

产品选型手册

Product selection guide



DVC48 • Series

Applications & Features



Compact, slim design, high-precision, resolutions up to 5000ppr. Straight and taper shaft are optional. Import optoelectronic components, high anti-interference ability.

Part Number

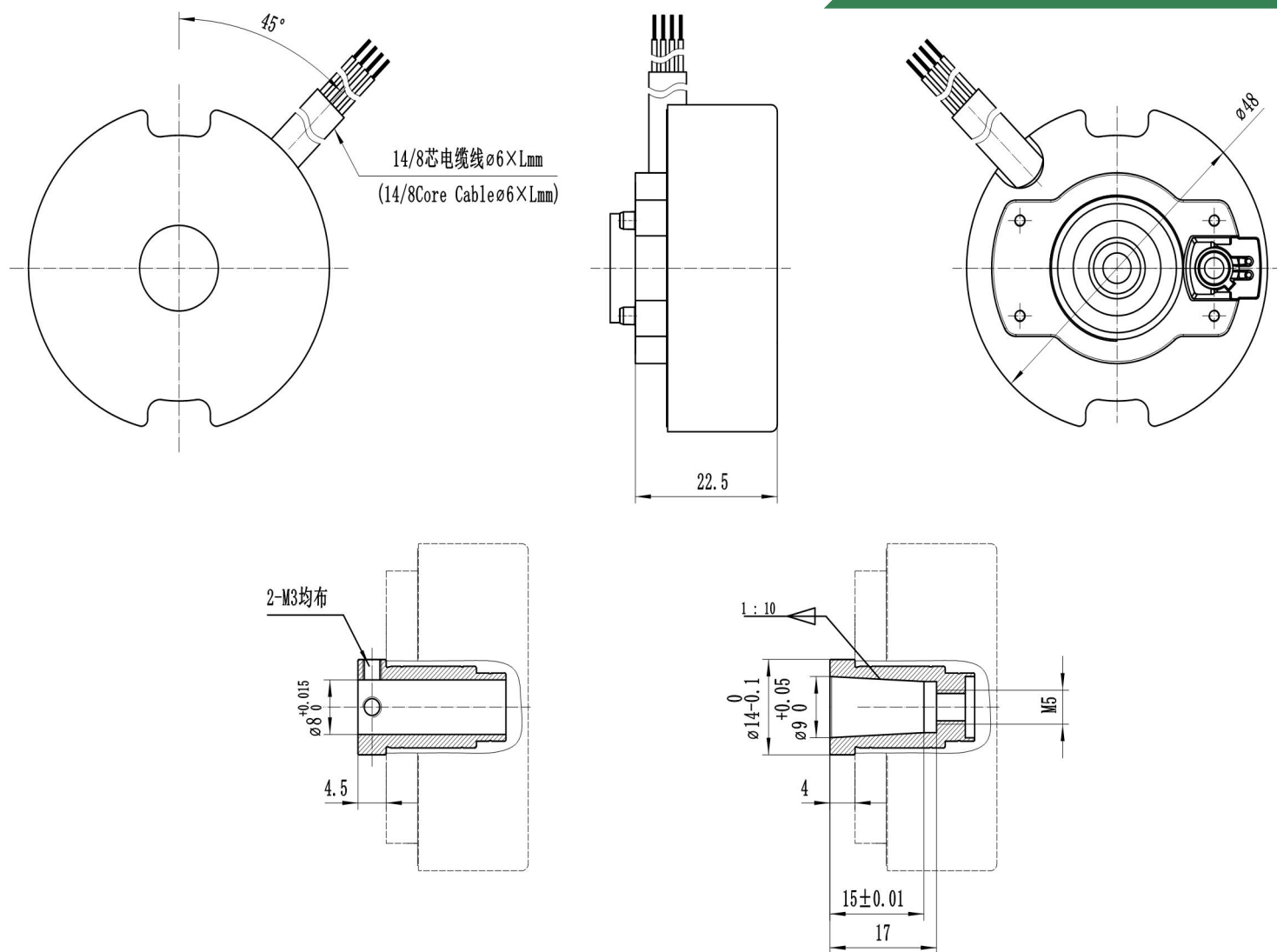
D	VC	48	V	9	□	-	G	□	1	-	L	□	B	M	4P
Product Class	External Diameter	Shaft Diameter	Termination	Supply Voltage	Resolution	Index Signal									
D: Reinforced	Φ48mm	Φ8mm Φ9mm	G: Dustproof radial output cable	1: DC5V	1024ppr 2048ppr 2500ppr 5000ppr	M: Z signal									
Product Type	Shaft Type	Accessory	Cable Length	Output Circuit	Signal	Pole No.									
Servo	V: Taper Hollow Shaft T: Straight Hollow shaft	A. B. C1. C2. D1. D2. E. F	Standard 0.3M	L: Line Driver Output	A: A phase signal B: 90° phase different A, B signals output	4P: 8 poles									

