

baelz 342-2

DESCRIPTION

The baelz 342-2 is a universal 3-way valve for industrial applications.

TECHNICAL SPECIFICATIONS

Connection type: Flange EN 1092-1, types D / E / F on request.
Plug type: parabolic slotted plug, special plug, perforated plug
Control characteristic: linear, equal percentage
Working fluids: liquids, water, steam, thermal oil, gases

Leakage class (EN 1349 / EN 60534-4)
Straight way (A-AB): 0.004 % Kvs (better than class IV)
Angle way (B-AB): 2 % Kvs (class I)

Stroke (mm)		Spindle diameter (mm)
DN 15-25	12	10
DN 32-125	22	

Options		Designation
Plug	Parabolic plug (standard)	-
	Perforated plug	LK
	Special plug	SKR
Spindle seal	V-rings in PFTE standard	-
	Cooling tube	-K
	Cooling tube + bellows seal	K-SS
Flanges	Flange faces: inlet groove, outlet tongue	NF
	Flange faces: inlet/outlet: male/female	VR
	Flange faces: groove both sides	ALL-N
Additional options	V-shaped seal heating (for fluids at temperatures of - 10 to - 40°C) Pmax. 20 W; 12-24 V / 110-230 V AC/DC	baelz 85950
	Silicone-free	Silf

T max. (°C) / P max. (bar)			
Valve body material	**Spheroidal ductile iron GJS-400-18-LT - 5.3103**		**Cast steel GP240GH - 1.0619**
Nominal pressure	**PN 16**	**PN 16/25**	**PN 40 (1)**
baelz 342-2-B		240/22 … 50/25	240/30,9 ... 50/40
baelz 342-2-BK		350/17,5 … 50/25	350/25,7 … 50/40
baelz 342-2-BK-SS	350/11,2 … 50/16	350/16 … 50/16 (2)	350/25 … 50/25
baelz 342-2-BKK-SS			400/23,8...50/25 (1)

(1) Up to 400 °C upon request for BKK-SS. Up to 450 °C upon request for BKK (450 °C / 13,1 bar ... 50 °C / 40 bar).
(2) For nominal diameters DN 15-25 these values apply: 350 °C / 17,5 bar ... 50 °C / 25 bar

Kvs value (m³/h)										
DN	**15**	**20**	**25**	**32**	**40**	**50**	**65**	**80**	**100**	**125**
Standard	5.9	7.8	9.6	16	25	36	63	105	130	200
Reduced Kvs	3	4	6.5	10	14	23	38	-	-	-
	2	-	-	-	-	-	-	-	-	-
Perforated plug (LK)	2.5	4	6.3	10	20	32	50	80	100	150
	2	2.5	4	6.3	16	25	36	63	80	130
	1.6	0.6	2,5	4	10	20	25	40	63	100

Note: As we are constantly improving our products, there is more than one series of this article.
When ordering spares or parts for an existing system, please state the old serial numbers and, if in doubt, contact Baelz. We'll be pleased to help.

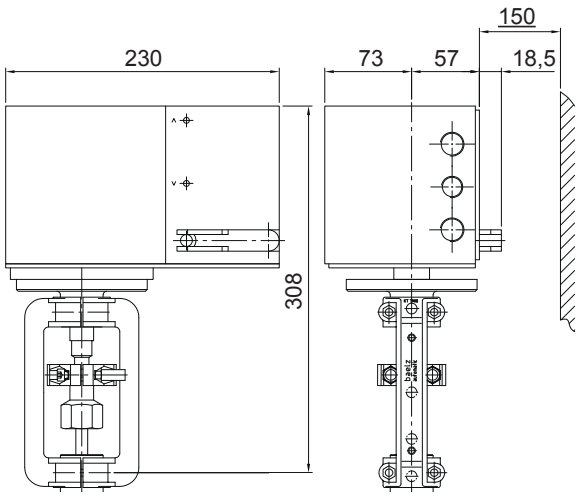
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Approximate weights of baelz 342-2 valves without actuator (kg)											
DN		15	20	25	32	40	50	65	80	100	125
Standard (B)	PN16	5.5	6.1	6.6	9.6	11.8	15.6	24	28.7	39	57
	PN25							-		-	-
With cooling tube (BK)	PN16	6.5	7.1	7.6	10.6	12.8	16.6	-	29.7	-	-
	PN25							25		40	58
	PN40	7	7.6	8.1	11.6	14.3	18.6	28	33.7	45	65
With cooling tube and bellows seal	PN16	6.8	7.4	7.9	10.9	13.1	16.9	25.3	30	40.3	58.3
	Pn40	7.3	7.9	8.4	11.9	14.6	18.9	28.3	34	45.3	65.3

