



# 得豐實業有限公司

## Df Wisdom Industrial CO., LTD

### NCRT 迴轉式扭力計 Non-Contact Rotary Torque Sensor

NCRT 迴轉式扭力計，係專為旋轉中量測扭力而設計之感測器，採用應變規式轉軸扭力量測結構，剛性強，結構穩固，轉速高。並且具備非接觸式傳遞電源，扭力信號先經放大及數位轉換後，以無線方式將數位扭力信號傳至內部接收板，再以RS-232、RS-485或類比方式輸出雜訊低、無接觸式電源及信號傳遞，無碳刷及一體式設計，簡潔美觀，堅固耐用，具以下之特點：

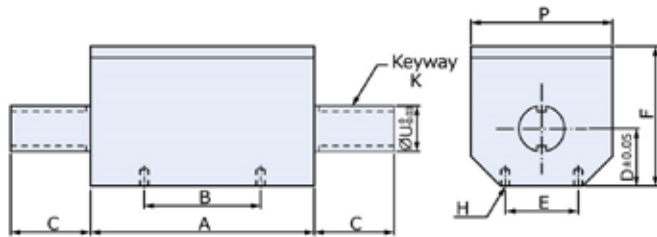


NCRT sensor is a special design for measuring the torque on a continual rotation shaft. Use the strain gauge shaft to comprise its structure. Equipped a non-contact power supply, and the signal is transferred with internal receiving board after being amplified and translated, and can be transferred by RS-232, RS-485 and  $\pm 5V, \pm 10V, 4-20mA$  output. The characteristic is no carbon brush and integrally formed, beautiful, durable.

#### ● 特點 Features

- 體積小 Small
- 高轉速 High Speed
- NCRT - 0.25, 0.5, 1, 2.5, 5, 10, 25, 50, 100, 250, 500, 1k, 2k, 2.5k, 5k, 10k Nm
- 非接觸式 Non-contact
- 低雜訊 Low Noise
- 剛性強 Rigid

#### ● 安裝尺寸 Installation Dimensions



TYPE	A	B	C	D	E	F	H	K	P	U	容許轉速
NCRT-0.25 Nm											
NCRT-0.5 Nm											
NCRT-1 Nm	96	51	20	18	32	55	M4x0.7 x7deep	3x1.8	52	10	12000 RPM
NCRT-2.5 Nm											
NCRT-5 Nm											
NCRT-10 Nm											
NCRT-25 Nm	98	51	35	25	32	62	M4x0.7 x7deep	4x2.5	62	20	12000 RPM
NCRT-50 Nm											
NCRT-100 Nm											
NCRT-250 Nm	115	65	60	36	44	84	M6x1.0 x8deep	10x5	88	40	6000 RPM
NCRT-500 Nm											
NCRT-1 k Nm											
NCRT-2 k Nm											
NCRT-2.5 k Nm	120	65	85	48	50	109	M6x1.0 x8deep	12x5	113	55	4500 RPM
NCRT-5 k Nm	131	65	98.5	49	50	110	M6x1.0 x8deep	16x6	114	65	4000 RPM
NCRT-10 k Nm	131	75	135	61	60	135	M6x1.0 x8deep	25x9	140	90	3000 RPM

#### ● 規格 Specification

總和誤差 Total Error	$\pm 0.3\%R.O.$
重現性 Repeatability	$\pm 0.2\%R.O.$
潛變 Creep	0.1% / 20min
解析度 Resolutions	10000
最大輸入電源 Max. Excitation Voltage	24V
建議輸入電源 Recommended Excitation Voltage	18V
控制接點 Control Contact	780Hz
使用範圍 Safe Temp. Range	$-10^{\circ}C \sim 50^{\circ}C$
溫度對零點之影響 Temp. Effect on Zero Balance	0.05%R.O. / $10^{\circ}C$
溫度對額定輸出之影響 Temp. Effect on Rated Output	0.03% Load / $10^{\circ}C$
零點誤差 Zero Balance	$\pm 3\%R.O.$
容許負荷 Safe Over Load Rating	150%
導線長度 Cable Length	3m
接線方式 Cable Connection	Input : Red (+) Exci : Black (-) Exci Output : Green (+) Sign White (-) Sign
訂購編號 Ordering Information	NCRT - N - R - O
	N - 扭力值(Nm) Torque Number
	R - RPM output : 0-non,R-output to RPM to meter
	O - 輸出信號格式 : Output Signal Format :
	485-Modubs RTU, 485-Fast, 232-Fast $\pm 5V, \pm 10V, 4-20mA$