

**CAST IRON BALL VALVE PN 16**

**Size :** DN 15 to DN 200  
**Ends :** PN10/16 Flanges  
**Min Temperature :** -10°C  
**Max Temperature :** + 200°C  
**Max Pressure :** 16 Bars  
**Specifications :** Full bore  
Stainless steel ball  
ISO 5211 mounting pad

**Materials :** Cast iron body EN GJL-250

**CAST IRON BALL VALVE PN 16**

**SPECIFICATIONS :**

- Full bore
- Anti blow-out stem
- With O ring FKM on stem and PTFE washer
- ISO 5211 mounting pad
- PN10/16 Flanges R.F. up to DN150 and PN16 for DN200 ( Threaded holes flanges for DN 125 and 150 )
- Solid stainless steel ball up to DN 25, hollow ball from DN 32 to DN 200
- Black painting colour RAL 9004 5-15 microns thickness

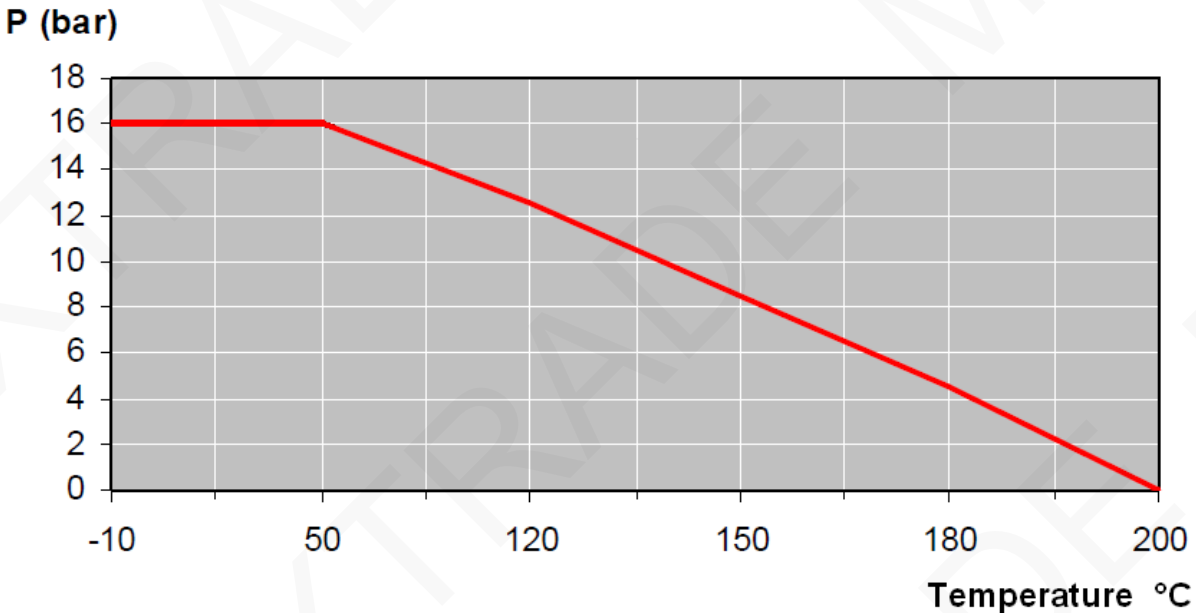
**USE :**

- For all common fluids
- Min and max Temperature Ts : - 10°C to + 200°C
- Max Pressure Ps : 16 bars
- **Do not use with steam**
- **Do not use with compressed air**

**RANGE :**

- Cast iron flanges R.F. with s.s. ball PN10/16 from DN15 to DN150 and PN16 for DN200 **Ref. 507** from DN 15 to DN 200

