

13 Aseptic Double Seat Valve MA



INFORMATION

Microbiologically sensitive products need to be treated with special care. The highest safety standards along the entire product handling chain are needed to guarantee that quality and shelf life will leave no grounds for complaint.

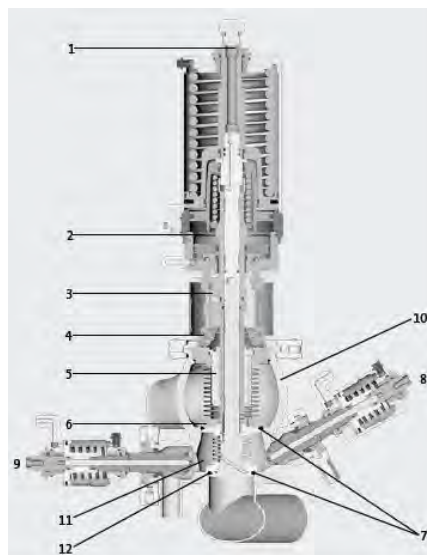
In addition to the use of seat valves, the integration of aseptic double seat valves based on the same design principle makes it possible to control numerous product and media flows not only under optimum aseptic conditions but also fully automatically and in minimum space.

The aseptic double seat valve is the nodal point for connections between individual pipe lines.

The new concept underlying these aseptic valves is based on extensive tests, which were carried out under production conditions in the valve technology field, and on the use of modern methods of analysis and engineering design. With this data in particular it has been possible to realise optimised details of design on all components. For you this means not only top performance from the individual components but also coherent concepts for your process as a whole.

Design features of modular aseptic double seat valves

- The housing withstands very high loads from operating pressures of PN25. The configuration and optimised geometry in accordance with EHEDG specifications ensure high reliability in the production process.
- The metal bellows provides for hermetic sealing of the product space from the atmosphere.
- Using independently working valve disks, each with its own seal, it is possible to realise the safe separation of hostile products. The safety chamber between the valve disks is connected via the flush valves.
- Alternatively a single-piece valve disk with seal made of PTFE compound or a two-piece valve disk, threaded, with seal made of EPDM / FDA or FKM HF is available.
- Cleaning and/or sterilisation of the safety chamber is performed via the flush valves or by lifting the upper or lower valve disk.
- Free cross-sections in the valve housing enable gentle handling of the product without pressure loss, resulting in lower energy consumption.
- The actuator's integrated lifting functions permit fast cycle times and low air consumption.
- With the option for using a temperature sensor it is possible to monitor the temperature directly in the housing.



- 1 Internal airflow on version with control head
- 2 Actuator with integrated lifting function
- 3 Valve shaft connection with rotational decoupling
- 4 Connection for leakage discharge
- 5 Support element
- 6 Upper valve disk
- 7 Metal stop
- 8 Flush valve NC
- 9 Flush valve NO
- 10 Optimised single-piece housing
- 11 Safety chamber
- 12 Lower valve disk



Threaded valve disk,
EPDM/FDA
or FKM HF seal



One-piece valve disk,
PTFE Compound seal

TECHNICAL DATA

Pressures

Product pressure	PN 87 psi (6 bar), 145 psi (10 bar) / vacuum -13.8 psi (-0.95 bar)
CIP / SIP max.	50 psi (3.5 bar) over flush valve
Cleaning pressure max.	73 psi (5 bar) when lifting valve disk
Housing	PN 360 psi (25 bar)
Control air pressure	min. 87 psi (6 bar) - max. 115 psi (8 bar)

