

电—气定位器 E/P POSITIONER

EPL800 SERIES



单动作型 SINGLE ACTING TYPE



EPL800 电—气定位器 Electro-Pneumatic Positioner

概要

EPL800 系列电—气定位器与气动执行机构配套使用,输入 $4\sim20~mA~DC$ 的信号转换成输出空气压力,控制执行机构的动作。同时根据执行机构的行程进行反馈,从而使执行机构的行程能按控制信号进行精确定位。

EPL800 系列电—气定位器仅能用于单动作型执行机构。

GENERAL

The EPL800 Series Positioner, mounted on a pneumatic actuator, moves the actuator by receiving DC $4 \sim 20$ mA signals from a controller. Also, the function of detecting and returning the actuator displacement provides accurate positioning in response to DC $4 \sim 20$ mA signals.

The EPL800 can be used with spring-return acting actuators only.

标准规格 STANDARD SPECIFICATIONS

系 列 Series	EPL800						
输入信号 Input signal	4~20 mA DCThe split range is possible by span adjustment可进行分程控制and zero adjustment.调整范围: 4~12、12~20 mA DCAdjustable range: 4~12, 12~20 mA DC.						
输入阻抗 Input impedance	250 ± 5% at 25						
输出特性 Characteristic	线性 Linear						
气源压力 Air supply	140 ~ 700 KPa						
耗 气 量 Air consumption	输出气压 50%时的耗气量。 Output air pressure 50% 单动作型 Single acting type: 5Nl/min at 140 Kpa air supply						
最大处理容量 Max. capacity	输出侧气源放空时 Capacity when output is atmospheric venting. 单动作型 Single acting type: 175Nl/min at 140 Kpa air supply						
性 能 Performance	单动作型执行机构 For single acting actuator 直 线性 Linearity						
气源接口 Air connection	Rc 1/4						
电气接口 Wiring connection	G 1/2						
环境温度 temperature	标准型 Standard type						
湿度范围 Ambient humidity range	10 ~ 90% RH						
结 构 形 式 Enclosure	室外防水型 Weather proof type (IP65) 耐压防爆型 Explosion proof type (Ex md CT6) 防爆合格证号:国仪检 01171 本质安全型 Intrinsically safe explosion proof type (Exia CT6) 合格证号:国仪检 01172						

附属机构 Standard anicillary	自动 — 手动切换装置 Auto-Manual change						
外 売 材 料 Housing material	铝合金 Aluminum alloy						
表面涂层Coating	环氧树脂 Epoxy resin group paint						
标准涂层色 Coating colors	本体 Body 墨绿 Dark green 外壳 Cover 浅灰 Light gray						
重 量 Approx. weight	2.5 Kg.						
附加规格 Optional specifications	根据客户要求制作。 Available upon request.						
电气接口 Wiring connection	1/2 NPT (室外防水型 For weather proof only) 耐压填料式 Packing cable gland (耐压防爆型 For explosion proof only) 密封接头式 Sealing fitting (耐压防爆型 For explosion proof only)						
安全棚 Safety device	齐纳安全栅 Zener barrier (Exia C)						
输入信号 Input signal	10 ~ 50 mA DC (100)						
压力表刻度 Pressure gauge	Kpa G、Bar、Psi						
输出特性Cam characteristic	等百分比 Equal percentage						
气源接口 Air connection	1/4 NPT						

CODE NO. EP	CODE NO.	EP			_		

#II		Т	L								单动作型执行机构用 For spring return type				
型	号	Type													
系	列	Series		8											
					0						室外防水型 Weather proof type				
结	结构 Enclosure 1									耐压防爆型 Explosion proof type					
					2						本质安全型 Intrinsically safe explosion proof type				
反馈	反馈方式 1 直行程执行机构用:标准型 Linear:Feedback for standard lever									直行程执行机构用:标准型 Linear: Feedback for standard lever					
Fee	Feedback style														
输出特性 Linear								线 性 Linear							
Car	Cam characteristics E 等百分比 Equal percentage									等百分比 Equal percentage					
2 200 Kpa (2Kgf/cm ²)									200 Kpa (2Kgf/cm ²)						
压力表最大刻度 Langle									4		400 Kpa (4Kgf/cm ²)				
Maximum pressure gauge range 10							ge	Ī	10		1000 Kpa (10Kgf/cm ²)				
/± п	使用环境温度										标准型 Standard type : - 20 ~ + 80 *				
										Н	高温型(选购) High temperature service (option) : 0 ~ + 100				
Ambient temperature limits										L	低温型(选购) Low temperature service (option) : -50~+60 *				

