

11 ESL Control Valve RD



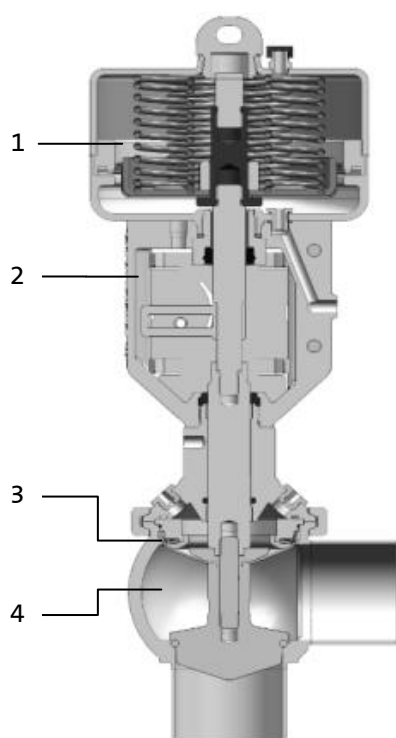
INFORMATION

The EVOGUARD E(extended)S(shelf)L(life) line meets all requirements to valve lines in hygiene class IV. It is employed for sensitive refreshment drinks without preservatives and drinks which need not be distributed in a cold chain. To adjust processes exactly and fast, reliable control valves are necessary. Ensuring a high hygienic level without employing aseptic valve technology is mandatory for numerous applications in beverage production. The ESL control valve RD was developed in a similar way to the EVOGUARD ESL seat valve SD. Therefore, EVOGUARD provides suitable components with a hygienic design for safe processes during the production of sensitive products. Furthermore, a high service life and ease of replacement are very important criteria in choosing a valve technology.

The high economic efficiency of these valves is based on lower costs as compared to aseptic valve technology as well as the high number of cycles that can be achieved.

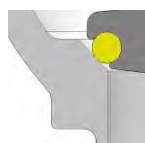
Design features of modular ESL control valves

- Valve housing without dome, designed for PN 25
- Newly developed sealing system using a stainless steel spring element to produce contact pressure at the sealing point, for a hermetical sealing of the product room against the atmosphere
- Allocation according to nominal diameter, KV value and seat diameter
- Actuator size matched to product pressure



1. Diaphragm actuator
2. Positioner
3. Sealing system
4. Housing

Seat Ø	Value		Stroke 20			Stroke 30		
	Kvs m ³ /h	Cvs USgal/min	DN25	DN40	DN50	DN65	DN80	DN100
10	0,63	0,73	x					
	1	1,16						
	1,6	1,86						
	2,5	2,9						
19	4	4,64	x	x				
	6,3	7,31						
26	10	11,6	x	x				
38	16	18,56		x	x	x		
	25	29						
50	32	37,12			x	x	x	
	40	46,4						
66	63	73,1				x	x	
81	100	116					x	x
100	160	185,6						x



One-piece valve disk,
PT FE Compound seal

TECHNICAL DATA

Pressures

Product pressure	PN 87 psi (6 bar), 145 psi (10 bar) / 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)

