

MTP Series
Multi-Turn Pneumatic Actuator
MTP系列多回轉氣動執行機構

瑞承機械有限公司

Ruicheng Machinery Co., Ltd.

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瑞承機械有限公司 ®

Valves & Actuators & Controls



Actuator Pneumatic



瑞承機械有限公司

Multi-Turn Pneumatic Actuator

COMPANY PROFILE

公司簡介

工業自動化操作

提供最佳產品和專業改善方案



MTP Series Multi-Turn Pneumatic Actuator

瑞承機械有限公司成立至今致力於各類氣動操作機開發與應用，為工業自動化操作提供最佳產品和專業改善

產品介紹

Product Introduction

- 直接安裝 Direct installation
- 位置指示 Position indication
- 模組化設計 Modular design
- 現場控制／遠方控制 Local / remote control
- 手自動切換靈活 Flexible manual automatic switching
- 操作簡易，節省安裝空間 Easy to operate, saves installation space
- 可增加防爆電磁閥，適用於防爆場所使用

An explosion-proof solenoid valve can be added, suitable for use in explosion-proof places

- 多種的扭力、推力、轉速組合可選用

Various combinations of torque, thrust and speed are available

產品特性

Product characteristics

- 全金屬設計，防爆防火 All-metal design, explosion-proof and fire-proof
- 模組化設計，維護簡便 Modular design, easy maintenance
- 高精度齒輪馬達，節能降噪 High-precision gear motor, energy-saving and noise reduction
- 扭矩限位裝置，過載保護 Torque Limit switch Devices, Overload Protection
- 配置靈活 Flexible configuration
- 智能控制氣源 Intelligent control of air supply
- 適用於防爆場所使用 Suitable for use in explosion-proof places
- 多種指示，使用範圍廣 Wide range of instruction
- 連接方便，可與減速機配合使用 Easy to connect, can be used with reducer

SCENE APPLY

現場應用

經過多年專業經驗及發展，以其卓越的產品質量及專業的售服維修，獲得廣大客戶一致肯定。

After years of professional experience and development, Ruicheng Machinery Co., Ltd. has won unanimous recognition from customers for its excellent product quality and professional sales and maintenance services.





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MTP Series Multi-Turn Pneumatic Actuator

