

ELECTRIC ACTUATORS



上海威炼机电设备有限公司

T:021-36365163

F:021-36365162

www.shweilian.com

伺 服 电 机

DM300系列伺服电机（风门控制器）

是控制燃气、液体燃料、蒸汽阀组及空气的专用自动调节电机。

DM300 Series are servo motors to control gaseous and liqued fuels and steam valves.

Also using these for building air conditioning systems.



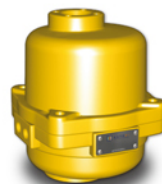
DM330 伺服电机



DM310
伺服电机



DM320
伺服电机



DM330 EX
防爆伺服电机



ED400EX
防爆火焰监测器



AUTODI
ENERGY SAVING AUTOMATION SYSTEMS

DM310 Series servo motors 伺服马达



■ 产品说明 (Product explanation)

DM310系列伺服电机（风门执行器）由调节电机驱动的电子电路和减速齿轮组成。
电子电路部分可选择多段或比例调节。

减速齿轮是性能优良的同步电机和优良耐磨性的马刺齿轮构成。

DM310 series electric actuator is composed of electronic circuit department which controls motor drive and reduction gear department.

Electronic circuit department is composed of circuit which it is possible position control or PID control. And reduction gear department is composed of powerful synchronous motor and spur gear.

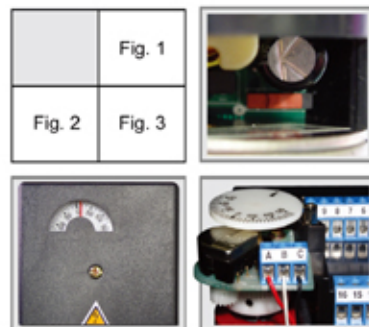
Fig.1 ▶ 输入转换开关 (Input method conversion switch)

：有两种可选：外接电阻 (0~135 Ω)或电流信号 (4~20mA)。
Select resistance type or current sensor type which is reporting current position of motor.

Fig.2 ▶ 刻度窗口 (Position indicator)

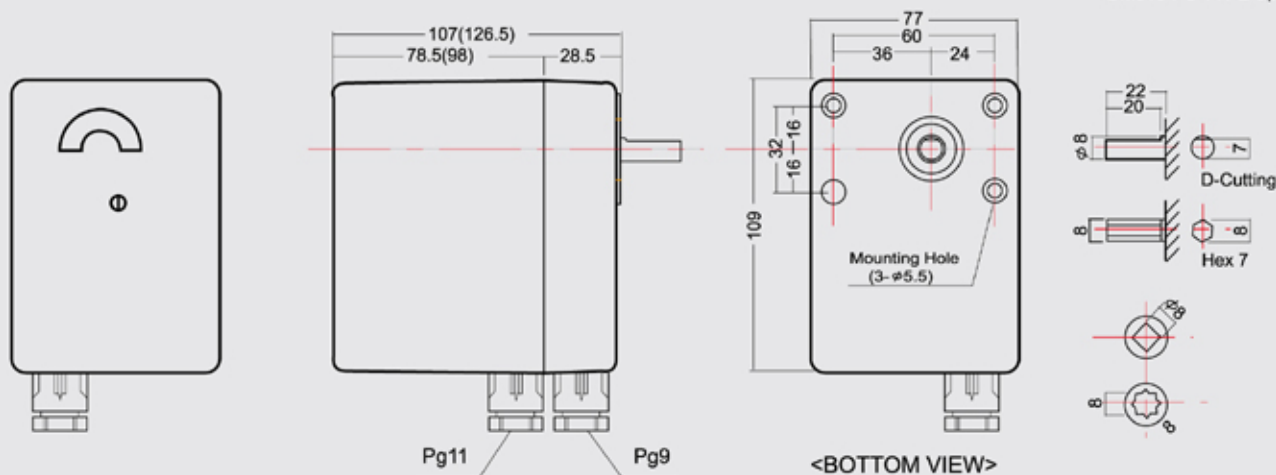
：从外部掌握伺服电机的运行状态。
You can see current position of motor without loosening outer cover.

