# Operating Instructions

Joystick JSi-3-*

THE STRONGEST LINK.

| | |
|---|---|
| **Operating Instructions version:** | **01.03.06** |
| **Issue date:** | **11.12.2024** |

# Disclaimer

Publisher and copyright holder:

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# Specific markings

The markings in these Operating Instructions refer to specific features that must be noted.

In detail, these are:

| | |
|---|---|
| DANGER | This sign alerts users to hazards that **will** result in death or serious injury if ignored ! |
| WARNING | This sign alerts users to hazards that **may** result in death or serious injury if ignored ! |
| CAUTION | This sign alerts users to hazards that may damage machinery or equipment or result in injury if ignored ! |
| ATTENTION | Information highlighted by this symbol indicates measures for the prevention of damage to machinery or equipment ! |
| NOTICE | Information highlighted by this symbol indicates important information of which particular note should be taken ! |
| DOCUMENTATION | Information highlighted by this symbol (with and without lettering) refers to a different chapter or section in this manual or other documentation or a web-page ! |

## Warnings

| | |
|---|---|
|  | Caution !<br>In ambient temperatures exceeding +45 °C the surface of the devices may heat up. Caution when touching ! |

# Table of contents



# 1 Preface

These Operating Instructions are intended for the safe installation of the JSi-3-* joysticks and cover all Ex-relevant aspects. Furthermore, these Operating Instructions contain all necessary information for assembly and connection of the joysticks.

| | |
|---|---|
| NOTICE | All data relevant to explosion protection from the EC-type examination certificate were copied into these Operating Instructions. |
| | For the correct operation of all associated components please note, in addition to these Operating Instructions, all other Operating Instructions enclosed in this delivery as well as the Operating Instructions of the additional equipment to be connected ! |

| | |
|---|---|
| DOCUMENTATION | Please note that all certificates of the joysticks can be found in a separate document (CE_Joystick-JSi).<br>You can find this document in the internet at www.r-stahl.com or request it from R. STAHL HMI Systems GmbH. |

# 2 Intended use

The type JSi-3-* joysticks are used to enter data, commands etc. on PCs and similar devices in hazardous areas.

The type JSi-3-* joysticks are explosion-protected equipment for installation in hazardous areas of zones 1 and 2. The devices may be connected to intrinsically safe PS2 or USB interfaces, depending on the joystick version. Power supply and data communication takes place via the associated interface of the operator interfaces. The joystick is connected with a fixed cable.
The joysticks can be mounted inside a front panel or a desktop housing.

# 3 Conformity to standards

The joysticks comply with the following standards and directive:

| Standard<br>3rd supplement<br>ATEX directive 2014/34/EU | Classification |
|---|---|
| IEC 60079-0 : 2011<br>EN 60079-0 : 2012 + A11 | General requirements |
| IEC 60079-11 : 2011<br>EN 60079-11 : 2012 | Intrinsic safety "i" |
| **The product corresponds to requirements from:** | |
| EN IEC 60079-0 : 2018 | General requirements |
| **Electromagnetic compatibility** | |
| **EMC directive 2014/30/EU** | **Classification** |
| EN 61326-1 : 2013 | General requirements |
| EN 61000-6-2 : 2005 | Interference resistance |
| EN 61000-6-4 : 2007 + A1 : 2011 | Interference emission |
| **RoHS directive** | |
| **2011/65/EU** | **Classification** |
| EN IEC 63000 : 2018 | Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances |

# 4 Certificates

| | |
|---|---|
| | Certificates: r-stahl.com |
| | The device has IECEx approval. See IECEx homepage: https://www.iecex-certs.com/#/home. |

## 4.1 Approvals

The joysticks JSi-3-* are certified for installation in the following areas:

| Synonym | Scope of validity | Valid until | Certificate number | Note |
|---|---|---|---|---|
| CE | Europe | unlimited | | according to directive 2014/30/EU 2014/34/EU 2011/65/EU |
| ATEX | Europe | unlimited | BVS 18 ATEX E 031 U | Issue 03 |
| IECEx | Global | unlimited | IECEx BVS 18.0026U | Issue: 4 |

# 5 Marking

| | | |
|---|---|---|
| Manufacturer | R. STAHL HMI Systems GmbH | |
| Type code | JSi-3-PS2-*, JSi-3-USB-* | |
| CE classification: | CE 0158 | |
| Testing authority and certificate number: | BVS 08 ATEX E 081<br>IECEx BVS 08.0032 | |
| Ex classification: | | |
| ATEX | Ex | II 2 G Ex ib IIC T4 |
| IECEx | | Ex ib IIC T4 |

# 6 Safety-related data

| | JSi-3-PS2 | JSi-3-USB |
|---|---|---|
| $U_i$ | 5.9 VDC | 5.9 VDC |
| $I_i$ | 350 mA | 3 A |
| $P_i$ | 1.2 W | 6.02 W |
| $C_i$ | 7 µF | 7 µF |
| $L_i$ | 1 µH ( 1 m connection cable) | |
| | 1.5 µH ( 1.5 m connection cable) | |
| | 2 µH ( 2 m connection cable) | |
| | 3 µH ( 3 m connection cable) | |
| | 4 µH ( 4 m connection cable) | |
| | 5 µH ( 5 m connection cable) | |

# 7 Ambient temperature range

The temperature range is –20 °C up to +60 °C

# 8 Proof of intrinsic safety

Proof of intrinsic safety for the connection of JSi-3-* joysticks with the HMI devices of the EAGLE (ET-/MT-xx6-A), MANTA (ET-/MT-xx7), RAPTOR (ET-208) and SHARK (ET-/MT-xx8) platform.