MTP系列多回轉氣動執行機構

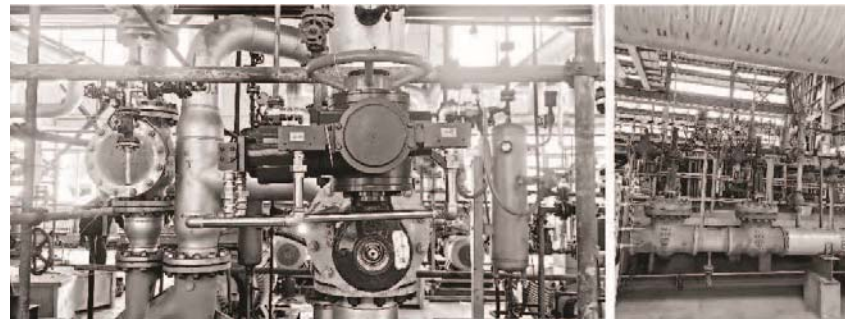


MTP Series Multi-Turn Pneumatic Actuator

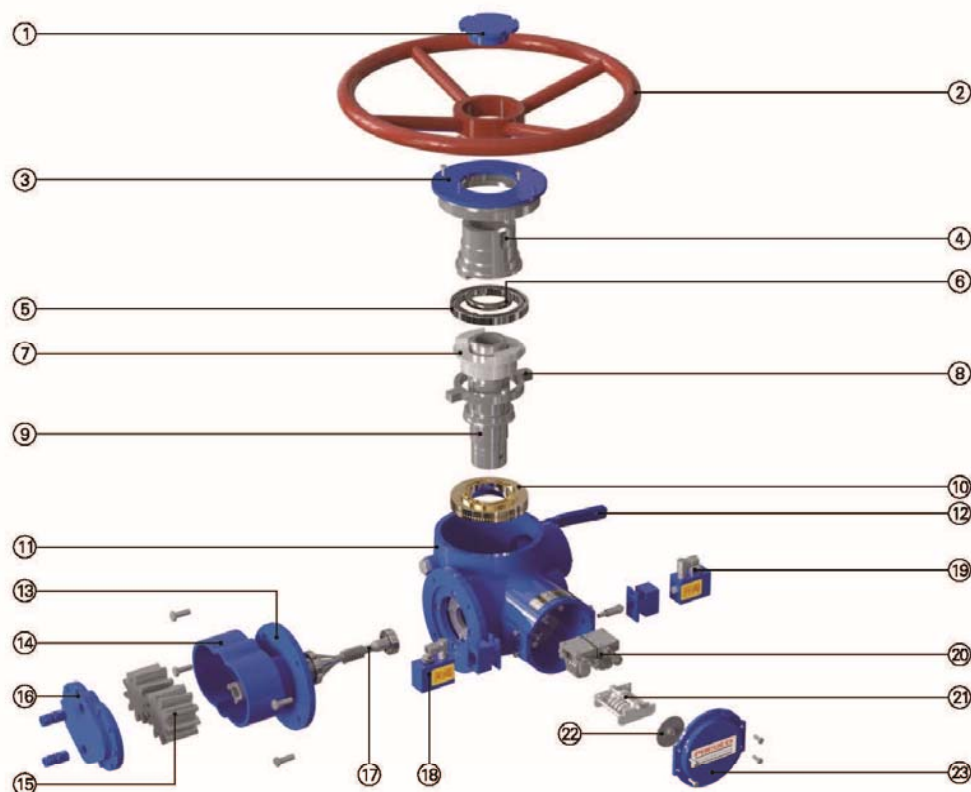
設計及特點 Design and characteristics

MTP氣動操作機，是一種多回轉型閥門驅動裝置，以氣源驅動氣動齒輪馬達為動力，蝸輪蝸桿為傳動機件，在有氣源下利用位置極限限位設定開關位置，扭矩限位裝置，過載保護，無需供電。無氣源情況下，可切換受動離合器，用手輪驅動閥門。

MTP pneumatic Actuator is a multi-turn valve drive device that uses an air source to drive a gear-assisted motor as its motive force and a worm gear as its transmission mechanism. Use the position limit switch to set the position and torque switch device under air supply, and does not require power supply. In the absence of air source, the passive clutch can be switched and the valve can be driven by the handwheel.

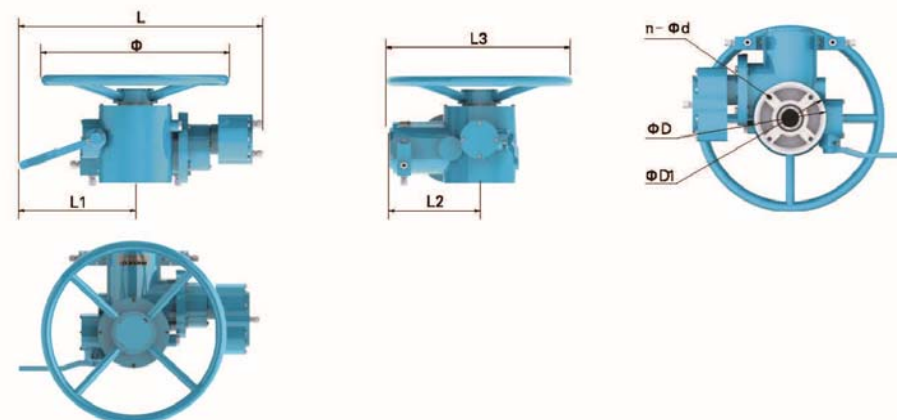


◆ 零件與材料清單 Parts and material list

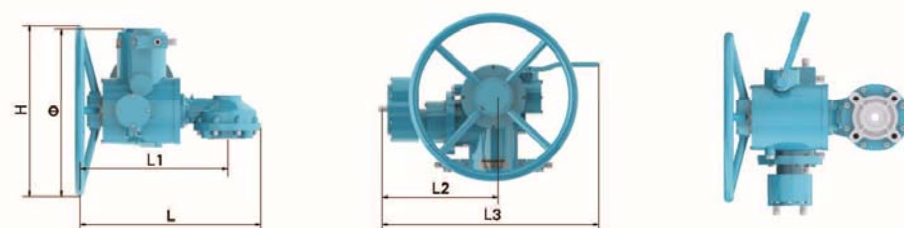


- | | | | |
|------------------------------|--------------------------|---------------------------------|--|
| 1 手輪壓蓋
Handwheel gland | 7 下聯軸器
Lower coupling | 13 齒輪馬達法蘭盤
Gear motor flange | 19 平衡閥
Balance valve |
| 2 手輪
Handwheel | 8 手動撥塊
Manual block | 14 馬達殼體
Motor housing | 20 限位模塊
Limit module |
| 3 主軸壓蓋
Spindle gland | 9 主軸
Spindle | 15 齒輪
Gear | 21 無極指示(選配)
Non-polar indication (optional) |
| 4 上聯軸器
Upper coupling | 10 渦輪
Turbine | 16 馬達端蓋
Motor end cover | 22 開關指示(選配)
Switch indication (optional) |
| 5 聯軸器軸承
Coupling bearing | 11 殼體
Shell | 17 蝸杆
Worm | 23 殼體端蓋
Shell end cover |
| 6 主軸軸承
Main shaft bearing | 12 切換手柄
Toggle handle | 18 氣控閥
Pneumatic valve | |

