

4 Overflow Valve O



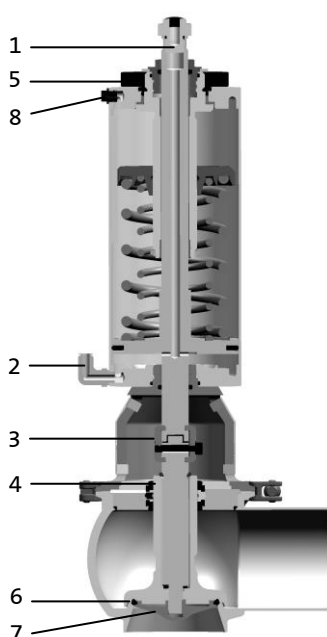
INFORMATION

A big topic in beverage production is the flow control. Often it is necessary to keep the product pressure constant under different product removal out of the pipes. This is a special application for overflow valves. As soon as the product pressure exceeds the pressure preset for the overflow valve, the valve opens into a bypass. This ensures cavitation demands at pumps and keeps the product pressure constant in the pipelines. After the preset product pressure is reached, the overflow valve changes into closed position.

EVOGUARD overflow valves contain all the construction details of seat valves for a high performance during the day-to-day operation. Besides, no special tools are necessary for the adjustment of the product pressure. The design of the valve disk ensures optimal flow conditions. The metal stop on the valve disk and the positioning of the seal prevent excessive stress on the seal also with air pressure superposition in the actuator. Optimal compliance with hygienic design is another outstanding feature of the valves.

Design features of modular overflow valves

- Seal geometry optimized for all applicable process conditions
- Two-piece threaded valve disk with defined clearance for the seal enhances ease of installation
- Optimum design of the flow conditions in the valve seat area
- Actuator size matched to product pressure
- Rotational decoupling on linkage between valve shaft and drive for torsion-free lift motion of the valve disk
- Shaft seal with wiper function protects against contamination ingress
- External air fitting supplied as standard feature to open the valve during cleaning
- Air connection for air pressure superposition in the actuator
- Bracket for proximity switches mountable on the top of the actuator
- Internal airflow when a control head is used to open the valve during cleaning



- 1 Internal airflow on version with control head
- 2 External air connection
- 3 Valve shaft connection with rotational decoupling
- 4 Shaft seal with wiper function
- 5 Adjustment pressure required (to open valve)
- 6 Metal stop
- 7 Two-piece valve disk, threaded
- 8 Connection for superposition of compressed air

Set pressure

DN	Actuator D85/0-3/NC/34		Actuator D85/1-9/NC/34		Actuator D104/4-29/NC/34		Actuator D129/21-41/NC/34	
	min. bar	max. bar	min. bar	max. bar	min. bar	max. bar	min. bar	max. bar
25	2,2	7,8	-	-	-	-	-	-
40	0,6	2,2	1,8	8,0	5,6	10,0	-	-
50	0,7	2,3	1,8	8,0	5,6	10,0	-	-
65	0,3	1,5	0,8	4,1	2,6	10,0	-	-
80	-	-	0,4	2,4	1,3	7,4	5,7	10,0
100	-	-	0,2	1,5	0,7	4,8	3,5	6,7

Higher pressures available upon request

TECHNICAL DATA

Pressures

Product pressure	Adjustable, please see table above / vacuum -13.8 psi (-0.95 bar)
Housing	PN 360 psi (25 bar)
Control air pressure	min. 87 psi (6 bar) - max. 115 psi (8 bar)

