



baelz 342

DESCRIPTION

The baelz 342 is a universal 3-way valve in a ball housing. For industrial applications.

TECHNICAL SPECIFICATIONS

Connection type: Flange EN 1092-2; EN 1092-1 Shapes D / E / F on request.
 Plug type: parabolic plug / conical
 Control characteristic: linear
 Working media: liquids, water, thermal oil, steam, gases

Leakage class (EN 1349)
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
DN32-125	22	

Options		Designation example*
Plug	Parabolic plug (standard)	baelz 342-B
	Cage plug	baelz 342-B-LK
Stem seal	V-rings in PTFE (standard)	baelz 342-B
	Cooling tube	baelz 342-BK
	Stainless steel bellows + safety gland	baelz 342-BK-SS
Additional options	V-shaped seal heating (for media with temperatures of -10.. - 40°C) Power feed: 8-26 W - 230 V AC/DC	baelz 342-B...-Hz
	Construction without silicone	baelz 342-B...-Silf

Housing material	T max. (°C) / P max. (bar)						
	Spheroid ductile iron GJS-400-18-LT - 5.3103		Cast steel GP240GH - 1.0619			Stainless steel 1.4313	
	PN16	PN25	PN40		PN40		
baelz 342-B	240/14 ... 50/16	240/22 ... 50/25	-	-	-	-	-
baelz 342-BK	350/10.2 ... 50/16	350/17.5 ... 50/25	-	-	350/25.7 ... 50/40	-	-
baelz 342-BK-SS	350/11.2 ... 50/16	-	-	-	350/25 ... 50/25	-	-
baelz 342-ES (nur DN25)	-	-	-	-	-	-	240/30.9 ... 50/40

DN	Kvs value (m³/h)									
	15	20	25	32	40	50	65	80	100	125
Standard	5.6	-	-	-	-	-	-	-	-	-
	3	6.3	9	16	25	36	63	105	130	200
	2	-	-	-	-	-	-	-	-	-
Cage plug (LK)	2.5	4	6.3	12.5	20	32	50	80	100	-
	2	3.2	5	10	16	25	40	63	80	130
	1.6	2.5	4	6.3	10	16	25	40	63	100

baelz 342 plug variants				
Valve function	Actuator type	Pressure difference at the plug (bar)	Nominal diameter	Plug type
Flow separation	Electric actuator	≤0.6	DN15 - 350	without restrictions
		>0.6	DN15 - 32	without restrictions
		>0.6	DN40 - 350	balanced (EMF) see baelz 347*
	Pneumatic actuator	≤0.6	DN15 - 350	without restrictions
		>0.6	DN15 - 32	on request
Flow mix	without restrictions			

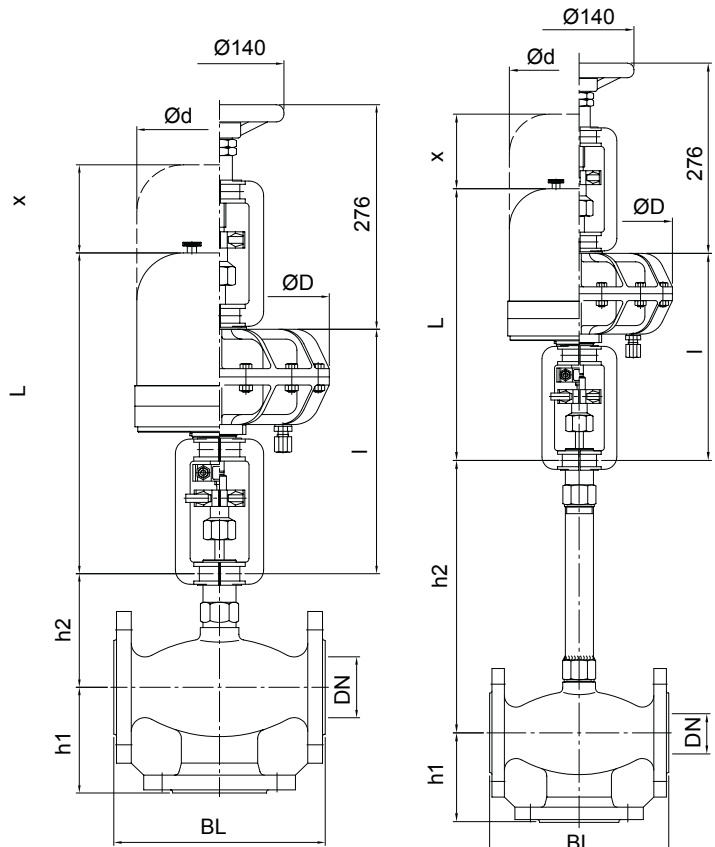
* Baelz will gladly inform you about possible applications with other plug variants

