

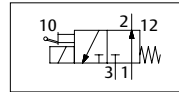
ASCO™ Solenoid Valves

for Fire Deluge applications - direct operated, balanced poppet, 1/4

3/2
SERIES
327

Features

- These solenoid valves are designed for the control of Fire deluge valves for Sprinkler systems
- Direct operated, balanced poppet, 3/2-way, Normally Closed, Normally Open valve with auto latching lever and manual override
- In normal state the Solenoid Valve is de-energized. In case of fire the Detection Unit of the Sprinkler System will detect this and energizes the solenoid valve. This will open the large Deluge Valve which supplies the water to all the interconnected Sprinkler Heads
- PTFE rider rings and graphite-filled PTFE seals reduce friction and eliminate sticking
- Coils used in metal enclosures have class H insulation materials
- Peak voltage suppression diodes are standard in DC solenoids with metal enclosures
- The solenoid valves satisfy all relevant EU directives



General

Differential pressure 0 - 16 bar [1 bar = 100kPa]
Maximum viscosity 65cST (mm²/s)
Response times 75 - 100 ms

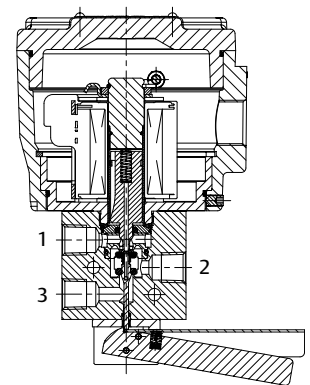
fluids (*)	temperature range (TS)	seal material (*)
air, inert gas, fresh water	-20 to +60°C	VMQ (silicone)



Materials in contact with fluid

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

	Stainless steel body
Body	AISI 316L SS
Stem	Stainless steel
Core tube	Stainless steel
Core and plugnut	Stainless steel
Springs	Stainless steel
Sealings & poppets	VMQ
Rider ring	PTFE



Specifications

pipe size	orifice size	flow coefficient Kv		operating pressure differential (bar)		power level (W)	prefix optional solenoids			basic catalogue number
				min.	max. (PS)		ATEX / IECEx			
					air, water, gas (*)		Ex db		Ex eb mb	
							~/=	NF	WSCR	
❖	(mm)	(m³/h)	(l/m)			~/=				stainless steel
U - Universal, VMQ sealings and poppets										
1/4	5.7	0.45	5.8	0	16	8	●	●	●	❖ 327B502

❖ Select 8 for NPT ANSI 1.20.3 or Select G for ISO G(228/1)

Prefix table

prefix							description
1	2	3	4	5	6	7	
N	F						Flameproof - Aluminium (EN/IEC 60079-1, 60079-31)*
W	S	C	R				Flameproof 316L SS (EN/IEC 60079-0+1+31)*
W	S	C	R	E	M		Increased Safety / Encapsulated 316L SS (EN/IEC 60079-0+7+18+31)*

* ATEX/IECEx valves using these solenoids are approved according to EN ISO 80079-36 & EN ISO 80079-37 (non electrical)

Options & Accessories

catalogue number	spare part kit no. ⁽¹⁾	mounting bracket
	~ / =	
NF ❖327B502	C326404	■
WSCR ❖327B502	C326405	■

❖ Select 8 for NPT ANSI 1.20.3 or select G for ISO G(228/1)

⁽¹⁾ Standard prefixes/suffixes are also applicable to kits

■ Mounting holes in body

Ordering Examples Valves:

	NF	8	327B502	24V / DC
	WSCR	G	327B502	230V / 50/60HZ
prefix				
pipe thread				
basic number				
				voltage

Product Selection Guide

STEP 1

Select the fluid temperature range and seal material from the general table on page 1. Select, based on the selected seal material (if applicable), the basic catalogue number. Also select the pipe thread identification letter.

Example: G327B502

STEP 2

Select prefix (combination): Select the appropriate operator from the prefix table on the left. Select for this operator in the electrical characteristics table below: the type of electrical enclosure protection and the desired temperature class.

Warning: the ambient temperature range of your application may not exceed the temperature range of your operator (see also below the section: Explanation of temperature ranges of solenoid valves).

Example: NF G327B502

STEP 3

Select voltage. Refer to standard voltages below.

Example: 230V / 50/60Hz

STEP 4

Final catalogue / ordering number.

