

BALL VALVE for natural GAS
with welded ends / threaded ends / flanges
35000, 35200, 35300, 35500 series

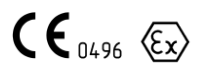


Description

Edition 05-07-2016

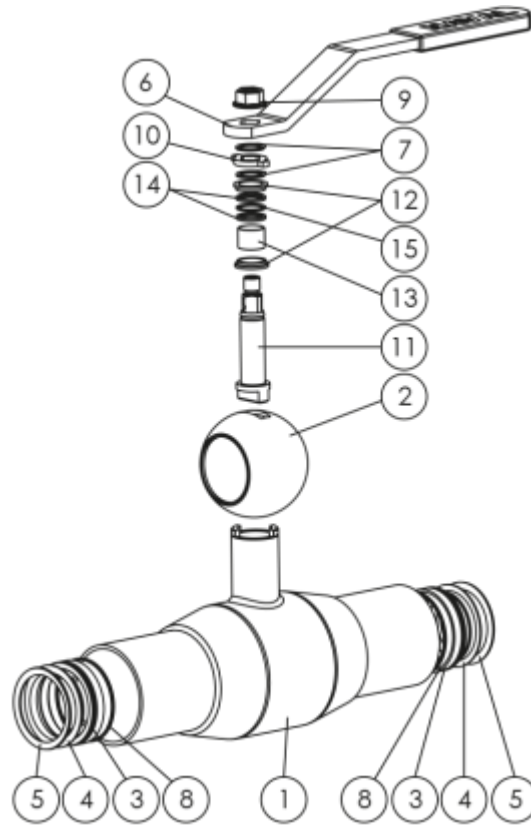
Gas ball valves series 35000 - 35500 are designed for shut-off applications in natural gas pipelines. The valve has all-welded body and is fitted with carbon-reinforced Teflon seals which are long-lasting against frequent operation, impurities and chemicals. A ground and polished stainless steel ball gives easy turning and reliable operation over many years. A floating ball construction is used. Bevel spring washers keep the seals pressed against the ball to ensure that the valve remains leak-tight regardless of pressure fluctuations.

Nominal dimensions	35000TR-N – DN 10 – 500
	35200TR-N, 35300TR-N – DN 10 - 50
	35500TR-N – DN 15 – 500
Nominal pressure	35000TR-N, DN 10 - 50 – PN 40 bar DN 65 - 500 – PN 25 bar
	35010TR-N DN 15 – 40 – PN 40 bar DN 50 – 400 – PN 25 bar
	35200TR-N / 35300 TR-N DN 10 - 50 – PN 40 bar
	35500TR-N, DN 15 - 50 – PN 40 bar, DN 65 - 500 – PN 16 or PN 25 bar according to flanges drilling 35510TR-N, DN 15 – 40 – PN 40 bar DN 50 – 800 - PN 16 or PN 25 bar according to flanges drilling (Available PN 10,16,25,40)
Connection	35000TR-N – welded ends, 35010TR-N – welded ends, fullbore 35200TR-N – threaded socket / welded end, 35300TR-N – threaded ends, 35500TR-N – flanges: EN1092-1 35510TR-N – flanges: EN1092-1, fullbore
Tightness class ISO 5208, EN 12266-1	RATE A
Working temperature of liquid media	-20°C... +200°C - standard -40°C... +200°C - option
Safety	Conform to the requirements of the Council Directive 97/23/EC on Pressure Equipment, marking: Class: gas, group 1. Explosion-proof design is available as per special order.

