



**FOCUS**  
on a world  
of advanced technology

# Butterfly valves DPX - DPAX

The operating conditions are given for information. Some combinations of extreme operating conditions are not always suitable. It is highly recommended to ask for advice from our technical department.

## FEATURES

- Reliable and economical technology
- Quick assembly and disassembly
- Can be used for a variety of applications
- Low pressure loss and line transfer without retention
- Easy to adjust operating devices

## SPECIFICATIONS

### DIMENSIONS

- SMS - DIN - US  
from DN 25 (1") to DN 150 (6")

### MATERIALS

- Half body: stainless steel 1.4404 / 316L  
 Disc: stainless steel 1.4404 / 316L  
 Seal: EPDM - fluorinated elastomer (FKM) or silicon  
 Operating devices: stainless steel 1.4301 / 304

### CONNECTIONS

- CONNECTION TYPES STANDARDS  
 To weld SMS - DIN - US standard  
 Threaded SMS - DIN  
 Liner-nut SMS - DIN  
 Clamp US standard

### OPERATING DEVICES

#### MANUAL - DPX

- Right-opening standard or multiposition handle
- Left-opening standard or multiposition handle
- Simple adjusting handle
- Micrometric handle

#### AUTOMATIC - DPAX

- Single or double acting valve actuator

### SIGNALLING EQUIPMENT

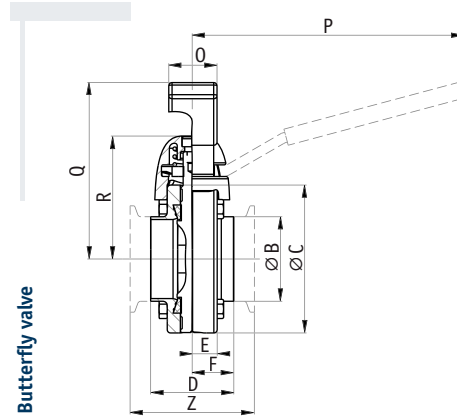
- Visible on single or double stainless steel bracket
- Point-to-point or AS-i control unit
- ICS (from DN 25 to DN 150)
- ACS (from DN 25 to DN 150)

### SURFACE CONDITIONS

- RA exterior = 1.2 µm (150 grit)
- RA interior = 0.8 µm (180 grit)

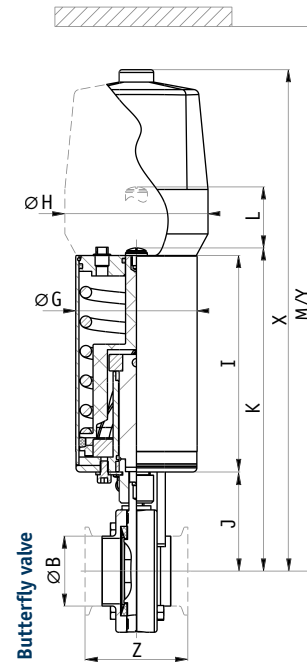
### SERVICE CONDITIONS

- Max. temperature: + 120°C/+ 248°F  
(temperature depending on seal type)
- Min. temperature: 0°C/+ 32°F
- Max. working pressure:  
14 bar (1400 kPa)/203 psi DN 25 to DN 51  
12 bar (1200 kPa)/174 psi DN 63 to DN 80  
10 bar (1000 kPa)/145 psi DN 100  
8 bar (800 kPa)/116 psi DN 125 to DN 150
- Actuator air supply pressure:  
min. 5.5 bar (550 kPa)/80 psi  
max. 8 bar (800 kPa)/116 psi
- Vacuum resistance: 0.4 cm<sup>3</sup>/s



DPX manual - standard handle

DPX manual - multiposition handle



DPAX automatic



Tube ØB	ØC	D	E	F	ØG	ØH	I	J	K	L (stroke)	M (without unit)	O	P	Q	R	X	Y (with unit)	Z	Weight in Kg	
																			DPX	DPAX
SMS 22.6/25	79	50	15	25	89	104	157	67	231	53	304	30	165	100	70	376	406	75	1.4	4.6
SMS 30/32	79	50	15	25	89	104	157	67	231	53	304	30	165	100	70	376	406	75	1.3	4.5
SMS 35.6/38	79	50	15	25	89	104	157	67	231	53	304	30	165	100	70	376	406	75	1.3	4.5
SMS 48.5/51	89	50	15	25	89	104	157	73	237	53	310	30	165	105	75	382	412	75	1.6	4.8
SMS 60.3/63.5	104	50	15	25	89	104	157	82	246	53	319	30	165	112	83	391	421	75	1.7	4.9
SMS 72/76	119	50	15	25	89	104	157	91	255	53	328	30	165	120	91	400	445	75	2	5.2
SMS 100/104	149	58	19	29	114	140	174	101	285	53	363	35	260	155	112	432	467	89	4.1	9.9
DIN 26/29	79	50	15	25	89	104	157	67	231	53	304	30	165	100	70	376	406	75	1.4	4.6
DIN 32/35	79	50	15	25	89	104	157	67	231	53	304	30	165	100	70	376	406	75	1.3	4.5
DIN 38/41	79	50	15	25	89	104	157	67	231	53	304	30	165	100	70	376	406	75	1.3	4.5
DIN 50/53	89	50	15	25	89	104	157	73	237	53	310	30	165	105	75	382	412	75	1.6	4.8
DIN 66/70	119	50	15	25	89	104	157	91	255	53	328	30	165	120	91	400	445	75	2.1	5.3
DIN 81/85	129	58	19	29	89	104	157	90	274	53	352	30	165	145	101	416	469	98	3.4	9.2
DIN 100/104	149	58	19	29	114	140	174	101	285	53	363	35	260	155	112	432	467	89	4.1	9.9
DIN 125/129	179	58	19	29	114	140	174	116	300	53	383	35	260	170	128	447	487	95	4.5	10.3
DIN 150/154	204	58	19	29	114	140	173	129	312	53	395	35	260	190	140	459	502	95	5.6	12
US 1" (22.1/25.4)	79	50	15	25	89	104	157	67	231	53	304	30	165	100	70	376	406	75	1.4	4.6
US 1 1/2 (34.8/38.1)	79	50	15	25	89	104	157	67	231	53	304	30	165	100	70	376	406	75	1.3	4.5
US 2" (47.5/50.8)	89	50	15	25	89	104	157	73	237	53	310	30	165	105	75	382	412	75	1.6	4.8
US 2 1/2 (60.2/63.5)	104	50	15	25	89	104	157	82	246	53	319	30	165	112	83	391	421	75	1.7	4.9
US 3" (72.9/76.1)	119	50	15	25	89	104	157	91	255	53	328	30	165	120	91	400	445	75	2	5.2
US 4" (97.4/101.6)	149	58	19	29	114	140	174	101	285	53	363	35	260	155	112	432	467	89	4.1	9.9
US 6" (146.9/152.4)	204	58	19	29	114	140	173	129	312	53	395	35	260	190	140	459	502	95	5.6	12

# Interflange butterfly valves DPX EBC - DPAX EBC

The operating conditions are given for information. Some combinations of extreme operating conditions are not always suitable. It is highly recommended to ask for advice from our technical department.

## FEATURES

- New compact interflange valve design
- O-rings that seal between the half bodies and the flange
- Quick assembly and disassembly
- Can be used for a variety of applications
- Low pressure loss and line transfer without retention
- Easy to adjust operating devices

## SPECIFICATIONS

### DIMENSIONS

- SMS - DIN - US  
from DN 25 (1") to DN 150 (6")

### MATERIALS

- Half body: stainless steel 1.4404 / 316L
- Disc: stainless steel 1.4404 / 316L
- Weld end: stainless steel 1.4404 / 316L
- Seal: EPDM - fluorinated elastomer (FKM) or silicon
- Flange and fastening: stainless steel 1.4301 / 304
- Operating devices: stainless steel 1.4301 / 304

### OPERATING DEVICES

#### MANUAL - DPX

- Left opening standard or multiposition handle
- Right opening standard or multiposition handle

#### AUTOMATIC - DPAX

- Single or double acting valve actuator

### SIGNALLING EQUIPMENT

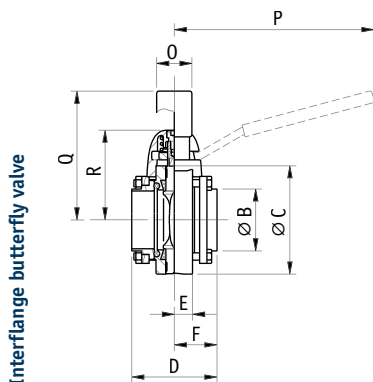
- Visible on single or double stainless steel bracket
- Point-to-point or AS-i control unit
- ICS (from DN 25 to DN 150)
- ACS (from DN 25 to DN 150)

### SURFACE CONDITIONS

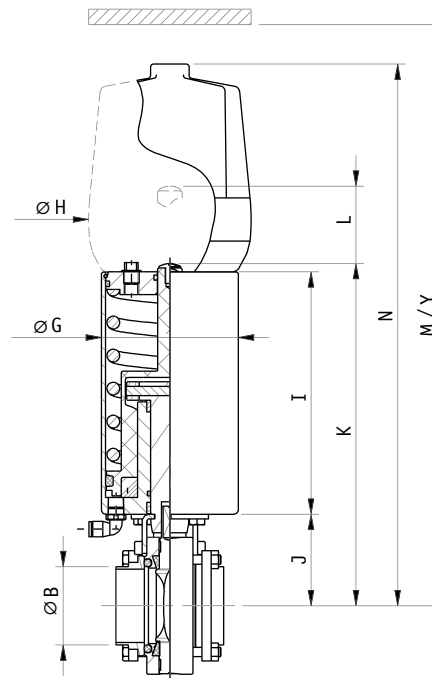
- RA exterior = 1.2 µm (150 grit)
- RA interior = 0.8 µm (180 grit)

### SERVICE CONDITIONS

- Max. temperature: + 120°C/+ 248°F  
(temperature depending on seal type)
- Min. temperature: 0°C/+ 32°F
- Max. working pressure:
  - 14 bar (1400 kPa)/203 psi DN 25 to DN 51
  - 12 bar (1200 kPa)/174 psi DN 63 to DN 80
  - 10 bar (1000 kPa)/145 psi DN 100
  - 8 bar (800 kPa)/116 psi DN 125 to DN 150
- Actuator air supply pressure:
  - min. 5.5 bar (550 kPa)/80 psi
  - max. 8 bar (800 kPa)/116 psi
- Vacuum resistance: 0.4 cm<sup>3</sup>/s



DPX EBC manual



Interflange butterfly valve

DPAX EBC automatic



Tube ØB	ØC	D	E	F	ØG	ØH	I	J	K	L		N	O	P	Q	R	Y		Weight in Kg	
										(stroke)	(without unit)						(with unit)	DPX	DPAX	
SMS 22.6/25	79	68	15	34	89	104	157	55	218	53	291	382	30	165	100	70	406	1.8	5.1	
SMS 30/32	79	68	15	34	89	104	157	55	218	53	291	382	30	165	100	70	406	1.6	5	
SMS 35.6/38	79	70	15	35	89	104	157	55	218	53	291	382	30	165	100	70	406	1.8	4.9	
SMS 48.5/51	89	70	15	35	89	104	157	60	223	53	296	387	30	165	105	75	412	1.8	5.1	
SMS 60.3/63.5	104	82	15	41	89	104	157	68	230	53	303	395	30	165	112	83	421	3.9	5.9	
SMS 72/76	119	82	15	41	89	104	157	76	239	53	312	403	30	165	120	91	445	3.9	6.4	
SMS 100/104	149	90	19	45	114	140	174	90	275	53	353	438	35	260	155	112	467	5.1	10.7	
DIN 26/29	79	68	15	34	89	104	157	55	218	53	291	382	30	165	100	70	406	1.8	5.1	
DIN 32/35	79	68	15	34	89	104	157	55	218	53	291	382	30	165	100	70	406	1.6	5	
DIN 38/41	79	70	15	35	89	104	157	55	218	53	291	382	30	165	100	70	406	1.8	4.9	
DIN 50/53	89	70	15	35	89	104	157	60	223	53	296	387	30	165	105	75	412	1.8	5.1	
DIN 66/70	119	82	15	41	89	104	157	76	239	53	312	403	30	165	120	91	445	3.5	6.2	
DIN 81/85	129	82	15	41	89	104	157	76	239	53	317	403	30	165	120	91	445	4.1	6.6	
DIN 100/104	149	90	19	45	114	140	174	90	275	53	353	438	35	260	155	112	467	5.1	10.7	
DIN 125/129	179	92	19	46	114	140	174	105	291	53	374	453	35	260	170	128	493	7.1	12.5	
DIN 150/154	204	92	19	46	114	140	174	118	303	53	386	466	35	260	190	140	499	8.4	13.6	
US 1" (22.1/25.4)	79	68	15	34	89	104	157	55	218	53	291	382	30	165	100	70	406	1.8	5.1	
US 1 1/2 (34.8/38.1)	79	70	15	35	89	104	157	55	218	53	291	382	30	165	100	70	406	1.8	4.9	
US 2" (47.5/50.8)	89	70	15	35	89	104	157	60	223	53	296	387	30	165	105	75	412	1.8	5.1	
US 2 1/2 (60.2/63.5)	104	82	15	41	89	104	157	68	230	53	303	395	30	165	112	83	421	3.9	5.9	
US 3" (72.9/76.1)	119	82	15	41	89	104	157	76	239	53	312	403	30	165	120	91	445	3.9	6.4	
US 4" (97.4/101.6)	149	90	19	45	114	140	174	90	275	53	353	438	35	260	155	112	467	5.1	10.7	
US 6" (146.9/152.4)	204	92	19	46	114	140	174	118	303	53	386	466	35	260	190	140	499	8.4	13.6	

# Diaphragm valves DMX - DMAX

The operating conditions are given for information. Some combinations of extreme operating conditions are not always suitable. It is highly recommended to ask for advice from our technical department.



