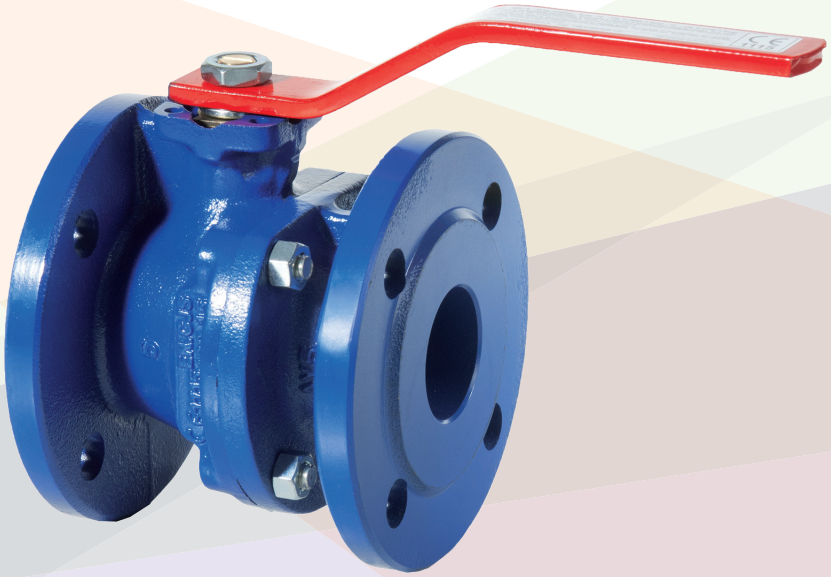
Serie B2.1

Valvole a sfera flangiata in ghisa
Flanged ductile iron ball valve

DOWNLOAD
DATASHEET



B2.1_02/03/2017

By FERRARI Components & tools

Valvola a sfera flangiata in ghisa / *Flanged ductile iron ball valve*

Le valvole serie B2.1 sono valvole di intercettazione a sfera tipo split-body con corpo in ghisa sferoidale e sfera flottante, realizzate in accordo alle normative di prodotto rilevanti ed al sistema di gestione della qualità EN ISO 9001.
Sono adatte per riscaldamento e condizionamento (HVAC), teleriscaldamento, trattamento e distribuzione dell'acqua, applicazioni industriali, agricole, per aria compressa, gas, oli e idrocarburi.
(Fatta salva la scelta corretta dell'articolo in base all'applicazione)

Series B2.1 valves are shut-off ball valves split-body type in ductile iron and floating ball, manufactured according to the severe product standards and the quality management relative to ISO 9001.
Suitable for heating and conditioning (HVAC), district heating, distribution and treatment of water, industrial application, agricultural application, for compressed air processing, for oils and hydrocarbon.
(Please ensure the choice of the corresponding item)

Sono idonee: per impieghi in linea e a fine linea e per servizio che richieda frequenti azionamenti; il supporto integrato in accordo a ISO 5211 permette il facile montaggio di una vasta gamma di servocomandi.
Le valvole a sfera serie B2 presentano un passaggio pieno e diritto che minimizza le turbolenze e le perdite di carico.

YES: *for installation in line and end of line, for services with frequent acting, the integrated ISO 5211 support allows the installation of a wide range of actuators.*
The B2.1 range of ball valves are full and straight bore reducing turbulences and minimizing head loss.

Non sono idonee: per vapore, per la parzializzazione e regolazione della portata.

NO: *for steam, for choking and flow regulation.*

Accessori

- Prolunga per isolamento termico
- Cappuccio quadro per presa stradale
- Prolunga per presa stradale
- Kit flangia ISO 5211
- Kit Leva di manovra lucchettabile
- Kit interruttori di finecorsa per segnalazione Aperto/Chiuso

Accessories

- *Stem extension for thermal insulation*
- *Square cap for water main system connection*
- *Stem extension*
- *Kit ISO 5211 flange*
- *Kit lockable operation lever*
- *Kit limit switches for ON/OFF position indicator*

Comandi

- Attuatori pneumatici a doppio e semplice effetto
- A richiesta: box finecorsa, posizionatore
- Attuatori elettrici
- Riduttori manuali

Actuators

- *Double acting and single acting pneumatic actuators*
- *On request: limit switches, position indicator*
- *Electric actuators*
- *Gear box*

Certificazioni / *Certifications*

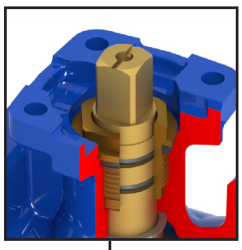
Conformi alla Direttiva 2014/68/UE (ex 97/23/CE PED)
Conformi alla Norma EN 13774,
omologazione DVGW per gas

In conformity with directive 2014/68/UE (ex 97/23/CE PED)
Conformity to EN 13774 norms,
DVGW certification for gas

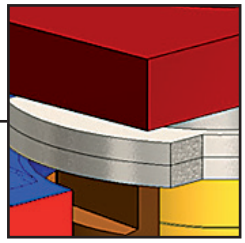
Norme costruttive e di collaudo (equivalenti):
Scartamento: EN558/1 ISO 5752
Flange: EN1092 ISO 7005, ANSI B16.5 #150
Design: EN 1983, EN12516, ISO 5211
Marcatura EN19
Collaudo: testate al 100%, EN 12266 cat. A (ISO 5208 cat. A)