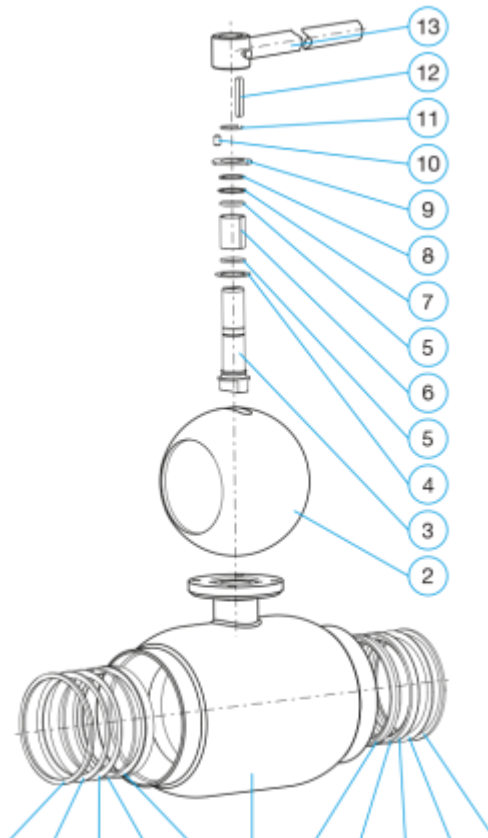




Exploded view, parts list



DN 10-150	
Part number	Part
1	Valve body
2	Ball
3	Ball seal
4	Support ring
5	Spring plate
6	Actuator
7	Key
8	Retaining ring
9	Bush
10	O-ring
11	Distance plate
12	Bush
13	Stem
14	Sliding plate
15	Screw and washer



DN 200-300		
Part number	Part	Qty
1	Valve body	1
2	Ball	1
3	Stem	1
4	Sliding plate	1
5	O-ring	2
6	Sliding bearing	1
7	Top distance plate	1
8	Retaining ring	1
9	Block stop	1
10	Dowel pin	1
11	Retaining ring	1
12	Key	1
13	Handle *	1
14	Retaining ring	2
15	Spring plate	2
16	Support plate	2
17	O-ring	2
18	Ball seal	2
* DN300 without handle		

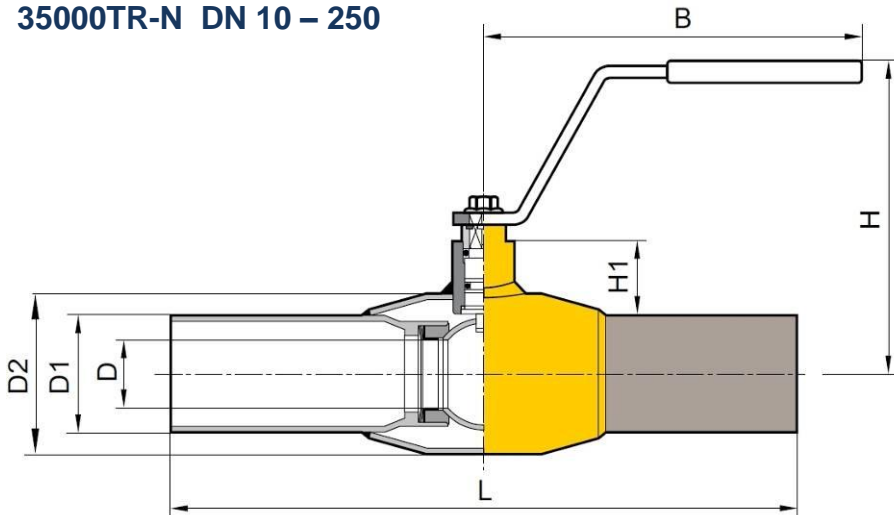


Standard materials

	DN 15-500
Body	Steel P235GH
Ball	Stainless steel 1.4301
Stem	Stainless steel 1.4305
Stem seals	NBR
Ball seals	PTFE+C
Operation	DN 10-250 with galvanized steel handle. We recommend manual gear operation for sizes DN 125 and larger. DN 250 and larger without handle. Valves are available with manual gear, electric actuator or hydraulic actuator.

