
ProFoss™ Spare Parts Manual

6003 8793 / Rev. 4



Information may be changed or updated without notice. The latest version is found at www.foss.dk.

Rev.	Date of Issue	Revised Material
1	2009-11-17	First issue.
2	2011-05-12	Spare parts updated.
3	2012-03-30	Spare parts updated.
4	2017-10-23	Revised for Ex/ATEX approval.

Note: Please note that all information is liable to change without prior notice.

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Controlled Reference Page

Note: The design and version of this page must not be changed without the written accept of the Ex authorised person at FOSS Analytical.

For installation in dust environments where Ex/ATEX zoning regulations apply, an EX certified version of the ProFoss must be used and the precautions in the Explosion Safety Manual (FOSS part number 60041820) must be followed. All information in the Explosion Safety Manual must be followed carefully and all information in the Explosion Safety Manual supersede any information found in this manual.

p/n: 60083512r1
Date: 2017.10.23

1 General

This document contains Spare Parts for ProFoss™.



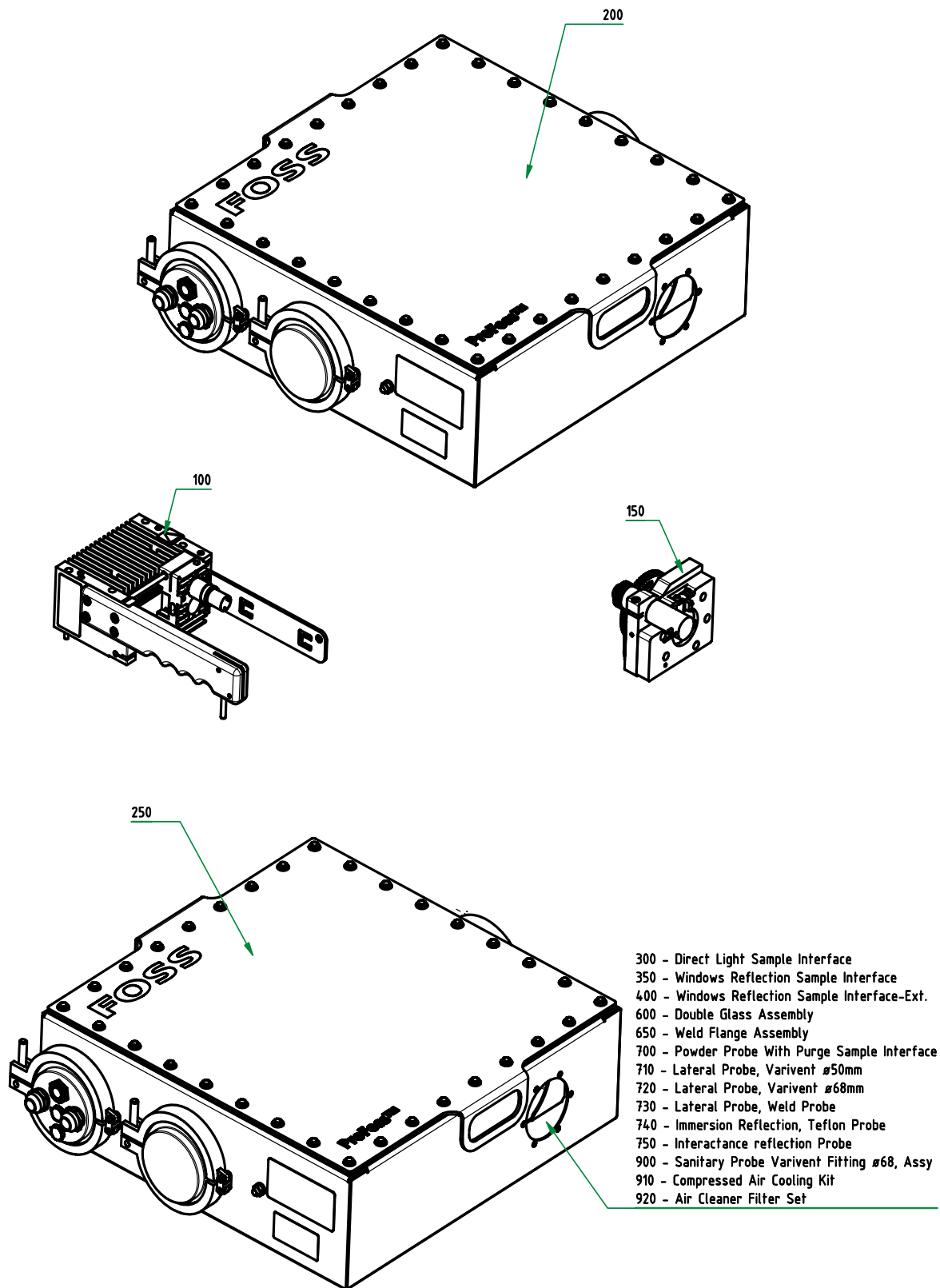
Warning

Please read Safety Precautions in the Service Manual prior to maintenance or exchange of spare parts.

The system may only be repaired by FOSS personnel or by other personnel approved by FOSS.

