

## GAS SOLENOID VALVES

Class A BS EN161 Approved British Gas & European Standards



## APPLICATION

- Gas Solenoid Valves are used for safety and control of gas for shut-off in gas feed pipes
- Suitable for various gasses, including Natural gas, Propane and LPG
- ¼" Inlet and outlet plugs suitable for CPI switch, pressure guage, connection to proving and interlock systems

## OPERATION AND INSTALLATION

- Two-way, normally-closed – energise to open.
- Rapid opening.
- Mounting direct on pipeline more or less 90 degrees (max) from the vertical axis.

## TECHNICAL SPECIFICATION

- Opening time <1 second.
- Closing time <1 second.
- Max number of operations : 20 per minute.
- ¼" Inlet and outlet plugs.
- Incorporated AISI 303 steel mesh filter.
- Cable entry gland PG11 Live, Neutral, Earth.
- Protection to IP54
- NBR based seal with a strong resistance to hydrocarbons (UNI 4916-74).
- Bodies and flanges in diecast aluminium.
- AISI 302 steel pressure spring.
- Chromate Fe 37 steel armature.
- Ambient temperature -15°C to 60°C.
- Coil temperature about 70°C

## STANDARDS AND APPROVALS

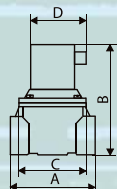
- Class "A" BS EN161:2002 Approved.
- British Gas & European Standards.
- 90/396/EEC - 73/23/EEC - 89/336/EEC .
- Certificate CE EC-87/07/009.

## ELECTRICAL SPECIFICATION

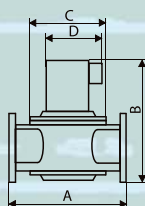
- Supply voltage 230V (+10%-15%) 50-60Hz.  
24 Vac.
- Coils to Class F, 360° rotation, suitable for permanent excitation.

## NORMALLY CLOSED - 230VAC

TYPE	SIZE	CONNECTION	MAX PRESS.	POWER VA
ZEV10	3/8"	BSP	350 mbar	20
ZEV15	1/2"	BSP	350 mbar	20
ZEV20	3/4"	BSP	200 mbar	25
ZEV25	1"	BSP	200 mbar	25
ZEV32	1 1/4"	BSP	200 mbar	50
ZEV40	1 1/2"	BSP	200 mbar	50
ZEV50	2"	BSP	200 mbar	50
ZEV65	2 1/2"	BSP	200 mbar	68
ZEV80	3"	BSP	200 mbar	68
ZEVF65	65mm (2 1/2")	Flanged PN16	200 mbar	68
ZEVF80	80mm (3")	Flanged PN16	200 mbar	68
ZEVF100	100mm (4")	Flanged PN16	200 mbar	170
ZEVF125	125mm (5")	Flanged PN16	200 mbar	290
ZEVF150	150mm (6")	Flanged PN16	200 mbar	290



Type	A	B	C	D
ZEV10	72	112	52	85
ZEV15	72	112	52	85
ZEV20	86	156	70	96
ZEV25	100	156	75	96
ZEV32	150	214	110	118
ZEV40	150	214	110	118
ZEV50	170	220	135	123
ZEV65	220	290	170	145
ZEV80	220	290	170	145



## NORMALLY CLOSED - 24VAC

TYPE	SIZE	CONNECTION
ZEV10F	3/8"	BSP
ZEV15F	1/2"	BSP
ZEV20F	3/4"	BSP
ZEV25F	1"	BSP
ZEV32F	1 1/4"	BSP
ZEV40F	1 1/2"	BSP
ZEV50F	2"	BSP
ZEV65F	2 1/2"	BSP
ZEV80F	3"	BSP
ZEVF65F	65mm (2 1/2")	Flanged PN16
ZEVF80F	80mm (3")	Flanged PN16

Type	A	B	C	D
ZEVF65	310	343	200	148
ZEVF80	310	343	200	148
ZEVF100	350	384	250	185
ZEVF125	400	592	300	250
ZEVF150	480	630	300	250

ZEV20



ZEV50



ZEV65



ZEVF100





## APPLICATION

- Slow opening gas solenoid valves are used for control and regulation of gaseous fluids in gas power burners, atmospheric gas boilers, melting furnaces, incinerators and other gas consuming appliances.