## FEATURES

- No product entrapment areas that prevents the development of bacteria
- Retained passage diameter
- Low loss of pressure
- Quick assembly and disassembly ; easy maintenance
- Easy to adjust operating devices
- Machined solid body to guarantee good material uniformity
- Valve can be washed and sterilised
- Leak detection in case of deterioration of the diaphragm

## SPECIFICATIONS

### DIMENSIONS

- Diaphragm valve from DN 9/13.5 to DN 41.8/48.3 ISO STD
- Sampling diaphragm valve from DN 6/8 to DN 16/18 DIN

### MATERIALS

- Body: stainless steel 1.4404 / 316L  
 Handle: plastic material PBT (thermoplastic polyester) / stainless steel 1.4301 / 304 on request  
 Actuator: stainless steel 1.4301 / 304  
 Diaphragm: uniform composite diaphragm (PTFE and elastomer) FDA/3A certified EPDM or silicon diaphragm

### CONNECTIONS

- CONNECTION TYPES STANDARDS  
 Welded SMS - DIN - US standard  
 Threaded SMS - DIN  
 Liner-nut SMS - DIN  
 Clamp US standard

### OPERATING DEVICES

- MANUAL - DMX**  
 Ergonomic handle with visual opening indicator  
**AUTOMATIC - DMAX**  
 Single or double acting valve actuator

### SIGNALLING EQUIPMENT

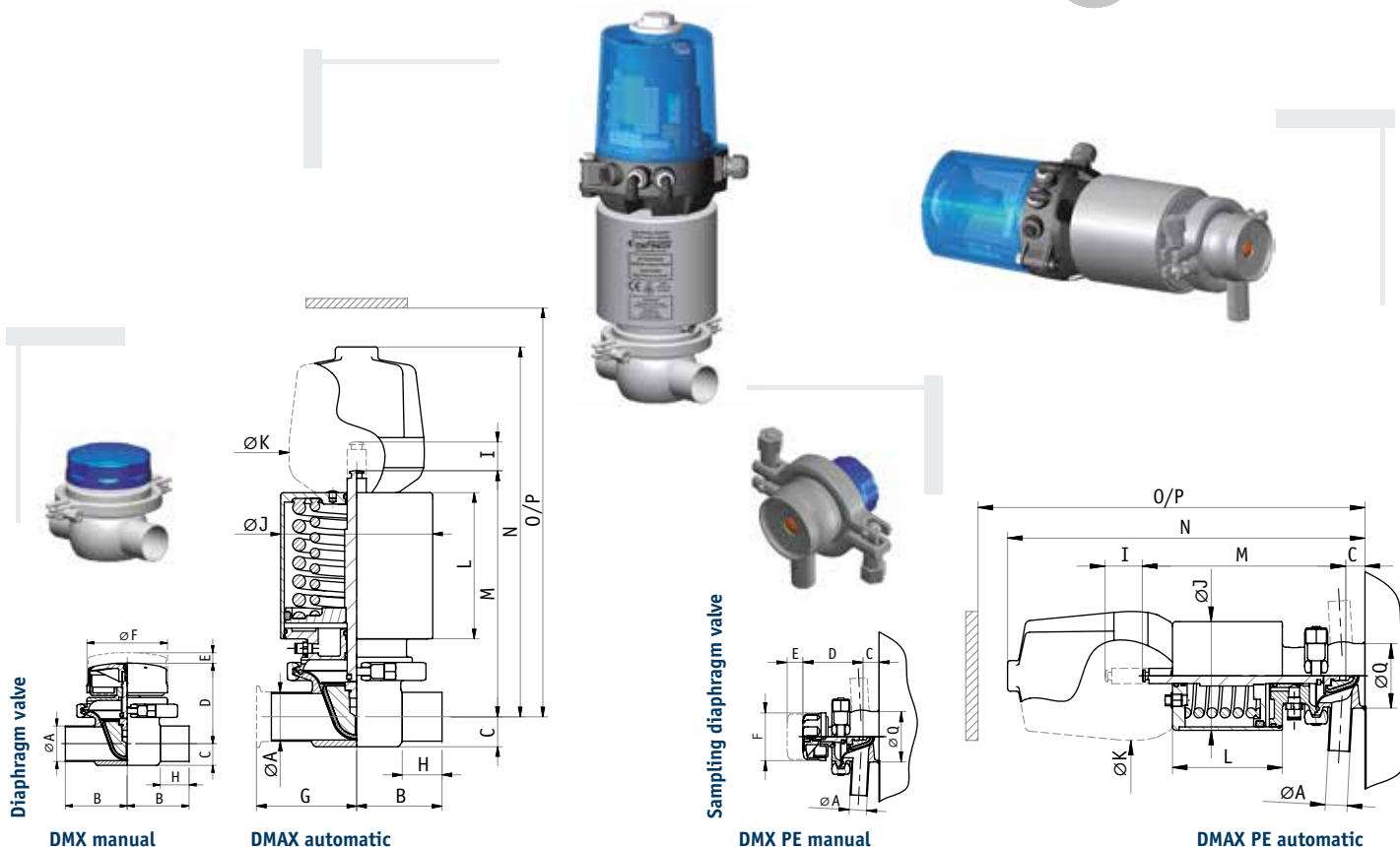
- Visible on single or double stainless steel bracket  
 Point to point or AS-i control unit  
 ICS (from DN 9 to DN 53)

### SURFACE CONDITIONS

- RA exterior = 1.2 µm (150 grit)
- RA interior = 0.8 µm (180 grit)  
 0.4 µm (240 grit) on request  
 0.2 µm (320 grit) on request

### SERVICE CONDITIONS

- Max. temperature: + 140°C/+ 284° F
- Min. temperature: 0°C/+ 32°F
- Max. working pressure: 10 bars (1000 kPa)/145 psi elastomer diaphragm from DN10 to DN25  
 6 bars (600 kPa)/87 psi elastomer diaphragm from DN32 to DN51  
 8 bar (800 kPa)/116 psi PTFE diaphragm
- Vacuum resistance elastomer diaphragm: 10<sup>-6</sup> mbar  
 Helium tightness (leakage rate): 10<sup>-6</sup> atm.cm<sup>3</sup>/s
- Vacuum resistance PTFE diaphragm: 10<sup>-3</sup> mbar  
 Helium tightness (leakage rate): 10<sup>-3</sup> atm.cm<sup>3</sup>/s
- Actuator air supply pressure:  
 min. 5.5 bar (550 kPa)/80 psi  
 max. 8 bar (800 kPa)/116 psi
- Fatigue resistance: 100 000 cycles elastomer diaphragm  
 40 000 cycles PTFE diaphragm



Tube $\varnothing A$	B	C	D	E	$\varnothing F$	G	H	I	$\varnothing J$	$\varnothing K$	L	M	N	O	P	Q	Weight in Kg	
																	DMX	DMAX
Standard version				(stroke)				(stroke)						(without unit)	(with unit)			
SMS 22,6/25	60	21	97	13	78	72,5	26	12	114	104	120	224	349	262	387	-	2,4	7
SMS 30/32	60	20	94	12	78	72,5	25	12	114	104	120	220	346	255	381	-	2,2	5,8
SMS 35,6/38	88,5	33	120	22	78	101	41	22	159	104	147	284	400	340	456	-	4,8	16,1
SMS 48,5/51	88,5	40	114	22	78	101	41	22	159	104	147	277	393	326	442	-	4,9	16,2
DIN 10/12	30	14	56	5	50	42,5	18	5	59	104	90	173	303	190	320	-	0,2	2,4
DIN 16/18	50	17	68	11	50	62,5	29	11	89	104	90	181	314	211	344	-	0,6	2,7
DIN 26/29	60	23	95	12	78	72,5	26	12	114	104	120	222	348	258	384	-	2,4	7
DIN 32/35	88,5	31	122	22	78	101	43	22	159	104	147	285	401	342	458	-	2,7	14
DIN 38/41	88,5	24	120	22	78	101	43	22	159	104	147	282	398	336	452	-	4,5	15,8
DIN 50/53	88,5	32	114	22	78	101	42	22	159	104	147	276	392	324	440	-	4,8	16

### Sampling

DN 6/8	-	5	56	5	50	-	-	5	59	104	90	173	315	193	335	25	0.3	2.5
DN 10/12	-	8	68	5	50	-	-	5	89	104	90	181	329	201	359	53	0.3	3.5
DN 9/13.5	-	8	68	5	50	-	-	5	89	104	90	181	329	201	359	53	0.3	3.7
DN 16/18	-	8	68	10	50	-	-	11	89	104	90	181	329	211	369	53	1	4

# Manual sampling valves PEX - PEAX

The operating conditions are given for information. Some combinations of extreme operating conditions are not always suitable. It is highly recommended to ask for advice from our technical department.

## FEATURES

- Simple and secure sampling solution
- Flame sterilisation (1 outlet PEX1 / PEAX1) or steam injection sterilisation or cleaning with a sterilising agent (2 outlets PEX2 / PEAX2)
- Neutral diaphragm available FDA certified
- Quick and easy to change operating devices

## SPECIFICATIONS

### DIMENSIONS

- DIN from DN 6/8 to DN 16/18

### MATERIALS

Body: stainless steel 1.4404 / 316L machined from solid  
 Handle: white plastic material or stainless steel 1.4301 / 304  
 Actuator: stainless steel 1.4301 / 304  
 Diaphragm: elastomer (fluorinated elastomer (FKM) - EPDM or white silicon)

### VALVE BODY CONNECTIONS

Wall welded  
 Clamp  
 Pipe line welded  
 Male gas end

### OPERATING DEVICES

**MANUAL - PEX**  
 Ergonomic handle

**AUTOMATIC - PEAX**  
 Compact pneumatic valve actuator  
 Stainless steel operating lever for DN 6 and 10 for manual control in an automatic cycle

### SIGNALLING EQUIPMENT

Detection possible on request

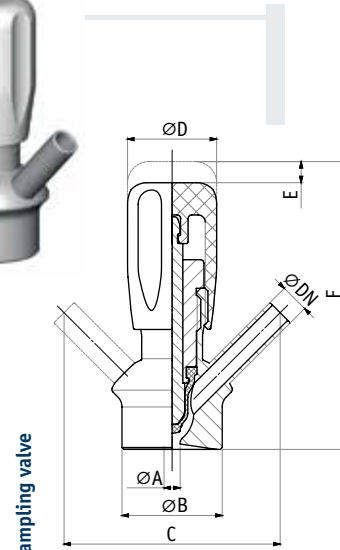
### SURFACE CONDITIONS

- RA exterior = 0.8 µm (180 grit)
- RA interior = 0.8 µm (180 grit) standard  
 0.4 µm (240 grit) on request

### SERVICE CONDITIONS

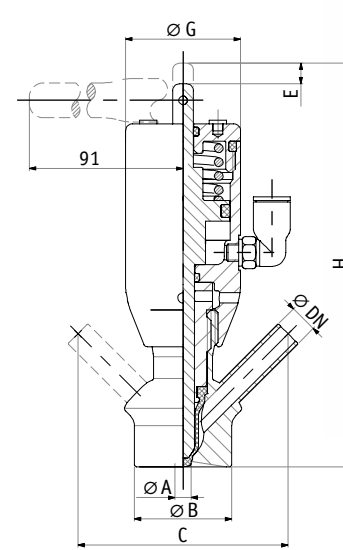
- Max. temperature: + 120°C/+ 248°F
- Min. temperature: 0°C/+ 32°F
- Max. working pressure: 10 bar (1000 kPa)/145 psi
- Actuator air supply pressure: 4 to 6 bar (400 to 600 kPa)/58 to 87 psi
- Air connection: Ø 4/6

Tube ØB	ØA	ØB	C	ØD	E	F	ØG	H	Standard clamp			Weight in Kg		
									ØI	ØJ	ØK	PEX	PEAX	
DN 6/8	Ø4.5	Ø28	60	Ø26	5	75	Ø33	115	Ø50.4	Ø5.9	Ø7	12	0.2	0.5
DN 10/12	Ø8	Ø36	65	Ø30	7	90	Ø39	140	Ø50.4	Ø9.9	Ø11	12	0.3	0.65
DN 16/18	Ø15	Ø52	85	Ø39	7	102	Ø55	160	Ø50.4	Ø16.9	Ø18	12	0.75	1.5

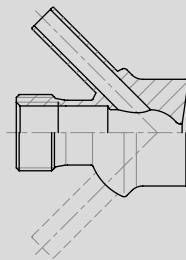


Sampling valve

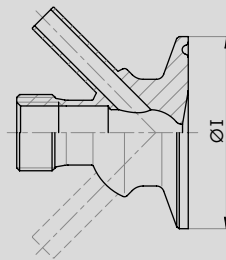
PEX manual



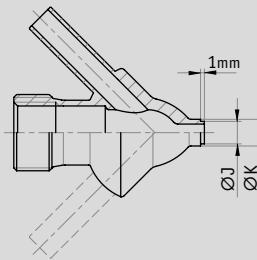
PEAX automatic



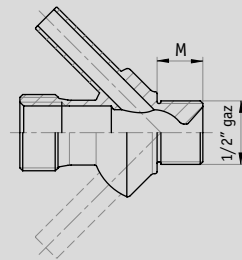
Wall welded



Clamp



Pipe line welded



Male gas end

# Single sealing changeover valves DCX3 - DCX4

The operating conditions are given for information. Some combinations of extreme operating conditions are not always suitable. It is highly recommended to ask for advice from our technical department.

