

HERCULES for non self-lubricating media carbon steel ball valve

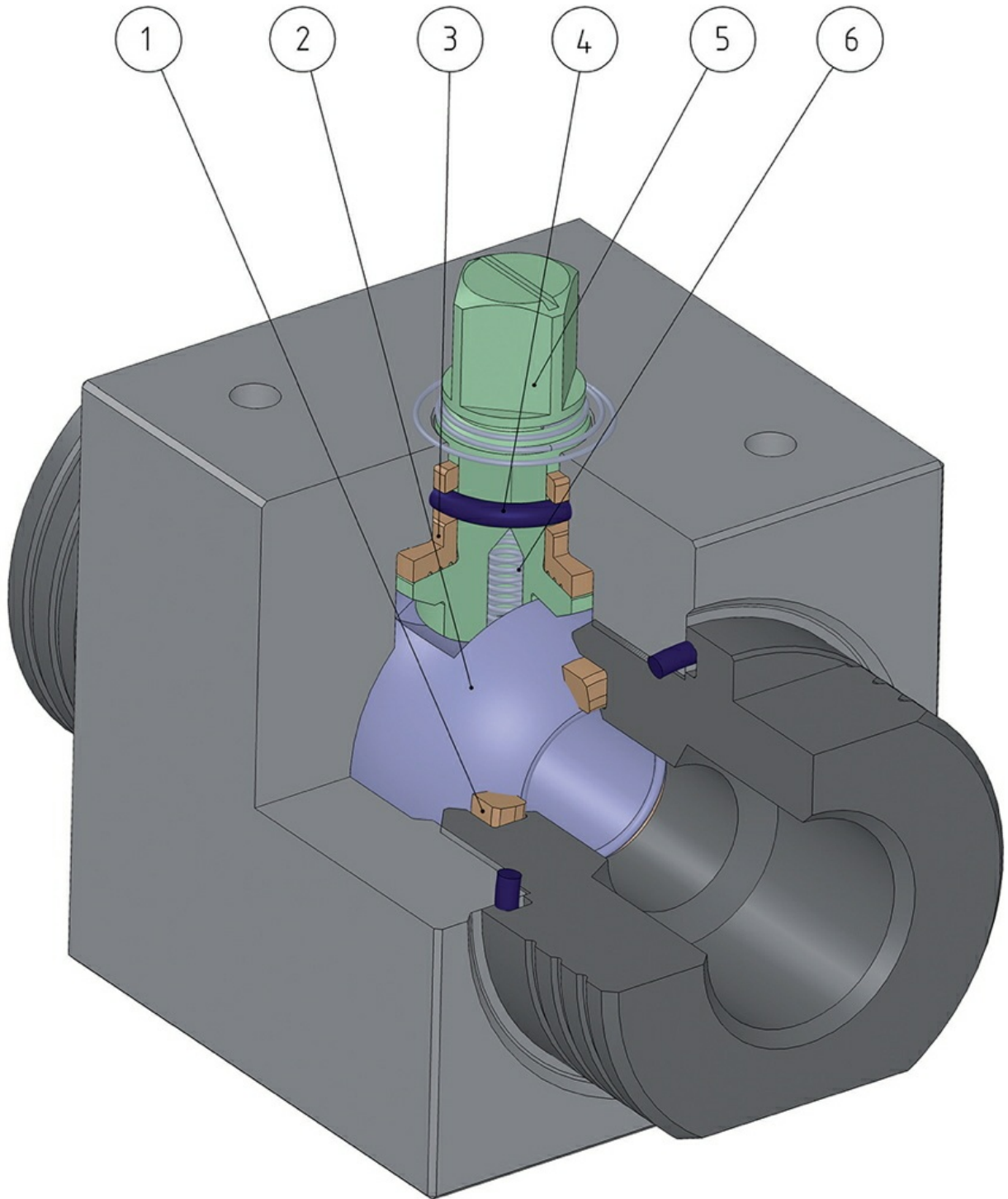


Macro Ball valves

Category HERCULES

Subcategory HERCULES for non self-lubricating media

benefits



1. Seat in "LUBROSEAT"

Acetal resin compound containing self-lubricating additives.
Ideal for non-lubricating fluids.
High resistance to stress.

