

MD系列电磁圆盘式制动器 MD series Electromagnetic disk brake

应用: MD系列电磁圆盘式制动器（以下简称制动器）多安装于电动机尾端，也可安装在减速机高速轴等位置。适用于风力发电机组、起重运输机械、冶金采矿设备、金属压延设备中行走机构的减速和维持（停车）制动，也可用于电梯、扶梯、机床、化工、建筑、包装印刷、纺织等机械传动系统中，起定位、断电保护作用。

Application:

MD series electromagnetic disk brake (hereafter called brake) is mostly installed on the motor rear, may also be on the high speed shaft of reducer. It is applicable to the wind turbine generator system, travelling mechanisms' deceleration and stop /braking of cranes and transport machinery, metallurgical mining equipment and metal rolling equipment, may also be used in the mechanical drive system for positioning and the power failure protective function of the elevator, ladder, machine tool, chemical industry, construction, package printing, textile and so on.

主要特点

- 常闭型设计：弹簧制动，电力释放，安全可靠。
- 结构简单、安装方便。
- 动作迅速、可靠，可满足较高工作频率的工况要求。
- 有多种摩擦材料供选择，以适应不同的工况。
- 根据需要，产品可由一个或多个摩擦副组成。
- 带有手动释放功能，可在断电时应急释放。
- E型产品防护等级可达IP66，可适应海上工作环境，其余产品防护等级为IP54。

Main feature:

- Normally closed design: spring applied, electric released, safe and reliable.
- Simple structure, and easy to install.
- Quick action, reliable, and may satisfy the working conditions of high operating frequency.
- Many kinds of friction materials can be chosen, it adapts to the different operating modes.
- As needed, the product may consist of one or more friction pairs.
- With the manual release function, emergency release when the power failure.
- Protection class of type E product may reach IP66, which may adapt to the marine circumstances, and protection class of other product is IP54.

附加装置

- 可根据需要加装检测开关，进行状态显示或保护。

Additional devices:

- Detection switch can be installed as needed, which can realize signal indication and interlocking protection.

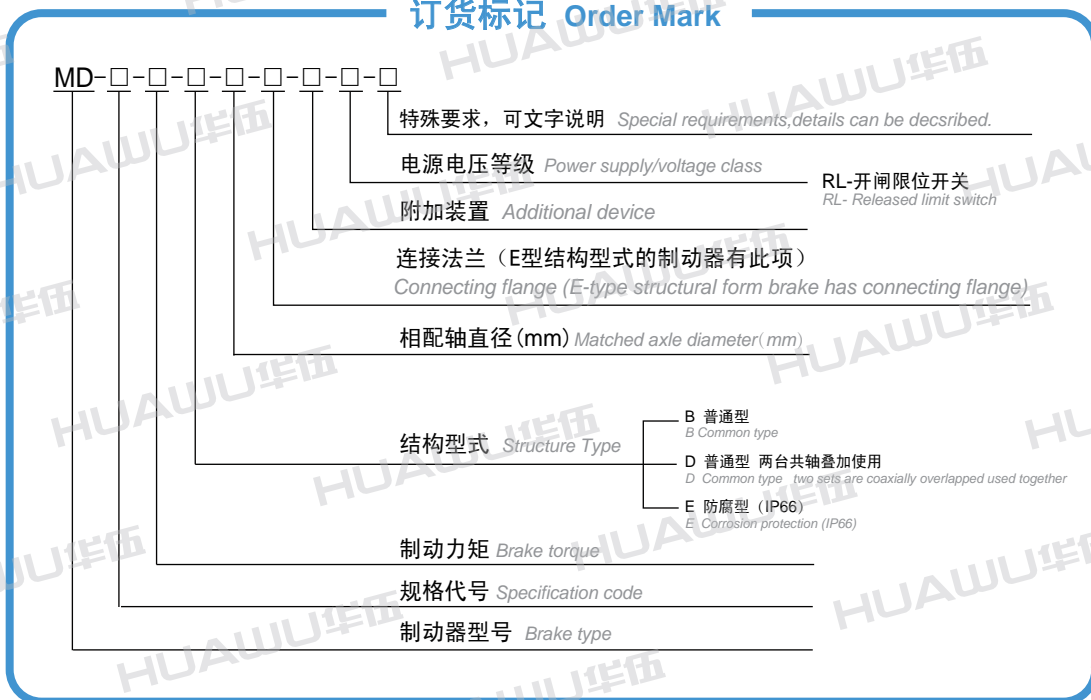


MD□-□-B型 Series



MD□-□-D型 Series

订货标记 Order Mark



说明

■ 制动器适用的标准电压为AC380V、AC220V或DC24V、DC110V、DC170V、DC205V, 其他电压等级请与本公司技术部门联系。

■ 键槽标准按GB/T1095。

Instructions:

■ The applicable standard voltage of brake is AC380V, AC220V or DC24V, DC110V, DC170V, DC205V, for other grades, please keep touch with our technical department.

订货示例

■ MD20-250-B-40-RL-AC220V/50HZ, 表示规格为20、制动力矩为250Nm、B型结构、配套轴径为40mm、要求配开闸限位, 电源电压为AC220V/50HZ的电磁圆盘式制动器。

■ MD25-400-E-50-A300-RL-AC220V/50HZ, 表示规格为25、制动力矩为400Nm、E型结构(防腐型)、配套轴径为50mm、连接法兰为A300、要求配开闸限位, 电源电压为AC220V/50HZ的电磁圆盘式制动器。

■ MD25-400-E-50-A300-RL-DC110V, 表示规格为25、制动力矩为400Nm、E型结构(防腐型)、配套轴径为50mm、连接法兰为A300、要求配开闸限位, 电源电压为DC110V的电磁圆盘式制动器。

Ordering example:

■ MD20-250-B-40-RL-AC220V/50HZ electro-magnetic drum disc brake, specification of which is 20, brake torque is 250Nm, B-type structure, the matched shaft diameter is 40mm, release limit switch required to be equipped and power voltage is AC220V/50HZ.

■ MD25-400-E-50-A300-RL-AC220V/50HZ electro-magnetic drum disc brake, specification of which is 25, brake torque is 400Nm, E-type structure(anti-corrosion), the matched shaft diameter is 50mm, connecting flange is A300, release limit switch is required to equipped, and power voltage is AC220V/50HZ.

■ MD25-400-E-50-A300-RL-DC110V electro-magnetic drum disc brake, specification of which is 25, brake torque is 400Nm, E-type structure(anti-corrosion), the matched shaft diameter is 50mm, connecting flange is A300, release limit switch is required to equipped, and power voltage is DC110V.