## OPERATION AND INSTALLATION

- Two-way, normally-closed – energise to open.
- Slow opening.
- Mounting direct on pipeline more or less 90 degrees (max) from the vertical axis.

## TECHNICAL SPECIFICATION

- Slow opening from 1 to 30 seconds, step pressure and flow regulation from top of the coil.
- Closing time <1 second.
- Max number of operations : 1 per minute.
- ¼" Inlet and outlet plugs.
- Incorporated AISI 303 steel mesh filter.
- Cable entry gland PG11 Live, Neutral, Earth.
- Protection to IP54
- NBR based seal with a strong resistance to hydrocarbons (UNI 4916-74).
- Bodies and flanges in diecast aluminium.
- AISI 302 steel pressure spring.
- Chromate Fe 37 steel armature.
- Ambient temperature -15°C to 60°C.  
Coil temperature about 70°C

## STANDARDS AND APPROVALS

- Class A BS EN161:2002 Approved.
- British Gas & European Standards.
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## ELECTRICAL SPECIFICATION

- Supply voltage 230V (+10%-15%) 50-60Hz.
- Coils to Class F, 360° rotation, suitable for permanent excitation.

ZEVS15

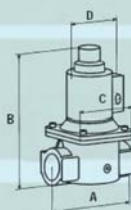


ZEVS50

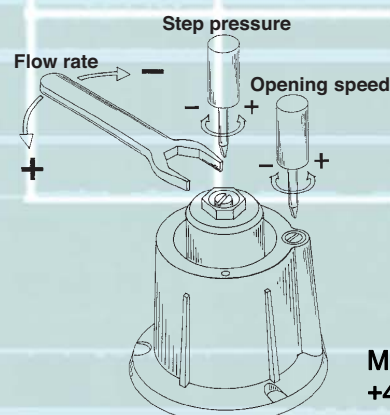
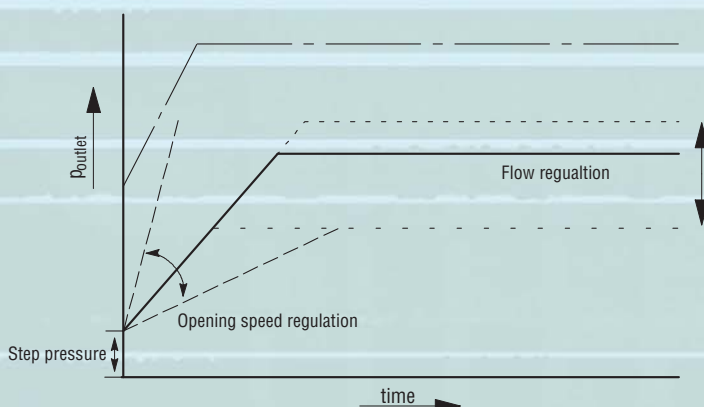


## NORMALLY CLOSED - 230VAC

TYPE	SIZE	CONNECTION	MAX PRESS.	POWER VA
ZEVS10	3/8"	BSP	350 mbar	20
ZEVS15	1/2"	BSP	350 mbar	20
ZEVS20	3/4"	BSP	200 mbar	25
ZEVS25	1"	BSP	200 mbar	25
ZEVS32	1 1/4"	BSP	200 mbar	50
ZEVS40	1 1/2"	BSP	200 mbar	50
ZEVS50	2"	BSP	200 mbar	50



Type	A	B	C	D
ZEVS10	72	168	52	85
ZEVS15	72	168	52	85
ZEVS20	86	200	70	96
ZEVS25	100	200	75	96
ZEVS32	150	288	110	118
ZEVS40	150	288	110	118
ZEVS50	170	304	135	123



## APPLICATION

- Gas Solenoid Valves are used for safety and control of gas for shut-off in gas feed pipes
- Suitable for various gasses, including Natural gas, Propane and LPG
- ¼" Inlet and outlet plugs suitable for CPI switch, pressure gauge

## OPERATION AND INSTALLATION

- Two-way, normally-closed – energise to open.
- Manual opening.
- Mounting direct on pipeline more or less 90 degrees (max) from the vertical axis.