2 Overview

Pos.	Description	Note
100-1	Lamp House, Assy	
150-1	Optical Switch, Assy	
200-1	Basic Unit	
250-1	ProFoss Main Units	
300-1	Direct light window assembly	
350-1	Windows Reflection sample Interface	
400-1	Windows Reflection Sample Interface-Ext.	
600-1	Double glass assembly	
650-1	Weld flange assembly	
700-1	Powder Probe with purge Sample Interface	
710-1	Lateral Probe, Varivent ø50mm	
720-1	Lateral Probe, Varivent ø68mm	
730-1	Lateral Probe, Weld probe	
740-1	Immersion reflection, teflon probe	
750-1	Interactance reflection Probe	
900-1	Sanitary Probe, Varivent fitting ø68mm	
910-1	Compressed Air Cooling Kit	
920-1	Air cleaner filter kit	



60038225 Doc. Rev:02 Doc.type:95

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Fig. 1

3 Lamp House, Assy

Assembly No.: 60035809 **Page:** 100-1

Pos.	Part No.	Description	Note
2	60031655	Gear Rack Modul	
8	60031462	Lamp 12v/20w	
200	00140525	Allen screw	
450	60037751	Lamp Socket w. cable	
451-1	60046390	Opto reader OPTO 1, Lamp house	
451-2	60046391	Lamp switch motor Cpl. SP	
451-13	60046415	Opto reader OPTO 2 , lamp house	
452	60035781	Lamp Referance Fiber	

EX Lamp House, Assy
60035809

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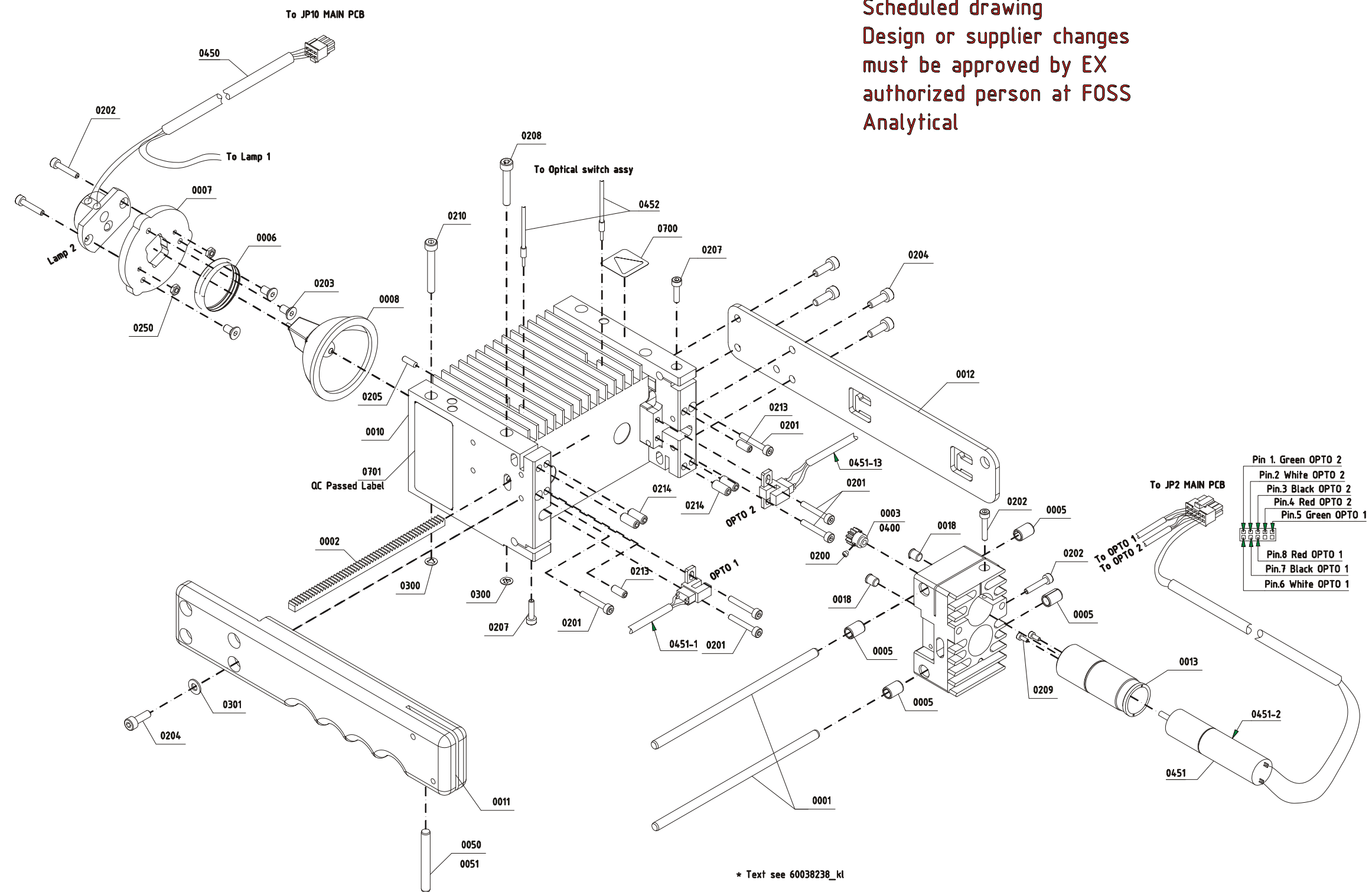


Fig. 2

4 Optical Switch, Assy

Assembly No.: 60035143 Page: 150-1

Pos.	Part No.	Description	Note
12	60039929	Spurgear Module 1 z70	
23	00039172	Pull Spring	
202	00201160	Allen screw	
450	60039861	Motor w.cable	
450-2	60046359	Opto reader w pin, Optical switch	

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Scheduled drawing
Design or supplier changes
must be approved by EX
authorized person at FOSS
Analytical

