

# Strain Link with Amplifier DSRT 22DB

## Features

- Static and dynamic applications
- Integrated reset switch for automatic zero point setting
- Measuring range 100 up to 750  $\mu\epsilon$ , extension and compression
- Current output



## S/G Data

Strain gage type      Foil strain gage

## Mechanical Data

Material  
 - Housing                    1.7225 chemically nickel-plated  
 - Cover                      1.4301

Electrical connection    5 pin (M12 x 1)

Application position      any

Force on sensor attachment at 250  $\mu\epsilon$     approx. 120 N

## Environmental Conditions

Operating temp.range    0...+70 °C

Storage temp. range     -40...+85°C

EMC                          EN 61000-6-2  
                                     EN 61000-6-4

Vibration IEC 60068-2-6    10 - 2000 Hz 10 g (amplitude  $\pm 0,75$  mm, 10 - 58 Hz)

Random IEC 60068-2-64    20 - 1000 Hz, 0,1 g<sup>2</sup>/Hz

Shock IEC 60068-2-27    50 g / 11 ms

Protection class            IP 67

## Delivery Contents

Mounting screws            4 pcs. M6 x 25  
                                     strength class 12.9

## Order Code

DSRT 22DB-S5-     /

**T** Tension load (structure strain)  
**C** Compression load (structure strain)

**0100** Measuring range 100  $\mu\epsilon$   
**0250** Measuring range 250  $\mu\epsilon$   
**0350** Measuring range 350  $\mu\epsilon$   
**0500** Measuring range 500  $\mu\epsilon$   
**0750** Measuring range 750  $\mu\epsilon$

## Electrical Data

Measuring range             $\pm 100 \mu\epsilon \dots \pm 750 \mu\epsilon$   
                                     (1  $\mu\epsilon$  = 0,001 mm/m resp.  
                                     1  $\mu\epsilon$  equals 0,001 mm  
                                     strain per meter)

Output signal                4 - 20 mA

Characteristic curve deviation    < 1,0% FSR

Linearity                     < 0,5% FSR

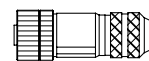
Hysteresis                    < 0,5% FSR

Repeatability                < 0,1% FSR (cycle to cycle)

Supply voltage range        14 - 33 VDC

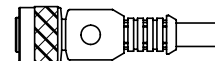
Taring "activ High"         Low < 1 VDC  
    High 5...33 VDC

## Accessories (not included in delivery)



Series 713

Bushing, control side, 5-pin, Part No. 10135462

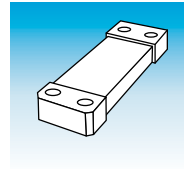


Bushing with cable, control side, 5-pin

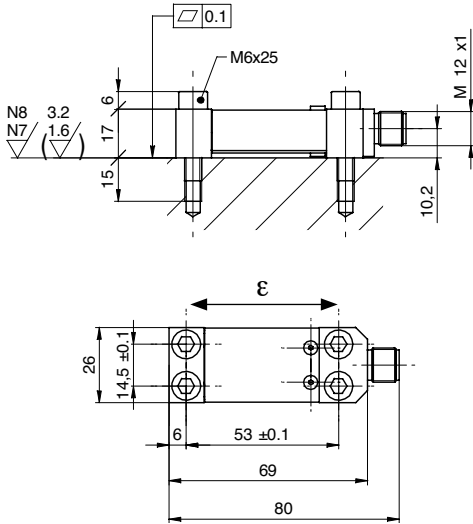
ES 34CP2B 5-pin (shielded) 2 m, PUR,  
 (Part No. 11046264)

ES 34CP5B 5-pin (shielded) 5 m, PUR,  
 (Part No. 11046266)

ES 34CP10B 5-pin (shielded) 10 m, PUR,  
 (Part No. 10155587)



Dimensions (mm)

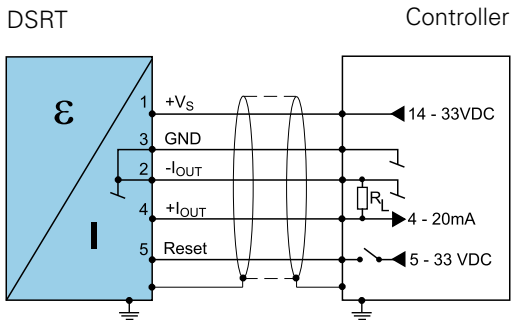


Electrical Connections

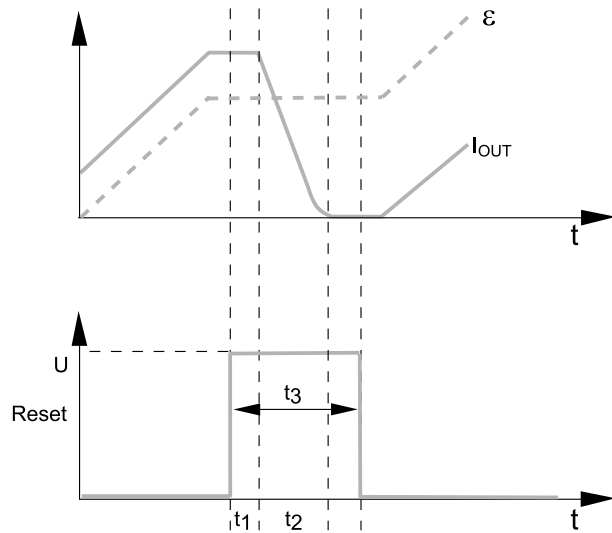


Pin	Signal
1	+Vs
2	-V <sub>OUT</sub>
3	GND
4	+V <sub>OUT</sub>
5	Reset
Housing	Shield

Control



Reset Function



$I_{OUT}$	Output signal
$\epsilon$	Input signal
Reset	Reset input (active high)
$t_1$	Reset delay (< 0,3 ms)
$t_2$	Reset time (< 5 ms)
$t_3$	Reset impulse (> 1 ms)