## 8.1 General information

Proof of intrinsic safety is based on the principles of IEC/EN 60079-14 and the standards referred to therein. Particular reference is made to Chapter 12 "Additional requirements for the type of protection i - intrinsic safety" in IEC/EN 60079-14.

Proof has been drawn up on the basis of conformity certification as per IEC/EN 60079-0 and IEC/EN 60079-11 or the EC type examination certificate in accordance with Directive 2014/34/EU and the comparison of the safety-related data listed in these documents.

The following EC-type examination certificates were used:

| Device | | EC type examination certificate |
|---|---|---|
| ET-xx6-A | — | TÜV 11 ATEX 7041 X |
| MT-xx6-A | — | TÜV 11 ATEX 7103 X |
| ET-xx7 | — | BVS 11 ATEX E 102 X |
| MT-xx7 | — | BVS 12 ATEX E 033 X |
| ET-208 | — | BVS 15 ATEX E 042 X |
| ET-xx8 | — | BVS 14 ATEX E 134 X |
| MT-xx8 | — | |
| JSi-3-PS2-*, JSi-3-USB-* | — | BVS 08 ATEX E 081 |

The testing authority has listed **all** conditions applicable to intrinsic safety in the EC type examination certificates.
If an EC type examination certificate for a device only specifies the input voltage (Ui), for example, intrinsic safety is guaranteed if the associated supply does not exceed this voltage (Uo is less than / equals Ui).
Other output parameters specified in the examination certificate of the power supply (e.g. Io, Po) are in this case irrelevant to intrinsic safety.

| | |
|---|---|
| NOTICE | The data given in this document do **NOT** absolve the fitter and / or operator of the systems from their obligation to ensure compliance with legal requirements, directives and regulations. Due diligence remains the sole responsibility of the fitter and / or operator ! |

## 8.2 Interconnection

In this part we list the voltages, currents, capacitance and inductance values of all circuits to determine whether the JSi-3-* joysticks are connected with a standard cable of 1.7 metres (usable are 1.5 metres) to the HMI devices of the EAGLE (ET-/MT-xx6-A), MANTA (ET-/MT-xx7), RAPTOR (ET-208) and SHARK (ET-/MT-xx8) platforms.

If the engineer or operator extends the joystick cable, the additional C and L cable values must be taken into account for the connection for proving intrinsic safety !

| | |
|---|---|
| NOTICE | From the Ex technical point of view, a maximum cable length of 5 metres is permitted ! |
| | Please note that we cannot comment on the functionality of such a cable extension. |

### 8.2.1 JSi-3-PS2 with HMI device ET-/MT-xx6-A

a) ET-/MT-xx6-A HMI device with joystick JSi-3-PS2 (1.7 m connection cable) circuts in zone 1

| Source / active | | | | | ==> | Acceptor / passive |
|---|---|---|---|---|---|---|
| ET-/MT-xx6-A | | | | | | JSi-3-PS2 |
| Terminal X9 | | | | | | Joystick connection |
| Uo = 5.88 VDC | | | | | ≤ | Ui = 5.9 VDC |
| Io = 200 mA | | | | | ≤ | Ii = 350 mA |
| Po = 1.18 W | | | | | ≤ | Pi = 1.2 W |
| $Co_{IIC}$ [µF] = | 15.4 | - | - | - | ≥ | Ci = 7 µF |
| $Lo_{IIC}$ [µH] = | 2 | - | - | - | ≥ | Li = 1.7 µH |
| $Co_{IIB}$ [µF] = | 10.4 | 20.4 | 43.4 | 82.4 | ≥ | Ci = 7 µF |
| $Lo_{IIB}$ [µH] = | 100 | 50 | 20 | 10 | ≥ | Li = 1.7 µH |

$C_o$ and $L_o$ pairs directly above / underneath each other may be used.

b) MT-xx6-A HMI device with joystick JSi-3-PS2 (1.7 m connection cable) circuts in zone 2

| Source / active | | | | | ==> | Acceptor / passive |
|---|---|---|---|---|---|---|
| MT-xx6-A | | | | | | JSi-3-PS2 |
| Terminal X9 | | | | | | Joystick connection |
| Uo = 5.88 VDC | | | | | ≤ | Ui = 5.9 VDC |
| Io = 200 mA | | | | | ≤ | Ii = 350 mA |
| Po = 1.18 W | | | | | ≤ | Pi = 1.2 W |
| $Co_{IIC}$ [µF] = | 68.4 | - | - | - | ≥ | Ci = 7 µF |
| $Lo_{IIC}$ [µH] = | 2 | - | - | - | ≥ | Li = 1.7 µH |
| $Co_{IIB}$ [µF] = | 33.4 | 53.4 | 102.4 | 222.4 | ≥ | Ci = 7 µF |
| $Lo_{IIB}$ [µH] = | 100 | 50 | 20 | 10 | ≥ | Li = 1.7 µH |

$C_o$ and $L_o$ pairs directly above / underneath each other may be used.

| | |
|---|---|
| CAUTION | Cable length for ET-/MT-xx6-A in IIC maximum 2 metres ! |

### 8.2.2 JSi-3-USB with HMI device ET-/MT-xx6-A

c) ET-/MT-xx6-A HMI device with joystick JSi-3-USB (1.7 m connection cable) circuts in zone 1

| Source / active | | | | | ==> | Acceptor / passive |
|---|---|---|---|---|---|---|
| ET-/MT-xx6-A | | | | | | JSi-3-USB |
| Terminal X6 | | | | | | Joystick connection |
| Uo = 5.9 VDC | | | | | ≤ | Ui = 5.9 VDC |
| Io = 2.18 A | | | | | ≤ | Ii = 3 A |
| Po = 1.24 W | | | | | ≤ | Pi = 6.02 W |
| $Co_{IIC}$ [µF] = | 11 | 28 | - | - | ≥ | Ci = 7 µF |
| $Lo_{IIC}$ [µH] = | 5 | 2 | - | - | ≥ | Li = 1.7 µH |
| $Co_{IIB}$ [µF] = | 14 | 40 | 79 | 200 | ≥ | Ci = 7 µF |
| $Lo_{IIB}$ [µH] = | 50 | 20 | 10 | 5 | ≥ | Li = 1.7 µH |

