

## Item 545 carbon steel ball valve



Macro [Ball valves](#)

Category [Other carbon steel ball valves](#)

3-way flat body flanged carbon 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 -10°C to +150°C (+200° C with special seals)
- Working pressure: see diagram.
- Intercepted fluid: water, liquid petroleum products and petrochemicals.
- Reduced bore.

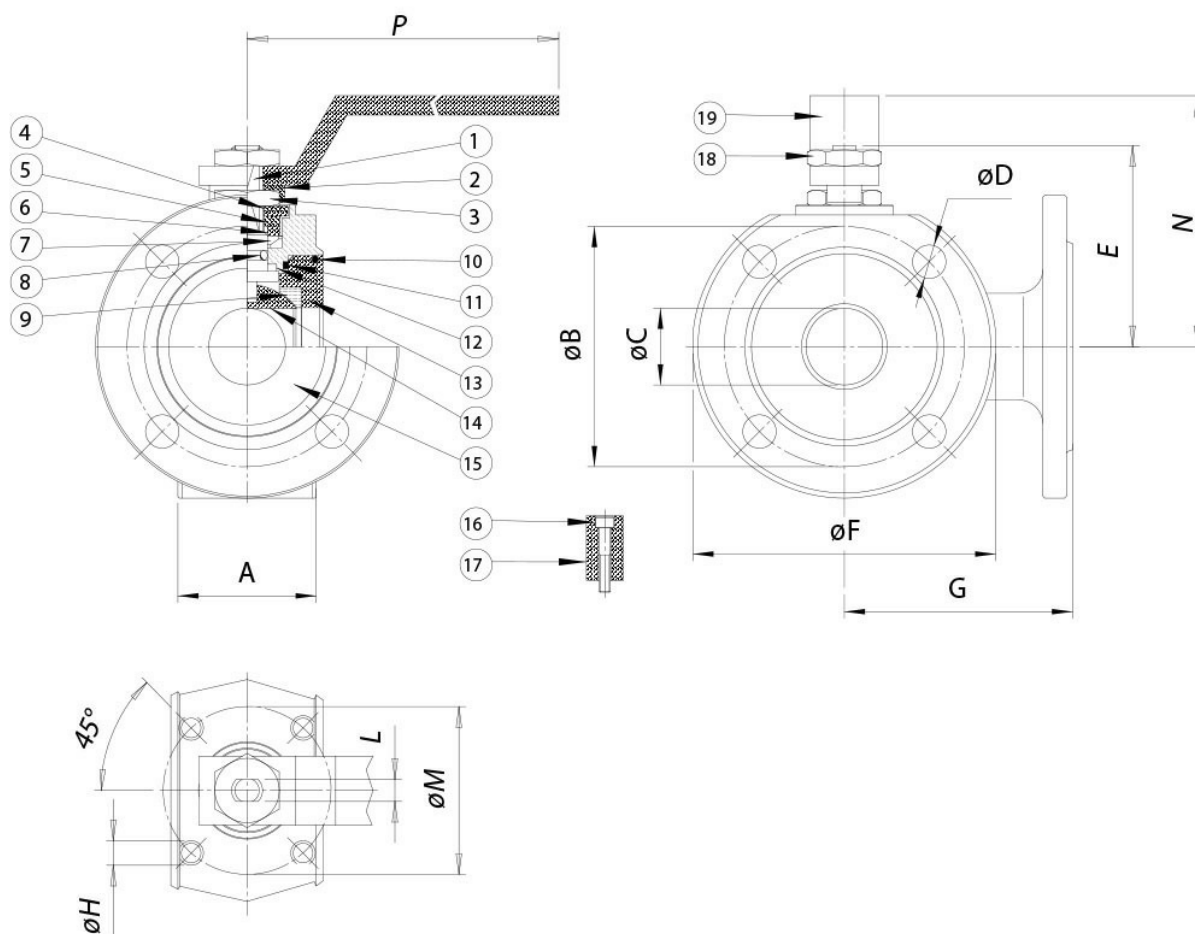
#### ON REQUEST:

- Body in A350 LF2 for -20°C
- Seals made of:
  - PTFE glass filled,
  - PTFE with carbon graphite
- "T" port (port 3 inlet only)
- For other applications, please contact our technical department.

