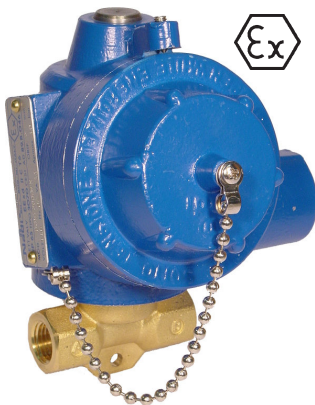


GENERAL DESCRIPTION / APPLICATIONS



Two way direct acting solenoid valve with spring return.

Suitable for gaseous and liquid media compatible with the (body/seals) material used, vacuum.

Forged brass, nickel-plated brass or stainless steel body.

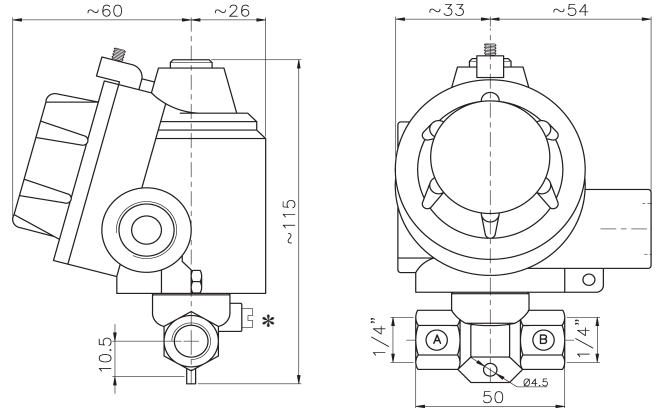
Stainless steel internal parts.

Stainless steel springs.

360° degrees orientable solenoid.

Mountable in any position.

DIMENSIONS (in mm)



* Optional Manual Operator

ELECTRICAL SPECIFICATIONS

Light alloy epoxy painted explosion-proof "Ex-d" (EN60079-1) solenoid housing. Electrical and mechanical parts certified according to 94/9/CE ("ATEX") directive, suitable to control the flow of inert and/or flammable gases or liquids. Internal and external anti-twist ground connecting screws. Inside terminal board suitable for cable up to 2,5 mm².

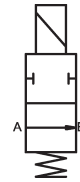
cable entry threaded:	1/2" Gk UNI-6125 (standard) 1/2" NPT, ISO M20x1.5 (available upon request)
protection class:	IP-67
Ex protection class:	II 1/2 GD (Ex-dc, Ex-td A21, IIB, IIC)
Temperature class:	T6/T5 (t.amb -20 ÷ +40 °C) T5/T4 (t.amb -20 ÷ +60 °C) upon request. T5/T4 (t.amb -60 ÷ +60 °C) upon request ⁽¹⁾ , F (155°C) - H (180°C) upon request. H (180°C).
Coil insulation class:	F (155°C) - H (180°C) upon request.
Winding wire class:	H (180°C).
Duty:	Continuous (S.I.) 100% ED
Power consumption ⁽²⁾ :	Alternate current 11VA (inrush 28VA). Direct current 11W.
Tolleranza tensione:	± 10% (standard) others available upon request
Voltage tolerance:	± 10%
Insulation:	>1000 MOhm
Dielectrical Strength:	>2000 V/1'
Standard voltages	12, 24, 48, 110, 115, 125, 220, 240 Volt
DC= ⁽⁴⁾ o AC~(50/60Hz):	other voltages available upon request.

OPERATION



L03 - Normally closed.

In: A
Out: B
Coil de-energized: A and B closed.
Coil energized: from A to B.



L08 - Normally open.

In: A
Out: B
Coil de-energized: from A to B.
Coil energized: A and B closed.

SPECIFICATIONS AND AVAILABLE OPTIONS

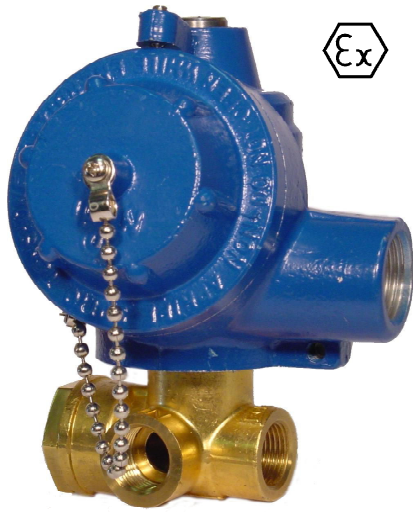
MODEL	ORIFICE DIAMETER mm	PRESSURES IN BAR ⁽³⁾				Flow factor kv (liters/min.')	WEIGHT Kg.					
		BODY RATING	MIN./MAX. OPERATING DIFFERENTIAL PRESSURE									
a	b		c	d	e	MIN.	MAX. NORM. CLOSED AC~	DC=	MAX. NORM. OPEN AC~	DC=		
L 0 3	0 8					0	60	60	40	40	0,2	0,9
L 0 3	1 8					0	25	20	14	14	1,2	0,9
L 0 3	2 5					0	20	18	5	5	1,6	0,9
L 0 3	3 2					0	8	6	3	3	1,8	0,9

suffix (options available upon request): ⁽¹⁾ "LT" (low t.amb. certificate), ⁽²⁾ "LC" (low consumption), ⁽³⁾ "AP" (High pressure version)- ⁽⁴⁾ "V" spike suppressor.

a	b	c	d	e
T Brass. I Stainless steel.	C 1/4" GAS D 1/4" NPT	0 Buna N 1 FPM 3 PTFE 6 EPDM	B II 1/2 GD - Ex-d IIB C II 1/2 GD - Ex-d IIC	X Stable manual operator. Option available for NC models only.

