

Strain Link with CANopen DSRT 22DJ

Features

- Digital linearization
- Decoupling of torsion and bending
- Taring function with PDO- or SDO-command
- Measuring range ± 100 up to $\pm 750 \mu\epsilon$, extension and compression



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
Sensor stiffness	1 N/ $\mu\epsilon$ @100 0,2 N/ $\mu\epsilon$ @250 - 750

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 ² /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 22DJ-S5-

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

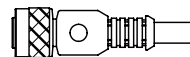
Electrical Data

Measuring range	$\pm 100 \mu\epsilon$... $\pm 750 \mu\epsilon$ (1 $\mu\epsilon$ = 0,001 mm/m resp. 1 $\mu\epsilon$ equals 0,001 mm strain per meter)
Output / Protocol	CANopen DS404
Resolution	0,1 $\mu\epsilon$
Measuring rate	1000 x / sec.
Data format	Fix points
Total error at ambient temperature	< 0,5% FS
Hysteresis	< 0,4% FS
Repeatability	< 0,1% FS
Taring time	< 9 ms
Supply voltage range	10 - 33 VDC
Current draw	< 60 mA

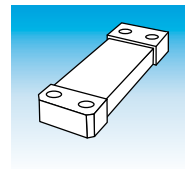
Accessories (not included in delivery)



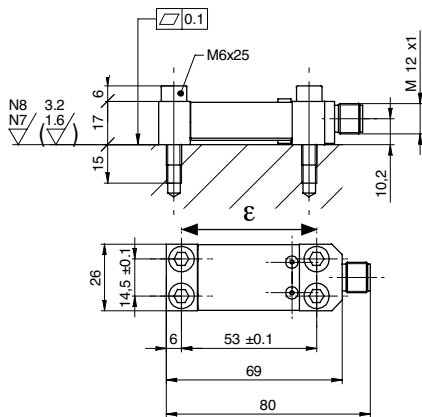
Connector female, control side, 5-pin, Part No. 10135462



Connector female with cable, control side, 5-pin
ESG 34CH0200G 5-pin (shielded) 2 m, PUR,
(Part No. 11046264)
ESG 34CH0500G 5-pin (shielded) 5 m, PUR,
(Part No. 11046266)
ESG 34CH1000G 5-pin (shielded) 10 m, PUR,
(Part No. 10155587)



Dimensions (mm)



Supported Objects

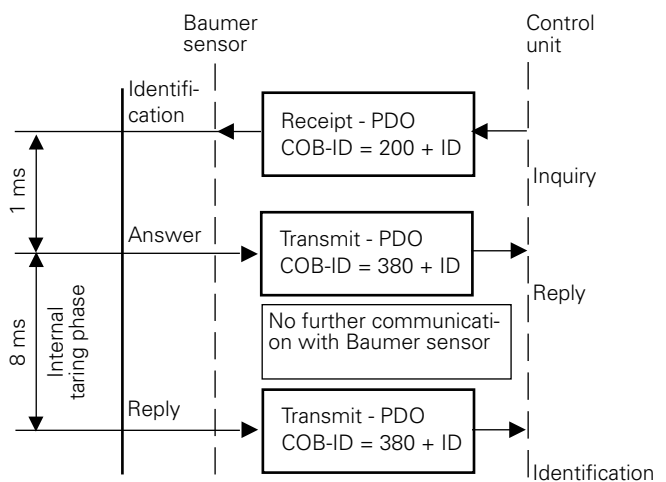
Object	Description
1000	Device profile
1001	Error register
1002	Serial number
1003	Emergency history
1005	Sync ID
1008	Device description
1009	Hardware version
100A	Software version
1010	Store
1011	Load default values
1017	Heartbeat
1018	Device identity
1400	Reception PDO1 parameter
1600	PDO 1 Mapping parameter
1800	Transmit PDO1 parameter
1801	Transmit PDO2 parameter
1802	Transmit PDO3 parameter
1A00	1. PDO Mapping
1A01	2. PDO Mapping
1A03	3. PDO Mapping
2000	Averaging time
2001	Auto zero store
2100	Baud rate
2101	Identification
6110	Sensor Type
6112	Operating mode
6125	Auto zero
6131	Process unit
6132	Decimal places
6150	Status of measurement
7130	Interrogate measured value (Process value)
7133	Delta Value

Electrical Connections



Pin	Signal
1	n.c.
2	+VS
3	GND
4	CANH
5	CANL
Housing	Shield

Temporal Course



Example

ID	DLC
201h	0

First answer of strain link

(Command realized)

ID	DLC	Byte 1
381h	1	75h

Second answer of strain link

(Taring finished)

ID	DLC	Byte 1	Byte 2
381h	2	66	0

Error

(Unstable signal)

ID	DLC	Byte 1	Byte 2
381h	2	65h	72h