

# Position Transducer Model DL/SU (universal sensor)

## Digital Indicator (DL/SU/I) (optional)

### Technical Characteristics Assembly Diagram



# Position Transducer/Indicator Model DL/SU

## Technical Characteristics

Electrical, Environmental and Housing Characteristics	
Supply	Universal 80 – 265 V
Supply isolation	1500 V (power supply against any other terminal)
Operating temperature	-10 to 85 °C
Storage temperature	-10 to 85 °C
Operating humidity	10 to 95% without condensation
Electromagnetic compatibility	Immune up to 0.5 mT
Electrostatic compatibility	Immune
Consumption	≤ 1.5 W
Housing and connection diagram	Dwg. TR0002/I rev. 0
Assembly	DIN 35 mm rail
Dimensions (W x H x L)	75 x 22 x 110 mm
Weight	210 g
Wire cross section	≤ 2.5 mm <sup>2</sup>
Proof tests	Impulse voltage, according to NBR 716 and IEC 255.5 Switching surge, according to ANSI C. 3790 a. Applied voltage/ground, 2000 V, 50/60Hz, 1 min. Megger 500 Vdc: isolation better than 100 MΩ

Technical Characteristics - Sensor	
Sensor type	Potentiometric, 3 wire configuration

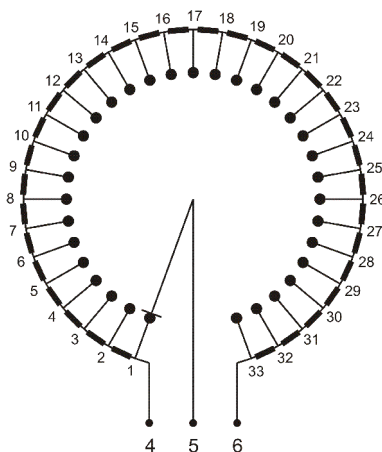
Technical Characteristics - Transducer	
Precision	0.25% or 0.50% (user specified)
Proportional output	Voltage or current (user specified)
Temperature drift	0.1% / 10 °C
Response time	≤ 400 ms (0 to 90% of the output current)
Ripple	≤ 2%
Line resistance	$R_l \leq \frac{15}{I_{out} [Amperes]} [Ohms]$

Technical Characteristics - Indicator	
Display	3 ½ digits, 7 segment LED displays
Indication accuracy	0.5% ± 1 digit
Scale	User adjustable up to ± 5%

The DigiLoop/SU position transducer can be connected to any resistor association, regardless of the number of resistors or the resistance per position, as long as:

1. All resistors are identical
2. The total resistance (of all associated resistors) is equal or greater than 30  $\Omega$ .

Note: No adjustment or calibration is required. The transducer automatically adjusts itself to each sensor (potentiometric disk).



