



# YP SERIES ELECTRO-HYDRAULIC DISC BRAKES

YP系列电力液压盘式制动器

致力传动安全 Committed to transmission security



# YP系列电力液压盘式制动器

## YP SERIES ELECTRO-HYDRAULIC DISC BRAKES

**应用:** YP系列电力液压盘式制动器是一种高性能、多功能的先进产品, 由于其具有瓦块退距自动均等, 衬垫磨损自动补偿等先进功能, 使用过程中维护非常便捷。通过增设各种限位开关, 可给主机PLC提供所需的联锁保护信号。非常适合各种现代的大型专用装卸机械、起重运输机械、冶金设备、矿山设备及工程机械中各种机构的减速和维持(停车)制动。

### Application:

YP Series Electro-hydraulic Disc Brakes are advanced products with high performance and multiple functions. They are maintenance-friendly due to advanced functions applied on them such as automatic shoe clearance equalization and wear-self-compensation. Various limit switches can provide interlocking protection signal to main machinery PLC. They fit very well for decelerating and stop/braking large-scale modern machines such as loading and unloading machinery, lifting and transporting machinery, metallurgy equipment and mining equipment.

### 主要特点 Main feature:

1

- + 联锁退距均等装置和瓦块自动随位装置(专利技术), 使用过程中可始终保持两侧瓦块退距均等且无需调整, 完全避免制动衬垫浮贴制动盘的现象。

Interlocking shoes clearance equalization device and shoe auto-aligning device (patented technology), constantly equalize the clearance of brake shoes on both sides and no need to adjust, thus completely avoid one side of brake lining sticking to brake disc.

2

- + 主要摆动铰点均设有自润滑轴承, 使用过程中无需润滑; 传动效率高, 动作灵敏, 制动器闭合(上闸)时间为0.25~0.4s。

Self-lubricating bearings are equipped at main hinge points, which bring high efficiency of transmission, flexible action life and unnecessary to lubricate in the course of operation. The closing time is short (only 0.25-0.4s).

3

- + 无级衬垫磨损自动补偿装置, 可使瓦块退距和制动力矩在使用过程中保持恒定, 免去经常调整的麻烦。

Stepless lining wear-self-compensation devices can make shoe clearance and brake torque be kept constant in the process of operation, thus be free from the trouble of frequent adjustment.

4

- + 力矩可调内置式弹簧, 设有力矩标尺。

Torque adjustable built-in springs is set up with torque scale .

5

- + 制动衬垫为插装式, 更换便捷。提供半金属、粉末冶金等多种材质衬垫以适应不同工况。

Brake linings are plug-in style, which are easy to replace. Brake linings of various materials such as powder metallurgy and semimetals (non-asbestos), which are suitable for different working conditions.



YP1.YP2系列 Series



YP31.YP32系列 Series

6

+ 配套本公司新型推动器、动作灵敏、寿命长。  
*Equipped with our new thrusters: Swift reaction and having long life-span.*

7

+ 带有手动释放装置，可以在断电情况下实现制动器的打开。  
*With hand release device, which can open the brake when under the powered-off condition.*



Y P41系列 Series

## 附加装置 Additional devices:

- 手动释放限位装置，制动器实施手动释放时，将信号反馈给主控以便进行联锁保护。
- 释放（开闸）限位开关，可实现制动器是否正常释放的信号显示或联锁保护。
- 闭闸限位开关，可实现制动器是否正常闭合的信号显示或联锁保护。
- 衬垫磨损极限限位开关，衬垫磨损到极限时，发出信号以便主机进行联锁保护。
- *Hand release device can automatically send signals to main control to carry out the interlocking protection when brake applies the hand release.*
- *Release limit switches can indicate signals such as whether brake is properly released or provide interlocking protection.*
- *Close limit switch can make the closing signals of brakes are correctly displayed or the interlocking protection be properly carried out.*
- *Lining wear limit switches can automatically indicate alarm signal or provide interlocking protection when wear of brake lining reached the limit.*

## 使用条件 Operating condition:

- 环境温度：-20°C~+50°C。
  - 相对湿度：≤90%。
  - *Ambient temperature:-20°C~+50°C.*
  - *Relative humidity: ≤90%.*
- 有特殊要求时，在订货时协商确定。 *Special requirements can be discussed in order.*

