

MOON ND A105

WAFER BALL VALVE - FULL BORE WITH CONTAINED BALL

MAIN STANDARD FEATURES

- CONSTRUCTION: ASTM A 105
- General prescriptions: BS 5351
- CERTIFICATIONS: FIRE SAFE to: BS 6755 - API 6 FA - API 607
DVGW for gas
TÜV for TA Luft
- DIAMETER: from DN15 to DN100
- PRESSURES: PN16/40 from DN15 to DN50 and DN80
PN16 for DN65 and DN100
- TEMPERATURE LIMITS: from -10°C to +180°C
- CONNECTIONS with flanges:
UNI 2223-2229 and DIN 2501 BL.1
- FLANGE DRILLING: METRIC
- BLOW-OUT PROOF stem with antistatic device (from DN40)
- WRAPPING SEATS
- TRIPLE stem-packing with labyrinth effect and automatic adjustment by Belleville washers
- ISO 5211 mounting plate for actuators
- OPERATION devices: lever handle



STANDARD PART NUMBERS

- Art. 2881 DN15□□25
 Art. N50 DN32
 Art. N70 DN40□□100
 with stainless steel ball

SPECIAL EXECUTIONS

- 15% GLASS-FILLED PTFE with temperature limits -10°C + 195°C
- PTFE+CARBOGRAPHITE with temperature limits -20°C + 210°C
- Integral sealing in PTFE from DN15 to DN100
- DN65 and DN100 PN25/40: metric drilled flanges
- From 1/2" to 4" ANSI 150: through drilled flanges
- Reduction gear with manual operation
- Stem extensions; 50mm or 100mm
- Yellow lever handle for gas
- Heating jacket (see MOON CR series)
- Drilled ball and unidirection valve
- Body in LF2 up to -20°C
- Antistatic device from DN15 to DN32
- On request the valve is available with ATEX certificate
- For further special requests please consult our technical/commercial service

GENERAL APPLICATIONS

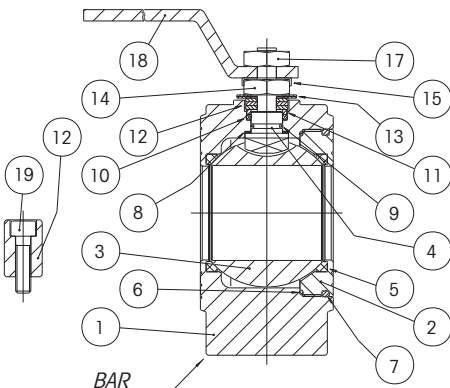
Use as an ON-OFF valve for: distribution lines for gas, air, water. Suitable for vacuum 1.10-3 STD CC, steam up to +195°C with PTFE+CARBOGRAPHITE and for industrial installations in general. Tanks to its reduced face to face dimensions and its intrinsic features it offers wide applications in new projects also as an alternative to the split body valve.

For special utilizations ascertain the compatibility with process features and the corrosion resistance also by the relevant table.

LIST OF COMPONENTS AND MATERIALS

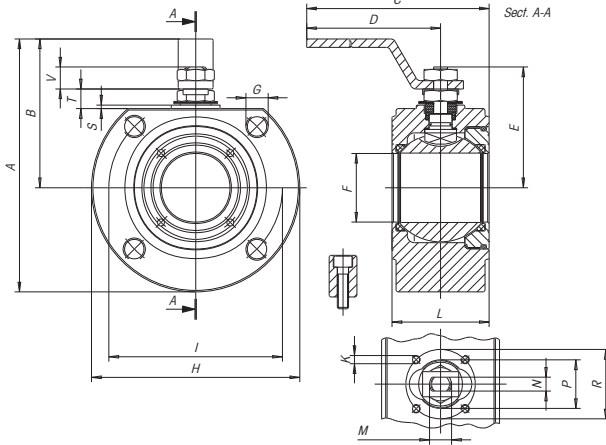
REF.	PART	MATERIAL	DIN MAT.	QTY
1	BODY	ASTM A105		1
2	THREADED LOCKING RING	ASTM A105		1
3	BALL	See below		1
4	STEM	AISI 304	1.4301	1
5	SEAT	PTFE		2
6	SIDE SEALING RING	PTFE		1
7	O-RING	NBR		1
8	UPPER RING	PTFE		2
9	STEM O-RING	VITON		1
10	UPPER SEALING COUPLE	PTFE		1
11	PACKING GLAND	AISI 304	1.4301	1
12	OPERATION STOP	AISI 304		1
13	BELLEVILLE WASHERS	50CrV4		2
14	STEM RETAINING NUT	C.S.		1
15	FIXING NUT PLATE	AISI 304	1.4301	1
17	LOCKING NUT	C.S.		1
18	LEVER HANDLE	C.S.		1
19	OPERATION STOP SCREW	C.S.		1

