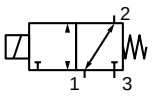
# SOLENOID VALVES

direct operated, basic flow
balanced poppet
1/4

U




**3/2**
Series
**327**

## FEATURES

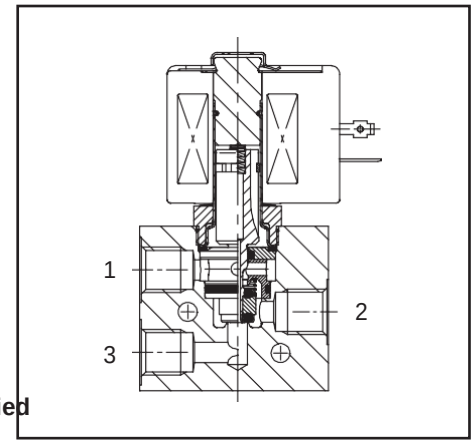
- *The valves are certified according to IEC 61508 Functional Safety data and have SIL-3 capability (TÜV & Exida certification)*
- *The solenoid valves are recommended for pilot applications with basic flow, wide pressure ranges and no minimum operating pressure*
- *PTFE rider rings and graphite-filled PTFE seals reduce friction and eliminate sticking*
- *Coils used in metal enclosures have class H insulation materials*
- *Dedicated execution for low power*
- *Dedicated execution for extreme low ambient temperatures*
- *Peak voltage suppression diodes are standard in DC solenoids with metal enclosures*
- *The solenoid valves satisfy all relevant EU directives*
- *Manual Operators are optional including an under pressure removable type*
- *Environmental NACE compliant and certified vibration resistant in combination with WSCR solenoids*

## GENERAL

**Differential pressure** 0 - 10 bar [1 bar = 100kPa]
**Maximum viscosity** 65cST ($mm^2/s$)
**Response times** 75 - 100 ms(1)

| fluids(2) (✶) | temperature range (TS)(3) | seal materials (✶) |
|---|---|---|
| air, inert gas, water, oil | -20 to +120°C<br>-40 to +40°C<br>-60 to +60°C | FPM (fluoroelastomer)<br>VMQ (silicone)<br>(F)VMQ ((fluor)silicone) |

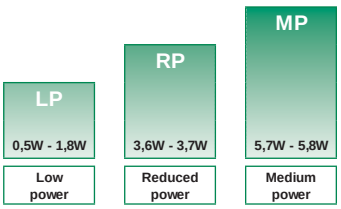
(1) Energising time for Ex i version booster coils will be < 2 sec (NFIS, WSNFIS and WSCRIS)
(2) Air / inert gas only for Ex i version (NFIS, WSNFIS and WSCRIS)
(3) Can be limited by the operator ambient temperature range for explosion proof solenoids




## MATERIALS IN CONTACT WITH FLUID

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

| | Brass body | Stainless steel body |
|---|---|---|
| **Body** | Brass | AISI 316L SS |
| **Stem** | Stainless steel | Stainless steel |
| **Core tube** | Stainless steel | Stainless steel |
| **Core and plugnut** | Stainless steel | Stainless steel |
| **Springs** | Stainless steel | Stainless steel |
| **Sealings & poppets** | FPM, VMQ, (F)VMQ | FPM, VMQ, (F)VMQ |
| **Rider ring** | PTFE | PTFE |





**POWER LEVELS - cold electrical holding values (watt)**

## SPECIFICATIONS

| pipe size | orifice size | flow coefficient Kv | | operating pressure differential (bar) | | power level | prefix optional solenoids | | | | | | | | | basic catalogue number | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | min. | max. (PS) air/water (✶) | | NEMA 7&9 | ATEX / IECEx Ex db | | Ex i | | Ex eb mb | Ex mb | IP65 | | | |
| ❖ | (mm) | ($m^3/h$) | (l/m) | | ~/= | ~/= | EF | NF | WSCR | NFIS | WSCRIS | EM | WSCREM | PV | SC | brass(4) | stainless steel |
| **U - Universal, FPM sealings and poppets (minimum fluid temperature -20°C)** (3) | | | | | | | | | | | | | | | | | |
| 1/4 | 5,7 | 0,45 | 7,5 | 0 | 10 | BP | ● | ● | - | - | - | ● | - | ❍ | ● | ❖ 327B001 | ❖ 327B002 |
| 1/4 | 5,7 | 0,45 | 7,5 | 0 | 10 | MP | - | ● | ● | - | - | ● | ● | - | ● | ❖ 327B201 | ❖ 327B202 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/4 | 5,7 | 0,45 | 7,5 | 0 | 10 | RP | - | ● | ● | - | - | ● | ● | - | ● | ❖ **327B101** | ❖ **327B102** |
| 1/4 | 5,7 | 0,45 | 7,5 | 0 | 10 (2) | LP | - | ❍ | ❍ | ❍ | ❍ | - | ❍ | - | - | ❖ **327B301** | ❖ **327B302** |
| **U - Universal, VMQ sealings and poppets (minimum fluid temperature -40°C)** (3) | | | | | | | | | | | | | | | | | |
| 1/4 | 5,7 | 0,45 | 7,5 | 0 | 10 | BP | ● | ● | - | - | - | ● | - | ❍ | ● | ❖ **327B011** | ❖ **327B012** |
| **U - Universal, (F)VMQ sealings and poppets (minimum fluid temperature -50°C)** (3) | | | | | | | | | | | | | | | | | |
| 1/4 | 5,7 | 0,45 | 7,5 | 0 | 10 | MP | - | - | - | - | - | ● | - | - | ● | ❖ **327B211** | ❖ **327B212** |
| 1/4 | 5,7 | 0,45 | 7,5 | 0 | 10 | RP | - | ● | ● | - | - | ● | ● | - | ● | ❖ **327B111** | ❖ **327B112** |
| 1/4 | 5,7 | 0,45 | 7,5 | 0 | 10 (2) | LP | - | ❍ | ❍ | ❍ | ❍ | - | ❍ | - | - | ❖ **327B311** | ❖ **327B312** |
| **U - Universal, (F)VMQ sealings and poppets (minimum fluid temperature -60°C)** (3) | | | | | | | | | | | | | | | | | |
| 1/4 | 5,7 | 0,45 | 7,5 | 0 | 10 | MP | - | ● | ● | - | - | - | ● | - | - | ❖ **327B291** | ❖ **327B292** |

❖ Select 8 for NPT ANSI 1.20.3 or Select G for ISO G(228/1) ● Available feature ❍ Available feature in DC only - Not available

(2) Air / inert gas only for Ex i version (NFIS, WSNFIS and WSCRIS) (3) For maximum ambient temperature check operator ambient temperature range on page 3

(4) Not in combination with WSCR solenoids

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