

APS-361 系列角度传感器 APS-361 Series of Angle Sensor

➤ 产品介绍 Product Description

APS-361 系列角度传感器专为各类工业车辆&非道路设备应用而设计。

The APS-361 series of Angle Sensor is specially designed for a variety of industrial vehicles & off-road equipments applications.

非接触式霍尔原理传感器以及滚珠轴承的应用,使产品具有超长的使用寿命; 坚实、全密封的结构设计,使得产品在恶劣的环境下仍具有优秀的稳定性和可靠性。产品可以安装在驾驶室内,也在露天环境下使用。

With Hall-effect, non-contact sensor and roller bearings equipped, the unit has ultra-long operation life. And robust and full-sealing structural design makes the unit maintain excellent stability and reliability even in rugged environments. The unit can be mounted inside or outside the cab.

从结构上直观的分, APS-361 系列角度传感器分为 A,B,C 三款。A 款平薄,安装腰孔中心距为 50mm,集成 AMP 三针连接器; B 款厚实,集成德驰六针连接器; C 款除集成 AMP 三针连接器外,其他结构和尺寸与 B 款完全一样。B 款和 C 款的安装孔中心距都有 32mm 和 38mm 两种。

Intuitively distinguished from the structure, the APS-361 series angle sensors have A, B & C three models. Model A has a flat profile and is integrated with an AMP three-pin connector, and it has a 50mm mounting-hole central distance ; Model B is thicker and integrated with an DEUTSCH six-pin connector; Model C has the same structure and dimensions as Model B except for the integrated AMP three-pin connector. 32mm and 38mm mounting-hole central distance are optional for both model B and C.



三款都可以定制 0-360° 区间的任意角度。

All three types can be customized to any rotation angle in the range of 0-360° .

该系列均为 10-30 VDC,4.5-5.5VDC 供电电压可选。

Power supply voltage of 10-30 VDC and 4.5-5.5 VDC are optional for all models.

防护等级均为 IP67.

IP67 protection class.

标配滚珠轴承。

Standard with ball bearing.

尼龙连接杆可选。

Nylon made actuating lever optional.

➤ 主要技术参数 General Specifications

通用参数 General Specifications

工作环境温度	Operating Temp.	-40°C~85°C
储存环境温度	Storage Temp.	-40°C~125°C
使用寿命	Product life	500 万次
防护等级	IP Class	IP67
重量(不带连接臂)	Weight w/o lever	61g

机械性能 Mechanical characteristics

安装孔中心距	Central Distance of mounting holes	A-50mm;B-32 or 38mm;C-32 or 38mm
轴	Shaft	D type,Ø5.98*10,4.6*6.6mm
轴承	Bearings	Standard with ball bearings
外壳材质	Shell material	PBT
连接器	Connector	AMP 282105-1, Deutsch DT04-6P

