

2 PIECES CARBON STEEL TRUNNION BALL VALVE FLANGED CLASS 300 PN50 JC LONG PATTERN (ASME B16.10 TABLE 2-7) PTFE FILLED WITH GRAPHITE SEAT

2 pieces split body trunnion ball valve JC with PTFE bearing, full bore for Chemical industries, petrochemical industries, hydraulic installation, heating, water distribution, compressed air.

Double block and bleed :

- To control the double tightness upstream/downstream of the valve
- Maximum safety for maintenance working downstream the valve

Low torque and high tightness even at low pressure. Seat installed on Inconel springs simple piston effect type (double piston effect on request).

Ball valve with firesafe certificate ISO 10497 and API 607 to reduce risks in case of fire.

Compatible with explosive atmosphere, ATEX Zone 1&21 and Zone 2&22 thanks to the antistatic device.

Handling possible with locking device, gearbox, oval handwheel or stem extension.

Thanks to the ISO 5211 plate, an actuator can be installed on the valve.



JC
VALVES



NACE MR01-75

Size : DN50 to DN300 (NPS 2" to 12")
Connection : Flanges Class 300 PN50 RF
Min Temperature : -29°C
Max Temperature : +260°C
Max Pressure : 50 Bars
Specifications : Trunnion ball valve on PTFE bearing
 ISO 5211 mounting pad
 Anti blow-out stem, full bore
 Simple piston effect
 Fire safe ISO 10497 and API 607

Materials : Forged carbon steel ASTM A105N

*the installation defects and wear defects are not covered by the guarantee

Sferaco 90 rue du Ruisseau 38297 St Quentin Fallavier Tel: + 33 (0) 474.94.15.90 Fax: + 33 (0) 474.95.62.08 Internet: www.sferaco.com E-mail: info@sferaco.fr

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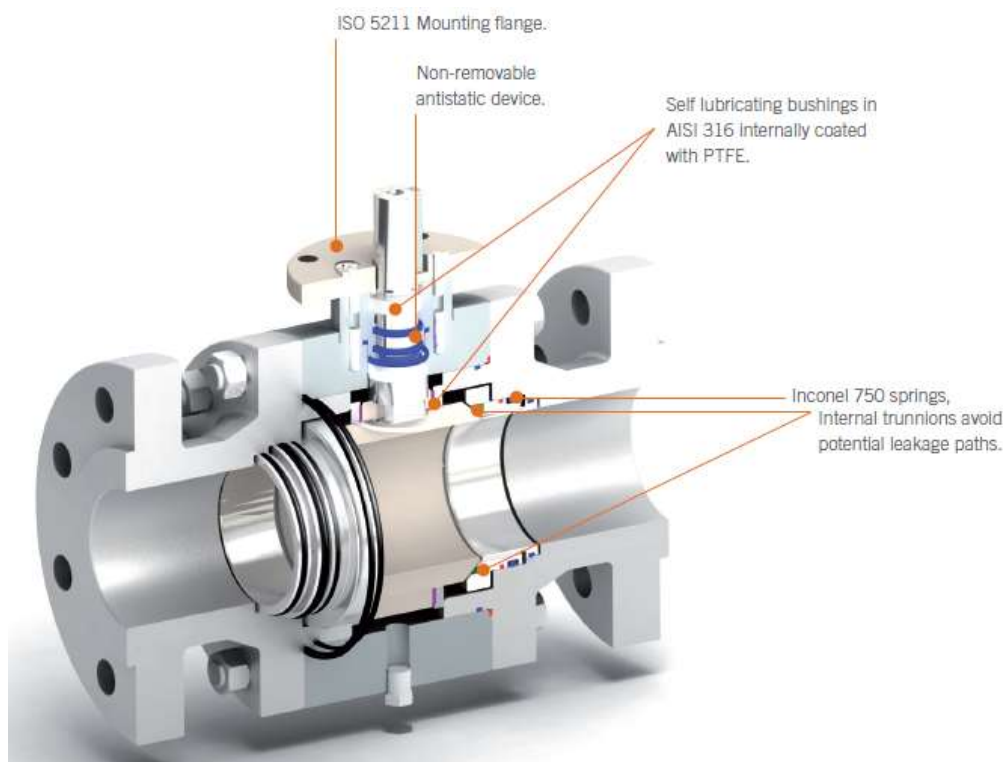
SPECIFICATIONS :

