

## Item 460-461 stainless steel ball valves



Macro Ball valves

Category Other stainless steel ball valves

3 way 4 seals full-bore flanged stainless steel ball valve, "T" or "L" port

ITEM 460  
Valve "T" port  
ITEM 461  
Valve "L" port

### features

#### GENERAL FEATURES:

- The valve is manufactured in 316L stainless steel.
- Flanges as per EN 1092-1
- Valve with 4 ball seats. Inlet from any of the 3 ends. see plan.
- Working temperature: from -20°C to +150°C
- Working pressure: see table.
- Fluid range: air, water, food industry.
- Surface treatment: polished.
- ISO 5211 flange connection.
- **The manual version (with lever) doesn't have the ISO 5211 flange connection and its therefore not possible to mount on it any kind of actuators.**

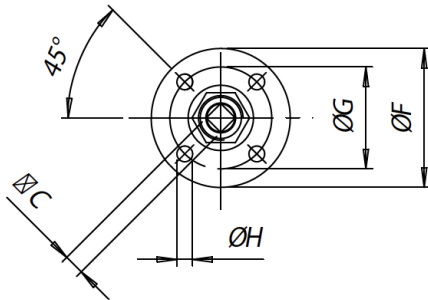
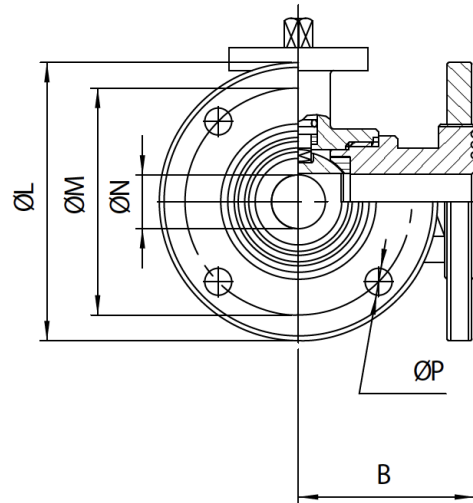
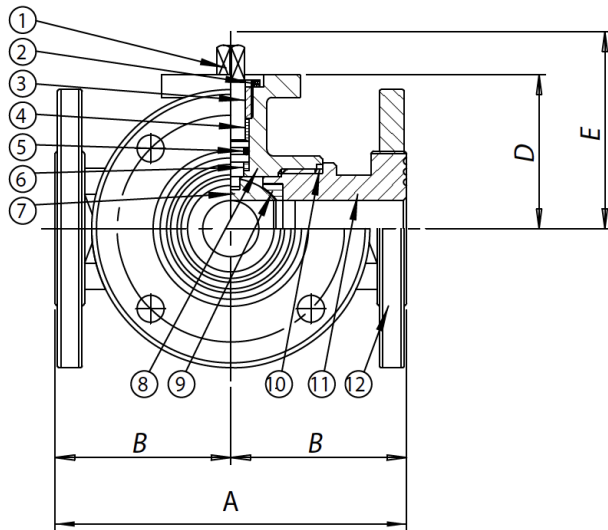
#### ON REQUEST:

- Flanges: Zinc-plated - ASME B16.5 Classe 150,300.
- Seals made of:
  - PTFE glass filled,
  - PTFE with carbon graphite,
  - High-molecular weight polyethylene.
- For other applications, please contact our technical department.

