

Valves Series

Solenoid Valves



01V

Pg. 18.3

Inox Solenoid Valves



X1V

Pg. 18.42

Solenoid Valves



07V

Pg. 18.50

Namur Solenoid Valves



08V

Pg. 18.53

Miniature Electropilots U1



AA

Pg. 18.60

Universal Valves G1/8 - G1/4



CL - CM

Pg. 18.67

Rotary Hand Lever Valves



12V

Pg. 18.96

Micro Valves



AI JET

Pg. 18.99

Micro Valves



AI JET2

Pg. 18.104

16mm Valves - Mechanical and Manual Operators



CH

Pg. 18.107

Pedal Valves



AM

Pg. 18.110

FIELDBUS Valves Series

Fieldbus Electropneumatic Valves



16V

Pg. 18.114

Fieldbus Electropneumatic Valves



17V

Pg. 18.121

ISO Valves Series

Valves ISO 5599 - Size 1 - 2 - 3 - 4



BE

Pg. 18.156

COILS & CONNECTORS Series

Solenoid and Connectors



Coils & Connectors

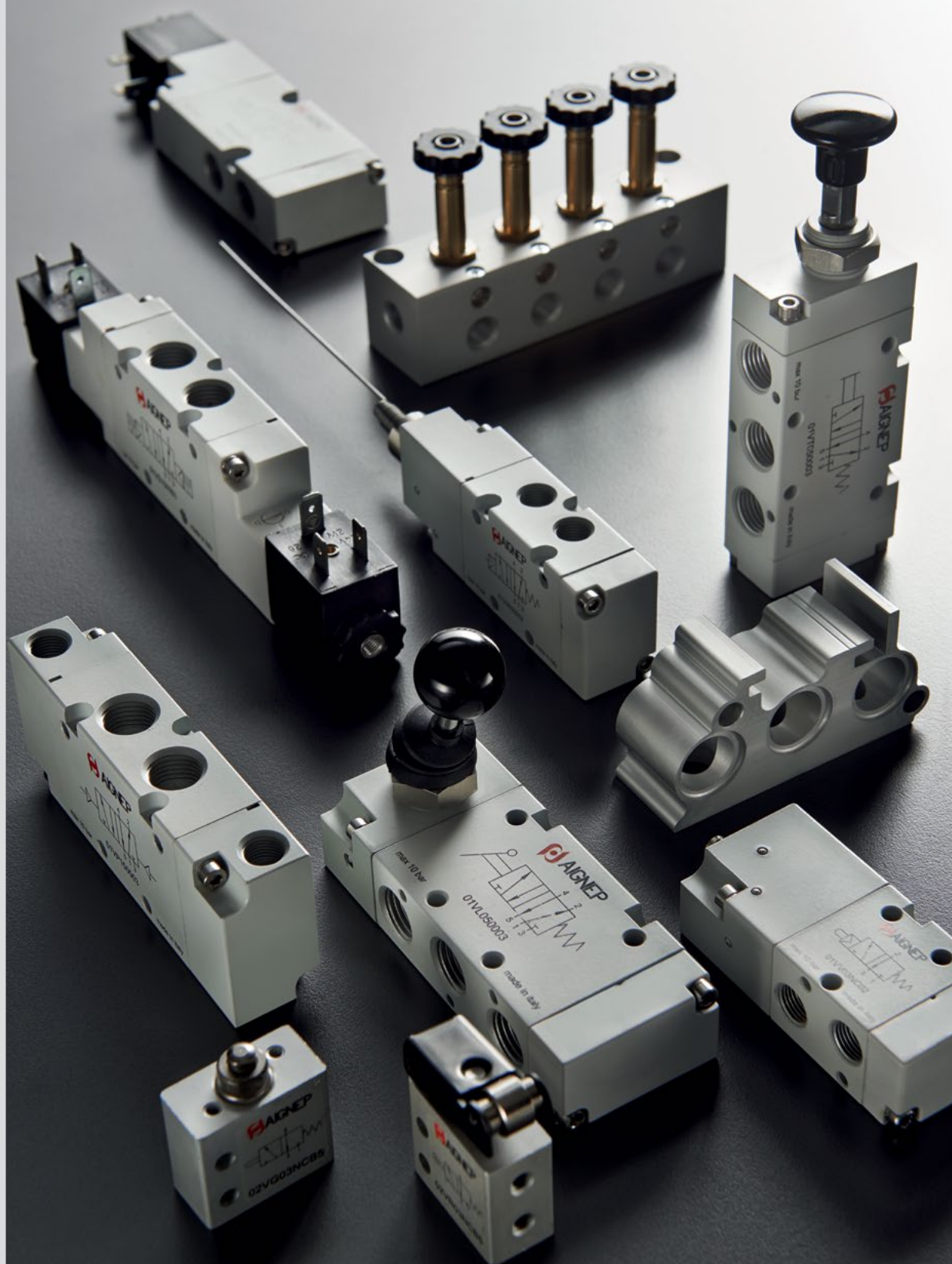
Pg. 18.169

Click here to view the **Valves Series** on our Website



MANUAL, PNEUMATIC, SOLENOID PILOT,
FIELDBUS AND ISO VALVES

Valves Series





TECHNICAL CHARACTERISTICS



Reference Standard

1907/2006
REACH

2011/65/CE
RoHS

PED
2014/68/UE



Component Parts and Materials

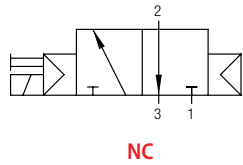
Stainless Steel 316 L (1.4404) body
Stainless Steel 316 L (1.4404) spool
PUR seals and FKM O-Ring