**PRESSURE / TEMPERATURE GRAPH ( STEAM EXCLUDED ) :**

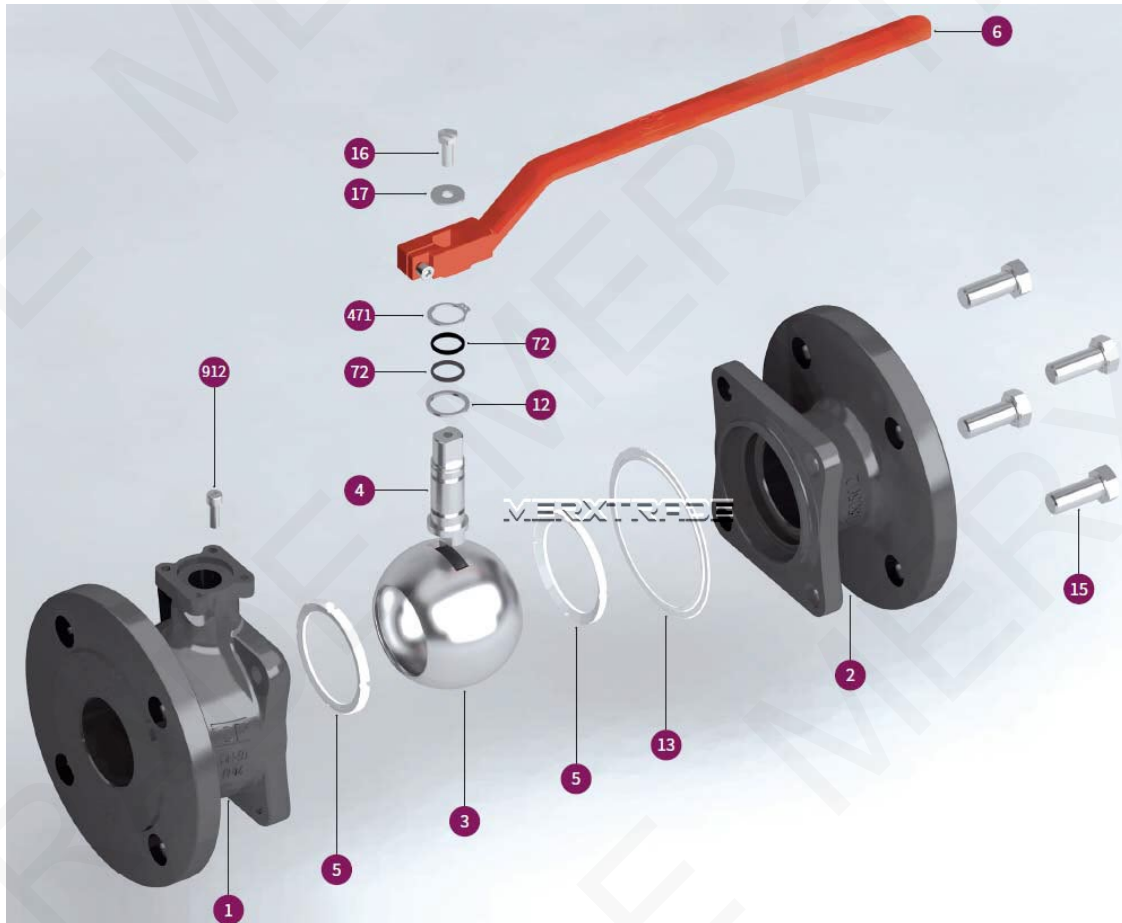


**FLOW COEFFICIENT Kvs ( in M3/H ) :**

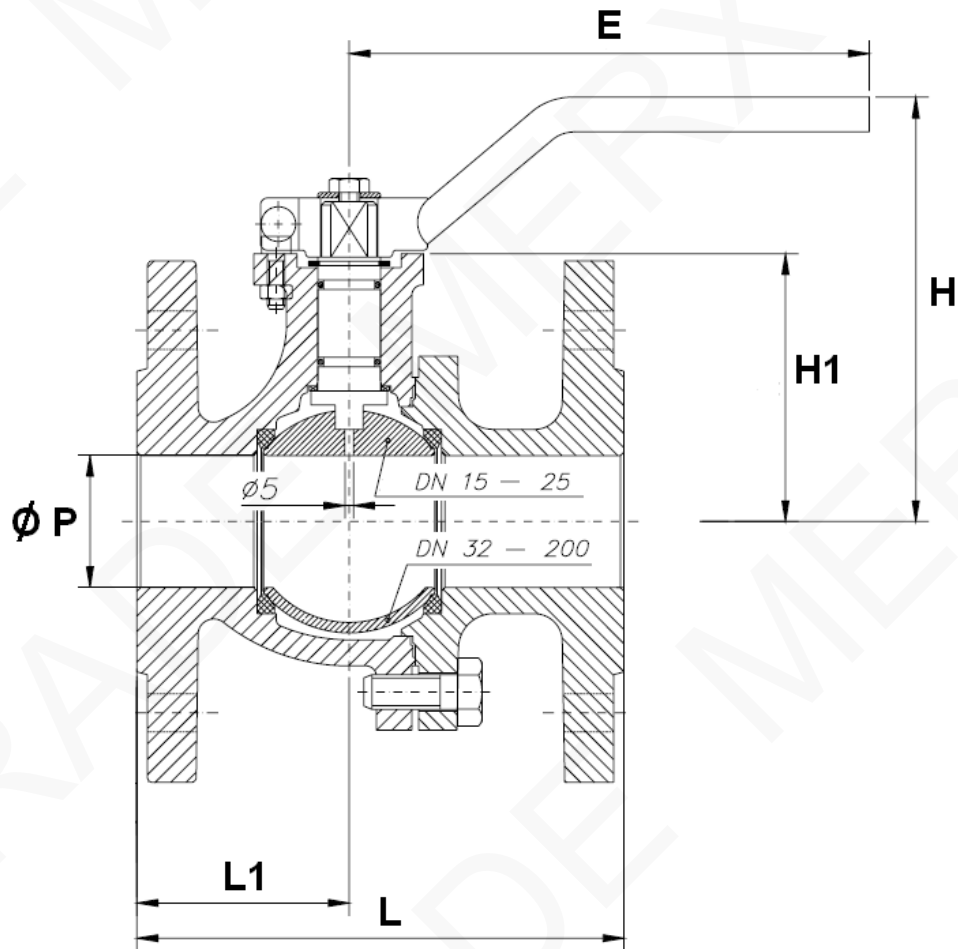
DN	15	20	25	32	40	50	65	80	100	125	150	200