GENERAL DESCRIPTION / APPLICATIONS

DIMENSIONS (mm)



Two way internal pilot solenoid valve.

Suitable for gaseous and liquid media compatible with the (body/seals) material used, vacuum.

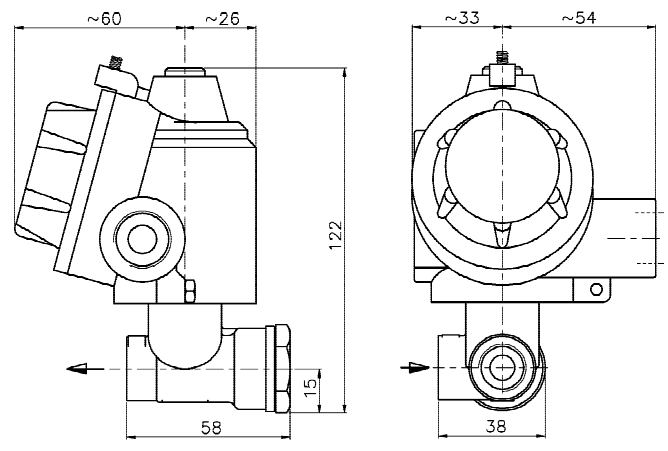
Forged brass or nickel-plated brass body.

Stainless steel internal parts.

Stainless steel springs.

360° degrees orientable solenoid.

Mountable in any position.

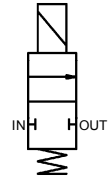


ELECTRICAL INFORMATIONS

Light alloy epoxy painted explosion-proof "Ex-d" (EN60079-1) solenoid housing. Electrical and mechanical parts certified according to 94/9/CE ("ATEX") directive, suitable to control the flow of inert and/or flammable gases or liquids. Internal and external anti-twist ground connecting screws. Inside terminal board suitable for cable up to 2,5 mm².

- cable entry threaded: 1/2" Gk UNI-6125 (standard)
1/2" NPT, ISO M20x1.5 (available upon request)
- protection class: IP-67
- Ex protection class: II 1/2 GD (Ex-dc, Ex-td A21, IIB, IIC)
- Temperature class: T6/T5 (t.amb -20 ÷ +40 °C)
T5/T4 (t.amb -20 ÷ +60 °C) upon request.
T5/T4 (t.amb -60 ÷ +60 °C) upon request⁽¹⁾.
F (155°C) - H (180°C) upon request.
- Coil insulation class: H (180°C).
- Winding wire class: H (180°C).
- Duty: Continuous (S.I.) 100% ED
- Power consumption: Alternate current 11VA (inrush 28VA).
Direct current 11W.
- Tolleranza tensione: ± 10% (standard) others available upon request
- Voltage tolerance: ± 10%
- Insulation: >1000 MOhm
- Dielectrical Strength: >2000 V/1'
- Standard voltages 12, 24, 48, 110, 115, 125, 220, 240 Volt
- DC=₍₂₎ o AC~(50/60Hz): other voltages available upon request.

OPERATION



L20 - Normally closed.

In: N
Out: OUT

Coil de-energized: IN and OUT closed.

Coil energized: from IN to OUT.

SPECIFICATIONS AND DIMENSIONS

MODEL	ORIFICE DIAMETER mm	PRESSURE IN BAR				Flow factor kv (liters/min.)	WEIGHT Kg.
		NOMINAL MAX.	MIN.	DIFFERENTIAL			
				MAX. AC~	MAX. DC=		
L 2 0	8,7	100	0,5	100	60	?	?

suffix (options available upon request): ⁽¹⁾ "LT" (low t.amb. certificate), ⁽²⁾ "V" spike suppressor.

a Body material	b Port size	c Seals material	d Protection class
T Brass. N Nickel-plated brass.	E 3/8" GAS	3 PTFE	D EEx-d IIB F EEx-d IIC

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Le caratteristiche possono subire variazioni senza preavviso / Characteristics may change without notice.

GENERAL DESCRIPTION / APPLICATIONS



Two way direct acting solenoid valve with spring return.

Suitable for gaseous and liquid media compatible with the (body/seals) material used, vacuum.

Suitable for low differential pressure (zero-differential).

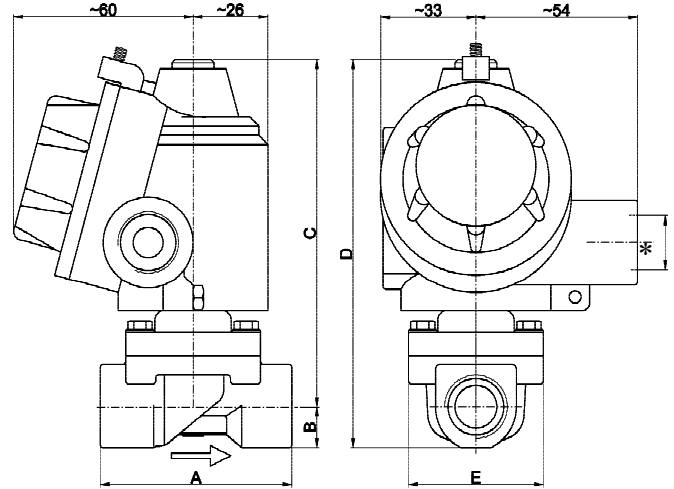
Forged brass, nickel-plated brass or stainless steel body.