◆ 外形尺寸表 Outline Dimension Table



型號 Type	L	L1	L2	L3	H	Φ	n-Φd	ΦD	ΦD1
MTP200	635	325	255	520	390	300~530	4-M12	185	205
MTP210	680	325	255	520	390	300~530	4-M12	185	205
MTP300	630	325	255	520	390	300~530	4-M12	185	205
MTP310	685	325	255	520	390	300~530	4-M12	185	205



型號 Type	L	L1	L2	L3	H	Φ
MTP201	665	515	310	635	520	300
MTP211	665	515	365	690	520	300
MTP301	665	515	305	630	520	300
MTP302	770	580	305	630	520	300
MTP311	665	515	360	685	520	300
MTP312	770	580	360	685	520	300

◆ 執行器規格型號、技術參數 Specification, model and technical parameters of actuator

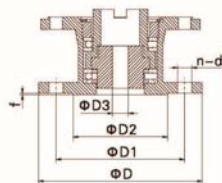
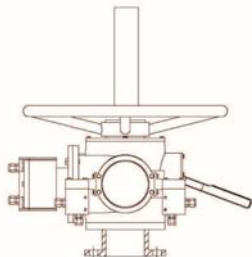
氣源壓力0.4Mpa air supply pressure 0.4Mpa

型號 Type	輸出扭矩N.m Output torque N.m	轉速r/min Speed r/min	重量Kg Weight Kg	耗氣量Nm³/min Gas consumption Nm³/min	最大閥杆直徑mm Maximum valve stem diameter mm
MTP200	72	52	~32	0.1~0.3	38
MTP300	150	45	~49	0.1~0.4	38
MTP210	205	20	~38	0.1~0.3	38
MTP310	427	16	~55	0.1~0.4	38
MTP201	324	13	~52	0.1~0.3	50
MTP301	641	11	~69	0.1~0.4	50
MTP211	872	5	~58	0.1~0.3	50
MTP311	1827	4	~75	0.1~0.4	50
MTP312	2109	3	~79	0.1~0.4	60

直裝式 Direct-mounted type

◆ 法蘭連接尺寸 Flange connection dimensions

ΦD	ΦD1	ΦD2	ΦD3	f	n-d	備註 Remarks
175	140	100	≤38	3	4-Φ18	尺寸 Default Size
210	165	130	≤38	4.5	4-Φ22	
300	254	200	≤38	4.5	8-Φ18	



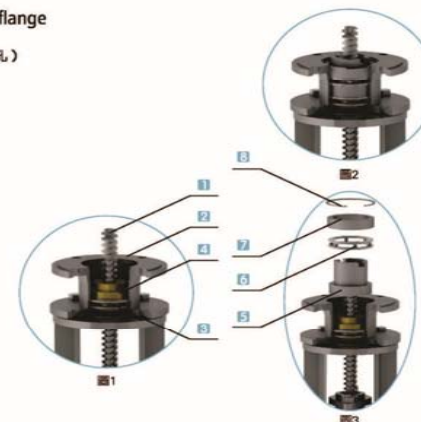
◆ 法蘭盤安裝步驟 Installation procedure for flange

1. 螺桿頂部加工出M10*15的螺紋孔（帶減速機的不需要螺紋孔）
2. 安裝連接支架
3. 放入平面軸承
4. 將加工好的閥杆螺母旋入（買家自行加工）
5. 放入連接套，注意要完全卡進去
6. 放入平面軸承
7. 放入限位環
8. 安裝卡簧

安裝完成，如圖2所示

1. Threaded holes of M10*15 are machined on top of the screw (no threaded holes are required with reducer)
2. Installing connection bracket
3. Place in plane bearing
4. Screw in the processed stem nuts (Buyer processes by himself)
5. Put in connecting sleeve, pay attention to clipping in completely
6. Place in plane bearing
7. Put in limit ring
8. Installing the circlip

Installation is complete as shown in Figure 2



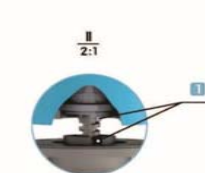
◆ 馬達安裝步驟 Motor installation procedure



1. 將馬達切換成手動狀態（手柄往下壓，如壓不到位，轉動手輪）；
2. 旋轉手輪，是圖中1的兩個凹凸對齊；
3. 安裝到位後擰緊固定螺絲；
4. 裝上不銹鋼閥位指示杆2（選配）；
5. 將指示護套旋入3（選配）