		1/4	1/2
	THREAD	G 1/4	G 1/2
	6 bar FLOW RATE with Δp 1 bar	1250 NI/min	3000 NI/min
	TEMPERATURE	min max	-50 °C -58 °F +50 °C +122 °F
	SOLENOID VOLTAGE	24V DC - 12V DC - 24V AC 110V AC - 220V AC	
	MINIMUM POWER	3W - 5VA	
	MANUAL CONTROL	BISTABLE	
	TIGHTENING TORQUE OF THE SOLENOID'S NUT	0.6 Nm	

Series	Actuation	Reactuation	Ways	Function	Size	Thread	Solenoid
X 1 V	S	1	3	N C	0 3		S A
	S = Solenoid	1 = Bistable 4 = Monostable pneumatic return	3 = 3/2 5 = 5/2	NC = Normally closed 00 = Function not provided	03 = 1/4 05 = 1/2	= G	SA = SOL01012C1000 S1 = SOL01024A2000 SB = SOL01024C1000 SZ = SOL01024C3000 S2 = SOL01110A2000 S3 = SOL01220A2000 UA = SOLU1012C1000 U1 = SOLU1024A2000 UB = SOLU1024C1000 UZ = SOLU1024C3000 U2 = SOLU1110A2000 U3 = SOLU1220A2000 WA = SOLX1012C1000 W1 = SOLX1024A2000 WB = SOLX1024C1000 RA = SOLX2012C1000 R1 = SOLX2024A2000 RB = SOLX2024C1000 R2 = SOLX2110A2000 R3 = SOLX2220A2000

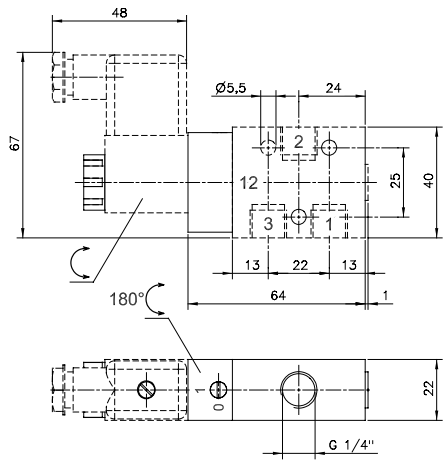
3/2

MONOSTABLE PNEUMATIC RETURN

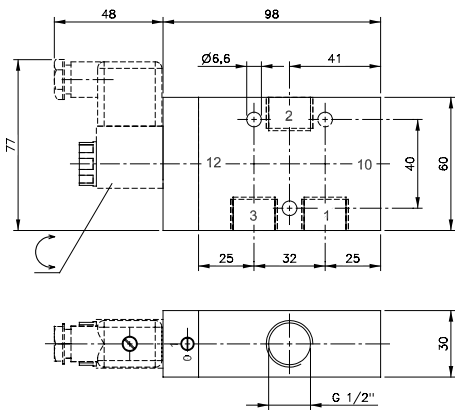


Part No.	Function	Working pressure	Size	Pack.
X1V S4 3 NC 03	3/2 NC	29 ÷ 145 psi (2 ÷ 10 bar)	1/4	1
X1V S4 3 NC 05	3/2 NC	15 ÷ 145 psi (1 ÷ 10 bar)	1/2	1