2. Stainless steel ball, coated with 40µm Hard Chrome

Longer seal life due to the low wear of the ball

3. "POWERAMMIDE"[™] stem bush

It grants a perfect alignment of the shaft on the body and prevents oscillations with high pressure
No seizing
High number of cycles

4. Elastomer O-Ring with a hardness of 90 Shore A

No deterioration with quick operations

4. Low-permeability O-ring "Rapid Gas Decompression"

Good resistance to explosive decompression

5. Stem in 17-4 PH H900

Increased mechanical strength about 5 times more compared to a standard 316 S.S.

5. Shaft rolling

Less wear of the seals due to the low roughness (0,4 micron Ra) which facilitate the sliding of the shaft

6. Antistatic device (electrical continuity between ball, stem and body)

Static electricity is avoided which can cause sparks and fire in an inflammable/explosive environment
Contact safety throughout the entire life of the valve

Fire safe design

Guarantees the tightness of the valve also in case of fire

Atex Certificate

Installation is possible in a potential explosive environment

UP to SIL 3 certified

Guarantee of the high level of functional safety

features

GENERAL FEATURES:

- Ends: Threaded ends EN ISO 228 or NPT.
- Working temperature: from -20°C to +80°C.
- Working pressure: PN400/6000 psi DN10, DN15, DN20; PN320/4500 psi DN25
- Working media: oils, petroleum and petrochemical products, water and other compatible with the constructive materials.
- Antistatic device.
- Fire safe design.

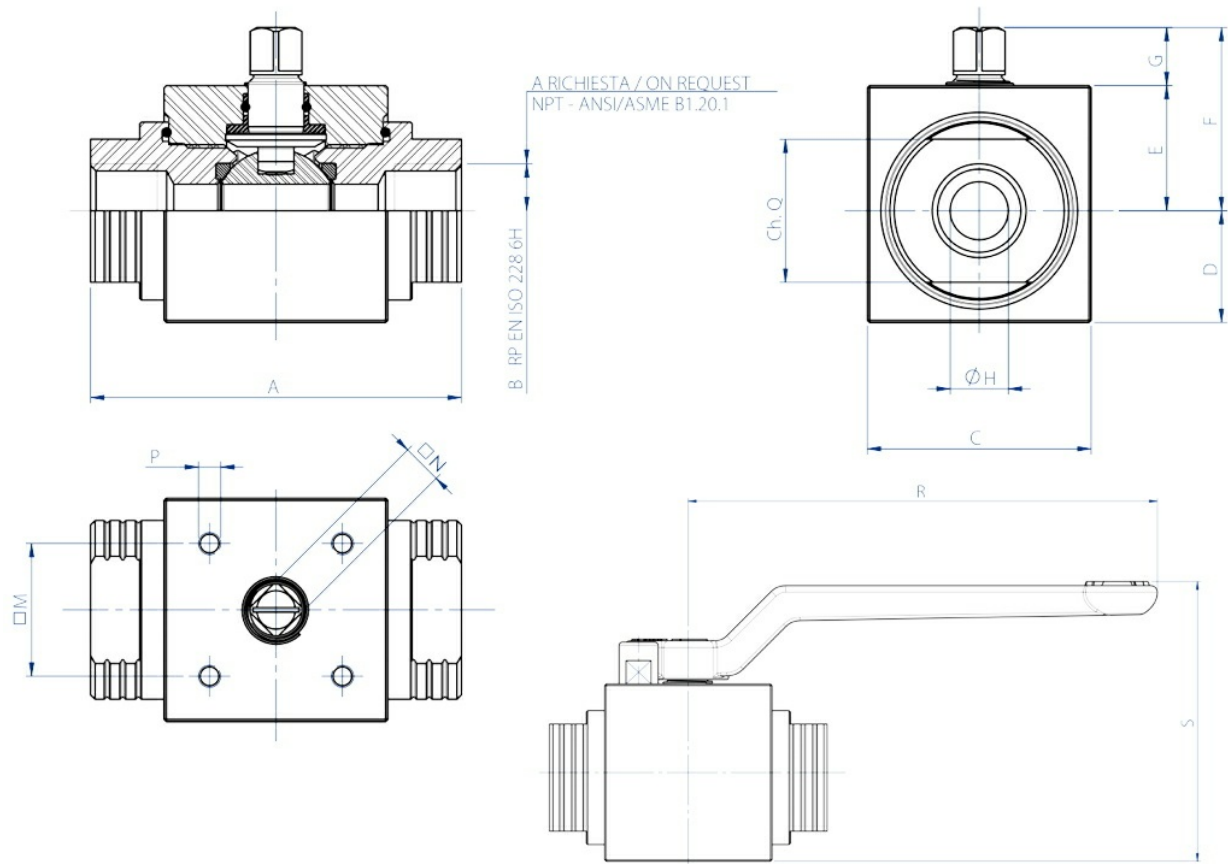
SPECIAL EXECUTION ON REQUEST:

For other applications, please contact our sales department.

CERTIFICATIONS:

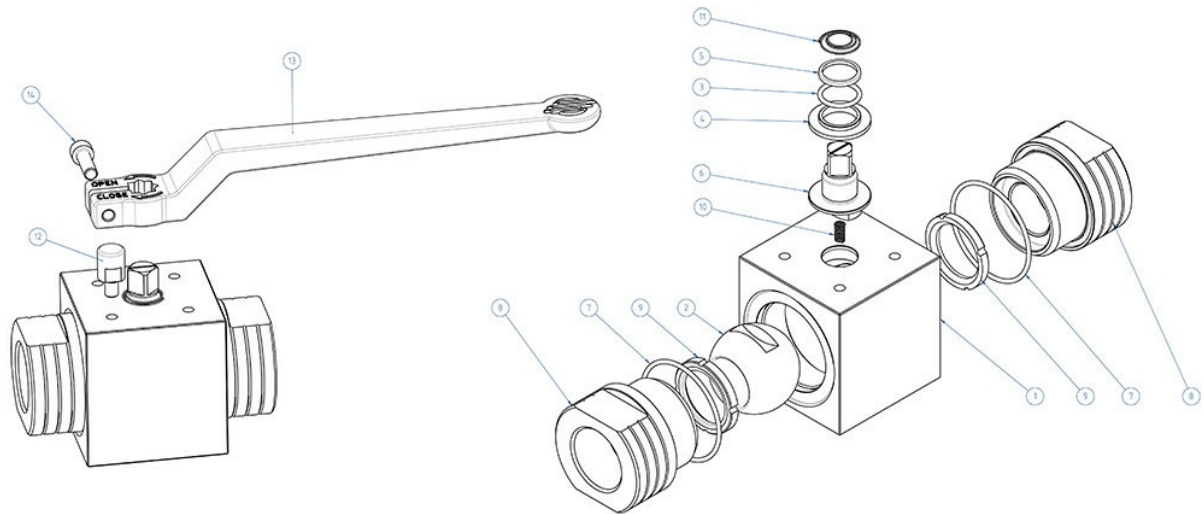
- ATEX version in conformity with European Directive 2014/34/EU.
- ATEX certificate on request.
- Safety integrity level up to SIL 3 according to the IEC 61508.
- In compliance with European Directive 2014/68/EU PED.