- Trunnion ball valve on PTFE bearing
- PTFE filled with 20% graphite seat
- Forged carbon steel body
- Quadruple tightness on stem
- Inconel springs on seat
- Simple piston effect (double piston effect on request)
- With drain and blowhole
- Full bore
- Anti blow-out stem
- Locking device on request
- ISO 5211 mounting pad
- 3 pieces type
- Class 300 PN50 Flanges R.F.
- Antistatic device
- Fire safe ISO 10497 and API 607
- Fugitive emissions EN 15848-1 : 2006 and TA LUFT VDI 2440
- Graphite packing + 3 FKM O rings on stem
- Painting color RAL 5009, 15-50µ thickness

USE :

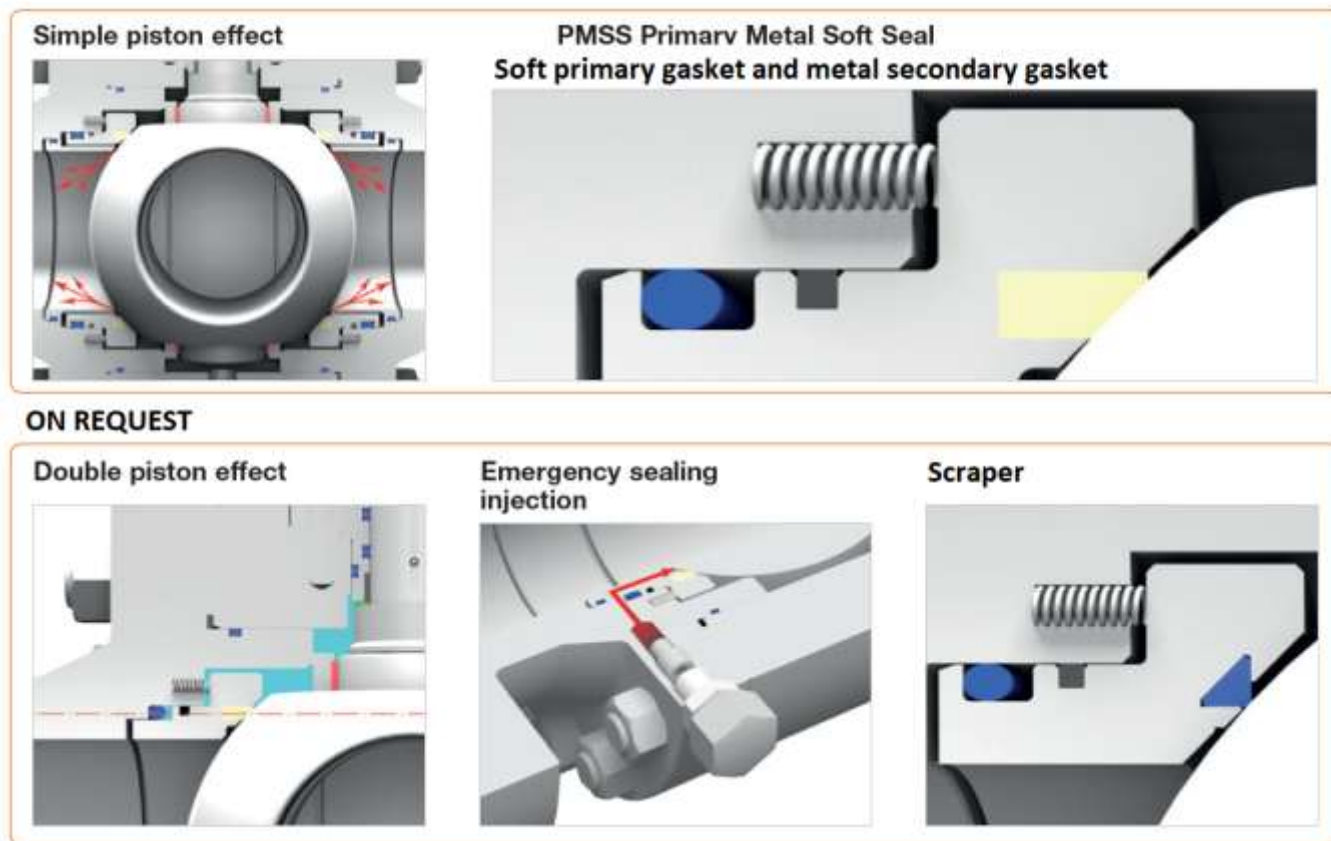
- Chemical industries, petrochemical industries, hydraulic installation, heating, water distribution, compressed air
- Min and max Temperature Ts : -29°C to + 260°C
- Max Pressure Ps : 50 bars (see graph)
- Vacuum 10⁻² torr
- Compressed air (ambient temperature) : 16 bars maximum

