


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



**MODELS 14**

MANUALLY-OPERATED GAS VALVE  
WITH FLAME SURVEILLANCE DEVICE FOR COOKING APPLIANCES

			
		<b>EN 126 EN 13611</b>	
		models	<b>14 (51BU3852)</b>

## GENERAL INSTRUCTIONS

Feature	Description
type	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	0°C
maximum working temperature	80/130°C
nominal flow rate	0.27 m <sup>3</sup> /h (test gas: air - pressure drop 100 Pa – EN 126)
Reduced flow rate	0.060 m <sup>3</sup> /h (test gas: air - pressure drop 100 Pa – EN 126)
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 126 - EN 13611)
Flame supervisor device continued operation	10,000 cycles (EN 126 - EN 13611)
inlet gas connection	bracket, flange (see inlet variant table)
outlet gas connection	see outlet variant table
storage temperature range	-15°C to + 50°C
hold-on current/drop-out current (safety device)	≤ 180 mA / ≥ 60 mA (version 1) ≤ 110 mA / ≥ 20 mA (version 2) ≤ 60 mA / ≥ 10 mA (version 3)
Themocouples maximum closing time	90 sec

If applicable,

TABLE 1 - MICROSWITCH CHARACTERISTICS	
Nominal tension	250 V
Method for operation	push-button
Max. operating temperature	125 °C
Contact distance	small – standard
Protection level	IP00
Insulation class	I
Pollution situation	standard
Heat-resistance	category D
Tracking index	PTI250

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 (all colors except black) while nitrile elastomer gaskets are resistant up to 80°C (black gasket).

## INSTRUCTIONS 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.

A few seconds after the burner ignites, the thermocouple generates enough current to hold the safety magnet open. The control shaft needs no longer be pressed down.

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

If the flame should accidentally go out, the thermocouple cools and the current is reduced, the safety magnet is closed and the flow of gas is blocked after a few seconds.

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 beside the cap with a screwdriver.

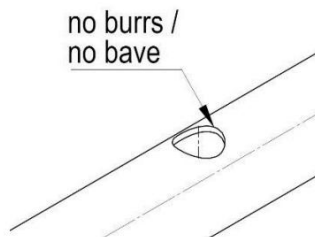
## ASSEMBLY INSTRUCTIONS

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

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

To ensure a perfect seal:

- Place an elastomer gasket between the manifold tube and the valve
- Realize, on the manifold, the seating holes according to the table "inlet variants" and ensure they are free of burrs (see following sketch)



The outlet is designed for a burner connection by pipe or injector.