dimensions



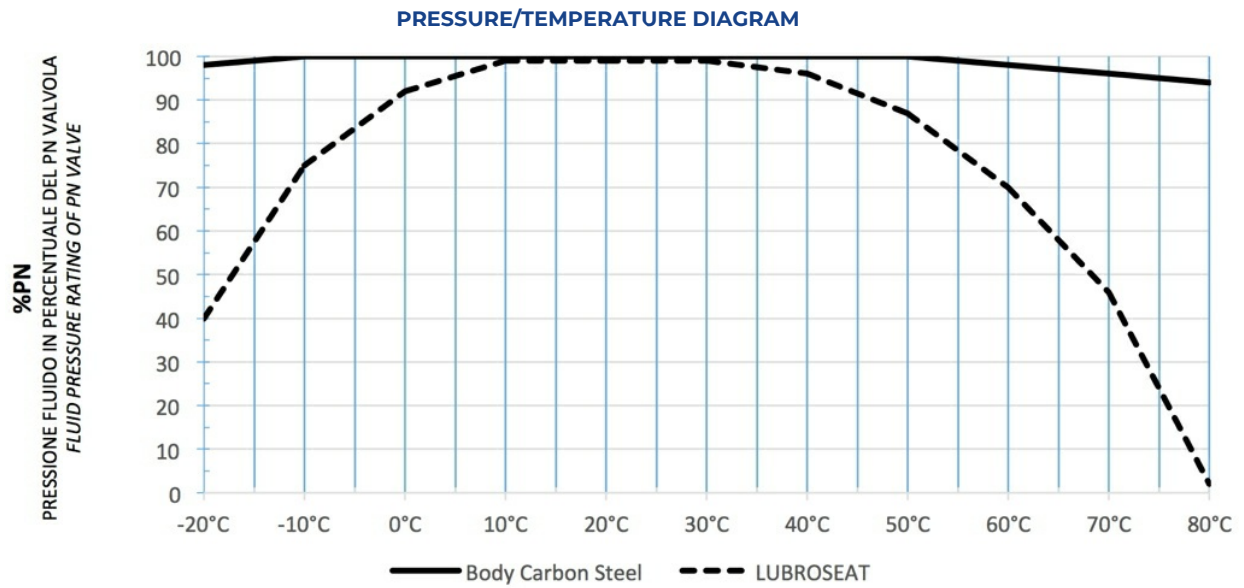
SIZE		DIMENSIONS													
DN [mm]	[inch]	A	B	C	D	E	F	G	ØH	Ch.Q.	□M	□N	P	R	S
DN 10	3/8"	72	3/8"	45	19,7	25,3	38,3	13	9	24	29,7 (F04)	9	M5	140	75,5
DN 15	1/2"	83	1/2"	50	25	28	41	13	13	32	29,7 (F04)	9	M5	140	83,6
DN 20	3/4"	95	3/4"	55	27,5	31	46	15	19	37	35,36 (F05)	11	M6	212	94,8
DN 25	1"	113	1"	65	32,5	35	50	15	25	45	35,36 (F05)	11	M6	212	103,8

materials



MATERIALS		
1	Body	≤DN25: 1.0737 (11SMnPb37);
2	Ball	A217 CA15 / A479 tp. 410 / A182 F6A + Hard chromium plated
3*	O-ring	NBR (FKM on request)
4*	Lower bush	Modified nylon PA66
5*	Upper bush	Modified nylon PA66
6	Stem	A564 Tp 630 (17-4 PH)
7*	O-ring	NBR (FKM on request)
8	Ends	≤DN25: 1.0737 (11SMnPb37) / ASTM A350 LF2;
9*	Seats	Filled POM
10	Antistatic device spring	1.4310 - X12CrNi17-7
11	Upper antistatic device spring	1.4310 - X12CrNi17-7
12**	Holder screw	X5CrNiMo1713 - 316 S.S.
13**	Lever	EN AB 46100 - AL SI 11 CU (FE) Painted
14**	Screw	A2 - 70
* Seals kit components		
** Lever kit components		

diagrams and breakaway torque



DN10, DN15, DN20	PN400/6000 psi
DN25	PN320/4500 psi

BREAKAWAY TORQUES in Nm

PN	DN 10 3/8"	DN 15 1/2"	DN 20 3/4"	DN 25 1"
PN 400 bar	20	31	40	
PN 320 bar	15	25	34	62
PN 100 bar	10	20	30	39

Torque can vary depending on temperature and type of fluid, a safety factor 1.4 must be applied.

FLOW RATE KV m³/h

KV m ³ /h	5	11	24	44

Kv is the coefficient, expressed in m³/h (with water at 15°C) causing a pressure loss of 1 bar.

documents

Certificati

SIL IEC 61508 - HERCULES
ATEX - Ball Valves

Istruzioni

ISTRUZIONI ATEX 8_0486
ISTRUZIONI USO 8_1095

Manuali

MANUALE UMAH1000