



**TECHNICAL CHARACTERISTICS**  
**INSTRUCTIONS FOR USE, ASSEMBLY INSTRUCTIONS,**  
**MAINTENANCE INSTRUCTIONS**



**MODEL 3 – 3X**

**MANUALLY-OPERATED GAS VALVE**

 Gas Safety Certified	
<b>AS 4617 - 2018</b>	<b>EN 1106:2010</b> <b>EN 13611:2019</b>

## GENERAL INSTRUCTIONS

Feature	Description
Type	2 - conical plug valve
applications	hot plates, ovens, grills etc
types of gas used	1 <sup>st</sup> – 2 <sup>nd</sup> – 3 <sup>rd</sup> family
group	1
number of outlets	1
nominal diameter	8
maximum working pressure	6.5 kPa
minimum working temperature (body)	0°C
maximum working temperature (body)	80/130°C
nominal flow rate	0.430 m <sup>3</sup> /h (test gas: air - pressure drop 100 Pa)
Reduced flow rate	0.06 m <sup>3</sup> /h (test gas: air – pressure drop 100 Pa)
opening angle of max. flow rate	90°
opening angle of min. flow rate	160°
external leak tightness	leakage ≤ 60 cc/h (1 ml/min) (air - pressure 15 kPa)
internal leak tightness	leakage ≤ 20 cc/h (0.3 ml/min) (air - pressure 15 kPa)
gas valve continued operation	40,000 cycles (EN 1106:2010 - EN 13611:2019) 10,000 cycles (AS 4617-2018)
inlet gas connection	bracket, flange (see attached sheets)
outlet gas connection	see attached sheets
storage temperature range	-15°C to +50°C

These valves can be used with pipes of various diameters and flat manifolds.

To ensure a perfect seal, place an elastomer gasket between the manifold and the valve.

Gaskets of different materials can be used for the manifold depending on the temperature reached: silicon elastomer gaskets are resistant up to 130°C while nitrile elastomer gaskets are resistant up to 80°C.

(See the table of manifold connection diagrams)

## ISTRUCTIONS FOR USE

To turn the valve on, simultaneously press and turn the control shaft.

Holding down the control shaft and turning it anti-clockwise allows the gas to pass to the burner

Maximum flow-rate is reached after turning the control shaft through 90°; reduced flow-rate is reached by continuing the rotation up to 160°.

The valve has an adjustable perforated metering screw (by-pass) which fixes the reduced flow-rate at a preset value when fully tightened. If a different type of gas is used, the amount of reduced flow can be adjusted by turning the by-pass with a screwdriver.

The valves are designed to be used with manifolds of different diameters using flange or bracket fastenings.

To ensure a perfect seal, place an elastomer gasket between the ramp and the valve.

## ASSEMBLY INSTRUCTIONS

**The valves are designed to be used inside the cooking appliances, protected from any possible infiltrations of liquid or dirt and from the atmospheric agents. The non-observance of this prescription can compromise the correct working and the safety of the product.**

The valves are suitable for assembly onto manifolds of various diameters either by means of a nut and olive fixing system or by means of a direct screwing onto the tubing. When screwing the valve onto the manifold, tightness will be obtained by use of a proper sealant.

The outlet is designed for an injector or connection pipe to the burner.

To avoid damage that may compromise correct functioning of the valve, do not exceed the tightening torques listed in the attached tables.

**To avoid dirt or other material entering the equipment which may affect functioning of the valve, a suitable filter should be mounted on the manifold supply inlet.**

### MAINTENANCE INSTRUCTIONS

Maintenance of the taps is not foreseen, in case of failure or incorrect operation replace the tap with a new one (same model and same characteristics).

**NB.: Leak test should be performed using a suitable appliance. Leak test mustn't be done by means of a flame or immersion of the valve in water or other liquids. The non-observance of this prescription can compromise the correct working and the safety of the product.**

### SAFETY & ENVIRONMENT INSTRUCTIONS

Please note that none of our articles contain substances that may be released intentionally during normal or reasonably foreseeable use.

The normal or reasonably foreseeable use of our items does not involve particular precautions; only for disposal at the end of their life, it is recommended not to subject the articles to mechanical processing such as cutting or drilling, which could cause exposure to the substances contained in the articles or their dispersion into the environment.

