

GAS BALL VALVES - GAS METER VALVES

BALL VALVES GAS METER BRACKETS

FUNCTION AND USAGE

Designed to be used on medium and low pressure distribution systems, tested for a usage at up to 16 bars, GNALI BOCIA ball valves are suitable for all types of gas: methane and liquid gases in low and medium pressure gas plants. The valves can be installed in any position as long as they are easily accessible and the operating lever is free and can be operated easily.

GNALI BOCIA ball valves are also suitable to be used with hot and cold water, compressed air, oil and hydrocarbons in general. They are guaranteed to last for a long time and require no maintenance.

They are constructed in compliance with UNI-CIG 7129-92 and EN 331 standards. In the bracket version for meters they are supplied with a clamp complete with dowels. The valves are designed with an anti-explosion rod with double seal as prescribed by the most stringent international provisions, a double seal with o-ring and are inspected individually according to applicable provisions and the standards required by the customer.

The ANTIFRAUD version is specifically designed to be used on gas distribution mains, in particular for use on meters mounted in batteries, in compliance with the requirement of standard UNI 9036, on the gas safety device. It can also be used on distribution systems and storage cisterns for water, or various liquids or plants that are not accessible to the public. Manufactured with a safe closing system built into the body of the valve, the ANTIFRAUD valve is practical and easy to use, avoiding the antiquated sealing method using string and lead.

The lock has two types of keys. A "universal" key that operates all the combinations installed on the utilities, while each lock has a dedicated key. When the plant controller needs to seal the flow on the "Closed" position, by using the "universal" key he can close the valve using one single key simultaneously on all utilities.

In order to guarantee sufficient diversity in the user keys, the valves with the ANTIFRAUD device are sold in multiples of 25.

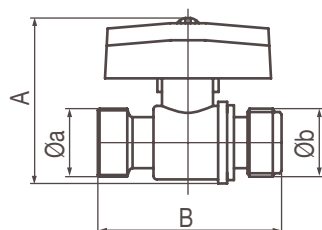




CONSTRUCTIONAL FEATURES

- **Body:** CW617N pressed **Brass**
- **Sleeve:** CW617N pressed **Brass**
- **Small ring nut:** CW617N pressed **Brass**
- **Ball:** CW617N pressed, chrome-plated **Brass**
- **Rod:** CW614N extruded/drawn **Brass**
- **Ball housings:** P.T.F.E.
- **O-ring:** NBR
- **Control:** butterfly UNI 5076 painted aluminium
- **Support and sleeve:** galvanised steel
- **Operation:** by turning the operating device 90°
- **Seal:** hole on butterfly and body / Lock and key
- **Threading:** UNI ISO 7/ 1, UNI ISO 228
- **Passage:** according to UNI-CIG 71 29-92
- **Utilisation pressure:** PN 16 bars
- **Operating temperatures:** from -20 to +90 °C

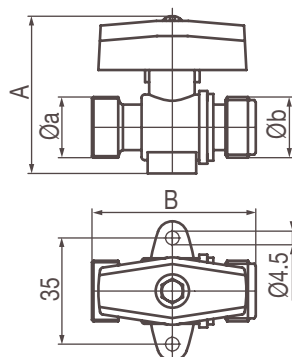
ON-OFF GAS VALVES WITH PUSH TO TURN LEVER



On-Off GAS valve WITH FASTENING BRACKET and "PUSH TO TURN" safety lever to prevent accidental openings. Body, sleeve and ball in CW617N pressed brass, available for GPL or METHANE (CNG)

Code	Øa	Øb	A	B		
N1900	M 1/2"	M 1/2"	49	56		
N1920	M 20x1,5	M 20x1,5	49	56		

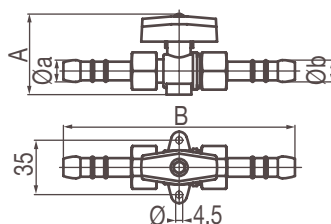
ON-OFF GAS VALVES WITH PUSH TO TURN LEVER



On-Off GAS valve WITH FASTENING BRACKET and "PUSH TO TURN" safety lever to prevent accidental openings. Body, sleeve and ball in CW617N pressed brass, available for GPL or METHANE (CNGO)

Code	Øa	Øb	A	B		
N1910	M20x1,5	M20x1,5	54	56		
N1915	M 1/2"	M 1/2"	54	56		

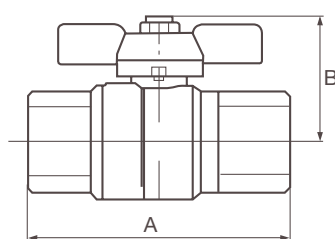
ON-OFF GAS VALVES WITH PUSH TO TURN LEVER



Total passage FF ISO 7/1 ball valve, suitable for every type of hydraulic, water, combustible oil and gas systems. Operating temperatures from -20° to +140°, for gas usages. Max. temp. 60°. Explosion-proof stem, double seal with o-ring. Body sleeve and ball in CW617N brass. Stem: pressed OT 58 UNI 5705/65. Ball housings: P.T.F.E. O-ring: NBR. Butterfly Al UNI 5076 painted.

