

Ed,YTD,MYT2 Series Electro-hydraulic Thrusters



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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(<math> < 90^\circ </math>) mechanism and clamping devices.

Standards compliant:

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.

Main Design Features:

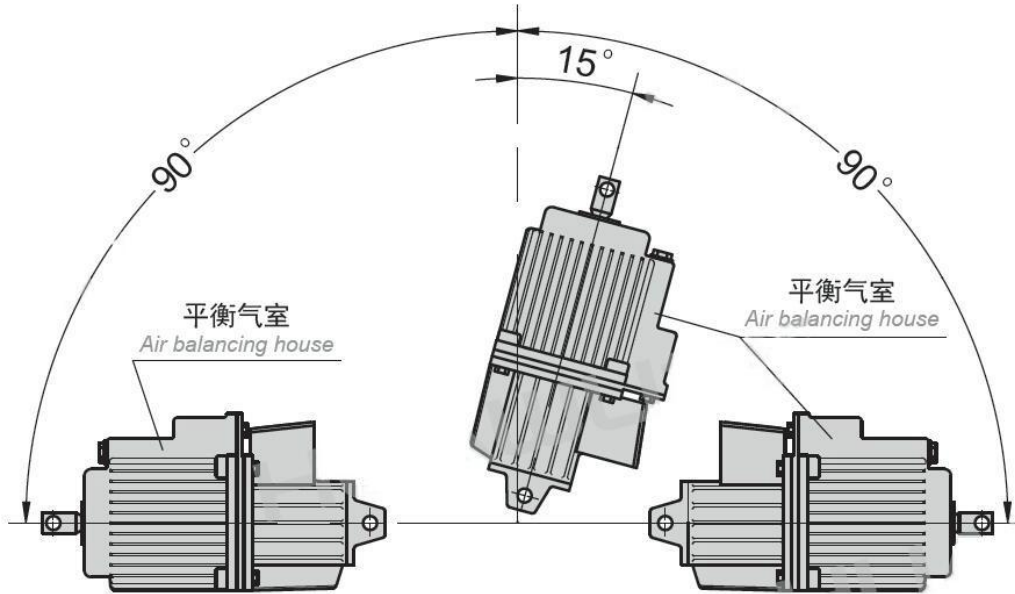
- The casing is made by casting aluminum alloy, light and good-look.
- Electrical motor is of non-under-oil structure, B grade or F grade insulation (according to customer's requirements), durable and good heat resistance.
- Cover of junction box is tightly sealed. Cable stuffing box is adopted for inlet wire, which is firm and reliable. Electrical protection of casing reaches IP65 grade.
- The surface of motor axle and pusher is handled specially to make the sealing parts much more durable.
- Balancing air house is set at one side of oil cylinder casing, which can make the thruster to be installed at any direction within range of $0\sim 180^\circ$ and enlarge the using range.
- All sealing parts and bearing of Ed series are all world famous products. The sealing is reliable and durable.
- Fastening parts of Ed series are made of stainless steel, good-look and durable.

Additional Equipment:

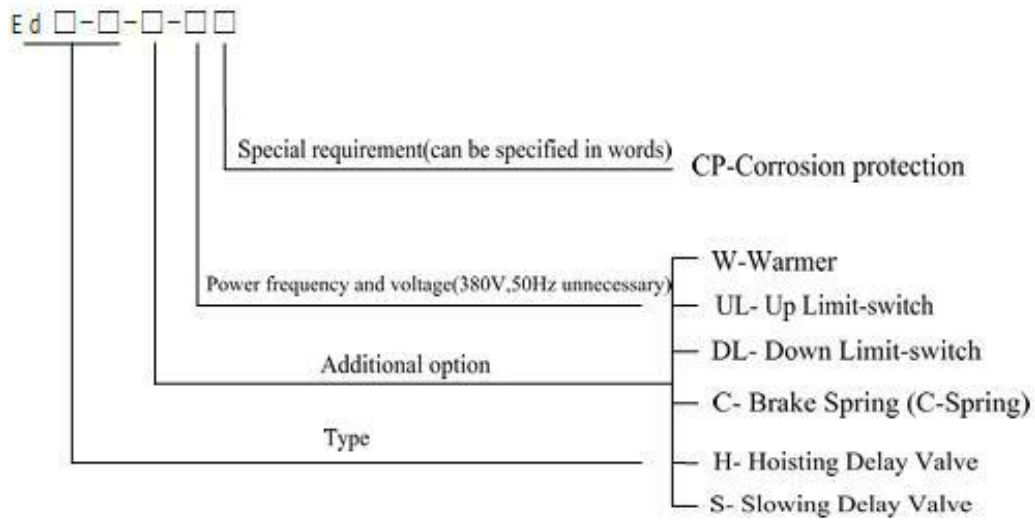
- Up limit switch, which can indicate whether brake is open, or whether the thruster is at the right position.
- Down limit switch, which can indicate whether the brake is properly close, whether the thruster return to right position. Up and down limit switches can be set together.
- Build-in spring or release 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 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.

