

## QB型部分回转阀门电动装置

### Model QB Quarter-turn Valve Electric Actuators

QB型部分回转阀门电动装置是我公司最新研制的换代型产品。适用于控制蝶阀、球阀、旋塞阀等做90°回转的阀门。该产品体积小、重量轻，具有高效率、高可靠性、高防护性能、低噪音等特点。可现场操作，也可远距离控制。可广泛用于石油、化工、发电厂、水处理、造纸等各行业。

该产品的防护等级为IP67（需IP68时特殊订货），隔爆型产品（型号中有Ex）的隔爆等级为d II BT4。

As an alternation product of generation, the model QB quarter-turn valve electric actuators are newly developed by our company. These actuators are suitable for use on butterfly valve, ball valve and cock valve etc. which are required to turn 90°. These actuators are featured by small size, light weight, high efficiency, high reliability, high protection capability, low noise and so on. Both operation at site and remote controlling can be carried out. So they have been applied in petroleum and chemical industries, power generating plant, water treatment and paper-making industries.

The protection class is IP67 (as IP68 is required, please specify in ordering). For explosion-proof products (code Ex is included in model signal), the protection class is d IIBT4.

### QB1-QB2型技术参数

Technical parameters of Model QB1-QB2 products

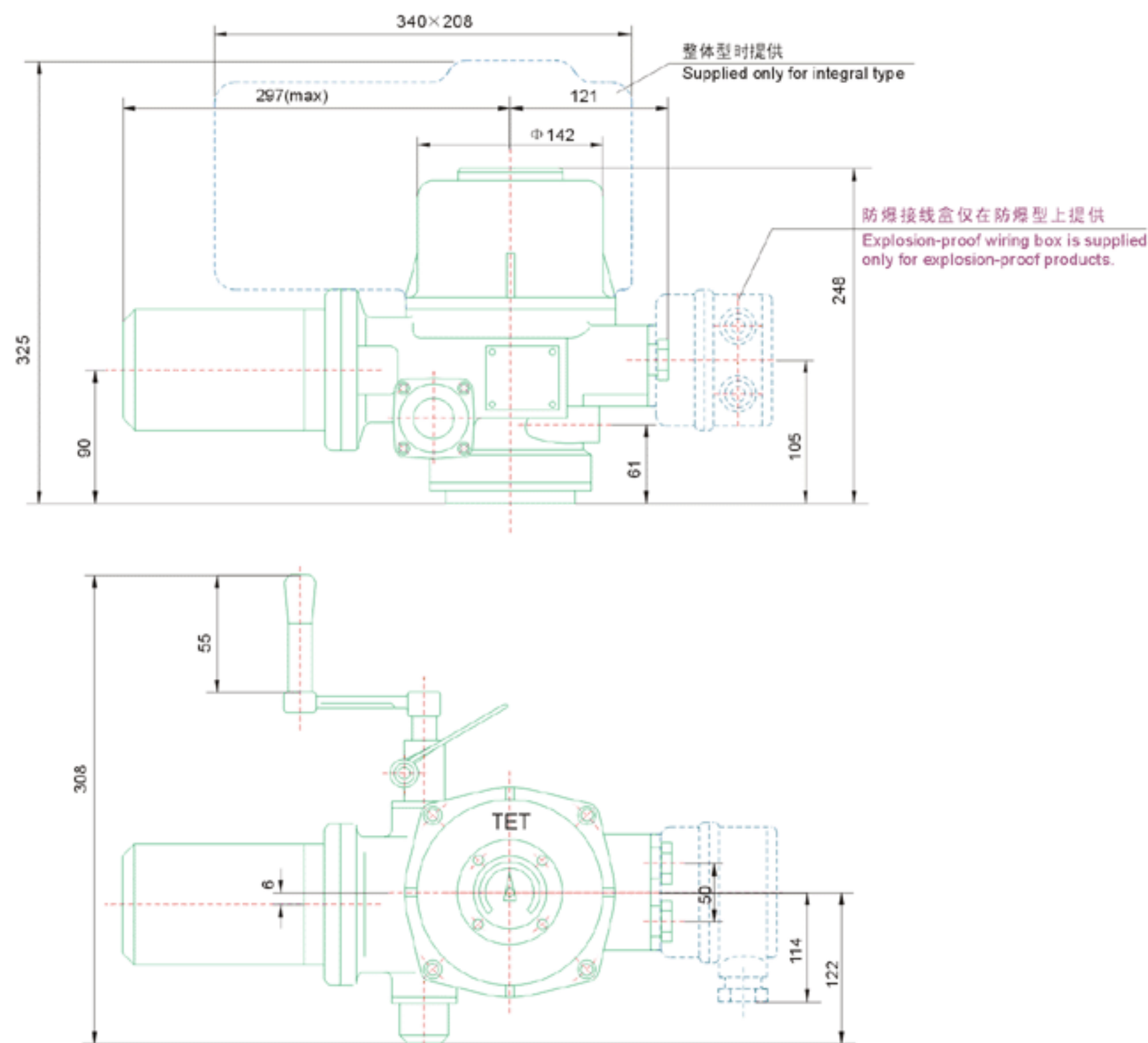
项目 Item	规格 Specification	输出转矩 Output Torque (N.m)	输出转速 Output Speed (r.min)	电机功率 Motor power (Kw)	电机堵转电流 Blocking current of motor (A)	运行时间 Operation time (s)	参考重量 Reference weight (kg)
型号 Type							
QB1 QB1Ex	QB5-1	50	1	0.04	1.82	15	22
	QB5-2		2	0.06		7.5	
	QB10-1	100	1	0.06	2.45	15	
	QB10-1		2	0.09		7.5	
	QB15-1	150	1	0.09	3.36	15	
	QB15-1		2	0.12		7.5	
	QB20-1	200	1	0.09	3.36	15	
	QB20-1		2	0.12		7.5	
	QB30-1	300	1	0.12	3.99	15	
	QB30-1		2	0.18		7.5	
QB2 QB2Ex	QB40-1	400	1	0.18	5.81	15	40
	QB40-1		2	0.25		7.5	
	QB60-1	600	1	0.18	5.81	15	
	QB60-1		2	0.25		7.5	

