

About Temper ball valves

Application

Heating and cooling networks, natural gas, LPG, petrochemical and industrial pipelines.

Features

Fully welded lightweight construction.

Stainless steel ball and stem.

Fully stainless steel edition for chemically harshest working mediums.

Galvanized handle.

Total bi-directional tightness rate A (no leaks).

Maintenance-free 25+ years service life.

3 years warranty.

> 10 000 operating cycles.

Advantages

Galvanized corrosion resistant spring unit with PTFE+C ball seals.

Heavy-duty polymer painting for durability and corrosion resistance.

Preservation of inner surfaces for extended storage and operating terms in various conditions.

Ability to create customized products.

Smart price.

Range

DN10 – DN500.

PN16, PN25, PN40.

Reduced and full bore design.

Min. temperature: -40°C or -60°C.

Max. temperature: 200°C.

Connections: welded, flanged, threaded, choke-nippel, PE and their combinations.

EN 488 certified valves for underground installation with stem heights up to 3000 mm.



TEMPER BALL VALVES range product codes

Configurations	Connection types		Materials	Nominal diameters
	Standard bore	Full bore		
2 – Main type (basic stem) 3 – Gas series 4 – Extended stem 5 – Extended stem with hard insulation of Protegol 6 – Balancing ball valve	80 – Female threads 81 – Female threads / Welded 82 – Welded 83 – Flanged 84 – Flanged Pn25 85 – Choke-nipple 86 – Flanged (short length) 87 – Flanged PN25 (short length) 88 – Flanged PN25 / Welded 89 – Flanged / Welded	90 – Female threads 91 – Female threads / Welded 92 – Welded 93 – Flanged 94 – Flanged PN25 98 – Flanged PN25 / Welded 99 – Flanged / Welded	20 – Carbon steel 45 – Alloy steel 66 – Stainless steel	DN15 – DN500

Example: **281 66 040**

281 - Fully welded shut-off Temper ball valve. Reduced bore. Combined threaded/welding ends.

66 - with stainless steel body

040 - DN40

FLOW RATE VALUES OF TEMPER BALL VALVE, KV, M³/H

Standard bore ball valves

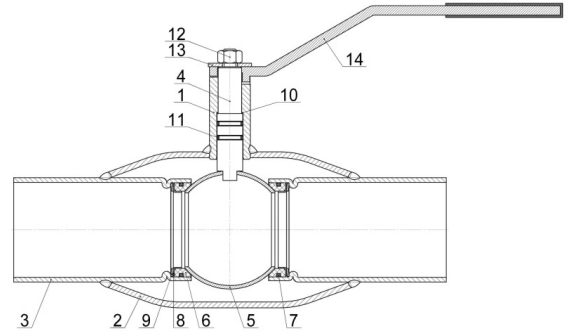
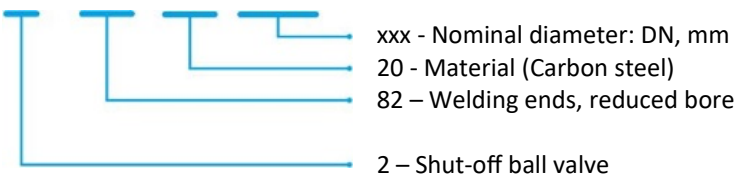
DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80	DN 100	DN 125	DN 150	DN 200	DN 250	DN 300	DN 400	DN 500
8	14	25	41	68	107	183	317	471	832	1150	1760	3200	4610	13350	18780

Full bore ball valves

DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80	DN 100	DN 125	DN 150	DN 200	DN 250	DN 300	DN 400
20	42	67	87	138	212	356	532	965	1477	2150	3880	5640	25470	48700

