

DPX - DPAX butterfly valve technical description

DEFINOX butterfly valves

have been made for several years using a choice of materials and machining conditions that guarantee top quality strength and surface finish.

The various seal types and numerous accessories make this **a highly versatile valve**.



● Manual DPX



● Automated DPAX

● Design

The DEFINOX butterfly valve consists of:

- a polished 316L stainless steel one-piece disc,
- o'ring,
- a food quality elastomer seal:

The seal is an essential component of the butterfly valve. It must be selected with care and adapted to the service conditions of the process. Identification of the seal is also necessary for maintenance operations. Butterfly valves are delivered as standard with an

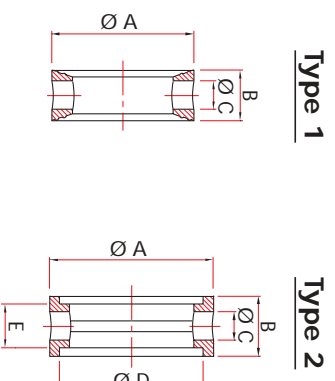
EPDM seal, except for DN 125 which comes with a "FKM" fluorinated elastomer seal.

- Two symmetrical 316L stainless steel half-bodies,
- Securing screws (M6) in 304 stainless steel,
- An operating device.

These valves can be used at 140°C maximum, during a short time and valve open only (during sterilization for instance).

DPX - DPAX butterfly valve technical description

Seals for butterfly valves



MODEL	TYPE	DN			DIMENSIONS					REFERENCES							
		SMS	DIN	US	A	B	C	D	E	Food neoprene	Silicone	Food (FKM) fluorated Elastomer	Anti-acid (FKM) fluorated Elastomer	Clear food EPDM	Black food EPDM	Potash industrial EPDM	
STANDARD	1	25	25	1"	41	23	13										
		32	32	1,5"	55	23	13										
		38	40														
		51	50	2"	65	23	13										
		63		2,5"	75	27,4	13	65,5	20								
		76	65	3"	90	27,4	13	80,5	20								
	2		80		97	34,5	17	88,5	27								
		104	100	4"	117	34,5	17	108,5	27								
			125		150	35	17	137,5	25								
			150		175	35	17	159,5	25								
T old type	2		80		98	27	13	88,5	20								
		104	100	4"	118	27,4	13	108,5	20								
Old type (seal for pin disc)	1	63	65	2,5"	85	26	13										
		76	80	3"	105	33,5	17										
			104	4"	125	33,5	17										
			125		150	33,5	17										

Manual DPX - automated DPAX butterfly valves dimensions

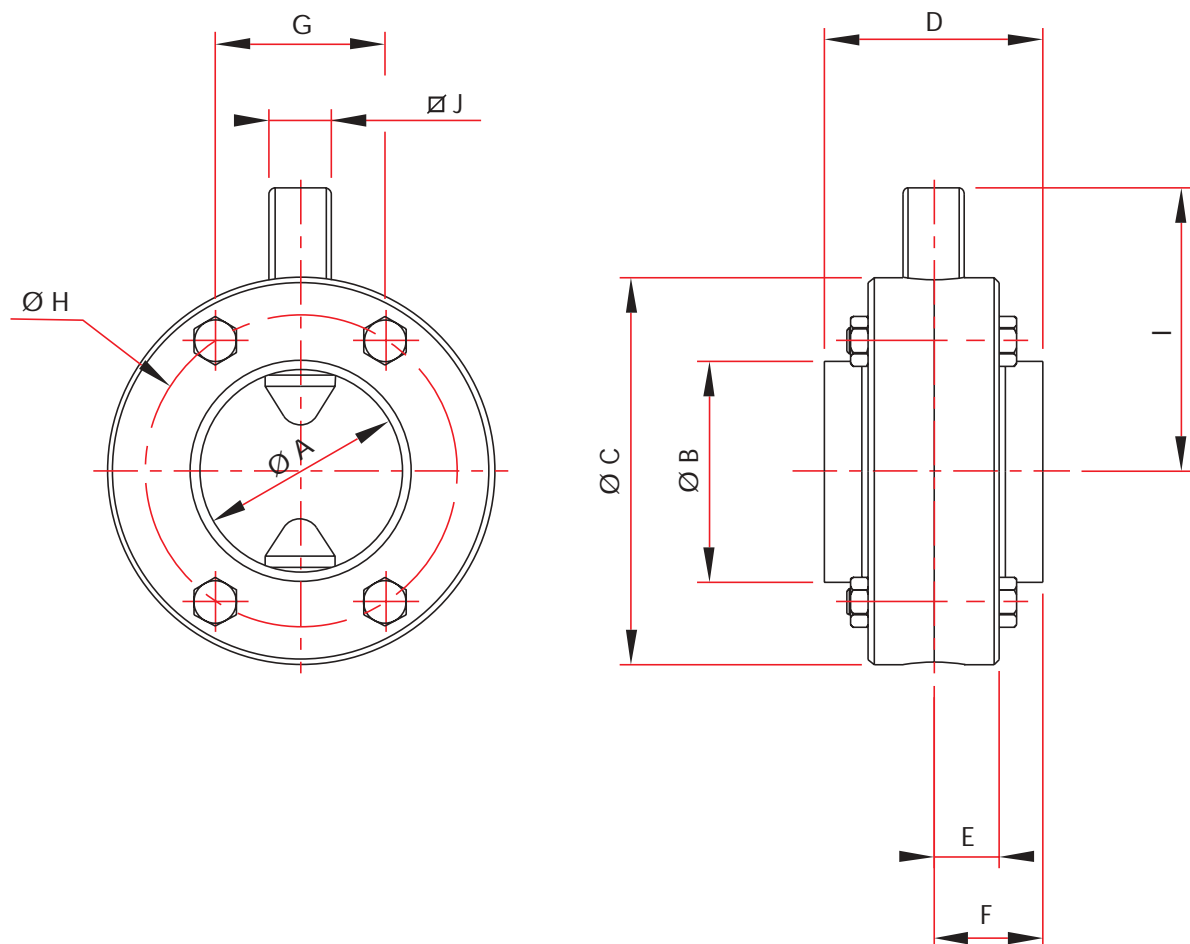
DPX manual butterfly valve

The DPX1 disc stem has a driving square allowing various types of handle to be fitted.

The operating device is secured by a screw at the top of the disc.

Two sizes of square cover the entire range. Two handles of different length adapted to the operating torque correspond to these squares.

A device with a padlocking facility is optionally available.



Manual DPX - automated DPAX butterfly valves dimensions

DPX manual butterfly valve

SMS	DN		Ø A	Ø B	Ø C	D	E	F	G	Ø H	I	Ø J	Weight in kg
	DIN	US											
25			22,1	25,4	79	50	15	25	45	65	59,3	11	1
		1"	22,1	25,4	79	50	15	25	45	65	59,3	11	1
	25		26	29	79	50	15	25	45	65	59,3	11	1
32			29,6	32	79	50	15	25	45	65	59	11	0,9
	32		32	35	79	50	15	25	45	65	59	11	0,9
38			34,8	38,1	79	50	15	25	45	65	59	11	0,9
		1" 1/2	34,8	38,1	79	50	15	25	45	65	59	11	0,9
	40		38	41	79	50	15	25	45	65	59	11	0,9
		2"	47,5	50,8	89	50	15	25	45	75	64,5	11	1,2
51			47,5	50,8	89	50	15	25	45	75	64,5	11	1,2
	50		50	53	89	50	15	25	45	75	64,5	11	1,2
		2" 1/2	60,2	63,5	104	50	15	25	45	90	73	11	1,3
63			60,2	63,5	104	50	15	25	45	90	73	11	1,3
	65		66	70	119	50	15	25	45	105	81	11	1,7
76			72,9	76,2	119	50	15	25	45	105	81	11	1,6
		3"	72,9	76,2	119	50	15	25	45	105	81	11	1,6
	80		81	85	129	58	19	29	57	115	90,5	14	2,7
		4"	97,4	101,6	149	58	19	29	57	135	101,5	14	3,4
	100		100	104	149	58	19	29	57	135	101,5	14	3,4
104			100	104	149	58	19	29	57	135	101,5	14	3,4
	125		125	129	179	58	19	29	57	162	118	14	3,8
		6"	146,9	152,4	204	58	19	29	57	187	131	14	4,8
	150		150	154	204	58	19	29	57	187	131	14	4,8

Manual DPX - automated DPAX butterfly valves dimensions

Manual DPX butterfly valve with standard handle

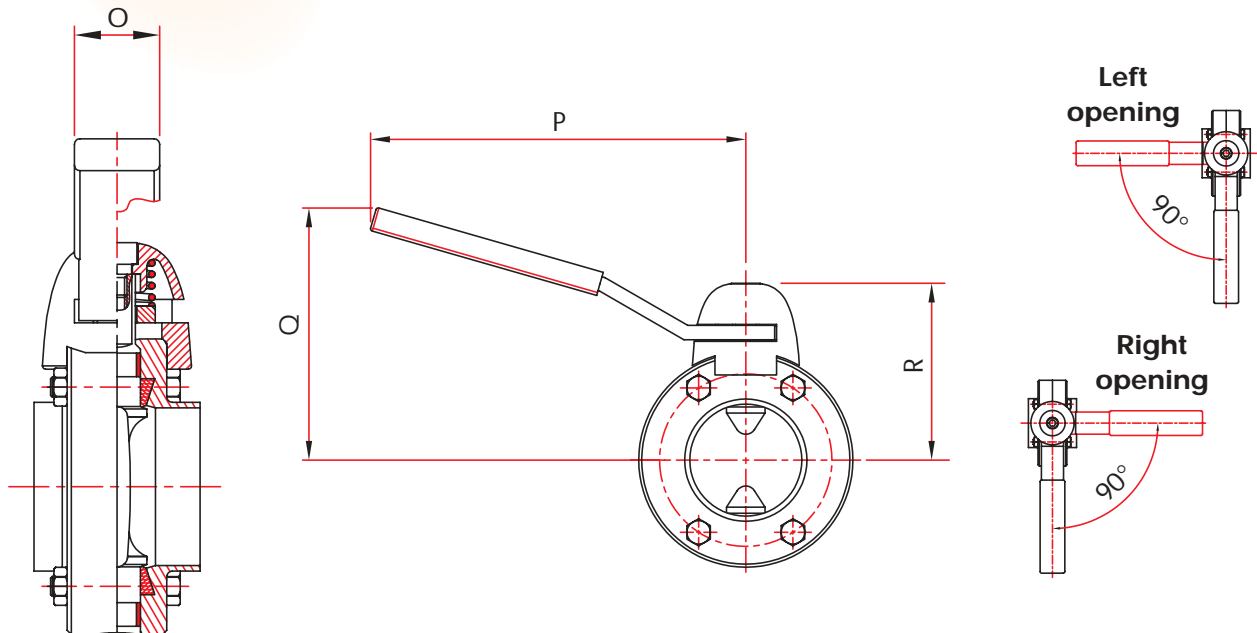


This quarter-turn handle is easy to fit and remove. It is equipped with three stop devices at the open, closed and 45° intermediate positions. Pressure must be applied to release it before turning.

