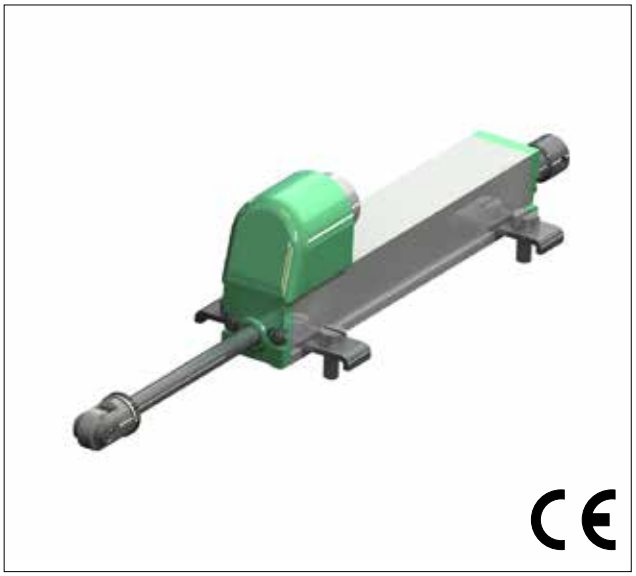
GEFRAN

SIN-W

RECTILINEAR DISPLACEMENT TRANSDUCER WITH BEARING TIP AND INTERNAL RETURN SPRING



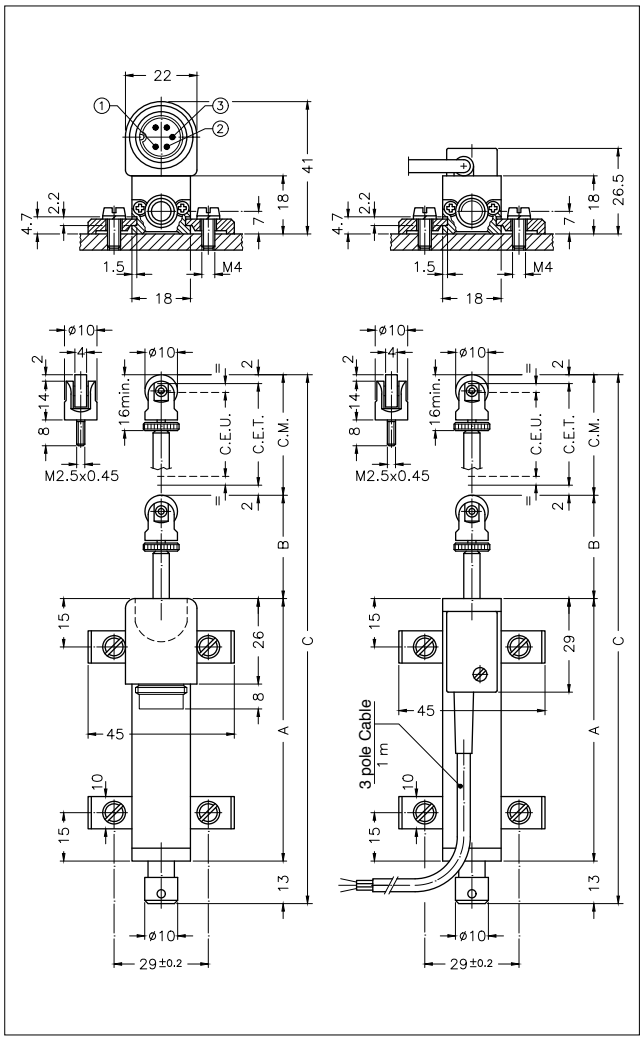
MAIN FEATURES

- *From 10mm up to 150 mm*
- *Double rod support and internal return spring*
- *Tip with M2.5x0.45 threaded shank and stainless steel ball bearing*
- *Independent linearity up to ±.0.05%*
- *No change in electrical output signal, outside the theoretical electric stroke*
- *Suitable for use in environments with danger of explosion with the presence of gas (groups IIA, IIB and IIC) and combustible dusts.*
  Simple apparatus regulatory:
  ATEXCEI EN 50020 2003– paragrafo 5.4 a

