

## Item 424 stainless steel ball valves



Macro Ball valves

Category Other stainless steel ball valves

2-way full-bore three piece casted stainless steel ball valve threaded-ends or butt weld - PN 63

### features

#### GENERAL FEATURES:

- Manufactured in three pieces to facilitate replacement on plants which requires frequent maintenance.
- Threaded ends as per ISO 7/1 specifications; socket welding; butt welding.
- Standard seals: PTFE.
- Working temperature: from -20°C to +180°C (see diagram)
- Working pressure: see diagram.
- Fluid range: air, water, gas, petroleum and petrochemical products, aggressive media.
- ISO 5211 flange connection.
- Integrated locking device for lever version.

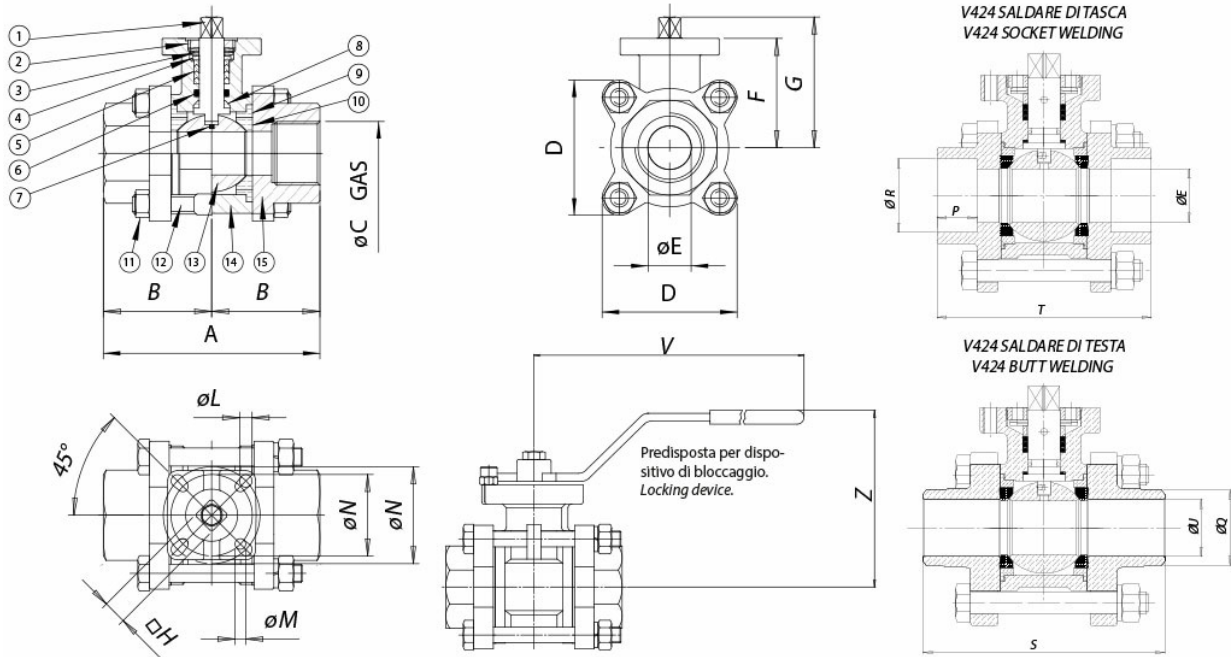
#### ON REQUEST:

- Seals made of:
  - RPTFE (15% glass filled)
  - CTFE (25% carbon filled)
  - TFM 1600.
- For other applications, please contact our sales department.