SPECIFICATIONS :



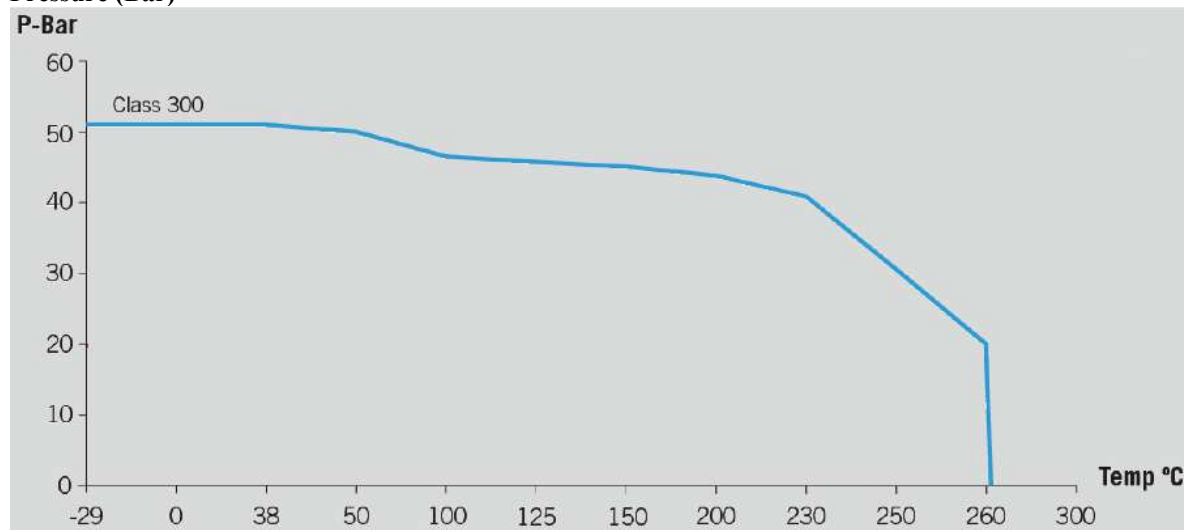
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SPECIFICATIONS (SUITE) :



PRESSURE / TEMPERATURE GRAPH (STEAM EXCLUDED) :

Pressure (Bar)



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FLOW COEFFICIENT Kvs (in m³ / h) :

NPS (")	2"	3"	4"	6"	8"	10"	12"
DN (mm)	50	80	100	150	200	250	300
Kvs (m ³ / h)	268	729	1602	4195	8293	14331	22014

TORQUE VALUE (in Nm without safety coefficient) at 50 bars :

NPS (")	DN (mm)	BTO*	RTO	ETO	BTC	RTC	ETC*	MAST
2"	50	64	32	38	48	32	51	262
3"	80	136	68	82	102	68	109	559
4"	100	231	116	139	173	116	185	769
6"	150	457	228	274	342	228	365	1691
8"	200	842	421	505	631	421	673	3137
10"	250	1480	740	888	1110	740	1184	4076
12"	300	2222	1111	1333	1667	1111	1778	6556

BTO* : Break to open

ETC* : End Torque Close

RANGE :

