


TECHNICAL CHARACTERISTICS
INSTRUCTIONS FOR USE, ASSEMBLY INSTRUCTIONS,
MAINTENANCE INSTRUCTIONS



MODEL 16F – 16FS

2-OUTLETS MANUALLY-OPERATED GAS VALVE

 Gas Safety Certified		<div style="font-size: 48pt; font-weight: bold;">CE</div>	
AS 4617 - 2018		EN 1106:2010 EN 13611:2019	
models	16FS (SAI-400157)	models	16F – 16FS (51BR3391)

GENERAL INSTRUCTIONS

Feature	Description
Type	2 - conical plug valve
applications	hot plates, ovens, grills etc
types of gas used	1 st – 2 nd – 3 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 (mod. 16F)	0.27 m³/h (test gas: air - pressure drop 100 Pa)
reduced flow rate (mod. 16F)	0.075 m³/h (test gas: air – pressure drop 100 Pa)
nominal flow rate (mod. 16FS)	0.34 m³/h (test gas: air - pressure drop 100 Pa)
reduced flow rate (mod. 16FS)	0.15 m³/h (test gas: air – pressure drop 100 Pa)
opening angle of max. flow rate	180° (16F) – 90° (16FS)
opening angle of min. flow rate	230° (16F) – 180° (16FS)
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

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 flow to pass to the burner.

Starting from the “closed” position (0°A), after turning the control shaft from 30° to 60° is reached the maximum flow-rate for the second and simmer outlet that allow the ignition of gas, this condition is maintained until 90°. From 90° to 180° the flow rate of the second outlet decrease to the minimum, while simmer outlet is still ON. From 180° to 200° the second outlet is going OFF while the simmer is still ON. this condition is maintained until 230°.

The valve has one adjustable perforated metering screws (by-pass) which fix the reduced flow-rate of the second outlets 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-passes beside the cap with a screwdriver.

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.

The thermocouple must be positioned in correspondence of the burner connected with the valve's first outlet.

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.

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)
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 - 14N	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

outlet	denomination	assembly
A	injector	injector + external thread
B	injector	injector
C	tube diameter 8 mm	compression fitting
D	tube diameter 6 mm	compression fitting
E	G 1/4" gas	flared tube
F	M 14 x 1.5	flared tube
G	tube diameter 7 mm	compression fitting
H	M 16 x 1.5	flared tube
I	tube diameter 6 mm	compression fitting
J	M 6 x 0.75	flare tube
K	tube diameter 4 mm	compression fitting
L	tube diameter 7 mm	compression fitting
M	tube diameter 8 mm	compression fitting
N	tube diameter 10 mm	compression fitting
O	tube diameter 6.35 mm	compression fitting
P	tube diameter 6 mm	compression fitting
Q	tube diameter 6.35 mm	compression fitting
R	injector	injector
S	tube diameter 6 mm	compression fitting
T	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
Y	tube diameter 7 mm	compression fitting
X	Gc 1/8" angle 6°	various
Z	tube diameter 8 mm	compression fitting

Max. torque values:

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

MANUFACTURING DATE CODES			
MONTH	CODE	YEAR	CODE
JANUARY	N	1992	A
FEBRUARY	O	1993	B
MARCH	P	1994	C
APRIL	R	1995	D
MAY	S	1996	E
JUNE	T	1997	F
JULY	U	1998	H
AUGUST	V	1999	I
SEPTEMBER	W	2000	J
OCTOBER	X	2001	K
NOVEMBER	Y	2002	L
DECEMBER	Z	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 14TH WEEK OF 2004 IS MARKED

1404