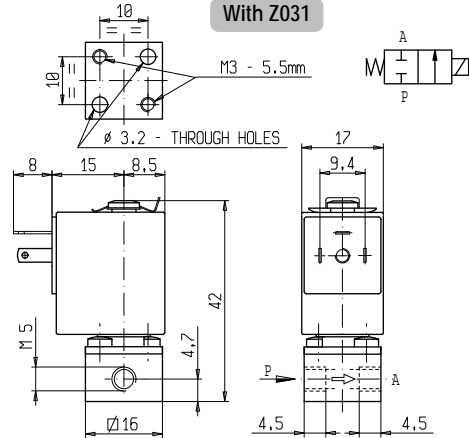
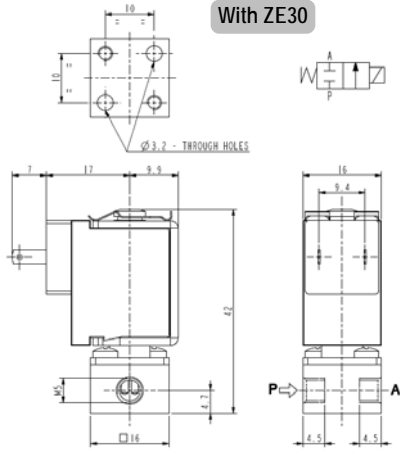




**MICRO SOLENOID VALVE**  
**2/2 - NC (Normally closed)**  
**Direct acting**  
**M5**

**V165**



**► GENERAL FEATURES**

Direct acting micro solenoid valve; minimum overall dimensions.  
 Quick response time and high number of cycles.  
 Suitable to shut off liquid and gaseous fluids (verify the compatibility of fluid with materials in contact).

**► TECHNICAL FEATURES**

*Maximum allowable pressure (PS)* 16 bar  
*Opening time* from ~ 5ms to ~ 10ms  
*Closing time* from ~ 5ms to ~ 10ms  
*Fluid temperature* 0°C +130°C (FPM)  
 0°C +140°C (FFPM)  
 -10°C +90°C (HNBR)  
*Max viscosity* 3°E (~22 cStokes or mm<sup>2</sup>/s)

**► MATERIALS IN CONTACT WITH FLUID**

*Body* Brass (see notes)  
*Sealing* FPM or FFPM or HNBR  
*Internal components* Stainless steel  
*Seat* Brass  
*Guide assembly* Stainless steel  
*Shading ring (only for V165V02)* Copper

**► COIL**

*Continuous duty*  
*Encapsulation material*  
*Coil insulation class*  
*Ambient temperature*  
*Electric connections*  
*Protection degree*  
*Voltages*

	ZE30	Z031
	ED 100%	
<i>Encapsulation material</i>	PA (Polyamide) fiberglass reinforced	PET (polyethylene terephthalate) fiberglass reinforced
<i>Coil insulation class</i>	F (155°C)	
<i>Ambient temperature</i>	-10°C +60°C	
<i>Electric connections</i>	DIN 46340	DIN 46340 – 3 micro-poles connectors
<i>Protection degree</i>	IP40 (EN 60529) with female wire terminals 2,8 x 0,5 totally insulated	IP65 (EN 60529) with plug micro-connector
<i>Voltages</i>	DC: 12-24V (+10% - 5%)	AC: 24V/50Hz (+10% -15%)

(Other voltages and frequencies on request.- AC: max 24V)