Configuration

2 82 20 xxx



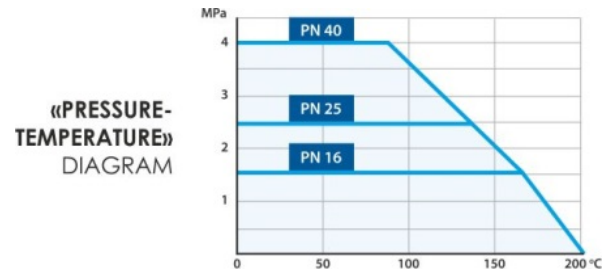
MATERIAL OF KEY COMPONENTS

No	Component	20 (Carbon steel)	45 (Alloy)	66 (Stainless steel)
1	Neck	1.1151	9MnSi5	1.4541
2	Body	1.1151	9MnSi5	1.4541
3	Welding ends	1.1151	9MnSi5	1.4541
4	Stem	1.4021	1.4021	1.4541
5	Ball	1.4301	1.4301	1.4541
6	Seat	PTFE+C	PTFE+C	PTFE+C
7	Round profile O-ring	FVMQ	FVMQ	FVMQ
8	L – Supporting ring	1.4301	1.4301	1.4541
9	Plate spring	66Mn4	66Mn4	1.4541
10	O-Ring	PTFE+C	PTFE+C	PTFE+C
11	Neck assembly seal	FVMQ	FVMQ	FVMQ
12	Nut	Galvanized Steel	Galvanized Steel	Galvanized Steel
13	Spacer	Galvanized Steel	Galvanized Steel	Galvanized Steel
14	Handle	Galvanized Steel	Galvanized Steel	Galvanized Steel

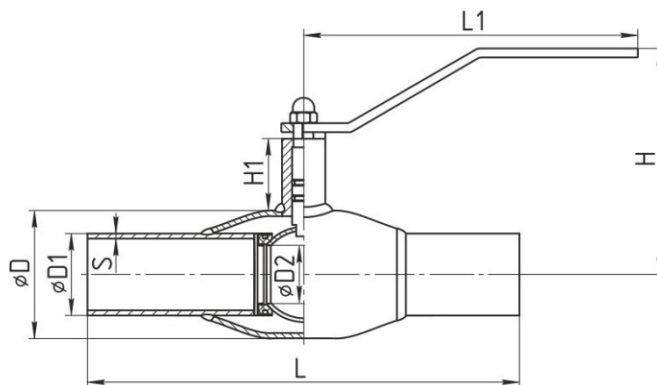
Warranty period: 3 years or 10 000 cycles*

Service life: At least 25 years*

* Subject to the rules of operation.



282 REDUCED BORE WELDING ENDS DN15-DN100



PRODUCT NUMBER	DN	PN	L	L1	H	H1	D	D1	D2	S
282 20 015	15	40	230	148	132	49	38	21,3	10	2,0
282 20 020	20	40	230	148	135	50	42	26,9	15	2,3
282 20 025	25	40	230	148	138	50	48	33,7	20	2,6
282 20 032	32	40	260	148	142	50	57	42,4	25	2,6
282 20 040	40	40	260	235	145	44	76	48,3	32	2,6
282 20 050	50	40	300	235	154	46	89	60,3	40	2,9
282 20 065	65	25	300	235	159	42	108	76,1	50	2,9
282 20 080	80	25	300	283	200	66	133	88,9	65	3,2
282 20 100	100	25	325	283	209	63	159	114,3	80	3,6

