

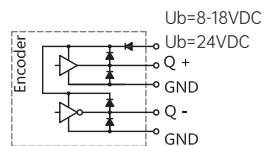
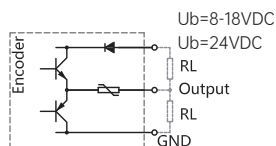


BDEEX100HA Series
Explosion-proof Encoder
Equipment Type: Class II (Gas) Class III (dust)
Explosion-proof form : Intrinsically
Explosion proof mark: Ex ib IIC T4 Gb, Ex tb IIIC T80°C Db, Ex ib IIIC T130°C Db
Applicable danger Zone 1 (gas) /21 (dust)
Sensing method Optical
Functional principle: Explosion-proof incremental encoder
Housing size $\Phi 101\text{mm}$
Hollow shaft diameter $\Phi 25$ 、 30 、 35 、 38 、 40 、 42 、 45mm
 $5/8"$ 、 $3/4"$ 、 $7/8"$ 、 $1"$ 、 $1-1/8"$ 、 $1-3/8"$
Max. resolution 3000PPR
Supply voltage 8-18VDC、24VDC
Protection IP66

Mechanical characteristics

Shaft diameter	$\Phi 25$ 、 30 、 35 、 38 、 40 、 42 、 45mm $5/8"$ 、 $3/4"$ 、 $7/8"$ 、 $1"$ 、 $1-1/8"$ 、 $1-3/8"$
Protection	IP66
Speed	Max. 3000 min ⁻¹
Shaft loading	Max. 100 N Axial; max. 200 N Radial
Shock resistance	100g, 6ms
Vibration resistance	10g, 10...2000HZ
Bearing life	10 ⁹ turns
Rotor moment of inertia	<0.1Nm
Starting torque	Approx. $150 \times 10^{-6} \text{kgm}^2$
Materials	Hollow shaft : Stainless steel Flange : Aluminum alloy Housing: Aluminum alloy
Working temperature	-40°C...+80°C
Storage temperature	-40°C...+80°C
Weight	Approx. 1kg (Cable 2m)

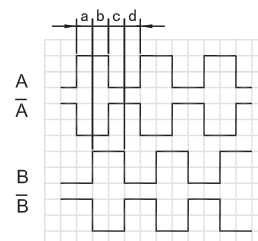
Electrical characteristics



Output circuit	Push-Pull	Push-Pull Differential
Pulse rate	Max. 3000 P/R	Max. 3000 P/R
Supply voltage	8-18VDC、24VDC	8-18VDC、24VDC
Power consumption(no load)	Max. 80 mA	Max. 80 mA
Permissible load/channel	Max. $\pm 40\text{mA}$	Max. $\pm 40\text{mA}$
Pulse frequency	Max. 100 KHz	100KHz
Signal level high	Min. $U_b - 2.5\text{V}$	Min. $U_b - 2.5\text{V}$
Signal level low	Max. 0.8V	Max. 0.8V
Rise time Tr	Max. 1 μs	Max. 1 μs
Fall time Tf	Max. 1 μs	Max. 1 μs
Short circuit proof outputs	Yes	Yes

Terminal assignment

Signal		OV	+Ub	A	OV	B	OV	
Cable Colour		WH	BN	GN	PK	YE	BU	Shield



⌚ Shaft turning clockwise, top-view of shaft.
a、b、c、d = $T/4 \pm T/8$

Ordering information

BDEEX 100 HA 25 1024 B

① Operating voltage

Null: 24VDC

V: 8-18VDC

② Shaft type

HA: Hollow shaft

③ Shaft diameter

25: 25mm

30: 30mm

35: 35mm

38: 38mm

40: 40mm

42: 42mm

45: 45mm

C: 5/8"

D: 3/4"

E: 7/8"

F: 1"

G: 1-1/8"

H: 1-3/8"

④ Pulse rate

300, 600, **1024**

1200, 1500, 3000

⑤ Output type

B: A B

D: A $\bar{A}$ B $\bar{B}$

Note: Printed in bold=standard items

Notes: 1. Cable length should be ≤ 50 m.