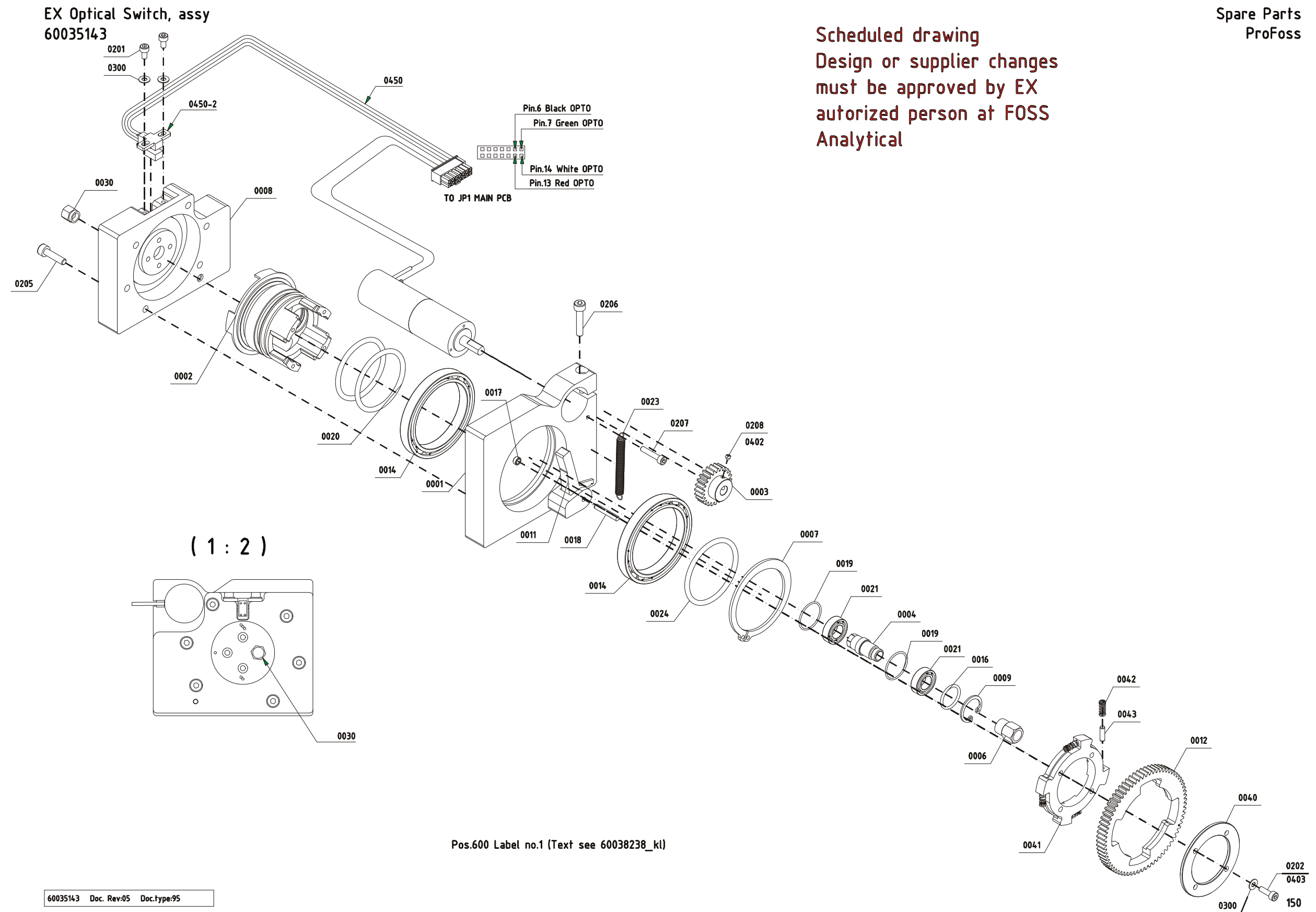


Fig. 3

5 Basic Unit

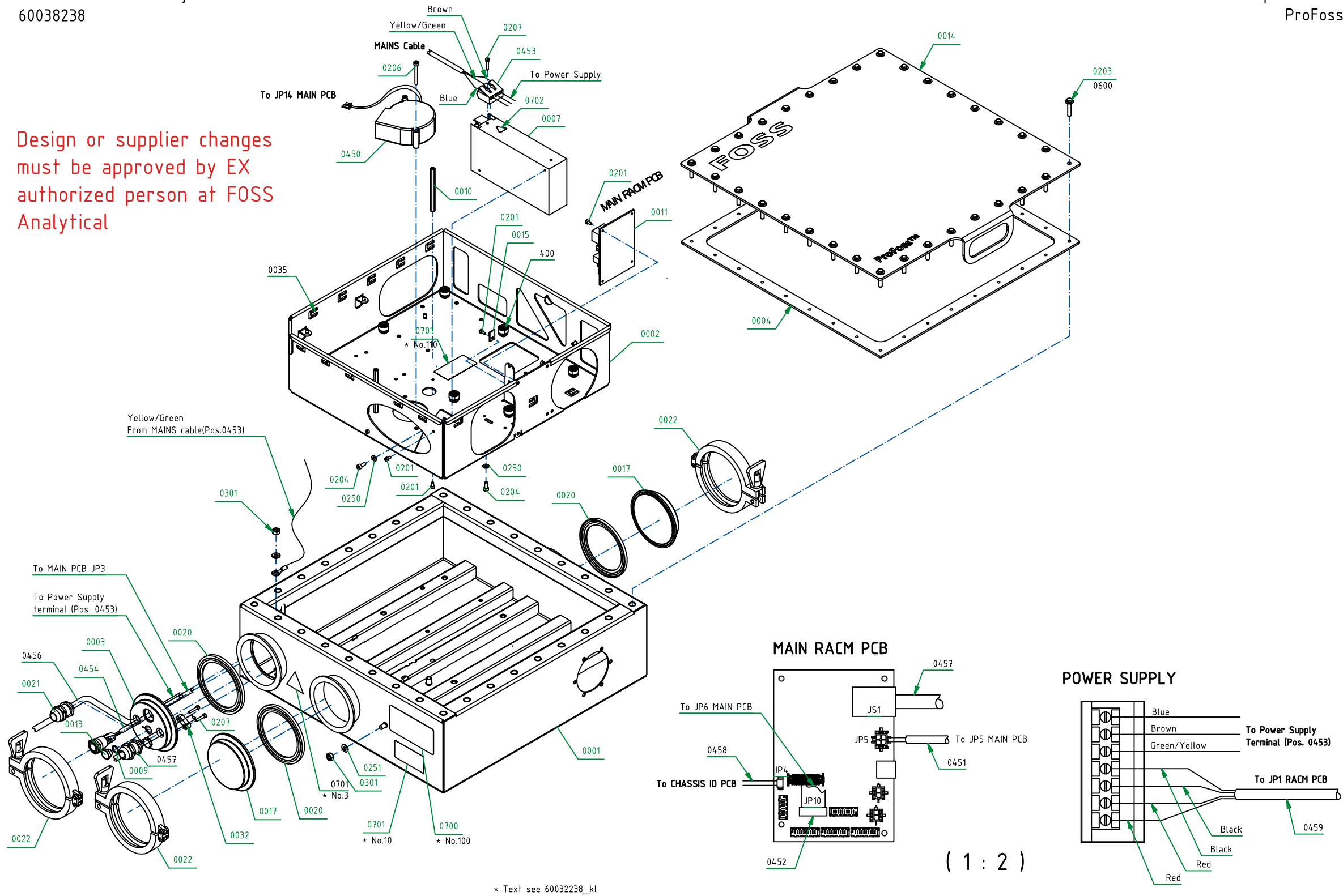
Assembly No.: 60038238 Page: 200-1

Pos.	Part No.	Description	Note
4	60038163	Lid Seal	
7	60038889	Power Supply	
9	00054353	O-ring ø9.10xø1.6	
11	00589432	Pcb assy Main Racm PCB	
17	60038164	Fixation connector	
20	60038237	Seal for support	
21	60037415	ATEX Cable gland M16x1,5	
22	60035789	Tri clamp	
201	00227348	Allen screw M3x6	
203	60038445	Screw M05.0x025 w/flange	
450	60037425	Fan assy.	
451	60037115	Cable Main PCB Power assy	
452	60037140	Flat cable assy, CAN-Bus	