$C_o$ and $L_o$ pairs directly above / underneath each other may be used.

d) MT-xx6-A HMI device with joystick JSi-3-USB (1.7 m connection cable) circuts in zone 2

| Source / active | | | | | ==> | Acceptor / passive |
|---|---|---|---|---|---|---|
| MT-xx6-A | | | | | | JSi-3-USB |
| Terminal X6 | | | | | | Joystick connection |
| Uo = 5.9 VDC | | | | | ≤ | Ui = 5.9 VDC |
| Io = 2.18 A | | | | | ≤ | Ii = 3 A |
| Po = 1.24 W | | | | | ≤ | Pi = 6.02 W |
| $Co_{IIC}$ [µF] = | 12 | 24 | 74 | - | ≥ | Ci = 7 µF |
| $Lo_{IIC}$ [µH] = | 10 | 5 | 2 | - | ≥ | Li = 1.7 µH |
| $Co_{IIB}$ [µF] = | 37 | 92 | 200 | 790 | ≥ | Ci = 7 µF |
| $Lo_{IIB}$ [µH] = | 50 | 20 | 20 | 5 | ≥ | Li = 1.7 µH |

$C_o$ and $L_o$ pairs directly above / underneath each other may be used.

### 8.2.3 JSi-3-USB with HMI device ET-/MT-xx7

a) ET-/MT-xx7 HMI device with joystick JSi-3-USB (1.7 m connection cable)

| Source / active | | ==> | Acceptor / passive |
|---|---|---|---|
| ET-/MT-xx7 | | | JSi-3-USB |
| Terminal X11, X12, X24, X25 | | | Joystick connection |
| Uo = 5.5 VDC | | ≤ | Ui = 5.9 VDC |
| Io = 0.309 A | | ≤ | Ii = 3 A |
| Po = 0.629 W | | ≤ | Pi = 6.02 W |
| Co [µF] = | 50 | ≥ | Ci = 7 µF |
| Lo [µH] = | 40 | ≥ | Li = 1.7 µH |

$C_o$ and $L_o$ pairs directly above / underneath each other may be used.

### 8.2.4 JSi-3-USB with HMI device ET-208

a) ET-208 HMI device with joystick JSi-3-USB (1.7 m connection cable)

| Source / active | | | | ==> | Acceptor / passive |
|---|---|---|---|---|---|
| ET-208 | | | | | JSi-3-USB |
| Terminal X7 or X8 | | | | | Joystick connection |
| Uo = 5.45 VDC | | | | ≤ | Ui = 5.9 VDC |
| Io = 0.755 A | | | | ≤ | Ii = 3 A |
| Po = 2.5 W | | | | ≤ | Pi = 6.02 W |
| $Co_{IIC}$ [µF] = | 4.7 | 27.7 | - | ≥ | Ci = 7 µF |
| $Lo_{IIC}$ [µH] = | 4.8 | 1.8 | - | ≥ | Li = 1.7 µH |
| $Co_{IIB}$ [µF] = | 20.7 | 51.7 | 107.7 | ≥ | Ci = 7 µF |
| $Lo_{IIB}$ [µH] = | 49.8 | 19.8 | 9.8 | ≥ | Li = 1.7 µH |

$C_o$ and $L_o$ pairs directly above / underneath each other may be used.

| | |
|---|---|
| ⚠ CAUTION | Cable length for ET-208 in IIC maximum 1.8 metres ! |

### 8.2.5 JSi-3-USB with HMI device ET-/MT-xx8

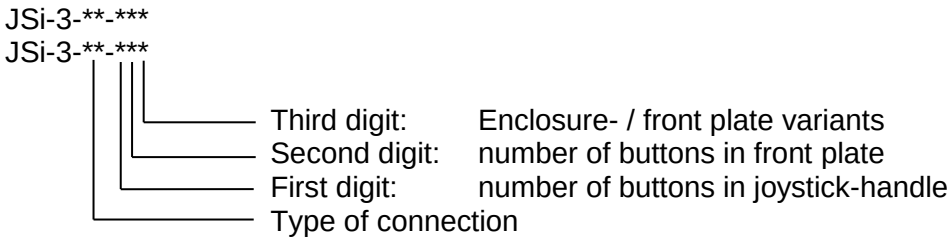
a) ET-/MT-xx8 HMI device with joystick JSi-3-USB (1.7 m connection cable)

| Source / active | | | | ==> | Acceptor / passive |
|---|---|---|---|---|---|
| ET-/MT-xx8 | | | | | JSi-3-USB |
| Terminal X33, X34 | | | | | Joystick connection |
| Uo = 5.36 VDC | | | | ≤ | Ui = 5.9 VDC |
| Io* = 0.25 A | | | | ≤ | Ii = 3 A |
| Po = 0.518 W | | | | ≤ | Pi = 6.02 W |
| $Co_{IIB}$ [µF] = | 21 | 25 | 32 | ≥ | Ci = 7 µF |
| $Lo_{IIB}$ [µH] = | 4.68 | 3.68 | 2.68 | ≥ | Li = 1.7 µH |

$C_o$ and $L_o$ pairs directly above / underneath each other may be used.

| | |
|---|---|
| NOTICE | * The value for Io has been rounded up in the table, see certificate for original value. |