X1V S4 3 NC 03

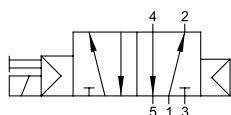


X1V S4 3 NC 05



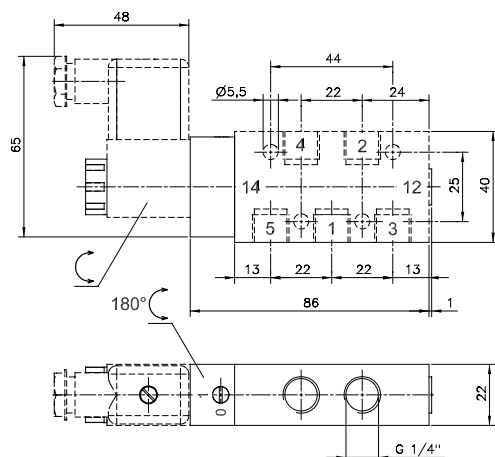
5/2

MONOSTABLE PNEUMATIC RETURN

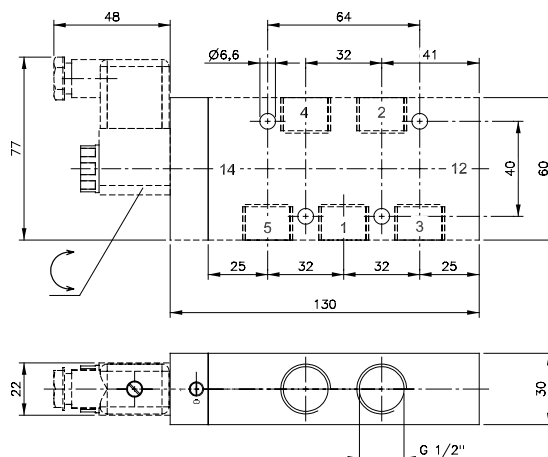


Part No.	Function	Working pressure	Size	Pack.
X1V S4 5 00 03	5/2	29 ÷ 145 psi (2 ÷ 10 bar)	1/4	1
X1V S4 5 00 05	5/2	29 ÷ 145 psi (2 ÷ 10 bar)	1/2	1

X1V S4 5 00 03

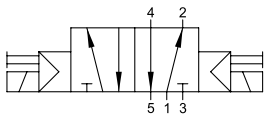


X1V S4 5 00 05



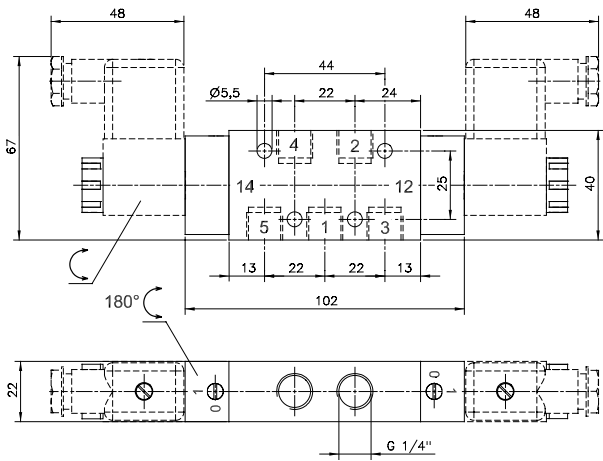
5/2

TWO STABLE POSITIONS

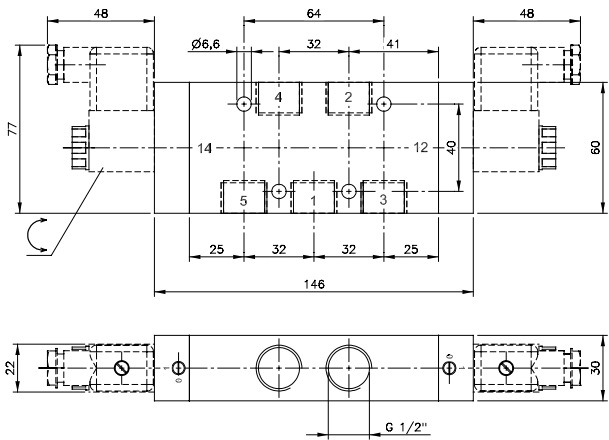


Part No.	Function	Working pressure	Size	Pack.
X1V S1 5 00 03	5/2	29 ÷ 145 psi (2 ÷ 10 bar)	1/4	1
X1V S1 5 00 05	5/2	15 ÷ 145 psi (1 ÷ 10 bar)	1/2	1

X1V S1 5 00 03



X1V S1 5 00 05





TECHNICAL CHARACTERISTICS



1/4		
	THREAD	G 1/4
	6 bar FLOW RATE with Δp 1 bar	1250 NI/min
	OPERATING PRESSURE	15 ÷ 145 psi (1 ÷ 10 bar)
	TEMPERATURE	min -58 °F (-50 °C)
		max +122 °F (+50 °C)
	ACTIVATION FORCE	20 N



Reference Standard

1907/2006 REACH	2011/65/CE RoHS	PED 2014/68/UE
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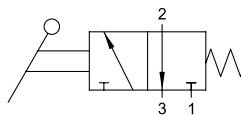
Component Parts and Materials

Stainless Steel 316 L (1.4404) body
Stainless Steel 316 L (1.4404) spool
PUR seals and FKM O-Ring

Series	Actuation	Reactuation	Ways	Function	Size
X 1 V	L	0	3	N C	0 3
	L = 90° Lever	0 = Monostable spring return 1 = Bistable 2 = Stable in 3 positions	3 = 3/2 5 = 5/2 7 = 5/3	NC = Normally closed CC = Center closed OC = Center exhausted PC = Center in pressurized 00 = Function not provided	03 = 1/4