Code	Øa	Øb	A	B		
N1905	Pg Ø 10	Pg Ø 10	54	118		
N1906	M 1/2"	Pg Ø 10	54	87		
N1907	Pg Ø 14	Pg Ø 14	54	150		
N1908	M 1/2"	Pg Ø 14	54	103		
N1930	RTR Ø 10	RTR Ø 10	54	96		
N1931	RTR Ø 10	Pg Ø 10	54	107		
N1932	RTR Ø 10	Pg Ø 14	54	123		
N1933	RTR Ø 10	M 1/2"	54	76		

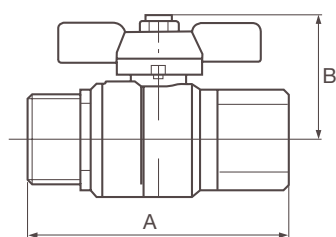
HOMOLOGATED BALL VALVES FOR GAS



Total passage FF ISO 7/1 ball valve, suitable for every type of hydraulic, water, combustible oil and gas systems. Operating temperatures from -20° to +140°, for gas usages. Max. temp. 60°. Explosion-proof stem, double seal with o-ring. Body sleeve and ball in CW617N brass. Stem: pressed OT 58 UNI 5705/65. Ball housings: P.T.F.E. O-ring: NBR. Butterfly Al UNI 5076 painted.

Code	DN	A	B		
V6-041	1/2"	65	42		
V6-042	3/4"	74	50		
V6-043	1"	87	54		
V6-044	1"1/4	102	64		
V6-045	1"1/2	116	72		
V6-046	2"	133	84		

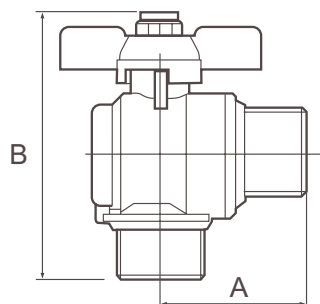
HOMOLOGATED BALL VALVES FOR GAS



Total passage FF ISO 7/1 ball valve, suitable for every type of hydraulic, water, combustible oil and gas systems. Operating temperatures from -20° to +140°, for gas usages. Max. temp. 60°. Explosion-proof stem, double seal with o-ring. Body, sleeve and ball in CW617N brass. Stem: pressed OT 58 UNI 5705/65. Ball housings: P.T.F.E. O-ring: NBR. Butterfly AI UNI 5076 painted.

Code	DN	A	B		
V6-061	1/2"	71	42		
V6-062	3/4"	79	50		
V6-063	1"	91	54		
V6-064	1"1/4	105	64		
V6-065	1"1/2	116	72		
V6-066	2"	139	84		

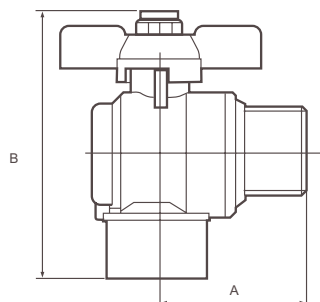
HOMOLOGATED GAS 90° ELBOW BALL VALVES



90° elbow MF male ISO 7/1, ISO 228 ball valve, suitable for every type of hydraulic, water, combustible oil and gas systems. Operating temperatures from -20° to +140°, for gas usages. Max. temp. 60°. Explosion-proof stem, double seal with o-ring. Body sleeve and ball in CW617N brass. Stem: pressed OT 58 UNI 5705/65. Ball housings: P.T.F.E. O-ring: NBR. Butterfly AI UNI 5076 painted.

Code	DN	A	B		
V5-071	1/2"	39	73		
V5-072	3/4"	45	88		
V5-073	1"	52	100		

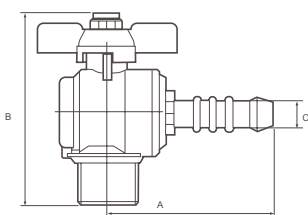
HOMOLOGATED GAS 90° ELBOW BALL VALVES



90° elbow MF male ISO 7/1, ISO 228 ball valve, suitable for every type of hydraulic, water, combustible oil and gas systems. Operating temperatures from -20° to +140°, for gas usages. Max. temp. 60°. Explosion-proof stem, double seal with o-ring. Body sleeve and ball in CW617N brass. Stem: pressed OT 58 UNI 5705/65. Ball housings: P.T.F.E. O-ring: NBR. Butterfly AI UNI 5076 painted.

Code	DN	A	B		
V5-081	1/2"	39	73		
V5-082	3/4"	45	88		
V5-083	1"	52	100		

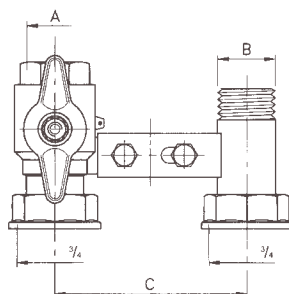
HOMOLOGATED GAS 90° ELBOW BALL VALVES



90° elbow MF male ISO 7/1, ISO 228 ball valve, suitable for every type of hydraulic, water, combustible oil and gas systems. Operating temperatures from -20° to +140°, for gas usages. Max. temp. 60°. Explosion-proof stem, double seal with o-ring. Body sleeve and ball in CW617N brass. Stem: pressed OT 58 UNI 5705/65. Ball housings: P.T.F.E. O-ring: NBR. Butterfly AI UNI 5076 painted.

