

## 技术数据表

### 旋转编码器系列信息

配件编号: 90000470

EI30-P 100 HI

#### 内容

- 技术参数
- 产品型号描述



图片可能不同

|              |                      |
|--------------|----------------------|
| 编码器_系列       | EI 100 HI            |
| 编码器_基本原理     | 增量                   |
| 编码器_工作原理     | 光学插值                 |
| 编码器_法兰直径     | Ø 100 mm             |
| 编码器_法兰型号     | 空心轴绝缘                |
| 编码器_实心轴/空心轴H | 空心轴                  |
| 编码器_轴直径      | Ø 25 mm              |
|              | Ø 30 mm              |
|              | Ø 32 mm              |
|              | Ø 38 mm              |
|              | Ø 40 mm              |
|              | Ø 42 mm              |
| 编码器_供电电压     | 10 ... 30 V DC       |
|              | 4.75 ... 5.5 V DC    |
|              | 5 ... 30V DC         |
| 编码器_输出电路     | 1 Vss Sin/Cos        |
|              | HTL                  |
|              | HTL , 逆转             |
|              | TTL                  |
|              | TTL , RS422 紧凑型 , 逆转 |
| 编码器_脉冲数      | 10240 I/U            |
|              | 16384 I/U            |
|              | 20480 I/U            |
|              | 4096 I/U             |
|              | 8192 I/U             |

## 技术参数

## Encoder EI30 P 100 HI

## Resolution

|                           |                 |
|---------------------------|-----------------|
| Pulses per revolution PPR | up to 20480 PPR |
|---------------------------|-----------------|

## Mechanical Data

|                                |                                                                  |
|--------------------------------|------------------------------------------------------------------|
| Flange                         | hollow shaft (through-bored)                                     |
| Flange material                | aluminum                                                         |
| Housing material               | aluminum, powder coated                                          |
| Torque supports                | incl. 1 torque support                                           |
| - 1. Spring plate compensation | axial: $\pm 0.8$ mm [0.0315"],<br>radial: $\pm 0.2$ mm [0.0079"] |
| Flange diameter                | $\varnothing$ 100 mm [ $\varnothing$ 3.543"]                     |

## Shaft(s)

|                 |                                                          |
|-----------------|----------------------------------------------------------|
| Shaft material  | stainless steel                                          |
| Starting torque | approx. 1.5 Ncm [2.124 in-ozf]<br>at ambient temperature |
| Fixing          | 2 x M4, DIN 913;<br>Starting torque: 2,5 Nm              |

|                                       |                                             |
|---------------------------------------|---------------------------------------------|
| <b>Shaft</b>                          | $\varnothing$ 25 mm [ $\varnothing$ 0.984"] |
| Shaft length                          | L: 42 mm [1.654"]                           |
| Insertion depth min.                  | 52 mm [2.047"]                              |
| Max. Permissible shaft loading radial | 200 N [20.394 kp]                           |
| Max. Permissible shaft loading axial  | 100 N [10.197 kp]                           |

|                                       |                                             |
|---------------------------------------|---------------------------------------------|
| <b>Shaft</b>                          | $\varnothing$ 28 mm [ $\varnothing$ 1.102"] |
| Shaft length                          | L: 42 mm [1.654"]                           |
| Insertion depth min.                  | 52 mm [2.047"]                              |
| Max. Permissible shaft loading radial | 200 N [20.394 kp]                           |
| Max. Permissible shaft loading axial  | 100 N [10.197 kp]                           |

|                                       |                                             |
|---------------------------------------|---------------------------------------------|
| <b>Shaft</b>                          | $\varnothing$ 30 mm [ $\varnothing$ 1.181"] |
| Shaft length                          | L: 42 mm [1.654"]                           |
| Insertion depth min.                  | 52 mm [2.047"]                              |
| Max. Permissible shaft loading radial | 200 N [20.394 kp]                           |
| Max. Permissible shaft loading axial  | 100 N [10.197 kp]                           |

|                                       |                                            |
|---------------------------------------|--------------------------------------------|
| <b>Shaft</b>                          | $\varnothing$ 32 mm [ $\varnothing$ 1.26"] |
| Shaft length                          | L: 42 mm [1.654"]                          |
| Insertion depth min.                  | 52 mm [2.047"]                             |
| Max. Permissible shaft loading radial | 200 N [20.394 kp]                          |
| Max. Permissible shaft loading axial  | 100 N [10.197 kp]                          |