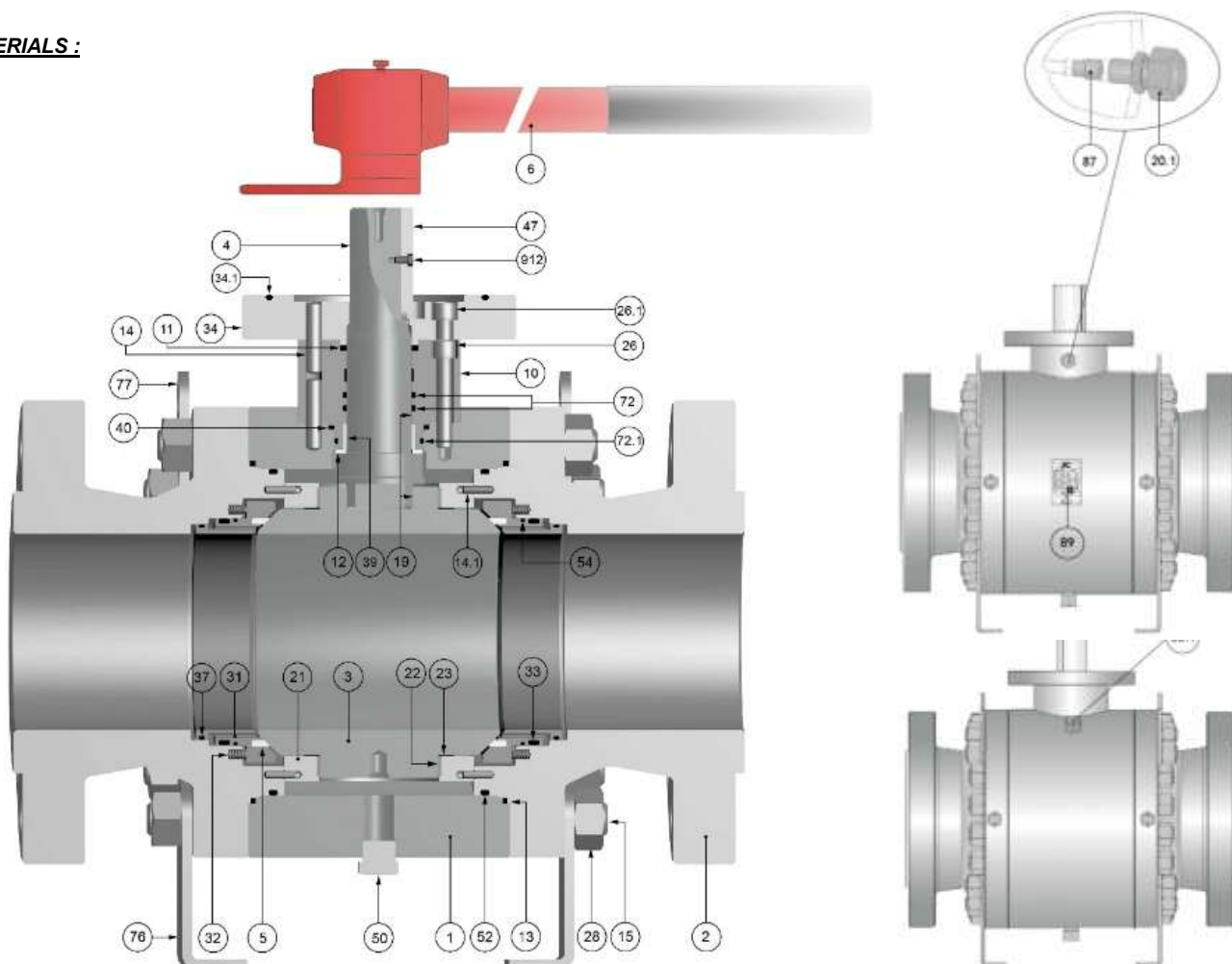
- Trunnion Carbon steel body ball valve with handle flanged Class 300 PN50 **Ref. 6030AICG** from DN50 to DN150 (NPS 2" to 6")
- Trunnion Carbon steel body ball valve with gearbox flanged Class 300 PN50 **Ref. 6030AICG** from DN200 to DN300 (NPS 8" to 12")

ENDS:

- Class 300 PN50 R.F. Flanges

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MATERIALS :

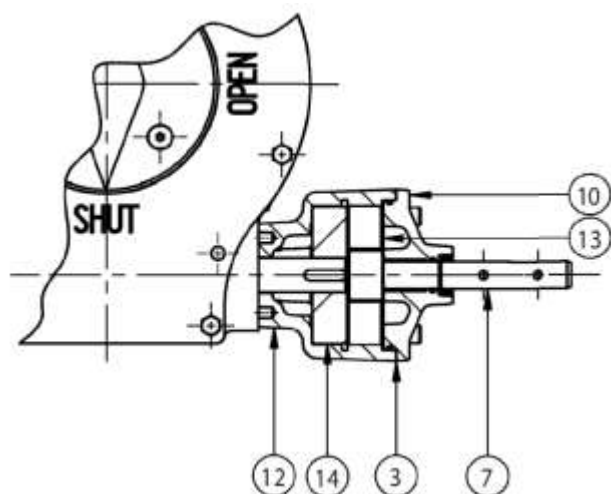
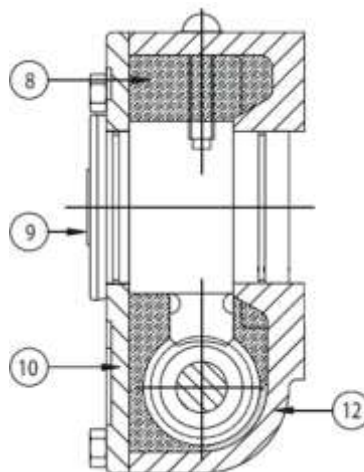
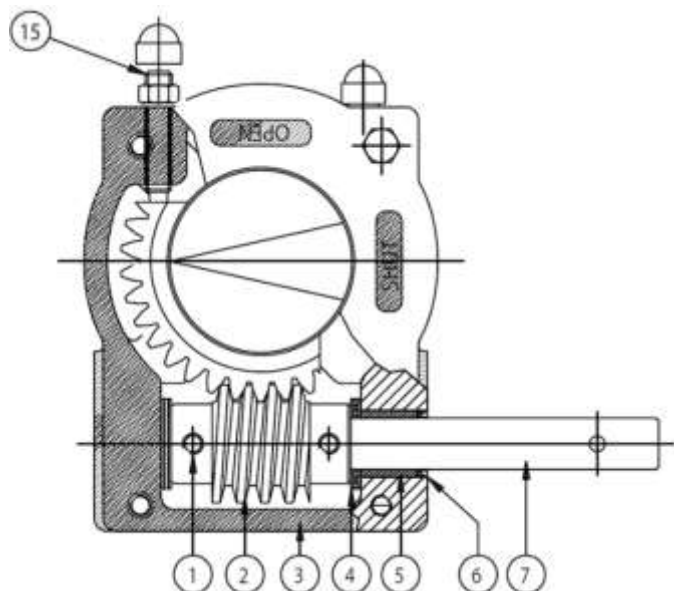


