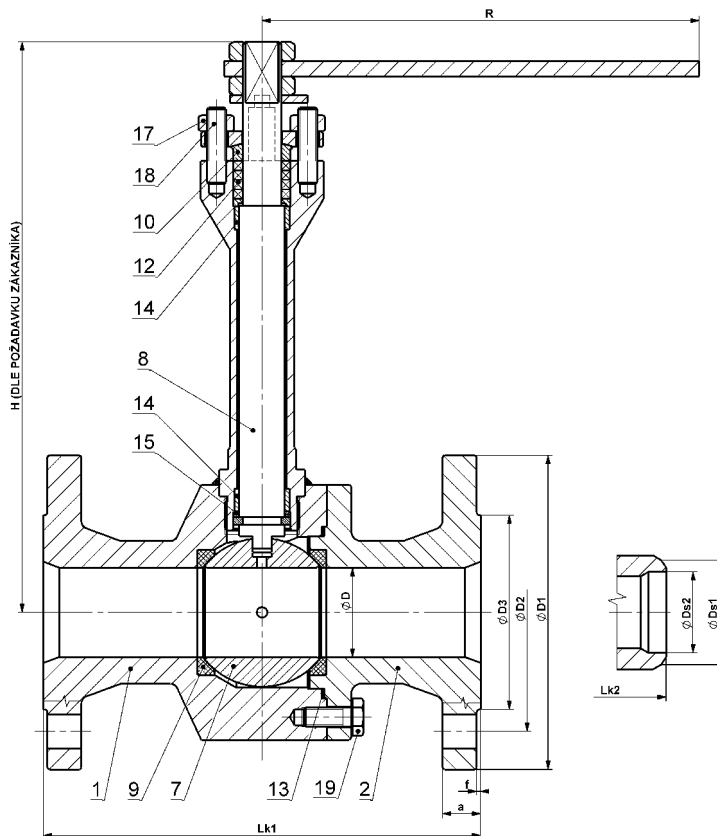


CRYOGENIC BALL VALVE
KM 9108.X-CT (flanged)
KM 9103.X-CT (butt welding ends)
DN 10–100 PN 16–100



Materials

Type KM 9103.X-CT Type KM 9108.X-CT		Material
		Stainless steel
		X=3 For temperatures from -196 °C to +70 °C
Position	Component	
1	Body with extension	1.4541, A 182 F321
2	Cover	
7	Ball	1.4541, A 182 F321
8	Stem	1.4541, A 182 F321
9	Seat	PTFE, RPTFE
10	Gland cover	1.4021, ČSN 17 027
12	Packing	PTFE, graphite
13	Sealing	PTFE, PTFE+C, graphite
14	Bearing	Nitronic 60
15	Bearing	PTFE, PTFE+C
17	Nut	A2-70, A194 Gr. 8
18	Stud bolt	A2-70, A193 B8
19	Bolt	A2-70, A193 B8

Dimensions and weights

PN 16, 25, 40	DN	ØD	ØD1	ØD2	ØD3	Lk1	Lk2	f	a	n	Ød	ØDs1	ØDs2	Trubka/Pipe	
	10	9,5	90	60	40	150	270	2	16	4	14	14	18	13	17,1×2
	15	14	95	65	45	155	270	2	16	4	14	22	16	21,3×2,6	
	20	19	105	75	58	160	270	2	18	4	14	27,5	21,5	26,9×2,6	
	25	25	115	85	68	160	270	2	18	4	14	34	28,5	33,7×2,6	
	32	30	140	100	78	180	270	2	18	4	18	43	37	42,4×2,6	
	40	38	150	110	88	200	270	2	18	4	18	49	42,5	48,3×2,9	
	50	47	165	125	102	230	300	2	20	4	18	61	53,5	60,3×3,2	
	65	62	185	145	122	290	360	2	22	8	18	77	69,5	76,1×3,2	
80	76	200	160	138	310	390	2	24	8	18	90	81,5	88,9×3,6		

PN 16	DN	ØD	ØD1	ØD2	ØD3	Lk1	Lk2	f	a	n	Ød	ØDs1	ØDs2	Trubka/Pipe
	100	98	220	180	158	350	450	2	20	8	18	115	106	114,3×4

PN 25 PN 40	DN	ØD	ØD1	ØD2	ØD3	Lk1	Lk2	f	a	n	Ød	ØDs1	ØDs2	Trubka/Pipe
	100	98	235	190	162	350	450	2	24	8	22	116	106	114,3×4