# 9 Type code




Versions:

| Version code | | | | | | Description |
|---|---|---|---|---|---|---|
| | | | | | | Joystick variante with |
| **JSi-3-** | **PS2** | - | * | * | * | PS2 connection |
| | **USB** | - | * | * | * | USB connection |
| | | - | **0** | | | No button in joystick-handle |
| | | - | **1** | | | One button in joystick-handle |
| | | - | **2** | | | Two button in joystick-handle |
| | | - | | **0** | | No button in front plate |
| | | - | | **1** | | One button in front plate |
| | | - | | **2** | | Two button in front plate |
| | | - | | **3** | | Three button in front plate |
| | | - | | | **0** | Rectangular |
| | | - | | | **1** | Triangular |
| | | - | | | **2** | Round |

Product type:

| Order number | Description |
|---|---|
| | Joystick version with |
| JSi-3-PS2-130 | PS2 connection, one button in joystick-handle, three button in front plate, stainless steel front plate rectangular |
| JSi-3-USB-130 | USB connection, one button in joystick-handle, three button in front plate, stainless steel front plate rectangular |

# 10 Safety Advice

| | |
|---|---|
| | This chapter is a summary of the key safety measures. The summary is supplementary to existing rules which staff also have to study. |
| NOTICE | The safety of persons and equipment in hazardous areas depends on compliance with all relevant safety regulations. Thus, the installation and maintenance staff carry a particular responsibility, requiring precise knowledge of the applicable regulations and conditions. |

| | |
|---|---|
| CAUTION | The notes listed below in section 10.1 must be heeded to avoid injury and damage to equipment ! |

## 10.1 Installation and operation

Please note the following when installing and operating the device:

- The national regulations for installation and assembly apply (e.g. IEC/EN 60079-14).
- The joysticks may be installed in zones 1 or 2.
- The JSi-3-* joystick enclosure must be earthed via the PA connection (earthing screw) at the back of the enclosure !
- The intrinsically safe circuits must be installed according to applicable regulations.
- The joystick may only be switched on when it is closed.
- When installed in zones 1 and 2, the joysticks may be connected to intrinsically safe input circuits.
- The safety values of the joysticks must match those of the device to which it is connected.
- Interconnecting several active devices in an intrinsically safe circuit may result in different safe maximum values. This could compromise intrinsic safety !
- National safety and accident prevention rules.
- Generally accepted technical rules.
- Safety instructions contained in these Operating Instructions.
- Any damage may compromise the explosion protection.

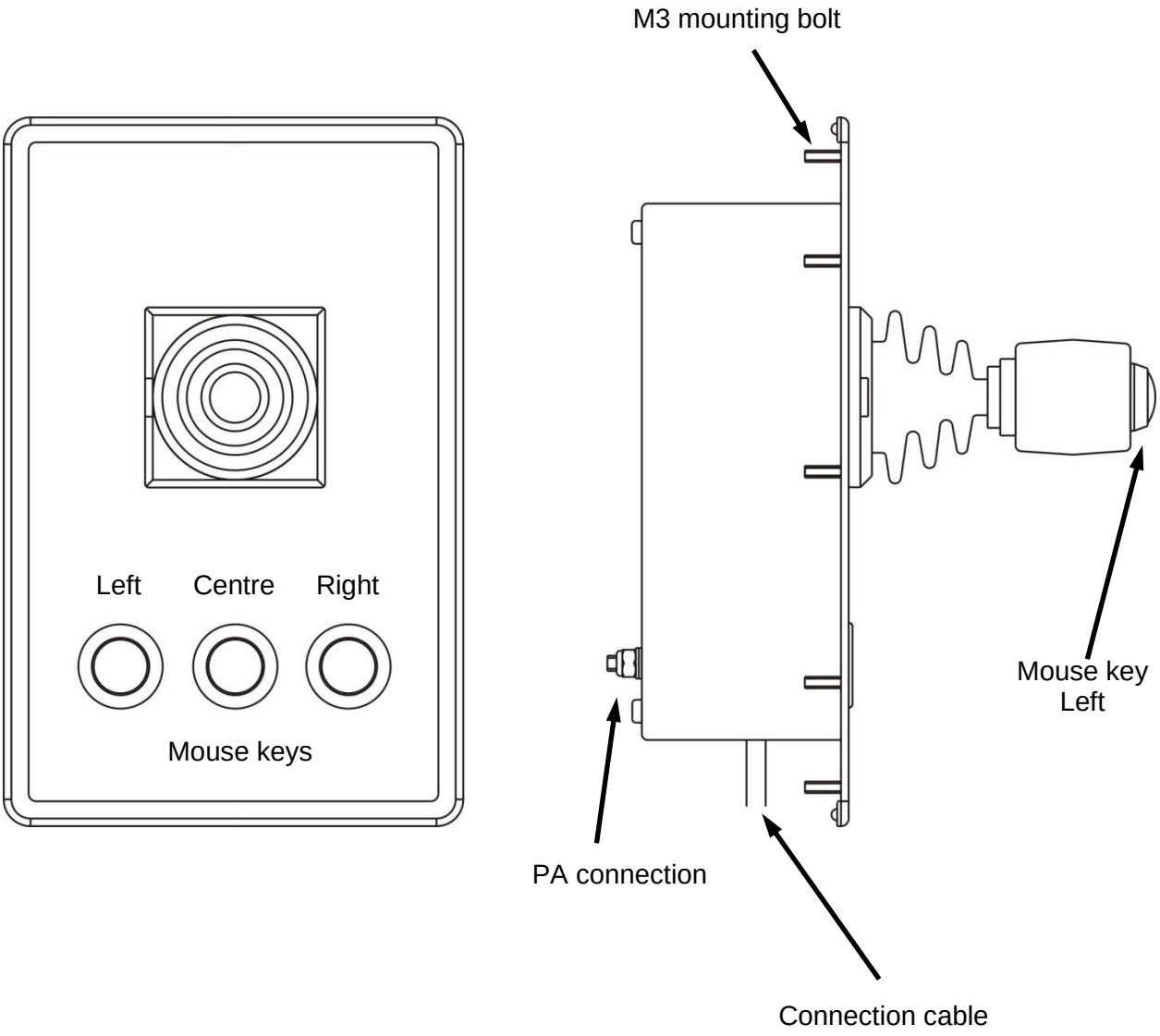
Use the joysticks for their intended purpose only (see "Intended use").
Incorrect or unauthorized use and non-compliance with the instructions in this manual will void any warranty on our part.
No changes may be made to the joysticks that compromise explosion protection !
The joysticks may only be installed and operated in an undamaged, dry and clean condition !