Fig.3 ▶ 电位器套件 (Potentiometer kit)

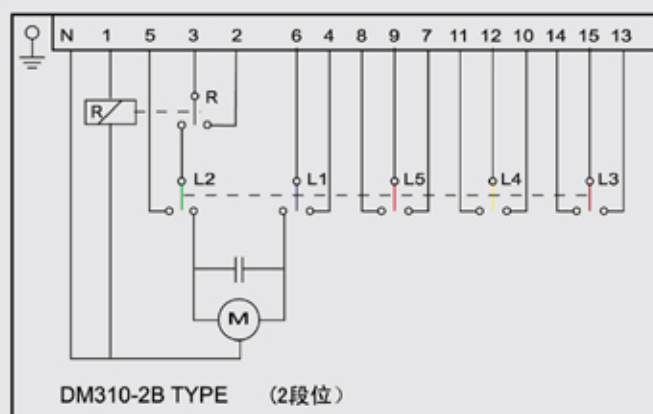
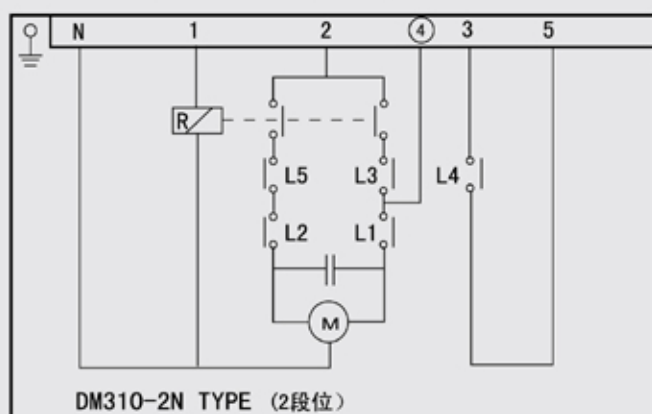


■ 产品尺寸 (Dimensions)

★ () 里的尺寸是DM310-PC型号的
Inside () dimension is
DM3310-PC TYPE Specification



■ 电路图 (Wire Diagrams)



※ 另有2张电路图见参数表下方。

DM320 Series servo motors 伺服马达



■ 产品说明 (Product explanation)

DM320系列伺服电机（风门执行器）由调节电机驱动的电子电路和减速齿轮组成。电子电路部分可选择2, 3, 4段位置调节。减速齿轮部分由耐腐蚀性的铝制外壳、涡轮蜗杆及同步电机组成。

DM320 series electric actuator is composed of 2,3,4 position control type electronic circuit department which controls motor drive and reduction gear department. Reduction gear department is composed of aluminum casing, worm & wheel gear, and powerful synchronous motor.

Fig. 4 ▶ 凸轮调整装置 (Cam adjustment method)

: 不用凸轮调整工具就可以调整凸轮。

Unnessary can adjustment tool. Handle type can used.

Fig. 5 ▶ 涡轮和蜗杆 (Worm and wheel gear)

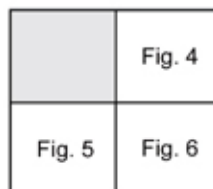
: 涡轮蜗杆可防止伺服电机倒转。

Using worm & wheel gear, it prevent reverse rotation.