## 订货标记 Order Mark

Y P □ - □ - □ × □ - I I A - C L . H L 380V / 50Hz

电源电压等级和电源频率 *Power voltage and power frequency*

HL-手动释放限位开关 *Hand release limit-switch*

WL-衬垫磨损极限限位开关 *Lining wear limit-switch*

RL-开闸限位开关 *Release limit-switch*

CL-闭闸限位开关 *Close limit-switch*

制动器安装型式(参见尺寸图) *Installation version of brake*

制动盘直径和厚度 *Diameter and width of disc*

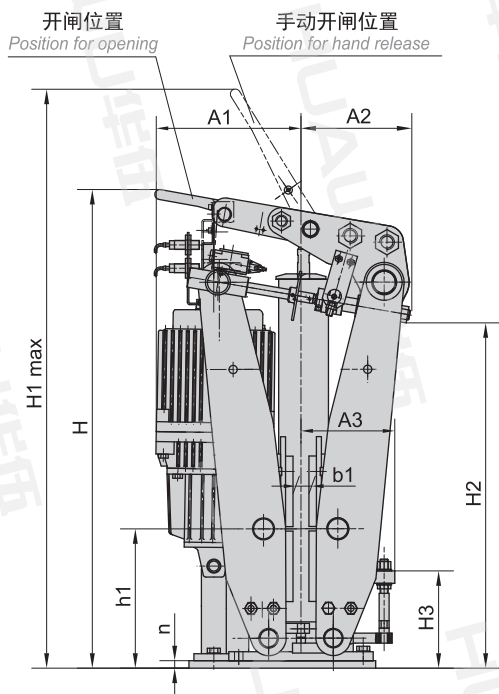
推动器规格(推力) *Thruster size (thrust)*

产品型号 *Brake type*

# YP1、YP2系列

# 外形及安装尺寸

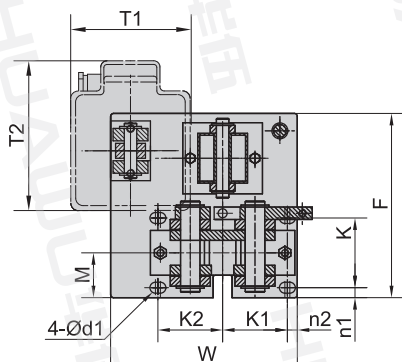
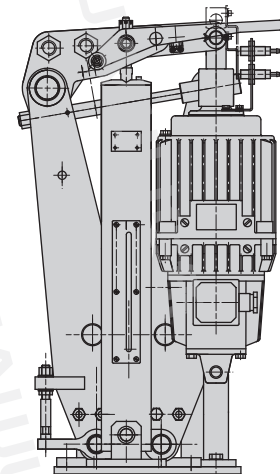
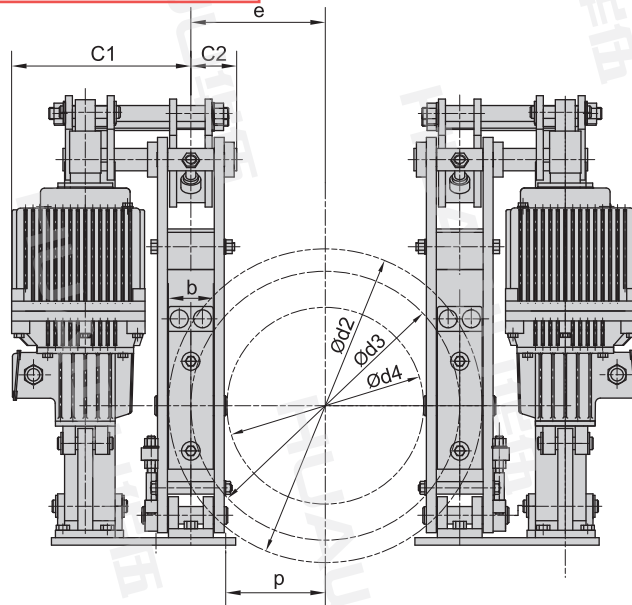
Outline and installation dimensions of the YP1.YP2



I型安装  
Installation of the I

II型安装  
Installation of the II

配装接近开关  
With proximity switch

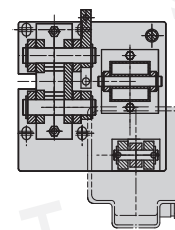
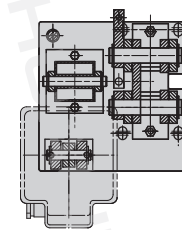
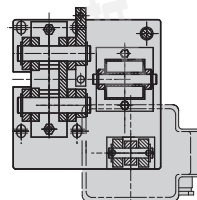
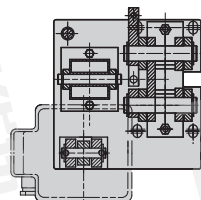


IB型安装  
Installation of IB

IIB型安装  
Installation of IIB

IA型安装  
Installation of IA

IIA型安装  
Installation of IIA



YP1.YP2系列 Series  
电力液压盘式制动器  
Electro-hydraulic Disc Brakes

V1.2



# YP1.YP2系列 Series 电力液压盘式制动器 Electro-hydraulic Disc Brakes

V1.2

## YP1系列盘式制动器尺寸和技术参数 *Dimensions and technical data of YP1 series disc brake*

推动器型号 Thruster type	h1	H	H1	H2	H3	b	k	k1	k2	d1	n	n1	n2	F	W	M	A1		A2	A3	C1		C2	T1		T2	
																	A型	B型			A型	B型		A型	B型	A型	B型
Ed220-50	230	685	845	526	218	70	120	80	180	18	14	20	20	300	300	80	270	250	180	150	250	290	80	197	160	160	197
Ed300-50																	310	250			260	320		254	194	194	254
Ed500-60																	310	250	260	320	254	194	194	254			
Ed800-60																	310	250	260	320	254	194	194	254			