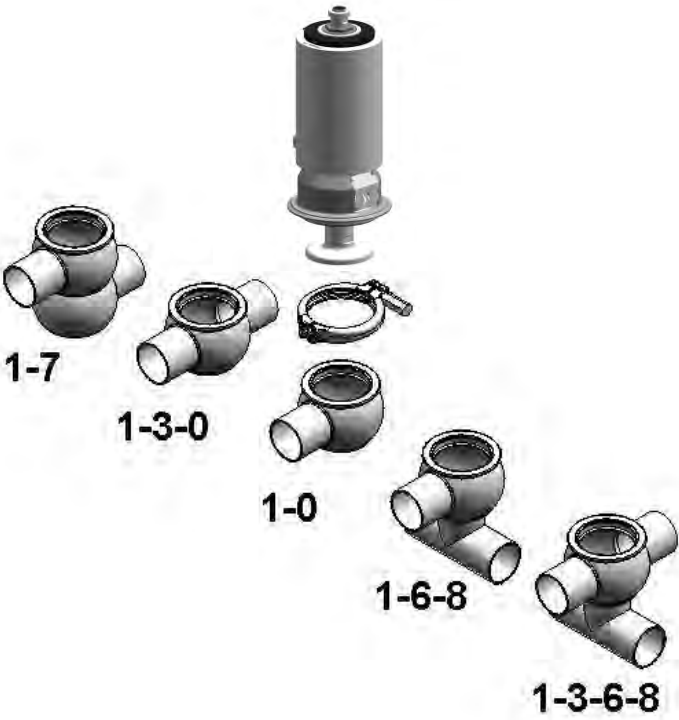
Material

With product contact	1.4404 / AISI 316L
Without product contact	1.4301
Seal	EPDM / FDA Further materials available upon request

Surface

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

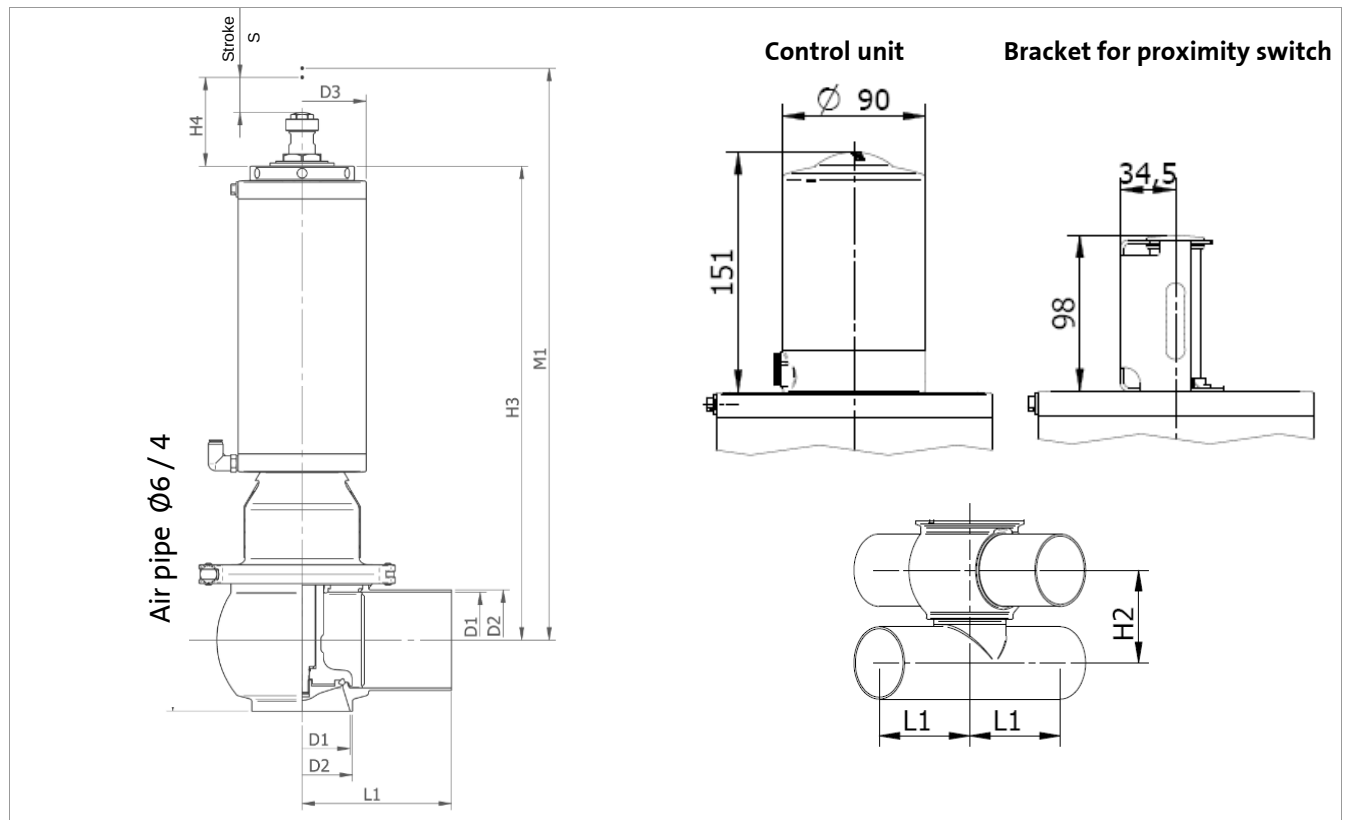
Designs

Housing versions	
Actuator	Pneumatic drive NC adjustable
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



