

LIMIT SWITCH

ALUMINUM/STAINLESS STEEL LIMIT SWITCH

AKCESERVIS



限位开关 LIMIT SWITCH

DESCRIPTION

The limit switches of AKCESERVIS are comprised of WP series with waterproof grades and EP series and feature with die cast aluminium alloy shell and surface powder electrostatic spray, which achieves high corrosion assistance and beautiful appearance.

The increase of indicators' height and the invisible area of indicators achieve clearer observation of the On/Off state of valves.

Allow many kinds of sensors to be installed to satisfy various working requirement, which includes mechanical (SPDT), inductive proximity (P+F) and magnetic proximity (SPDT). Its output current from 4~20mA (EP series).

The connecting shafts and brackets conforms to NAMUR standard, which can be installed on actuators easily.

The terminals strips are set to be leaned in 45° degree, NPT standard conduit entries, safe and reliable wiring terminal.

埃克赛维斯(AKCESERVIS)的限位开关有防水等级的WP系列和防爆等级的EP系列,铝合金壳体表面粉末静电喷涂工艺,美观而且防腐.

增加了高度、增大了可视面积的就地显示指示器高辨识度,可以清楚的观察到阀门所处的开/关状态.

不锈钢连接轴和支架符合NAMUR标准,可快速安装到执行器上.

接线端子排45°倾斜设置,接线安全、高效. EP系列最多可有3个NPT标准电气接口,方便特殊使用.

可内置多种传感器来满足不同的工况需求,包括:机械式(SPDT)、接近式 (P+F)、接近式 (SPDT),以及输出模拟量4~20mA(仅限EP系列).



EP Series



316ss WP Series

ALUMINUM



WP Series

适合海洋大气 高温、高湿、高盐雾 环境的产品

The products that are suitable for the marine environment (high-temperature, high-humidity, high salt spray)

埃克赛维斯(AKCESERVIS)微等离子体氧化技术处理的产品表面是陶瓷化的氧化膜。与喷涂在产品表面得到的陶瓷膜不同，这是金属基体原位生长的陶瓷膜，因此致密均匀，结合牢固。耐腐蚀性能、耐磨硬度、绝缘性能非常突出。

中性盐雾性能：800-1000h，最高2000h。

硬度：1000-2000HV，最高可达3000HV，与硬质合金相同。

绝缘性能：电阻值100MΩ，有效防止电化学腐蚀。

AKCESERVIS utilize Aluminium micro-arc oxidation on metal. Because they can represent high hardness and a continuous barrier, these coatings can offer protection against wear, corrosion or heat as well as electrical insulation.

The coating is a chemical conversion of the substrate metal into its oxide, and grows both inwards and outwards from the original metal surface. Because it grows inward into the substrate, it has excellent adhesion to the substrate metal.

Neutral salt spray performance:
800-1000h. Maximum :2000h.

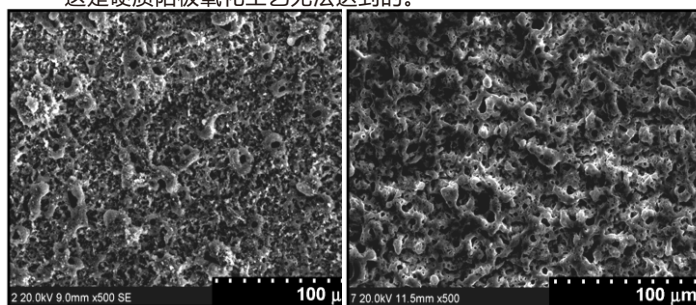
Hardness:
1000-2000HV, Maximum 3000HV, which is the same as that of hard alloy.

Electrical insulation performance :
resistance value: 100MΩ, sufficiently prevent galvanic corrosion



陶瓷氧化膜显微形貌

显微放大看到的原位生长、熔融状态的陶瓷膜结构,晶粒细小致密. 这是硬质阳极氧化工艺无法达到的。



Micro structure of micro-arc oxidation ceramic surface

SENSORS OPTIONS

机械式

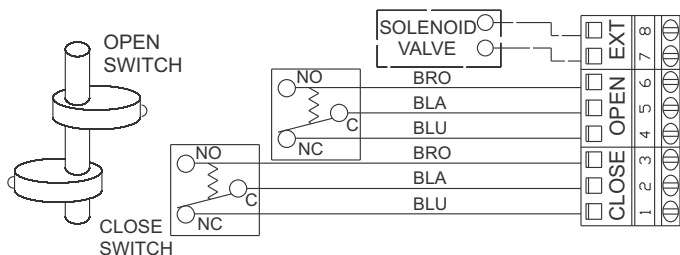
输出极型	Output type	SPDT
额定电压	Rated Voltage	负载 Load
125V DC		0.5A
250V DC		0.25A
125V AC		4A
250V AC		10A