MECHANICAL DIMENSIONS

Useful electrical stroke (C.E.U).	10/25/50/75/100/125/150
Independent linearity (within C.E.U.)	See table
Resolution	Infinite
Electrical connections	SIN-Wxx-C 3-pole shielded 1m cable SIN-Wxx-P 5-pin connector DIN43322
IP protection degree IP40	IP40
Displacement speed	Standard ≤ 10 m/s
Displacement force	≤ 4 N
Vibrations	5….2000 Hz, Amax = 0.75 mm amax. = 20 g
Shock	50g, 11 ms
Operational acceleration	200 m/s2 max (20g)
Tolerance on resistance	± 20 %
Recommended cursor current	< 0.1 µA
Maximum current in the circuit of cursor in case of malfunction	10 mA
Maximum applicable voltage	See table
Electrical isolation	> 100 MΩ at 500 V =, 1bar, 2s
Dielectric strength	< 100 µA at 500 V~ , 50Hz, 2s , 1 bar
Dissipation at 40°C (0W at 120°C)	3W
Resistance thermal coefficient	-200 …. +200 ppm/°C typical
Effective thermal coefficient of the output voltage	≤ 5 ppm/°C typical
Working temperature	- 30…+100°C
Storage temperature	- 50…+120°C
Case material	Anodised aluminium, Nylon 66 G25
Control rod material	Stainless steel AISI 303
Fixing	Variable wheelbase brackets

MECHANICAL DIMENSIONS

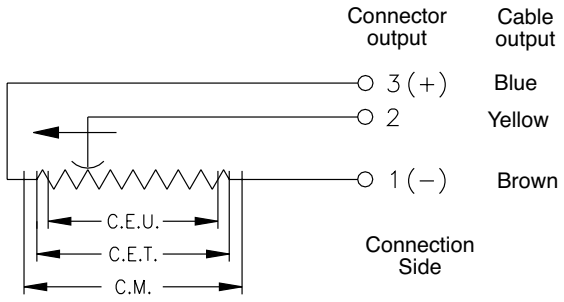


Important: all the data reported in the catalogue are valid for a sensor utilization as a ratiometric device with a max current across the cursor Ic ≤ 0.1 mA.

MECHANICAL / ELECTRICAL DATA

MODEL		10	25	50	75	100	125	150
Useful electrical stroke (C.E.U.) +1/-0	mm	10	25	50	75	100	125	150
Theoretical electrical stroke (C.E.T.) ±1	mm	11	26	51	76	101	126	151
Resistance (C.E.T.)	kΩ	1	1	5	5	5	5	5
Independent linearity (within C.E.U.)	± %	0,3	0,2	0,1	0,1	0,1	0,05	0,05
Dissipation at 40° (0W at 120°C)	W	0,2	0,6	1,2	1,8	2,4	3	3,6
Maximum applicable voltage	V	14	25	60	60	60	60	60
Mechanical stroke (C.M.)	mm	C.E.U. + 5						
Case length (A)	mm	60,8	75,8	112,7	149,1	185,1	221,6	270,1
Tip length (B)	mm	16,7	29,9	24,4	28	23,6	23,6	23,6
Total length (C)	mm	105,5	148,7	205,1	270,1	326,7	388,2	461,7

ELECTRICAL CONNECTIONS

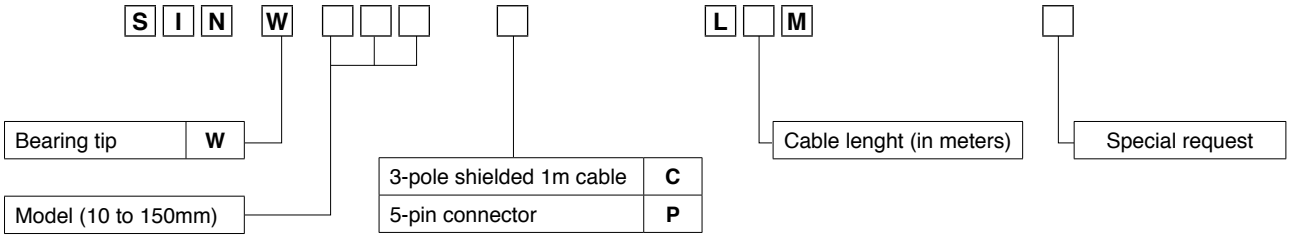


INSTALLATION INSTRUCTIONS

- Respect the indicated electrical connections (DO NOT use the transducer as a variable resistance)
- When calibrating the transducer, be careful to set the stroke so that the output does not drop below 1% or rise beyond 99% of the supply voltage.

ORDER CODE

Displacement transducer SIN-W



E.g. SIN-W-010-C-L01M

SIN-W rectilinear displacement transducer with bearing tip and internal return spring, useful electrical stroke (C.E.U.) 10mm, 3-pole 1m shielded cable.

ACCESSORIES (standard)

PKIT005	Fixing KIT: 4 brackets, M4x10 screws , grower
PTAS001	Tip with bearing

ACCESSORIES (on demand)

CON011	Axial 5-pole DIN43322 female connector, IP40 cable clamp for ø4-ø6 mm cable
CON012	Axial 5-pole DIN43322 female connector, IP65 cable clamp PG7 for ø4-ø6 mm cable
CON013	90° radial female connector 5-pole DIN43322, IP40 cable clamp for ø4-ø6 mm cable

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