Mounting:

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.



Order Mark



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 Series Electro-hydraulic Thruster

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
Heater	Power (W)	40							
	Power Supply	110/220V AC 50/60 Hz (Other power levels can be customized as needed)							
Cable size			Cable entry		Limit switch		Hydraulic fluid		
Main power supply	Heater	Main power supply	Heater	power supply	Cable size	Ambient temperature (°C)	Hydraulic fluid		
4×2.5/1.5mm ²	2×2.5/1.5mm ²	M25×1.5		25~250V AC/DC	2×1.5mm ²	-10~+50°C	DB-25(SY1351)、DB-45(SY1351)		
						-25~+50°C	HL10(DIN51524) C10(Shall tell us)		
Ed/ YTD Technical data									
Thruster type	Lifting thrust (N)	Stroke (mm)	Braking spring force (c-spring) (N)	Power consumption (W)	Rated current (A)	Rated voltage (V)	Max.Operating frequency (1/h)	Weight (kg)	
Ed220-50 YTD220-50	220	50	180	120	0.38	380~400V	2000	10	
Ed300-50 YTD300-50									
Ed500-60 YTD500-60	500	60	460	370	1.34	380~400V	2000	23	
Ed800-60 YTD 800-60									
Ed1250-60 YTD 1250-60	1250	60	1200	550	1.52	380~400V	2000	39	
Ed2000-60 YTD 2000-60									
Ed3000-60 YTD 3000-60	3000	60	2700	900	2.21	380~400V	1500	40	
Ed500-120 YTD 500-120									
Ed800-120 YTD 800-120	800	120		550	1.52	380~400V	1200	27	
Ed1250-120 YTD 1250-120									
Ed2000-120 YTD 2000-120	2000	120		750	1.98	380~400V	1200	39	
Ed3000-120 YTD 3000-120									
Ed4500-120 YTD 4500-120	4500	120		1100	2.56	380~400V	900	45	
Ed1250-80 YTD 1250-80									
Ed2000-80 YTD 2000-80	2000	80		750	1.98		1200	39	
Ed3000-80 YTD 3000-80									
Ed4500-80 YTD 4500-80	4500	80		1100	2.56		900	45	

MYT2 Technical data

Thruster type	Lifting thrust (N)	Rated Stroke (mm)	Power consumption (W)	Rated current (A)	Rated voltage (V)	Max.Operating frequency (1/h)	Weight (kg)	Exchangeable (equivalent) products
MYT2-10/25	100	25	120	0.38	380~400V	2000	6	(M)YT1-18Z/2
MYT2-25/4	250	40	120	0.38	380~400V	2000	14	(M)YT1-25ZB/4
MYT2-25/5	250	50	250	0.78			14.5	(M)YT1-25ZC/4
MYT2-50/6	500	60	250	0.78	380~400V	2000	25	(M)YT1-45Z/5/6
MYT2-100/6	1000	60	550	1.52	380~400V	2000	32	(M)YT1-90Z/6/8
MYT2-125/6	1250	60	370	1.34	380~400V	2000	49	
MYT2-125/10	1250	100	550	1.52		1200	50	(M)YT1-125Z/10
MYT2-200/6	2000	60	550	1.52	380~400V	1500	56	
MYT2-200/12		120				900	60	(M)YT1-180Z/8~12
MYT2-300/6	3000	60	750	1.98	380~400V	1500	58	
MYT2-300/12		120				900	62	(M)YT1-320Z/12