## TECHNICAL SPECIFICATION

- Manual opening when electrically energized.
- Closing time <1 second.
- ¼" Inlet and outlet plugs
- Incorporated AISI 303 steel mesh filter.
- Cable entry gland PG11 Live, Neutral, Earth.
- Protection to IP54
- NBR based seal with a strong resistance to hydrocarbons (UNI 4916-74).
- Bodies and flanges in diecast aluminium.
- AISI 302 steel pressure spring.
- Chromate Fe 37 steel armature.
- Ambient temperature -15°C to 60°C.
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## STANDARDS AND APPROVALS

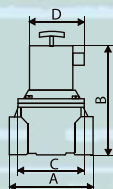
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## ELECTRICAL SPECIFICATION

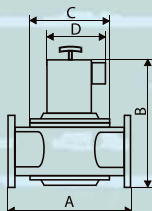
- Supply voltage 230V (+10%-15%) 50-60Hz.
- Coils to Class F, 360° rotation, suitable for permanent excitation.

## NORMALLY CLOSED - 230VAC

TYPE	SIZE	CONNECTION	MAX PRESS.	POWER VA
ZEVM10	3/8"	BSP	500 mbar	5
ZEVM15	1/2"	BSP	500 mbar	5
ZEVM20	3/4"	BSP	500 mbar	5
ZEVM25	1"	BSP	500 mbar	5
ZEVM32	1 1/4"	BSP	500 mbar	5
ZEVM40	1 1/2"	BSP	500 mbar	5
ZEVM50	2"	BSP	500 mbar	18
ZEVM65	2 1/2"	BSP	500 mbar	18
ZEVM80	3"	BSP	500 mbar	18
ZEVMF65	65mm (2 1/2")	Flanged PN16	500 mbar	18
ZEVMF80	80mm (3")	Flanged PN16	500 mbar	18
ZEVMF100	100mm (4")	Flanged PN16	500 mbar	18



Type	A	B	C	D
ZEVM10	72	150	52	85
ZEVM15	72	150	52	85
ZEVM20	86	160	70	85
ZEVM25	100	160	75	85
ZEVM32	150	221	110	85
ZEVM40	150	221	110	85
ZEVM50	170	285	135	120
ZEVM65	220	285	170	120
ZEVM80	220	330	170	120