## FEATURES

- Fitted as standard with a floating PFA valve seal that can be cleaned and offers outstanding tightness at high temperatures and good resistance to chemical products
- Dismountable pneumatic valve actuator that can be easily transformed into NO (Normally Open) - NC (Normally Closed) or DA (Double Acting)
- Connection of actuators and shut-off units with clamps for easier maintenance and offering a variety of options
- Spherical body with thick walls guaranteeing excellent resistance to expansion constraints and offering a variety of configurations: + - T - L - L/L - T/L

## SPECIFICATIONS

### DIMENSIONS

- SMS - DIN - US  
from DN 25 (1") to DN 104 (4") for the manual version  
from DN 25 (1") to DN 150 (6") for the automatic version

### MATERIALS

- Body: stainless steel 1.4404 / 316L
- Shut-off unit: stainless steel 1.4404 / 316L
- Valve seal: floating PFA - EPDM  
fluorinated elastomer (FKM) or silicon
- Other seals: EPDM - fluorinated elastomer (FKM) or silicon
- Operating devices: stainless steel 1.4301 / 304

### CONNECTIONS

- | CONNECTION TYPES | STANDARDS               |
|------------------|-------------------------|
| Welded           | SMS - DIN - US standard |
| Threaded         | SMS - DIN               |
| Liner-nut        | SMS - DIN               |
| Clamp            | US standard             |

### OPTIONS

- Elastomer seal tightness
- Long stroke for maximum valve disengage

### SIGNALLING EQUIPMENT

- Visible on single or double stainless steel bracket
- Point-to-point or AS-i control unit
- ICS (from DN 25 to DN 80)
- ACS (from DN 25 to DN 150)

### SURFACE CONDITIONS

- RA exterior = 1.2 µm (150 grit)
- RA interior = 0.8 µm (180 grit)

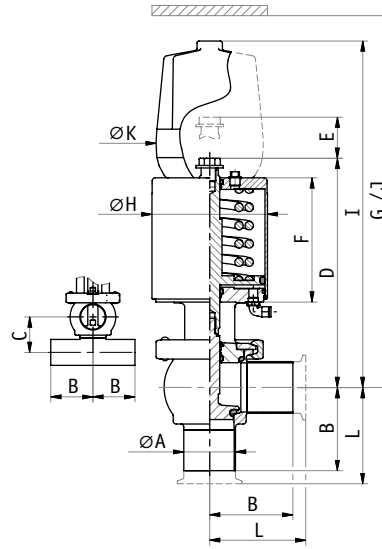
### SERVICE CONDITIONS

- Max. temperature: + 140°C/+ 284°F  
(temperature depending on seal type)
- Min. temperature: - 5°C/+ 23°F
- Max. working pressure: 8 bar (800 kPa)/116 psi
- Actuator air supply pressure:  
min. 5.5 bar (550 kPa)/80 psi  
max. 8 bar (800 kPa)/116 psi
- Vacuum resistance: 0.4 cm<sup>3</sup>/s

Changeover valve

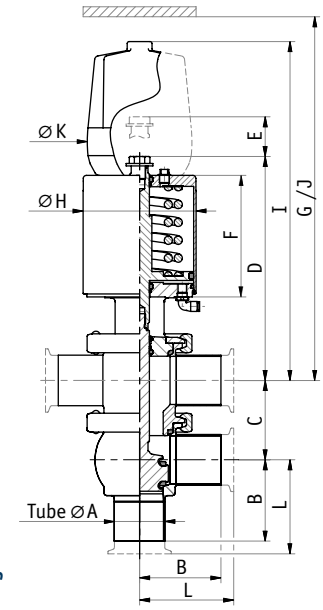


DCX3 manual



DCX3 automatic

Changeover valve



DCX4 automatic



Tube ØA	B	C		D		E (stroke)		F	G	ØH	I	J	ØK	L	Weight in Kg	
		DCX3	DCX4	DCX3	DCX4	DCX3	DCX4								(without unit)	(with unit)
SMS 22.6/25	55	45	55	193	192	17	14	110	280	89	337	465	104	70	4.5	6
SMS 35.6/38	70	55	70	195	195	21	18	110	300	89	344	465	104	85	5	6.5
SMS 48.5/51	82	70	80	224	225	29	27	123	340	114	373	495	104	97	8	9
SMS 60.3/63.5	105	85	95	276	275	35	32	159	400	167	423	535	104	125	17	20
SMS 72/76	110	95	105	281	280	35	32	159	430	167	429	545	104	130	17	21
SMS 100/104	130	125	150	333	335	40	35	181	530	216	483	622	140	155	33	40
DIN 26/29	55	47	55	192	192	17	14	110	280	89	337	465	104	-	4.6	5
DIN 32/35	55	51	65	197	194	17	17	110	300	89	342	465	104	-	4.7	5
DIN 38/41	70	55	70	195	195	21	18	110	310	89	344	465	104	-	5	5
DIN 50/53	80	71	80	224	225	29	27	123	340	114	373	495	104	-	8	9
DIN 66/70	108	93	100	277	277	35	31	159	400	167	425	535	104	-	17	20
DIN 81/85	115	105	130	288	291	40	36	159	420	167	455	545	104	-	18	23
DIN 100/104	130	125	150	333	335	40	35	181	530	216	483	622	140	-	33.1	45.8
DIN 125/129	160	155	165	488	488	70	56	285	590	270	636	752	140	-	62	73
DIN 150/154	180	180	195	500	500	70	62	285	620	270	647	782	140	-	65	78
US 1" (22.1/25.4)	51	45	82.5	192	192	17	14	110	280	89	337	465	104	64	4.5	6
US 1" 1/2 (34.8/38.1)	57	55	82.5	195	195	21	18	110	300	89	344	465	104	70	5	6.5
US 2" (47.5/50.8)	76	70	95	224	225	29	27	123	350	114	373	495	104	89	7.5	10.2
US 2" 1/2 (60.2/63.5)	76	85	108	276	275	35	32	159	420	167	423	555	104	89	15	19.3
US 3" (72.9/76.1)	82	95	120	281	280	35	32	159	430	167	429	565	104	95	15.5	19.1
US 4" (97.4/101.6)	130	125	165	333	335	40	35	181	540	216	483	612	140	146	33	40
US 6" (146.9/152.4)	180	180	195	500	500	70	62	285	620	270	647	782	140	200	65	78



# Fractional changeover valves DCX3 - DCX4

The operating conditions are given for information. Some combinations of extreme operating conditions are not always suitable. It is highly recommended to ask for advice from our technical department.

## FEATURES

- High sealing pressure
- Self-contained and compact body with a variety of configuration options: + - T - L - L/L - T/L
- Quick to disassemble

## SPECIFICATIONS

### DIMENSIONS

- US  
DN 1/2" and DN 3/4"

### MATERIALS

- Body: stainless steel 1.4404 / 316L
- Shut-off unit: stainless steel 1.4404 / 316L
- Valve seal: PFA - EPDM - fluorinated elastomer (FKM) or silicon
- Handle: plastic material
- Actuator: stainless steel 1.4301 / 304

### CONNECTIONS

- To weld
- Clamp

### OPERATING DEVICES

#### MANUAL

Ergonomic handle with visual opening indicator

#### AUTOMATIC

Single or double acting compact pneumatic valve actuator

### OPTION

Adjustable actuator to pre-set the pressure for use as relief valve

### SIGNALLING EQUIPMENT

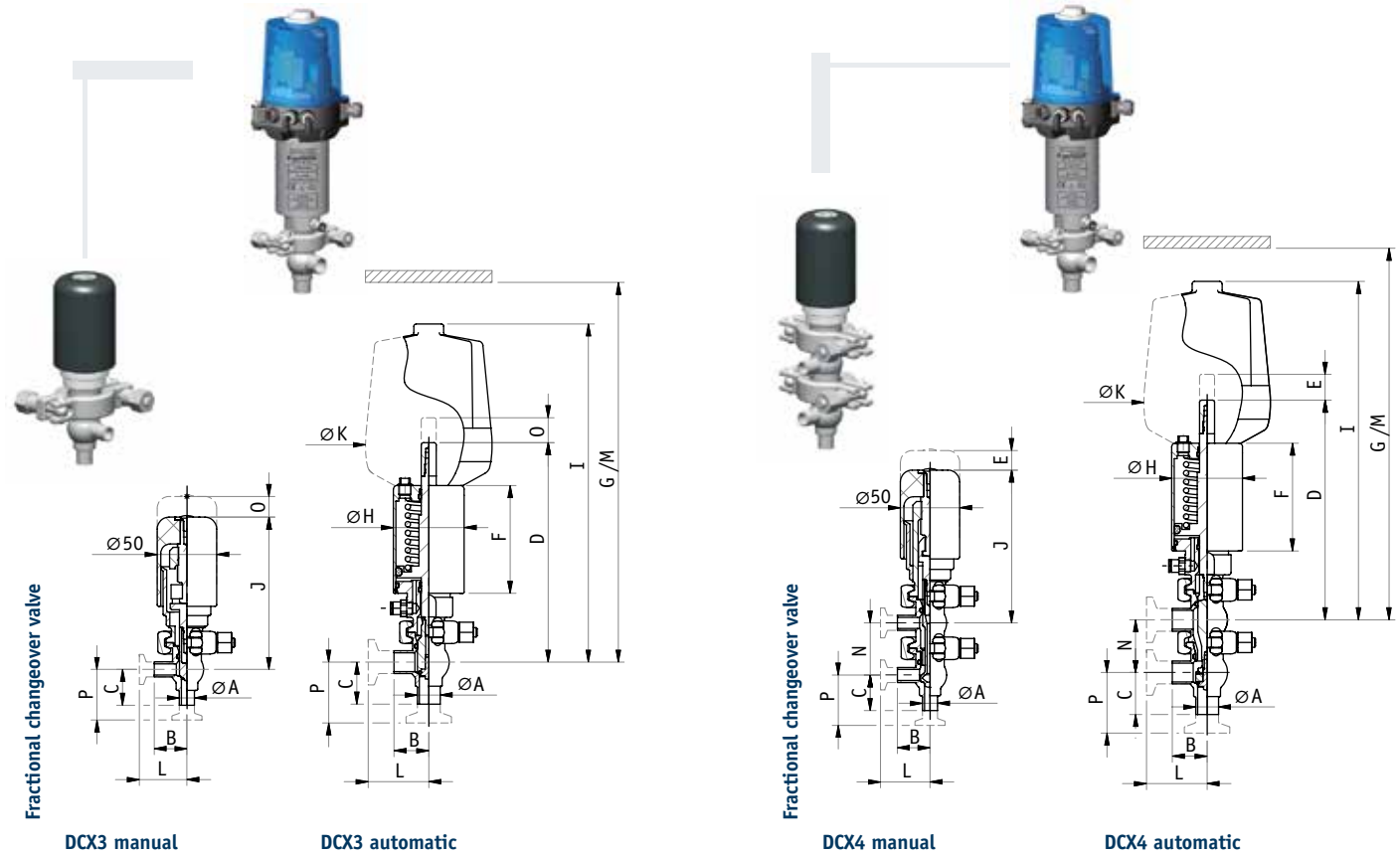
Visible on single or double stainless steel bracket  
Point-to-point or AS-i control unit  
ICS (DN 1/2" and DN 3/4")

### SURFACE CONDITIONS

- RA exterior = 1.2 µm (150 grit)
- RA interior = 0.8 µm (180 grit)

### SERVICE CONDITIONS

- Max. temperature: + 140°C/+ 284°F  
(temperature depending on seal type)
- Min. temperature: - 5°C/+ 23°F
- Max. working pressure: 18 bar (1800 kPa)/261 psi
- Actuator air supply pressure:  
min. 5.5 bar (550 kPa)/80 psi  
max. 8 bar (800 kPa)/116 psi
- Vacuum resistance: 0.4 cm<sup>3</sup>/s



Tube ØA	B	C	D	E	F	G	ØH	I	J	ØK	L	M	N	O	P	Weight in Kg DCX3		Weight in Kg DCX4	
																MANUAL	AUTO	MANUAL	AUTO
US 1/2" (9.4/12.7)	27.5	30	192	10.5	90	215	59	337	128	104	40	465	44	12	42.5	0.6	1.5	0.7	1.6
US 3/4" (15.75/19.05)	29	35	195	11	90	220	59	344	130	104	41.5	465	44	12	47.5	0.6	1.5	0.7	1.7
US 1" (22.1/25.4)	35.3	40	212	14.7	103	240	71	373	130	104	64	495	55	15	64	1	1.9	1.1	2

# Diaphragm / Aseptic bearing changeover valves DCX3

The operating conditions are given for information. Some combinations of extreme operating conditions are not always suitable. It is highly recommended to ask for advice from our technical department.

## DCX3 diaphragm changeover valve

### FEATURES

- Same features as standard DCX3 (floating seal – thick body, etc...)
- Fitted with PTFE (PolyTetraFluorEthylene) diaphragm to ensure a physical barrier between the inside of the valve and the outside environment and with microvalve to warn of a leak or possible seal damage
- The stroke on these valves is slightly shorter than on a standard DCX valve.

