MAXIMUM PERMISSIBLE PRESSURE DROPS FOR ADCATROL AND ADCAPURE CONTROL VALVES

GENERAL

This information sheet serves as a sizing and selection guide for ADCATrol actuators to be used with ADCATrol and ADCAPure control valves. The specified values are an overview for the most common valve configurations.

- Leakage classes are according to IEC 60534-4.
- Specified pressure drops are based on parabolic and V-port guided plugs.
- “PTFE” specified pressure drops are applicable to valves assembled with V-rings and O-ring stem seals independently of the material.
- “GRAPH.” specified pressure drops are applicable to valves assembled with graphite or bellow stem seals.
- In case of unmentioned conditions, other actuators and valve configurations, such as flow to open, balanced trim valves and others, consult the manufacturer.

PNEUMATIC ACTUATORS

- All permissible pressure drops are based on the specified operating ranges.
- Specified pressure drops for three way valves are valid for actuators with direction of action air to open and air to close.
- Operating ranges which differ from the spring range – bench range – specified on the actuator datasheet, are written parentheses. This is the case when the valve and actuator have different rated strokes or when additional spring precompression has been applied to actuators with additional possible spring compression.

ELECTRIC ACTUATORS

- The specified values for fail safe actuator with spring return (AVF and ELR series) refer to spring closing forces and not to the motor torques.
- When selecting an electric actuator always observe if the operating speed meets the process requirements.

CONTENT

ADCATROL V16/2 TWO-WAY GLOBE CONTROL VALVES **3**
- V16/2 with pneumatic actuator and metal to metal sealing 3
- V16/2 with electric actuator and metal to metal sealing 6
- V16/2 with pneumatic actuator and soft sealing 8
- V16/2 with electric actuator and soft sealing 11

ADCATROL V25/2 TWO-WAY GLOBE CONTROL VALVES **13**
- V25/2 with pneumatic actuator and metal to metal sealing 13
- V25/2 with electric actuator and metal to metal sealing 18
- V25/2 with pneumatic actuator and soft sealing 21
- V25/2 with electric actuator and soft sealing 26

ADCATROL V303 THREE-WAY GLOBE CONTROL VALVES **29**
- V303 with pneumatic actuator and metal to metal sealing 29
- V303 with electric actuator and metal to metal sealing 31

ADCATROL V253 THREE-WAY GLOBE CONTROL VALVES **33**
- V253 with pneumatic actuator and metal to metal sealing 33
- V253 with electric actuator and metal to metal sealing 34

ADCATROL VPC26 TDS BLOWDOWN CONTROL VALVES **36**
- VPC26 with pneumatic actuator and metal to metal sealing 36
- VPC26 with electric actuator and metal to metal sealing 36

ADCATROL V926A TWO-WAY ASEPTIC CONTROL VALVES **37**
- V926A with pneumatic actuator and metal to metal sealing 37
- V926A with electric actuator and metal to metal sealing 39
- V926A with pneumatic actuator and soft sealing 40
- V926A with electric actuator and soft sealing 42

ADCATROL V926H TWO-WAY HYGIENIC CONTROL VALVES **43**
- V926H with pneumatic actuator and metal to metal sealing 43
- V926H with electric actuator and metal to metal sealing 45
- V926H with pneumatic actuator and soft sealing 46
- V926H with electric actuator and soft sealing 48

ADCATROL V928 TWO-WAY HYGIENIC CONTROL VALVES **49**
- V928 with pneumatic actuator and metal to metal sealing 49
- V928 with electric actuator and metal to metal sealing 51
- V928 with pneumatic actuator and soft sealing 52
- V928 with electric actuator and soft sealing 54

ADCATROL V928 THREE-WAY HYGIENIC CONTROL VALVES **55**
- V928 with pneumatic actuator and metal to metal sealing 55
- V928 with electric actuator and metal to metal sealing 56
- V928 with pneumatic actuator and soft sealing 57
- V928 with electric actuator and soft sealing 58

ADCATROL V16/2 TWO-WAY GLOBE CONTROL VALVES
(EN and ASME)

V16/2 – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)																MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)		AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)														
							AIR SUPPLY PRESSURE (bar)														
							1,4		2		3		3,5		4		5		6		
					PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	
12	DN 15 to 25 1/2" to 1"	20	PA10 (100 cm²)	0,2 – 1	–	–	18,7	9,6	50	50	50	50	50	50	40	50	50	50	50	50	6
				0,2 – 1 (0,4 – 1,2)	18,7	9,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
15	DN 15 to 32 1/2" to 11/4"	20	PA10 (100 cm²)	0,2 – 1	–	–	11,1	5,3	38,3	32,5	50	50	50	50	50	50	50	50	50	50	6
				0,2 – 1 (0,4 – 1,2)	11,1	5,3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	38,3	32,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA25 (250 cm²)	0,2 – 1 (0,4 – 1,2)	38,3	32,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				0,4 – 2 (0,8 – 2,4)	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
19,2	DN 20 to 40 3/4" to 11/2"	20	PA10 (100 cm²)	0,2 – 1	–	–	6,1	2,5	22,6	19,1	50	46,7	50	50	50	50	50	50	50	50	6
				0,2 – 1 (0,4 – 1,2)	6,1	2,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	22,6	19,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	46,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA25 (250 cm²)	0,2 – 1	–	–	22,6	19,1	50	50	50	50	50	50	50	50	50	50	–	–	5
				0,2 – 1 (0,4 – 1,2)	22,6	19,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				0,4 – 2 (0,8 – 2,4)	50	46,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
25	DN 25 to 50 1" to 2"	20	PA10 (100 cm²)	0,2 – 1	–	–	3	0,9	12,8	10,7	29,1	27	37,2	35,1	45,3	43,3	50	50	50	50	6
				0,2 – 1 (0,4 – 1,2)	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	12,8	10,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	29,1	27	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA25 (250 cm²)	0,2 – 1	–	–	12,8	10,7	37,2	35,1	50	50	50	50	50	50	50	50	–	–	5
				0,2 – 1 (0,4 – 1,2)	12,8	10,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				0,4 – 2 (0,8 – 2,4)	29,1	27	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	37,2	35,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 1 to 2 bar operating range requires a minimum of 2,2 bar air supply pressure.

V16/2 – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)																MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)		AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)														
							AIR SUPPLY PRESSURE (bar)														
							1,4		2		3		3,5		4		5		6		
					PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	
32	DN 32 to 50 11/4" to 2"	20	PA10 (100 cm²)	0,2 – 1	–	–	1,4	0,1	7,3	6,1	17,3	16	22,3	21	27,2	26	37,2	35,9	47,1	45,9	6
				0,2 – 1 (0,4 – 1,2)	1,4	0,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	7,3	6,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	17,3	16	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	DN 32 to 65 11/4" to 21/2"	20	PA25 (250 cm²)	0,2 – 1	–	–	7,3	6,1	22,3	21	47,1	45,9	50	50	50	50	50	50	–	–	5
				0,2 – 1 (0,4 – 1,2)	7,3	6,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				0,4 – 2 (0,8 – 2,4)	17,3	16	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	22,3	21	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	47,1	45,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
38	DN 40 to 50 11/2" to 2"	20	PA10 (100 cm²)	0,2 – 1	–	–	0,7	–	4,9	4	12	11,1	15,5	14,6	19,1	18,1	26,1	25,2	33,2	32,3	6
				1 – 2	4,9	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	12	11,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	DN 40 to 80 11/2" to 3"	20	PA25 (250 cm²)	0,2 – 1	–	–	4,9	4	15,5	14,6	33,2	32,3	42	41,1	50	49,9	50	50	–	–	5
				0,2 – 1 (0,4 – 1,2)	4,9	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				0,4 – 2 (0,8 – 2,4)	12	11,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	15,5	14,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	33,2	32,3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA40 (400 cm²)	0,2 – 1 (0,2 – 0,75)	–	–	16,2	15,3	33,2	32,3	50	50	50	50	–	–	–	–	–	–	3,5
				0,2 – 1 (0,45 – 1)	10,6	9,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4
				0,4 – 2 (0,95 – 2)	24,7	23,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				1 – 2 (1,35 – 2)	36	35,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4 (2,65 – 4)	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
48	DN 50 2"	20	PA10 (100 cm²)	0,2 – 1	–	–	0,2	–	2,8	2,3	7,2	6,7	9,5	8,9	11,7	11,1	16,1	15,5	20,5	19,9	6
				1 – 2	2,8	2,3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	7,2	6,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	DN 50 to 100 2" to 4"	20	PA25 (250 cm²)	0,2 – 1	–	–	2,8	2,3	9,5	8,9	20,5	19,9	26	25,5	31,6	31	42,6	42	–	–	5
				0,2 – 1 (0,4 – 1,2)	2,8	2,3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				0,4 – 2 (0,8 – 2,4)	7,2	6,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	9,5	8,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	20,5	19,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 1 to 2 bar operating range requires a minimum of 2,2 bar air supply pressure.

V16/2 – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)																MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)		AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)														
							AIR SUPPLY PRESSURE (bar)														
							1,4		2		3		3,5		4		5		6		
					PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	
48	DN 50 to 100 2" to 4"	20	PA40 (400 cm²)	0,2 – 1 (0,2 – 0,75)	–	–	9,9	9,3	20,5	19,9	38,2	37,6	47	46,5	–	–	–	–	–	–	3,5
				0,2 – 1 (0,45 – 1)	6,4	5,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4
				0,4 – 2 (0,95 – 2)	15,2	14,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				1 – 2 (1,35 – 2)	22,3	21,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4 (2,65 – 4)	45,3	44,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
	DN 65 to 100 21/2" to 4"	20	PA40 (400 cm²)	2,7 – 4,6 (3,3 – 4,6)	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
65	DN 65 to 100 21/2" to 4"	30	PA40 (400 cm²)	0,2 – 1	–	–	2,7	2,4	8,5	8,2	18,2	17,8	23	22,7	27,8	27,5	–	–	–	–	4
				0,2 – 1 (0,4 – 1,2)	2,7	2,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				0,4 – 2 (0,8 – 2,4)	6,6	6,3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				1 – 2	8,5	8,2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	18,2	17,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				2,7 – 4,6	24,9	24,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA80 (800 cm²)	0,4 – 2 (0,8 – 2,4)	14,3	14	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3,5
				1 – 2	18,2	17,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1,5 – 3	27,8	27,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
76	DN 80 to 100 3" to 4"	30	PA40 (400 cm²)	0,2 – 1	–	–	1,9	1,6	6,1	5,9	13,2	12,9	16,7	16,5	20,2	20	–	–	–	–	4
				0,2 – 1 (0,4 – 1,2)	1,9	1,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				0,4 – 2 (0,8 – 2,4)	4,7	4,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				1 – 2	6,1	5,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	13,2	12,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				2,7 – 4,6	18,1	17,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA80 (800 cm²)	0,4 – 2 (0,8 – 2,4)	10,3	10,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3,5
				1 – 2	13,2	12,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1,5 – 3	20,2	20	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
96	DN 100 4"	30	PA40 (400 cm²)	0,2 – 1	–	–	1	0,9	3,7	3,5	8,1	8	10,3	10,2	12,5	12,4	–	–	–	–	4
				0,2 – 1 (0,4 – 1,2)	1	0,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				0,4 – 2 (0,8 – 2,4)	2,8	2,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				1 – 2	3,7	3,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	8,1	8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				2,7 – 4,6	11,2	11,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA80 (800 cm²)	0,4 – 2 (0,8 – 2,4)	6,3	6,2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3,5
				1 – 2	8,1	8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1,5 – 3	12,5	12,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 1 to 2 bar operating range requires a minimum of 2,2 bar air supply pressure.

V16/2 – EL, ELR, ELS AND AV SERIES ELECTRIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	ACTUATOR MODEL	CLOSING FORCE (kN)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)	
					PTFE	GRAPHITE
12	DN 15 to 25 1/2" to 1"	20	EL12 / ELR2.1	1,2	50	50
			EL20 / ELS20 / AVF234S	2	50	50
			ELR2.2 / AVM234S	2,5	50	50
			ELR2.3	2,8	50	50
15	DN 15 to 32 1/2" to 11/4"	20	EL12 / ELR2.1	1,2	47,3	50
			EL20 / ELS20 / AVF234S	2	50	50
			ELR2.2 / AVM234S	2,5	50	50
			ELR2.3	2,8	50	50
19,2	DN 20 to 40 3/4" to 11/2"	20	EL12 / ELR2.1	1,2	28,2	24,6
			EL20 / ELS20 / AVF234S	2	50	46,7
			ELR2.2 / AVM234S	2,5	50	50
			ELR2.3	2,8	50	50
25	DN 25 to 50 1" to 2"	20	EL12 / ELR2.1	1,2	16	13,9
			EL20 / ELS20 / AVF234S	2	29,1	27
			ELR2.2 / AVM234S	2,5	37,2	35,1
			ELR2.3	2,8	42,1	40
			EL45 / ELS45	4,5	50	50
32	DN 32 to 50 11/4" to 2"	20	EL12	1,2	9,3	8,1
	DN 32 to 65 11/4" to 21/2"	20	ELR2.1	1,2	9,3	8,1
			EL20 / ELS20 / AVF234S	2	17,3	16
			ELR2.2 / AVM234S	2,5	22,3	21
			ELR2.3	2,8	25,3	24
			EL45 / ELS45	4,5	42,2	40,9
			EL80 / ELS80	8	50	50
38	DN 40 to 50 11/2" to 2"	20	EL12	1,2	6,4	5,5
	DN 40 to 80 11/2" to 3"	20	ELR2.1	1,2	6,4	5,5
			EL20 / ELS20 / AVF234S	2	12	11,1
			ELR2.2 / AVM234S	2,5	15,5	14,6
			ELR2.3	2,8	17,6	16,7
			EL45 / ELS45	4,5	29,6	28,7
			EL80 / ELS80	8	50	50
48	DN 50 2"	20	EL12	1,2	3,7	3,1
	DN 50 to 100 2" to 4"	20	ELR2.1	1,2	3,7	3,1
			EL20 / ELS20 / AVF234S	2	7,2	6,7
			ELR2.2 / AVM234S	2,5	9,5	8,9
			ELR2.3	2,8	10,8	10,2
			EL45 / ELS45	4,5	18,3	17,7
			EL80 / ELS80	8	33,8	33,2
	DN 65 to 100 21/2" to 4"	20	ELS100	10	42,6	42
			EL120 / ELS140	12	50	50

V16/2 – EL, ELR, ELS AND AV SERIES ELECTRIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)						
SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	ACTUATOR MODEL	CLOSING FORCE (kN)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)	
					PTFE	GRAPHITE
65	DN 65 to 100 21/2" to 4"	30	EL20 / ELS20 / AVF234S	2	3,7	3,4
			ELR2.2	2,3	4,4	4,1
			AVM234S	2,5	4,9	4,6
			ELR2.3	2,6	5,1	4,8
			EL45 / ELS45	4,5	9,7	9,4
			EL80 / ELS80	8	18,2	17,8
			ELS100	10	23	22,7
			EL120 / ELS140	12	27,8	27,5
76	DN 80 to 100 3" to 4"	30	EL20 / ELS20 / AVF234S	2	2,6	2,4
			ELR2.2	2,3	3,1	2,9
			AVM234S	2,5	3,5	3,2
			ELR2.3	2,6	3,6	3,4
			EL45 / ELS45	4,5	7	6,8
			EL80 / ELS80	8	13,2	12,9
			ELS100	10	16,7	16,5
			EL120 / ELS140	12	20,2	20
96	DN 100 4"	30	EL20 / ELS20 / AVF234S	2	1,5	1,3
			ELR2.2	2,3	1,8	1,7
			AVM234S	2,5	2	1,9
			ELR2.3	2,6	2,1	2
			EL45 / ELS45	4,5	4,2	4,1
			EL80 / ELS80	8	8,1	8
			ELS100	10	10,3	10,2
			EL120 / ELS140	12	12,5	12,4

V16/2 – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, SOFT SEALING (CLASS VI)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)																MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)		AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)														
							AIR SUPPLY PRESSURE (bar)														
							1,4		2		3		3,5		4		5		6		
					PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	
12	DN 15 to 25 1/2" to 1"	20	PA10 (100 cm²)	0,2 – 1	–	–	23,2	14,2	50	50	50	50	50	50	50	50	50	50	50	50	6
				0,2 – 1 (0,4 – 1,2)	23,2	14,2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
15	DN 15 to 32 1/2" to 11/4"	20	PA10 (100 cm²)	0,2 – 1	–	–	14,7	8,9	41,9	36,1	50	50	50	50	50	50	50	50	50	50	6
				0,2 – 1 (0,4 – 1,2)	14,7	8,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	41,9	36,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA25 (250 cm²)	0,2 – 1 (0,4 – 1,2)	41,9	36,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				0,4 – 2 (0,8 – 2,4)	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
19,2	DN 20 to 40 3/4" to 11/2"	20	PA10 (100 cm²)	0,2 – 1	–	–	8,9	5,3	25,5	21,9	50	49,6	50	50	50	50	50	50	50	50	6
				0,2 – 1 (0,4 – 1,2)	8,9	5,3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	25,5	21,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	49,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA25 (250 cm²)	0,2 – 1	–	–	25,5	21,9	50	50	50	50	50	50	50	50	50	50	–	–	5
				0,2 – 1 (0,4 – 1,2)	25,5	21,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				0,4 – 2 (0,8 – 2,4)	50	49,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
25	DN 25 to 50 1" to 2"	20	PA10 (100 cm²)	0,2 – 1	–	–	5,2	3,1	14,9	12,8	31,2	29,1	39,4	37,3	47,5	45,4	50	50	50	50	6
				0,2 – 1 (0,4 – 1,2)	5,2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	14,9	12,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	31,2	29,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA25 (250 cm²)	0,2 – 1	–	–	14,9	12,8	39,4	37,3	50	50	50	50	50	50	50	50	–	–	5
				0,2 – 1 (0,4 – 1,2)	14,9	12,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				0,4 – 2 (0,8 – 2,4)	31,2	29,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	39,4	37,3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
32	DN 32 to 50 11/4" to 2"	20	PA10 (100 cm²)	0,2 – 1	–	–	3,1	1,8	9	7,8	19	17,7	24	22,7	28,9	27,7	38,9	37,6	48,8	47,6	6
				0,2 – 1 (0,4 – 1,2)	3,1	1,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	9	7,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	19	17,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 1 to 2 bar operating range requires a minimum of 2,2 bar air supply pressure.