Item	Designation	Material	Item	Designation	Material
1	Body	ASTM A105N	28	Nut	A 194 Gr.2HM + Zinc Bichromated
2	Body Connector		31	Seat carrier	ASTM A182 F316
3	Ball	ASTM A182 F316	32	Spring	Inconel – 750
4	Stem		33	O-Ring	FKM
5	Seat	PTFE filled with 20% graphite	34	Mounting flange	ASTM A105N
6	Lever	ASTM A216 Gr. WCB	34.1-37	O-Ring	FKM
10	Gland	ASTM A105N	39	Stem bushing	AISI 316 + PTFE
11	Gland packing	Graphite	40	Gasket	Graphite
12	Stem thrust seal	PTFE filled with 25% glass	47	Key	Steel
13	Body connector seal	Graphite	50	Drain plug	ASTM A105N
14-14.1	Pin	Steel	50.1	Vent plug	
15	Stud	A193 Gr. B7M + Zinc Bichromated	52	O-Ring	FKM
19	Antistatic device	Stainless steel	54	Seat carrier seal	Graphite
20.1	Stem injection fitting	ASTM A105N/ A350 Gr. LF2	72-72.1	O-Ring	FKM
21	Ball Trunnion		76*	Support Legs	ST 235 N
22	Trunnion bearing	AISI 316 + PTFE	77*	Lifting lugs	
23	Bearing	PTFE filled with 25% glass	87	Check valve	ASTM A276 Tp.316
26-26.1	Bolt	A193 Gr. B7M + Zinc Bichromated	89	Name plate	
<i>*from the DN150</i>			912	Bolt	A4-70