Stainless steel internal parts.

Stainless steel springs.

360° degrees orientable solenoid.

DIMENSIONS (in mm)



** available sizes for electrical connection:
1/2" Gk UNI-6125 (standard)
1/2" NPT (upon request)
ISO M20x1,5 (upon request)

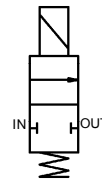
PORT SIZE	DIMENSIONS IN millimeters (mm)				
	A	B	C	D	E
3/8"	64	14	115	128	45
1/2"	64	14	115	128	45
3/4"	83	17	119	136	55

ELECTRICAL INFORMATIONS

Light alloy epoxy painted explosion-proof "Ex-d" (EN60079-1) solenoid housing. Electrical and mechanical parts certified according to 94/9/CE ("ATEX") directive, suitable to control the flow of inert and/or flammable gases or liquids. Internal and external anti-twist ground connecting screws. Inside terminal board suitable for cable up to 2,5 mm².

cable entry threaded:	1/2" Gk UNI-6125 (standard) 1/2" NPT, ISO M20x1.5 (available upon request)
protection class:	IP-67
Ex protection class:	II 1/2 GD (Ex-dc, Ex-td A21, IIB, IIC)
Temperature class:	T6/T5 (t.amb -20 ÷ +40 °C) T5/T4 (t.amb -20 ÷ +60 °C) upon request. T5/T4 (t.amb -60 ÷ +60 °C) upon request ⁽¹⁾ . F (155°C) - H (180°C) upon request.
Coil insulation class:	H (180°C).
Winding wire class:	Continuous (S.I.) 100% ED
Duty:	Alternate current 11VA (inrush 28VA). Direct current 11W.
Power consumption ⁽²⁾ :	± 10% (standard) others available upon request
Tolleranza tensione:	± 10%
Voltage tolerance:	>1000 MOhm
Insulation:	>2000 V/1'
Dielectrical Strength:	12, 24, 48, 110, 115, 125, 220, 240 Volt
Standard voltages	other voltages available upon request.
DC= ⁽⁴⁾ o AC~(50/60Hz):	

OPERATION



L64 - Normally closed

In: N
Out: OUT
Coil de-energized: IN and OUT closed.
Coil energized: from IN to OUT.

Mount with the coil in vertical position, facing up.

SPECIFICATIONS AND AVAILABLE OPTIONS

MODEL	ORIFICE DIAMETER mm	NOMINAL MAX.	PRESSURE IN BAR ⁽³⁾ DIFFERENTIAL			Flow factor kv (liters/min.)	WEIGHT Kg.
			MIN.	MAX. AC~	MAX. DC=		
L 6 4 a 1 2 E T	12,7	16	0	5	35	1	
L 6 4 a 1 2 F G	12,7	16	0	5	40	1	
L 6 4 a 1 8 H I	18	16	0	2	87	1,4	

suffix (options available upon request): ⁽¹⁾ "LT" (low t.amb. certificate), ⁽²⁾ "LC" (low consumption), ⁽³⁾ "AP" (High pressure version)- ⁽⁴⁾ "V" spike suppressor.

a	Body material	b	Port size	c	Seals material	d	Protection class	
T	Brass.	E	3/8" GAS	T	3/8" NPT	0	Buna N	
N	nickel-plated brass	F	1/2" GAS	G	1/2" NPT	1	FPM	
I	Stainless steel *	H	3/4" GAS	I	3/4" NPT	3	PTFE	
						6	EPDM	
							B	II 1/2 GD - Ex-d IIB
							C	II 1/2 GD - Ex-d IIC

* available only for 1/2" and 3/4" valve.

GENERAL DESCRIPTION / APPLICATIONS / DIMENSIONS (in mm)



Two way internal pilot solenoid valve.
Driven diaphragm or driven piston type.

Suitable for gaseous and liquid media compatible with the (body/seals) material used.

Adjustable closing time speed regulator to reduce water hammering available on 1", 1 1/4", 1 1/2" and 2" bodies.

Diaphragm seal type (L65/L66) for general purpose or piston type (L67/L68) used in heavy duty operation; high frequency duty cycle. PTFE piston is suitable for media not compatible with the standard elastomers.

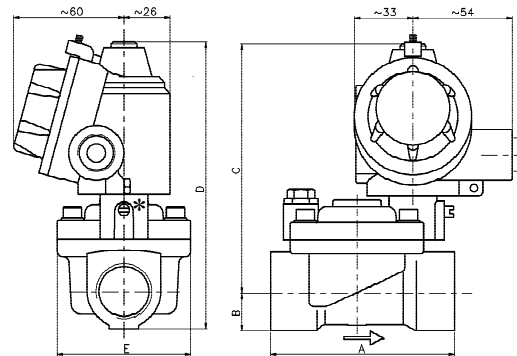
Forged brass, nickel-plated brass or stainless steel body (1/2" & 3/4").

Stainless steel internal parts. Stainless steel springs. 360° degrees orientable solenoid. Mountable in any position.