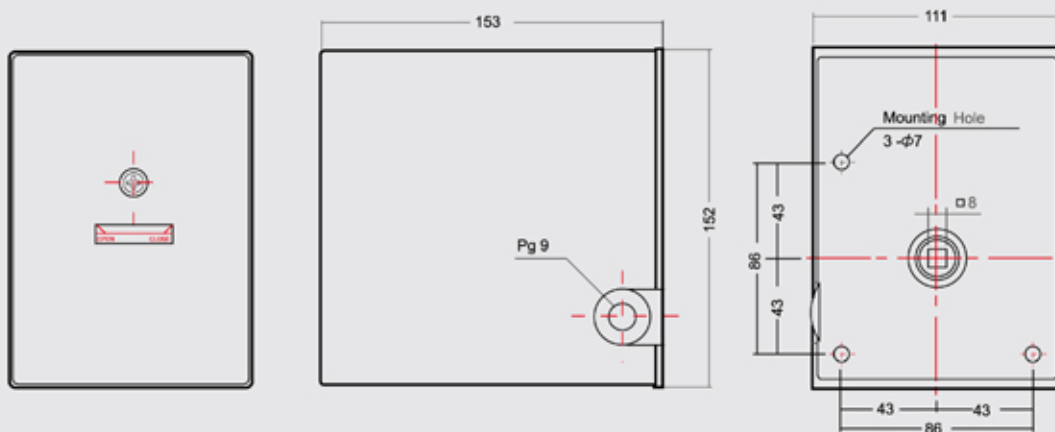
Fig. 6 ▶ 手动操作旋钮 (Manual operating knob)

: 电机的手动操作是可能的。

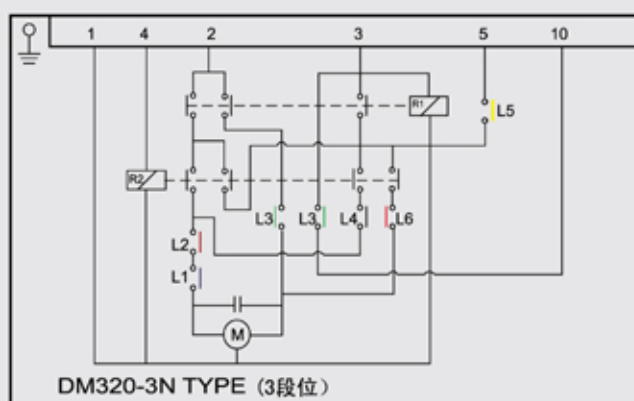
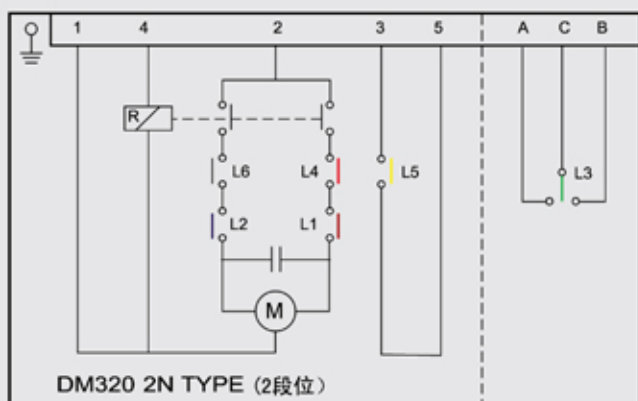
Manual operation of motor is possible.



产品尺寸 (Dimensions)



电路图 (Wire Diagrams)



※ 另有2张电路图见参数表下方。

DM330 Series servo motors 伺服马达



■ 产品说明(Product explanation)

DM330系列伺服电机(风门执行器)由调节电机驱动的电子电路和具有6个调整凸轮及减速齿轮组成。电子电路可选择2, 3, 4段位置调节或比例调节。减速齿轮可由二级可调式性能优良的同步电机和马刺齿轮构成。

DM330 series electric actuator is composed of electronic circuit department which controls motor drive and operating department which contains six cams and reduction gear department.

Electronic circuit department is composed of circuit which is possible position control or PID control. And reduction gear department is composed of powerful synchronous motor which is able to assemble at couple and spur gear.

Fig. 7 ▶ 比例调节电路(PID control electronic circuit)

: 可选择外接电阻 ($0 \sim 135 \Omega$) 或电流信号 ($4 \sim 20 \text{mA}$).
Possible resistance type or current sensor type PID control which is reporting current position of motor.