SPDT MECHANICAL SWITCHES



机械式 SPDT

WIRING DIAGRAM



P+F接近式防爆传感器：SJ-3.5N

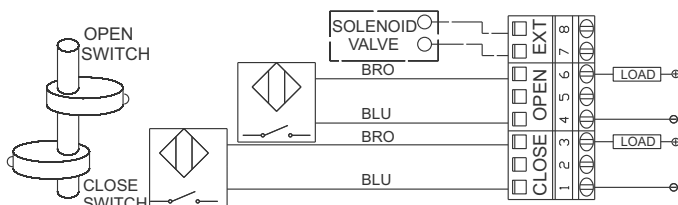
工作电压	Normal voltage [v]	8V
输出极型	Output type	NAMUR
输出线型	Output type	两线 2-wire
感应槽宽	Slot width	3.5mm
频率	frequency	0-3000Hz
功能	Switching function	常闭型 Normally closed (NC)
防爆等级	ATEX marking	ExiaIICT6
环境温度	Ambient temperature	-25-100°C

INDUCTIVE PROXIMITY SENSORS



接近式 NAMUR

WIRING DIAGRAM



P+F接近式PNP传感器：SB-3.5-E2

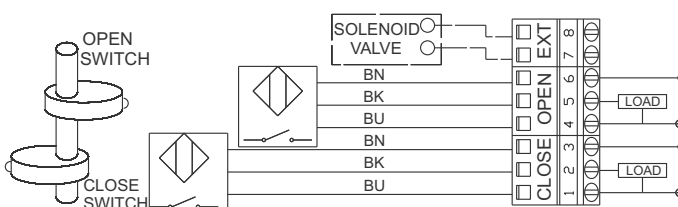
工作电压	Normal voltage [v]	0-30V DC
输出极型	Output type	PNP
输出线型	Output type	三线 3-wire
感应槽宽	Slot width	3.5mm
频率	frequency	0-3000Hz
功能	Switching function	常开型 Normally closed (NO)
防爆等级	ATEX marking	不防爆
环境温度	Ambient temperature	-25-85°C

INDUCTIVE PROXIMITY SENSORS



接近式 3-wire PNP

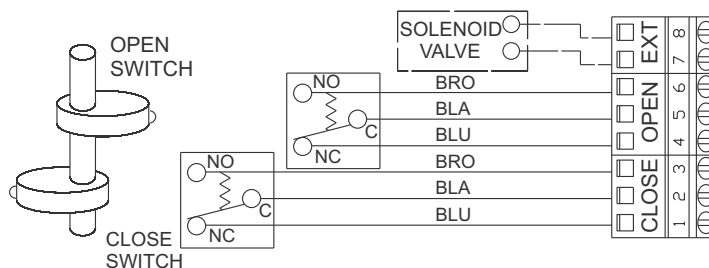
WIRING DIAGRAM



MIAENSOR接近式SPDT传感器

工作电压	Normal voltage [V]	0-30V
输出极型	Output type	SPDT
输出线型	Output type	三线 3-wire
最大负载电流	Max	1A
环境温度	Ambient temperature	-50-85°C

