

Introduction

Explosion-proof robust valve position monitor with built-in solenoid and more feedback options designed to provide an outstanding performance under harsh working environments

Features

- Flameproof / explosion-proof enclosure (Exd IIB+H2 T6 IP66)
- SUS 316 housing
- Compact single unit with built-in solenoid valve
- Auto / Manual button easy to convert
- NAMUR mounting shaft or fork lever shaft adjustable for a non-NAMUR pneumatic actuator

Option

- 4 x SPDT mechanical limit switches
- 4 x inductive sensors
- 4-20mA output position transmitter

Specifications

Protection Class	Flameproof (Ex d IIB+H2 T6, IP66)
Operating Air Pressure	1.5 ~ 10kgf/cm ² (single coil) 1.0 ~ 10kgf/cm ² (double coil)
Air Supply(Max.)	Max 15kgf/cm ²
Solenoid Valve Operating Voltage	24 VDC / 110 AC / 220 AC
Solenoid Valve Manual Override	Push Button
Solenoid Valve Response Time	25ms
Coil Insulation Class	F - Class
Operating Temperature	-30 ~ +75°C
Pneumatic Connections	NPT 1/4
Electrical Connections	NPT 3/4
Body Material	SUS 316
Weight	5.8 kg

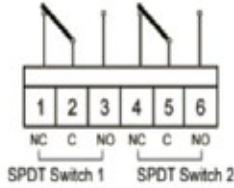


Mechanical Switches & Inductive Sensor Rating

Mechanical Switches



< SPDT Mechanical Switch >

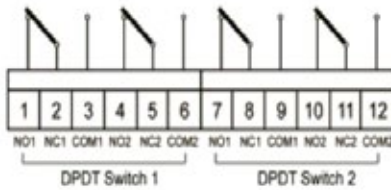


SPDT, SZM-V16-2FA-61 / STARION

Type		Non-inductive load		Inductive load	
		Resistive load	Lamp load	Inductive load	Motor load
Rating	250 VAC	16A	2A	10A	3A
	8 VDC	16A	4A	10A	6A
	30 VDC	10A	4A	10A	4A
	125 VDC	0.6A	0.1A	0.6A	0.1A
	250 VDC	0.3A	0.05A	0.3A	0.05A
Operating Temperature		-20 ~ +105 °C			



< DPDT Mechanical Switch >



DPDT, DZ-10G / OMRON

Type		Non-inductive load				Inductive load			
		Resistive load		Lamp load		Inductive load		Motor load	
		NC	NO	NC	NO	NC	NO	NC	NO
Rating	125 VAC	10A	2A	1A		6A	3A	1.5A	
	250 VAC	10A	1.5A	0.7A		4A	2A	1A	
	8 VDC	10A	3A	1.5A		6A	5A	2.5A	
	14 VDC	10A	3A	1.5A		6A	5A	2.5A	
	30 VDC	10A	3A	1.5A		4A	3A	1.5A	
	125 VDC	0.5A	0.5A	0.5A		0.05A	0.05A	0.05A	
	250 VDC	0.25A	0.25A	0.25A		0.03A	0.03A	0.03A	
Operating Temperature		-20 ~ +80 °C							

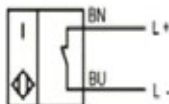
Proximity Sensors



< NJ2-V3-N / P&F >



< NJ4-12GK-N / P&F >



NJ2-V3-N / P&F

General Specifications

Switching element function	NAMUR NC
Rated operating distance	2mm
Installation	embeddable
Output polarity	NAMUR
Assured operating distance	0 ~ 1.62mm

Nominal Ratings

Nominal voltage	8.2 VDC
Switching frequency	0 ~ 1000 Hz
Hysteresis	0.01 ~ 0.1 mm
Current consumption	
Measuring plate not detected	> 3 mA
Measuring plate detected	< 1 mA

Mechanical Specifications

Connection type	cable PCV, 130 mm
Core cross-section	0.14 mm
Housing material	PBT
Sensing face	PBT
Protection degree	IP67
Operating Temperature	-25 ~ +100 °C

NJ4-12GK-N / P&F

General Specifications

Switching element function	NAMUR NC
Rated operating distance	4 mm
Installation	not embeddable
Output polarity	NAMUR
Assured operating distance	0 ~ 3.24 mm

Nominal Ratings

Nominal voltage	8.2 VDC
Switching frequency	0 ~ 1500 Hz
Hysteresis	3 %
Current consumption	
Measuring plate not detected	> 3 mA
Measuring plate detected	< 1 mA

Mechanical Specifications

Connection type	cable PCV, 2 m
Core cross-section	0.34 mm
Housing material	PBT
Sensing face	PBT
Protection degree	IP66
Operating Temperature	-25 ~ +100 °C

How to Order

LSB-7S

Switch Type	Switch / Sensor	Position Transmitter	Coil Type	Power Supply	Indicator Option	Electrical Connections	Pneumatic Connections	Feedback Shaft	Mounting Bracket
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Description	Code
Switch Type :	0 : Mechanical switches 1 : Proximity sensors
Switch / Sensor : - Mechanical Switches	N : None 0 : 2 x SPDT 1 : 3 x SPDT 2 : 4 x SPDT 4 : 2 x DPDT
- Proximity Sensors	6 : 2 x NJ2-V3-N / P&F 7 : 4 x NJ2-V3-N / P&F 8 : 2 x NJ4-12GK-N / P&F 9 : 4 x NJ4-12GK-N / P&F
Position Transmitter : (only for 2 x switch / sensor)	N : None O : 4 ~ 20mA output signal
Coil Type :	N : None S : Single coil type D : Dual coil type
Pilot Power Supply	A : 220VAC B : 110VAC C : 24VDC

Description	Code
Indicator Option :	N : 2-way (standard) L : 3-way L-port T : 3-way T-port
Electrical Connections :	F : 2 x NPT 3/4
Pneumatic Connections :	O : None (without solenoid) 2 : NPT 1/4
Feedback Shaft :	F : Fork lever N : NAMUR shftat(direct mounting)
Mounting bracket :	N : None R : Multi-size bracket for IEC 60534-6-2 (VDI / VDE 3845)

Ex) LSB - 7S00 - O - SA - NF1 - NR : Mechaical Switches / 2xSPDT / 4~20mA output signal / 220 VAC single coil / 2-way indicator / 2xNPT 3/4 / Rc 1/4 / NAMUR shaft / Multi-size bracket