

H2 Invictus - High pressure hydrogen ball valve



Makro Kugelhähne

Kategorie H2 INVICTUS

vorteile



H2 INVICTUS PN 550 H35

Pressure class

PN 550 H35

Body and ends

Made of ASTM A479 TP.316.

Ball and stem

Made of XM-19 (NITRONIC 50).

They combine high mechanical strength with a structure that minimises hydrogen embrittlement.

Sealing

Guaranteed by lip seals insensitive to rapid decompression phenomena.

Longer life due to its elastic module.

H2 Ready

All selected materials are suitable for 100% H2 service and verified by Material Assessment validated by TÜV SÜD.

ISO 19880-3 certification

Shut-off service - class "A".

Allows installation inside hydrogen fuelling stations with a designation up to H35.

In compliance with ATEX 2014/34/UE european directive

Installation is possible in a potential explosive environment.

H2 INVICTUS PN 700 H50

Pressure class

PN 700 H50

Body and ends

Made of ASTM A479 TP.316 with additional requirements for hydrogen service.

Ball and stem

Made of XM-19 (NITRONIC 50).

They combine high mechanical strength with a structure that minimises hydrogen embrittlement.

Sealing

Guaranteed by lip seals insensitive to rapid decompression phenomena.

Longer life due to its elastic module.

H2 Ready

All selected materials are suitable for 100% H2 service and verified by Material Assessment validated by TÜV SÜD.

ISO 19880-3 certification

Shut-off service - class "A".

Allows installation inside hydrogen fuelling stations with a designation up to H50.

In compliance with ATEX 2014/34/UE european directive

Installation is possible in a potential explosive environment.

eigenschaften

MAIN FEATURES:

- Floating ball;
- 2-pieces body;
- PN550 / H35;
- PN700 / H50;
- Soft-seat seal PEEK;
- Operating temperature: -40°C/+ 85°C;
- NPT-F (ANSI B1.20.1) and Cone & Thread connections (on request);
- Size range:
 - from 1/8" to 1/2" with 8 mm passage diameter
 - from 3/4" to 1" with 12 mm passage diameter
- Antistatic device EN12266-2;
- Anti Blow-out stem;
- Actuator connection as per standard ISO 5211;
- Intercepted fluid: hydrogen;

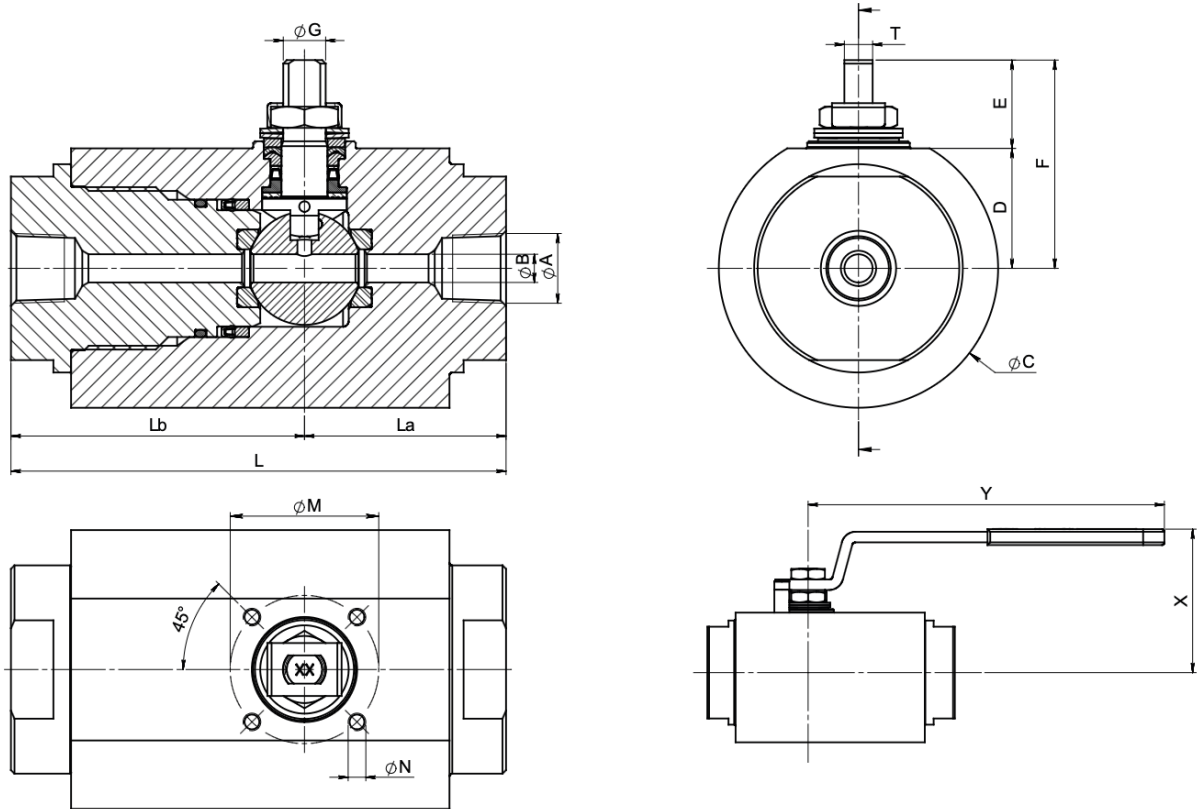
CERTIFICATIONS:

- ISO 19880-3 certificate on request;
- H2 materials compatibility assessment on request;
- Safety integrity level up to SIL 3 according to IEC 61508;
- Ex CE/UKCA;

ENGINEERING STANDARDS:

- ISO 19880-1;
- ASME B16.34, ASME VIII div.1, EN 12516;

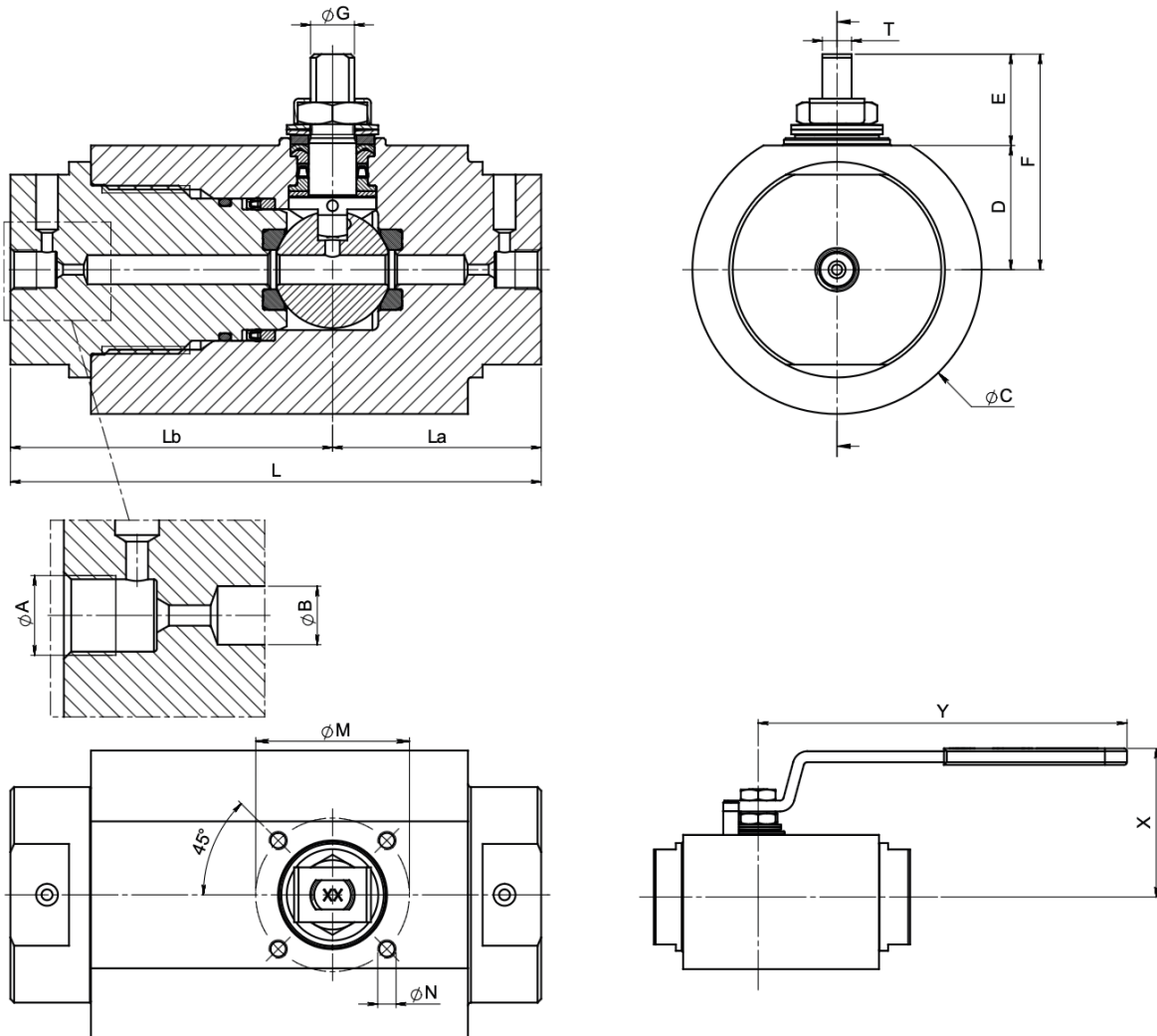
abmessungen

NPT DIMENSIONS


NPT DIMENSIONS																			
NPS	DN	ØA	L	La	Lb	ØB	ØC	D	E	F	ØG	T	ISO 5211	ØM	ØN	Y	X	Weight Kg	
1/8"	06	1/8" NPT	140	57	83	8	79	34	25	59	12	8	F04	42	M5	201,5	81	4,8	
1/4"	08	1/4" NPT																4,8	
3/8"	10	3/8" NPT																4,7	
1/2"	15	1/2" NPT																4,6	
3/4"	20	3/4" NPT	160	67	93	12	98	41	31	72	16	10	F05	50	M6	276,5	93	8,2	
1"	25	1" NPT																	8,1

Dimensions valid for both PN550 and PN700.

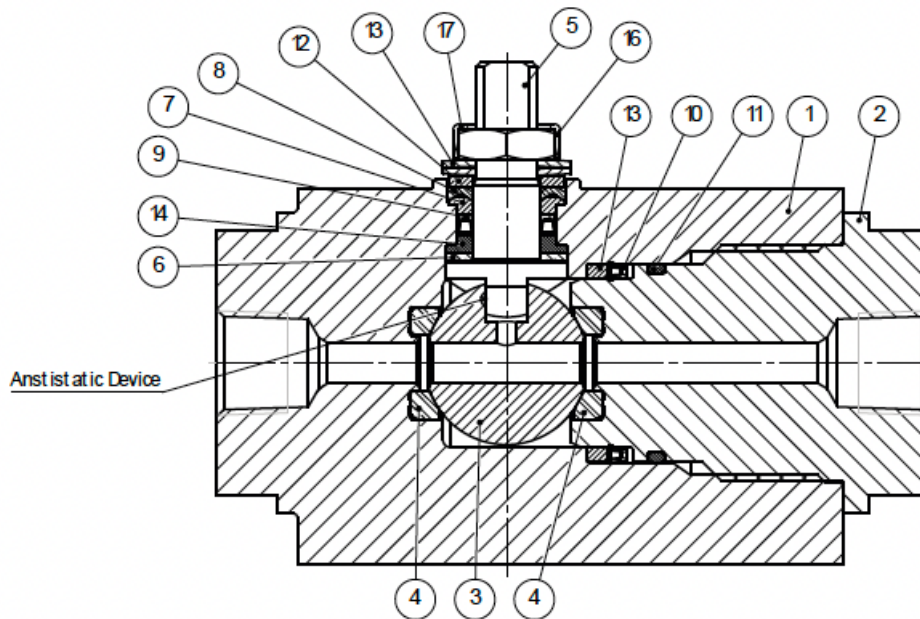
C & T DIMENSIONS



C & T DIMENSIONS																			
C & T	ØA	ØP	ØB	L	La	Lb	ØB	ØC	D	E	F	ØG	T	ISO 5211	ØM	ØN	Y	X	Weight Kg