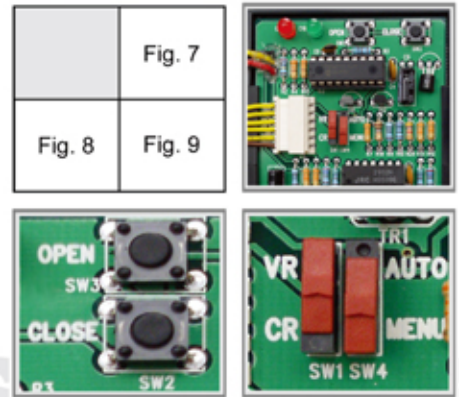
Fig. 8 ▶ 手动操作开关 (SW2, 3) (Manual operation switch)[SW2, 3]

: 零点回位及产品维修操作选取。
Service switch for manual operation when starting up and for maintenance.

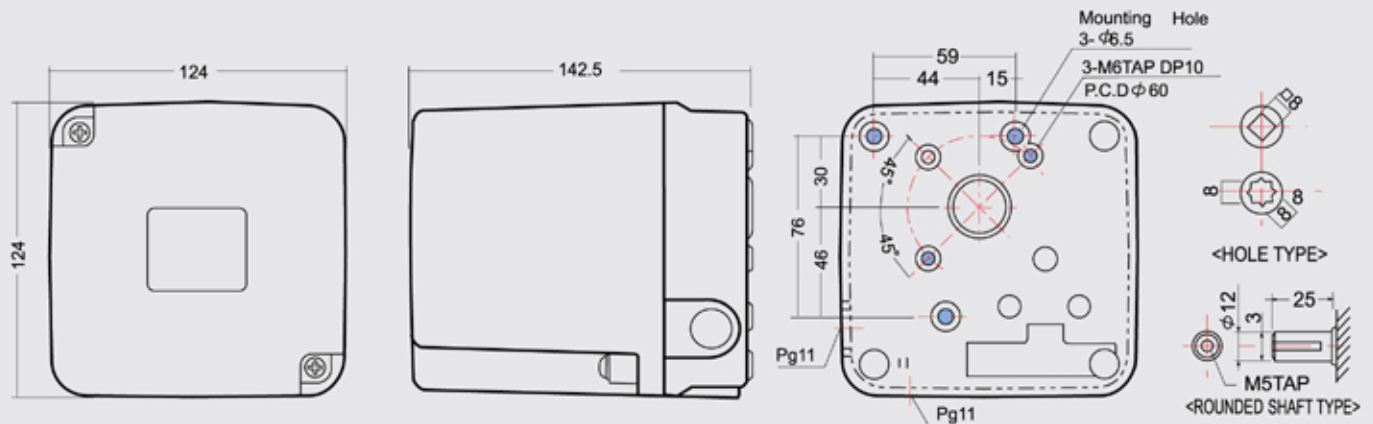
Fig. 9 ▶ 输入转换开关 (SW1) 及自动/手动转换开关 (SW4)

(Input method and manual/automatic conversion switch)

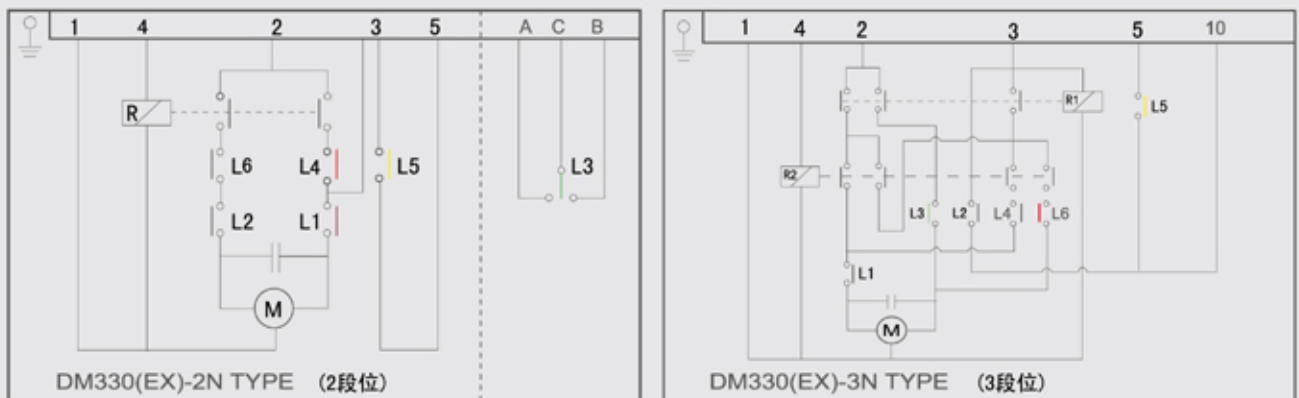
: 外接电阻 ($0 \sim 135 \Omega$) 或电流信号 ($4 \sim 20 \text{mA}$) 选择SW1.
Select resistance type or current sensor type which is reporting current position motor.
: 自动或手动转换操作选择SW4
Selecting automatic or manual operation of motor is possible.