453	60037632	Terminal block with wires	
454	60037509	Switch with Cable Assy	
456	60040017	Mains Cable 3 Meter	
457	60038921	LAN Cable	
458	60023887	Cable, Chas-ID	
459	60037424	Cable assy, PS-RACM	
600	60051189	Food Lube Multi Paste (85 g)	

EX ProFoss Basic assy
60038238

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Fig. 4

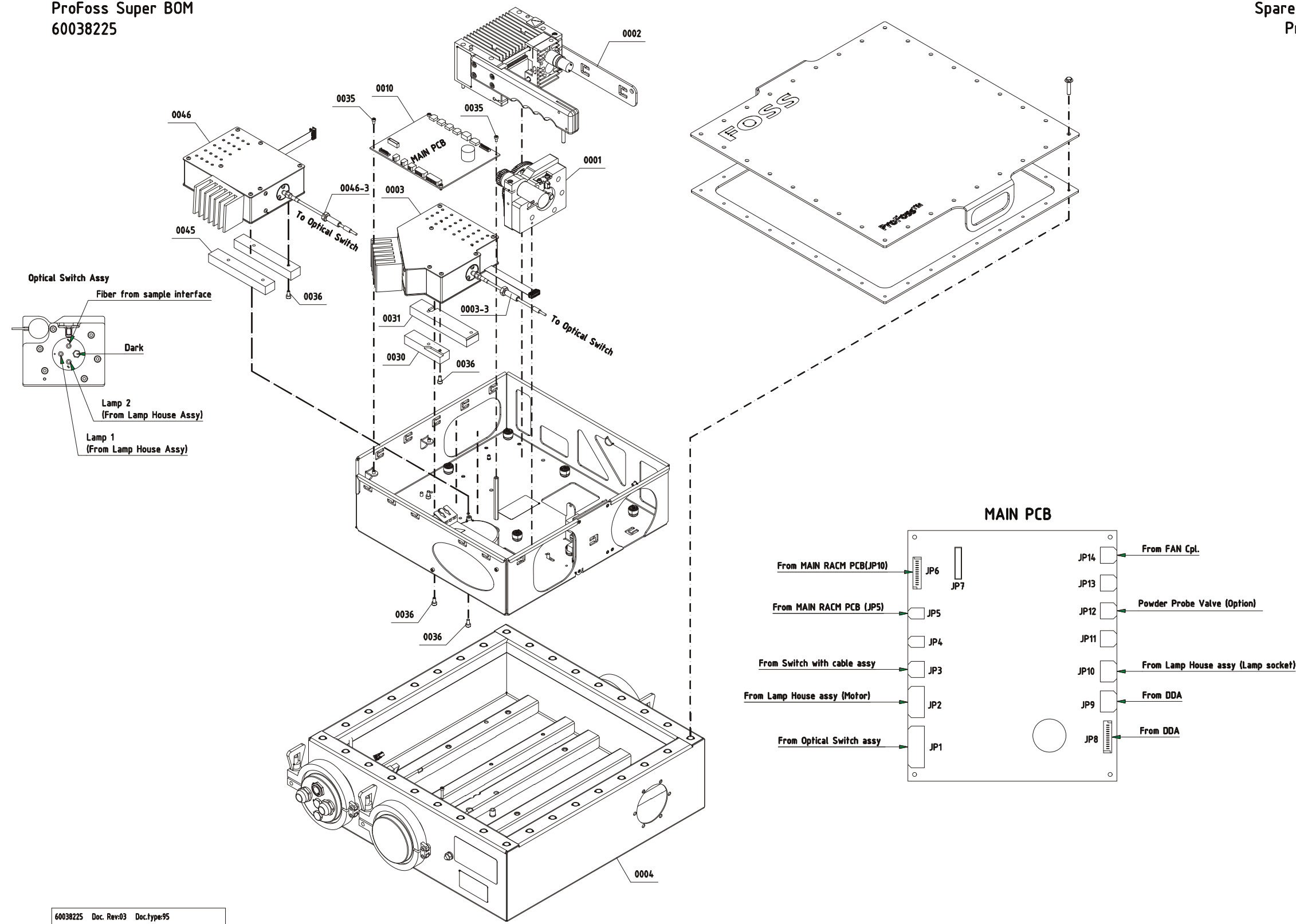
6 ProFoss Main Units

Assembly No.: 60038225 Page: 250-1

Pos.	Part No.	Description	Note
1	60035143	Optical Switch, assy	
2	60035809	Lamp House, Assy	
3	60050312	DDA, long wave	
10	1052083	Pcb assy Main PCB	
46	60050310	DDA, short wave	

