

小型叶片式摆动气缸 Mini Rotary Actuator/Vane Type

TCRB2 Series



Common Specification (共同规格)

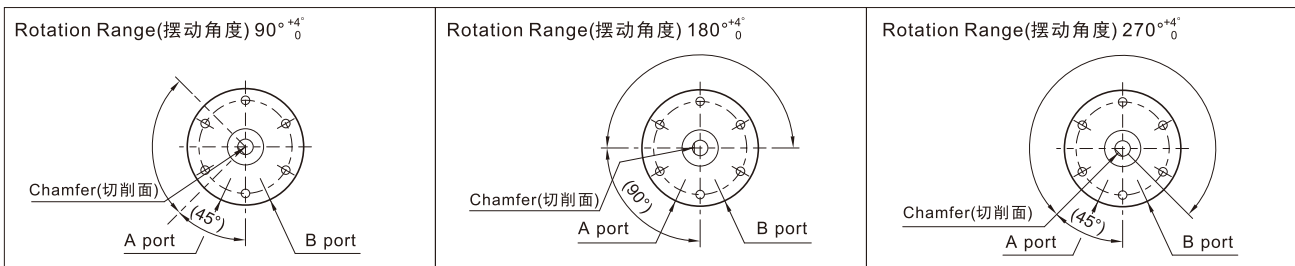
Bore(缸径)(mm)	Ø10	Ø15	Ø20	Ø30	Ø40
Fluid(流体)	Clean Air(洁净空气)				
Action(动作形式)	Double Acting(双动)				
Torque(扭矩)	0.14N·m	0.38N·m	0.81N·m	2.25N·m	3.8N·m
Bore Size(气缸轴径)	Ø4	Ø5	Ø6	Ø8	Ø10
Rotation Angle(摆动角度)	90° 180° 270°				
Port Size(接管口径)	M5X0.8				
Pressure Range(使用压力)	1.5~7Kgf/cm ² (0.15~0.7Mpa)				
Amb.Temp.(环境及流体温度)	0~50°C				
Allowance of Kinetic Energy(允许动能)	0.0015J	0.001J	0.003J	0.02J	0.04J

How To Order (型号表示方法)

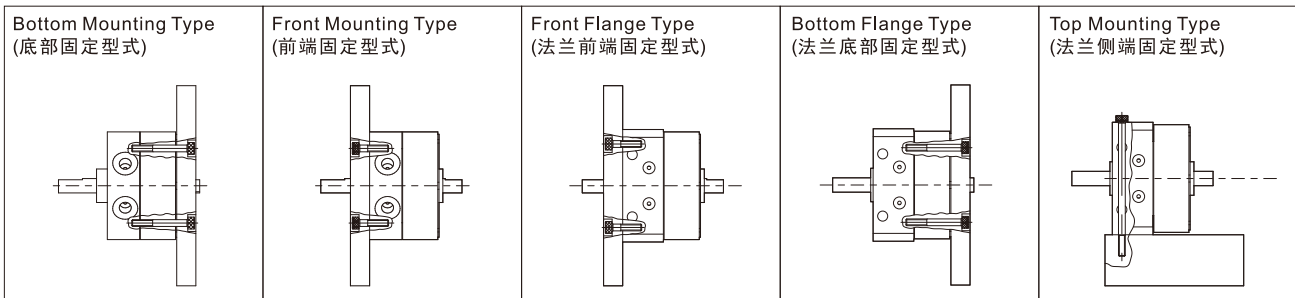
TC D RB2W U B 10 - 90 - M9 S

Magnet 有无磁环	Angle Adjustable 角度调整单元	Flange Type 法兰型式	Bore 缸径	*Auto Switch 磁性开关	No. of Auto Switch 磁性开关数量
Nil(空) None(无磁环)	Nil(空) None(无)	B Standard(标准型)	10, 15, 20, 30, 40	Nil(空) None(无磁性开关)	Nil(空) 2(个)
D Built-in Magnet(有磁环)	U Have(有)	F With Front Flange Plate(前座法兰型)	Rotation Angle 摆动角度	M9 Reed Switch(带有接点磁性开关)	S 1(个)
			90 90°	*Auto Switch(磁性开关) 引线长度表示记号: L - 3m (标准) Z - 5m	
			180 180°		
			270 270°		

