OMAL S.p.A. Società Benefit
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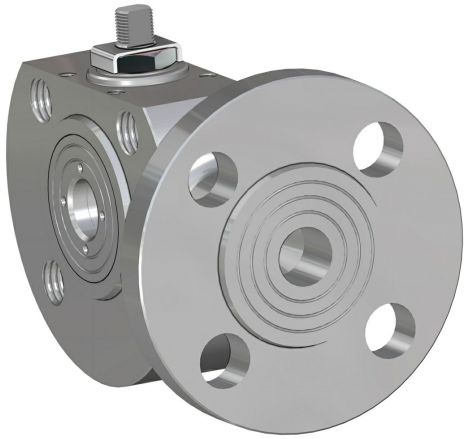
Item 445 stainless steel ball valves



Macro Ball valves

Category Other stainless steel ball valves

3-way flat body flanged stainless steel ball valve “L” port, reduced bore.

features

GENERAL FEATURES:

- **The valve works only as a diverter. The closure can only take place from the central way; check diagram.**
- Flanges as per: EN 1092-1 PN40 fino a DN50; PN16 DN65,80,100
- Working temperature: from -20°C to +150°C (+200° C with special seals)
- Working pressure: PN 40 up to DN50 PN16 above
- Intercepted fluid: water, petroleum products, petrochemicals and other aggressive liquids.
- Reduced bore.

ON REQUEST:

- Seals made of: PTFE glass filled, PTFE with carbon graphite
- “T” port , see mounting plan
- For other applications, please contact our technical department.

CERTIFICATIONS:

- ATEX version in conformity with European Directive 2014/34/EU.
- ATEX certificate on request.

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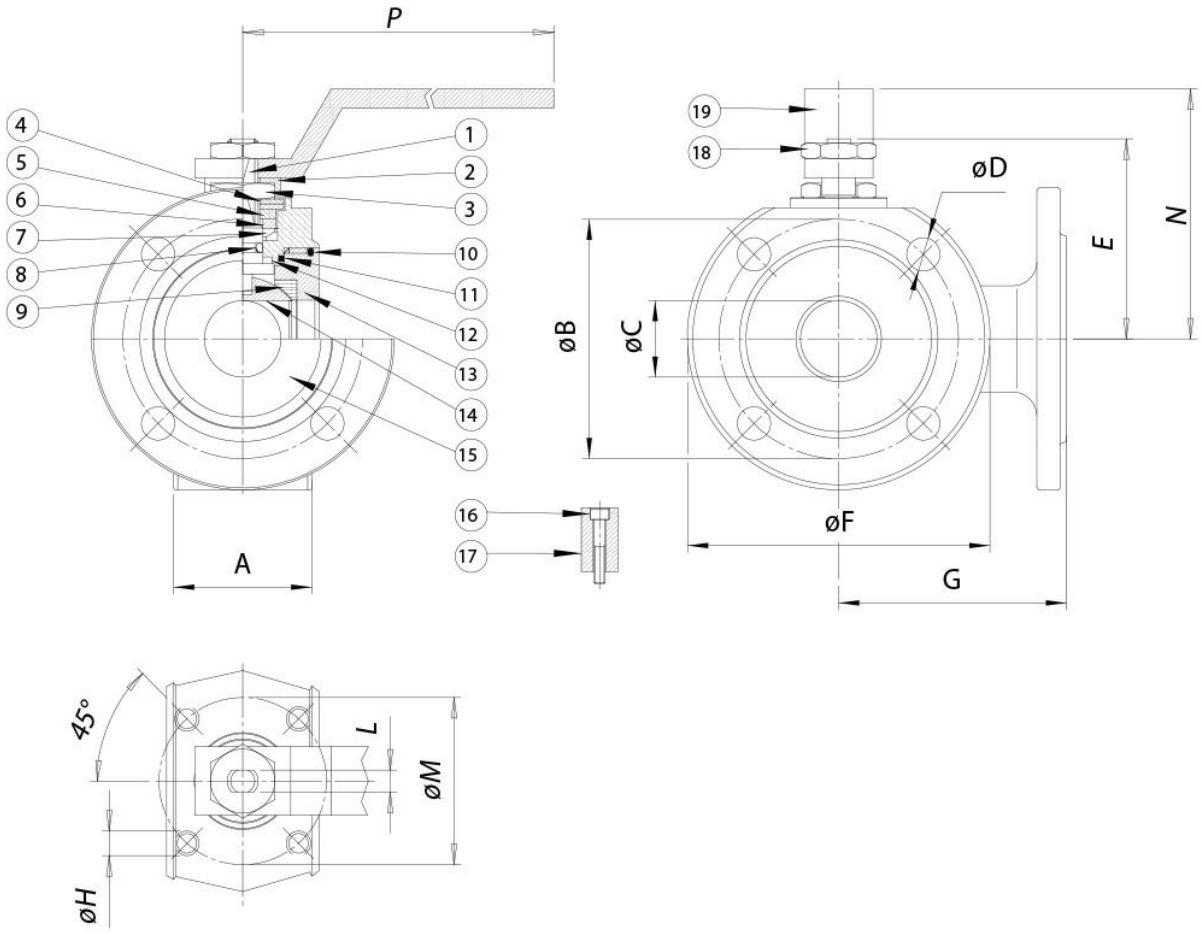
dimensions