V16/2 – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, SOFT SEALING (CLASS VI)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)														MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)		AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)												
							AIR SUPPLY PRESSURE (bar)												
							1,4		2		3		3,5		4		5		6	
					PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	
32	DN 32 to 65 11/4" to 21/2"	20	PA25 (250 cm²)	0,2 – 1	–	–	9	7,8	24	22,7	48,8	47,6	50	50	50	50	50	50	–	–	5
				0,2 – 1 (0,4 – 1,2)	9	7,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				0,4 – 2 (0,8 – 2,4)	19	17,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	24	22,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	48,8	47,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
38	DN 40 to 50 11/2" to 2"	20	PA10 (100 cm²)	0,2 – 1	–	–	2,1	1,2	6,4	5,5	13,4	12,5	17	16,1	20,5	19,6	27,5	26,6	34,6	33,7	6
				1 – 2	6,4	5,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	13,4	12,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	DN 40 to 80 11/2" to 3"	20	PA25 (250 cm²)	0,2 – 1	–	–	6,4	5,5	17	16,1	34,6	33,7	43,4	42,5	50	50	50	50	–	–	5
				0,2 – 1 (0,4 – 1,2)	6,4	5,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				0,4 – 2 (0,8 – 2,4)	13,4	12,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	17	16,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	34,6	33,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA40 (400 cm²)	0,2 – 1 (0,2 – 0,75)	–	–	17,7	16,8	34,6	33,7	50	50	50	50	–	–	–	–	–	–	3,5
				0,2 – 1 (0,45 – 1)	12	11,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4
				0,4 – 2 (0,95 – 2)	26,1	25,2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				1 – 2 (1,35 – 2)	37,4	36,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4 (2,65 – 4)	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
48	DN 50 2"	20	PA10 (100 cm²)	0,2 – 1	–	–	1,3	0,7	4	3,4	8,4	7,8	10,6	10	12,8	12,2	17,2	16,7	21,6	21,1	6
				1 – 2	4	3,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	8,4	7,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	DN 50 to 100 2" to 4"	20	PA25 (250 cm²)	0,2 – 1	–	–	4	3,4	10,6	10	21,6	21,1	27,2	26,6	32,7	32,1	43,7	43,2	–	–	5
				0,2 – 1 (0,4 – 1,2)	4	3,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				0,4 – 2 (0,8 – 2,4)	8,4	7,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	10,6	10	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	21,6	21,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA40 (400 cm²)	0,2 – 1 (0,2 – 0,75)	–	–	11	10,5	21,6	21,1	39,3	38,8	48,2	47,6	–	–	–	–	–	–	3,5
				0,2 – 1 (0,45 – 1)	7,5	6,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4
				0,4 – 2 (0,95 – 2)	16,3	15,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				1 – 2 (1,35 – 2)	23,4	22,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4 (2,65 – 4)	46,4	45,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
	DN 65 to 100 21/2" to 4"	20	PA40 (400 cm²)	2,7 – 4,6 (3,3 – 4,6)	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 1 to 2 bar operating range requires a minimum of 2,2 bar air supply pressure.

V16/2 – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, SOFT SEALING (CLASS VI)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)																MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)		AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)														
							AIR SUPPLY PRESSURE (bar)														
							1,4		2		3		3,5		4		5		6		
					PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	
65	DN 65 to 100 21/2" to 4"	30	PA40 (400 cm²)	0,2 – 1	–	–	3,6	3,3	9,4	9	19	18,7	23,8	23,5	28,6	28,3	–	–	–	–	4
				0,2 – 1 (0,4 – 1,2)	3,6	3,3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				0,4 – 2 (0,8 – 2,4)	7,4	7,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				1 – 2	9,4	9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	19	18,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				2,7 – 4,6	25,7	25,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA80 (800 cm²)	0,4 – 2 (0,8 – 2,4)	15,1	14,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3,5
				1 – 2	19	18,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1,5 – 3	28,6	28,3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
76	DN 80 to 100 3" to 4"	30	PA40 (400 cm²)	0,2 – 1	–	–	2,6	2,4	6,8	6,6	13,9	13,6	17,4	17,2	20,9	20,7	–	–	–	–	4
				0,2 – 1 (0,4 – 1,2)	2,6	2,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				0,4 – 2 (0,8 – 2,4)	5,4	5,2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				1 – 2	6,8	6,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	13,9	13,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				2,7 – 4,6	18,8	18,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA80 (800 cm²)	0,4 – 2 (0,8 – 2,4)	11,1	10,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3,5
				1 – 2	13,9	13,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1,5 – 3	20,9	20,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
96	DN 100 4"	30	PA40 (400 cm²)	0,2 – 1	–	–	1,6	1,5	4,3	4,1	8,7	8,5	10,9	10,7	13,1	13	–	–	–	–	4
				0,2 – 1 (0,4 – 1,2)	1,6	1,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				0,4 – 2 (0,8 – 2,4)	3,4	3,2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				1 – 2	4,3	4,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	8,7	8,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				2,7 – 4,6	11,8	11,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA80 (800 cm²)	0,4 – 2 (0,8 – 2,4)	6,9	6,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3,5
				1 – 2	8,7	8,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1,5 – 3	13,1	13	–	–	–	–	–	–	–	–	–	–	–	–	–	–	

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 1 to 2 bar operating range requires a minimum of 2,2 bar air supply pressure.

V16/2 – EL, ELR, ELS AND AV SERIES ELECTRIC ACTUATORS – FTO, UNBALANCED TRIM, SOFT SEALING (CLASS VI)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	ACTUATOR MODEL	CLOSING FORCE (kN)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)	
					PTFE	GRAPHITE
12	DN 15 to 25 1/2" to 1"	20	EL12 / ELR2.1	1,2	50	50
			EL20 / ELS20 / AVF234S	2	50	50
			ELR2.2 / AVM234S	2,5	50	50
			ELR2.3	2,8	50	50
15	DN 15 to 32 1/2" to 11/4"	20	EL12 / ELR2.1	1,2	50	50
			EL20 / ELS20 / AVF234S	2	50	50
			ELR2.2 / AVM234S	2,5	50	50
			ELR2.3	2,8	50	50
19,2	DN 20 to 40 3/4" to 11/2"	20	EL12 / ELR2.1	1,2	30,5	26,9
			EL20 / ELS20 / AVF234S	2	50	49,1
			ELR2.2 / AVM234S	2,5	50	50
			ELR2.3	2,8	50	50
25	DN 25 to 50 1" to 2"	20	EL12 / ELR2.1	1,2	17,8	15,7
			EL20 / ELS20 / AVF234S	2	30,8	28,8
			ELR2.2 / AVM234S	2,5	39	36,9
			ELR2.3	2,8	43,9	41,8
			EL45 / ELS45	4,5	50	50
32	DN 32 to 50 11/4" to 2"	20	EL12	1,2	10,7	9,5
	DN 32 to 65 11/4" to 21/2"	20	ELR2.1	1,2	10,7	9,5
			EL20 / ELS20 / AVF234S	2	18,7	17,4
			ELR2.2 / AVM234S	2,5	23,7	22,4
			ELR2.3	2,8	26,7	25,4
			EL45 / ELS45	4,5	43,6	42,3
			EL80 / ELS80	8	50	50
38	DN 40 to 50 11/2" to 2"	20	EL12	1,2	7,5	6,6
	DN 40 to 80 11/2" to 3"	20	ELR2.1	1,2	7,5	6,6
			EL20 / ELS20 / AVF234S	2	13,2	12,3
			ELR2.2 / AVM234S	2,5	16,7	15,8
			ELR2.3	2,8	18,8	17,9
			EL45 / ELS45	4,5	30,8	29,9
			EL80 / ELS80	8	50	50
48	DN 50 2"	20	EL12	1,2	4,6	4,1
	DN 50 to 100 2" to 4"	20	ELR2.1	1,2	4,6	4,1
			EL20 / ELS20 / AVF234S	2	8,2	7,6
			ELR2.2 / AVM234S	2,5	10,4	9,8
			ELR2.3	2,8	11,7	11,1
			EL45 / ELS45	4,5	19,2	18,7
			EL80 / ELS80	8	34,7	34,1
	DN 65 to 100 21/2" to 4"	20	ELS100	10	43,5	43
			EL120 / ELS140	12	50	50

V16/2 – EL, ELR, ELS AND AV SERIES ELECTRIC ACTUATORS – FTO, UNBALANCED TRIM, SOFT SEALING (CLASS VI)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	ACTUATOR MODEL	CLOSING FORCE (kN)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)	
					PTFE	GRAPHITE
65	DN 65 to 100 21/2" to 4"	30	EL20 / ELS20 / AVF234S	2	4,4	4,1
			ELR2.2	2,3	5,1	4,8
			AVM234S	2,5	5,6	5,3
			ELR2.3	2,6	5,8	5,5
			EL45 / ELS45	4,5	10,4	10,1
			EL80 / ELS80	8	18,8	18,5
			ELS100	10	23,7	23,4
			EL120 / ELS140	12	28,5	28,2
76	DN 80 to 100 3" to 4"	30	EL20 / ELS20 / AVF234S	2	3,2	2,9
			ELR2.2	2,3	3,7	3,5
			AVM234S	2,5	4	3,8
			ELR2.3	2,6	4,2	4
			EL45 / ELS45	4,5	7,6	7,4
			EL80 / ELS80	8	13,7	13,5
			ELS100	10	17,3	17
			EL120 / ELS140	12	20,8	20,6
96	DN 100 4"	30	EL20 / ELS20 / AVF234S	2	1,9	1,8
			ELR2.2	2,3	2,3	2,1
			AVM234S	2,5	2,5	2,4
			ELR2.3	2,6	2,6	2,5
			EL45 / ELS45	4,5	4,7	4,6
			EL80 / ELS80	8	8,6	8,4
			ELS100	10	10,8	10,6
			EL120 / ELS140	12	13	12,9

ADCATROL V25/2 TWO-WAY GLOBE CONTROL VALVES (EN and ASME)

V25/2 – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)														MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)		AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)												
							AIR SUPPLY PRESSURE (bar)												
							1,4		2		3		3,5		4		5		6	
					PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	
4	DN 15 to 25 1/2" to 1"	20	PA10 (100 cm²)	0,2 – 1	–	–	50	50	50	50	50	50	50	50	50	50	50	50	50	50	6
				0,2 – 1 (0,4 – 1,2)	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
8	DN 15 to 25 1/2" to 1"	20	PA10 (100 cm²)	0,2 – 1	–	–	46,1	25,7	50	50	50	50	50	50	50	50	50	50	50	50	6
				0,2 – 1 (0,4 – 1,2)	46,1	25,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
12	DN 15 to 25 1/2" to 1"	20	PA10 (100 cm²)	0,2 – 1	–	–	18,7	9,6	50	50	50	50	50	50	50	50	50	50	50	50	6
				0,2 – 1 (0,4 – 1,2)	18,7	9,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
15	DN 15 to 32 1/2" to 11/4"	20	PA10 (100 cm²)	0,2 – 1	–	–	11,1	5,3	38,3	32,5	50	50	50	50	50	50	50	50	50	50	6
				0,2 – 1 (0,4 – 1,2)	11,1	5,3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	38,3	32,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA25 (250 cm²)	0,2 – 1	–	–	38,3	32,5	50	50	50	50	50	50	50	50	50	50	–	–	5
				0,2 – 1 (0,4 – 1,2)	38,3	32,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				0,4 – 2 (0,8 – 2,4)	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
19,2	DN 20 to 40 3/4" to 11/2"	20	PA10 (100 cm²)	0,2 – 1	–	–	6,1	2,5	22,6	19,1	50	46,7	50	50	50	50	50	50	50	50	6
				0,2 – 1 (0,4 – 1,2)	6,1	2,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	22,6	19,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	46,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA25 (250 cm²)	0,2 – 1	–	–	22,6	19,1	50	50	50	50	50	50	50	50	50	50	–	–	5
				0,2 – 1 (0,4 – 1,2)	22,6	19,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				0,4 – 2 (0,8 – 2,4)	50	46,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 1 to 2 bar operating range requires a minimum of 2,2 bar air supply pressure.

V25/2 – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)																MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)		AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)														
							AIR SUPPLY PRESSURE (bar)														
							1,4		2		3		3,5		4		5		6		
					PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	
25	DN 25 to 50 1" to 2"	20	PA10 (100 cm²)	0,2 – 1	–	–	3	0,9	12,8	10,7	29,1	27	37,2	35,1	45,3	43,3	50	50	50	50	
				0,2 – 1 (0,4 – 1,2)	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				1 – 2	12,8	10,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	29,1	27	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA25 (250 cm²)	0,2 – 1	–	–	12,8	10,7	37,2	35,1	50	50	50	50	50	50	50	50	–	–	5
				0,2 – 1 (0,4 – 1,2)	12,8	10,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				0,4 – 2 (0,8 – 2,4)	29,1	27	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				1 – 2	37,2	35,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
32	DN 32 to 50 11/4" to 2"	20	PA10 (100 cm²)	0,2 – 1	–	–	1,4	0,1	7,3	6,1	17,3	16	22,3	21	27,2	26	37,2	35,9	47,1	45,9	
				1 – 2	7,3	6,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				2 – 4	17,3	16	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	DN 32 to 65 11/4" to 21/2"	20	PA25 (250 cm²)	0,2 – 1	–	–	7	5,1	22	20,1	46,8	44,9	50	50	50	50	50	50	–	–	5
				0,2 – 1 (0,4 – 1,2)	7	5,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				0,4 – 2 (0,8 – 2,4)	17	15,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				1 – 2	22	20,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	46,8	44,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
38	DN 40 to 50 11/2" to 2"	20	PA10 (100 cm²)	0,2 – 1	–	–	0,7	–	4,9	4	12	11,1	15,5	14,6	19,1	18,1	26,1	25,2	33,2	32,3	
				1 – 2	4,9	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				2 – 4	12	11,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	DN 40 to 80 11/2" to 3"	20	PA25 (250 cm²)	0,2 – 1	–	–	4,7	3,4	15,3	14	32,9	31,6	41,8	40,4	50	49,2	50	50	–	–	5
				0,2 – 1 (0,4 – 1,2)	4,7	3,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				0,4 – 2 (0,8 – 2,4)	11,8	10,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				1 – 2	15,3	14	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	32,9	31,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA40 (400 cm²)	0,2 – 1 (0,2 – 0,75)	–	–	16	14,7	32,9	31,6	50	50	50	50	–	–	–	–	–	–	3,5
				0,2 – 1 (0,45 – 1)	10,4	9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4
				0,4 – 2 (0,95 – 2)	24,5	23,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2 (1,35 – 2)	35,8	34,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				2 – 4 (2,65 – 4)	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 1 to 2 bar operating range requires a minimum of 2,2 bar air supply pressure.

