G 911
14.01.09 MC
REV. 01

N.C. GAS SOLENOID VALVES

GNC Eng.

- **Constructed to DIN standards**
- **European approval EN 161, Class A, Group 2**
- **Body in diecast aluminium**
- **NBR seals**
- **Screwed (DN 1/2" to 2") connections**
- **Flanged PN 16 (DN 65 to 100) connections**

GNC 1/2"÷ 2"

GNC 65 ÷ 100

CE

1. APPLICATION

Used, in conjunction with safety systems, for shut-off in gas feed pipes.

2. OPERATION

When powered they open, without power they close. Ideal for continuous service (continuously powered).

WARNING **During normal operation of the gas valve the surface temperature of the coil can reach 70 °C, careful consideration must be taken when selecting suitable supply cables and the positioning of the valve in relation to surrounding materials**

3. MODELS

Code	Connect DN	Power supply Volt	Power absorbed (W) in operation	Power absorbed (W) start up	P.max(1) mbar	Orifice Ø mm	Flow m³/h(2) 0.5 mbar	Flow m³/h(2) 1mbar	Certificatiom GASTEC PIN:
GNC 815	scrd. 1/2"	230 V ~	20	–	200	18	2.8	4	63 AQ1350 –10/99
GNC 415	scrd. 1/2"	24 V ~/–	16	–	200	18	2.8	4	
GNC 215	scrd. 1/2"	12 V ~/–	25	–	200	18	2.8	4	
GNC 820	scrd. 3/4"	230 V ~	45	–	360	27	5.5	8	63 AQ1350 –10/99
GNC 420	scrd. 3/4"	24 V ~/–	30	–	200	27	5.5	8	
GNC 220	scrd. 3/4"	12 V ~/–	30	–	200	27	5.5	8	
GNC 825	scrd. 1"	230 V ~	45	–	360	27	8.3	13	63 AQ1350 –10/99
GNC 425	scrd. 1"	24 V ~/–	30	–	200	27	8.3	13	
GNC 225	scrd. 1"	12 V ~/–	30	–	200	27	8.3	13	
GNC 832	scrd. 1"1/4	230 V ~	20	80	360	45	14	20	63 AQ1350 –10/99
GNC 432	scrd. 1"1/4	24 V ~/–	65	–	200	45	14	20	
GNC 232	scrd. 1"1/4	12 V ~/–	65	–	200	45	14	20	
GNC 840	scrd. 1"1/2	230 V ~	20	80	360	45	19	28	63 AQ1350 –10/99
GNC 440	scrd. 1"1/2	24 V ~/–	65	–	200	45	19	28	
GNC 240	scrd. 1"1/2	12 V ~/–	65	–	200	45	19	28	
GNC 850	scrd. 2"	230 V ~	20	80	360	56	27	40	63 AQ1350 –10/99
GNC 450	scrd. 2"	24 V ~/–	65	–	130	56	27	40	
GNC 250	scrd. 2"	12 V ~/–	65	–	130	56	27	40	
GNC 865	flang. 65	230 V ~	45	185	200	80	55	80	63 AQ1350 –10/99
GNC 465	flang. 65	24 V ~/–	15	185	200	80	55	80	
GNC 880	flang. 80	230 V ~	45	185	200	80	73	100	63 AQ1350 –10/99
GNC 480	flang. 80	24 V ~/–	15	185	200	80	73	100	
GNC 8100	flang. 100	230 V ~	70	290	200	100	110	160	63 AQ1350 –10/99
GNC 4100*	flang. 100	24 V ~/–	20	200	200	100	110	160	

(1) – Maximum working pressure. 100 mbar = 10 kPa = 1.000 mmCA
(2) – Natural gas flow with pressure drop of 0.5 mbar (5mmWG) and 1 mbar (10mmWG).
(*) – Approved in Class "B".
N.B. should it be necessary to use a transformer for the power supply, calculate the power of this in relation to consumption at startup.

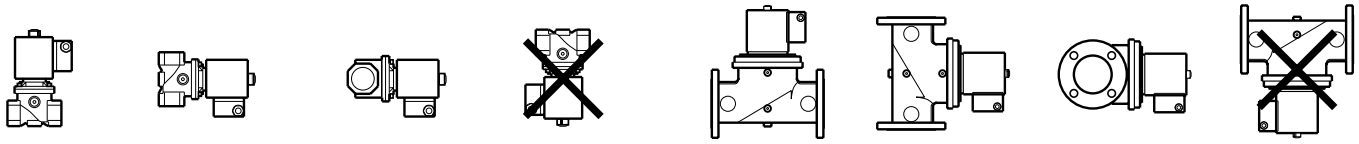
4. TECHNICAL DATA

Power supply	230 V ~, 24 - 12 V ~/–
Voltage tollerance	– 15 to + 10 %
Power absorbed in Watts	(see table 3)
Protection	IP 54
Cable entry gland	PG 11
Connections :	
GNC ..15 to ..50	Female screwed
GNC ..65 to ..100	Flanged PN16

