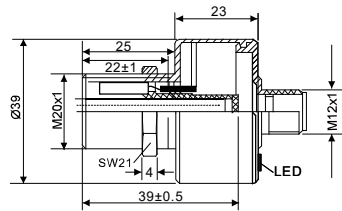
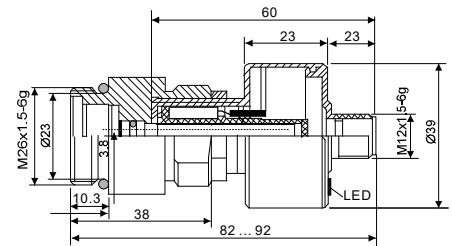


Features 产品特点

- **Metal Objects Sensing**
Flush Mounting
齐平安装, 对金属物质感应
- **M12 Connector**
M12接头连接方式
- **10-30Vdc Operating Voltage**
直流10-30V工作电压
- **NPN-NO+NC/PNP-NO+NC Output**
NPN-NO+NC/PNP-NO+NC输出方式
- **Built-in Electrical Protection**
内置电气保护
- **IP67 Protection**
IP67防护等级, 防尘、防水
- **Applied to the spool displacement detection of hydraulic relief valve**
应用于液压安全阀阀芯位移检测



(Unit: mm)



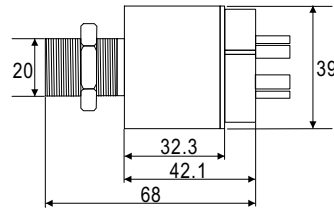
(Unit: mm)



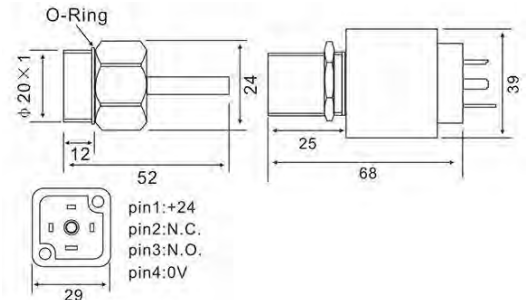
Connection 连接方式		M12 Connector /M12接头	M12 Connector /M12接头
Mounting 安装方式		Flush 齐平	Flush 齐平
Steel Case 材质	NPN-NO+NC	VSMN01A	VSMN01B
	PNP-NO+NC	VSMP01A	VSMP01B
General Data 产品参数			
Housing size 产品尺寸	Ø39x61mm	Ø39x96mm	
Installation type 安装方式	Flush 齐平	Flush 齐平	
Sensing distance 感应距离	10mm	11mm	
Sensing element size 感应元件尺寸	Ø3mm	Ø3mm	
Installation dimension 安装尺寸	M20x1.5-6g	M20x1.5-6g	
Assured operating distance 有效感应距离	0 ... 80% of Sn	0 ... 80% of Sn	
Hysteresis 磁滞	<15%	<15%	
Housing material 壳体材质	Nickel plated steel 铁镀镍	Nickel plated steel 铁镀镍	
Operating voltage 工作电压	10 ... 30VDC	10 ... 30VDC	
Electrical Data 电气性能			
Peak voltage 峰值电压	<10%	<10%	
Repeated accuracy 重复精度	±1%	±10%	
Ripple 滤波	<10%	<10%	
No load current 无负载电流	<10mA	<10mA	
Max. Load current 最大负载电流	400mA	200mA	
Leakage current 漏电流	<0.01mA	<0.01mA	
Voltage drop 电压降	<2V	<2V	
Switching frequency 频率	500Hz	500Hz	
Response time 响应电压	0.5ms	0.5ms	
Rated insulation voltage 绝缘电压	75VDC	75VDC	
Ambient temperature 温度	-25°C ... +80°C	-25°C ... +80°C	
Ambient humidity 湿度	35-95%RH	35-95%RH	
Temperature drift 温度漂移	<10%(Sr)	<10%(Sr)	
Power indicator 电源指示	No	No	
Function indicator 输出指示	LED	LED	
Reverse polarity protection 极性保护	Yes	Yes	
Short-circuit protection 短路保护	Yes	Yes	
Overload trip point 过载保护点	430mA	220mA	
Correction factors 衰减系数	Steel=1	Steel=1	
Mechanical Data 机械性能			
Sensing surface material 感应面材质	/	/	
Protection 防护等级	IP67	IP67	
Shock rating 耐冲击	Shock, half-sinus, 30gn, 11ms	Shock, half-sinus, 30gn, 11ms	
Vibration rating 耐振动	55Hz, 1mm ampl., 3x30min.	55Hz, 1mm ampl., 3x30min.	
EMC 电磁兼容	IEC 60947-5-2 EN 55501: Class B	IEC 60947-5-2 EN 55501: Class B	
Accessory 附件	/	/	
Connection 电气连接方式	M12x1-6g	M12x1-6g	
Weight 重量	Approx. 约 140g	Approx. 约 190g	