Dimensions. 35000TR-N series valve

35000TR-N DN 10 – 250



DN	PN	L	D	D1	D2	H	B	H1	Weight kg
10	40	230	10	17,2	33,7	98	145	22	0,6
15	40	230	10	21,3	33,7	98	145	22	0,6
20	40	230	15	26,9	42,4	103	145	23	0,8
25	40	230	20	33,7	48,3	118	145	34	1
32	40	260	25	42,4	60,3	121	145	33	1,4
40	40	260	32	48,3	70	120	188	43	1,8
50	40	300	40	60,3	88,9	127	188	44	2,6



65	25	300	50	76,1	101,6	159	277,5	62	4
80	25	300	65	88,9	121	171	277,5	68	5,3
100	25	325	80	114,3	146	218	278,5	101	8,3
125	25	325	100	139,7	177,8	252	400	101	13,4
150	25	350	125	168,3	219,1	272	600	107	18
200	25	400	150	219,1	273	280	870	92	39
250	25	530	200	273	355,6	350	1200	108	74

35010TR-N

DN	PN	L	D	D1	D2	H	H1	kg
15	40	230	15	21,3	42,4	103	23	0,8
20	40	230	20	26,9	48,3	118	37	1,5
25	40	265	25	33,7	60,3	121	37	2,2
32	40	260	32	42,4	70	121	46	2,5
40	40	300	40	48,3	88,9	127	49	4
50	25	300	50	60,3	101,6	158	70	4,5
65	25	300	65	76,1	121	190	74	6,7
80	25	325	80	88,9	146	218	114	10,5
100	25	325	100	114,3	177,8	253	113	15,5
125	25	360	125	139,7	219,1	272	121	25
150	25	400	150	168,3	273	281	117	51
200	25	530	200	219,1	355,6	343	135	95
250	25	550	250	273	457	-	158	126
300	25	686	290	315,7	508	-	206	177
350	25	762	340	355,6	610	-	267	258
400	25	1100	390	406	660	-	309	519
500	25	970	489	508	813	-	325	920
600	25	1065	589	610	965	-	388	2325
700	25	1205	684	712	1125	-	709	3450
800	25	1330	779	1290	1290	-	799	5160

Sizes DN 10 - 250 can be operated with handlever. We recommend to use a manual gear from the size DN125 and larger.

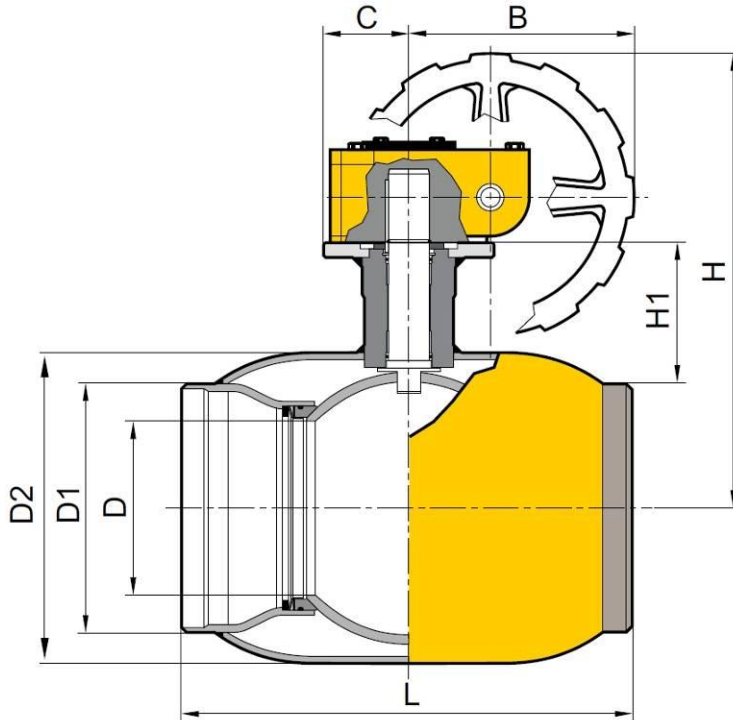
The opening and closing of valves is stepless.

The valve is open when the handlever is in line with pipe.



