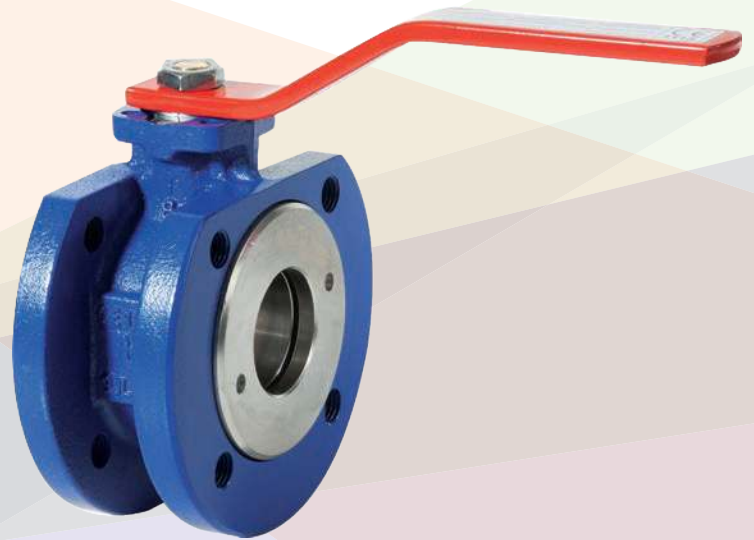


Serie B1



Valvole a sfera wafer in ghisa
Wafer cast iron ball valve

DOWNLOAD
DATASHEET



b-Smart, Be-Brandoni



brandoni
VALVES

www.brandonivalves.com

Valvola a sfera wafer in ghisa / Wafer cast iron ball valve

Le valvole serie B1 sono valvole di intercettazione a sfera tipo wafer con corpo in ghisa grigia 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, antincendio, oli e idrocarburi.

(Fatta salva la scelta corretta dell'articolo in base all'applicazione)

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 ampia gamma di servocomandi.

Le valvole a sfera serie B1 presentano un passaggio pieno e diritto che minimizza le turbolenze e le perdite di carico.

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

Accessori

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

Comandi

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

Certificazioni / Certifications



Conformi alla direttiva 2014/68/UE PED (ex 97/23/CE)
Conformi al D.M. 174 (direttiva 98/83/CE), per utilizzo a contatto con acqua potabile.

Norme costruttive e di collaudo (equivalenti):

Flange: EN1092 ISO 7005
Design: EN 1983, EN12516, ISO 5211
Marcatura EN19
Collaudo: testate al 100%, EN 12266 cat. A (ISO 5208 cat. A)

Series B1 consists of wafer-ball-type shut-off valves, with the body in cast iron and a floating ball, manufactured in accordance with the severe product standards and the quality management of ISO 9001.

Suitable for heating and conditioning (HVAC), district heating, distribution and water treatment, industrial applications, agricultural applications, for compressed air processing, for fire fighting, for oils and hydrocarbons.

(Please ensure the choice of the corresponding item)

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 B1 wafer ball valves are full and straight bore reducing turbulences and minimizing head loss.

NO: for steam, for choking and flow regulation.

Accessories

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

Actuators

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

*In conformity with directive 2014/68/UE PED (ex 97/23/CE)
Suitable for drinking water application, comply with Italian regulation D.M.174*

Design and testing standards (correspondences) :

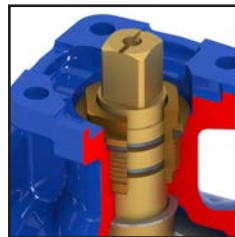
*Flanges: EN1092 ISO 7005
Design: EN 1983, EN12516, ISO 5211
Marking: EN19
Testing: 100% testing in accordance with EN 12266 cat. A (ISO 5208 cat. A)*



Verniciatura interna ed esterna con smalto epossidico, resistente alle alte temperature. Vernice a base acqua, a basso impatto ecologico.

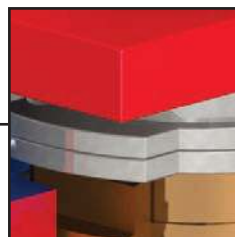
Inside and outside epoxy coating, high-temperature resistance.