Code	DN	A	B	C	
V5-091	3/4"	65	66	12	
V5-092	3/4"	49	66	9	

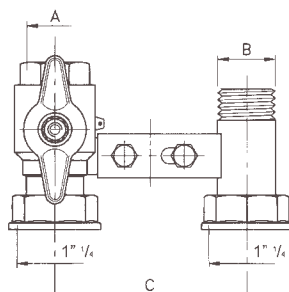
BRACKETS AND BALL VALVES FOR GAS METERS



A bracket complete with ball valve for gas meters, in compliance with standard UNI-CIG 71 29-92 is supplied with clamp and masonry dowels. Explosion-proof stem, double seal with o-ring. Body sleeve and ball in CW617N brass. Stem: pressed OT 58 UNI 5705/65. Ball housings: P.T.F.E. O-ring: NBR. Butterfly Al UNI 5076 painted. Support and sleeve: galvanised steel ISO 7/ 1, ISO 228 connections. Passage: according to UNI-CIG 71 29-92. PN 16 bar. Operating temperatures: from -20 to +90 °C

Code	A	B	C		
M3-04 1	1/2"	1/2"	110		
M3-04 2	1/2"	1/2"	250		

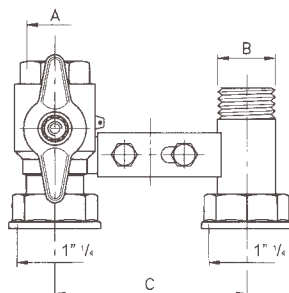
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Code	A	B	C		
M3-00 1	1/2"	1/2"	110		
M3-00 2	1/2"	1/2"	250		
M3-00 3	1/2"	3/4"	110		
M3-00 4	1/2"	3/4"	250		
M3-00 5	1/2"	1"	110		
M3-00 6	1/2"	1"	250		

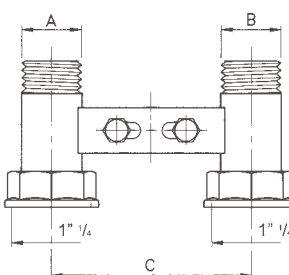
BRACKETS AND BALL VALVES FOR GAS METERS



A bracket complete with ball valve for gas meters, in compliance with standard UNI-CIG 71 29-92 is supplied with clamp and masonry dowels. Explosion-proof stem, double seal with o-ring. Body sleeve and ball in CW617N brass. Stem: pressed OT 58 UNI 5705/65. Ball housings: P.T.F.E. O-ring: NBR. Butterfly Al UNI 5076 painted. Support and sleeve: galvanised steel ISO 7/ 1, ISO 228 connections. Passage: according to UNI-CIG 71 29-92. PN 16 bar. Operating temperatures: from -20 to +90 °C

Code	A	B	C		
M3-00 7	3/4"	3/4"	110		
M3-00 8	3/4"	3/4"	250		
M3-00 9	3/4"	1"	110		
M3-00 10	3/4"	1"	250		
M3-00 11	1"	1"	110		
M3-00 12	1"	1"	250		

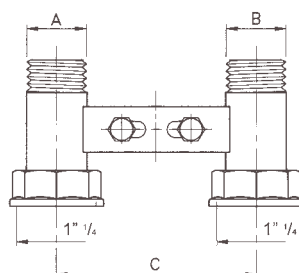
STEEL BRACKET FOT GAS METERS



Bracket for connection to gas meters without valve, stain tubes with galvanization protection treatment

Code	A	B	C		
M3-02 1	1/2"	1/2"	110		
M3-02 2	1/2"	1/2"	250		
M3-02 3	1/2"	3/4"	110		
M3-02 4	1/2"	3/4"	250		
M3-02 5	1/2"	1"	110		
M3-02 6	1/2"	1"	250		

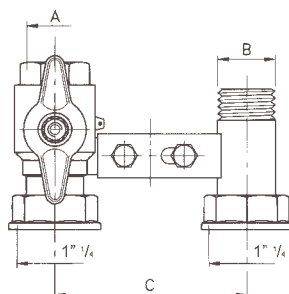
STEEL BRACKET FOR GAS METERS



Bracket for connection to gas meters without valve, stain tubes with galvanization protection treatment

Code	A	B	C		
M3-02 7	3/4"	3/4"	110		
M3-02 8	3/4"	3/4"	250		
M3-02 9	3/4"	1"	110		
M3-02 10	3/4"	1"	250		
M3-02 11	1"	1"	110		
M3-02 12	1"	1"	250		

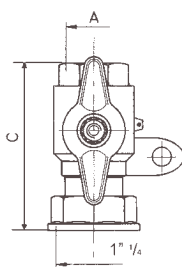
BRACKETS AND ANTIFRAUD BALL VALVES FOR GAS METERS



ANTI-FRAUD bracket complete with ball valve for gas meters, in compliance with standard UNI-CIG 7129-92 is supplied with clamp and masonry dowels. Explosion-proof stem, double seal with o-ring. Body sleeve and ball in CW617N brass. Stem: pressed OT 58 UNI 5705/65. Ball housings: P.T.F.E. O-ring: NBR. Butterfly Al UNI 5076 painted. Support and sleeve: galvanised steel. ISO 7/ 1, ISO 228 connections. Passage: according to UNI-CIG 7129-92. PN 16 bar. Operating temperatures: from -20 to +90 °C. With "MASTER" key for distributor and "SLAVE" key for user.

