

Series

84

IO-Link Touch.

www.eao.com/84-io-link



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Switch into Industry 4.0 – *the freely configurable, bright and capacitive IO-Link Touch opens up numerous new HMI application possibilities for a wide range of raw industrial applications.*

With the advent of digitisation in the industrial sector, machine manufacturers can develop completely new machines and equipment. At the same time, this creates an even more intensive operating experience for the end user.

However, to reap the benefits of digitisation, machine manufacturers must overcome demanding challenges, for instance in terms of system complexity or the enormous investment of time and money required to digitally transform their analogue machines. With the Series 84 IO-Link Touch, digital machine systems can be equipped and operated with HMIs easily and rapidly.

Simply digitally networked

Thanks to the globally established IO-Link communication interface and programmable connection options, the innovative HMIs can be networked with an advanced machine system via an integrated M12 5-pin screw connection with a mounting depth of just 25.8 mm, making your equipment Industry 4.0-compatible.



Freely configurable HMIs

The many potential uses for the HMIs are based on a freely selectable configuration which can be precisely aligned to the respective application – from illumination, to symbols, to the switching function. For example, the illumination can switch on with a deliberate delay when actuated. Or HMI operational readiness can be signalled by green illumination which changes to yellow when actuated, and to red a few seconds later. The configuration remains stored on the HMI even with no power supplied.

Innovative RGB LED illumination

The static or flashing RGB LED illumination in up to 16 million colours is particularly bright. Thanks to the integrated ambient light level sensor, the HMI always illuminates at the right intensity in any lighting conditions – without dazzling or being too dim. This feature also optimises the HMI power consumption as well as LED lifetime. Four lateral illuminated windows integrated into the front frame ensure excellent visibility of the entire status display. Combined with high-contrast and optionally illuminated standard or custom symbols, the attractive design of the IO-Link Touch means it also integrates visually in any modern application setting.

Flexible switching function and capacitive actuation

Almost all operating and electrical parameters can also be freely configured, from capacitive actuation sensitivity and minimum actuation time to the switching function (PNP-NO, PNP-NC, NPN-NO, NPN-NC). This flexibility enables capacitive operation even for example when the operator is wearing gloves and prevents the permeation of water triggering any unintentional operation.

Robust, fully encapsulated construction

Thanks to fully encapsulated electronic switching technology, actuation does not trigger any mechanical movement. As a result, the IO-Link Touch can reliably withstand up to 100 million switching cycles, hard impact (IK08) and frontal impact (IP69K) – in operating temperatures ranging from –30 to +65 degrees.

Advantages.

- Freely configurable HMIs with IO-Link interface (Industry 4.0)
- Optionally illuminated standard or custom symbols
- Ambient light adaptive RGB LED illumination in 16 million colours
- Capacitive actuation with different actuation sensitivities
- EAO Value Added Services and worldwide availability

Certification and conformity

- CSA certification
- EHEDG certification, European Hygienic Engineering and Design Group (food industry approval)

Application-specific HMI variants

With its three HMI variants – Standard, Stainless Steel and Hygiene – the IO-Link Touch range offers actuators and indicators which are ideal for a wide range of applications in the mechanical engineering industry and far beyond.

Typical applications

- Industrial equipment
 - Automated production (smart factories)
 - Controls and switch cabinets
 - Food and beverage industry
 - Packaging equipment
- Lifting and moving
 - Autonomous robot transport systems
 - Monitoring stations for industrial conveyor belts
- Other applications
 - Mobile, medical devices
 - Transmission systems for telecommunications
 - Video router systems

EAO – your expert partner for HMIs

EAO has a global production and distribution network at its disposal. EAO has production sites in Switzerland, Germany, North America and China, as well as 10 wholly owned international sales companies and distributors in over 50 countries, so we can guarantee global availability – around the world, around the clock. EAO manufactures one of the world's largest ranges of HMI products. With decades of experience, we have the knowledge and the skills to satisfy any application or product requirement.

Further information is available at
www.eao.com/84-io-link



Product variant "Standard".



Product variant "Stainless Steel".



Product variant "Hygiene".

Technical data and standard symbols.