Rotation Angle(摆动角度)



Rotation Angle(摆动角度)

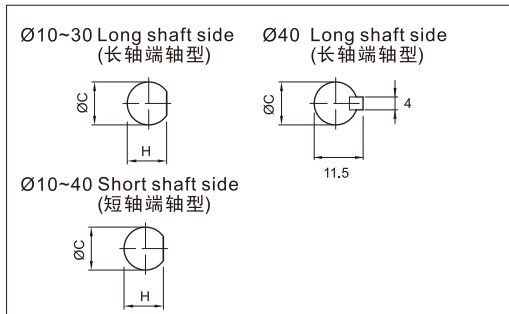
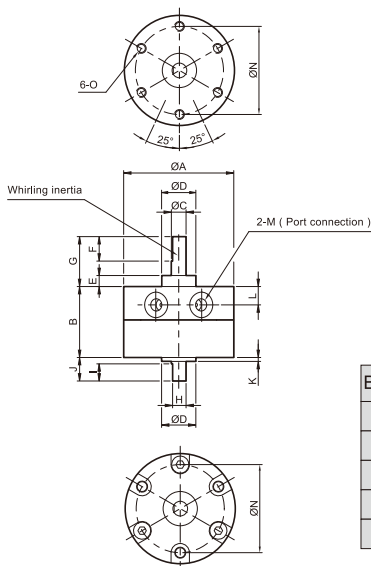


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Dimensions(mm)(外形尺寸图(毫米))

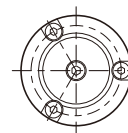
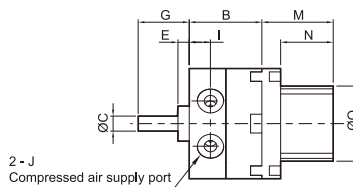
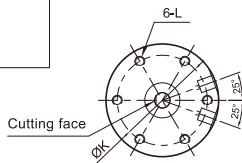
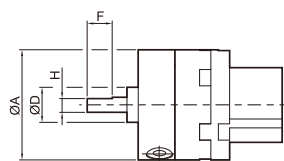
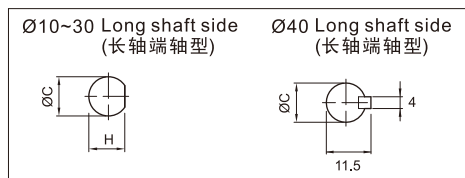
TCRB2WB10、15、20、30、40



Bore(缸径)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Ø10	30	17	4	9	3	9	14	3.5	5	8	1	4.2	M5x0.8p	24	M3x0.8p
Ø15	35	20.1	5	12	4	10	18	4.5	6	9	1.5	5	M5x0.8p	29	M3x0.8p
Ø20	44	29.1	6	14	4.5	10	20.3	5.5	7	9.6	1.6	8.5	M5x0.8p	36	M4x0.7p
Ø30	51	40	8	16	5	12	22	7.5	8	13	2	11	M5x0.8p	43	M5x0.8p
Ø40	64	45	10	25	6.5	22	30	9	9	15	4.5	9.5	M5x0.8p	56	M5x0.8p

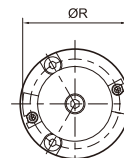
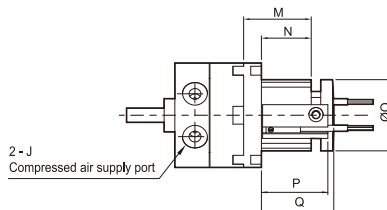
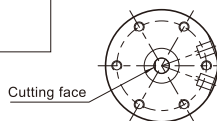
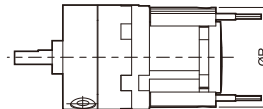
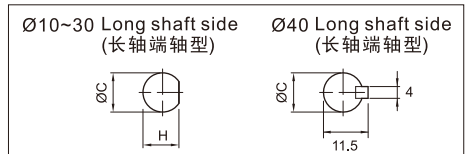
TCRB2WUB10、15、20、30、40