■ 产品尺寸 (Dimensions)



■ 电路图 (Wire Diagrams)



※ DM330和DM330EX的电路图通用。

DM330EX Series explosion-proof servo motors 防爆型伺服马达



■ 产品说明 (Product explanation)

DM330EX系列伺服电机（风门执行器）适用于外界环境存在易燃易爆气体的防爆类型。由调节电机驱动的电子电路、具有耐压防爆功能的外壳及减速齿轮组成。

DM330EX series electric actuator is planned to be suitable in the work environment which needs inside pressure explosionproof structure.

This product is composed of electronic circuit department which controls motor drive and outer casing for inside pressure explosion-proof structure and reduction gear department.

► 防爆等级 (Enclosure) : Exd IIB T4

Fig.10 ► 刻度窗口 (Position indicator)

能从外部掌握伺服电机的运行状态。

You can see current position of motor without losing outer cover.

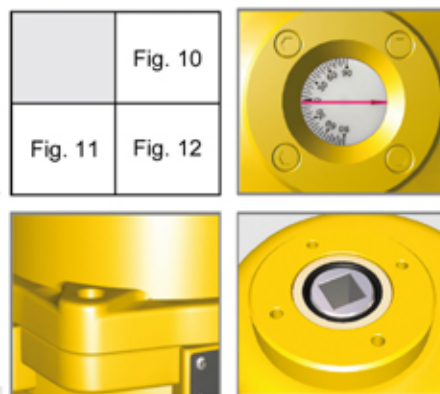
Fig.11 ► 外壳和密封 (Outer casing and packing)

外壳是10mm厚的铝制壳体，在壳体之间有很好的密封性以做到防爆功能。It is very hard that using aluminum casing which has 10mm clothing thickness. And it composes perfect packing between body and casing to exterminate hazards explosion.