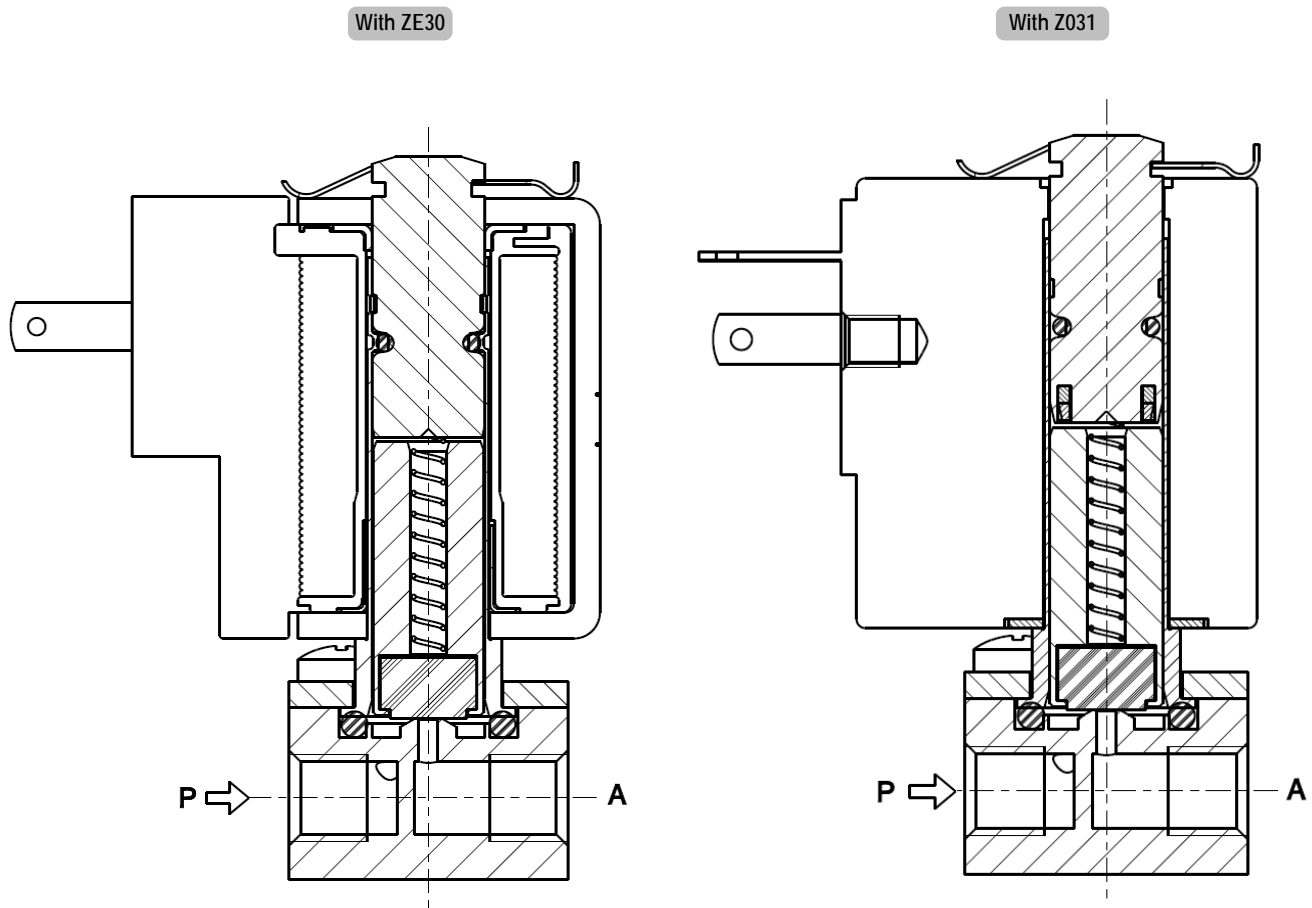
Port size ISO-UNI 4534	Orifice size (mm)	Differential pressure (bar)				Kv (m <sup>3</sup> /h)	Series and type		Power absorption			Sealings	Notes	Weight (kg)	
		Δp min	Δp max				Valve	Coil	AC (VA)		DC (W)				
			AC	DC	AC				DC	Inrush					Holding
M5	1,1	0	-	0,5	-	0,5	V165V03	ZE30L	-	-	0,5	FPM	-	0,060	
			14	10	14	10	V165V02	Z031C / ZE30C	4	3	2,5				
			-	14	-	14	V165V04	ZE30C	-	-					4
			-	14	-	14	V165V01	ZE30A	-	-	4				
			8	4	8	4	V165V02	Z031A / ZE30A	6	5					2,5
	5		1,5	5	1,5	V165V02	Z031C / ZE30C	4	3	4					
	2		0	-	4	-	4	V165V01	ZE30C		-	-	2,5	FPM	-
				-	4	-	4	V165Z08	ZE30A	-	-	4			
				-	4	-	4	V165Z15	ZE30A	-	-		4	FFPM	1 1-3
				-	4	-	4	V165Z15	ZE30A	-	-	4			
-		4		-	4	V165Z15	ZE30A	-	-	4					

**► NOTES**

- These micro-solenoid valves are not suitable for stagnating media subject to vaporization which deposit solid, calcareous, incrusting residues or similar.
- Seal: FPM = Fluoro-carbon elastomer FFPM = Perfluorate elastomer HNBR = Hydrogenated nitrile-butylene elastomer
- DC versions available with Z031 coil on request (Electric connections: DIN 46340 – micro plug connector; Protection degree: IP65)
- 1 - Solenoid valves with body and bonnet in chemically nickel plated brass (Ni-P).
- 2 - Particularly suitable to shut off refrigerating fluids (version available on request)
- 3 - FFPM complying with FDA standards; particularly suitable for applications in the food and pharmaceutical sector (version available on request).

# V165

## ► SPARE PARTS



## ► MOUNTING

Solenoid valve can be mounted in any position; vertical with coil upwards preferred.

THE VALIDITY OF REPORTED DATA IS REFERRED TO THE DATE OF ISSUE. POSSIBLE UPDATES ARE AVAILABLE ON REQUEST.