Adjust angle implement(角度调整器)



TCDRB2WUB10、15、20、30、40

Sensor switch holder(感应器固定座)



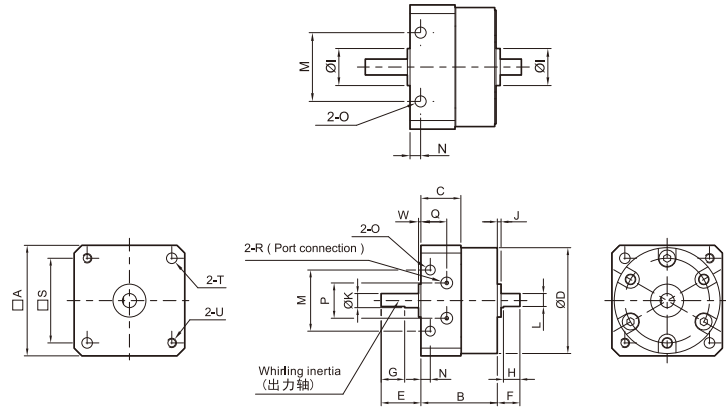
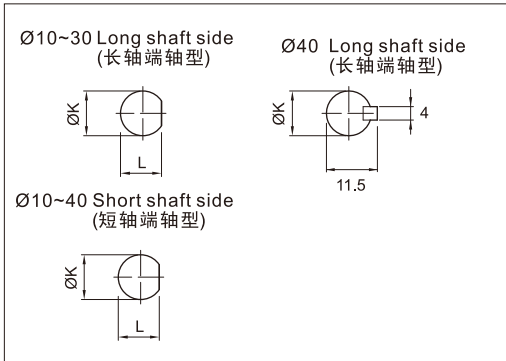
Bore(缸径)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
Ø10	30	17	4	9	3	9	14	3.5	4.2	M5x0.8p	24	M3x0.5p	24	18	18	23.3	24	29
Ø15	35	20.1	5	12	4	10	18	4.5	5	M5x0.8p	29	M3x0.5p	28	22	24	27.3	29.5	34
Ø20	44	29.1	6	14	4.5	10	20.3	5.5	8.5	M5x0.8p	36	M4x0.7p	28.5	21	30	28	30.5	42
Ø30	51	40	8	16	5	12	22	7.5	11	M5x0.8p	43	M5x0.8p	32.5	24	34	30.8	34	47
Ø40	64	45	10	25	6.5	22	30	-	9.5	M5x0.8p	56	M5x0.8p	34.5	26	34	33	36	47

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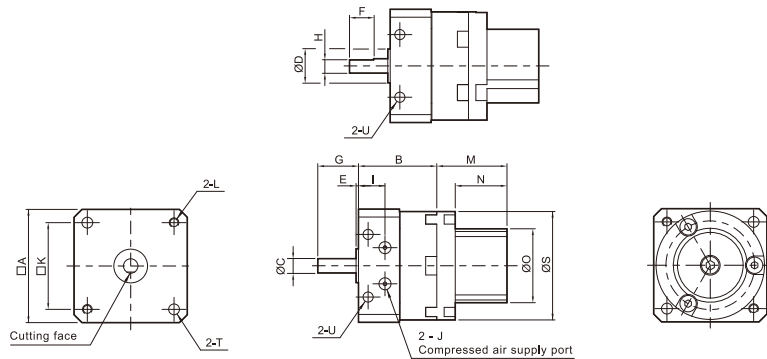
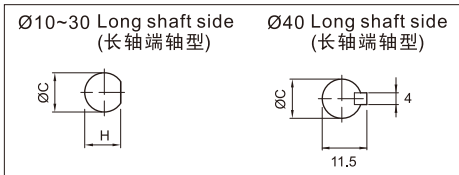
Dimensions(mm)(外形尺寸图(毫米))