### SPECIFICATIONS

#### DIMENSIONS

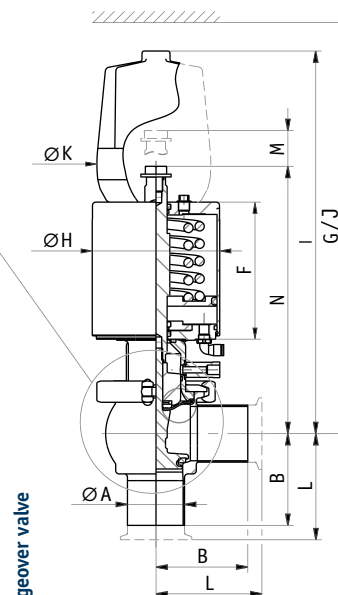
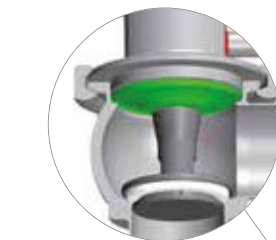
- SMS - DIN - US from DN 25 (1") to DN 150 (6")

#### OPTIONS

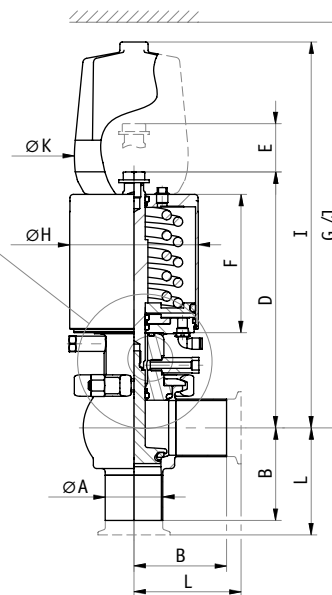
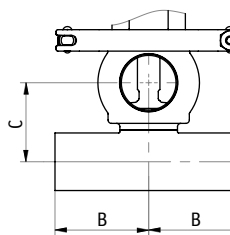
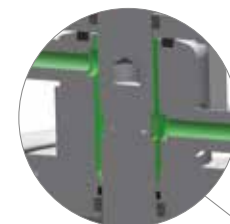
Deformable sealing diaphragm in PTFE and alcohol barrier  
On request available up to DN 250 (10")

#### SERVICE CONDITIONS

- Max. temperature: +140°C/+ 284°F (temperature depending on seal type)
- Min. temperature: +1°C/+ 33,8°F
- Max. working pressure: 8 bar (800 kPa)/116 psi
- Actuator air supply pressure: min. 5.5 bar (550 kPa)/80 psi max. 8 bar (800 kPa)/116 psi
- Vacuum resistance: 0,4 cm<sup>3</sup>/s



DCX3 diaphragm type



DCX3 with aseptic bearing



## DCX3 changeover valve with aseptic bearing

### FEATURES

- Same features as standard DCX3 (floating seal – thick body, etc...)
- Fitted with an aseptic guide bearing which steam or fluid (washing - rinsing) circulates through to clean the parts of the plug, which come into contact with the outside environment on the valve outstroke  
When the valve closes, the stem in contact with the outside environment is sterilized before penetrating the valve body.

### SPECIFICATIONS

#### DIMENSIONS

- SMS - DIN - US from DN 25 (1") to DN 150 (6")

#### OPTION

Cooling bearing

#### SERVICE CONDITIONS

- Max. temperature: + 140°C/+ 284°F (temperature depending on seal type)
- Min. temperature: - 5°C/+ 23°F
- Max. working pressure: 8 bar (800 kPa)/116 psi
- Actuator air supply pressure: min. 5.5 bar (550 kPa)/80 psi max. 8 bar (800 kPa)/116 psi
- Vacuum resistance: 0,4 cm<sup>3</sup>/s

DIMENSIONS Tube ØA	COMMON DIMENSIONS									WITH DIAPHRAGM			WITH ASEPTIC BEARING		
	B	C	F	G	ØH	I	J	ØK	L	M	N	Weight in Kg	D	E	Weight in Kg
	(without unit)									(stroke)			(stroke)		
SMS 22,6/25	55	45	110	280	89	337	465	104	70	12	205	6	193	17	5
SMS 35,6/38	70	55	110	300	89	344	465	104	85	12	205	6,5	195	21	5,5
SMS 48,5/51	82	70	123	340	114	373	495	104	97	17	239	9,5	224	29	8,5
SMS 60,3/63,5	105	85	159	400	167	423	535	104	125	26	292	18,5	276	35	18
SMS 72/76	110	95	159	430	167	429	545	104	130	26	292	18,5	281	35	18
SMS 100/104	130	125	181	530	216	483	622	140	155	35	342	36	333	40	34
DIN 26/29	55	47	110	280	89	337	465	104	-	12	205	6	192	17	5
DIN 32/35	55	51	110	300	89	342	465	104	-	12	205	6	197	17	5
DIN 38/41	70	55	110	310	89	344	465	104	-	12	205	6,5	195	21	5,5
DIN 50/53	80	71	123	340	114	373	495	104	-	17	239	9,5	224	29	8,5
DIN 66/70	108	93	159	400	167	425	535	104	-	26	292	18,5	277	35	18
DIN 81/85	115	105	159	420	167	455	545	104	-	35	342	19,5	288	40	19
DIN 100/104	130	125	181	530	216	483	622	140	-	35	342	36	333	40	34
DIN 125/129	160	155	285	590	270	636	752	140	-	36	513	69	488	70	68
DIN 150/154	180	180	285	620	270	647	782	140	-	36	525	81	500	70	80
US 1" (22,1/25,4)	51	45	110	280	89	337	465	104	64	12	205	6	192	17	5
US 1 1/2 (34,8/38,1)	57	55	110	300	89	344	465	104	70	12	205	6	195	21	5,5
US 2" (47,5/50,8)	76	70	123	350	114	373	505	104	89	17	239	9,5	224	29	8,5
US 2 1/2 (60,2/63,5)	76	85	159	420	167	423	555	104	89	26	292	18,5	276	35	18
US 3" (72,9/76,1)	82	95	159	430	167	429	555	104	95	26	292	18,5	281	35	18
US 4" (97,4/101,6)	130	125	181	540	216	483	612	140	146	35	342	36	333	40	34
US 6" (146,9/152,4)	180	180	285	620	270	647	782	140	200	36	525	81	500	70	80



The operating conditions are given for information. Some combinations of extreme operating conditions are not always suitable. It is highly recommended to ask for advice from our technical department.

## FEATURES

- Fitted with a positioner enabling the flow, pressure or level to be regulated on all supply fluids using a signal (0)4/20 mA or 0/10 V
- Profiled plug (without sealing)

## SPECIFICATIONS

### DIMENSIONS

- SMS - DIN - US  
from DN 25 (1") to DN 100 (4")

### MATERIALS

Body:	stainless steel 1.4404 / 316L
Shut-off unit:	stainless steel 1.4404 / 316L
Valve seal:	EPDM fluorinated elastomer (FKM) or silicon
Operating devices:	stainless steel 1.4301 / 304

### CONNECTIONS

CONNECTION TYPES	STANDARDS
To weld	SMS - DIN - US standard
Threaded	SMS - DIN
Liner-nut	SMS - DIN
Clamp	US standard

### OPTION

Elastomer seal for absolute tightness

### SIGNALLING EQUIPMENT

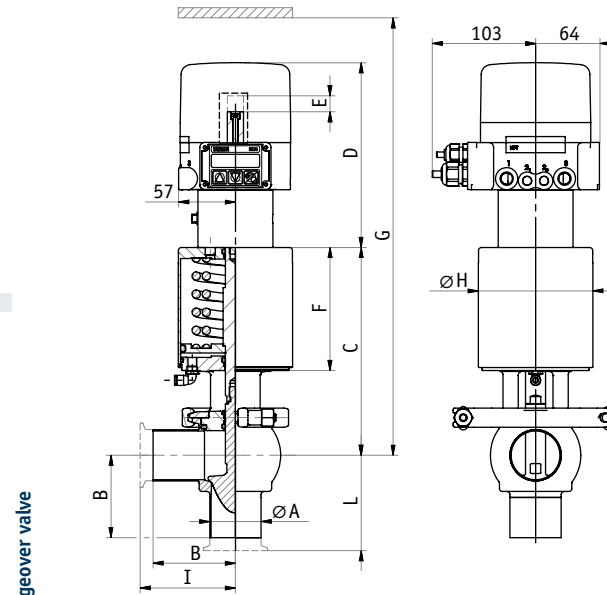
(0) 4/20 mA or 0/10 V positioner

### SURFACE CONDITIONS

- RA exterior = 1.2 µm (150 grit)
- RA interior = 0.8 µm (180 grit)

### SERVICE CONDITIONS

- Max. temperature: + 140°C/+ 284°F  
(temperature depending on seal type)
- Min. temperature: - 5°C/+ 23°F
- Max. working pressure:  
8 bar (800 kPa)/116 psi with elastomer seal
- Actuator air supply pressure:  
min. 5.5 bar (550 kPa)/80 psi  
max. 8 bar (800 kPa)/116 psi
- Vacuum resistance: 0,7 cm<sup>3</sup>/s



DCX3 regulating type



Tube ØA	B	C	D	E (stroke)	F	G (with unit)	ØH	I	Weight in Kg
SMS 22,6/25	55	170	165	17	110	390	89	70	5,5
SMS 35,6/38	70	177	165	21	110	400	89	85	5,5
SMS 48,5/51	82	206	185	29	123	500	114	97	8,5
SMS 60,3/63,5	105	256	185	35	159	560	167	125	17,5
SMS 72/76	110	262	185	35	159	590	167	130	17,5
SMS 100/104	130	312	185	40	181	660	216	155	29,5
DIN 26/29	55	170	165	17	110	390	89	-	5,5
DIN 32/35	55	175	165	17	110	400	89	-	5,5
DIN 38/41	70	177	165	21	110	400	89	-	5,5
DIN 50/53	80	206	185	29	123	500	114	-	8,5
DIN 66/70	108	258	185	35	159	570	167	-	17,5
DIN 81/85	115	268	185	40	159	580	167	-	20,5
DIN 100/104	130	312	185	40	181	660	216	-	29,5
US 1" (22,1/25,4)	51	170	165	17	110	390	89	64	5,5
US 1 1/2 (34,8/38,1)	57	177	165	21	110	400	89	70	5,5
US 2" (47,5/50,8)	76	206	185	29	123	500	114	89	8,5
US 2 1/2 (60,2/63,5)	76	256	185	35	159	560	167	89	17,5
US 3" (72,9/76,1)	82	262	185	35	159	590	167	95	17,5
US 4" (97,4/101,6)	130	312	185	40	181	660	216	146	29,5

# Double sealing changeover valve DCX3 DE

The operating conditions are given for information. Some combinations of extreme operating conditions are not always suitable. It is highly recommended to ask for advice from our technical department.

## FEATURES

- Non-independent double valve system
- Leakage chamber with indicator preventing any risk of mixing between the lines
- Able to absorb overpressure under the plug
- Spherical body with thick walls guaranteeing excellent resistance to expansion constraints

## SPECIFICATIONS

### DIMENSIONS

- SMS - DIN - US  
from DN 51 (2") to DN 100 (4")

### MATERIALS

- Body: stainless steel 1.4404 / 316L  
 Shut-off unit: stainless steel 1.4404 / 316L  
 Valve seal: EPDM - fluorinated elastomer (FKM) or silicon  
 Actuator: stainless steel 1.4301 / 304

### CONNECTIONS

- | CONNECTION TYPES | STANDARDS               |
|------------------|-------------------------|
| To weld          | SMS - DIN - US standard |
| Threaded         | SMS - DIN               |
| Liner-nut        | SMS - DIN               |
| Clamp            | US standard             |

### OPTION

Washing microvalve that cleans the leakage chamber and the leakage microvalve when the valve is closed (requiring a 2<sup>nd</sup> solenoid valve in the control unit)

### SIGNALLING EQUIPMENT

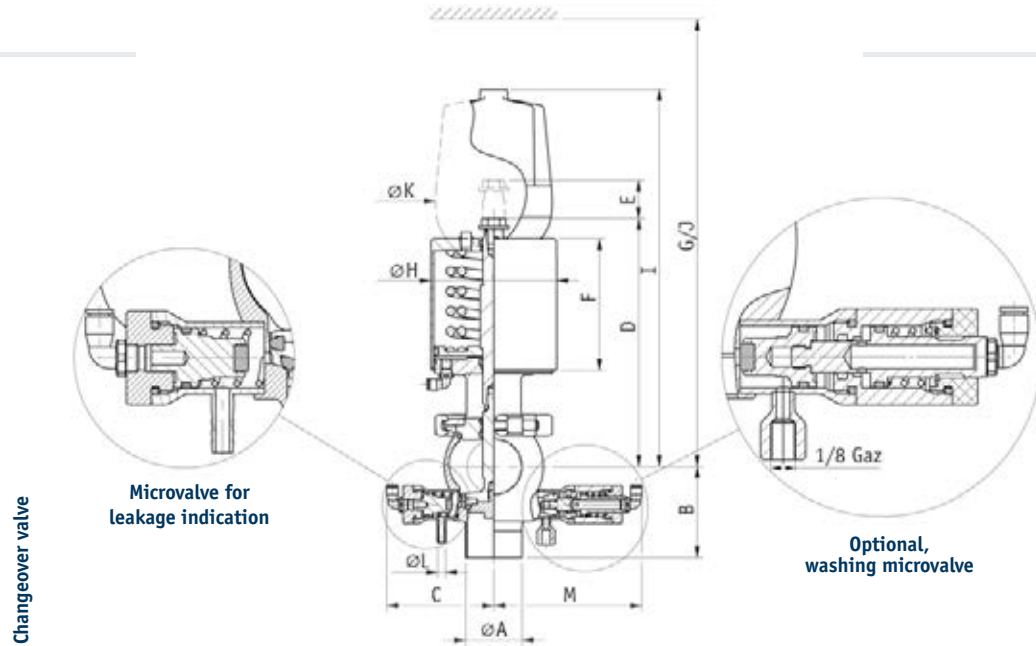
Visible on single or double stainless steel bracket  
 Point-to-point or AS-i control unit  
 ICS (from DN 51 to DN 80)  
 ACS (from DN 51 to DN 104)