Body material options

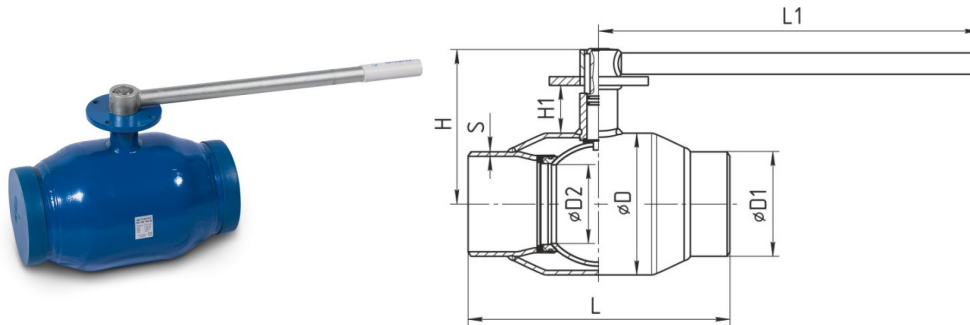
282 20 xxx – carbon steel – 1.1151

282 45 xxx – alloy steel - 9MnSi5(13Mn6)

282 66 xxx – stainless steel – 1,4541(12X18H10T)

282 REDUCED BORE WELDING ENDS DN125-DN500

With ISO 5211 flange for actuator



PRODUCT NUMBER	DN	PN	L	L1	H	H1	D	D1	D2	S
282 20 125	125	25	325	525	195	51	180	139,7	100	4,0
282 20 150	150	25	350	525	210	58	219	168,3	125	4,5
282 20 200	200	25	400	525	225	55	273	219,1	150	4,5
282 20 250	250	25	530	1030	270	51	351	273,0	200	5,0
282 20300	300	16/25	730	-	329	98	426	323,9	250	5,6
282 20 350	350	16/25	730	-	464	100	530	355,6	300	10
282 20 400	400	16/25	860	-	373	98	530	406,4	300	10
282 20 500	500	16/25	970	-	435	98	630	508	390	10

Body material options

282 20 xxx – carbon steel – 1.1151

282 45 xxx – alloy steel - 9MnSi5(13Mn6)

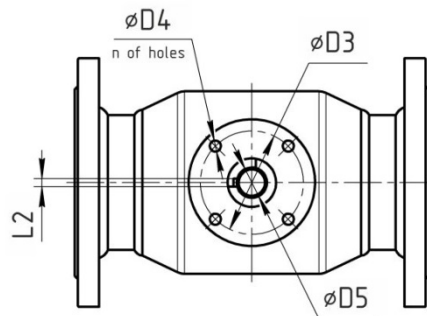
282 66 xxx – stainless steel – 1,4541(12X18H10T)

TORQUES for actuators, N*M

DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80	DN 100	DN 125	DN 150	DN 200	DN 250	DN 300	DN 400	DN 500
10	20	22	25	32	35	50	90	130	170	210	420	1100	2400	5000	12000

FLANGE for actuator mount dimensions

DN	Designation ISO 5211	Torque, N*m	D3	D4	D5	n of holes	L2
125 reduced bore, 100 full bore	F10	170	102	11	30	4	8
150 reduced bore, 125 full bore	F10	210	102	11	30	4	8
200 reduced bore, 150 full bore	F10	420	102	11	30	4	8
250 reduced bore, 200 full bore	F12	1100	125	13	35	4	10
300 reduced bore, 250 full bore	F16	2400	165	22	50	4	14
400 reduced bore	F16	5000	165	22	60	4	18
300 full bore	F25	5000	254	17	60	8	18
500 reduced bore, 400 full bore	F30	12000	298	22	90	8	25



SELECTION OF PRO-GEAR GEARBOX FOR TEMPER BALL VALVES

DN	Torque	Flange ISO 5211	Gearbox type -25 +110	Gearbox weight, kg	Dimensions (without handwheel), mm			Handwheel diameter, mm
					A	B	C	
125	200	F10	X-61	3	225	170,5	77	200
150	400	F10	X-61	3	225	170,5	77	200
200	600	F10	Q-800	7,9	380,5	187,5	90,5	200
250	1600	F12	Q-1500	14	292	206	97	400
300	4000	F16	Q-4000	33,7	441	326	128	500
400	5000	F16	Q-5000	45.2	441	326	128	400
500	12000	F30	Q-16000	62.5	586	540	135	500