Electrical characteristics

- Operating voltage
DC 24V (8.4 ... 32V)
- Load current
max. 200mA
- Output
Adjustable PNP/NPN; NO/NC
- Output pulse duration
Adjustable
- Reverse polarity protection
Protection of all lines
- Short circuit protection
Short-circuit and overload protected
- Voltage drop
max. 5V at 200mA
- Current consumption at 24V
max. 40mA

Ambient conditions

- Operating temperature
-30°C ... +65°C
- Relative humidity
max. 95 %, non-condensing

Front protection

- IP69K max. unevenness of the mounting surface <0.1 mm

Impact resistance

- IK08

Mechanical characteristics

- Communication interface
IO-Link specification V1.1
- Control voltage E1 / E2
on 80 % U_{V+} , off 0 ... 20 % U_{V+}
- Measuring principle
Capacitive
- Type of actuation
Touch
- Actuating force
No actuating force necessary
- Max. altitude
2000 metres above normal zero at «CSA Listing»










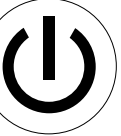
Material

- Seal
Plastic
- Housing
- Plastic transparent/black
- Stainless steel (SUS 316L)

Standards

- DIN EN 61010/DIN EN 60947-5-1

Standard symbols (examples)

 Symbol B10	 Symbol B11	 Symbol B12	 Symbol B13	 Symbol B14
 Symbol C17	 Symbol C18	 Symbol C12	 Symbol C19	 Symbol C16

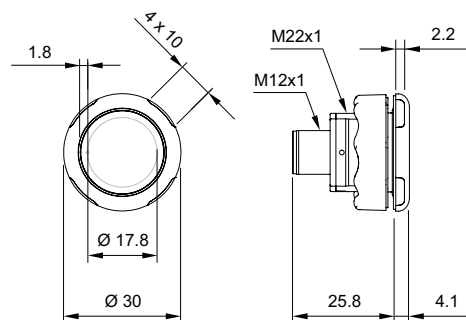
Please note

- BXX symbols are illuminated
- CXX symbols are printed on
- Further standard symbols and also customised symbols possible

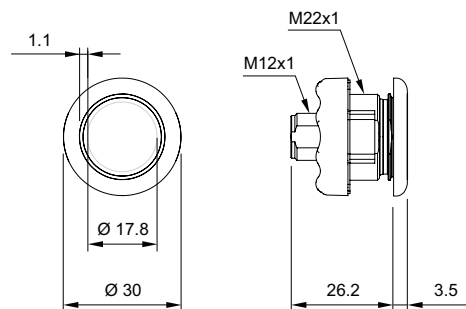
Dimensions and mounting cut-outs.

Dimensions

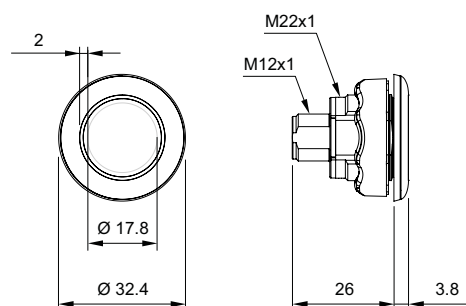
Product variant "Standard"



Product variant "Stainless Steel"

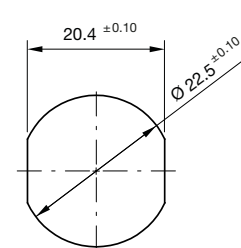


Product variant "Hygiene"

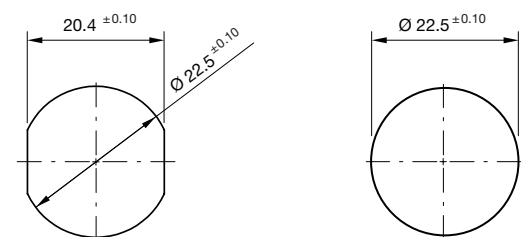


Mounting cut-outs

Product variants "Standard" and "Hygiene"



Product variant "Stainless Steel"

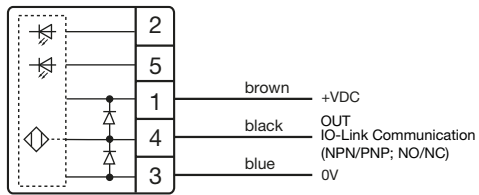


All dimensions in mm.