V25/2 – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)																MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)		AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)														
							AIR SUPPLY PRESSURE (bar)														
							1,4		2		3		3,5		4		5		6		
					PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	
48	DN 50 2"	20	PA10 (100 cm²)	0,2 – 1	–	–	0,2	–	2,8	2,3	7,2	6,7	9,5	8,9	11,7	11,1	16,1	15,5	20,5	19,9	6
				1 – 2	2,8	2,3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	7,2	6,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	DN 50 to 100 2" to 4"	20	PA25 (250 cm²)	0,2 – 1	–	–	2,7	1,8	9,3	8,5	20,4	19,5	25,9	25	31,4	30,6	42,5	41,6	–	–	5
				0,2 – 1 (0,4 – 1,2)	2,7	1,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				0,4 – 2 (0,8 – 2,4)	7,1	6,3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	9,3	8,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	20,4	19,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		20	PA40 (400 cm²)	0,2 – 1 (0,2 – 0,75)	–	–	9,8	8,9	20,4	19,5	38,1	37,2	46,9	46	–	–	–	–	–	–	3,5
				0,2 – 1 (0,45 – 1)	6,2	5,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4
				0,4 – 2 (0,95 – 2)	15,1	14,2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				1 – 2 (1,35 – 2)	22,1	21,3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4 (2,65 – 4)	45,1	44,3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
	DN 65 to 100 21/2" to 4"	20	PA40 (400 cm²)	2,7 – 4,6 (3,3 – 4,6)	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
65	DN 65 to 100 21/2" to 4"	30	PA40 (400 cm²)	0,2 – 1	–	–	2,7	2,2	8,4	8	18,1	17,6	22,9	22,4	27,7	27,3	37,4	36,9	47	46,6	6
				0,2 – 1 (0,4 – 1,2)	2,7	2,2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				0,4 – 2 (0,8 – 2,4)	6,5	6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	8,4	8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	18,1	17,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2,7 – 4,6	24,8	24,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	DN 65 to 125 21/2" to 5"	30	PA80 (800 cm²)	0,2 – 1	–	–	6,5	6	18,1	17,6	37,4	36,9	47	46,6	50	50	50	50	–	–	5
				0,2 – 1 (0,4 – 1,2)	6,5	6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				0,4 – 2 (0,8 – 2,4)	14,2	13,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				1 – 2	18,1	17,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1,5 – 3	27,7	27,3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	37,4	36,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4 (3 – 4)	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
76	DN 80 to 100 3" to 4"	30	PA40 (400 cm²)	0,2 – 1	–	–	1,8	1,5	6,1	5,7	13,1	12,8	16,6	16,3	20,2	19,8	27,2	26,9	34,3	33,9	6
				0,4 – 2 (0,8 – 2,4)	4,6	4,3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	6,1	5,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	13,1	12,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2,7 – 4,6	18	17,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 1 to 2 bar operating range requires a minimum of 2,2 bar air supply pressure.

V25/2 – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)																MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)		AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)														
							AIR SUPPLY PRESSURE (bar)														
							1,4		2		3		3,5		4		5		6		
					PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	
76	DN 80 to 150 3" to 6"	30	PA80 (800 cm²)	0,2 – 1	–	–	4,6	4,3	13,1	12,8	27,2	26,9	34,3	33,9	41,3	41	50	50	–	–	5
				0,2 – 1 (0,4 – 1,2)	4,6	4,3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				0,4 – 2 (0,8 – 2,4)	10,3	9,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				1 – 2	13,1	12,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1,5 – 3	20,2	19,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	27,2	26,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4 (3 – 4)	41,3	41	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
96	DN 100 4"	30	PA40 (400 cm²)	0,2 – 1	–	–	1	0,8	3,7	3,4	8,1	7,9	10,3	10,1	12,5	12,3	16,9	16,7	21,3	21,1	6
				0,4 – 2 (0,8 – 2,4)	2,8	2,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	3,7	3,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	8,1	7,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2,7 – 4,6	11,2	11	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	DN 100 to 200 4" to 8"	30	PA80 (800 cm²)	0,2 – 1	–	–	2,8	2,6	8,1	7,9	16,9	16,7	21,3	21,1	25,8	25,5	34,6	34,4	–	–	5
				0,2 – 1 (0,4 – 1,2)	2,8	2,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				0,4 – 2 (0,8 – 2,4)	6,3	6,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				1 – 2	8,1	7,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1,5 – 3	12,5	12,3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	16,9	16,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4 (3 – 4)	25,8	25,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
125	DN 125 to 200 5" to 8"	50	PA80 (800 cm²)	0,2 – 1 (0,2 – 0,8)	–	–	2,5	2,3	5,6	5,4	10,9	10,7	13,5	13,3	16,1	15,9	21,3	21,1	26,5	26,3	6
				0,4 – 2 (1,05 – 2,4)	4,9	4,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2 (1,15 – 2)	5,4	5,2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1,5 – 3 (1,75 – 3)	8,5	8,3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4 (2,35 – 4)	11,6	11,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA80D (1600 cm²)	0,2 – 1 (0,2 – 0,8)	–	–	5,6	5,4	11,9	11,7	22,3	22,1	27,6	27,3	–	–	–	–	–	–	3,5
				0,2 – 1 (0,55 – 1,2)	5,1	4,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				0,4 – 2 (1,05 – 2,4)	10,3	10,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				1 – 2 (1,15 – 2)	11,4	11,2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4
				1,5 – 3 (1,75 – 3)	17,6	17,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				2 – 4 (2,35 – 4)	23,9	23,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 1 to 2 bar operating range requires a minimum of 2,2 bar air supply pressure.

V25/2 – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)																MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)		AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)														
							AIR SUPPLY PRESSURE (bar)														
							1,4		2		3		3,5		4		5		6		
					PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	
125	DN 200 8"	50	PA80T (2400 cm²)	0,4 – 2 (1,05 – 2,4)	15,8	15,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				1 – 2 (1,15 – 2)	17,4	17,2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				1,5 – 3 (1,75 – 3)	26,8	26,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				2 – 4 (2,35 – 4)	36,2	35,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
150	DN 150 to 200 6" to 8"	50	PA80 (800 cm²)	0,2 – 1 (0,2 – 0,8)	–	–	1,7	1,5	3,9	3,7	7,5	7,3	9,3	9,1	11,1	10,9	14,7	14,6	18,3	18,2	6
				0,4 – 2 (1,05 – 2,4)	3,3	3,2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2 (1,15 – 2)	3,7	3,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1,5 – 3 (1,75 – 3)	5,8	5,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4 (2,35 – 4)	8	7,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA80D (1600 cm²)	0,2 – 1 (0,2 – 0,8)	–	–	3,9	3,7	8,2	8,1	15,4	15,3	19,1	18,9	–	–	–	–	–	–	3,5
				0,4 – 2 (1,05 – 2,4)	7,1	7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				1 – 2 (1,15 – 2)	7,8	7,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4
				1,5 – 3 (1,75 – 3)	12,2	12	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				2 – 4 (2,35 – 4)	16,5	16,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
	DN 200 8"	50	PA80T (2400 cm²)	0,4 – 2 (1,05 – 2,4)	10,9	10,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				1 – 2 (1,15 – 2)	12	11,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				1,5 – 3 (1,75 – 3)	18,5	18,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				2 – 4 (2,35 – 4)	25	24,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
200	DN 200 8"	60	PA80 (800 cm²)	0,2 – 1	–	–	0,5	0,4	1,7	1,6	3,7	3,6	4,7	4,7	5,8	5,7	7,8	7,7	9,8	9,7	6
				2 – 4	3,7	3,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA80D (1600 cm²)	0,2 – 1	–	–	1,3	1,2	3,7	3,6	7,8	7,7	9,8	9,7	11,9	11,8	15,9	15,9	20	19,9	6
				0,4 – 2 (0,8 – 2,4)	2,9	2,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	3,7	3,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1,5 – 3	5,8	5,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	7,8	7,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA80T (2400 cm²)	0,4 – 2 (0,8 – 2,4)	4,5	4,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				1 – 2	5,8	5,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				1,5 – 3	8,8	8,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				2 – 4	11,9	11,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 1 to 2 bar operating range requires a minimum of 2,2 bar air supply pressure.

V25/2 – EL, ELR, ELS AND AV SERIES ELECTRIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	ACTUATOR MODEL	CLOSING FORCE (kN)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)	
					PTFE	GRAPHITE
4 / 8 / 12	DN 15 to 25 1/2" to 1"	20	EL12 / ELR2.1	1,2	50	50
			EL20 / ELS20 / AVF234S	2	50	50
			ELR2.2 / AVM234S	2,5	50	50
			ELR2.3	2,8	50	50
15	DN 15 to 32 1/2" to 11/4"	20	EL12 / ELR2.1	1,2	47,3	41,5
			EL20 / ELS20 / AVF234S	2	50	50
			ELR2.2 / AVM234S	2,5	50	50
			ELR2.3	2,8	50	50
19,2	DN 20 to 40 3/4" to 11/2"	20	EL12 / ELR2.1	1,2	28,2	24,6
			EL20 / ELS20 / AVF234S	2	50	46,7
			ELR2.2 / AVM234S	2,5	50	50
			ELR2.3	2,8	50	50
25	DN 25 to 50 1" to 2"	20	EL12 / ELR2.1	1,2	16	13,9
			EL20 / ELS20 / AVF234S	2	29,1	27
			ELR2.2 / AVM234S	2,5	37,2	35,1
			ELR2.3	2,8	42,1	40
			EL45 / ELS45	4,5	50	50
32	DN 32 to 50 11/4" to 2"	20	EL12 / ELR2.1	1,2	9,3	8,1
			AVF234S	2	17,3	16
			ELR2.2 / AVM234S	2,5	22,3	21
			ELR2.3	2,8	25,3	24
	DN 32 to 65 11/4" to 21/2"	20	EL20 / ELS20	2	17	15,1
			EL45 / ELS45	4,5	41,9	39,9
38	DN 40 to 50 11/2" to 2"	20	EL12	1,2	6,4	5,5
			AVF234S	2	12	11,1
			AVM234S	2,5	15,5	14,6
			ELR2.1	1,2	6,1	4,8
	DN 40 to 80 11/2" to 3"	20	EL20	2	11,8	10,4
			ELR2.2	2,5	15,3	14
			ELR2.3	2,8	17,4	16,1
			EL45 / ELS45	4,5	29,4	28,1
			EL80 / ELS80	8	50	50
48	DN 50 2"	20	EL12	1,2	3,7	3,1
			AVF234S	2	7,2	6,7
			AVM234S	2,5	9,5	8,9
	DN 50 to 100 2" to 4"	20	EL20 / ELS20	2	7,1	6,3
			ELR2.1	1,2	3,6	2,7
			ELR2.2	2,5	9,3	8,5
			ELR2.3	2,8	10,6	9,8
			EL45 / ELS45	4,5	18,2	17,3
			EL80 / ELS80	8	33,6	32,8
	DN 65 to 100 21/2" to 4"	20	ELS100	10	42,5	41,6
			EL120	12	50	50

V25/2 – EL, ELR, ELS AND AV SERIES ELECTRIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	ACTUATOR MODEL	CLOSING FORCE (kN)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)	
					PTFE	GRAPHITE
65	DN 65 to 100 21/2" to 4"	30	EL20	2	3,6	3,2
			PF-M100	32,5	50	50
	DN 65 to 125 21/2" to 5"	30	EL45 / ELS45	4,5	9,6	9,2
			EL80 / ELS80	8	18,1	17,6
			ELS100	10	22,9	22,4
			EL120	12	27,7	27,3
			ELS140	14	32,5	32,1
			EL250 / ELS250	25	50	50
			PF-M50	22,3	50	50
			AUMA SA/SAR 07.2	13,4	31,1	30,6
			AUMA SA/SAR 07.6	21,1	50	50
	DN 125 5"	30	PF-M100	35,2	50	50
76	DN 80 and 100 3" and 4"	30	PF-M100	32,5	50	50
			AUMA SA/SAR 10.2	32,5	50	50
	DN 80 to 150 3" to 6"	30	EL45 / ELS45	4,5	6,9	6,6
			EL80 / ELS80	8	13,1	12,8
			ELS100	10	16,6	16,3
			EL120	12	20,2	19,8
			ELS140	14	23,7	23,3
			EL250 / ELS250	25	43,1	42,7
			PF-M50	22,3	38,3	38
			AUMA SA/SAR 07.2	13,4	22,6	22,3
			AUMA SA/SAR 07.6	21,1	36,2	35,9
	DN 125 and 150 5" and 6"	30	PF-M100	35,2	50	50
			AUMA SA/SAR 10.2	42,2	50	50
96	DN 100	50	PF-M100	32,5	35,2	34,9
			AUMA SA/SAR 10.2	32,5	35,2	34,9
	DN 100 to 150 4" to 6"	30	EL45 / ELS45	4,5	4,2	4
			EL80 / ELS80	8	8,1	7,9
			ELS100	10	10,3	10,1
			EL120	12	12,5	12,3
			ELS140	14	14,7	14,5
			EL250 / ELS250	25	26,9	26,7
	DN 100 to 200 4" to 8"	50	PF-M50	22,3	23,8	23,5
	DN 125 to 200 5" to 8"	50	PF-M100	35,2	38,1	37,7
			AUMA SA/SAR 07.2	13,4	14	13,6
			AUMA SA/SAR 07.6	21,1	22,5	22,1
			AUMA SA/SAR 10.2	42,2	45,8	45,5

V25/2 – EL, ELR, ELS AND AV SERIES ELECTRIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	ACTUATOR MODEL	CLOSING FORCE (kN)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)	
					PTFE	GRAPHITE
125	DN 125 to 150 5" to 6"	50	EL80 / ELS80	8	4,6	4,4
			ELS100	10	5,9	5,7
			EL120	12	7,2	7
			ELS140	14	8,5	8,3
			EL250 / ELS250	25	15,7	15,5
	DN 125 to 200 5" to 8"	50	PF-M50	22,3	13,9	13,7
			PF-M100	35,2	22,3	22,1
			AUMA SA/SAR 07.2	13,4	8,1	7,9
			AUMA SA/SAR 07.6	21,1	13,1	12,9
			AUMA SA/SAR 10.2	42,2	26,9	26,7
	DN 200 8"	50	AUMA SA/SAR 14.2	80,1	50	50
150	DN 150 6"	50	EL80 / ELS80	8	3,1	3
			ELS100	10	4	3,9
			EL120	12	4,9	4,8
			ELS140	14	5,8	5,7
	DN 150 and 200 6" and 8"	50	EL250 / ELS250	25	10,8	10,7
			PF-M50	22,3	9,6	9,5
			PF-M100	35,2	15,4	15,3
			AUMA SA/SAR 07.2	13,4	5,6	5,4
			AUMA SA/SAR 07.6	21,1	9,1	8,9
			AUMA SA/SAR 10.2	42,2	18,6	18,5
	DN 200 8"	50	AUMA SA/SAR 14.2	80,1	35,8	35,6
			AUMA SA/SAR 14.6	89,7	40,1	40
200	DN 200 8"	60	PF-M50	22,3	5,3	5,2
			PF-M100	35,2	8,6	8,5
			AUMA SA/SAR 07.2	13,4	3,1	3
			AUMA SA/SAR 07.6	21,1	5	4,9
			AUMA SA/SAR 10.2	42,2	10,4	10,3
			AUMA SA/SAR 14.2	80,1	20	20
			AUMA SA/SAR 14.6	89,7	22,5	22,4

V25/2 – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, SOFT SEALING (CLASS VI)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)														MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)		AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)												
							AIR SUPPLY PRESSURE (bar)												
							1,4		2		3		3,5		4		5		6	
					PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	
4	DN 15 to 25 1/2" to 1"	20	PA10 (100 cm²)	0,2 – 1	–	–	50	50	50	50	50	50	50	50	50	50	50	50	50	50	6
				0,2 – 1 (0,4 – 1,2)	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
8	DN 15 to 25 1/2" to 1"	20	PA10 (100 cm²)	0,2 – 1	–	–	50	32,5	50	50	50	50	50	50	50	50	50	50	50	50	6
				0,2 – 1 (0,4 – 1,2)	50	32,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
12	DN 15 to 25 1/2" to 1"	20	PA10 (100 cm²)	0,2 – 1	–	–	23,2	14,2	50	50	50	50	50	50	50	50	50	50	50	50	6
				0,2 – 1 (0,4 – 1,2)	23,2	14,2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
15	DN 15 to 32 1/2" to 11/4"	20	PA10 (100 cm²)	0,2 – 1	–	–	14,7	8,9	41,9	36,1	50	50	50	50	50	50	50	50	50	50	6
				0,2 – 1 (0,4 – 1,2)	14,7	8,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	41,9	36,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA25 (250 cm²)	0,2 – 1	–	–	41,9	36,1	50	50	50	50	50	50	50	50	50	50	–	–	5
				0,2 – 1 (0,4 – 1,2)	41,9	36,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				0,4 – 2 (0,8 – 2,4)	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
19,2	DN 20 to 40 3/4" to 11/2"	20	PA10 (100 cm²)	0,2 – 1	–	–	8,9	5,3	25,5	21,9	50	49,6	50	50	50	50	50	50	50	50	6
				0,2 – 1 (0,4 – 1,2)	8,9	5,3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	25,5	21,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	49,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA25 (250 cm²)	0,2 – 1	–	–	25,5	21,9	50	50	50	50	50	50	50	50	50	50	–	–	5
				0,2 – 1 (0,4 – 1,2)	25,5	21,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				0,4 – 2 (0,8 – 2,4)	50	49,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
25	DN 25 to 50 1" to 2"	20	PA10 (100 cm²)	0,2 – 1	–	–	5,2	3,1	14,9	12,8	31,2	29,1	39,4	37,3	47,5	45,4	50	50	50	50	6
				0,2 – 1 (0,4 – 1,2)	5,2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	14,9	12,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	31,2	29,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 1 to 2 bar operating range requires a minimum of 2,2 bar air supply pressure.

