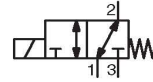




SOLENOID VALVES

direct operated, balanced poppet
high flow, flameproof enclosure
II 2 G/D Ex db IIC T6..T4 Gb / Ex tb IIIC Db IP66/67
1/4 - 1/2

U



3/2
Series
327

FEATURES

- Solenoid valves with explosionproof operators NF or WSNF type for use in potentially explosive atmospheres according to ATEX Directive 2014/34/EU EU type examination certificate no.: **LCIE 00 ATEX 6008 X** IECEx Certificate of Conformity no.: **IECEx LCI 07.0015X**
- Compliance with the Essential Health and Safety Requirements has been assured by compliance with the International and European Standards EN-IEC 60079-0, EN-IEC 60079-1 and EN-IEC 60079-31
- The solenoid valves are recommended for pilot applications with high flow, wide pressure ranges and no minimum operating pressure
- Special execution for low ambient and fluid temperatures
- Manual Operators are optional including an under pressure removable type
- The valves are certified according to IEC 61508 Functional Safety data and have SIL-3 capability (TUV & Exida certification)

GENERAL

Differential pressure

0 - 10 bar [1 bar = 100 kPa]

Maximum viscosity

65 cSt (mm²/s)

Response time

< 100 ms

fluids (*)	temperature range (TS)	seal materials (*)
5,7 mm air, inert gas, water, oil	- 20°C to + 120°C	FPM (fluoroelastomer)
	- 40°C to + 40°C	VMQ (silicone)
	- 60°C to + 60°C	(F)VMQ ((fluoro)silicone)
12 mm air, inert gas	- 25°C to + 60°C	NBR (nitrile)
	- 10°C to + 90°C	FPM (fluoroelastomer)
	- 50°C to + 60°C	(F)VMQ ((fluoro)silicone)

MATERIALS IN CONTACT WITH FLUID

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

Body

Brass or stainless steel AISI 316L

Stem, core tube

Stainless steel

Core and plugnut

Stainless steel

Springs

Stainless steel

Seals & poppets

Ø 5,7 mm: FPM or VMQ or (F)VMQ

Ø 12 mm: NBR or FPM or (F)VMQ

PTFE

Rider ring

OTHER MATERIALS

Solenoid enclosure

NF: Chromated aluminium, epoxy coated

WSNF: Stainless steel (AISI 316L)

NF: Steel (zinc plated)

WSNF: Stainless steel

Stainless steel

Stainless steel

Core tube

Core and plugnut

ELECTRICAL CHARACTERISTICS

Coil insulation class

H (5,7 mm), F (12 mm) IECEx / Ex II 2G Ex db IIC T6..T4 Gb

Coil connection

Screw terminals IECEx / Ex II 2D Ex tb IIIC 85°C to 135°C Db IP66/67

Electrical safety

IEC 60335-1

Standard voltages

DC (=) : 24V - 48V

(Other voltages and 60 Hz on request)

AC (~) : 24V - 48V - 115V - 230V / 50 Hz

SAFETY CODE

option		~	~	=	temperature range (TS) (C°) ⁽³⁾	~	=	(1)	
		(VA)	(VA)	(W)		(W)	230 V/50 Hz		24 V DC
NF	5,7	10	10	10	9 / 11,2	-60 to + 40/60	400915-017	400913-142	01-02
		5,8	5,8	5,8	5,2 / 5,7	-60 to + 60/75/90	400921-297	400914-442	
		3,7	3,7	3,7	3,2 / 3,6	-60 to + 60	(2)	400914-242	
		1,85	1,85	1,85	1,5 / 1,8	-60 to + 55	(3)	400914-542	
WSNF	12	10	10	10	9 / 10	-60 to + 40/60	400921-197	400911-342	01-02
		14,1	14,1	14,1	11 / 14	-60 to + 40/60/90	400921-697	400911-642	

(1) Refer to the dimensional drawings on the following page.

(2) AC limited to 127V/50/60Hz or 125V/DC

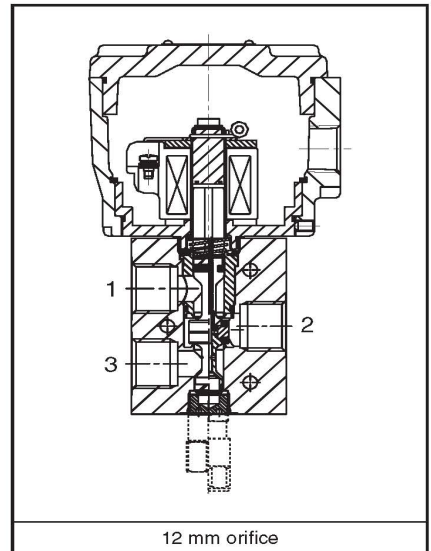
(3) Temperature range can be limited by sealings.

