

FEATURES

- Explosionproof operator for use in potentially explosive atmospheres according to ATEX-Directive 2014/34/EU
EC type examination certificate no.: **LCIE 10 ATEX 3043X**
IECEX Certificate of Conformity no.: **IECEX LCI 10.0010X**
- Compliance with the Essential Health and Safety Requirements has been assured by compliance with the International and European Standards IEC and EN: 60079-0, 60079-1 and 60079-31
- Easy electrical installation by means of a screw terminal coil
- Enclosure provided with a 1/2 NPT threaded entry hole for a broad range of cable entries
- A wide range of valves can be supplied with the CNOMO size 30 solenoid pilot interface

GENERAL

Differential pressure

See «SPECIFICATIONS» [1 bar = 100 kPa]

Flow

See «SPECIFICATIONS»

Pneumatic base

ISO 15218 (CNOMO E06.05.80, size 30)

Response time

70 - 140 ms

fluids (*)	temperature range (TS)	seal materials (*)
air or inert gas	- 25°C to +60°C	NBR (nitrile) FPM (fluoroelastomer) VMQ (silicone)

GENERAL

Solenoid enclosure	Aluminium, cataphoresis black painting
Cover screws	Stainless steel
Nameplate	Aluminium

MATERIALS IN CONTACT WITH FLUID

(*) Ensure that the compatibility of the fluids in contact with the materials is verified

Body	Aluminium, black painting
Core, core tube and plugnut	Stainless steel
Springs	Stainless steel
Seals	VMQ
Upper disc	FPM
Lower disc	NBR

SAFETY CODE

Gas	II2G Ex d IIB+H2 Gb T6..T4
Dust	II2D Ex tb IIIC Db T85°C...T135°C IP66/IP67

ELECTRICAL CHARACTERISTICS

Coil insulation class	F
Coil connection	Embedded screw terminals
Electrical enclosure protection	IP67 (EN 60529)
Standard voltages	DC (=) : 24V - 48V
(Other voltages on request)	AC (~) : 24V - 48V - 115V - 230V/50-60 Hz

TEMPERATURE CLASSIFICATION TABLES

AC solenoids (~)

Un (V)	Pn (2)(3) (watt)	solenoid size M6	maximum ambient °C (1) (4)		
			surface temperature		
			T6 85°C	T5 100°C	T4 135°C
24	5,4	●	40	-	60
48	5,8	●	40	-	60
115	7,1	●	-	40	60
230	7,4	●	-	40	60

DC solenoids (=)

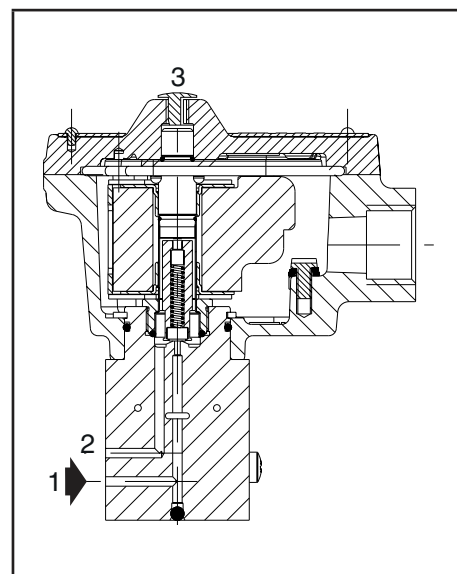
Un (V)	Pn (watt)	solenoid size M6	maximum ambient °C (1) (4)		
			surface temperature		
			T6 85°C	T5 100°C	T4 135°C
24	5,9	7,5 (3)	●	-	40
48	6	7,6 (3)	●	-	40

(1) The minimum allowable ambient temperature is -25°C for the operator. Actual temperature range can be limited depending on valve operation limits.

(2) Rectified coil construction.

(3) Maximum cold wattage.