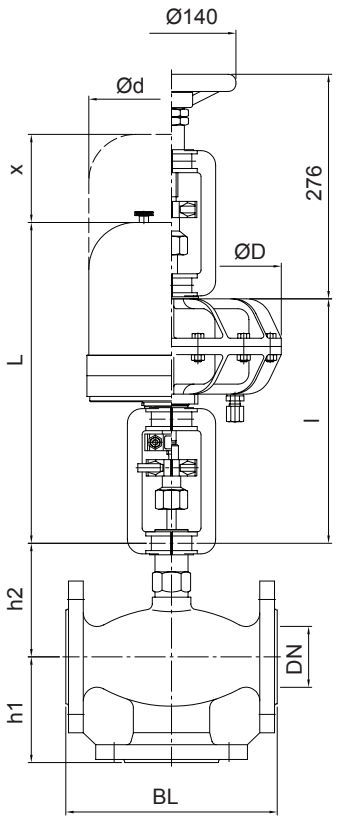
baelz 342-2 dimensions (mm)				
DN	BL	h1	h2	
			342-2-B	342-2-BK, 342-2-BK-SS
15	130	75	110 (105)*	236 (231)*
20	150	75	110 (105)*	236 (231)*
25	160	85	110 (105)*	236 (231)*
32	180	100	104	283 (283)*
40	200	105	114	283 (281)*
50	230	115	124	293 (277)*
65	290	125	144	313 (269)*
80	310	130	154	323 (269)*
100	350	150	169	338 (262)*
125	400	200	189	358 (252)*

* Dimension h2 for previous version of baelz 342

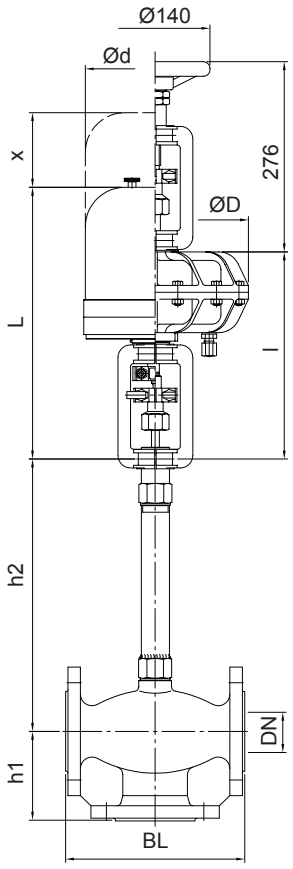
baelz actuators dimensions (mm)					
Designation	L	x	Ød	l	ØD
E07	320	145	129		
E45	560	150	175		
E65	see dimensional drawing below				
P11				244	160
P21				268	242
P21-V6				304	242
P22				322	242



Dimensions of the baelz 373-E65 actuator



baelz 342-2-B DN15-125



baelz 342-2-BK DN15-125
baelz 342-2-BK-SS DN15-125

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Maximum differential pressure ΔPmax (bar) at which the actuator closes the valve completely
The differential pressures specified here are limited by the nominal pressure of the valve body, if this is lower.