Features 产品特点

- **Metal Objects Sensing**
Flush Mounting
齐平安装, 对金属物质感应
- **Hirschmann Connector**
赫尔曼接头连接
- **10-30Vdc Operating Voltage**
直流10-30V工作电压
- **NPN-NO+NC/PNP-NO+NC Output**
NPN-NO+NC/PNP-NO+NC输出方式
- **Built-in Electrical Protection**
内置电气保护
- **IP67 Protection**
IP67防护等级, 防尘、防水
- **Applied to the spool displacement detection of hydraulic relief valve**
应用于液压安全阀阀芯位移检测



(Unit: mm)



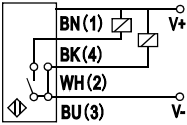
(Unit: mm)

Connection 连接方式		Hirschmann Connector /赫尔曼接头		Hirschmann Connector /赫尔曼接头	
Mounting 安装方式		Flush齐平		Flush齐平	
Steel Case 材质	NPN-NO+NC	VSHN01A		VSHN01R	
	PNP-NO+NC	VSHP01A		VSHP01R	
General Data 产品参数					
Housing size产品尺寸		Ø39x68mm		Ø39x68mm	
Installation type安装方式		Flush齐平		Flush齐平	
Sensing distance感应距离		10mm		10mm	
Sensing element size感应件尺寸		Ø3mm		Ø3mm	
Installation dimension安装尺寸		M20x1.5-6g		M20x1.5-6g	
Assured operating distance有效感应距离		0 ... 80% of Sn		0 ... 80% of Sn	
Hysteresis磁滞		<15%		<15%	
Housing material壳体材质		Nickel plated steel铁镀镍		Nickel plated steel铁镀镍	
Operating voltage工作电压		10 ... 30VDC		10 ... 30VDC	
Electrical Data电气性能					
Peak voltage峰值电压		<10%		<10%	
Repeated accuracy重复精度		±1%		±1%	
Ripple涟波		<10%		<10%	
No load current无负载电流		<10mA		<10mA	
Max. Load current最大负载电流		400mA		400mA	
Leakage current漏电流		<0.01mA		<0.01mA	
Voltage drop电压降		<2V		<2V	
Switching frequency频率		500Hz		500Hz	
Response time响应电压		0.5ms		0.5ms	
Rated insulation voltage绝缘电压		75VDC		75VDC	
Ambient temperature温度		-25°C ... +80°C		-25°C ... +80°C	
Ambient humidity湿度		35-95%RH		35-95%RH	
Temperature drift温度飘移		<10%(Sr)		<10%(Sr)	
Power indicator电源指示		No		No	
Function indicator输出指示		LED		LED	
Reverse polarity protection极性保护		Yes		Yes	
Short-circuit protection短路保护		Yes		Yes	
Overload trip point过载保护点		430mA		430mA	
Correction factors衰减系数		Steel=1		Steel=1	
Mechanical Data机械性能					
Sensing surface material感应面材质		/		/	
Protection防护等级		IP67		IP67	
Shock rating耐冲击		Shock, half-sinus, 30gn, 11ms		Shock, half-sinus, 30gn, 11ms	
Vibration rating耐振动		55Hz, 1mm ampl., 3x30min.		55Hz, 1mm ampl., 3x30min.	
EMC电磁兼容		IEC 60947-5-2 EN 55501: Class B		IEC 60947-5-2 EN 55501: Class B	
Accessory附件		/		/	
Connection电气连接方式		M12x1-6g		M12x1-6g	
Weight重量		Approx. 约 160g		Approx. 约 180g	

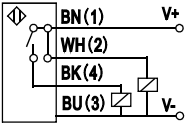


Wiring

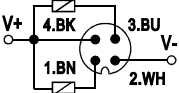
DC 4 Wire NPN-N.O. & N.C.



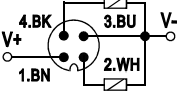
DC 4 Wire PNP-N.O. & N.C.



DC M12 Connector NPN-N.O. & N.C.



DC M12 Connector PNP-N.O. & N.C.



Hirschmann Connector