Design and testing standards *(correspondences):*
Face-to-face: EN558/1 ISO 5752
Flanges: EN1092 ISO 7005, ANSI B16.5 #150
Design: EN 1983, EN12516, ISO 5211
Marking: EN19
Testing: 100% testing in accordance with EN 12266 cat. A (ISO 5208 cat. A)

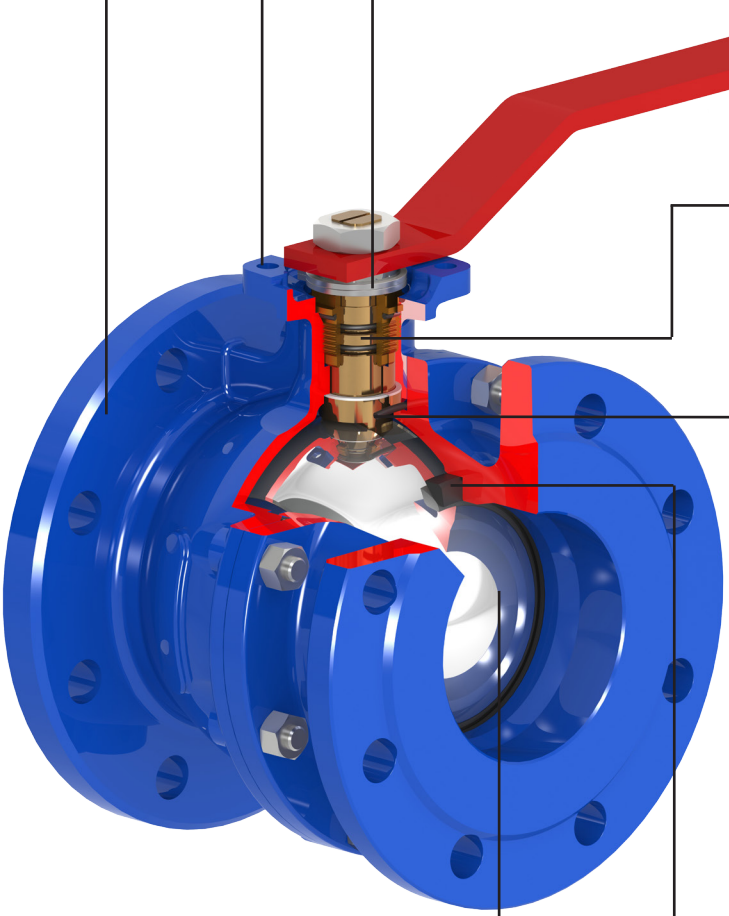
Verniciatura interna ed esterna con smalto epossidico, resistente alle alte temperature. Vernice a base acqua, a basso impatto ecologico.
Inside and outside epoxy coating, high temperature resistant. Environmentally friendly, water-based paint.



Flangia in accordo a ISO5211 integrata.
Integrated flange, in accordance with ISO 5211.

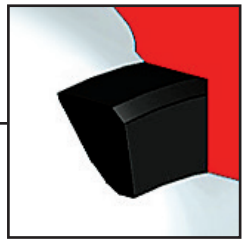


Sfilando una piastrina e ruotandola di 90° è possibile bloccare la leva in posizione aperta o chiusa.
Removing and repositioning of the plate at 90° allows locking of the valve in ON-OFF position.

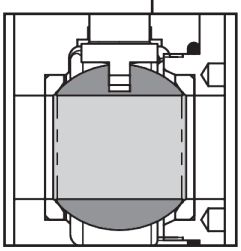


Il doppio O-Ring sullo stelo e la bussola metallica garantiscono la tenuta dinamica anche nelle condizioni più gravose.
The dynamic seal of the stem is guaranteed by a double O-ring, even in severe working conditions.

Stelo con design antiespulsione.
Blow-out proof stem.



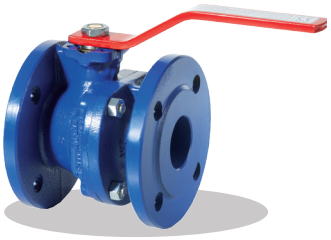
Sede sfera in PTFE caricato, al variare della temperatura la coppia di manovra rimane costante.
Seat of ball in reinforced PTFE, as temperature changes, the torque remains constant.



Sfera a passaggio pieno e cilindrico, in ottone cromato o in acciaio inox.
Ball with full and straight bore, in chromed brass or stainless steel.