Manual gear

35000TR-N DN 100 – 800



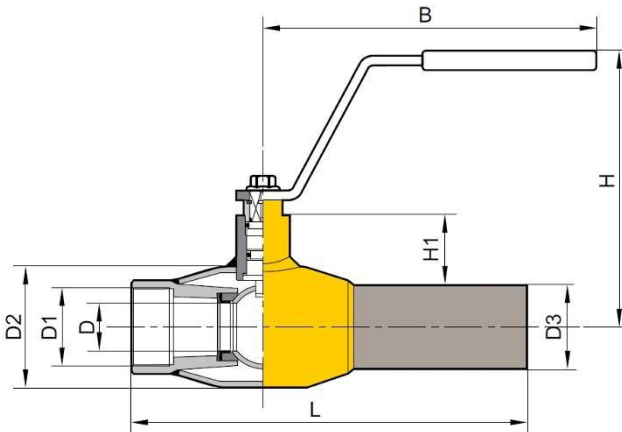
DN	PN	L	D	D1	D2	H	B	C	H1	Weight kg
100	25	325	80	114,3	146	258,5	115,5	53	105	18
125	25	325	100	139,7	177,8	316	153	53	112	20
150	25	350	125	168,3	219,1	336	153	53	118	25
200	25	400	150	219,1	273	369	194	69	92	49
250	25	530	200	273	355,6	444	247	97	108	94
300	25	550	250	323,9	457	593	367	117	133	152
350	25	686	290	355,6	508	668	367	117	192	212
400	25	762	340	406,4	610	750	388	138	242	293
500	25	914	390	508	660	826	430	180	259	467
600	25	1065	489	610	813	893	430	180	274	1025
700	25	1205	589	712	965	1128	603	222	337	2700
800	25	1330	684	813,5	1125	1208	603	222	366	4050

Opening and closing of the valves from the hand wheel.

The position of ball can be seen on a position indicator on top of the gear.

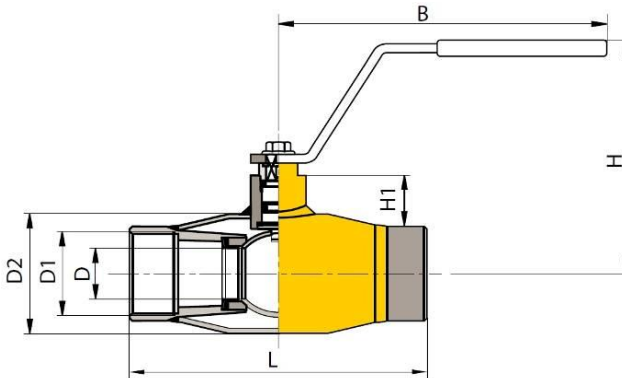


Dimensions. 35200TR-N and 35300TR-N series valves



DN	PN	L	D	D1	D2	D3	H	B	H1	kg
15	40	158	10	R 1/2	33.7	21.3	98	145	22	0.6
20	40	165	15	R 3/4	42.4	26.9	103	145	23	0.8
25	40	172	20	R 1	48.3	33.7	118	145	34	1,1
32	40	195	25	R1 1/4	60.3	42.4	121	145	33	1.4
40	40	205	32	R1 1/2	70.0	48.3	120	188	43	1.9
50	40	240	40	R 2	88.9	60.3	127	188	44	2.7

35300TR-N



DN	PN	L	D	D1	D2	H	B	H1	kg
15	40	85	10	R 1/2	33.7	98	145	22	0.5
20	40	100	15	R 3/4	42.4	103	145	23	0.6
25	40	115	20	R 1	48.3	118	145	34	1
32	40	130	25	R1 1/4	60.3	121	145	33	1,2
40	40	150	32	R1 1/2	70.0	120	188	43	1.8
50	40	180	40	R 2	88.9	127	188	44	2.3