# 11 Assembly and disassembly

## 11.1 General information

| | |
|---|---|
| NOTICE | Assembly and disassembly are subject to general technical rules. Additional, specific safety regulations apply to electronic and pneumatic installations. |

## 11.2 Views




NB:

- The key on the joystick has the same function as a left mouse key. There are therefore two keys on the JSi joystick that have the "left mouse key" function.

## 11.3 Mechanical dimensions

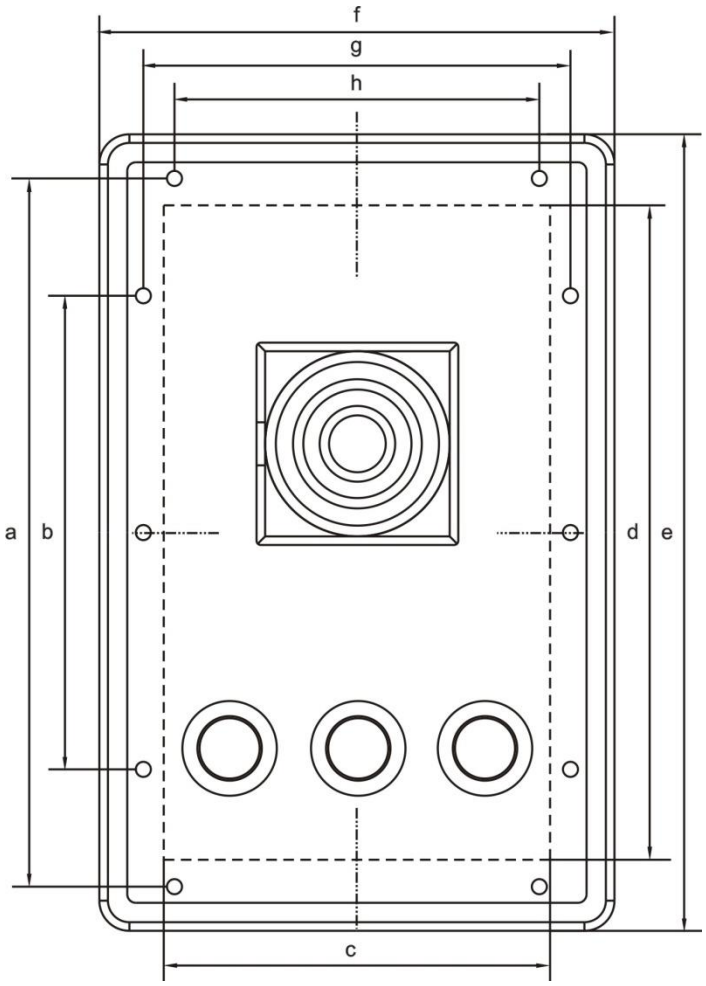
Dimensions in mm

### 11.3.1 Overview

| Joystick | Front plate (HxB) | Cut-out (HxB) | Hole pattern | Material thickness |
|---|---|---|---|---|
| JSi-3-PS2<br>JSi-3-USB | 185 x 120 | 152 x 90 (±1) | see diagram | up to 6 |
| | **Depth of cut-out (Depth)** | | **Design front (Height)** | |
| | 60 | | 83 (joystick height) | |

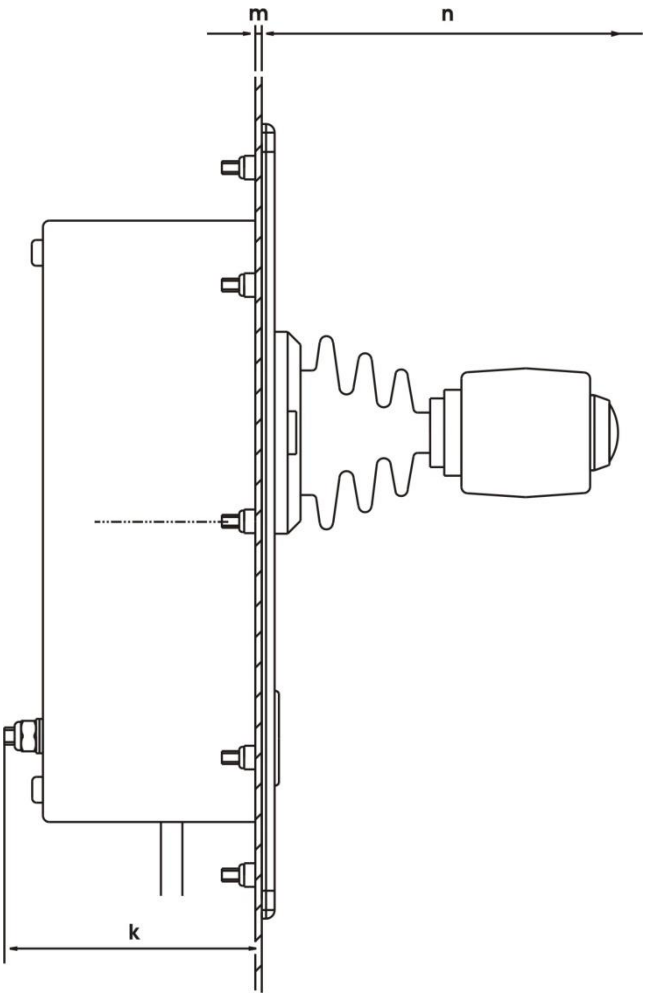
### 11.3.2 Dimensional drawing

Front view:




| | | | |
|---|---|---|---|
| e | = | dimensions front plate height (h) | = 185 |
| f | = | dimensions front plate width (w) | = 120 |
| c | = | cut-out width (w) | = 90 (± 1) |
| d | = | cut-out height (h) | = 152 (± 1) |
| a | = | distance fitting holes | = 164.5 |
| b | = | distance fitting holes | = 110 |
| g | = | distance fitting holes | = 99.5 |
| h | = | distance fitting holes | = 85 |

Lateral view:




| | | | |
|---|---|---|---|
| k | = | depth of cut-out | = 60 |
| m | = | material thickness | = up to 6 |
| n | = | design front height | = 83 |

## 11.4 Installation instructions

The JSi-3-* joystick is intended for installation in an appropriate desk housing or control panel.

If the JSi-3-* joystick has **NOT** been mounted by the manufacturer, a sufficiently large cut-out for mounting the joystick must be provided.

- Make a cut-out with the dimensions mentioned above.
- Drill 10 holes of a diameter of 3.5 mm according to the hole pattern.
- Insert the joystick into the cut-out from the outside.
- For affixing the joystick use the self-locking nuts (10x M3) provided with the joystick.

| | |
|---|---|
| ATTENTION | Optimum sealing:<br>• Check the position of the joystick, ensuring above all that the **rubber seals are correctly positioned**.<br>• Then tighten fully all self-locking nuts with a tightening torque of 0.1 - 1.5 Nm.<br>• Connect the joystick cable to the corresponding terminal at the HMI device according to the connection diagram. |
| | Earth:<br>• The JSi-3-* joystick housing must be earthed via the PA connection (earthing screw) at the back of the housing !<br>• A wire cross section of 4 mm² is recommended for earthing the device. |

# 12 Operation

## 12.1 General information

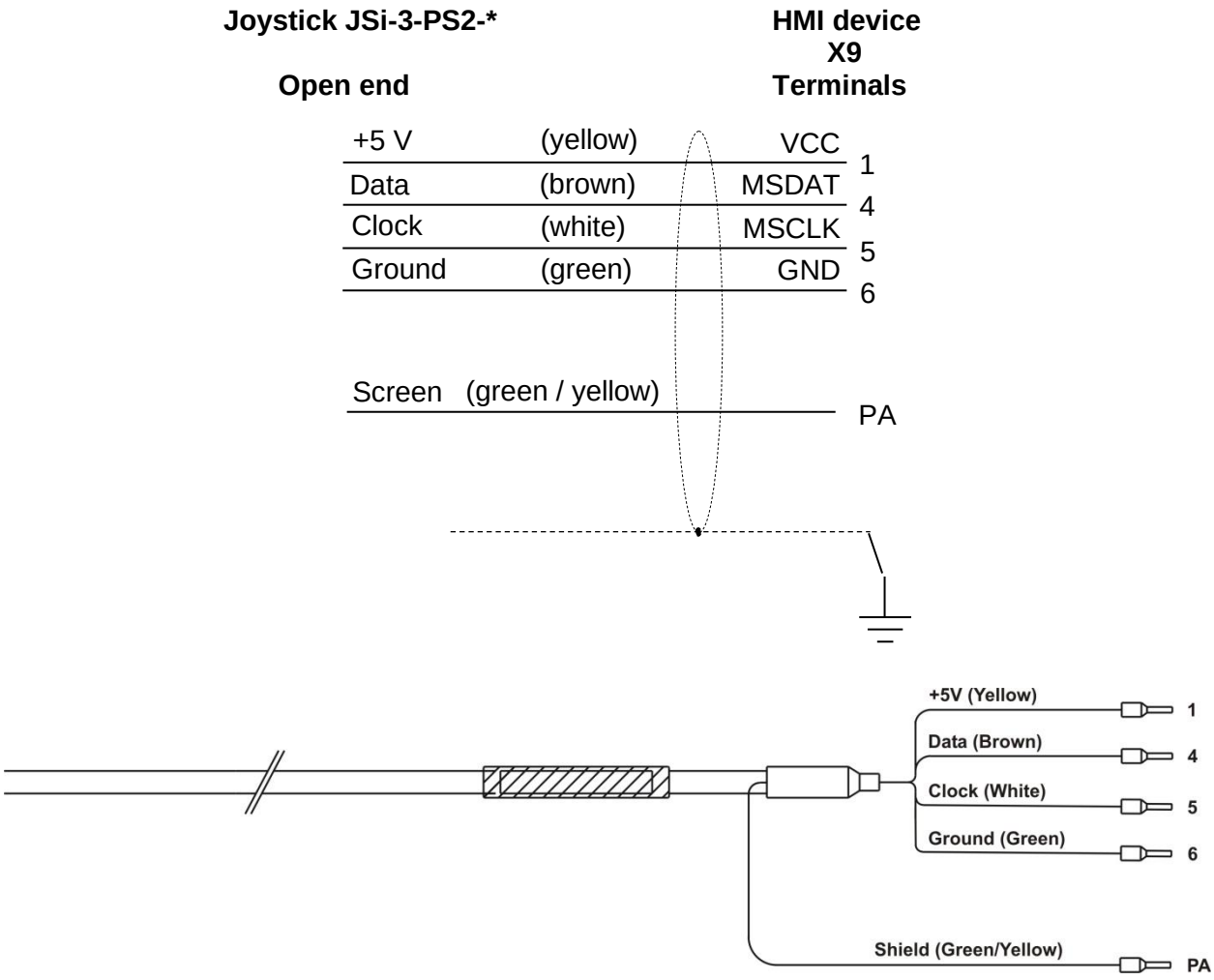
| | |
|---|---|
| NOTICE | When operating the devices, particular care shall be taken that:<br>• the joystick has been properly installed according to instructions,<br>• the joystick is not damaged,<br>• all screws are tightened fast,<br>• the cable is connected properly,<br>• the joystick housing has been connected to earth via the PA connection. |