WIRING DIAGRAM

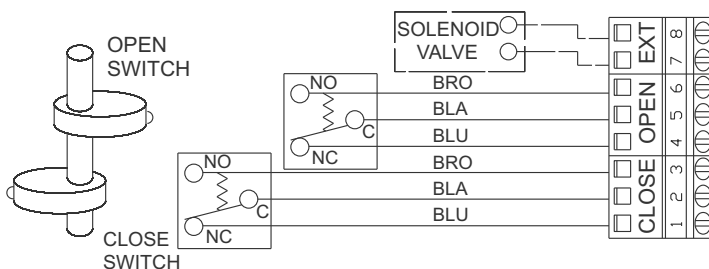


接近式 SPDT

接近式SPDT传感器

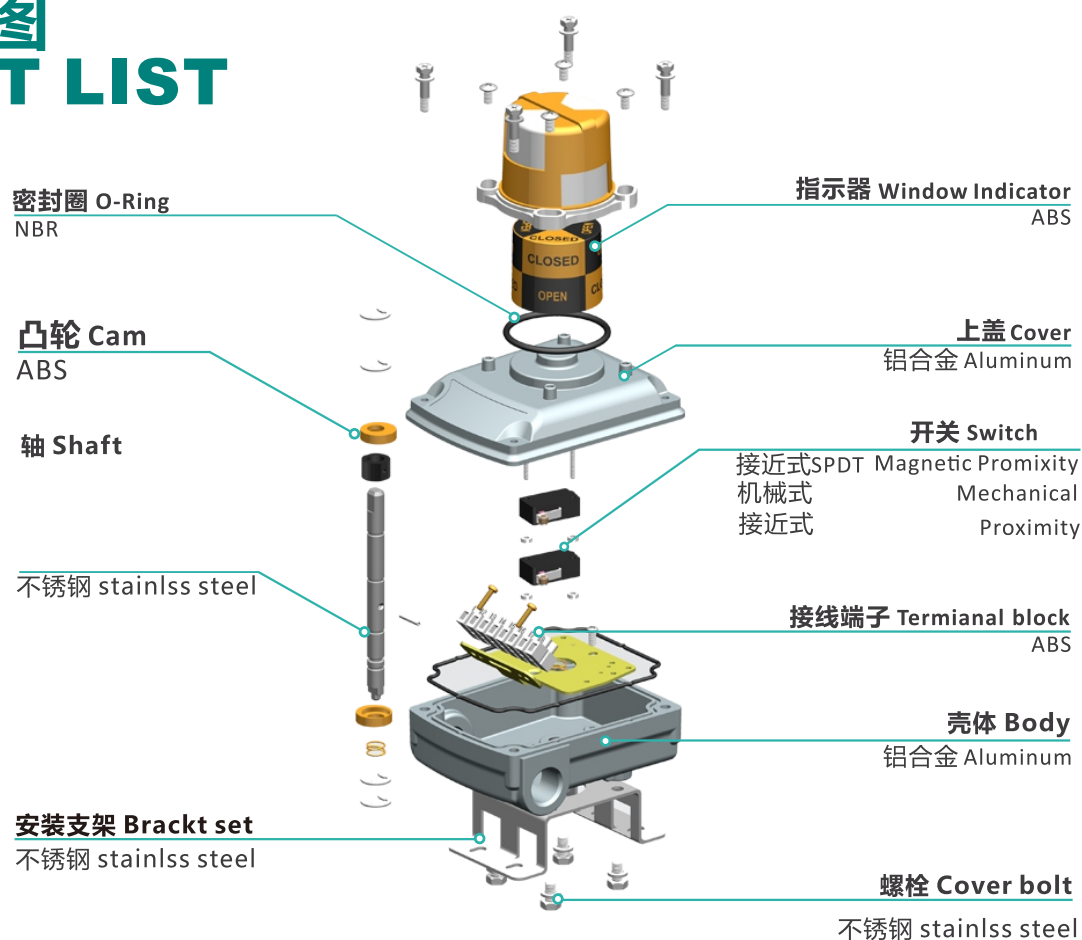
工作电压	Normal voltage [V]	0-30V
输出极型	Output type	SPDT
输出线型	Output type	三线 3-wire
最大负载电流	Max	3A
开关容量	Pmax	60W
环境温度	Ambient temperature	-50-85°C

WIRING DIAGRAM



接近式 SPDT

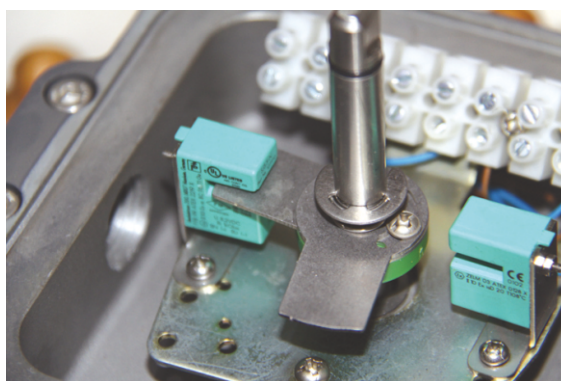
零件图 PART LIST



本安型和PNP接近式的开关,特别选用的槽型结构的传感器。

区别于矩形传感器的齐平安装方式,反馈杆在更宽的3.5mm槽型反馈区域内,非常稳定,有效的避免了因外力的影响而造成的反馈脱靶、信号中断。

最适合管道震动大的阀门使用。



NAMUR standard and PNP proximity switch, the sensors with slot structure are especially chosen in this case.

Unlike the flush installation of rectangular sensors, in this case, metal lever is able to work with great stability within the wider 3.5 mm slotted feedback range. In this case, neither the failure of feedback nor the interruption of feedback signal appear.

Most suitable for the valves in which the pipes undergo large-amplitude vibration.