DIMENSIONS												
SIZE		A	øB	øC	øD	E	øF	G	øH	L	øM	N	P
DN [mm]	[inch]												
DN 15	1/2"	35	65	10	M12X4	48	90	85	M5	6	36	65	140
DN 20	3/4"	38	75	15	M12X4	51	100	90	M5	6	36	70	140
DN 25	1"	43	85	20	M12X4	62,5	110	90	M5	8	42	82	180
DN 32	1" 1/4	54	100	25	M16X4	67	130	105	M5	8	42	85	180
DN 40	1" 1/2	66	110	32	M16X4	80	140	120	M6	10	50	102	230
DN 50	2"	83	125	40	M16X4	87	150	130	M6	10	50	110	230
DN 65	2" 1/2	103	145	50	M16X4	119,5	175	150	M8	14	70	137,5	350
DN 80	3"	122	160	65	M16X8	129,5	190	175	M8	14	70	150	350
DN 100	4"	153	180	78	M16X8	148,5	220	185	M10	16	102	165	508

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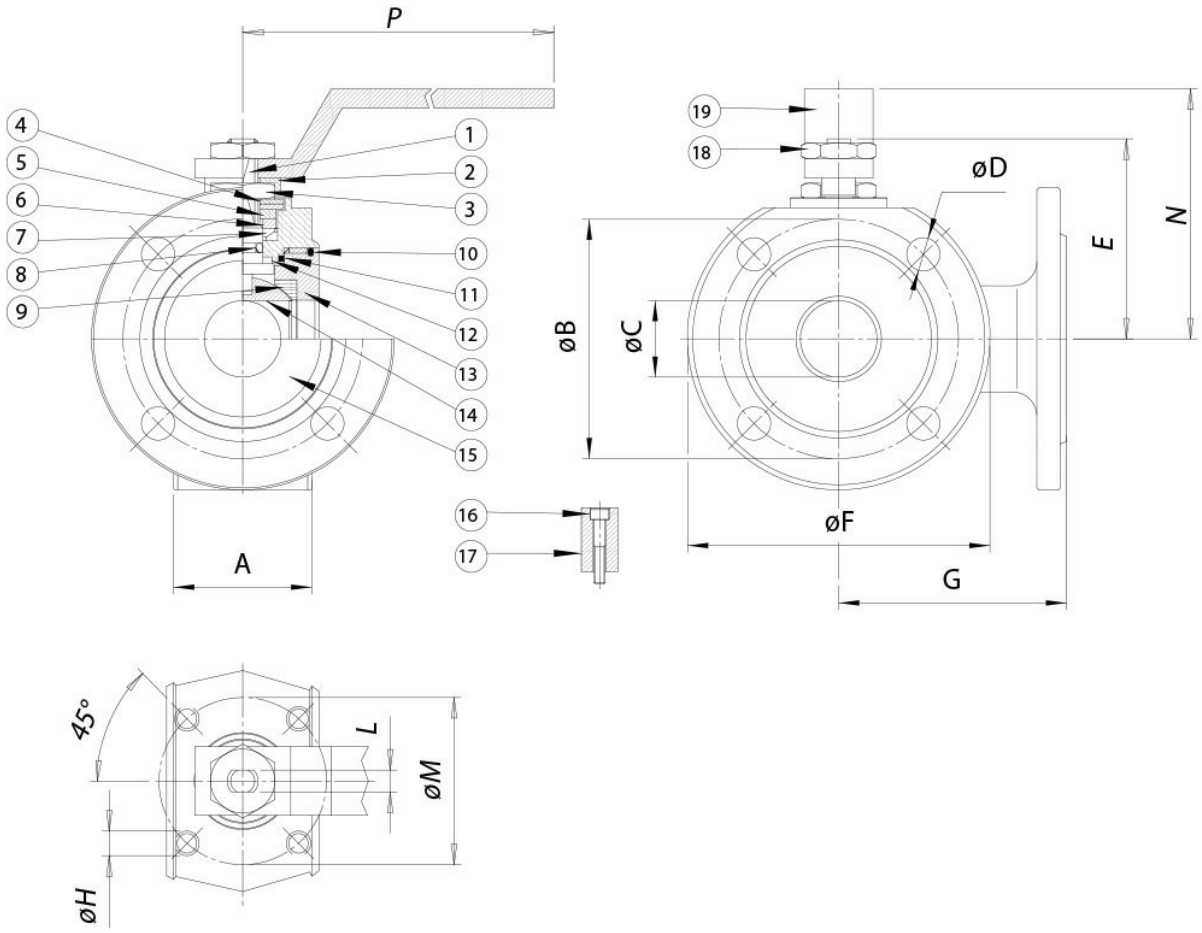
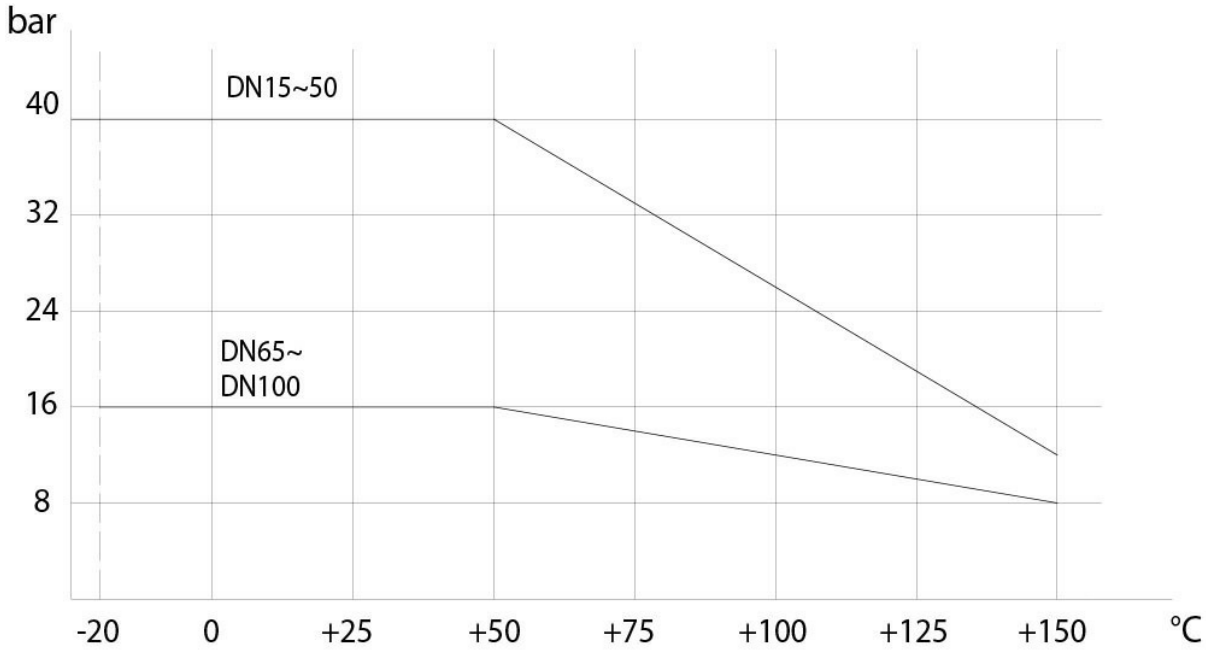
materials