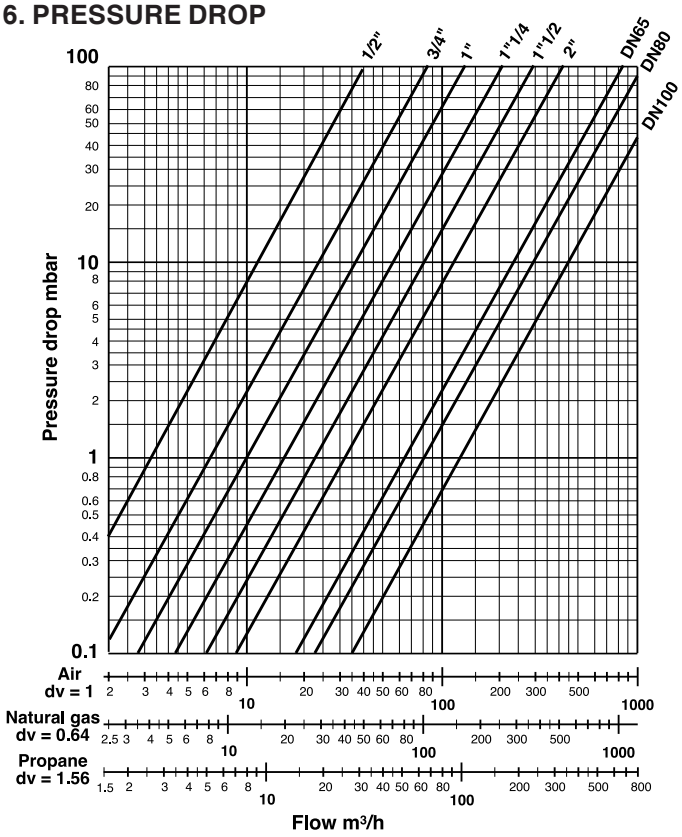
Opening time & closure time	≤ 1 s
Ambient temperature	– 15 °C to + 60 °C
Coil temperature	about 70 °C
Construction :	
– valve body	diecast aluminium
– seals	NBR (UNI 4916 -74)
– pressure spring	AISI 302 steel
– plug	chromium-plated Fe 37 steel

5. INSTALLATION

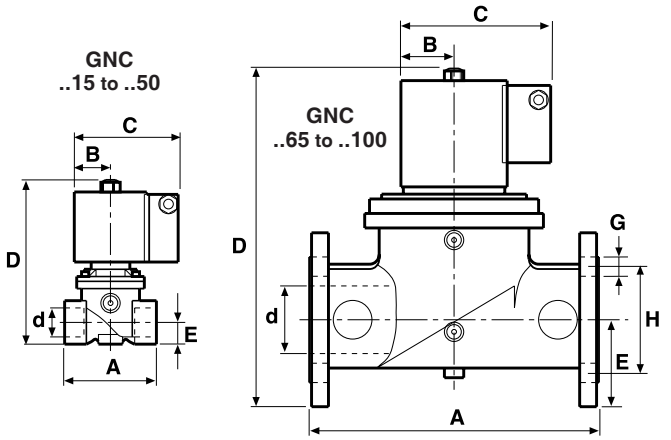
- It is preferable to position the valve downstream of the gas meter and outside the area traversed by the gas pipework.
- If positioned in the open air it must be protected from rain.
- Ensure that in the pipework there are no residues from soldering or from tapping or threading.
- Check the alignment of the pipework connections and ensure that they are not subject to vibrations.
- Pay attention to the flow direction marked on the valve body.
- Valve can be installed in any position except that with the coil facing downwards.
- Leave sufficient space for any future removal of the coil and around the valve itself for the circulation of air.
- Avoid absolutely using the coil as a lever; instead use appropriate tools on the seating of the valve body.
- On completion of the installation check the seals.



6. PRESSURE DROP



7. OVERALL DIMENSIONS



Type	d DN	A mm	B mm	C mm	D mm	E mm	G mm	H mm	Wt kg
..15	1/2"	77	33	96	140	18	–	–	1.4
..20	3/4"	96	44	108	164	25	–	–	2.5
..25	1"	96	44	108	164	25	–	–	2.5
..32	1"1/4	153	51	128	220	35	–	–	5.7
..40	1"1/2	153	51	128	220	35	–	–	5.7
..50	2"	156	51	128	230	39	–	–	6.0
..65	65	308	58	143	355	85	4 x19	145	12.5
..80	80	308	58	143	355	85	8 x19	160	13.0
..100	100	350	80	188	492	130	8 x19	180	37.0

8. ELECTRICAL CONNECTIONS & MAINTENANCE

The twin-wire power cable must be connected to the two poles of the rectifier terminal block housed in the wiring box.
In the 24 V and 12 V valves (except for models DN65, DN80, DN100), on the junction box there are two inputs marked with the simbols "L, N", e "+, –" :

– with alternating current connect to input "L, N",
– with direct current connect to terminals "+, –" , according to polarity.

To remove the coil, first switch off the power and turn off the gas then unscrew the round knurled nut on top of the coil housing.
In many cases the coils damaged by excessive voltages have only one or more rectifier diodes burnt out; if the resistance at the heads of the winding is about 2 kΩ for 1/2", 1 kΩ for 3/4" - 1", 600Ω for 1"1/4 - 1"1/2 -2", 285Ω for 65-80, replace only the rectifier.

WARNING : during normal operation of the gas valve the surface temperature of the coil can reach 70 °C, careful consideration must be taken when selecting suitable supply cables and the positioning of the valve in relation to surrounding materials.

Amendments to data sheet

Date	Revision No.	Page	Section	Details of amendments
12.11.06 MC		1	3. MODELS	For some models the consumptions figures have been changed and also the certification date
14.01.09 MC	**01**	1	3. MODELS	Added data on consumption at startup

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