



#### 雙動迴轉氣缸 Double acting rotary cylinders

<b>RAL</b>	外軸型迴轉缸 MALE PIVOT GEAR (STANDARD TYPE)	
<b>RAL-D</b>	雙心外軸型迴轉缸 MALE PIVOT GEAR (DOUBLE END ROD TYPE)	

- 本系列迴轉缸，造型美觀，性能優異，具高扭力。
- 一律附有磁性感應及角度調整裝置。
- The body is manufactured in anodized aluminum alloy, and has been designed looking at the harmonious aesthetic development.
- Pinion and rack produced from carbon steel reduces backlash within the mechanism.
- Rotation adjustment screw.

#### 規格表 Specifications

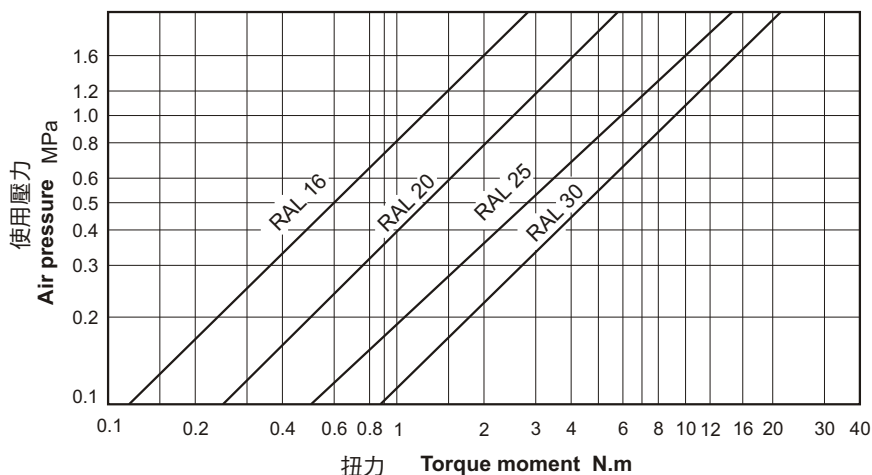
氣缸內徑 Bore sizes of cylinder (mm)	φ 16	φ 20	φ 25	φ 30
旋轉角度 Standard rotation	90 ± 5° , 180 ± 5°			
轉軸軸徑 Rotating shaft dia. (mm)	φ 6	φ 8	φ 10	φ 12
轉軸原點 Initial position of slot (mm)	詳見尺寸圖 See dimensional feature			
工作媒體 Power fluid	已濾清之壓縮空氣(潤滑或未潤滑) Filtered air with or without lubrication			
使用壓力範圍 The range of pressure (kgf/cm <sup>2</sup> )	1.3 ~ 7			
使用溫度範圍 Ambient temperature (°C)	-10 ~ 60			
允許軸向負荷 Max. allowable axial thrust (kg)	0.013	0.022	0.041	0.060

#### 訂購代號 Order No.

**RAL** - **20** / **90** - **D** - **LN-01D** × **2**

- 型式 Type: RAL
- 內徑 Bore: 16 φ 16, 20 φ 20, 25 φ 25, 30 φ 30
- 旋轉角度 Rotation: 90
- 雙心轉軸 End rod type: D
- 近接開關 Sensor switch: LN-01D
- 感應器數量 Quantity: 2