V25/2 – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, SOFT SEALING (CLASS VI)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)																MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)		AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)														
							AIR SUPPLY PRESSURE (bar)														
							1,4		2		3		3,5		4		5		6		
					PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	
25	DN 25 to 50 1" to 2"	20	PA25 (250 cm²)	0,2 – 1	–	–	14,9	12,8	39,4	37,3	50	50	50	50	50	50	50	50	–	–	5
				0,2 – 1 (0,4 – 1,2)	14,9	12,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				0,4 – 2 (0,8 – 2,4)	31,2	29,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	39,4	37,3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
32	DN 32 to 50 11/4" to 2"	20	PA10 (100 cm²)	0,2 – 1	–	–	3,1	1,8	9	7,8	19	17,7	24	22,7	28,9	27,7	38,9	37,6	48,8	47,6	6
				1 – 2	9	7,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	19	17,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	DN 32 to 65 11/4" to 21/2"	20	PA25 (250 cm²)	0,2 – 1	–	–	8,7	6,8	23,7	21,8	48,5	46,6	50	50	50	50	50	50	–	–	5
				0,2 – 1 (0,4 – 1,2)	8,7	6,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				0,4 – 2 (0,8 – 2,4)	18,7	16,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	23,7	21,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	48,5	46,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
38	DN 40 to 50 11/2" to 2"	20	PA10 (100 cm²)	0,2 – 1	–	–	2,1	1,2	6,4	5,5	13,4	12,5	17	16,1	20,5	19,6	27,5	26,6	34,6	33,7	6
				1 – 2	6,4	5,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	13,4	12,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	DN 40 to 80 11/2" to 3"	20	PA25 (250 cm²)	0,2 – 1	–	–	6,2	4,8	16,7	15,4	34,4	33	43,2	41,8	50	50	50	50	–	–	5
				0,2 – 1 (0,4 – 1,2)	6,2	4,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				0,4 – 2 (0,8 – 2,4)	13,2	11,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	16,7	15,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	34,4	33	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA40 (400 cm²)	0,2 – 1 (0,2 – 0,75)	–	–	17,4	16,1	34,4	33	50	50	50	50	–	–	–	–	–	–	3,5
				0,2 – 1 (0,45 – 1)	11,8	10,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4
				0,4 – 2 (0,95 – 2)	25,9	24,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				1 – 2 (1,35 – 2)	37,2	35,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4 (2,65 – 4)	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
48	DN 50 2"	20	PA10 (100 cm²)	0,2 – 1	–	–	1,3	0,7	4	3,4	8,4	7,8	10,6	10	12,8	12,2	17,2	16,7	21,6	21,1	6
				1 – 2	4	3,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	8,4	7,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	DN 50 to 100 2" to 4"	20	PA25 (250 cm²)	0,2 – 1	–	–	3,8	3	10,5	9,6	21,5	20,7	27	26,2	32,6	31,7	43,6	42,8	–	–	5
				0,2 – 1 (0,4 – 1,2)	3,8	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				0,4 – 2 (0,8 – 2,4)	8,2	7,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	10,5	9,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	21,5	20,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 1 to 2 bar operating range requires a minimum of 2,2 bar air supply pressure.

V25/2 – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, SOFT SEALING (CLASS VI)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)																MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)		AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)														
							AIR SUPPLY PRESSURE (bar)														
							1,4		2		3		3,5		4		5		6		
					PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	
48	DN 50 to 100 2" to 4"	20	PA40 (400 cm²)	0,2 – 1 (0,2 – 0,75)	–	–	10,9	10	21,5	20,7	39,2	38,3	48	47,2	–	–	–	–	–	–	3,5
				0,2 – 1 (0,45 – 1)	7,4	6,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4
				0,4 – 2 (0,95 – 2)	16,2	15,3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				1 – 2 (1,35 – 2)	23,3	22,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4 (2,65 – 4)	46,3	45,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
	DN 65 to 100 21/2" to 4"	20	PA40 (400 cm²)	2,7 – 4,6 (3,3 – 4,6)	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
65	DN 65 to 100 21/2" to 4"	30	PA40 (400 cm²)	0,2 – 1	–	–	3,5	3	9,3	8,8	18,9	18,5	23,7	23,3	28,6	28,1	38,2	37,7	47,9	47,4	6
				0,2 – 1 (0,4 – 1,2)	3,5	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				0,4 – 2 (0,8 – 2,4)	7,3	6,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	9,3	8,8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	18,9	18,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2,7 – 4,6	25,7	25,2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	DN 65 to 125 21/2" to 5"	30	PA80 (800 cm²)	0,2 – 1	–	–	7,3	6,9	18,9	18,5	38,2	37,7	47,9	47,4	50	50	50	50	–	–	5
				0,2 – 1 (0,4 – 1,2)	7,3	6,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				0,4 – 2 (0,8 – 2,4)	15,1	14,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				1 – 2	18,9	18,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1,5 – 3	28,6	28,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	38,2	37,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4 (3 – 4)	50	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
76	DN 80 to 100 3" to 4"	30	PA40 (400 cm²)	0,2 – 1	–	–	2,5	2,2	6,8	6,4	13,8	13,5	17,3	17	20,9	20,5	27,9	27,6	35	34,6	6
				0,4 – 2 (0,8 – 2,4)	5,4	5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	6,8	6,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	13,8	13,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2,7 – 4,6	18,8	18,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	DN 80 to 150 3" to 6"	30	PA80 (800 cm²)	0,2 – 1	–	–	5,4	5	13,8	13,5	27,9	27,6	35	34,6	42	41,7	50	50	–	–	5
				0,2 – 1 (0,4 – 1,2)	5,4	5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				0,4 – 2 (0,8 – 2,4)	11	10,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				1 – 2	13,8	13,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1,5 – 3	20,9	20,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	27,9	27,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4 (3 – 4)	42	41,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 1 to 2 bar operating range requires a minimum of 2,2 bar air supply pressure.

V25/2 – WITH PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, SOFT SEALING (CLASS VI)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)																MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)		AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)														
							AIR SUPPLY PRESSURE (bar)														
							1,4		2		3		3,5		4		5		6		
					PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	
96	DN 100 4"	30	PA40 (400 cm²)	0,2 – 1	–	–	1,6	1,4	4,2	4	8,6	8,4	10,9	10,6	13,1	12,9	17,5	17,3	21,9	21,7	6
				0,4 – 2 (0,8 – 2,4)	3,3	3,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	4,2	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	8,6	8,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2,7 – 4,6	11,7	11,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	DN 100 to 200 4" to 8"	30	PA80 (800 cm²)	0,2 – 1	–	–	3,3	3,1	8,6	8,4	17,5	17,3	21,9	21,7	26,3	26,1	35,2	35	–	–	5
				0,2 – 1 (0,4 – 1,2)	3,3	3,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				0,4 – 2 (0,8 – 2,4)	6,9	6,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				1 – 2	8,6	8,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1,5 – 3	13,1	12,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	17,5	17,3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4 (3 – 4)	26,3	26,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
125	DN 125 to 200 5" to 8"	50	PA80 (800 cm²)	0,2 – 1 (0,2 – 0,8)	–	–	3	2,7	6,1	5,9	11,3	11,1	13,9	13,7	16,5	16,3	21,7	21,5	26,9	26,7	6
				0,4 – 2 (1,05 – 2,4)	5,3	5,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2 (1,15 – 2)	5,8	5,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1,5 – 3 (1,75 – 3)	9	8,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4 (2,35 – 4)	12,1	11,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA80D (1600 cm²)	0,2 – 1 (0,2 – 0,8)	–	–	6,1	5,9	12,3	12,1	22,8	22,6	28	27,8	–	–	–	–	–	–	3,5
				0,2 – 1 (0,55 – 1,2)	5,6	5,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				0,4 – 2 (1,05 – 2,4)	10,8	10,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				1 – 2 (1,15 – 2)	11,8	11,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4
				1,5 – 3 (1,75 – 3)	18,1	17,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				2 – 4 (2,35 – 4)	24,3	24,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
	DN 200 4"	50	PA80T (2400 cm²)	0,4 – 2 (1,05 – 2,4)	16,3	16	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				1 – 2 (1,15 – 2)	17,8	17,6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				1,5 – 3 (1,75 – 3)	27,2	27	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				2 – 4 (2,35 – 4)	36,6	36,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 1 to 2 bar operating range requires a minimum of 2,2 bar air supply pressure.

V25/2 – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, SOFT SEALING (CLASS VI)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)																MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)		AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)														
							AIR SUPPLY PRESSURE (bar)														
							1,4		2		3		3,5		4		5		6		
					PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	PTFE	GRAPH.	
150	DN 150 to 200 6" to 8"	50	PA80 (800 cm²)	0,2 – 1 (0,2 – 0,8)	–	–	2	1,9	4,2	4,1	7,8	7,7	9,6	9,5	11,5	11,3	15,1	14,9	18,7	18,6	6
				0,4 – 2 (1,05 – 2,4)	3,7	3,5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2 (1,15 – 2)	4	3,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1,5 – 3 (1,75 – 3)	6,2	6,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4 (2,35 – 4)	8,4	8,2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA80D (1600 cm²)	0,2 – 1 (0,2 – 0,8)	–	–	4,2	4,1	8,6	8,4	15,8	15,7	19,4	19,3	–	–	–	–	–	–	3,5
				0,4 – 2 (1,05 – 2,4)	7,5	7,3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				1 – 2 (1,15 – 2)	8,2	8,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4
				1,5 – 3 (1,75 – 3)	12,5	12,4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				2 – 4 (2,35 – 4)	16,9	16,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
	DN 200 8"	50	PA80T (2400 cm²)	0,4 – 2 (1,05 – 2,4)	11,3	11,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				1 – 2 (1,15 – 2)	12,4	12,2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				1,5 – 3 (1,75 – 3)	18,9	18,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				2 – 4 (2,35 – 4)	25,4	25,3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
200	DN 200 8"	60	PA80 (800 cm²)	0,2 – 1	–	–	0,7	0,6	2	1,9	4	3,9	5	4,9	6	5,9	8,1	8	10,1	10	6
				2 – 4	4	3,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA80D (1600 cm²)	0,2 – 1	–	–	1,5	1,5	4	3,9	8,1	8	10,1	10	12,1	12,1	16,2	16,1	20,3	20,2	6
				0,4 – 2 (0,8 – 2,4)	3,2	3,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1 – 2	4	3,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				1,5 – 3	6	5,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
				2 – 4	8,1	8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			PA80T (2400 cm²)	0,4 – 2 (0,8 – 2,4)	4,8	4,7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				1 – 2	6	5,9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
				1,5 – 3	9,1	9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
				2 – 4	12,1	12,1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 1 to 2 bar operating range requires a minimum of 2,2 bar air supply pressure.

V25/2 – EL, ELR, ELS AND AV SERIES ELECTRIC ACTUATORS – FTO, UNBALANCED TRIM, SOFT SEALING (CLASS VI)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	ACTUATOR MODEL	CLOSING FORCE (kN)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)	
					PTFE	GRAPHITE
4 / 8 / 12	DN 15 to 25 1/2" to 1"	20	EL12 / ELR2.1	1,2	50	50
			EL20 / ELS20 / AVF234S	2	50	50
			ELR2.2 / AVM234S	2,5	50	50
			ELR2.3	2,8	50	50
15	DN 15 to 32 1/2" to 11/4"	20	EL12 / ELR2.1	1,2	50	44,5
			EL20 / ELS20 / AVF234S	2	50	50
			ELR2.2 / AVM234S	2,5	50	50
			ELR2.3	2,8	50	50
19,2	DN 20 to 40 3/4" to 11/2"	20	EL12 / ELR2.1	1,2	30,5	26,9
			EL20 / ELS20 / AVF234S	2	50	49,1
			ELR2.2 / AVM234S	2,5	50	50
			ELR2.3	2,8	50	50
25	DN 25 to 50 1" to 2"	20	EL12 / ELR2.1	1,2	17,8	15,7
			EL20 / ELS20 / AVF234S	2	30,8	28,8
			ELR2.2 / AVM234S	2,5	39	36,9
			ELR2.3	2,8	43,9	41,8
			EL45 / ELS45	4,5	50	50
32	DN 32 to 50 11/4" to 2"	20	EL12 / ELR2.1	1,2	10,7	9,5
			AVF234S	2	18,7	17,4
			ELR2.2 / AVM234S	2,5	23,7	22,4
			ELR2.3	2,8	26,7	25,4
	DN 32 to 65 11/4" to 21/2"	20	EL20 / ELS20	2	18,4	16,5
			EL45 / ELS45	4,5	43,3	41,3
38	DN 40 to 50 11/2" to 2"	20	EL12	1,2	7,5	6,6
			AVF234S	2	13,2	12,3
			AVM234S	2,5	16,7	15,8
			ELR2.1	1,2	7,3	6
	DN 40 to 80 11/2" to 3"	20	EL20	2	13	11,6
			ELR2.2	2,5	16,5	15,1
			ELR2.3	2,8	18,6	17,3
			EL45 / ELS45	4,5	30,6	29,2
			EL80 / ELS80	8	50	50
48	DN 50 2"	20	EL12	1,2	4,6	4,1
			AVF234S	2	8,2	7,6
			AVM234S	2,5	10,4	9,8
	DN 50 to 100 2" to 4"	20	EL20 / ELS20	2	8	7,2
			ELR2.1	1,2	4,5	3,7
			ELR2.2	2,5	10,3	9,4
			ELR2.3	2,8	11,6	10,7
			EL45 / ELS45	4,5	19,1	18,2
			EL80 / ELS80	8	34,6	33,7
	DN 65 to 100 21/2" to 4"	20	ELS100	10	43,4	42,6
			EL120	12	50	50

V25/2 – EL, ELR, ELS AND AV SERIES ELECTRIC ACTUATORS – FTO, UNBALANCED TRIM, SOFT SEALING (CLASS VI)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	ACTUATOR MODEL	CLOSING FORCE (kN)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)	
					PTFE	GRAPHITE
65	DN 65 to 100 21/2" to 4"	30	EL20	2	4,3	3,8
			PF-M100	32,5	50	50
	DN 65 to 125 21/2" to 5"	30	EL45 / ELS45	4,5	10,3	9,9
			EL80 / ELS80	8	18,8	18,3
			ELS100	10	23,6	23,1
			EL120	12	28,4	28
			ELS140	14	33,2	32,8
			EL250 / ELS250	25	50	50
			PF-M50	22,3	50	50
			AUMA SA/SAR 07.2	13,4	31,8	31,3
			AUMA SA/SAR 07.6	21,1	50	50
	DN 125 5"	30	PF-M100	35,2	50	50
76	DN 80 and 100 3" and 4"	30	PF-M100	32,5	50	50
			AUMA SA/SAR 10.2	32,5	50	50
	DN 80 to 150 3" to 6"	30	EL45 / ELS45	4,5	7,5	7,2
			EL80 / ELS80	8	13,7	13,4
			ELS100	10	17,2	16,9
			EL120	12	20,7	20,4
			ELS140	14	24,3	23,9
			EL250 / ELS250	25	43,7	43,3
			PF-M50	22,3	38,9	38,6
			AUMA SA/SAR 07.2	13,4	23,2	22,9
			AUMA SA/SAR 07.6	21,1	36,8	36,5
	Dn 125 and 150 5" and 6"	30	PF-M100	35,2	50	50
			AUMA SA/SAR 10.2	42,2	50	50
96	DN 100 4"	50	PF-M100	32,5	35,6	35,4
			AUMA SA/SAR 10.2	32,5	35,6	35,4
	DN 100 to 150 4" to 6"	30	EL45 / ELS45	4,5	4,7	4,5
			EL80 / ELS80	8	8,5	8,3
			ELS100	10	10,8	10,5
			EL120	12	13	12,8
			ELS140	14	15,2	15
			EL250 / ELS250	25	27,3	27,1
	DN 100 to 200 4" to 8"	50	PF-M50	22,3	24,3	23,9
	DN 125 to 200 5" to 8"	50	PF-M100	35,2	38,5	38,2
			AUMA SA/SAR 07.2	13,4	14,4	14,1
			AUMA SA/SAR 07.6	21,1	23	22,6
			AUMA SA/SAR 10.2	42,2	46,3	45,9