Valvola a sfera flangiata in ghisa / *Flanged ductile iron ball valve*

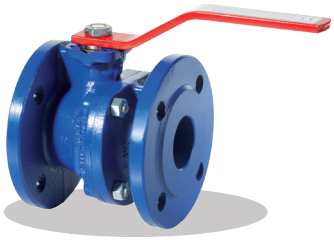
O-Ring in NBR



B2.100

Corpo: Ghisa sferoidale
Sfera: Ottone
Asta: Ottone
O-ring: NBR
Temp: da -10 a +100°C

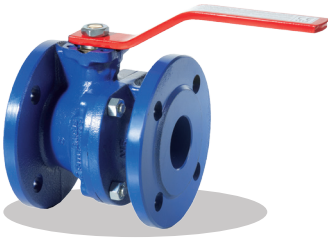
Body: Ductile iron
Ball: Brass
Stem: Brass
O-ring: NBR
Temp: -10 +100°C



B2.110

Corpo: Ghisa sferoidale
Sfera: AISI 304
Asta: Ottone
O-ring: NBR
Temp: da -10 a +100°C

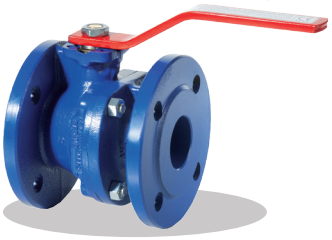
Body: Ductile iron
Ball: AISI 304
Stem: Brass
O-ring: NBR
Temp: -10 +100°C



B2.111

Corpo: Ghisa sferoidale
Sfera: AISI 304
Asta: AISI 304
O-ring: NBR
Temp: da -10 a +100°C

Body: Ductile iron
Ball: AISI 304
Stem: AISI 304
O-ring: NBR
Temp: -10 +100°C



B2.121

Corpo: Ghisa sferoidale
Sfera: AISI 316
Asta: AISI 304
O-ring: NBR
Temp: da -10 a +100°C

Body: Ductile iron
Ball: AISI 316
Stem: AISI 304
O-ring: NBR
Temp: -10 +100°C

Per DN 200 - 250 / *For DN 200 - 250*

B2.000

Corpo: Ghisa grigia
Body: Cast iron

B2.010

Corpo: Ghisa grigia
Body: Cast iron

B2.011

Corpo: Ghisa grigia
Body: Cast iron

B2.021

Corpo: Ghisa grigia
Body: Cast iron

Scartamento EN 558/1-29 (ex NF 29-323) / *Face to face EN 558/1-29 (ex NF 29-323)*

F2.100

Vedi B2.100
See: B2.100

F2.110

Vedi B2.110
See: B2.110

F2.111

Vedi B2.111
See: B2.111

F2.121

Vedi B2.121
See: B2.121

Per Gas / *For Gas*

B2.100 gas

Corpo: Ghisa sferoidale
Sfera: Ottone
Asta: Ottone
O-ring: NBR
Temp: da -10 a +70°C

Body: Ductile iron
Ball: Brass
Stem: Brass
O-ring: NBR
Temp: -10 +70°C

B2.110 gas

Corpo: Ghisa sferoidale
Sfera: AISI 304
Asta: Ottone
O-ring: NBR
Temp: da -10 a +70°C

Body: Ductile iron
Ball: AISI 304
Stem: Brass
O-ring: NBR
Temp: -10 +70°C

B2.111 gas

Corpo: Ghisa sferoidale
Sfera: AISI 304
Asta: AISI 304
O-ring: NBR
Temp: da -10 a +70°C

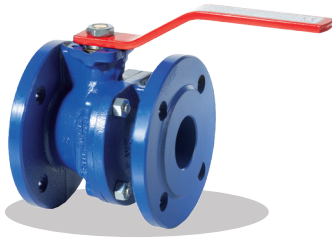
Body: Ductile iron
Ball: AISI 304
Stem: AISI 304
O-ring: NBR
Temp: -10 +70°C

B2.121 gas

Corpo: Ghisa sferoidale
Sfera: AISI 316
Asta: AISI 304
O-ring: NBR
Temp: da -10 a +70°C

Body: Ductile iron
Ball: AISI 316
Stem: AISI 304
O-ring: NBR
Temp: -10 +70°C

O-Ring in FKM



B2.100 FKM *

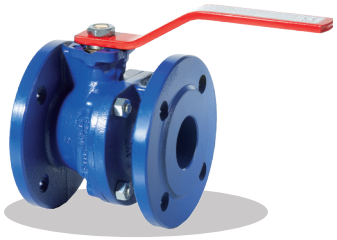
Corpo: Ghisa sferoidale
Sfera: Ottone
Asta: Ottone
O-ring: FKM
Temp: da -10 a +150°C

Body: Ductile iron
Ball: Brass
Stem: Brass
O-ring: FKM
Temp: -10 +150°C

B2.110 FKM *

Corpo: Ghisa sferoidale
Sfera: AISI 304
Asta: Ottone
O-ring: FKM
Temp: da -10 a +150°C

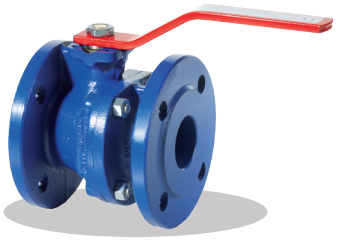
Body: Ductile iron
Ball: AISI 304
Stem: Brass
O-ring: FKM
Temp: -10 +150°C



B2.111 FKM *

Corpo: Ghisa sferoidale
Sfera: AISI 304
Asta: AISI 304
O-ring: FKM
Temp: da -10 a +150°C

Body: Ductile iron
Ball: AISI 304
Stem: AISI 304
O-ring: FKM
Temp: -10 +150°C



B2.121 FKM *

Corpo: Ghisa sferoidale
Sfera: AISI 316
Asta: AISI 304
O-ring: FKM
Temp: da -10 a +150°C