M压防爆型的使用环境温度范围为 - 20~ + 60 ,本质安全型的使用环境温度范围为 - 40~ + 60 。
In the case of explosion proof type, explosion proof warranty temperature is - 20~ + 60 .
In the case of intrinsically safe explosion proof type, intrinsically safe explosion proof warranty temperature is - 40~ + 60 .

特点

适用干小容量及大容量的执行机构

由于采用了载荷控制弹簧,选择相应的弹簧后就能获得最适合于该执行机构的定位器。

耗气量小

放大器的耗气量小、容量大。

可以选择输出特性

由于反馈机械中有凸轮装置,因此可以选择标准特性以外的输出特性。

耐压防爆型可在现场进行调整

由于信号($4 \sim 20 \text{ mA. DC}$)输入端接头及线圈部位的封装呈耐压防爆结构,因此在进行检修及行程调整时,可以在现场防爆区域内拆除定位器外壳。

本质安全的构造有着广阔的适用范围

接线盒及线圈有着本质安全的构造(力矩线圈型号:EP82),因此与专用的齐纳安全栅组合使用能使力矩线圈适用于所有危险气体的场所(包括 0 区),使用环境温度范围为 - 40 ~ + 60 。

FEATURES

USABLE WITH LOW TO HIGH CAPACITY ACTUATORS

By adjusting the built-in capacity control spring, the positioner can be made optimum to the given actuator.

A LOW AIR CONSUMPTION

The pilot valve is low in air consumption and high in capacity.

OUTPUT CHARACTERISTICS SELECTABLE

Having a cam within the feedback construction, choices other than the standard linear characteristic are available.

ANTI-PRESSURE AND EXPLOSION PROOF STRUCTURE MARKING ON-SITE ADJUSTMENT POSSIBLE

The anti-pressure and explosion proof construction, with the terminal and coil blocks enclosed together in one package, makes it possible to remove the positioner cover for inside inspection or span adjustment even in an explosive ambient.

INTRINSICALLY SAFE CONSTRUCTION FOR A WIDE SCOPE OF APPLICATIONS

The intrinsically safe construction (torque-coil type: EP82) cover terminals and coil as one package. This, combined with The adoption of the specified zener barrier, makes the unit applicable in all hazardous gas location (including Class 0 area) ranging from low (-40) to high (+60) temperature environment.

ELECTRO-PNEUMATIC POSITIONER 193.5 37 151.5 64 STROKE 12~100 KOSO POSITIONER 78.5 OUT1 *A ∞ **GAUGE *B** SUP.*A MOUNTING HOLES 2-M8 47.5 MODEL EPL8 1—L *3 PROOF TYPE 54 0 WEATHER PROOF Exmd CT6 1 2 Exia CT6 *2 **GAUGE TYPE** 51 2kgf/cm² 200kPa 30psi 4 4kgf/cm² 400kPa 4bar 60psi (8) 10 10kgf/cm² 1000kPa 10bar 160psi **(3)** SERVICE *3 WEATHER PROOF Exmd CT6 Exia CT6 -20~+80 <STANDARD> -20~+60 -20~+60 L -50~+60 <LOW TEMP.> -40~+60 Н 0~+100 <HIGH TEMP.> *A *B CONNECTION UNIT kgf/cm² Bar, psi Rc=PT **SPECIAL DESCRIPTION** kPa kPa G=PF *AAIR CONNECTION Rc1/4 1/4"NPT *B GAUGE CONNECTION 1/8"NPT Rc1/8 CONDUIT CONNECTION G1/2 1/2"NPT

NOTE:	D	RAWING NO.
FOR SPRING RETURN ACTING ACTUATOR		E-EPL801
	REV	
	Α	NOSO