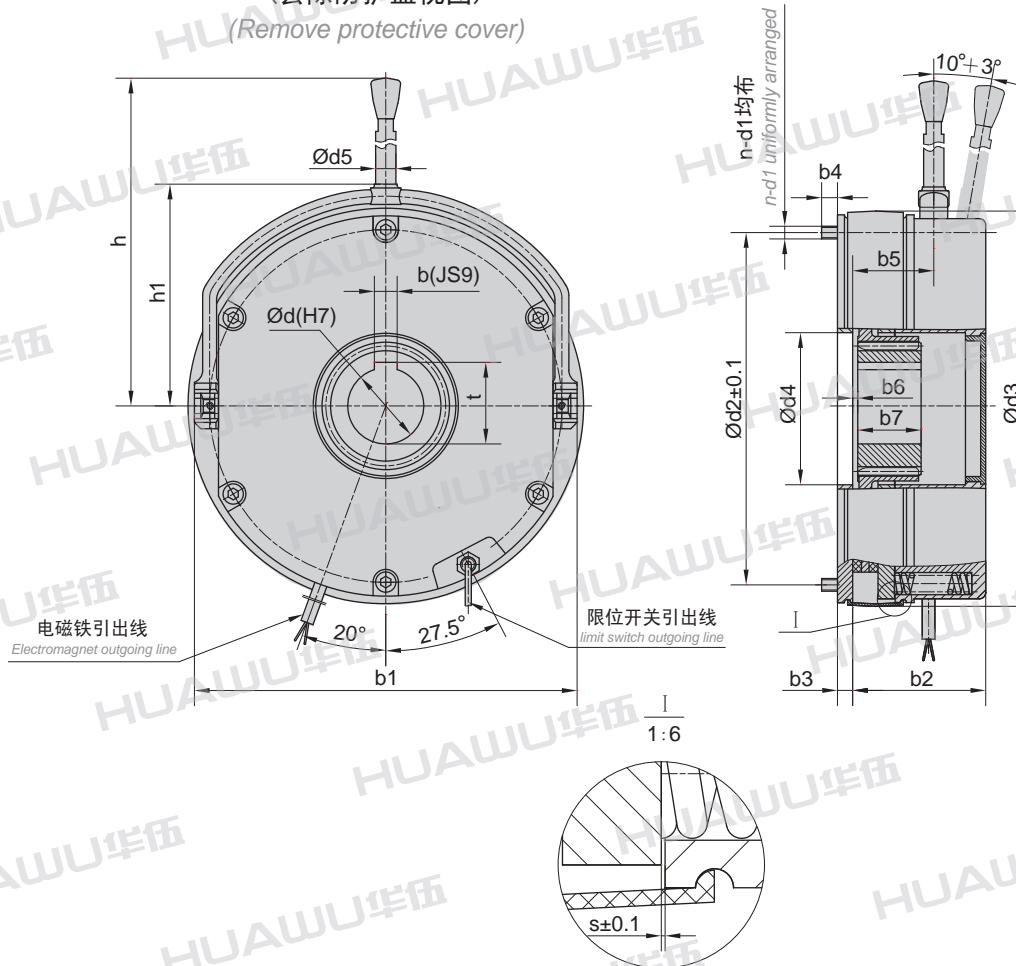


MD□-□-B系列 Series
电磁圆盘式制动器
Electromagnetic disk brake

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外形及安装尺寸 Outline and installation dimension

(去除防护盖视图)
(Remove protective cover)



MD□-□-B型制动器尺寸和技术参数 Dimensions and technical data of MD□-□-B type brake

型号 Type	最大制动力矩 M Max. Brake torque(Nm)	功率 P ¹⁾ Power (W)	S ²⁾		d	b	t	n	d1	d2	d3	d4	d5	b1	b2	b3	b4	b5	b6	b7	h	h1	L ³⁾
			额定 Rated	最大 Max																			
MD06-5-B	5	33	0.2	0.5	11/14/15	4/5/5	12.8/16.3/17.3	3	M4	72	98	30	8	89	40	6	6	30	1.5	18	100	55	400
MD07-10-B	10	42	0.2	0.5	14/15	5/5	16.3/17.3	3	M5	90	120	40	8	111	48	6	7	44	2.5	20	110	65	400
MD09-20-B	20	50	0.3	0.8	15/20	5/6	17.3/22.8	3	M6	112	145	50	10	132	54	9	9	39	3.5	20	130	75	400
MD11-40-B	40	63	0.3	0.8	20/25	6/8	22.8/28.3	3	M6	132	168	60	10	151	60	9	9	42	3	25	140	85	400
MD12-63-B	63	75	0.3	0.8	25/30/35	8/8/10	28.3/33.3/38.3	3	M8	145	188	70	12	172	70	10	11	46	3	30	165	97	400
MD15-100-B	100	96	0.4	1.0	30/35/40	8/10/12	33.3/38.3/43.3	3	M8	170	213	80	12	196	80	10	11	52	3	30	186	116	500
MD17-160-B	160	114	0.4	1.0	30/35/40/45	8/10/12/14	33.3/38.3/43.3/48.8	3	M8	196	245	90	12	224	90	11	10.5	58	4	35	200	128	500
MD20-250-B	250	150	0.5	1.3	35/40/45/50	10/12/14/14	38.3/43.3/48.8/53.8	3	M10	230	276	90	19	258	99	11	17	62	4	40	285	148	600
MD25-400-B	400	210	0.5	1.3	45/50/55/60/65	14/14/16/18/18	48.8/53.8/59.3/64.4/69.4	6	M10	278	324	120	19	304	105	12	20	64	4	50	310	175	600

注：1) 功率P：20℃下线圈的功率，允许范围为±10%。 2) S为衔铁工作气隙。 3) L为电磁铁引出线长度。

Note: 1) Power P: coil's power(W) under 20°C, the allowable scope is ±10%. 2) s is operating air gap of armature. 3) L is the length of the pull-out lead.