Environmentally friendly water-based paint.



Flangia in accordo a ISO5211 integrata per DN40-100. DN20-32 predisposti per montaggio Kit ISO.

Integrated flange, in accordance with ISO 5211 for DN 40-100. DN 20-32 suitable for mounting kit ISO.

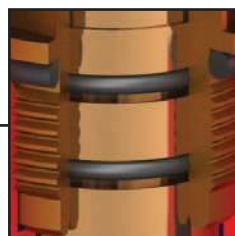


Doppia piastrina di fermo.

Sfilando una piastrina e ruotandola di 90° è possibile bloccare la leva in posizione aperta o chiusa.

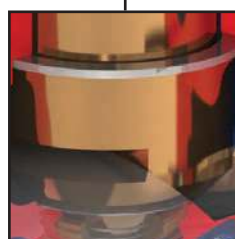
Twin stop plate.

Removing and repositioning one of the plate at 90° allows locking of the valve in ON-OFF position.



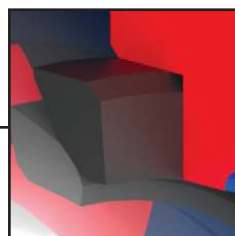
Il doppio O-Ring sullo stelo e la busola metallica garantiscono la tenuta dinamica anche nelle condizioni più gravose.

The dynamic seal of the stem is guaranteed by a double O-ring, even in severe working conditions.



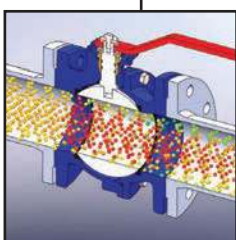
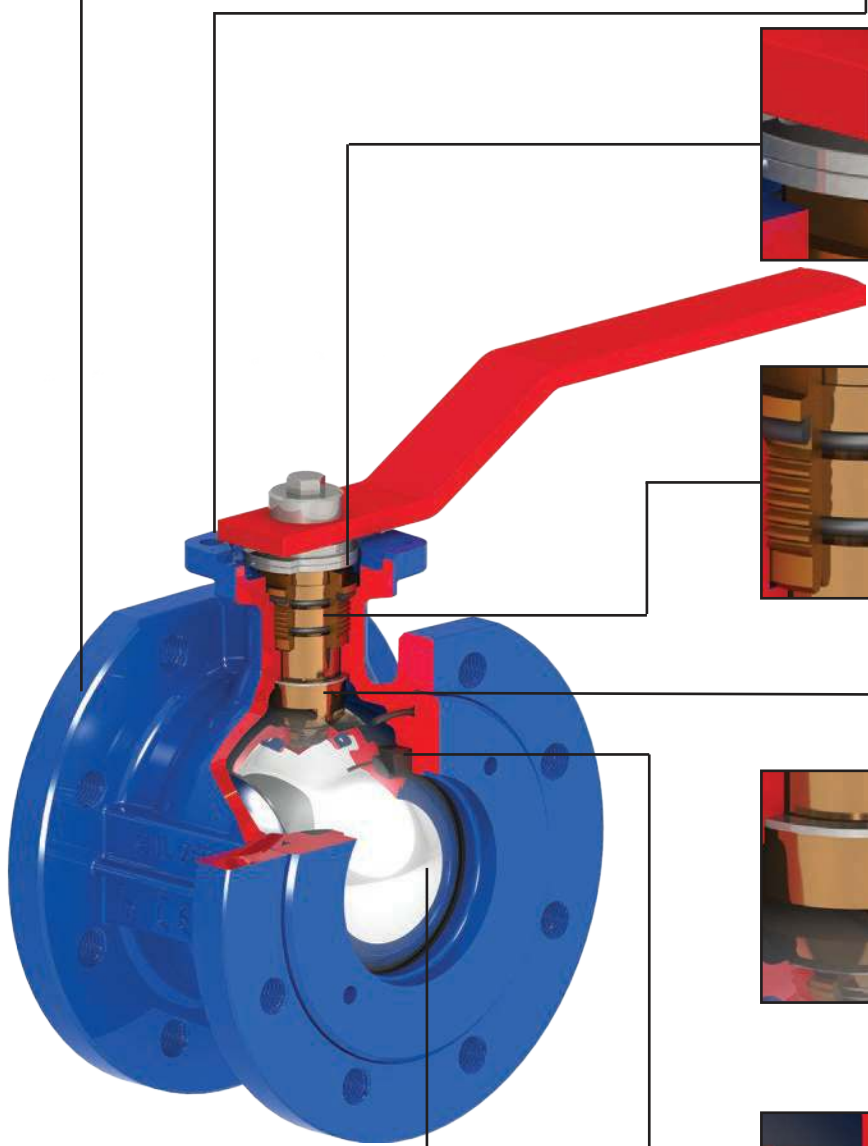
Stelo con design antiespulsione.