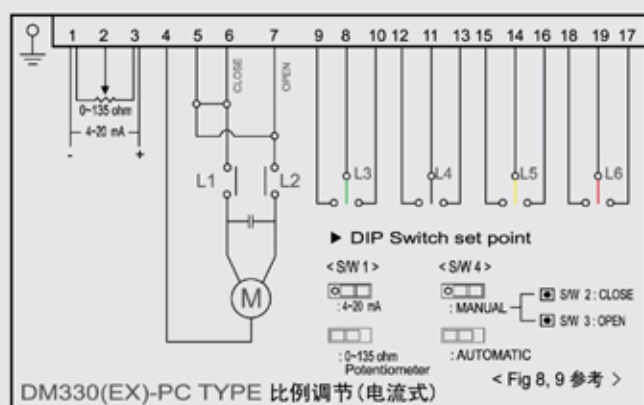
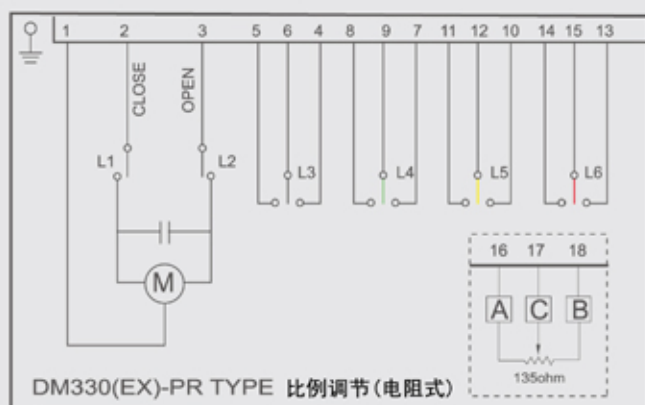
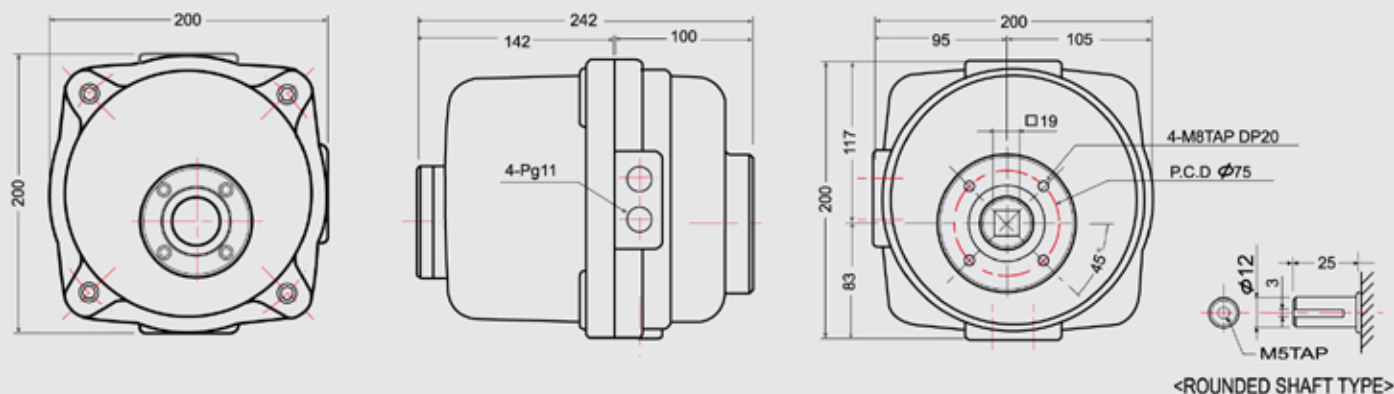
Fig.12 ► 油封 (Oil seal)

轴的底部设有特制的油封，以提高产品内外部的密封性。

Using oil-seal at the end of the shaft. It improves confidentiality of product inside and outside.



■ 产品尺寸 (Dimensions)



※ DM330和DM330EX的电路图通用。

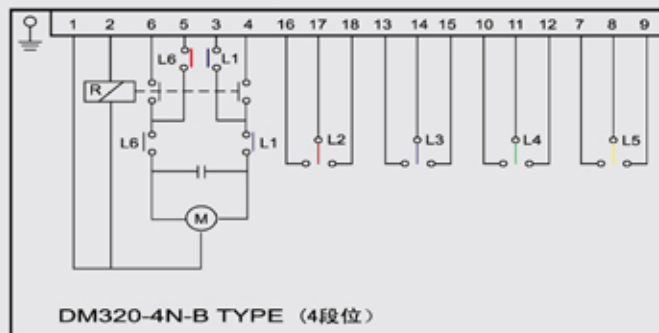
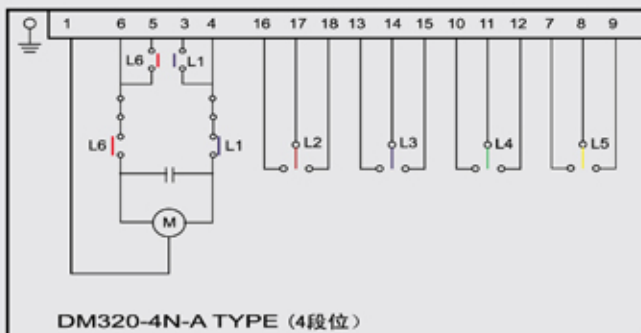
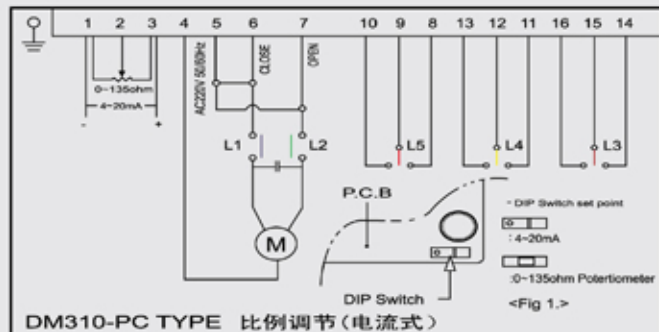
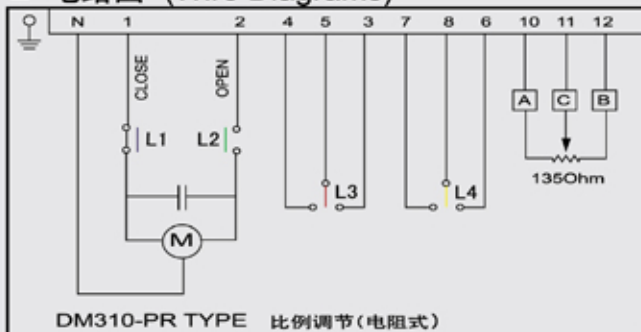
■ 产品选型表 (Model Number Designation)