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### QB1 (QB1Ex) 外形尺寸图

Outline and overall dimensions of QB1 (QB1Ex)



注：两电缆进线密封机构推荐使用Φ17控制电缆和Φ11电源电缆

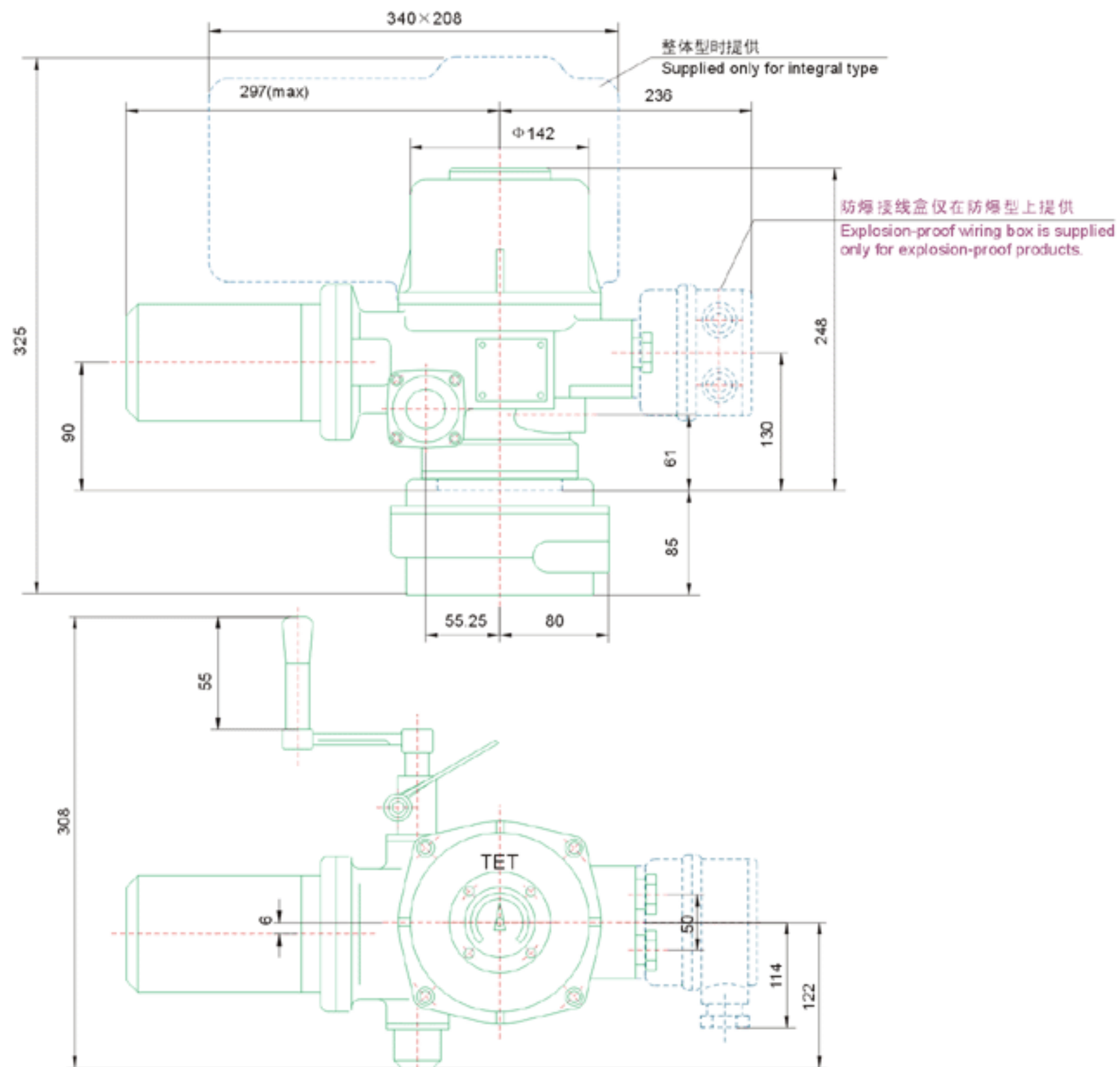
Note: For two cable inlet sealing structures, it is recommended to use Φ17 control cable and Φ11 power source cable.

