



baelz 342-2

DESCRIPTION

The baelz 342-2 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 fluids: liquids, water, thermal oil, steam, gases

Please note: New valve series!
 Altered value for h2 marked in table of dimensions (s. next page 22).

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
Plug	Parabolic plug (standard)	baelz 342-2-B...
	Cage plug	MP342-LK...
Spindle seal	V-rings in PTFE standard	baelz 342-2-B...
	Cooling tube	baelz 342-2-BK...
	Cooling tube + bellows seal	baelz 342-2-BK-SS...
Flanges	Flange facing: groove all sides	MP342-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...
	Construction without silicone	MP342-Silf...

Housing material	T max. (°C) / P max. (bar)			
	Spheroid ductile iron GJS-400-18-LT - 5.3103			Cast steel GP240GH - 1.0619
	PN 6	PN 16	PN 16/25	PN 40
Nominal pressure				
baelz 342-2-B	240/5.2 ... 50/6		240/22 ... 50/25	-
baelz 342-2-BK	-		350/17.5 ... 50/25	350/25.7 ... 50/40
baelz 342-2-BK-SS	-	350/11.2 ... 50/16	-	350/25 ... 50/25

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

baelz 342-2 plug variants				
Valve function	Actuator type	Pressure difference at the plug (bar)	Nominal diameter	Plug type
Flow separation	Electric actuator	≤0.6	DN15 - 125	without restrictions
		>0.6	DN15 - 32	without restrictions
		>0.6	DN40 - 125	balanced (EMF) see baelz 347-2*
	Pneumatic actuator	≤0.6	DN15 - 125	without restrictions
		>0.6	DN15 - 32	on request
Flow mix	without restrictions			

* Baelz will be pleased to inform you about possible applications with other plug variants

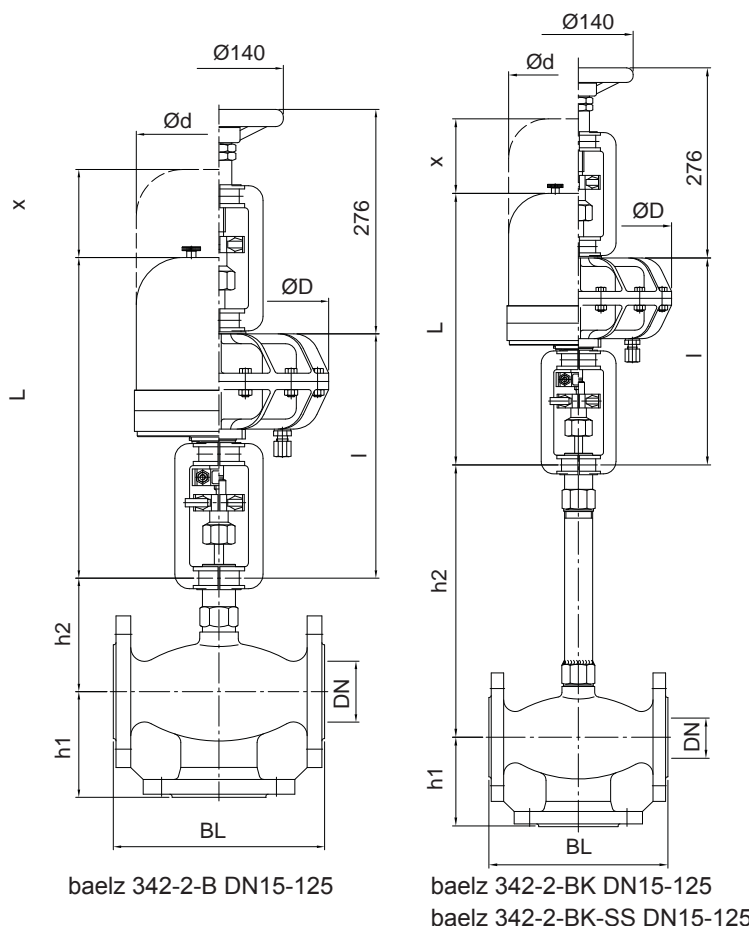
Actuators	Identification
Electric linear actuator	baelz 373-E
Pneumatic diaphragm actuator	baelz 373-P

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	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		
P11				244	160
P21				268	242
P21-V6				304	242
P22				322	242



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 342-2-B, 342-2-BK, 342-2-BK-SS.
 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 diverting valves baelz 342-2-B, 342-2-BK, 342-2-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