V25/2 – EL, ELR, ELS AND AV SERIES ELECTRIC ACTUATORS – FTO, UNBALANCED TRIM, SOFT SEALING (CLASS VI)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	ACTUATOR MODEL	CLOSING FORCE (kN)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)	
					PTFE	GRAPHITE
125	DN 125 to 150 5" to 6"	50	EL80 / ELS80	8	5	4,8
			ELS100	10	6,3	6,1
			EL120	12	7,6	7,4
			ELS140	14	8,9	8,7
			EL250 / ELS250	25	16	15,8
	DN 125 to 200 5" to 8"	50	PF-M50	22,3	14,3	14,1
			PF-M100	35,2	22,7	22,5
			AUMA SA/SAR 07.2	13,4	8,5	8,3
			AUMA SA/SAR 07.6	21,1	13,5	13,3
			AUMA SA/SAR 10.2	42,2	27,3	27
	DN 200 8"	50	AUMA SA/SAR 14.2	80,1	50	50
150	DN 150 6"	50	EL80 / ELS80	8	3,4	3,3
			ELS100	10	4,3	4,2
			EL120	12	5,2	5,1
			ELS140	14	6,1	6
	DN 150 to 200 6" to 8"	50	EL250 / ELS250	25	11,1	11
			PF-M50	22,3	9,9	9,8
			PF-M100	35,2	15,7	15,6
			AUMA SA/SAR 07.2	13,4	5,9	5,7
			AUMA SA/SAR 07.6	21,1	9,4	9,2
			AUMA SA/SAR 10.2	42,2	18,9	18,8
	DN 200 8"	50	AUMA SA/SAR 14.2	80,1	36,1	35,9
			AUMA SA/SAR 14.6	89,7	40,4	40,3
200	DN 200 8"	60	PF-M50	22,3	5,5	5,5
			PF-M100	35,2	8,8	8,7
			AUMA SA/SAR 07.2	13,4	3,3	3,2
			AUMA SA/SAR 07.6	21,1	5,2	5,2
			AUMA SA/SAR 10.2	42,2	10,6	10,5
			AUMA SA/SAR 14.2	80,1	20,3	20,2
			AUMA SA/SAR 14.6	89,7	22,7	22,6

ADCATROL V303 THREE-WAY GLOBE CONTROL VALVES

V303 – PA SERIES PNEUMATIC ACTUATORS – MIXING OR DIVERTING, METAL TO METAL (CLASS IV)

SEAT Ø (mm) (a)	VALVE SIZE	STROKE (mm)	ACTUATOR MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)		MINIMUM AIR SUPPLY PRESSURE (bar)	MAXIMUM AIR SUPPLY PRESSURE (bar)
					PTFE	GRAPHITE		
25	DN 15 to 25	20	PA10 (100 cm²)	0,2 – 1 (0,4 – 1,2)	3	0,9	1,6	6
				1 – 2	12,8	10,7	3	
				2 – 4	29,1	27	6	
32	DN 32	20	PA10 (100 cm²)	0,2 – 1 (0,4 – 1,2)	1,4	0,1	1,6	6
				1 – 2	7,3	6,1	3	
				2 – 4	17,3	16	6	
			PA25 (250 cm²)	0,2 – 1 (0,4 – 1,2)	7,3	6,1	1,6	6
				1 – 2	22,3	21	3	
				2 – 4	47,1	45,9	6	
38	DN 40	20	PA10 (100 cm²)	0,2 – 1 (0,4 – 1,2)	0,7	–	1,6	6
				1 – 2	4,9	4	3	
				2 – 4	12	11,1	6	
			PA25 (250 cm²)	0,2 – 1 (0,4 – 1,2)	4,9	4	1,6	6
				1 – 2	15,5	14,6	3	
				2 – 4	33,2	32,3	6	
			PA40 (400 cm²)	0,2 – 1 (0,45 – 1)	10,6	9,7	1,5	6
				1 – 2	26,1	25,2	3	
				2 – 4	50	50	6	
48	DN 50	20	PA10 (100 cm²)	1 – 2	2,8	2,3	3	6
				2 – 4	7,2	6,7	6	
			PA25 (250 cm²)	0,2 – 1 (0,4 – 1,2)	2,8	2,3	1,6	6
				1 – 2	9,5	8,9	3	
				2 – 4	20,5	19,9	6	
			PA40 (400 cm²)	0,2 – 1 (0,45 – 1)	6,4	5,8	1,5	6
				1 – 2	16,1	15,5	3	
				2 – 4	33,8	33,2	6	
65	DN 65	30	PA40 (400 cm²)	0,2 – 1 (0,4 – 1,2)	2,7	2,2	1,6	6
				1 – 2	8,4	8	3	
				2 – 4	18,1	17,6	6	
			PA80 (800 cm²)	0,2 – 1 (0,4 – 1,2)	6,5	6	1,6	5
				0,4 – 2 (0,8 – 2,4)	14,2	13,8	3,2	6
				1 – 2	18,1	17,6	3	5
				1,5 – 3	27,7	27,3	4,5	6
				2 – 4	37,4	36,9	6	

(a) Upper and lower seat diameters respectively.

Remark: PA25 and PA40 actuators with spring range 2 to 4 bar are not available with direction of action "air to close" (stem retracts by spring force).

V303 – PA SERIES PNEUMATIC ACTUATORS – MIXING OR DIVERTING, METAL TO METAL (CLASS IV)								
SEAT Ø (mm) (a)	VALVE SIZE	STROKE (mm)	ACTUATOR MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)		MINIMUM AIR SUPPLY PRESSURE (bar)	MAXIMUM AIR SUPPLY PRESSURE (bar)
					PTFE	GRAPHITE		
76	DN 80	30	PA40 (400 cm²)	0,2 – 1 (0,4 – 1,2)	1,8	1,5	1,6	6
				1 – 2	6,1	5,7	3	
				2 – 4	13,1	12,8	6	
			PA80 (800 cm²)	0,2 – 1 (0,4 – 1,2)	4,6	4,3	1,6	5
				0,4 – 2 (0,8 – 2,4)	10,3	9,9	3,2	6
				1 – 2	13,1	12,8	3	5
				1,5 – 3	20,2	19,8	4,5	6
				2 – 4	27,2	26,9	6	
96	DN 100	30	PA40 (400 cm²)	0,2 – 1 (0,4 – 1,2)	1	0,8	1,6	6
				1 – 2	3,7	3,4	3	
				2 – 4	8,1	7,9	6	
			PA80 (800 cm²)	0,2 – 1 (0,4 – 1,2)	2,8	2,6	1,6	5
				0,4 – 2 (0,8 – 2,4)	6,3	6,1	3,2	6
				1 – 2	8,1	7,9	3	5
				1,5 – 3	12,5	12,3	4,5	6
				2 – 4	16,9	16,7	6	

(a) Upper and lower seat diameters respectively.

Remark: PA25 and PA40 actuators with spring range 2 to 4 bar are not available with direction of action "air to close" (stem retracts by spring force).

V303 – EL, ELR, ELS AND AV SERIES ELECTRIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	ACTUATOR MODEL	CLOSING FORCE (kN)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)	
					PTFE	GRAPHITE
25	DN 15 to 25	20	EL12 / ELR2.1	1,2	16	13,9
			EL20 / ELS20 / AVF234S	2	29,1	27
			ELR2.2 / AVM234S	2,5	37,2	35,1
			ELR2.3	2,8	42,1	40
			EL45 / ELS45	4,5	50	50
			EL80 / ELS80	8	50	50
32	DN 32	20	EL12 / ELR2.1	1,2	9,3	8,1
			EL20 / ELS20 / AVF234S	2	17,3	16
			ELR2.2 / AVM234S	2,5	22,3	21
			ELR2.3	2,8	25,3	24
			EL45 / ELS45	4,5	42,2	40,9
			EL80 / ELS80	8	50	50
38	DN 40	20	EL12 / ELR2.1	1,2	6,4	5,5
			EL20 / ELS20 / AVF234S	2	12	11,1
			ELR2.2 / AVM234S	2,5	15,5	14,6
			ELR2.3	2,8	17,6	16,7
			EL45 / ELS45	4,5	29,6	28,7
			EL80 / ELS80	8	50	50
48	DN 50	20	EL12 / ELR2.1	1,2	3,7	3,1
			EL20 / ELS20 / AVF234S	2	7,2	6,7
			ELR2.2 / AVM234S	2,5	9,5	8,9
			ELR2.3	2,8	10,8	10,2
			EL45 / ELS45	4,5	18,3	17,7
			EL80 / ELS80	8	33,8	33,2
			ELS100	10	42,6	42
			EL120	12	50	50
			ELS140	14	50	50
65	DN 65	30	EL20 / ELS20	2	3,6	3,2
			ELR2.2	2,3	4,3	3,9
			ELR2.3	2,6	5,1	4,6
			EL45 / ELS45	4,5	9,6	9,2
			EL80 / ELS80	8	18,1	17,6
			ELS100	10	22,9	22,4
			EL120	12	27,7	27,3
			ELS140	14	32,5	32,1
			EL250 / ELS250	25	50	50
			PF-M50	22,3	50	50
			PF-M100	32,5	50	50
			PF-M100	35,2	50	50
			AUMA SA/SAR 07.2	13,4	31,1	30,6
			AUMA SA/SAR 07.6	21,1	50	50

V303 – EL, ELR, ELS AND AV SERIES ELECTRIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	ACTUATOR MODEL	CLOSING FORCE (kN)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)	
					PTFE	GRAPHITE
76	DN 80	30	EL20 / ELS20	2	2,5	2,2
			ELR2.2	2,3	3,1	2,7
			ELR2.3	2,6	3,6	3,2
			EL45 / ELS45	4,5	6,9	6,6
			EL80 / ELS80	8	13,1	12,8
			ELS100	10	16,6	16,3
			EL120	12	20,2	19,8
			ELS140	14	23,7	23,3
			EL250 / ELS250	25	43,1	42,7
			PF-M100	32,5	50	50
			PF-M100	35,2	50	50
			AUMA SA/SAR 07.2	13,4	22,6	22,3
			AUMA SA/SAR 07.6	21,1	36,2	35,9
			AUMA SA/SAR 10.2	32,5	50	50
			AUMA SA/SAR 10.2	42,2	50	50
96	DN 100	30	EL20 / ELS20	2	1,4	1,2
			ELR2.2	2,3	1,8	1,6
			ELR2.3	2,6	2,1	1,9
			EL45 / ELS45	4,5	4,2	4
			EL80 / ELS80	8	8,1	7,9
			ELS100	10	10,3	10,1
			EL120	12	12,5	12,3
			ELS140	14	14,7	14,5
			EL250 / ELS250	25	26,9	26,7
		50	PF-M50	22,3	23,9	23,7
			PF-M100	32,5	35,2	34,9
			PF-M100	35,2	38,1	37,9
			AUMA SA/SAR 07.2	13,4	14	13,8
			AUMA SA/SAR 07.6	21,1	22,6	22,3
			AUMA SA/SAR 10.2	32,5	35,2	34,9

ADCATROL V253 THREE-WAY GLOBE CONTROL VALVES

V253 – PA SERIES PNEUMATIC ACTUATORS – MIXING OR DIVERTING, METAL TO METAL (CLASS IV)

SEAT Ø (mm) (a)	VALVE SIZE	STROKE (mm)	ACTUATOR MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)		MINIMUM AIR SUPPLY PRESSURE (bar)	MAXIMUM AIR SUPPLY PRESSURE (bar)
					PTFE	GRAPHITE		
20 / 15	DN 15 to 20	20	PA25 (250 cm²)	1 – 2	25	25	3	6
25 /20	DN 25	20	PA25 (250 cm²)	1 – 2	25	25	3	6
32 / 25	DN 32	20	PA25 (250 cm²)	1 – 2	22,3	21	3	6
				2 – 4	25	25	6	
			PA40 (400 cm²)	0,4 – 2 (0,95 – 2)	25	25	3	4
				1 – 2 (1,35 – 2)	25	25	3,4	
40 / 32	DN 40	20	PA25 (250 cm²)	1 – 2	13,9	13,1	3	6
				2 – 4	25	25	6	
			PA40 (400 cm²)	0,4 – 2 (0,95 – 2)	22,2	21,4	3	4
				1 – 2 (1,35 – 2)	25	25	3,4	
				1,5 – 3 (2 – 3)	25	25	5	5
50 / 40	DN 50	20	PA25 (250 cm²)	1 – 2	8,7	8,1	3	4
				2 – 4	18,8	18,3	6	
			PA40 (400 cm²)	0,4 – 2 (0,95 – 2)	14	13,4	3	4
				1 – 2 (1,35 – 2)	20,5	20	3,4	
				1,5 – 3 (2 – 3)	25	25	5	5
				2 – 4 (2,3 – 3,65)	25	25	6	6
65 / 50	DN 65	30	PA40 (400 cm²)	0,4 – 2 (0,8 – 2,4)	6,6	6,3	3,2	4
				1 – 2	8,5	8,2	3	
				1,5– 3	13,3	13	4,5	5
				2– 4	18,2	17,8	6	6
80 / 65	DN 80	30	PA40 (400 cm²)	0,4 – 2 (0,8 – 2,4)	4,2	4	3,2	4
				1 – 2	5,5	5,3	3	
				1,5– 3	8,7	8,4	4,5	5
				2– 4	11,8	11,6	6	6
100 / 80	DN 100	30	PA40 (400 cm²)	0,4 – 2 (0,8 – 2,4)	2,6	2,4	3,2	4
				1 – 2	3,4	3,2	3	
				1,5– 3	5,4	5,3	4,5	5
				2– 4	7,4	7,3	6	6
			PA80 (800 cm²)	1,5 – 3	11,5	11,4	4,5	4,5
100 / 100	DN 125 (DIVERTING)	35	PA80 (800 cm²)	1 – 2	7,4	7,3	3	3,5
				1,5 – 3	11,5	11,4	4,5	4,5
125 / 120	DN 125 (MIXING)	35	PA80 (800 cm²)	1 – 2	4,7	4,6	3	3,5
				1,5 – 3	7,3	7,2	4,5	4,5
120 / 120	DN 150 (DIVERTING)	35	PA80 (800 cm²)	1 – 2	5,1	5	3	3,5
				1,5 – 3	7,9	7,8	4,5	4,5
150 / 140	DN 150 (MIXING)	35	PA80 (800 cm²)	1 – 2	3,2	3,1	3	3,5
				1,5 – 3	5	4,9	4,5	4,5

(a) Upper and lower seat diameters respectively.
Remarks: Higher thrust actuators are available for valves with bellow sealing – consult the manufacturer.
PA25 and PA40 actuators with spring range 2 to 4 bar are not available with direction of action "air to close" (stem retracts by spring force).

V253 – EL, ELR AND ELS SERIES ELECTRIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)						
SEAT Ø (mm) (a)	VALVE SIZE	STROKE (mm)	ACTUATOR MODEL	CLOSING FORCE (kN)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)	
					PTFE	GRAPHITE
20 / 15	DN 15 to 20	20	EL12 / ELR2.1	1,2	25	22,6
			EL20 / ELS20	2	25	25
			ELR2.2	2,5	25	25
			ELR2.3	2,8	25	25
25 / 20	DN 25	20	EL12 / ELR2.1	1,2	16	13,9
			EL20 / ELS20	2	25	25
			ELR2.2	2,5	25	25
			ELR2.3	2,8	25	25
32 / 25	DN 32	20	EL12 / ELR2.1	1,2	9,3	8,1
			EL20 / ELS20	2	17,3	16
			ELR2.2	2,5	22,3	21
			ELR2.3	2,8	25	24
			EL45 / ELS45	4,5	25	25
40 / 32	DN 40	20	EL12 / ELR2.1	1,2	5,7	4,8
			EL20 / ELS20	2	10,7	9,9
			ELR2.2	2,5	13,9	13,1
			ELR2.3	2,8	15,8	15
			EL45 / ELS45	4,5	25	25
50 / 40	DN 50	20	EL12	1,2	3,4	2,8
			EL20 / ELS20	2	6,6	6,1
			ELR2.1	1,2	3,4	2,8
			ELR2.2	2,5	8,7	8,1
			ELR2.3	2,8	9,9	9,4
			EL45 / ELS45	4,5	16,8	16,3
			EL80 / ELS80	8	25	25
65 / 50	DN 65	20	EL20 / ELS20	2	3,7	3,4
			ELR2.2	2,5	4,9	4,6
			ELR2.3	2,8	5,6	5,3
			EL45 / ELS45	4,5	9,7	9,4
			EL80 / ELS80	8	18,2	17,8
			ELS100	10	23	22,7
			EL120 / ELS140	12	25	25
80 / 65	DN 80	20	ELR2.2	2,5	3,1	2,9
			ELR2.3	2,8	3,6	3,4
			EL45 / ELS45	4,5	6,3	6,1
			EL80 / ELS80	8	11,8	11,6
			ELS100	10	15	14,8
			EL120 / ELS140	12	18,2	18

(a) Upper and lower seat diameters respectively.