Specifications

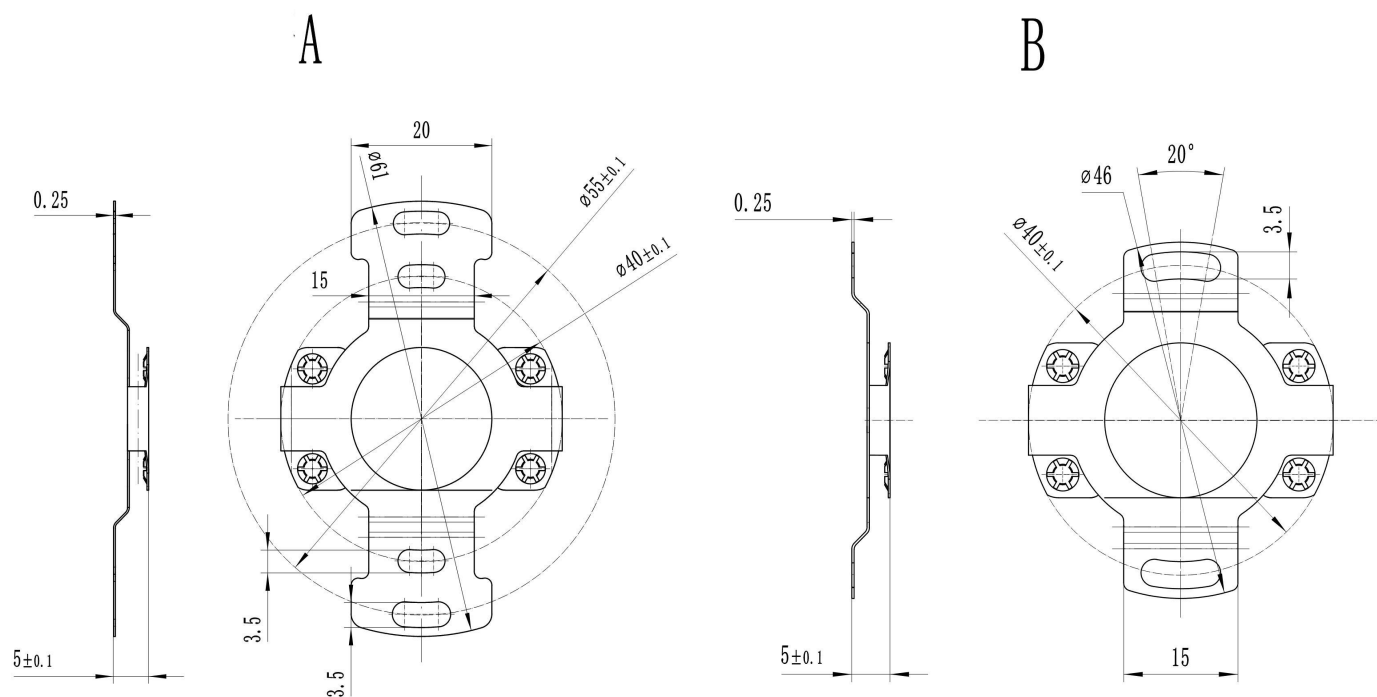
Mechanical Specifications	Standard Type
Universal Max Rotating Speed	8000rpm
Max Rotating Speed	15000rpm
Start Torque	9.8×10 N·m (100gk·cm Max)
Moment of Inertia	6.5×10 kg·m ² (65g·cm ² Max)
Mounting Tolerance	Radial Play 0.05mm TIR Max
	Axial Play 0.2mm Max
	Angular Inclination 0.1° Max
Breaking Strength of Shaft and Bearing	≥650N
Axial Pressure ±10N	Axial End-play Within ±0.005mm