|                                       |                                             |
|---------------------------------------|---------------------------------------------|
| <b>Shaft</b>                          | $\varnothing$ 38 mm [ $\varnothing$ 1.496"] |
| Shaft length                          | L: 42 mm [1.654"]                           |
| Insertion depth min.                  | 52 mm [2.047"]                              |
| Max. Permissible shaft loading radial | 200 N [20.394 kp]                           |

|                                      |                   |
|--------------------------------------|-------------------|
| Max. Permissible shaft loading axial | 100 N [10.197 kp] |
|--------------------------------------|-------------------|

|              |                                             |
|--------------|---------------------------------------------|
| <b>Shaft</b> | $\varnothing$ 40 mm [ $\varnothing$ 1.575"] |
|--------------|---------------------------------------------|

|              |                   |
|--------------|-------------------|
| Shaft length | L: 42 mm [1.654"] |
|--------------|-------------------|

|                      |                |
|----------------------|----------------|
| Insertion depth min. | 52 mm [2.047"] |
|----------------------|----------------|

|                                       |                   |
|---------------------------------------|-------------------|
| Max. Permissible shaft loading radial | 200 N [20.394 kp] |
|---------------------------------------|-------------------|

|                                      |                   |
|--------------------------------------|-------------------|
| Max. Permissible shaft loading axial | 100 N [10.197 kp] |
|--------------------------------------|-------------------|

|              |                                             |
|--------------|---------------------------------------------|
| <b>Shaft</b> | $\varnothing$ 42 mm [ $\varnothing$ 1.654"] |
|--------------|---------------------------------------------|

|              |                   |
|--------------|-------------------|
| Shaft length | L: 42 mm [1.654"] |
|--------------|-------------------|

|                      |                |
|----------------------|----------------|
| Insertion depth min. | 52 mm [2.047"] |
|----------------------|----------------|

|                                       |                   |
|---------------------------------------|-------------------|
| Max. Permissible shaft loading radial | 200 N [20.394 kp] |
|---------------------------------------|-------------------|

|                                      |                   |
|--------------------------------------|-------------------|
| Max. Permissible shaft loading axial | 100 N [10.197 kp] |
|--------------------------------------|-------------------|

|              |                                             |
|--------------|---------------------------------------------|
| <b>Shaft</b> | $\varnothing$ 45 mm [ $\varnothing$ 1.772"] |
|--------------|---------------------------------------------|

|              |                   |
|--------------|-------------------|
| Shaft length | L: 42 mm [1.654"] |
|--------------|-------------------|

|                      |                |
|----------------------|----------------|
| Insertion depth min. | 52 mm [2.047"] |
|----------------------|----------------|

|                                       |                   |
|---------------------------------------|-------------------|
| Max. Permissible shaft loading radial | 200 N [20.394 kp] |
|---------------------------------------|-------------------|

|                                      |                   |
|--------------------------------------|-------------------|
| Max. Permissible shaft loading axial | 100 N [10.197 kp] |
|--------------------------------------|-------------------|

## Bearings

|                       |                                                                                                                                                                    |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bearings type         | 2 precision ball bearings                                                                                                                                          |
| Nominale service life | 3 x 10 <sup>10</sup> revs. at 100 % rated shaft load<br>1 x 10 <sup>11</sup> revs. at 40 % rated shaft load<br>1 x 10 <sup>12</sup> revs. at 20 % rated shaft load |
| Max. operating speed  | 3500 rpm                                                                                                                                                           |

## Machinery Directive: basic data safety integrity level

|                              |                                                                  |
|------------------------------|------------------------------------------------------------------|
| MTTF <sub>d</sub>            | 200 a                                                            |
| Mission time (TM)            | 25 a                                                             |
| Nominale service life (L10h) | 1 x 10 <sup>12</sup> revs. at 20 % rated shaft load and 3500 rpm |
| Diagnostic coverage (DC)     | 0 %                                                              |

## Electrical Data

|                                  |                                                                                                                                                                                     |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power supply/Current consumption | 4.75 VDC up to 30 VDC: typ. 70 mA (100 mA only C3, D3)                                                                                                                              |
| Power supply/Current consumption | 5 VDC up to 30 VDC: typ. 70 mA                                                                                                                                                      |
| Power supply/Current consumption | 10 VDC up to 30 VDC: typ. 70 mA (100 mA only C2, C4, D4)                                                                                                                            |
| Operating principle              | optical                                                                                                                                                                             |
| Output circuit                   | TTL<br>TTL, RS422 compatible, inv.<br>HTL<br>HTL, inv.<br>1 Vpp sin/cos                                                                                                             |
| Pulse frequency                  | TTL $\leq$ 5000 ppr: max. 200 kHz<br>HTL $\leq$ 5000 ppr: max. 200 kHz<br>TTL more than 1200 ppr: max. 2 MHz<br>HTL more than 1200 ppr: max. 600 kHz<br>1 Vpp sin/cos: max. 100 kHz |