OVERFLOW VALVE O NC PRODUCT PRESSURE ADJUSTABLE DN

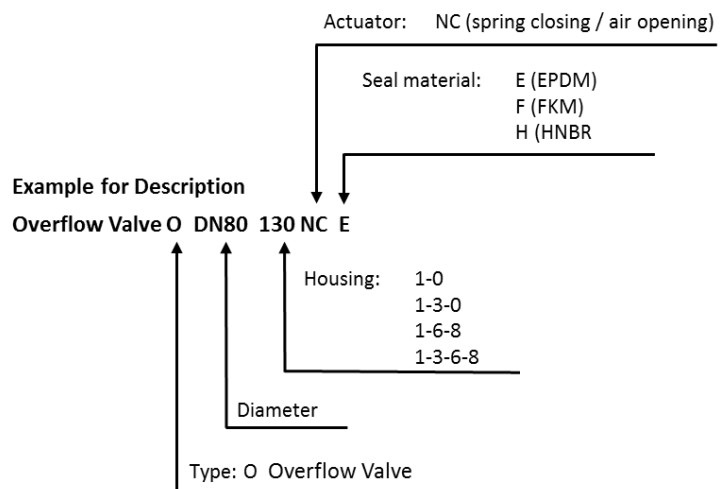


Dimensions

DN	ØD1 mm	ØD2 mm	ØD3 85/0-3 mm	ØD3 85/1-9 mm	ØD3 104/4-29 mm	ØD3 129/21-41 mm	L1 mm	H1 mm	H2 mm	H3 mm	M1 mm	Stroke mm
25	26	29	89	89	-	-	90	31	47	367	425	15
40	38	41	89	89	108	-	90	39	62	370	445	20
50	50	53	89	89	108	-	90	41	71	376	470	19
65	66	70	89	89	108	133	125	52	92	409	515	22
80	81	85	-	-	108	133	125	60	107	400	515	25
100	100	104	-	-	108	133	125	70	128	420	560	30
125	125	129	-	-	-	-	-	-	-	-	-	-
150	150	154	-	-	-	-	-	-	-	-	-	-

Weight

DN	1-0 kg	1-3-0 kg	1-6-8 kg	1-3-6-8 kg
25	6,8			
40	8,3			
50	8,5			
65	12,5			
80	16,9			
100	21,1			
125	-			
150	-			

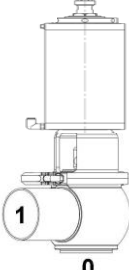


OVERFLOW VALVE O NC

Including switch mount for proximity switch

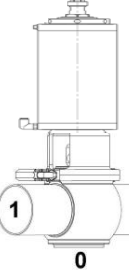
1-0

1.4404 / AISI 316L

	DN / bar	- EPDM	- HNBR	- FKM
		Material no.	Material no.	Material no.
	25 / 2,2-7,8	0903487447		0904714915
	25 / 6,9-22,7	0904495978		
	40 / 0,6-2,2	0903717013		0904601147
	40 / 1,8-8,0	0903486078	0904353187	0904043323
	40 / 5,6-22,7	0904729256		
	50 / 0,7-2,3	0903682673		
	50 / 1,8-8,0	0903482460		0903706757
	50 / 5,6-22,7	0904729391		
	65 / 0,3-1,5	0903718789		
	65 / 0,8-4,1	0903486124		
	65 / 2,6-12,8	0903582561		
	65 / 10,0-17,7			
	80 / 0,4-2,4	0903682878		
	80 / 1,3-7,4	0903486997		0905152753
	80 / 5,7-10,3	0903912233		
	100 / 0,2-1,5	0903682914		
	100 / 0,7-4,8	0903793389		
	100 / 3,5-6,7	0904705571		
	125			
	150			