V253 – EL, ELR AND ELS SERIES ELECTRIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)						
SEAT Ø (mm) (a)	VALVE SIZE	STROKE (mm)	ACTUATOR MODEL	CLOSING FORCE (kN)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)	
					PTFE	GRAPHITE
100 / 80	DN 100	30	EL45 / ELS45	4,5	3,9	3,8
			EL80 / ELS80	8	7,4	7,3
			ELS100	10	9,5	9,4
			EL120 / ELS140	12	11,5	11,4
100 / 100	DN 125 (DIVERTING)	35	EL45 / ELS45	4,5	3,9	3,8
			EL80 / ELS80	8	7,4	7,3
			ELS100	10	9,5	9,4
			EL120 / ELS140	12	11,5	11,4
125 / 120	DN 125 (MIXING)	35	EL45 / ELS45	4,5	2,4	2,3
			EL80 / ELS80	8	4,7	4,6
			ELS100	10	6	5,9
			EL120 / ELS140	12	7,3	7,2
120 / 120	DN 150 (DIVERTING)	40	EL45 / ELS45	4,5	2,6	2,5
			EL80 / ELS80	8	5,1	5
			ELS100	10	6,5	6,4
			EL120 / ELS140	12	7,9	7,8
150 / 140	DN 150 (MIXING)	40	EL45 / ELS45	4,5	1,6	1,5
			EL80 / ELS80	8	3,2	3,1
			ELS100	10	4,1	4
			EL120 / ELS140	12	5	4,9

(a) Upper and lower seat diameters respectively.

ADCATROL VPC26 TDS BLOWDOWN CONTROL VALVES (EN and ASME)

VPC26 – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL						
SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	ACTUATOR MODEL	SPRING RANGE (bar)	MAX. PERMISSIBLE PRESSURE DROP (bar) AIR TO OPEN (STEM EXTENDS BY SPRING FORCE) PTFE	MAXIMUM AIR SUPPLY PRESSURE (bar) (a)
10	DN 15 to DN 25 1/2" to 1"	6	PA10 (100 cm²)	2 – 4 (2 – 2,6)	50	6
12	DN 40 11/2"	8				

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 2 to 2,6 bar operating range requires a minimum of 2,8 bar air supply pressure.

VPC26 – AV SERIES ELECTRIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL					
SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	ACTUATOR MODEL	CLOSING FORCE (kN)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar) PTFE
10	DN 15 to DN 25 1/2" to 1"	6	AVF234S	2	50
12	DN 40 11/2"	8			

ADCAPURE V926A TWO-WAY ASEPTIC CONTROL VALVES

V926A – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)							MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)	AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)						
						AIR SUPPLY PRESSURE (bar)						
						1,4	2	3	3,5	4	5	6
4	1/2" to 1"	7,5	PA10 (100 cm²)	0,2 – 1 (0,7 – 1)	–	1,9	5,5	10	10	10	10	10	6
				1 – 2 (1,3 – 1,7)	7,4	–	–	–	–	–	–	–	
				2 – 4 (2,6 – 3,25)	10	–	–	–	–	–	–	–	
8	1/2" to 1"	7,5	PA10 (100 cm²)	0,2 – 1 (0,7 – 1)	–	1,8	5,4	10	10	10	10	10	6
				1 – 2 (1,3 – 1,7)	7,2	–	–	–	–	–	–	–	
				2 – 4 (2,6 – 3,25)	10	–	–	–	–	–	–	–	
12	1/2" to 1"	7,5	PA10 (100 cm²)	0,2 – 1 (0,7 – 1)	–	1,6	5,2	10	10	10	10	10	6
				1 – 2 (1,3 – 1,7)	7,1	–	–	–	–	–	–	–	
				2 – 4 (2,6 – 3,25)	10	–	–	–	–	–	–	–	
15	3/4" and 1"	7,5	PA10 (100 cm²)	0,2 – 1 (0,7 – 1)	–	1,5	5,1	10	10	10	10	10	6
				1 – 2 (1,3 – 1,7)	6,9	–	–	–	–	–	–	–	
				2 – 4 (2,6 – 3,25)	10	–	–	–	–	–	–	–	
	11/2"	7,5	PA10 (100 cm²)	0,2 – 1 (0,7 – 1)	–	0,8	2,7	5,8	7,4	8,9	10	10	6
				1 – 2 (1,3 – 1,7)	3,6	–	–	–	–	–	–	–	
				2 – 4 (2,6 – 3,25)	7,7	–	–	–	–	–	–	–	
	11/2"	7,5	PA25 (250 cm²)	1 – 2 (1,3 – 1,7)	10	–	–	–	–	–	–	–	6
19,2	1"	7,5	PA10 (100 cm²)	0,2 – 1 (0,7 – 1)	–	1,3	5	10	10	10	10	10	6
				1 – 2 (1,3 – 1,7)	6,8	–	–	–	–	–	–	–	
				2 – 4 (2,6 – 3,25)	10	–	–	–	–	–	–	–	
	11/2"	7,5	PA10 (100 cm²)	0,2 – 1 (0,7 – 1)	–	0,7	2,6	5,7	7,3	8,8	10	10	6
				1 – 2 (1,3 – 1,7)	3,5	–	–	–	–	–	–	–	
				2 – 4 (2,6 – 3,25)	7,6	–	–	–	–	–	–	–	
			PA25 (250 cm²)	1 – 2 (1,3 – 1,7)	10	–	–	–	–	–	–	–	6
25	11/2" and 2"	15	PA10 (100 cm²)	0,2 – 1 (0,4 – 1)	–	0,6	2,5	5,6	7,2	8,7	10	10	6
				1 – 2 (1,25 – 2)	3,2	–	–	–	–	–	–	–	
				2 – 4 (2,5 – 4)	7,2	–	–	–	–	–	–	–	
			PA25 (250 cm²)	1 – 2 (1,25 – 2)	10	–	–	–	–	–	–	–	6

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 2 to 2,6 bar operating range requires a minimum of 2,8 bar air supply pressure.

V926A – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)								MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)	AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)							
						AIR SUPPLY PRESSURE (bar)							
						1,4	2	3	3,5	4	5	6	
32	11/2" and 2"	15	PA10 (100 cm²)	0,2 – 1 (0,4 – 1)	–	0,4	2,3	5,5	7	8,6	10	10	6
				1 – 2 (1,25 – 2)	3,1	–	–	–	–	–	–	–	
				2 – 4 (2,5 – 4)	7	–	–	–	–	–	–	–	
			PA25 (250 cm²)	2 – 4 (1,25 – 2)	9	–	–	–	–	–	–	–	6
				2 – 4 (2,5 – 4)	10	–	–	–	–	–	–	–	
38	11/2" and 2"	15	PA10 (100 cm²)	0,2 – 1 (0,4 – 1)	–	0,3	2,2	5,3	6,9	8,5	10	10	6
	2"	15	PA10 (100 cm²)	1 – 2 (1,25 – 2)	3	–	–	–	–	–	–	–	6
				2 – 4 (2,5 – 4)	6,9	–	–	–	–	–	–	–	
			PA25 (250 cm²)	2 – 4 (1,25 – 2)	8,9	–	–	–	–	–	–	–	6
				2 – 4 (2,5 – 4)	10	–	–	–	–	–	–	–	
47	2"	15	PA10 (100 cm²)	0,2 – 1 (0,4 – 1)	–	0,1	2	5,2	6,7	8,3	10	10	6
				1 – 2 (1,25 – 2)	2,8	–	–	–	–	–	–	–	
				2 – 4 (2,5 – 4)	6,7	–	–	–	–	–	–	–	
			PA25 (250 cm²)	1 – 2 (1,25 – 2)	8,7	–	–	–	–	–	–	–	6
				2 – 4 (2,5 – 4)	10	–	–	–	–	–	–	–	

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 2 to 2,6 bar operating range requires a minimum of 2,8 bar air supply pressure.

V926A – EL AND ELS SERIES ELECTRIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)					
SEAT Ø (mm)	**VALVE SIZE**	**STROKE (mm)**	**ACTUATOR MODEL**	**CLOSING FORCE (kN)**	**MAXIMUM PERMISSIBLE PRESSURE DROP (bar)**
4	**1/2" to 1"**	**7,5**	**EL12**	1,2	6,8
			EL20 / ELS20	2	10
8	**1/2" to 1"**	**7,5**	**EL12**	1,2	6,6
			EL20 / ELS20	2	10
12	**1/2" to 1"**	**7,5**	**EL12**	1,2	6,5
			EL20 / ELS20	2	10
15	**3/4" and 1"**	**7,5**	**EL12**	1,2	6,3
			EL20 / ELS20	2	10
	11/2"	**7,5**	**EL12**	1,2	3,3
			EL20 / ELS20	2	5,8
			EL45 / ELS45	4,5	10
19,2	**1"**	**7,5**	**EL12**	1,2	6,2
			EL20 / ELS20	2	10
	11/2"	**7,5**	**EL12**	1,2	3,2
			EL20 / ELS20	2	5,7
			EL45 / ELS45	4,5	10
25	**11/2" and 2"**	**15**	**EL12**	1,2	3,1
			EL20 / ELS20	2	5,6
			EL45 / ELS45	4,5	10
32	**11/2" to 21/2"**	**15**	**EL12**	1,2	2,9
			EL20 / ELS20	2	5,5
			EL45 / ELS45	4,5	10
38	**2"**	**15**	**EL12**	1,2	2,8
			EL20 / ELS20	2	5,3
			EL45 / ELS45	4,5	10
47	**2"**	**15**	**EL12**	1,2	2,6
			EL20 / ELS20	2	5,2
			EL45 / ELS45	4,5	10

V926A – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, SOFT SEALING (CLASS VI)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)								MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)	AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)							
						AIR SUPPLY PRESSURE (bar)							
						1,4	2	3	3,5	4	5	6	
4	1/2" to 1"	7,5	PA10 (100 cm²)	0,2 – 1 (0,7 – 1)	–	2	5,7	10	10	10	10	10	6
				1 – 2 (1,3 – 1,7)	7,5	–	–	–	–	–	–	–	
				2 – 4 (2,6 – 3,25)	10	–	–	–	–	–	–	–	
8	1/2" to 1"	7,5	PA10 (100 cm²)	0,2 – 1 (0,7 – 1)	–	2	5,6	10	10	10	10	10	6
				1 – 2 (1,3 – 1,7)	7,5	–	–	–	–	–	–	–	
				2 – 4 (2,6 – 3,25)	10	–	–	–	–	–	–	–	
12	1/2" to 1"	7,5	PA10 (100 cm²)	0,2 – 1 (0,7 – 1)	–	2	5,6	10	10	10	10	10	6
				1 – 2 (1,3 – 1,7)	7,4	–	–	–	–	–	–	–	
				2 – 4 (2,6 – 3,25)	10	–	–	–	–	–	–	–	
15	3/4" and 1"	7,5	PA10 (100 cm²)	0,2 – 1 (0,7 – 1)	–	2	5,6	10	10	10	10	10	6
				1 – 2 (1,3 – 1,7)	7,4	–	–	–	–	–	–	–	
				2 – 4 (2,6 – 3,25)	10	–	–	–	–	–	–	–	
	11/2"	7,5	PA10 (100 cm²)	0,2 – 1 (0,7 – 1)	–	1	2,9	6	7,6	9,2	10	10	6
				1 – 2 (1,3 – 1,7)	3,8	–	–	–	–	–	–	–	
				2 – 4 (2,6 – 3,25)	7,9	–	–	–	–	–	–	–	
			PA25 (250 cm²)	1 – 2 (1,3 – 1,7)	10	–	–	–	–	–	–	–	6
19,2	1"	7,5	PA10 (100 cm²)	0,2 – 1 (0,7 – 1)	–	1,9	5,6	10	10	10	10	10	6
				1 – 2 (1,3 – 1,7)	7,4	–	–	–	–	–	–	–	
				2 – 4 (2,6 – 3,25)	10	–	–	–	–	–	–	–	
	11/2"	7,5	PA10 (100 cm²)	0,2 – 1 (0,7 – 1)	–	1	2,9	6	7,6	9,2	10	10	6
				1 – 2 (1,3 – 1,7)	3,8	–	–	–	–	–	–	–	
				2 – 4 (2,6 – 3,25)	7,9	–	–	–	–	–	–	–	
	11/2"	7,5	PA25 (250 cm²)	1 – 2 (1,3 – 1,7)	10	–	–	–	–	–	–	–	6
25	11/2" and 2"	15	PA10 (100 cm²)	0,2 – 1 (0,4 – 1)	–	1	2,9	6	7,6	9,1	10	10	6
				1 – 2 (1,25 – 2)	3,7	–	–	–	–	–	–	–	
				2 – 4 (2,5 – 4)	7,6	–	–	–	–	–	–	–	
	11/2" and 2"	15	PA25 (250 cm²)	1 – 2 (1,25 – 2)	10	–	–	–	–	–	–	–	6

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 2 to 2,6 bar operating range requires a minimum of 2,8 bar air supply pressure.

V926A – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, SOFT SEALING (CLASS VI)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)							MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)	AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)						
						AIR SUPPLY PRESSURE (bar)						
						1,4	2	3	3,5	4	5	6
32	11/2" and 2"	15	PA10 (100 cm²)	0,2 – 1 (0,4 – 1)	–	1	2,9	6	7,6	9,1	10	10	6
				1 – 2 (1,25 – 2)	3,6	–	–	–	–	–	–	–	
				2 – 4 (2,5 – 4)	7,6	–	–	–	–	–	–	–	
	11/2" and 2"	15	PA25 (250 cm²)	2 – 4 (1,25 – 2)	9,5	–	–	–	–	–	–	–	6
				2 – 4 (2,5 – 4)	10	–	–	–	–	–	–	–	
38	11/2" and 2"	15	PA10 (100 cm²)	0,2 – 1 (0,4 – 1)	–	1	2,8	6	7,5	9,1	10	10	6
	2"	15	PA10 (100 cm²)	1 – 2 (1,25 – 2)	3,6	–	–	–	–	–	–	–	6
				2 – 4 (2,5 – 4)	7,5	–	–	–	–	–	–	–	
			PA25 (250 cm²)	2 – 4 (1,25 – 2)	9,5	–	–	–	–	–	–	–	6
				2 – 4 (2,5 – 4)	10	–	–	–	–	–	–	–	
47	2"	15	PA10 (100 cm²)	0,2 – 1 (0,4 – 1)	–	0,9	2,8	5,9	7,5	9,1	10	10	6
				1 – 2 (1,25 – 2)	3,6	–	–	–	–	–	–	–	
				2 – 4 (2,5 – 4)	7,5	–	–	–	–	–	–	–	
			PA25 (250 cm²)	1 – 2 (1,25 – 2)	9,5	–	–	–	–	–	–	–	6
				2 – 4 (2,5 – 4)	10	–	–	–	–	–	–	–	

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 2 to 2,6 bar operating range requires a minimum of 2,8 bar air supply pressure.