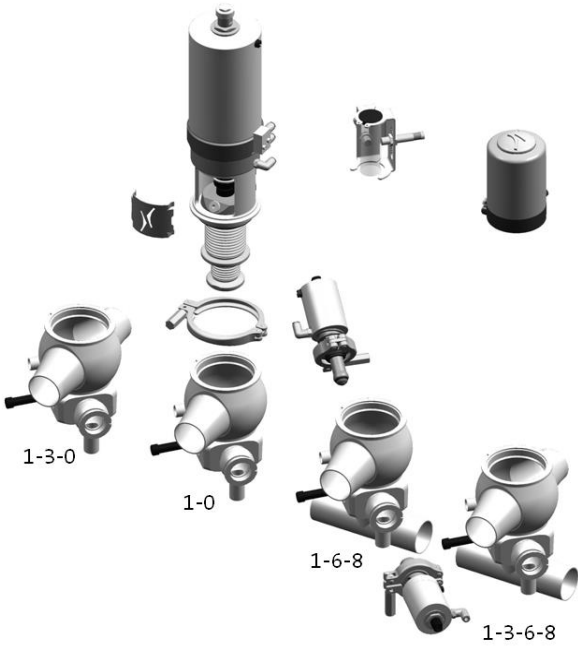
Material

With product contact	1.4404 / AISI 316L
Without product contact	1.4301
Seal	EPDM / FDA, FKM HF PTFE Compound