### SURFACE CONDITIONS

- RA exterior = 1.2 µm (150 grit)
- RA interior = 0.8 µm (180 grit)

### SERVICE CONDITIONS

- Max. temperature: + 120°C/+ 248°F
- Min. temperature: 0°C/+ 32°F
- Max. working pressure: 8 bar (800 kPa)/116 psi
- Actuator air supply pressure:  
min. 5.5 bar (550 kPa)/80 psi  
max. 8 bar (800 kPa)/116 psi
- Vacuum resistance: 0.3 cm<sup>3</sup>/s



DCX3 DE double sealing



Tube ØA	B	C	D	E (stroke)	F	G (without unit)	ØH	I	J (with unit)	ØK	ØL	M	Weight in kg
SMS 48.5/51	82	97	227	29	123	360	114	377	505	104	8	134	8
SMS 60.3/63.5	105	107	276	35	159	430	167	425	545	104	8	144	17
SMS 72/76	110	113	282	35	159	460	167	432	565	104	8	152	17.5
SMS 100/104	130	127	338	40	181	550	216	485	622	140	8	166	36.5
DIN 50/53	80	97	227	29	123	360	114	377	505	104	8	134	8
DIN 66/70	108	113	279	35	159	460	167	428	565	104	8	152	17.5
DIN 81/85	115	127	288	40	159	470	167	439	575	104	8	166	18
DIN 100/104	130	127	338	40	181	550	216	485	622	140	8	166	37
US 2" (47.5/50.8)	76	97	227	29	123	370	114	377	505	104	8	134	8
US 2"1/2 (60.2/63.5)	76	107	276	35	159	430	167	425	545	104	8	144	17
US 3" (72.9/76.1)	82	113	282	35	159	460	167	432	565	104	8	152	17.5
US 4" (97.4/101.6)	130	127	338	40	181	550	216	485	622	140	8	166	36.5

# DCX3 adjustable relief valve

The operating conditions are given for information. Some combinations of extreme operating conditions are not always suitable. It is highly recommended to ask for advice from our technical department.

## DCX3 relief valve

### FEATURES

- A predefined pressure enables the main circuit to be off-loaded thus protecting certain equipment or circuits
- Actuator with special spring
- Possibility to add additional air thanks to an unit with a single regulator

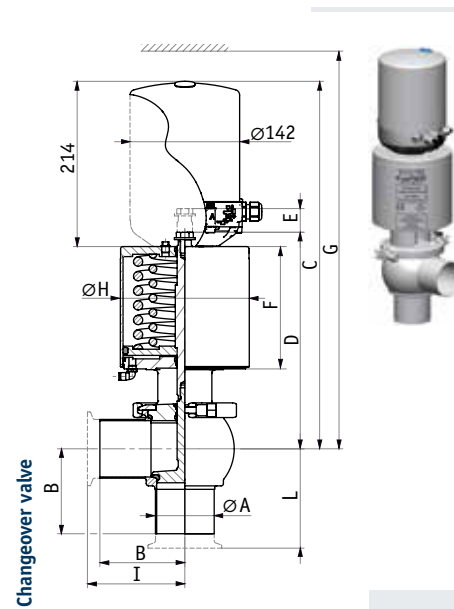
### SPECIFICATIONS

#### DIMENSIONS

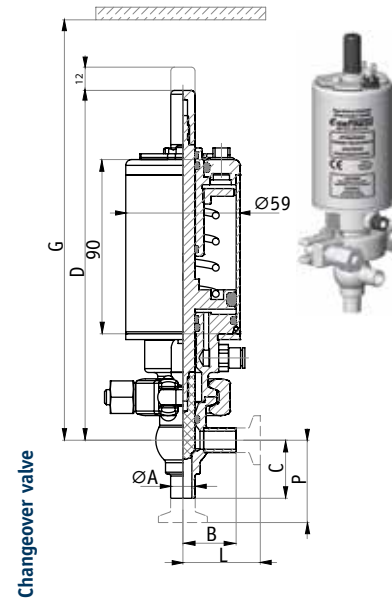
- SMS - DIN - US from DN 25 (1") to DN 100 (4")

#### SERVICE CONDITIONS

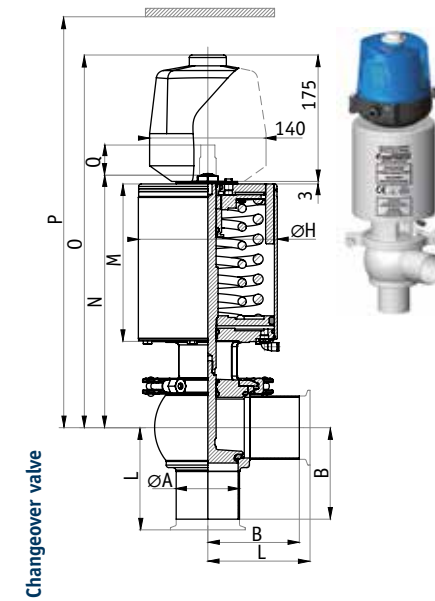
- Max. temperature: + 140°C/+ 284°F
- Min. temperature: - 5°C/+ 23°F
- Max. working pressure: 8 to 12 bar (800 to 1200 kPa)/116 to 174 psi depending on the diameter
- Tolerance for pressure adjustment: ±15 %
- Actuator air supply pressure: min. 5.5 bar (550 kPa)/80 psi max. 8 bar (800 kPa)/116 psi
- Vacuum resistance: 0.4 cm³/s



DCX3 relief valve with additional air



DCX3 fractional mechanical relief valve



DCX3 mechanical relief valve

## DCX3 mechanical relief valve

### FEATURES

- The DCX3 adjustable relief valve combines security and precision thanks to its adjustable system with fine thread.
- A manual adjustment with a standard wrench allows an accurate adjustment.
- Standard or balanced plug
- PFA or elastomer seal
- One or two spring depending on its configuration

### SPECIFICATIONS

#### DIMENSIONS

- SMS - DIN - US DN1/2" and DN3/4" - from DN25 (1") to DN100 (4")

#### SERVICE CONDITIONS

- Max. temperature: + 140°C/+ 284°F
- Min. temperature: - 5°C/+ 23°F
- Max. working pressure: 0,2 to 10 bar (20 to 1000 kPa)/3 to 145 psi depending on the diameter
- Tolerance for pressure adjustment: reduced thanks to its fine thread
- Actuator air supply pressure: min. 5.5 bar (550 kPa)/80 psi max. 8 bar (800 kPa)/116 psi
- Vacuum resistance: 0.4 cm³/s

DIMENSIONS Tube ØA	COMMON DIMENSIONS					RELIEF VALVE ADDITIONAL AIR				MECHANICAL RELIEF VALVE					Weight in Kg	
	B	E (stroke)	F	ØH	L	C	D	G (with unit)	Weight in Kg	M	N	O	P (with unit)	Q		R (with unit)
SMS 22,6/25	55	17	110	89	70	415	193	490	4	109	171	335	482	18	400	6,7
SMS 35,6/38	70	21	110	89	85	422	195	490	4	109	189	355	502	22	420	6,9
SMS 48,5/51	82	29	123	114	97	451	224	520	7	132	228	369	512	30	430	9,7
SMS 60,3/63,5	105	35	159	167	125	501	276	590	16	190	298	464	612	37	530	18,5
SMS 72/76	110	35	159	167	130	507	281	600	16	190	304	467	612	37	530	18,5
SMS 100/104	130	40	181	216	155	557	333	750	28	217	361	526	672	40	590	38,4
DIN 26/29	55	17	110	89	-	415	192	490	4	109	170	335	482	18	400	6,7
DIN 32/35	55	17	110	89	-	420	197	490	4	109	191	353	502	18	420	6,9
DIN 38/41	70	21	110	89	-	422	195	490	4	109	189	355	502	22	420	6,9
DIN 50/53	80	29	123	114	-	451	224	520	7	132	228	369	512	30	430	9,7
DIN 66/70	108	35	159	167	-	503	277	590	16	190	299	466	612	37	530	18,5
DIN 81/85	115	40	159	167	-	548	288	610	27	190	311	512	622	40	540	37,4
DIN 100/104	130	40	181	216	-	557	333	750	28	217	361	526	672	40	590	38,4
US 1" (22,1/25,4)	51	17	110	89	64	415	192	490	4	109	170	335	482	18	400	6,7
US 1 1/2 (34,8/38,1)	57	21	110	89	70	422	195	500	4	109	189	355	502	22	420	6,9
US 2" (47,5/50,8)	76	29	123	114	89	451	224	520	7	132	228	369	512	30	430	9,7
US 2 1/2 (60,2/63,5)	76	35	159	167	89	501	276	590	16	190	298	464	612	37	530	18,5
US 3" (72,9/76,1)	82	35	159	167	95	507	281	600	16	190	304	467	612	37	530	18,5
US 4" (97,4/101,6)	130	40	181	216	146	557	333	750	28	217	361	526	672	40	590	38,4

DIMENSIONS Tube ØA	DCX3 FRACTIONAL MECHANICAL VALVE						
	B	C	D	G	L	P	Weight in Kg
US 1/2" (9,4/12,7)	27,5	30	192	215	40	42,5	1,7
US 3/4" (15,75/19,05)	29	35	195	220	41,5	47,5	1,7

# Tank bottom changeover valves DCX3 FdC

The operating conditions are given for information. Some combinations of extreme operating conditions are not always suitable. It is highly recommended to ask for advice from our technical department.



## FEATURES

- Body and plug shape provide the tightest seal to the tank wall without retention area
- Same features as standard DCX3 (floating seal - thick body, etc...)
- Two versions: raising or lowering plug

## SPECIFICATIONS

### DIMENSIONS

- SMS - DIN - US  
from DN 25 (1") to DN 100 (4")

### MATERIALS

- Body: stainless steel 1.4404 / 316L
- Shut-off unit: stainless steel 1.4404 / 316L
- Flange: stainless steel 1.4404 / 316L
- Plug seal: PFA
- Body seal: EPDM - fluorinated elastomer (FKM) or silicon
- Actuator: stainless steel 1.4301 / 304

### CONNECTIONS

- On tank with special welded flange

### OPTION

- Long stroke actuator for complete disengagement of the plug (recommended for fragile or inconsistent products)

### SIGNALLING EQUIPMENT

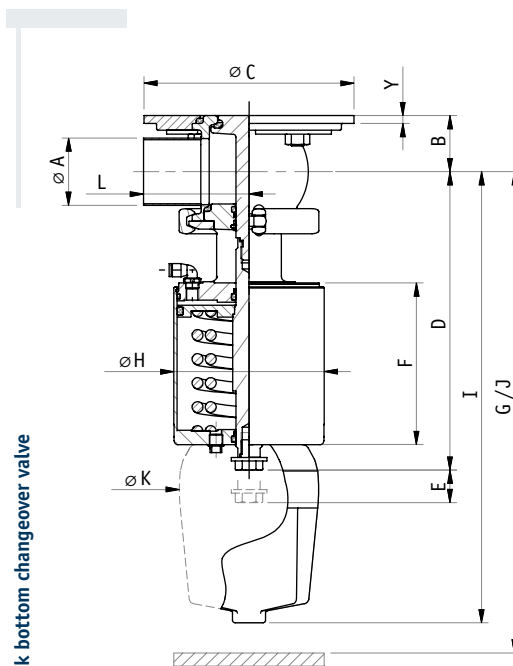
- Visible on single or double stainless steel bracket
- Point-to-point or AS-i control unit
- ICS (from DN 25 to DN 76)
- ACS (from DN 25 to DN 104)

### SURFACE CONDITIONS

- RA exterior = 1.2 µm (150 grit)
- RA interior = 0.8 µm (180 grit)

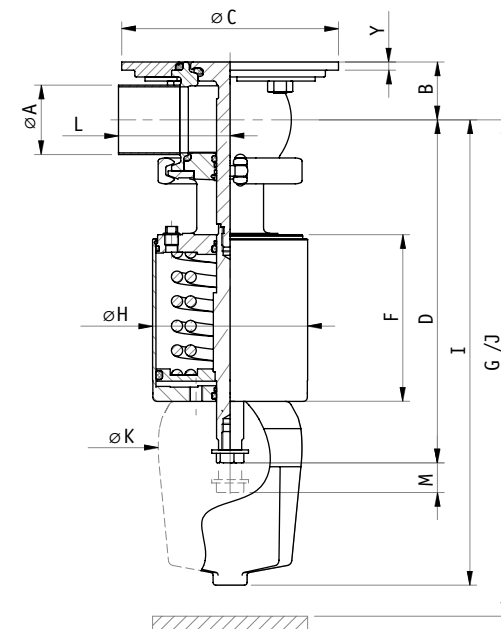
### SERVICE CONDITIONS

- Max. temperature: + 140°C/+ 284°F
- Min. temperature: - 5°C/+ 23°F
- Max. working pressure: 7 bar (700 kPa)/102 psi
- Actuator air supply pressure:  
min. 5.5 bar (550 kPa)/80 psi  
max. 8 bar (800 kPa)/116 psi
- Vacuum resistance: 0.4 cm³/s



