## Control and displays

## XENO THUMB JOYSTICK

Due to its compact and robust design, the XENOthumb joystick offers a wide range of installation options. Its modular design and sensitive control allow it to be used ergonomically with the fingertips. Further characteristics of the XENO thumb joystick are its intuitive use and its long service life. Besides being used in the BRAVA ACTRA MONO 400 PLUS armrest, the thumb joystick is predestined for use in customer-specific applications.

- Contactless Hall-effect sensor technology
- Two axes
- Two analogue signals per axis, X characteristic
- Ergonomic design
- Protection class IP 68, except plug
- Long service life of 3.5 million cycles
- EMC in accordance with EN 12895
- Functional safety in accordance with EN ISO 13849, PL d


## Control and displays



Transmission Protocol

| Nominal operating |
| :--- |
| voltage (5 V ) |
| 90\% Nominal |
| operating voltage |
| [ V ] |


| Elec |
| :--- |
| 10\% Nominal |
| operating voltage |
| [ V ] |


| Meca |
| :--- | :--- | :--- |



| Technical data |  |
| :---: | :---: |
| Technology | Contactless hall sensor |
| Mechanical data |  |
| Dimensions | See drawing |
| Mechanical angle of rotation | $+20^{\circ}$ |
| Electrical data |  |
| Nominal operating voltage | $5 \mathrm{VDC} \pm 0.02 \mathrm{~V}$ |
| Operating voltage range | $4.5-5.5 \mathrm{~V}$ DC |
| Power current | $<25 \mathrm{~mA}$ |
| Analogue output ratiometric | X characteristic: $0.5-4.5 \mathrm{~V}$ DC |
| Operating conditions |  |
| Operating temperature | $-30^{\circ} \mathrm{C}$ to $+65^{\circ} \mathrm{C}$ |
| Storage temperature | $-40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ |
| Maximum force | 0.07 Nm |
| Actuation force | 1.5 Nm |
| Service life | 3,5 million cycles |
| Protection class | IP 68 |
| EMC | 36 V/M after EN 12896: 2015-09 |

## Dimensions [mm]

| Connector pin assignment Molex Mini-Fit Jr. ${ }^{\text {T }}$ ( ${ }^{\text {pin, dual row } 5557-06 \mathrm{R}(-210)}$ |  |
| :---: | :---: |
|  |  |
| PIN 1 | + 5 V |
| PIN 2 | GND |
| PIN 3 | Signal 1 - 1 |
| PIN 4 | Signal 1-2 |
| PIN 5 | Signal 2 - 1 |
| PIN 6 | Signal 2 - 2 |