ELECTRICAL SPECIFICATIONS

Light alloy epoxy painted explosion-proof "Ex-d" (EN60079-1) solenoid housing. Electrical and mechanical parts certified according to 94/9/CE ("ATEX") directive, suitable to control the flow of inert and/or flammable gases or liquids. Internal and external anti-twist ground connecting screws. Inside terminal board suitable for cable up to 2,5 mm².

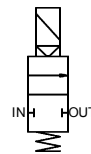
- cable entry threaded: 1/2" Gk UNI-6125 (standard)
1/2" NPT, ISO M20x1.5 (available upon request)
- protection class: IP-67
- Ex protection class: II 1/2 GD (Ex-dc, Ex-td A21, IIB, IIC)
- Temperature class: T6/T5 (t.amb -20 ÷ +40 °C)
T5/T4 (t.amb -20 ÷ +60 °C) upon request.
T5/T4 (t.amb -60 ÷ +60 °C) upon request⁽¹⁾,
F (155°C) - H (180°C) upon request.
- Coil insulation class: Continuous (S.I.) 100% ED
- Winding wire class: Alternate current 11VA (inrush 28VA).
Direct current 11W.
- Duty: ± 10% (standard) others available upon request
- Power consumption⁽²⁾: ± 10%
- Tolleranza tensione: >1000 MOhm
- Voltage tolerance: >2000 V/1'
- Insulation: 12, 24, 48, 110, 115, 125, 220, 240 Volt
- Dielectrical Strength: other voltages available upon request.
- Standard voltages
- DC⁽³⁾ or AC~(50/60Hz):



* Optional Manual Operator

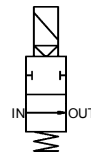
PORT SIZE	DIMENSIONS IN millimeters (mm)				
	A	B	C	D	E
3/8"	64	14	119	133	45
1/2"	64	14	119	133	45
3/4"	82	17	128	145	55
1"	100	20	135	155	70
1 1/4"	144	28	142	170	98
1 1/2"	144	28	142	170	98
2"	152	35	153	188	120

OPERATION



L65 / L67 - Normally closed

In: **N**
Out: **OUT**
Coil de-energized: **IN and OUT closed.**
Coil energized: **from IN to OUT.**



L66 / L68 - Normally open

In: **N**
Out: **OUT**
Coil de-energized: **from IN to OUT.**
Coil energized: **IN and OUT closed.**

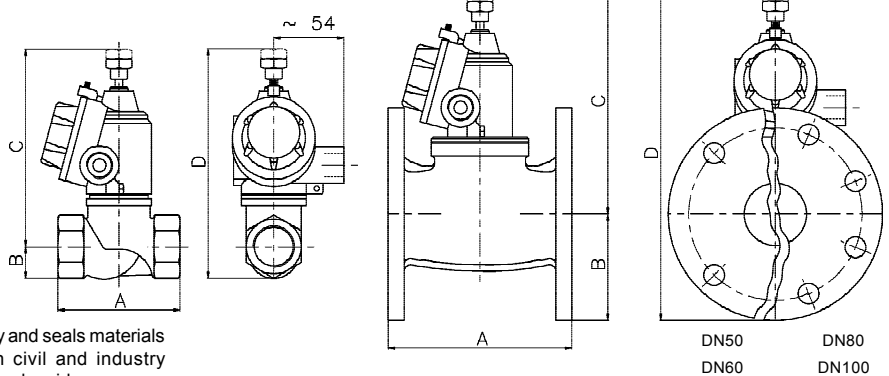
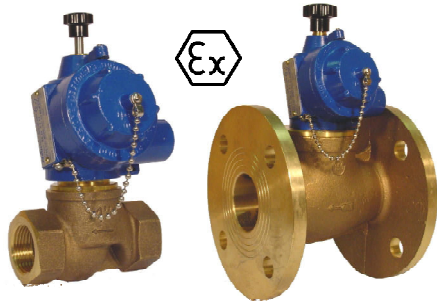
SPECIFICATIONS AND AVAILABLE OPTIONS

MODEL (Diaphragm seal) <i>Replace with L66 for N.O. model</i>	ORIFICE DIAMETER mm	PRESSURES IN BAR ⁽³⁾						Flow factor kv (liters/min.')	WEIGHT Kg.
		BODY RATING	MIN./MAX. OPERATING DIFFERENTIAL PRESSURE						
			MIN.	MAX. NORM. CLOSED AC~	DC=	MAX. NORM. OPEN AC~	DC=		
L 6 5	12,7	25	0,2	16	16	10	10	35	1
L 6 5	12,7	25	0,2	16	16	10	10	40	1
L 6 5	18	25	0,2	14	14	10	10	87	1,3
L 6 5	25	25	0,2	12	12	10	10	170	1,8
L 6 5	36	20	0,3	10	10	10	10	300	3,3
L 6 5	36	20	0,3	10	10	10	10	340	3,1
L 6 5	50	20	0,3	10	10	10	10	600	4,9
(Piston seal) <i>Replace with L68 for N.O. model</i>									
L 6 7	12,7	25	0,2	16	16	10	10	35	1
L 6 7	12,7	25	0,2	16	16	10	10	40	1
L 6 7	18	25	0,2	14	14	10	10	87	1,3
L 6 7	25	25	0,2	12	12	10	10	170	1,8

suffix (options available upon request): ⁽¹⁾ "LT" (low t.amb. certificate), ⁽²⁾ "LC" (low consumption), ⁽³⁾ "AP" (High pressure version)- ⁽⁴⁾ "N" spike suppressor.

a	b	c	d	e
Body material T Brass. N Nickel-plated brass. I Stainless steel *	Port size E 3/8" GAS T 3/8" NPT F 1/2" GAS G 1/2" NPT H 3/4" GAS I 3/4" NPT L 1" GAS M 1" NPT N 1 1/4 GAS O 1 1/2 GAS V 1 1/2 GAS P 2" GAS W 2" GAS	Seals material 0 Buna N 1 FPM 3 PTFE * 6 EPDM	Protection class B II 1/2 GD - Ex-d IIB C II 1/2 GD - Ex-d IIC	Optional features X Stable manual operator.
* available only for 1/2" and 3/4" valve.		* Available for piston type models only.		Option available only for NC models.

