

# 产品选型手册

Product selection guide



DVC42 (R42) · Series

# Application and Characteristic



结构坚固、抗干扰能力强接电子插座连接、简单方便  
Widely used in automatic control, automatic measurement, as the angle and speed sensor.



有多种输出形式可供客户选择，脉冲数最高可达到5000脉冲，脉冲数可根据客户要求定做。  
Small volume, light weight, good performance, suitable for small space application.



光电器件可靠性高，寿命长，抗干扰能力强，使用温度范围广等。  
The structure is compact, the highest resolution can reach 1024 pulse.

## Model Description

D	VC	42	V	9	□ - G	□	1	L - □	B	M	2P
Product Class R、D	Outer Diameter Φ 42mm	Shaft Diameter Φ 9mm	Termination G	Supply Voltage 1	Resolution 1000-6000	Index Signal M、N					
Product Type Servo	Spindle Shaft V、T	Accessory A、B、C	Cable Length Standard 0.3M	Output Type L	Output Signal A、B	Pole No. 2、3、4、5					

Type List

## Type List

Product Class	R : Common	Shaft Diameter	Φ 6mm-Φ 9mm	Resolution	1000、1024、2000、2500、3000、5000、6000
	D : Preference	Accessory	A、B、C		
Product Kind	Servo Motor Type	Termination	G: Radial Dust-proof	Signal	A: A phase one signal output
Outer Diameter	Φ 42mm	Output Mode	L: Line Driver		B: 90° phase difference A,B two phase signal
Shaft Type	T: Hollow Shaft	Supply Voltage	1: DC5V	Index Signal	+Z phase signal
	V: Hollow Taper Shaft	Cable Length	Standard 0.3M		-Z phase signal

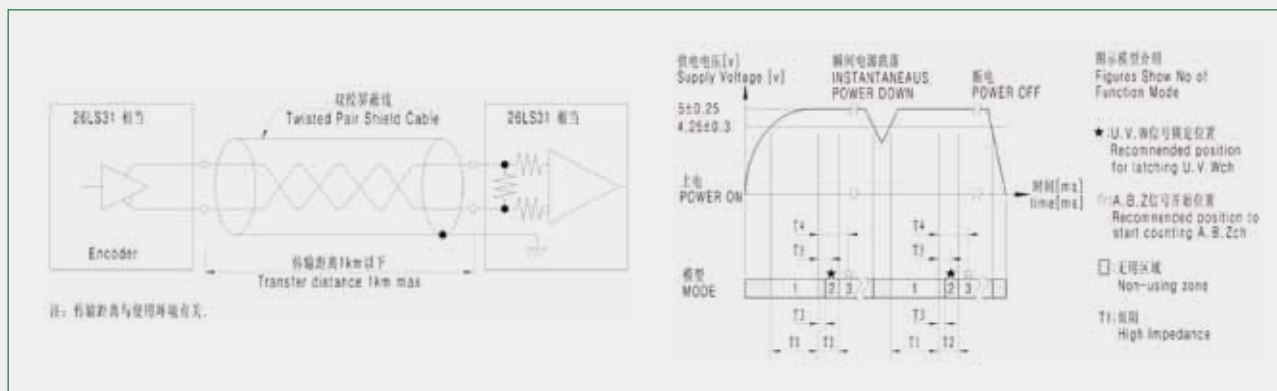
Note: Resolution can be customized

# Specifications

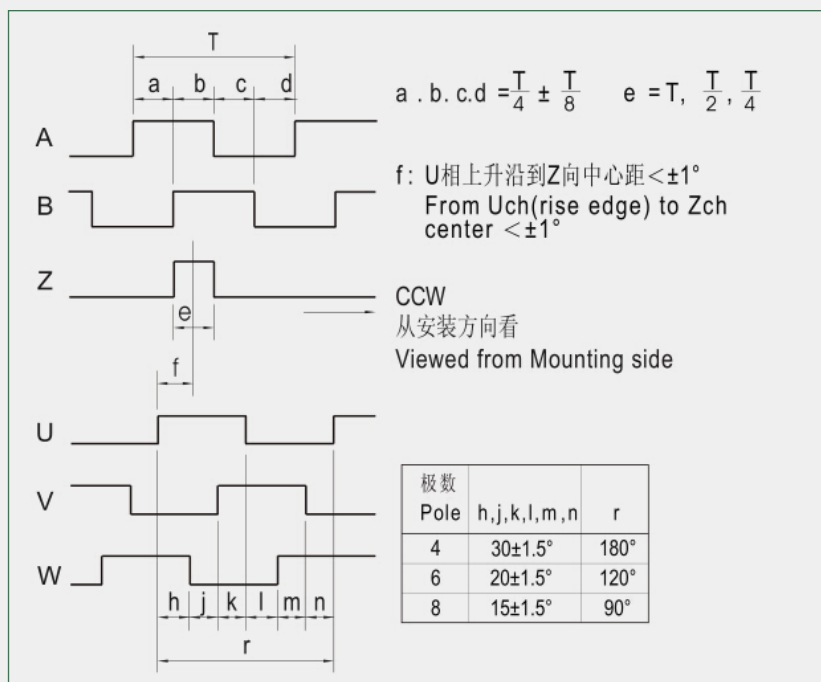
	Standard Type
Mechanical Specifications	
Universal Max Rotating Speed	8,000prm
Max Rotating Speed	15,000prm
Start Torque	$9.8 \times 10 \text{ N} \cdot \text{m}$ (100gk · cm Max)
Moment of Inertia	$6.5 \times 10 \text{ kg} \cdot \text{m}^2$ (65g · cm <sup>2</sup> Max)
Mounting Tolerance	Radial Play 0.05mm TIR Max
	Axial Play 0.2mm Max
	Angular Inclination 0.1° Max
Breaking Strength of Shaft and Bearing	$\geq 650\text{N}$
Axial Pressure $\pm 10\text{N}$	Axial End-play Within $\pm 0.005\text{mm}$

