



# ED, YTD, MYT2 SERIES ELECTRO-HYDRAULIC THRUSTERS

Ed、YTD、MYT2系列电力液压推动器

致力传动安全 Committed to transmission security



# Ed.YTD.MYT2系列电力液压推动器

## ED.YTD.MYT2 SERIES ELECTRO-HYDRAULIC THRUSTERS

**应用:** 电力液压推动器是一种集电机, 离心泵, 油缸为一体的, 结构非常紧凑的驱动控制装置, 被广泛用作各种鼓式制动器和盘式制动器的驱动装置, 还可用于各种工业阀门, 闸门, 定向摆动和转动( $<90^\circ$ )装置(机构)及夹紧装置的驱动控制。

### Application:

Electro-hydraulic thruster is a kind of drive control system, which is very compact in structure, and integrates electrical motor, centrifugal pump and oil cylinder. It is extensively used as drive mechanism of various drum and disc brakes, and as drive control of various industrial valves, penstock, directional pendulum and steering( $<90^\circ$ ) mechanism and clamping devices.

## 符合标准 Standards compliant:

### Ed.YTD.MYT2系列

Ed系列符合DIN15430标准, YTD系列符合JB/T10603-2006标准, MYT2系列连接尺寸符合Q/ZB120标准, 可取代(M)YT1系列老产品。

ED series comply with DIN15430 standard, YTD series comply with JB/T10603-2006 standard, MYT2 series connection dimension comply with Q/ZB120, which can replace (M)YT1 series old products.

## 主要特点 Main feature:

# 1

- + 外壳为铸造铝合金, 重量轻, 外形美观。  
*The casing is made by casting aluminum alloy, light and good-look.*

# 2

- + 电机为非浸油式结构, B级或F级绝缘(根据用户要求), 耐热性好, 寿命长。  
*Electrical motor is of non-under-oil structure, B grade or F grade insulation (according to customer's requirements), durable and good heat resistance.*

# 3

- + 电机接线盒盖设有密封, 采用电缆填料函进线, 牢固可靠, 电气外壳防护等级达IP65。  
*Cover of junction box is tightly sealed. Cable stuffing box is adopted for inlet wire, which is firm and reliable. Protection class of electric casing reaches IP65.*

# 4

- + 电机轴和推杆均表面特殊处理, 使密封件寿命大大延长。  
*The surface of motor shaft and pusher shall be specially treated specially to make seals be much more durable.*



Ed.YTD.MYT2系列 Series

# 5

+ 油缸壳体在一侧设有平衡气室,可使推动器在0~180°任何方向安装,从而扩大其使用范围。

*Balancing air chamber is set up at one side of oil cylinder housing, which can make the thruster to be installed at any direction within range of 0~180° and enlarge the using range.*

# 6

+ 全部密封件和轴承采用世界名牌产品,密封可靠,寿命长。

*All seals and bearing are all world famous products. The sealing is reliable and durable.*

# 7

+ 紧固件为不锈钢材质,美观耐用。

*Fasteners are made of stainless steel, good-look and durable.*

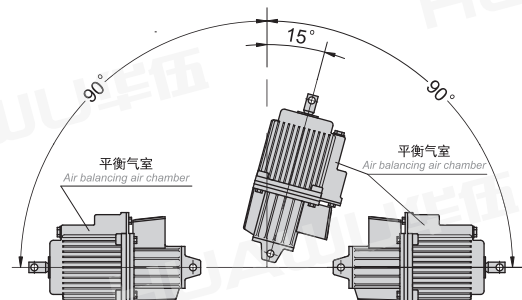
## 附加装置 Additional devices:

- 上限位开关: 可指示推动器是否打开, 推杆是否推到规定位置等信息。
- 下限位开关: 可指示推动器是否正确闭合, 推杆是否回到规定位置等信息, 可同时设置上下限位开关。
- 增设内置式弹簧(仅短行程推动器可以), 弹簧力可由用户确定, 但不得超过内置弹簧力(见参数表)。
- 增设加热器: 在使用地点环境温度低于-25℃时, 如用户需要, 可增设加热器, 加热器参数见附表1。
- 上升延时和下降延时阀或上升下降延时阀, 可无级延长上升或下降时间, 延时范围为5秒至30秒, 具体延时值可根据用户要求调定。
- *Upper limit switch, which can indicate whether brake is open, or whether the thruster is at the right position.*
- *Lower limit switch, which can indicate whether the brake is properly closed, whether the thruster return to right position. Upper and lower limit switches can be set together.*
- *Additionally install built-in spring (only for short stroke thruster). Spring force can be decided by customers, but within the force limit of built-in spring (refer to parameter tables).*
- *Heater: Customers can require heaters in the place where ambient temperature is below -25°C. Parameters of heaters are attached. (refer to Tab.1)*
- *Ascending time-delay valve, descending time-delay valve or ascending/descending time-delay valve can steplessly prolong the rising and falling time, delay range is from 5s to 30s, specific delay time can be set as customers' requirements.*

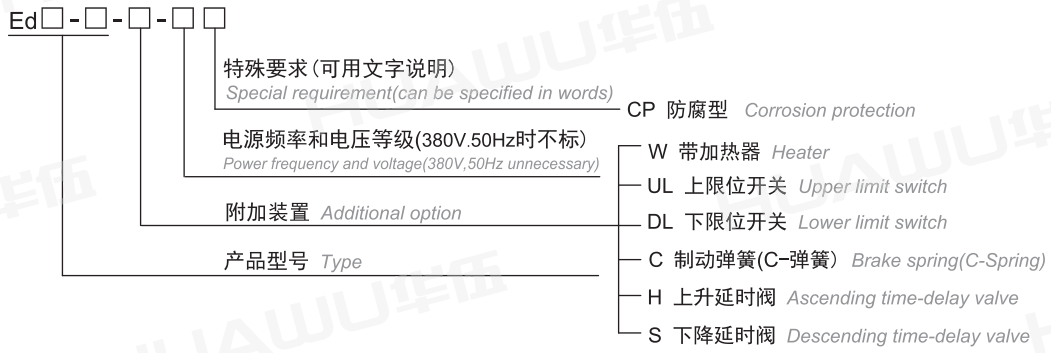
## 安装方式 Mounting:

底座均可旋转90°安装(用户在订货时注明), 推杆头可360°任意旋转, 全部推动器可垂直, 倾斜(15°)安装, 也可大于15°倾斜或水平安装, 但平衡气室应如图所示:

*Foundations can be installed by revolving 90° (please note it when customers ordered), head of push rod can be turned 360° freely, all thrusters can be vertically and ( $\geq 15^\circ$ ) obliquely or horizontally installed, the balancing air chamber is shown as right figure.*



## 订货标记 Order Mark



## 订货示例 Order Example

Ed500-60-H.UL 460V/60Hz.CP    YTD500-60-C.W.S 440V/60Hz.CP    MYT2-50/6-UL.S 460V/60Hz  
 Ed500-60    YTD500-60    MYT2-50/6



# Ed.YTD.MYT2系列 Series 电力液压推动器 Electro-hydraulic Thrusters

## V1.2

表1 Table.1

推动器型号 Thruster type		Ed220 YTD220	Ed300 YTD300 MYT2-25	Ed500 YTD500 MYT2-50	Ed800 YTD800 MYT2-100	Ed1250 YTD1250 MYT2-125	Ed2000 YTD2000 MYT2-200	Ed3000 YTD3000 MYT2-300	Ed4500 YTD4500
加热器 Heater	功率 Power (W)	40							
	电源 Power supply	110/220V AC 50/60 Hz(其它电源等级可按需要定制 Other power supply can be decided according to requirements)							

电缆规格 Cable size		电缆进线管 Cable entry		限位开关 Limit switch		液压油 Hydraulic fluid	
主电源 Main power supply	加热器 Heater	主电源 Main power supply	加热器 Heater	电源 Power supply	电缆规格 Cable size	环境温度 Ambient temperature (°C)	液压油 Hydraulic fluid
4×2.5/1.5mm <sup>2</sup>	2×2.5/1.5mm <sup>2</sup>	M25×1.5		25~250V AC/DC	2×1.5mm <sup>2</sup>	-10~+50° -25~+50°	DB-25(SY1351)、DB-45(SY1351) HL10(DIN51524) C10(Shell tellus)

