

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



# MODEL 50

# MANUALLY-OPERATED GAS VALVE

| CE                      |  |
|-------------------------|--|
| EN 1106:2010            |  |
| EN 13611:2007 + A2:2011 |  |

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### **GENERAL INSTRUCTIONS**

| Feature                            | Description   |
|------------------------------------|---|
| Туре                               | 2 - conical plug valve  |
| applications                       | hot plates, ovens, grills etc   |
| types of gas used                  | 1st - 2nd - 3rd family  |
| group                              | 1   |
| number of outlets                  | 2   |
| 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 (1° outlet)      | 0.436 m <sup>3</sup> /h (test gas: air - pressure drop 125 Pa - AS 4617-2007) |
|                                    | 0.390 m <sup>3</sup> /h (test gas: air - pressure drop 100 Pa - EN 1106:2010) |
| nominal flow rate (2° outlet)      | 0.414 m <sup>3</sup> /h (test gas: air - pressure drop 125 Pa - AS 4617-2007) |
|                                    | 0.370 m <sup>3</sup> /h (test gas: air - pressure drop 100 Pa - EN 1106:2010) |
| Reduced flow rate                  | 0.067 m3/h (test gas: air – pressure drop 125 Pa - AS 4617-2007)              |
|                                    | 0.06 m3/h (test gas: air – pressure drop 100 Pa- EN 1106:2010)                |
| 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 13611:2007 + A2:2011)                        |
|                                    | 10,000 cycles (AS 4617-2007)  |
| 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)

### **INSTRUCTIONS FOR USE**

Nel caso si voglia realizzare il fermo in posizione di "chiuso" mediante un dispositivo esterno, il rubinetto viene fornito senza molla.

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

Pressing the control shaft free the valve from the "closed" position block. This allows the plug to rotate and 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°.

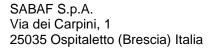
It's possible to realize the latch in "closed" position by means of an external device, in this case the tap is supplied without a spring.

Maximum flow rate on the first outlet is reached after a counterclockwise rotation of 90°, reduced flow-rate is reached by continuing the rotation up to 160°.

Maximum flow rate on the second outlet is reached after a clockwise rotation of 90°, there are no regulation of flow rate on the second outlet.

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 inserted into the hole in the control shaft.

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### **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 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.

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.



# **VARIANTS**

## **INLET VARIANTS**

| inlet    | denomination   |          | inlet denomination assemb |                | embly   |  |
|----------|----------------|----------|---------------------------|----------------|---------|--|
| 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 | bracket        | 1 screw  | tube diameter 16 mm       | (hole diameter | 8.2 mm) |  |

# **OUTLET VARIANTS**

| outlet | denomination          | assembly                   |
|--------|-----------------------|----------------------------|
| Α      | injector              | injector + external thread |
| В      | injector              | injector                   |
| С      | tube diameter 8 mm    | compression fitting        |
| D      | tube diameter 6 mm    | compression fitting        |
| Е      | G 1/4"                | flared tube                |
| F      | M 140 x 1.5           | flared tube                |
| G      | tube diameter 7 mm    | compression fitting        |
| Н      | 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 10 mm   | compression fitting        |
| 0      | tube diameter 6.35 mm | compression fitting        |
| Р      | tube diameter 6 mm    | compression fitting        |
| Q      | tube diameter 6.35 mm | compression fitting        |
| R      | injector              | injector                   |
| S      | tube diameter 6 mm    | compression fitting        |
| Т      | tube diameter 8 mm    | compression fitting        |
| U      | tube diameter 8 mm    | compression fitting        |
| V      | G 1/8"                | various                    |
| W      | M 16 x 1.25           | flared tube                |
| X      | Gc 1/8" ANGLE. 6°     | various                    |
| Y      | Gc 1/8" angle 6°      | various                    |
| Z      | tube diameter 8 mm    | compression fitting        |

# Max. torque values:

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

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| MANUFACTURING DATE CODES |          |      |      |
|--------------------------|----------|------|------|
| MONTH                    | CODE     | YEAR | CODE |
| JANUARY                  | N        | 1992 | А    |
| FEBRUARY                 | 0        | 1993 | В    |
| MARCH                    | Р        | 1994 | С    |
| APRIL                    | R        | 1995 | D    |
| MAY                      | S        | 1996 | E    |
| JUNE                     | Т        | 1997 | F    |
| JULY                     | U        | 1998 | Н    |
| AUGUST                   | V        | 1999 |      |
| SEPTEMBER                | W        | 2000 | J    |
| OCTOBER                  | Χ        | 2001 | K    |
| NOVEMBER                 | Υ        | 2002 | L    |
| DECEMBER                 | Z        | 2003 | M    |
|                          | <u> </u> | 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

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