Kvs (M3 / H)	37.4	74.8	105	176	223	416	660	1200	1980	3600	5040	10890

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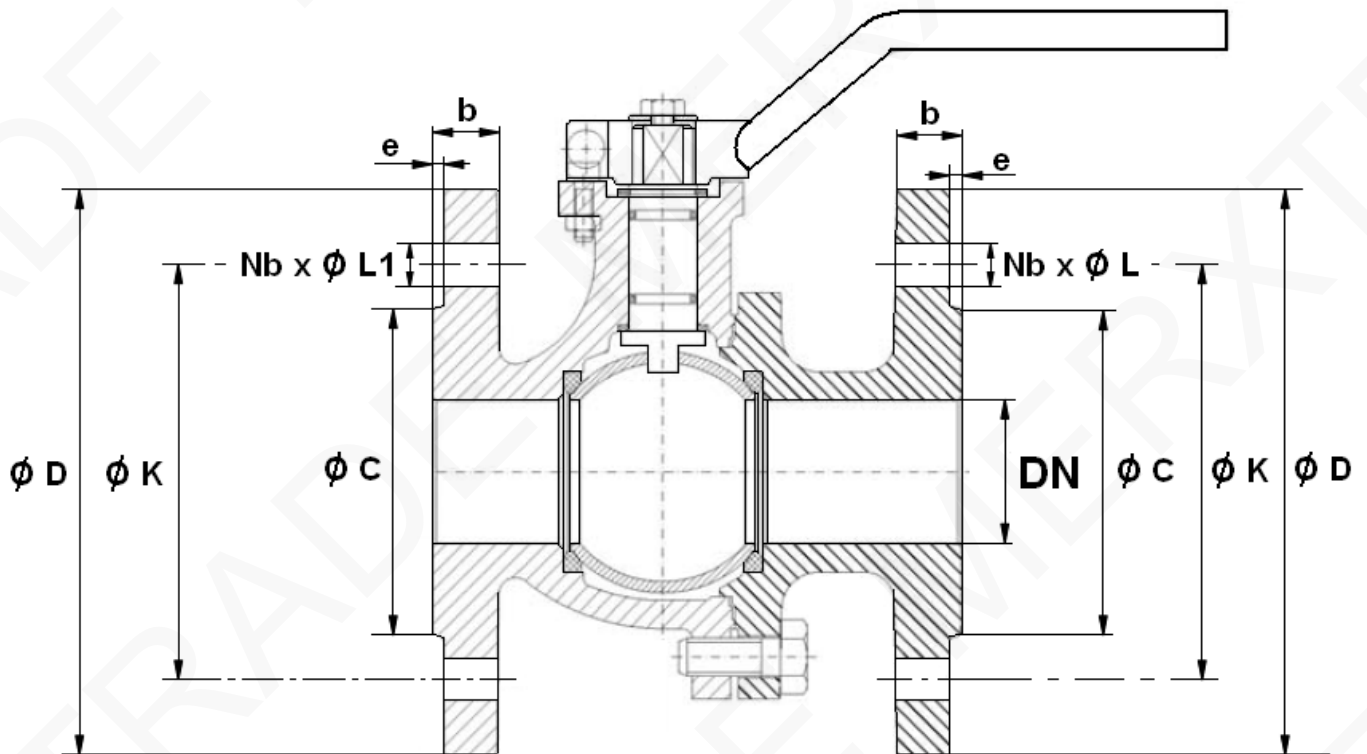
### MATERIALS:



Item	Designation	Materials
1	Body	Cast iron EN GJL-250
2	Ends	Cast iron EN GJL-250
3	Solid Ball DN 15 - 25	AISI 303
3	Hollow Ball DN 32 – 200	AISI 304
4	Stem	
5	Seat	PTFE
6	Handle	Steel
12	Washer	PTFE
13	Body gasket	PTFE
15	Body screw	Steel DIN 933 5.6
16	Handle screw	Steel DIN 933 5.6
17	Handle washer	Steel
72	O ring	FKM
471	Circlip	Steel DIN 471
912	Stop Screw	Steel DIN 912 8.8

**CAST IRON BALL VALVE PN 16**
**VALVE SIZE ( in mm ) :**


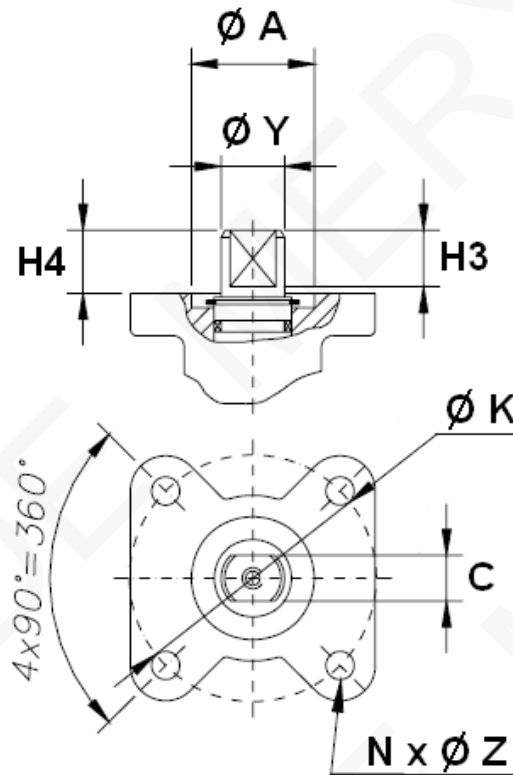
DN	15	20	25	32	40	50	65	80	100	125	125	150	150	200
Ø P	13	17	24	31	38	50	65	80	100	125	125	150	150	200
L	115	120	125	130	140	150	170	180	190	200	325	210	350	400
L1	49	55.5	51.5	53	61	62	81.5	79	94	93	120.5	100	155	190
H	92	95.5	102.2	114.7	119	127	141	151.5	176.5	208	208	254.5	254.5	293.5
H1	48.5	53	59.5	72	77	85	98	108.5	134	165	165	190	190	229
E	170	170	170	170	302.5	302.5	335	335	350	350	350	500	500	500
Weight (Kg)	2.12	2.72	3.62	5.32	6.9	9	11.68	14.68	20.23	33	33.73	47.5	49.77	81.77