3/2 Ways

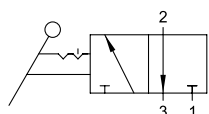
MONOSTABLE SPRING RETURN



Code	Ways	Function	Size	Pack.
X1V L0 3 NC 03	3/2	NC	1/4	1

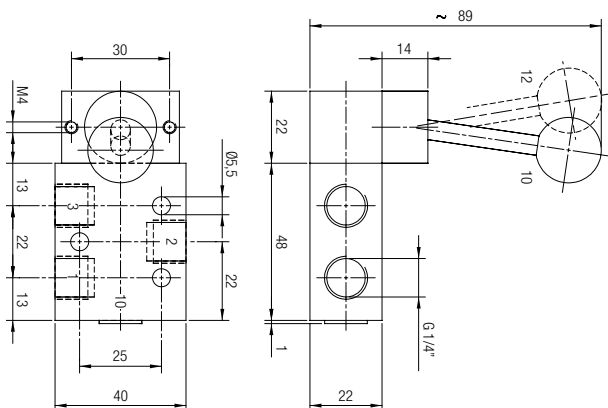
3/2 Ways

TWO STABLE POSITIONS



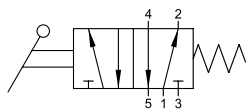
Code	Ways	Size	Pack.
X1V L1 3 00 03	3/2	1/4	1

X1V L0 3 NC 03 X1V L1 3 00 03



5/2 Ways

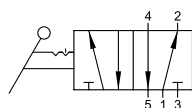
MONOSTABLE SPRING RETURN



Code	Ways	Size	Pack.
X1V L0 5 00 03	5/2	1/4	1

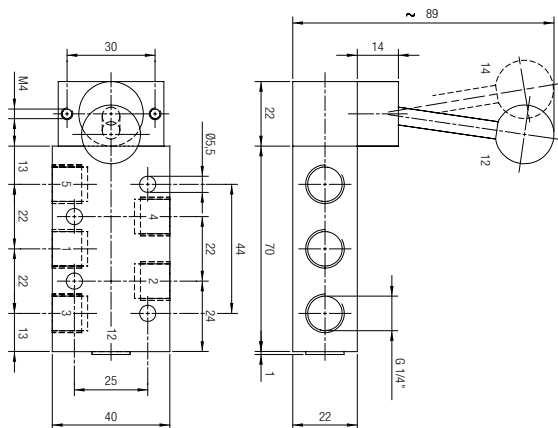
5/2 Ways

TWO STABLE POSITIONS



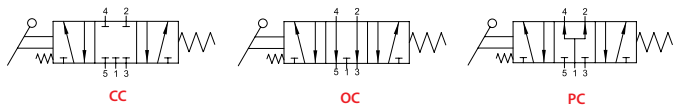
Code	Ways	Size	Pack.
X1V L1 5 00 03	5/2	1/4	1

X1V L0 5 00 03 X1V L1 5 00 03



5/3 Ways

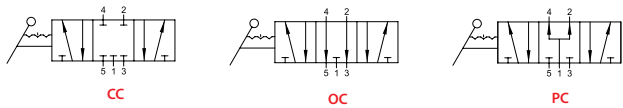
MONOSTABLE SPRING RETURN



Code	Ways	Function	Size	Pack.
X1V L0 7 CC 03	5/3	CC	1/4	1
X1V L0 7 OC 03	5/3	OC	1/4	1
X1V L0 7 PC 03	5/3	PC	1/4	1

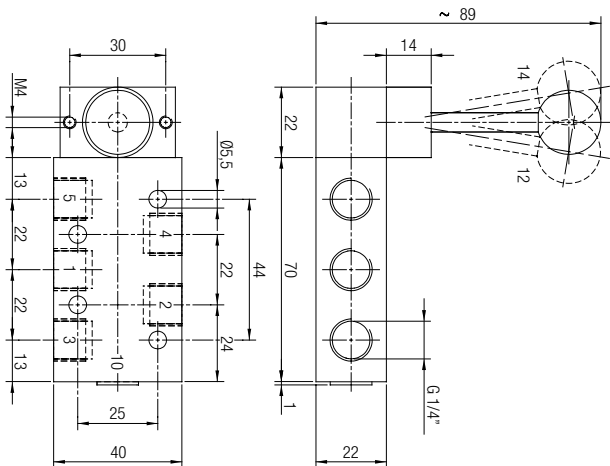
5/3 Ways

3 STABLE POSITIONS



Code	Ways	Function	Size	Pack.
X1V L2 7 CC 03	5/3	CC	1/4	1
X1V L2 7 OC 03	5/3	OC	1/4	1
X1V L2 7 PC 03	5/3	PC	1/4	1

X1V L0 7 CC 03 X1V L0 7 OC 03 X1V L0 7 PC 03
X1V L2 7 CC 03 X1V L2 7 OC 03 X1V L2 7 PC 03



COILS AND CONNECTORS

COILS AND CONNECTORS COMPATIBILITY

							
		SOLU1	SOL01	SOLX1	SOLX2	U1	U3
		22 mm	22 mm	30 mm	22 mm	22 mm	30 mm
01V							
07V							
08V							
AA							
CL-CM							
BE							