与制动盘有关的尺寸 <i>Dimensions related to brake disc</i>							技术参数 <i>Technical data</i>											
制动盘直径d2 Disc diameter	b1	s <sup>1)</sup>	d3	d4 <sup>2)</sup>	e	p	配套推动器 <i>Thruster</i>				制动盘直径d2(mm) <i>Disc Diameter d2(mm)</i>					整机重量 Weight (kg)		
							推动器型号 Thruster type	功率 Power (W)	额定电流 Rated Current(A)	重量 Weight (kg)	315	355	400	450	500		最大制动力矩(Nm) <i>Max. Brake torque μ=0.4<sup>3)</sup></i>	
315	20	0.7~0.9	235	120	117.5	58	Ed220-50	120	0.38	10	280	320						85
355	20		275	160	137.5	78	Ed300-50	250	0.78	14	400	450	500					88
400	20		320	205	160	100	Ed500-60	370	1.34	23		710	800	900	1000			94
450	20		370	255	185	125	Ed800-60	550	1.52	25		1150	1350	1560	1750			96
500	20		420	305	210	150												

## YP2系列盘式制动器尺寸和技术参数 *Dimensions and technical data of YP2 series disc brake*

推动器型号 Thruster type	h1	H	H1	H2	H3	b	k	k1	k2	d1	n	n1	n2	F	W	M	A1		A2	A3	C1		C2	T1		T2																	
																	A型	B型			A型	B型		A型	B型	A型	B型																
Ed500-60	280	965	1170	690	195	90	140	130	130	22	15	20	20	370	375	90	335	325	235	190	315	375	92	254	194	194	254																
Ed800-60																	335	325			340	365		268	240	240	268																
Ed1250-60																	335	325																									
Ed2000-60																	335	325																									
Ed3000-60																	335	325																									

与制动盘有关的尺寸 <i>Dimensions related to brake disc</i>							技术参数 <i>Technical data</i>												
制动盘直径d2 Disc diameter	b1	s <sup>1)</sup>	d3	d4 <sup>2)</sup>	e	p	配套推动器 <i>Thruster</i>				制动盘直径d2(mm) <i>Disc Diameter d2(mm)</i>					整机重量 Weight (kg)			
							推动器型号 Thruster type	功率 Power (W)	额定电流 Rated Current(A)	重量 Weight (kg)	450	500	560	630	710		最大制动力矩(Nm) <i>Max. Brake torque μ=0.4<sup>3)</sup></i>		
450	30	0.7~1.1	350	190	175	105	Ed500-60	370	1.34	23	1000	1150	1350						166
500	30		400	240	200	130	Ed800-60	550	1.52	25	1600	1800	2120	2500					169
560	30		460	300	230	160	Ed1250-60	550	1.52	40	2500	2875	3350	4000	4500				185
630	30		530	370	265	195	Ed2000-60	750	1.98	40	4000	4500	5400	6300	7100				189
710	30		610	450	305	235	Ed3000-60	900	2.21	42	4600	5300	6300	7300	8400				192

注: 1) s=每侧瓦块退距。 2) d4=允许最大的联轴器外径。 3) 该摩擦系数为配套摩擦材料的平均值。

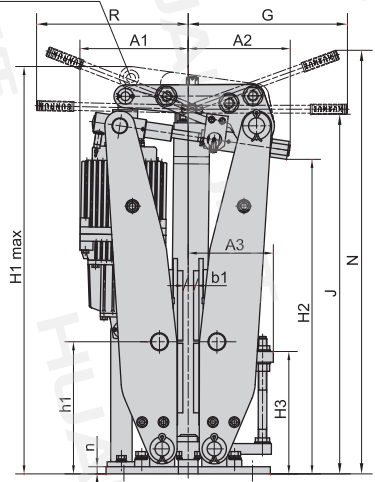
Note: 1) s=Shoe clearance of each side. 2) d4=Max. allowable coupling or hub outer diameter. 3) This friction factor is the average value of friction material.

