

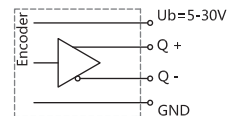
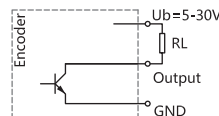
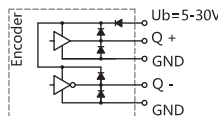
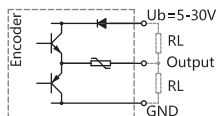


| | |
|-----------------------|------------------------|
| IE76H Series | |
| Sensing method | Optical |
| Housing size | Φ78.5 mm |
| Hollow shaft diameter | Φ12、Φ20、Φ25 mm |
| Max. resolution | 2048 PPR |
| Supply voltage | 5VDC, 5-30VDC, 9-26VDC |
| Protection | IP54 |

Mechanical characteristics

| | |
|-------------------------|--|
| Shaft diameter | Φ12、Φ20、Φ25mm |
| Protection | IP54 |
| Speed | max. 6000 min ⁻¹ |
| Shaft loading | max. 40 N Axial ; max. 80 N Radial |
| Shock resistance | 100g, 6ms |
| Vibration resistance | 10g, 10...2000HZ |
| Bearing life | 109 turns |
| Rotor moment of inertia | approx. 1.8×10 ⁻⁶ kgm ² |
| Starting torque | < 0.05Nm |
| Materials | Solid shaft : Stainless steel Flange : Aluminum alloy Housing: Tensile iron shell +Black painted |
| Working temperature | -40 C...+85 C |
| Storage temperature | -40 C...+85 C |
| Weight | approx. 280g (Cable 2m) |

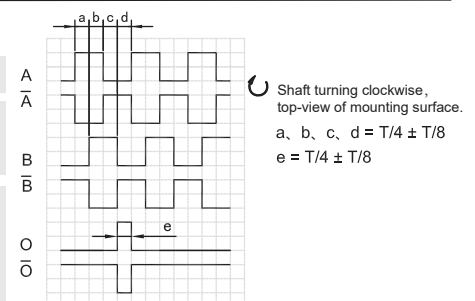
Electrical characteristics



| Output circuit | Push-Pull | Push-Pull Differential | Open Collector | RS422 (TTL Compatible) |
|-----------------------------|---------------|------------------------|----------------|------------------------|
| Pulse rate | max. 2048 P/R | max. 2048 P/R | max. 2048 P/R | max. 2048 P/R |
| Supply voltage | 5-30V | 5-30V | 5-30V | 5-30V |
| Power consumption(no load) | max. 125 mA | max. 125 mA | max. 80 mA | max. 80 mA |
| Permissible load/channel | max. ±80 mA | max. ±80 mA | max. -50 mA | max. ±50 mA |
| Pulse frequency | max. 100 KHz | max. 100 KHz | max. 100 KHz | max. 100 KHz |
| Signal level high | min. Ub-2.5V | min. Ub-2.5V | / | min. 2.5V |
| Signal level low | max. 0.8V | max. 0.8V | / | max. 0.4V |
| Rise time Tr | max. 1μs | max. 1μs | / | max. 1μs |
| Fall time Tf | max. 1μs | max. 1μs | / | max. 1μs |
| Short circuit proof outputs | yes | yes | yes | yes |

Terminal assignment

| | | | | | | | | | | |
|------------------------------------|--|----|-----|----|-----------|----|-----------|----|-----------|---------|
| Signal | | OV | +Ub | A | \bar{A} | B | \bar{B} | O | \bar{O} | \perp |
| Cable Colour | | WH | BN | GN | PK | YE | BU | GY | RD | Shield |
| Sub-D male connector, 9-pin (9109) | | 3 | 4 | 2 | 8 | 1 | 9 | 7 | 6 | 5 |



Note: Positional relationship of O channel and A&B channels is not specified.