Type	A	B	C	D
ZEVMF65	310	360	200	120
ZEVMF80	310	360	200	120
ZEVMF100	350	360	250	120



ZEVM20



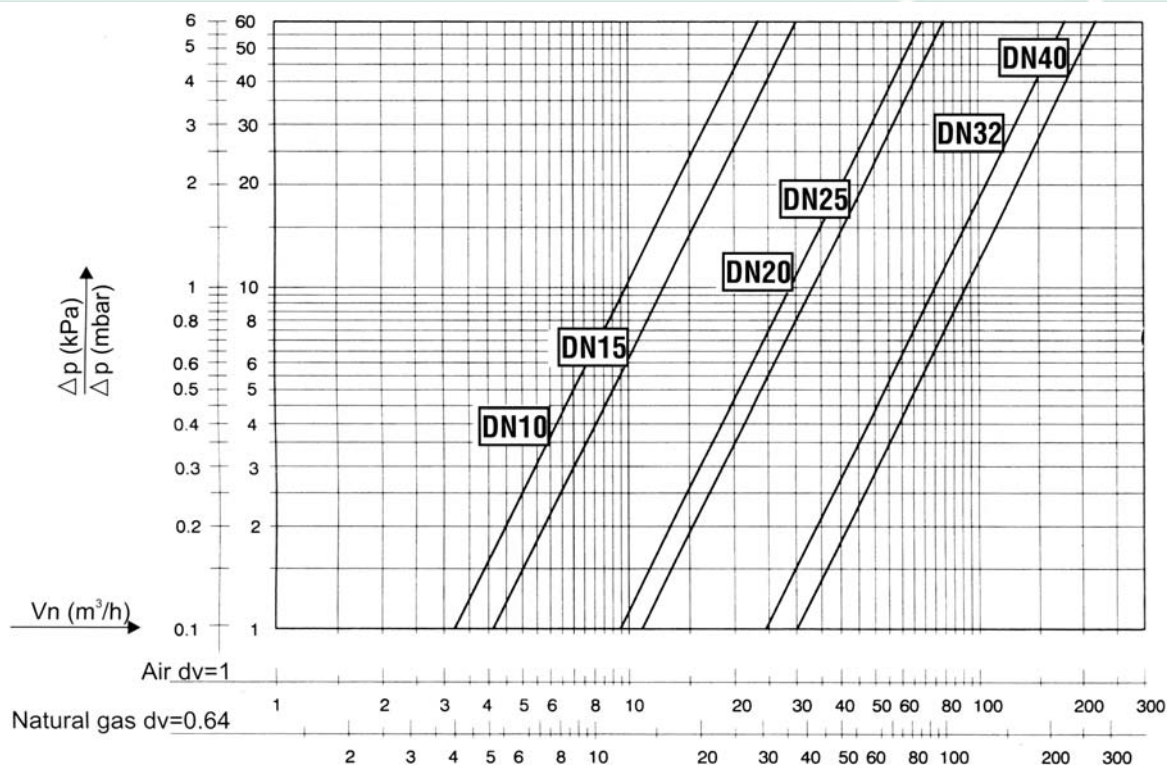
ZEVM80

## FLOW RATE DIAGRAM

MKW Heating Controls  
+44 (0) 1942 205 504

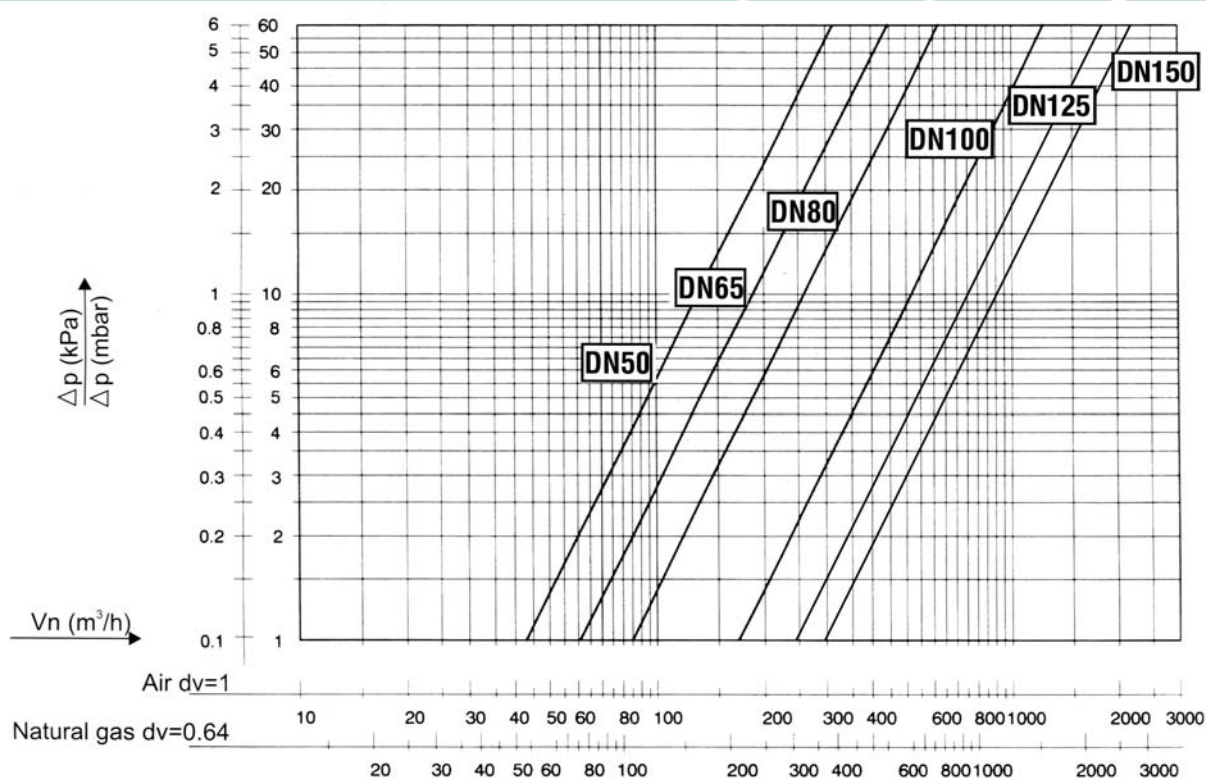
Flow rate  $\text{m}^3/\text{h}$  with  $\Delta p = 2.54 \text{ mbar}$  (specific gravity = 1 to 1013 mbar,  $15^\circ \text{C}$ )

