

INDUSTRY Range

R/W head

TCF932

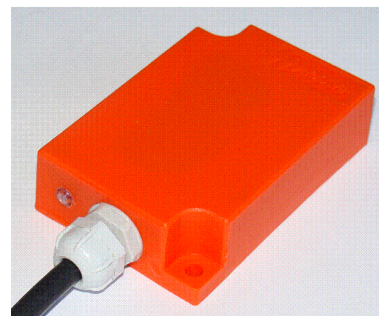
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GENERAL FEATURES

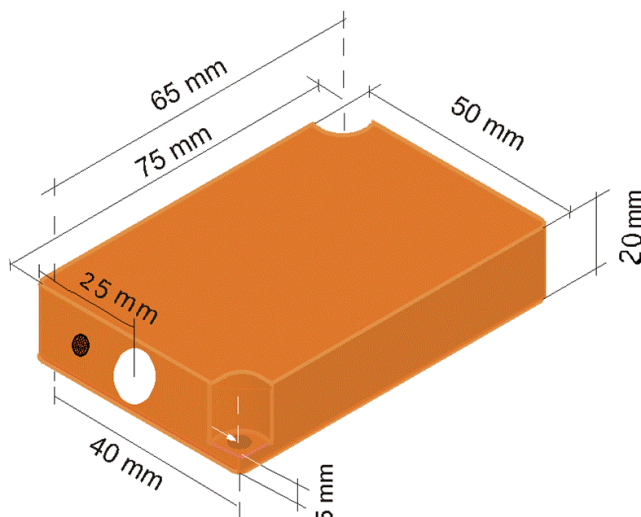
TCF 932 is an R/W head allowing to exchange data with tags TAI or TAM without contact, using a protocol compliant with the standards ISO 18000-3 mode 1 and ISO 15693.

It has to be linked up to a Balogh interface, chosen among:

- BI**170 McMc (for the tag TAI) or BI**170 TT (for the tag TAM)
- CEPR96* (programmable)



ASSEMBLY DATA



Assembly using two screws (2xØ4, right-angled distances : 65x40 mm)

CONNECTION

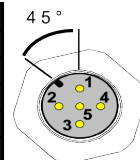
The TCF932 is fitted with a 2m cable and a connector 5 pin M12 metallic male.

Use a corresponding female cable connector(A-coded, réf. 202 274) and a shielded cable with the following characteristics:

- max length : 50m,
- overall max. capacity between conductors and the shield :10nF.

The shield must be in contact to the cable connector housing 360° round crimping.

PIN Nr	Description	Wire Colour
1	+24 Vdc	brown
2	Output	white
3	Input	blue
4	0 V	black
5	0 V	green/yellow



CHARACTERISTICS

TCF932 (TAG without metal ; reader on metal)	TAG			
	TAI19x19 IC SLI	TAI50x50 IC SLI	TAI29 Label IC SLI	TAI29 Inlay IC SLI
S _n "nominale" range (mm)	35	75	35	30
S _r recommanded range (mm)	20	45	20	15
LS _r Lenght of transmission zone @ S _r (mm)	25	60	25	20
D _{tt} distance tags end to end (mm)	120	200	100	120
D _{er} distance transceivers end to end (mm)	120	130	120	120
D _{ef} distance transceivers face to face (mm)	120	130	120	120
TCF932 (TAG without metal ; reader on metal)	TAG			
	TAI20 IC SLI	TAI20 2K FRAM	TAI30 IC SLI	TAI30 2K FRAM
S _n "nominale" range (mm)	25	20	40	35
S _r recommanded range (mm)	15	14	25	20
LS _r Lenght of transmission zone @ S _r (mm)	20	20	35	30
D _{tt} distance tags end to end (mm)	120	120	140	130
D _{er} distance transceivers end to end (mm)	120	120	120	120
D _{ef} distance transceivers face to face (mm)	120	120	120	120
TCF932 (TAG without metal ; reader on metal)	TAG			
	TAI50 IC SLI	TAI50 2K FRAM	TAM931 32K	TAM931 8K ou 2K
S _n "nominale" range (mm)	60	65	20	30
S _r recommanded range (mm)	35	40	14	21
LS _r Lenght of transmission zone @ S _r (mm)	50	55	20	30
D _{tt} distance tags end to end (mm)	170	190	100	160
D _{er} distance transceivers end to end (mm)	140	140	120	120
D _{ef} distance transceivers face to face (mm)	140	140	120	120