2. The resolution list shows commonly used pulse counts. Other pulse values should be specified upon request.

3. For 12 VDC power supply, match with safety barrier model ZSB-V15.

4. For 15 VDC power supply, match with safety barrier model ZSB-V17.

5. For 24 V power supply, match with safety barrier model ZSB-V25.

6. Please select the ordering information: product model, shaft diameter, resolution, output channels, and cable length.

Ordering example: BDEEX100HA301024B

Description: BDEEX100HA series, hollow shaft diameter 30 mm, output A B, 1500 PPR

***Cable length shall be specified in the order as a contract summary. The format is shown in the lower right area of the label, below the wire sequence information.**

Accessories (sold separately)

Note: Further fixing components can be found in the accessories selection table.

Mounting bracket
Model (common) : 8116-A



Mounting bracket
Model (common) : 8117A



Mounting bracket
Model (common) : 8145A



Mounting bracket
Model (common) : 8150



Mounting bracket
Model (common) : 8150A

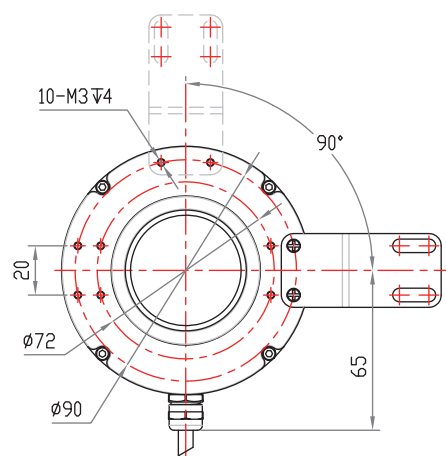
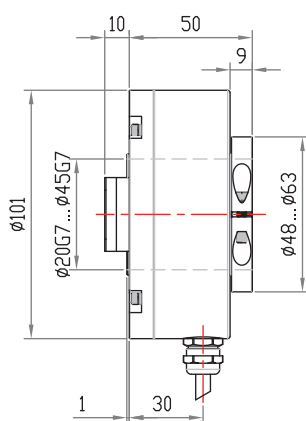
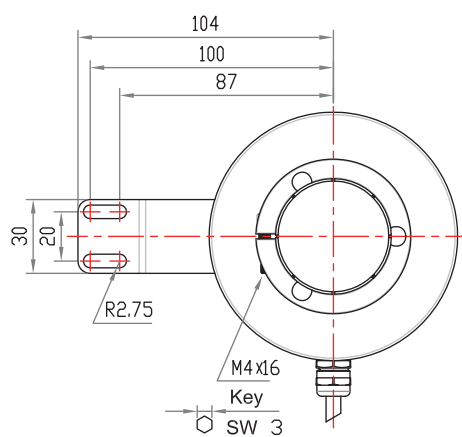


