

COMBINED GAS VALVE M3N

M3N

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

The SUNTEC M3N 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

M3N combined gas valve comprises two class A automatic safety valves, directacting, electrically operated.

At rest, both safety valves are closed; thus gas cannot flow beyond chamber \bigcirc .

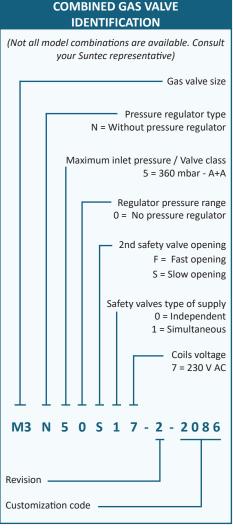
When energized, the coils open and release the gas flow from chamber ① to chamber ② for valve V1 (from chamber ② to chamber ③ for V2).

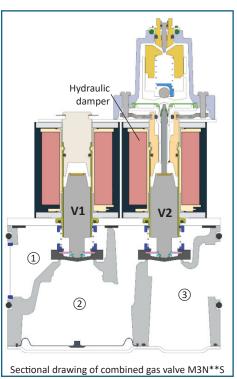
When de-energized, each safety valve closes within 0.2 s.

Slow opening (M3N**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 slow initial opening (ignition flow) of the safety valve V2, adjustable up to 80% of the maximum flow.





TECHNICAL SPECIFICATIONS

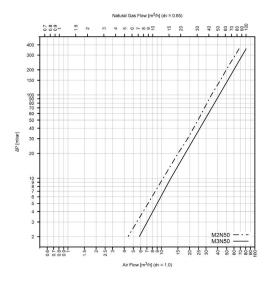
General

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	M3N**F: 2.3 kgM3N**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 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)	• M3N**F: < 0.5 s
	 M3N**S: < 10 S (For other setting, contact SUNTEC.)
Closing time (EN 161)	• M3N**F: < 0.2 s
	• M3N**S: < 0.2 s
Voltage	230 V AC, 50/60 Hz
Consumption	42 VA
IP rating	IP54 (with suitable connector) according to EN 60529 standard.

FLOW CURVE



P burner = 3 mbar Flange = Rp3/4"

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