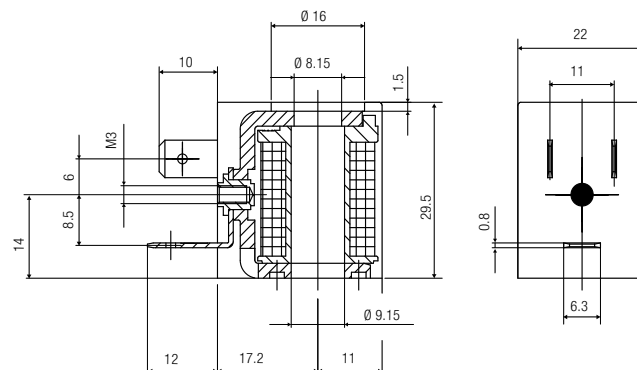
SOLU1

COIL

22 mm



9 mm



UL 1446 & CSA C22.2

Code	Short Code	Voltage	Power	Voltage tolerance	Ambient temperature	
					Min	Max
SOLU1 012 C 1 000	UA	12V DC	3W	±10 %	-4 °F (-20 °C)	+122 °F (+50 °C)
SOLU1 024 C 1 000	UB	24V DC	3W	±10 %	-4 °F (-20 °C)	+122 °F (+50 °C)
* SOLU1 024 C 3 000	UZ	24V DC	2W	±10 %	-4 °F (-20 °C)	+122 °F (+50 °C)
SOLU1 024 A 2 000	U1	24V AC	5VA	±10 %	-4 °F (-20 °C)	+122 °F (+50 °C)
SOLU1 110 A 2 000	U2	110V AC	5VA	±10 %	-4 °F (-20 °C)	+122 °F (+50 °C)
SOLU1 220 A 2 000	U3	220V AC	5VA	±10 %	-4 °F (-20 °C)	+122 °F (+50 °C)

* Solenoid Recommended (ECO-FRIENDLY), only for 01V - 07V - 08V.

INSULATION CLASS

H
CEI
EN 60085

ENCAPSULATION MATERIAL

RYNITE®

ELECTRICAL CONNECTIONS

INDUSTRIAL
AMP FORM
B - INDUSTRIAL
EN 175301-803
(EX DIN 43650)

AMBIENT TEMPERATURE

-4 °F
+122 °F

PROTECTION DEGREE

IP65
IEC 60529
WITH CONNECTOR
IP65

DUTY RATE

ED 100 %

SOL01

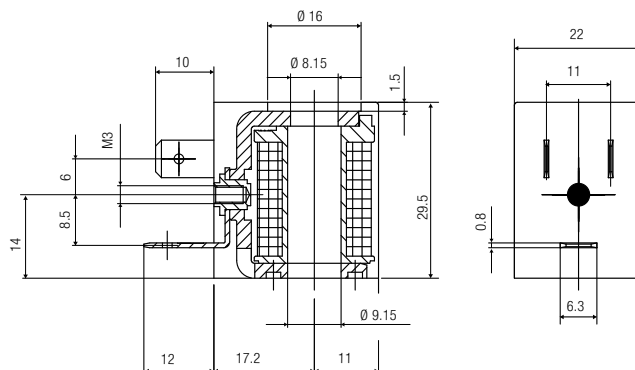
COIL



22 mm



9 mm



Code	Short Code	Voltage	Power	Voltage tolerance	Ambient temperature	
					Min	Max
SOL01 012 C 1 000	SA	12V DC	3W	±10 %	-4 °F (-20 °C)	+122 °F (+50 °C)
SOL01 024 C 1 000	SB	24V DC	3W	±10 %	-4 °F (-20 °C)	+122 °F (+50 °C)
* SOL01 024 C 3 000	SZ	24V DC	2W	±10 %	-4 °F (-20 °C)	+122 °F (+50 °C)
SOL01 024 A 2 000	S1	24V AC	5VA	±10 %	-4 °F (-20 °C)	+122 °F (+50 °C)
SOL01 110 A 2 000	S2	110V AC	5VA	±10 %	-4 °F (-20 °C)	+122 °F (+50 °C)
SOL01 220 A 2 000	S3	220V AC	5VA	±10 %	-4 °F (-20 °C)	+122 °F (+50 °C)

* Solenoid Recommended (ECO-FRIENDLY), only for 01V - 07V - 08V.

INSULATION CLASS

F
CEI
EN 60085

ENCAPSULATION MATERIAL

PA

ELECTRICAL CONNECTIONS

INDUSTRIAL
AMP FORM
B - INDUSTRIAL
EN 175301-803
(EX DIN 43650)