### Ed、YTD 系列电力液压推动器技术参数 Technical data

推动器型号 Thruster type	额定推力 Rated thrust (N)	额定行程 Rated stroke (mm)	制动弹簧力 Braking spring force (c-spring) (N)	功率消耗 Power consumption (W)	额定电流 Rated current (A)	额定电压 Rated voltage (V)	最大操作频率 Max.Operating frequency (1/h)	重量 Weight (kg)
Ed220-50	220	50	180	120	0.38	380~400V	2000	10
YTD220-50								
Ed300-50	300	50	270	250	0.78	380~400V	2000	14
YTD300-50								
Ed500-60	500	60	460	370	1.34	380~400V	2000	23
YTD500-60				250	0.78			
Ed800-60	800	60	750	550	1.52	380~400V	2000	24
YTD800-60				370	1.34			
Ed1250-60	1250	60	1200	550	1.52	380~400V	2000	39
YTD1250-60				370	1.34			
Ed2000-60	2000	60	1900	750	1.98	380~400V	2000	39
YTD2000-60				550	1.52			
Ed3000-60	3000	60	2700	900	2.21	380~400V	1500	40
YTD3000-60				750	1.98			
Ed500-120	500	120		370	1.34	380~400V	1200	26
YTD500-120				250	0.78			
Ed800-120	800	120		550	1.52	380~400V	1200	27
YTD800-120				370	1.34			
Ed1250-120	1250	120		550	1.52	380~400V	1200	39
YTD1250-120								
Ed2000-120	2000	120		750	1.98	380~400V	1200	39
YTD2000-120				550	1.52			
Ed3000-120	3000	120		900	2.21	380~400V	900	40
YTD3000-120				750	1.98			
Ed4500-120	4500	120		1100	2.56	380~400V	900	45
YTD4500-120								
Ed1250-80	1250	80		550	1.52		1200	39
YTD1250-80				370	1.34			
Ed2000-80	2000	80		750	1.98		1200	39
YTD2000-80				550	1.52			
Ed3000-80	3000	80		900	2.21		900	40
YTD3000-80				750	1.98			
Ed4500-80	4500	80		1100	2.56		900	45
YTD4500-80								

### MYT2系列电力液压推动器技术参数 Technical data

推动器型号 Thruster type	额定推力 Rated thrust (N)	额定行程 Rated stroke (mm)	功率消耗 Power consumption (W)	额定电流 Rated current (A)	额定电压 (50Hz) Rated voltage (V)	最大操作频率 Max.Operating frequency (1/h)	重量 Weight (kg)	可直接互换(取代)的老产品 Exchangeable (equivalent) products
MYT2-10/25	100	25	120	0.38	380~400V	2000	6	(M)YT1-18Z/2
MYT2-25/4	250	40	250	0.78				
MYT2-25/5	250	50	250	0.78	380~400V	2000	14.5	(M)YT1-25ZB/4
MYT2-50/6	500	60	250	0.78				
MYT2-100/6	1000	60	550	1.52	380~400V	2000	32	(M)YT1-25ZC/4
MYT2-125/6	1250	60	370	1.34				
MYT2-125/10	1250	100	550	1.52	380~400V	2000	49	(M)YT1-45Z/5/6
MYT2-200/6	2000	60	550	1.52		380~400V	1200	50
MYT2-200/12		120			1500		56	
MYT2-300/6	3000	60	750	1.98	380~400V	900	60	(M)YT1-180Z/8~12
MYT2-300/12		120				1500	58	
						900	62	(M)YT1-320Z/12

1)内置弹簧力为推动器推起1/3额定行程时的力; 2)推动器内置上表弹簧时,输出的推力为零; 3)其它电源电压下的电流参数请与我们技术人员联系。

1)Build-in spring force is the force while thruster pushing up 1/3 rated stroke;2)When thruster is built in above springs, the output thrust is zero;3)Other current parameters under power supply and voltage please contact our technicians.