Torque arm
Model (common) : 8561 300≥L≥80



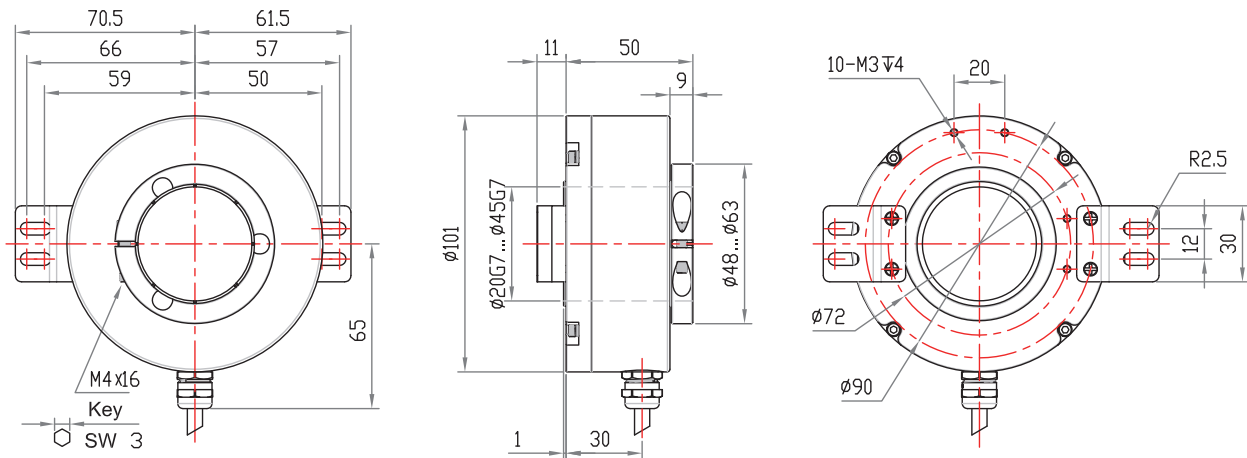
Dimensions

BDEEX100HA+8117A

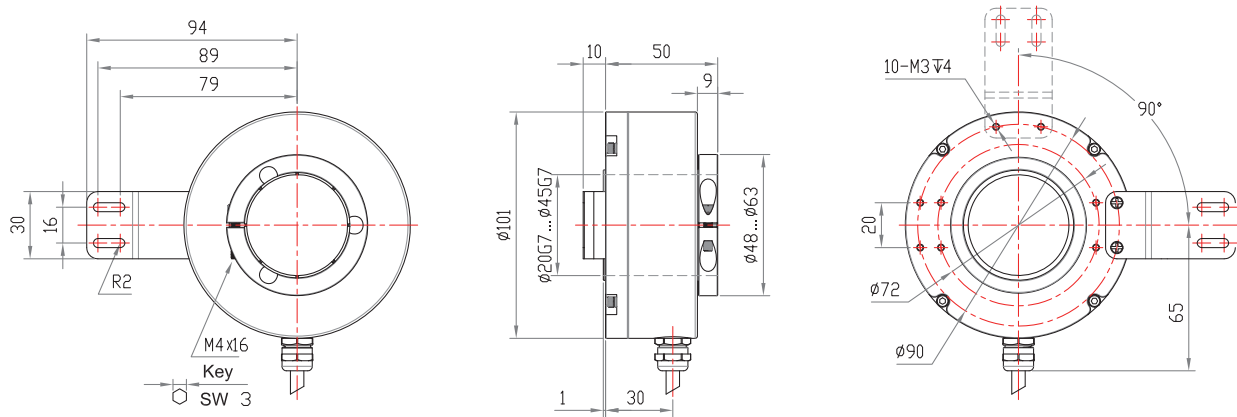


Dimensions

BDEEX100HA+8116A

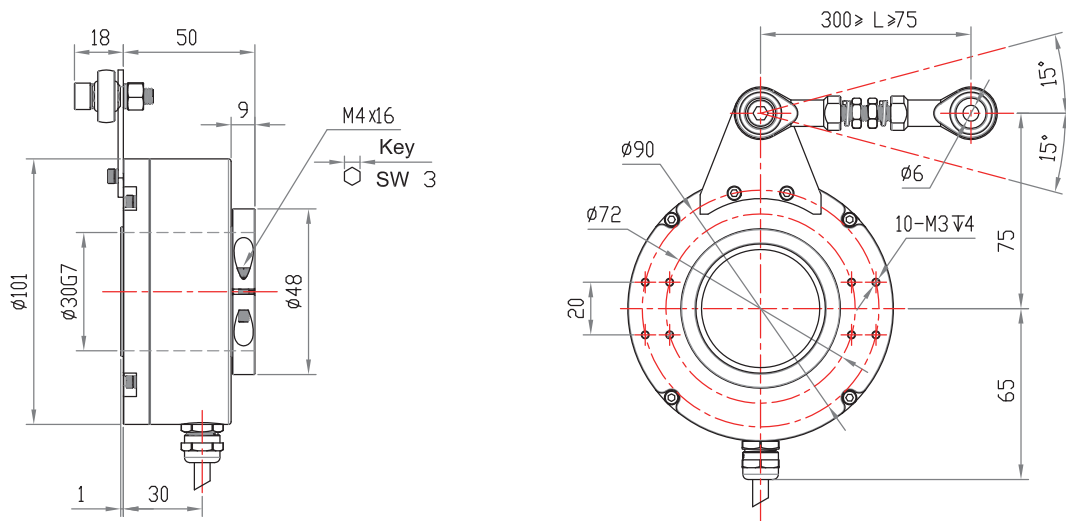


BDEEX100HA+8145A



Dimensions

BDEEX100HA+8150



BDEEX100HA+8150A