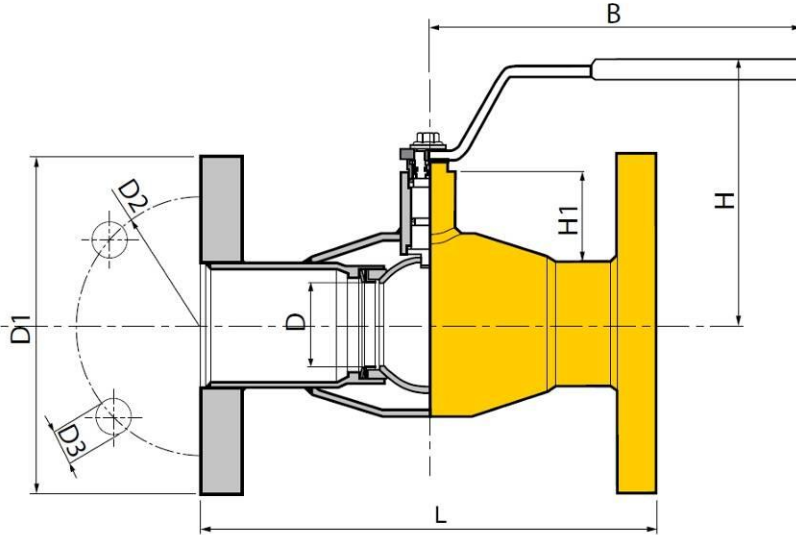
The opening and closing of valves is stepless.

The valve is open when the handlever is in line with pipe.



Dimensions. 35500TR-N series valve

35500TR-N DN 15 – 600



DN	L	D	D1			H	B	H1		Weight kg
			PN 40	PN 40	PN 40			PN 40	PN 40	
15	130	10	95	65	14	98	145	22	1.8	
20	150	15	105	75	14	103	145	23	2.5	
25	160	20	115	85	14	118	145	34	3.3	
32	180	25	140	100	18	121	145	33	5.0	
40	200	32	150	110	18	120	188	43	5.8	
50	230	40	165	125	18	127	188	44	7.8	

DN	L	D	D1		D2		D3		H	B	H1		Weight kg	
			PN 16	PN 25	PN 16	PN 25	PN 16	PN 25			PN 16	PN 25	PN 16	PN 25
65	270	50	185	185	145	145	18	18	159	277.5	62	62	10.5	11.3
80	280	65	200	200	160	160	18	18	171	277.5	68	68	12.5	14.9
100	300	80	220	235	180	190	18	22	218	278.5	101	101	17.0	19
125	325	100	250	270	210	220	18	26	252	400	101	101	25.0	29
150	350	125	285	300	240	250	22	26	272	600	107	107	33	37
200	400	150	340	360	295	310	22	26	280	870	92	92	58	67
250	500	200	405	425	355	370	26	30	350	1200	108	108	102	114
300	500	250	460	325	410	457	26	50	-	-	133	133	148	110
350	706	290	520	377	470	508	26	50	-	-	192	181	226	170
400	810	340	580	426	525	610	30	70	-	-	242	232	322	250
500	978	390	715	530	650	660	33	90	-	-	259	248	528	400
600	1130	489	840	630	770	813	36	90	-	-	274	265	1144	997

Sizes DN 15 - 250 can be operated with handlever. We recommend to use a manual gear from the size DN125 and larger. The opening and closing of valves is stepless.

The valve is open when the handlever is in line with pipe.

Flanges: EN 1092-1.