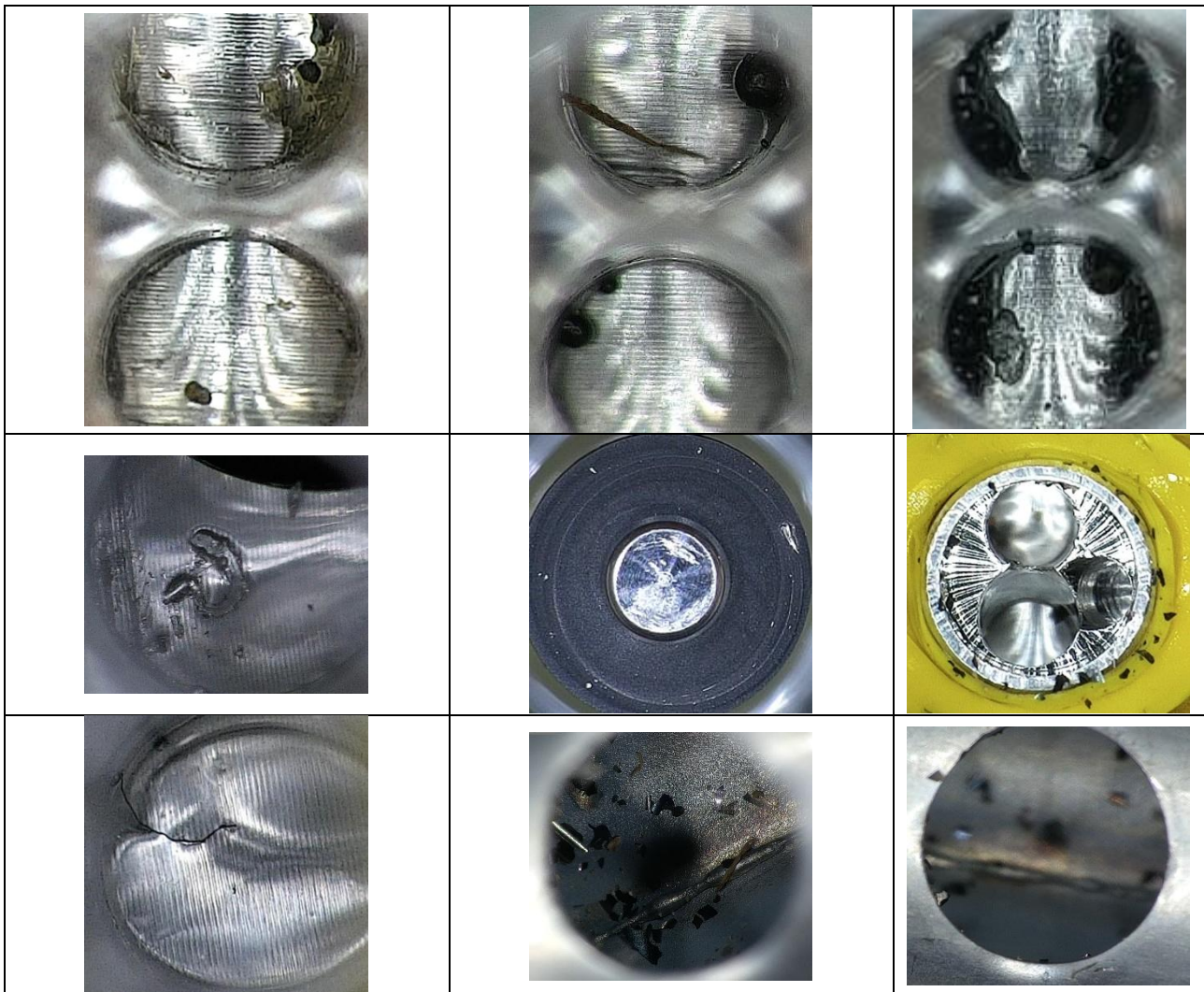
To avoid damage that may compromise correct functionality of the valve, do not exceed the tightening torques listed in the table "maximum torque value".

**To avoid dirt or other material (solid or liquid) entering the appliance which may affect functionality of the valve, a suitable filter must be mounted on the manifold inlet.**

**The valve has to be stored and assembled in a cleaned area to avoid any contamination.**

**To avoid any damage on the valve, the manifold must be completely cleaned and free of burrs before the valve assembling. In order to guarantee a cleaned manifold, moreover an air blowing process, a degreasing washing system has to be considered, like an ultrasonic system.**

*Examples of possible particles contamination that could come in the valve from the inlet compromising its functionality:*



## 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 products / components 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 products / components to mechanical processing such as cutting or drilling, which could cause exposure to the substances contained in the products / components or their dispersion into the environment.

**VARIANTS**

**INLET VARIANTS**

<b>inlet</b>	<b>denomination</b>		<b>assembly</b>	
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)
5 - 5N	single bracket	1 screw	tube diameter 18 mm	(hole diameter 8.2 mm)
8 – 8N	bracket	2 screws	tube diameter 18 mm	(hole diameter 8.2 mm)
9 – 9N	bracket	2 screws	tube diameter 1/2"gas	(hole diameter 8.2 mm)
13 – 13N	bracket	2 screws	tube diameter 16 mm	(hole diameter 8.2 mm)
14	flange	2 screws	flat tube	(hole diameter 5.7 mm)
15 – 15N	bracket	2 screws	tube diameter 8 mm	(hole diameter 5.7 mm)
16 – 16N	bracket	2 screws	tube diameter 10 mm	(hole diameter 5.7 mm)
17 – 17N	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)
27 – 27N	single bracket	1 screw	tube diameter 16 mm	(hole diameter 8.2 mm)

**OUTLET VARIANTS**

<b>outlet</b>	<b>denomination</b>	<b>assembly</b>
A	injector	injector

**Max. torque values:**

<b>maximum torque value</b>		
<b>Component</b>	<b>Nm</b>	<b>lbf.in</b>
Screws for fixing brackets	1.5	13
Injectors	4	35

<b>MANUFACTURING DATE CODES</b>
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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 five digit code indicating the day (first two digits), the month (third digit – 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**

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**