Two symmetrical handles allow all opening configurations.

The standard manual operating device consists of:

- a 304 stainless steel handle with a square drive socket
- a plastic sleeve which can be customised with the user's name,
- a 304 stainless steel hub,
- a stainless steel return spring,
- a securing screw.



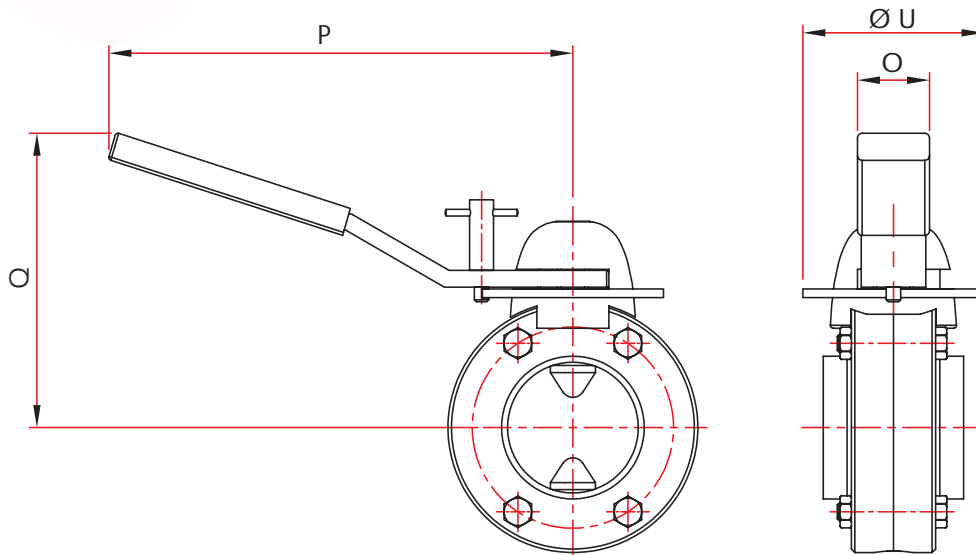
DN			O	P	Q	R	Weight in kg
SMS	DIN	US					
25	25	1"	30	165	100	70	1,4
32	32		30	165	100	70	1,3
38	40	1" 1/2	30	165	100	70	1,3
51	50	2"	30	165	105	75	1,6
63		2" 1/2	30	165	112	83	1,7
	65		30	165	120	91	2,1
76		3"	30	165	120	91	2
	80		35	260	145	101	3,4
104	100	4"	35	260	155	112	4,1
	125		35	260	170	128	4,5
	150	6"	35	260	190	140	5,6

Manual DPX - automated DPAX butterfly valves dimensions

Manual DPX butterfly valve with lock screw handle



This similar system to the standard handle has a lock screw to set an intermediate disc position. This handle is suited to settings that do not require a great degree of accuracy.



DN			O	P	Q	Ø U	Weight in kg
SMS	DIN	US					
25	25	1"	30	187	100	59	1,5
32	32		30	187	100	59	1,4
38	40	1" 1/2	30	187	100	59	1,4
51	50	2"	30	187	105	59	1,7
63		2" 1/2	30	187	112	59	1,8
	65		30	187	120	59	2,2
76		3"	30	187	120	59	2,1
	80		35	280	145	71	3,5
104	100	4"	35	280	155	71	4,2
	125		35	280	170	71	4,6
	150	6"	35	280	170	71	5,7

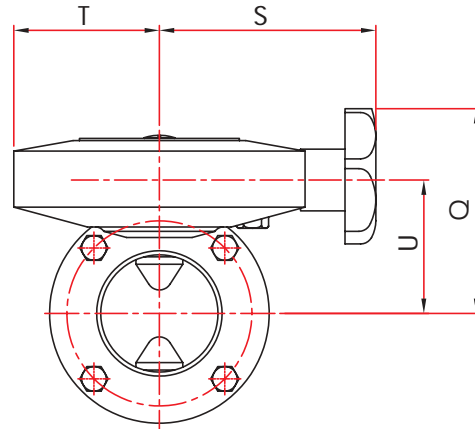
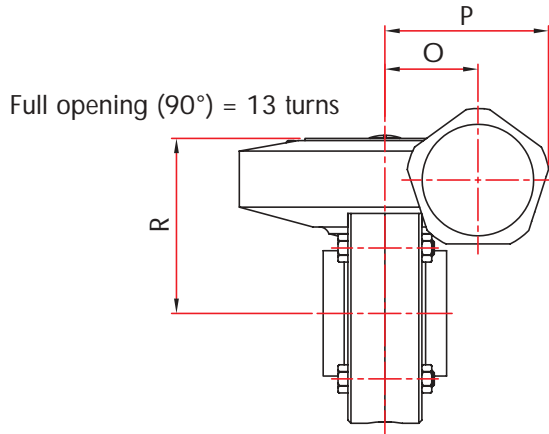
Manual DPX - automated DPAX butterfly valves dimensions

Manual DPX butterfly valve with micrometer handle and its different valve ends

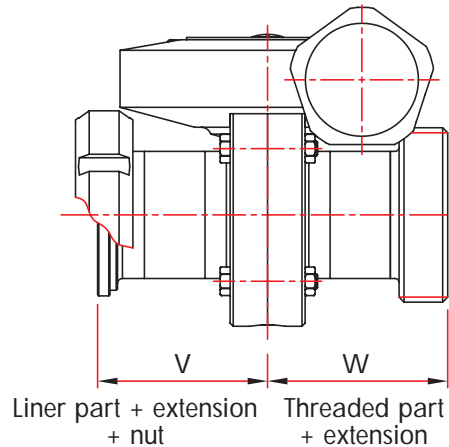
This system uses a wheel and worm screw device.

Fine opening and repeat positioning are possible via the graduated scale.

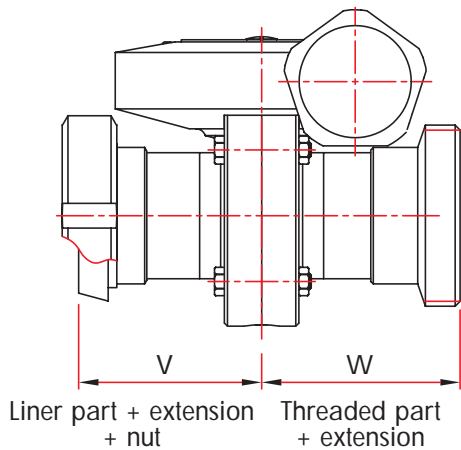
Note: Unions cannot be welded directly to the half body of valves fitted with this handle.



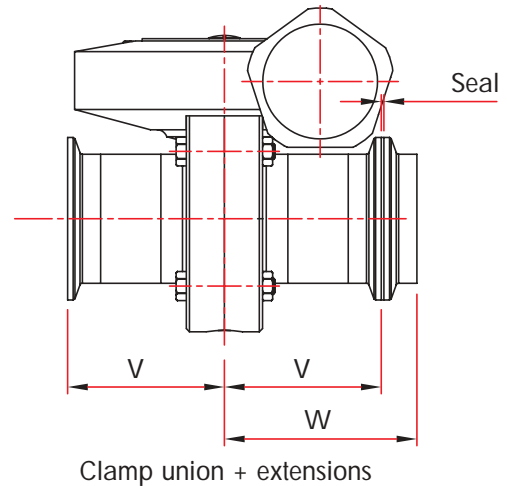
SMS end



DIN end



Clamp end



Manual DPX - automated DPAX butterfly valves dimensions

 **Manual DPX butterfly valve with micrometer handle and its different valve ends**

DN		O	P	Q	R	S	T	U	Weight in kg
SMS	DIN								
25		37,7	68	80	67	90	59	50	1,8
		37,7	68	80	67	90	59	50	1,8
	25	37,7	68	80	67	90	59	50	1,8
32		37,7	68	80	67	90	59	50	1,7
		37,7	68	80	67	90	59	50	1,7
	32	37,7	68	80	67	90	59	50	1,7
38		37,7	68	80	67	90	59	50	1,7
		37,7	68	80	67	90	59	50	1,7
	40	37,7	68	80	67	90	59	50	1,7
		37,7	68	85	72	90	59	55	2
51		37,7	68	85	72	90	59	55	2
		37,7	68	85	72	90	59	55	2
	50	37,7	68	85	72	90	59	55	2
		37,7	68	93	80	90	59	63	2,1
63		37,7	68	93	80	90	59	63	2,1
		37,7	68	93	80	90	59	63	2,1
	65	37,7	68	100	87	90	59	70	2,5
		37,7	68	100	87	90	59	70	2,4
76		37,7	68	100	87	90	59	70	2,4
		37,7	68	100	87	90	59	70	2,4
	80	37,7	68	105	92	90	59	75	3,5
		37,7	68	115	102	90	59	85	4,2
		37,7	68	115	102	90	59	85	4,2
	100	37,7	68	115	102	90	59	85	4,2
104		37,7	68	115	102	90	59	85	4,2
		37,7	68	130	117	90	59	100	4,6