V926A – EL AND ELS SERIES ELECTRIC ACTUATORS – FTO, UNBALANCED TRIM, SOFT SEALING (CLASS VI)					
SEAT Ø (mm)	**VALVE SIZE**	**STROKE (mm)**	**ACTUATOR MODEL**	**CLOSING FORCE (kN)**	**MAXIMUM PERMISSIBLE PRESSURE DROP (bar)**
4	**1/2" to 1"**	**7,5**	**EL12**	1,2	6,9
			EL20 / ELS20	2	10
8	**1/2" to 1"**	**7,5**	**EL12**	1,2	6,8
			EL20 / ELS20	2	10
12	**1/2" to 1"**	**7,5**	**EL12**	1,2	6,8
			EL20 / ELS20	2	10
15	**3/4" and 1"**	**7,5**	**EL12**	1,2	6,7
			EL20 / ELS20	2	10
	11/2"	**7,5**	**EL12**	1,2	3,5
			EL20 / ELS20	2	6
			EL45 / ELS45	4,5	10
19,2	**1"**	**7,5**	**EL12**	1,2	6,7
			EL20 / ELS20	2	10
	11/2"	**7,5**	**EL12**	1,2	3,5
			EL20 / ELS20	2	6
			EL45 / ELS45	4,5	10
25	**11/2" and 2"**	**15**	**EL12**	1,2	3,4
			EL20 / ELS20	2	5,9
			EL45 / ELS45	4,5	10
32	**11/2" to 21/2"**	**15**	**EL12**	1,2	3,4
			EL20 / ELS20	2	5,9
			EL45 / ELS45	4,5	10
38	**2"**	**15**	**EL12**	1,2	3,4
			EL20 / ELS20	2	5,9
			EL45 / ELS45	4,5	10
47	**2"**	**15**	**EL12**	1,2	3,3
			EL20 / ELS20	2	5,8
			EL45 / ELS45	4,5	10

ADCAPURE V926H TWO-WAY HYGIENIC CONTROL VALVES

V926H – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)								MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)	AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)							
						AIR SUPPLY PRESSURE (bar)							
						1,4	2	3	3,5	4	5	6	
4	1/2" to 1"	15	PA10 (100 cm²)	0,2 – 1 (0,4 – 1)	–	10	10	10	10	10	10	10	6
				1 – 2 (1,25 – 2)	10	–	–	–	–	–	–	–	
8	1/2" to 1"	15	PA10 (100 cm²)	0,2 – 1 (0,4 – 1)	–	10	10	10	10	10	10	10	6
				1 – 2 (1,25 – 2)	10	–	–	–	–	–	–	–	
12	1/2" to 1"	15	PA10 (100 cm²)	0,2 – 1 (0,4 – 1)	–	10	10	10	10	10	10	10	6
				1 – 2 (1,25 – 2)	10	–	–	–	–	–	–	–	
15	3/4" to 11/2"	15	PA10 (100 cm²)	0,2 – 1 (0,4 – 1)	–	10	10	10	10	10	10	10	6
				1 – 2 (1,25 – 2)	10	–	–	–	–	–	–	–	
19,2	1" and 11/2"	15	PA10 (100 cm²)	0,2 – 1 (0,4 – 1)	–	6,1	10	10	10	10	10	10	6
				1 – 2 (1,25 – 2)	10	–	–	–	–	–	–	–	
25	11/2" and 2"	20	PA10 (100 cm²)	0,2 – 1	–	3	10	10	10	10	10	10	6
				0,2 – 1 (0,4 – 1,2)	3	–	–	–	–	–	–	–	
				1 – 2	10	–	–	–	–	–	–	–	
32	11/2" to 21/2"	20	PA10 (100 cm²)	0,2 – 1	–	1,1	7	10	10	10	10	10	6
				1 – 2	7	–	–	–	–	–	–	–	
				2 – 4	10	–	–	–	–	–	–	–	
38	2" to 3"	20	PA10 (100 cm²)	0,2 – 1	–	–	1,2	8,2	10	10	10	10	6
				1 – 2	4,7	–	–	–	–	–	–	–	
				2 – 4	10	–	–	–	–	–	–	–	
50	2" to 4"	20	PA10 (100 cm²)	0,2 – 1	–	–	2,4	6,5	8,5	10	10	10	6
				1 – 2	2,4	–	–	–	–	–	–	–	
				2 – 4	6,5	–	–	–	–	–	–	–	
			PA25 (250 cm²)	0,2 – 1	–	2,4	8,5	10	10	10	10	–	5
				0,2 – 1 (0,4 – 1,2)	2,4	–	–	–	–	–	–	–	6
				0,4 – 2 (0,8 – 2,4)	6,5	–	–	–	–	–	–	–	
				1 – 2	8,5	–	–	–	–	–	–	–	
				2 – 4	10	–	–	–	–	–	–	–	
65	3" and 4"	30	PA40 (400 cm²)	0,2 – 1	–	2,7	8,4	10	10	10	–	–	4
				0,2 – 1 (0,4 – 1,2)	2,7	–	–	–	–	–	–	–	
				0,4 – 2 (0,8 – 2,4)	6,5	–	–	–	–	–	–	–	5
				1 – 2	8,4	–	–	–	–	–	–	–	
				2 – 4	10	–	–	–	–	–	–	–	6

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 2 to 2,6 bar operating range requires a minimum of 2,8 bar air supply pressure.

V926H – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)							MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)	AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)						
						AIR SUPPLY PRESSURE (bar)						
						1,4	2	3	3,5	4	5	6	
76	4"	30	PA40 (400 cm²)	0,2 – 1	–	1,8	6,1	10	10	10	–	–	4
				0,4 – 2 (0,8 – 2,4)	4,6	–	–	–	–	–	–	–	5
				1 – 2	6,1	–	–	–	–	–	–	–	
				2 – 4	10	–	–	–	–	–	–	–	6
96	4"	30	PA40 (400 cm²)	0,2 – 1	–	1	3,7	8,1	10	10	–	–	4
				0,4 – 2 (0,8 – 2,4)	2,8	–	–	–	–	–	–	–	5
				1 – 2	3,7	–	–	–	–	–	–	–	
				2 – 4	8,1	–	–	–	–	–	–	–	6
				2,7 – 4,6	10	–	–	–	–	–	–	–	

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 2 to 2,6 bar operating range requires a minimum of 2,8 bar air supply pressure.

V926H – EL AND ELS SERIES ELECTRIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)					
SEAT Ø (mm)	**VALVE SIZE**	**STROKE (mm)**	**ACTUATOR MODEL**	**CLOSING FORCE (kN)**	**MAXIMUM PERMISSIBLE PRESSURE DROP (bar)**
4 / 8 / 12	**1/2" to 1"**	**20**	**EL12**	1,2	10
			EL20 / ELS20	2	10
15	**3/4" to 11/2"**	**20**	**EL12**	1,2	10
			EL20 / ELS20	2	10
19,2	**1" and 11/2"**	**20**	**EL12**	1,2	10
			EL20 / ELS20	2	10
25	**11/2" and 2"**	**20**	**EL12**	1,2	10
			EL20 / ELS20	2	10
32	**11/2" to 21/2"**	**20**	**EL12**	1,2	9
			EL20 / ELS20	2	10
38	**2" to 3"**	**20**	**EL12**	1,2	6,1
			EL20 / ELS20	2	10
50	**2" to 4"**	**20**	**EL12**	1,2	3,2
			EL20 / ELS20	2	6,5
			EL45 / ELS45	4,5	10
65	**3" and 4"**	**30**	**EL20 / ELS20**	2	3,6
			EL45 / ELS45	4,5	10
76	**4"**	**30**	**EL20 / ELS20**	2	2,5
			EL45 / ELS45	4,5	6,9
			EL80 / ELS80	8	10
96	**4"**	**30**	**EL20 / ELS20**	2	1,4
			EL45 / ELS45	4,5	4,2
			EL80 / ELS80	8	8,1
			ELS100	10	10
			EL120	12	10

V926H – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, SOFT SEALING (CLASS VI)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)								MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)	AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)							
						AIR SUPPLY PRESSURE (bar)							
						1,4	2	3	3,5	4	5	6	
4	1/2" to 1"	15	PA10 (100 cm²)	0,2 – 1 (0,4 – 1)	–	10	10	10	10	10	10	10	6
				1 – 2 (1,25 – 2)	10	–	–	–	–	–	–	–	
8	1/2" to 1"	15	PA10 (100 cm²)	0,2 – 1 (0,4 – 1)	–	10	10	10	10	10	10	10	6
				1 – 2 (1,25 – 2)	10	–	–	–	–	–	–	–	
12	1/2" to 1"	15	PA10 (100 cm²)	0,2 – 1 (0,4 – 1)	–	10	10	10	10	10	10	10	6
				1 – 2 (1,25 – 2)	10	–	–	–	–	–	–	–	
15	3/4" to 11/2"	15	PA10 (100 cm²)	0,2 – 1 (0,4 – 1)	–	10	10	10	10	10	10	10	6
				1 – 2 (1,25 – 2)	10	–	–	–	–	–	–	–	
19,2	1" and 11/2"	15	PA10 (100 cm²)	0,2 – 1 (0,4 – 1)	–	8,9	10	10	10	10	10	10	6
				1 – 2 (1,25 – 2)	10	–	–	–	–	–	–	–	
25	11/2" and 2"	20	PA10 (100 cm²)	0,2 – 1	–	5,2	10	10	10	10	10	10	6
				0,2 – 1 (0,4 – 1,2)	5,2	–	–	–	–	–	–	–	
				1 – 2	10	–	–	–	–	–	–	–	
32	11/2" to 21/2"	20	PA10 (100 cm²)	0,2 – 1	–	2,8	8,7	10	10	10	10	10	6
				1 – 2	8,7	–	–	–	–	–	–	–	
				2 – 4	10	–	–	–	–	–	–	–	
38	2" to 3"	20	PA10 (100 cm²)	0,2 – 1	–	–	2,6	9,7	10	10	10	10	6
				1 – 2	6,2	–	–	–	–	–	–	–	
				2 – 4	10	–	–	–	–	–	–	–	
50	2" to 4"	20	PA10 (100 cm²)	0,2 – 1	–	1,1	3,5	7,6	9,6	10	10	10	6
				1 – 2	3,5	–	–	–	–	–	–	–	
				2 – 4	7,6	–	–	–	–	–	–	–	
	2" to 4"	20	PA25 (250 cm²)	0,2 – 1	–	3,5	9,6	10	10	10	10	–	5
				0,2 – 1 (0,4 – 1,2)	3,5	–	–	–	–	–	–	–	6
				0,4 – 2 (0,8 – 2,4)	7,6	–	–	–	–	–	–	–	
				1 – 2	9,6	–	–	–	–	–	–	–	
				2 – 4	10	–	–	–	–	–	–	–	
65	3" and 4"	30	PA40 (400 cm²)	0,2 – 1	–	3,5	9,3	10	10	10	–	–	4
				0,2 – 1 (0,4 – 1,2)	3,5	–	–	–	–	–	–	–	
				0,4 – 2 (0,8 – 2,4)	7,3	–	–	–	–	–	–	–	5
				1 – 2	9,3	–	–	–	–	–	–	–	
				2 – 4	10	–	–	–	–	–	–	–	6

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 2 to 2,6 bar operating range requires a minimum of 2,8 bar air supply pressure.

V926H – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, SOFT SEALING (CLASS VI)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)							MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)	AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)						
						AIR SUPPLY PRESSURE (bar)						
						1,4	2	3	3,5	4	5	6	
76	4"	30	PA40 (400 cm²)	0,2 – 1	–	2,5	6,8	10	10	10	–	–	4
				0,4 – 2 (0,8 – 2,4)	5,4	–	–	–	–	–	–	–	5
				1 – 2	6,8	–	–	–	–	–	–	–	
				2 – 4	10	–	–	–	–	–	–	–	6
96	4"	30	PA40 (400 cm²)	0,2 – 1	–	1,6	4,2	8,6	10	10	–	–	4
				0,4 – 2 (0,8 – 2,4)	3,3	–	–	–	–	–	–	–	5
				1 – 2	4,2	–	–	–	–	–	–	–	
				2 – 4	8,6	–	–	–	–	–	–	–	6
				2,7 – 4,6	10	–	–	–	–	–	–	–	

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 2 to 2,6 bar operating range requires a minimum of 2,8 bar air supply pressure.

V926H – EL AND ELS SERIES ELECTRIC ACTUATORS – FTO, UNBALANCED TRIM, SOFT SEALING (CLASS VI)					
SEAT Ø (mm)	**VALVE SIZE**	**STROKE (mm)**	**ACTUATOR MODEL**	**CLOSING FORCE (kN)**	**MAXIMUM PERMISSIBLE PRESSURE DROP (bar)**
4 / 8 / 12	**1/2" to 1"**	**20**	**EL12**	1,2	10
			EL20 / ELS20	2	10
15	**3/4" to 11/2"**	**20**	**EL12**	1,2	10
			EL20 / ELS20	2	10
19,2	**1" and 11/2"**	**20**	**EL12**	1,2	10
			EL20 / ELS20	2	10
25	**11/2" and 2"**	**20**	**EL12**	1,2	10
			EL20 / ELS20	2	10
32	**11/2" to 21/2"**	**20**	**EL12**	1,2	10
			EL20 / ELS20	2	10
38	**2" to 3"**	**20**	**EL12**	1,2	7,3
			EL20 / ELS20	2	10
50	**2" to 4"**	**20**	**EL12**	1,2	4,1
			EL20 / ELS20	2	7,4
			EL45 / ELS45	4,5	10
65	**3" and 4"**	**30**	**EL20 / ELS20**	2	4,3
			EL45 / ELS45	4,5	10
76	**4"**	**30**	**EL20 / ELS20**	2	3,1
			EL45 / ELS45	4,5	7,5
			EL80 / ELS80	8	10
96	**4"**	**30**	**EL20 / ELS20**	2	1,9
			EL45 / ELS45	4,5	4,7
			EL80 / ELS80	8	8,5
			ELS100	10	10
			EL120	12	10

ADCAPURE V928 TWO-WAY HYGIENIC CONTROL VALVES

V928 TWO-WAY – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)								MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)	AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)							
						AIR SUPPLY PRESSURE (bar)							
						1,4	2	3	3,5	4	5	6	
4	DN 15 to 25	20	PA10 (100 cm²)	0,2 – 1	–	10	10	10	10	10	10	10	6
				0,2 – 1 (0,4 – 1,2)	10	–	–	–	–	–	–	–	
				1 – 2	10	–	–	–	–	–	–	–	
8	DN 15 to 25	20	PA10 (100 cm²)	0,2 – 1	–	10	10	10	10	10	10	10	6
				0,2 – 1 (0,4 – 1,2)	10	–	–	–	–	–	–	–	
				1 – 2	10	–	–	–	–	–	–	–	
12	DN 15 to 25	20	PA10 (100 cm²)	0,2 – 1	–	10	10	10	10	10	10	10	6
				0,2 – 1 (0,4 – 1,2)	10	–	–	–	–	–	–	–	
				1 – 2	10	–	–	–	–	–	–	–	
15	DN 15 to 25	20	PA10 (100 cm²)	0,2 – 1	–	10	10	10	10	10	10	10	6
				0,2 – 1 (0,4 – 1,2)	10	–	–	–	–	–	–	–	
				1 – 2	10	–	–	–	–	–	–	–	
19,2	DN 20 to 50	20	PA10 (100 cm²)	0,2 – 1	–	6,1	10	10	10	10	10	10	6
				0,2 – 1 (0,4 – 1,2)	6,1	–	–	–	–	–	–	–	
				1 – 2	10	–	–	–	–	–	–	–	
25	DN 25 to 65	20	PA10 (100 cm²)	0,2 – 1	–	3	10	10	10	10	10	10	6
				0,2 – 1 (0,4 – 1,2)	3	–	–	–	–	–	–	–	
				1 – 2	10	–	–	–	–	–	–	–	
32	DN 32 to 80	20	PA10 (100 cm²)	0,2 – 1	–	–	7,3	10	10	10	10	10	6
				1 – 2	7,3	–	–	–	–	–	–	–	
				2 – 4	10	–	–	–	–	–	–	–	
38	DN 40 to 100	20	PA10 (100 cm²)	0,2 – 1	–	–	4,9	10	10	10	10	10	6
				1 – 2	4,9	–	–	–	–	–	–	–	
				2 – 4	10	–	–	–	–	–	–	–	
50	DN 50 to 100	20	PA10 (100 cm²)	0,2 – 1	–	–	2,5	6,6	8,7	10	10	10	6
				1 – 2	2,5	–	–	–	–	–	–	–	
				2 – 4	6,6	–	–	–	–	–	–	–	
			PA25 (250 cm²)	0,2 – 1	–	2,4	8,5	10	10	10	10	–	5
				0,2 – 1 (0,4 – 1,2)	2,4	–	–	–	–	–	–	–	6
				0,4 – 2 (0,8 – 2,4)	6,5	–	–	–	–	–	–	–	
				1 – 2	8,5	–	–	–	–	–	–	–	
				2 – 4	10	–	–	–	–	–	–	–	

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 2 to 2,6 bar operating range requires a minimum of 2,8 bar air supply pressure.

V928 TWO-WAY – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)							MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)	AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)						
						AIR SUPPLY PRESSURE (bar)						
						1,4	2	3	3,5	4	5	6	
65	DN 65 to 100	30	PA40 (400 cm²)	0,2 – 1	–	2,7	8,4	10	10	10	–	–	4
				0,2 – 1 (0,4 – 1,2)	2,7	–	–	–	–	–	–	–	
				0,4 – 2 (0,8 – 2,4)	6,5	–	–	–	–	–	–	–	5
				1 – 2	8,4	–	–	–	–	–	–	–	
				2 – 4	10	–	–	–	–	–	–	–	6
76	DN 80 and 100	30	PA40 (400 cm²)	0,2 – 1	–	1,8	6,1	10	10	10	–	–	4
				0,4 – 2 (0,8 – 2,4)	4,6	–	–	–	–	–	–	–	5
				1 – 2	6,1	–	–	–	–	–	–	–	
				2 – 4	10	–	–	–	–	–	–	–	6
96	DN 100	30	PA40 (400 cm²)	0,2 – 1	–	1	3,7	8,1	10	10	–	–	4
				0,4 – 2 (0,8 – 2,4)	2,8	–	–	–	–	–	–	–	5
				1 – 2	3,7	–	–	–	–	–	–	–	
				2 – 4	8,1	–	–	–	–	–	–	–	6
				2,7 – 4,6	10	–	–	–	–	–	–	–	

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 2 to 2,6 bar operating range requires a minimum of 2,8 bar air supply pressure.