Face to face dimensions according to: EN558-1

**BLUE LINE****GAS BALL VALVE
of carbon steel**

Valves

35000, 35200, 35300, 35500 series

05-07-2016

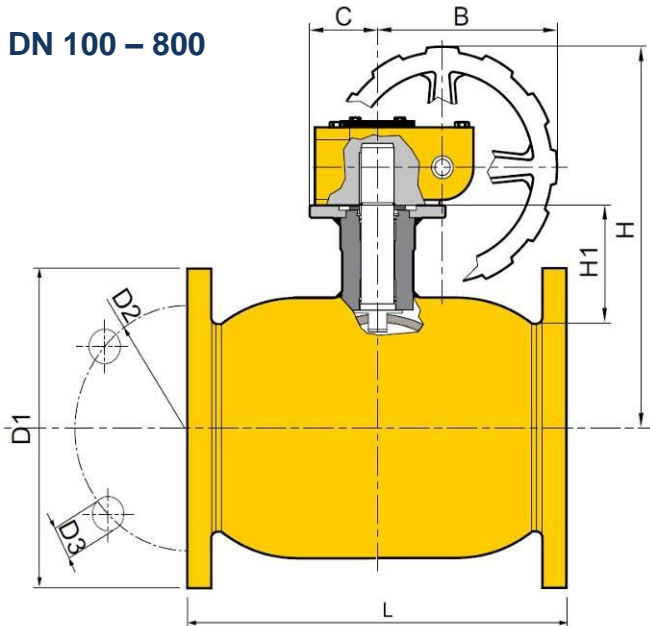
35510TRN-N

DN	L	D	D1		D2		D3		H	B	H1		Weight kg	
			PN 40	PN 40	PN 40	PN 40	PN 40	PN 40			PN 40	PN 40		
15	245	15	95	65	14	103	145,5	26	1,3					
20	245	20	105	75	14	117	144,5	37	3					
25	275	25	115	85	14	121	144,5	37	3,5					
32	275	32	140	100	18	121	188	46	5,5					
40	320	40	150	110	18	127	188	49	7,5					

DN	L	D	D1		D2		D3		H	B	H1		Weight kg	
			PN 16	PN 25	PN 16	PN 25	PN 16	PN 25			PN 16	PN 25	PN 16	PN 25
50	320	50	165	165	125	125	18	14	160	277,5	70	70	9,5	9,5
65	325	65	185	185	145	145	18	14	171	277,5	74	74	13,5	13
80	350	80	200	200	160	160	18	14	218	277,5	114	114	19	18
100	350	100	220	235	180	190	18	22	252	400	114	114	24	30
125	375	125	250	270	210	220	18	26	270	600	122	122	34	41
150	515	150	285	300	240	250	22	26	280	870	118	118	65	72
200	560	200	340	360	295	310	22	26	350	1200	135	135	123	130
250	595	250	405	425	355	370	26	30	-	-	158	158	160	170
300	716	290	460	485	410	430	26	30	-	-	208	208	223	230
350	802	340	520	555	471	490	26	33	-	-	267	267	350	374
400	1140	390	580	620	525	550	30	36	-	-	309	309	610	660
500	1016	489	715	730	650	660	33	36	-	-	308	308	1100	1150
600	1130	589	840	845	770	770	36	39	-	-	371	371	2520	2575
700	1245	684	910	960	840	875	36	42	-	-	416	416	3660	3840
800	1385	779	1025	1085	950	990	36	48	-	-	421	421	5400	5400

**35500TR-N + Manual gear**

DN 100 – 800



DN	L	D	D1		D2		D3		H	B	H1		Weight kg	
			PN 16	PN 25	PN 16	PN 25	PN 16	PN 25			PN 16	PN 25	PN 16	PN 25
100	300	80	220	235	180	190	18	22	268,5	115,5	114	114	23	26
125	325	100	250	270	210	220	18	26	316	153	112	112	30	35
150	350	125	285	300	240	250	22	26	336	153	118	118	37	44
200	400	150	340	360	295	310	22	26	369	194	92	92	68	78
250	500	200	405	425	355	370	26	30	444	247	108	108	122	134
300	500	250	460	485	410	430	26	30	593	368	115	115	190	205
350	706	290	520	555	470	490	26	33	668	368	192	192	268	295
400	810	340	580	620	525	550	30	36	750	388	242	242	365	408
500	978	390	715	730	650	660	33	36	826	430	259	259	595	640
600	1130	489	840	845	770	770	36	39	893	430	260	260	1230	1280
700	1245	589	910	589	840	875	36	42	1128	603	325	325	2900	3100
800	1385	684	1025	684	950	990	39	48	1208	603	358	358	4200	4400

The position of ball can be seen on a position indicator on top of the gear.