Body: Ductile iron
Ball: AISI 316
Stem: AISI 304
O-ring: FKM
Temp: -10 +150°C

*** Particolarmente indicate per Teleriscaldamento per acqua fino a 150°C**
**** Most suitable for district heating for water up to 150 °C***

Verniciatura: Colore RAL 5002
Coating: RAL 5002 colour

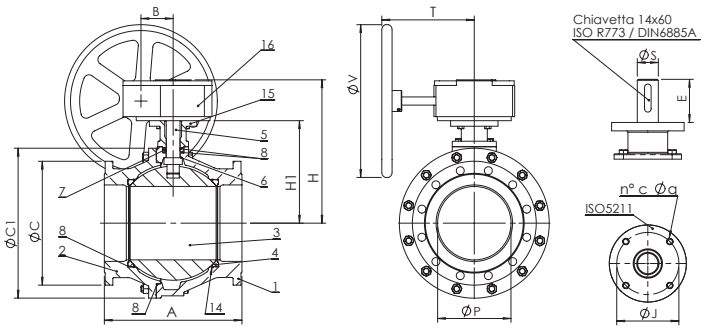
Valvola a sfera flangiata in ghisa / *Flanged ductile iron ball valve*

Comandi e accessori / *Actuators and accessories*

B2.1 + RM

Riduttore manuale

Gear box

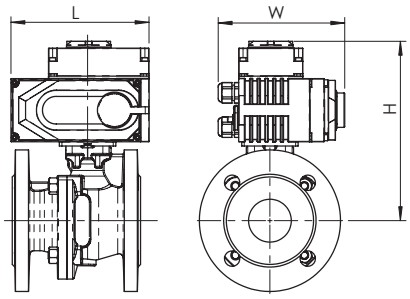


DN	15	20	25	32	40	50	65	80	100	125	150	200	250***
H													448
H1													335
B													101
4 x 9	-	-	-	-	-	-	-	-	-	-	-	-	490
V	-	-	-	-	-	-	-	-	-	-	-	-	500
T	-	-	-	-	-	-	-	-	-	-	-	-	284

B2.1 + AOX

Attuatori elettrici

Electric actuators

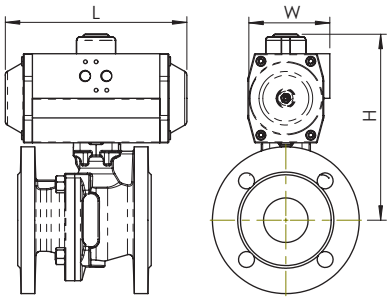


DN	15	20	25	32	40	50	65	80	100	125	150	200
B2 + AOX												
L	123	123	123	123	160	160	160	189	189	268	268	268
H	164	165	172	177	200	208	216	247	262	329	347	394
W	100	100	100	100	121	121	121	145	145	225	225	225
Peso / *Weight* Kg	4.7	5.4	6.3	7.9	11.1	12.6	14.1	20.1	23.1	41.4	52.3	107.5

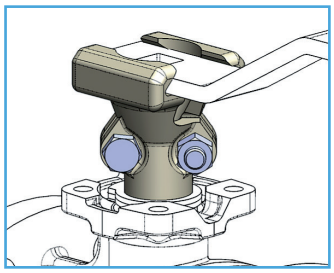
B2.1 + AP

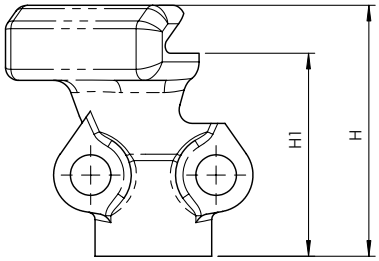
Attuatori pneumatici

Pneumatic actuator



DN	15	20	25	32	40	50	65	80	100	125	150	200	250
B2 + AP DE													
L	155	155	155	155	213	213	213	276	276	366	388	563	750
H	153.5	155	162	167	199	207	215	263	278	350	389	530	720
W	73	73	73	73	85	85	85	110	110	140	160	215	290
Peso / *Weight* Kg	4.02	4.72	5.62	7.22	10.04	11.54	13.04	20.6	23.6	38.1	52.44	129.6	257
B2 + AP SE													
L	213	213	236	236	236	236	276	310	388	468	563	750	-
H	210.5	212	229	234	259	267	290	350	399	455	543	575	-
W	85	85	98	98	98	98	110	128	160	175	215	290	-
Peso / *Weight* Kg	5.7	6.4	8.5	10.1	11.8	13.3	16.7	25.17	35.59	51.86	83.32	194	-