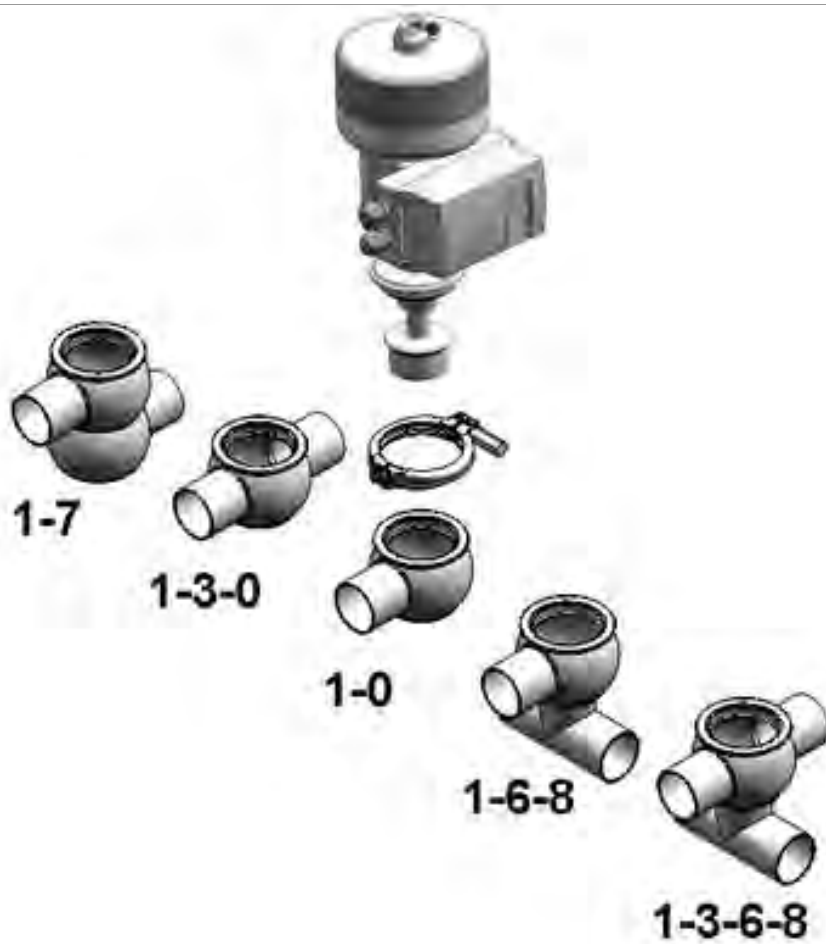
Material

With product contact	1.4404 / AISI 316L
Without product contact	1.4301
Seal	PTFE Compound

Surface

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

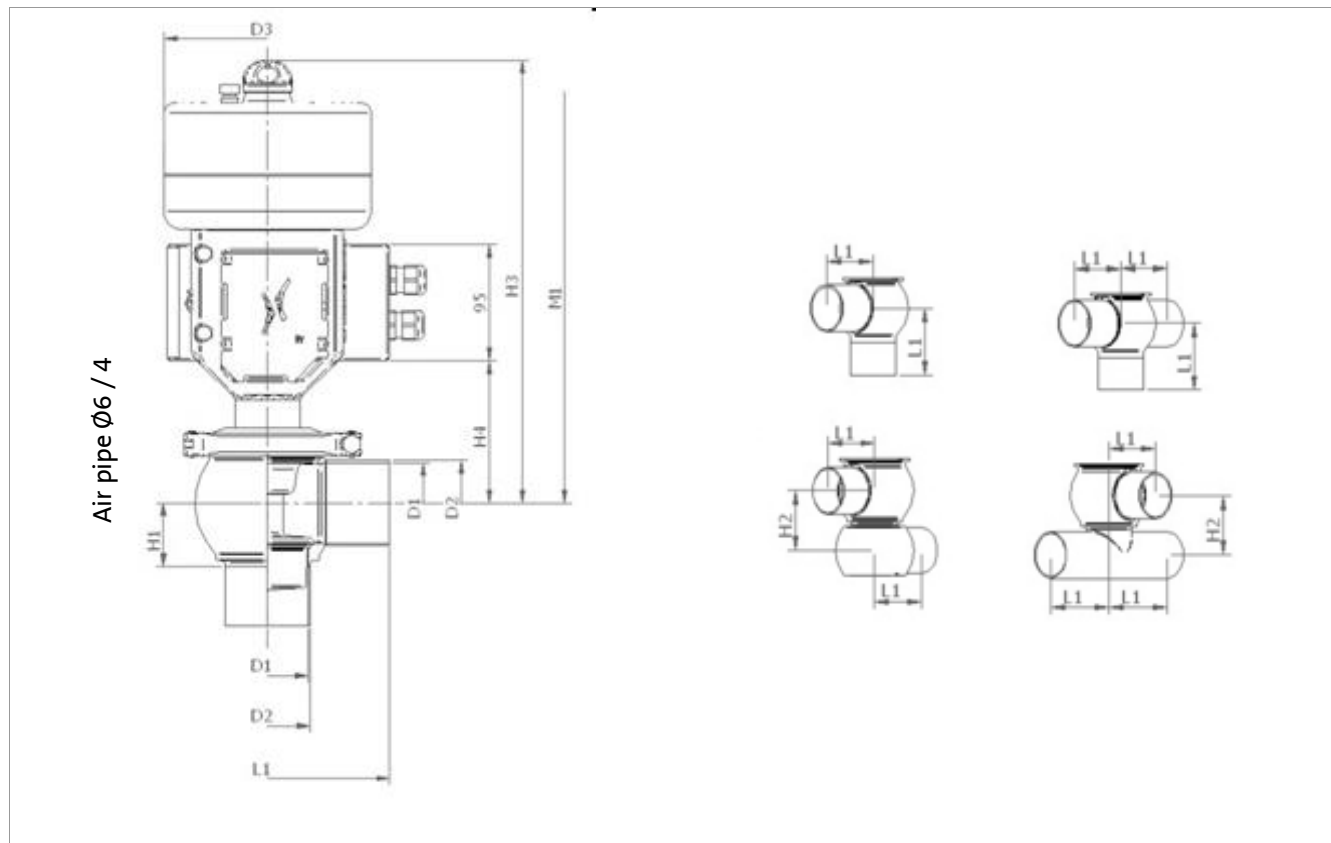
Designs

Housing versions	
Actuator	Pneumatic diaphragm actuator NC / NO
Additional equipment	Positioner set value 4 – 20 mA