YP3系列

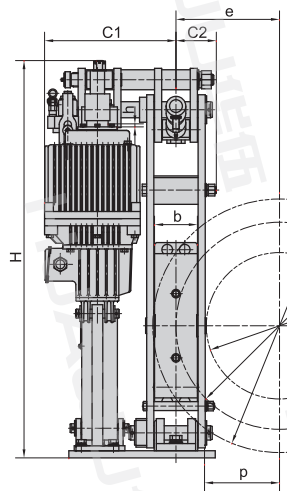
外形及安装尺寸

Outline and installation dimensions of the YP3

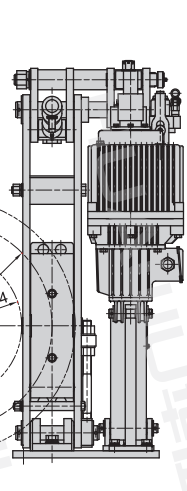
开闸位置  
Position for release



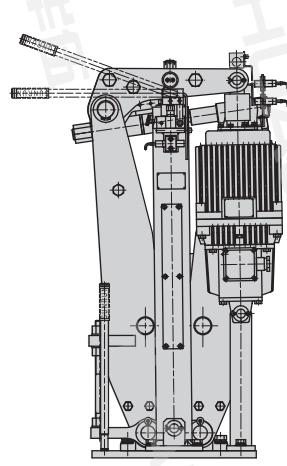
I型安装  
Installation of I



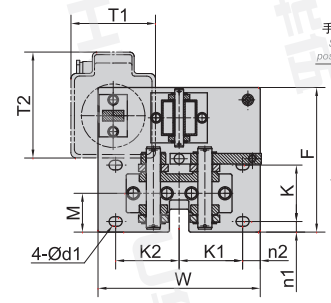
II型安装  
Installation of II



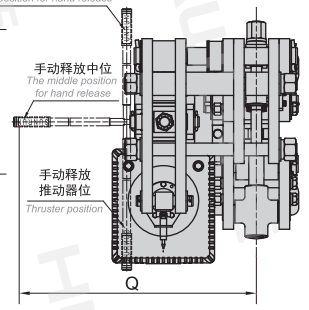
配装接近开关  
With proximity switch



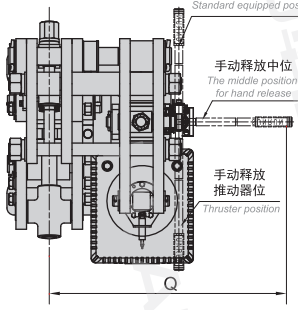
IA型安装  
Installation of the IA



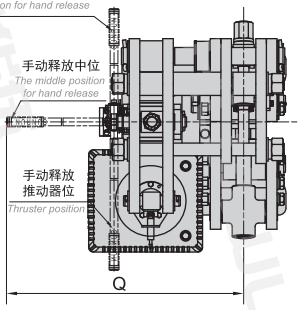
手动释放标配位置  
Standard equipped position for hand release



IIA型安装  
Installation of the IIA

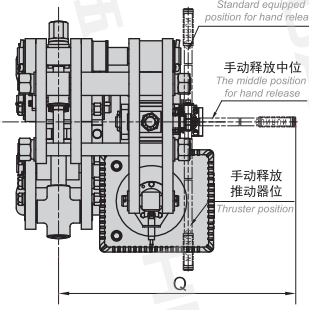


手动释放标配位置  
Standard equipped position for hand release



IB型安装  
Installation of the IB

IIB型安装  
Installation of the IIB



手动释放标配位置  
Standard equipped position for hand release



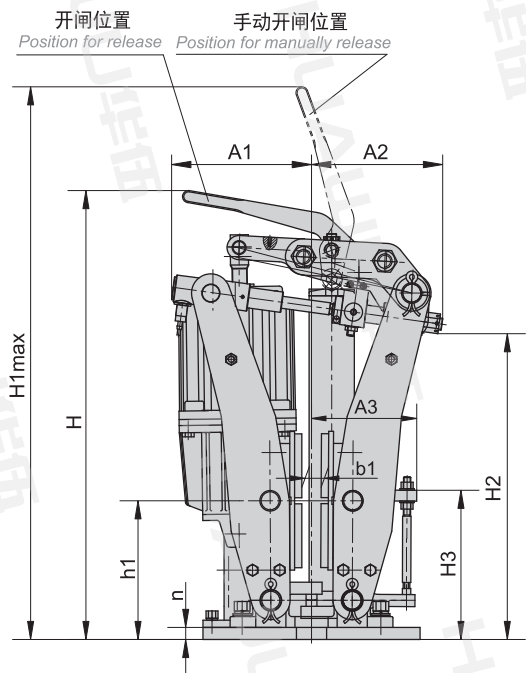
YP3系列 Series  
电力液压盘式制动器  
Electro-hydraulic Disc Brakes



