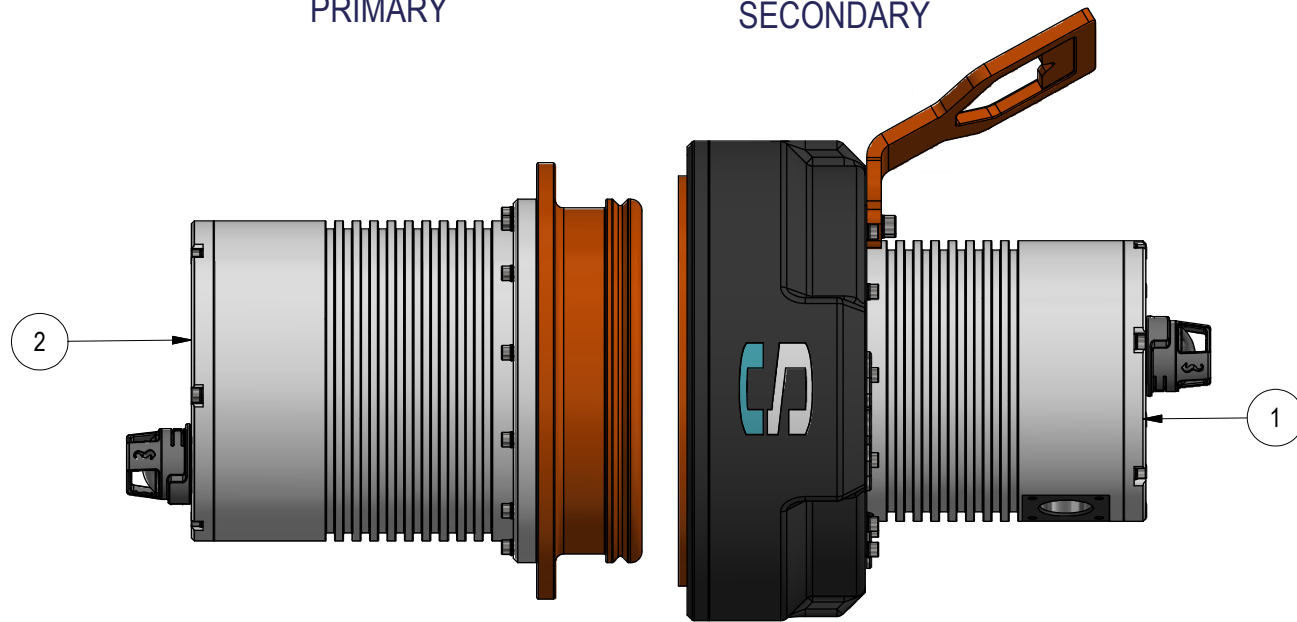


Parts List			
ITEM	PART No.	TITLE	e-Sea WebLink
1	BB8029	F45-140 Sec-Flange Perm 2,5kW 325VDC Ethernet	https://e-sea.bluelogic.no/main.aspx?page=article&artno=BB8029
2	BB7133	F45-140 Pri-Flange Perm 2,5kW 400VDC Ethernet	https://e-sea.bluelogic.no/main.aspx?page=article&artno=BB7133