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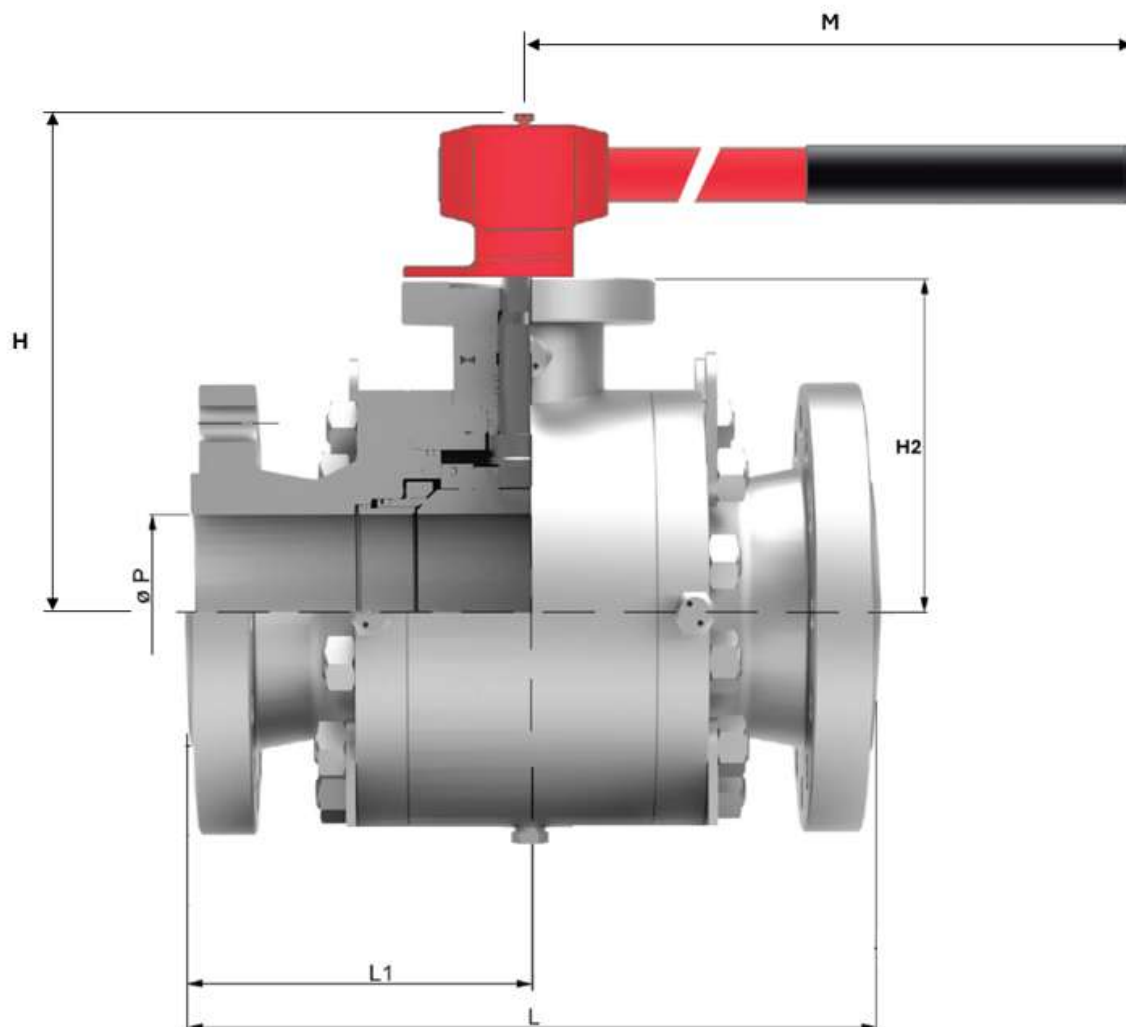
LOCKABLE GEARBOX MATERIALS :



Item	Designation	Material
1	Hex bolts	Steel
2	Worm	
3	Gasket	Rubber
4	Axial bearing	hardened steel
5	Bushing	copper alloy
6	Oil seal	Nitrile
7	Shaft	AISI 1045
8	Grease	Renolit CLX2
9	Position indicator	Polypropylene
10	Coverplate	cast iron
12	Body	
13	Gear	Steel
14	Carrier	
15	Stop screw	