MATERIALS				
1	Shaft	316 S.S.	1.4401	UNI X5CrNiMo 17 12
2	Nut holder	304 S.S.	1.4301	UNI X5CrNi 18 10
3	Lock nut	304 S.S.	1.4301	UNI X5CrNi 18 10
4	Belleville washer	301 S.S.	1.4310	UNI X5CrNiMo 17 12
5	Ring	304 S.S.	1.4301	UNI X5CrNi 18 10
6*	Gland nut ring	304 S.S.	1.4301	UNI X5CrNi 18 10
7*	Top sealing	P.T.F.E.		
8*	O-ring	FKM		
9*	Seals	P.T.F.E.		
10*	O-ring	FKM		
11*	Ring nut sealing	P.T.F.E.		
12*	Bottom sealing	P.T.F.E.		
13	Ring nut	316 S.S.	1.4401	UNI X5CrNiMo 17 12
14	Ball	316 S.S.	1.4401	UNI X5CrNiMo 17 12
15	Body	316 S.S.	1.4408	
16	Holder screw	304 S.S.	1.4301	UNI X5CrNi 18 10
17	Holder	304 S.S.	1.4301	UNI X5CrNi 18 10
18	Lever nut	304 S.S.	1.4301	UNI X5CrNi 18 10
19	Lever	304 S.S.	1.4301	UNI X5CrNi 18 10
* Components of spare part kit KGBV44...				

diagrams and breakaway torque

Pressure/temperature diagram



BREAKAWAY TORQUES Nm									
SIZE	DN 15 1/2"	DN 20 3/4"	DN 25 1"	DN 32 1"1/4	DN 40 1"1/2	DN 50 2"	DN 65 2"1/2	DN 80 3"	DN 100 4"
PN 16 bar							85	128	212
PN 40 bar	8	13	20	30	42	61			

Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied. Torque can drop on high frequency of operations. The actuator/valve sizing, indicated on the following pages, are based for valves to be used with liquids or gaseous fluids, clean, and for medium temperatures. For further information, or different uses please contact our sales department.

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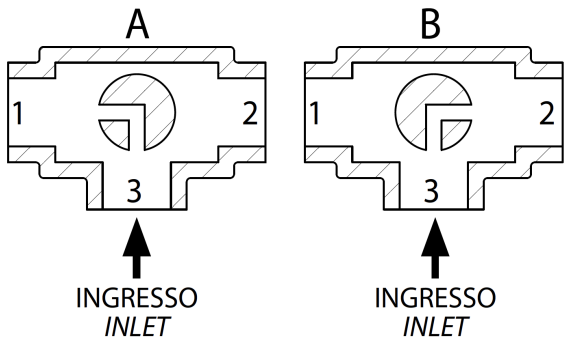
specifications

Plan for "L" port

N.B.:
"**A**" must be the rest position of the ball with **SR FAIL CLOSE** actuator.
"**B**" must be the rest position of the ball with **SR FAIL OPEN** actuator.

Plan for L port

Vista da sopra *View from above*



Plan for "T" port (on request)

With actuator 2 positions with 90° rotation are possible only: the configuration of the ball must always be communicated at our sales department.

N.B.:
Choose the rest position of the ball with **SR FAIL CLOSE** actuator; whenever supplied with air, actuator turns in an anticlockwise direction.
Choose the rest position of the ball with **SR FAIL OPEN** actuator; whenever supplied with air, actuator turns in a clockwise direction.

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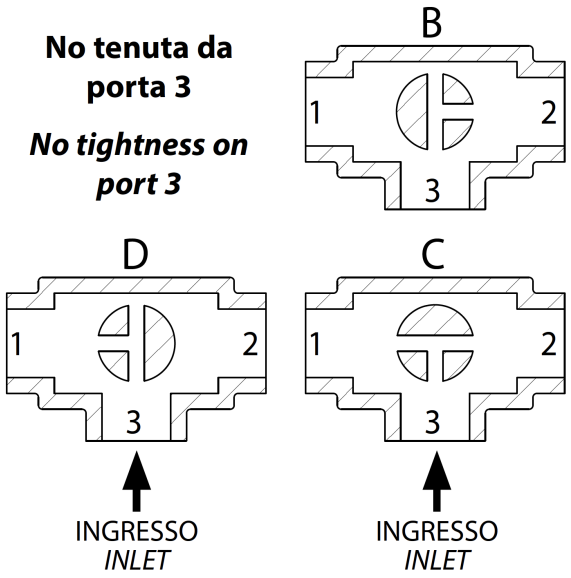
Plan for T port (on request)

Vista da sopra *View from above*