## 12.2 Connections JSi

The joysticks are fitted with an 1.7 m long connection cable (usable length 1.5 m) that can be connected to the corresponding terminal of the HMI devices.

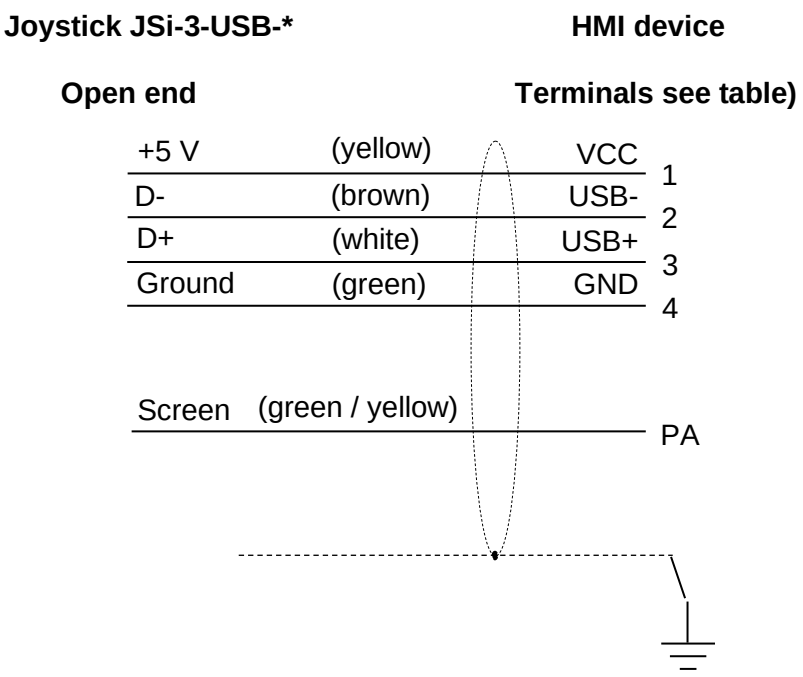
In the case of joystick version JSi-3-* the connection depends on the interface version (PS2 or USB).

### 12.2.1 Connection cable JSi-3-PS2-* to ET-/MT-xx6-A

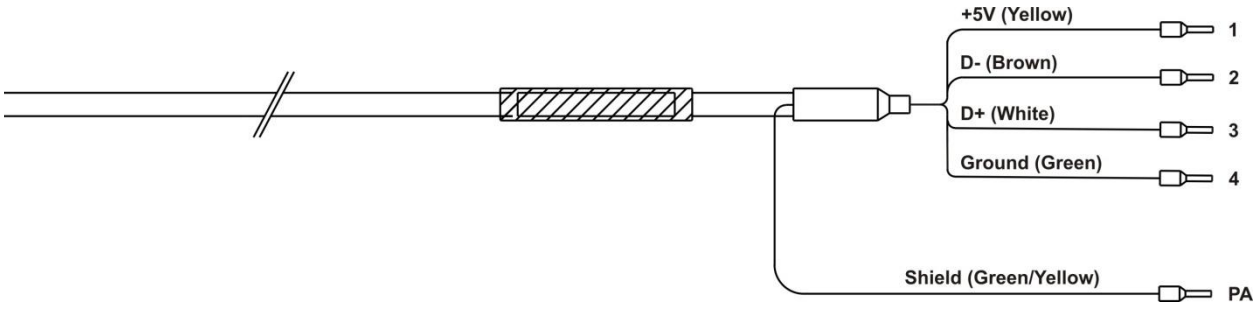



| | |
|---|---|
| CAUTION | The shielding connection (green / yellow cable) must be connected to the PA terminal block of the HMI devices ! |

### 12.2.2 Connection cable JSi-3-USB-*




| HMI device | ET-/MT-xx6-A | ET-/MT-xx7 | ET-208 | ET-/MT-xx8 |
|---|---|---|---|---|
| Terminal | X6 | X11, X12, X24, X25 | X7 | X33, X34 |
| VCC | pin 1 | | | |
| USB- | pin 2 | | | |
| USB+ | pin 3 | | | |
| GND | pin 4 | | | |
| Shield | PA | | pin 5 | PA |




| | |
|---|---|
| ⚠ CAUTION | The shielding connection (green / yellow cable) must be connected to the PA terminal block of the HMI devices ! |

# 13 Maintenance, service

| | |
|---|---|
| NOTICE | Associated equipment is subject to maintenance, service and testing according to guidelines 1999/92/EC, IEC/EN 60079-14, -17, -19 and BetrSichVer (Betriebssicherheitsverordnung - Occupational Safety and Health) ! |

Because the transmission of the joysticks remains reliable and stable over long periods of time, regular adjustments are not required.