Ordering information

| | | | | | | | | |
|------|----|---|----|---|------|----|----|------|
| IE76 | XX | H | 20 | P | 1024 | P9 | /F | XXXX |
| | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ |

① Extended No.
XX

② Shaft type
H:Hollow shaft
HK:Hollow shaft with keyway
HS:Hollow shaft with mounting thread
KS:Hollow shaft with keyway + mounting thread

③ Shaft diameter ¹⁾
12: 12mm
20: 20mm
25: 25mm

④ Output type
P : 9-26VDC, Push-Pull, A B
5P: 9-26VDC, Push-Pull, A B O
6P: 5-30VDC, Push-Pull, $\overline{A\overline{A}}$ $\overline{B\overline{B}}$ $\overline{O\overline{O}}$
T : 5VDC, TTL, $\overline{A\overline{A}}$ $\overline{B\overline{B}}$
5T: 5VDC, TTL, $\overline{A\overline{A}}$ $\overline{B\overline{B}}$ $\overline{O\overline{O}}$

⑤ Pulse rate
300,400,500,512,
600,720,1000,
1024,2000,2048

⑥ Connection type
P9:Cable length 0.3m+Sub-D male connector, 9-pin
6R:Radial Output 6m

⑦ Direction of clamping ring
Empty: Clamping ring is on the other side of the mounting surface
/F:Clamping ring and mounting surface are on the same side

⑧ Special code
XXXX

Note: Printed in bold=standard items

Notes: 1, ¹⁾ Shaft diameter available at a short notice (12mm,20mm,25mm) , other shaft diameter on request.

2, Pulse rates available at a short notice (300,400,500,512,600,720,1000,1024,2000,2048) , other pulse rates on request.

3, Please chose the ordering information: Extended No., Shaft type, Shaft diameter, Output type, Pulse rate, Connection type, Direction of clamping ring and Special code.

Ordering example: 1、IE76H20P1024P9, special requirements please indicate to the back.

Explanation: IE76H Series, Shaft diameter 20mm, Output channels A B, Push-Pull, DC 9-26V, 1024PPR, Cable length 0.3m+ Sub-D male connector, 9-pin.

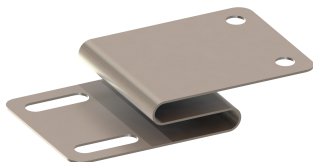
2、IE76H205T10246R/F, special requirements please indicate to the back.

Explanation: IE76H Series, Shaft diameter 20mm, Output channels $\overline{A\overline{A}}$ $\overline{B\overline{B}}$ $\overline{O\overline{O}}$, TTL, DC 5V, 1024PPR, Radial Output 6m, Clamping ring and mounting surface are on the same side.

Accessories (sold separately) Note: Further fixing components can be found in the accessories selection table.