Electrical Specifications	Standard	Less Wiring
Output Mode	Square Wave (TTL) 26LS31	
Supply Voltage DV (V)	5V±5%	
Consumption Current (mA)	≤60mA	≤80mA
Max Response Frequency (kHz)	300kHz	
Rise time & Fall Time	100nec Max	
Operating Temp. Range	-20~+85°C	
Storage Temp.	-30~+120°C	
Weight	0.05kg Max	
Protection Class	IP 50	

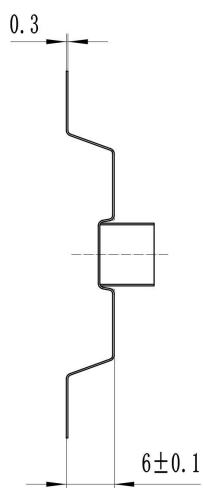
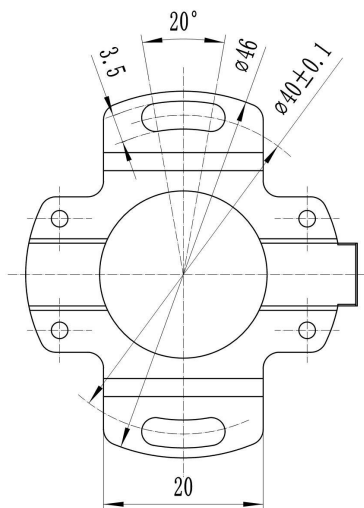
Dimensions



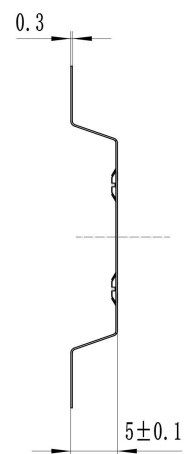
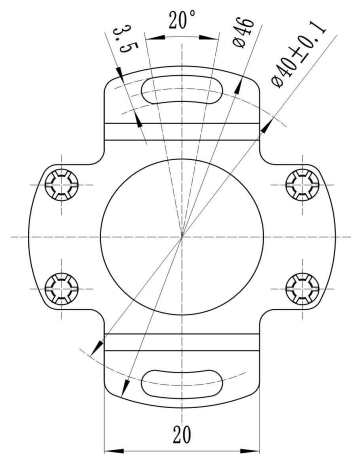
Bracket Options



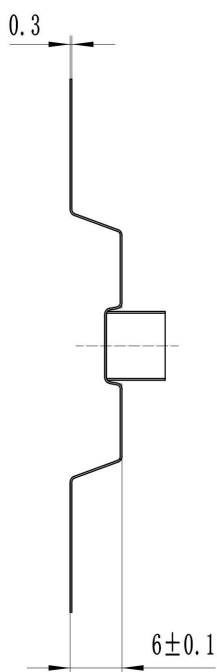
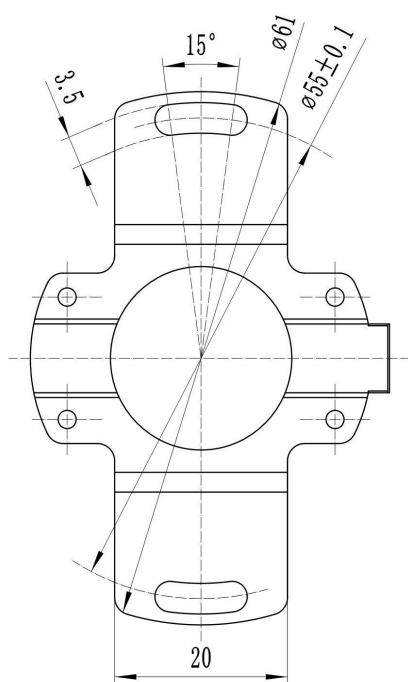
C1