技术参数

Encoder EI30 P 100 HI

Electrical Data

|                    |                                                       |
|--------------------|-------------------------------------------------------|
| Channels           | B<br>N<br>and inverted signals                        |
| Load               | max. 40 mA / channel<br>@ 1 Vpp sin/cos: min. 120 Ohm |
| Circuit protection | circuit type C6 and D6 only                           |

Accuracy

|                    |                                                                                       |
|--------------------|---------------------------------------------------------------------------------------|
| Phase offset       | 90° ± max. 7.5 % of the period duration                                               |
| pulse-/pause-ratio | ≤5000 ppr: 50 % ± max. 7 %<br>Output circuits C2, C3, C4, D3, D4:<br>50 % ± max. 10 % |

Environmental data

|                                  |                                           |
|----------------------------------|-------------------------------------------|
| ESD (DIN EN 61000-4-2):          | 8 kV                                      |
| Burst (DIN EN 61000-4-4):        | 2 kV                                      |
| includes EMC:                    | DIN EN 61000-6-2<br>DIN EN 61000-6-3      |
| Vibration:<br>(DIN EN 60068-2-6) | 50 m/s <sup>2</sup> (10 Hz up to 2000 Hz) |
| Shock:<br>(DIN EN 60068-2-27)    | 1000 m/s <sup>2</sup> (6 ms)              |
| Electrical Safety:               | according DIN VDE 0160                    |

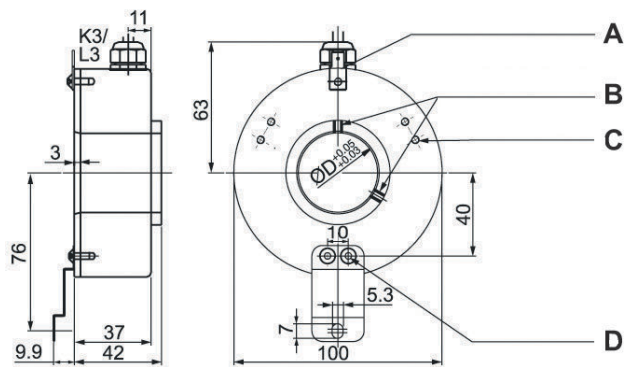
Duty information

|                        |          |
|------------------------|----------|
| Customs tariff number: | 90318020 |
| Country of origin:     | Germany  |

General Data

|                                 |                                                                                                       |
|---------------------------------|-------------------------------------------------------------------------------------------------------|
| Weight                          | approx. 720 g [25.397 oz]                                                                             |
| Connections                     | cable or connector, radial                                                                            |
| Protection rating<br>(EN 60529) | IP54                                                                                                  |
| Operating temperature           | -20 °C up to +80 °C<br>[ -4 °F up to +176 °F]<br>1 Vpp: -10 °C up to +70 °C<br>[+14 °F up to +158 °F] |
| Storage temperature             | -30 °C up to +80 °C<br>[-22 °F up to 176 °F]                                                          |

Cable connection R-N, R-C radial with 2 m cable



All dimensions in mm

- A Plug-in connexctor for functional ground connection  
(flat pin 6.3 x 0.8 according to DIN 46244)
- B 2x threaded pin M4
- C 6x M4x0.7-6H - 6 deep
- D Spring plate as torque support

Description

N inv. poss.

|     |                                             |   |
|-----|---------------------------------------------|---|
| R-N | radial, shield not connected                | • |
| R-C | radial, shield connected to encoder housing | • |

Assignments

|         | R-N, R-C              | R-N, R-C                         | R-C |
|---------|-----------------------|----------------------------------|-----|
| Circuit | C3, C4, C5,<br>C6, C7 | C1, C2, D3,<br>D4, D5, D6,<br>D7 | D8  |
| GND     | WH                    | WH                               | WH  |
| (+) Vcc | BN                    | BN                               | BN  |
| A       | GN                    | GN                               | GN  |