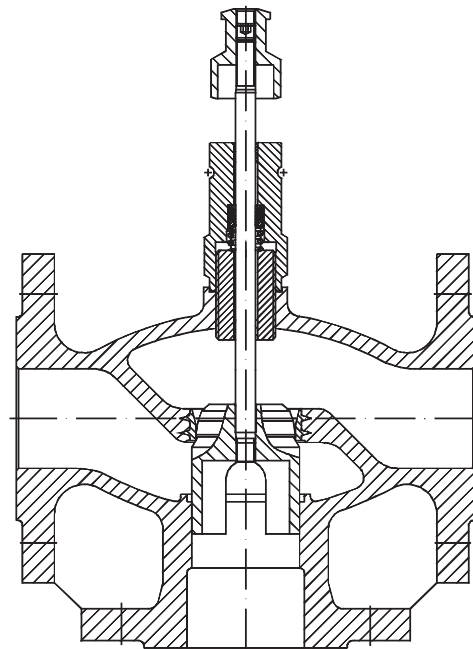
Pneumatic actuators. 3-way valves as mixing valves baelz 342-2-B, 342-2-BK, 342-BK-SS.
 Plug closes against the flow.

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
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	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

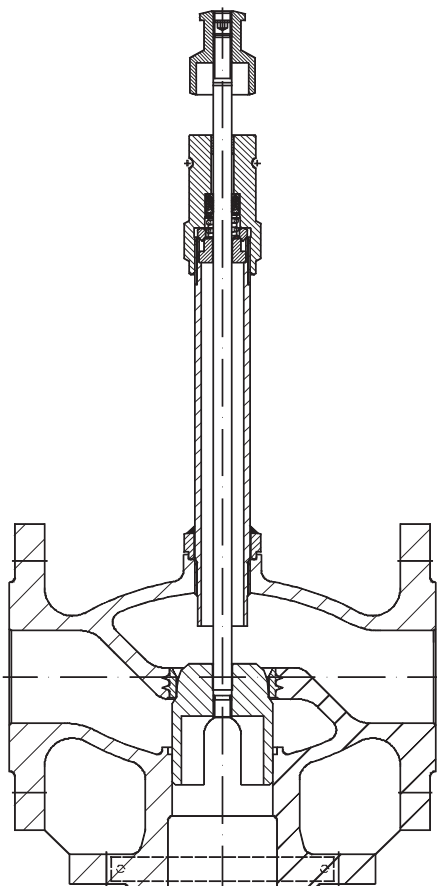
Pneumatic actuators. 3-way valves as diverting valves baelz 342-2-B, 342-2-BK, 342-2-BK-SS.
 Plug closes in direction of flow.

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 diverting valves only up to 0.6 bar differential pressure. If a diverting valve with > 0.6 bar is required, valve with > 0.6 bar is required, a damping device must be provided on the actuator.													

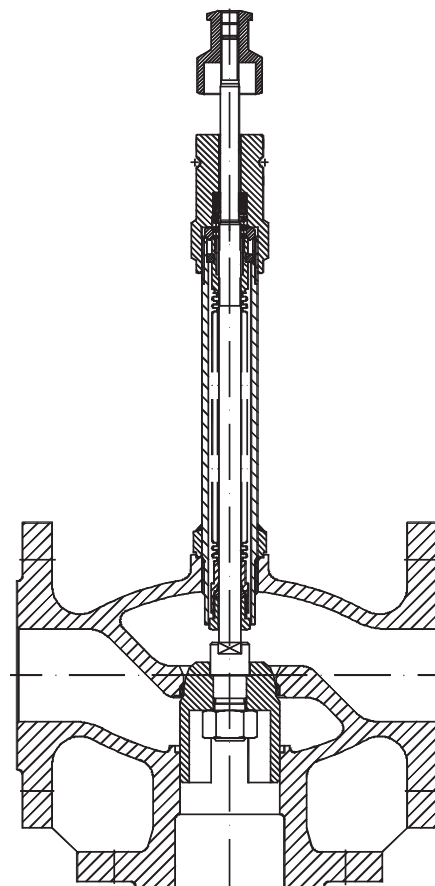
Sectional drawings of the baelz 342-2 plug



Mixing plug with slot guides
baelz 342-2-B



Mixing plug with slot guides
baelz 342-2-BK



baelz 342-2-BK-SS reinforced mixing plug
with slot guides