AMBIENT TEMPERATURE

-4 °F
+122 °F

PROTECTION DEGREE

IP65
IEC 60529
WITH CONNECTOR
IP65

DUTY RATE

ED 100 %

SOLX1

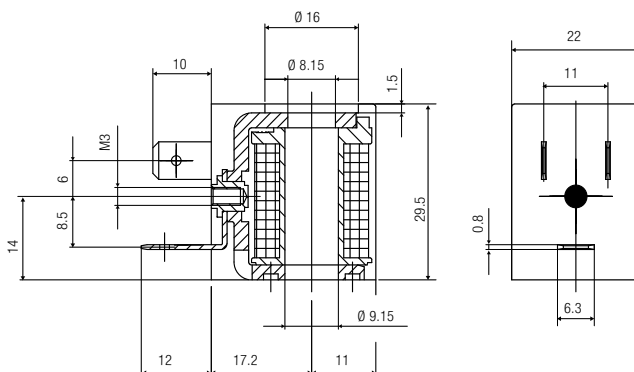
COIL



22 mm



9 mm



II 3G Ex nA IIC T5 Gc | II 3D Ex tc IIIC 95°C Dc

Code	Short Code	Voltage	Power	Voltage tolerance	Ambient temperature	
					Min	Max
SOLX1 012 C 1 000	WA	12V DC	3W	±10 %	+5 °F (-15 °C)	+122 °F (+50 °C)
SOLX1 024 C 1 000	WB	24V DC	3W	±10 %	+5 °F (-15 °C)	+122 °F (+50 °C)
SOLX1 024 A 2 000	W1	24V AC	5VA	±10 %	+5 °F (-15 °C)	+122 °F (+50 °C)

INSULATION CLASS	F CEI EN 60085
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ENCAPSULATION MATERIAL	PA
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ELECTRICAL CONNECTION	INDUSTRIAL AMP FORM B - INDUSTRIAL <i>EN 175301-803</i> <i>(EX DIN 43650)</i>
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AMBIENT TEMPERATURE	+5 °F +122 °F
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PROTECTION DEGREE	IP65 IEC 60529 WITH CONNECTOR IP65
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DUTY RATE	ED 100 %
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SOLX2

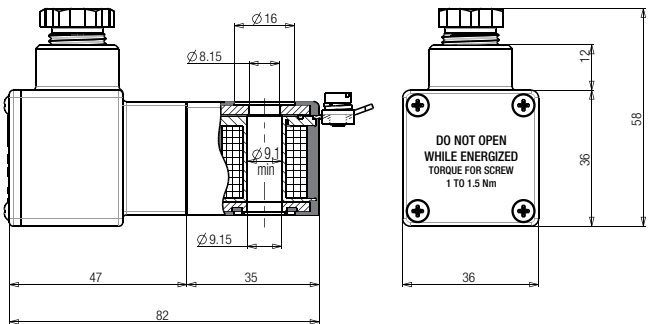
COIL

30 mm 

9 mm 



II 2G Ex db mb IIC T5 Gb | II 2D Ex tb IIIC T5 Db



Code	Short Code	Voltage	Power	Voltage tolerance	Ambient temperature	
					Min	Max
SOLX2 012 C 1 000	RA	12V DC	3W	±10 %	-58 °F (-50 °C)	+122 °F (+50 °C)
SOLX2 024 C 1 000	RB	24V DC	3W	±10 %	-58 °F (-50 °C)	+122 °F (+50 °C)
SOLX2 024 A 2 000	R1	24V AC	4,8VA	±10 %	-58 °F (-50 °C)	+122 °F (+50 °C)
SOLX2 110 A 2 000	R2	110V AC	4,8VA	±10 %	-58 °F (-50 °C)	+122 °F (+50 °C)
SOLX2 220 A 2 000	R3	220V AC	4,8VA	±10 %	-58 °F (-50 °C)	+122 °F (+50 °C)

Do not use with 01VB bases

With 08V NAMUR valves use the 08V01 spacer

INSULATION CLASS	F CEI EN 60085	ENCAPSULATION MATERIAL	PA	ELECTRICAL CONNECTIONS	PG9
AMBIENT TEMPERATURE	-58 °F +122 °F	PROTECTION DEGREE	IP66 IEC 60529	DUTY RATE	ED 100 %

COILS

CSA/UL

Possibility of replacement without intervention in the pneumatic circuit

Other voltages available upon request

360° rotation on the pilot. Coil winding: H class

Ambient temperature: +14 ÷ +113 °F. Fluid temperature: +14 ÷ +203 °F.

The solenoid valves functioning with 100V-230V must be incorporated (EN60204-1)

Under continuous service a maximum temperature will not compromise the functioning of the coil provided that the working position is ventilated.

Protection class IP65, if used with connector.