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 dritto, in ottone cromato o in acciaio inox.

Ball with full and straight bore, in chrome-plated brass or stainless steel.

Valvola a sfera wafer in ghisa / Wafer cast iron ball valve

O-Ring: NBR



B1.000

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

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



B1.010

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

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



B1.011

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

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

O-Ring in FKM



B1.000 *

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

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



B1.010 *

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

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



B1.011 *

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

Body: Cast iron
Ball: AISI 304
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: rivestimento epossidico interno ed esterno colore RAL 5002
Coating: inside and outside epoxy coated RAL 5002 colour

Combinazioni diverse disponibili su richiesta.
Special versions on request.

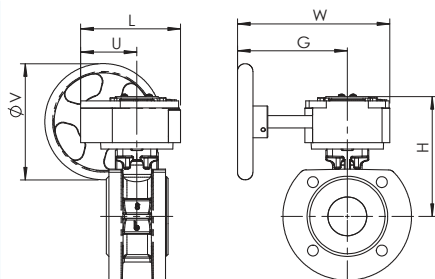
I componenti ed accessori realizzati in acciaio NON inox, anche se protetti da verniciatura, zincatura o altro trattamento, se utilizzati in ambienti all'aperto, in condizioni di forte umidità/condensa od in ambienti aggressivi, possono mostrare una durata di protezione all'ossidazione limitata nel tempo.
Components and accessories made in steel different from stainless steel, even if protected by painting or galvanizing, if used in outdoor environments, in conditions of high humidity / condensation or in aggressive environments, may exhibit a limited protection span against oxidation.

Comandi e accessori / Actuators and accessories



B1 + RM

Riduttore manuale
Gear box

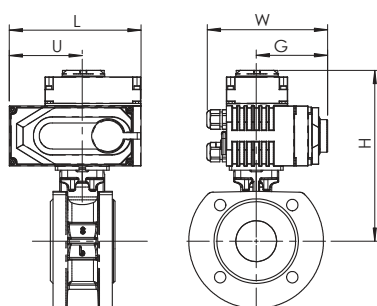


DN	20	25	32	40	50	65	80	100
B1 + RM	RM.0250							
L	130	130	130	130	130	130	130	130
D	77	77	77	77	77	77	77	77
H	154	161	166	141	149	157	180	195
W	225	225	225	225	225	225	225	225
F	170	170	170	170	170	170	170	170
V	150	150	150	150	150	150	150	150
Peso / Weight Kg	6.2	6.84	7.9	9.7	11.4	14.8	17	22.8



B1 + AOX

Attuatori elettrici
Electric actuators

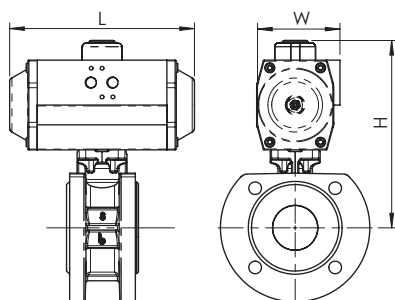


DN	20	25	32	40	50	65	80	100
B1 + AOX	003	003	003	005	005	008	015	015
L	123	123	123	160	160	160	189	189
D	74	74	74	89	89	89	107	107
H	205	212	177	200	208	216	247	262
W	100	100	100	121	121	121	145	145
F	65	65	65	84	84	84	89	89
Peso / Weight Kg	4	4.64	5.7	8.7	10	12.4	16.1	19.4