Surface

With product contact	$Ra \leq 0.8 \mu$
Without product contact	$Ra \leq 1.6 \mu$

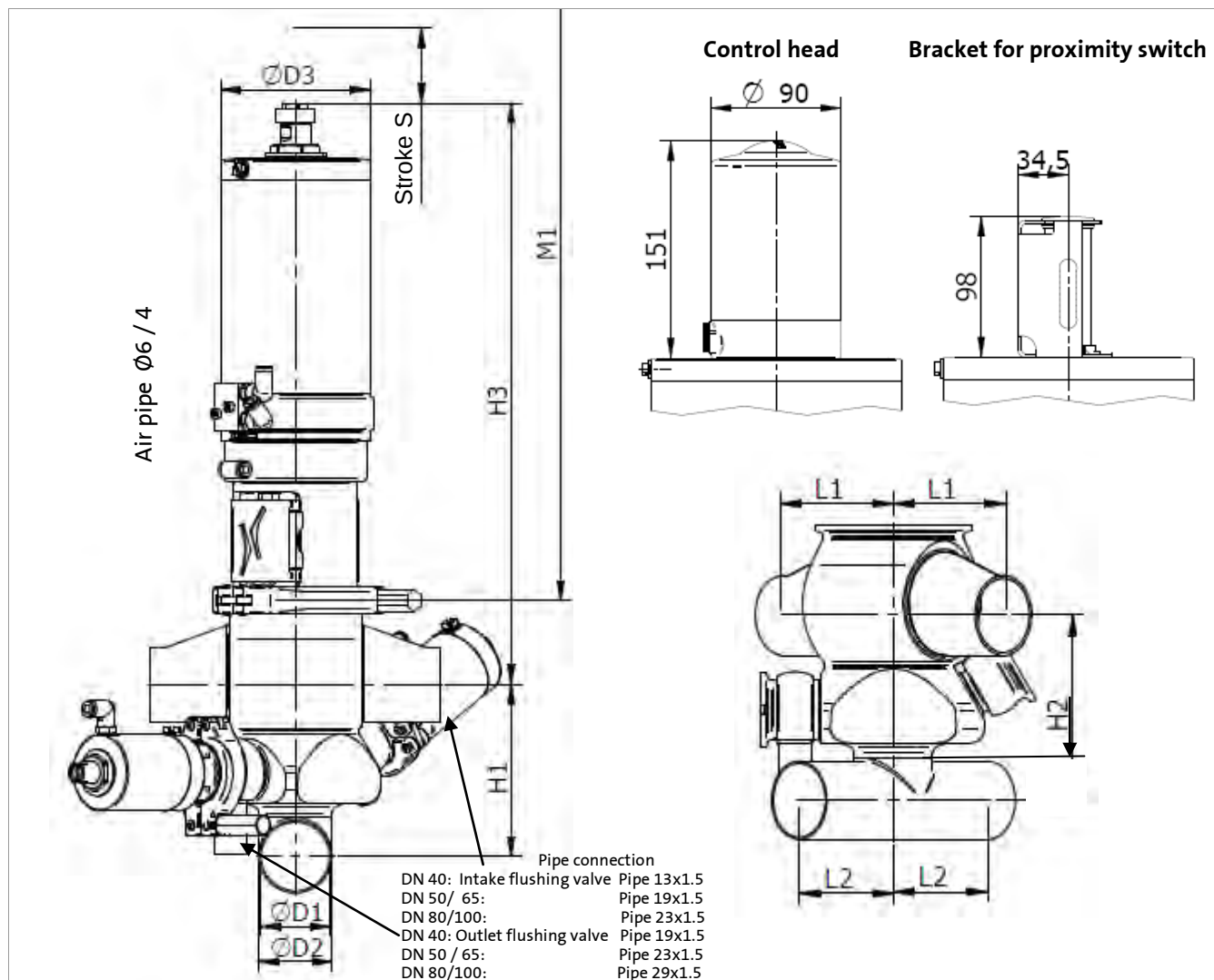
Designs

Housing versions	
Actuator	Pneumatic actuator NC
Additional equipment	Control head Proximity switch M12x1

According to legal requirements
 EU Pressure Equipment Directive 2014/68/EU
 EU Machinery Directive 2006/42/EC
 Design check by TÜV Süd



ASEPTIC DOUBLE SEAT VALVE MA NC

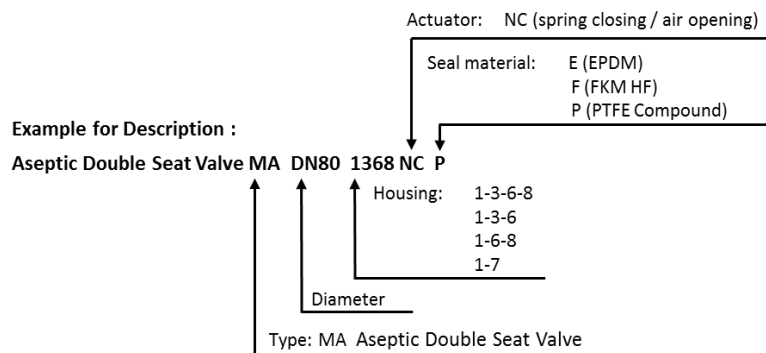


Dimensions

DN	ØD1 mm	ØD2 mm	ØD3 PN 6 mm	ØD3 PN10 mm	L1 mm	L2 mm	H1 mm	H2 mm	H3 PN 6 mm	H3 PN10 mm	M1 PN 6 mm	M1 PN 10 mm	Stroke mm
25													
40	38	41	89	108	90	90	107	82	366	395	490	525	11,5
50	50	53	108	133	105	90	125	96	423	450	575	605	15,5
65	66	70	133	173	110	125	143	105	458	525	630	695	19
80	81	85	173	216	135	165	167	122	545	552	760	765	23,5
100	100	104	216	216	160	180	186	131	595	805	830	1040	27,5
125													
150													

Weight

DN	1-3-6-8 PN 6 kg	1-3-6-8 PN10 kg
25		
40	14,6	17,2
50	20,5	25,0
65	29	40,0
80	50,9	66,6
100	73,9	90,2
125		
150		

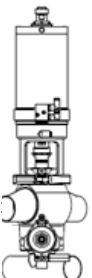


ASEPTIC DOUBLE SEAT VALVE MA NC PRODUCT PRESSURE 6 BAR

Including switch mount for proximity switch

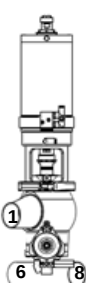
1-3-6-8

1.4404 / AISI 316L

	DN	- EPDM	- FKM HF	- PTFE Compound
		Material no.	Material no.	Material no.
25				
40				0903377163
50				0903063397
65				0902942332
80				0903123092
100				0903386996
125				
150				