**CAST IRON BALL VALVE PN 16**
**FLANGES SIZE ( in mm ):**


Ref.	DN	15	20	25	32	40	50	65	80	100	125	150	200	
507	$\phi C$	45	58	68	78	88	102	122	138	158	188	212	268	
	$\phi D$	95	105	115	140	150	165	185	200	220	250	285	340	
	$\phi K$	65	75	85	100	110	125	145	160	180	210	240	295	
	Nb x $\phi L$	4 x 14	4 x 14	4 x 14	4 x 18	4 x 18	4 x 18	4 x 18	4 x 18	8 x 18	8 x 18	8 x M16	8 x M20	12 x 22
	Nb x $\phi L1$	4 x 14	4 x 14	4 x 14	4 x 18	4 x 18	4 x 18	4 x 18	4 x 18	8 x 18	8 x 18	8 x M16	8 x M20	12 x 22
	b	14	16	16	16	16	18	18	20	20	22	22	24	
	e	2	2	2	2	3	3	3	3	3	3	3	3	

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STEM AND ISO MOUNTIG PAD SIZE ( in mm ) :



Ref.	DN	15	20	25	32	40	50	65	80	100	125	150	200
507	Ø K	42	42	42	42	42	42	70	70	70	70	102	102
	ISO	F04	F04	F04	F04	F04	F04	F07	F07	F07	F07	F10	F10
	N x Ø Z	4 x 5	4 x 5	4 x 5	4 x 5	4 x 5	4 x 5	4 x 8	4 x 8	4 x 8	4 x 8	4 x 10	4 x 10
	C	7	7	7	7	12	12	13	13	16	16	20	20
	Ø Y	10	10	10	10	16	16	18	18	22	22	28	28
	H3	5.5	5	5	5.5	16	16	19	19	20	20	27	27
	H4	7.5	6	6.2	6.7	15	15	18	18	19	19.5	24.5	24.5
	Ø A	19	19	21	21	30	30	35	35	38	38	50	50

**CAST IRON BALL VALVE PN 16****TORQUE VALUES ( in Nm without safety coefficient ) :**

DN	15	20	25	32	40	50	65	80	100	125	150	200
Torque ( Nm )	6	6	11	12	26	41	41	71	119	190	220	450

**STANDARDS :**

- Fabrication according to ISO 9001 :2008
- DIRECTIVE 2014/68/EU : Risk Category I module A from DN65 to DN150
- Valve design according to DIN 3357
- Body design according to DIN 3840
- ISO 5211 mounting pad
- Length according to EN 558 series 27 ( DIN 3202 F18 )
- Length according to EN 558 series 14 from DN 125 to 150 for Refs 507126 and 507151
- Flanges R.F according to EN 1092-2 PN10/16
- Marking according to EN 19
- Pressure tests according to EN 12266-1

**ADVICE :** Our opinion and our advice are not guaranteed and MXT shall not be liable for the consequences of damages. The customer must check the right choice of the products with the real service conditions.

## CAST IRON BALL VALVE PN 16

### INSTALLATION INSTRUCTIONS

#### GENERAL GUIDELINES :

- Ensure that the valves to be used are appropriate for the conditions of the installation (type of fluid, pressure and temperature).
- Be sure to have enough valves to be able to isolate the sections of piping as well as the appropriate equipment for maintenance and repair.
- Ensure that the valves to be installed are of correct strength to be able to support the capacity of their usage.
- **Installation of all circuits should ensure that their function can be automatically tested on a regular basis (at least two times a year).**

#### INSTALLATION INSTRUCTIONS :

- **Before installing the valves, clean and remove any objects from the pipes** (in particular bits of sealing and metal) which could obstruct and block the valves.
- **Ensure that both connecting pipes either side of the valve (upstream and downstream) are aligned (if they're not, the valves may not work correctly).**
- **Make sure that the two sections of the pipe (upstream and downstream) match, the valve unit will not absorb any gaps. Any distortions in the pipes may affect the tightness of the connection, the working of the valve and can even cause a rupture.** To be sure, place the kit in position to ensure the assembling will work.
- **If sections of piping do not have their final support in place, they should be temporarily fixed. This is to avoid unnecessary strain on the valve.**
- Tighten the bolts in cross.
- It's recommended to operate the valve ( open and close ) 1 to 2 times per year