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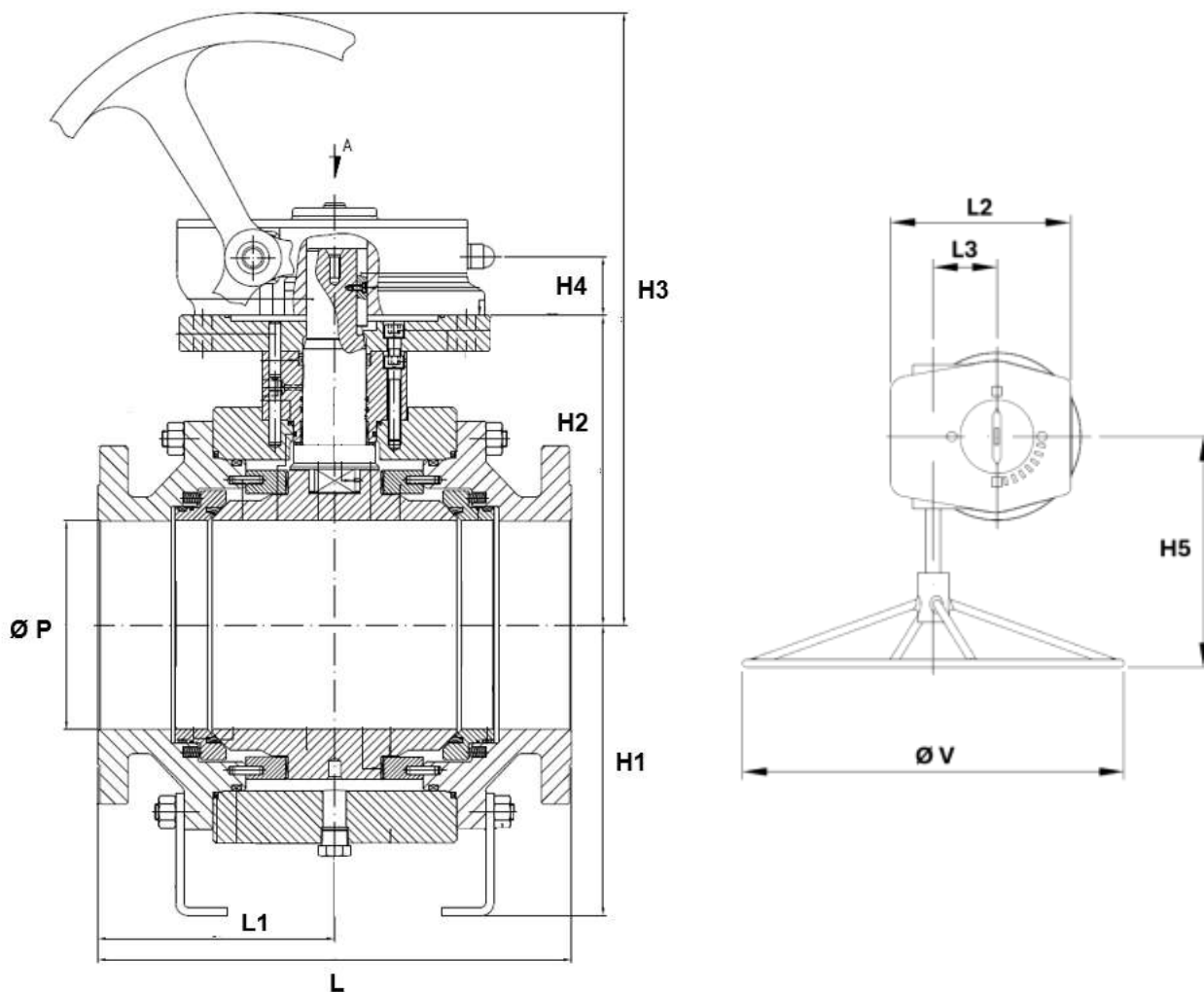
SIZE DN50-100 (in mm) :



NPS (")	2"	3"	4"
DN (mm)	50	80	100
Ø P	49	74	100
L	216	283	305
L1	108	141.5	152.5
H2	120.5	163	180.5
H	207	270	287
M	610	665	665
Weight (in Kg)	25	58	86
Ref.	6030AICG050	6030AICG080	6030AICG100

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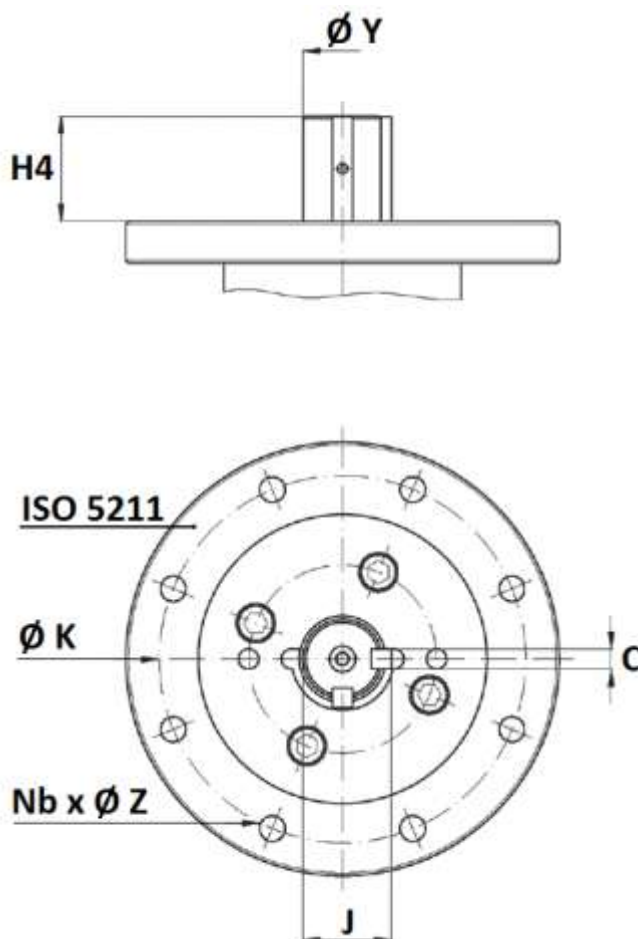
SIZE DN150-300 (in mm) :