#### CERTIFICATIONS:

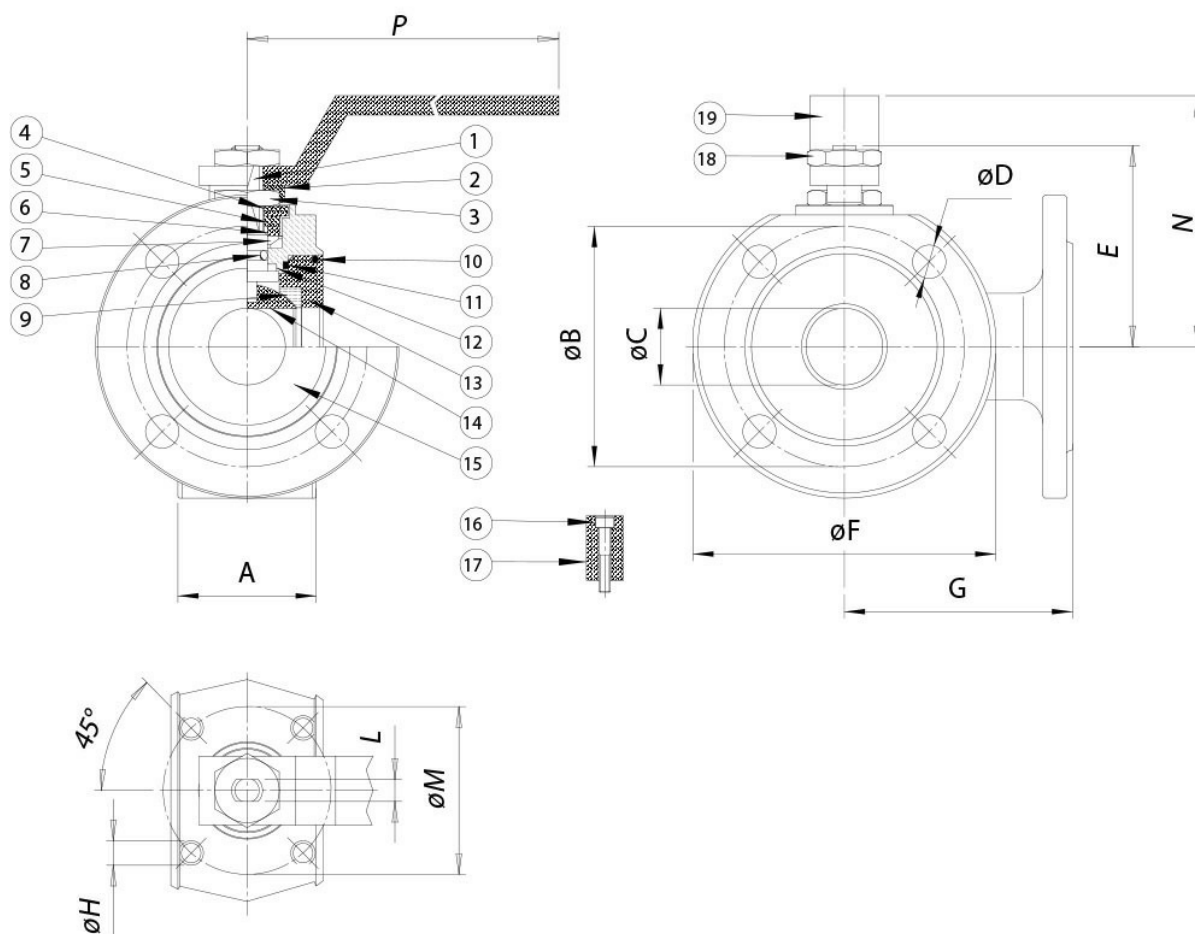
- ATEX version in conformity with European Directive 2014/34/EU.
- ATEX certificate on request.