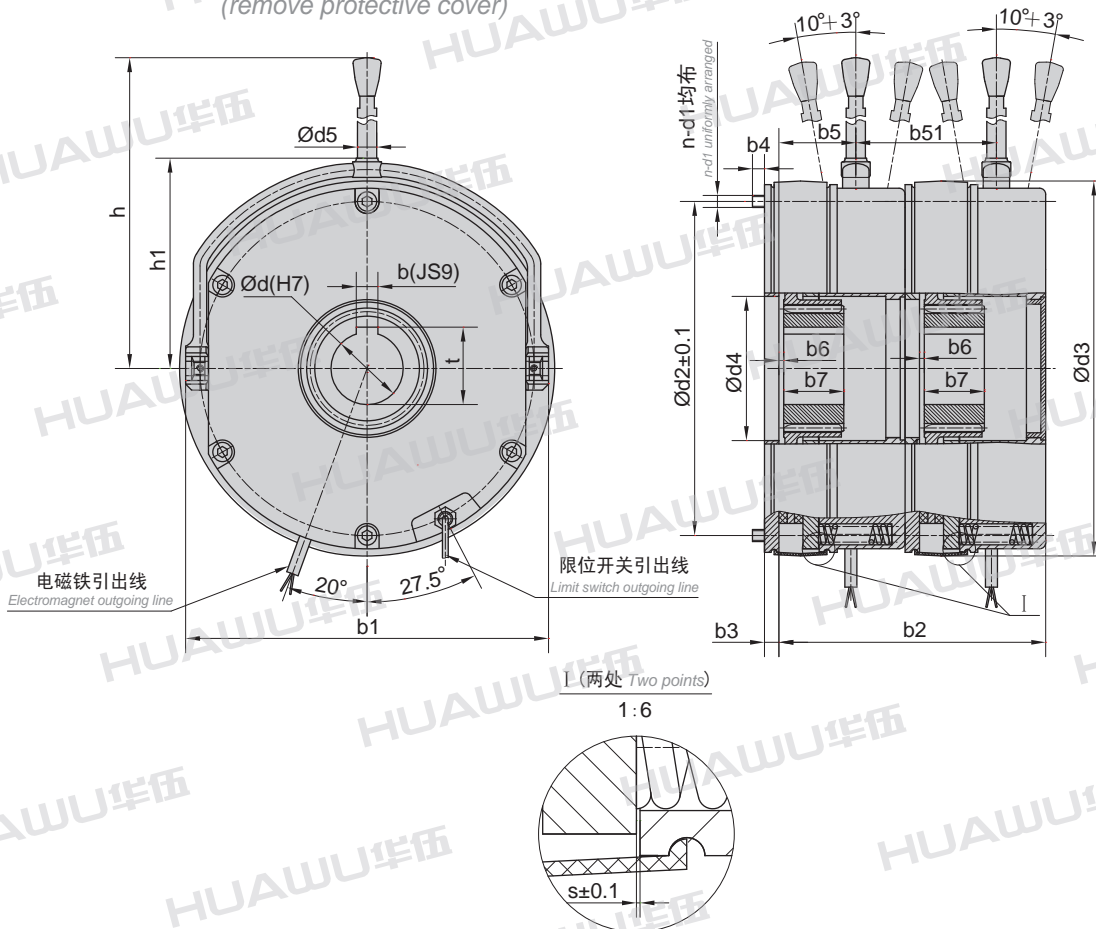


MD□-□-D系列 Series
电磁圆盘式制动器
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外形及安装尺寸 Outline and installation dimension

(去除防护盖视图)
(remove protective cover)