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## Model QB Quarter-turn Valve Electric Actuators

### QB2 (QB2Ex) 外形尺寸图

Outline and overall dimensions of QB2 (QB2Ex)



注：两电缆进线密封机构推荐使用Φ17控制电缆和Φ11电源电缆

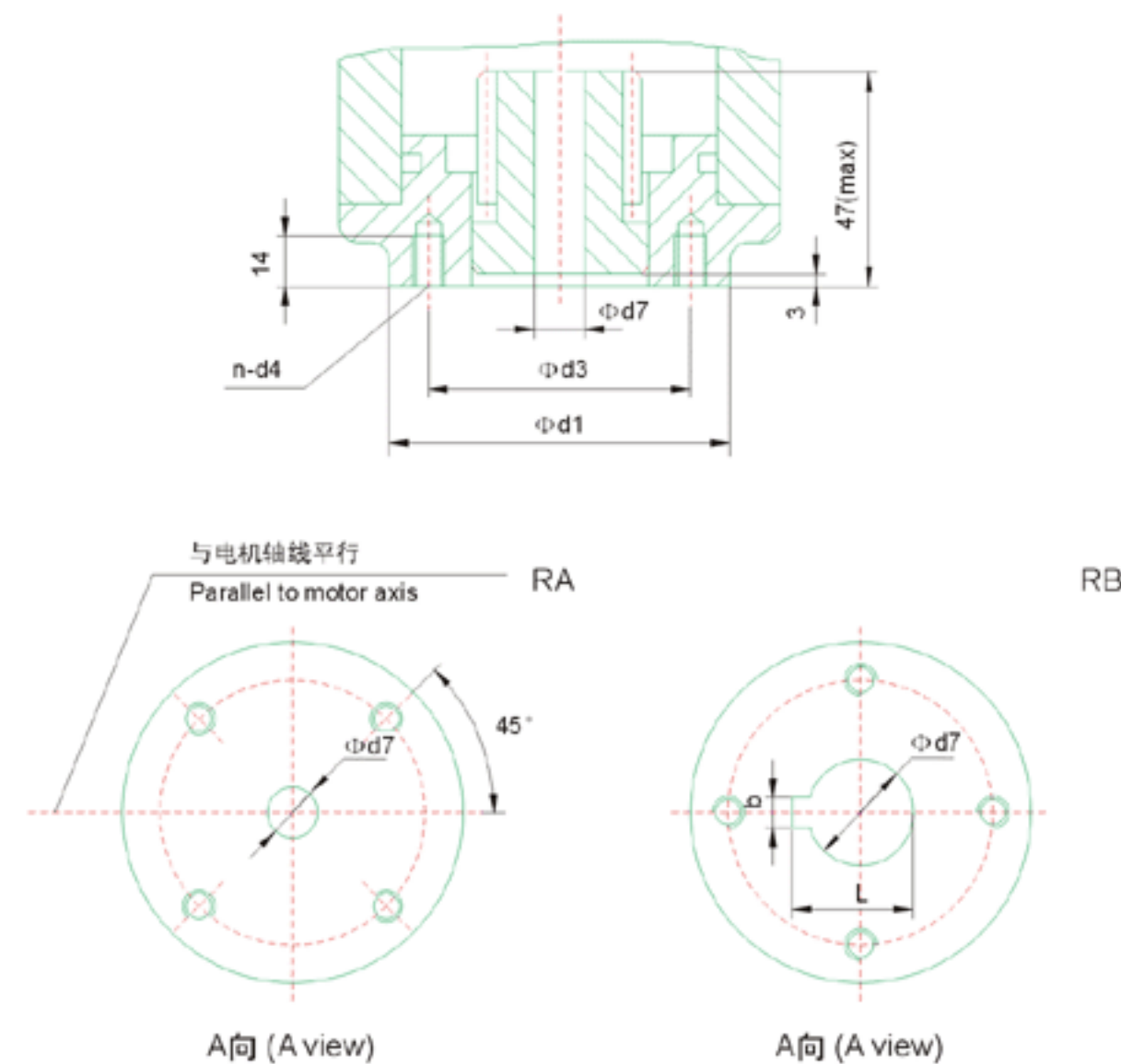
Note: For two cable inlet sealing structures, it is recommended to use Φ17 control cable and Φ11 power source cable.