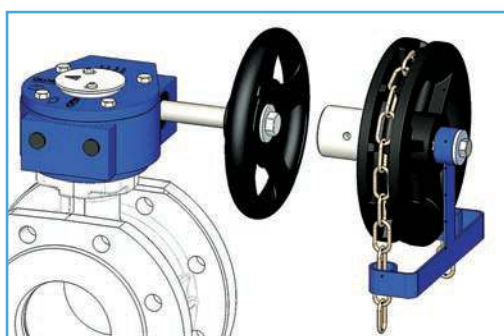


B1 + AP

Attuatori pneumatici
Pneumatic actuators



DN	20	25	32	40	50	65	80	100
B1 + AP DE / DA	AP052	AP052	AP063	AP063	AP063	AP075	AP092	AP105
L	147	147	165	165	165	182	262	270
H	184	191	212	186.5	195	215	255	285.5
W	72	72	83	83	83	95	109	125
Peso / Weight Kg	3.1	3.74	5.6	7.1	8.4	11.4	16.1	20.8
B1 + AP SE / SPRING RETURN	AP075S	AP075S	AP075S	AP083S	AP083S	AP092S	AP125S	AP140S
L	182	182	182	208	208	262	298	395
H	212	219	224	207.5	216	232	282	384.5
W	95	95	95	103	103	109	134	153
Peso / Weight Kg	4.76	5.4	6.46	8.7	10	14.2	21.5	31.3

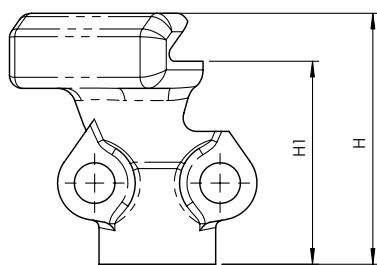
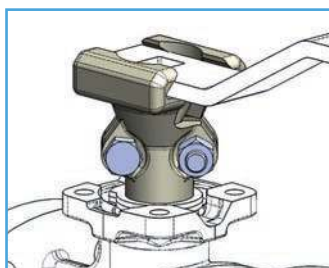


KCAT

Kit comando a catena
Chain driver kit

Valvola a sfera wafer in ghisa / Wafer cast iron ball valve

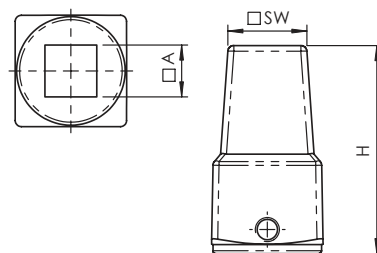
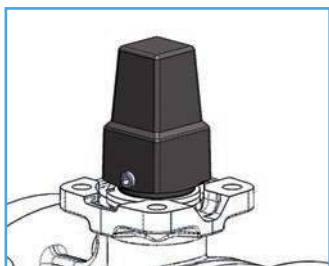
Comandi e accessori / Actuators and accessories



DN	25-32-40-50-65	80-100-125-150
H	68	68
H1	55	55

KITB2

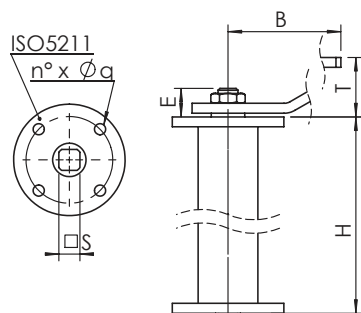
Prolunga per isolamento termico / Stem extension for thermal insulation