Code	A	B	C		
M4-00 7	3/4"	3/4"	110		
M4-00 8	3/4"	3/4"	250		
M4-00 9	3/4"	1"	110		
M4-00 10	3/4"	1"	250		
M4-00 11	1"	1"	110		
M4-00 12	1"	1"	250		

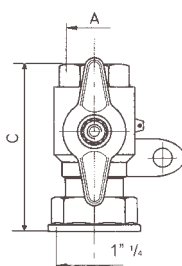
BALL VALVES FOR GAS METERS



Bracket complete with ball valve for gas meters, in compliance with standard UNI-CIG 7129-92. Explosion-proof stem, double seal with o-ring. Body sleeve and ball in CW617N brass. Stem: pressed OT 58 UNI 5705/65. Ball housings: P.T.F.E. O-ring: NBR. Butterfly Al UNI 5076 painted. Support and sleeve: galvanised steel. ISO 7/ 1, ISO 228 connections. Passage: according to UNI-CIG 7129-92. PN 16 bar. Operating temperatures: from -20 to +90 °C.

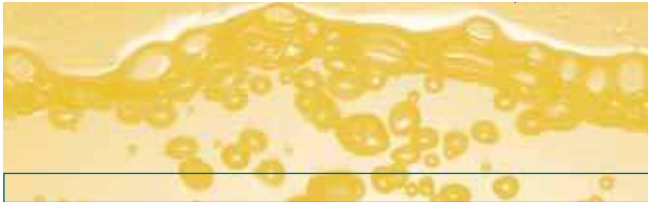
Code	A	B	C		
V3-04 1	1/2"	1"1/4	64		
V3-04 2	3/4"	1"1/4	84		
V3-04 3	1"	1"1/4	85		

ANTIFRAUD BALL VALVES FOR GAS METERS

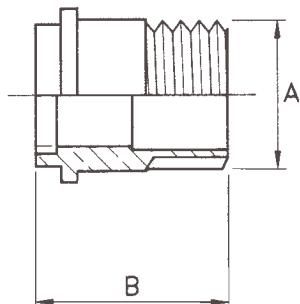


ANTI-FRAUD ball valve for gas meters, in compliance with standard UNI-CIG 7129-92. Explosion-proof stem, double seal with o-ring. Body sleeve and ball in CW617N brass. Stem: pressed OT 58 UNI 5705/65. Ball housings: P.T.F.E. O-ring: NBR. Butterfly Al UNI 5076 painted, ISO 7/ 1, ISO 228 connections. Passage: according to UNI-CIG 7129-92. PN 16 bar. Operating temperatures: from -20 to +90 °C. With "MASTER" key for distributor and "SLAVE" key for user.

Code	A	B	C		
V4-04 2	3/4"	1"1/4	84		
V4-04 3	1"	1"1/4	85		



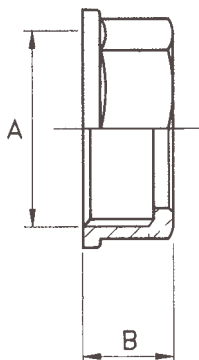
SLEEVE SMALL RING FOR GAS METERS



Sleeve for tang and small ring for gas meters, CW617N pressed brass, F ISO 228 connection

Code	A	B				
C3-06 1	1/2"	30				
C3-06 2	3/4"	33				
C3-06 3	1"	33				

SMALL RING FOR GAS METERS



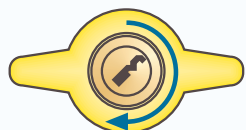
Nut for tang and small ring for gas meters, CW617N pressed brass, M ISO 228 connection

Code	A	B				
G3-08 1	3/4"	13				
G3-08 2	1"	16				
G3-08 3	1"1/4	18				



1 DELIVERY POSITION

The valve is delivered with key in the CLOSED position.



2 NORMAL POSITION

Starting from position 1, rotate 135° clockwise the key, you will be in this position.
The valve work normally OPEN/ CLOSE
The key cannot be extracted.



3 USER OPENING POSITION

Starting from position 2, rotate 90° counter-clockwise the handle, you will be in this position.
The valve is OPEN.
The key cannot be extracted.



4 USER BLOCKING POSITION

Starting from position 3, rotate 135° counter-clockwise the key, you will be in this position
The key can be extracted.
The valve is OPEN, can be blocked on CLOSED position by rotating 90° clockwise the handle.



5 DEFAULT POSITION'

POSITION ACHIEVEBLE ONLY BY THE MASTER KEY- (owned by the gas company).
Starting from position 1 insert the master key, rotate 180° clockwise the key you will be in this position. The master key can be extracted. The valve with the key in this position is BLOCKED on CLOSED position and CANNOT be open by the user.