**VARIANTS**
**INLET VARIANTS**

inlet	denomination		assembly	
1 – 1N	single bracket	1 screw	tube diameter 14 mm	(hole diameter 8,2 mm)
2 – 2N	single bracket	1 screw	tube diameter 16 mm	(hole diameter 8,2 mm)
3 – 3N	bracket	1 screw	tube diameter 16 mm	(hole diameter 8,2 mm)
4 – 4 N	bracket	1 screw	tube diameter 16 mm	(hole diameter 8,2 mm)
4a – 4aN	bracket	2 screws	tube diameter 16 mm	(hole diameter 8,2 mm)
5 – 5N	single bracket	1 screw	tube diameter 18 mm	(hole diameter 8,2 mm)
6 – 6N	bracket	1 screw	tube diameter 18 mm	(hole diameter 8,2 mm)
7 – 7N	bracket	1 screw	tube diameter 18 mm	(hole diameter 11,2 mm)
8 – 8N	bracket	1 screw	tube diameter 18 mm	(hole diameter 8,2 mm)
8a – 8aN	bracket	2 screws	tube diameter 18 mm	(hole diameter 8,2 mm)
9 – 9N	bracket	2 screws	tube diameter ½" gas	(hole diameter 8,2 mm)
10 – 10N	single bracket	1 screw	tube diameter ½" gas	(hole diameter 8,2 mm)
11 – 11N	single bracket	1 screw	tube diameter ½" gas	(hole diameter 8,2 mm)
12 – 12N	bracket	2 screws	tube diameter 15 mm	(hole diameter 8,2 mm)
13 – 13N	bracket	2 screws	tube diameter 16 mm	(hole diameter 8,2 mm)
13a – 13aN	bracket	2 screws	tube diameter 14 mm	(hole diameter 8,2 mm)
13b – 13bN	single bracket	1 screw	tube diameter 16 mm	(hole diameter 8,2 mm)
14	flange	2 screws	flat tube	(hole diameter 5,5 mm)
15 – 15N	bracket	2 screws	tube diameter 8 mm	(hole diameter 5,5 mm)
16 – 16N	bracket	2 screws	tube diameter 10 mm	(hole diameter 5,5 mm)
17	bracket	2 screws	tube diameter 16 mm	(hole diameter 6,2 mm)
17a	bracket	2 screws	tube diameter 16 mm	(hole diameter 6,2 mm)
18 – 18N	bracket	2 screws	tube diameter 14 mm	(hole diameter 8,2 mm)
19 – 19N	bracket	2 screws	tube diameter 19 mm	(hole diameter 8,2 mm)
20 – 20N	bracket	2 screws	tube diameter 17 mm	(hole diameter 8,2 mm)
21 – 21N	single bracket	1 screw	tube diameter 8 mm	(hole diameter 5,7 mm)
22 – 22N	single bracket	1 screw	shaped tube	(hole diameter 8,2 mm)

**OUTLET VARIANTS**

outlet	denomination	assembly
A	injector	injector+external thread
B	injector	injector
C	tube diameter 6.35 mm	compression fitting
D	tube diameter 6.35 mm	compression fitting
E	G ¼"	flared tube
F	M 14 x 1,5	flared tube
G	M 15 x 1,5	flared tube
H	M 16 x 1,5	flared tube
I	tube diameter 6 mm	compression fitting
L	tube diameter 7 mm	compression fitting
M	tube diameter 8 mm	compression fitting
N	tube diameter 8 mm	compression fitting
O	M 12 x 1	flared tube
P	tube diameter 9,525 mm (3/8")	compression fitting
R	Injector	injector
S	tube diameter 7 mm	compression fitting
T	tube diameter 6 mm	compression fitting
W	M 16 x 1,25	flared tube

**Max. torque values:**

maximum torque value		
<i><b>Component</b></i>	<b>Nm</b>	<b>lbf.in</b>
Nut + (olive) + tube for outlet of valves	15	133
Screws for fixing brackets	1.5	13
Injectors	4	35

**MANUFACTURING DATE CODES**

MONTH	CODE
JANUARY	N
FEBRUARY	O
MARCH	P
APRIL	R
MAY	S
JUNE	T
JULY	U
AUGUST	V
SEPTEMBER	W
OCTOBER	X
NOVEMBER	Y
DECEMBER	Z

YEAR	CODE
1992	A
1993	B
1994	C
1995	D
1996	E
1997	F
1998	H
1999	I
2000	J
2001	K
2002	L
2003	M
2004	4
2005	5
2006	6
2007	7
2008	8
2009	9
2010	0
2011	1
2012	2
2013	3
2014	4
2015	5
2016	6

EXAMPLE: A COMPONENT PRODUCED IN APRIL 2004 IS MARKED

**R4**

Alternatively, on the component can be marked a four digit code indicating the week (first two digits) and the year of production (last two digits).

EXAMPLE: A COMPONENT PRODUCED THE 14<sup>TH</sup> WEEK OF 2004 IS MARKED

**1404**

Alternatively, on the component can be marked the day (first digits), the month (according with the code in table above) and the year of production (last two digits).

EXAMPLE: A COMPONENT PRODUCED IN APRIL, 19 2004 IS MARKED

**19 R 04**