#### CERTIFICATIONS:

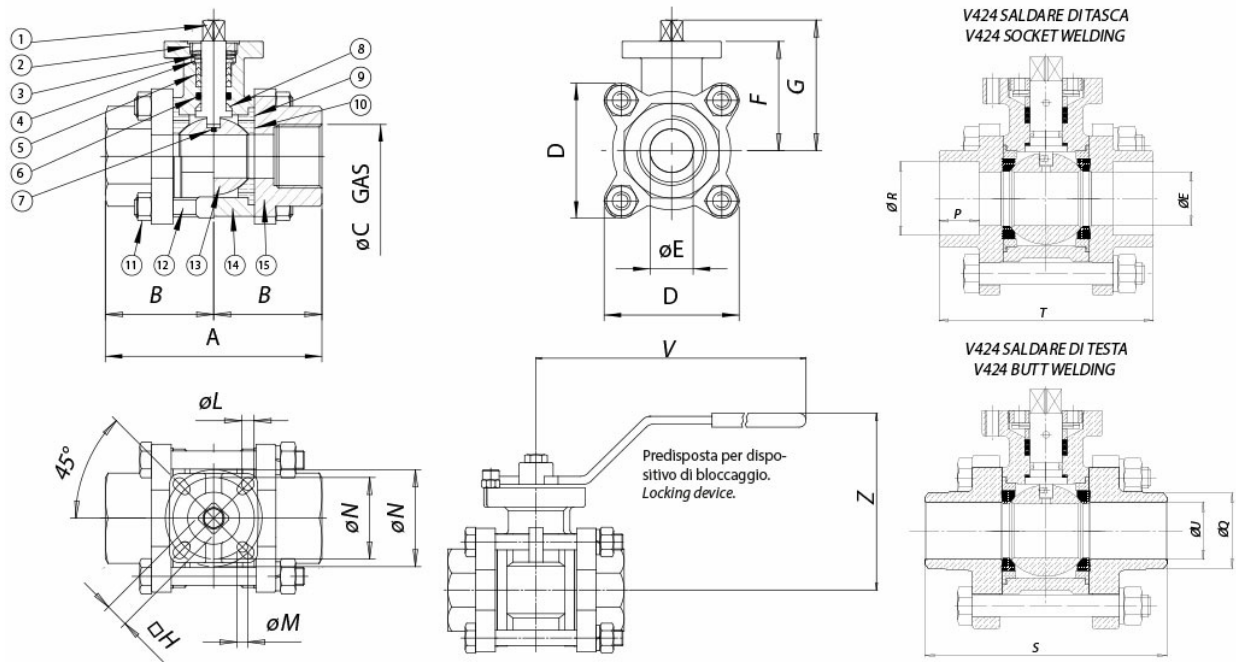
- ATEX version in conformity with European Directive 2014/34/EU.
- ATEX certificate on request.
- In compliance with European Directive 2014/68/EU PED.

## dimensions



SIZE		DIMENSIONS																		
DN [mm]	[inch]	A	B	øE	D	F	G	øH	øL	øM	øN	THREADED END	SOCKET WELDING END			BUTT WELDING END			V	Z
		øC	øR	P	T	øU	øQ	S												
DN 08	1/4"	65	32,5	11,2	48,8	42	49,5	9	6	6	36-42	1/4"	14,3	13,0	65,0	10,4	14,8	70	150	78,0
DN 10	3/8"	65	32,5	12,6	48,8	42	49,5	9	6	6	36-42	3/8"	17,7	13,0	65,0	13,7	18,5	70	150	78,0
DN 15	1/2"	75	37,5	15,0	48,8	42	49,5	9	6	6	36-42	1/2"	22,0	16,0	75,0	15,0	21,0	75	150	78,0
DN 20	3/4"	80	40,0	20,0	50,3	45	53,5	9	6	6	36-42	3/4"	27,5	16,0	80,0	21,4	28,3	90	150	82,5
DN 25	1"	90	45,0	25,0	64,0	52	62,7	11	7	6	42-50	1"	34,3	17,0	90,0	27,2	35,5	100	200	91,5
DN 32	1" 1/4	110	55,0	32,0	73,4	57	67,7	11	7	6	42-50	1" 1/4	43,0	20,0	110,0	35,5	43,7	110	200	95,5
DN 40	1" 1/2	120	60,0	38,0	82,0	68	81,5	11	9	7	50-70	1" 1/2	49,0	20,0	120,0	41,2	50,0	125	250	112,0
DN 50	2"	140	70,0	50,8	94,3	77	91,0	14	9	7	50-70	2"	61,4	22,0	140,0	52,7	63,0	150	250	118,5
DN 65	2" 1/2	185	92,5	65,0	165,0	100	117	17	11	9	70-102	2" 1/2	77,2	33,0	185,0	65,3	77,2	190	300	140,0
DN 80	3"	205	102,5	80,0	190,0	111	127,7	17	11	9	70-102	3"	90,0	34,3	205,0	79,5	89,8	220	300	151,0
DN 100	4"	240	120,0	100,0	240,0	138	159,8	22	13	11	102-125	4"	115,4	41,0	240,0	102,3	115,4	270	400	178,0