Le caratteristiche possono subire variazioni senza preavviso / Characteristics may change without notice.

GENERAL DESCRIPTION / APPLICATIONS


Two way bronze body manual reset solenoid valve.
Suitable for gaseous and liquid media compatible with the body and seals materials
Particularly indicated for use with gas leakage sensor in civil and industry application. Stainless steel springs. 360° degrees orientable solenoid.

Mountable in any position.

ELECTRICAL INFORMATIONS

Light alloy epoxy painted explosion-proof "Ex-d" (EN60079-1) solenoid housing. Electrical and mechanical parts certified according to 94/9/CE ("ATEX") directive, suitable to control the flow of inert and/or flammable gases or liquids. Internal and external anti-twist ground connecting screws. Inside terminal board suitable for cable up to 2,5 mm².

cable entry threaded: 1/2" Gk UNI-6125 (standard)
1/2" NPT, ISO M20x1.5 (available upon request)

protection class: IP-67

Ex protection class: II 1/2 GD (Ex-dc, Ex-td A21, IIB, IIC)

Temperature class: T6/T5 (t.amb -20 ÷ +40 °C)
T5/T4 (t.amb -20 ÷ +60 °C) upon request.
T5/T4 (t.amb -60 ÷ +60 °C) upon request⁽¹⁾,
F (155°C) - H (180°C) upon request.
H (180°C).

Coil insulation class: Continuous (S.I.) 100% ED

Winding wire class: Alternate current* 11W (inrush 28VA).
Direct current 11W.

Tolleranza tensione: ± 10% (standard) others available upon request

Voltage tolerance: ± 10%

Insulation: >1000 MOhm

Dielectrical Strength: >2000 V/1'

Standard voltages 12, 24, 48, 110, 115, 125, 220, 240 Volt

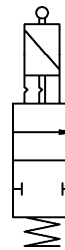
DC= o AC~(50/60Hz): other voltages available upon request.

* Alternate current operation (Vac~) is performed using a direct current coil fitted with an internal rectifier (Nadi coil type B6/R)

OPERATION

Two way Manual reset solenoid valves are safety lock devices which are manually latched in the "open" position and going back to the "closed" position electrically.

Manual reset solenoid valves must be exclusively hand operated to go from the "closed" position to the "open" position.


"E" type operation

Valve shutter is manually latched in the "open" position with solenoid de-energized.
After solenoid is energized shutter unlatch turning valve to the "closed" position.

"D" type operation

Valve shutter is manually latched in the "open" position with solenoid energized.
When solenoid is de-energized shutter unlatch and valve go to the "closed" position.

SPECIFICATIONS AND DIMENSIONS

MODEL (Thread connections)	ORIFICE DIAMETER mm	PRESSURE IN BAR			OPER.	Flow factor kv (liters/min.)	WEIGHT Kg.	DIMENSION (millimeters)				
		NOMINAL MAX.	DIFFERENTIAL					A	B	C	D	
			MIN.	MAX.								
E 5 0	a 2 0 H 0	20	16	0	5	D	100	1,2	80	20	124	144
E 5 2	2 0 H 0	20	16	0	5	E	100	1,2	80	20	140	160
E 5 1	2 5 L 0	25	16	0	5	D	160	1,4	94	25	130	155
E 5 3	2 5 L 0	25	16	0	5	E	160	1,5	94	25	145	170
E 5 5	3 2 N 0	32	16	0	5	D	250	1,8	109	31	159	190
E 5 6	3 8 O 0	38	16	0	5	D	360	2,1	119	34	166	201
E 5 7	5 0 P 0	50	16	0	5	D	645	2,9	140	41	176	217
E 6 0	6 2 Q 0	62	16	0	5	D	1000	4,7	170	51	204	255
E 5 8	7 5 R 0	75	16	0	5	D	1450	6,7	188	61	205	266
E 0 9	9 8 S 0	100	16	0	1.5	D	2400	13,3	209	72	248	320
Flanged connections		FLANGE UNI-2223 PN16										
E 5 7	5 0 Z 0	DN50	16	0	5	D	645	6,3	142	83	180	263
E 6 0	6 2 Z 0	DN60	16	0	5	D	1000	9,3	158	93	202	295
E 5 8	7 5 Z 0	DN80	16	0	5	D	1450	11,3	189	100	208	308
E 0 9	9 8 Z 0	DN100	16	0	1.5	D	2400	22,3	246	110	245	355

a	Body material	b	Port size	c	Seals material	d	Protection class
T	Bronze	H	3/4" GAS	P	2" GAS	B	II 1/2 GD - Ex-d IIB
N	Nickel-plated bronze	L	1" GAS	Q	2 1/2 GAS	C	II 1/2 GD - Ex-d IIC
		N	1 1/4 GAS	R	3" GAS		
		O	1 1/2 GAS	S	4" GAS		
				O	Buna N		

Le caratteristiche possono subire variazioni senza preavviso / Characteristics may change without notice.