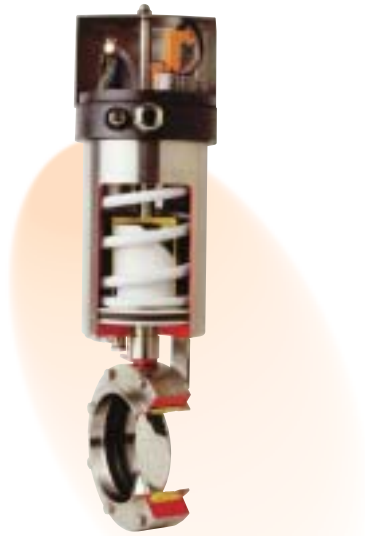
DN	V	W
SMS		
25	59	63
38	63	67
51	68	72
63	76	81
76	86	91
104	89	94
DIN		
25	66	73
32	69	76
40	70	77
50	77	84
65	86	94
80	97	104
100	108	118
125	98	110
Clamp		
1"	57	71,5
1" 1/2	57	71,5
2"	62	76,5
2" 1/2	67	81,5
3"	77	91,5
4"	80	97,5

Manual DPX - automated DPAX butterfly valves dimensions

Automated DPAX butterfly valve

The butterfly valve can easily be automated. A vertical cylindrical pneumatic actuator replaces the standard manual handle. Three sizes of actuator cover the entire range:

- DN 25 to DN 76
(diameter: 89 mm)
- DN 80 to DN 125
(diameter: 115 mm)
- DN 150
(diameter: 114 mm)



A red plastic locator showing the position of the valve is inserted between the square of the disc and the end of the actuator shaft. It indicates the NO (Normally Open) or NC (Normally Closed) position when the air supply to the valve is shut off.

The actuator also has a rising stem to provide remote information on the position of the valve if it is equipped with a signal-back unit (see signal-back section).

It is designed for single or double-acting operation with filtered air within a pressure range of 4 to 8 bar.

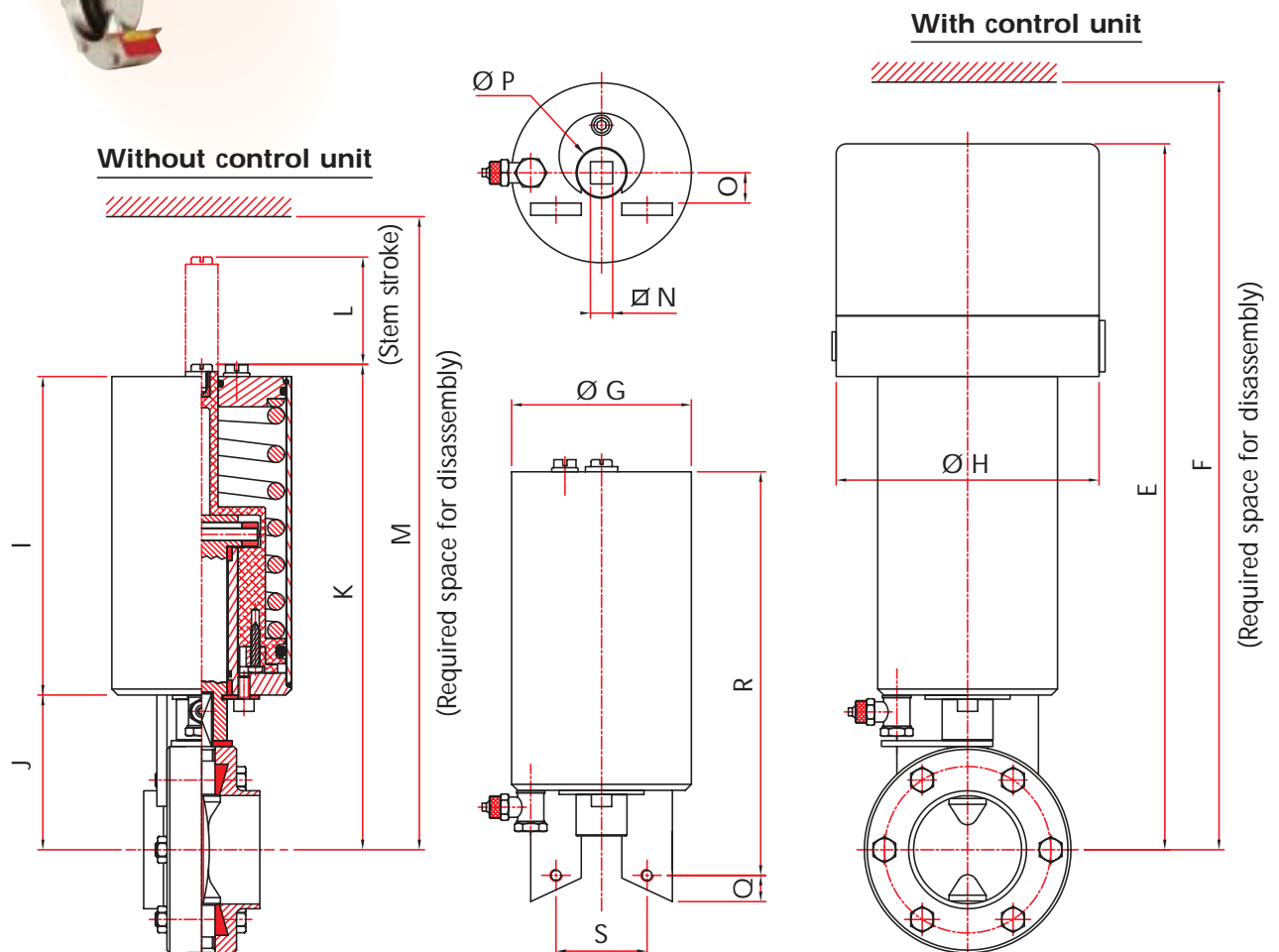
Mounting on the valve and putting into service:

The butterfly valve can quickly be automated with this actuator. The screws securing the half-bodies hold the actuator in place by its threaded lugs which ensures good centring and disc and drive shaft alignment.

It is equipped as standard with adjustable air fittings for Rilsan 4/6 hoses.

This actuator consists mainly of the following parts:

- a 304L stainless steel outer body,
- a 304L stainless steel drive shaft,
- a plastic helical cam,
- a spring with an anti-corrosion coating,
- a cover held by a stainless steel retaining ring.



Manual DPX - automated DPAX butterfly valves dimensions

Automated DPAX butterfly valve

DN		E	F	Ø G	Ø H	I	J	K	L	M	Ø N	O	Ø P	Q	R	S	Weight* in kg*
SMS	DIN																
25		339	369	89	130	157	67	231	53	304	11	15	25	13	200	45	4,6
		339	369	89	130	157	67	231	53	304	11	15	25	13	200	45	4,6
	1"	339	369	89	130	157	67	231	53	304	11	15	25	13	200	45	4,6
		339	369	89	130	157	67	231	53	304	11	15	25	13	200	45	4,5
32		339	369	89	130	157	67	231	53	304	11	15	25	13	200	45	4,5
	25	339	369	89	130	157	67	231	53	304	11	15	25	13	200	45	4,5
		339	369	89	130	157	67	231	53	304	11	15	25	13	200	45	4,5
38		339	369	89	130	157	67	231	53	304	11	15	25	13	200	45	4,5
		339	369	89	130	157	67	231	53	304	11	15	25	13	200	45	4,5
	1" 1/2	339	369	89	130	157	67	231	53	304	11	15	25	13	200	45	4,5
51		345	375	89	130	157	73	237	53	310	11	15	25	13	200	45	4,8
		345	375	89	130	157	73	237	53	310	11	15	25	13	200	45	4,8
	2"	345	375	89	130	157	73	237	53	310	11	15	25	13	200	45	4,8
		345	375	89	130	157	73	237	53	310	11	15	25	13	200	45	4,8
	50	345	375	89	130	157	73	237	53	310	11	15	25	13	200	45	4,8
63		354	384	89	130	157	82	246	53	319	11	15	25	13	200	45	4,9
		354	384	89	130	157	82	246	53	319	11	15	25	13	200	45	4,9
	2" 1/2	354	384	89	130	157	82	246	53	319	11	15	25	13	200	45	4,9
		363	393	89	130	157	91	255	53	328	11	15	25	13	200	45	5,3
	65	363	393	89	130	157	91	255	53	328	11	15	25	13	200	45	5,3
76		363	393	89	130	157	91	255	53	328	11	15	25	13	200	45	5,2
		363	393	89	130	157	91	255	53	328	11	15	25	13	200	45	5,2
	3"	363	393	89	130	157	91	255	53	328	11	15	25	13	200	45	5,2
		379	414	115	130	174	90	274	53	352	14	19	30	8	214	57	9,2
	80	390	425	115	130	174	101	285	53	363	14	19	30	8	214	57	9,9
	100	390	425	115	130	174	101	285	53	363	14	19	30	8	214	57	9,9
		390	425	115	130	174	101	285	53	363	14	19	30	8	214	57	9,9
	4"	390	425	115	130	174	101	285	53	363	14	19	30	8	214	57	9,9
104		405	445	115	130	174	116	300	53	383	14	19	30	8	214	57	10,3
	125	417	460	114	130	173	129	312	53	395	14	19	30	8	221	57	12
		417	460	114	130	173	129	312	53	395	14	19	30	8	221	57	12
	150	417	460	114	130	173	129	312	53	395	14	19	30	8	221	57	12

