

FFF SERIES PNEUMATIC VALVES

FAMILY 01 – GROUP 66

FFF pneumatic on/off valves are angle-seat valves with CF8M steel body, threaded or socket weld connections and a servo control made of 304 stainless steel. Seal on the valve seat is soft type, and can be made of different materials according to customer's needs. Tightness on stem is guaranteed by packing glands made of PTFE + graphite-loaded PTFE.



TECHNICAL DATA					
Valve type	2-way ball valve, with oblique angle body, unidirectional (under shutter flow).				
∅ Servo Control	25	32	70	80	125
DN	5 (1/4")	8 (1/4") ÷ 20 (3/4")	15 (1/2") ÷ 25 (1")	25 (1") ÷ 50 (2")	40 (1 1/2") ÷ 65 (2 1/2")
Max. allowed P	40 bar (DN 5÷11); 16 bar (DN 15÷65)				
Min. allowed P	0 bar				
Connections	FF GAS; Socket welding				
Seal	PTFE		EPDM, PTFE-coated EPDM, PTFE		
Max temperature	+140 °C.		+150 °C with EPDM seal		
			+155° with PTFE-coated EPDM seal		
			+200 °C with PTFE seal		
Min. temperature	-10°C (in liquid phase)				
Air couplings	RILSAN quick coupling ∅ 6-4 mm.				
Feeding fluid	instrument air				
Feeding pressure	6 – 8 bar				
Optional	inductive or magnetic sensors; pneumatic or electromechanical limit switches; stroke limit switches; solenoid valves				
MATERIALS					
Intermediate body	CF8M				
Middle section	CF8M	CF8 + S31600 + S30400			
Stem	S31600				
Shutter plate	S31600				
Seat seal	PTFE	EPDM, PTFE-coated EPDM, PTFE			
Stem seal	FPM	PTFE+GRAPHITE-LOADED PTFE			
Body gaskets	FPM	PTFE (DN 8#50) / NOVATEC or GRAPHITE+KEVLAR (DN 65)			
Servo Control	CF8M+S30400	S30400			

Air consumption table

CONTROL PRESSURE	AIR CONSUMPTION OF FFF SERIES VALVES [NI / cycle]				
	Servo control ∅ 25	Servo control ∅ 32	Servo control ∅ 70	Servo control ∅ 80	Servo control ∅ 125
6 bar	0.016	0.087	0.824	1.182	4.982

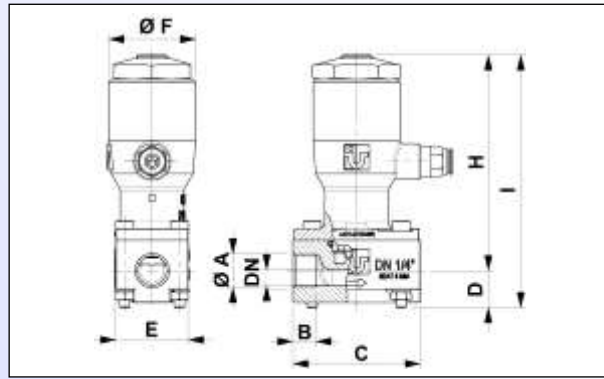
Table Δp of sealing (bar) for N.C. valves - without air supply.

∅ Servo Control	DN 5	DN 8	DN 11	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65
25	40	/	/	/	/	/	/	/	/	/
32	/	20	12	7	4	/	/	/	/	/
70	/	/	/	16	14	9.5	6.5	4	2.5	/
80	/	/	/	/	/	16	16	11	7	/
125	/	/	/	/	/	/	/	16	16	12

FFF DN 5 valve dimensions - Ø 25 servo control

DN	5	
Ø A	1/4" GAS	
B	9	
C	50	
D	14.5	
E	28.5	
Ø F	34	
H	CLOSED	84.5
	OPEN	88.5
I	CLOSED	99
	OPEN	103
Kv [m ³ /h]	0.66	

Dimensions are in mm



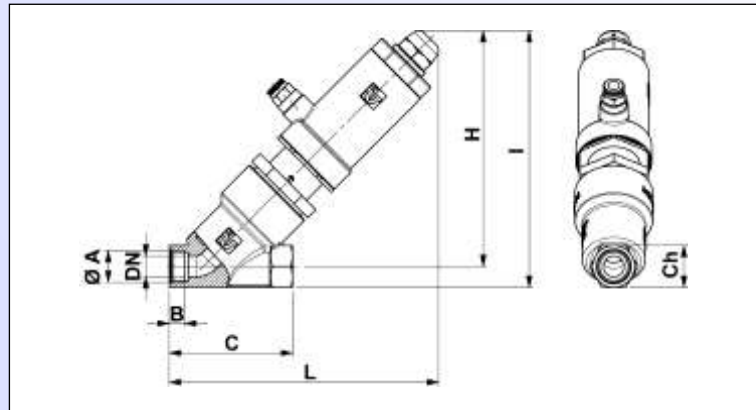
FFF valve dimensions - Ø 32 servo control