LONG-TERM PROGRAM

PRIMARY

SECONDARY

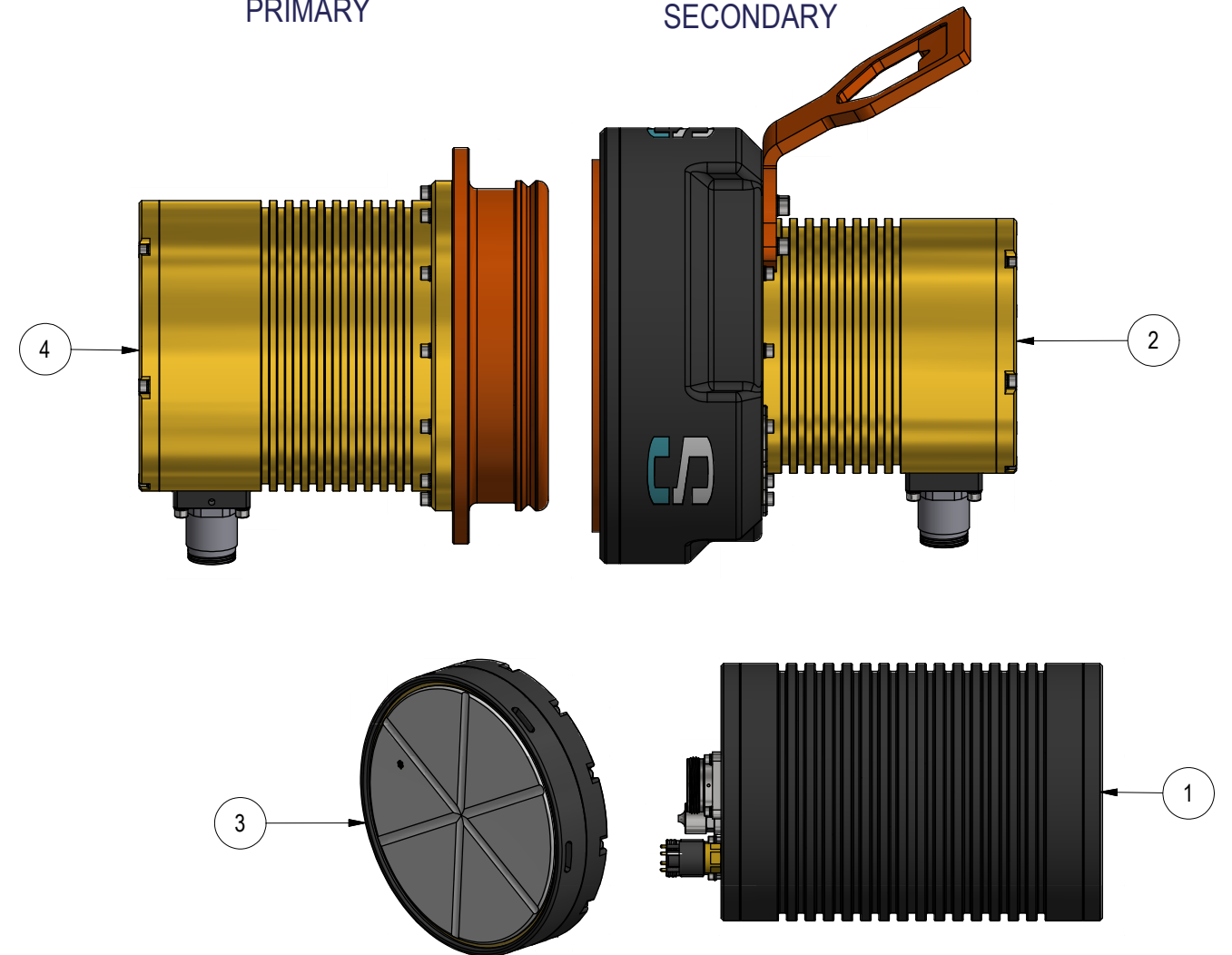


Parts List			
ITEM	PART No.	TITLE	e-Sea WebLink
1	BC0821	Type D 2kW Gen2 Electronics 120-185V Charge	http://e-sea.bluelogic.no/main.aspx?page=article&artno=BB8762
2	BB9064	F45-140 Sec-Flange 2,5kW 325VDC Ethernet Golden Unit	https://e-sea.bluelogic.no/main.aspx?page=article&artno=BB9064
3	BB7856	Type D 2kW Coil for External Electronics	on request
4	BB7520	F45-140 Pri-Flange 2,5kW 400VDC Ethernet Golden Unit	https://e-sea.bluelogic.no/main.aspx?page=article&artno=BB7520

INTERVENTION PROGRAM

PRIMARY

SECONDARY



NOTE: 1

ADDITIONAL INFORMATION:

The Subsea USB F45-140 system is based on the Unplugged inductive technology for transfer of electrical power and communication subsea. The F45-140 connector system is part of the complete "Subsea-USB" system covering power range from 50W to 3000W with communication speeds up to 1 Gbit/s.

In general, each Inductive system consists of a Primary (TX) and a Secondary (RX) side installed in a ROV friendly housing. The power is transferred from the Primary side to the Secondary side whilst communication is operated in full duplex.

The F45-140 Connectors can be configured:

1. Manually operated by hand
2. ROV/UID/AUV operated.
3. Tether connection
4. Bulkhead piggy backed on other equipment.

400VDC +/- 10% (DC-FO) input voltage and 325VD +/- 5% 7,7A output at the secondary side. A telemetry/diagnostic interface is available on the ethernet interface. Approx. efficiency of the inductive connectors, end to end is >90%. The inductive coils are galvanically isolated from each other and can be regarded as a 1 to 1 transformer. The F45-140 system Secondary side can be configured with RS232 or RS485 (230kbps) and with Ethernet (80Mbps). The Primary side has 2 ethernet channels; one for transparent ethernet and one as a configuration channel. The system has IoT functionality and can operate as a Controllable power supply and thus be configured as a battery charger with CC/CV charge algorithm. The system can control voltage and current using the internal regulation Firmware. This will require special software for both primary and secondary connector. I.e. by use of SW we can control Voltage +/- 20%. Most systems rated to 3000m water depth.

The system can be delivered in the following material types: Aluminium or Super duplex. It is recommended to always include the connector in the CP protection system on the aluminium connector and make sure it is in galvanic contact. Aluminium is designed for short-term (intervention) use.

The super duplex version has been fully qualified according to API17F and API 17H with a design life of 15years+. It has a MK3 PBOF Hose Flange interface enabling permanent installation with Electrical Flying Leads. A dedicated API for Cloud control is also available with condition data delivered to a default cloud connection.

FOR INFORMATION ONLY

Rev.	Date	Reason for issue	Revision change	WTJ	Made	Chk'd	Appr.
01	25.1.2023	3-IFI (Issued for Information)					



Dwg Scale:	NTS
Dwg Proj:	
Dwg Format:	A3

Drawing title:	F45-140 2,5kW Program Gen2
Drawing number:	BB9499

Rev. 01