Tank bottom changeover valve

DCX3 FdC lowering plug



DCX3 FdC raising plug



Tube ØA	B	ØC	D	E	F	G	ØH	I	J	ØK	L	M	Y	Weight in Kg
				(lowering plug stroke)		(without unit)			(with unit)			(raising plug stroke)		
SMS 22,6/25	29,5	139	189	23,5	109,5	300	89	355	485	104	55	21	6	4,5
SMS 35,6/38	35	139	193,5	25,5	109,5	320	89	362	485	104	70	21	6	5
SMS 48,5/51	42,5	159	226	29,5	123	360	114	391	505	104	82	19,5	6	8,5
SMS 60,3/63,5	48,5	189	275,5	35	159	420	167	441	555	104	105	20,5	6	15
SMS 72/76	55	189	282	35	159	450	167	447	565	104	110	20	6	15,4
SMS 100/104	75	249	337	40	181	600	216	484	722	140	130	20	10	47
DIN 26/29	30,5	139	191,5	22,5	109,5	300	89	355	485	104	55	20,5	6	4,5
DIN 32/35	33,5	139	192	25,5	109,5	300	89	360	485	104	55	28	6	4,7
DIN 38/41	36	139	194	26	109,5	300	89	362	485	104	70	28	6	5,2
DIN 50/53	42,5	159	226	29,5	123	360	114	391	505	104	80	28	6	8,4
DIN 66/70	52	189	279	34,5	159	460	167	443	565	104	108	35	6	15
DIN 81/85	69	249	328	40	181	510	217	454	575	140	115	34,5	10	43
DIN 100/104	75	249	337	40	181	600	216	484	722	140	130	34,5	10	47
US 1" (22,1/25,4)	29,5	139	189	23,5	109,5	300	89	355	485	104	51	35	6	4,5
US 1 1/2 (34,8/38,1)	35	139	193,5	25,5	109,5	320	89	362	485	104	57	35	6	5
US 2" (47,5/50,8)	42,5	159	226	29,5	123	360	114	391	505	104	76	39,5	6	8,5
US 2 1/2 (60,2/63,5)	48,5	189	275,5	35	159	420	167	441	555	104	76	39,5	6	15
US 3" (72,9/76,1)	55	189	282	35	159	450	167	447	565	104	82	39,5	6	15,4
US 4" (97,4/101,6)	75	249	337	40	181	600	216	484	722	140	130	39,5	10	47

# Tank bottom mixproof valve VDCI MC FdC

The operating conditions are given for information. Some combinations of extreme operating conditions are not always suitable. It is highly recommended to ask for advice from our technical department.

## FEATURES

- Isolates the tank from the rest of the process circuit
- Body and plug shape provide the tightest seal to the tank wall, without retention area
- Same features as VDCI MC (floating seal - thick body, etc...)
- Leakage chamber washed by pulsing the lower plug
- The leak can be viewed thanks to a controlled microvalve
- Leak free opening

## SPECIFICATIONS

### DIMENSIONS

- SMS - DIN - US  
from DN 51 (2") to DN 100 (4")

### MATERIALS

- Body: stainless steel 1.4404 / 316L
- Shut-off unit: stainless steel 1.4404 / 316L
- Plug seal: PFA
- Other seals: EPDM - fluorinated elastomer (FKM)
- Actuator: stainless steel 1.4301 / 304

### CONNECTIONS

- On tank with special welded flange

### OPTION

- Steam bearing stem
- Second microvalve to clean the leakage chamber without activating the plugs

### SIGNALLING EQUIPMENT

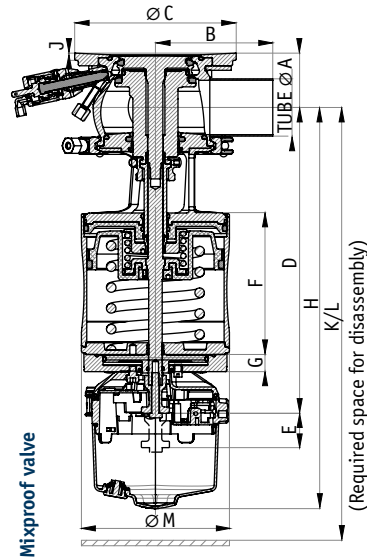
- ACS control top can be adapted

### SURFACE CONDITIONS

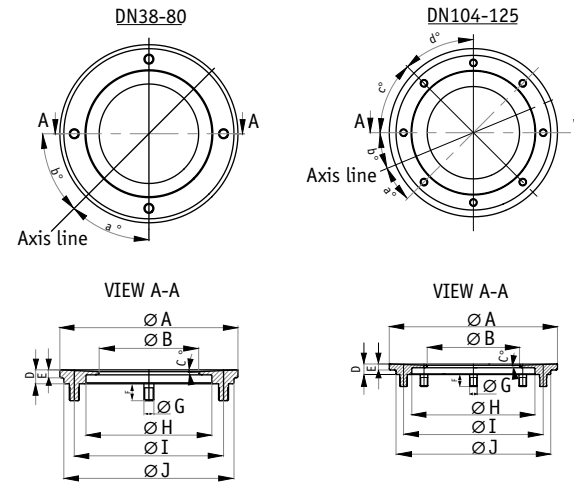
- RA exterior = 1.2 µm (150 grit)
- RA interior = 0.8 µm (180 grit)

### SERVICE CONDITIONS

- Max. temperature: + 140°C/+ 284°F
- Temperature differential between the upper line and the lower line: max. + 90°C/+ 194°F
- Min. temperature: - 5°C/+ 23°F
- Max. working pressure permissible in the tank: 4 bar (400 kPa)/58 psi
- Max. working pressure in the valve: 7 bar (700 kPa)/102 psi
- Actuator air supply pressure: 5.5 to 7 bars (500 to 700 kPa)/80 to 102 psi with ACS control top  
Up to 8 bars (800 kPa)/116 psi with direct supply, according to the conditions of operation
- Vacuum resistance: 0.4 cm<sup>3</sup>/s



VDCI MC FdC tank bottom



## Valve VDCI MC FdC

DN	Tube ØA	B	ØC	D	E (stroke)	F	G	H	I	J	K (without unit)	L (with unit)	ØM	Weight in Kg*
SMS 38	38 x 1,2	88	149	294	33	127	19,5	423	53	8,5	351	473	128	10
SMS 51	51 x 1,25	105	149	294	34	127	19,5	424	53	8,5	392	514	128	10
SMS 63	63,5 x 1,6	130	179	339	39	157	19	468	61	8	490	612	164	21
SMS 76	76,1 x 1,6	130	179	346	38	157	19	475	66	8	501	623	164	21,5
SMS 104	104 x 2	155	224	425	60	196	19	553	81	8	658	780	218	42
DIN 40	40 x 1	105	149	294	34	127	19,5	424	53	8,5	352	474	128	10
DIN 50	53 x 1,5	105	149	294	34	127	19,5	424	53	8,5	392	514	128	10
DIN 65	70 x 2	130	179	342	39	157	19	471	63	8	485	607	164	21,5
DIN 80	85 x 2	155	179	350	39	157	19	479	71	8	527	649	164	22
DIN 100	104 x 2	155	224	425	60	196	19	553	81	8	658	780	218	42
DIN 125	129 x 2	200	224	437	60	196	19	565	93	8	724	846	218	44
US 2"	50,8 x 1,65	105	149	293	33	127	19,5	423	53	8,5	391	513	128	11
US 2" 1/2	63,5 x 1,65	130	179	339	39	157	19	468	61	8	490	612	164	21
US 3"	76,1 x 1,6	130	179	346	38	157	19	475	66	8	501	623	164	21,5
US 4"	101,6 x 2,1	155	224	423	60	196	19	552	82	8	657	779	218	42

\*without unit

## Flanges VDCI MC FdC

DN	a°	b°	c°	d°	ØA	ØB	C°	D	E	F	ØG	ØH	ØI	ØJ
SMS 38-51	45°	45°	/	/	149	79	6,25°	12,5	8,5	12	M8	99	112	130
SMS 63-76	45°	45°	/	/	179	100	2,75°	14	8	17	M10	126,5	150	171
SMS 104	22,5°	22,5°	45°	45°	224	123	2°	14	8	16	M10	164	186	206
DIN 40-50	45°	45°	/	/	149	79	6,25°	12,5	8,5	12	M8	99	112	130
DIN 65-80	45°	45°	/	/	179	100	2,75°	14	8	17	M10	126,5	150	171
DIN 125	22,5°	22,5°	45°	45°	224	123	2°	14	8	16	M10	164	186	206
US 2"	45°	45°	/	/	149	79	6,25°	12,5	8,5	12	M8	99	112	130
US 2" 1/2 - 3"	45°	45°	/	/	179	100	2,75°	14	8	17	M10	126,5	150	171
US 4"	22,5°	22,5°	45°	45°	224	123	2°	14	8	16	M10	164	186	206



# Mixproof valve VDCI MC PFA

The operating conditions are given for information. Some combinations of extreme operating conditions are not always suitable. It is highly recommended to ask for advice from our technical department.

## FEATURES

- Standard solid machined compact actuator for all versions
- Reduced disassembly and assembly times for the actuator
- Plugs can be removed from the lantern making maintenance much easier
- Volume machined body with a new profile guaranteeing excellent resistance against mechanical and thermal damage
- Counter Balance offering good resistance against pressure hammer
- Improved cleaning of the leakage chamber thanks to the internal plug which has floating seals for easy cleaning and are extremely resistant to chemical attack
- Leak indicator showing any fault in the sealing point between the plugs
- High level of modularity for all options and versions
- Option to accurately detect the movement of each independent plug with our new generation ACS control unit

## SPECIFICATIONS

### DIMENSIONS

- SMS - DIN - US from DN 38 (1" 1/2) to DN 125 (5")

### MATERIALS

- Body: stainless steel 1.4404 / 316L  
 Shut-off unit: stainless steel 1.4404 / 316L  
 Plug seal: PFA  
 Other seals: EPDM - fluorinated elastomer (FKM)  
 Actuator: stainless steel 1.4301 / 304

### CONNECTIONS

- | CONNECTION TYPES | STANDARDS               |
|------------------|-------------------------|
| Welded           | SMS - DIN - US standard |
| Threaded         | SMS - DIN               |
| Liner-nut        | SMS - DIN               |
| Clamp            | US standard             |

### OPTION

Sterilisation of the stem and counter balancer by the upper and lower bearings

### SIGNALLING EQUIPMENT

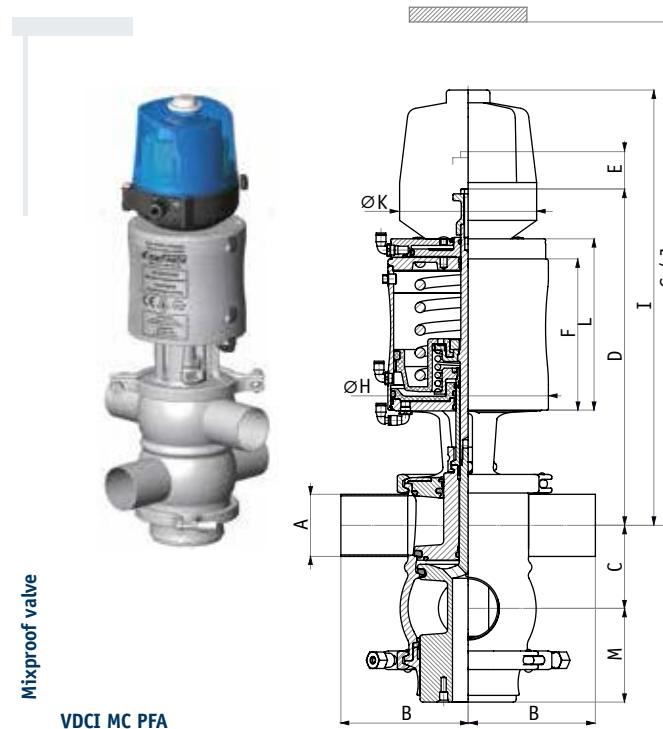
- Visible on single or double stainless steel bracket
- Point-to-point or AS-i control unit
- ACS (from DN 25 to DN 125)
- Option: lantern detector for breakaway of the upper plug

### SURFACE CONDITIONS

- RA exterior = 1.2 µm (150 grit)
- Interior RA = 0.8 µm (180 grit)

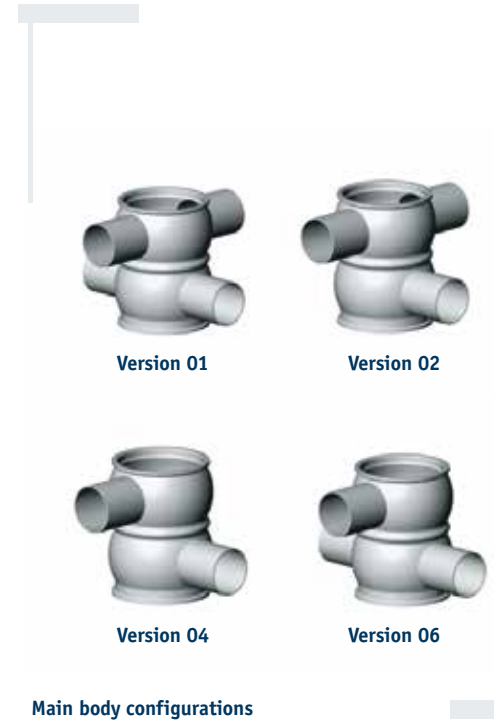
### SERVICE CONDITIONS

- Operating temperature: - 5 to + 130°C/+ 23°F to + 266°F
- Sterilisation temperature: + 140°C/+ 284°F
- Max. working pressure: 9 bar (131 psi) (900 kPa) Except during the cleaning 7 bar (700 kPa)/102 psi
- Actuator air supply pressure: 5.5 to 7 bar (500 to 700 kPa)/80 to 102 psi with the ACS unit up to 8 bar (800 kPa)/116 psi with direct supply



Mixproof valve

VDCI MC PFA



Main body configurations

Other configurations available on request

Tube ØA	B	C	D	E (stroke)	F	G (without unit)	ØH	I	J (with unit)	ØK	L	M	Weight in kg
SMS 35.6/38	105	55	279	26	126	329	128	401	451	140	145	80	14.5
SMS 48.5/51	105	70	287	35	126	377	128	409	499	140	145	88	28.5
SMS 60.3/63.5	130	85	333	45	156	477	164	455	599	140	175	103	30
SMS 72/76	130	95	340	45	156	488	164	462	610	140	175	110	61.5
SMS 100/104	155	125	418	62	196	645	218	530	767	140	215	141	14.5
DIN 38/41	105	60	280	26	126	330	128	402	452	140	145	81	15
DIN 50/53	105	70	287	35	126	377	128	409	499	140	145	88	29
DIN 66/70	130	90	337	45	156	473	164	459	595	140	175	106	31
DIN 81/85	155	110	344	45	156	514	164	466	636	140	175	113	62
DIN 100/104	155	125	418	62	196	645	218	530	767	140	215	141	67
DIN 125/129	200	155	431	62	196	712	218	553	834	140	215	152	14.5
US 1" 1/2 (34.8/38.1)	105	55	280	26	126	330	128	402	452	140	145	80	15
US 2" (47.5/50.8)	105	70	287	35	126	377	128	409	499	140	145	88	28.5
US 2" 1/2 (60.2/63.5)	130	85	333	45	156	477	164	455	599	140	175	103	30
US 3" (72.9/76.1)	130	95	340	45	156	488	164	462	610	140	175	110	61.5
US 4" (97.4/101.6)	155	125	418	62	196	645	218	530	767	140	215	141	62



# Mixproof valves VDCI MC SP-C/PMO-C

The operating conditions are given for information. Some combinations of extreme operating conditions are not always suitable. It is highly recommended to ask for advice from our technical department.

