

# Multi-Axis Controller V1



The V1 is a robust Joystick commonly used in electro-hydraulic applications. The modular design enables the switching device to be used universally. Long life and high reliability is ensured by the latest contactless hall-technology.

## Technical data

|                       |  |
|-----------------------|--|
| Mechanical life V1    | 6 million operating cycles                                       |
| Supply voltage        | See interface  |
| Operation temperature | -40°C to +85°C   |
| Degree of protection  | up to IP65   |
| Functional safety     | PLd compatible (EN ISO 13849, complies SIL2 to DIN EN IEC 61508) |

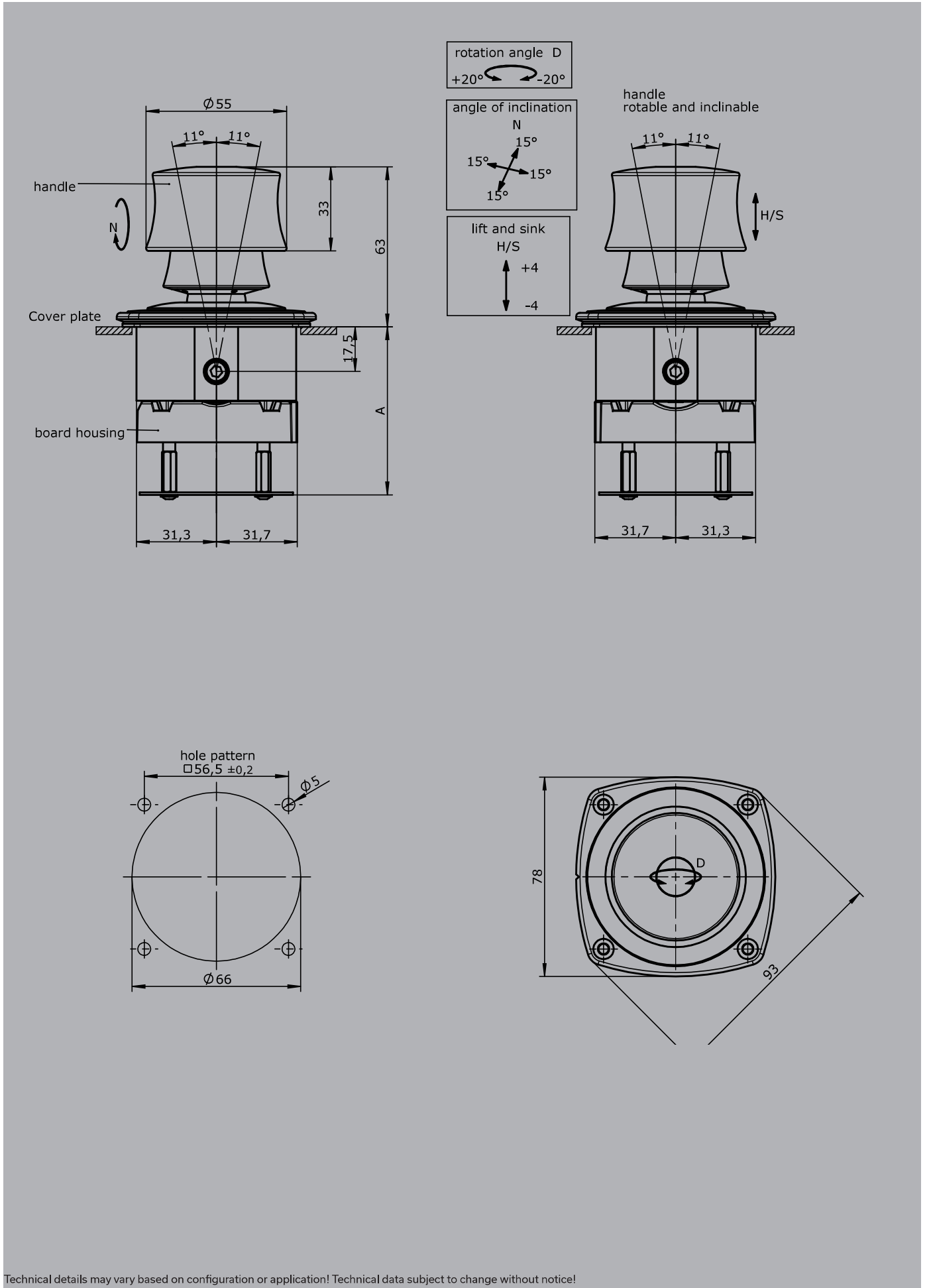


|   | V1 | P | H11 | H13 | H15 | H17 | -Z | +Z | -B | -E... | -S... | -X |
|---|----|---|-----|-----|-----|-----|----|----|----|-------|-------|----|
| <b>Basic unit</b>   |    |   |     |     |     |     |    |    |    |       |       |    |
| V1.1 1-axis   |    |   |     |     |     |     |    |    |    |       |       |    |
| V1 2-axis   |    |   |     |     |     |     |    |    |    |       |       |    |
| <b>Gate</b>   |    |   |     |     |     |     |    |    |    |       |       |    |
| P Cross gate  |    |   |     |     |     |     |    |    |    |       |       |    |
| PX Special gate   |    |   |     |     |     |     |    |    |    |       |       |    |
| <b>Grip / Grip functions</b>                              |    |   |     |     |     |     |    |    |    |       |       |    |
| Grip (included in basic unit!)                            |    |   |     |     |     |     |    |    |    |       |       |    |
| H11 Additional axis 1 / Grip up - down                    |    |   |     |     |     |     |    |    |    |       |       |    |
| H13 Additional axis 2 / Grip rotate left - right          |    |   |     |     |     |     |    |    |    |       |       |    |
| H15 Additional axis 3 / Grip tilt forwards - backwards    |    |   |     |     |     |     |    |    |    |       |       |    |
| H17 Additional axis 4 / Grip tilt left - right            |    |   |     |     |     |     |    |    |    |       |       |    |
| <b>Axis 1</b>   |    |   |     |     |     |     |    |    |    |       |       |    |
| Z Spring return   |    |   |     |     |     |     |    |    |    |       |       |    |
| R Friction brake  |    |   |     |     |     |     |    |    |    |       |       |    |
| <b>Axis 2 (not applicable to V1.1)</b>                    |    |   |     |     |     |     |    |    |    |       |       |    |