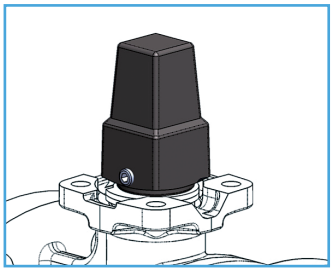


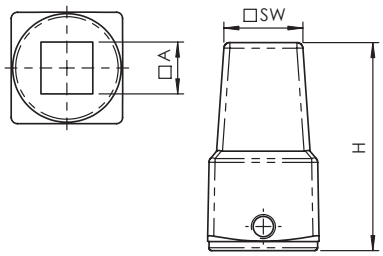


DN	40-50-65	80-100-125-150
H	68	68
H1	55	55

KITB2

Prolunga per isolamento termico / *Stem extension for thermal insulation*

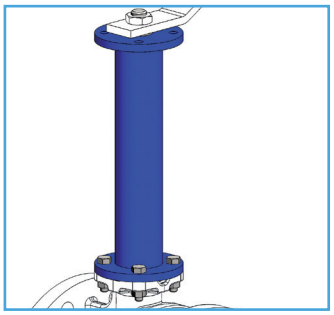


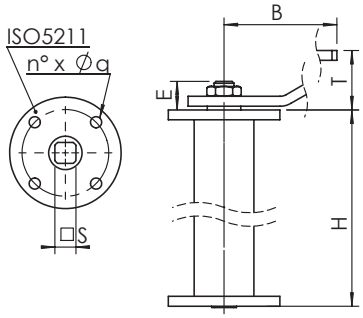


DN	40-50-65	80-100	125-150
SW	26	26	26
A	14	17	22
H	69	69	71

KCAPB2

Cappuccio quadro per presa stradale / *Square cap for water main system connection*

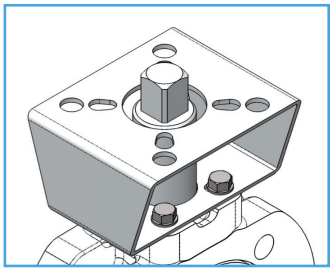


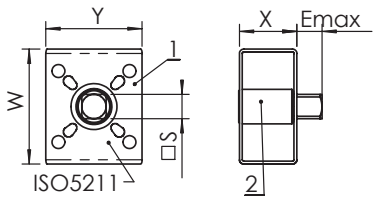


DN	40	50	65	80	100	125	150
H	250-500-800-1000						
T	48	48	48	48	48	59	59
B	230	230	230	280	360	450	560
ISO 5211	F05	F05	F05	F07	F07	F10	F10
J	50	50	50	70	70	102	102
n° x Ø q	4x7	4x7	4x7	4x9	4x9	4x11	4x11
E	22	22	22	23	23	27	27
S	14	14	14	17	17	22	22

KPRB

Prolunga per presa stradale / *Stem extension for water main system connection*



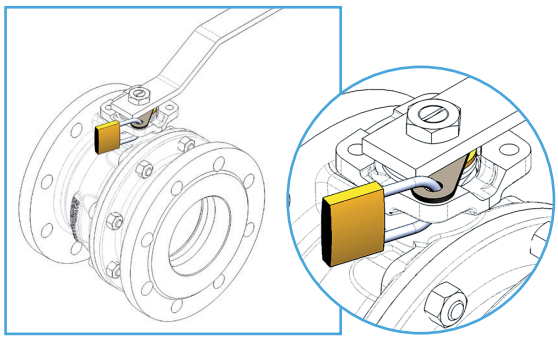


1) Flangia / *Bracket*
2) Giunto / *Joint*

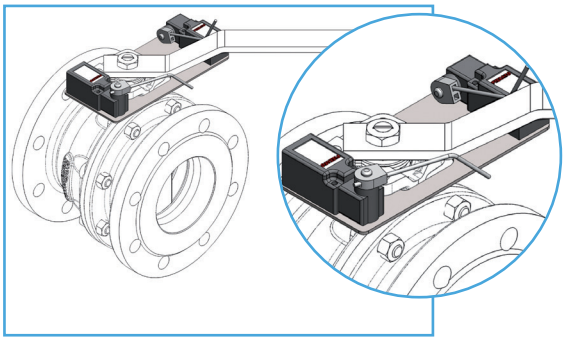
DN	15-20	25-32	40-50-65	80	100	125	150
ISO 5211*	F04-05-07	F04-05-07	F05-07	F10-12	F10-12	F10-12	F10-12-14
S x E	14 x 14	17 x 17	17 x 17	22 x 22	27 X 27	27 X 27	36 X 36
S1 x E1**	11 x 11	11 x 11	-	-	-	-	-
Foratura lato valvola Drilling valve side	F03-04	F03-04	F05-07	F07-10	F07-10	F07-10	F10-12-14
X	40	40	50	60	60	60	80
Y	70	70	70	120	120	120	140
W	80	80	100	120	120	120	160