ProFoss Super BOM
60038225

Spare Parts
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60038225 Doc. Rev:03 Doc.type:95

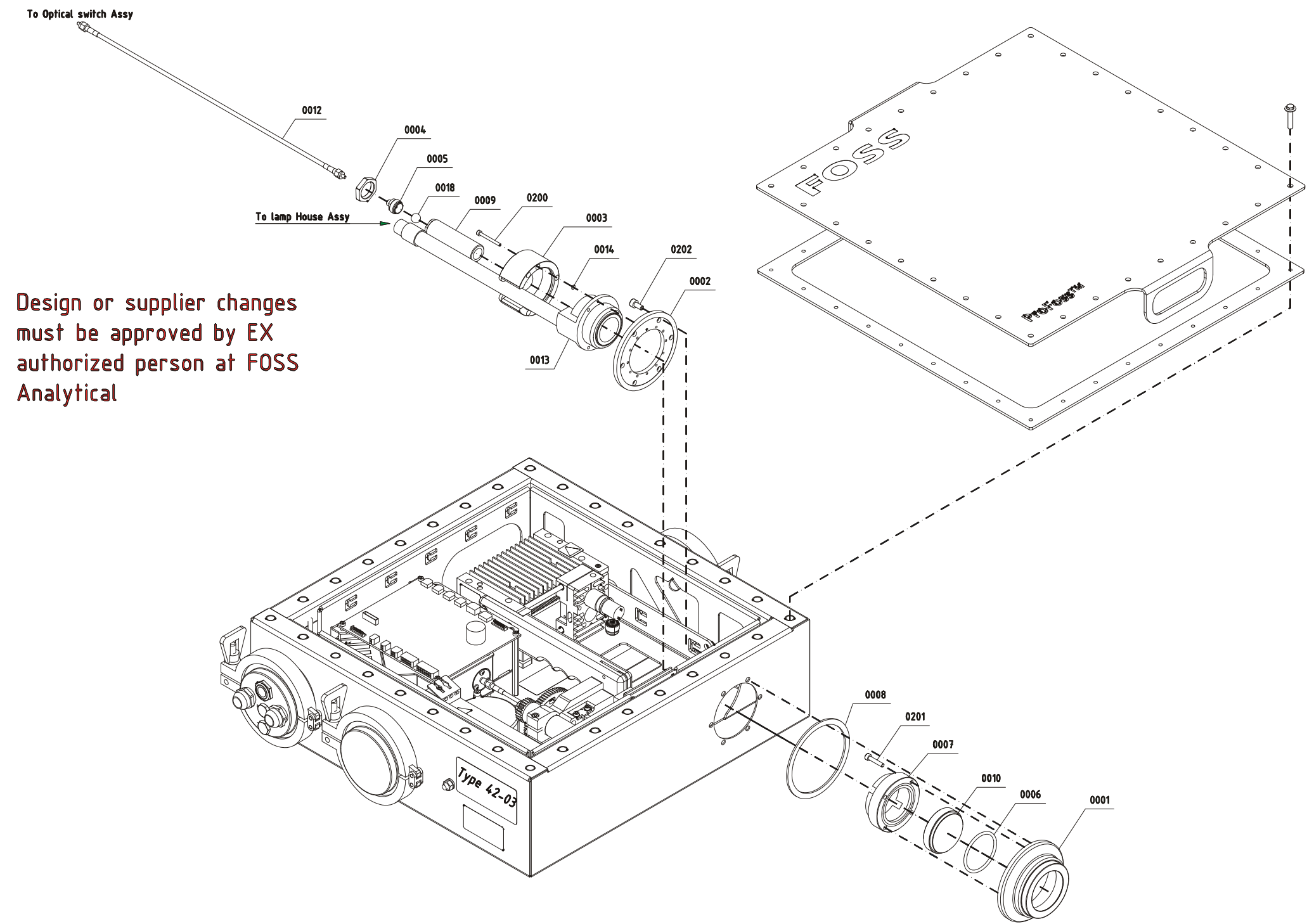
7 Direct light window assembly

Assembly No.: 60038240 Page: 300-1

Pos.	Part No.	Description	Note
1	60035681	DL Hygeine Sample Interface	
6	60031448	O-ring ID44xW3	
8	60035598	Gasket, DL/WR interface	
10	60037808	Sapphire Glass Window	
12	60035780	Sample Collection Fiber	
13	60035600	Ringlight direct Light	
200	55320015	Screw M3x30	
201	00201137	Screw M4x20	
202	00231837	Allen screw M5x10	

EX Direct Light Sample interface
60038240

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60038240 Doc. Rev:05 Doc.type:95