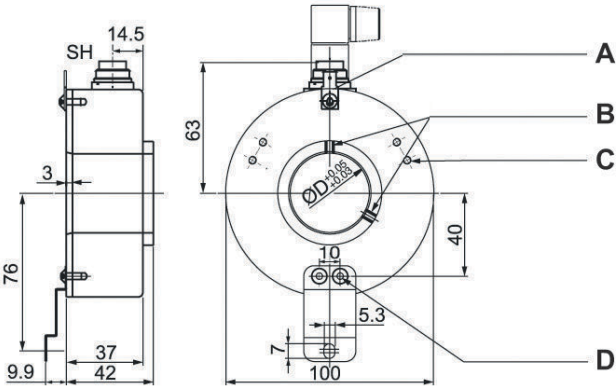
技术参数

Encoder EI30 P 100 HI

Assignments

|        |      |                   |      |
|--------|------|-------------------|------|
| B      | YE   | YE                | GY   |
| N      | GY   | GY                | BK   |
|        | –    | –                 | –    |
| A inv. | –    | RD                | YE   |
| B inv. | –    | BK,<br>(BU at LT) | PK   |
| N inv. | –    | VT                | –    |
| Shield | flex | flex              | flex |

Connector (M16x0.75) R, radial, 5-, 6-, 8-, 12-pin



All dimensions in mm

- A Plug-in connector for functional ground connection (flat pin 6.3 x 0.8 according to DIN 46244)
- B 2x threaded pin M4
- C 6x M4x0.7-6H - 6 deep
- D Spring plate as torque support

Description

N inv. poss.

|     |                                                        |   |
|-----|--------------------------------------------------------|---|
| R5  | radial, 5-pin, Connector connected to encoder housing  | – |
| R6  | radial, 6-pin, Connector connected to encoder housing  | – |
| R8  | radial, 8-pin, Connector connected to encoder housing  | • |
| R12 | radial, 12-pin, Connector connected to encoder housing | • |

Assignments

|         | R5<br>5-pin        | R6<br>6-pin        | R8<br>8-pin                | R8<br>8-pin | R12<br>12-pin              | R12<br>12-pin |
|---------|--------------------|--------------------|----------------------------|-------------|----------------------------|---------------|
|         |                    |                    |                            |             |                            |               |
| Circuit | C3, C4, C5, C6, C7 | C3, C4, C5, C6, C7 | C1, C2, D3, D4, D5, D6, D7 | D8          | C1, C2, D3, D4, D5, D6, D7 | D8            |
| GND     | 1                  | 6                  | 1                          | 1           | K, L                       | K, L          |
| (+) Vcc | 2                  | 1                  | 2                          | 2           | M, B                       | M, B          |
| A       | 3                  | 2                  | 3                          | 3           | E                          | E             |
| B       | 4                  | 4                  | 4                          | 4           | H                          | H             |
| N       | 5                  | 3                  | 5                          | 5           | C                          | C             |
| –       | –                  | –                  | –                          | –           | –                          | –             |
| A inv.  | –                  | –                  | 6                          | 6           | F                          | F             |
| B inv.  | –                  | –                  | 7                          | 7           | A                          | A             |

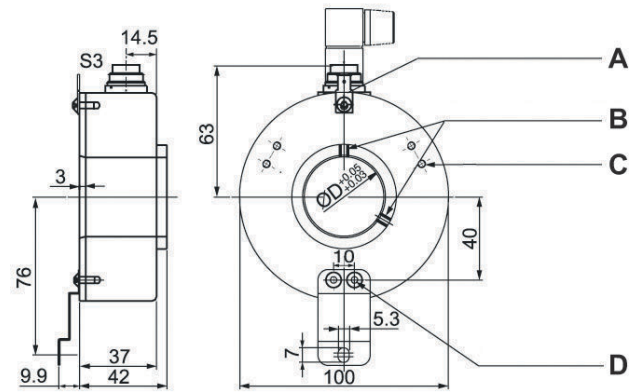
技术参数

Encoder EI30 P 100 HI

Assignments

|        |   |   |   |   |      |      |
|--------|---|---|---|---|------|------|
| N inv. | - | - | 8 | 8 | D    | D    |
| n. c.  | - | 5 | - | - | G, J | G, J |
| Shield | - | - | - | - | -    | -    |

Connector (M16x0.75) R7, radial, 7-pin



All dimensions in mm

- A Plug-in connexctor for functional ground connection (flat pin 6.3 x 0.8 according to DIN 46244)
- B 2x threaded pin M4
- C 6x M4x0.7-6H - 6 deep
- D Spring plate as torque support

Description

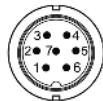
N inv. poss.