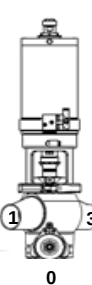
1-6-8

1.4404 / AISI 316L

	DN	- EPDM	- FKM HF	- PTFE Compound
		Material no.	Material no.	Material no.
25				
40				
50				
65				
80				
100				
125				
150				

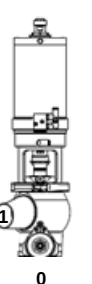
1-3-0

1.4404 / AISI 316L

	DN	- EPDM	- FKM HF	- PTFE Compound
		Material no.	Material no.	Material no.
25				
40				0903399374
50				
65				0902865615
80				0903123314
100				
125				
150				

1-0

1.4404 / AISI 316L

	DN	- EPDM	- FKM HF	- PTFE Compound
		Material no.	Material no.	Material no.
25				
40				0903274529
50				
65				0903023629
80				
100				
125				
150				

ASEPTIC DOUBLE SEAT VALVE MA NC PRODUCT PRESSURE 10 BAR

Including switch mount for proximity switch

1-3-6-8

1.4404 / AISI 316L

	DN	- EPDM	- FKM HF	- PTFE Compound
		Material no.	Material no.	Material no.
	25			
	40			
	50			0903897110
	65			0903252800
	80			0903491976
	100			0903564311
	125			
	150			

1-6-8

1.4404 / AISI 316L

	DN	- EPDM	- FKM HF	- PTFE Compound
		Material no.	Material no.	Material no.
	25			
	40			
	50			
	65			
	80			
	100			
	125			
	150			

1-3-0

1.4404 / AISI 316L

	DN	- EPDM	- FKM HF	- PTFE Compound
		Material no.	Material no.	Material no.
	25			
	40			0903564373
	50			
	65			
	80			
	100			
	125			
	150			

1-0

1.4404 / AISI 316L

	DN	- EPDM	- FKM HF	- PTFE Compound
		Material no.	Material no.	Material no.
	25			
	40			0904136090
	50			
	65			0905304901
	80			
	100			
	125			
	150			

SPARE PARTS ASEPTIC DOUBLE SEAT VALVE MA

Seal kit main valve, with product contact

	DN	EPDM	FKM HF	PTFE Compound
		Material no.	Material no.	Material no.
	25			
	40	0903063491		0903063577
	50	0903063492		0903063578
	65	0903063493		0903063579
	80	0903063494		0903063610
	100	0903063495		0903063611
	125			
	150			

Seal kit, intake flushing valve, with product contact

	DN	EPDM	FKM HF	PTFE Compound
		Material no.	Material no.	Material no.
	25			
	40	0903063930		
	50	0903063931		
	65	0903063931		
	80	0903063932		
	100	0903063932		
	125			
	150			

Seal kit, outlet flushing valve, with product contact

	DN	EPDM	FKM HF	PTFE Compound
		Material no.	Material no.	Material no.
	25			
	40	0903063931		
	50	0903063932		
	65	0903063932		
	80	0903063933		
	100	0903063933		
	125			
	150			

EVOGUARD

Aseptic Double Seat Valve MA

Upper bellow, elastomer seal

	DN	
	Material no.	
	25	
	40	0902964266
	50	0902837537
	65	0902644352
	80	0902967610
	100	0902972042
	125	
	150	

Lower bellow, elastomer seal

	DN	
	Material no.	
	25	
	40	0902964508
	50	0902837777
	65	0902644357
	80	0902967518
	100	0902972043
	125	
	150	

Bellow, PTFE Compound seal shrunk-on

	DN	
	Material no.	
	25	
	40	0903420516
	50	0903420518
	65	0902420540
	80	0903420541
	100	0903420542
	125	
	150	

Seal kit, actuator main valve PN 6

DN	Material no.
25	
40	0903064068
50	0903064113
65	0903064116
80	0903064119
100	0903064120
125	
150	