V928 TWO-WAY – EL AND ELS SERIES ELECTRIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)					
SEAT Ø (mm)	**VALVE SIZE**	**STROKE (mm)**	**ACTUATOR MODEL**	**CLOSING FORCE (kN)**	**MAXIMUM PERMISSIBLE PRESSURE DROP (bar)**
4 / 8 / 12 / 15	**DN 15 to 25**	**20**	**EL12**	1,2	10
			EL20 / ELS20	2	10
19,2	**DN 20 to 50**	**20**	**EL12**	1,2	10
			EL20 / ELS20	2	10
25	**DN 25 to 65**	**20**	**EL12**	1,2	10
			EL20 / ELS20	2	10
32	**DN 32 to 80**	**20**	**EL12**	1,2	9,3
			EL20 / ELS20	2	10
38	**DN 40 to 100**	**20**	**EL12**	1,2	6,4
			EL20 / ELS20	2	10
50	**DN 50 to 100**	**20**	**EL12**	1,2	3,4
			EL20 / ELS20	2	6,6
			EL45 / ELS45	4,5	10
65	**DN 65 to 100**	**30**	**EL20 / ELS20**	2	3,6
			EL45 / ELS45	4,5	10
76	**DN 80 to 100**	**30**	**EL20 / ELS20**	2	2,5
			EL45 / ELS45	4,5	6,9
			EL80 / ELS80	8	10
96	**DN 100**	**30**	**EL20 / ELS20**	2	1,4
			EL45 / ELS45	4,5	4,2
			EL80 / ELS80	8	8,1
			ELS100	10	10
			EL120	12	10

V928 TWO-WAY – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, SOFT SEALING (CLASS VI)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)							MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)	AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)						
						AIR SUPPLY PRESSURE (bar)						
						1,4	2	3	3,5	4	5	6	
4	DN 15 to 25	20	PA10 (100 cm²)	0,2 – 1	–	10	10	10	10	10	10	10	6
				0,2 – 1 (0,4 – 1,2)	10	–	–	–	–	–	–	–	
				1 – 2	10	–	–	–	–	–	–	–	
8	DN 15 to 25	20	PA10 (100 cm²)	0,2 – 1	–	10	10	10	10	10	10	10	6
				0,2 – 1 (0,4 – 1,2)	10	–	–	–	–	–	–	–	
				1 – 2	10	–	–	–	–	–	–	–	
12	DN 15 to 25	20	PA10 (100 cm²)	0,2 – 1	–	10	10	10	10	10	10	10	6
				0,2 – 1 (0,4 – 1,2)	10	–	–	–	–	–	–	–	
				1 – 2	10	–	–	–	–	–	–	–	
15	DN 15 to 25	20	PA10 (100 cm²)	0,2 – 1	–	10	10	10	10	10	10	10	6
				0,2 – 1 (0,4 – 1,2)	10	–	–	–	–	–	–	–	
				1 – 2	10	–	–	–	–	–	–	–	
19,2	DN 20 to 50	20	PA10 (100 cm²)	0,2 – 1	–	8,9	10	10	10	10	10	10	6
				0,2 – 1 (0,4 – 1,2)	8,9	–	–	–	–	–	–	–	
				1 – 2	10	–	–	–	–	–	–	–	
25	DN 25 to 65	20	PA10 (100 cm²)	0,2 – 1	–	5,2	10	10	10	10	10	10	6
				0,2 – 1 (0,4 – 1,2)	5,2	–	–	–	–	–	–	–	
				1 – 2	10	–	–	–	–	–	–	–	
32	DN 32 to 80	20	PA10 (100 cm²)	0,2 – 1	–	3,1	9	10	10	10	10	10	6
				1 – 2	9	–	–	–	–	–	–	–	
				2 – 4	10	–	–	–	–	–	–	–	
38	DN 40 to 100	20	PA10 (100 cm²)	0,2 – 1	–	2,1	6,4	10	10	10	10	10	6
				1 – 2	6,4	–	–	–	–	–	–	–	
				2 – 4	10	–	–	–	–	–	–	–	
50	DN 50 to 100	20	PA10 (100 cm²)	0,2 – 1	–	1,2	3,6	7,7	9,7	10	10	10	6
				1 – 2	3,6	–	–	–	–	–	–	–	
				2 – 4	7,7	–	–	–	–	–	–	–	
			PA25 (250 cm²)	0,2 – 1	–	3,5	9,6	10	10	10	10	–	5
				0,2 – 1 (0,4 – 1,2)	3,5	–	–	–	–	–	–	–	6
				0,4 – 2 (0,8 – 2,4)	7,6	–	–	–	–	–	–	–	
				1 – 2	9,6	–	–	–	–	–	–	–	
				2 – 4	10	–	–	–	–	–	–	–	

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 2 to 2,6 bar operating range requires a minimum of 2,8 bar air supply pressure.

V928 TWO-WAY – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, SOFT SEALING (CLASS VI)

SEAT Ø (mm)	VALVE SIZE	STROKE (mm)	MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)							MAX. AIR SUPPLY (bar) (a)
					AIR TO OPEN (STEM EXTENDS BY SPRING FORCE)	AIR TO CLOSE (STEM RETRACTS BY SPRING FORCE)						
						AIR SUPPLY PRESSURE (bar)						
						1,4	2	3	3,5	4	5	6	
65	DN 65 to 100	30	PA40 (400 cm²)	0,2 – 1	–	3,5	9,3	10	10	10	–	–	4
				0,2 – 1 (0,4 – 1,2)	3,5	–	–	–	–	–	–	–	
				0,4 – 2 (0,8 – 2,4)	7,3	–	–	–	–	–	–	–	5
				1 – 2	9,3	–	–	–	–	–	–	–	
				2 – 4	10	–	–	–	–	–	–	–	6
76	DN 80 and 100	30	PA40 (400 cm²)	0,2 – 1	–	2,5	6,8	10	10	10	–	–	4
				0,4 – 2 (0,8 – 2,4)	5,4	–	–	–	–	–	–	–	5
				1 – 2	6,8	–	–	–	–	–	–	–	
				2 – 4	10	–	–	–	–	–	–	–	6
96	DN 100	30	PA40 (400 cm²)	0,2 – 1	–	1,6	4,2	8,6	10	10	–	–	4
				0,4 – 2 (0,8 – 2,4)	3,3	–	–	–	–	–	–	–	5
				1 – 2	4,2	–	–	–	–	–	–	–	
				2 – 4	8,6	–	–	–	–	–	–	–	6
				2,7 – 4,6	10	–	–	–	–	–	–	–	

(a) Minimum required air supply pressure = Upper operating range value + 0,2 bar. Example: An actuator with 2 to 2,6 bar operating range requires a minimum of 2,8 bar air supply pressure.

V928 TWO-WAY – EL AND ELS SERIES ELECTRIC ACTUATORS – FTO, UNBALANCED TRIM, SOFT SEALING (CLASS VI)					
SEAT Ø (mm)	**VALVE SIZE**	**STROKE (mm)**	**ACTUATOR MODEL**	**CLOSING FORCE (kN)**	**MAXIMUM PERMISSIBLE PRESSURE DROP (bar)**
4 / 8 / 12 / 15	**DN 15 to 25**	**20**	**EL12**	1,2	10
			EL20 / ELS20	2	10
19,2	**DN 20 to 50**	**20**	**EL12**	1,2	10
			EL20 / ELS20	2	10
25	**DN 25 to 65**	**20**	**EL12**	1,2	10
			EL20 / ELS20	2	10
32	**DN 32 to 80**	**20**	**EL12**	1,2	10
			EL20 / ELS20	2	10
38	**DN 40 to 100**	**20**	**EL12**	1,2	7,5
			EL20 / ELS20	2	10
50	**DN 50 to 100**	**20**	**EL12**	1,2	4,3
			EL20 / ELS20	2	7,5
			EL45 / ELS45	4,5	10
65	**DN 65 to 100**	**30**	**EL20 / ELS20**	2	4,3
			EL45 / ELS45	4,5	10
			EL80 / ELS80	8	10
76	**DN 80 to 100**	**30**	**EL20 / ELS20**	2	3,1
			EL45 / ELS45	4,5	7,5
			EL80 / ELS80	8	10
96	**DN 100**	**30**	**EL20 / ELS20**	2	1,9
			EL45 / ELS45	4,5	4,7
			EL80 / ELS80	8	8,5
			ELS100	10	10
			EL120	12	10

ADCAPURE V928 THREE-WAY HYGIENIC CONTROL VALVES

V928 THREE-WAY – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)

SEAT Ø (mm) (a)	VALVE SIZE	STROKE (mm)	ACTUATOR MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)	MINIMUM AIR SUPPLY PRESSURE (bar)	MAXIMUM AIR SUPPLY PRESSURE (bar)
15	DN 15	20	PA10 (100 cm²)	0,2 – 1 (0,4 – 1,2)	10	1,6	6
				1 – 2	10	3	
19,2	DN 20	20	PA10 (100 cm²)	0,2 – 1 (0,4 – 1,2)	6,1	1,6	6
				1 – 2	10	3	
25	DN 25	20	PA10 (100 cm²)	0,2 – 1 (0,4 – 1,2)	3	1,6	6
				1 – 2	10	3	
32	DN 32	20	PA10 (100 cm²)	1 – 2	7,3	3	6
				2 – 4	10	6	
38	DN 40	20	PA10 (100 cm²)	1 – 2	4,9	3	6
				2 – 4	10	6	
50	DN 50	20	PA10 (100 cm²)	1 – 2	2,5	3	6
				2 – 4	6,6	6	
			PA25 (250 cm²)	0,2 – 1 (0,4 – 1,2)	2,4	1,6	6
				0,4 – 2 (0,8 – 2,4)	6,5	3,2	
				1 – 2	8,5	3	
				2 – 4	10	6	
65	DN 65	30	PA40 (400 cm²)	0,2 – 1 (0,4 – 1,2)	2,7	1,6	6
				0,4 – 2 (0,8 – 2,4)	6,5	3,2	
				1 – 2	8,4	3	
				2 – 4	10	6	
76	DN 80	30	PA40 (400 cm²)	0,4 – 2 (0,8 – 2,4)	4,6	1,6	6
				1 – 2	6,1	3	
				2 – 4	10	6	
96	DN 100	30	PA40 (400 cm²)	0,4 – 2 (0,8 – 2,4)	2,8	3,2	6
				1 – 2	3,7	3	
				2 – 4	10	6	

(a) Upper and lower seat diameters respectively.
Remark: PA25 and PA40 actuators with spring range 2 to 4 bar are not available with direction of action "air to close" (stem retracts by spring force).

V928 THREE-WAY – EL, ELS AND AV SERIES ELECTRIC ACTUATORS – FTO, UNBALANCED TRIM, METAL TO METAL (CLASS IV)					
SEAT Ø (mm)	**VALVE SIZE**	**STROKE (mm)**	**ACTUATOR MODEL**	**CLOSING FORCE (kN)**	**MAXIMUM PERMISSIBLE PRESSURE DROP (bar)**
15	**DN 15**	**20**	**EL12**	1,2	10
			EL20 / ELS20 / AVF234S	2	10
			AVM234S	2,5	10
19,2	**DN 20**	**20**	**EL12**	1,2	10
			EL20 / ELS20 / AVF234S	2	10
			AVM234S	2,5	10
25	**DN 25**	**20**	**EL12**	1,2	10
			EL20 / ELS20 / AVF234S	2	10
			AVM234S	2,5	10
32	**DN 32**	**20**	**EL12**	1,2	9,3
			EL20 / ELS20 / AVF234S	2	10
			AVM234S	2,5	10
38	**DN 40**	**20**	**EL12**	1,2	6,4
			EL20 / ELS20 / AVF234S	2	10
			AVM234S	2,5	10
50	**DN 50**	**20**	**EL12**	1,2	3,4
			EL20 / ELS20 / AVF234S	2	6,6
			AVM234S	2,5	8,7
			EL45 / ELS45	4,5	10
65	**DN 65**	**30**	**EL20 / ELS20 / AVF234S**	2	3,6
			AVM234S	2,5	4,8
			EL45 / ELS45	4,5	9,6
			EL80 / ELS80	8	10
76	**DN 80**	**30**	**EL20 / ELS20 / AVF234S**	2	2,5
			AVM234S	2,5	3,4
			EL45 / ELS45	4,5	6,9
			EL80 / ELS80	8	10
96	**DN 100**	**30**	**EL20 / ELS20 / AVF234S**	2	1,4
			AVM234S	2,5	2
			EL45 / ELS45	4,5	4,2
			EL80 / ELS80	8	8,1
			ELS100	10	10
			EL120	12	10

V928 THREE-WAY – PA SERIES PNEUMATIC ACTUATORS – FTO, UNBALANCED TRIM, SOFT SEALING (CLASS VI)

SEAT Ø (mm) (a)	VALVE SIZE	STROKE (mm)	ACTUATOR MODEL	SPRING RANGE (bar)	MAXIMUM PERMISSIBLE PRESSURE DROP (bar)	MINIMUM AIR SUPPLY PRESSURE (bar)	MAXIMUM AIR SUPPLY PRESSURE (bar)
15	DN 15	20	PA10 (100 cm²)	0,2 – 1 (0,4 – 1,2)	10	1,6	6
				1 – 2	10	3	
19,2	DN 20	20	PA10 (100 cm²)	0,2 – 1 (0,4 – 1,2)	8,9	1,6	6
				1 – 2	10	3	
25	DN 25	20	PA10 (100 cm²)	0,2 – 1 (0,4 – 1,2)	5,2	1,6	6
				1 – 2	10	3	
32	DN 32	20	PA10 (100 cm²)	1 – 2	9	3	6
				2 – 4	10	6	
38	DN 40	20	PA10 (100 cm²)	1 – 2	6,4	3	6
				2 – 4	10	6	
50	DN 50	20	PA10 (100 cm²)	1 – 2	3,6	3	6
				2 – 4	7,7	6	
			PA25 (250 cm²)	0,2 – 1 (0,4 – 1,2)	3,5	1,6	6
				0,4 – 2 (0,8 – 2,4)	7,6	3,2	
				1 – 2	9,6	3	
				2 – 4	10	6	
65	DN 65	30	PA40 (400 cm²)	0,2 – 1 (0,4 – 1,2)	3,5	1,6	6
				0,4 – 2 (0,8 – 2,4)	7,3	3,2	
				1 – 2	9,3	3	
				2 – 4	10	6	
76	DN 80	30	PA40 (400 cm²)	0,4 – 2 (0,8 – 2,4)	5,4	1,6	6
				1 – 2	6,8	3	
				2 – 4	10	6	
96	DN 100	30	PA40 (400 cm²)	0,4 – 2 (0,8 – 2,4)	3,3	3,2	6
				1 – 2	4,2	3	
				2 – 4	10	6	

(a) Upper and lower seat diameters respectively.

Remark: PA25 and PA40 actuators with spring range 2 to 4 bar are not available with direction of action "air to close" (stem retracts by spring force).

V928 THREE-WAY – EL, ELS AND AV SERIES ELECTRIC ACTUATORS – FTO, UNBALANCED TRIM, SOFT SEALING (CLASS VI)					
SEAT Ø (mm)	**VALVE SIZE**	**STROKE (mm)**	**ACTUATOR MODEL**	**CLOSING FORCE (kN)**	**MAXIMUM PERMISSIBLE PRESSURE DROP (bar)**
15	**DN 15**	**20**	**EL12**	1,2	10
			EL20 / ELS20 / AVF234S	2	10
			AVM234S	2,5	10
19,2	**DN 20**	**20**	**EL12**	1,2	10
			EL20 / ELS20 / AVF234S	2	10
			AVM234S	2,5	10
25	**DN 25**	**20**	**EL12**	1,2	10
			EL20 / ELS20 / AVF234S	2	10
			AVM234S	2,5	10
32	**DN 32**	**20**	**EL12**	1,2	10
			EL20 / ELS20 / AVF234S	2	10
			AVM234S	2,5	10
38	**DN 40**	**20**	**EL12**	1,2	7,5
			EL20 / ELS20 / AVF234S	2	10
			AVM234S	2,5	10
50	**DN 50**	**20**	**EL12**	1,2	4,3
			EL20 / ELS20 / AVF234S	2	7,5
			AVM234S	2,5	9,6
			EL45 / ELS45	4,5	10
65	**DN 65**	**30**	**EL20 / ELS20 / AVF234S**	2	4,3
			AVM234S	2,5	5,5
			EL45 / ELS45	4,5	10
			EL80 / ELS80	8	10
76	**DN 80**	**30**	**EL20 / ELS20 / AVF234S**	2	3,1
			AVM234S	2,5	4
			EL45 / ELS45	4,5	7,5
			EL80 / ELS80	8	10
96	**DN 100**	**30**	**EL20 / ELS20 / AVF234S**	2	1,9
			AVM234S	2,5	2,5
			EL45 / ELS45	4,5	4,7
			EL80 / ELS80	8	8,5
			ELS100	10	10
			EL120	12	10