Electric actuators. 3-way valves as mixing/diverting valves baelz 342-2-B, 342-2-BK, 342-2-BK-SS.
Plug closes against the flow.

Actuator baelz 373-		Force (N)	DN (mm) / maximum differential pressure ΔPmax (bar)												
			15	20	25	32	40	50	65	80	100	125	150	200	250	300
E07-	OSX-	700	14,5	14,5	10	4,8	2,4	1,1	0,3							
E07-	20-	2000	40	40	32	20	12	8	4,8	3	2	1,2				
E65-	11-	1100	26,8	26,8	19	10	5,6	3	1,4	0,7	0,2					
E65-	20-	2000	40	40	32	20	12	8	4,8	3	2	1,2				
E45-	40-	4000	40	40	40	40	25	16	10	6,9	4,4	2,8	1,7			
E66-	80-	8000							23,8	15,1	9,3	5,7	3,1	1,6	0,9	
E66-	150-	15000								28,3	17,9	11,3	7,1	3,8	2,3	1,5
E88-	100-	10000							28	18	11	7,4	5	2,4	1,7	1,1
E88-	100-	13000							37	24	15	9,8	6,7	3,3	2,3	1,5
E88-	100-	16000							40	30	19	12	8,4	4,5	2,9	2
E88-	300-	30000									(36)	(23)	15,3	9	5,8	3,9
E88-	300-	35000											18,9	10,5	6,7	4,6
E88-	300-	40000											21,7	12,1	7,7	5,3

Electric actuators. 2-way and 3-way valves. Plug closing with the flow.
baelz 340, 342, 347, 365, 367

Actuator baelz 373-		Force (N)	DN (mm) / maximum differential pressure ΔPmax (bar)												
			15	20	25	32	40	50	65	80	100	125	150	200	250	300
E07-	OSX-	700	16	16	12,5	7,5	4,8	3,0	1,8	1,2	0,7	0,5				
E65-	11-	1100	25,9	25,9	20	12,1	7,7	5,0	2,9	1,9	1,2	0,8				

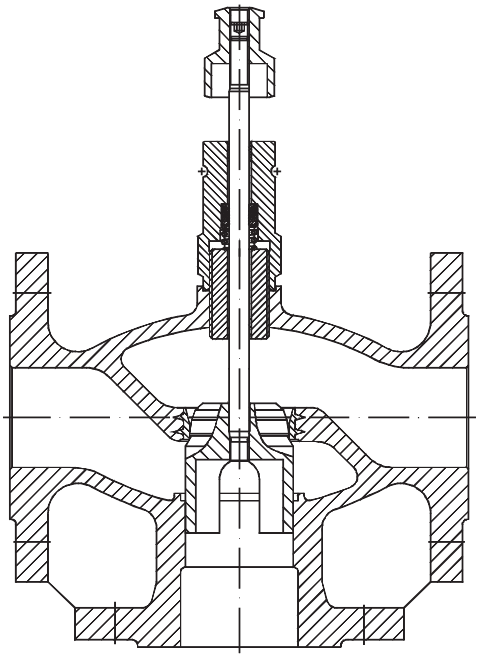
Pneumatic actuators. 3-way valves as mixing valves baelz 342-2-B, 342-2-BK, 342-BK-SS.
Plug closes against the flow.

Actuator baelz 373-		Force (N)	oper. press. (bar)	DN (mm) / maximum differential pressure ΔPmax (bar)												
				15	20	25	32	40	50	65	80	100	125	150	200	250	300
P11-	1	950	6,0	18,6	18,6	13,9	5,6	3,4	1,9	0,9	0,4						
P21-	3	1020	1,2	7	7	4,5	2,8	1,7	1,1	0,7	0,4	0,3	0,2				
P21-	6	2040	3,0	40	40	33	20	13	8	5	3,3	2,1	1,3				
P21-	12	3390	6,0	40	40	40	35	22	14	8,5	5,6	3,6	2,3				
P21-	18	4030	6,0	40	40	40	40	27	17	10	7	4,3	2,7				
P21-	V6	7590	6,0	40	40	29	18	11,5	7	4,3	2,8	1,8	1,2				
P31-	3	2480	3,0											6,3			
P31-	6	4960	3,0											2,8			
P31-	18	10560	6,0											5,6			
P32-	6	4402	3,0											1,4	0,6	0,3	0,2
P32-	18	8115	6,0											4,9	2,6	1,6	1,0