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Fig. 6

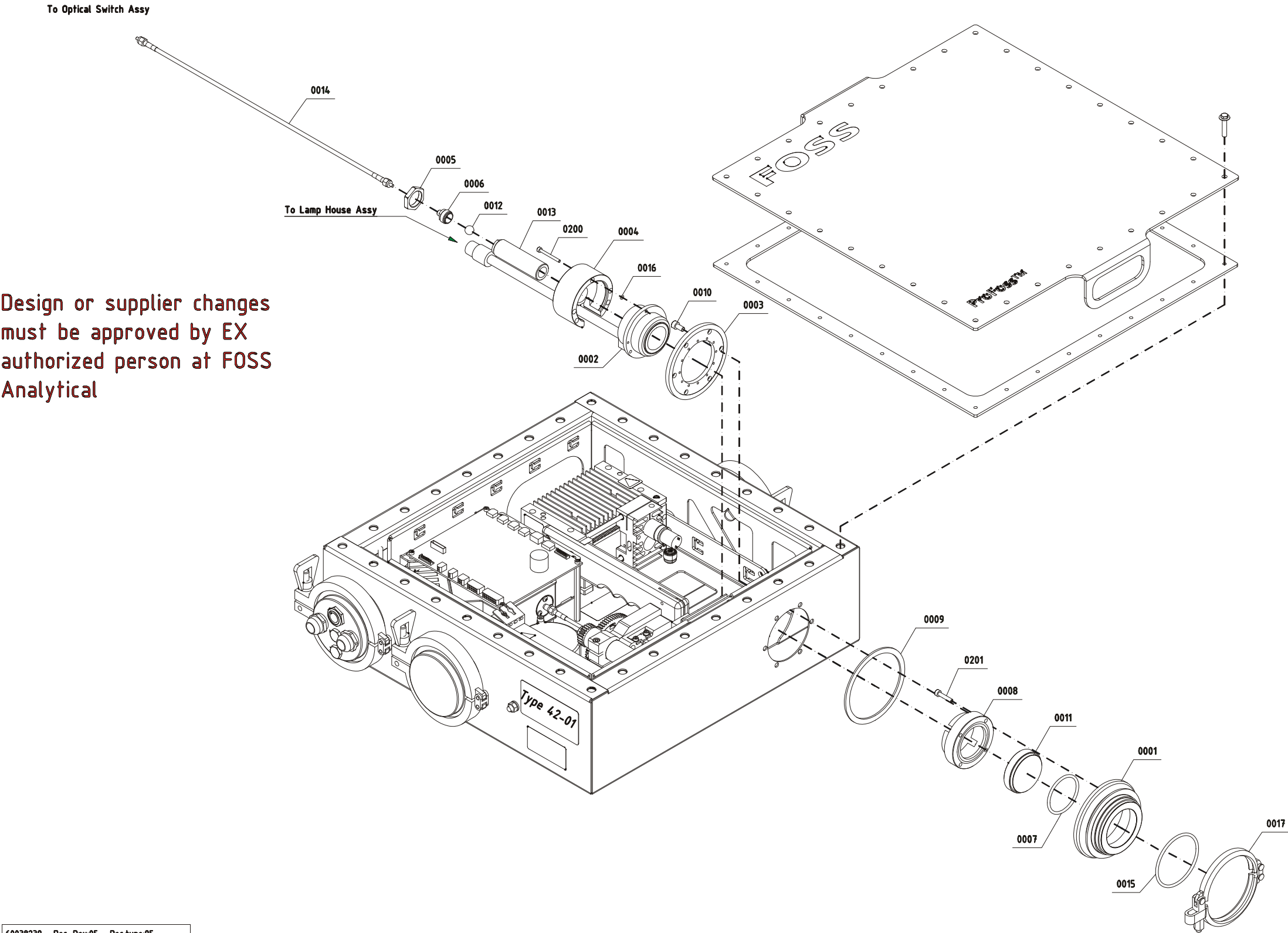
8 Windows Reflection sample Interface

Assembly No.: 60038239 Page: 350-1

Pos.	Part No.	Description	Note
1	60035586	WR Clamp Sample interface	
2	60035595	Ringlight window reflection	
7	60031448	O-ring ID44xW3	
9	60035598	Gasket, DL/WR interface	
10	00231837	Allen screw M5x10	
11	60037808	Sapphire Glass Window	
14	60035780	Sample Collection Fiber	
15	60035791	O-ring ID62xW3	
200	55320015	Screw M3x30	

EX Windows Reflection Sample interface
60038239

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60038239 Doc. Rev:05 Doc.type:95

Fig. 7

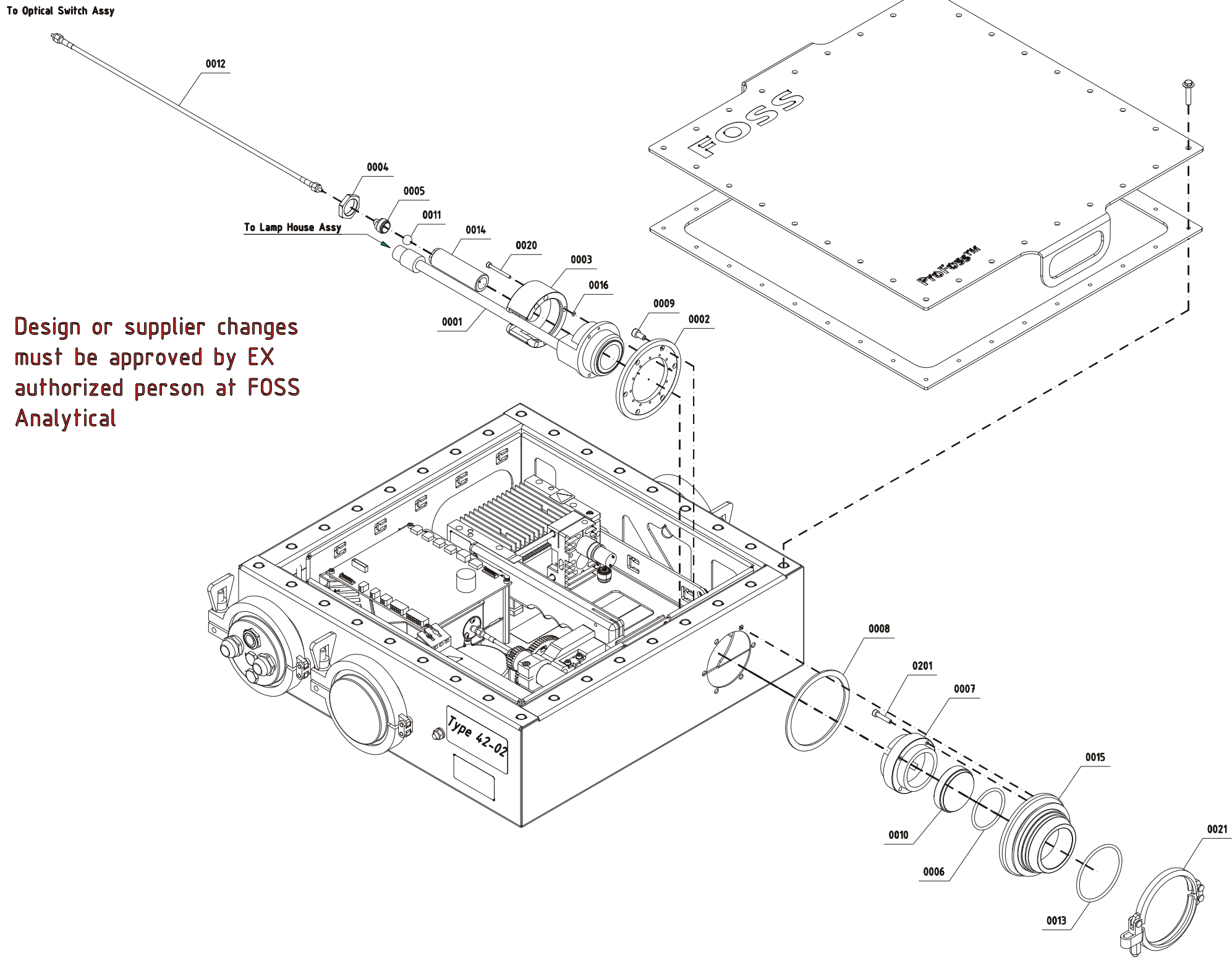
9 Windows Reflection Sample Interface-Ext.