Maintenance should focus on the following:

- Seal wear
- All cables and lines are properly connected and undamaged
- Enclosure damage

## 13.1 Servicing

It is the responsibility of the operator of an electrical plant in a hazardous environment to have the plant serviced. Please also note the appropriate national rules and regulations.

# 14 Troubleshooting

Users cannot carry out any repairs on the joysticks.

| | |
|---|---|
| NOTICE | Devices operated in hazardous areas must not be modified. Repairs may only be carried out by qualified, authorized staff specially trained for this purpose. |
| | Repairs may only be carried out by specially trained staff who are familiar with all basic conditions of the applicable user regulations and – if requested – have been authorized by the manufacturer. |

# 15 Disposal / Restricted substances

Disposal of old electric and electronic devices, packaging and used parts is subject to regulations valid in whichever country the device has been installed.
For countries under the jurisdiction of the EU the corresponding WEEE directive applies.

The joysticks are classified according to the table below:

| | |
|---|---|
| Directive | WEEE II Directive 2012/19/EU |
| Valid | from 2018-08-15 |
| Category | SG5 Small equipment <50 cm |

R. STAHL HMI Systems GmbH meets the requirements of directive 2012/19/EU (WEEE) and is registered under the number DE 15180083.

We shall take back our devices according to our General Terms and Conditions.

## 15.1 RoHS directive 2011/65/EU

The joysticks meet the requirements of RoHS Directive 2011/65/EU.

### 15.1.1 China RoHS labelling

The part of all toxic or hazardous substance contained in the homogeneous materials of the joysticks is below the limit stipulated in SJ/T11363-2006.

# 16 EU Declaration of conformity

## EU-Konformitätserklärung
*EU Declaration of Conformity*
*Déclaration de Conformité UE*

STAHL

**R. STAHL HMI Systems GmbH • Adolf-Grimme-Allee 8 • 50829 Köln, Germany**
**erklärt in alleiniger Verantwortung,** *declares in its sole responsibility, déclare sous sa seule responsabilité,*

| | |
|---|---|
| **dass das Produkt:**<br>*that the product:*<br>*que le produit:* | **Joystick Modul** |
| **Typ(en)**, *type(s), type(s):* | **JSi-3-PS2-*****<br>und / and / et<br>**JSi-3-USB-*****<br>***=any character without relevance for explosion protection |

**mit den Anforderungen der folgenden Richtlinien und Normen übereinstimmt.**
*is in conformity with the requirements of the following directives and standards.*
*est conforme aux exigences des directives et des normes suivantes.*

| Richtlinie(n) / *Directive(s) / Directive(s)* | | Norm(en) / *Standard(s) / Norme(s)* | |
|---|---|---|---|
| **2014/34/EU**<br>*2014/34/EU*<br>*2014/34/UE* | **ATEX-Richtlinie**<br>*ATEX Directive*<br>*Directive ATEX* | EN 60079-0:2012 + A11:2013<br>EN 60079-11:2012 | Das Produkt entspricht Anforderungen aus:<br>*Product corresponds to requirements from:*<br>*Produit correspond aux exigences:*<br>EN IEC 60079-0:2018 |

**Kennzeichnung,** *marking, marquage:* Ⓔx **II 2G Ex ib IIC T4 Gb**

CE 0158

| | |
|---|---|
| **EU-Baumusterprüfbescheinigung:**<br>*EU Type Examination Certificate:*<br>*Attestation d'examen UE de type:* | **BVS 08 ATEX E 081**<br>**DEKRA EXAM GmbH (NB 0158)**<br>Dinnendahlstraße 9, 44809 Bochum, Germany |

| | | |
|---|---|---|
| **2014/30/EU**<br>*2014/30/EU*<br>*2014/30/UE* | **EMV-Richtlinie**<br>*EMC Directive*<br>*Directive CEM* | EN 61000-6-2:2005<br>EN 61000-6-4:2007 + A1:2011<br>EN 61326-1:2013 |
| **Produktnormen nach RoHS-Richtlinie (2011/65/EU):**<br>*Product standards according to RoHS Directive:*<br>*Normes des produit pour la Directive RoHS:* | | EN IEC 63000:2018 |

Für spezifische Merkmale und Bedingungen siehe Betriebsanleitung.
*For specific characteristics and conditions see operating instructions.*
*Pour les caractéristiques et conditions spécifiques, voir le mode d'emploi.*

| | | |
|---|---|---|
| Köln, 2020-12-15 | i.V. Joachim Düren | i.V. A. Jung |
| **Ort und Datum**<br>*Place and date*<br>*Lieu et date* | **J. Düren**<br>Technical Director | **A. Jung**<br>Ex Representative |

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# 17 Release notes

This chapter lists the changes made in the most recent versions of these Operating Instructions.

Version 01.03.05

- Removal of previous release notes
- Changing disclaimer
- Adaption type code according to examination certificate
- Changing cabel length into 1.7 m (usable 1.5 m)
- Adaption "Proof of intrinsic safety" according to new cabel length
- Addition of note in "Proof of intrinsic safety" with "max. cabel length of 5 m"
- Removal of note "joysticks with polyester" in "Installation and operation"
- Formal changes

Version 01.03.06

- Adaption of OI according to current design
- Update of telephone and email data
- Changing text (with and without lettering) according to documentation note in "Specific markings"
- Removal of reference to "Online Manual" in "Preface"
- Changing title "Function" into "Intended use"
- Update of section "Conformity to standards"
- Restructuring chapter "Approvals"
- Addition of "Proof of intrinsic safety" with HMI devices of MANTA, RAPTOR and SHARK platform
- Addition of "Connections" for HMI devices of MANTA, RAPTOR and SHARK platform
- Update of section "Disposal / Restricted substances"
- Renew EU declaration of conformity
- Formal changes

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