DN	8	11	15	20	
	1/4"	3/8"	1/2"	3/4"	
Ø A	F ⁽¹⁾	1/4" GAS	3/8" GAS	1/2" GAS	3/4" GAS
	ST ⁽²⁾	14.2	17.6	22	27.5
B	F ⁽¹⁾	8	8	8	9
	ST ⁽²⁾	10	10	11	12
C	65	65	65	75	
H	124	124	124	125.5	
I	133.5	135	137.5	141.5	
L	142	142	142	145.5	
Ch	19	22	27	32	
Kv [m ³ /h]	1,2	2,3	4	7,5	

Dimensions are in mm

⁽¹⁾ "F" threaded connection

⁽²⁾ "ST" socket-weld connection



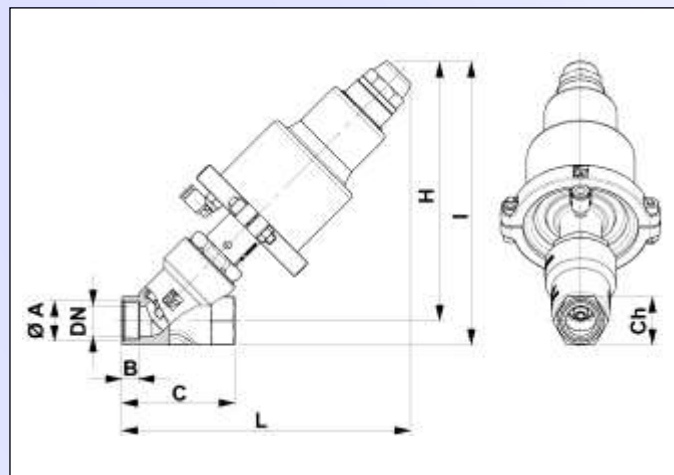
FFF valve dimensions - Ø 70 and Ø 80 servo control

DN	15	20	25	32	40	50	
	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	
Ø Servo Control	70	70	70 80	70 80	70 80	70 80	
Ø A	F ⁽¹⁾	1/2" GAS	3/4" GAS	1" GAS	1 1/4" GAS	1 1/2" GAS	2" GAS
	ST ⁽²⁾	22	27.5	34	43	49	61
B	F ⁽¹⁾	8	9	12	14	14	16
	ST ⁽²⁾	11	12	15	17	17	19
C	65	75	90	110	120	150	
H	170.5	172	179 196	191.5 208.5	196.5 214	208 225	
I	184	188	198.5 215.5	216 233	224 241.5	242 259	
L	188.5	192	206 223	226.5 243.5	230.5 248	246 263	
Ch	27	32	39	49	55	68	
Kv [m ³ /h]	4	7.5	12	19	30	45	

Dimensions are in mm

⁽¹⁾ "F" threaded connection

⁽²⁾ "ST" socket-weld connection



FFF valve dimensions - Ø 125 servo control

DN	40	50	65	
	1 1/2"	2"	2 1/2"	
Ø A	F ⁽¹⁾	1 1/2" GAS	2" GAS	2 1/2" GAS
	ST ⁽²⁾	49	61	77
B	F ⁽¹⁾	14	16	26
	ST ⁽²⁾	17	19	28
C	120	150	185	
H	275.5	286.5	319	
I	303	320.5	363	
L	310	324.5	362.5	
Ch	55	68	88	
Kv [m ³ /h]	43.8	58.1	77.8	