Seal kit, actuator main valve PN 10

DN	Material no.
25	
40	0903064113
50	0903064116
65	0903064119
80	0903064120
100	0903064120
100	0903063354
125	
150	

Seal kit, actuator flushing valve

DN	Material no.
25	
40	
50	
65	0902517095
80	
100	
125	
150	

Bearing set, main valve PN 6

DN	Material no.
25	
40	0903064129
50	0903064170
65	0903064171
80	0903064172
100	0903064173
125	
150	

Bearing set, main valve PN 10

DN	Material no.
25	
40	0903064170
50	0903064171
65	0903064172
80	0903064173
100	0903064173
	0902491509
125	
150	

Bearing set, intake flushing valve

DN	Material no.
25	
40	
50	
65	0903063891
80	
100	
125	
150	

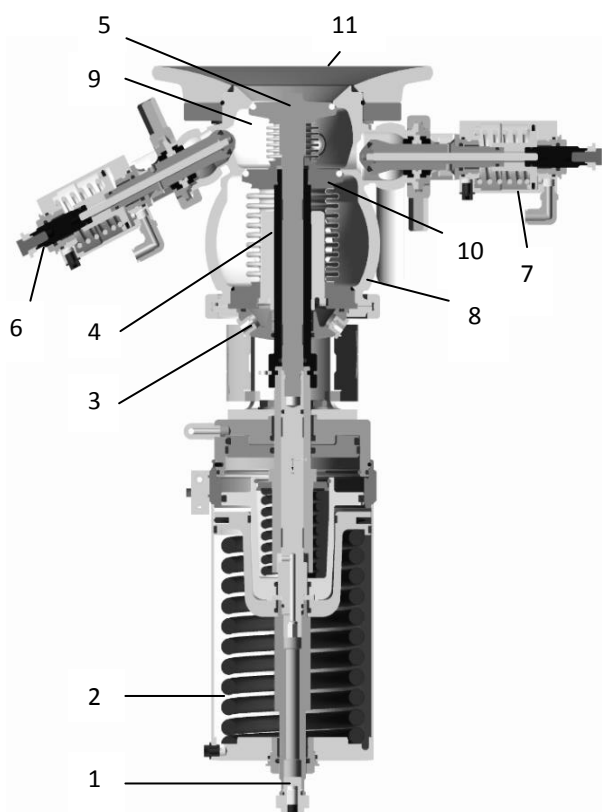
Bearing set, outlet flushing valve

DN	Material no.
25	
40	
50	0903063891
65	
80	0903063808
100	
125	
150	

ASEPTIC DOUBLE SEAT TANK OUTLET VALVE MTA

Design features of modular aseptic double seat tank outlet valves

- Flat to tank bottom – no sump
- The metal bellows provides for hermetic sealing of the product space from the atmosphere
- One-piece housing, continuously adjustable over 360° PN 25
- Using independently working valve disks, each with its own seal, it is possible to realise the safe separation of incompatible products. The safety chamber between the valve disks is connected via the flush valves
- Cleaning and/or sterilisation of the safety chamber is performed via the flush valves or by lifting the upper or lower valve disk
- Free cross-sections in the valve housing enable gentle handling of the product
- Actuator size matched to product pressure
- The actuator's integrated lifting functions permit fast cycle times and low air consumption
- Seal geometry optimized for all applicable process conditions
- The option of using a temperature sensor makes it possible to monitor the temperature directly in the housing



1. Internal air flow for version with control head
2. Actuator with integrated lifting function
3. Connection for leakage discharge
4. Support element
5. Upper valve disk
6. Flush valve NC
7. Flush valve NO
8. Optimised one-piece housing
9. Safety chamber
10. Lower valve disk
11. Flat to tank bottom