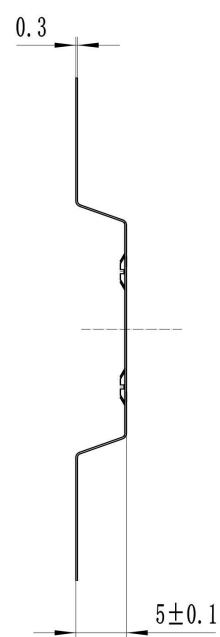
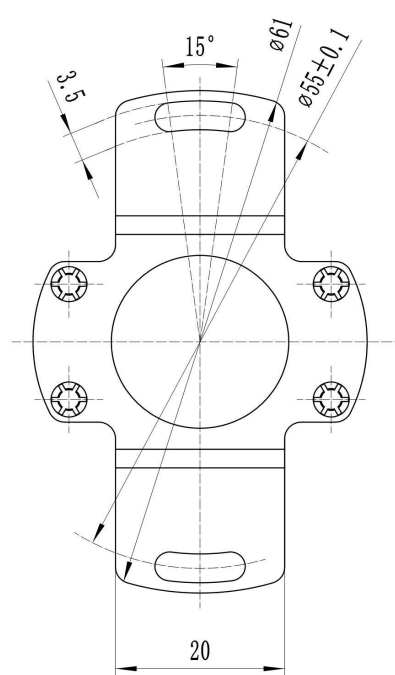
C2