# QB型部分回转阀门电动装置

## Model QB Quarter-turn Valve Electric Actuators

### QB1 (QB1Ex) 法兰结构及尺寸表

Table of structure and dimensions of QB1(QB1Ex) flange



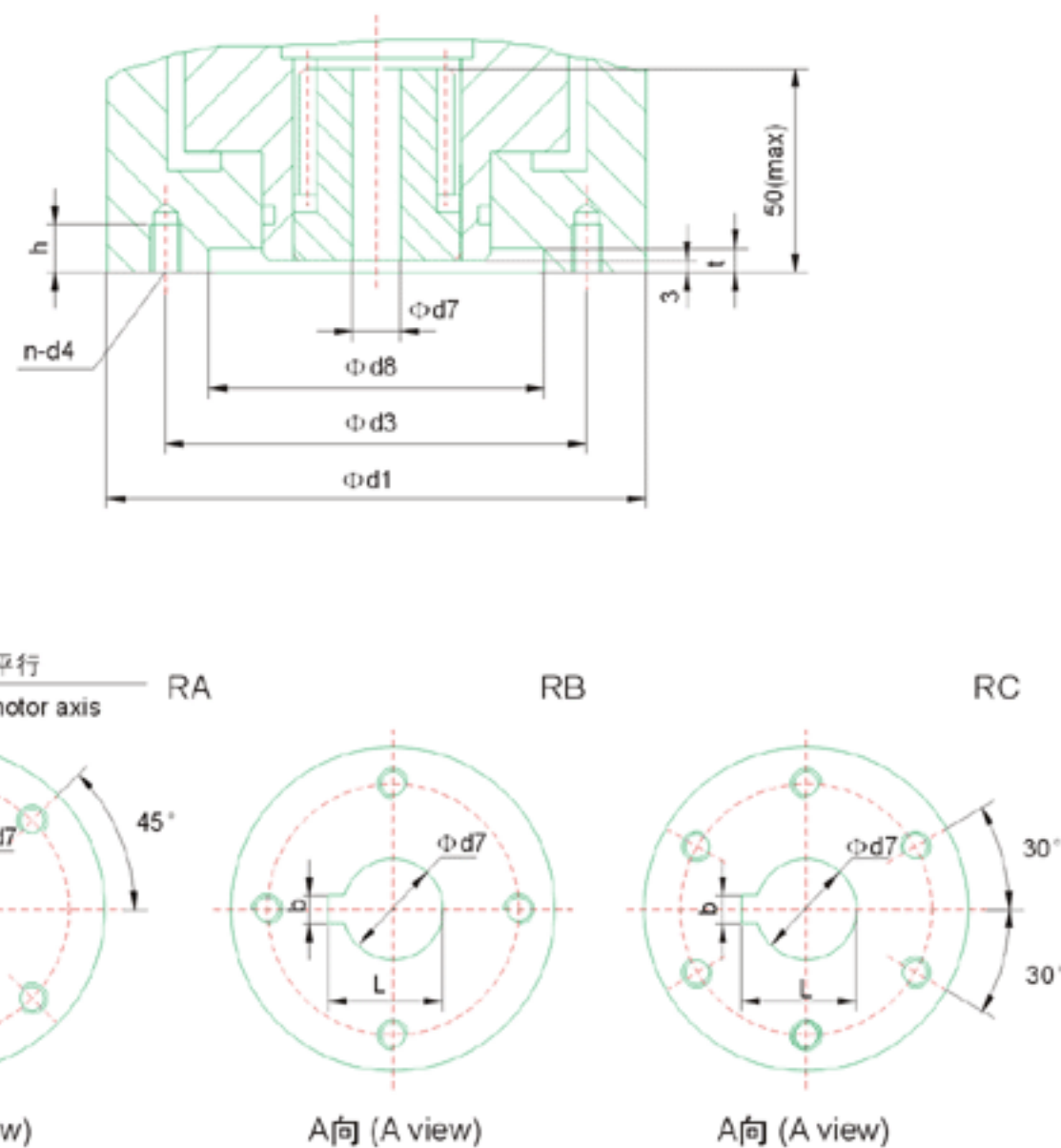
代号 型号 Code Type	法兰号 Flange code	d1	d3	d7			b	L	n-d4	
				标准尺寸 Standard dimensions	预留尺寸 Preliminary dimensions	最大允许 Max permissible				
QB1 QB1Ex	RA	F05	Φ65	Φ50		10	22		4-M6	
		F07	Φ90	Φ70		15	28		4-M8	
		F10	Φ125	Φ102					4-M10	
	RB	2"、3"	Φ77	Φ57.15	Φ12.7	10	22	3	14.1	4-M6
		4"	Φ92	Φ69.85	Φ15.8	15	28	5	18.1	4-M10
		5"、6"			Φ19		32		21.2	

# QB型部分回转阀门电动装置

## Model QB Quarter-turn Valve Electric Actuators

### QB2 (QB2Ex) 法兰结构及尺寸表

Table of structure and dimensions of QB2 (QB2Ex) flange



代号 Code 型号 Type	法兰号 Flange code	d1	d3	d7			b	L	n-d4	d8	h	t
				标准尺寸 Standard dimensions	预留尺寸 Preliminary dimensions	最大允许 Max permissible						
QB2 QB2Ex	RA	F10	Φ125	Φ102	—	—	—	—	4-M10	—	15	—
	RB	8"	Φ115	Φ88.9	Φ22.1	15	32	5	24.4	—	20	—
		10"			Φ28.45							
RC	Q60	Φ170	Φ140	Φ28	—	—	8	31.3	4-M10	Φ110	15	7