MD□-□-D型制动器尺寸和技术参数 Dimensions and technical data of MD□-□-D type brake

型号 Type	制动力矩M ⁵⁾ Brake torque (Nm)			功率P ¹⁾ Power (W)		d	b	t	n	d1	d2	d3	d4	d5	b1	b2	b3	b4	b5	b6	b7	h	h1	L ³⁾	b51	
				额定 Rated	最大 Max																					
MD06-5-D	2x5	2x3.8	2x2.5	2x22	0.2	0.5	11/14/15	4/5/5	12.8/16.3/17.3	3	M4	72	89	30	8	89	82.6	6	10	34.5	1.5	18	110	55	400	44.3
MD07-10-D	2x10	2x7.5	2x5	2x28	0.2	0.5	14/15	5/5	16.3/17.3	3	M5	90	109	40	8	111	102.4	6	11	47	2.5	20	120	65	400	54.5
MD09-20-D	2x20	2x15	2x10	2x34	0.3	0.8	15/20	5/6	17.3/22.8	3	M6	112	135	50	10	132	115.2	9	13	37.5	3.5	20	160	75	400	62
MD11-40-D	2x40	2x30	2x20	2x42	0.3	0.8	20/25	6/8	22.8/28.3	3	M6	132	155	60	10	151	129.6	9	13	42	3	25	200	85	400	69
MD12-63-D	2x63	2x47	2x32	2x50	0.3	0.8	25/30/35	8/8/10	28.3/33.3/38.3	3	M8	145	175	70	12	172	150.6	10	15	46	3	30	220	97	400	81
MD15-100-D	2x100	2x75	2x50	2x64	0.4	1.0	30/35/40	8/10/12	33.3/38.3/43.3	3	M8	170	201	80	12	196	171.8	10	15	53	3	30	220	116	500	91
MD17-160-D	2x160	2x120	2x80	2x76	0.4	1.0	30/35/40/45	8/10/12/14	33.3/38.3/43.3/48.8	3	M8	196	231	90	12	224	190.6	11	15.5	58	4	35	250	128	500	101
MD20-250-D	2x250	2x175	2x125	2x100	0.5	1.3	35/40/45/50	10/12/14/14	38.3/43.3/48.8/53.8	3	M10	230	264	90	19	258	208.8	11	22	62	4	40	330	148	600	110
MD25-400-D	2x400	2x300	2x200	2x140	0.5	1.3	45/50/55/60/65	14/14/16/18/18	48.8/53.8/59.3/64.4/69.4	6	M10	278	312	120	19	304	220	12	16	63.5	4	50	360	175	600	115.5

注: 1) 功率P: 20°C下线圈的功率, 允许范围为±10%。2) s为衔铁工作气隙。3) L为电磁铁引出线长度。4) 为制动器配不同规格弹簧时产生的不同力矩。
Note: 1) Power P: coil's power under 20°C, the allowable scope is ±10%. 2) s is operating air gap of armature. 3) L is the length of the pull-out lead. 4) The brake will produce different torques when equip with different kinds of springs.