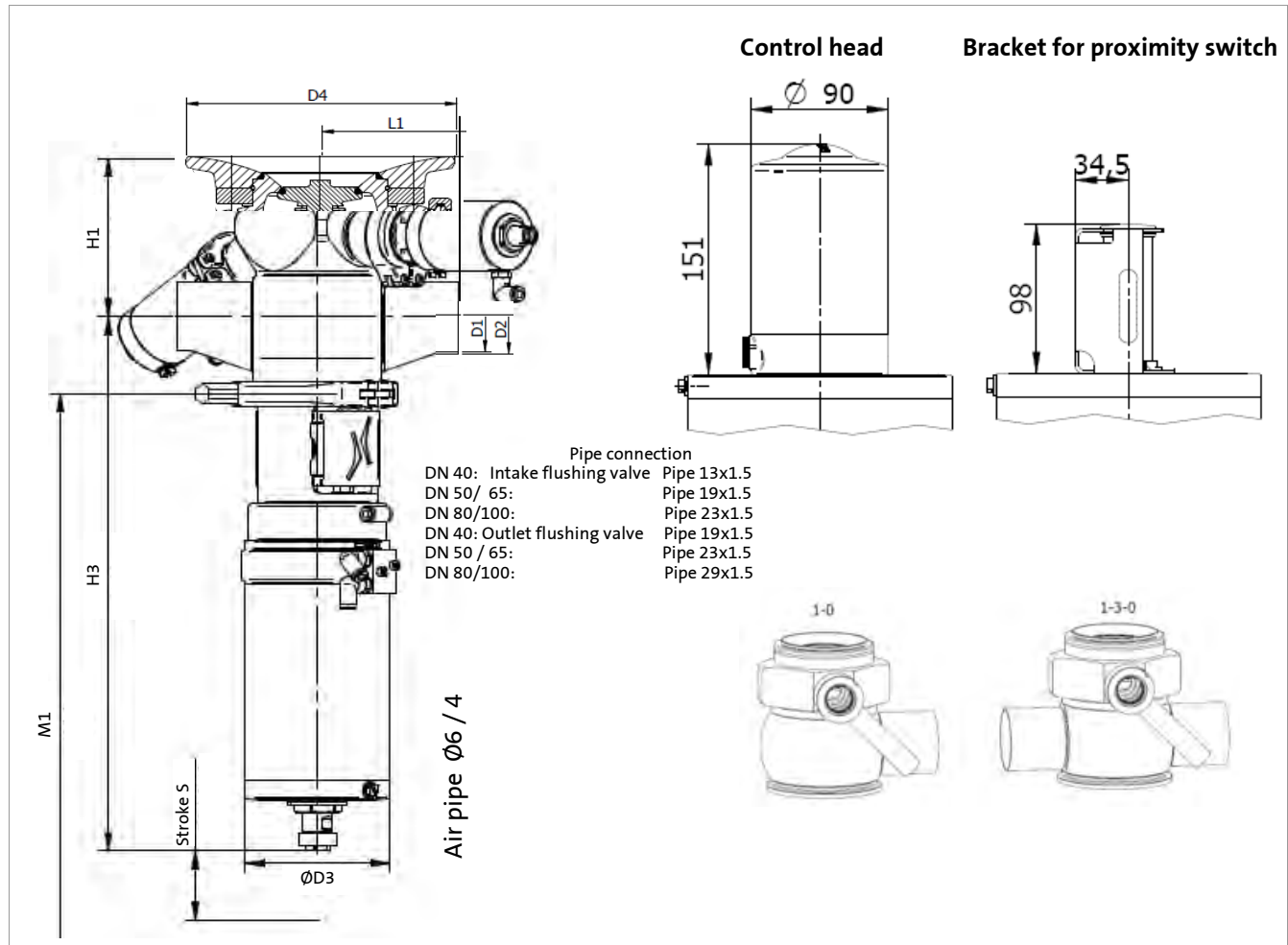


Threaded valve disk,
EPDM/FDA
or FKM HF seal



One-piece
valve disk,
PTFE Compound
seal

ASEPTIC DOUBLE SEAT TANK OUTLET VALVE MTA



Measures

DN	ØD1 mm	ØD2 mm	ØD3 PN 6 mm	ØD3 PN 10 mm	ØD4 mm	L1 mm	H1 mm	H2 mm	H3 PN6 mm	H3 PN10 mm	M1 PN6 mm	M1 PN10 mm	Stroke mm
25													
40	38	41	89	108	190	90			366	395	490	525	12
50	50	53	108	133	190	105			423	450	575	605	16
65	66	70	133	173	230	110			458	525	630	695	19
80	81	85	173	216	250	135			545	552	760	765	23
100	100	104	216	216	280	160			595	805	830	1040	27,5
125													
150													

Weight

DN	1-0 PN10 kg	1-3-0 kg
25		
40	17	
50	25	
65	40	
80	67	
100	90	
125		
150		

Example for Description:

Aseptic Double Seat Tank Outlet Valve MTA DN80 130 NC P

Actuator: NC (spring closing / air opening)

Seal material: E (EPDM)
F (FKM HF)
P (PTFE Compound)

Housing: 1-0
1-3-0

Diameter

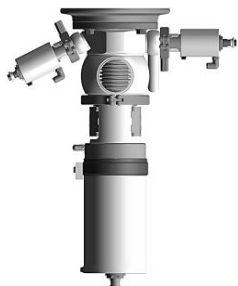
Type: MTA Aseptic Double Seat Tank Outlet Valve

ASEPTIC DOUBLE SEAT TANK OUTLET VALVE MTA NC PRODUCT PRESSURE 6 BAR

Including switch mount for proximity switch
Tank flange is not included!

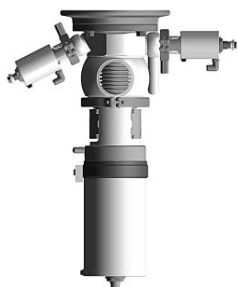
1-0

1.4404 / AISI 316L

	DN	- EPDM	- FKM HF	- PTFE Compound
		Material no.	Material no.	Material no.