Actuators	Identification
Electric linear actuator	baelz 373-E
Pneumatic diaphragm actuator	baelz 373-P

Weight of the baelz 342 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	-
With cooling tube and bellows	PN40	7	7.6	8.1	11.6	14.3	18.6	28	33.7	45	65
	PN16	6.8	7.4	7.9	10.9	13.1	16.9	25.3	30	40.3	58.3
Made of stainless steel (ES)	Pn40	7.3	7.9	8.4	11.9	14.6	18.9	28.3	34	45.3	65.3
	PN40	-	-	6.6	-	-	15.6	-	-	-	-

baelz 342 dimensions (mm)				
DN	BL	h1	h2	
			342-B. 342-ES	342-BK. 342-BK-SS
15	130	75	105	231
20	150	75	105	231
25	160	85	105	231
32	180	100	104	283
40	200	105	114	281
50	230	115	124	277
65	290	125	144	269
80	310	130	154	269
100	350	150	169	262
125	400	200	189	252
150	480	240	244	324

baelz actuators dimensions (mm)					
Designation	L	x	Ød	l	ØD
E 07	320	145	129		
E 45	560	150	175		
P 21				268	242
P 21-V6				304	242
P 22				322	242



baelz 342-B DN15-125
baelz 342-ES DN15-125

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

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

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

Actuator baelz 373-	Power (N)	DN (mm) / maximum differential pressure ΔP_{max} (bar)														
		15	20	25	32	40	50	65	80	100	125	150	200	250	300	
E07- 20-	2000	40	40	32	20	12	8	4.8	3	2	1.2					
E65- 11-	1100	25	25	21	11	6.3	3.5	1.7	0.9	0.3						
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												3.1	1.6	0.9	
E66- 150-	15000												7.1	3.8	2.3	1.5
E88-ALS-25-	2500												0.5			
E88-ALS-75-	7500												3.1	1.6	0.9	
E88- 100-	10000								28	18	11	7.4	5	2.7	1.7	1.1
E88- 100-	13000								37	24	15	9.8	6.7	3.7	2.3	1.5
E88- 100-	16000								40	30	19	12	8.4	4.6	2.9	2
E88- 300-	30000												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. 3-way valves as changeover valves baelz 342-B, 342-BK, 342-BK-SS. Plug closes in direction of flow.

Actuator baelz 373-	Power (N)	DN (mm) / maximum differential pressure ΔP_{max} (bar)														
		15	20	25	32	40	50	65	80	100	125	150	200	250	300	
E07- 20-	2000	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6				
E65- 11-	1100	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5				
E65- 20-	2000	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6				
E45- 40-	4000	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6				
E66- 150-	15000												1	0.6	0.6	0.6
E88- 100-	10000												1	0.6	0.6	0.6
E88- 300-	30000												1	0.6	0.6	0.6

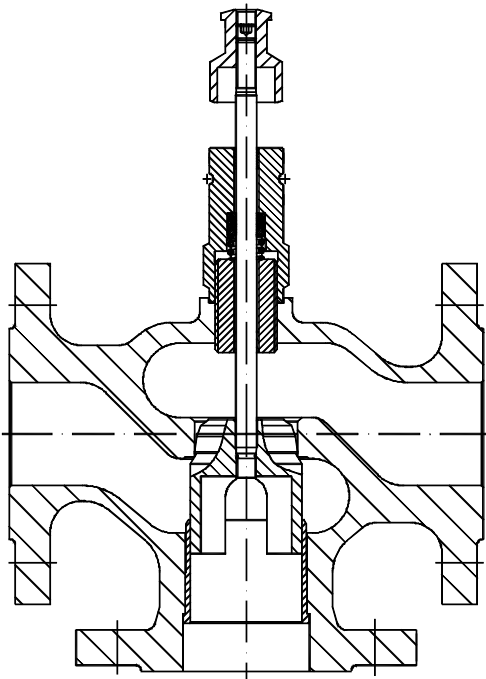
Pneumatic actuators. 3-way valves as mixing valves baelz 342-B, 342-BK, 342-BK-SS, 342-ES. Plug closes against the flow.