1-3-0

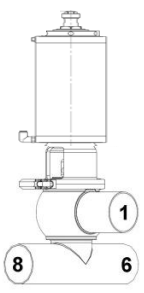
1.4404 / AISI 316L

	DN / bar	- EPDM	- HNBR	- FKM
		Material no.	Material no.	Material no.
	25 / 2,2-7,8			
	25 / 6,9-22,7			
	40 / 0,6-2,2	0904326449		
	40 / 1,8-8,0	0903821002		
	40 / 5,6-22,7			
	50 / 0,7-2,3	0904818310		
	50 / 1,8-8,0	0903880781		
	50 / 5,6-22,7			
	65 / 0,3-1,5			
	65 / 0,8-4,1	0904360256		
	65 / 2,6-12,8	0904540240		
	65 / 10,0-17,7			
	80 / 0,4-2,4	0904818314		
	80 / 1,3-7,4	0904651885		0904043405
	80 / 5,7-10,3			
	100 / 0,2-1,5			
	100 / 0,7-4,8	0904828611		
	100 / 3,5-6,7			
	125			
	150			

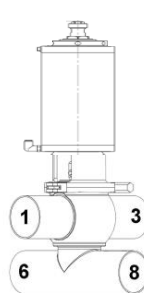
EVOGUARD

Overflow Valve O

1-6-8
1.4404 / AISI 316L

	DN / bar	- EPDM	- HNBR	- FKM
		Material no.	Material no.	Material no.
	25 / 2,2-7,8			
	25 / 6,9-22,7			
	40 / 0,6-2,2			
	40 / 1,8-8,0			
	40 / 5,6-22,7			
	50 / 0,7-2,3			
	50 / 1,8-8,0			
	50 / 5,6-22,7			
	65 / 0,3-1,5			
	65 / 0,8-4,1			
	65 / 2,6-12,8			
	65 / 10,0-17,7			
	80 / 0,4-2,4			
	80 / 1,3-7,4			
	80 / 5,7-10,3			
	100 / 0,2-1,5			
	100 / 0,7-4,8			
	100 / 3,5-6,7			
	125			
	150			

1-3-6-8
1.4404 / AISI 316L

	DN / bar	- EPDM	- HNBR	- FKM
		Material no.	Material no.	Material no.
	25 / 2,2-7,8	0903747638		
	25 / 6,9-22,7	0904072202		0904143200
	40 / 0,6-2,2			
	40 / 1,8-8,0	0904220308		
	40 / 5,6-22,7	0903675990		
	50 / 0,7-2,3			
	50 / 1,8-8,0	0903748640		
	50 / 5,6-22,7	0903675993		
	65 / 0,3-1,5			
	65 / 0,8-4,1			
	65 / 2,6-12,8	0903653756		
	65 / 10,0-17,7			
	80 / 0,4-2,4			
	80 / 1,3-7,4	0903527769		
	80 / 5,7-10,3	0903675885		
	100 / 0,2-1,5			
	100 / 0,7-4,8	0903135131		
	100 / 3,5-6,7	0903527938		
	125			
	150			

Further types available upon request

SPARE PARTS OVERFLOW VALVE O

Seal kit with product contact DN

DN	EPDM	HNBR	FKM
	Material no.	Material no.	Material no.
25	0903521515	0903988189	0903988128
40	0903521519	0903988211	0903988182
50	0903521519	0903988211	0903988182
65	0903521681	0903988212	0903988184
80	0903521682	0903988213	0903988186
100	0903521761	0903988214	0903988188
125			
150			

Seal kit, actuator

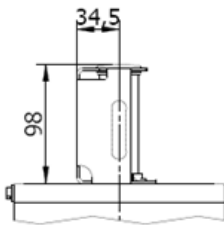
DN	Material no.
25	0903521517
40	
50	
65	
80	
100	
125	
150	

Bearing set

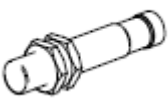
DN	Material no.
25	0903521518
40	0903521680
50	0903521680
65	0903521683
80	0903521683
100	0903521762
125	
150	

ADDITIONAL EQUIPMENT OVERFLOW VALVE O

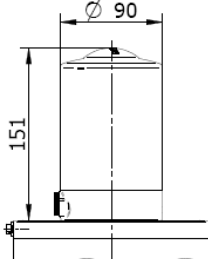
Proximity switch mount M12x1

	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, 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	0903679841	0903679844
	40		
	50		
	65		
	80		
	100		
	125		
	150		