TCRB2WF10、15、20、30、40

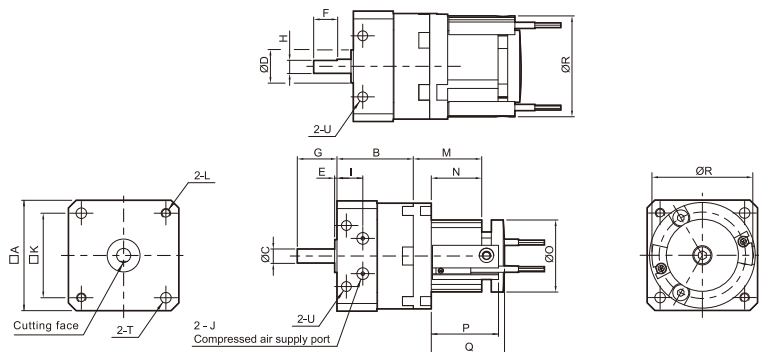
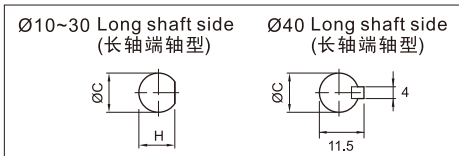


Bore (缸径)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
Ø10	31	22	13.3	30	14	8	9	5	9	1	4	3.5	17	3	3.5	10.5	9.2	M5x0.8p	25	3.5	M3x0.5p	24	1
Ø15	36	25.7	15.5	35	18	9	10	6	12	1.5	5	4.5	21	3	3.5	10.5	10.5	M5x0.8p	29	3.5	M3x0.5p	29	1.5
Ø20	44	33.6	19	44	20	9.6	10	7	14	1.6	6	5.5	26	4	4.2	15	13	M5x0.8p	36	4.5	M4x0.7p	36	1
Ø30	52	47.5	27.2	51	22	13	12	8	16	2	8	7.5	29	4.5	5.5	13.5	18.5	M5x0.8p	42	5.5	M5x0.8p	43	2
Ø40	64	53	30.4	64	30	15	22	9	25	4.5	10	9	38	5	5.5	19	14	M5x0.8p	52	5.5	M5x0.8p	56	3

TCRB2WUF10、15、20、30、40 Adjust angle implement(角度调整器)



TCDRB2WUF10、15、20、30、40 Sensor switch holder(感应器固定座)



Bore (缸径)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
Ø10	31	22	4	9	1	9	14	3.5	9.2	M5x0.8p	25	M3x0.5p	24	18	18	23.3	24	29	30	3.5	3.5
Ø15	36	25.7	5	12	1.5	10	18	4.5	10.5	M5x0.8p	29	M3x0.5p	28	22	24	27.3	29.5	34	35	3.5	3.5
Ø20	44	33.6	6	14	1	10	20	5.5	13	M5x0.8p	36	M4x0.7p	28.5	21	30	28	30.5	42	44	4.5	4.2
Ø30	52	47.5	8	16	2	12	22	7.5	18.5	M5x0.8p	42	M5x0.8p	32.5	24	34	30.8	34	47	51	5.5	5.5
Ø40	64	53	10	25	3	22	30	-	14	M5x0.8p	52	M5x0.8p	34.5	26	34	33	36	47	64	5.5	5.5

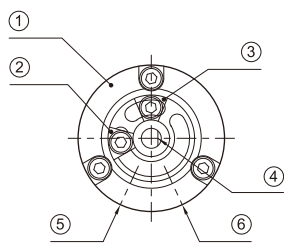
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TCRB2 Series

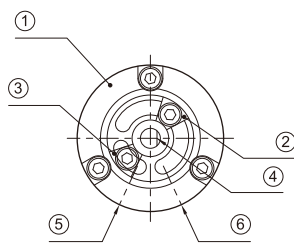
Description of Adjustment(调整范围说明)

There are three angle setting position (as showing figure - 1 , 2, 3 below) for sensor positioning base of each model. The preset range of adjustment is between internal angle position block inside the cylinder. Since there is limitation of accuracy of the internal angle positioning blocks inside the cylinder, if 90° and 180° accurate positioning is required, please adjust to 270°.