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



ESL CONTROL VALVE RD

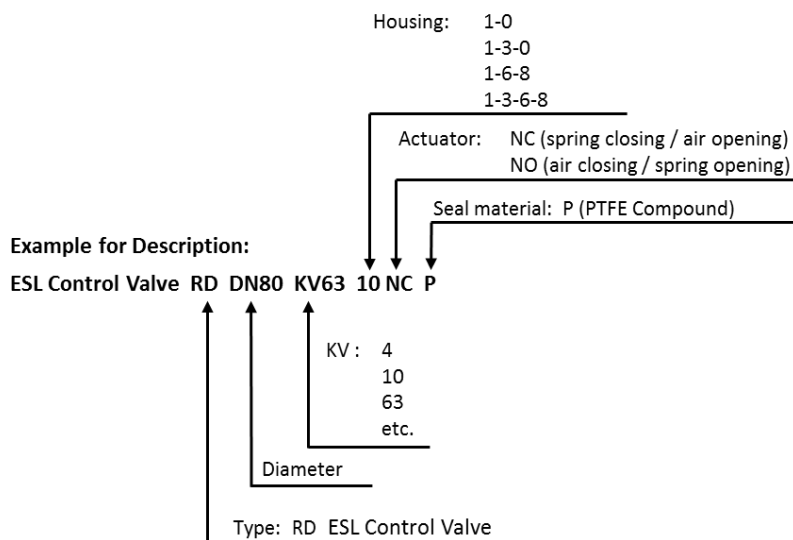


Dimensions

DN	$\varnothing D1$ mm	$\varnothing D2$ mm	$\varnothing D3$ PN10 mm	L1 mm	H1 mm	H2 mm	H3 mm	H4 mm	M1 mm
25									
40	38	41	170	75	37	60	349	103	455
50	50	53	170	85	41	70	355	109	466
65	66	70	228	100	52	89	365	116	504
80	81	85	334	110	60	105	441	131	596
100	100	104	334	120	70	124	454	145	637
125									
150									

Weight

DN	1-0 PN10 kg	1-3-0 kg
25		
40	16,3	
50	16,8	
65	23,1	
80	51,5	
100	56,8	
125	74,5	
150		

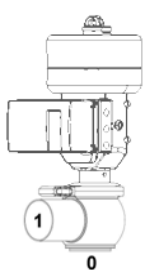


ESL CONTROL VALVE RD PRODUCT PRESSURE 6 BAR

KV value max. corresponding to nominal diameter, positioner Siemens Sipart PS2

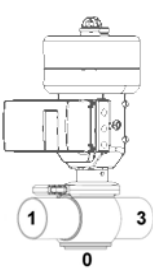
1-0

1.4404 / AISI 316L

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

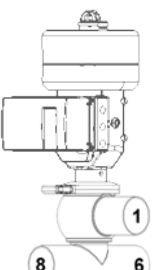
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1.4404 / AISI 316L

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

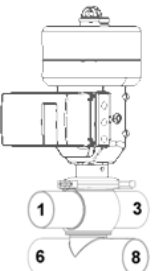
1-6-8

1.4404 / AISI 316L

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

1-3-6-8

1.4404 / AISI 316L

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

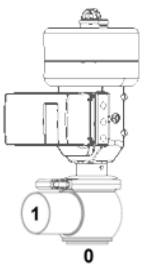
Further types available upon request

ESL CONTROL VALVE RD PRODUCT PRESSURE 10 BAR

KV value max. corresponding to nominal diameter, positioner Siemens Sipart PS2

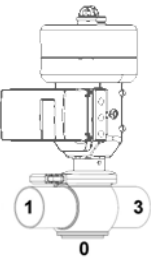
1-0

1.4404 / AISI 316L

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

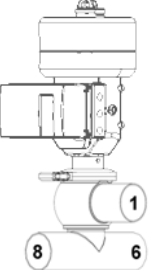
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1.4404 / AISI 316L

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

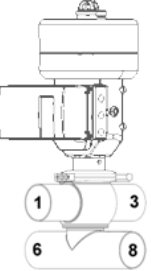
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1.4404 / AISI 316L

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

1-3-6-8

1.4404 / AISI 316L

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

Further types available upon request

SPARE PARTS ESL CONTROL VALVE RD

Seal kit with product contact, up to KV 10

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

Seal kit with product contact, KV 16 to KV 40

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

Seal kit with product contact, KV 63

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

Seal kit with product contact, KV 100

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

Seal kit with product contact KV 160

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

Diaphragm

	DN	PTFE Compound
		Material no.
	25	
	40	0904575431
	50	0904575431
	65	
	80	0904608047
	100	
	125	
	150	

Diaphragm for diaphragm actuator

	TYPE	NBR
	813	Material no.
	MF I	0904201142
	MF III	0904201144

Sealing and bearing set for diaphragm actuator

	TYPE	NBR
	813	Material no.
	MF I	0904202629
	MF III	0904202289

Positioner without mounting parts

	DN	
		Material no.
	Siemens Sipart PS2	0902798583
	Siemens Sipart PS 2 HART	0903626760