R7 radial, 7-pin, Connector connected to encoder housing

-

Assignments

R7  
7-pin

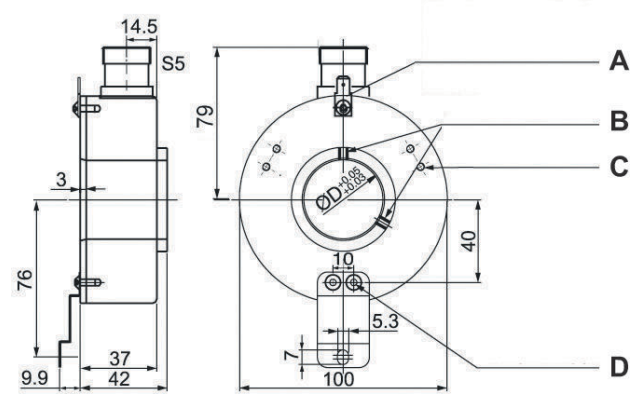


|         |                    |
|---------|--------------------|
| Circuit | C3, C4, C5, C6, C7 |
| GND     | 1                  |
| (+) Vcc | 2                  |
| A       | 3                  |
| B       | 4                  |
| N       | 5                  |
| -       | -                  |
| A inv.  | -                  |
| B inv.  | -                  |
| N inv.  | -                  |
| n. c.   | 6, 7               |
| Shield  | -                  |

技术参数

Encoder EI30 P 100 HI

Connector (M23) R12M, radial, 12-pin

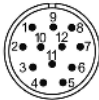
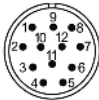


All dimensions in mm

- A Plug-in connexctor for functional ground connection (flat pin 6.3 x 0.8 according to DIN 46244)
- B 2x threaded pin M4
- C 6x M4x0.7-6H - 6 deep
- D Spring plate as torque support

| Description |                                                        | N inv. poss. |
|-------------|--------------------------------------------------------|--------------|
| R12M        | radial, 12-pin, Connector connected to encoder housing | •            |

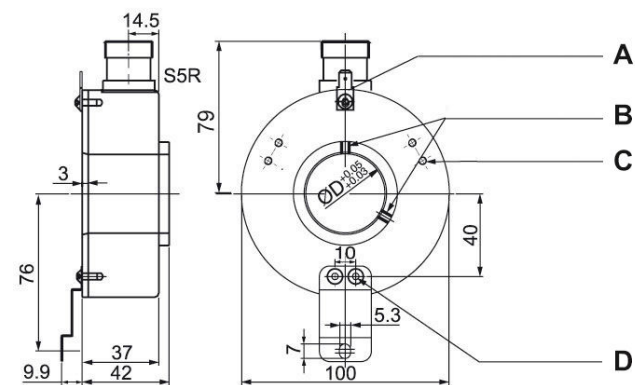
Assignments

|         | R12M<br>12-pin                                                                      | R12M<br>12-pin                                                                      | R12M<br>12-pin                                                                      |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         |  |  |  |
| Circuit | C3, C4, C5, C6, C7                                                                  | C1, C2, D3, D4, D5, D6, D7                                                          | D8                                                                                  |
| GND     | 10                                                                                  | 10                                                                                  | 10                                                                                  |
| (+) Vcc | 12                                                                                  | 12                                                                                  | 12                                                                                  |
| A       | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| B       | 8                                                                                   | 8                                                                                   | 8                                                                                   |
| N       | 3                                                                                   | 3                                                                                   | 3                                                                                   |
| –       | –                                                                                   | –                                                                                   | –                                                                                   |
| A inv.  | –                                                                                   | 6                                                                                   | 6                                                                                   |
| B inv.  | –                                                                                   | 1                                                                                   | 1                                                                                   |
| N inv.  | –                                                                                   | 4                                                                                   | 4                                                                                   |
| n. c.   | 1, 2, 4, 6, 7, 9, 11                                                                | 2, 7, 9, 11                                                                         | 2, 7, 9, 11                                                                         |
| Shield  | –                                                                                   | –                                                                                   | –                                                                                   |

技术参数

Encoder EI30 P 100 HI

Connector (M23) RC12, radial, 12-pin (clockwise)



All dimensions in mm

- A Plug-in connexctor for functional ground connection (flat pin 6.3 x 0.8 according to DIN 46244)
- B 2x threaded pin M4
- C 6x M4x0.7-6H - 6 deep
- D Spring plate as torque support

| Description |                                                        | N inv. poss. |
|-------------|--------------------------------------------------------|--------------|
| RC12        | radial, 12-pin, Connector connected to encoder housing | •            |