(4) For the layout of the control circuit, see the installation and maintenance instructions at: www.asconumatics.eu



SPECIFICATIONS

SPECIFICATIONS											15-DIGIT PRODUCT CODE							
pipe size	orifice size	flow coefficient Kv				operating pressure differential (bar)			thread type	dimensions / type (1)	brass	voltage code						
		1 → 2		2 → 3		min.	max. (PS)					24 V/50 Hz	48 V/50 Hz	115 V/50 Hz	230 V/50 Hz	24 V/DC	48 V/DC	
	air, inert gas (*)																	
	(mm)	(m³/h)	(l/min)	(m³/h)	(l/min)		~	=										
WITHOUT MANUAL OPERATOR																		
NC - Normally closed, NBR seal and disc																		
1/4	1,6	0,08	1,3	0,05	0,8	0	10	10	pad mount	01	R314K311GNN00	FQ	FS	FC	FH	F1	F9	
WITH MAINTAINED MANUAL OPERATOR																		
NC - Normally closed, NBR seal and disc																		
1/4	1,6	0,08	1,3	0,05	0,8	0	10	10	pad mount	01	R314K311GNN01	FQ	FS	FC	FH	F1	F9	

⁽¹⁾ For dimensions, see drawing(s) for each construction type on the following page(s).

(*) Ensure that the compatibility of the fluids in contact with the materials is verified.

15-DIGIT PRODUCT CODE

R 314 K 311 GN N00 F1

Connection

R = Pad mount

Product series

314

Revision letter

K = Initial release

Valves version

311 = ISO 15218 (CNOMO E06.05.80, size 30)
1,6 mm orifice size / LPKF

Voltage - class

FQ = 24 V / 50-60 Hz - class F

FS = 48 V / 50-60 Hz - class F

FC = 115 V / 50-60 Hz - class F

FH = 230 V / 50-60 Hz - class F

F1 = 24 V DC - class F

F9 = 48 V DC - class F

Options

Without manual operator

N00 = NBR disc and seals

With maintained manual operator

N01 = NBR disc and seals

Electrical interface

Standard

GN = 1/2 NPT female thread cable entry
screw terminal

Option

GT = M20 x 1,5 female thread cable entry
screw terminal

INSTALLATION

- The solenoid valves can be mounted in any position without affecting operation
- The solenoid valves are supplied with mounting screws
- Mounting on valve or single, non-joinable subbase with ISO 15218 (CNOMO, size 30) interface
- Installation/maintenance instructions are included with each valve

OPERATOR CONNECTION

- Any ATEX approved cable entry device can be fitted in the 1/2" NPT threaded entry hole (M20 x 1.5, in option); supplied without cable gland
- Internal and external earthing connection
- The operator can be rotated through 360° to select the most favourable position for cable entry

DIMENSIONS (mm), WEIGHT (kg)



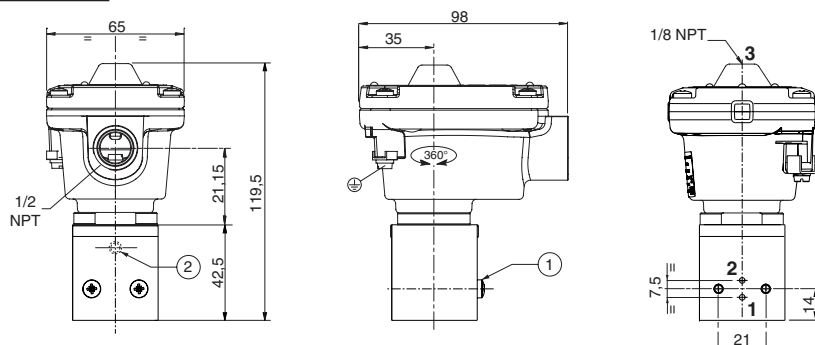
TYPE 01

Electrical interface "GN"

IEC, EN: 60079-1, 61241-1

II2G Ex d IIB+H2 Gb T6..T4

II2D Ex tb IIIC Db IP66/IP67 T85°C..T135°C



type	weight ⁽²⁾
01	0,7

① Mounting: two screws M4 x 35

② Manual operator location

⁽²⁾ Without cable gland.

All leaflets are available on: www.asconumatics.eu

V1012-2



THORNE &
DERRICK
INTERNATIONAL

Thorne & Derrick
+44 (0) 191 490 1547
www.heatingandprocess.com