# QB型部分回转阀门电动装置

## Model QB Quarter-turn Valve Electric Actuators

### QBR3~QBR5型技术参数

Technical parameters of Model QBR3~QBR5 product

项目 Item 型号 Type	规格 Specification	输出 转矩 Output Torque (N.m)	输出 转速 Output Speed (r/min)	电机参考 功率 Reference power of motor (Kw)	电机额定 电流 Rated current of motor (A)	90℃ 运行时间 Operation time for 90 turn (s)	参考重量 (基本型) Reference weight (general type) (kg)
QBR3 QBR3.EX	QB120-0.5	1200	0.5	0.25	1.30	30	70
	QB120-1		1.0	0.37	1.60	15	
	QB120-2		2.0	0.55	2.40	7.5	
	QB200-0.5	2000	0.5	0.37	1.60	30	
	QB200-1		1.0	0.55	2.40	15	
	QB200-2		2.0	1.10	3.40	7.5	
	QB250-0.5	2500	0.5	0.37	1.60	30	
	QB250-1		1.0	0.55	2.40	15	
QB250-2	2.0		1.10	3.40	7.5		
QBR4 QBR4.EX	QB400-0.25	4000	0.25	0.37	1.60	60	120
	QB400-0.5		0.5	0.55	2.40	30	
	QB500-0.25	5000	0.25	0.55	2.40	60	
	QB500-0.5		0.5	0.75	2.72	30	
	QB600-0.25	6000	0.25	0.55	2.40	60	
	QB600-0.5		0.5	1.10	3.40	30	
QBR5 QBR5.EX	QB800-0.25	8000	0.25	1.10	3.40	60	210
	QB800-0.5		0.5	1.50	4.50	30	
	QB1000-0.25	10000	0.25	1.50	4.50	60	
	QB1000-0.5		0.5	2.20	6.50	30	
	QB1200-0.25	12000	0.25	2.20	6.50	60	
	QB1200-0.5		0.5	3.0	9.00	30	

- 说明: 1. 额定电压下, 电机堵转电流与额定电流之比的保证值为7, 其容差为保证值的+20%。  
2. 输出转速为2r/min时, 产品输出轴不自锁, 当阀门有自锁要求时应给予注意。  
3. 产品为防爆型时整机重量增加5kg。

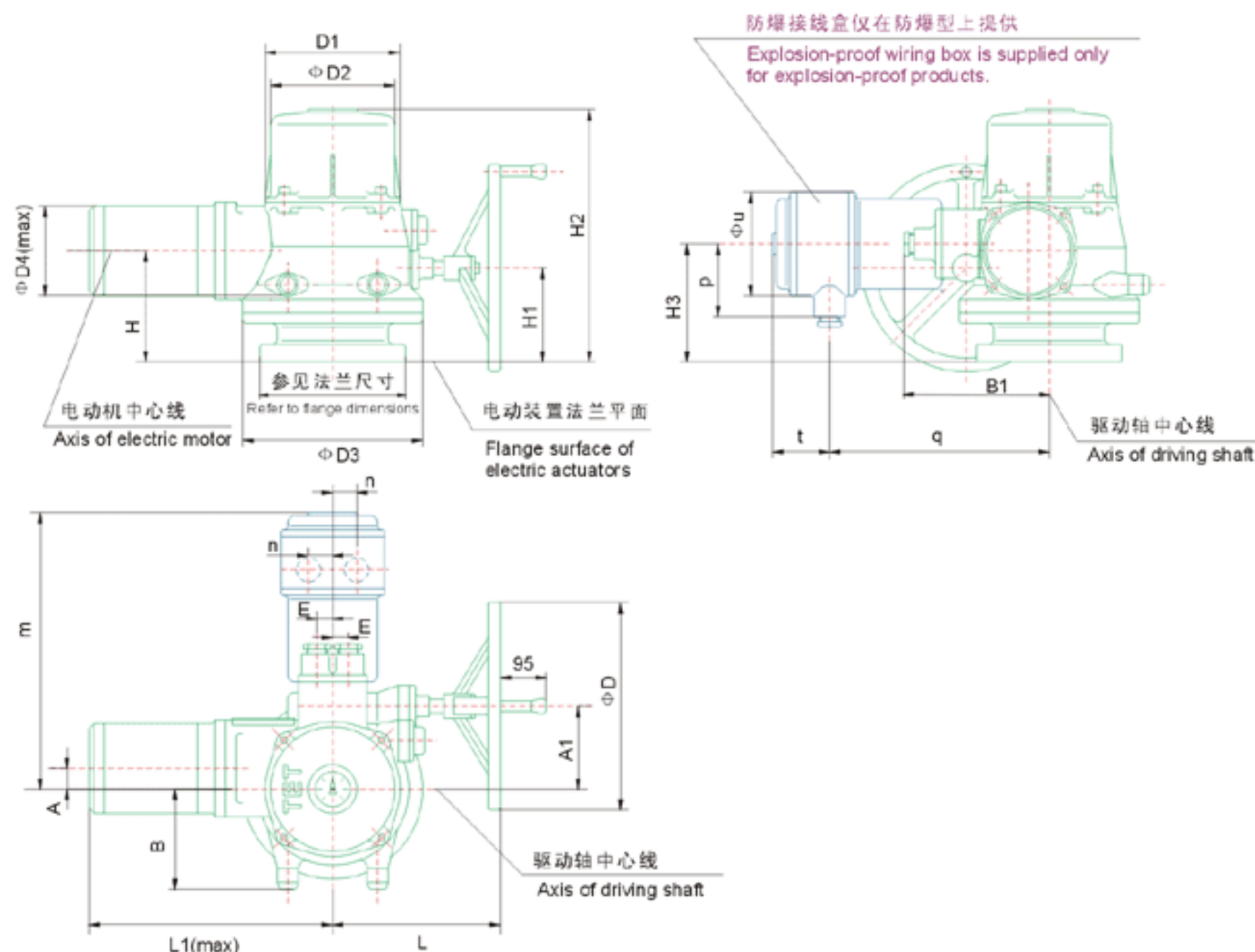
- Description:** 1. Under rated voltage, guarantee value of the ratio of motor blocking current to rated current is 7, its tolerance is +20% of the guarantee value.  
2. As the output speed is 2 r/min, the output shaft of the products does not self-lock. As a requirement of valve for self-locking is present, note should be taken.  
3. For explosion-proof products, total weight may be increased by 5Kg