6 BACK TO NORMAL POSITION- AFTER DEFOULT

POSITION ACHIEVEBLE ONLY BY THE MASTE KEY (owned by the gas company)
Starting from position 5 insert the master key, rotate 180° counter-clockwise the key, you will be in this position. The mster key can be extracted. By positioning the valve in this position by the Gas company, the valve can work normally with user key. From position 1.

FLEXIBLE STAINLESS STEEL HOSES GNALIFLEX

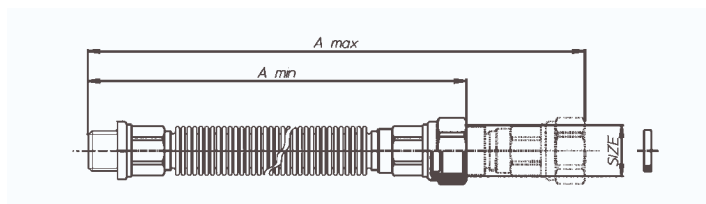
FUNCTION AND USAGE

Flexible and extendible pipe in AISI 316 stainless steel, for domestic gas cookers, in compliance with standard UNI-CIG 9891. Insulating cladding with anti-corrosion, self-extinguishing, non-toxic, yellow sheath. Can be extended to twice its original length.

Available with combined MF conical gas and ISO228 sockets for connection to domestic appliances. On request combined or special connections are available. Available in WATER version for use with boilers, radiators or hydraulic systems, with ISO 228 connections, without cladding or with white cladding. PN 16 Maximum temperature 120°. Other colours on request.

GAS HOSES TEST

- **Test:** 6 bar pressure, water submerged, with helium spectrometer and by computerized static pressure sealing test.
- **Destructive test:** Static, according compulsory international norms



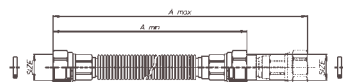
GAS HOSES CONSTRUCTIONAL FEATURES

- Flexible and extensible hose with external protection sleeve
- Max working pressure 6 bar
- Temperature range: -20° / +120°
- Minimum bending angle: 1.5 times the external diameter
- Material in contact with gas: Stainless steel

CONSTRUCTIONAL FEATURES

- **Pipe:** AISI 316-L stainless steel, parallel wrinkle Thickness: > 0.21mm
- **Male connections:** AISI 303 Hi speed stainless steel. Threads: UNI-ISO 7/ 1
- **Swivel connections:** AISI 303 Hi speed stainless steel
- **Nut:** AISI 303 Hi speed stainless steel. Threads: UNI-ISO 228/ 1
- **Protective sleeve:** Inflammable polyolefin, yellow, a toxic
- **Gaskets:** Aluminium
- **Internal diameter:** (Flow) 12mm
- **Hardening:** by thermal treatment
- **Soldering:** TIG without metals addition in controlled atmosphere

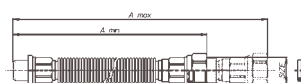
FLEXIBLE STEEL GAS HOSE F/F



Stainless steel flexible pipe that can be extended up to twice its minimum length, for domestic gas cookers, in compliance with UNI-CIG 9891. Insulating cladding in anti-corrosive, self-extinguishing, non-toxic sheath. FF ISO 7 Gas connections

Code	øa	A Min	A Max	øb		
284/5G FF	1/2"	500	1000	1/2"		
284/7G FF	1/2"	750	1500	1/2"		
284/10G FF	1/2"	1000	2000	1/2"		

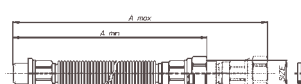
FLEXIBLE STEEL GAS HOSE F/M



Stainless steel flexible pipe that can be extended up to twice its minimum length, for domestic gas cookers, in compliance with UNI-CIG 9891. Insulating cladding in anti-corrosive, self-extinguishing, non-toxic sheath. FM ISO 7 Gas connections

Code	øa	A Min	A Max	øb		
284/5G MF	1/2"	500	1000	1/2"		
284/7G MF	1/2"	750	1500	1/2"		
284/10G MF	1/2"	1000	2000	1/2"		

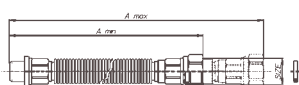
FLEXIBLE STEEL GAS HOSE F/M



Stainless steel flexible pipe that can be extended up to twice its minimum length, for domestic gas cookers, in compliance with UNI-CIG 9891. Insulating cladding in anti-corrosive, self-extinguishing, non-toxic sheath. FM ISO 7 Gas connections

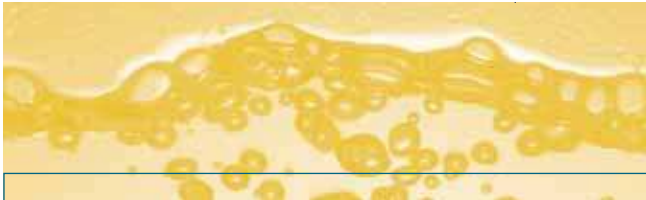
Code	øa	A Min	A Max	øb		
288/20MF	1/2"	100	200	3/4"		
288/20MF1	1"	100	200	1"		
288/20MF12	1/2"	100	200	1/2"		
288/20MF34	3/4"	100	200	3/4"		
288/40MF	1/2"	200	400	3/4"		
288/40MF1	1"	200	400	1"		
288/40MF12	1/2"	200	400	1/2"		
288/40MF34	3/4"	200	400	3/4"		