		DM330 -		P	C	M2	R	30S	Q
产品系列名称 (Series Name)									
--DM310 --DM320									
--DM330 --DM330EX									
调节方式 (Control Type)									
2 } 3 } 4 }		段位调节 (Position Control)							
p -		比例调节 (P.I.D Control)							
PC-Board输入选择 (PC-Board Type)									
N - 普通式 (Standard Type)		B - 自定式 (custom type)							
R - 电阻式 (Potentiometer, Nominal 135Ω)		C - 电流式 (4 ~ 20mA or 135Ω)							
驱动电机大小 (马达) (Synchronous Motor Size)									
M1 - 1级电机 (Nomal Size Motor, Single)									
M2 - 2级电机 (Double Size Motor, Couples)									
驱动轴旋转方向 - 背视时 (Sense of Rotation - Bottom View)									
L - 左旋转 (逆时针) (Left Turn, CCW.)									
R - 右旋转 (顺时针) (Right Turn, C.W.)									
90度旋转时间 (Running Time for 90°)									
4S - 4秒 (4 Second)		8S - 8秒 (8 Second)							
20S - 20秒 (20 Second)		30S - 30秒 (30 Second)							
驱动轴形态 (Shaft Type)									
R - 圆形杆式 (Rounded-Straight Shaft Type)									
Q - 四角形 (Quadrilateral-hole type)									
D - D形杆 (D-Cutting straight shaft type)									

■ 参数 (Specifications)

项目Section)		单位 (Unit)	产品系列名称(Series Name)			
			DM310	DM320	DM330	DM330EX
电压 (Supply Voltage)		V×Hz	AC220×50/60	AC220×50/60	AC220×50/60	AC220×50/60
电耗 (Electrical power)	M1	W×A	18×1.0	18×1.0	18×1.0	18×1.0
	M2		-	-	36×2.0	36×2.0
调节方式 (Control Type)		-	2.3段位调节/比例调节 (2.3 Position/PID control)	2.3.4段位调节 (2.3.4 Position control)	2.3.4段位调节/比例调节 (2.3.4 Position/PID control)	2.3.4段位调节/比例调节 (2.3.4 Position/PID control)
90° 旋转时间/50/60Hz (Running time for 90 degrees)	4S	Sec (秒)	3.4	3.4	4	4
	8S		-	6.8	-	-
	20S		18	-	20	20
	30S		26	-	30	30
力矩 (扭矩) (Rated torque Value)	M1	Nm	2	3	3	3
			-	5	-	-
			6	-	10	10
			8	-	15	15
	M2		-	-	5	5
			-	-	-	-
			-	-	18	18
			-	-	30	30

■ 电路图 (Wire Diagrams)



FD440EX Series explosion-proof electronic flame detectors

防爆型火焰监测器



■ 产品说明 (Product explanation)

FD400EX系列是用于监测工业用燃气、燃油或油气混合火焰紫外线辐射的电子式火焰监测器。该产品是以需要耐压防爆结构功能的工作环境而设计制造。

The FD400EX series electronic flame detectors is used to detect industrial gas, oil or gas -oil hybrid flame ultraviolet radiation . The design and manufacture is based on the need for pressure explosion-proof structure and function of the working environment.

