


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



**MODEL 45F – 45FX**

**2-OUTLETS MANUALLY-OPERATED GAS VALVE  
FOR COOKING APPLIANCES**

		
<b>ANSI Z21.15 – CSA 9.1</b>		
<b>models</b>	<b>45F – 45FX</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	2
nominal diameter	8
maximum working pressure	½ psi
minimum working temperature (body)	0°C
maximum working temperature (body)	150°C
nominal flow rate (model 45F)	8.22 ft <sup>3</sup> /h (233 l/h) (test gas: air - pressure drop 75 Pa)
calculated nominal capacity (model 45F)	10,313 Btu/h (test gas: air - pressure drop 75 Pa)
Reduced flow rate (model 45F)	1.23 ft <sup>3</sup> /h (35 l/h) (test gas: air - pressure drop 75 Pa)
nominal flow rate (model 45FX)	8.22 ft <sup>3</sup> /h (233 l/h) (test gas: air - pressure drop 75 Pa)
calculated nominal capacity (model 45FX)	10,313 Btu/h (test gas: air - pressure drop 75 Pa)
Reduced flow rate (model 45FX)	2.15 ft <sup>3</sup> /h (61 l/h) (test gas: air - pressure drop 75 Pa)
opening angle of max. flow rate	90°
opening angle of min. flow rate	210° (45F); 230° (45FX)
external leak tightness	leakage ≤ 60 cc/h (air - pressure 3 psi (20.7 kPa))
internal leak tightness	leakage ≤ 20 cc/h (air - pressure 3 psi (20.7 kPa))
gas valve continued operation	10,000 cycles
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.  
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 45F, 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 preset 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.

As regards the gas valve model 45F, X variant, starting from the “closed” position (0°A), after turning the control shaft through 90° is reached the maximum flow-rate of the outlet 1, by continuing the rotation up to 160° is reached the reduced flow-rate of the outlet 1 and then by continuing the rotation up to 230° is reached the closure of the outlet 1. The outlet 2, from 90°A to 230°A, remains always opened. The valve has an adjustable perforated metering screw (by-pass) which fixes the reduced flow-rate of the outlet 1 at a preset value when fully tightened. If a different type of gas is used, the amount of reduced flow of the first outlet can be adjusted by turning the by-pass with a screwdriver.

If the valve (Mod. 45F – 45FX) 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	I
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.**

**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	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)
13b - 13bN	single bracket	1 screw	tube diameter 16 mm	(hole diameter 8.2 mm)
13c - 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)
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	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)

### 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 1/4" gas	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		
Component	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 14<sup>TH</sup> WEEK OF 2004 IS MARKED

**1404**