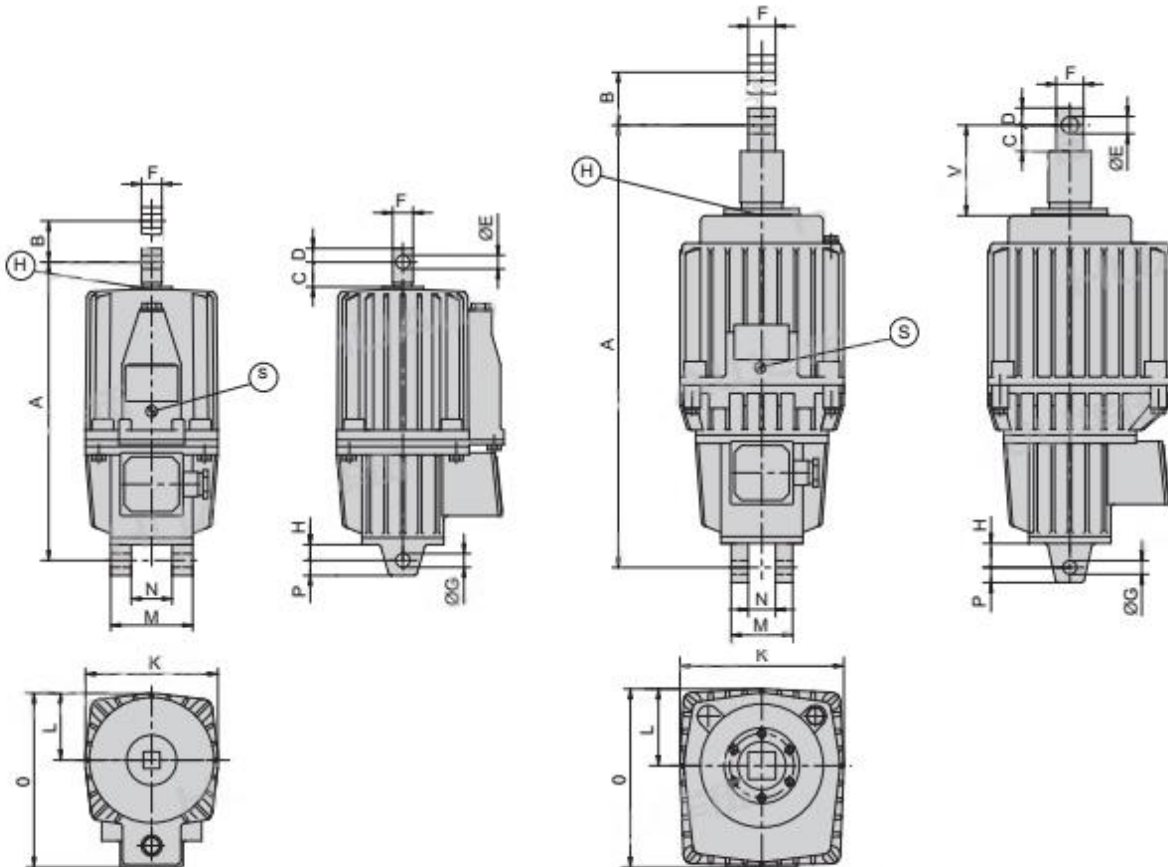
1) Build-in spring force equals the force the thruster applying to 1/3 of rated stroke. 2) When springs listed in above tables are equipped in thruster, output thrust is zero.

3) For current parameters under other voltage, please contact with our technicians.

Operating conditions :

- Ambient temperature:-25~+50°C
- Relative humidity:generally, ≤90%;anti-corrosive thrusters should be selected for damp and hot areas or corrosive environment.
- Operating duty: in remittent(S3-60%) and continuous(S1)

Special requirements can be discussed in order.



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

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

Note: 1) H=Lifting valve(Hoising delay)S=falling valve(Slowing delay)(not for MYT2-10/2.5,Ed220.YTD220).2)
The thruster head can be revolved freely in 360 °

Dimensions of Ed, YTD series thruster

Thruster type	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	
YTD 800-60															
Ed1250-60	645	60	37	25	25	40	25	33	240	120	90	40	268	25	130
YTD 1250-60															
Ed2000-60	645	60	37	25	25	40	25	33	240	120	90	40	268	25	130
YTD 2000-60															
Ed3000-60	645	60	37	25	25	40	25	33	240	120	90	40	268	25	130
YTD 3000-60															
Ed500-120	515	120	35	20	20	30	20	61	194	97	120	60	254	22	
YTD 500-120															
Ed800-120	530	120	35	20	20	30	20	61	194	97	120	60	254	22	
YTD 800-120															
Ed1250-120	705	120	37	25	25	40	25	43	240	120	90	40	268	25	190
YTD 1250-120															
Ed2000-120	705	120	37	25	25	40	25	43	240	120	90	40	268	25	190
YTD 2000-120															
Ed3000-120	705	120	37	25	25	40	25	43	240	120	90	40	268	25	190
YTD 3000-120															
Ed4500-120	850	120	48	35	30	50	30	40	290	145	110	60	325	30	190
YTD 4500-120															
Ed1250-80	665	80	37	25	25	40	25	33	240	120	90	40	268	25	150
YTD 1250-80															
Ed2000-80	665	80	37	25	25	40	25	33	240	120	90	40	268	25	150
YTD 2000-80															
Ed3000-80	665	80	37	25	25	40	25	33	240	120	90	40	268	25	150
YTD 3000-80															
Ed4500-80	810	80	48	35	30	50	30	40	290	145	110	60	325	30	150
YTD 4500-80															

Dimensions of MYT2 series thruster

Thruster type	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			30			170	30
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