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### QBR3 (QBR3Ex) ~QBR5 (QBR5Ex) 外形尺寸图

Outline and overall dimensions of QBR3(QBR3Ex)~QBR5(QBR5Ex)



- 注: (1) 产品为防爆型时, H2尺寸均增加20mm。  
 (2) 两电缆进线密封机构推荐使用Φ17控制电缆和Φ11电源电缆。(防爆型产品的进线结构和使用方法详见产品使用说明)

**Note:** (1) For explosion-proof products, add 12mm to size H2.  
 (2) For two cable inlet sealing structures, it is recommended to use Φ17 control cable and Φ11 power source cable. (For inlet structure of explosion-proof products, see product operation manual)

# QB型部分回转阀门电动装置

## Model QB Quarter-turn Valve Electric Actuators

### QBR3 (QBR3Ex) ~QBR5 (QBR5Ex) 外形尺寸表

Overall dimensions of QBR3(QBR3Ex)~QBR5(QBR5Ex)

型号 Type	代号 Code	A	A1	B	B1	ΦD	ΦD1	ΦD2	ΦD3	ΦD4 (max)	E	H
QBR3 (QBR3Ex)		20	113	160	195	308	212	198	265	150		156
QBR4 (QBR4Ex)		34	134	180	225	457	246	230	315	170	21	$\frac{204}{179}$
QBR5 (QBR5Ex)		38	164	212	245	457	284	270	408	185		247

型号 Type	代号 Code	H1	H2	H3	L	L1 (max)	以下为防爆型增加外形尺寸 The following is additive overall dimensions of explosion-proof products							
							m	n	p	q	t	Φu		
QBR3 (QBR3Ex)		123	350	156	225	450	336					273		
QBR4 (QBR4Ex)		$\frac{163}{138}$	$\frac{417}{392}$	$\frac{219}{194}$	262	510	365	25	100	302	63	142		
QBR5 (QBR5Ex)		203	496	280	410	710	385			322				

- 注: (1) 尺寸H-H3分子所示为法兰RA2, RB, RC2时产品的高度。分母所示为法兰RA1, RC1时产品的高度。  
 (2) 产品为防爆型时H2尺寸均增加20mm。  
 (3) 两电缆进线密封机构推荐使用Φ17控制电缆和Φ11电源电缆。(防爆型产品的进线机构和使用方法详见产品使用说明)

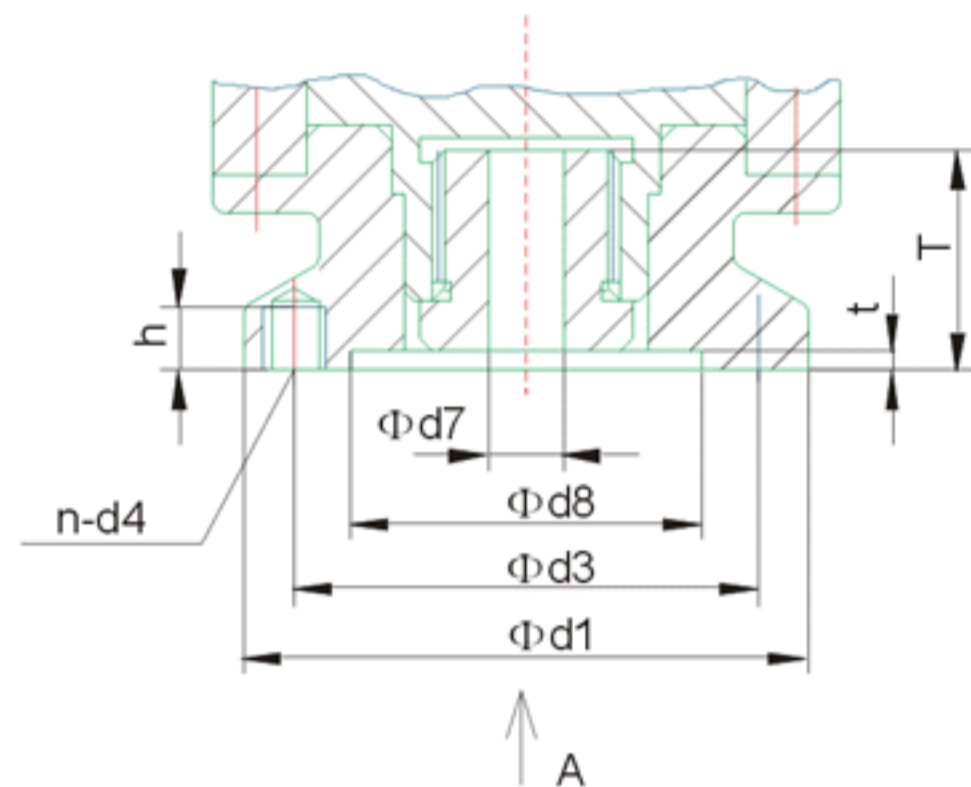
**Note:** (1) The numerator of size H-H3 indicates the height of product, as flange is RA2, RB and RC2. The denominator indicates the height of product, as flange is RA1 and RC1.  
 (2) As product is of explosion-proof type, the size H2 increases 20mm.  
 (3) For two cable inlet sealing structures, it is recommended to use Φ17 control cable and Φ11 power source cable. (For details of inlet structure and operating method of explosion-proof products, see operation manual).

