

# MINI-SOLENOID VALVES

non-sparking protection non-sparking protection
II 3G Ex **nA** II T6..T4, II 3D Ex tD A22 T85°C..T135°C IP67 ISO 15218 (CNOMO, size 15) interface direct operated, pad mounting body, connection M12



NC



 $C \in$ 

### **FEATURES**

 Mini-low consumption valves for use in potentially explosive atmospheres according to ATEX-Directive 94/9/EC

EC type examination certificate no.: INERIS 10 ATEX 3016X

- Compliance with the Essential Health and Safety Requirements has been assured by compliance with European Standards EN 60079-0, EN 60079-15, EN 61241-0 and EN 61241-1
- · Compact, monobloc solenoid pilot valve with M12 connector
- Integral LED indicator and electrical protection, LED indicator visible from 3 sides
- Universal version for vacuum operation (3/2 way)

### **GENERAL**

**Differential pressure** See «SPECIFICATIONS» [1 bar = 100 kPa] Pneumatic base ISO 15218 (CNOMO E06.36.120N, size 15)

Connection Response time 8 - 15 ms

fluids (*)	temperature range (TS)	seal materials (*)
air or inert gas	05°C to 140°C (LDO) (I)	NBR (nitrile)
filtered at 50 µm, lubricated or not	- 25°C to + 40°C (LP2) (1)	FPM (fluoroelastomer)

<sup>(1)</sup> LP2: see "electrical characteristics" table

### MATERIALS IN CONTACT WITH FLUID

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

**Body** 

Internal parts POM, PET, stainless steel and brass

**Seals** NBR (disc), FPM (others)

Pneumatic interface seal

### **OTHER MATERIALS**

Thermoplastic PET

**Enclosure with PVC cable** PP (polypropylene) glass-fibre reinforced

#### **ELECTRICAL CHARACTERISTICS** SAFETY CODE

Coil insulation class

⟨Ex⟩ II 3G Ex nA II T6..T4

II 3D Ex tD A22 IP65 T 85°C..T 135°C

Connection Connector M12 (5 m cable length)

> CNOMO E03.62.520.N connector M12

**Electrical safety IEC 335** 

Moulded IP67 (EN 60529) **Electrical enclosure protection** 

Standard voltages DC (=): 24V

coils		power ratings (2)	max. amb	type (5)		
power voltages ranges		hot/cold	sur			
		=	Т6	T5	T4	type
ranges	=	(W)	85°C	100°C	135°C	
LP2 (3)	24	1,15 / 1,35	40	55	60	01

Nominal power ratings with LED indicator and electrical protection.

The minimum allowable ambient temperature is -25°C. Actual temperature range can be limited depending on valve operation limits.

Voltage: -15% / +20%

COII	cons power ratings (5)		IIIax. aiiik	type (5)		
power voltages		hot/cold	sur			
power ranges	voitages	II	T6	T5	T4	type
runges	=	(W)	85°C	100°C	135°C	
LP2 (3)	24	1,15 / 1,35	40	55	60	01

#### (5) Refer to the dimensional drawings on the following page

## **SPECIFICATIONS**

			flo	ow					basic catalogue number				
	orifice size	at 6	bar	coefficient		operating pressure differential (bar)		power		manual o	operator		
	3120	l/min	(ANR)	K	(v	unieren	liai (Dai)	ranges	impulse		maintained		
	(mm)					min.	max. (PS)		~	=	~	=	
ı		1 → 2	2 → 3	1 → 2	2 <b>→</b> 3								
ı	3/2 NC - normally closed (Without LED and protection)												
	0,6	11	20	0,11	0,26	0	10	LP2	-	30212109NAD	-	30212110NAD	
	0,8	17	28	0,22	0,35	0	8	LP2	-	30212112NAD	-	30212113NAD	
	1.1	32	51	0.35	0.50	0	5	LP2	-	30212118NAD	-	30212119NAD	

When ordering, please specify, in addition to the basic catalogue number, the type of current: voltage

Examples: 24V DC: 30212110NAD 24V DC



Thorne & Derrick

specifications are subject to change without notice. All rights reserved.



### **OPTIONS AND ACCESSORIES**

• Seals and disc made of FPM (fluoroelastomer)

### **INSTALLATION**

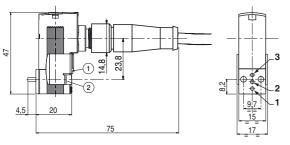
- The solenoid valves can be mounted in any position without affecting operation
- Pre-wired connector, supplied and certified with the product (Connector M12, with 5 m cable length). For connection, only use the connector supplied with the product
- Solenoid valve supplied with mounting screws and mounting pad seal(s)
- Installation/maintenance instructions are included with each valve

### **DIMENSIONS** (mm), **WEIGHT** (kg)



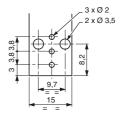


TYPE 01
IEC 335 /
Straight M12 connector, 5 m cable length IP67



	connection				
function	1	2	3		
NC	Р	0	Е		
P: Pressure O: Outlet E: Exhaust					

Subbase mounting surface: ISO 15218 (CNOMO E06.36.120N, size 15)



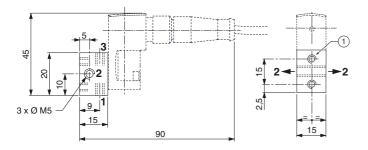
weight (1)
0.288
0,200

- (1) Manual operator location
- 2 2 mounting screw M3 x 20



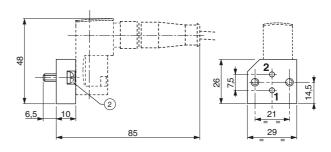
## Single subbase

Aluminium or brass



# Adapter CNOMO size 30 (only for NC version) Aluminium

(1) with connector.



1 Mounting: 2 holes M3, depth 4,5

Orifice (2) can be connected on the left or on the right of the subbase.

material	catalogue number	weight (1)
aluminium	88263002	0,011
brass	30300001	0,034

<sup>(1)</sup> subbase alone

2 Mounting: 2 screws M4 x 10 (supplied)

catalogue number	weight (2)
88263001	0,018

<sup>(2)</sup> adapter alone



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