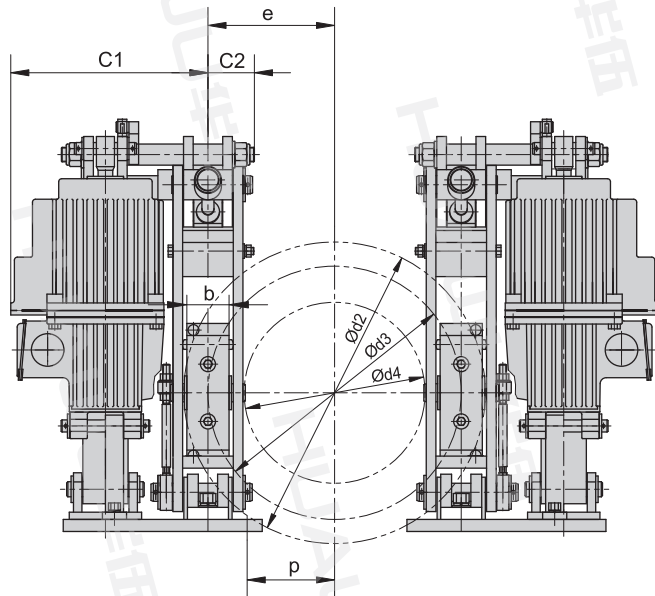
# YP11、YP21系列

# 外形及安装尺寸

Outline and installation dimensions of the YP11, YP21

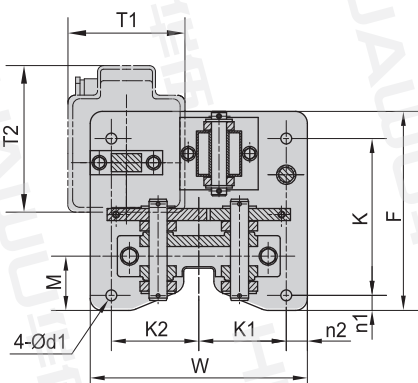
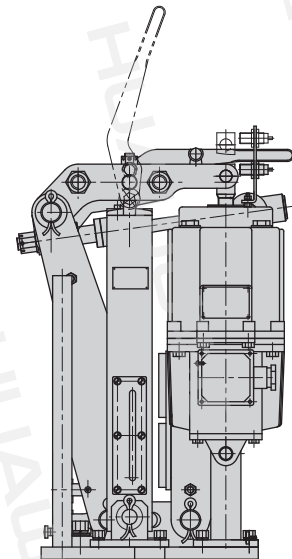


I 型安装  
Installation of I

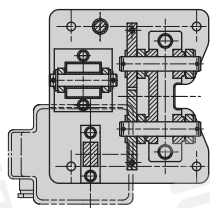


II 型安装  
Installation of II

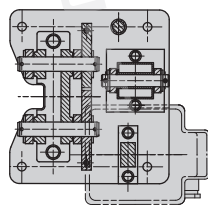
配装感应接近开关  
With proximity switch



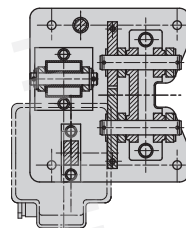
IB 型安装  
Installation of IB



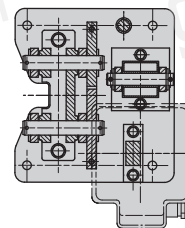
IIB 型安装  
Installation of IIB



IA 型安装  
Installation of IA



IIA 型安装  
Installation of IIA



YP11、YP21系列 Series  
电力液压盘式制动器  
Electro-hydraulic Disc Brakes

V1.2



# YP11.YP21系列 Series 电力液压盘式制动器 Electro-hydraulic Disc Brakes

V1.2

## YP11系列盘式制动器尺寸和技术参数 Dimensions and technical data of YP11 series disc brakes

推动器型号 Thruster type	h1	H	H1	H2	H3	b	k	k1	k2	d1	n	n1	n2	F	W	M	A1	A2	A3	C1		C2	T1		T2	
																				A型	B型		A型	B型	A型	B型
Ed220-50	160	545	685	360	195	52	200	80	150	14	15	15	20	230	270	52	185	190	135	220	260	65	197	160	160	197
Ed300-50																										
与制动盘有关的尺寸 Dimensions related to brake disc										技术参数 Technical data (mm)																
制动盘直径d2 Disc diameter	b1	s <sup>1)</sup>	d3	d4 <sup>2)</sup>	e	p	配套推动器 Thruster				制动盘直径d2(mm) Disc Diameter d2(mm)						整机重量 Weight (kg)									
							推动器型号 Thruster type	功率 Power (W)	额定电流 Rated Current(A)	重量 Weight (kg)	250	280	315	355	400	450		500								
250	20	0.7~0.9	195	95	97.5	60	Ed220-50	120	0.38	10	200	230	260	300	345	395	445	53								
280	20		225	125	112.5	75	Ed300-50	250	0.78	14	270	310	355	410	470	540	610	54								
315	20		260	160	130	92.5	注: 1) s=每侧瓦块退距。 2) d4=允许最大的联轴器外径。 3) 该摩擦系数为配套摩擦材料的平均值。 Note: 1) s=Shoe clearance of each side. 2) d4=Max. allowable coupling or hub out diameter. 3) This friction factor is the average value of friction material.																			
355	20		300	200	150	112.5																				
400	20		345	245	172.5	135																				
450	20		395	295	197.5	160																				
500	20		445	345	222.5	185																				