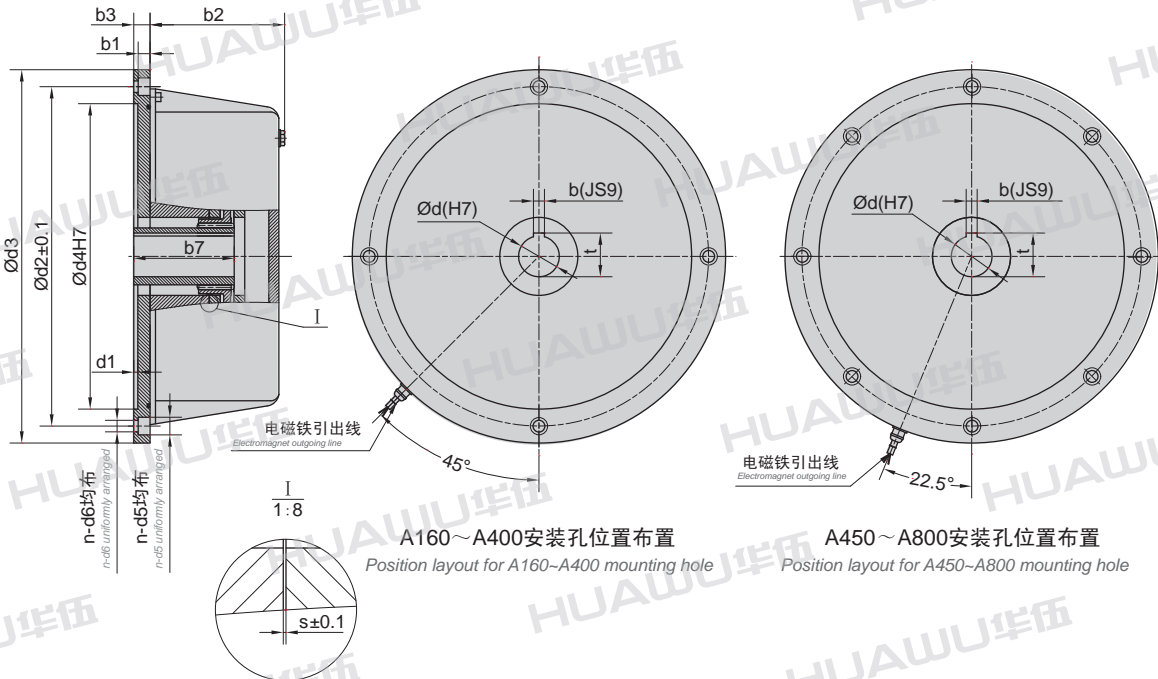


MD□-□-E系列 Series
电磁圆盘式制动器
Electromagnetic disk brake

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外形及安装尺寸

Outline and installation dimension



MD□-□-E型制动器尺寸和技术参数 Dimensions and technical data of MD□-□-E type brake

型号 Type	制动力矩M ⁴⁾ Brake torque (N.m)			功率P ¹⁾ Power (W)		s ²⁾		d	b	t			L	连接法兰型号 Connecting flange model
	45	54	63	99	0.3	0.9	额定 Rated			最大 Max	b2	b7		
MD06-63-E	45	54	63	99	0.3	0.9	28/32/38	8/10/10	31.3/35.3/41.3	115	117	1000	A160/A200/A250/A300	
MD15-100-E	63	80	100	128	0.3	1.2	28/32/38	8/10/10	31.3/35.3/41.3	118	117	1000	A200/A250/A300/A350	
MD17-160-E	100	130	160	158	0.3	1.2	38/42/48/55	10/12/14/16	41.3/45.3/51.8/59.3	137	124	1000	A300/A350/A400/A450	
MD20-250-E	180	210	250	196	0.4	1.3	38/42/48/55	10/12/14/16	41.3/45.3/51.8/59.3	143	124	1000	A300/A350/A400/A450	
MD25-400-E	260	330	400	220	0.4	1.4	48/55/60	14/16/18	51.8/59.3/64.4	169	142	1200	A350/A400/A450/A550	
MD28-630-E	450	520	630	307	0.4	1.8	60/65/75	18/18/20	64.4/69.4/79.9	171	148	1200	A350/A400/A450/A550	
MD30-1000-E	660	830	1000	344	0.4	1.8	60/65/75	18/18/20	64.4/69.4/79.9	183	148	1200	A450/A550/A660	
MD35-1600-E	1050	1300	1600	435	0.4	2.3	65/70/75/80/90	18/20/20/22/25	69.4/74.9/79.9/85.4/95.4	211	191	1500	A660/A800	
MD40-2500-E	1650	2100	2500	495	0.4	2.5	65/70/75/80/90	18/20/20/22/25	69.4/74.9/79.9/85.4/95.4	232	191	1500	A660/A800	
连接法兰型号 Connecting flange model	A160	A200	A250	A300	A350	A400	A450	A550	A660	A800				
d1	5	5	5	5	6	6	6	6	7	7				
d2	130	165	215	265	300	350	400	500	600	740				
d3	160	200	250	300	350	400	450	550	660	800				
d4	110	130	180	230	250	300	350	450	550	680				
d5	15	18	20	20	26	26	26	26	32	32				
d6	9	11	13	13	17	17	17	17	21	21				
b1	11	11	13	13	17.5	17.5	17.5	17.5	21.5	21.5				
b3	24	24	24	24	25	25	25	25	30	30				
n	4	4	4	4	4	4	8	8	8	8				
安装螺栓 (客户自备) ⁵⁾ Mounting bolts (customers self-prepare)	4xM8	4xM10	4xM12	4xM12	4xM16	4xM16	8xM16	8xM16	8xM20	8xM20				

注: 1) 功率P: 20℃下线圈的功率, 允许范围为±10%。2) s为衔铁工作气隙。3) L为电磁铁引出线长度。4) 为制动器配不同规格弹簧时产生的不同力矩。5) 建议: ≤M12的安装螺栓材质选用A4-70, >M12的安装螺栓材质选用热浸锌或达克罗。
Note: 1) Power P: power of coil below 20℃(W), allowable range is ±10%. 2) s is the air gap when armature worked. 3) L is the length of the outgoing line of electro-magnet. 4) Different brake torques will be obtained when brake is equipped with springs of different specifications. 5) suggestions: when mounting bolts are not more than M12, material of them should choose A4-70, when mounting bolts are > M12, material should choose hot-dip galvanizing or Dacromet.