	25			
	40			
	50			
	65			
	80			
	100			
	125			
	150			

1-3-0

1.4404 / AISI 316L

	DN	- EPDM	- FKM HF	- PTFE Compound
		Material no.	Material no.	Material no.
	25			
	40			
	50			
	65			
	80			
	100			
	125			
	150			

ASEPTIC DOUBLE SEAT TANK OUTLET VALVE MTA NC PRODUCT PRESSURE 10 BAR

Including switch mount for proximity switch

Tank flange is not included!

1-0

1.4404 / AISI 316L

	DN	- EPDM	- FKM HF	- PTFE Compound
		Material no.	Material no.	Material no.
	25			
	40			
	50			
	65			
	80			
	100			

1-3-0

1.4404 / AISI 316L

	DN	- EPDM	- FKM HF	- PTFE Compound
		Material no.	Material no.	Material no.
	25			
	40			
	50			
	65			
	80			
	100			

Tank flange

1.4404 / AISI 316L

	DN	
		Material no.
	25	
	40	0902888419
	50	0902888419
	65	0902944701
	80	0902620094
	100	0902620095
	125	0903995180
	150	

SPARE PARTS ASEPTIC DOUBLE SEAT VALVE MTA
Seal kit main valve, with product contact

DN	EPDM	FKM HF	PTFE Compound
	Material no.	Material no.	Material no.
25			
40			
50			
65			
80			
100			
125			
150			

Seal kit, intake flushing valve with product contact

DN	EPDM	FKM HF	PTFE Compound
	Material no.	Material no.	Material no.
25			
40	0903063930		
50	0903063931		
65	0903063931		
80	0903063932		
100	0903063932		
125			
150			

