

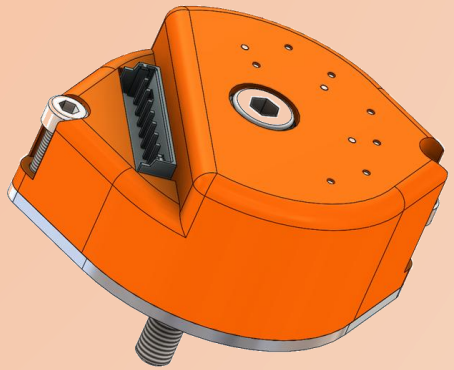
OptiSens (Sendix S19) | a new motor feedback encoder for servo motors

OptiSens



Motorfeedback System: compact – bearingless – optical – multiturn Encoder

Performance up – cost down – Single cable



High resolution & System accuracy

- Singleturn resolution 24 bit – optical scanning
- Multiturn resolution 12 bit – mechanical gearbox
- System accuracy < 60” – thanks to innovative auto calibration algorithm

Very compact design

- Fits even into 40mm Motor
- Only 19 mm installation depth

Extremely robust design – resistant to shock/ vibrations and contamination

- Stainless steel code disc
- One-PCB Design, no ball bearings
- No mechanical adjustment necessary, no screws inside
- LED and photodiodes on same chip by reflective scanning
- Optical sensor is protected against contamination from motor and brake

Quick and easy installation and calibration

- Tapered shaft with M4 screw und two M3 screws for flange mounting
- 5 s auto calibration procedure – also works at non-constant speed