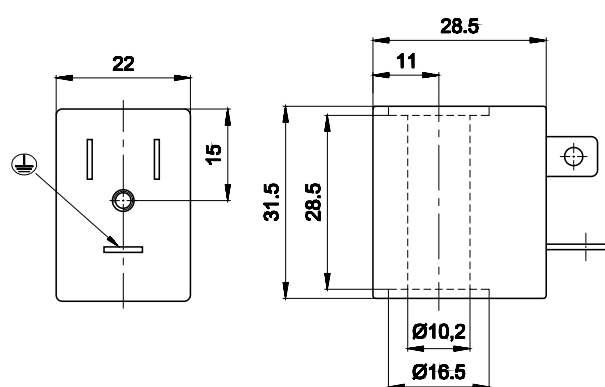
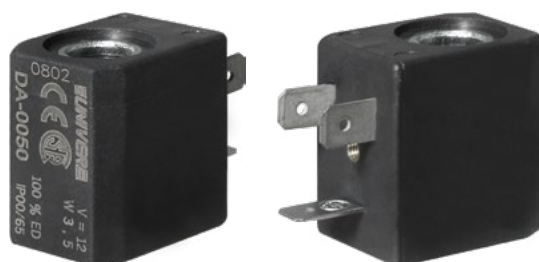


COILS U1

22 mm



10 mm



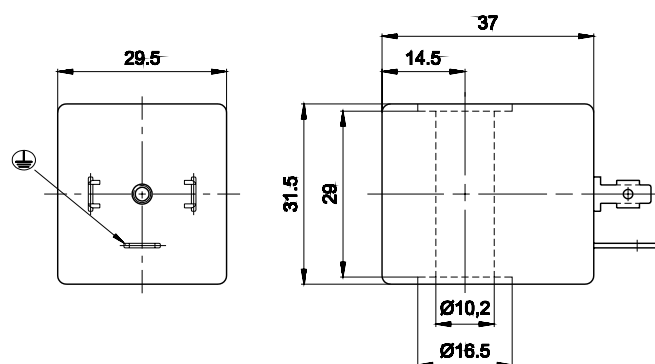
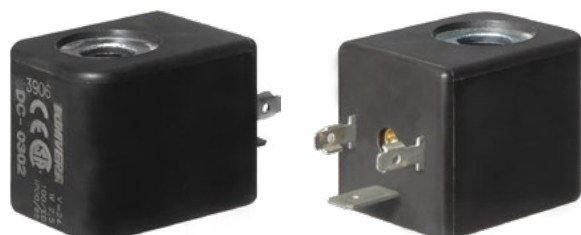
Code	Duty cycle ED (a) %	Power consumption W		Tolerance tension %	Rated voltage	Weight lb (Kg)
		Hold	Inrush			
UDA 0050	100	3,5	3,5	±10	12 V DC	0.13 (0.06)
UDA 0051	100	3,5	3,5	±10	24 V DC	0.13 (0.06)
UDA 0106	100	5,4 VA (Max)	7,8 VA (Max)	±10	24 V AC/50-60 HZ	0.13 (0.06)
UDA 0108	100	5,4 VA (Max)	7,8 VA (Max)	±10	110 V AC/50-60 HZ	0.13 (0.06)
UDA 0124	100	5,4 VA (Max)	7,8 VA (Max)	±10	230 V AC/50-60 HZ	0.13 (0.06)

COILS U3

30 mm



10 mm



Code	Duty cycle ED (a) %	Power consumption W		Tolerance tension %	Rated voltage	Weight lb (Kg)
		Hold	Inrush			
UDC 0301	100	2,5	2,5	±10	12 V DC	0.18 (0.08)
UDC 0302	100	2,5	2,5	±10	24 V DC	0.18 (0.08)
UDC 0307	100	3,3 VA (Max)	5 VA (Max)	±10	24 V AC/50-60 HZ	0.18 (0.08)
UDC 0309	100	3,3 VA (Max)	5 VA (Max)	±10	110 V AC/50-60 HZ	0.18 (0.08)
UDC 0310	100	3,3 VA (Max)	5 VA (Max)	±10	230 V AC/50-60 HZ	0.18 (0.08)

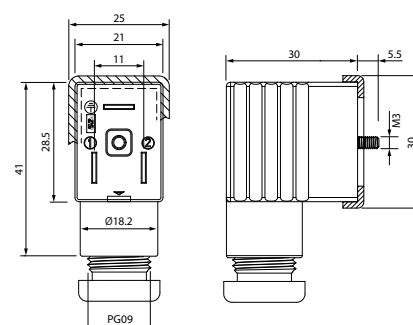
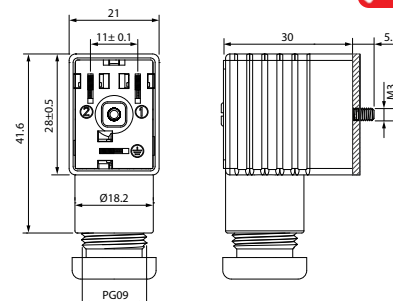
(a) = 110V - 230V solenoid valves must be built-in (EN-60204-1)

Under continuous service a maximum temperature will not compromise the functioning of the coil provided that the working position is ventilated

CON01 - CONU1

CONNECTOR

22 mm



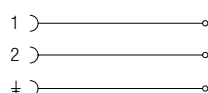
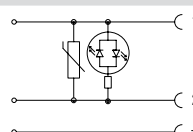
Code	Size	Colour	Characteristics
CON01 000 01	.866 (22 mm)	BLACK	2 PINS
CON02 024 00	.866 (22 mm)	TRANSPARENT	LED + VDR 0 - 24V
CON02 110 00	.866 (22 mm)	TRANSPARENT	LED + VDR 110V
CON02 250 00	.866 (22 mm)	TRANSPARENT	LED + VDR 220V
* CONU1 000 01	.866 (22 mm)	BLACK	2 PINS
* CONU2 024 00	.866 (22 mm)	TRANSPARENT	LED + VDR 0 - 24V
* CONU2 110 00	.866 (22 mm)	TRANSPARENT	LED + VDR 110V
* CONU2 250 00	.866 (22 mm)	TRANSPARENT	LED + VDR 220V

*: UL 1977 AND CAN/CSA C22.2 NO. 182.3

VDR: Fitted with varistors as surge protection device.



