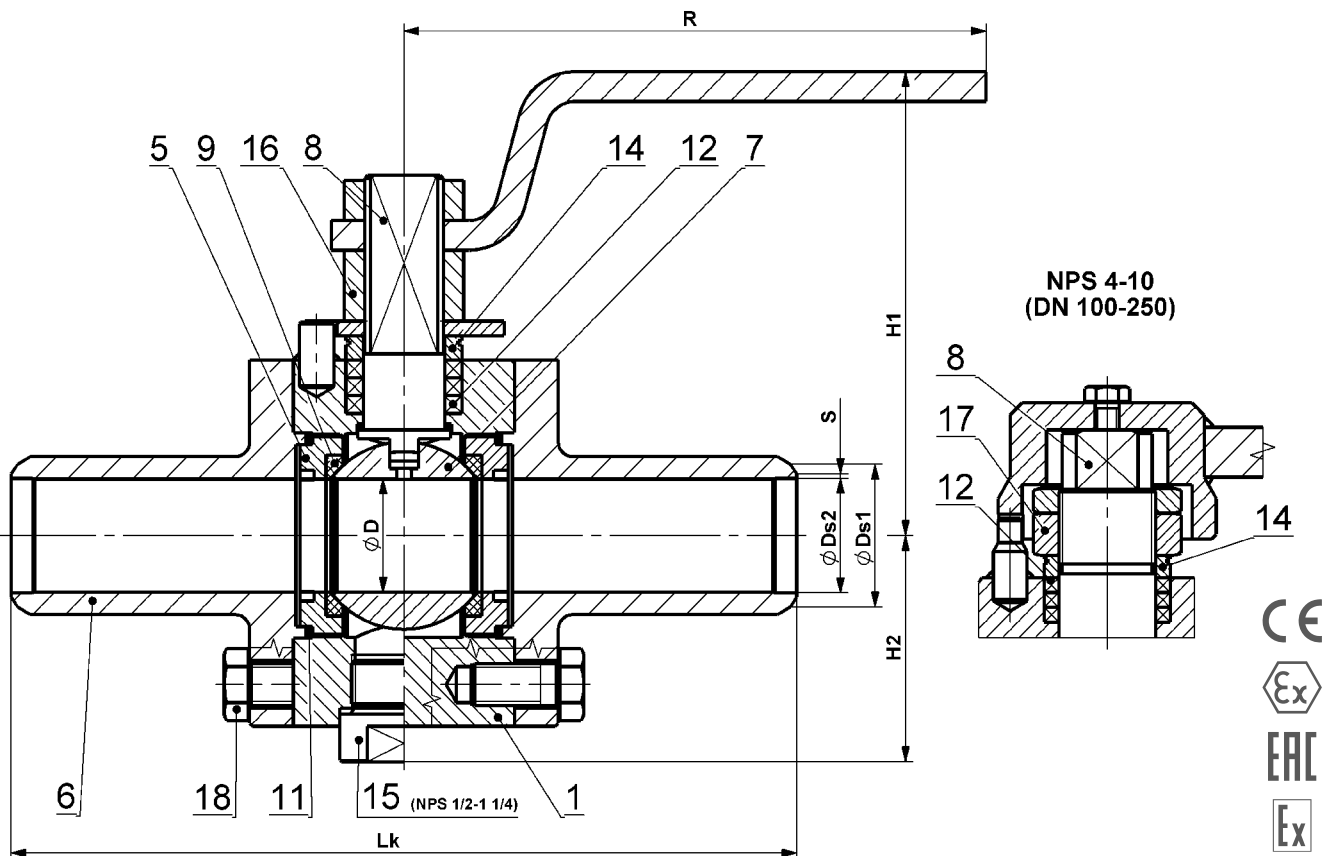


## BUTT WELD END BALL VALVE FOR HIGH TEMPERATURES

### KM 9103.X-HT-AF

NPS 1/2"–4" Class 150–900



### Materials

Type KM 9103.X-HT-AF		Material				
		Carbon steel		Alloyed steel	Stainless steel	
Position	Component	X=1 For temperatures from -20 °C to +300 °C	X=5 For temperatures from -46 °C to +400 °C	X=8 <sup>1)</sup> For temperatures from 0 °C to +500 °C	X=3 <sup>1)</sup> For temperatures from -60 °C to +500 °C	X=4 <sup>1)</sup> For temperatures from -60 °C to +500 °C
1	Body	1.0577, S355J2	1.0565, A350 LF2, P355NH	1.5415, 16Mo3	1.4541, A182 F321	1.4571, A182 F316
5	Seat body					
6	Socket					
7	Ball	1.4021, ČSN 17 027	1.4021, ČSN 17 027	1.4923		
8	Stem		1.4541, A182 F321			
9	Seat	Carbon+Sb				
11	Gasket	Graphite				
12	Packing	Graphite				
14	Gland cover	1.4021, ČSN 17 027				
15	Screw plug	1.0577, S355J2	1.0565, A350 LF2	1.5415, 16Mo3	1.4541, A182 F321	1.4571, A182 F316
16	Nut	Cl.8, A2-70, A194 Gr. 2H	A2-70, A194 Gr. 7	A2-70 <sup>2)</sup> , A194 Gr. 2H	A2-70 <sup>2)</sup> , A194 Gr. 8	
17	Nut	1.4021, ČSN 17 027		1.4923	1.4021 <sup>2)</sup> , ČSN 17 027 <sup>2)</sup> , 1.4923	
18	Bolt	8.8, A2-70, A193 B7	A2-70, A320 L7	A193 B7, 1.4980	A2-70 <sup>2)</sup> , A193 B8 <sup>2)</sup> , 1.4980	