**技术参数**

Technical data

行程-动作时间曲线 Stroke-action time curve  
 (在20°C, 用砝码测定的 at 20°C, measured by weight)

短行程系列 Short-stroke series

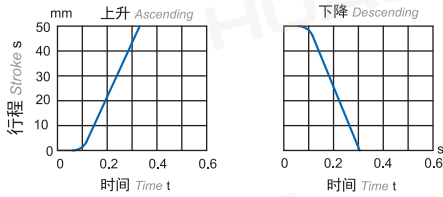


图 Fig 1-1 Ed220.Ed300.YTD220.YTD300

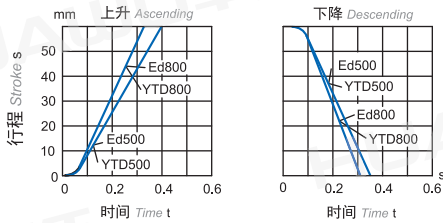


图 Fig 1-2 Ed500.Ed800.YTD500.YTD800

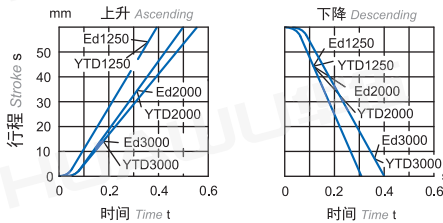


图 Fig.1-3 Ed1250.Ed2000.Ed3000  
 YTD1250.YTD2000.YTD3000

推力-行程曲线 Thrust-stroke curve

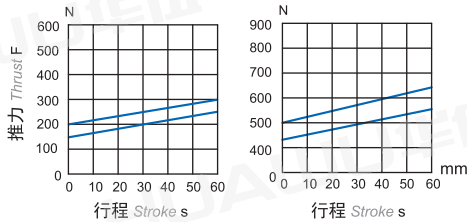


图 Fig.2-1  
 Ed220.YTD220

图 Fig.2-3  
 Ed500.YTD500

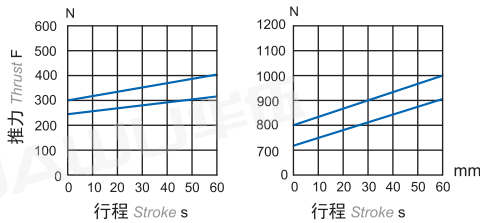


图 Fig.2-2  
 Ed300.YTD300

图 Fig.2-4  
 Ed800.YTD800

长行程系列 Long-stroke series

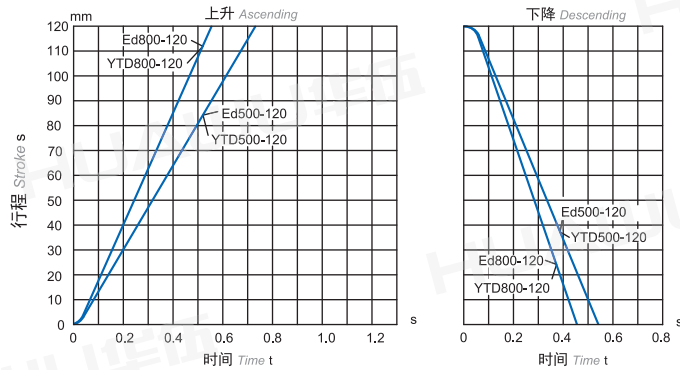


图 Fig.1-4 Ed500-120.Ed800-120.YTD500-120.YTD800-120

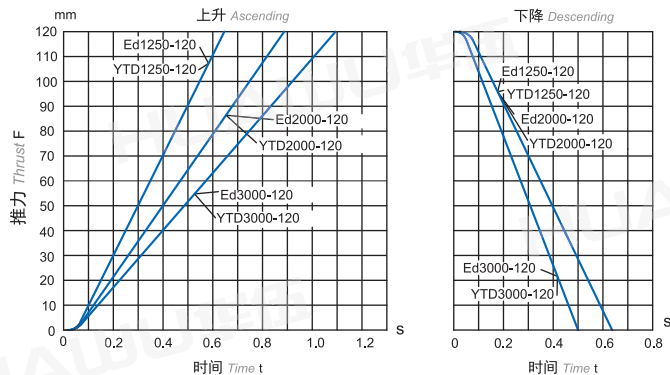


图 Fig .1-5 Ed1250-120.Ed2000-120.Ed3000-120.  
 YTD1250-120.YTD2000-120.YTD3000-120