* Without
control unit

Manual DPX - automated DPAX butterfly valves working conditions

Manual DPX butterfly valve

DN			Maximum working pressure (Bar)	Pressure drop (Kv)	Pressure drop (Cv)	Sealing pressure (Bar)
SMS	DIN	US				
25		1"	10	42	48,72	12
	25		10	49	56,84	12
32			10	61	70,76	12
	32		10	65	75,4	12
38		1"1/2	10	78	90,48	12
	40		10	85	98,6	12
51		2"	10	185	214,6	12
	50		10	190	220,4	12
63		2" 1/2	10	360	417,6	12
	65		10	395	458,2	12
76		3"	10	430	498,8	12
	80		6	552	640,32	8
104	100	4"	6	860	997,6	8
	125		4	1350	1566	6
	150	6"	4	1980	2297	6

FOR ALL DIAMETERS OF MANUAL DPX BUTTERFLY VALVE

Maximum temperature: +120 °C	Minimum temperature: 0 °C	Temperature difference: 90 °C
Vacuum resistance: 0,4 cm ³ /s		

Manual DPX - automated DPAX butterfly valves working conditions

ITDFX100 GB - REV 1 - MAY 2002

Automated DPAX butterfly valve

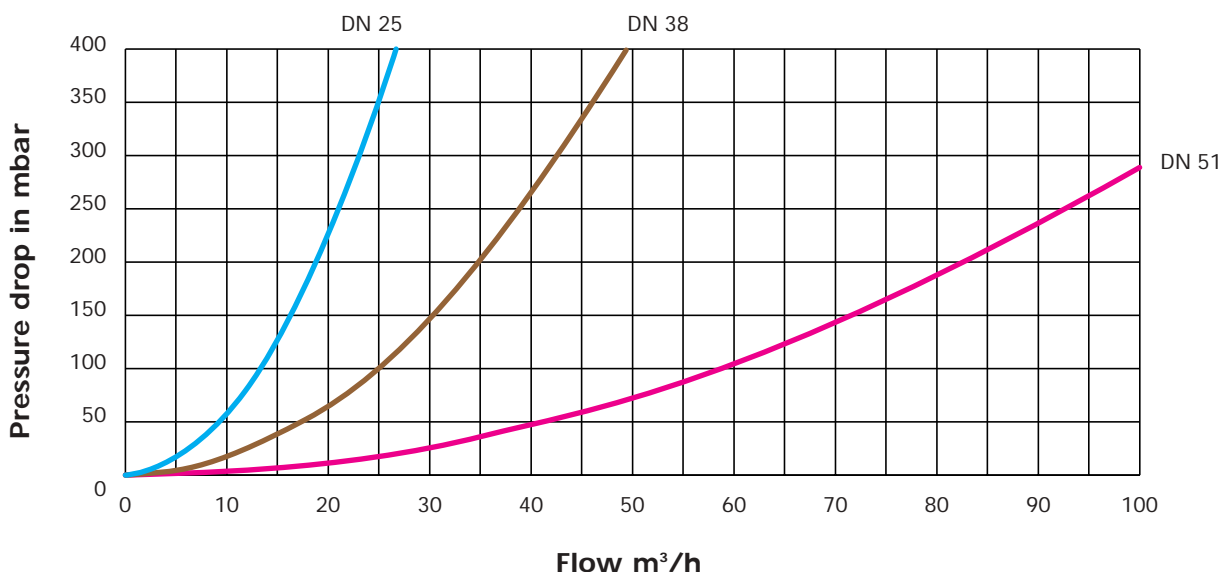
SMS	DN		Maximum working pressure (Bar)	Pressure drop (Kv)	Pressure drop (Cv)	Sealing pressure (Bar)	Opening time (s)	Air consumption (NI)	Torque (da N/m)
	DIN	US							
25	25	1"	10	42	48,72	12	3	2	2,8
			10	49	56,84	12	3	2	2,8
32			10	61	70,76	12	3	2	2,8
			10	65	75,4	12	3	2	2,8
38		1"1/2	10	78	90,48	12	3	2	2,8
			10	85	98,6	12	3	2	2,8
51		2"	10	185	214,6	12	3	2	2,8
			10	190	220,4	12	3	2	2,8
63		2"1/2	10	360	417,6	12	3	2	2,8
			10	395	458,2	12	3	2	2,8
76		3"	10	430	498,8	12	3	2	2,8
			6	552	640,3	8	5	4	4
104		4"	6	860	997,6	8	5	4	4
			4	1350	1566	6	5	4	4
			4	1980	2297	6	6	4	4,5

FOR ALL DIAMETERS OF AUTOMATED DPAX BUTTERFLY VALVE

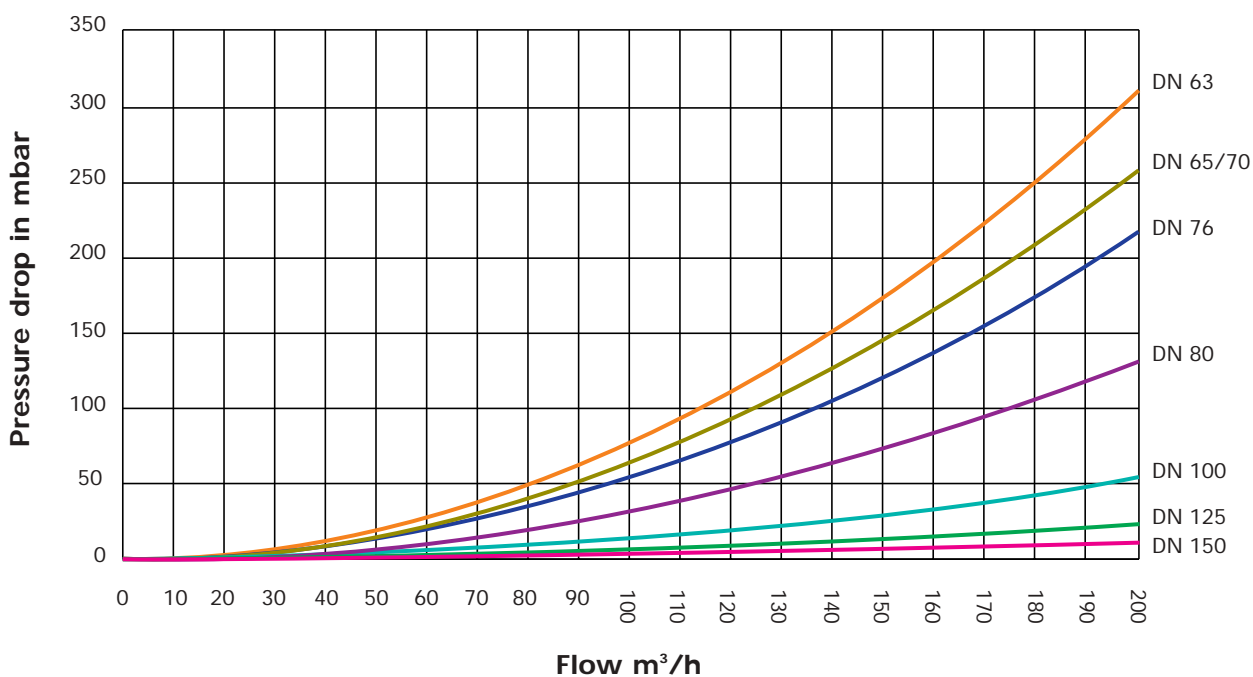
Maximum temperature: +120 °C	Minimum temperature: 0 °C	Temperature difference: 90 °C
Maximum supply pressure: 8 Bar	Minimum supply pressure: 4,5 Bar	Vacuum resistance: 0,4 cm ³ /s

Manual DPX - automated DPAX butterfly valves working conditions

Pressure drop DPX butterfly valves DN 25 to DN 51



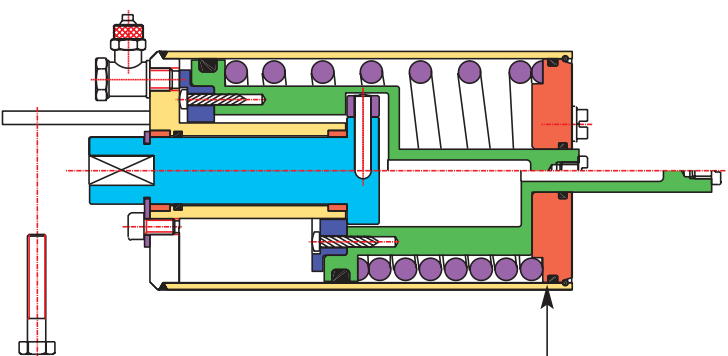
Pressure drop DPX Butterfly Valves DN 63 to DN 150



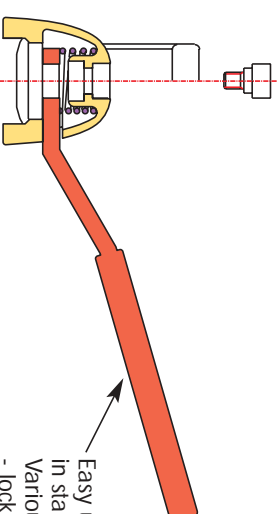


Manual DPX - automated DPAX butterfly valves features

DPAX

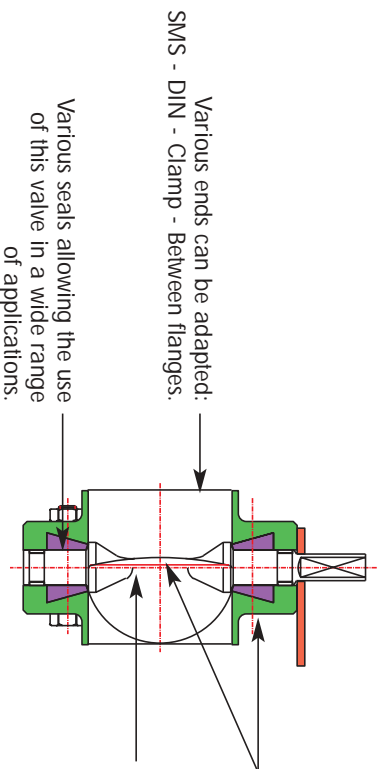


Pneumatic actuator easily modified:
Normally Open "NO",
Normally Closed "NC",
Double acting "DE".