FLEXIBLE STEEL HOSE F/M

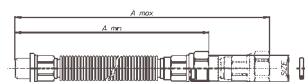


Stainless steel hose extensible. Suitable for stoves, cookers, boilers. Flexible: FM-FF connection with 2 seals. Packed in plastic bag

Code	øa	A Min	A Max	øb		
289/40MF	1/2"	200	400	3/4"		
289/40MF1	1"	200	400	1"		
289/40MF12	1/2"	200	400	1/2"		
289/40MF34	3/4"	200	400	3/4"		



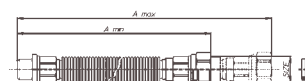
FLEXIBLE STEEL HOSE F/M



Stainless steel hose extensible. Suitable for stoves, cookers, boilers.
Flexible: FMFF connection with 2 seals. Packed in plastic bag

Code	øa	A Min	A Max	øb		
289/20MF	1/2"	100	200	3/4"		
289/20MF1	1"	100	200	1"		
289/20MF12	1/2"	100	200	1/2"		
289/20MF34	3/4"	100	200	3/4"		
289/35FF12	1/2"	175	350	1/2"		
289/35FF34	3/4"	175	350	3/4"		

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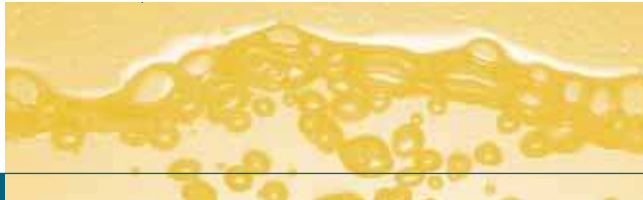
Code	øa	A Min	A Max	øb		
289/35MF12	1/2"	175	350	1/2"		
289/35MF34	3/4"	175	350	3/4"		