Example:

SC G327B502 VMS 230V / 50/60 Hz

Explanation of temperature ranges of solenoid valves

Valve temperature range	The valve temperature range (TS) is determined by the selected seal material, the temperature range for proper operation of the valve and sometimes by the fluid (e.g. steam)
Operator ambient temperature range	The operator ambient temperature range is determined by the selected power level and the safety code
Total temperature range	The temperature range of the complete solenoid valve is determined by the limitations of both temperature ranges above

Electrical characteristics

Coil insulation class H

Electrical safety IEC 335

Standard voltages

DC (=) 24V; Allowable voltage variation $\pm 15\%$

AC (~) 115V - 230V/50/60Hz; Other voltages are available on request

prefix option	power ratings				operator ambient temperature range	safety code	electrical enclosure protection (EN 60529)	replacement coil / kit		Type ⁽²⁾
	inrush	holding		hot/cold						
	~	~		=						
	(VA)	(VA)	(W)	(W)						
(C°)										
Medium Power (MP)										
NF	8,0	8,0	5,0	6,4 / 8	-20 to +60	II2G Ex db IIC Gb T6, II2D Ex tb IIIC Db	IP67, alu.	400962-497	400961-042	01
WSCR	8,0	8,0	5,0	6,4 / 8	-20 to +60	II2G Ex db IIC Gb T6, II2D Ex tb IIIC Db	IP67, SS	400962-497	400961-042	02
WSCREM	8,0	8,0	5,0	6,4 / 8	-20 to +60	II2G Ex eb mb IIC Gb T6, II2D Ex tb IIIC Db	IP67, SS	400962-497	400961-042	02

⁽²⁾ Refer to the dimensional drawings on page 3 and 4

Electrical connections

prefix	connection
WSCREM	316 SS cable gland for cables with an outer diameter from 7,2 to 11,7 mm.
NF, WSCR	1/2" NPT threaded cable entry. Enclosures are supplied without cable gland
NFET, WSCRET	M20 x 1,5 threaded cable entry. Enclosures are supplied without cable gland

Additional options

- M20 x 1,5 (prefix "ET") conduits (aluminium or 316 SS) available for steel solenoid housing
- Solid state components for peak voltage suppression and/or rectification
- Material certification like EN 10204 3.1 on the 316L Stainless Steel bodies are available on request

Installation

- Multi language installation/maintenance instructions are included with each valve
- The solenoid valves must be mounted vertical and upright
- The mounting holes are provided in the valve body
- Threaded pipe connection identifier is 8 = NPT (ANSI 1.20.3); G = G (ISO 228/1)
- Declarations of conformity are available on request
- All enclosures are supplied without cable gland
- All DC solenoids with metal enclosure are provided with switch-off peak voltage suppression diodes

Dimensions (mm), Weight (kg)

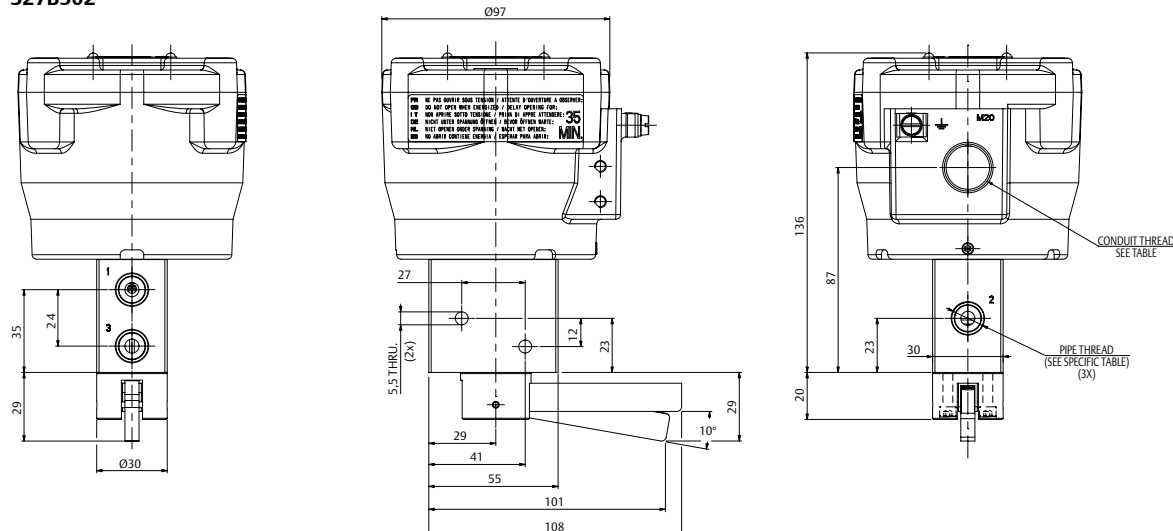


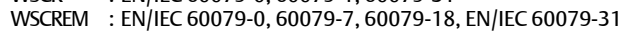
TYPE 01

Aluminium, epoxy coated

NF : EN/IEC 60079-1, 60079-31

327B502





139

101

23

30

2

CONDUIT THREAD
SEE TABLE

PIPE THREAD
(SEE SPECIFIC TABLE)
(3X)