• 型号区分 (Model Number Designation)

- FD400EX: 标准型 Standard
- FD400EXR: 继电器内置型 (可选型) Built-in Relay (Optional)

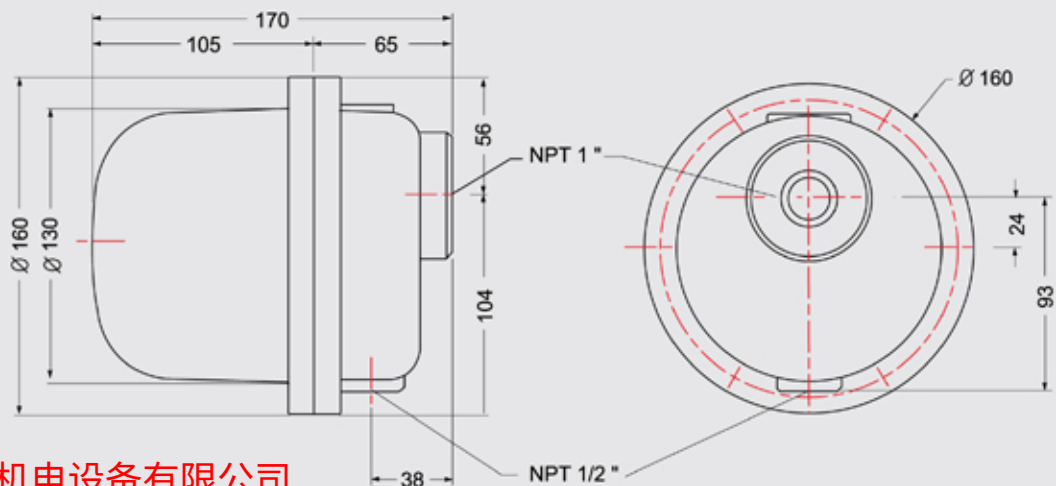
■ 产品特性 (Features)

- 为防止因热辐射引起的频繁停运状态, 采用紫外线辐射监测。
In order to prevent the frequent stop running result of radiation-induced , it used ultraviolet radiation monitoring.
- 监视口所用材料及设计能够防止燃气、粉尘或水分进入感知器所引发的问题
The monitor window can prevent the problems arising of gas, dust or moisture into the perceptor.
- 本型号是防爆型
This model is the explosion-proof type.
- 本产品制造标准符合 (Enclosure) : Exd II B T6 (防爆标准)
This product conforms to the standard of Exd II B T6.

■ 产品参数 (Specifications)

- 监测范围: 紫外线专用
Monitor range : Special ultraviolet ray.
- 外 壳: 浇注铝外壳
material : Aluminum alloy die-cast.
- 外形尺寸: 160mm(L) × 160mm (W) × 170mm (H)
dimensions :
- 环境温度: - 40° C ~ +120° C
Ambient temperature :
- 接线连接: 侧面有连接信号输入线及防爆插头用1/2口径电线管孔, 连线时应拆除内六角堵丝。
Connection:The RP 1/2" electric wire aperture on the side of unit which is suitable for signal input lines connection and explosion-proof plugs, removed hexagonal screw when connected.
- 设置方法: 用NPT标准 1英寸外对丝和连接头连接。参照图2。
Installation method:Used NPT standard external fuse joint with the connector.----The detail data refer to Fig2.

■ 产品尺寸图 (Dimensional Drawing) (图1)



上海威炼机电设备有限公司

T:021-36365163

F:021-36365162

www.shweilian.com