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

KCAPB2

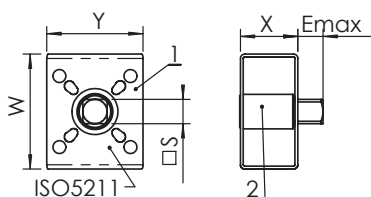
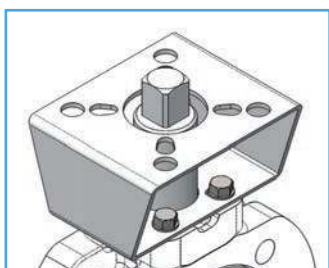
Cappuccio quadro per presa stradale / Square cap for water main system connection



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

KPRB2

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

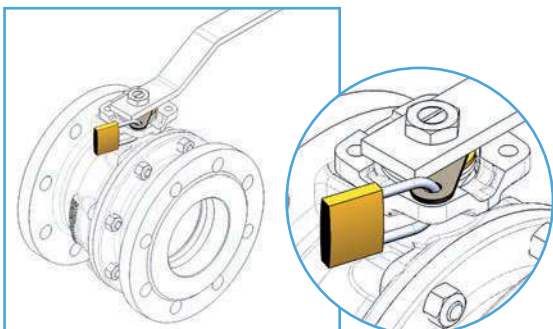


- 1) Flangia / Bracket
- 2) Giunto / Joint

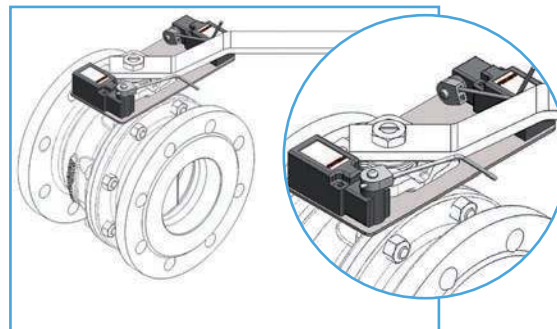
KISO.B1

Kit flangia ISO 5211 / Kit ISO 5211 flange

DN	15-20	25-32	40-50-65	80	100
ISO 5211'	F04-05-07	F04-05-07	F05-07	F10-12	F10-12
S x E	14 x 14	17 x 17	17 x 17	22 x 22	27 X 27
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
X	40	40	50	60	60
Y	70	70	70	120	120
W	80	80	100	120	120



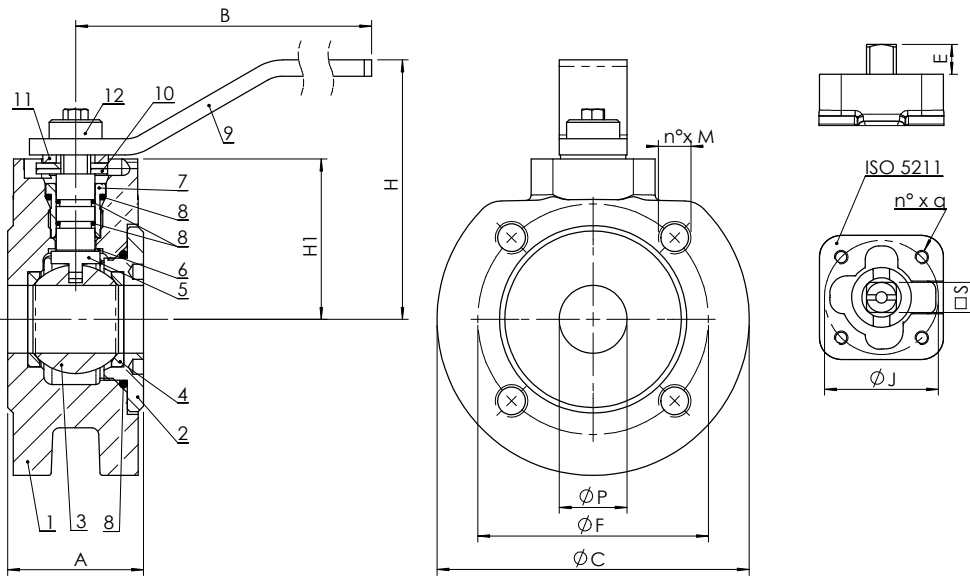
Kit leva di manovra lucchettabile (solo DN 40-100)
Kit lockable operation lever (only DN 40-100)