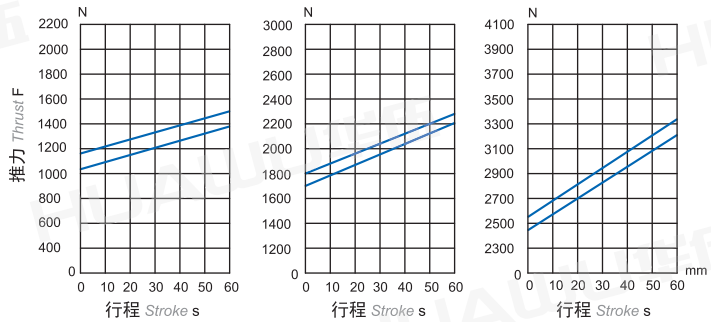


图 Fig.2-5  
 Ed1250.YTD1250

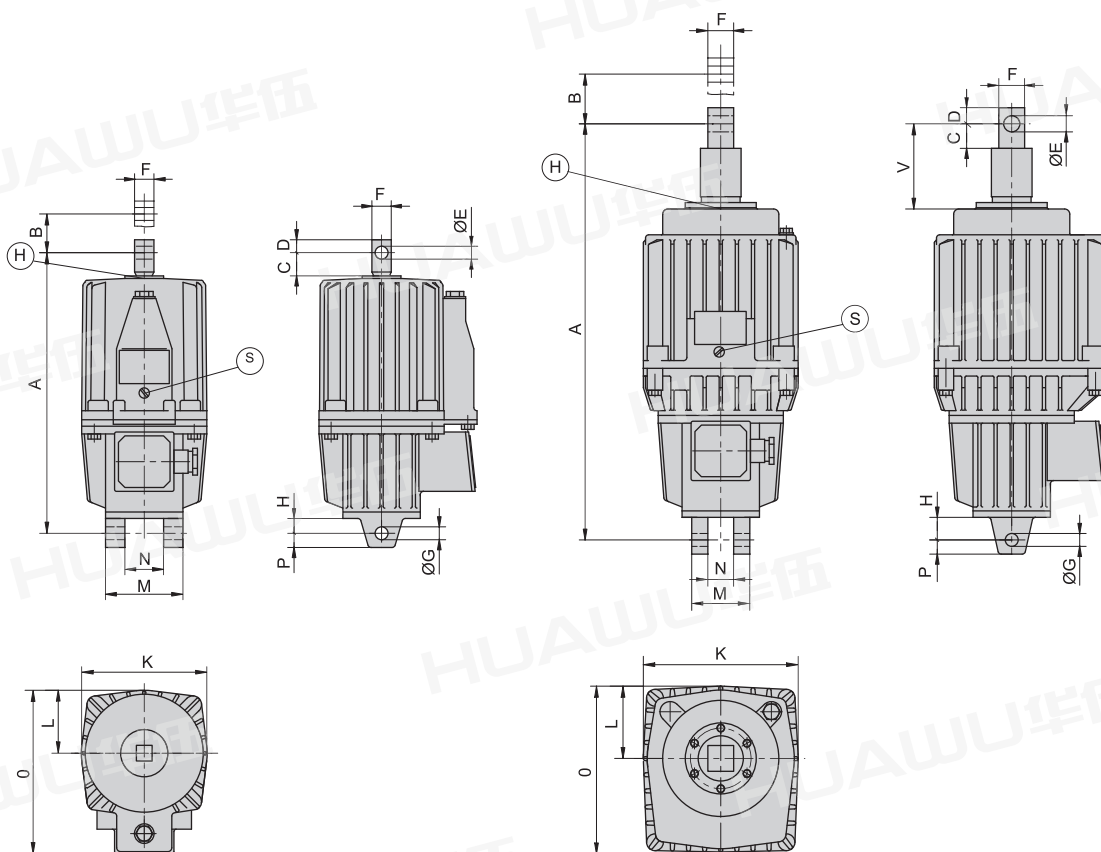
图 Fig.2-6  
 Ed2000.YTD2000

图 Fig.2-7  
 Ed3000.YTD3000

### 使用条件 Operating condition:

- 环境温度: -20~+50℃。
  - 相对湿度: ≤90%, 当用于湿热地区或有腐蚀性大气(气体)的环境中时, 应选用防腐型产品。
  - 适应的工作制: 断续(S3-60%)和连续(S1)工作制。
- 有特殊要求时, 在订货时协商确定。

- Ambient temperature: -20~+50℃.
  - Relative humidity: ≤90%; anti-corrosive thrusters should be selected for damp and hot areas or corrosive environment.
  - Operating duty: intermittent(S3-60%) and continuous(S1).
- Special requirements can be discussed in order.