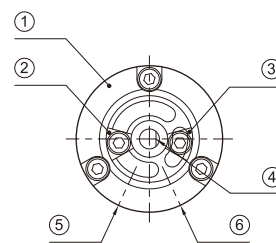
气缸的感应器固定座有三种角度设定位置(如下图所示的1/2/3)。原设定的旋转范围位于气缸内部的角度定位块之间。因为气缸内部的定位块定位精度有限,若需要准确定位90°或180°时,请调整至270°使用。



Position-1
(位置1)



Position-2
(位置2)



Position-3
(位置3)

- ① Sensor positioning base (磁开固定座)
- ④ Cutting face (切削面)

- ② Angle positioning block-1 (角度定位块-1)
- ⑤ A through hold (A 通气孔)

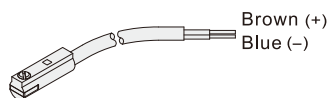
- ③ Angle positioning block-2 (角度定位块-2)
- ⑥ B through hold (B 通气孔)

While using one group of Angel positioning block and fixed to long slot side, the range of adjustable angle for each specification and listed as below :

当只使用一组角度定位块且固定于长槽侧时, 各规格可调整的角度范围如下:

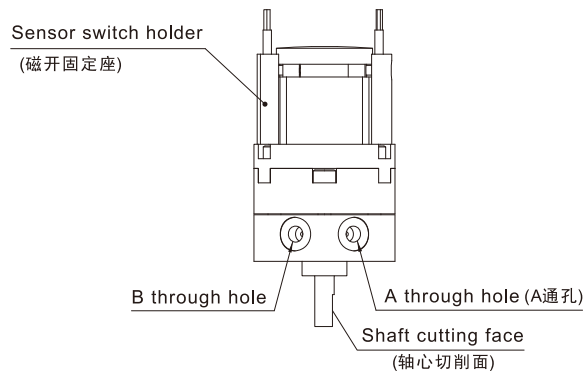
Bore (缸径)	Position-1 (位置1)			Position-2 (位置2)			Position-3 (位置3)		
	90°	180°	270°	90°	180°	270°	90°	180°	270°
Ø10									
Ø15									
Ø20	0°~90°	130°~180°	175°~225°	30°~90°	0°~180°	0°~250°	0°~10°	105°~180°	105°~270°
Ø30									
Ø40									

Sensor Switch Model(感应器型号)



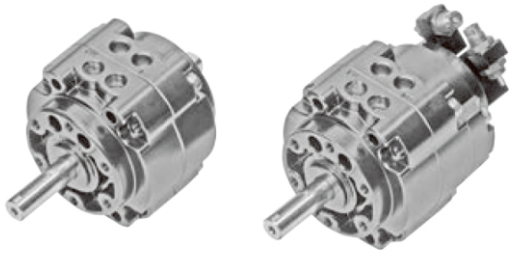
Voltage(电压) : DC/AC 5~120V

M9



大型叶片式摆动气缸 Large Rotary Actuator/Vane Type

TCRB2 Series



Common Specification (共同规格)

Bore(缸径)(mm)	Ø50	Ø63	Ø80	Ø100
Fluid(流体)	Clean Air(洁净空气)			
Action(动作形式)	Double Acting(双动)			
Torque(扭矩)	5N·m	10N·m	18N·m	35N·m
Bore Size(气缸轴径)	Ø12	Ø15	Ø17	Ø25
Rotation Angle(摆动角度)	90° 180° 270°			
Port Size(接管口径)	Rc1/8		Rc1/4	
Pressure Range(使用压力)	1.5~7Kgf/cm ² (0.15~0.7Mpa)			
Amb.Temp.(环境及流体温度)	0~50°C			
Allowance of Kinetic Energy(允许动能)	0.082J	0.12J	0.39J	0.6J