Actuator baelz 373-	Power (N)	req. feed pressure (bar)	DN (mm) / maximum differential pressure ΔP_{max} (bar)													
			15	20	25	32	40	50	65	80	100	125	150	200	250	300
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	1.2											0.6			
P31- 6	4960	3.0											2.3			
P31- 18	10560	6.0											5			
P41- 3	3765	1.2											2.4	1	0.6	0.4
P41- 6	7530	3.0											4.8	2	1.3	0.9
P41- V6	31920	6.0											8.2	3.5	2.3	1.6

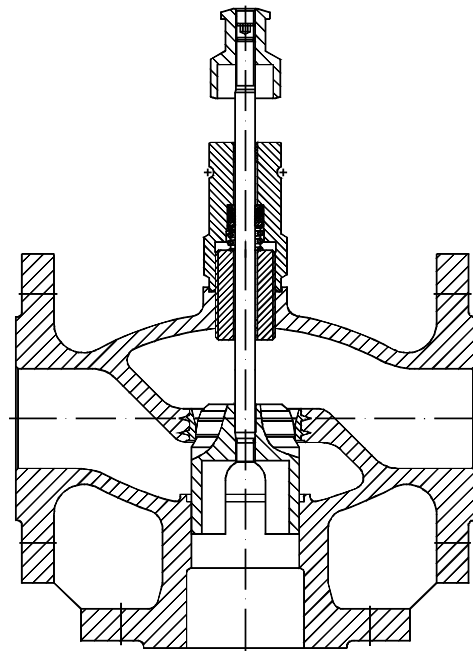
Pneumatic actuators. 3-way valves as changeover valves baelz 342-B, 342-BK, 342-BK-SS. Plug closes in direction of flow.

Actuator baelz 373-	Power (N)	req. feed pressure (bar)	DN (mm) / maximum differential pressure ΔP_{max} (bar)													
			15	20	25	32	40	50	65	80	100	125	150	200	250	300
all		1.2 - 6.0	Deploy all changeover valves only up to 0.6 bar differential pressure. If a changeover valve with > 0.6 bar is required, valve with > 0.6 bar is required, a damping device must be provided on the actuator.													

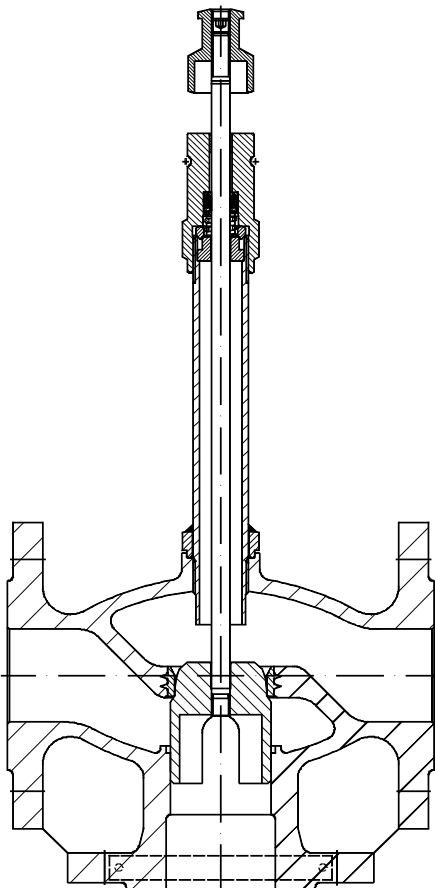
Sectional drawings of the baelz 342 plug



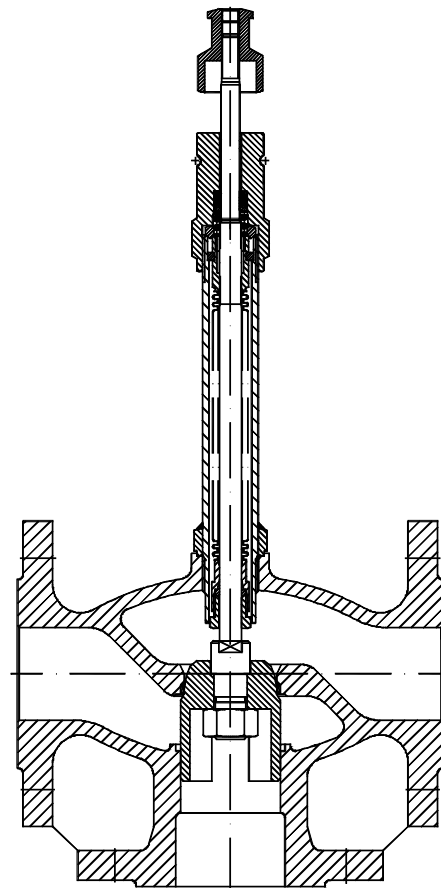
Mixing plug with slot guides
baelz 342-ES



Mixing plug with slot guides
baelz 342-B



Mixing plug with slot guides
baelz 342-BK



baelz 342-BK-SS reinforced mixing plug
with slot guides