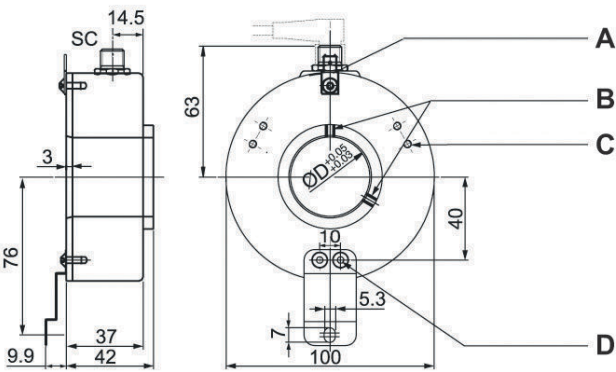
| Assignments |                      |                            |                |
|-------------|----------------------|----------------------------|----------------|
|             | RC12<br>12-pin       | RC12<br>12-pin             | RC12<br>12-pin |
|             |                      |                            |                |
| Circuit     | C3, C4, C5, C6, C7   | C1, C2, D3, D4, D5, D6, D7 | D8             |
| GND         | 10                   | 10                         | 10             |
| (+) Vcc     | 12                   | 12                         | 12             |
| A           | 5                    | 5                          | 5              |
| B           | 8                    | 8                          | 8              |
| N           | 3                    | 3                          | 3              |
| —           | —                    | —                          | —              |
| A inv.      | —                    | 6                          | 6              |
| B inv.      | —                    | 1                          | 1              |
| N inv.      | —                    | 4                          | 4              |
| n. c.       | 1, 2, 4, 6, 7, 9, 11 | 2, 7, 9, 11                | 2, 7, 9, 11    |
| Shield      | —                    | —                          | —              |

Hier waren die falschen Bilder drin: es fehlte unten rechts das R

技术参数

Encoder EI30 P 100 HI

Sensor-connector (M12x1) RS, radial, 4-, 5-, 8-, 12-pin



All dimensions in mm

- A Plug-in connexctor for functional ground connection (flat pin 6.3 x 0.8 according to DIN 46244)
- B 2x threaded pin M4
- C 6x M4x0.7-6H - 6 deep
- D Spring plate as torque support

| Description |                                                        | N inv. poss. |
|-------------|--------------------------------------------------------|--------------|
| RS4         | radial, 4-pin, Connector connected to encoder housing  | –            |
| RS5         | radial, 5-pin, Connector connected to encoder housing  | –            |
| RS8         | radial, 8-pin, Connector connected to encoder housing  | •            |
| RS12        | radial, 12-pin, Connector connected to encoder housing | •            |

Assignments

|         | RS4<br>4-pin       | RS5<br>5-pin       | RS8<br>8-pin               | RS8<br>8-pin | RS12<br>12-pin             |
|---------|--------------------|--------------------|----------------------------|--------------|----------------------------|
|         |                    |                    |                            |              |                            |
| Circuit | C3, C4, C5, C6, C7 | C3, C4, C5, C6, C7 | C1, C2, D3, D4, D5, D6, D7 | D8           | C1, C2, D3, D4, D5, D6, D7 |
| GND     | 3                  | 3                  | 1                          | 1            | 3                          |
| (+) Vcc | 1                  | 1                  | 2                          | 2            | 1                          |
| A       | 2                  | 4                  | 3                          | 3            | 4                          |
| B       | 4                  | 2                  | 4                          | 5            | 6                          |
| N       | –                  | 5                  | 5                          | –            | 8                          |
| –       | –                  | –                  | –                          | –            | –                          |
| A inv.  | –                  | –                  | 6                          | 4            | 9                          |
| B inv.  | –                  | –                  | 7                          | 6            | 7                          |
| N inv.  | –                  | –                  | 8                          | –            | 10                         |
| n. c.   | –                  | –                  | –                          | 7, 8         | 2, 5, 11, 12               |
| Shield  | –                  | –                  | –                          | –            | –                          |

技术参数

Encoder EI30 P 100 HI

Options

| Low temperature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Order key       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| The encoder EI30 P 100 HI with the output circuit types C4, C6, D4, D6, C3, C5, D3, D5, C1, C2 is also available with the extended temperature range -40 °C up to +85 °C [-40 °F up to +185 °F] (measured at the flange).                                                                                                                                                                                                                                                                                                                                                                                    | LT              |
| Pressure equalising membrane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Order key       |
| The EI30 P 100 HI shaft encoder is also optionally available with a pressure equalising membrane. This prevents water from penetrating into the encoder housing in the case of high air humidity.<br><br>The IP67 protection level, temperature range and salt spray resistance are maintained.<br>Resistant to chemicals and solvents in accordance with DIN EN ISO 2812-1.<br>Max. RPM: 1500 rpm<br>Permitted Shaft-Loading, axial: 100 N [10.197 kp]<br>Permitted Shaft-Loading, radial: 120 N [12.236 kp]<br>Max. PPR: 20480 ppr<br>Starting-torque: approx. 5 Ncm [7.081 in-ozf] at ambient temperature | PE              |
| Cable length                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Order key       |
| The encoder EI30 P 100 HI can be supplied with more than 2 m cable.<br>The maximum cable length depends on the supply voltage and the frequency.<br><br>Please extend the standard order code with a three figure number, specifying the cable length in decimetres.<br>Example: 5 m cable = 050                                                                                                                                                                                                                                                                                                             | XXX = Decimeter |