Dimensions are in mm

⁽¹⁾ "F" threaded connection

⁽²⁾ "ST" socket-weld connection

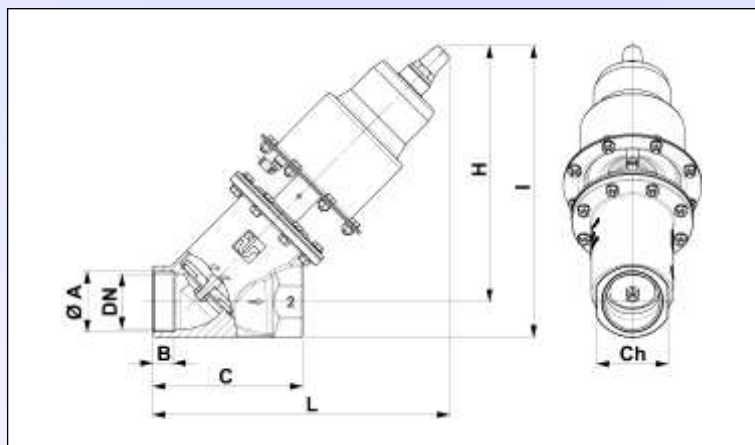


Table of Ø 25 servo control DN5 valve components

REF	DESCRIPTION
1	Or gasket
2	Servo control spring
3	NO gasket
4	Air inlet fitting
5	Or gasket
6	Jig bushing
7	Or gasket
8	Stem with shutter
9	Or gasket
10	Closing screw
11	Spring housing cylinder
12	Seeger ring
13	Or gasket
14	Hex. con. screw
15	Valve body
16	Spring washer
17	Hexagon nut

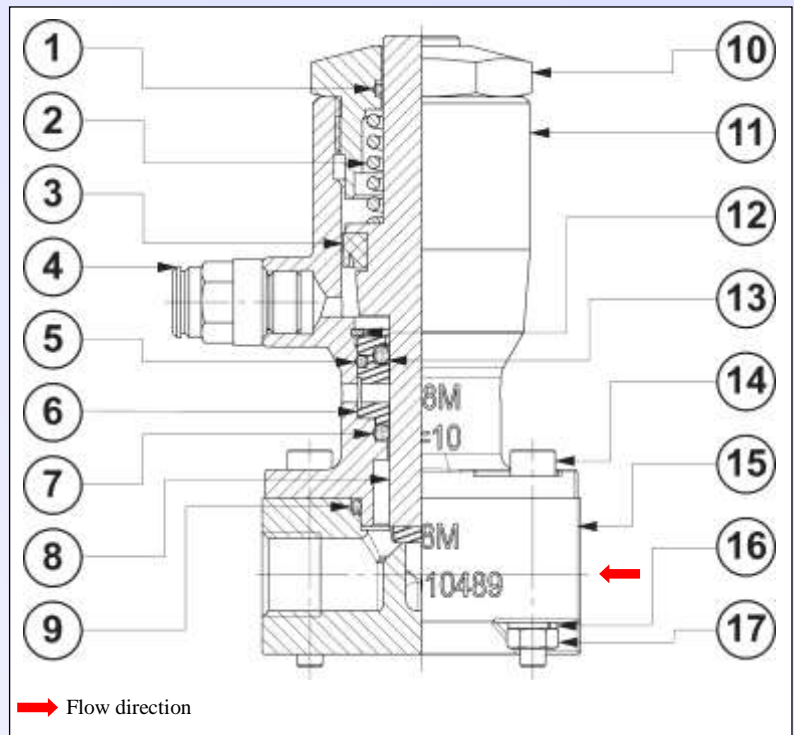


Table of Ø 32 servo control FFF valve components

REF	DESCRIPTION
1	Stroke indicator
2	Servo control spring
3	Self- locking nut
4	Spring washer
5	NADUOP piston
6	Or gasket
7	Piston bearing washer
8	Air inlet fitting
9	Or gasket
10	Packing gland
11	Packing gland spring
12	Body gasket
13	Shaft with shutter
14	Transparent cap
15	Spring housing cylinder
16	Seeger ring
17	Distance ring washer
18	Intermediate body
19	Valve body