#### CERTIFICATIONS:

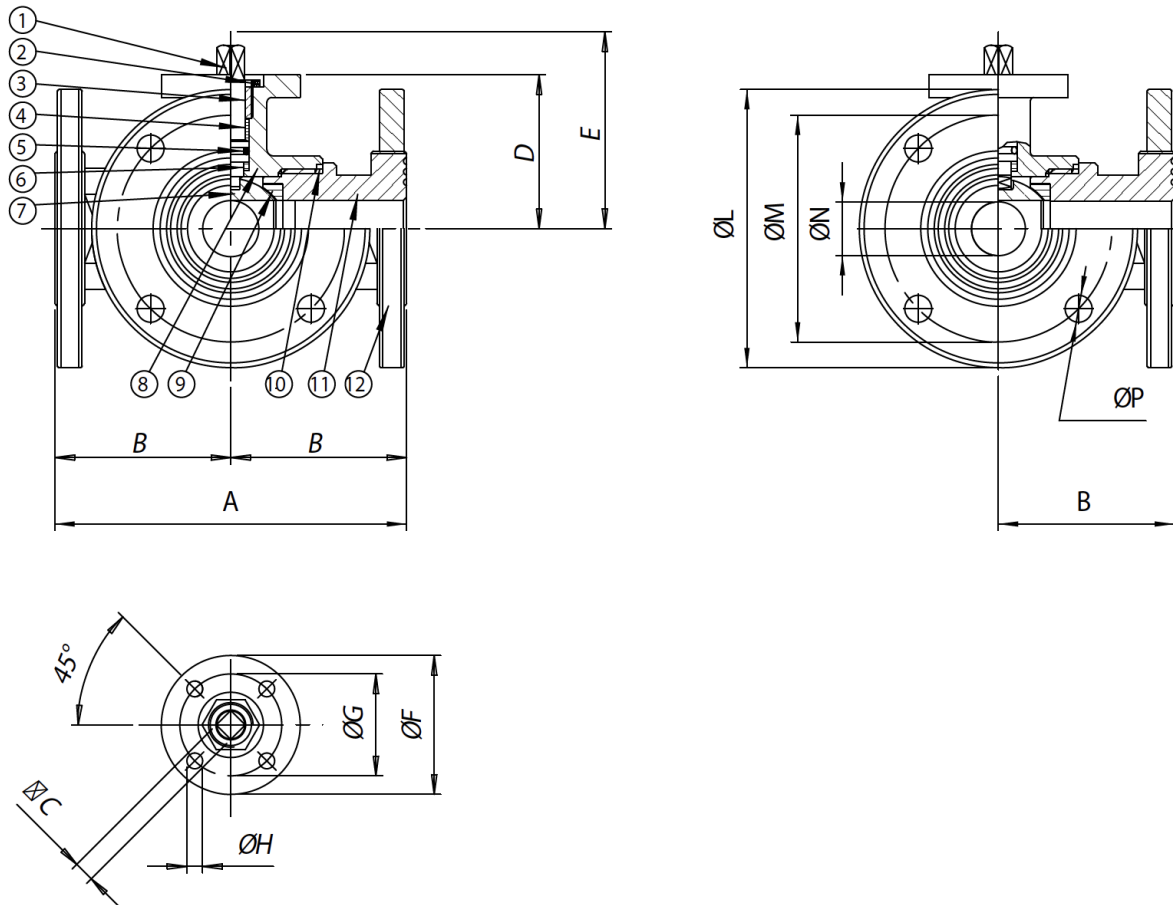
- ATEX version in conformity with European Directive 2014/34/EU.
- ATEX certificate on request.

## dimensions



SIZE		DIMENSIONS											
DN [mm]	[inch]	A	B	□C	D	E	øF	øG	øH	øL	øM	øN	n°xøP
DN 10	3/8"	120	60	6	46,5	54,5	46	36	6	90	60	10	4x14
DN 15	1/2"	130	65	6	49	57	54	42	6	95	65	15	4x14
DN 20	3/4"	140	70	9	56,5	69,5	65	50	7	105	75	20	4x14
DN 25	1"	150	75	9	61	74	65	50	7	115	85	25	4x14
DN 32	1" 1/4	180	90	14	81,5	94,5	65	50	7	140	100	32	4x18
DN 40	1" 1/2	200	100	14	89	102	90	70	9	150	110	40	4x18
DN 50	2"	220	110	17	91,5	106,5	90	70	9	165	125	50	4x18
DN 65	2" 1/2	240	120	17	101,5	116,5	125	102	11	185	145	65	4x18
DN 80	3"	260	130	17	116	134	125	102	11	200	160	80	8x18
DN 100	4"	300	150	17	131	149	125	102	11	220	180	100	8x18