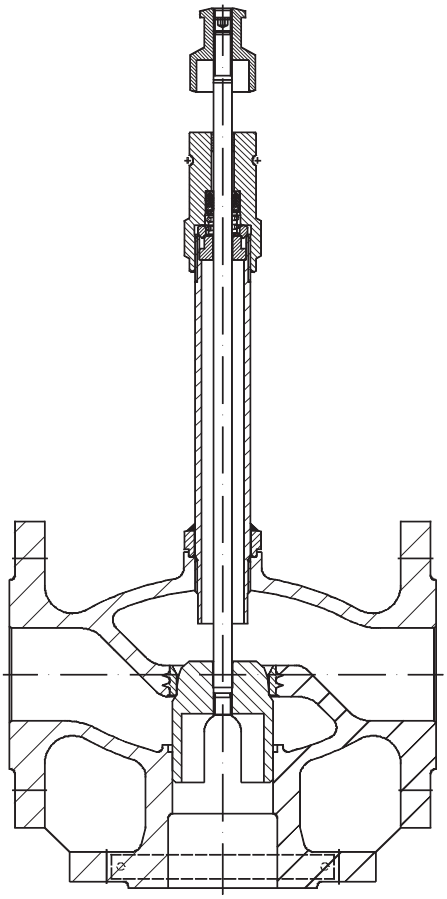
Pneumatic actuators. 3-way valves as diverting valves baelz 342-2-B, 342-2-BK, 342-2-BK-SS.
Plug closes in direction of flow.

Actuator baelz 373-	Force (N)	oper. press. (bar)	DN (mm) / maximum differential pressure ΔPmax (bar)													
			15	20	25	32	40	50	65	80	100	125	150	200	250	300
all pneumat. actuators		1,2 - 6,0	Deploy all diverting valves only up to 0.6 bar differential pressure. If a diverting valve with > 0.6 bar is required, a damping device must be provided on the actuator.													

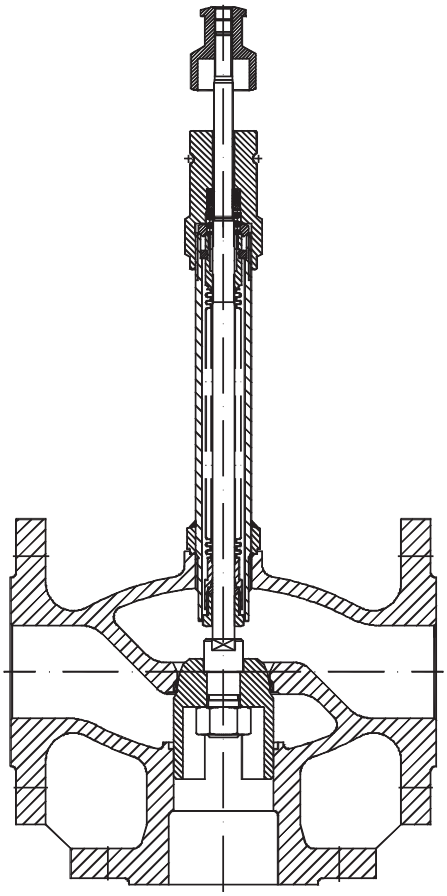
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Standard:
Mixing plug with slot guides
baelz 342-2-B



Mixing plug with slot guides
Cooling tube
baelz 342-2-BK



Reinforced mixing plug with slot guides
Cooling tube and stainless steel bellows
baelz 342-2-BK-SS

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