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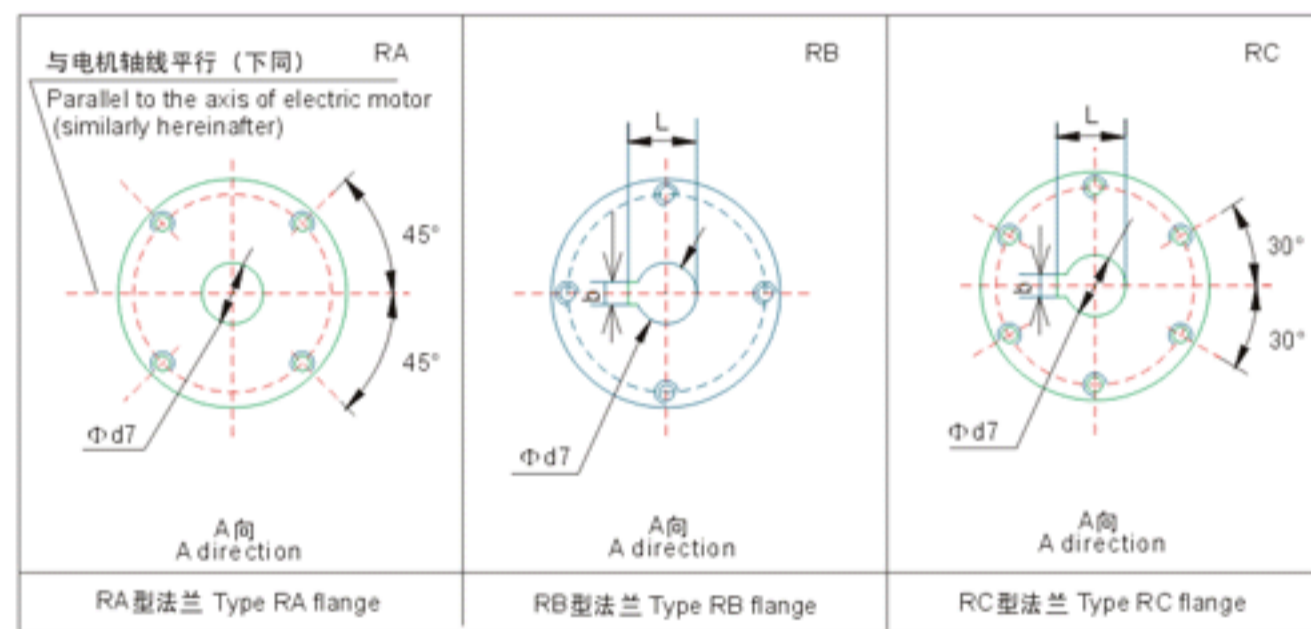
### QBR3~QBR5 法兰结构、型式及尺寸表

