

## Data sheet

Commercial Art.No.: R1.450.1110.0

safe HTL encoder SAFE HTL ENCODER SENC-58H14HTL0360R

Safe HTL Encoder, SIL3, PLe, Hollow shaft, Size 58mm, Aluminium, 14 mm shaft diameter, Power supply 11-30V, digital HTL output (AA/, BB/, ZZ/), 360ppr, M23, 12 pins, Counter-Clockwise wiring, Radial



Commercial Art.No.	R1.450.1110.0
EAN	4049088521744
Order Unit	1

certificates / approvals



## Technical data

### general

nominal voltage	24 V
operating voltage min.	11 V
operating voltage max.	30 V
galvanic isolation	no
rated current	100 mA
ambient temperature min.	-20 °C
ambient temperature max.	85 °C
storage temperature / transport min.	-20 °C
storage temperature / transport max.	85 °C
degree of protection (IP)	IP65
standards	IEC 61508, IEC 13849-1, IEC 61800-5-2, IEC 62061

### safety parameters

category (ISO 13849-1)	4
PL (ISO 13849-1)	level e
SIL <sub>Cl</sub> (IEC 62061)	3
PFD <sub>d</sub> (Low demand mode)	6.6 E-5
PFH <sub>d</sub> (High demand mode)	7.53 E-10 1/h
HFT	1
DC	99 %
MTTF <sub>d</sub>	1515 a

T <sub>M</sub>	20 a
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**mechanical data**

housing material	die-cast zinc
shaft material	AISI 303 stainless steel
bearing type	series 6803 - sealed
mechanical life time	>24*10 <sup>9</sup> rotations/ 100000 hours
weight	280 g

**electrical data**

output signal	digital HTL-Signal (11-30V DC)
pin coding	A,A',B,B' for safety incremental Pulses
color-coding encoder cable	A:grey,A':pink,B:brown,B':green,O:red,O':black,+V:blue and green/brown, 0V:white und white/green
resolution	360 ppm
short-circuit protective device	yes
reverse polarity protection	yes

**safety-related data**

PFD avg. speed monitoring for 40°C	6.60E-05
PFH speed monitoring for 40°C	7.53E-10
MTTFd speed monitoring for 40°C	1515
DCavg speed monitoring for 40°C	99 %
mission time speed monitoring for 40°C	20 a
PFD avg. speed monitoring for 80°C	2.97E-04
PFH speed monitoring for 80°C	7.53E-10
MTTFd speed monitoring for 80°C	336
DCavg speed monitoring for 80°C	99 %
mission time speed monitoring for 80°C	20 a
PFD avg. position monitoring for 40°C	6.60E-05
PFH position monitoring for 40°C	7.53E-10
DCavg position monitoring for 40°C	99 %
mission time position monitoring for 40°C	20 a
PFD avg. position monitoring for 80°C	2.97E-04
PFH position monitoring for 80°C	3.39E-09
DCavg position monitoring for 80°C	99 %
mission time position monitoring for 80°C	20 a
PL category	PLe/Kat4
SIL <sub>CL</sub> (IEC 62061)	SIL3

**classification**

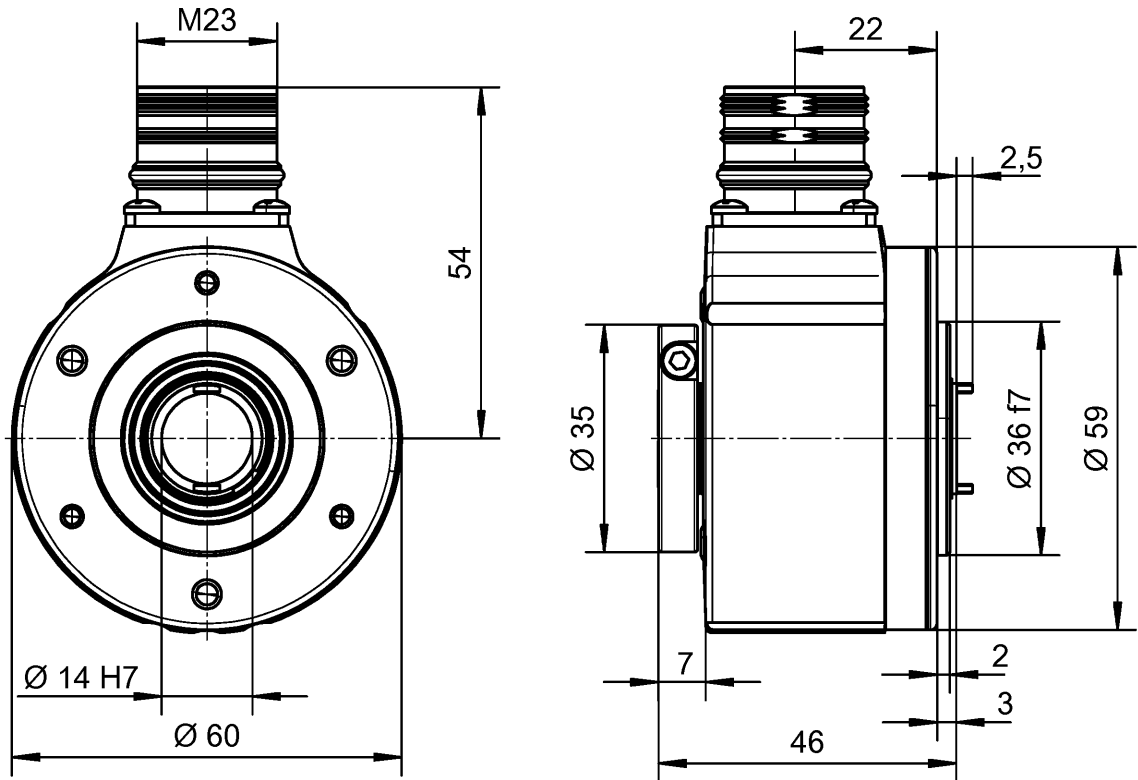
ECLASS 11	27272500
ECLASS 8.1	27272590
ETIM 9.0	EC001486
ETIM 8.0	EC001486
ETIM 7.0	EC001486
ETIM 6.0	EC001486
ETIM 5.0	EC001486