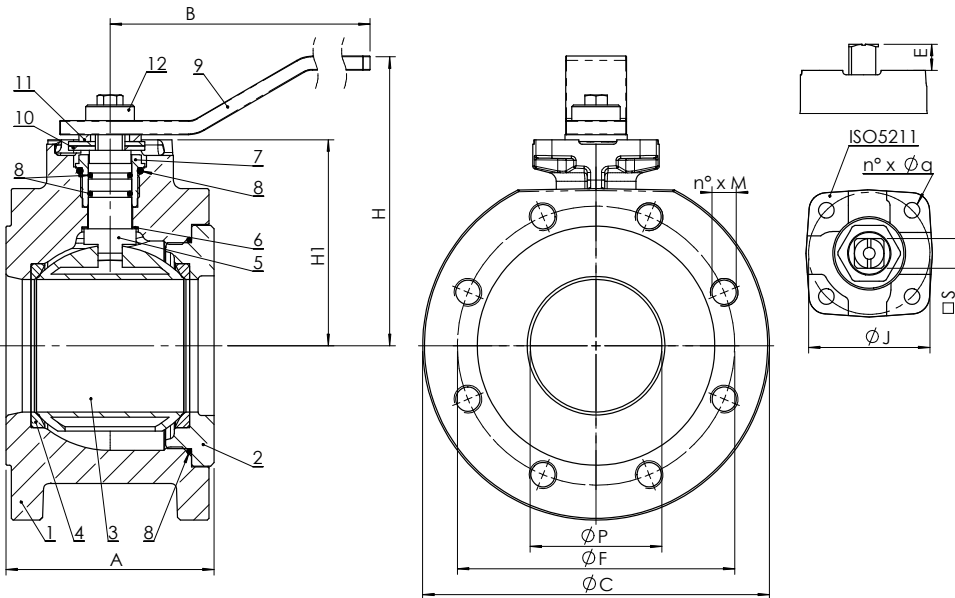
KFC

Kit interruttori di finecorsa per segnalazione Aperto/Chiuso (DN40-100)
Kit limit switches for ON/OFF position indicator (DN40-100)

B1 DN20 - 32



B1 DN40 - 100



Dimensioni (mm) / Dimensions (mm)

DN		20	25	32	40	50	65	80	100
P		20	25	32	40	50	63	76	95
A	non unificato - not standardized	40	50	55	65	80	100	120	130
H		83	96	101	125	133	142	166	181
H1		52	59	64	78,5	87	95	118	132,5
B		160	170	170	230	230	230	280	360
C		105	115	140	150	165	185	200	220
n° x M		4x M12	4x M12	4x M16	4x M16	4x M16	4x M16	8x M16	8x M16
F		75	85	100	110	125	145	160	180
ISO 5211		F03	F04	F04	F05	F05	F05	F07	F07
J		36	42	42	50	50	50	70	70
n° x q		4x M5	4x M5	4x M5	4x7	4x7	4x7	4x9	4x9
E		9,5	11	11	13,5	13,5	13,5	15	15
S		9	11	11	14	14	14	17	17

Peso (kg) / Weight (kg)

B1.000	1,9	2,54	3,6	5,1	6,4	8,8	11,5	14,8
B1.010 - B1.011	1,9	2,54	3,6	5,4	7,1	10,5	12,7	18,5

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

DN	20	25	32	40	50	65	80	100
Nm	15	18	18	18	20	40	70	100

N.B. al fine di ottimizzare la scelta del servocomando si consiglia di moltiplicare il momento torcente per il coefficiente di sicurezza K=1,5
 N.B.: In order to choose the right actuator, we recommend multiplying the operating torque figure by a safety coefficient, K=1,5