Table of structure, type and dimensions of QBR3~QBR5 flange



### QBR3 法兰及尺寸表

Type and dimensions of QBR3 flange



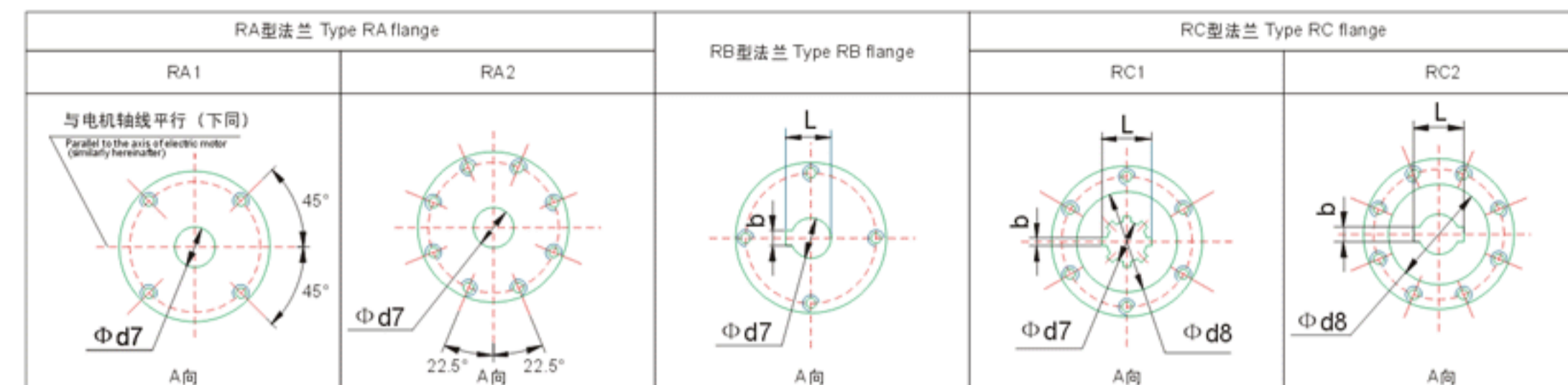
法兰型式 Flange type	法兰口径 或法兰号 Flange bore and flange code	Φd1	Φd3	Φd7			b	L	n-d4	Φd8	T	t	h
				标准尺寸 Standard dimensions	预留尺寸 Preliminary dimensions	最大允许 Max permissible							
RA	F14	170	140	—	—	—	—	—	4-M16	—	—	—	—
RB	16"	215	158.75	33.15	20	50	10	36.45	4-M18	—	67	7	25
	18"			38.00				41.3					
	20"			41.15				44.45					
RC	Q60	170	140	—	—	—	—	—	6-M10	110	—	—	—
	Q120	215	165	—	—	—	—	—	6-M16	135	—	—	—

# QB型部分回转阀门电动装置

## Model QB Quarter-turn Valve Electric Actuators

### QBR4 法兰及尺寸表

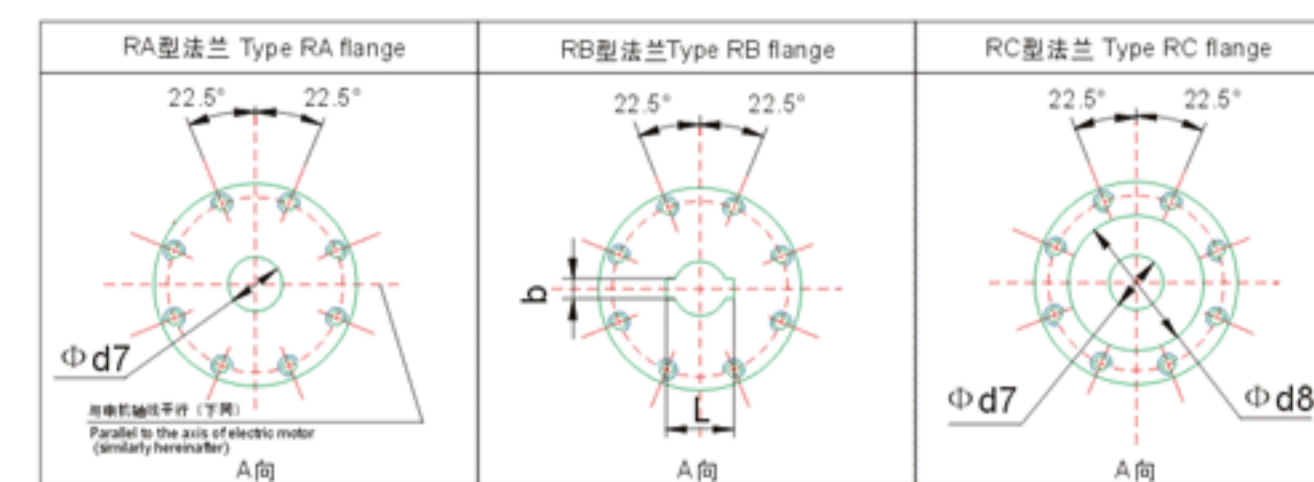
Type and dimensions of QBR4 flange



法兰型式 Flange type	法兰口径 或法兰号 Flange bore and flange code	Φd1	Φd3	Φd7			b	l	n-d4	Φd8	T	t	h
				标准尺寸 Standard dimensions	预留尺寸 Preliminary dimensions	最大允许 Max permissible							
RA	RA1	F16	210	165	—	—	—	—	4-M20	—	79	—	—
	RA2	F25	300	254	—	—	—	—	8-M16	—	—	—	—
RB	24"	276	215.9	50.65	30	70	16	54.65	4-M20	—	98	6	30
RC	RC1	Q120	215	165	36H12	—	—	7D9	42H7	6-M16	135F9	79	—
	RC2	Q500	300	254	55H8	—	—	16	62.2 <sup>+0.2</sup> <sub>0</sub>	8-M16	200F9	98	—

### QBR5 法兰及尺寸表

Type and dimensions of QBR5 flange



法兰型式 Flange type	法兰口径 或法兰号 Flange bore and flange code	Φd1	Φd3	Φd7			b	l	n-d4	Φd8	T	t	h
				标准尺寸 Standard dimensions	预留尺寸 Preliminary dimensions	最大允许 Max permissible							
RA	F25	300	254	—	—	—	—	—	8-M16	—	—	—	—
	F30	350	298	—	—	—	—	—	8-M20	—	—	—	—
RB	28"	300	254	55	50	105	16	63	8-M16	—	116	6	30
RC	Q500	—	—	—	—	—	—	—	—	—	200F9	—	—