

AT100/AT500 型磁致伸缩液位变送器

AT100/AT500 MAGNETOSTRICTIVE LEVEL TRANSMITTER

概述 INTRODUCTION

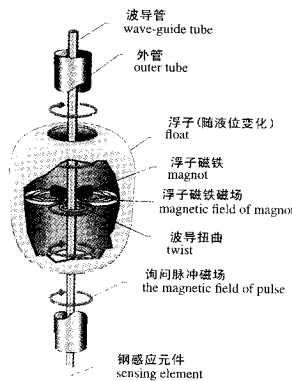
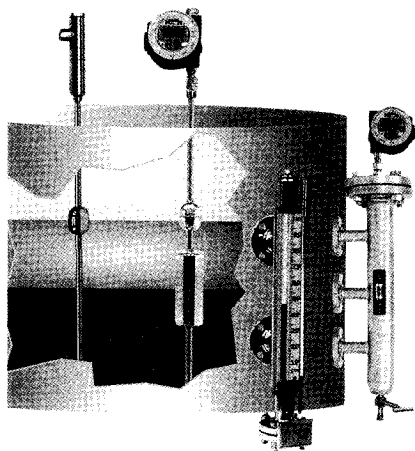
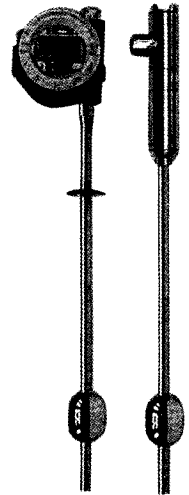
AT100/AT500型磁致伸缩液位计是本公司引进美国K-TEK公司OEM产品，是高精度的液位测量仪表。仪表测量范围大，工作可靠，多种安装形式，调试快捷，具有极高的性价比。

AT100/AT500 magnetostrictive level transmitter is a high precise level measure instrument. It is manufactured or American K-TEK corporation technology and OEM product. Large in measuring range, reliable in operation various in mounting forms, quick in calibration, it has rather high performance/cost ratio.

结构原理 STRUCTURE PRINCIPLE

AT100/AT500型磁致伸缩液位计是采用不导磁的不锈钢管(测杆)、磁致伸缩线(波导线)、可移动的磁浮球和电子部件等部分组成。脉冲发生器发出电流脉冲(起始脉冲)沿波导线传播，电流脉冲产生的磁场与浮球内的磁环磁场矢量相加形成螺旋磁场，产生瞬时扭力，使波导线扭动并产生终止脉冲，沿波导线传回。通过测量出起始脉冲和终止脉冲之间的时间来精确地确定被测液位。

AT100/AT500 magnetostrictive level transmitter is made up of impermeable stainless steel tube (measuring rod), magnetostrictive line (wave-guide line), movable magnetic float and electronic parts. Pulse generator emits a current pulse (start pulse) to transmit it along wave-guide line. The magnetic field produced by current pulse is added by vector with the magnetic field of magnetic ring in float to form a corkscrew magnetic field, and the field produces an instant torque force to twist the wave-guide line and produce a stop pulse. Then the stop pulse is transmitted back along wave-guide line. The time between start pulse and stop pulse is measured to decide precisely the measured liquid level.



主要技术参数

MAIN TECHNICAL PARAMETER

- 测量范围 measuring range: 300~22000mm
- 精确度 accuracy: $\pm 0.01\%FS$
- 输出信号 output: 4~20mA DC 二线制
- 电源 power supply: 24V DC (13.5~36V)
- 工作压力 operating pressure: 21MPa
- 环境温度 ambient temperature: -40~65℃
- 防护等级 enclosure class: IP67
- 过程连接 process connecting: DN50 PN1.0, 法兰标准HG20592-97,
- 接液材质 contact material: 316L 不锈钢
- 电气接口 electric connection: M20×1.5 内螺纹 inner thread

型号规格 MODEL AND SPEC

AT500-	磁致伸缩液位计，无现场数显 magnetostriuctive level transmitter without local display		
AT100-	磁致伸缩液位计，带现场数显 magnetostriuctive level transmitter with local display		
	R	标准型 standard type (刚性), 杆径: 16mm, 最长 9000mm	测量类型 measuring rod
	F	柔性 flexible type, 最长 22.3m	
		H0 $\leq 77^\circ C$	过程温度 process temperature
		H1 $\leq 121^\circ C$	
		H2 $\leq 232^\circ C$	
	R	有二个液位(一液位+一界位) with two liquid levels (liquid+interface)	选项 options
	W	带温度变送输出 with temperature transmission output	
	H	带HART协议	
	D	隔爆型 explosion-proof type: EEX dIICT6	
	E	本安型 intrinsically safe type: EEX iaIIBT6	
		-□ 测杆长度 the length of measuring rod(mm)	
		-□ 测量范围 measure span(mm)	

外形尺寸 DIMENSIONS