1. Switch motor to manual state (handle) Press down, if not in place, turn the handwheel;
2. Rotating handwheel is the two concave and convex of Figure 1 Align;
3. Tighten the fixing screw after installation in place;
4. Mount stainless steel valve position indicator rod 2 (optional);
5. Screw in the indicating sheath into 3 (optional)

◆ 安裝注意事項 Installation Precautions



1. 將配指示杆的請在安裝前在螺桿上鑽好M10*15螺絲孔；
2. 不可對齒輪馬達施加外力，以免損壞；
3. 閥杆螺母出廠未加工螺紋，用戶需自行加工；
4. 所有配件均可輕鬆安裝，如遇卡頓、錯位，請勿用外力強行安裝。

1. Before installing, please install the indicator rod in the Drill M10*15 screw hole on screw;
2. Do not exert any external force on the gear motor. Avoid damage;
3. Stem nut unprocessed thread from factory. Users need to process by themselves;
4. All accessories can be easily installed, such as in the case of Carton Misalignment, do not force installation with external force.

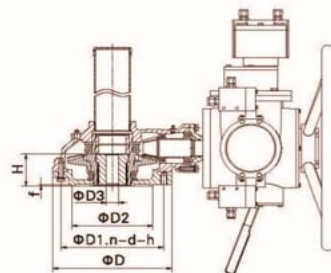


帶減速機式 Reducer type

◆帶減速機說明 Description of belt reducer

對於較大口徑的閥門，MTP系列氣動執行器在使用時需要配置減速機。浙江孚格流體為用戶提供了三種常規減速機型號，也可按用戶要求定制。用戶也可自行提供減速機。本頁提供了詳細的安裝方法及連接尺寸，用戶在使用本產品前需仔細閱讀本頁說明，如有疑問，請致電本公司。

For larger caliber valves, MTP series pneumatic actuators are in use A reduction gear is required. Zhejiang Fuge Fluid Provides Three Common reducer models can also be customized to customer requirements. Users also Reducers are available on their own. Detailed installation methods and procedures are provided on this page. Connection dimensions, users need to read this page carefully before using this product Ming, if you have any questions, please call us.



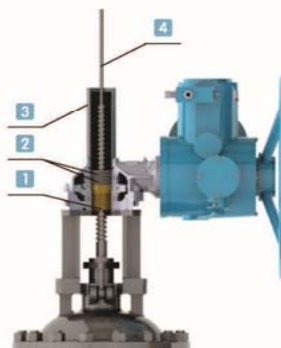
◆法蘭盤連接尺寸 Flange joint dimensions

型号 Type	ΦD	ΦD1	ΦD2	ΦD3	n-d-h	f	H
BA-1	300	254	200	≤48	8-M16-24	3	78
BA-2	350	298	230	≤62	8-M16-24	4.5	101
BA-3	415	356	260	≤76	8-M20-30	4.5	146

◆帶減速機安裝步驟 Installation procedure for belt reducer

- 1、卸下鎖緊螺母2；
- 2、取出閥杆螺母1，加工成需要尺寸；
- 3、在閥杆上鑽出M10×15螺紋孔（標配無需加工）；
- 4、安裝減速機，固定好螺栓；
- 5、將閥杆螺母旋入，裝好鎖緊螺母；
- 6、安裝指示杆4；
- 7、旋入閥杆防護罩3，如執行器和減速機出廠前是分離的，最後將執行器安裝好。

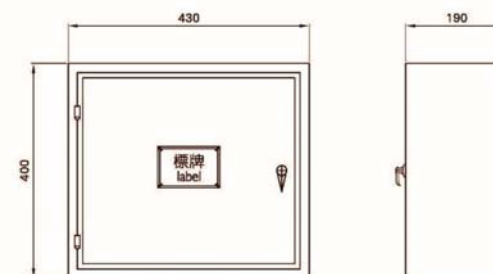
1. Remove lock nut 2;
2. Remove the stem nut 1 and machine to the required size.
3. Drill M10 through valve stem × 15 threaded holes (no machining required as standard);
4. Install the reducer and fix the bolts;
5. Screw in the stem nut and fix the lock nut.
6. Install indicator rod 4.
7. Screw in valve stem guard 3, e.g. separating actuator and reducer before leaving factory And finally install the actuator.



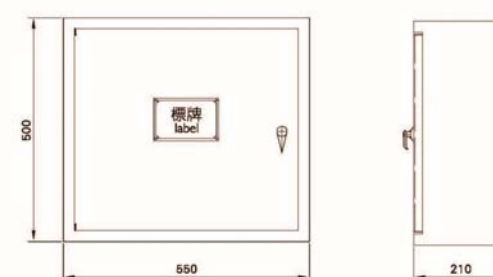
◆控制箱尺寸 Control box size



手動控制箱
Manual control box



遠程控制箱
Remote control box



智能控制箱
Intelligent control box