KISO.B2

Kit flangia ISO 5211 / *Kit ISO 5211 flange*



Kit leva di manovra lucchettabile
Kit lockable operation lever

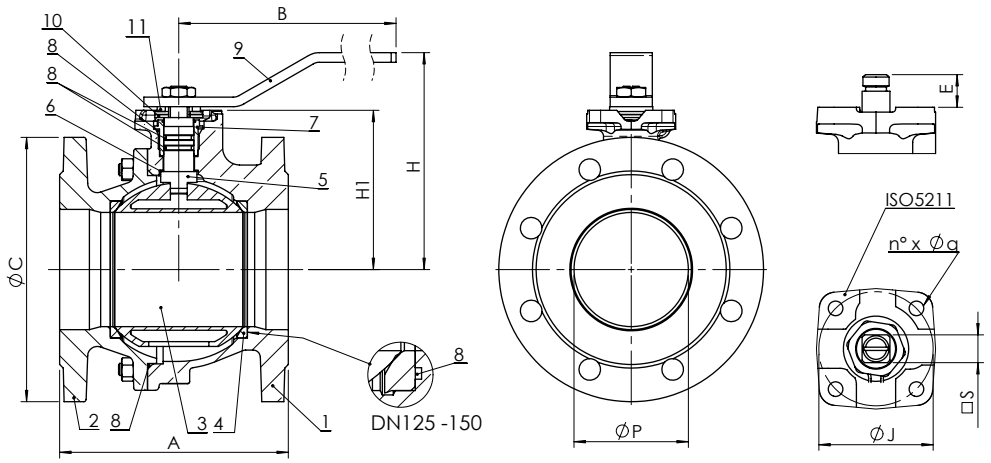


KFC

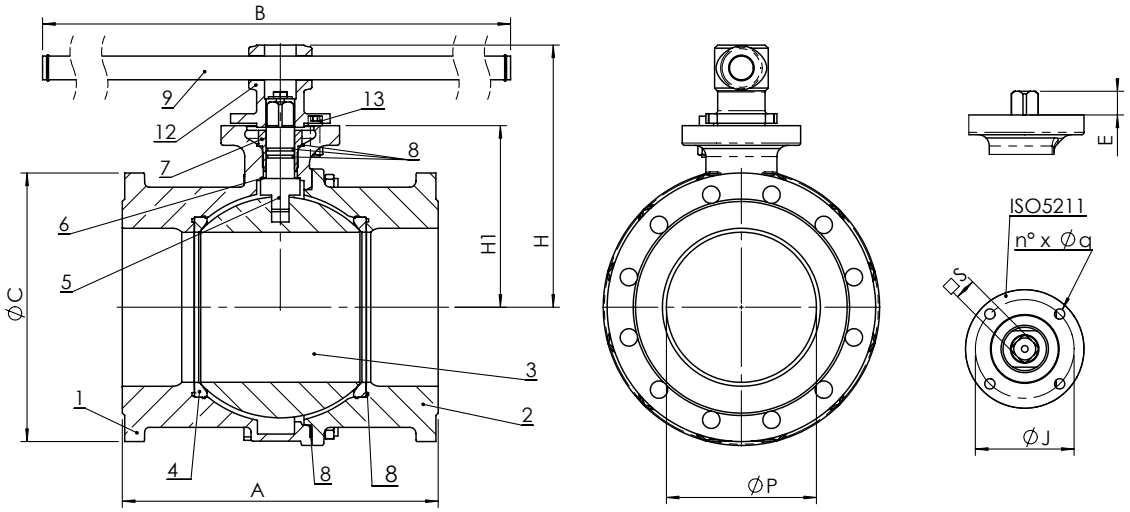
Kit interruttori di finecorsa per segnalazione Aperto/Chiuso
Kit limit switches for ON/OFF position indicator

Valvola a sfera flangiata in ghisa / *Flanged ductile iron ball valve*

B2.1 - DN 15- 150



B2.0/B2.1 - DN 200



Dimensioni (mm) / *Dimensions (mm)*

DN		15	20	25	32	40	50	65	80	100	125	150	200	250***
P		15	20	25	32	40	50	63	76	95	120	145	190	250
A (B2.1)	EN 558/1 - 14 (ex DIN 3202 F4)	115	120	125	130	140	150	170	180	190	200	210	-	-
A (B2.0)	EN 558/1 - 14 (ex DIN 3202 F5)	-	-	-	-	-	-	-	-	-	-	-	400	450
A (F2.1)	EN 558/1 - 29 (ex NF 29-323)	-	-	-	-	136	142	154	160	172	186	200	-	-
H		84	84	96	101	125	135	143	165	180	225	243	320	448
H1		50,5	52	59	64	78,5	87	95	450	132,5	165	182,5	230	335
B		160	160	170	170	230	230	230	280	360	450	560	1000	101
C	EN1092/2 PN 16	95	105	115	140	150	165	185	200	220	250	285	340	405
ISO 5211		F04	F04	F04	F04	F05	F05	F05	F07	F07	F10	F10	F12	12
J		42	42	42	42	42	50	50	70	70	102	102	125	125
n° x Ø q		4 x 6	4 x 6	4 x 6	4 x 6	4 x 7	4 x 7	4 x 7	4 x 9	4 x 9	4 x 11	4 x 11	4 x 13	4 x 13
E		11,5	11,5	14,5	14,5	17,5	17,5	17,5	20	20	24,5	24,5	27	92
S		□ 9	□ 9	□ 11	□ 11	□ 14	□ 14	□ 14	□ 17	□ 17	□ 22	□ 22	□ 27	Ø 45

