

COMBINED GAS VALVE

M2N

This is a general documentation; for specific applications not covered by this leaflet, please consult us.

The SUNTEC M2N combined gas valve is a 1-stage system, with two safety valves.

APPLICATIONS

The SUNTEC combined gas valve is recommended for collective or industrial pressure jet burners.

The use of the SUNTEC combined gas valve is recommended in all gas installations requiring a safety shutoff for inlet pressure up to 360 mbar.

It is suitable for use with 1st, 2nd and 3rd family gases (according to EN 437).

OPERATION PRINCIPLE

M2N combined gas valve comprises two class A automatic safety valves, direct-acting, electrically operated.

At rest, both safety valves are closed; thus gas cannot flow beyond chamber (1).

When energized, the coils open and release the gas flow from chamber ① to chamber ② for safety valve V1 (from chamber ② to chamber ③ for V2).

When de-energized, each safety valve closes within 0.2 s.

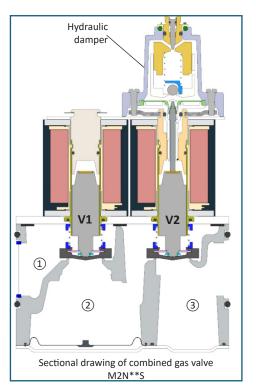
Slow opening (M2N**S)

A hydraulic damper, placed above the safety valve V2, offers the possibility to dampen the movement of the safety valve V2 and thus apply a progressive gas flow in the combustion chamber in the starting phases.

This device allows a fast initial opening (ignition flow) of the safety valve V2, adjustable up to 80% of the maximum flow.

COMBINED GAS VALVE IDENTIFICATION
(Not all model combinations are available. Consult your Suntec representative)
Gas valve size
Seats size 2 = Ø17 mm
Pressure regulator type N = Without pressure regulator
Maximum inlet pressure / Valve class 5 = 360 mbar - A+A
Regulator pressure range 0 = No pressure regulator
2nd safety valve opening F = Fast opening S = Slow opening
Safety valves type of supply 0 = Independent 1 = Simultaneous
Coils voltage 7 = 230 V AC
M 2 N 5 0 F 0 7 - 2 - 2086
Revision
Customization code ————

M2N - 11 - Ed 6 - June 2023



TECHNICAL SPECIFICATIONS

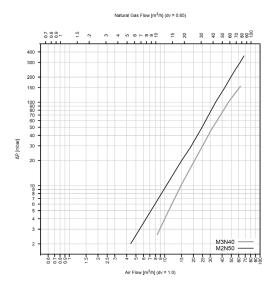
General

Maximum operating pressure	360 mbar
Ambient temperature range	-20°C to +60°C
Operation with	Air and gas of 1st, 2nd and 3rd families
Body	Aluminium
Weight	• M2N**F : 2.3 kg
	• M2N**S : 2.5 kg
Certification	CE: Certificate n°1312CU6361
	UKCA : certificate n°8510/0099
Inlet/outlet flanges	• DN15 (Rp1/2")
	• DN20 (Rp3/4'')
Pressure taps	G1/8" connections
	Supplied in 3 locations on the combined gas valve, and
	on inlet/outlet flanges.
Inlet strainer	Mesh size : 0.6 mm.
	Replaceable filter.
Pressure switch (optional)	Factory mounted on inlet flange.
	When suitable configuration, can be side-mounted.

Safety valve characteritics

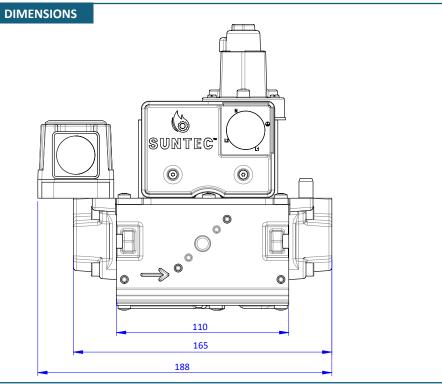
Leakage class Class A+A Opening time (EN 161) • M2N**F : < 0.5 s • M2N**S : < 10 s (For other setting, contact SUNTEC.) Closing time (EN 161) • M2N**F : < 0.2 s
• M2N**S : < 10 s (For other setting, contact SUNTEC.)
Closing time (EN 161) • M2N**F : < 0.2 s
• M2N**S : < 0.2 s
Voltage 230 V AC, 50/60 Hz
Consumption 34 VA
IP rating IP54 (with suitable connector) according to EN 6052
standard.

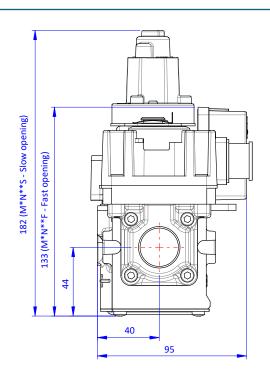
FLOW CURVE



P burner = 3 mbar Flange = Rp3/4"

Maximum flow can be reduced when other flanges are connected with.





We reserve the right to change specifications without prior notice.