Assembly No.: 60038392 **Page:** 400-1

Pos.	Part No.	Description	Note
1	60035595	Ringlight window reflection	
6	60031448	O-ring ID44xW3	
8	60035598	Gasket, DL/WR interface	
9	00231837	Allen screw M5x10	
10	60037808	Sapphire Glass Window	
12	60035780	Sample Collection Fiber	
13	60035791	O-ring ID62xW3	
15	60037128	WR Clamp Sample Interface - long	
20	55320015	Screw M3x30	

EX Windows Reflection Sample Int.-Ext.
60038392

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Fig. 8

10 Double glass assembly

Assembly No.: 60038922 Page: 600-1

Pos.	Part No.	Description	Note
3	60037808	Sapphire Glass Window	
4	60031448	O-ring ID44xW3	
5	60035791	O-ring ID62xW3	
6	60041642	O-ring ø042.00xø1.00	
7	60038446	Varinline, clamp hinged	
300	00227348	Allen screw M3x6	

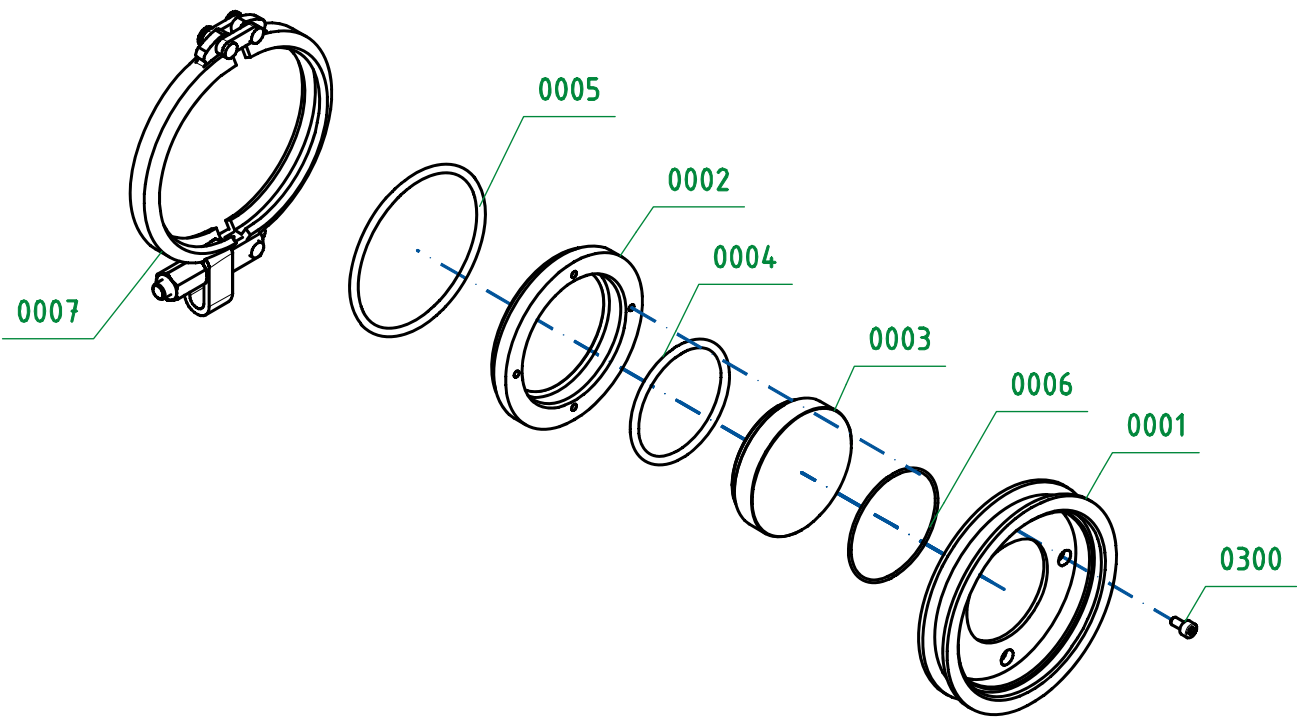


Fig. 9

11 Weld flange assembly

Assembly No.: 60038396 Page: 650-1

Pos.	Part No.	Description	Note
1	60035819	Flange, Weld, Flat Surface	
4	60037808	Sapphire Glass Window	
5	60031448	O-ring ID44xW3	
6	60035791	O-ring ID62xW3	
7	60041642	O-ring ø042.00xø1.00	
8	60038433	Blind plate	
9	60038446	Varinline, clamp hinged	
300	00227348	Allen screw M3x6	