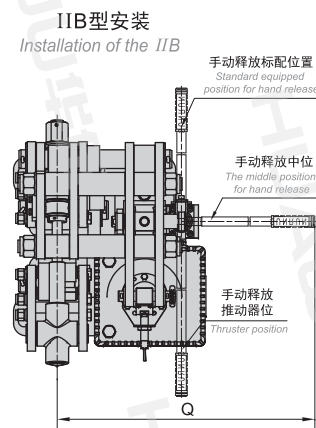
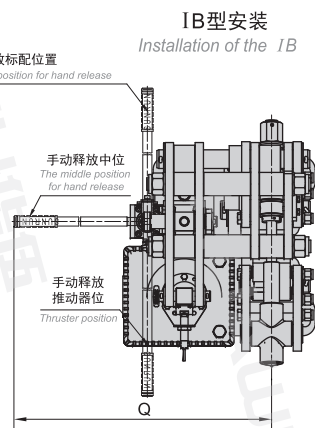
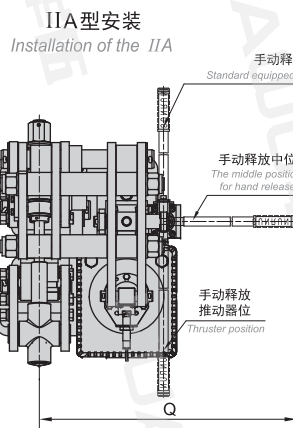
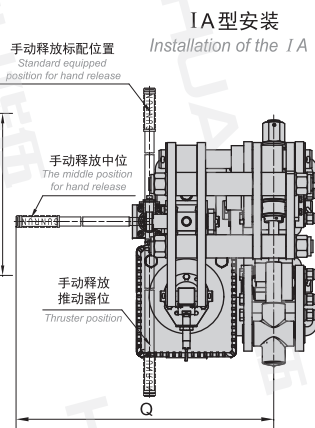
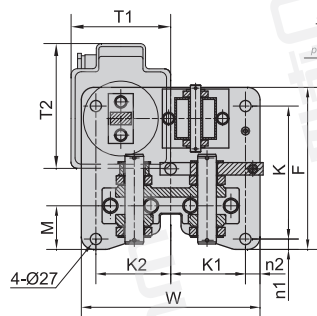
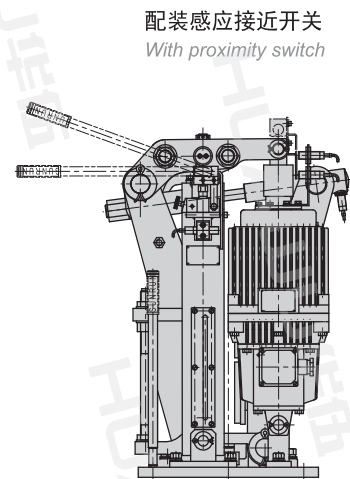
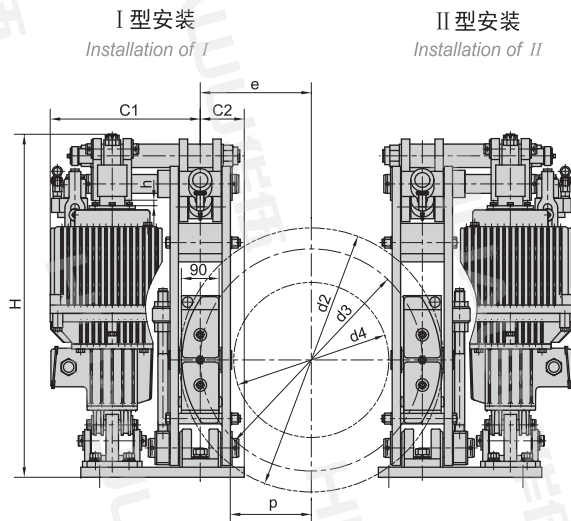
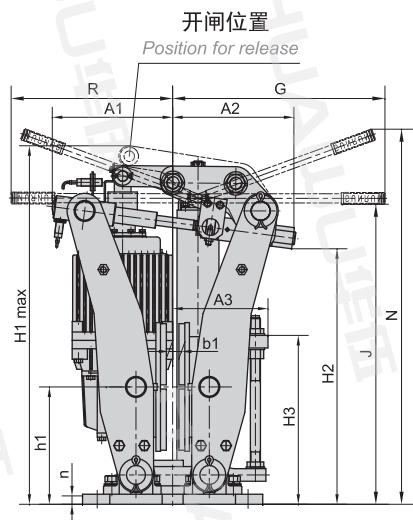
## YP21系列盘式制动器尺寸和技术参数 Dimensions and technical data of YP21 series disc brakes