技术参数

Encoder EI30 P 100 HI

| Example Order No.          | Type                                                                                                                            |                  |                                      |   |           |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------|--------------------------------------|---|-----------|
| EI30 P 100 HI              | EI30 P 100 HI                                                                                                                   |                  |                                      |   |           |
|                            | EI30 P 100 HI                                                                                                                   |                  |                                      |   |           |
| Shaft                      |                                                                                                                                 |                  |                                      |   |           |
| 25                         | 25; 28; 30; 32; 38; 40; 42; 45                                                                                                  |                  |                                      |   |           |
| Pulses per revolution PPR: |                                                                                                                                 |                  |                                      |   |           |
| 1024                       | 512, 1024, 2048, 2500, 3600, 4096, 4500, 5000, 8192, 10240, 16384, 20480 1 Vpp Sin/Cos only<br>1024, 2048 Other PPRs on request |                  |                                      |   |           |
| Channels:                  |                                                                                                                                 |                  |                                      |   |           |
| N                          | B, N                                                                                                                            |                  |                                      |   |           |
| Output circuit             |                                                                                                                                 |                  |                                      |   |           |
| C6                         | Resolution PPR                                                                                                                  | Power supply VDC | Output circuit                       | – | Order key |
|                            | up to 2500                                                                                                                      | 5 - 30           | HTL (TTL at 5 VDC)                   | – | C7        |
|                            |                                                                                                                                 | 5 - 30           | HTL, inv. (TTL/RS422 comp. at 5 VDC) | – | D7        |
|                            | up to 5000                                                                                                                      | 4.75 - 5.5       | TTL                                  | – | C5        |
|                            |                                                                                                                                 | 4.75 - 5.5       | TTL, RS422 comp., inverted           | – | D5        |
|                            |                                                                                                                                 | 10 - 30          | HTL                                  | – | C6        |
|                            |                                                                                                                                 | 10 - 30          | HTL inverted                         | – | D6        |
|                            | (higher frequency) 1200 up to 25000                                                                                             | 10 - 30          | TTL, RS422 comp., inverted           | – | C1        |
|                            |                                                                                                                                 | 4.75 - 5.5       | TTL                                  | – | C3        |
|                            |                                                                                                                                 | 4.75 - 5.5       | TTL, RS422 comp., inverted           | – | D3        |
|                            |                                                                                                                                 | 10 - 30          | HTL                                  | – | C4        |
|                            |                                                                                                                                 | 10 - 30          | HTL inverted                         | – | D4        |
|                            |                                                                                                                                 | 10 - 30          | TTL, RS422 comp., inverted           | – | C2        |
|                            | 1024, 2048                                                                                                                      | 4.75 - 5.5       | 1 Vpp sin/cos                        | – | D8        |

技术参数

Encoder EI30 P 100 HI

Electrical connections

| Description |                                                         | N inv. poss. | Order key |
|-------------|---------------------------------------------------------|--------------|-----------|
| R-N         | <b>Cable: length (2 m standard)</b>                     |              |           |
|             | radial, shield not connected                            | •            | R-N       |
|             | radial, shield connected to encoder housing             | •            | R-C       |
|             | <b>Connector: (shield connected to encoder housing)</b> |              |           |
|             | connector, M16x0.75, 5-pin, radial                      | –            | R5        |
|             | connector, M16x0.75, 6-pin, radial                      | –            | R6        |
|             | connector, M16x0.75, 8-pin, radial                      | •            | R8        |
|             | connector, M16x0.75, 12-pin, radial                     | •            | R12       |
|             | connector, M16x0.75, 7-pin, radial                      | –            | R7        |
|             | connector, M23, 12-pin, radial                          | •            | R12M      |
|             | connector, clockwise pin count, M23, 12-pin, radial     | •            | RC12      |
|             | sensor-connector, M12x1, 4-pin, radial                  | –            | RS4       |
|             | sensor-connector, M12x1, 5-pin, radial                  | –            | RS5       |
|             | sensor-connector, M12x1, 8-pin, radial                  | •            | RS8       |
|             | sensor-connector, M12x1, 12-pin, radial                 | •            | RS12      |