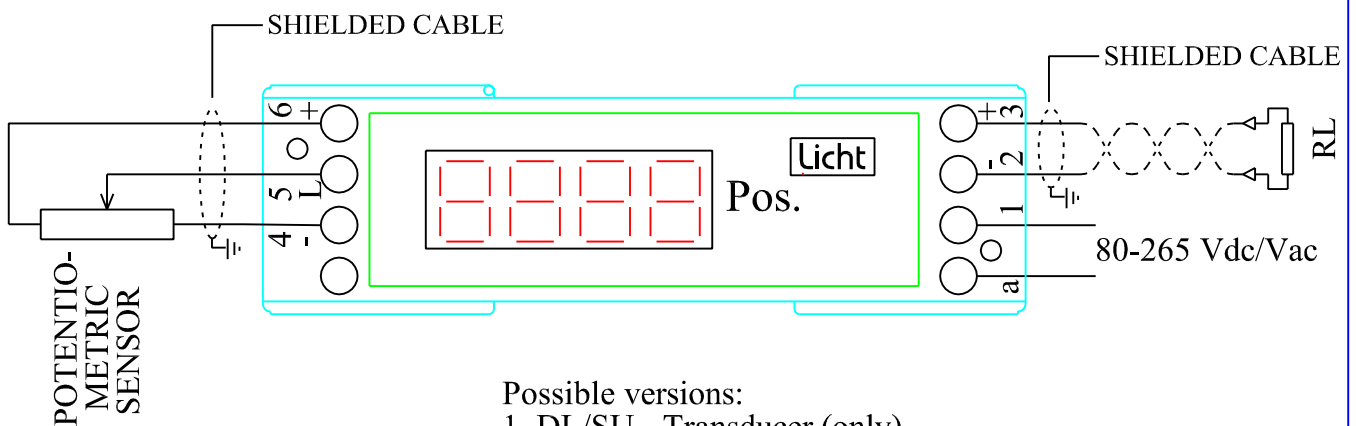
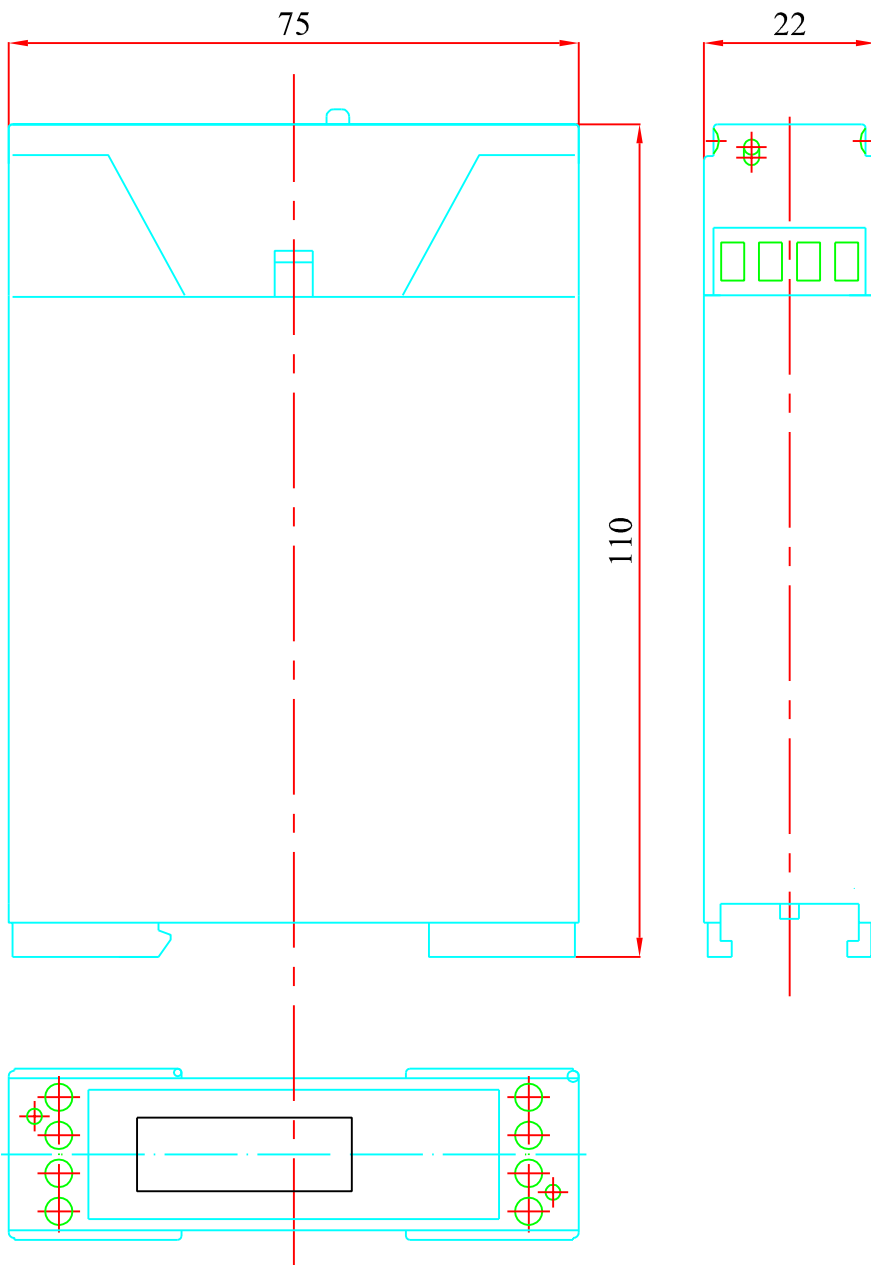
*Typical potentiometric disc  
(33 positions, 32 resistors)*



*Standalone transducer*



*Transducer with two outputs*



Possible versions:

1. DL/SU - Transducer (only)
2. DI/SU/I - Transducer with indicator
3. DI/I - Indicator (only)

Aceito Cont. Qualid.	Aceito Produção:	<b>DL/SU TRANSDUCER+ INDICATOR</b>	Escala Ref.	
Projeto Conf.	Des. Por. N/A			
Des. Conf.	Emit. Depto Data. 09/12/05	<b>Dwg. TR002/I-rev.0</b>	Alt. Num.	Folha
<b>Licht Eletro Eletrônica</b>				1/1