

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



**MODEL 49F** 

# MANUALLY OPERATED GAS VALVE

Gas Safety Certified		CE			
AS 4617 - 2018			EN 1106:2010 EN 13611:2019		
models	models 49F (SAI-400157)		models	49F (51CR4738)	
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#### **GENERAL INSTRUCTIONS**

Feature	Description
	2 - conical plug valve
applications	hot plates, ovens, grills etc
types of gas used	$1^{\text{st}} - 2^{\text{nd}} - 3^{\text{rd}}$ 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	0.302 m <sup>3</sup> /h (test gas: air - pressure drop 100 Pa)
open max 1 & 2 (90°)	
Reduced flow rate	0.045 m <sup>3</sup> /h (test gas: air – pressure drop 100 Pa)
opening angle of max flow rate	۵Uo
opening angle of min_flow rate	210°
external leak tightness	$\frac{210}{10}$
internal leak tightness	$ aakage \leq 00 \text{ cc/h} (1 \text{ m/min}) (air - pressure 15 kPa)$
as valve continued operation	40.000  cycloc (EN 1106:2010 EN 12611:2010)
gas valve continued operation	10,000  cycles (EN 1100.2010 - EN 13011.2019) 10,000  cycles (AS 4617-2018)
inlet gas connection	hracket flange (see attached sheets)
	bidurel, lidiiye (see allaulieu sileels)
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 (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. Pressing the control shaft frees the valve from the "closed" position block. This allows the plug to rotate and the gas to pass to the burner.

For the gas valves model 49F, starting from the "closed" position (0°A), after turning the control shaft through 90° is reached the maximum flow-rate of both the outlets (1 and 2); by continuing the rotation up to 165° is reached the closure of outlet 1 and the maximum flow-rate of the outlet 2. At 210°A is reached the reduced flow-rate of the outlet 2, while the outlet 1, from 165°A to 210°A, remains always closed. The valve has an adjustable perforated metering screw (by-pass) which fixes the reduced flow-rate of the outlet 2 at a presetted value when fully tightened. If a different type of gas is used, the amount of reduced flow of the outlet 2 can be adjusted by turning the by-pass with a screwdriver.

If the valve has a microswitch, press down on the control shaft activating the microswitch which drives the thermoelectric lighting device (see table 1).



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	1		
Pollution situation	standard		
Heat-resistance	category D		
Tracking index	PTI250		

#### 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.

#### **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.

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### VARIANTS

### **INLET VARIANTS**

inlet	denomina	tion	asser	mbly
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	bracket	1 screw	tube diameter 16 mm	(hole diameter 8.2 mm)
4 - 4N	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	bracket	1 screw	tube diameter 18 mm	(hole diameter 8.2 mm)
7	bracket	1 screw	tube diameter 18 mm	(hole diameter 11 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 1/2"gas	(hole diameter 8.2 mm)
10	bracket	1 screw	tube diameter 1/2"gas	(hole diameter 8.2 mm)
11 – 11N	bracket	1 screw	tube diameter 1/2"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	bracket	2 screws	tube diameter 14 mm	(hole diameter 8.2 mm)
13bN	single bracket	1 screw	tube diameter 16 mm	(hole diameter 8.2 mm)
13cN	single bracket	1 screw	tube diameter 16 mm	(hole diameter 8.2 mm)
14	flange	2 screws	flat tube	(hole diameter 5.7 mm)
15	bracket	2 screws	tube diameter 8 mm	(hole diameter 5.7 mm)
16	bracket	2 screws	tube diameter 10 mm	(hole diameter 5.7 mm)
17	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	bracket	2 screws	tube diameter 17 mm	(hole diameter 8.2 mm)
21	single bracket	1 screw	tube diameter 8 mm	(hole diameter 5.7 mm)
22	single bracket	1 screw	shaped tube	(hole diameter 8.2 mm)

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# **OUTLET VARIANTS**

outlet	denomination	assembly	
А	injector	injector + external thread	
В	injector	injector	
С	tube diameter 6.35 mm	compression fitting	
D	tube diameter 6.35 mm	compression fitting	
Е	G ¼" gas	flared tube	
F	M 14 x 1.5	flared tube	
G	M 15 x 1.5	flared tube	
Н	M 16 x 1.5	flared tube	
I	tube diameter 6 mm	compression fitting	
J	tube diameter 8 mm	spring + gasket + flared tube	
J2	tube diameter 7 mm	spring + gasket + flared tube	
J3	tube diameter 6.35 mm	spring + gasket + flared tube	
L	tube diameter 7 mm	compression fitting	
Μ	tube diameter 8 mm	compression fitting	
Ν	tube diameter 8 mm	compression fitting	
0	M 12 x 1	flared tube	
Р	tube diameter 9.525 mm (3/8")	compression fitting	
Q	tube diameter 8 mm	spring + gasket + flared tube	
Q2	tube diameter 7 mm	spring + gasket + flared tube	
Q3	tube diameter 6.35 mm	spring + gasket + flared tube	
R	injector	injector	
S	tube diameter 7 mm	compression fitting	
Т	tube diameter 6 mm	compression fitting	
W	M 16 x 1.25	flared tube	

## 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	



	MANUFACTU	RING
MONTH	CODE	
JANUARY	N	
FEBRUARY	0	
MARCH	Р	
APRIL	R	
MAY	S	
JUNE	Т	
JULY	U	
AUGUST	V	
SEPTEMBER	W	
OCTOBER	Х	
NOVEMBER	Y	
DECEMBER	Z	

DATE CODES		
YEAR	CODE	
1992	A	
1993	В	
1994	С	
1995	D	
1996	E	
1997	F	
1998	Н	
1999	I	
2000	J	
2001	К	
2002	L	
2003	М	
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