ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
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Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

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Find the *Nemicon 50S-2048-2MD-10-046-15E* at our website: *Click HERE*

SHAFT TYPE

50S Model



Heavy Duty Model

- Compact Sized Encoder with OD50mm x L33mm.
- High Specification Type with Up to 5000P/R.

Model

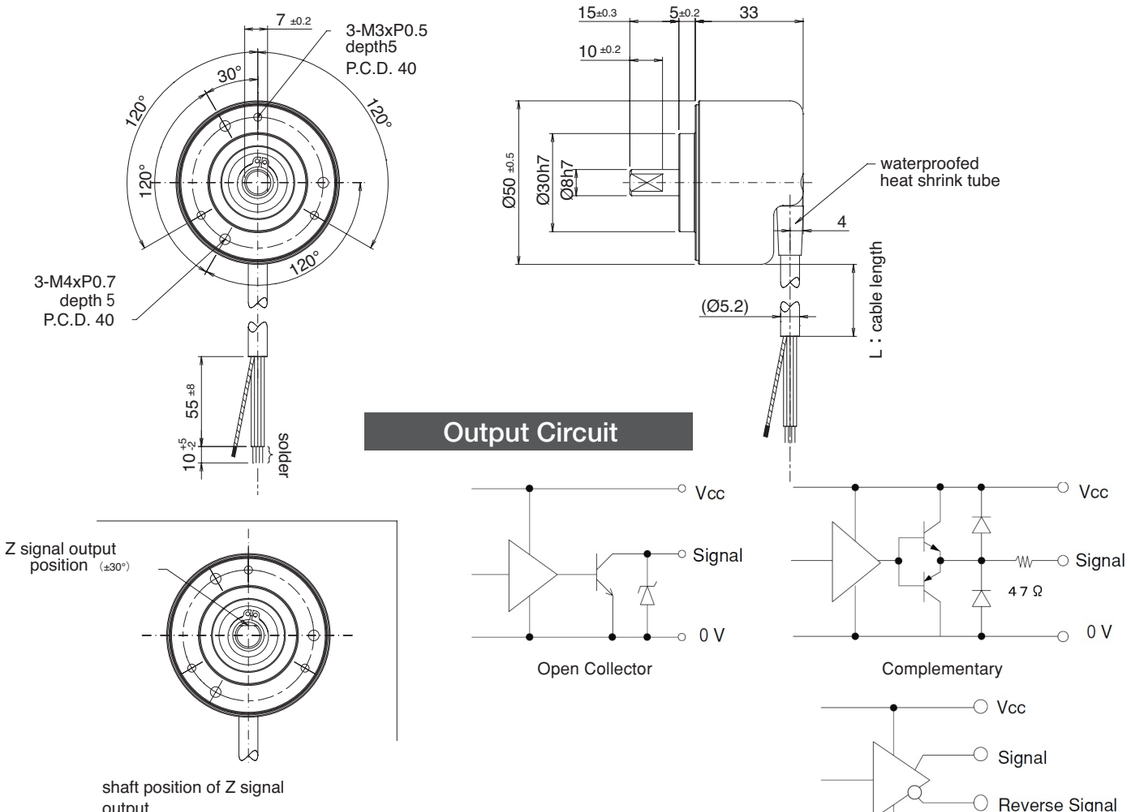
TÜV CE EN 50081-2 EN 50082-2

50S–□□–□□-8-□□□-00E

- Resolution
- Output Mode
  - 2MC : A, B, Z Open Collector Output
  - 2MT : A, B, Z Complementary Output
  - 2MD : A, B, Z Line Driver Output
- Outer diameter shaft
  - 8 : ϕ8
- Cable Length
  - 200 : 2000mm
  - 300 : 3000mm
  - 500 : 5000mm
- Complying with RoHS

360	360 P/R	1000	1000 P/R	2000	2000 P/R
500	500 P/R	1024	1024 P/R	5000	5000 P/R

External Dimension



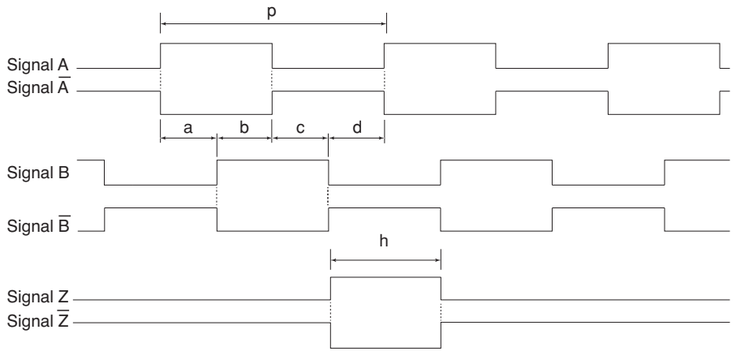
Output Circuit

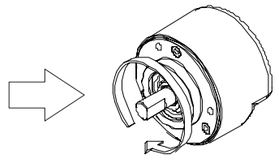
Electrical Spec

TYPE		2MC	2MT	2MD
Power Supply(Vcc)		DC 4.5 to 30V (Ripple 3% or less (P-P))		DC 4.5 to 5.5V (Ripple 3% or less (P-P))
Current Consumption		30mA Max	60mA Max	30mA Max
Output Voltage	"H"	-	Vcc −3V Min	2.5V Min
	"L" ※1	0.5V Max	3V Max	0.5V Max
Maximum Sink Current		40mA		20mA
Maximum Frequency Response	500P/R or less	120kHz		
	1000P/R or more	240kHz		
Rise & Fall Time		1 μs Max	200ns Max	100ns Max

※1) at Maximum Sink Current

Wave Form





CW → Rotating Toward Clockwise Viewed from an Arrow

P = 1 / Resolution

Line driver output is available for only $\overline{A}$, $\overline{B}$, $\overline{Z}$ signal.

Signal A,B a,b,c,d= (P/4)±(P/8)
Duty = (P/2)±(P/4)

Signal Z (P/4)≦h≦(3P/4)

Electrical Connections

Open Collector・Complementary		Line Driver	
Red	Vcc	Red	Vcc
Black	0V	Black	0V
Blue	Sig A	Green	Sig A
White	Sig B	Blue	Sig $\overline{A}$
Yellow	Sig Z	White	Sig B
Shield	N.C	Gray	Sig $\overline{B}$
—	—	Yellow	Sig Z
—	—	Orange	Sig $\overline{Z}$
—	—	Shield	N.C

Mechanical Spec

Starting Torque		9.8×10^{-3}N・m Max(at 25℃)
Angular Acceleration		1×10^{5} rad・s^2
Shaft Loading	Thrust	49.0N
	Radial	78.4N
Moment of Inertia		8×10^{-7}kg・m^2
Maximum Permissible Speed		5000min^{-1}
Net Weight		250g Max (Without Cable)

Environmental Spec

Operating Temperature	–10℃～+85℃
Storage Temperature	– 30℃～+85℃
Humidity	RH 85% Max No Condensation
Vibration	10~55 Hz / 1.5mm X,Y,Z Each 2h
Shock	980m/s^2,11ms X, Y, Z Each 3 times
Ingress Protection	IP65

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

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We're here to make your life easier. How can we help you today?

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