#### 扭力出力表 Output torque table

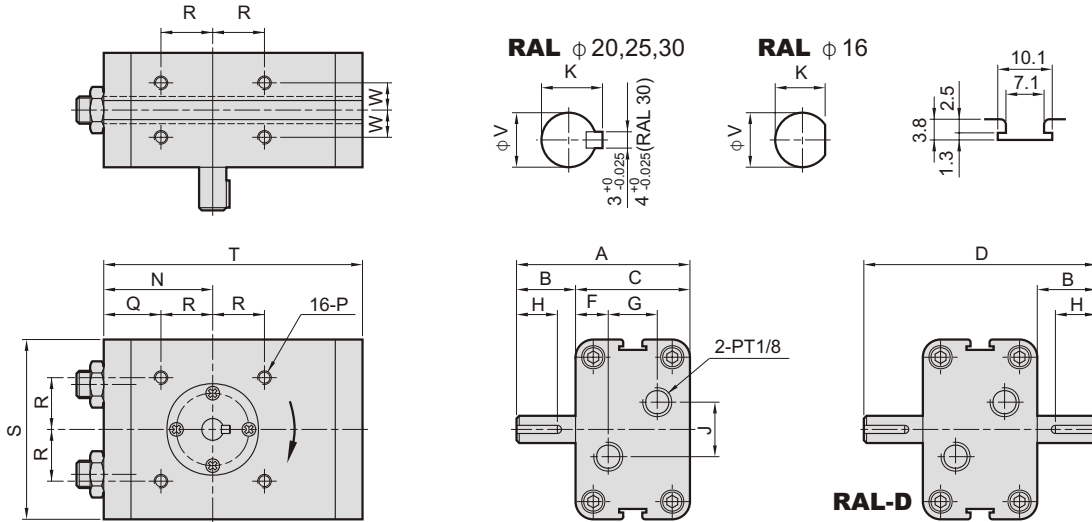


尺寸圖 Dimension  $\phi 16 \sim \phi 30$

**RAL** 外軸型迴轉缸  
Male pivot gear (standard type)

RAL  $\square$  VB(RAL90°)  
 RAL  $\square$  HB(RAL180°)
 RAL  $\square$  DVB(RAL90°-D)  
 RAL  $\square$  DHB(RAL180°-D)

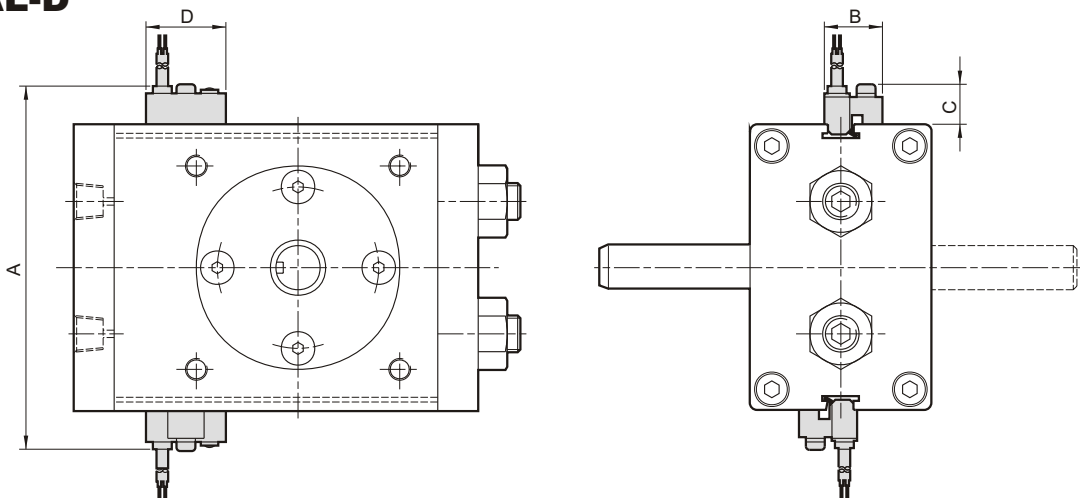
**RAL-D** 雙心外軸型迴轉缸  
Male pivot gear (double end rod type)



Type	A	B	C	D	F	G	H	J	K	N	P	Q	R	S	T	V	W
RAL16/90	52	20	32	72	11	10	10	16	5.5	30.5	M5×P0.8 深7	14.5	16	52	70	6	8
RAL16/180	52	20	32	72	11	10	10	16	5.5	35.5	M5×P0.8 深7	19.5	16	52	86	6	8
RAL20/90	61	25	36	86	11	14	19	14	9.2	34.5	M5×P0.8 深7	17.5	17	56	81	8	9
RAL20/180	61	25	36	86	11	14	19	14	9.2	44	M5×P0.8 深7	27	17	56	103	8	9
RAL25/90	72	30	42	102	12	18	19	20	11.2	40	M5×P0.8 深7	21	19	66	94	10	10
RAL25/180	72	30	42	102	12	18	19	20	11.2	52	M5×P0.8 深7	33	19	66	120	10	10
RAL30/90	90	40	50	130	12	26	19	36	13.2	50	M6×P1.0 深8	22	28	78	110	12	15
RAL30/180	90	40	50	130	12	26	19	36	13.2	71	M6×P1.0 深8	43	28	78	150	12	15

近接開關 Sensor switches 尺寸圖 Dimension  $\phi 16 \sim \phi 30$

**RAL / RAL-D**



Bore	近接開關型式 Sensor switch	A	B	C	D
$\phi 16$	LN-01D	74	16	11	22
$\phi 20$	LN-01D	78	16	11	22
$\phi 25$	LN-01D	88	16	11	22
$\phi 30$	LN-01D	100	16	11	22