Materiali / *Materials*

	Componente - *Component*	Materiale - *Material*
1	Corpo - *Body*	Ghisa sferoidale EN GJS 400-15 / Ghisa grigia EN GJL250*, verniciato epossidico - *Ductile iron EN GJS 400-15 / Cast iron EN GJL250*, epoxy coated*
2	Flangia - *Flange*	Ghisa sferoidale EN GJS 400-15 / Ghisa grigia EN GJL250*, verniciato epossidico - *Ductile iron EN GJS 400-15 / Cast iron EN GJL250*, epoxy coated*
3	Sfera - *Ball*	Ottone CuZn40Pb2 cromato / AISI304 / AISI316 / EN GJL 250** - *Brass CuZn40Pb2 chrome plated / AISI 304 / AISI 316 / EN GJL250***
4	Sede sfera - *Ball seat*	PTFE + Carbone - *Reinforced PTFE*
5	Asta - *Stem*	Ottone CuZn40Pb2/ AISI304 / AISI316 - *Brass CuZn40Pb2 / AISI 304 / AISI 316*
6	Anello antifrizione - *Sliding washer*	PTFE
7	Ghiera - *Ring*	Ottone CuZn40Pb2 / AISI304 / AISI316 - *Brass CuZn40Pb2 / AISI 304 / AISI 316*
8	O Ring - *O-Ring*	NBR / FKM (Viton®)
9	Leva - *Lever*	Acciaio al carbonio, verniciato epossidico - *Carbon steel, epoxy coated*
10	Piastrina fermo - *Stop plate*	Acciaio al carbonio zincato - *Galvanized carbon steel*
11	Anello elastico - *Spring washer*	Acciaio al carbonio zincato - *Galvanized carbon steel*
12	Mozzo leva - *Lever hub*	Ghisa sferoidale EN GJS 400-15 - *Ductile iron EN GJS 400-15*
13	Fermo lev - *Lever stop*	Acciaio al carbonio zincato - *Galvanized carbon steel*
14	Anello antiestrazione - *Anti-blow-out ring*	AISI302 - *AISI 302*
15	Supporto per riduttore - *Mounting pad for gear box*	Ghisa sferoidale EN GJS 400-15 / Ghisa grigia EN GJL250 - *Ductile iron EN GJS 400-15 / Cast iron EN GJL 250*
16	Riduttore manuale - *Gear box*	-
17	Bulloneria - *Bolts*	Acciaio al carbonio zincato - *Galvanized carbon steel*

*: solo DN 200-250 * *: per DN 250 con sfera EN GJL 250 - CODICE: 02.040 / *: only DN 200-250 **: DN 250 with ball in EN GJL 250 - CODE: 02.040*

Peso (kg) / *Weight (kg)*

DN		15	20	25	32	40	50	65	80	100	125	150	200	250
B2.100		2,6	3,3	4,2	5,8	7,5	9	10,5	15,5	18,5	28	38,5	93	180
B2.111 - B2.122		2,6	3,3	4,2	5,8	7,8	9,7	12,2	16,7	22,2	35,8	46,6	117	180

Coppia di manovra (Nm) / *Operating torque (Nm)*

DN		15	20	25	32	40	50	65	80	100	125	150	200	250
Nm		15	15	18	18	18	20	40	70	100	180	250	600	2000

Foratura / *Drilling*

DN		15	20	25	32	40	50	65	80	100	125	150	200	250
Dim. flangia in accordo PN 16 EN1092/2 ***Dimensions of flanges according to PN 16 EN1092/2***	Foratura PN 16 EN1092/2 *Drilling PN 16 EN1092/2*	std	std	std	std	std	std	std	std	std	std	std	std	std
	Foratura PN 10 EN1092/2 *Drilling PN 10 EN1092/2*	=	=	=	=	=	=	=	=	=	=	=	opt	opt
	Foratura PN 6 EN1092/2 *Drilling PN 6 EN1092/2*	opt	opt	opt	opt	opt	opt	opt	opt	opt	opt	opt	opt	opt
	Foratura PN 25 EN1092/2 *Drilling PN 25 EN1092/2*	=	=	=	=	=	=	opt	=	no	no	no	no	no
	Foratura ANSI B16.5 #150 *Drilling ANSI B16.5 #150*	opt	opt	opt	opt	opt	opt	opt	opt	opt*	opt	opt	opt	opt

std: standard / opt: opzionale a richiesta / =: uguale a PN16 / *std: standard / opt: option on request / =: same as PN16*

Valvola a sfera flangiata in ghisa / *Flanged ductile iron ball valve*

Pressione massima / *Maximum pressure*

Tipo fluido * - *Fluids**	Montaggio - *Mounting*	
	TRA FLANGE *BETWEEN FLANGES*	FINE LINEA *END OF LINE*
Gas pericolosi *Hazardous gases*	16 bar DN15-200 10 bar DN250	10 bar DN15-100 NO DN125-250
Liquidi pericolosi *Hazardous liquids*	16 bar DN15-200 10 bar DN250	10 bar
Tutti gli altri fluidi *All remaining fluids*	16 bar DN15-200 10 bar DN250	10 bar

*: gas, liquidi pericolosi (esplosivi, infiammabili, tossici) secondo 2014/68/UE e 1272/2008 (CLP)

*: *Hazardous gas, liquids (explosive, inflammable, toxic) in accordance with 2014/68/UE and 1272/2008 (CLP)*