Ball: in AISI304 da DN15 to DN32 (Art. 2881 and N50)
 in AISI316 da DN40 to DN100 (Art. N70)



MOON ND A105

WAFER BALL VALVE - FULL BORE WITH CONTAINED BALL

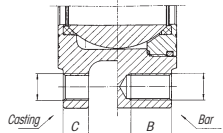


FLANGE DRILLINGS UNI2223-67

SIZE	A	B (PN40)	C (PN16)
DN15	M12	14	0
DN20	M12	16	0
DN25	M12	16	0
DN32	M16	18	0
DN40	M16	18	13
DN50	M16	18	15
DN65	M16	20	15
DN80	M16	24	17
DN100	M16	20	17
DN100	M20	24	0

FLANGE DRILLINGS ANSI 150

SIZE	A	B (PN40)	C (PN16)
DN15	1/2"	13	0
DN20	1/2"	14	0
DN25	1/2"	16	0
DN32	1/2"	17	0
DN40	1/2"	19	0
DN50	5/8"	20	(↑) 16.4 (17.6)
DN65	5/8"	24	(↑) 16.4 (20.6)
DN80	5/8"	24	(↑) 18.4 (22.2)
DN100	5/8"	24	(↑) 18.4 (22.2)



SIZE	A	B	C	D	E	F	G	H	K	I	L	M	N	P	R	S	T	V	N HOLES	PN	ISO	WEIGHT in gr.
DN15	110	65	160	140	48	15	M12	90	M5	65	35	M10	6	25	36	2	8	9	4	40	F03	1345
DN20	120	70	160	140	51	20	M12	100	M5	75	38	M10	6	25	36	2	8	9	4	40	F03	1810
DN25	137	82	200	180	62.5	25	M12	110	M5	85	43	M12	8	30	42	2	11.5	11.5	4	40	F04	2505
DN32	150	85	205	180	67	32	M16	130	M5	100	54	M12	8	30	42	2	9.5	11.5	4	40	F04	4420
DN40	172	102	260	230	80	40	M16	140	M6	110	66	M16	10	35	50	2.5	14	16	4	40	F05	6130
DN50	185	110	265	230	87	50	M16	150	M6	125	83	M16	10	35	50	2.5	14	16	4	40	F05	8555
DN65	225	137.5	400	350	119.5	65	M16	175	M8	145	103	M22	14	55	70	3	18.7	20.8	4	16	F07	15900
DN65	225	137.5	400	350	119.5	65	M16	175	M8	145	103	M22	14	55	70	3	18.7	20.8	8	40	F07	15900
DN80	245	150	410	350	129.5	78	M16	190	M8	160	122	M22	14	55	70	3	18.7	20.8	8	40	F07	20610
DN100	275	165	580	508	148.5	96	M16	220	M10	180	153	M27	16	70	102	3	22.2	25.3	8	16	F10	34230
DN100	291	173	580	508	156.5	96	M20	235	M10	190	153	M27	16	70	102	3	22.2		8	40	F10	39500

BREAKAWAY TORQUES in Nm

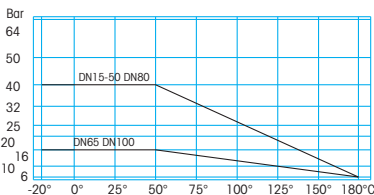
DN size	15	20	25	32	40	50	65	80	100
PN - bar	4	7	10	16	25	35	55	75	150
16	4.8	8.5	11.3	19	28	39	59	84.5	168
25	5.2	9.1	12	20.5	29.5	41.5	62.5	92	180
40	6	10.5	13	22.5	31.5	44	67	99	195

Nm

The values in Nm may vary as a function of the seals material, temperature and type of medium. For a firm operation of the various types of actuators, in the different working conditions it is necessary to consider a safety factor of 1.5. During operation, with frequent open and close cycles, the operating torque can decrease considerably in comparison with the initial breakaway torque.

PRESSURE/TEMPERATURE DIAGRAM

At each pressure level corresponds the admissible temperature level.



LOSS OF HEAD DIAGRAM/FLOW RATE

The Kv value is the flow rate causing a pressure drop of 1 bar