Confidential presentation



High operating temperature, ready for critical applications

- -40°C – 120 °C
- No ball bearings → no self-heating

Various interfaces incl. One Cable Technology

- BiSS-C
- SSI
- OCT

Customizable

- Flange, shaft and connectors can be adapted to customer needs

Safety

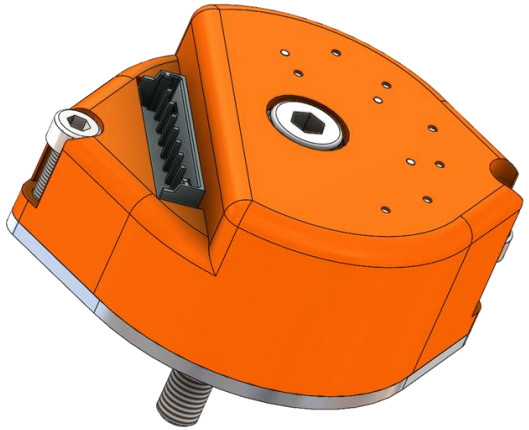
- Safe and standard versions - SIL 2

Confidential presentation

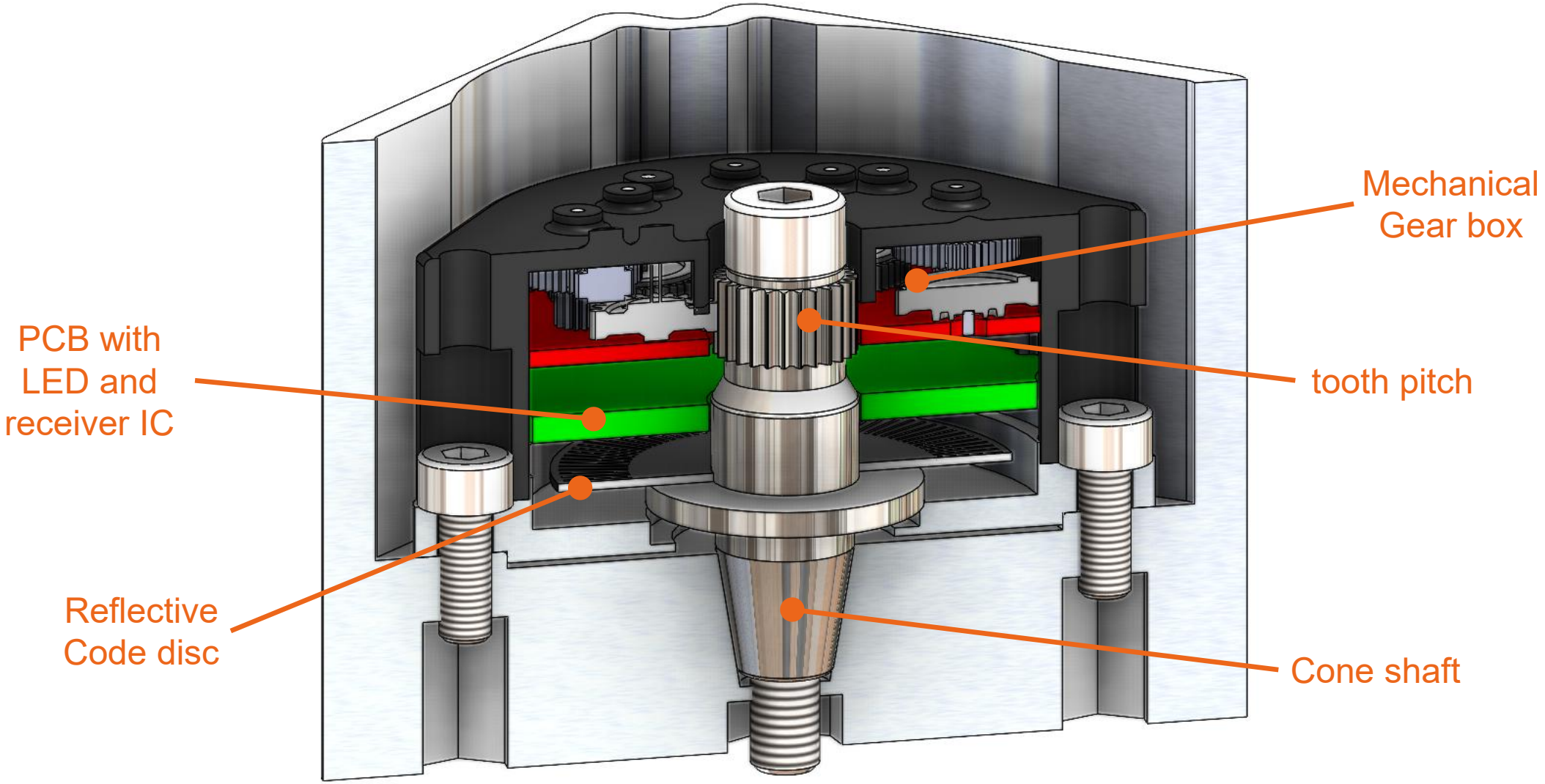
OptiSens

Product details





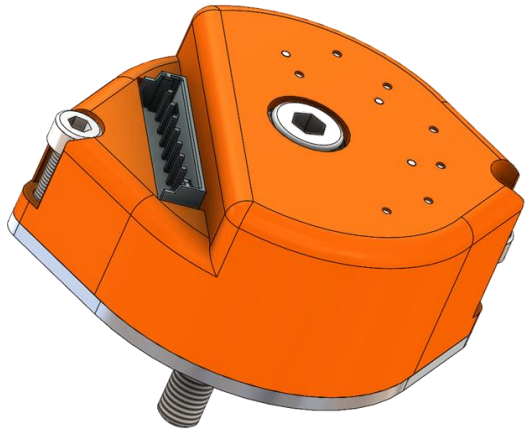
OptiSens - functional principle



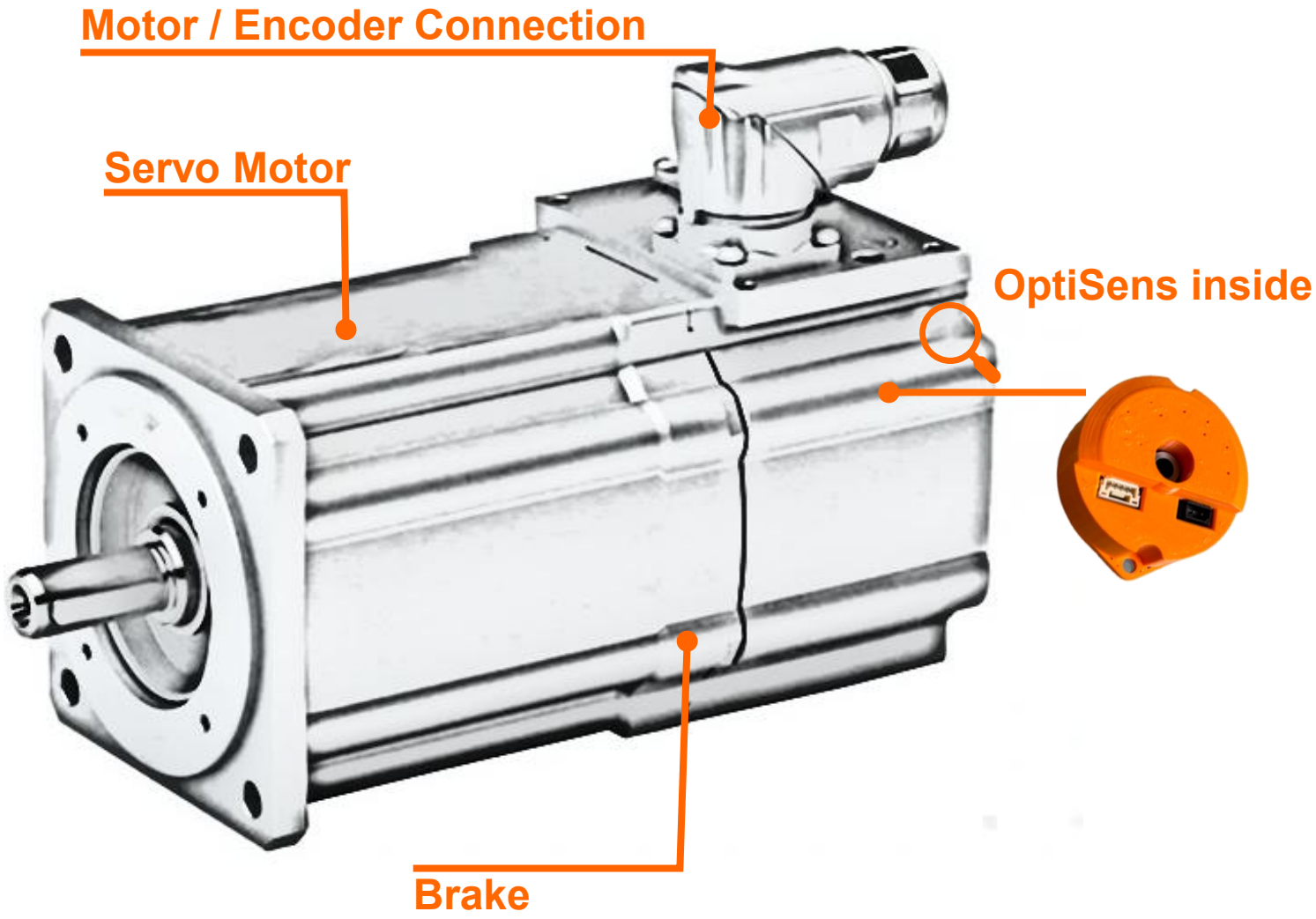
OptiSens - Specification

preliminary

Parameter		Comment
Dimensions	Ø 37 mm	outer diameter
	L 19 mm	installation depth (without plug)
Flange, circle for attachment	38 mm	2x M3 screws **unlosable**
Shaft	Cone 1:3, M4 screw	stainless steel
ST Technology	optical	
MT Technology	gearbox	
Max rotational speed	9.000 rpm	
Mech. Tolerances	Axial: ± 0,5 mm	
Nominal voltage	5 VDC ± 5% (BiSS-C)	7 – 12 VDC OCT
Resolution	ST 24 bit	
	MT 12 bit	
Accuracy	< ± 60”	with autocalibration
Interface	BiSS-C / OCT	OCT = one cable technology digital name plate for BiSS / OCT
Schutzklasse	IP20	
Connection type	PCB connector	Optional with temp. sensor input
Operating temperature	-40°C … 120°C	



OptiSens Inside a motor: At at glance



- Higher resolution & higher SYSTEM accuracy
- Various interfaces
- Unbreakable stainless steel code disc
- Digital name plate
- Easy and fast installation
- Reduced installation depth
- Protection against contamination from motor and brake