DPX

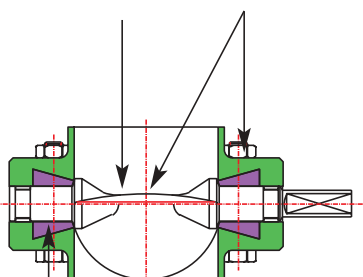
Easy use handle in stainless steel.
Various manual handles:
- lock screw handle,
- micrometer handle,
- left or right opening,
- with detection.



Various ends can be adapted:
SMS - DIN - Clamp - Between flanges.

Various seals allowing the use of this valve in a wide range of applications.

Valve body and stem in 316L stainless steel.
Low pressure drop and retention free flow.



Various ends can be adapted:
SMS - DIN - Clamp - Between flanges.

Various seals allowing the use of this valve in a wide range of applications.



DPX - DPAX butterfly valve ends

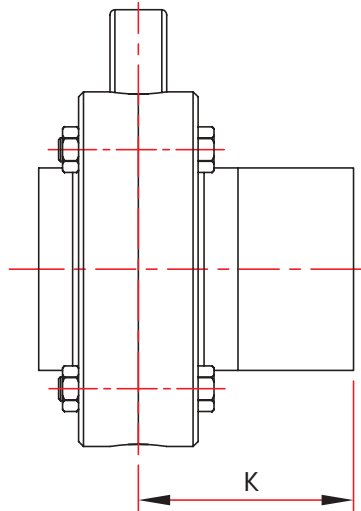
The DPX valve range splits into two distinct families using the same disc/seal pairing.

Butt weld valves whose half-bodies can be directly welded on with the usual standard fittings.

Valves fitted between supplied weld-on flanges.

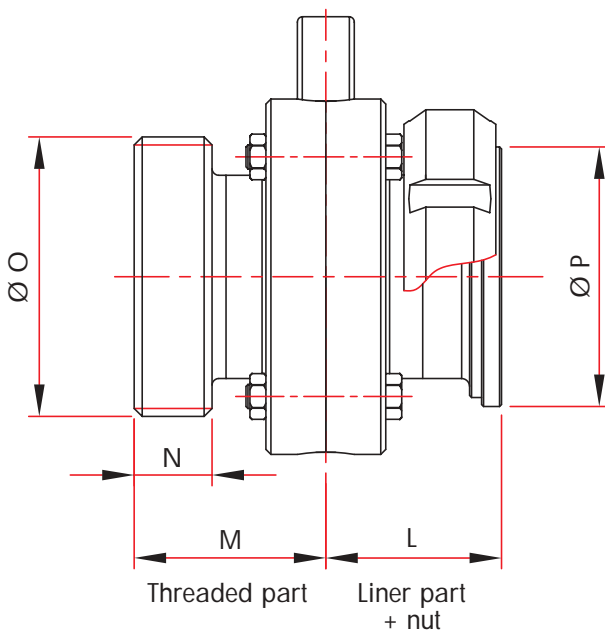
On request, we can weld your specific fittings (RJT, IDF, etc...).

Long butt weld ends (SMS or Din)



DN		K
SMS	DIN	
25		45
	25	45
32		45
	32	45
38		45
	40	45
51		50
	50	50
63		55
	65	55
76		65
	80	60
104		65
	100	65
	125	65

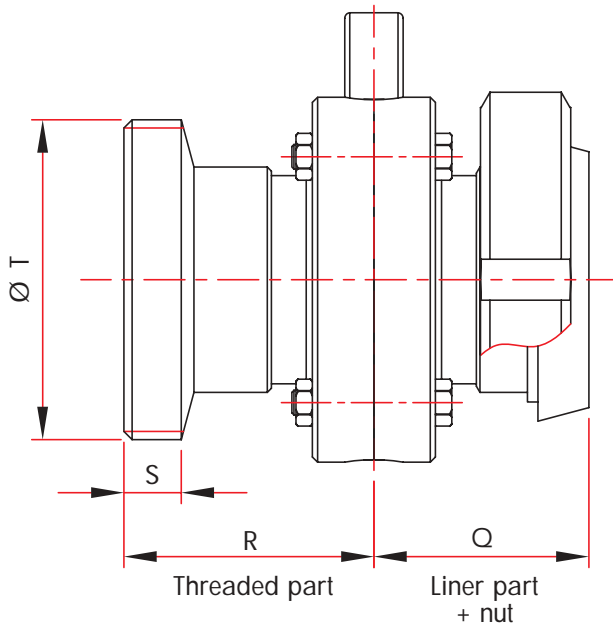
SMS ends



DN	L	M	N	Ø O	Ø P
SMS					
25	40	44	11	40 x1/6"	35
38	44	48	15	60 x1/6"	55
51	44	48	15	70 x1/6"	65
63	47	52	18	85 x1/6"	80
76	47	52	18	98 x1/6"	93
104	54	59	21	125 x1/4"	118,5

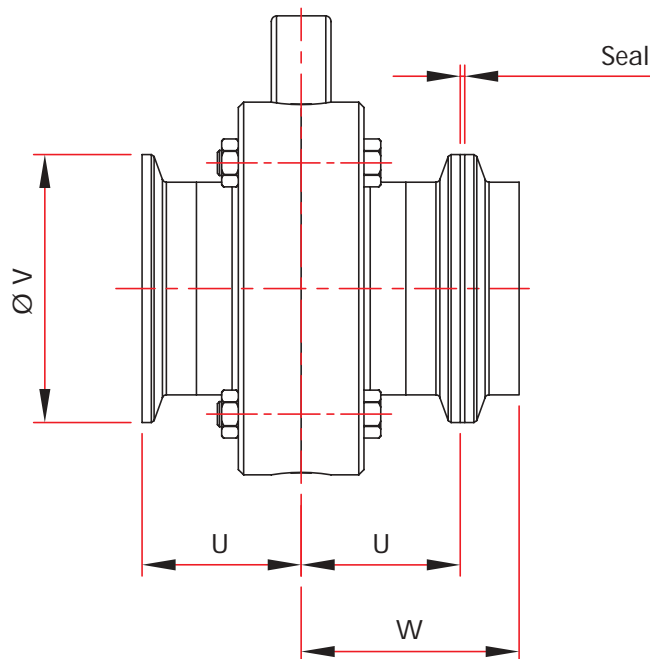
DPX - DPAX butterfly valve ends

Din ends



DN	Q	R	S	$\varnothing T$
25	47	54	14	52 x1/6"
32	50	57	14	58 x1/6"
40	51	58	14	65 x1/6"
50	53	60	14	78 x1/6"
65	57	65	16	95 x1/6"
80	67	74	20	110 x1/4"
100	73	83	20	130 x1/4"
125	63	75	20	160 x1/4"

Clamp ends



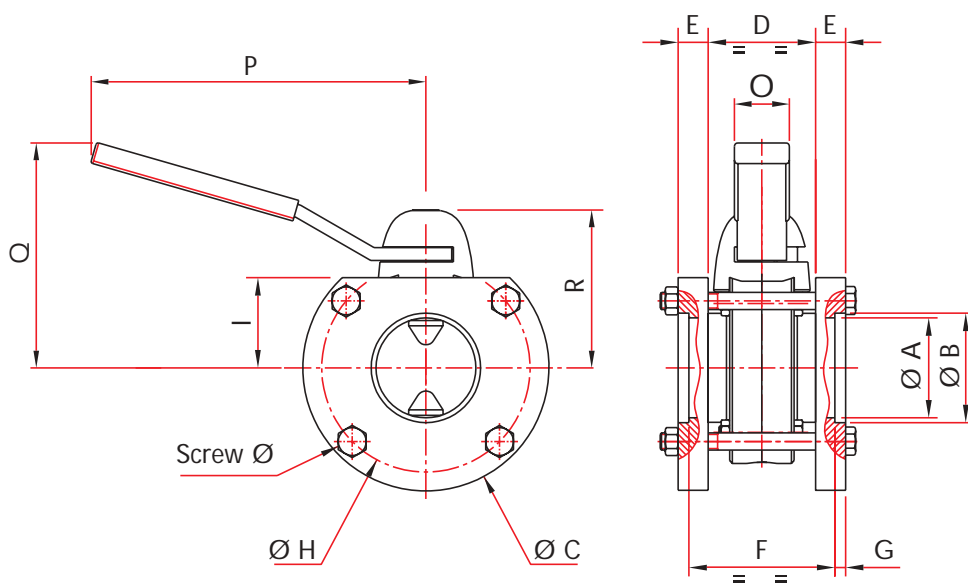
DN	U	$\varnothing V$	W
US			
1"	38	50,5	52,5
1,5"	38	50,5	52,5
2"	38	64	52,5
2,5"	38	77,5	52,5
3"	38	91	52,5
4"	45	119	62,5
100	54	119	71,5