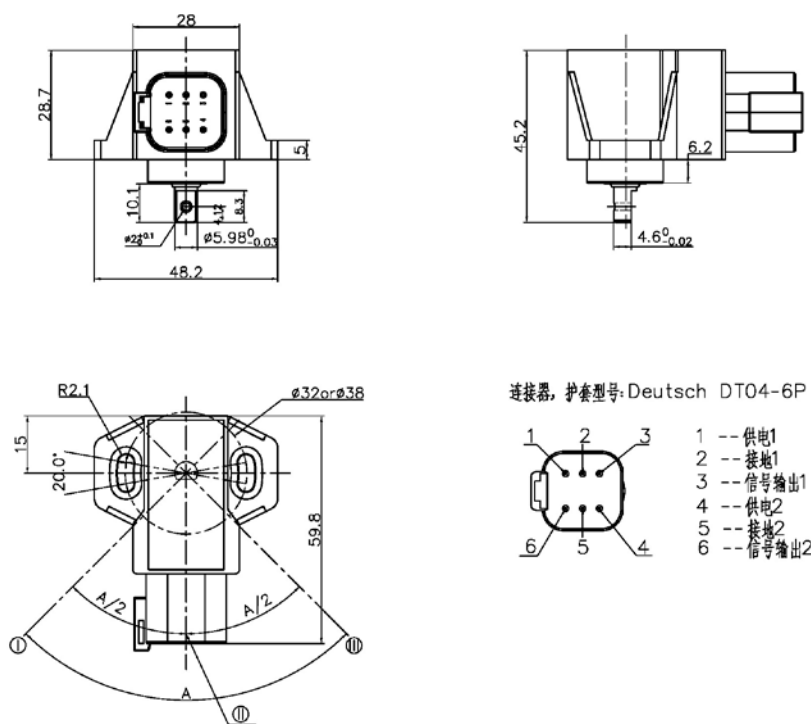
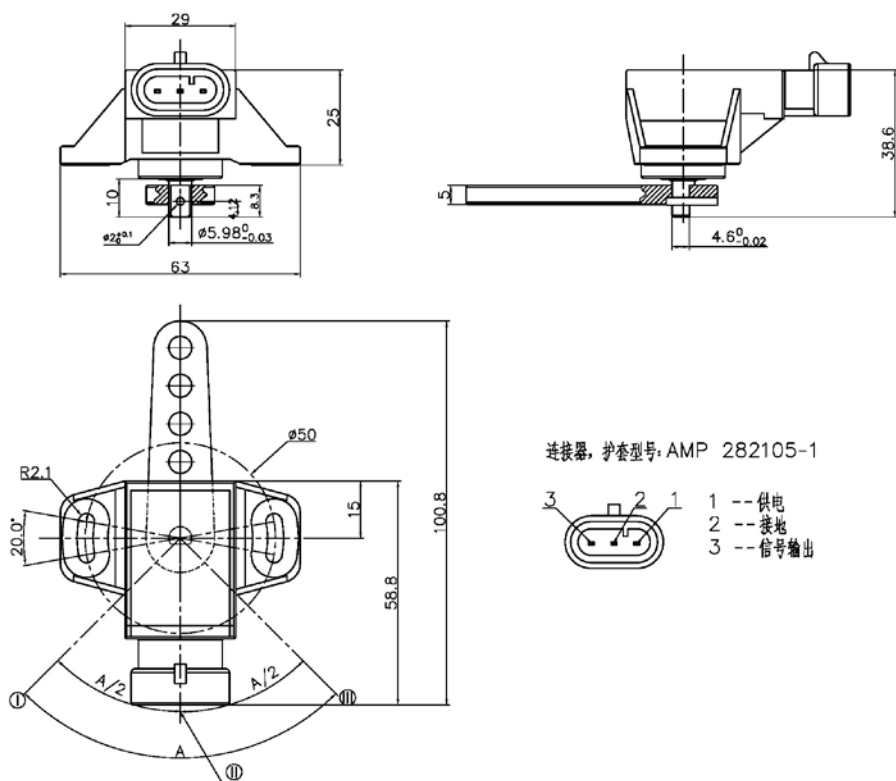
电气参数 Electrical specifications

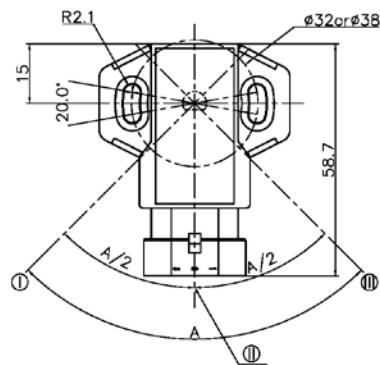
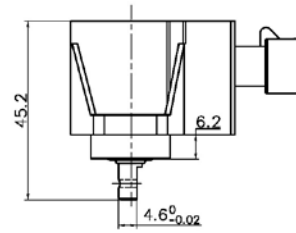
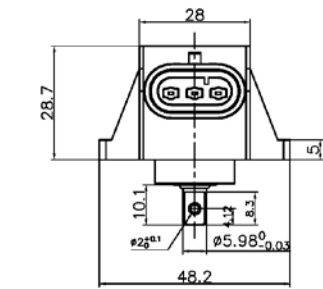
工作角度	Rotary Angle	0-360°可选
供电电压	Operating Voltage	10-30V,4.5-5.5V
输出信号	Output Signal	APS, PWM,Dual APS, Dual PWM, APS/IVS,CAN(SAE J1939),CAN open
精度	Accuracy	Max 1.0% FS
整体线性度	Integral Linearity	±1%
同步度	Integral Correlation	±1%
输出迟滞	delay time of output signal	approx. 3ms
温漂(mV/°C)	offset-temperature-drift (mV/°C)	0.2
温漂(µA/°C)	offset-temperature-drift (µA/°C)	0.8
短路保护	short-circuit proof	yes
反向电压保护	Reverse polarity protection of power supply	yes

