ST4

The weather-proof 1-axis joystick.

A specially-designed joystick for wind and rain, snow and ice. The innovative drive block, made of special plastic, guarantees even with defective rubber boot tightness and functionality when water enters. Specially designed for construction and agricultural machinery without cabin, this version ensures maximum performance. For everything that is exposed to wind, weather and sunlight.
Drive E
Arrangement Y, X

Basic version with:
- Lever deflection ± 26°
- Handle G45
- Rubber boot
- Installation from below

Note: Spring return or friction brake is required, see additional charge.

Options:
- Spring return R
- Friction brake B
- Mechanical interlock Z
- Mechanical interlock with reed contact Z0
- Potentiometers with/without amplifiers see sheet E-Electronic-1

Technical information:
- Electrical TI-ST4-1/2
- Mechanical TI-ST4-2/2

Contact circuits:
- 8P1 (connection cable 0,4m)
- 9P1 (solder connection)

Type code:

<table>
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<th>Type code</th>
<th>ST4</th>
<th>Y</th>
<th>X</th>
<th>E</th>
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<th>B</th>
<th>Z0</th>
<th>8P1</th>
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Installation dimensions

- External diameter with escutcheon: Ø 70 mm
- Mounting dimensions: Ø 40 mm to 51 mm
- Mounting depth: 60 mm from mounting plate

Mechanical characteristics

- Lever deflection: ± 26°
- Impact force: max. 400 N at 90 mm distance from pivot point
- Impact force in Z-direction: ± 400 N (compressive and tensile loading)
- Life cycle: > 6 million operating cycles under the influence of climate (-40°C bis +85°C)
- Brake power: 8N ± 1
- Retraction force: 4N ± 1

Electrical characteristics

Potentiometer BD1010:
- Conductive plastic, redundant resistance: per lane 10 KΩ
- Connection: 6-polig Mat N Lok
- Assignment of deflection joystick - connection potentiometer / extension cable:

<table>
<thead>
<tr>
<th>Pin</th>
<th>Mat N Lok</th>
<th>Color extension cable</th>
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<tr>
<td>1</td>
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Potentiometer BLR55 technical informations see TI-POTI-6
Potentiometer B55 technical informations see TI-POTI-5
Reedcontact for mechanical interlock:
- 1 opener
- Connection: 2-pin Mat N Lok

General characteristics

- Working temperature: -40°C to +85°C
- Storage temperature: -50°C to +90°C
- Degree of protection from outside (with standard handle and boot): IP67
Version: Handle G45, spring return

Version: with mechanical interlock, handle G45-Z, friction brake, reed contact