DPX - DPAX butterfly valve ends

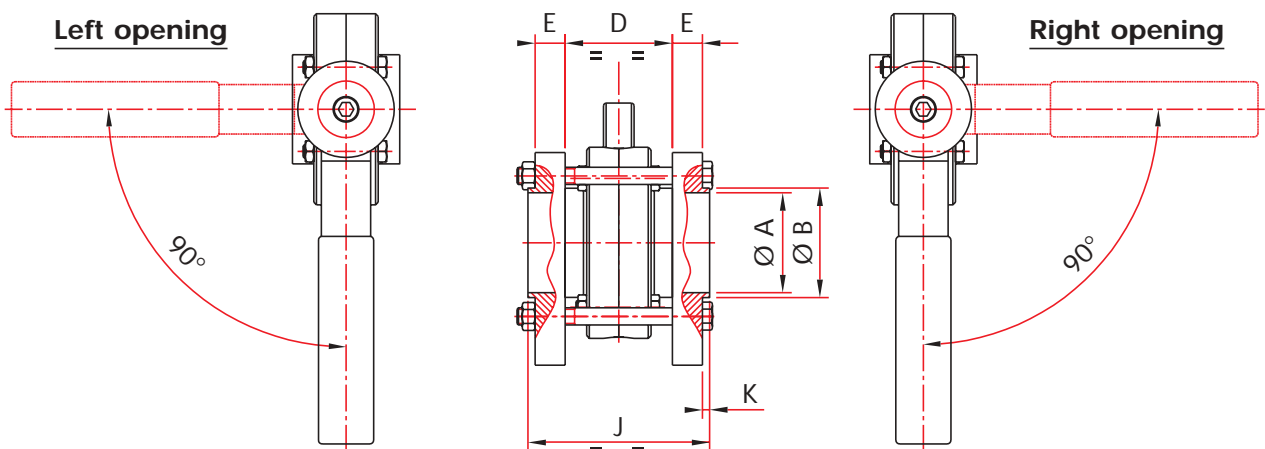


Manual DPX butterfly valve between flanges

The seal between the butterfly valve and the connecting flanges is produced by O'rings on both bodies.



Option on request Lip flanges



DPX - DPAX butterfly valve ends

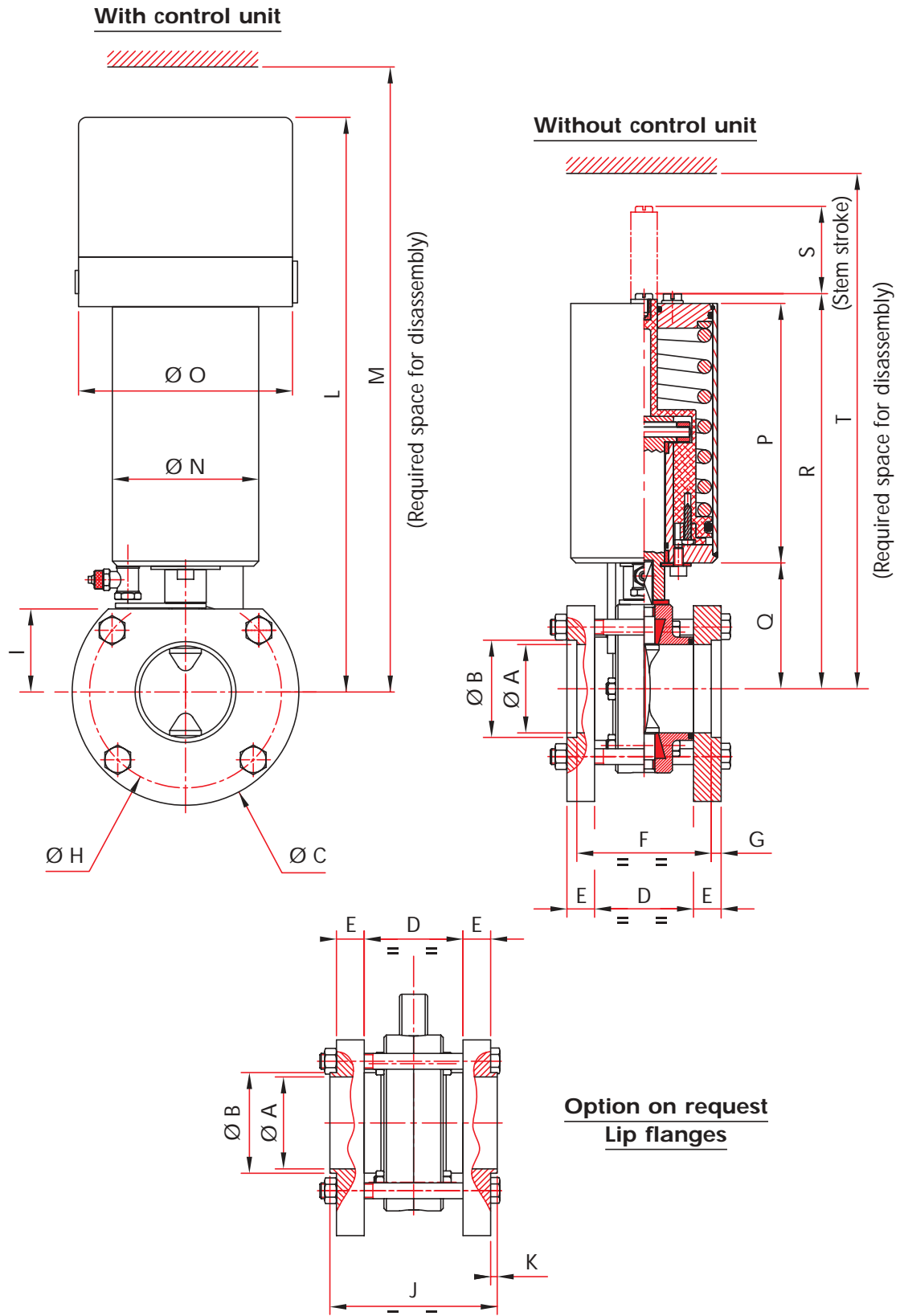
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Manual DPX butterfly valve between flanges

SMS	DN		Ø A	Ø B	Ø C	D	E	F	G	Ø H	I	J	K	O	P	Q	R	Screw Ø	Weight in kg
	DIN	US																	
25		1"	22,1	25	104	50	14	68	5	87	37	82	2	30	165	100	70	M8	1,9
			22,1	25	104	50	14	68	5	87	37	82	2	30	165	100	70	M8	1,9
	25		26	28	104	50	14	68	5	87	37	82	2	30	165	100	70	M8	1,9
			32	34	104	50	14	68	5	87	37	82	2	30	165	100	70	M8	1,9
38		1"1/2	34,8	38	104	50	14	68	5	87	37	82	2	30	165	100	70	M8	2,3
			34,8	38	104	50	14	68	5	87	37	82	2	30	165	100	70	M8	2,3
	40		38	40	104	50	14	68	5	87	37	82	2	30	165	100	70	M8	2,3
			47,5	51	114	50	14	68	5	97	42	82	2	30	165	105	75	M8	3,4
51		2"	47,5	51	114	50	14	68	5	97	42	82	2	30	165	105	75	M8	3,4
			47,5	51	114	50	14	68	5	97	42	82	2	30	165	105	75	M8	3,4
63	50		50	53	114	50	14	68	5	97	42	82	2	30	165	105	75	M8	3,4
			60,2	63,5	134	50	14	68	5	114	50	82	2	30	165	112	83	M10	3,6
		2" 1/2	60,2	63,5	134	50	14	68	5	114	50	82	2	30	165	112	83	M10	3,6
			66	70	149,5	50	14	68	5	129,5	57	82	2	30	165	120	91	M10	4,4
76		3"	72,9	76	149,5	50	14	68	5	129,5	57	82	2	30	165	120	91	M10	4,4
			72,9	76	149,5	50	14	68	5	129,5	57	82	2	30	165	120	91	M10	4,4
	80		81	85	164	58	14	76	5	138,5	61	90	2	35	260	145	101	M10	8,9
			97,4	101,6	188	58	14	76	5	158,5	72	90	2	35	260	155	112	M10	9,3
	100		100	104	188	58	14	76	5	158,5	72	90	2	35	260	155	112	M10	9,3
			100	104	188	58	14	76	5	158,5	72	90	2	35	260	155	112	M10	9,3
104			125	129	214	58	14	76	5	191	87	90	2	35	260	170	128	M12	9,7
			146,9	152,4	250	58	14	76	5	216	98	90	2	35	260	190	140	M12	11,8
	150		150	154	250	58	14	76	5	216	98	90	2	35	260	190	140	M12	11,8