NPS (")	6"	8"	10"	12"
DN (mm)	150	200	250	300
Ø P	150	201	252	303
L	403	502	568	648
L1	201.5	251	284	324
H1	220	270	335	400
H2	258	298.5	341.5	394.5
H3	530	599.5	652.5	259.5
H4	47	51	61	65
L2	226	291	293	355
L3	86	104.5	53	130
H5	339	380	382	459
Ø V	450	500	500	400
Weight (in Kg)	211	376	572	881
Ref.	6030AICG150	6030AICG200	6030AICG250	6030AICG300

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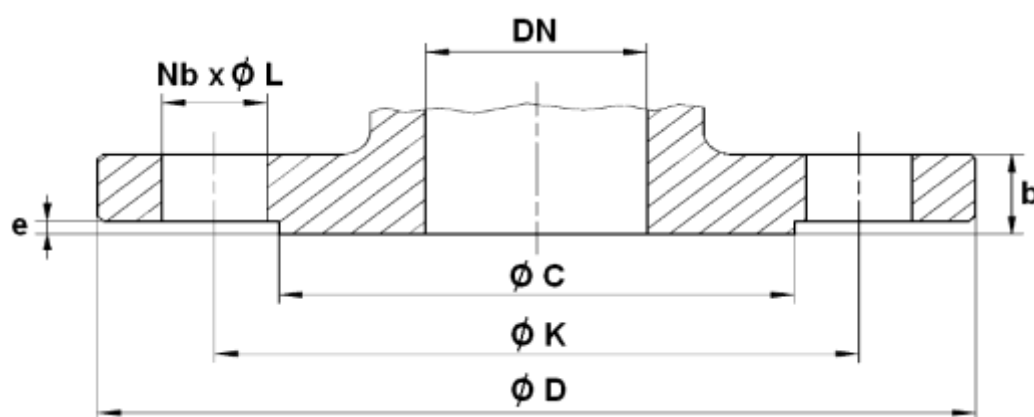
STEM AND ISO PLATE SIZE (in mm) :



NPS (")	2"	3"	4"	6"	8"	10"	12"
DN (mm)	50	80	100	150	200	250	300
H4	37	50	51	66.5	64.5	79	107
C	8	10	10	14	16	18	20
J	27.8	38.2	38.2	48.4	58.7	64.1	74.5
$\varnothing Y$	24.9	34.9	34.9	44.9	54.9	59.9	69.9
$\varnothing K$	102	125	125	165	254	254	254
ISO	F10	F12	F12	F16	F25	F25	F25
N x $\varnothing Z$	4 x 11	4 x 13.5	4 x 13.5	4 x 22	8 x 18	8 x 18	8 x 18

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FLANGES SIZE (in mm) :



NPS (")	2"	3"	4"	6"	8"	10"	12"
DN (mm)	50	80	100	150	200	250	300
Ø C	91.9	127	157.2	215.9	269.7	323.8	381
Ø D	165	210	254	318	381	444	521
Ø K	127	168.1	200.2	269.7	330.2	387.4	450.8
Nb x Ø L	8 x 19.1	8 x 22.2	8 x 22.2	12 x 22.2	12 x 25.4	16 x 28.6	16 x 31.8
b	22.1	28.4	31.7	36.6	41.1	47.5	50.8
e	1.5						

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STANDARDS :

- Manufacturer certified ISO 9001:2015 and ISO 14001 : 2015
- DIRECTIVE 2014/68/EU : For liquids and gas of Group 1
 - DN50-100 : Risk Category II, CE0056 marking
 - DN150-300 : Risk Category III, CE0056 marking
- Certificate 3.1 on request
- Valve designing according to ISO 17292, API 6D and ASME B16.34
- Body design according to ASME VIII Div.1
- Materials according to NACE MR 01-75
- Pressure Tests according to API 598
- Marking according to EN 19
- Fire safe according to ISO 10497 : 2004 and API 607 5th
- Fugitive Emissions according to EN 15848-1 : 2006 B Class and TA LUFT VDI 2440
- SIL2 according to IEC/EN 61508, SIL 3 possible according to the type of installation
- Flanges R.F. type B1 Class 300 according to ASME B16.5
- ISO 5211 mounting pad
- Length according to ASME B16.10 Table 2 Column 7
- ATEX Group II Category 2 G/2Dc Zone 1 & 21 Zone 2 & 22 (optional marking) according to directive 2014/34/EU
- Russian certificate TRCU 10, TRCU 12 and TRCU 32 (EAC marking and declaration **on request**)

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