(3) Only available in 24, 48 and 110V/DC

Pn	operator AC (~)			
	max. ambient temp. °C			
	surface temperature			
(W)	T6 85°C	T5 100°C	T4 135°C	
insulation class F/H (155°C/180°C) 100% E.D.				
1,85 ⁽⁴⁾	55	-	-	
3,7 ⁽⁴⁾	60	-	-	
5,8 ⁽⁴⁾	60	75	90	
10 ⁽⁴⁾	40	60	-	
14,1	40	60	90	

(4) AC rectified coil construction.

Pn	operator DC (=)			
	max. ambient temp. °C			
	surface temperature			
(W)	T6 85°C	T5 100°C	T4 135°C	
insulation class F/H (155°C/180°C) 100% E.D.				
1,8	55	-	-	
3,6	60	-	-	
5,7	60	75	90	
10	40	60	-	
11,2	40	60	-	
14	40	60	90	



SPECIFICATIONS

pipe size	orifice size	flow coefficient Kv		operating pressure differential (bar)				power coil (W)		catalogue number		options				
				min.	max. (PS)		maintained man. operator ⁽²⁾					impulse man. operator ⁽³⁾				
					air (*)	water (*)				brass	stainless steel					
NPT	(mm)	(m³/h)	(l/min)		~	=	~	=	~	=	~/=	~/=				
U - Universal, FPM seals and poppets																
1/4	5,7	0,45	7,5	0	10	10	10	10	10	11,2	NF8327B001	WSNF8327B002	MS ⁽¹⁾	MO	-	-
									5,8	5,7	NF8327B201	WSNF8327B202	MS ⁽¹⁾	MO	-	-
									3,7	3,6	NF8327B101	WSNF8327B102	MS ⁽¹⁾	MO	-	-
									1,85	1,8	NF8327B301	WSNF8327B302	MS ⁽¹⁾	MO	-	-
	12	1,5	25	0	10	10	-	-	14,1	14	NF8327A649	WSNF8327A650	MS ⁽¹⁾	MO	-	-
1/2	12	1,5	25	0	10	10	-	-	14,1	14	NF8327A609	WSNF8327A610	MS ⁽¹⁾	MO	-	-
U - Universal, NBR seals and poppets																
1/2	12	1,5	25	0	10	10	-	-	10	10	NF8327A607	WSNF8327A608	MS ⁽¹⁾	MO	-	-
U - Universal, VMQ seals and poppets																
1/4	5,7	0,45	7,5	0	10	10	10	10	10	11,2	NF8327B011	WSNF8327B012	MS ⁽¹⁾	MO	-	-
U - Universal, (F)VMQ seals and poppets																
1/4	5,7	0,45	7,5	0	10	10	10	10	5,8	5,7	NF8327B211	WSNF8327B212	MS ⁽¹⁾	MO	-	-
									3,7	3,6	NF8327B111	WSNF8327B112	MS ⁽¹⁾	MO	-	-
									1,85	1,8	NF8327B311	WSNF8327B312	MS ⁽¹⁾	MO	-	-
									10	10	NF8327A645	WSNF8327A646	MS ⁽¹⁾	MO	-	-
1/2	12	1,5	25	0	10	10	-	-	10	10	NF8327A605	WSNF8327A606	MS ⁽¹⁾	MO	-	-
U - Universal, (F)VMQ sealings and poppets (minimum fluid temperature -60°C)																
1/4	5,7	0,45	7,5	0	10	10	10	10	5,8	5,7	NF8327B291	WSNF8327B292	MS ⁽¹⁾	MO	-	-

⁽¹⁾ Functional Safety certification is not applicable with this feature.