## dimensions



DIMENSIONS													
SIZE		A	$\varnothing B$	$\varnothing C$	$\varnothing D$	E	$\varnothing F$	G	$\varnothing H$	L	$\varnothing M$	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

## materials

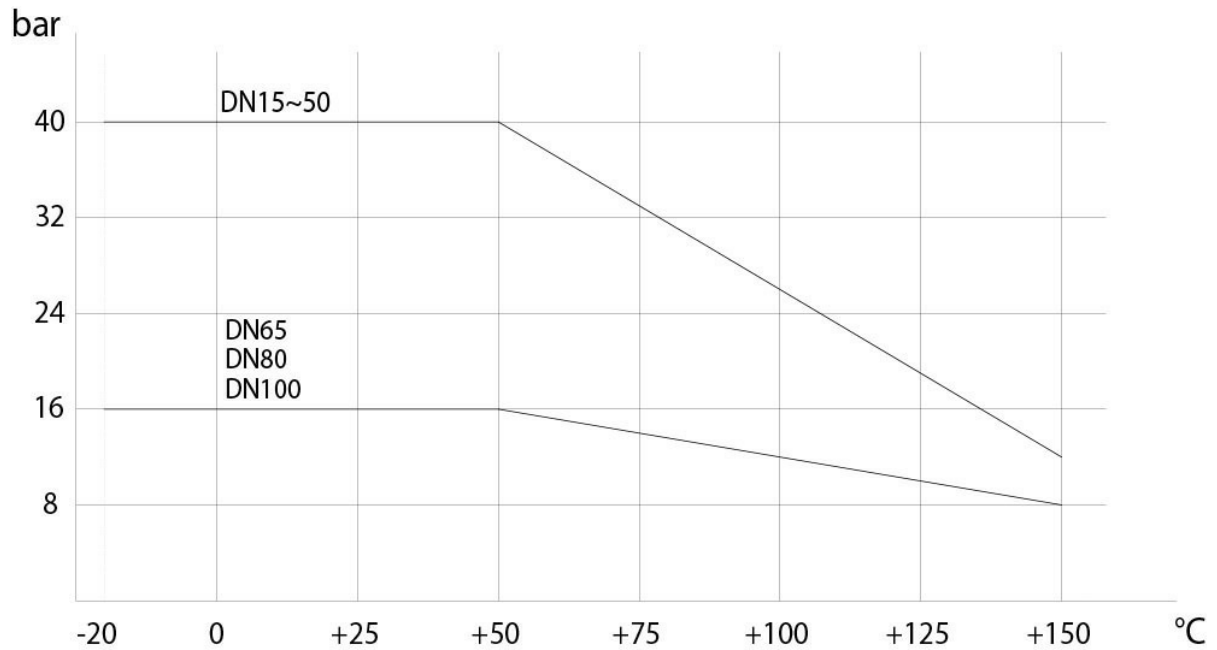


MATERIALS				
1	Shaft	316 S.S.	1.4401	UNI X5CrNiMo 17 12
2	Nut holder	304 S.S.	1.4301	UNI X5CrNi 18 10
3	Lock nut	Carbon steel		
4	Belleville washer	50Crv4		
5	Ring	304 S.S.	1.4301	UNI X5CrNi 18 10
6*	Gland nut ring	304 S.S.	1.4301	UNI X5CrNi 18 10
7*	Top sealing	P.T.F.E.		
8*	O-ring	FKM		
9*	Seals	P.T.F.E.		
10*	O-ring	FKM		
11*	Ring nut sealing	P.T.F.E.		
12*	Bottom sealing	P.T.F.E.		
13	Ring nut	A105		
14	Ball DN15-DN50	316 S.S.	1.4401	UNI X5CrNiMo 17 12
14	Ball DN65-DN100	304 S.S.	1.4301	UNI X5CrNi 18 10
15	Body	A105		
16	Holder screw	Carbon steel		
17	Holder	304 S.S.	1.4301	UNI X5CrNi 18 10
18	Lever nut	Carbon steel		
19	Lever	Carbon steel		

\* Components of spare part kit KGBV63...

## 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.

## specifications

### Plan for "L" port

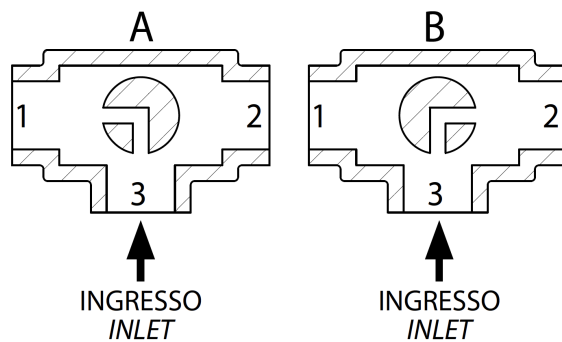
N.B.:

"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.

**Plan for T port (on request)**

Vista da sopra View from above