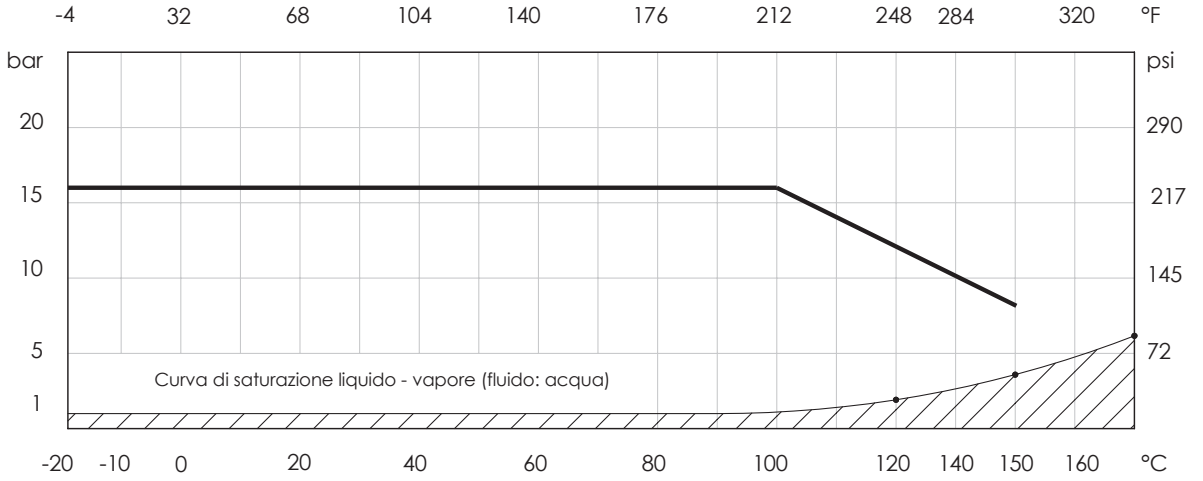
Temperature / *Temperature*

Temperatura - *Temperature*	min °C	max°C - *Max°C*	
		continuo *continuous*	picco *peak*
NBR	-10	100	110
FKM (Viton®)	-10	150	170

Attenzione: la pressione massima di utilizzo diminuisce con la temperatura, vedi diagramma "Pressione/Temperatura"

NB: the maximum working pressure decreases while temperature increases, please refer to "pressure/temperature" chart

Diagramma Pressione/Temperatura - *Pressure/temperature chart*



NON ADATTA PER VAPORE. NON utilizzare in condizioni di temperature e pressione al di sotto della curva di saturazione liquido-vapore (area tratteggiata)

RANGE NOT SUITABLE FOR STEAM. DO NOT use when temperature and pressure are below the liquid-steam saturation line (hatched area)

Perdite di carico Fluido: acqua (1m H2O = 0,098bar) / *Head loss Fluid: water (1m H2O = 0,098bar)*

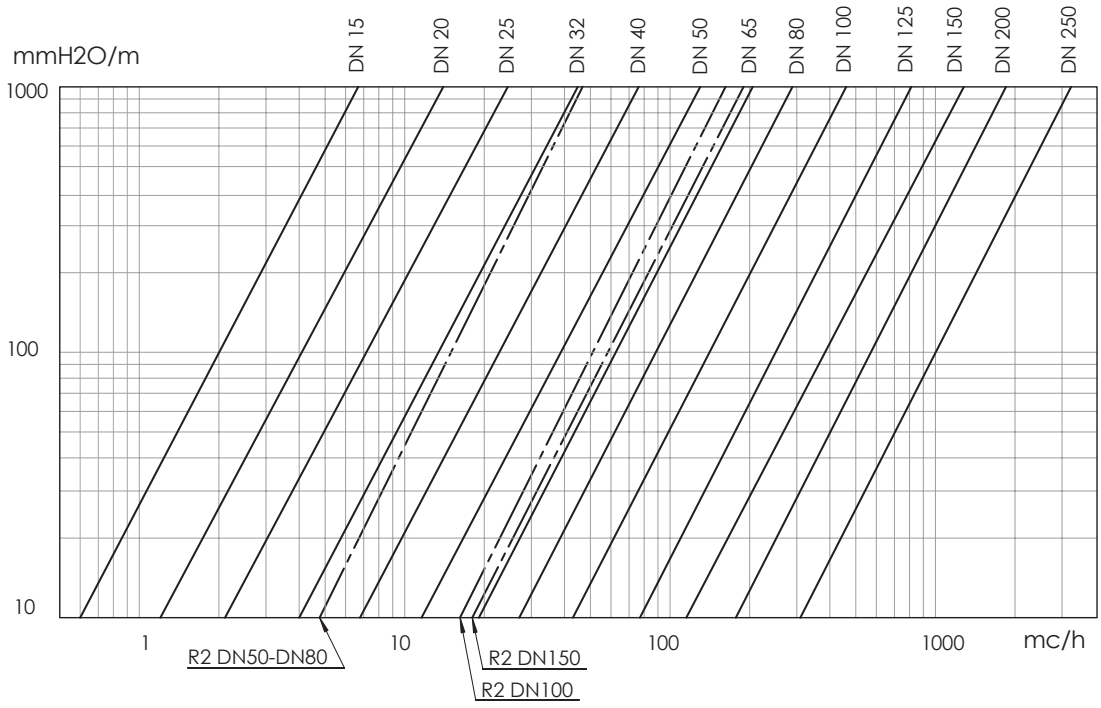


Tabella Kv - DN / *Kv - DN chart*

DN		15	20	25	32	40	50	65	80	100	125	150	200	250
Kv	mc/h	22,3	47,7	83,5	150,4	255	435	672	947	1508	2633	4261	5957	10510