## FEATURES

- Versions based on the same model as VDCI MC PFA
- **VDCI MC SP-C** leak-free opening: Sliding plug seal guaranteeing complete tightness and avoiding product loss on opening
- **VDCI MC PMO-C** "Pasteurized Milk Ordinance": leakage section identical to that used in the tubular process

## SPECIFICATIONS

### DIMENSIONS

- SMS - DIN - US  
from DN 38 (1" 1/2) to DN 125 (5")

### MATERIALS

- Body: stainless steel 1.4404 / 316L
- Shut-off unit: stainless steel 1.4404 / 316L
- Plug seal: EPDM - fluorinated elastomer (FKM)
- Valve seal: EPDM - fluorinated elastomer (FKM)
- Actuator: stainless steel 1.4301 / 304

### CONNECTIONS

- |                  |                         |
|------------------|-------------------------|
| CONNECTION TYPES | STANDARDS               |
| To weld          | SMS - DIN - US standard |
| Threaded         | SMS - DIN               |
| Liner-nut        | SMS - DIN               |
| Clamp            | US standard             |

### OPTION

Sterilisation of the stem and counter balancer by the upper and lower bearings

### SIGNALLING EQUIPMENT

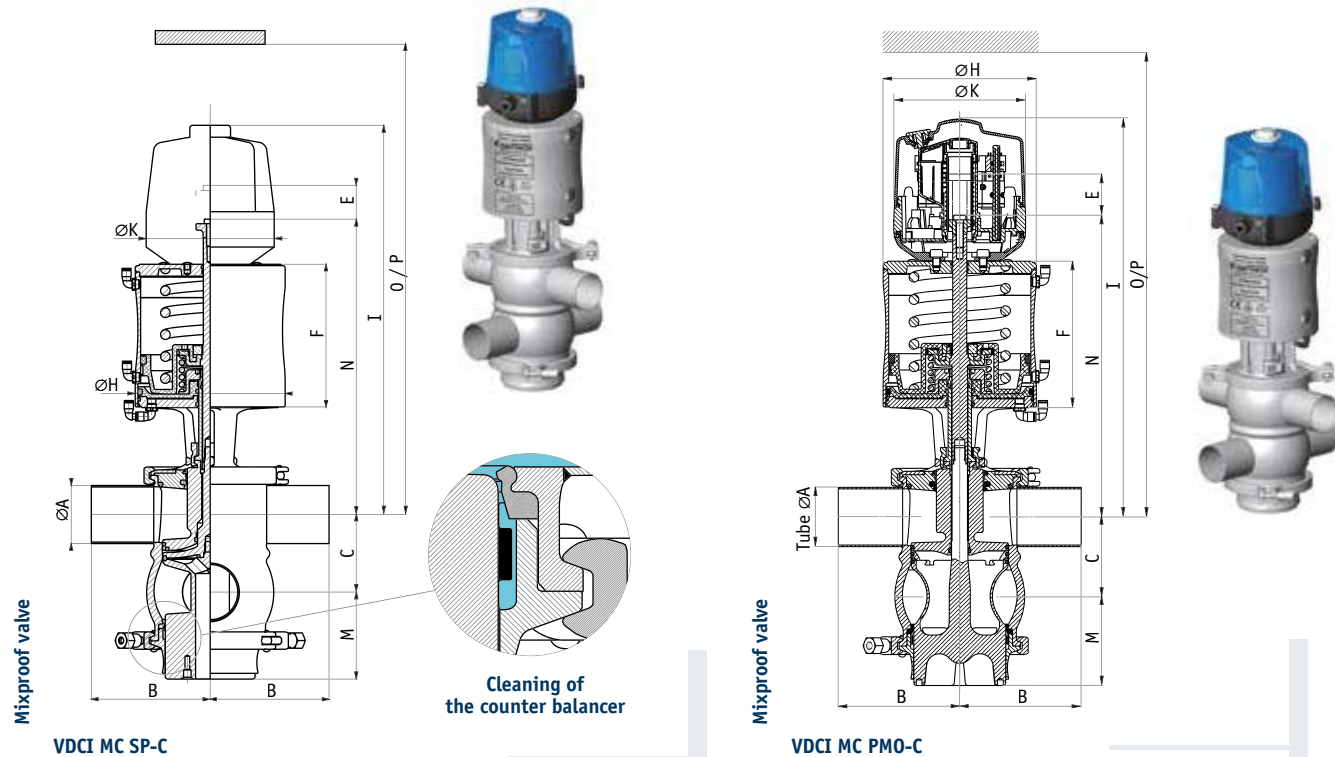
Visible on single or double stainless steel bracket  
Point-to-point or AS-i control unit  
ACS (from DN 25 to DN 125)  
Option: lantern detector for breakaway of the upper plug

### SURFACE CONDITIONS

- RA exterior = 1.2 µm (150 grit)
- RA interior = 0.8 µm (180 grit)

### SERVICE CONDITIONS

- Operating temperature: - 5 to + 120°C/+ 23°F to + 248°F
- Sterilisation temperature: + 130°C/+ 266°F
- Max. working pressure: 9 bar (900 kPa)/131 psi  
Except during the cleaning  
7 bar (700 kPa)/102 psi
- Actuator air supply pressure:  
5.5 to 7 bar (500 to 700 kPa)/80 to 102 psi  
with the ACS unit  
up to 8 bar(800 kPa)/116 psi  
with direct supply



Tube ØA	B	C	D	E (stroke)	F	ØH	I	ØK	L	M	N	O		P		Weight in Kg	
												(without unit)	(with unit)	SP-C	PMO-C		
SMS 35.6/38	105	55	279	26	126	128	401	140	145	80	275	325	477	13	-	-	-
SMS 48.5/51	105	70	287	35	126	128	409	140	145	88	282	372	494	13.5	-	-	-
SMS 60.3/63.5	130	85	333	45	156	164	455	140	175	103	323	449	571	25.5	-	-	-
SMS 72/76	130	95	340	45	156	164	462	140	175	110	588	480	602	27.5	-	-	-
SMS 100/104	155	125	418	62	196	218	530	140	215	141	408	635	755	59	-	-	-
DIN 38/41	105	60	280	26	126	128	402	140	145	81	276	333	455	13	-	-	-
DIN 50/53	105	70	287	35	126	128	409	140	145	88	283	373	495	13.5	-	-	-
DIN 66/70	130	90	337	45	156	164	459	140	175	106	326	463	585	26.5	-	-	-
DIN 81/85	155	110	344	45	156	164	466	140	175	113	333	505	627	28	-	-	-
DIN 100/104	155	125	418	62	196	218	530	140	215	141	408	635	757	59	-	-	-
DIN 125/129	200	155	431	62	196	218	553	140	215	152	421	703	825	63	-	-	-
US 1"1/2 (34.8/38.1)	105	55	280	26	126	128	402	140	145	80	275	325	477	13	12.5	-	-
US 2" (47.5/50.8)	105	70	287	35	126	128	409	140	145	88	282	372	494	13.5	13	-	-
US 2"1/2 (60.2/63.5)	130	85	333	45	156	164	455	140	175	103	323	449	571	26	24	-	-
US 3" (72.9/76.1)	130	95	340	45	156	164	462	140	175	110	330	480	602	27.5	24.5	-	-
US 4" (97.4/101.6)	155	125	418	62	196	218	530	140	215	141	408	635	755	59	53.5	-	-



# Ball valves DBX - DBAX

The operating conditions are given for information. Some combinations of extreme operating conditions are not always suitable. It is highly recommended to ask for advice from our technical department.

## FEATURES

- Valves used for auxiliary circuits
- Available with full or reduced port

## SPECIFICATIONS

### DIMENSIONS

- Full port from DN8 to DN50
- Reduced port from DN 15 to DN 65

### MATERIALS

Stainless steel 1.4404 / 316L and PTFE

### CONNECTIONS

CONNECTION TYPES      STANDARDS  
To weld                      ISO - SMS - DIN

### OPERATING DEVICES

#### MANUAL - DBX

Right or left opening standard handle

#### AUTOMATIC - DBAX

Fitted with pneumatic DPAX butterfly valve actuator

### SIGNALLING EQUIPMENT

Visible on single or double stainless steel bracket

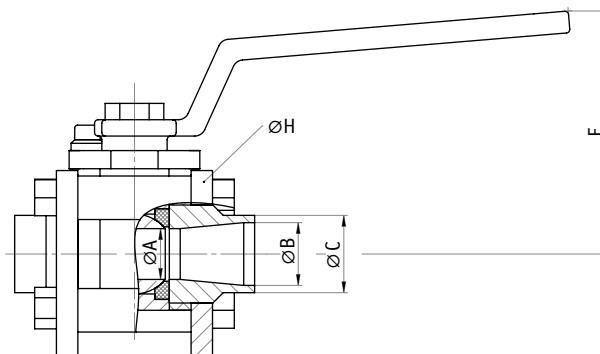
Point-to-point or AS-i control unit

ICS (from DN 8 to DN 65)

ACS (from DN 8 to DN 65)

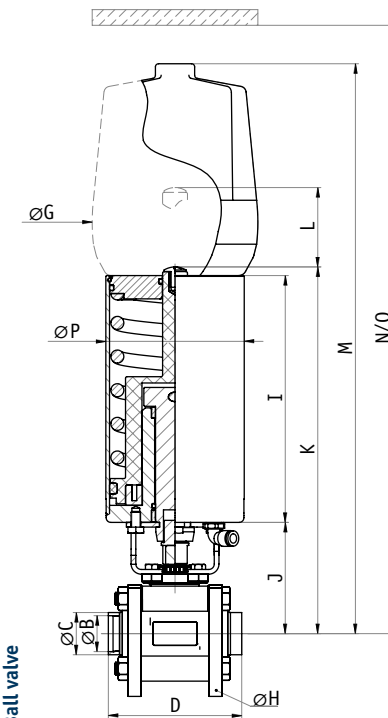
### SERVICE CONDITIONS

- Max. temperature: +160°C/+ 320°F
- Min. temperature: - 30°C/- 22°F
- Max. working pressure: 20 bar (2000 kPa)/290 psi
- Actuator air supply pressure: min. 5.5 bar (550 kPa)/80 psi max. 8 bar (800 kPa)/116 psi



Ball valve

DBX manual



Ball valve

DBAX automatic

Full port Ø ISO	ØA	ØB	ØC	D	E	F	ØG	ØH	I	J	K	L (stroke)	M (without unit)	N (with unit)	O (with unit)	ØP	Weight in Kg	
																	DBX	DBAX
Ø8	11.1	9.5	13.5	65	70	120	104	56	157	58	221	49	385	290	415	89	0.7	4.1
Ø12	11.1	13.2	17.2	65	70	120	104	56	157	58	221	49	385	290	415	89	0.7	4.1
Ø15	14	17.3	21.3	70	73	120	104	63	157	61	224	49	388	293	418	89	0.8	4.2
Ø20	19	22.9	26.9	85	91	160	104	80	157	71	234	49	398	303	428	89	1.6	5
Ø25	25	29.7	33.7	100	95	160	104	88	157	75	238	49	402	397	432	89	2.1	5.5
Ø32	32	37.2	42.4	110	111	190	104	104	157	93	256	49	420	325	450	89	3.3	6.7
Ø40	38	43.1	48.3	125	116	190	104	117	157	98	261	49	425	330	455	89	4.3	7.7
Ø50	50	54.5	60.3	150	137	230	104	148	174	119	282	51	446	353	476	114	8.7	12.1
<b>Reduced port Ø ISO</b>																		
Ø15	11.1	17.3	21.3	65	70	120	104	56	157	58	221	49	385	290	415	89	0.7	4.1
Ø20	14	22.9	26.9	70	73	120	104	63	157	61	224	49	388	293	418	89	0.8	4.2
Ø25	19	29.7	33.7	85	91	160	104	80	157	71	234	49	398	303	428	89	1.6	5
Ø32	25	37.2	42.4	100	95	160	104	88	157	75	238	49	402	307	432	89	2.1	5.5
Ø40	32	43.1	48.3	110	111	190	104	104	157	93	256	49	420	325	450	89	3.1	6.5
Ø50	38	54.5	60.3	125	116	190	104	117	157	98	261	49	425	330	455	89	4.3	7.7
Ø65	50	70.3	76.1	150	137	230	104	148	174	119	282	51	446	353	476	114	8.6	12

The operating conditions are given for information. Some combinations of extreme operating conditions are not always suitable. It is highly recommended to ask for advice from our technical department.