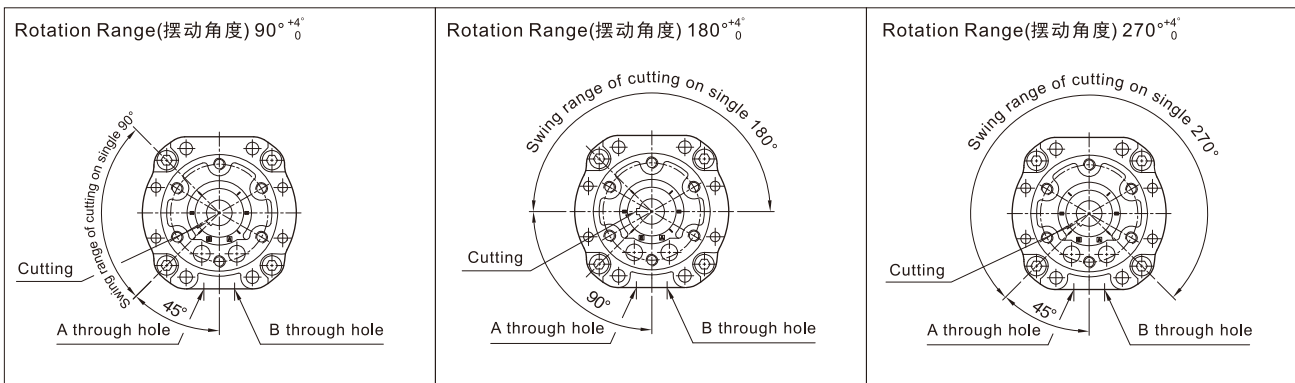
How To Order (型号表示方法)

TC D RB2W 50 - 90 - M9 S - A 1

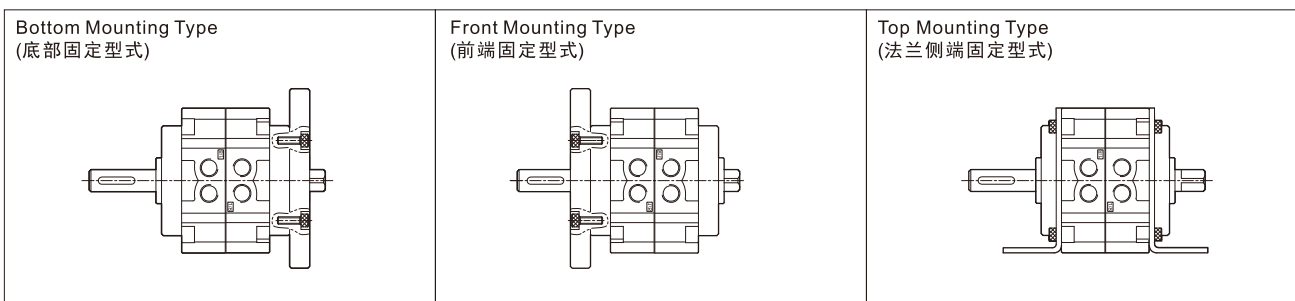
Magnet 有无磁环		Bore 缸径	Rotation Angle 摆动角度	*Auto Switch 磁性开关	No. of Auto Switch 磁性开关数量	*Shock Absorber 油压缓冲器	No. of Shock Absorber 油压缓冲器数量		
Nil(空)	None(无磁环)	50,63,80,100	90 90°	Nil(空)	None (无磁性开关)	Nil(空)	None (无)	1	1(个)
D	Built-in Magnet(有磁环)		180 180°	M9	Reed Switch(带有接点磁性开关)	A	Have (有)	2	2(个)
			270 270°						

*It could be choice shock absorber for rotating position and adjust angle. The angle range will be 0~-10°. (带油压缓冲器可微量调整角度, 旋转角度的调整范围为0~-10°)

Rotation Angle(摆动角度)



Rotation Angle(摆动角度)

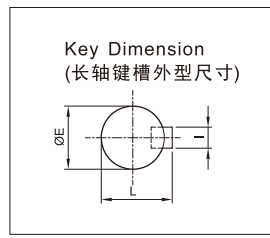
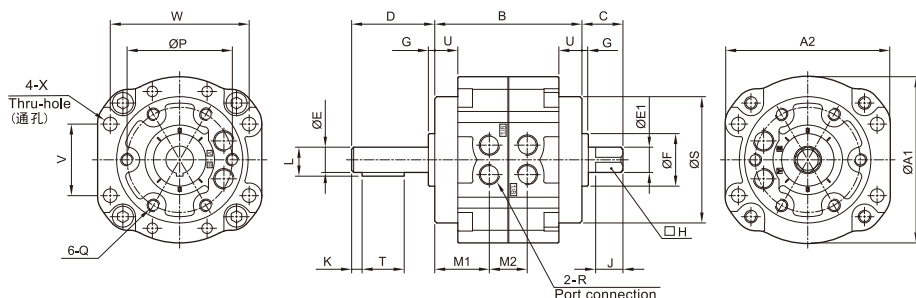