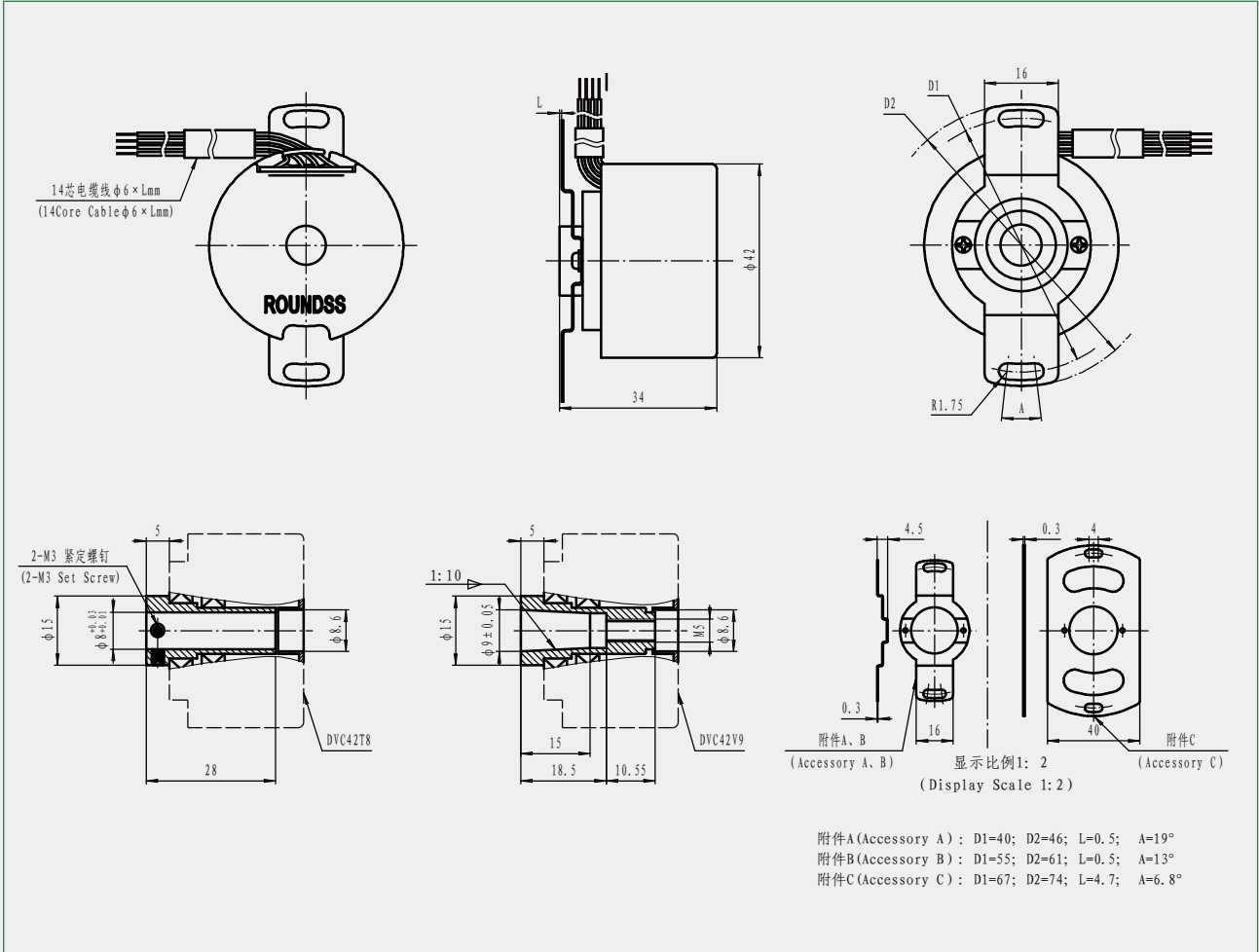
	Standard	Less Wiring
Electrical Specifications		
Output Mode	Square Wire (TTL) 26LS31	
Supply Voltage DV (V)	$5\text{V} \pm 5\%$	
Consumption Current (mA)	$\leq 60\text{mA}$	$\leq 80\text{mA}$
Max Response Frequency (kHz)	300kHz	
Rise time & Fall Time	100nec Max	
Operating Temp. Range	$-20 \sim +85^\circ\text{C}$	
Storage Temp.	$-30 \sim +120^\circ\text{C}$	
Weight	0.05kg Max	
Protection Class	IP 50	

## Line Driver output / Less Wiring Type Timing Chart



## Output Phase Shift





# Connection Table

## Standard Type

Color	Red	Black	Gray	Green
Line Driver	DG+5V	GND	A	B

Color	White/Gray	White/Green	White/Yellow	White/Brown
Line Driver	$\bar{A}$	$\bar{B}$	$\bar{Z}$	$\bar{U}$

Color	Yellow	Brown	Green	Orange
Line Driver	Z	U	V	W

Color	White/Green	White/Orange	Shield
Line Driver	$\bar{V}$	$\bar{W}$	G

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