Materiali / Materials

	Componente - Component	Materiale - Material	
1	Corpo - Body	Ghisa grigia - Cast iron EN GJL 250	
2	Flangia - Ring nut	Ghisa grigia - Cast iron EN GJL 250	
3	Sfera - Ball	Ottone CuZn40Pb2 Brass CuZn40Pb2 chrome plated	Acciaio inossidabile AISI 304 - Stainless steel AISI304
4	Sede sfera - Ball seat	PTFE + Carbone - Carbon + Reinforced PTFE	
5	Asta - Stem	Ottone CuZn40Pb2 Brass CuZn40Pb2	Acciaio inossidabile AISI 304 - Stainless steel AISI304
6	Anello antifrizione - Sliding washer	PTFE	
7	Ghiera - Ring	Ottone CuZn40Pb2 Brass CuZn40Pb2	Acciaio inossidabile AISI 304 - Stainless steel AISI304
8	O Ring - O-ring	NBR	FKM (Viton®)
9	Leva - Handle	Acciaio al carbonio, verniciato epossidico - Carbon steel epoxy coated	
10	Piastrina fermo - Stop plate	Acciaio al carbonio zincato - Carbon steel Galvanized	
11	Anello elastico - Spring washer	Acciaio al carbonio zincato - Carbon steel Galvanized	
12	Distanziale - Spacer	Ottone CuZn40Pb2 - Brass CuZn40Pb2	

Pressione massima / Maximum pressure

Tipo fluido * Fluids *	Montaggio Mounting	
	TRA FLANGE BETWEEN FLANGES	FINE LINEA END OF LINE
Gas pericolosi G1 Hazardous gases G1	NO	NO
Liquidi pericolosi L1 Hazardous liquids L1	16 bar	10 bar
Gas non pericolosi G2 Non hazardous gases G2	16 bar	10 bar
Liquidi non pericolosi G2 Non hazardous liquids G2	16 bar	10 bar
Acqua** Water**	16 bar	16 bar

* gas, liquidi pericolosi secondo 2014/68/EU e 1272/2008 (CLP)

** Per la raccolta, distribuzione e deflusso di acqua (PED 2014/68/EU 11.2b)

* hazardous gas, liquids acc. 2014/68/EU e 1272/2008 (CLP)

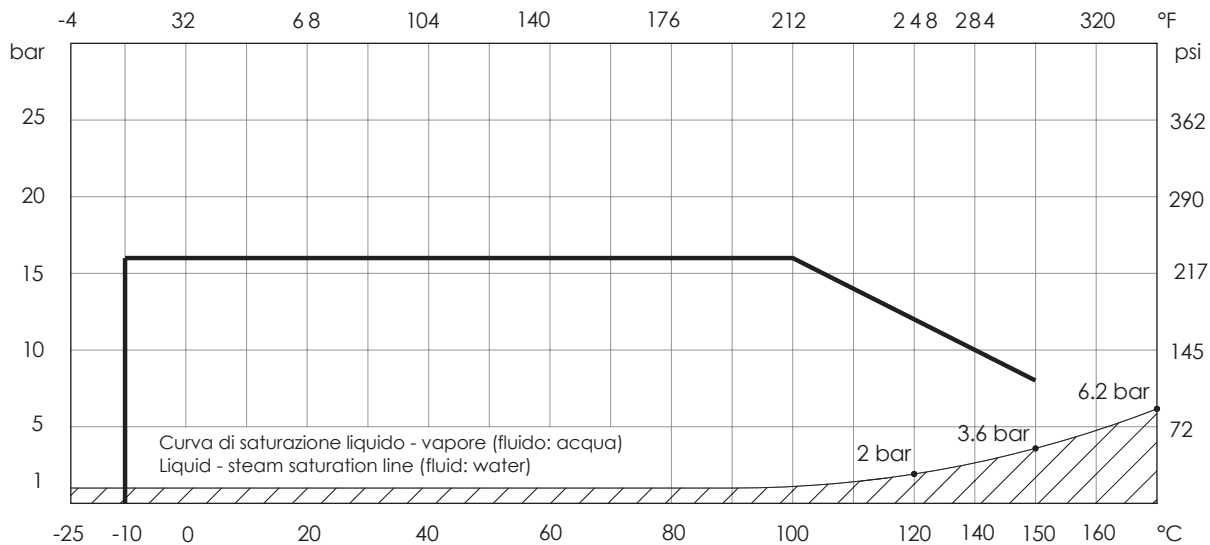
** For supply, distribution and discharge of water (PED 2014/68/EU 11.2b)