型号 Type: Ed220.Ed300.Ed500.Ed800  
 YTD220.YTD300.YTD500.YTD800  
 MYT2-10.MYT2-25.MYT2-50.MYT2-100

型号 Type: Ed1250.Ed2000.Ed3000.Ed4500  
 YTD1250.YTD2000.YTD3000.YTD4500  
 MYT2-125.MYT2-200.MYT2-300

说明: 1) H=上升阀(上升延时), S=下降阀(下降延时)(MYT2-10/2.5, Ed220,YTD220无此附加装置)。2) 推杆头可360°任意旋转。  
 Note: 1) H=Ascending valve (ascending delay) S=Descending valve (descending delay)(not for MYT2-10/2.5,Ed220.YTD220). 2) The head of push rod can be revolved freely in 360°.



Ed.YTD.MYT2系列 Series  
**电力液压推动器**  
 Electro-hydraulic Thrusters

V1.2

**Ed、YTD系列推动器安装尺寸** *Dimensions of Ed,YTD series thruster*

推动器型号 <i>Thruster type</i>	A	B	C	D	E	F	G	H	K	L	M	N	O	P	V
Ed220-50	286	50	23	14	12	20	16	20	160	80	80	40	197	16	
YTD220-50															
Ed300-50	370	50	33	17	16	25	16	20	160	80	80	40	197	16	
YTD300-50															
Ed500-60	435	60	35	22	20	30	20	23	194	97	120	60	254	22	
YTD500-60															
Ed800-60	450	60	35	22	20	30	20	23	194	97	120	60	254	22	
YTD800-60															
Ed1250-60	645	60	37	25	25	40	25	33	240	120	90	40	268	25	130
YTD1250-60															
Ed2000-60	645	60	37	25	25	40	25	33	240	120	90	40	268	25	130
YTD2000-60															
Ed3000-60	645	60	37	25	25	40	25	33	240	120	90	40	268	25	130
YTD3000-60															
Ed500-120	515	120	35	20	20	30	20	61	194	97	120	60	254	22	
YTD500-120															
Ed800-120	530	120	35	20	20	30	20	61	194	97	120	60	254	22	
YTD800-120															
Ed1250-120	705	120	37	25	25	40	25	43	240	120	90	40	268	25	190
YTD1250-120															
Ed2000-120	705	120	37	25	25	40	25	43	240	120	90	40	268	25	190
YTD2000-120															
Ed3000-120	705	120	37	25	25	40	25	43	240	120	90	40	268	25	190
YTD3000-120															
Ed4500-120	850	120	48	35	30	50	30	40	290	145	110	60	325	30	190
YTD4500-120															
Ed1250-80	665	80	37	25	25	40	25	33	240	120	90	40	268	25	150
YTD1250-80															
Ed2000-80	665	80	37	25	25	40	25	33	240	120	90	40	268	25	150
YTD2000-80															
Ed3000-80	665	80	37	25	25	40	25	33	240	120	90	40	268	25	150
YTD3000-80															
Ed4500-80	810	80	48	35	30	50	30	40	290	145	110	60	325	30	150
YTD4500-80															

**MYT2系列推动器安装尺寸** *Dimensions of MYT2 series thruster*

推动器型号 <i>Thruster type</i>	A	B	C	D	E	F	G	H	K	L	M	N	O	P	V
MYT2-10/2.5	261	25	23	14	12	20	12	20	160	80	80	40	197	16	
MYT2-25/4	370	40	33	19	12	25	16	20	160	80	80	40	197	16	
MYT2-25/5	370	50	33	17	14										
MYT2-50/6	460	60	35	20	16	30	20	46	194	97	94	47	254	22	
MYT2-100/6	570	60	35	22	20	30	25	52	194	97	110	60	254	25	
MYT2-125/6	645	60	37	25	25	40	25	33	240	120	90	40	268	25	130
MYT2-125/10	690	100						28							190
MYT2-200/6	690	60	37	25	25	40	30	78	240	120	135	85	268	28	130
MYT2-200/12	765	120						55			170			30	190
MYT2-300/6	690	60	37	25	25	40	30	78	240	120	135	85	268	28	130
MYT2-300/12	815	120		30	35	45	35	105			190	100		40	190