STAINLESS STEEL CLAD PIPE FOR GAS

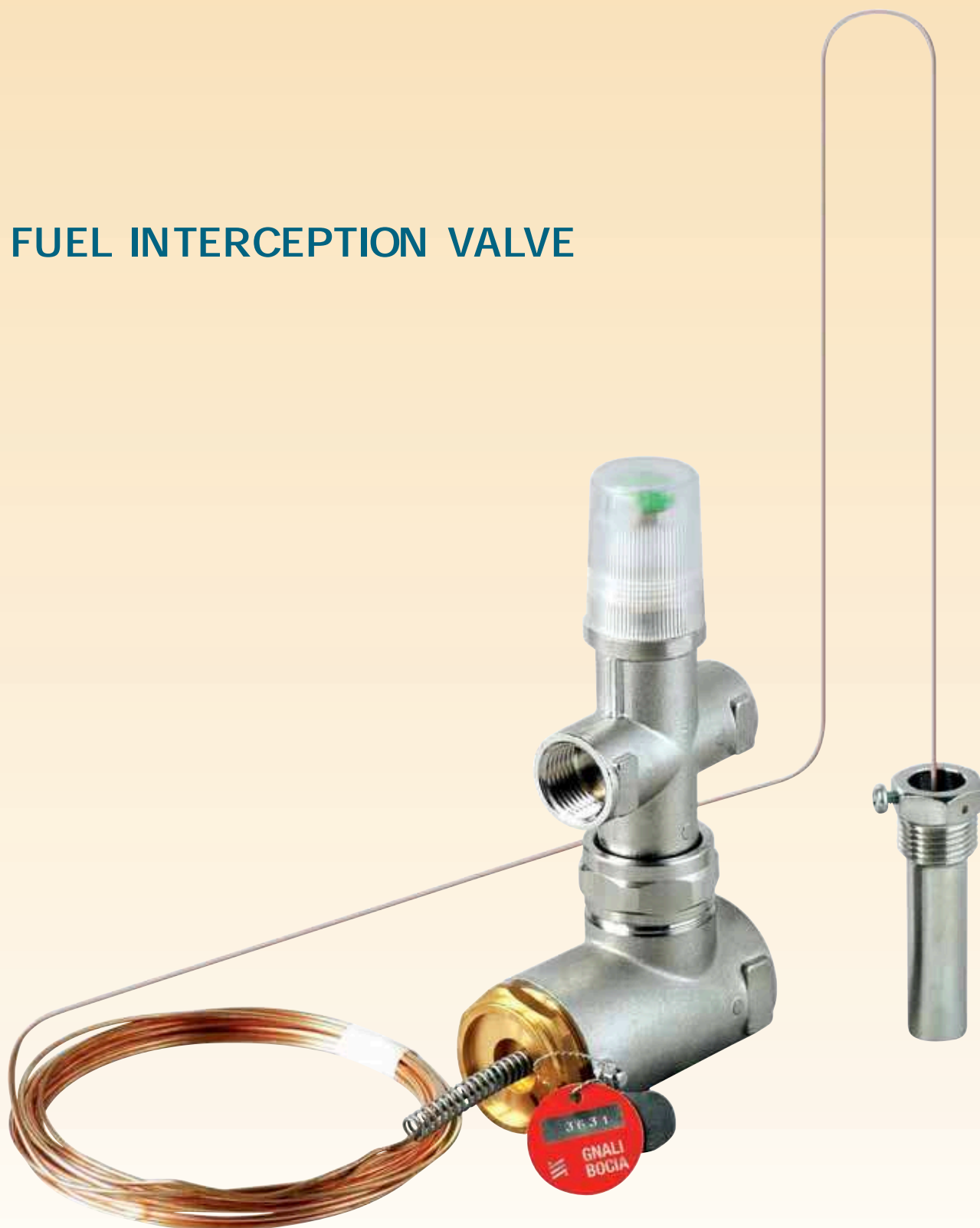


Accessory kit for extension and adjustment of stainless steel flexible pipe

Code	øa	A				
N2599						



FUEL INTERCEPTION VALVE



The advantages offered by using fuel interception valves are considerably greater than those for thermal discharge valves, as defined in the Standard Index denominated " R " which, when the request for fuel interception valve is indicated, confirms the alternative possibility to use the thermal discharge valve *(self-activating valve, with positive safety, where the shutter opens due to the excessive high temperature and closes again when it decreases. This means that an amount of the produced heat is transferred to the outside, by the discharge of water, in order to reach the preset temperature limit of the same water)*

The most significant advantages are outlined as follows:

- Installation is far easier (the thermal discharge valve is in fact also connected to a solenoid fuel valve and / or a valve that allows the reinstatement of the discharged fluid).
- When a thermal discharge valve is foreseen "with reinstatement" when operating the introduction of cold water causes drawbacks to the generator (thermal shock).
- When the thermal discharge valve is foreseen "without-reinstatement" when operating the amount of discharged fluid can, in most cases, flood the boiler room.
- The interception valve makes it easier for the plant designer to choose, as the sizing is performed entirely according to the sizes of the fuel adduction pipes.
- The fuel interception valve is also a much cheaper solution.

FUNCTIONING

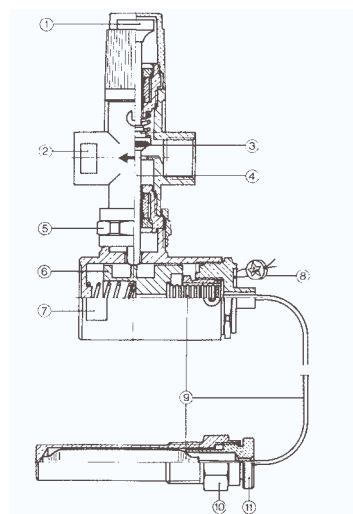
The valve consists in two parts:

- The body of the valve through which the liquid or gas fuel flows.
- The control device fitted with a sensitive (diathermic fluid) element.
- The valve shutter rod is connected to the control device so the valve can be closed (blocked) when:
 - a) the temperature of the generator exceeds the set value;
 - b) there is a leak of diathermic liquid (positive action).

In the case of a block, the valve closes and can only be operated by manual intervention. This operation can occur when the temperature of the heat generator decreases below 87°C. The positive action occurs whatever the temperature of the sensitive element. Under normal conditions (temperature less than 97°C) the rod (4) rests on the control piston (6) and the valve remains open. If the piston moves to the left due to the expansion of the fluid content in the sensitive element (9) it will cause the valve to close instantly. If the piston moves to the right due to a leak of fluid from the capillary (breakage) it will cause the valve to close instantly. To perform manual resetting (when the temperature decreases below 87°C) use the reset latch (1).

PARTS OF THE VALVE

- 1 Reset latch
- 2 Valve body
- 3 Shutter seal
- 4 Control rod
- 5 Connection ring nut
- 6 Control piston
- 7 Control device body
- 8 I.S.P.E.S.L. seal
- 9 Sensitive Element
- 10 Sheath
- 11 Threaded cap

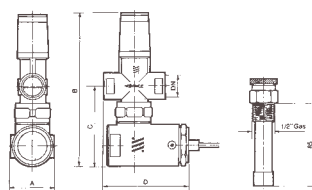


CONSTRUCTIONAL FEATURES

The valve is patented and totally conforms to all I.S.P.E.S.L. Standards and Specifications, (ISPESL- National Institute for prevention and safety)

- Valve body and the control device in forged and chromed brass CW617N
- Bellow in phosphorous bronze
- Copper capillary and probe (length 5m)
- Stainless steel control rod
- O-ring seal ring in nitrilic rubber
- Steel springs
- Other details in brass CW617N

FUEL INTERCEPTION VALVE



Active safety valve, body and parts: brass CW 617N.