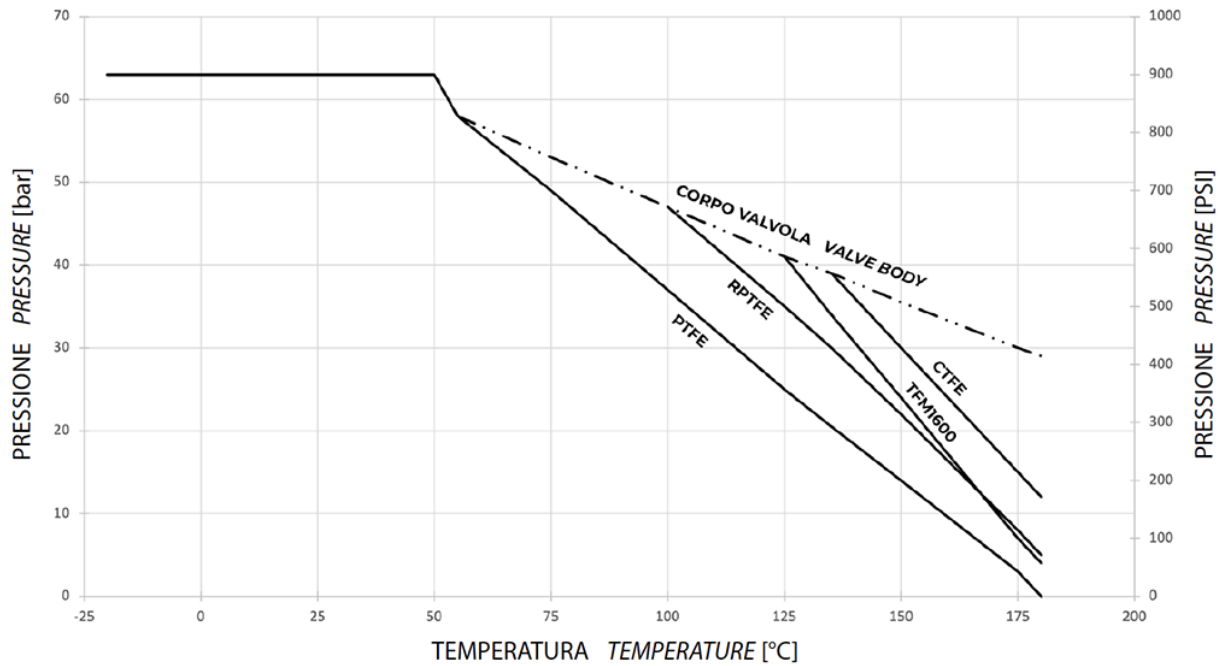
## materials



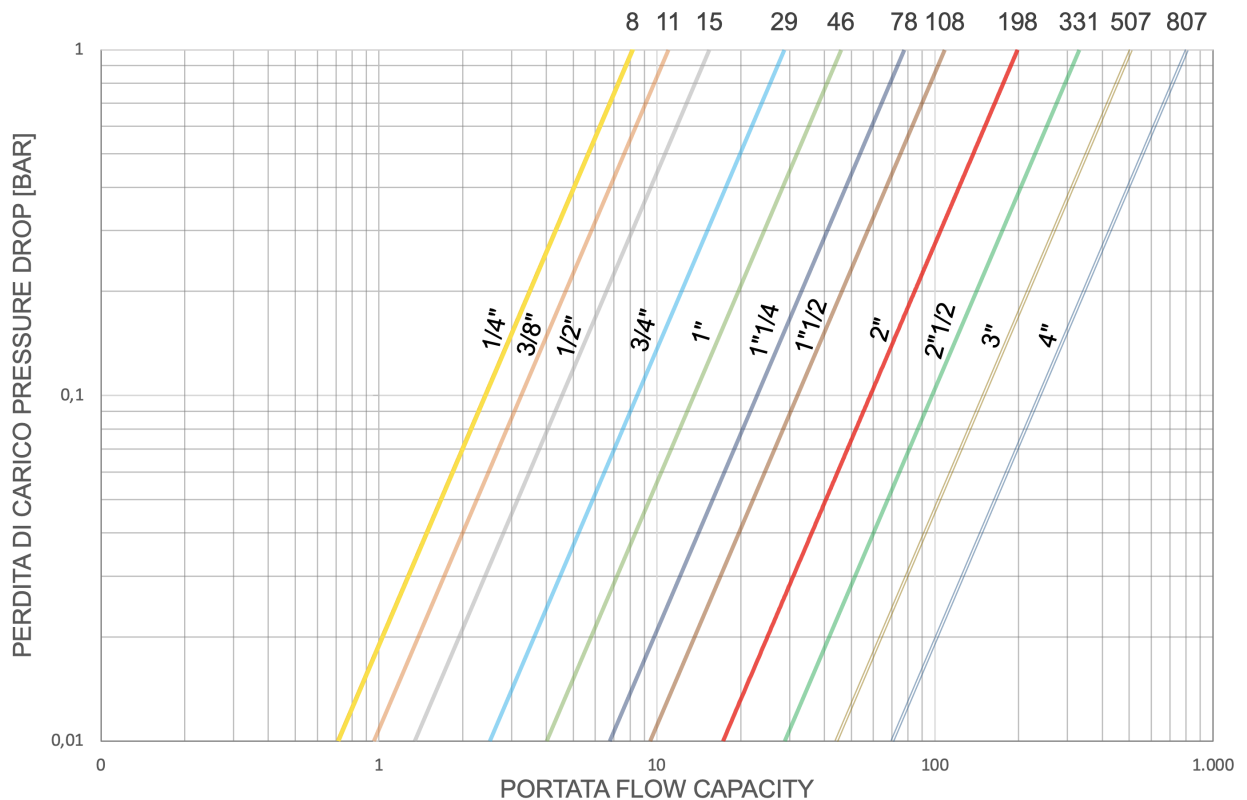
MATERIALS				
1	Shaft	316 S.S.	1.4401	UNI X5CrNiMo 17 12
2	Nut	304 S.S.	1.4301	UNI X5CrNi 18 10
3	Belleville washer	301 S.S.	1.4310	UNI X12CrNi 17 07
4	Gland	304 S.S.	1.4301	UNI X5CrNi 18 10
5*	V-ring stem packing	P.T.F.E.		
6*	O-ring	FKM		
7	Antistatic device	316 S.S.	1.4401	UNI X5CrNiMo 17 12
8*	Pyramidal stem seal	P.T.F.E.		
9*	Body gasket	P.T.F.E.		
10*	Seal	P.T.F.E.		
11	Nut	304 S.S.	1.4301	UNI X5CrNi 18 10
12	Bolt	304 S.S.	1.4301	UNI X5CrNi 18 10
13	Ball	316 S.S.	1.4401	UNI X5CrNiMo 17 12
14	Body	316 S.S.	1.4408	
15	End cap	316 S.S.	1.4408	
* Components of spare part kit KGBV60...				

## diagrams and breakaway torque

Pressure/temperature diagram



Flow/pressure loss diagram and Kv nominal coefficient



Kv is the coefficient, expressed in m<sup>3</sup>/h (with water at 15°C) causing a pressure loss of 1 bar.

<b>BREAKAWAY TORQUES Nm</b>											
<b>SIZE</b>	<b>DN 8 1/4"</b>	<b>DN 10 3/8"</b>	<b>DN 15 1/2"</b>	<b>DN 20 3/4"</b>	<b>DN 25 1"</b>	<b>DN 32 1 1/4"</b>	<b>DN 40 1 1/2"</b>	<b>DN 50 2"</b>	<b>DN 65 2 1/2"</b>	<b>DN 80 3"</b>	<b>DN 100 4"</b>
PN 63 bar	6	7	8	10	14	20	29	42	85	146	235

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.

## documents

### Certificates

[PED](#)

[ATEX - Ball Valves](#)

[EAC TR CU 012/2011 - EX](#)

[EAC TR CU 010/2011 - Ball Valves LST-LSP-424](#)

[EAC TR CU 032/2013 - Ball Valves LST-LSP-424](#)

### Instructions

[ISTRUZIONI ATEX 8\\_0486](#)

[ISTRUZIONI USO 8\\_0844-09](#)