GENERAL DESCRIPTION / APPLICATIONS

DIMENSIONS (millimeters)



Three way direct acting solenoid valve with spring return.

Suitable for gaseous and liquid media compatible with the (body/seals) material used, vacuum.

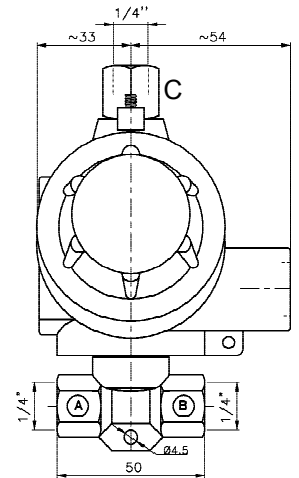
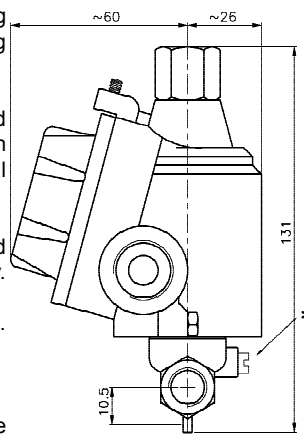
Forged brass, nickel-plated brass or stainless steel body.

Stainless steel internal parts.

Stainless steel springs.

360° degrees orientable solenoid.

Mountable in any position.



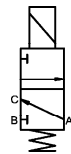
* Optional Manual Operator

ELECTRICAL INFORMATION

Light alloy epoxy painted explosion-proof "Ex-d" (EN60079-1) solenoid housing. Electrical and mechanical parts certified according to 94/9/CE ("ATEX") directive, suitable to control the flow of inert and/or flammable gases or liquids. Internal and external anti-twist ground connecting screws. Inside terminal board suitable for cable up to 2,5 mm².

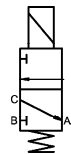
cable entry threaded:	1/2" Gk UNI-6125 (standard) 1/2" NPT, ISO M20x1.5 (available upon request)
protection class:	IP-67
Ex protection class:	II 1/2 GD (Ex-dc, Ex-td A21, IIB, IIC)
Temperature class:	T6/T5 (t.amb -20 + +40 °C) T5/T4 (t.amb -20 + +60 °C) upon request. T5/T4 (t.amb -60 + +60 °C) upon request ⁽¹⁾ , F (155°C) - H (180°C) upon request.
Coil insulation class:	H (180°C).
Winding wire class:	Continuous (S.I.) 100% ED
Duty:	Alternate current 11VA (inrush 28VA).
Power consumption:	Direct current 11W.
Tolleranza tensione:	± 10% (standard) others available upon request
Voltage tolerance:	± 10%
Insulation:	>1000 MOhm
Dielectrical Strength:	>2000 V/1'
Standard voltages	12, 24, 48, 110, 115, 125, 220, 240 Volt
DC= ₍₂₎ o AC~(50/60Hz):	other voltages available upon request.

OPERATION



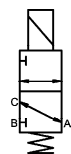
C03 - Normally closed.

In: B
Out: A
Vent: C
Coil de-energized: Input B closed from B to vent C
Coil energized: from A to B vent C closed



C08 - Normally open.

In: C
Out: A
Vent: B
Coil de-energized: from C to A. vent B closed.
Coil energized: from A to vent B input C closed



C13 - Universal

In: A, B or C
Out: A, B or C
Vent: A, B or C
Coil de-energized: port B closed. port A and C open.
Coil energized: port C closed port A and B open.

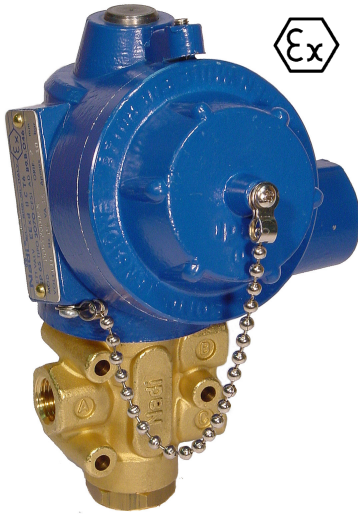
SPECIFICATIONS AND AVAILABLE OPTIONS

MODEL	ORIFICE DIAMETER mm	PRESSURES IN BAR ⁽³⁾								Flow factor kv (liters/min.')	WEIGHT Kg.
		MIN./MAX. OPERATING DIFFERENTIAL PRESSURE									
		MIN.	MAX. NORM. CLOSED (C03)		MAX. NORM. OPEN (C08)		MAX. UNIVERSAL (C13)				
Replace with: C08 for N.O. model C13 for Univ. model	a b c d e		AC~	DC=	AC~	DC=	AC~	DC=			
C 0 3	0 8	0,8 / 0,8	0	24	24	24	24		0,2	0,8	
C 0 3	1 8	1,8 / 1,8	0	10	10	10	10	6	6	0,8	
C 0 3	2 5	2,5 / 2,5	0	8	8	7	7	2	2	0,8	
C 0 3	3 2	3,2 / 2,5	0	4	4	4	4	1,4	1,4	0,8	

suffix (options available upon request): ⁽¹⁾ "LT" (low t.amb. certificate), ⁽²⁾ "V" spike suppressor⁽²⁾, ⁽³⁾ "AP" (High pressure version)-⁽⁴⁾ "V" spike suppressor.

a	b	c	d	e
T Brass. N Nickel-plated brass. I Stainless steel.	C 1/4" GAS D 1/4" NPT	0 Buna N 1 FPM 6 EPDM	B II 1/2 GD - Ex-d IIB C II 1/2 GD - Ex-d IIC	X Stable manual operator.