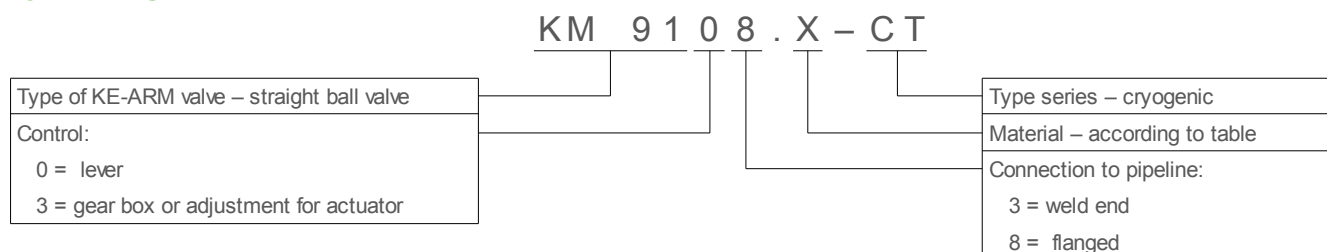
PN 63 PN 100	DN	ØD	ØD1	ØD2	ØD3	Lk1	Lk2	f	a	n	Ød	ØDs1	ØDs2	Trubka/Pipe
	10	9,5	100	70	40	150	270	2	20	4	14	18	13	17,1×2
	15	14	105	75	45	155	270	2	20	4	14	22	16	21,3×2,6

PN 63	DN	ØD	ØD1	ØD2	ØD3	Lk1	Lk2	f	a	n	Ød	ØDs1	ØDs2	Trubka/Pipe
	25	25	140	100	68	160	270	2	24	4	18	34	28,5	33,7×2,6
	32	30	155	110	78	180	270	2	24	4	22	43	37	42,4×2,6
	40	38	170	125	88	200	270	2	26	4	22	49	42,5	48,3×2,9
	50	47	180	135	102	230	300	2	26	4	22	61	53,5	60,3×3,2
	65	62	205	160	122	290	360	2	26	8	22	77	68,5	76,1×3,6
80	76	215	170	138	310	390	2	28	8	22	90	80,5	88,9×4	
100	98	250	200	162	350	450	2	30	8	26	115	104	114,3×5	

PN 100	DN	ØD	ØD1	ØD2	ØD3	Lk1	Lk2	f	a	n	Ød	ØDs1	ØDs2	Trubka/Pipe
	25	25	140	100	68	160	270	2	24	4	18	34	27,5	33,7×2,9
	32	30	155	110	78	180	270	2	24	4	22	43	36	42,4×3,2
	40	38	170	125	88	200	270	2	26	4	22	49	41	48,3×3,6
	50	47	195	145	102	230	300	2	28	4	26	61	51	60,3×4,5
	65	62	220	170	122	290	360	2	30	8	26	77	66	76,1×5
80	76	230	180	138	310	390	2	32	8	26	90	77,5	88,9×5,6	
100	98	265	210	162	350	450	2	36	8	30	115	100	114,3×7	

Dimensions of welding ends according to the dimensional table or customer requirement. Dimensions in [mm], weights in [kg].

Type designation



Application

Cryogenic ball valve is isolating valve designed to fully open or close the service fluid flow. It is not designed to be used for throttling or regulating purposes. For temperatures from $-196\text{ }^{\circ}\text{C}$ to $+70\text{ }^{\circ}\text{C}$.

For liquids and gases of temperature lower than $-60\text{ }^{\circ}\text{C}$, the ball of valve is equipped with upstream vent hole which ensures balancing of overpressure from valve cavity into upstream pipeline. In such case the valve is unidirectional and is equipped with label showing the fluid flow on the body.

Suitable for:

- for both corrosive and non-corrosive liquids and gases without mechanical impurities.

Approved for:

- fluids in groups 1 (hazardous) and 2 according to 2014/68/EU.

Characteristics

- floating ball,
- full bore,
- anti-static design,
- stem secured against release (anti-blow-out).
- sealed with PTFE.

Optional accessories, adjustments and services

- different face-to-face dimensions or end combinations,
- adaptation of face form (Groove, Tongue, Spigot, Recess, O-ring groove, RTJ),
- connection for actuator according to ISO 5211,
- fire-safe design – fire resistance in accordance with EN ISO 10497 (API 607),
- lockable handle with a padlock,
- extended stem – e.g. for the reason of insulation of the valve and pipeline,
- design according to TA-Luft or EN 15848-1,
- up-stream vent hole – for balancing pressure into up-stream pipeline,
- limit switches,
- documentation according to EN 10204 3.2,
- special adjustments according to customer requests,
- degreased for Oxygen service,
- fully-welded design,
- design for application in potentially explosive atmospheres according to the directive 2014/34/EU (ATEX).

Operation

- hand lever,
- hand wheel with worm gear,
- pneumatic actuator,
- electric actuator.

Compliance with standards

- EN 1983,
- EN 12516-1,
- EN 1092-1,
- EN 17292,
- EN 558-1 series 1, EN 12982 series 68,
- EN 1626,
- EN ISO 5211.

Testing

- EN 12266-1, leakage rate A – zero leakage.