DPX - DPAX butterfly valve ends

Automated DPAX butterfly valve between flanges



Automated DPAX butterfly valve between flanges

SMS	DN		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	Weight* in kg
	DIN	US																					
25			22,1	25	104	50	14	68	5	87	37	82	2	339	369	89	130	157	67	231	53	304	6,1
		1"	22,1	25	104	50	14	68	5	87	37	82	2	339	369	89	130	157	67	231	53	304	6,1
			26	28	104	50	14	68	5	87	37	82	2	339	369	89	130	157	67	231	53	304	6,1
			32	34	104	50	14	68	5	87	37	82	2	339	369	89	130	157	67	231	53	304	6
38			34,8	38	104	50	14	68	5	87	37	82	2	339	369	89	130	157	67	231	53	304	6,4
		1" 1/2	34,8	38	104	50	14	68	5	87	37	82	2	339	369	89	130	157	67	231	53	304	6,4
			38	40	104	50	14	68	5	87	37	82	2	339	369	89	130	157	67	231	53	304	6,4
51			47,5	51	114	50	14	68	5	97	42	82	2	345	375	89	130	157	73	237	53	310	7,8
		2"	47,5	51	114	50	14	68	5	97	42	82	2	345	375	89	130	157	73	237	53	310	7,8
			50	53	114	50	14	68	5	97	42	82	2	345	375	89	130	157	73	237	53	310	7,8
63			60,2	63,5	134	50	14	68	5	114	50	82	2	354	384	89	130	157	82	246	53	319	8,1
		2" 1/2	60,2	63,5	134	50	14	68	5	114	50	82	2	354	384	89	130	157	82	246	53	319	8,1
			66	70	149,5	50	14	68	5	129,5	57	82	2	363	393	89	130	157	91	255	53	328	9,3
76			72,9	76	149,5	50	14	68	5	129,5	57	82	2	363	393	89	130	157	91	255	53	328	9,2
		3"	72,9	76	149,5	50	14	68	5	129,5	57	82	2	363	393	89	130	157	91	255	53	328	9,2
			81	85	164	58	14	76	5	138,5	61	90	2	379	414	115	130	174	90	274	53	352	17,4
		4"	97,4	101,6	188	58	14	76	5	158,5	72	90	2	390	425	115	130	174	101	285	53	363	18,5
			100	104	188	58	14	76	5	158,5	72	90	2	390	425	115	130	174	101	285	53	363	18,5
104			100	104	188	58	14	76	5	158,5	72	90	2	390	425	115	130	174	101	285	53	363	18,5
			125	129	214	58	14	76	5	191	87	90	2	405	445	115	130	174	116	300	53	383	19,3
		6"	146,9	152,4	250	58	14	76	5	216	98	90	2	417	460	114	130	173	129	312	53	395	21,4
			150	154	250	58	14	76	5	216	98	90	2	417	460	114	130	173	129	312	53	395	21,4

* Without control unit

DPAX DE double sealing butterfly valve

Design

This valve assembly, only available in an automatic version, uses a combination of two main butterfly valves between flanges connected by a channel forming an air space. This channel is equipped with a leakage microvalve and an optional air space washing microvalve.

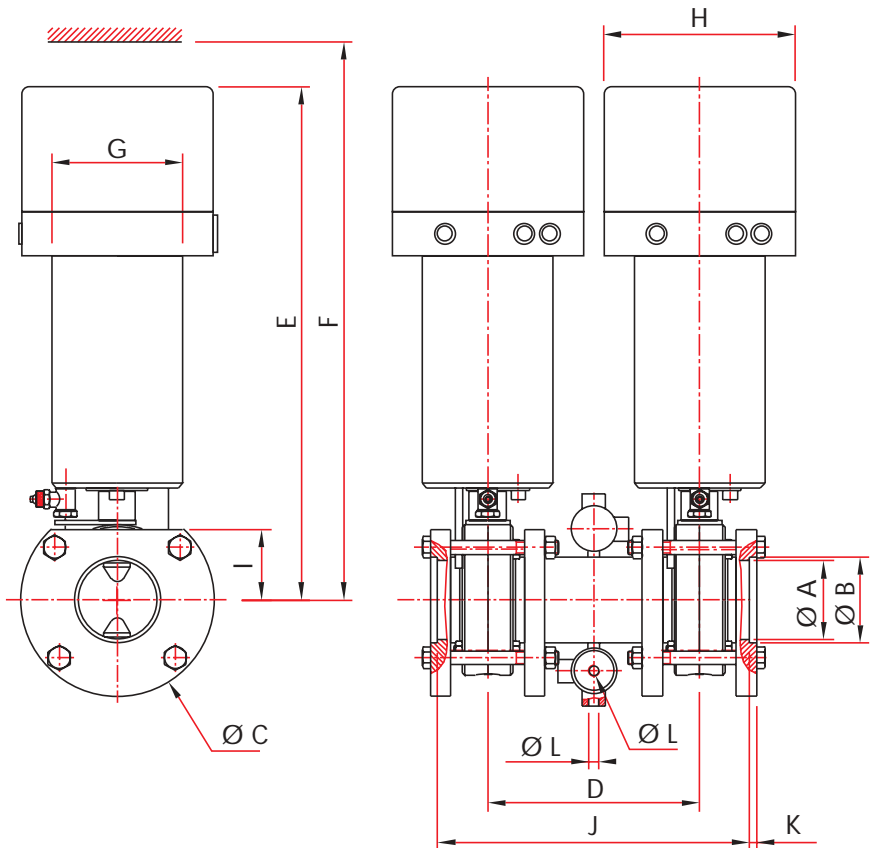
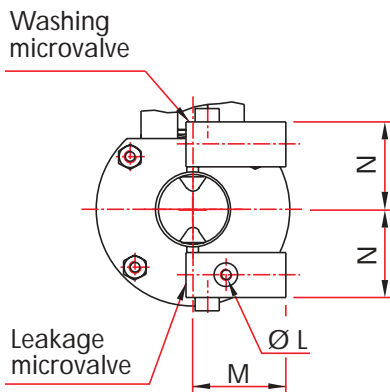
Technical specifications are the same as the base model specifications.

When both valves are closed, the venting of the air space reveals a fault on either of the valves. This guarantees that one circuit does not contaminate another.

In order to ensure simultaneous operation of these valves, a pneumatic connection is made between these three valves and the single control solenoid valve. An auxiliary solenoid valve may be used if necessary to open one of the two butterfly valves during cleaning in order to wash out the air space.

Components of the double sealing butterfly valve between flanges:

- leakage (and washing) indicator(s),
- two DPX valves between flanges,
- two actuators.



DPAX DE double sealing butterfly valve

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Dimensions

SMS	DN		Ø A	Ø B	Ø C	D	E	F	G	H	I	J	K	Ø L	M	N	Weight in kg*
	DIN	US															
25		1"	22,1	25	104	144	339	369	89	130	37	212	5	1/8 gas	63,5	46,5	11
			22,1	25	104	144	339	369	89	130	37	212	5	1/8 gas	63,5	46,5	11
			26	28	104	144	339	369	89	130	37	212	5	1/8 gas	63,5	48	11
			32	34	104	144	339	369	89	130	37	212	5	1/8 gas	63,5	51	11
38		1"1/2	34,8	38	104	144	339	369	89	130	37	212	5	1/8 gas	63,5	53	11,8
			34,8	38	104	144	339	369	89	130	37	212	5	1/8 gas	63,5	53	11,8
			38	40	104	144	339	369	89	130	37	212	5	1/8 gas	63,5	54	11,8
		2"	47,5	51	114	144	345	375	89	130	42	212	5	1/8 gas	63,5	59,5	14,2
			47,5	51	114	144	345	375	89	130	42	212	5	1/8 gas	63,5	59,5	14,2
51			47,5	51	114	144	345	375	89	130	42	212	5	1/8 gas	63,5	59,5	14,2
			50	53	114	144	345	375	89	130	42	212	5	1/8 gas	63,5	60,5	14,2
		2" 1/2	60,2	63,5	134	144	354	384	89	130	50	212	5	1/8 gas	63,5	66	14,6
63			60,2	63,5	134	144	354	384	89	130	50	212	5	1/8 gas	63,5	66	14,6
			66	70	149,5	144	363	393	89	130	57	212	5	1/8 gas	63,5	69	16,2
76			72,9	76	149,5	144	363	393	89	130	57	212	5	1/8 gas	63,5	72	16,2
		3"	72,9	76	149,5	144	363	393	89	130	57	212	5	1/8 gas	63,5	72	16,2
			81	85	164	150	379	414	115	130	61	226	5	1/8 gas	63,5	76,5	30,4
		4"	97,4	101,6	188	150	390	425	115	130	72	226	5	1/8 gas	63,5	85	31,2
			100	104	188	150	390	425	115	130	72	226	5	1/8 gas	63,5	85	31,2
104			100	104	188	150	390	425	115	130	72	226	5	1/8 gas	63,5	86	31,2
			125	129	214	150	405	445	115	130	87	226	5	1/8 gas	63,5	98,5	32
		6"	146,9	152,4	250	150	417	460	114	130	98	226	5	1/8 gas	63,5	110	36,5
			150	154	250	150	417	460	114	130	98	226	5	1/8 gas	63,5	111	36,5

* Without
control unit

DPAX DE double sealing butterfly valve

Working conditions

SMS	DN		Maximum working pressure (Bar)	Pressure drop (Kv)	Pressure drop (Cv)	Sealing pressure (Bar)	Opening time (s)	Air consumption (NI)	Torque (da N/m)
	DIN	US							
25	25	1"	10	42	48,72	12	3	2	2,8
			10	49	56,84	12	3	2	2,8
32			10	61	70,76	12	3	2	2,8
			10	65	75,4	12	3	2	2,8
38		1"1/2	10	78	90,48	12	3	2	2,8
	40		10	85	98,6	12	3	2	2,8
51		2"	10	185	214,6	12	3	2	2,8
	50		10	190	220,4	12	3	2	2,8
63		2" 1/2	10	360	417,6	12	3	2	2,8
	65		10	395	458,2	12	3	2	2,8
76		3"	10	430	498,8	12	3	2	2,8
	80		6	552	640,32	8	5	4	4
104	100	4"	6	860	997,6	8	5	4	4
	125		4	1350	1566	6	5	4	4
	150	6"	4	1980	2297	6	6	4	4,5

FOR ALL DIAMETERS OF DPAX DE DOUBLE SEALING BUTTERFLY VALVE

Maximum temperature: +120 °C	Minimum temperature: 0 °C	Temperature difference: 90 °C
Vacuum resistance: 0,4 cm ³ /s	Maximum supply pressure: 8 Bar	Minimum supply pressure: 4,5 Bar

DPX butterfly valve with quick-remove clamp

Dimensions

DN	Ø A	Ø B	Ø C	D	E	F	G	Ø H	I	J	K	L
25 SMS - 1" to be welded	22,1		25,4		25	56,5	68,5	79	100	165	30	85
1" clamp	22,1	50,5		44,5		56,5	68,5	79	100	165	30	85
1"1/2 clamp	39	64		36		56,5	68,5	79	100	165	30	85

Design

This valve is only available in 1" and 1 1/2" diameters with ends adapted as required. This is an exclusively manual valve designed for circumstances where frequent disassembly for cleaning and

sterilisation is called for. Can be supplied with a mirror finish (Ra = 0,2 µm or 320 grit).