Options

| Description     |  | Order key       |
|-----------------|--|-----------------|
| Low temperature |  | LT              |
| IP55            |  | PE              |
| Without option  |  | Empty           |
| Cable length    |  | XXX = Decimeter |

|                    |               |    |      |   |    |     |               |              |
|--------------------|---------------|----|------|---|----|-----|---------------|--------------|
| Example Order No.: | EI30 P 100 HI | 25 | 1024 | N | C6 | R-N | EI30 P 100 HI | Your encoder |
|--------------------|---------------|----|------|---|----|-----|---------------|--------------|

产品型号描述

产品名称：EABB CCCDDEE FFFFFFF GHHJKK LLMNOPPP RR

|        |                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A      | 旋转编码器型号<br>I：增量<br>S：绝对，单圈<br>M：绝对，多圈                                                                                                                                                                                                                                                                                                                                                           |
| BB     | 系列<br>10：条目<br>30：基本型<br>50：扩展型<br>70：高级版                                                                                                                                                                                                                                                                                                                                                       |
| CCC    | 法兰直径<br>024: 24 mm<br>036: 36 mm<br>058: 58 mm<br>063: 63 mm<br>067: 67 mm<br>070: 70 mm<br>080: 80 mm<br>100：100 mm<br>115: 115 mm                                                                                                                                                                                                                                                             |
| DD     | 法兰型号<br>BB：带有盲孔钻孔的空心轴<br>CC：夹紧法兰（紧凑结构形式）<br>CF：夹紧法兰（食品和饮料）<br>CH：夹紧法兰（重负载规格）<br>CL：夹紧法兰<br>HI：空心轴（绝缘）<br>HO：空心轴<br>HT：空心轴（特殊扭矩支承）<br>RC：圆形法兰（36/40 夹紧法兰，58 带 6-mm-轴）<br>RE：圆形法兰（扩展钻孔）<br>RN：圆形法兰<br>SC：定子联轴器<br>SF：螺栓法兰（53 夹紧法兰，58 食品和饮料）<br>SI：伺服法兰（高级轴负载和 IP 地址）<br>SQ：方形法兰<br>SR：螺栓法兰（36/40 夹紧法兰，58 耐腐蚀）<br>SY：同步（增量），伺服 (36)，同步 (58)（绝对）<br>TM：转速计（115 带 1-mm-轴，58 电机反馈）<br>TS：转速计（10-mm-轴） |
| EE     | 轴-/钻孔直径<br>06: 6 mm<br>07: 7 mm<br>08: 8 mm<br>08: 8 mm<br>10: 10 mm<br>11: 11 mm<br>12: 12 mm<br>14: 14 mm<br>15: 15 mm<br>06-72：空心/盲孔钻孔 (6 ... 72 mm)                                                                                                                                                                                                                                         |
| FFFFFF | 信号/分辨率<br>Axxxxx: A<br>Bxxxxx: AB<br>Nxxxxx: ABN<br>P16384：可编程<br>xx：单圈，1 ... 16 位<br>xx：多圈，0 ... 43 位（单圈时为 00）                                                                                                                                                                                                                                                                                 |
| G      | 电隔离（仅绝对）<br>0：无<br>1：带有                                                                                                                                                                                                                                                                                                                                                                         |
| HH     | 供电电源（仅绝对）<br>0：10 ... 32 V DC/带电隔离<br>1: 4.75 ... 5.5 V DC<br>2: 18 ... 30 V DC                                                                                                                                                                                                                                                                                                                 |
| J      | 工作原理<br>M：磁性<br>O：光学<br>P：光学插值                                                                                                                                                                                                                                                                                                                                                                  |

产品型号描述

|     |                                                                                                                   |
|-----|-------------------------------------------------------------------------------------------------------------------|
| KK  | 接口<br>01: RS485<br>07 : SSI 二进制<br>08: SSI Gray<br>35: CANopen<br>38: EtherCAT<br>48: PROFINET<br>58: EtherNet/IP |
| LL  | 电气连接<br>M08 : 圆形插头 M8<br>M12 : 圆形插头 M12<br>M16 : 圆形插头 M16<br>M23 : 圆形插头 M23<br>M12BC : 总线罩插头                      |
| M   | 电缆出口<br>A : 轴向<br>R : 径向<br>T : 正切                                                                                |
| NN  | 引脚数<br>xx : 引脚数                                                                                                   |
| O   | 屏蔽接口 ( 2-m-电缆 ) ( 可选 )<br>C : 已连接<br>N : 未连接                                                                      |
| PPP | 电缆长度<br>xxx : 电缆长度 ( 单位为 dm )                                                                                     |

注意

|                                                                                   |                                                                        |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------|
|  | 所有可用设备类型列表请查阅劳易测的网站 <a href="http://www.leuze.com">www.leuze.com</a> 。 |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------|