⁽²⁾ Under pressure removable execution

OPTIONS

- Waterproof enclosure with embedded screw terminal coil according to protection class IP67, CEE-10
- Explosionproof enclosures for use in zones 1/21-2/22, categories 2-3 to ATEX Directive 2014/34/EU (www.asco.com)
- Electrical enclosures according to "NEMA" standards are available
- Compliance with "UL", "CSA" and other local approvals available on request
- 3/8" pipe thread executions are available on request
- Stainless steel exhaust protector for valves certified to IEC 61508 Functional Safety, catalogue number: **131875-015** (NPT 1/4) or **131875-013** (NPT 1/2)
- Other pipe connections are available on request
- Any ATEX approved cable entry device can be fitted in the 1/2" NPT threaded entry hole (M20 x 1.5 in option), refer to the nameplate for identification of the maximum cable temperature
- Material certification like EN 10204 3.1 on the 316L Stainless Steel bodies are available on request

INSTALLATION

- The solenoid valves can be mounted in any position without affecting operation
- Solenoid valves have 2 or 3 mounting holes in body
- 1/2" NPT threaded cable entry. Enclosures are supplied without cable gland
- Pipe connection identifier is 8 = NPT (ANSI 1.20.3)
- Installation/maintenance instructions are included with each valve

SPARE PARTS KIT

catalogue number	spare parts kit no.
	~/=
(WS)NF8327B001/002	C123670
(WS)NF8327B011/012	C131237
(WS)NF8327B101/102/201/202	C132251
(WS)NF8327B111/112/211/212	C132253
(WS)NF8327B301/302	C133441
(WS)NF8327B311/312	C133442
(WS)NF8327A605/606/645/646	C117638
(WS)NF8327A607/608	C117640
(WS)NF8327A609/610/649/650	C117640V

ORDERING EXAMPLES:

NF	8	327	B	001	230V / 50 Hz
WSNF	8	327	B	202	MS 115V / 50 Hz
NF	8	327	A	607	MO 24V / DC
NF	8	327	A	606	230V / 50 Hz

prefix — pipe thread — basic number — voltage — suffix

ORDERING EXAMPLES KITS:

C123670	
C131237	
C117640	V

basic number — suffix

DIMENSIONS (mm), WEIGHT (kg)

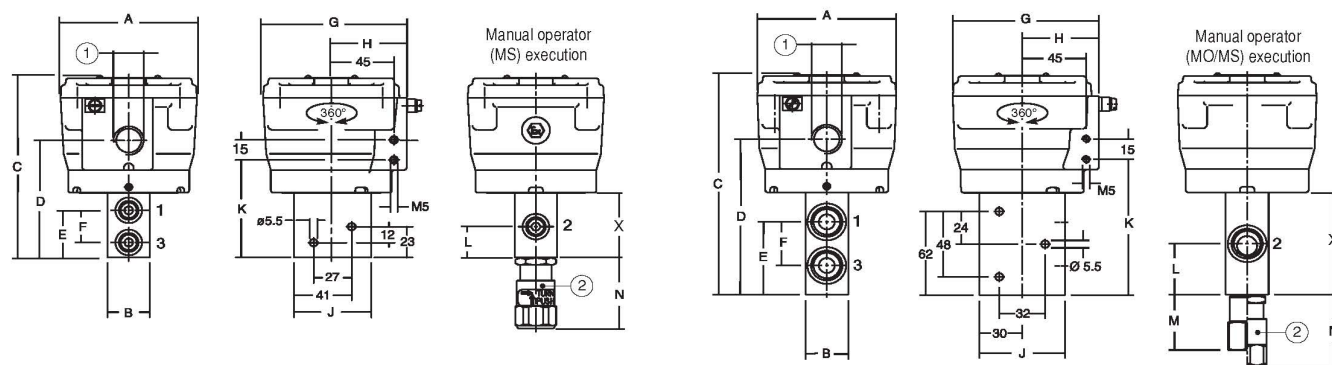


TYPE 01-02

Prefix "NF", "WSNF" Solenoid
Aluminium, stainless steel
EN-IEC 60079-1 and EN-IEC 60079-31
II 2G Ex db IIC Gb, II 2D Ex tb IIIC Db IP66/67

Type 01: NF8327B001/011/101/111/201/211/291/301/311
Type 02: WSNF8327B002/012/102/112/202/212/292/302/312

Type 01: NF8327A605/607/609/645/649
Type 02: WSNF8327A606/608/610/646/650



- ① 1/2 NPT
- ② Manual operator location

type	prefix option	catalogue number	A	B	C	D	E	F	G	H	J	K	L	M	N	X	weight ⁽¹⁾
01	NF	NF8327B001/011/101/111/201/211/291/301/311	97	30	136	87	35	24	102	54	55	73	23	-	54	48	2,6
		NF8327A605/607/609/645/649	97	30	165	115	54	32	102	54	60	100	38	40	54	76	2,4
02	WSNF	WSNF8327B002/012/102/112/202/212/292/302/312	97	30	136	87	35	24	102	54	55	73	23	-	54	48	2,6
		WSNF8327A606/608/610/646/650	97	30	165	115	54	32	102	54	60	100	38	40	54	76	3,8

⁽¹⁾ including coil.