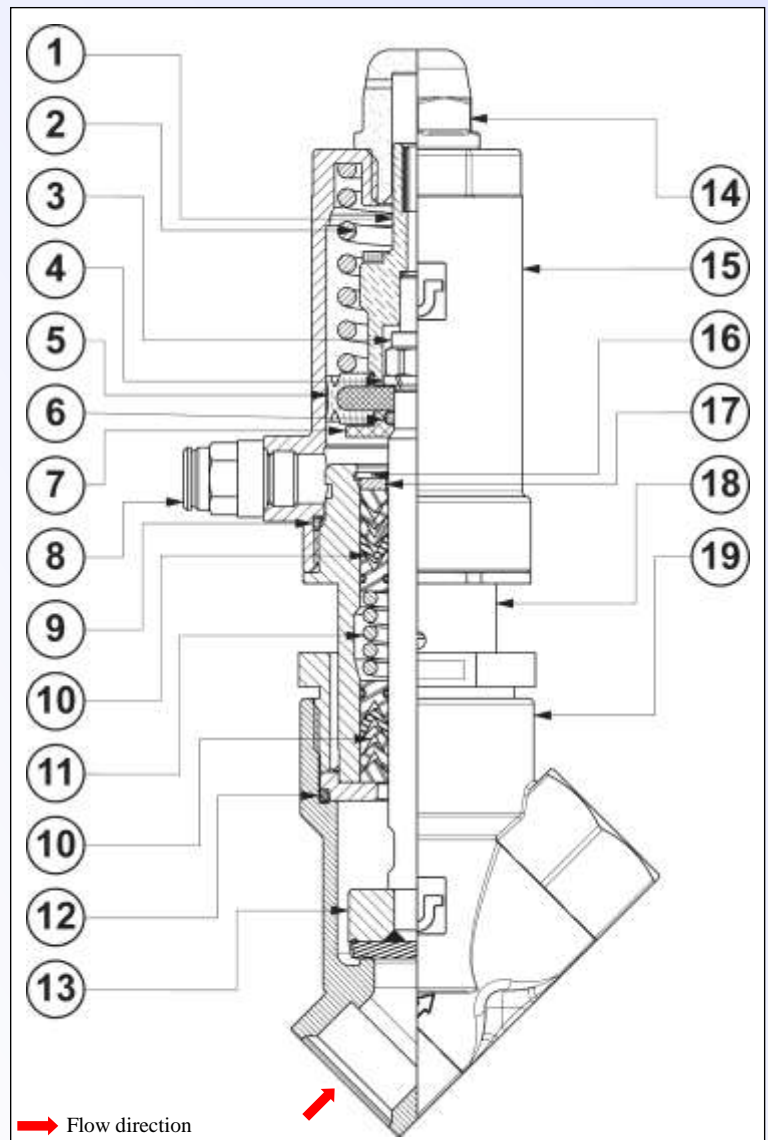


Table of Ø 70-80 servo control FFF valve components

REF	DESCRIPTION
1	Stroke indicator
2	Servo control spring
3	Piston
4	DE gasket
5	Piston bearing washer
6	Or gasket
7	Clamp
8	Packing gland
9	Air inlet fitting
10	Packing gland spring
11	Body gasket
12	Shaft
13	Or gasket
14	Plug holder with plug
15	Safety washer
16	Hexagon nut
17	Transparent cap
18	Spring housing cylinder
19	Self- locking nut
20	Flat washer
21	Or gasket
22	Seeger ring
23	Distance ring washer
24	Hexagon nut
25	Intermediate body
26	Valve body
27	Cylinder head screw

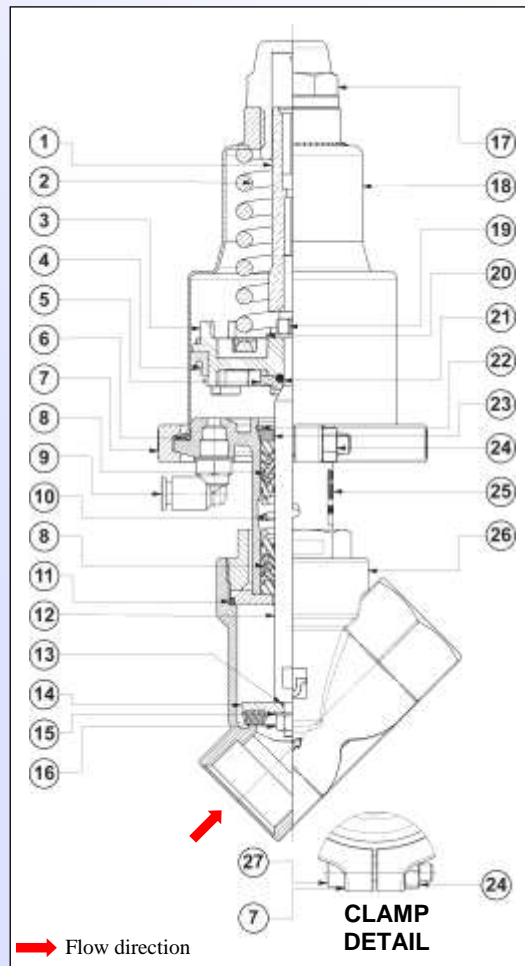


Table of Ø 125 servo control FFF valve components

REF	DESCRIPTION
1	Stroke indicator
2	Servo control spring
3	TDUOP piston
4	Or gasket
5	Piston bearing washer
6	Or gasket
7	Packing gland
8	Air inlet fitting
9	Packing gland spring
10	Body gasket
11	Shaft
12	Or gasket
13	Cap holder
14	Cap
15	Cap stop washer
16	Hexagon nut
17	Transparent cap
18	Spring housing cylinder
19	Self- locking nut
20	Flat washer
21	Seeger ring
22	Distance ring washer
23	Hexagon head screw
24	Spring washer
25	Hexagon nut
26	Intermediate body
27	Hexagon head screw
28	Spring washer
29	Hexagon nut
30	Valve body