## materials

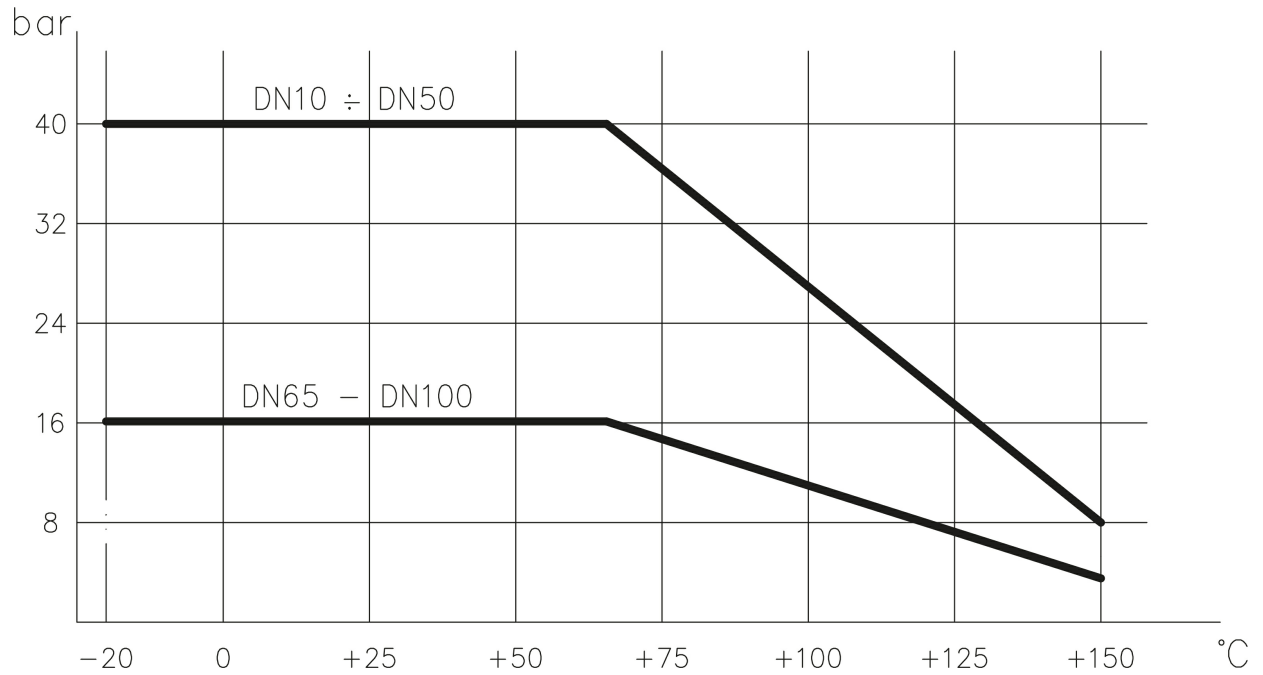


MATERIALS				
1	Shaft	316L S.S.	1.4401	UNI X2CrNiMo 17 12
2	Nut	303 S.S.		
3	Gland nut ring	304L S.S. (303 S.S.)		
4*	Top tight ring	P.T.F.E.		
5*	Shaft o-ring	FKM		
6*	Washer	P.T.F.E.		
7	Ball	316L S.S.	1.4401	UNI X2CrNiMo 17 12
8	Body	316L S.S.	1.4401	UNI X2CrNiMo 17 12
9*	Seals	P.T.F.E.		
10*	End sealings	P.T.F.E.		
11	End	316L S.S.	1.4401	UNI X2CrNiMo 17 12
12	Flange	316L S.S.	1.4401	UNI X2CrNiMo 17 12

\* Components of spare part kit KGBV46...

## diagrams and breakaway torque

Pressure/temperature diagram



BREAKAWAY TORQUES Nm										
SIZE	DN 10 3/8"	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								142	212	304
PN 40 bar	9	18	23	27	36	54	83			

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

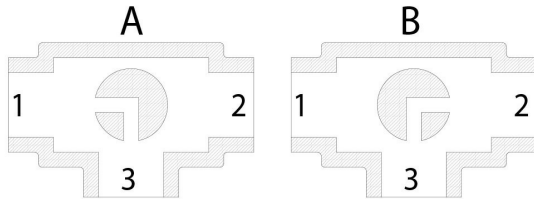
### Plan for "L" port

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.

#### View from above



### Plan for "T" port

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.

#### View from above