GENERAL DESCRIPTION / APPLICATIONS



Three way direct acting solenoid valve with spring return.

Suitable for gaseous media compatible with the (body/seals) material used, vacuum.

Not suitable for liquid media.

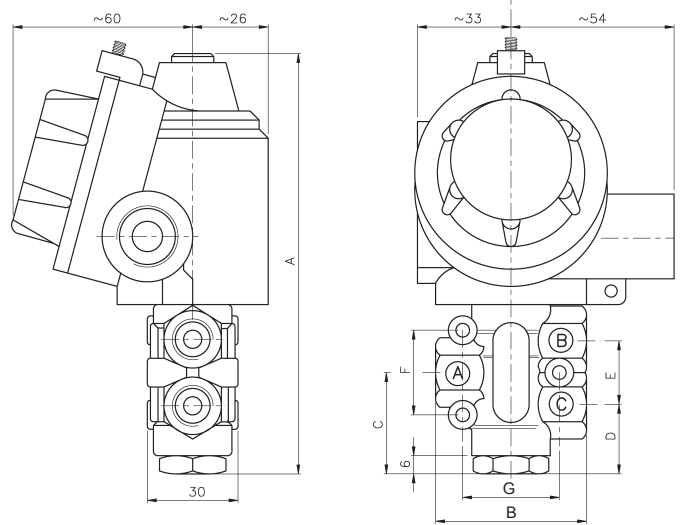
Forged brass, nickel-plated brass or stainless steel body.

Stainless steel internal parts.

Stainless steel springs.

360° degrees orientable solenoid.

Mountable in any position.

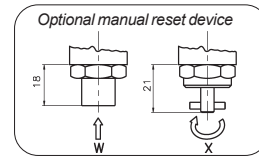


ELECTRICAL INFORMATION

Light alloy epoxy painted explosion-proof "Ex-d" (EN60079-1) solenoid housing. Electrical and mechanical parts certified according to 94/9/CE ("ATEX") directive, suitable to control the flow of inert and/or flammable gases or liquids. Internal and external anti-twist ground connecting screws. Inside terminal board suitable for cable up to 2,5 mm².

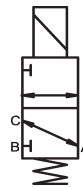
cable entry threaded:	1/2" Gk UNI-6125 (standard)
	1/2" NPT, ISO M20x1.5 (available upon request)
protection class:	IP-67
Ex protection class:	II 1/2 GD (Ex-dc, Ex-td A21, IIB, IIC)
Temperature class:	T6/T5 (t.amb -20 ÷ +40 °C)
	T5/T4 (t.amb -20 ÷ +60 °C) upon request.
	T5/T4 (t.amb -60 ÷ +60 °C) upon request ⁽¹⁾ .
	F (155°C) - H (180°C) upon request.
Coil insulation class:	H (180°C).
Winding wire class:	Continuous (S.I.) 100% ED
Duty:	Alternate current* 11W.
Power consumption ₍₂₎ :	Direct current 11W.
Tolleranza tensione:	± 10% (standard) others available upon request
Voltage tolerance:	± 10%
Insulation:	>1000 MOhm
Dielectrical Strength:	>2000 V/1'
Standard voltages	12, 24, 48, 110, 115, 125, 220, 240 Volt
DC ₍₃₎ o AC~(50/60Hz):	other voltages available upon request.

* Alternate current operation (Vac~) is performed using a direct current coil fitted with an internal rectifier (Nadi coil type B6/R).



OPERATION

C28 / C38 - Universal



In: A, B or C
 Out: A, B or C
 Vent: A, B or C
 Coil de-energized: port B closed. port A and C open.
 Coil energized: port C closed. port A and B open.

SPECIFICATIONS AND DIMENSIONS

MODEL	ORIFICE DIAMETER mm				PRESSURE IN BAR			Flow factor kv (liters/min.')	WEIGHT Kg.	DIMENSION (millimeters)							
	a	b	c	d	NOMINAL MAX.	DIFFERENTIAL				A	B	C	D	E	F	G	
						MIN.	MAX.										
C 2 8	6 0	C			6	10	0	10	9	0,9	138,5	50	33,5	23	21	28	32
C 2 8	6 0	D			6	10	0	10	9	0,9	138,5	50	33,5	23	21	28	32
C 3 8	0 9	E			9	10	0	10	16	1,2	157,5	60	43	28	30	40	40
C 3 8	0 9	T			9	10	0	10	16	1,2	157,5	60	43	28	30	40	40
C 3 8	0 9	F			9	10	0	10	16	1,2	157,5	60	43	28	30	40	40
C 3 8	0 9	G			9	10	0	10	16	1,2	157,5	60	43	28	30	40	40

suffix (options available upon request): ⁽¹⁾ "LT" (low t.amb. certificate), ⁽²⁾ "AP" (High pressure version), ⁽³⁾ "V" spike suppressor.

a	Body material	b	Port size	c	Seals material	d	Protection class	e	Optional feature
T	Brass.	C	1/4" GAS	D	1/4" NPT	0	Buna N	B	Manual operator
N	Nickel-plated brass.	E	3/8" GAS	T	3/8" NPT	1	FPM	X	stable
I	Stainless steel.	F	1/2" GAS	G	1/2" NPT	7	HNBR	W	instable

Le caratteristiche possono subire variazioni senza preavviso / Characteristics may change without notice.