$\frac{3}{8}" \text{ DN10}$	$\frac{1}{2}" \text{ DN15}$	$\frac{3}{4}" \text{ DN20}$	$1" \text{ DN25}$	$1\frac{1}{4}" \text{ DN32}$	$1\frac{1}{2}" \text{ DN40}$
5	6.4	14.8	16.7	38.5	47.1



Flow rate  $\text{m}^3/\text{h}$  with  $\Delta p = 2.5 \text{ mbar}$  (specific gravity = 1 to 1013 mbar,  $15^\circ \text{C}$ )

$2" \text{ DN50}$	$2\frac{1}{2}" \text{ DN65}$	$3" \text{ DN80}$	$4" \text{ DN100}$	$5" \text{ DN125}$	$6" \text{ DN150}$
66.7	94.2	131	264	370	450





## Thermal Link

The electro fusible thermal link is designed to be used where there is a potential fire hazard, such as in a boiler or plant rooms.

In the event of fire the temperature sensitive fuse will interrupt the power supply, activating alarms or shut down devices.

The unit should be mounted so that the perforated cover faces downwards and the ventilation holes in the back/side of the box must not be obstructed.

The link is electrically rated at 5 amps max on 200/250 Vac and melts at 68° C. IP30 Protection

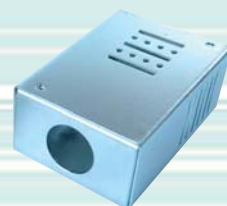
**TL-1** Cast aluminium box with a 20mm conduit thread 60x50x30mm

**TL 2** Zinc plated steel with a 20mm conduit entry 75x53x31mm

TL-1



TL-2



## Emergency Stop Button

The emergency stop button is designed for manual shut down of systems or machines in the event of fire or other emergencies.

Key reset version can be used to prevent any unauthorized restarting of machinery/system following an emergency shut down.

10 (6) Amps at 230 Vac Volts free contact. IP65 Protection

**EM-1** Push to break circuit – Turn to reset

**EM-1K** Push to break circuit – Use key to reset

EM-1K



EM-1



## Closed Position Indication Switch

The closed position switch can be used on ZEV gas solenoid valves to indicate position of valve.

**Operational voltage: 250 Vac 3A**

**Enclosure: IP65**

**Ambient Temperature: -15 to +60°C**

**CPI-20/25** Valve size 3/4" and 1"

**CPI-32/40** Valve size 1 1/4" and 1 1/2"

**CPI-50** Valve size 2"

**CPI-65/80** Valve size 2 1/2" and 3" BSP & Flanged

**CPI-100** Valve size 4" Flanged

CPI



## Xenon Beacon

White polycarbonite body.

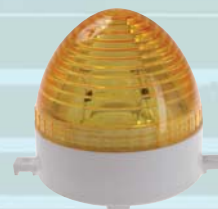
**BCR-1** Red 230 Vac 3W 1 sec pulses

**BCY-1** Amber 230 Vac 3W 1 sec pulses

BCR-1



BCY-1



## Stand Alone Gas Minder (Interlock System)

Complies with all current Corgi gas regulations for commercial kitchens. gas Minder ensures there is no gas flow to burners unless air extraction is present.

This unit to be used with 230 Vac gas solenoid valves

The system consists of central control unit + pressure switch + duct kit + emergency stop button

ISP-1





ISO9001:2000 approved. No. GB00568

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