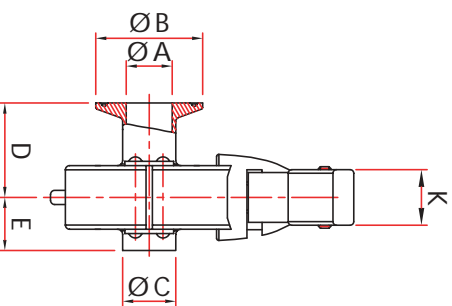
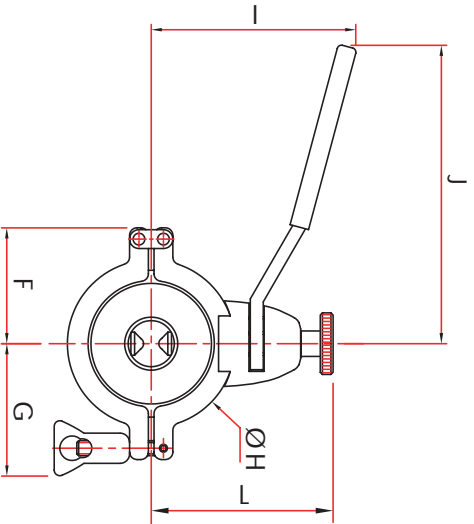
Technical specifications are the same as the base model specifications.

Working conditions

DN	US	Pressure drop (Kv)	Pressure drop (Cv)
SMS	US	42	48,72
25	1"		
38	1"1/2	78	90,48

FOR ALL DIAMETERS OF DPX BUTTERFLY VALVE WITH QUICK-REMOVE CLAMP

Maximum temperature: +120 °C	Minimum temperature: 0 °C	Temperature difference: 90 °C
Maximum working pressure: 10 Bar	Vacuum resistance: 0,4 cm ³ /s	Pressure sealing: 12 Bar



Standard signal back equipment suitable for the DPAX automated butterfly valves

Model	Signal back equipment & Fixing device	Components						Remarks
		Switch or Contact		Solenoid valve		Electronic		
		Reference	Characteristics	Reference	Characteristics	Reference	Characteristics	
Bracket	Figure 2 St. St. bracket for M18 switch (M12 on request)	7007906	PNP 10 - 36 V DC		None		None	1 or 2 switch(es) assembled Moulded cable: Lg 6 m
		7007911 7007949 (M12)	20 - 250 V AC/DC PNP 10 - 36 V DC		None		None	
Classic control unit	Figure 3 Double St. St. bracket for prismatic switches (40x26x12)	7007922	PNP 10 - 36 V DC		None		None	1 or 2 switch(es) assembled Moulded cable: Lg 2 m
		7007930 7007991	20 - 250 V AC/DC NAMUR		None		None	
Classic control unit	Figure 4 Ø130 control unit H: 120 fixed on the actuator st. st. or smoked housing for switches and solenoid valve	7007922	PNP 10 - 36 V DC	7007943	24 V AC/DC 2,5 W		None	1 or 2 switch(es) assembled, as well as 1 solenoid valve 3/2
		7007930	20 - 250 V AC/DC	7007944 7007947	48 V AC/DC 2,5 W 110 V AC 2,5 VA		None	
		7007991	NAMUR	7007948	220 V AC 2,5 VA		None	
Classic control unit	Figure 5 Ø130 control unit H: 120 fixed on the actuator st. st. or smoked housing for contacts and solenoid valve	7007923	Contactor	7007943	24 V AC/DC 2,5 W		None	1 or 2 contact(s) assembled, as well as 1 solenoid valve 3/2
			I max: 100 mA	7007944 7007947	48 V AC/DC 2,5 W 110 V AC 2,5 VA		None	
			20 - 250 V AC/DC	7007948	220 V AC 2,5 VA		None	
Classic control unit	Figure 6 Ø104 control unit H: 120 fixed on the actuator st. st. housing for switches and solenoid valve	7007922	PNP 10 - 36 V DC	7007943	24 V AC/DC 2,5 W		None	1 or 2 switch(es) assembled, as well as 1 solenoid valve 3/2
		7007930	20 - 250 V AC/DC	7007944 7007947	48 V AC/DC 2,5 W 110 V AC 2,5 VA		None	
		7007991	NAMUR	7007948	220 V AC 2,5 VA		None	
DN 130 control unit AS-i link	Figure 7 Ø104 control unit H: 120 fixed on the actuator st. st. housing for contacts and solenoid valve	7007923	Contactor	7007943	24 V AC/DC 2,5 W		None	1 or 2 contact(s) assembled, as well as 1 solenoid valve 3/2
			I max: 100 mA	7007944 7007947	48 V AC/DC 2,5 W 110 V AC 2,5 VA		None	
DN 130 control unit AS-i link	Figure 8 Ø130 control unit H: 110 fixed on the actuator st. st. or smoked housing for switches, 1 solenoid valve & AS-i module	7008045	Prismatic switch	7810504	Pilot & Interface	7707999	AS-i module with link cable and vampire connector	1 or 2 switch(es) assembled and 1 solenoid valve
				7007952		7010015		

Standard back equipment suitable for the DPAX automated butterfly valves

Photos and drawings of the figures mentioned on the data sheet



Fig. 2: St. St. bracket



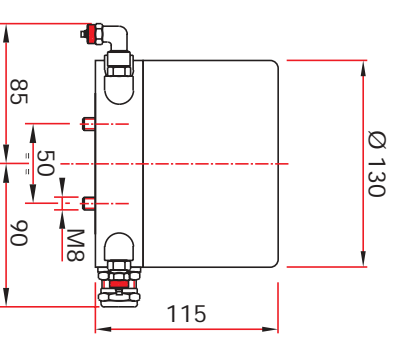
Fig. 4: Ø 130 control unit



Fig. 6: Ø 104 control unit



Fig. 8: Ø 130 control unit



Ø 130 standard control housing



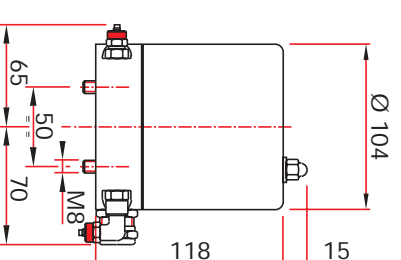
Fig. 3: Double st. st. bracket



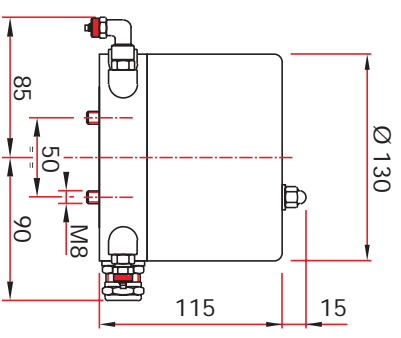
Fig. 5: Ø 130 control unit



Fig. 7: Ø 104 control unit



Ø 104 control unit st. st. housing



Ø 130 standard control unit st. st. housing

Automated DPAX butterfly valve signal back equipment

The choice of signal back equipment depends on the functions to be performed.

Remarks regarding the standard signal back equipment

1 - On request, we can fit Eex microcontacts or Namur pneumatic switches in control units for explosive environments.

2 - Specific detection devices can be studied (lantern detection).

3 - The supply of a control unit includes the entry gland, wiring to the electric components terminal strip and the 4/6 or 6/8 (from DN 80) pneumatic hose from the unit to the actuator.

4 - Standard signal-back equipment can also be complemented by the following accessories:

- rapid air release
- stainless steel or semi-rigid wiring
- stainless steel air connection
- etc...

AS-i network

The AS-i network provides a reliable, cost-effective valve networking solution.

An AS-i module installed in each of the signal back units allows the control of all pneumatic functions

on DEFINOX valves (valve opening and closing, stroke of the plugs...) and read the information sent by the opening and closing sensors, via the AS-i network.

Advantages of the AS-i network

- Open standard.
- Quick and easy to install and put into operation.
- Quick to wire up due to the use of "vampire" connectors and a non-shielded two-core cable.
- Free topology.
- Several AS-i masters available (PLC couplers or Profibus-DP, Device-Net, Interbus-S, WorldFip, Modbus, Modbus-Plus or other gateways).
- Max. 62 nodes on AS-i network distributed over 100 m of cable (300 m with repeaters).
- Cycle time : approx. 5ms for 31 nodes and 10 ms for 62 nodes.
- Transmission error control mechanisms.
- Extension possibilities.



Standard signal back equipment suitable for DPX manual butterfly valve



● Fig. 1 : St. st. plate

In order to provide remote information on the open and (or) closed position of the valve, the DPX can be equipped with one or two prismatic, inductive proximity switches secured to a stainless steel bracket. This device is presented in the form of a special handle that replaces the standard handle.

Note: Detection is not provided on the lock screw handles.

Model	Signal back equipment & Fixing device	Components						Remarks
		Switch or Contact		Solenoid valve		Electronic		
		Reference	Characteristics	Reference	Characteristics	Reference	Characteristics	
Bracket for right or left handle	St. st. plate for prismatic switch (40x26x12) welded on a special hub Figure 1	7007922	PNP 10 - 36 V DC		None		None	1 or 2 switch(es) assembled Moulded cable: Lg 2 m
		7007930	20 - 250 V AC/DC					
		7007991	NAMUR					