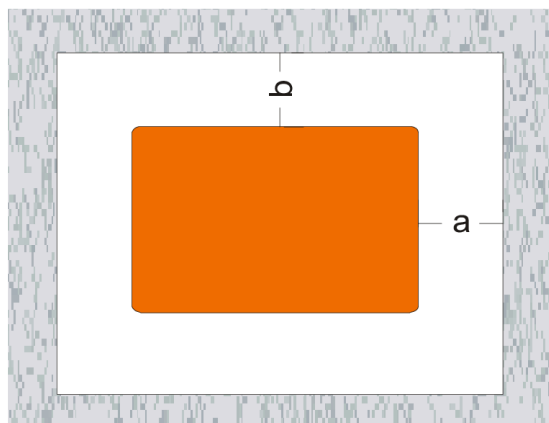
	min	nom	max	unit
Power				
Supply direct voltage (ripple included)	21	24	29	V
Protection against polarity reversal		yes		-
Supply current @24V			120	mA
Electronic				
Protection against short-circuits		yes		-
Carrier frequency		13,56		MHz
General				
Casing		PA12 (30% FV)		-
Operating temperature	-25		70	°C
Protection rating		IP65		-
Weight		220		g

ASSEMBLY RECOMMENDATIONS

- **The head is not to be mounted directly in a recessed metal cavity .**
A minimum metal-free clearance is required round the head.

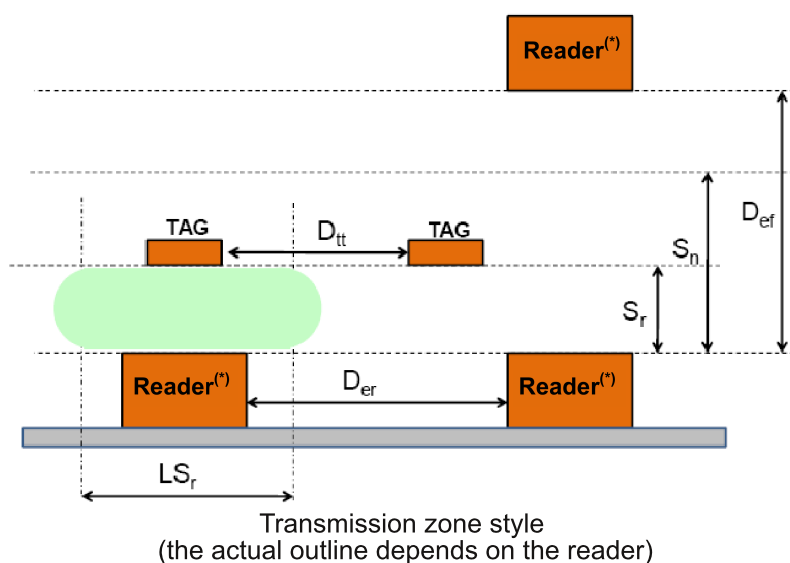
$a = 30 \text{ mm}$

$b = 30 \text{ mm}$



• Important:

To avoid interference between two TCF932, there must be a minimum space (D_{er}) between them (refer to the above table)



S_n	"nominale" range
S_r	Recommanded range
LS_r	Lenght of transmission zone at S_r
D_{er}	Distance transceivers end to end
D_{ef}	Distance transceivers face to face
D_{tt}	Distance tags end to end
(*)	Reader or Monoblock

ACCESSORY

M12 Female connector A-coded, ref 202274

For various possibles interfaces, Balogh proposes cables with straight connector(s)

- PUR cordset 5 m (réf. 495XXB4512) for BI interfaces (refer to accesories corresponding data sheet),
- PUR cable FFMD5/12 (lenght 2, 10 or 15 m) for the others interfaces.