4M	7/16-20 UNF 2B	2,7																	4,6
6M	9/16-18 UNF 2B	5,1	8	145	57	88	8	79	34	25	59	12	8	F04	42	M5	201,5	81	4,6
9M	13/16-16 UN 2B	7,8		155	62	93													4,8
12M	3/4-14 NPSM 2B	-	12	177	72	105	12	98	41	31	72	16	10	F05	50	M6	276,5	93	8,5

Dimensions valid for both PN550 and PN700.

werkstoffe



MATERIALS		
1	Body	A479 tp.316 / 1.4401
2	Ends	A479 tp.316 / 1.4401
3	Ball	A479 tp.XM19 (Nitronic 50) Hard Chromium plated
4	Seats	Filled PEEK
5	Stem	A479 tp.XM19 (Nitronic 50)
6	Bottom sealing	DEVLON
7	Lower Chevron ring	Filled PEEK
8	Upper Chevron ring	DEVLON
9	Primary stem seal	PEEK
10	Primary body seal	PEEK
11	Secondary body seal	FKM 90
12	Gland nut ring	A479 tp.316 / 1.4401
13	Spring washer	301 SS
14	Stem ring	A479 tp.XM19 (Nitronic 50)
16	Stem nut	A4-70
17	Stem nut plate	304 SS

dokumente

Certificati

ATEX - Ball Valves

SIL H2 Invictus series