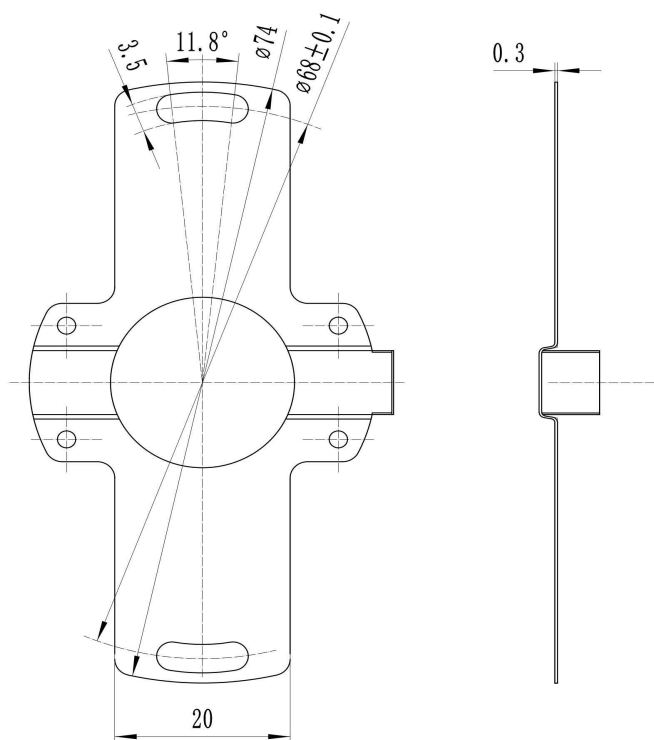
D1



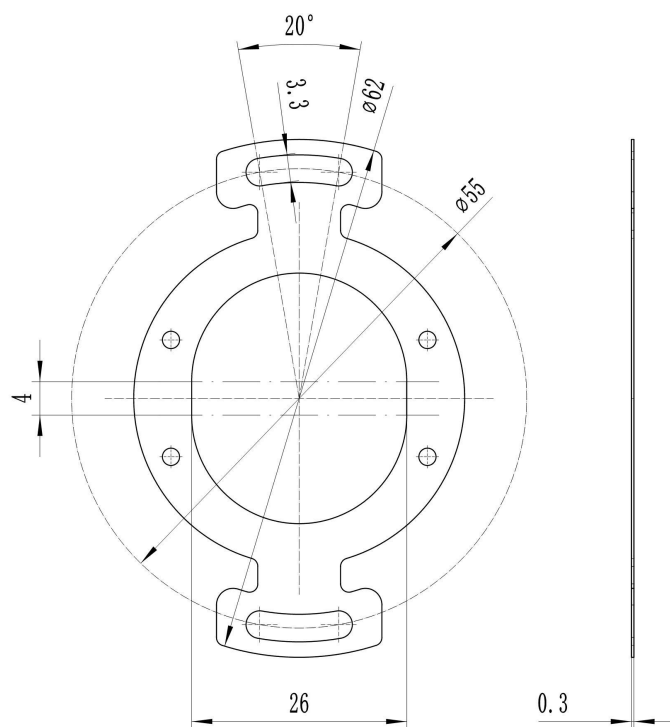
D2



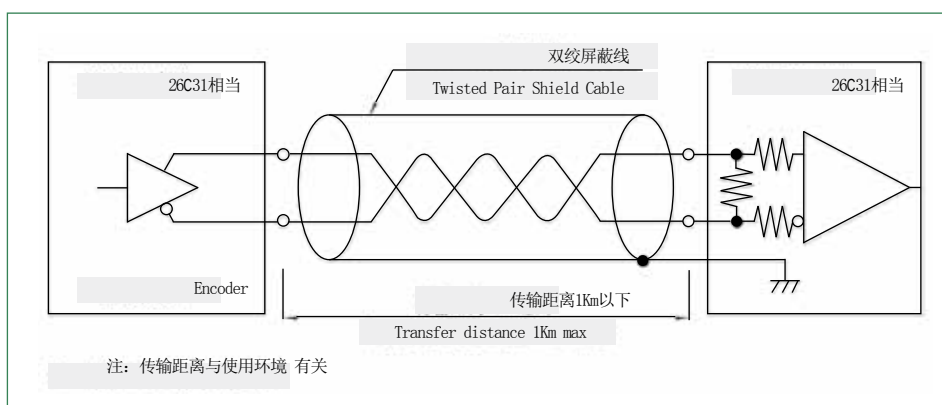
E



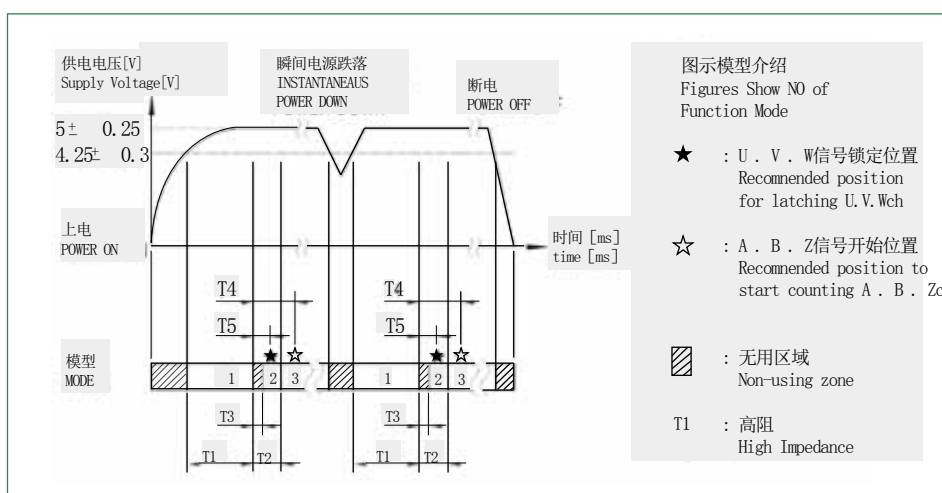
F



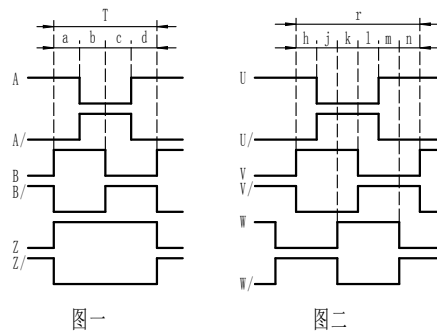
Line Driver Output



Less Wiring Type Timing Chart



Output Phase Shift



$$a, b, c, d = \frac{T}{4} \pm \frac{T}{8} \quad e = T, \frac{T}{2}, \frac{T}{4}$$

f: U相上升沿到Z向中心距 $<\pm 1^\circ$
From Uch(rise edge) to Zch
center $<\pm 1^\circ$

CCW
从安装方向看
Viewed from Mounting side

极数 Pole	h, j, k, l, m, n	r
4	$30 \pm 1.5^\circ$	180°
6	$20 \pm 1.5^\circ$	120°
8	$15 \pm 1.5^\circ$	90°

Connections

Standard type

color	RD	BK	GY	GN	YL	BN	BU	OG
signal	DC+5V	GND	A	B	Z	U	V	W

color	WH/GY	WH/GN	WH/YL	WH/BN	WH/BU	WH/OG	Shield
signal	$\bar{A}$	$\bar{B}$	$\bar{Z}$	$\bar{U}$	$\bar{V}$	$\bar{W}$	G

Less wire type

color	RD	BK	GY	GN	YL	BN	BU	OG	Shield
signal	DC+5V	GND	U/A	V/B	W/Z	$\bar{U}/\bar{A}$	$\bar{V}/\bar{B}$	$\bar{W}/\bar{Z}$	G

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