## NON-RETURN VALVE

- Non-return valve with full bore
- Quick disassembly using a SMS type nut

## SPECIFICATIONS

### DIMENSIONS

- SMS - DIN - US
- from DN 1/2" to DN 125 (5")

### MATERIALS

- Body - plug - spring: stainless steel 1.4404 / 316L
- Plug seal: PFA
- Seal: fluorinated elastomer (FKM) - EPDM - PFA

### CONNECTIONS

- TYPES OF CONNECTION STANDARD
- Welded SMS - DIN - US standard
- Threaded SMS - DIN
- Liner-nut SMS - DIN
- Clamp US standard

### OPTION

- Metal/metal tightness (requiring pairing)

### SERVICE CONDITIONS

- Max. temperature: +120°C/+248°F
- Min. temperature: 0°C/+32°F
- Max. working pressure: 10 bar (1000 kPa)/145 psi
- Counterpressure: 90 mbar

## PRESSURE VACUUM VALVE

- Manual forced opening device for 4" version

## SPECIFICATIONS

### DIMENSIONS

- CLAMP DN 2" and 2 1/2"
- CLAMP DN 4"

### MATERIALS

- Valve: stainless steel 1.4404 / 316L
- Pressure plug: PTFE
- Seal: fluorinated elastomer (FKM) - silicon

### CONNECTIONS

- Clamp

### SERVICE CONDITIONS

- Max. temperature: +80°C/+176°F
- Min. temperature: 0°C/+32°F
- Vacuum: 30 mbar
- Pressure: 0.2 to 2 bar/3 to 29 psi depending on spring

## PRESSURE RELIEF VALVE

- Easy disassembly using a SMS type nut
- Sealing option for a pre-established setting

## SPECIFICATIONS

### DIMENSIONS

- DN 1" 1/2 and 2"

### MATERIALS

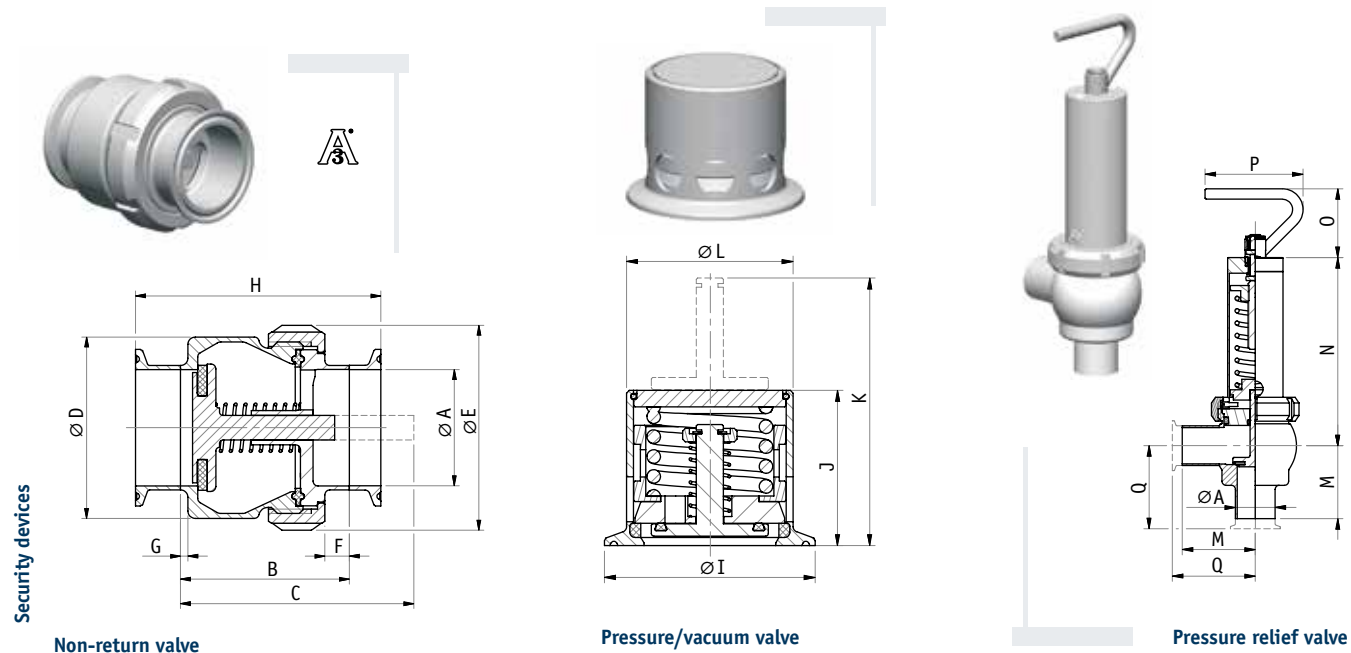
- Body and plug: stainless steel 1.4404 / 316L
- Seal: fluorinated elastomer (FKM) - EPDM
- Adjusting device: stainless steel 1.4301 / 304

### CONNECTIONS

- Welded SMS - DIN - US standard

### SERVICE CONDITIONS

- Max. temperature: +120°C/+248°F
- Min. temperature: 0°C/+32°F
- Adjustment range: 0 to 13 bar (1300 kPa)/0 to 189 psi



TUBE ØA	NON-RETURN VALVE							PRESSURE/VACUUM VALVE				PRESSURE RELIEF VALVE							
	B	C (release)	ØD	ØE	F	G	H	Weight in kg	ØI	J	K	ØL	Weight in kg	M	N	O	P	Q	Weight in kg
SMS 22,6/25	74,5	107	59,5	70	13	9	100,5	0,65	-	-	-	-	-	-	-	-	-	-	-
SMS 30/32	70,5	107	59,5	70	9	9	96,5	0,55	-	-	-	-	-	-	-	-	-	-	-
SMS 35,6/38	70,5	107	59,5	70	9	9	96,5	0,82	-	-	-	-	-	-	-	-	-	-	-
SMS 48,5/51	74,5	115	74	84	10	9	100,5	1,1	-	-	-	-	-	-	-	-	-	-	-
SMS 60,3/63,5	108,5	158	110	114	14	10	134,5	2,66	-	-	-	-	-	-	-	-	-	-	-
SMS 72/76	104,5	158	110	114	10	10	130,5	2,31	-	-	-	-	-	-	-	-	-	-	-
SMS 100/104	123,5	201	148	148	11	11	154,5	4,4	-	-	-	-	-	-	-	-	-	-	-
DIN 26/29	74,5	107	59,5	70	13	9	100,5	0,6	-	-	-	-	-	-	-	-	-	-	-
DIN 32/35	70,7	107	59,5	70	9	9	96,7	0,8	-	-	-	-	-	-	-	-	-	-	-
DIN 38/41	65,5	102	59,5	70	9	9	91,5	1	-	-	-	-	-	-	-	-	-	-	-
DIN 50/53	74,5	115	74	84	10	9	100,5	1,05	-	-	-	-	-	-	-	-	-	-	-
DIN 66/70	104,5	158	110	114	10	10	130,5	2,63	-	-	-	-	-	-	-	-	-	-	-
DIN 81/85	127,5	201	148	148	15	11	153,5	3,82	-	-	-	-	-	-	-	-	-	-	-
DIN 100/104	123,5	201	148	148	11	11	154,5	4,4	-	-	-	-	-	-	-	-	-	-	-
DIN 125/129	141,5	229	178	178	9	11	172,5	5,6	-	-	-	-	-	-	-	-	-	-	-
US 1/2" (9,4/12,7)	48,5	71	40	49,5	6	5	74,5	0,3	-	-	-	-	-	-	-	-	-	-	-
US 3/4" (15,75/19,05)	48,5	71	40	49,5	6	5	74,5	0,3	-	-	-	-	-	-	-	-	-	-	-
US 1" (22,1/25,4)	74,5	107	59,5	70	13	9	100,5	0,65	-	-	-	-	-	-	-	-	-	-	-
US 1 1/2 (34,8/38,1)	70,5	107	59,5	70	9	9	96,5	0,82	-	-	-	-	-	70	180	65	100	85	2,7
US 2" (47,5/50,8)	74,5	115	74	84	10	9	100,5	1,1	64	70	112	61	0,6	82	250	65	100	97	3,9
US 2 1/2 (60,2/63,5)	108,5	158	110	114	14	10	134,5	2,66	77,5	57	99	61	0,55	-	-	-	-	-	-
US 3" (72,9/76,1)	104,5	158	110	114	10	10	130,5	2,31	-	-	-	-	-	-	-	-	-	-	-
US 4" (97,4/101,6)	123,5	201	148	148	11	11	154,5	4,43	119	151	270	119	4,1	-	-	-	-	-	-

# ACS – ICS control units

The operating conditions are given for information. Some combinations of extreme operating conditions are not always suitable. It is highly recommended to ask for advice from our technical department.



## FEATURES

### OPTIMISED APPLICATION

- A modular design
- Easy handling
- A user-friendly interface
- Quick-fitting electric and pneumatic connections

### ADDITIONAL FUNCTIONS

- A relief valve
- Optional linear sensor to detect plug operations
- Various electronic modules
- Easy assembly and disassembly
- Remote view to indicate the status of the valve

### NEWS

- Simplified air circuit
- Threaded pneumatic connections on the base of the control top

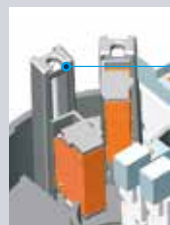
### 2 RANGES FOR ALL TYPES OF VALVES

#### ■ ACS (Advanced Control System)

The ACS control top covers:  
 DPAX range of butterfly valve from DN 25 to DN 150  
 DCX range of changeover valve from DN 25 to DN 150  
 DMX range of diaphragm valve from DN 25 to DN 50  
 VDCI MC range of mixproof valve from DN 38 to DN 150

#### ■ ICS (Integrated Control System)

The ICS control top covers:  
 DPAX range of butterfly valve from DN 25 to DN 150  
 DCX range of changeover valve from DN 10 to DN 80  
 DMX range of diaphragm valve from DN 25 to DN 50



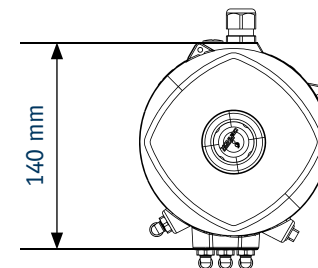
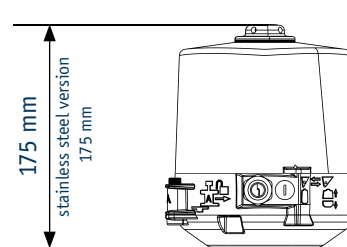
TOR sensors



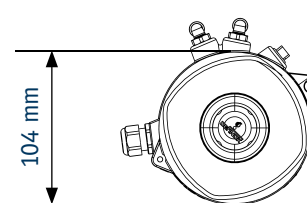
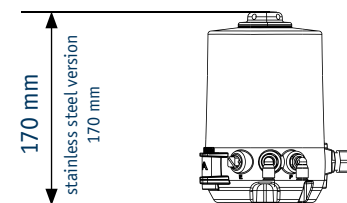
Linear sensor

Accurate detection

Unit  
**ACS**

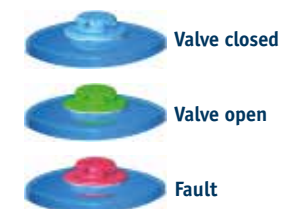


Unit  
**ICS**



For choice

SPECIFICATIONS	ACS unit	ICS unit
Stainless steel cover	Yes, optional	Yes, optional
Relief valve	Yes	Yes
Point-to-point connections	24-48V AC/DC	24-48V AC/DC
Multi-voltage modules	PNP/NPN retro data	PNP/NPN retro data
AS-i connections	AS-i 2.1 or AS-i 2.0	AS-i 2.1 or AS-i 2.0
Sensors	2 TOR sensors with fine adjustment or 1 linear sensor	2 TOR sensors
Linear sensor	Resolution 0.2 mm Manual calibration Stroke 80 mm	No
External sensor	Yes	No
Electrical consumption (1 SV and 1 sensor activated)	< 100 mA for AS-i < 80 mA for 24V DC	< 100 mA for AS-i < 80 mA for 24V DC
Solenoid valves	1 to 3 SV 3/2 or 1 SV 5/2 (24V DC)	1 SV 3/2 (24V DC)
Pneumatic functions	NC - NO and DA	NC - NO
Pneumatic connections	Quick 4/6	Quick 4/6
Air quality	Dry air filtered to 10µm 500 to 700 kPa (5 to 7 bar)	Dry air filtered to 10µm 500 to 700 kPa (5 to 7 bar)
Operating temperature	0°C/+ 32°F to + 70°C/+ 158°F	0°C/+ 32°F to + 70°C/+ 158°F
Protection index	IP67	IP67



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