Temperatura / Temperature

Temperatura Temperature	min °C	max°C			
		continuo continuous		picco peak	
		L1	G2,L2	L1	G2,L2
NBR	-10	100	100	-	110
FKM (Viton®)	-10	100	150	-	170

Attenzione: la pressione massima di utilizzo diminuisce con la temperatura, vedi diagramma "Pressione/Temperatura" G1, L1, G2, L2: vedi tabella a lato
NB: the maximum working pressure decreases while the temperature increases; please refer to "pressure/temperature" chart G1, L1, G2, L2: see chart to side

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)

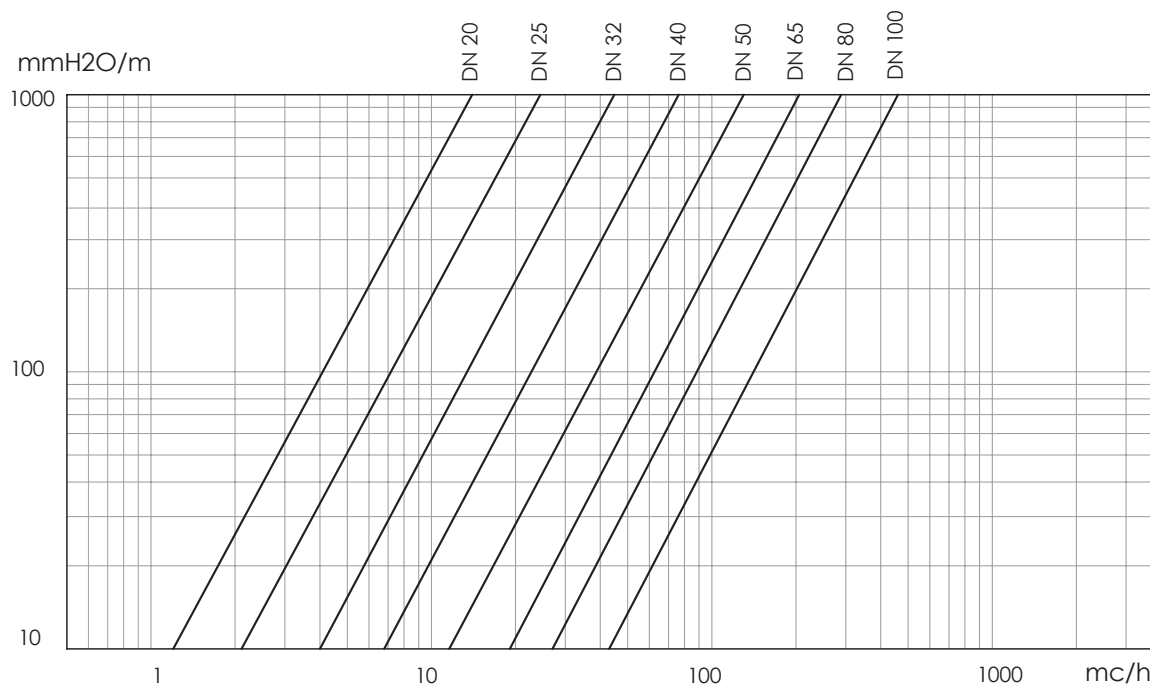


Tabella Kv - DN / Kv - DN chart

DN	20	25	32	40	50	65	80	100
Kv	47.7	83.5	150.4	255	435	672	947	1'508

I dati e le caratteristiche di questo catalogo sono forniti a titolo indicativo. La Brandoni S.p.A. si riserva di modificare una o più caratteristiche delle valvole senza preavviso. Per maggiori informazioni www.brandonivalves.com.

Brandoni SpA reserves the right to make changes in design and/or construction of the products at any time without prior notice. For further information, please refer to www.brandonivalves.com