Wiring

CON01 000 01
CONU1 000 01

CON02 024 00 CON02 110 00 CON02 250 00
CONU2 024 00 CONU2 110 00 CONU2 250 00


ELECTRICAL CONNECTION

INDUSTRIAL
AMP FORM
B - INDUSTRIAL
EN 175301-803
(EX DIN 43650)

PROTECTION DEGREE

IP67
IEC 60529

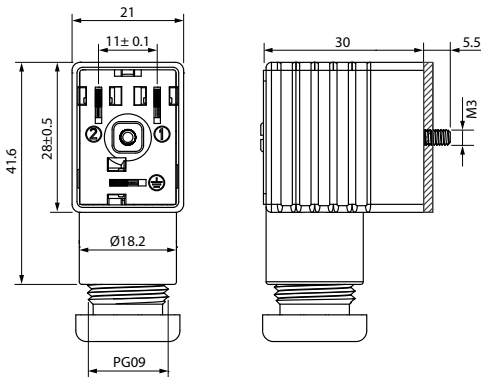
CABLE DIAMETER

1/4 ÷ 5/16
(6 ÷ 8 mm)

CONX1

CONNECTOR

22 mm 

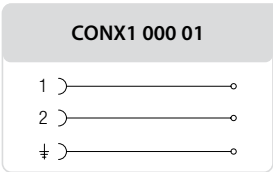


II 2G Ex e IIC T6 Gb | II 2D Ex tb IIIC T85°C Db

Code	Size	Colour	Characteristics
CONX1 000 01	.866 (22 mm)	BLACK	2 PINS



Wiring

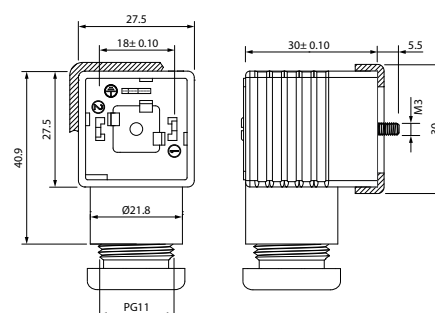
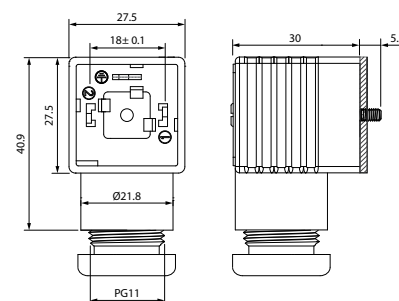


ELECTRICAL CONNECTIONS	INDUSTRIAL AMP FORM B - INDUSTRIAL <i>EN 175301-803 (EX DIN 43650)</i>	PROTECTION DEGREE	IP67 IEC 60529	CABLE DIAMETER	1/4 ÷ 5/16 (6 ÷ 8 mm)
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CON3 - CONU3

CONNECTOR

30 mm



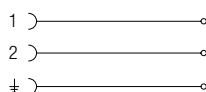
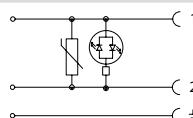
	Size	Colour	Characteristics
CON31 000 01	30 - 36 mm	BLACK	2 PINS
CON32 024 00	30 - 36 mm	TRANSPARENT	LED + VDR 0 - 24V
CON32 110 00	30 - 36 mm	TRANSPARENT	LED + VDR 110V
CON32 250 00	30 - 36 mm	TRANSPARENT	LED + VDR 220V
* CONU3 100 01	30 - 36 mm	BLACK	2 PINS
* CONU3 202 40	30 - 36 mm	TRANSPARENT	LED + VDR 0 - 24V
* CONU3 211 00	30 - 36 mm	TRANSPARENT	LED + VDR 110V
* CONU3 225 00	30 - 36 mm	TRANSPARENT	LED + VDR 220V

*: UL 1977 AND CAN/CSA C22.2 NO. 182.3

VDR: Fitted with varistors as surge protection device.



Wiring

CON31 000 01
CONU3 100 01

CON32 024 00 CON32 110 00 CON32 250 00
CONU3 202 40 CONU3 211 00 CONU3 225 00


ELECTRICAL CONNECTIONS

FORM A
EN 175301-803
(EX DIN 43650)

PROTECTION DEGREE

IP67
IEC 60529

CABLE DIAMETER

6 ÷ 8 MM
&
8 ÷ 11 MM