环境测试 Environmental Pratices

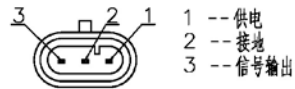
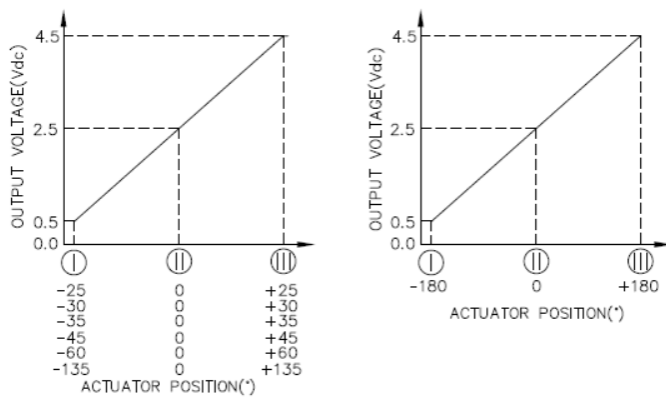
热循环测试	Thermal Cycling Test	SAE J1455-2006
热冲击	Thermal Shock	SAE J1455-2006
湿度测试	Humidity Test	SAE J1455-2006
振动测试	Vabrition Test	SAE J1455-2006
机械冲击	Mechanical Shock Test	SAE J1455-2006
IP 防护等级	IP Class	IEC 60529-2013/GB/T 4208-2017
EMI 电磁兼容性	EMC/EMI Test	SAE J1113-1/ISO 11452-2
ESD 测试(静电)	ESD Test	EN 61000-4-2

➤ 外形&安装尺寸 Mechanical Dimensions(mm)

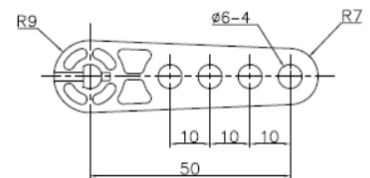




连接器, 护套型号: AMP 282105-1

**Model 361C**

典型输出信号 Typical Output



连接臂 Actuating Lever

➤ 编号规则 Product Code Reference

361	LV	A		1
产品类别	供电电压	集成连接器	安装孔中心距	轴承
Product Type	Supply Voltage	Integral Connector	Central Distance	Bearings
361-Angle Sensor	LV- 5±10% Vdc	A- AMP 3-pin,CD50	Blank-50mm(Model A)	1- roller bearings
	HV- 10-30 Vdc	B- Deutsch 6-pin,CD32/38	32-32mm(Model B&C)	
		C- AMP 3-pin,CD32/38	38-38mm(Model B&C)	

6	A	90	B	
输出信号	旋转轴	测量角度	连接臂	旋转方向
Signal Output	Shaft	Rotary Angle	Actuating Lever	Rotary Orietation
0- 1-5V,Single(HV)	A- 6mm shaft D-shape	3 digits,eg.: 090-90°	Blank- w/o lever	Blank- counter clockwise
1- 4-20 mA, Single (HV)	B- special shaft	090- 90°	B- with lever	X- clockwise
2- 1-5V,Dual(HV)		100- 100°((-50°~+50°)		
3- 4-20mA, Dual (HV)		120- 120°((-60°~+60°)		
4- 0.5-4.5V ratiometric,Dual(LV)				
6- 0.5-4.5V ratiometric,Single(LV)				
7- 0.5-4.5V,Single(HV)				
8- 0.5-4.5V,Dual(HV)				
O- CAN open				
J- CAN J1939				

➤ 应用 Application

应用于高空作业车、叉车、农机、摊铺机、桩工机械等各类搬运&非道路设备的角度控制。

The APS-361 series of Angle Sensor is widely applied to angle sensing and control of various industrial vehicles, agricultural machines & off-road equipments such as aerial work platforms, forklifts, pavers, and drilling rigs etc.

