Incremental Displacement Transducers OC30 and OC50

- ✓ 30 or 50mm Measuring Ranges
- ✓ 5µm or 10µm Increments
- ✓ 5 digit Display 0 - 50.000
- ✓ Analogue Output 0-10V and 0/4-20mA
- ✓ Serial Data Ports RS232, RS485
- ✓ Two Set Point Relay
- ✓ Supply 230VAC or 24VDC

OC30 and OC50 are high precision optical transducers for direct precision measurements of mechanical displacement in control and measuring applications. The transducers have high accuracy and repeatability, reliability and fast response. The moving rod is suspended by a spring which returns the rod into the initial position.

The displacement transducers OC30 and OC50 can be directly connected to Orbit Controls incremental controller OC7171A-50. The digital display increments in 5 µm or 10 µm steps and can be set to zero with the front keyboard to tare the initial readings. With the same keyboard the tare can also be cancelled causing the display to return to the original reading.

Analogue Outputs 0-10V and 0/4-20mA as well as two Serial Data Ports RS232 and RS485 are available for further data acquisition purposes.

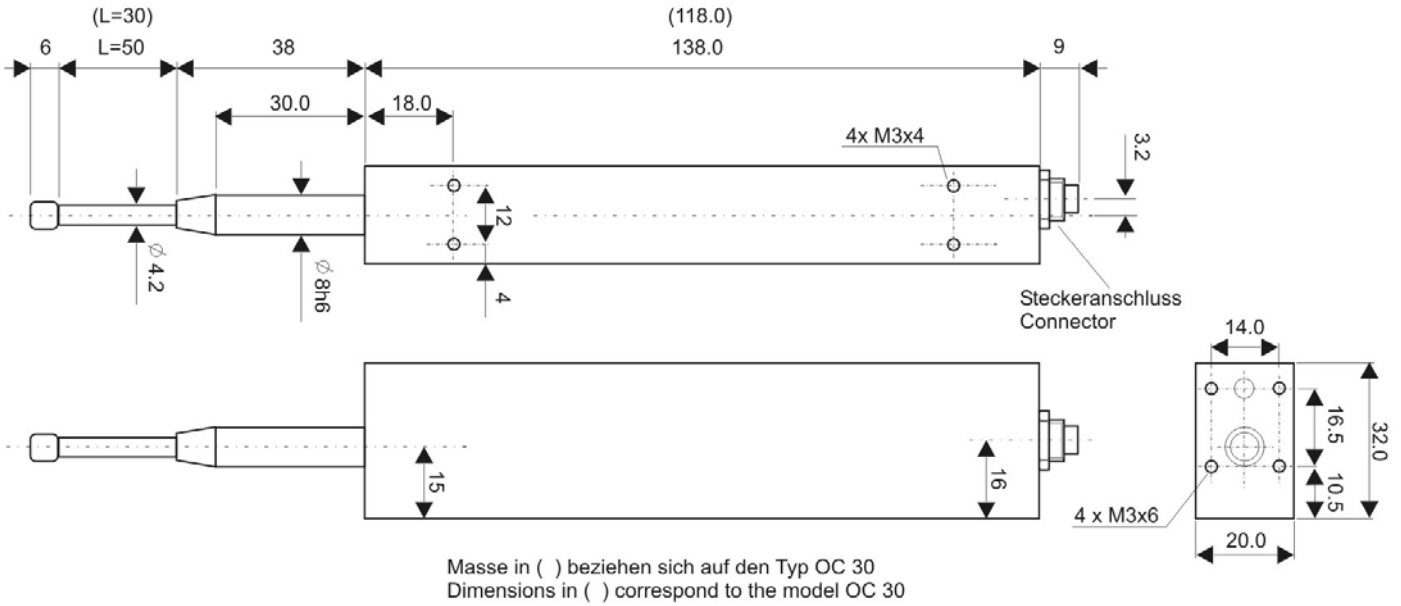
Two Set Point Relays can be programmed within the entire display range. They are activated as soon as the display exceeds the selected value.

SPECIFICATIONS

Range:	30mm (OC30) or 50mm (OC50)
Increments:	5 µm or 10 µm
Speed:	up to 2m/sec (10 µm) up to 1m/sec (5 µm)
Detached top:	Thread M2.5
Detached force:	Spring with 0.8N ± 0.2N
Output:	TTL Quadrature Signals A,B or Line Driver ± 20mA
Frequency:	100 kHz max.
Supply:	5V ±5%, 50mA max.
Weight:	20g measuring rod 200g whole transducer
Dimensions:	20 x 32 x 176 mm (W x H x L)
Terminals:	1m cable or a connector
Environment:	Working temperature 0-60 °C, relative humidity 95% max.

Process Controller OC7171A-50

DIMENSIONS



TERMINALS

Connector Pin	Cable Color	OC30 and OC50 Push-Pull, OC-NPN	OC30 and OC50 Line Driver, OC-NPN	OC30 and OC50 TTL
1	white	signal A		
2	yellow	signal B		
3	brown	10 … 30V supply	5V supply	
4	green	GND supply		
5	grey	signal A inverted		no connection
6	rose	signal B inverted		no connection
	screen	screen		

TO ORDER **OC 30 - X - X - X - X**
OC 50 - X - X - X - X

Without reversing spring …….....	0				
With reversing spring …….....	1				
Output	10...30V, push-pull	0			
	10…30V, Transistor OC.....	1			
	5V, Transistor OC	3			
	5V, Line Driver …….....	5			
	5V, TTL..……	6			
Increment	10µm ……		1		
	5µm……		2		
Connections	1m cable ……				0
	Connector ……....				1

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