| Z Spring return   |    |   |     |     |     |     |    |    |    |       |       |    |
| R Friction brake  |    |   |     |     |     |     |    |    |    |       |       |    |
| <b>Cover housing</b>                                      |    |   |     |     |     |     |    |    |    |       |       |    |
| B Cover housing (included in basic unit!)                 |    |   |     |     |     |     |    |    |    |       |       |    |
| <b>Interface (description see on the following pages)</b> |    |   |     |     |     |     |    |    |    |       |       |    |
| E1xx Voltage output                                       |    |   |     |     |     |     |    |    |    |       |       |    |
| More interfaces on request!                               |    |   |     |     |     |     |    |    |    |       |       |    |
| <b>Plug connectors</b>                                    |    |   |     |     |     |     |    |    |    |       |       |    |
| S... Standard plug connectors (see page 120)              |    |   |     |     |     |     |    |    |    |       |       |    |
| <b>Special model</b>                                      |    |   |     |     |     |     |    |    |    |       |       |    |
| X Special / customer specified                            |    |   |     |     |     |     |    |    |    |       |       |    |

Technical details may vary based on configuration or application! Technical data subject to change without notice!

| Voltage output (not stabilized)             |   |        |
|---|---|--------|
| Supply voltage                              | 4,75-5,25V DC   |        |
| Current carrying capacity                   | Direction signal 8 mA   |        |
| Mounting depth A                            | 85 mm   |        |
| Wiring                                      | 1. cable 14 x 0,25 mm <sup>2</sup> 500 mm long without plug connector         |        |
|   | Optional with plug connector ( <i>standard plug connectors see page 120</i> ) |        |
| 0,5...2,5...4,5V redundant signals per axis |   |        |
|   | 1 axis  | E103 1 |
|   | 2 axis  | 2      |
|   | 3 axis*   | 3      |
|   | 4 axis*   | 4      |
|   | 5 axis*   | 5      |
|   | 6 axis*   | 6      |
| <b>Output options</b>                       |   |        |
| Characteristic:                             |   |        |
|   | Inverse dual  | 1      |
|   | Dual  | 2      |
|   | Inverse dual with dead zone +/- 3° (standard)                                 | 3      |
|   | Dual with dead zone +/- 3°  | 4      |

*More outputs on request!*



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