大型叶片式摆动气缸 Large Rotary Actuator/Vane Type

TCRB2 Series

Dimensions(mm)(外形尺寸图(毫米))

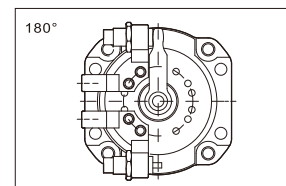
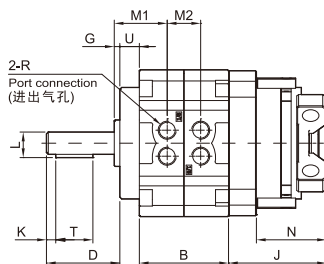
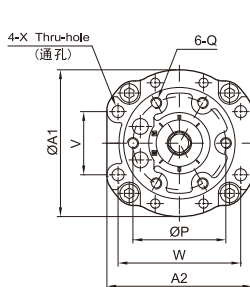
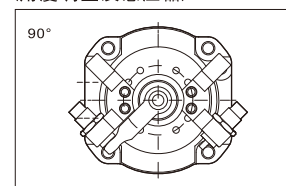
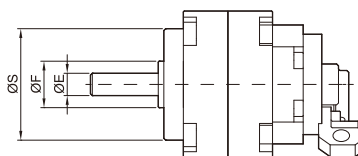
TCRB2WB50、63、80、100



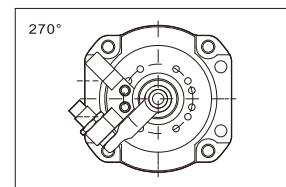
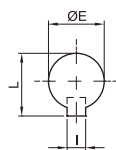
Bore (缸径)	A1	A2	B	C	D	E	F	G	H	I	J	K	L	M1	M2	P	Q	R	S	T	U	V	W	ØX
Ø50	79	78	70	19.5	39.5	12	25	3	10	4	13	5	13.5	26	18.2	50	M6X1.0P	RC1/8"	60	20	11	34	66	6.5
Ø63	98	98	80	21	45	15	28	3	12	5	14	5	17	28.9	22.2	60	M8X1.25P	RC1/8"	75	25	14	39	83	9
Ø80	110	110	90	23.5	53.5	17	30	3	13	5	16	5	19	30	30.2	70	M8X1.25P	RC1/4"	88	41	15	48	94	9
Ø100	140	140	103	30	65	25	45	4	19	7	22	5	28	35.4	32.2	80	M10X1.5P	RC1/4"	108	40	11.5	60	120	11

TCDRB2WB50、63、80、100

Angle adjustable and sensor device
(角度调整及感应器)



Key Dimension
(长轴键槽外型尺寸)



Bore (缸径)	A1	A2	B	D	E	F	G	I	J	K	L	M1	M2	N	P	Q	R	S	T	U	V	W	ØX
Ø50	79	78	48	39.5	12	25	3	4	52.7	5	13.5	26	18	37.7	50	M6X1.0P	RC1/8"	60	20	11	34	66	6.5
Ø63	98	98	52	59	15	28	3	5	56.4	5	17	31.9	22.2	37.7	60	M8X1.25P	RC1/8"	75	25	14	39	83	9
Ø80	110	110	60	53.5	17	30	3	5	58.9	5	19	30	30	39.2	70	M8X1.25P	RC1/8"	88	36	15	48	94	9
Ø100	140	140	80	76.5	25	45	4	7	62.9	5	28	39.4	32.2	39.2	90	M10X1.5P	RC1/4"	108	40	11.5	60	120	11