选型 Ordering Information

类型 Type	系列 Series	壳体材质 Shell Material	内置传感器 Mechanical Proximity Magnetic Proximity				电气接口 Conduit Entries		电气接口数量 Number of conduit entries
防水型 Waterproof	WP IP67	A 铝合金 Aluminium	机械SPDT Mechanical	MT1	2-SPDT LXW-16-1-3	-25~85℃	N2	NPT1/2	2
		MT2		2-SPDT V71C1	-40~85℃	N4	NPT3/4 (EP系列)	2	
		S 316不锈钢 Stainless Steel		MT3	2-DPDT DZ10WG22-1B	-25~85℃	M2	M20×1.5	
隔爆型 Explosion proof	EP ExdIICT6	C 陶瓷处理 MAO	接近式 NAMUR/PNP Proximity	PT1	NAMUR P+F SJ-3.5N ExiaIICT6	-25~85℃			
				PT2	NAMUR P+F SJ-3.5SN ExiaIICT6	-50~85℃			
				PT3	3-wire PNP/NO P+F SB3.5N	-25~85℃			
				PT4	2-wire NO P+F NBB3-V3-Z4	-25~85℃			
		接近式 SPDT Magnetic Proximity	MS1	2-SPDT PM-3-SD Imax:1A	-50-85℃				
			MS2	2-SPDT PM-3-SA Imax:3A (EP系列)	-50-85℃				
		阀位反馈 PTM	TM	4-20mA & 2-SPDT (EP系列)	-25~85℃				

型号
Model

WP

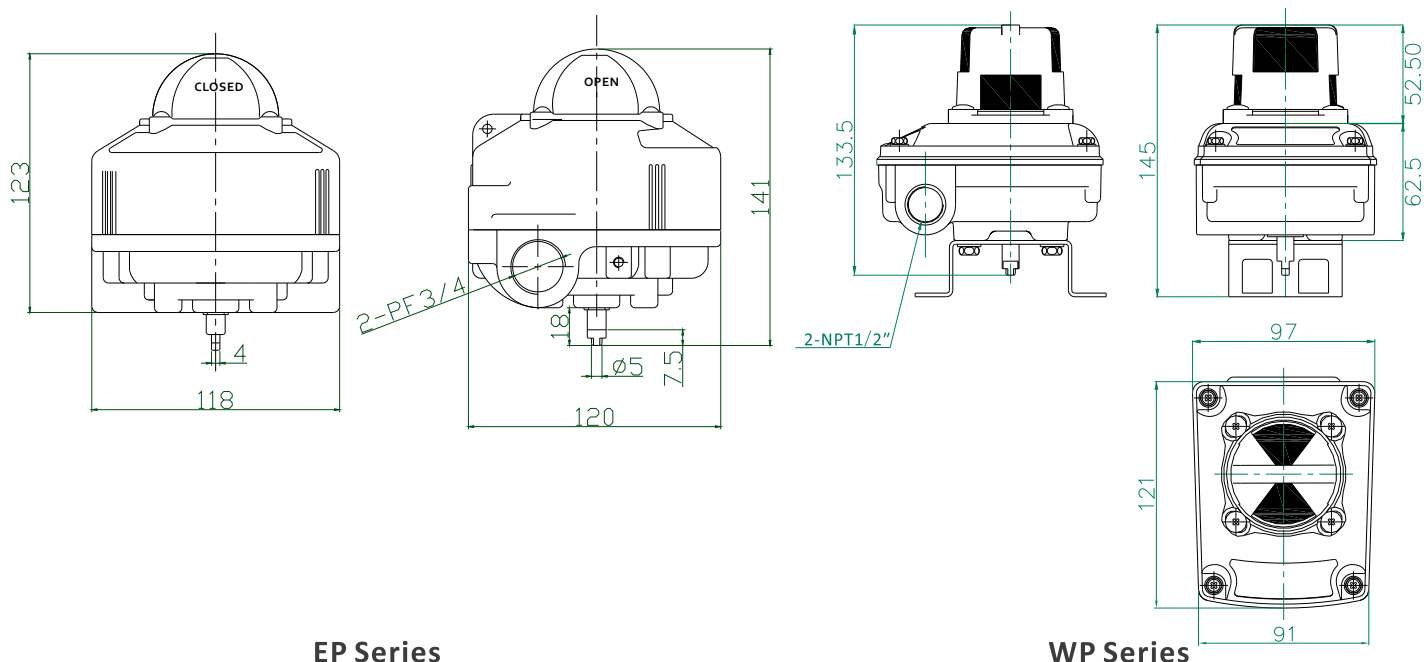
A

MT1

N2

2

DIMENSION



EP Series

WP Series

AKCESERVIS

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