推动器型号 Thruster type	h1	H	H1	H2	H3	b	k	k1	k2	d1	n	n1	n2	F	W	M	A1		A2	A3	C1		C2	T1		T2	
																	A型	B型			A型	B型		A型	B型	A型	B型
Ed500-60	230	785	925	505	248	70	260	145	145	18	20	25	35	330	360	90	285	240	225	175	275	335	85	254	194	194	254
Ed800-60																											
与制动盘有关的尺寸 Dimensions related to brake disc										技术参数 Technical data																	
制动盘直径d2 Disc diameter	b1	s <sup>1)</sup>	d3	d4 <sup>2)</sup>	e	p	配套推动器 Thruster				制动盘直径d2(mm) Disc Diameter d2(mm)						整机重量 Weight (kg)										
							推动器型号 Thruster type	功率 Power (W)	额定电流 Rated Current(A)	重量 Weight (kg)	355	400	450	500	560	630											
355	30	0.7~1.1	275	145	137.5	72.5	Ed500-60	370	1.34	23	935	1085	1255	1425	1630	1870	135										
400	30		320	190	160	95	Ed800-60	550	1.52	25	1600	1850	2100	2400	2750	137											
450	30		370	240	185	120	注: 1) s=每侧瓦块退距。 2) d4=允许最大的联轴器外径。 3) 该摩擦系数为配套摩擦材料的平均值。 Note: 1) s=Shoe clearance of each side. 2) d4=Max. allowable coupling or hub out diameter. 3) This friction factor is the average value of friction material.																				
500	30		420	290	210	145																					
560	30		480	350	240	175																					
630	30		550	420	275	210																					

YP31系列

外形及安装尺寸

Outline and installation dimensions of the YP31





YP31系列 Series  
 电力液压盘式制动器  
 Electro-hydraulic Disc Brakes

V1.2

YP31系列盘式制动器尺寸和技术参数 *Dimensions and technical data of YP31 series disc brakes*

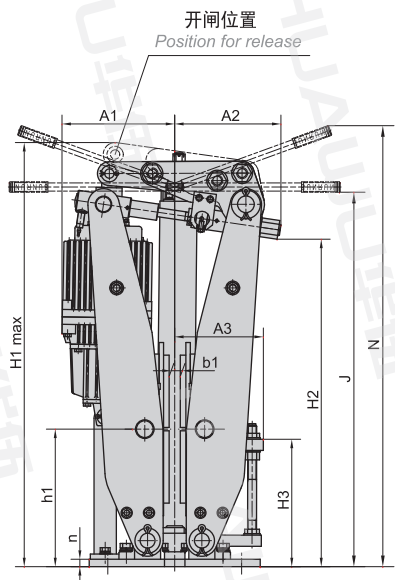
推动器型号 Thruster type	h1	H	H1	H2	H3	b	k	k1	k2	d1	n	n1	n2	F	W	M	A1	A2	A3	G	J	N	Q	R	C1	C2	T1		T2				
																											A型	B型	A型	B型			
Ed1250-60	280	820	860	605	405	90	320	180	180	27	24	25	35	390	430	105	290	300	240	520	710	1000	780	390	360	105	268	240	240	268			
Ed2000-60																																	
Ed3000-60																																	
与制动盘有关的尺寸 <i>Dimensions related to brake disc</i>										技术参数 <i>Technical data</i>																							
制动盘直径d2 Disc diameter	b1	s <sup>1)</sup>	d3	d4 <sup>2)</sup>	e	p	配套推动器 <i>Thruster</i>				制动盘直径d2(mm) <i>Disc Diameter d2 (mm)</i>										整机重量 Weight (kg)												
							推动器型号 Thruster type	功率 Power(W)	额定电流 Current(A)	重量 Weight(kg)	450	500	560	630	710	800	900	1000	1100	最大制动力矩(Nm) <i>Brake Torque(Nm)</i> $\mu=0.4^3)$													
450	30	0.8~1	350	190	175	95	Ed1250-60	550	1.52	40	2700	3100	3550	4100	4700	5400															230		
500			400	240	200	120	Ed2000-60	750	1.98	40	4300	5000	5750	6600	7600	8800															234		
560			460	300	230	150	Ed3000-60	900	2.21	42																						240	
630			530	370	265	185																	9700	11200	12800	14700	16500	18150					
710			610	450	305	225																											
800			700	540	350	270																											
900			800	640	400	320																											
1000			900	740	450	370																											
1100			1000	840	500	420																											

注：1) s=每侧瓦块退距。2) d4=允许最大的连轴器外径。3) 该摩擦系数为配套摩擦材料的平均值。  
 Note: 1) s=Shoe clearance of each side. 2) d4=Max. allowable coupling or hub out diameter. 3) This friction factor is the average value of friction material.

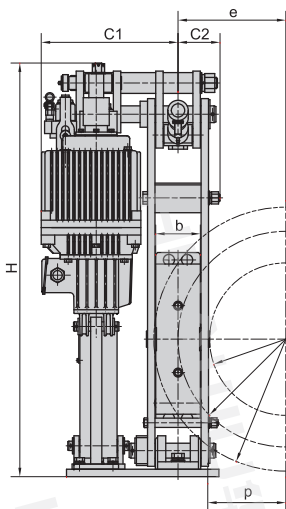
YP41系列

外形及安装尺寸

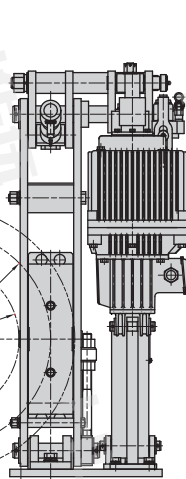
Outline and installation dimensions of the YP41