**product compliance**

ROHS conformity status	compliant
REACH-SVHC conformity status	compliant

## Accessories

Commercial Art.No.:	Article-type description:	Description:
R1.450.9110.0	stator coupling SAFE HTL ENCODER COUP-STATOR-58-S	Stator coupling for, Size 58mm , Stainless-Steel
R1.450.9120.0	tether arm coupling SAFE HTL ENCODER COUP-TETHER-58-S	Tether arm coupling for, Size 58mm , Stainless-Steel
R1.450.9210.0	flange adapter SAFE HTL ENCODER FLANGE-58-A	Flange adapter, Size 58mm , Aluminium
R1.450.9310.0	encoder cable SAFE HTL ENCODER CABLE-M23CKW-PUR-015	Encoder cable, 1,5 m, Head A:M23, 12 pins, Clockwise connector, Counter -Clockwise wiring, Cable:PUR, shielded, M23, 12 pins, Counter-Clockwise wiring, Head B: free end
R1.450.9314.0	encoder cable SAFE HTL ENCODER CABLE-M23CKW-PUR-030	Encoder cable, 3 m, Head A:M23, 12 pins, Clockwise connector, Counter-C lockwise wiring, Cable:PUR, shielded, M23, 12 pins, Counter-Clockwise wi ring, Head B: free end
R1.450.9320.0	encoder cable SAFE HTL ENCODER CABLE-M23CKW-PUR-050	Encoder cable, 5 m, Head A:M23, 12 pins, Clockwise connector, Counter-C lockwise wiring, Cable:PUR, shielded, M23, 12 pins, Counter-Clockwise wi ring, Head B: free end
R1.450.9324.0	encoder cable SAFE HTL ENCODER CABLE-M23CKW-PUR-070	Encoder cable, 7 m, Head A:M23, 12 pins, Clockwise connector, Counter-C lockwise wiring, Cable:PUR, shielded, M23, 12 pins, Counter-Clockwise wi ring, Head B: free end
R1.450.9330.0	encoder cable SAFE HTL ENCODER CABLE-M23CKW-PUR-100	Encoder cable, 10 m, Head A:M23, 12 pins, Clockwise connector, Counter- Clockwise wiring, Cable:PUR, shielded, M23, 12 pins, Counter-Clockwise w iring, Head B: free end
R1.450.9335.0	encoder cable SAFE HTL ENCODER CABLE-M23CKW-PUR-150	Encoder cable, 15 m, Head A:M23, 12 pins, Clockwise connector, Counter- Clockwise wiring, Cable:PUR, shielded, M23, 12 pins, Counter-Clockwise w iring, Head B: free end
R1.450.9340.0	encoder cable SAFE HTL ENCODER CABLE-M23CKW-PUR-200	Encoder cable, 20 m, Head A:M23, 12 pins, Clockwise connector, Counter- Clockwise wiring, Cable:PUR, shielded, M23, 12 pins, Counter-Clockwise w iring, Head B: free end



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Teile-Nr. / Part No.	Typ / Type
R1.450.1110.0	SENC-58H14HTL0360R
R1.450.1120.0	SENC-58H14HTL0512R
R1.450.1130.0	SENC-58H14HTL1024R

Weitere Angaben siehe KATALOG oder eKatalog.  
Additional data see CATALOG or eCatalog.

[www.wieland-electric.com](http://www.wieland-electric.com)  
[eshop.wieland-electric.com](http://eshop.wieland-electric.com)

ja/yes  Stoffverbots- und Deklarationsliste nach WN 5020.010 ist einzuhalten.  
Conformity with Wieland document WN 5020.010 e (list of prohibited / declarable hazardous substances) to be declared!

Freitoleranz nach General tolerance		CAD-Zeichnung, keine manuellen Änderungen CAD-Drawing, no manual modifications allowed			1. Verwendung: First Use:		Blatt: Sheet:		
		Werkstoff/ Material		2018	Tag/ Date	Name	Zeichnung Nr./ Drawing No. <b>T R1.450.1110.0 01K</b>		
				gezeichnet drawn	13.12.	Koetzner			
Maßstab/Scale		geprüft checked		Normgepr. Stand. check		Datei/ File: 046221_01K/R1.450.1110.0.DCD			
Datei/ File: 046221_01K/R1.450.1110.0.DCD		Ersatz für/ Replacement for:		Type	Benennung/ Title Teilespezifikation / Component specification SENC - sicherer HTL-Drehgeber / safe HTL-encoder				
Index	Datum/ Blatt Date/ Sheet	 www.wieland-electric.com							
Änderung/ Revision									