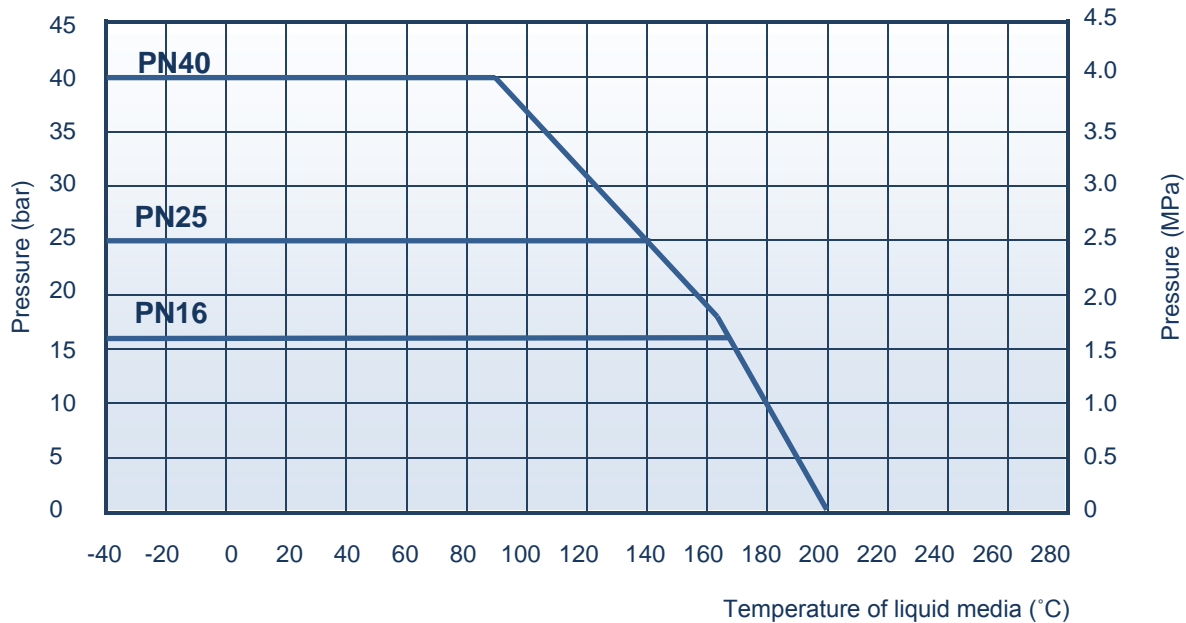
Flanges: EN 1092-1.

Face to face dimensions according to: EN588-1



Pressure / Temperature Rating

The max pressure difference depends on the working temperature.



If working temperature below -20°C, it must be mentioned in order.

Operation

Högfors valves can be equipped with an actuator to your specification.

- bare shaft,
- manual gear,
- hand lever,
- electric actuator,
- pneumatic actuator.



Table of recommended actuators

DN	Pneumatic actuator RC spring return	Manual gear	Electric actuator AUMA
10	RC210-SR(RC205-DA)		SG04.3
15	RC210-SR(RC205-DA)		SG04.3
20	RC210-SR(RC210-DA)		SG04.3
25	RC220-SR(RC210-DA)		SG04.3
32	RC220-SR(RC210-DA)		SG04.3
40	RC230-SR(RC220-DA)		SG04.3
50	RC230-SR(RC220-DA)		SG04.3
65	RC240-SR(RC230-DA)		SG05.1
80	RC240-SR(RC230-DA)		SG05.1
100	RC250-SR(RC240-DA)		SG07.1
125	RC260-SR(RC250-DA)		SG07.1
150	RC270-SR(RC260-DA)		SG10.1
200	RC270-SR(RC260-DA)	Q-800S-W250/15	SG12.1
250	RC280-SR(RC270-DA) -SR	Q-2000S-W300/20	SA07.5-GS100.3
300	(RC280-DA)	Q-4000S-W600	SA07.5-GS160.3

How to order

		3	5	000	TR-N	M
Body material:	3 - Carbon steel					
Valve type:	5 – gas ball valve					
Connection:	000 - welded end 010 – welded end, full bore 200 - welded end / threaded 300 - threaded 500 – flanged 510 – flanged, full bore					
Design features	TR-N – stainless steel ball					
Operation:	(_) - handlever, (Z) - bare shaft, (M) - manual gear					

Product codes

	Ball valve series 35000-35500
Handlever	35000TR-N _ _
Bare shaft	35000TR-N _ _ Z
Manual gear	35000TR-N _ _ M