34	84	7,9
40	125	RP11/2"	246	20	NPT11/2"	246	18,4	50	256	31	146	285	G1/4"	80	88	30	34	84	9,6
50	80	RP2"	246	22	NPT2"	246	18,8	63	272	38	98	260	G1/4"	55	88	30	34	84	8,2
50	125	RP2"	246	22	NPT2"	246	18,8	63	272	38	146	285	G1/4"	80	88	30	34	84	9,9



Technical specifications and Dimensions with Weld ends



Spring return closed

Nominal size DN [mm]	Actuator	Weld ends to DIN			Weld ends to ISO			D	E	G	I	SW1	SW2	Stroke	Kvs values [m³/h]	Weight [kg]
		A1	A2	A3	B1	B2	B3									
15	50	19	130	1,5	21,3	130	1,6	62	144	G1/8"	35	46	27	16	12,5	1,7
15	80	19	130	1,5	21,3	130	1,6	98	183	G1/4"	55	46	27	16	12,5	3,7
20	50	23	130	1,5	26,9	130	1,6	62	144	G1/8"	35	46	27	16	12,5	2
20	80	23	130	1,5	26,9	130	1,6	98	183	G1/4"	55	46	27	16	12,5	4
25	80	29	184	1,5	33,7	190	2	98	215	G1/4"	55	65	30	22	24	5
32	80	32	190	1,5	42,4	190	2	98	215	G1/4"	55	65	30	22	24	5,3
40	80	41	250	1,5	48,3	250	2	98	260	G1/4"	55	88	30	34	84	7,9
40	125	41	250	1,5	48,3	250	2	146	285	G1/4"	80	88	30	34	84	9,6
50	80	53	250	1,5	60,3	250	2	98	260	G1/4"	55	88	30	34	84	8,2
50	125	53	250	1,5	60,3	250	2	146	285	G1/4"	80	88	30	34	84	9,9

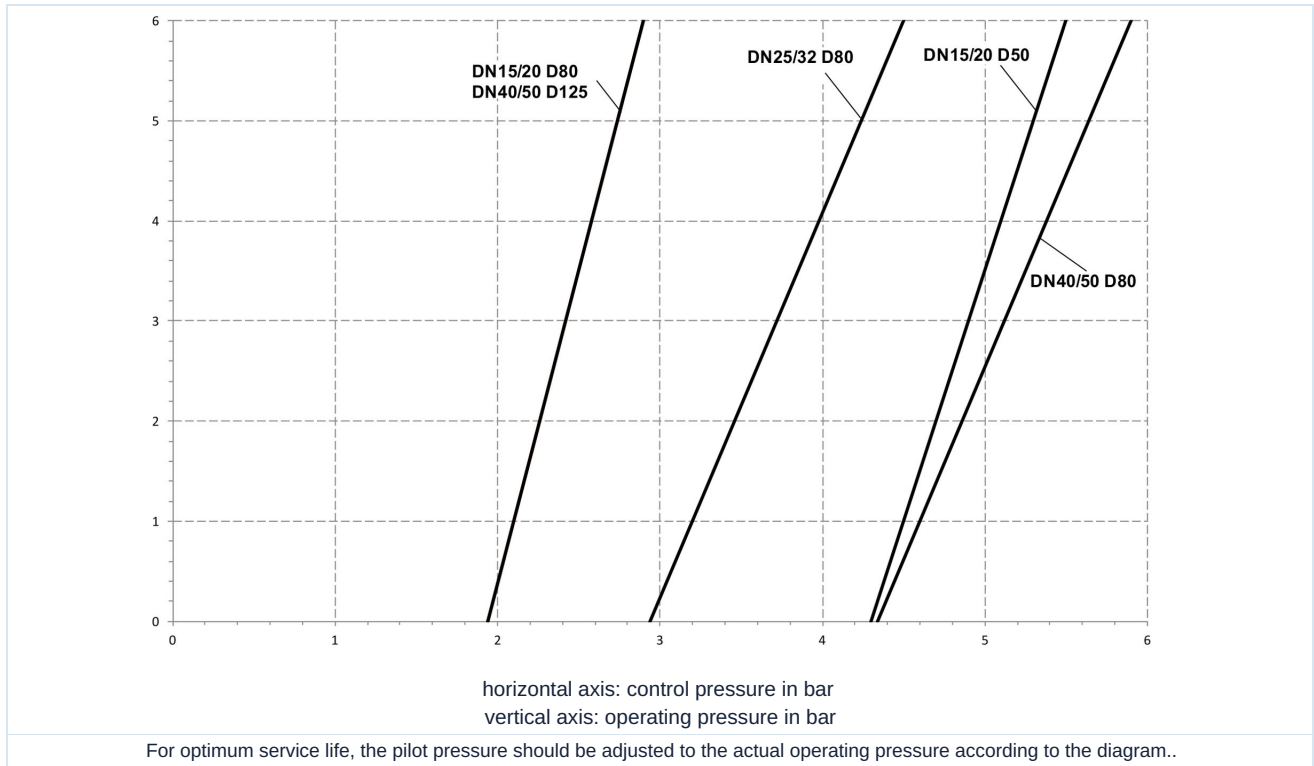


Selection table Spring return closed

Nominal size DN[mm]	Hose material	max. operating pressure [bar]	Control pressure [bar]	Actuator	Springs	
15/20	EPDM	3	4,4-10	50	2	
	NBR					
	FKM					
	Silicone	6				
	SBR					4
	EPDM					
	NBR	6	5,6-10	50	3	
	FKM					
	SBR					
	EPDM	6	3,5-10	80	1	
	NBR					
	FKM					
	Silicone					
	SBR					
	25/32	EPDM	4	3,5-10	80	1
NBR		3				
FKM						
Silicone						
SBR		3				
EPDM			6	4,4-10	80	2
NBR						
FKM						
Silicone						
SBR						
40/50	NBR	2	4,4-10	80	2	
	FKM					
	Silicone					3
	NBR	3	5,6-10	80	3	
	FKM					
	Silicone					
	EPDM	2	2,2-10	125	2	
	NBR					4
	FKM					
	Silicone					
	EPDM	5	3,1-10	125	3	
	NBR					
	FKM					
	Silicone					6
	SBR					



Selection charts - Dependence of operating pressure/control pressure - spring opens



Illustrations non-binding
Design, dimensional and material changes reserved

Armatures / Valves, butterfly valves and gate valves - automatically operated / Pinch valves - pneumatically operated / Pinch valve Series PI04