Seal kit, outlet flushing valve with product contact

DN	EPDM	FKM HF	PTFE Compound
	Material no.	Material no.	Material no.
25			
40	0903063931		
50	0903063932		
65	0903063932		
80	0903063933		
100	0903063933		
125			
150			

EVOGUARD

Aseptic Double Seat Valve MA

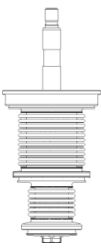
Upper bellow, elastomer seal

	DN	
	Material no.	
	25	
	40	0902964266
	50	0902837537
	65	0902644352
	80	0902967610
	100	0902972042
	125	
	150	

Lower bellow, elastomer seal

	DN	
	Material no.	
	25	
	40	0902964508
	50	0902837777
	65	0902644357
	80	0902967518
	100	0902972043
	125	
	150	

Bellow, PTFE Compound seal shrunk-on

	DN	
	Material no.	
	25	
	40	0903420516
	50	0903420518
	65	0902420540
	80	0903420541
	100	0903420542
	125	
	150	

Seal kit, actuator main valve PN 6

DN	Material no.
25	
40	0903064068
50	0903064113
65	0903064116
80	0903064119
100	0903064120
125	
150	

Seal kit, actuator main valve PN 10

DN	Material no.
25	
40	0903064113
50	0903064116
65	0903064119
80	0903064120
100	0903064120
125	0903063354
150	

Seal kit, actuator flushing valve

DN	Material no.
25	
40	
50	
65	0902517095
80	
100	
125	
150	

Bearing set, main valve PN 6

DN	Material no.
25	
40	0903064129
50	0903064170
65	0903064171
80	0903064172
100	0903064173
125	
150	

Bearing set, main valve PN 10

DN	Material no.
25	
40	0903064170
50	0903064171
65	0903064172
80	0903064173
100	0903064173
100	0902491509
125	
150	

Bearing set, intake flushing valve

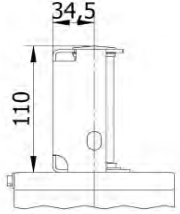
DN	Material no.
25	
40	
50	
65	0903063891
80	
100	
125	
150	

Bearing set, outlet flushing valve

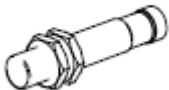
DN	Material no.
25	
40	
50	0903063891
65	
80	0903063808
100	
125	
150	

ADDITIONAL EQUIPMENT ASEPTIC DOUBLE SEAT VALVE MA

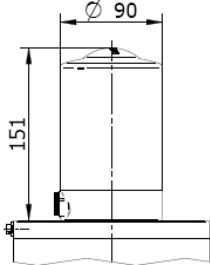
Proximity switch mount M12x1

	DN	Material no.
	25	0903370971
	40	
	50	
	65	
	80	
	100	
	125	
	150	

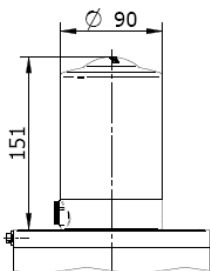
Proximity switch M12x1

	DN	Material no.
	25	0901443696
	40	
	50	
	65	
	80	
	100	
	125	
	150	

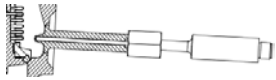
Control head flushing valve, 2 proximity switches

	DN	24 V DC 2 proximity switches 1 solenoid valve	24 V DC ASI 2 proximity switches 1 solenoid valve
		Material no.	Material no.
	25		
	40		
	50		
	65		
	80		
	100		
	125		
	150		

Control head main valve

	DN	24 V DC Position measurement system 3 solenoid valves	24 V DC ASI Position measurement system 3 solenoid valves
		Material no.	Material no.
	25	0903628605	0903628606
	40		
	50		
	65		
	80		
	100		
	125		
	150		

Additional price for adapter for temperature sensor welded in the housing

	DN	10 - 35 V DC
		Material no.
	25	0902324750
	40	
	50	
	65	
	80	
	100	
	125	
	150	

Further types available upon request