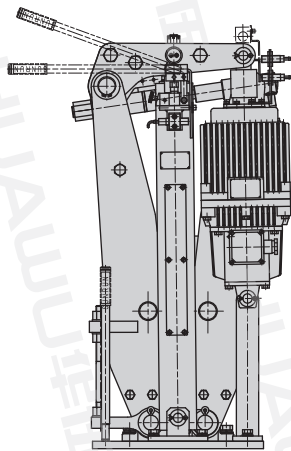
I 型安装  
Installation of I



II 型安装  
Installation of II

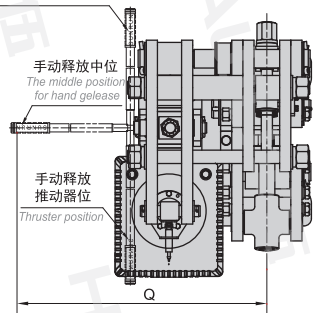


配备接近开关  
With proximity switch



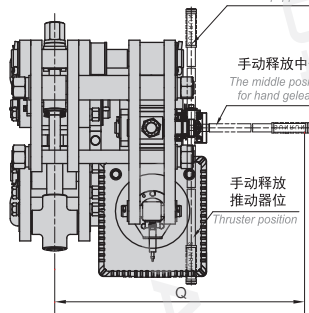
IA 型安装  
Installation of the IA

手动释放标配位置  
Standard equipped position for hand release



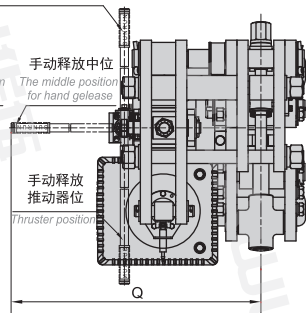
IIA 型安装  
Installation of the IIA

手动释放标配位置  
Standard equipped position for hand release



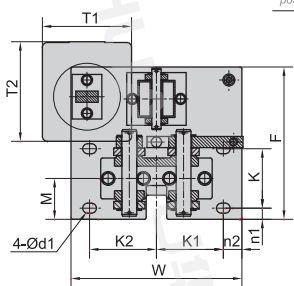
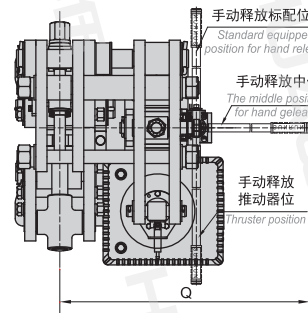
IB 型安装  
Installation of the IB

手动释放标配位置  
Standard equipped position for hand release



IIB 型安装  
Installation of the IIB

手动释放标配位置  
Standard equipped position for hand release





YP41系列 Series  
 电力液压盘式制动器  
 Electro-hydraulic Disc Brakes

V1.2

YP41系列盘式制动器尺寸和技术参数 *Dimensions and technical data of YP41 series disc brake*

推动器型号 Thruster type	h1	H	H1	H2	H3	b	k	k1	k2	d1	n	n1	n2	F	W	M	G	J	N	Q	R	A1		A2	A3	C1		C2	T1		T2	
	A型	B型	A型	B型	A型	B型	A型	B型	A型	B型	A型	B型	A型	B型	A型	B型	A型	B型	A型	B型	A型	B型	A型	B型	A型	B型	A型	B型	A型	B型		
Ed4500-80	370	1105	1140	850	375	120	160	180	180	27	28	40	50	465	460	120	470	975	1250	830	455	375	340	310	265	410	445	126	325	290	290	325
与制动盘有关的尺寸 <i>Dimensions related to brake disc</i>										技术参数 <i>Technical data</i>																						
制动盘直径d2 Disc diameter	b1	s <sup>1)</sup>	d3	d4 <sup>2)</sup>	e	p	配套推动器 <i>Thruster</i>				制动盘直径d2(mm) <i>Disc Diameter d2 (mm)</i>						整机重量 Weight (kg)															
	推动器型号 Thruster type	功率 Power(W)	额定电流 Current(A)	重量 Weight(kg)	630	710	800	900	1000	1250	最大制动力矩(Nm) <i>Brake Torque(Nm)</i> $\mu=0.4^3)$																					
630	30	0.7~1.3	500	295	250	170	Ed4500-80	1100	2.8	45	630	710	800	900	1000	1250	15000	17400	20000	23000	26000	33600	410									
710			580	375	290	210																										
800			670	465	335	255																										
900			770	565	385	305																										
1000			870	665	435	355																										
1250			1120	915	560	480																										

注：1) s=每侧瓦块退距。 2) d4=允许最大的联轴器外径。 3) 该摩擦系数为配套摩擦材料的平均值。  
 Note:1) s=Shoe clearance of each side. 2) d4=Max. allowable coupling or hub out diameter. 3) This friction factor is the average value of friction material.