GENERAL DESCRIPTION / APPLICATIONS

Three way direct acting solenoid valve with spring return, redundant configuration circuit.

Suitable for gaseous media compatible with the (body/seals) material used, vacuum.

Not suitable for liquid media.

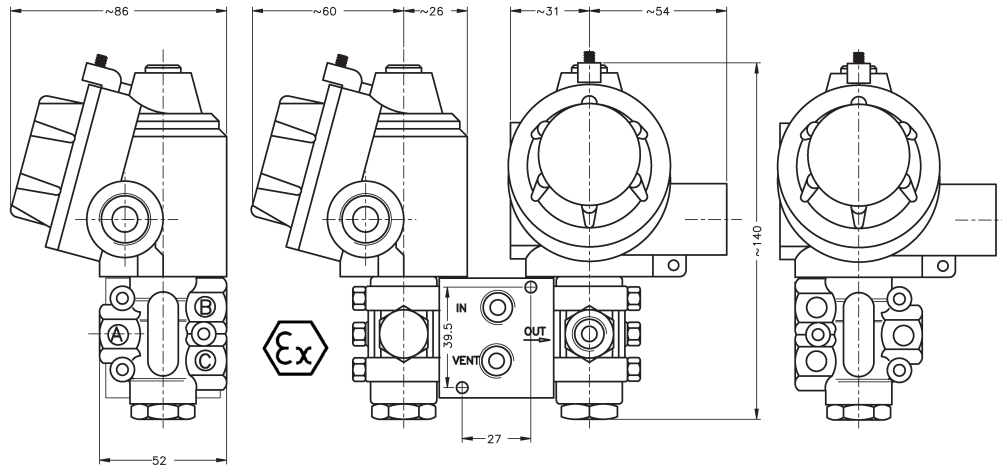
Forged brass, nickel-plated brass or stainless steel body.

Stainless steel internal parts.

Stainless steel springs.

360° degrees orientable solenoid.

Mountable in any position.



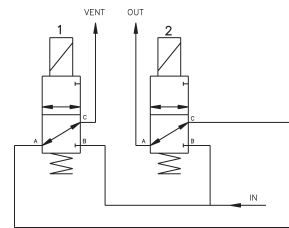
ELECTRICAL INFORMATION

Light alloy epoxy painted explosion-proof "Ex-d" (EN60079-1) solenoid housing. Electrical and mechanical parts certified according to 94/9/CE ("ATEX") directive, suitable to control the flow of inert and/or flammable gases or liquids. Internal and external anti-twist ground connecting screws. Inside terminal board suitable for cable up to 2,5 mm².

cable entry threaded:	1/2" Gk UNI-6125 (standard) 1/2" NPT, ISO M20x1.5 (available upon request)
protection class:	IP-67
Ex protection class:	II 1/2 GD (Ex-dc, Ex-td A21, IIB, IIC)
Temperature class:	T6/T5 (t.amb -20 + +40 °C) T5/T4 (t.amb -20 + +60 °C) upon request. T5/T4 (t.amb -60 + +60 °C) upon request ⁽¹⁾ . F (155°C) - H (180°C) upon request.
Coil insulation class:	H (180°C).
Winding wire class:	H (180°C).
Duty:	Continuous (S.I.) 100% ED
Power consumption ⁽²⁾ :	Alternate current* 11W. Direct current 11W.
Tolleranza tensione:	± 10% (standard) others available upon request
Voltage tolerance:	± 10%
Insulation:	>1000 MOhm
Dielectrical Strength:	>2000 V/1'
Standard voltages	12, 24, 48, 110, 115, 125, 220, 240 Volt
DC ₍₃₎ o AC~(50/60Hz):	other voltages available upon request.

* Alternate current operation (Vac~) is performed using a direct current coil fitted with an internal rectifier (Nadi coil type B6/R).

OPERATION



C90 - Redundant configuration (Voting 1oo2)

In:	N
Out:	OUT
Vent:	VENT
Coil de-energized:	port IN closed. port OUT and VENT open.
Coil energized:	port VENT closed port IN and OUT open.

SPECIFICATIONS AND DIMENSIONS

MODEL	ORIFICE DIAMETER	BODY RATING	PRESSURES IN BAR			Flow factor kv (liters/min.')	WEIGHT Kg.
			MIN.	MAX. AC~	MAX. DC=		
C 9 0	6	10	0	10	10	9	3

suffix (options available upon request): ⁽¹⁾ "LT" (low t.amb. certificate), ⁽²⁾ "LC" (low consumption), ⁽³⁾ "V" spike suppressor.

a Body material	b Port size	c Seals material	d Protection class
T Brass. I Stainless steel.	C 1/4" GAS D 1/4" NPT	0 Buna N 1 FPM 7 HNBR	B II 1/2 GD - Ex-d IIB C II 1/2 GD - Ex-d IIC