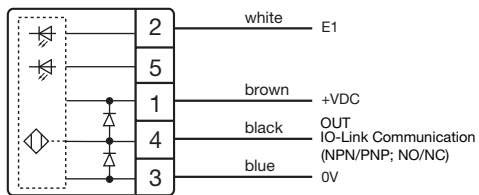
Diagrams and component layouts.

Wiring diagrams

Connection plan 3-pin



Connection plan 4-pin

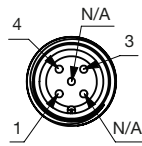


Connection plan 5-pin

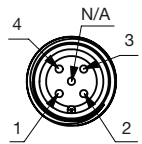


Component layouts

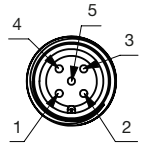
Plug M12 3-pin



Plug M12 4-pin



Plug M12 5-pin



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EAO Contact.

Your centre of excellence.

Headquarters

EAO Holding AG
Tannwaldstrasse 88
CH-4600 Olten
Telephone +41 62 286 92 00
info@eao.com

Manufacturing Companies

Switzerland
EAO AG
Tannwaldstrasse 88
CH-4600 Olten
Telephone +41 62 286 91 11
info@eao.com

EAO Systems AG
Tannwaldstrasse 88
CH-4600 Olten
Telephone +41 62 286 91 11
sales.esy@eao.com

China
EAO (Guangzhou) Ltd.
3/F, Block G4, South China
New Materials Innovation Park
31 Kefeng Road
Guangzhou Science City
CN-Guangzhou, PRC
Telephone +86 20 3229 0390
sales.ecn@eao.com

Germany
EAO Automotive GmbH & Co. KG
Richard-Wagner-Straße 3
DE-08209 Auerbach/Vogtland
Telephone +49 3744 8264 0
sales.esa@eao.com

North America
EAO Corporation
One Parrott Drive
Shelton
US-CT 06484
Telephone +1 203 951 4600
sales.eus@eao.com

Sales Companies

China
EAO (Guangzhou) Ltd.
3/F, Block G4, South China
New Materials Innovation Park
31 Kefeng Road
Guangzhou Science City
CN-Guangzhou, PRC
Telephone +86 20 3229 0390
sales.ecn@eao.com

EAO (Shanghai) Office
Rm.401, Lihpao Plaza,
NO.159 Shenwu Road,
Minhang District,
CN-Shanghai, 201106.
PRC
Telephone +86 21 6095 0717
sales.ecn@eao.com

France
EAO France SAS
Bâtiment Silex
15 rue des Cuirassiers
CS 33821
FR-69487 Lyon Cedex O3
Telephone +33 9 74 18 93 41
sales.eifr@eao.com

**Germany, Austria, Czech Republic,
Poland, Slovakia**
EAO GmbH
Langenberger Straße 570
DE-45277 Essen
Telephone +49 201 8587 0
sales.ede@eao.com

Hong Kong (Asia Pacific)
EAO (Far East) Ltd.
Unit A1, 1/F, Block A
Tin On Industrial Building
777 Cheung Sha Wan Road
Lai Chi Kok, Kln
HK-Hong Kong
Telephone +852 27 86 91 41
sales.ehk@eao.com

Italy
EAO Italia S.r.l.
Centro Direzionale Summit –
Palazzo D1
Via Brescia 28
IT-20063 Cernusco sul Naviglio (MI)
Telephone +39 029 247 0722
sales.eit@eao.com

Japan
EAO Japan Co. Ltd.
Net 1 Mita Bldg. 3F
3-1-4 Mita Minato-ku
JP-Tokyo 108-0073
Telephone +81 3 5444 5411
sales.ejp@eao.com

Netherlands, Belgium
EAO Benelux B.V.
Kamerlingh Onnesweg 46
NL-3316 GL Dordrecht
Telephone +31 78 653 17 00
sales.enl@eao.com

North America
EAO Corporation
One Parrott Drive
Shelton
US-CT 06484
Telephone +1 203 951 4600
sales.eus@eao.com

Switzerland
EAO Schweiz AG
Tannwaldstrasse 86
CH-4600 Olten
Telephone +41 62 286 95 00
sales.ech@eao.com

**United Kingdom, Denmark,
Finland, Ireland, Norway, Sweden**
EAO Ltd.
Highland House
Albert Drive
Burgess Hill
GB-West Sussex RH15 9TN
Telephone +44 1444 236 000
sales.euk@eao.com