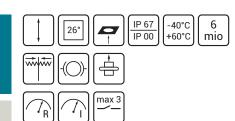
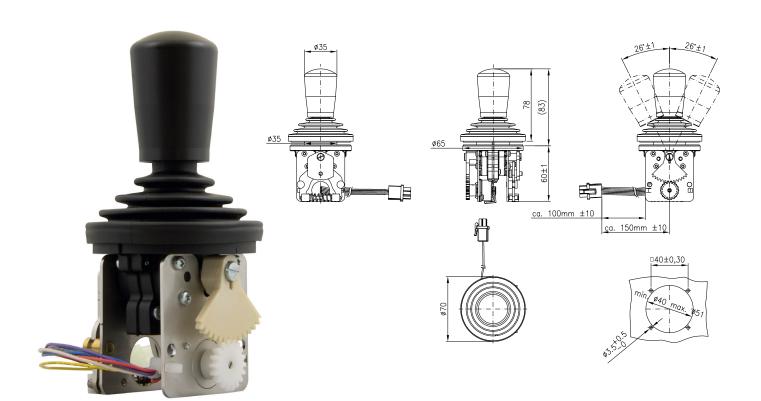
ST4 **J**-ST4-1/2 **J**-ST4-1/2

ST4





A specially-designed joystick for wind and rain, snow and ice. with defective rubber boottightness and functionality when water enters. For any application that is exposed to wind, weather and sunlight.

Specially designed for construction and agricultural machi-The innovative drive block, made of special plastic, guarantees even nery without cabin, this version ensures maximum performance.

J-ST4-2/2 ST4 **J**-ST4-2/2

ST4-2/2

Drive E

Arrangement Y, X









Basic version with:

- Lever deflection ± 26°
- Handle G45
- Rubber boot
- Installation from below

Technical information:

- Electrical TI-ST4-1/2
- Mechanical TI-ST4-2/2

Project planning notes:

Note possible combinations.

Possible combinations:

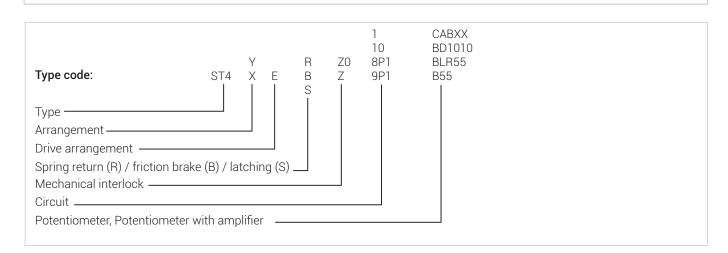
Oper- Version ation with type	Potentiometer	Microswitches	Potentiometer + Microswitches
Spring return	x	X	X
Friction brake with zero notch	х	-	-
Latching	-	х	-

Additional prices:

- Spring return
- R B
- Friction brake with zero notch
- Latching with notches, without spring return/ friction brake
- Mechanical interlock
- Ζ
- Mechanical interlock with reed contact Z0
- Wiring to connection cable or plug
- Potentiometers with/without amplifiers
- wiring on lead cable or connector

Contact circuits (microswitches):

- 8P1 (connection cable 0,4m)
- 9P1 (solder connection)
- 1 (connection cable 0,4m)
- 10 (solder connection)



TI-ST4-1/2 ST4 **TI**-ST4-1/2

rrors and techni hanges reserved

Installation dimensions

Diameter with boot ø 70 mm

Panel cut-out ø 40 mm to 51 mm

Mounting depth 60 mm from mounting plate (Version with potentiometer

without microswitches)

Mechanical characteristics

Lever deflection ± 26°

Impact force max. 400 N at 90 mm distance from pivot point mpact 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 $8N \pm 1$ Retraction force $4N \pm 1$

Potentiometer Pleas

Project planning notes:

Please note infos on sheet TI-Poti-6 (technical information)

Potentiometer BD1010: conductive plastic, redundant, without centre taps

resistance: per lane 10 KOhm

connection: cable approx. 100 mm long with 6-pin Mat N Lok

Assignment deflection joystick - connection potentiometer / extension cable

back left	wards	forward right
1	10 K	3
4	10 K	6

Pin Mat N Lok	Color extension cable
1	red
2	yellow
3	blue
4	white
5	violett
6	grey

Potentiometer BLR55: conductive plastic, 5K-0-5K, with direction signals

Potentiometer B55: conductive plastic, 5K-0-5K

Reedcontact

on mechanical interlock ZO 1 NC

Connection: cable approx. 100 mm long with 2-pole Mat N Lok

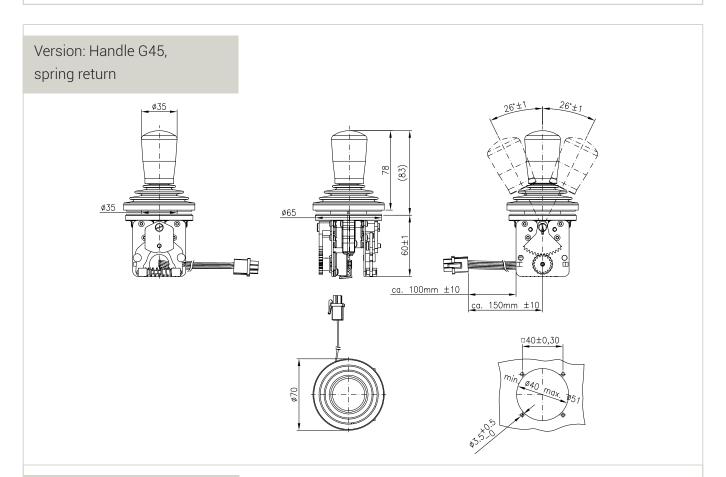
General characteristics

Working temperature -40°C to +85°C Storage temparature -50°C to +90°C Degree of protection from outside IP67

Degree of protection from outside (with standard handle and boot)

TI-ST4-2/2 Dimension sheet ST4 TI-ST4-2/2

ST4-2/2



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