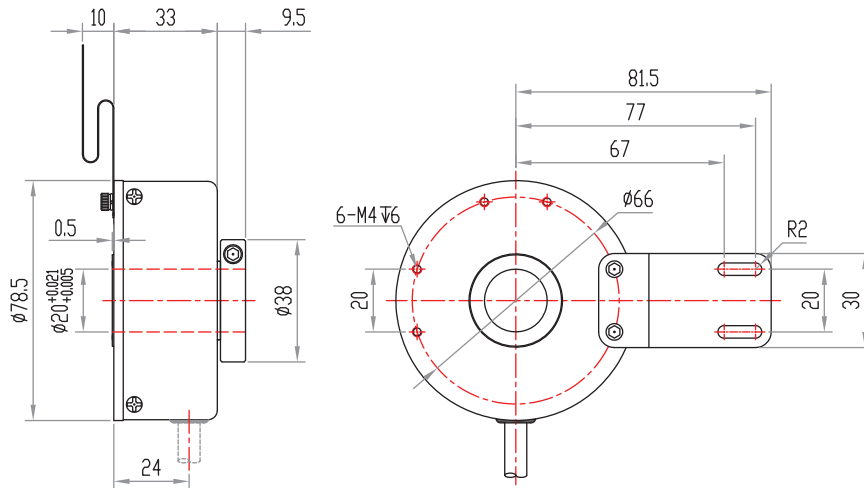
Tether square

Model (common) : 8117

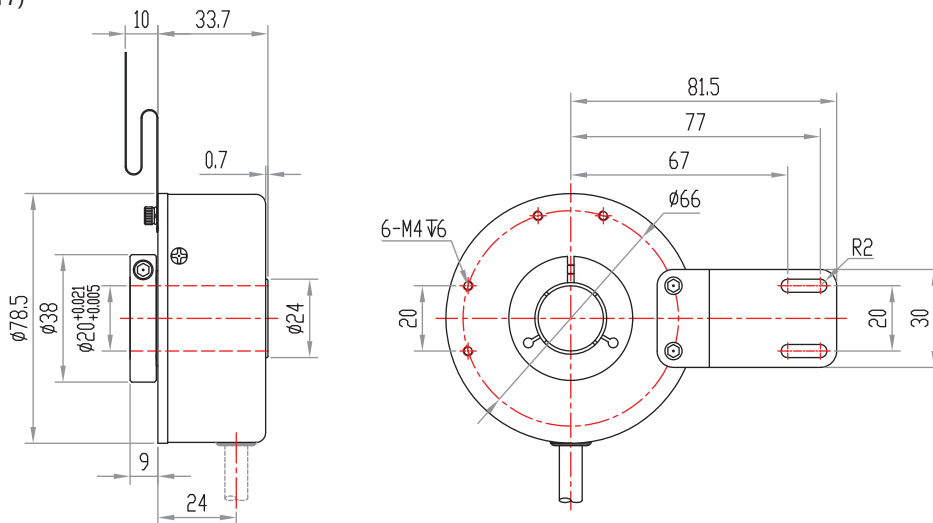


Dimensions

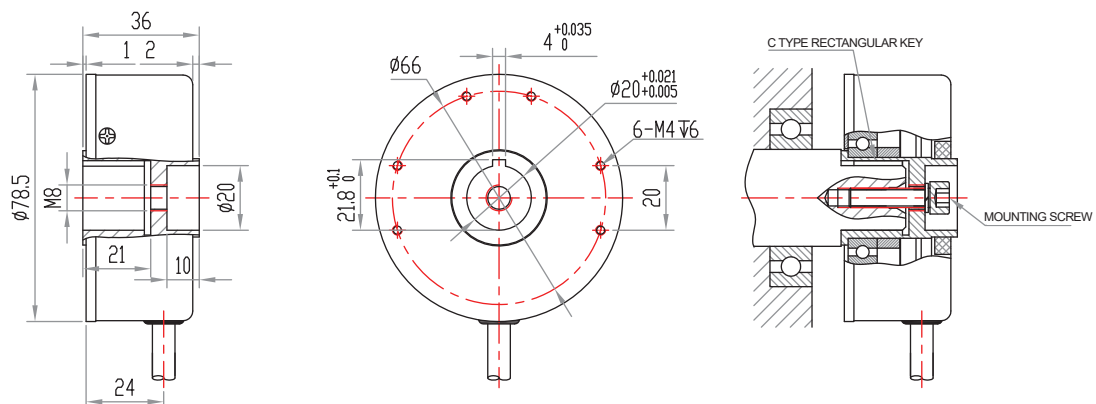
IE76H
(8117)



IE76H/F
(8117)

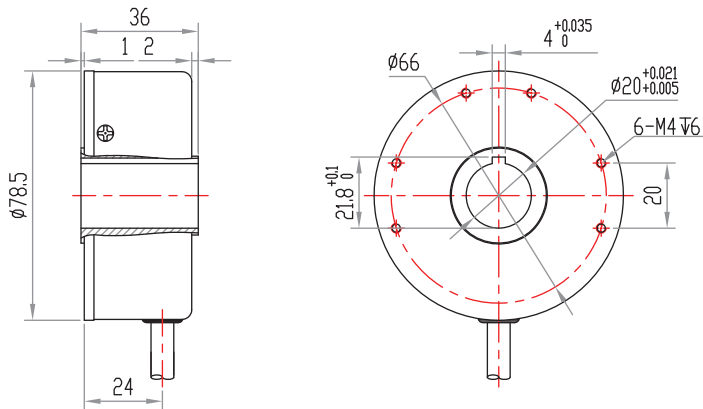


IE76KS



Dimensions

IE76HK



IE76HS