<sup>1)</sup> = for temperatures above +400 °C for non-oxidizing fluids only

<sup>2)</sup> = material up to +400 °C only.

Other materials upon request (P265GH, 1.4306, 1.4462, 1.7335 etc.).

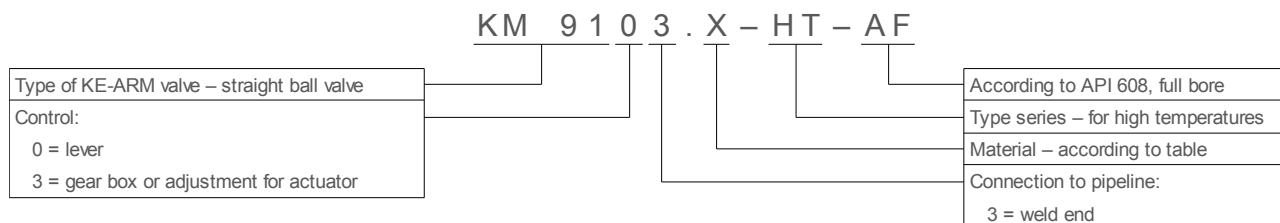
### Dimensions and weights

Class 150, 300	NPS	DN	∅D	∅Ds1	∅Ds2	s	Trubka / Pipe	Lk	H1	R	Hm / W
	½"	15	14,9	22	15,5	1,6	21,3×2,77 (Sch. 40)	270			
	¾"	20	19	27,5	20,5	1,6	26,7×2,87 (Sch. 40)	270			
	1"	25	25	34	26,5	1,6	33,4×3,38 (Sch. 40)	270			
	1 ¼"	32	30	43	35	1,6	42,2×3,56 (Sch. 40)	270			
	1 ½"	40	38	49	40,5	1,6	48,3×3,68 (Sch. 40)	270			
	2"	50	49	61	53,5	1,6	60,3×3,18	270			
	2 ½"	65	62	74	65,5	1,6	73×3,58	270			
	3" *	80	75	89	80,5	1,6	88,9×3,96	282			
4" **	100	100	115	103,5	1,6	114,3×5,16	305				

Class 600	NPS	DN	∅D	∅Ds1	∅Ds2	s	Trubka / Pipe	Lk	H1	R	Hm / W
	½"	15	14,9	22	15,5	1,6	21,3×2,77 (Sch. 40)	270			
	¾"	20	19	27,5	20,5	1,6	26,7×2,87 (Sch. 40)	270			
	1"	25	25	34	26,5	1,6	33,4×3,38 (Sch. 40)	270			
	1 ¼"	32	30	43	35	1,6	42,2×3,56 (Sch. 40)	270			
	1 ½"	40	38	49	40,5	1,6	48,3×3,68 (Sch. 40)	270			
	2"	50	49	61	52	1,6	60,3×3,91 (Sch. 40)	292			
	2 ½"	65	62	74	62,5	1,6	73×5,16 (Sch. 40)	330			
	3" *	80	75	89	77,5	1,6	88,9×5,49 (Sch. 40)	356			
4" **	100	100	115	102	1,6	114,3×6,02 (Sch. 40)	432				

\* = gearbox recommended, \*\* = with gearbox only. Dimensions in [mm], weights in [kg]. Dimensions of welding ends according to the dimensional table or customer requirement. Dimensions for Class 900 upon request.

### Type designation



## Application

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 up to +500 °C (for temperatures above +400 °C for non-oxidizing fluids only).

Suitable for:

- water, steam, gas, oil, heat transfer fluids and other 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).

## Optional accessories, adjustments and services

- different end-to-end dimensions or end combinations,
- connection for actuator according to ISO 5211,
- fire-safe design – fire resistance in accordance with EN ISO 10497 (API 607),
- heating jacket – for keeping the fluid liquid,
- 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,
- limit switches,
- documentation according to EN 10204 3.2,
- special adjustments according to customer requests,
- design according to standard NACE MR 0175 or ISO 15156.

## Operation

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

## Compliance with standards

- API 608,
- EN 12516-1,
- ANSI B16.25 and EN 17292
- ANSI B16.10 or not standardized
- EN ISO 5211,
- EN 13463-1 (ATEX) – II 1 GD Ex IIC TX, I M1.

## Testing

- API 598 or API Spec 6D – zero leakage.

## Pressure-temperature graph

