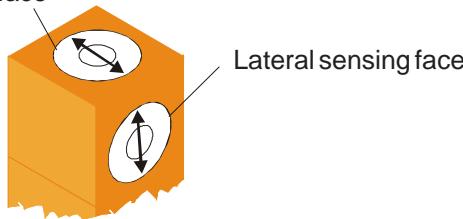


DESCRIPTION

The ERC 71 is an R/W head intended for reading /writing data to/from OMX Series electronic tags; it has to be connected to an appropriate Balogh control board (suffix: X).

The tags can pass near either sensing face along the marked direction:

Front sensing face



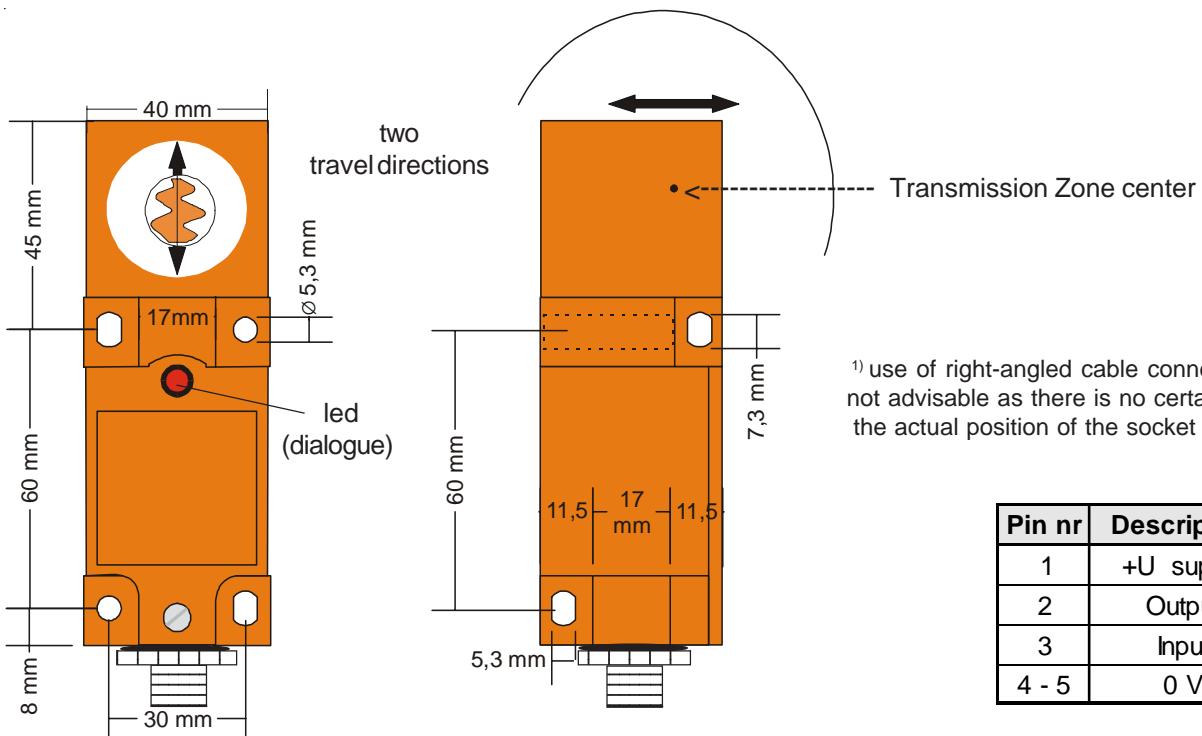
DATA FOR ASSEMBLY

Connection:

The ERC 71 is fitted with a 5-pin M12 male metallic connector.

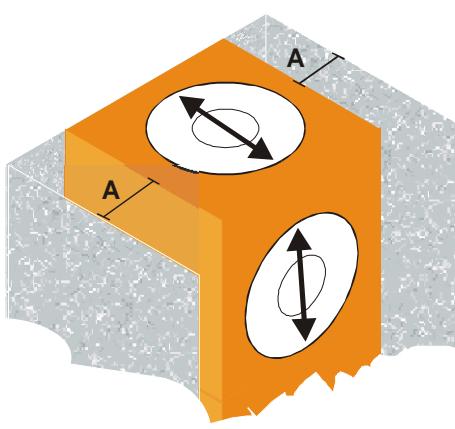
Use an assorted cable connector¹⁾ and a cable with Twin Shielded and Twin Twisted pairs, with or without an overall foil/braid shield, complying with the following:

- Max. length: 50 m.
- Overall max. capacity between conductors and shield: 14 nF.
- Input and Output leads must be apart.
- The shield of either pair must be connected to the pin nr 5.
- The optional overall shield must be in contact to the cable connector metal housing over 360°.



¹⁾ use of right-angled cable connector is not advisable as there is no certainty on the actual position of the socket keying.

Pin nr	Description
1	+U supply
2	Output
3	Input
4 - 5	0 V

C H A R A C T E R I S T I C C S A S S E M B L Y R E C O M M E N D A T I O N S	Tags								
	OMX 931								
FUNCTIONAL	Parameters		MIN	TYP	MAX	Unit			
	S_n "nominal" range			25		mm			
	S_r recommended range		from S_{min} to $0.4 \times S_n$			mm			
	S_{min} operation lower threshold		3			mm			
	LS_r transmission zone length @ S_r max		65			mm			
	$D_{\text{ét}}$ distances between two tags		100			mm			
Test conditions:									
<ul style="list-style-type: none"> - ERC and tag in a non metallic environment. - Max. allowed offsets to have at least the published value for LS_r : <ul style="list-style-type: none"> Angular: $\pm 20^\circ$ Lateral: ± 12 mm. 									
Electronics	Parameters		MIN	NOM	MAX	Unit			
	Ambient temperature		- 25		+70	°C			
	Supply direct voltage (ripple included)		21	24	29	V			
	Supply current @ 24VDC				90	mA			
	Protection against polarity reversal			yes		-			
	Transmission frequency			1.5		MHz			
General	Casing		PA 12 (30%GF)			-			
	Weight		200			g			
	Protection rating		IP 65			-			
The head is not to be mounted directly in a recessed metal cavity. A minimum metal-free clearance surrounding the head is required:									
$A > 20$ mm									
									
To avoid interference between two ERC 71, there must be a minimum space between them along the chosen travel direction:									
									