The valve cut off the flow of combustible fluid when:

- A) the heated fluid in contact with thermo sensor overpass the fixed limit.
B) when or if the capillary probe liquid spill out or broke. (active safety)

Code	DN	A	B	C	D
8030	1/ 2"	65	165	105	90
8031	3/ 4"	65	180	110	105
8032	1"	65	180	110	105
8033	1"1/ 4	65	180	110	105
8035	2"	65	205	12	122

CONSTRUCTIONAL FEATURES

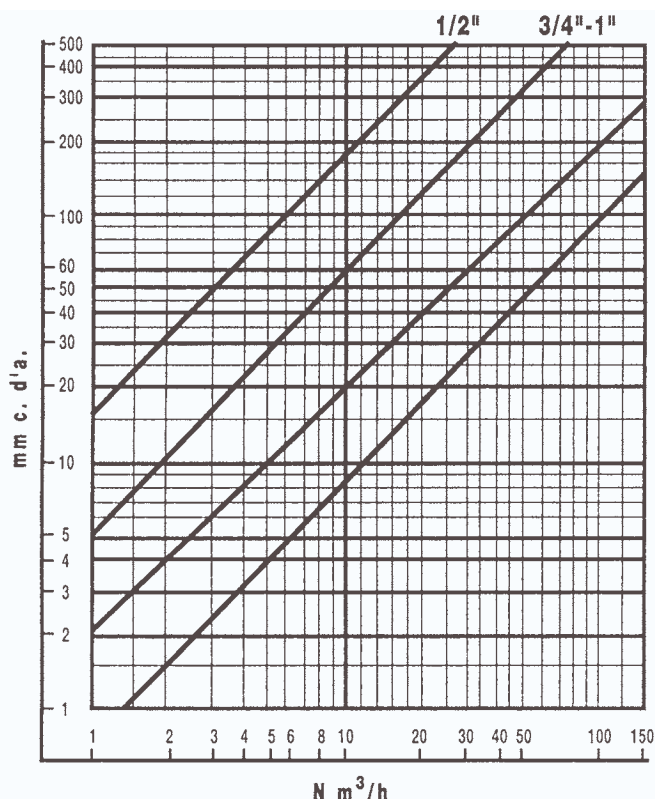


Diagram 1

Loss of valve load with gas-methane.

The diagram has been experimentally drawn, using methane gas, with a pressure upstream of the valve of 390 mm³ of air

Set temperature (conforming to request) 97°C ± 3°C

Temperature for manual resetting 87°C

Maximum environmental temperature 50°C

Maximum working pressure 6 bar (Kg/cm²)

Capillary length 5 m

GM Probe Connection fitting

GFF Valve body fitting

THE CHOICE

The valve is produced in five different versions:

Art. 8030 DN 1/2"	Kv = 1,8
Art. 8031 DN 3/4"	Kv = 5,0
Art. 8032 DN 1"	Kv = 5,3
Art. 8033 DN 1" 1/4	Kv = 16
Art. 8035 DN 2"	Kv = 31

It is renowned that, unlike the thermal discharge valves, it is not necessary to refer to the potential of the generator, to the static pressure, etc when choosing the valve; simply choose the article with a diameter suitable for the size of the fuel adduction pipe. The DN 1/2" version is particularly suitable for gas-oil fuel; the loss of capacity provided by the valve during the flow gas-oil with

100 Kg/h : 4 mm c.d'a.

150 Kg/h : 8 mm c.d'a.

200 Kg/h : 14 mm c.d'a.

Negligible losses in capacity, for the normal pipe lengths and burner suction pressures. The valve to be used when the fuel is thick oil is generally the DN 3/4" or DN 1" version. The DN 1" version can be used with maximum capacities of 200 Kg/h of naphtha (density 100 cSt). The 1" 1/4 and 2" versions are normally used in gas systems. It is renowned that the most commonly used gaseous fuel is methane gas; this fuel is distributed at a relatively low pressure and therefore the interception valve has to provide a limited loss of capacity. To assist in this choice, we have indicated the features of the valves in Diagram 1. The diagram has been prepared, under an experimentation form, using methane gas; the drop in pressure in the valve can reach different values, according to the available pressure. Generally methane is available at a pressure which varies from 6/700 and 150 mm of air. from area to area and, very often, the pressure tends to decrease in the winter period when the request for fuel is at its highest. To avoid that the drop in pressure in the valve prevents the correct functioning of the burner, it is recommended to limit the loss of capacity in the valve. We consider that, in most cases, is not possible to foresee a drop in pressure over 40 mm of air for a valve; with this loss in capacity the level in N m³/h will be:

DN 2" = 41 m³/h ≈ 350.000 Kcal/h.

DN 1" 1/4 = 20 m³/h ≈ 170.000 Kcal/h.

DN 1" = 7,5 m³/h ≈ 65.000 Kcal/h.

Evidently the verification of the pressure available upstream of the valve and the minimum level required by the burner will allow you, with the help of diagram 1, to make a precise choice of the loss of capacity of the valve.

NOTES ON INSTALLATION

The copper sheath that receives the probe has to be completely submerged into the fluid (fig.1 / 2).

Avoid excessively small curve radiuses ($R_{\min} = 70 \text{ MM}$) (FIG.3).

A green colour seen through the transparent cap means the valve is in the open position (fig 4); in the case it is activated (block) the green latch will descend and will no longer be visible through the transparent part of the hood. To perform manual resetting, proceed by unscrewing the cap to raise the rod using the reset latch (fig. 5/ 6).