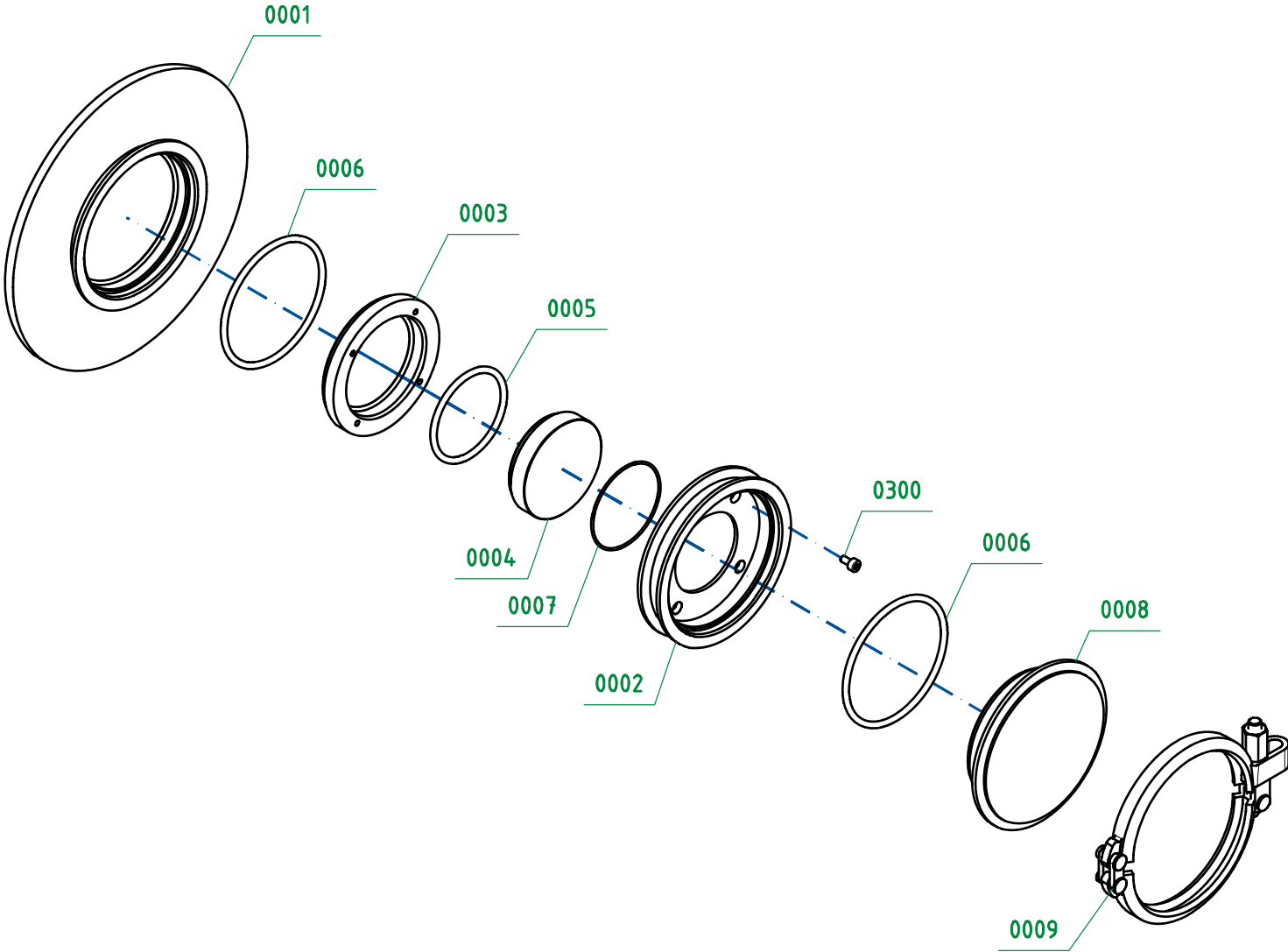


Fig. 10

12 Powder Probe with purge Sample Interface

Assembly No.: 60039243 Page: 700-1

Pos.	Part No.	Description	Note
3	60035598	Gasket, DL/WR interface	
5	60040252	Probe stop	
6	60037971	Solenoid, complete	
10	60038420	Quick connect air line fitting	
11	60038402	Quick connect air line	
12	60038403	Quick connect air	
14	60039245	Straight fittings	
15	60039232	Probe Connector Probe	
23	00054031	O-ring	
24	60031433	Fiber adapter	
303	00291724	Allen screw M4x12	
400	00109108	Springwasher	
550	60042164	Tube ø6/4 blue	
551	60042164	Tube ø6/4 blue	
A	60052073	Reflectance Fiber, 1 meter Complete SP	
B	60052074	Reflectance Fiber, 3 meter Complete SP	
C	60052075	Reflectance Fiber, 5 meter Complete SP	
D	60052076	Reflectance Fiber, 10 meter Complete SP	
E	60046396	Tube Kit 10 meter SP	
F	60051335	Cable, Earth, for 1 meter	
G	60051336	Cable, Earth, for 3 meter	
H	60051337	Cable, Earth, for 5 meter	
I	60051338	Cable, Earth, for 10 meter	

EX Powder Probe with purge Sample Interface
60039243

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Scheduled drawing
Design or supplier changes
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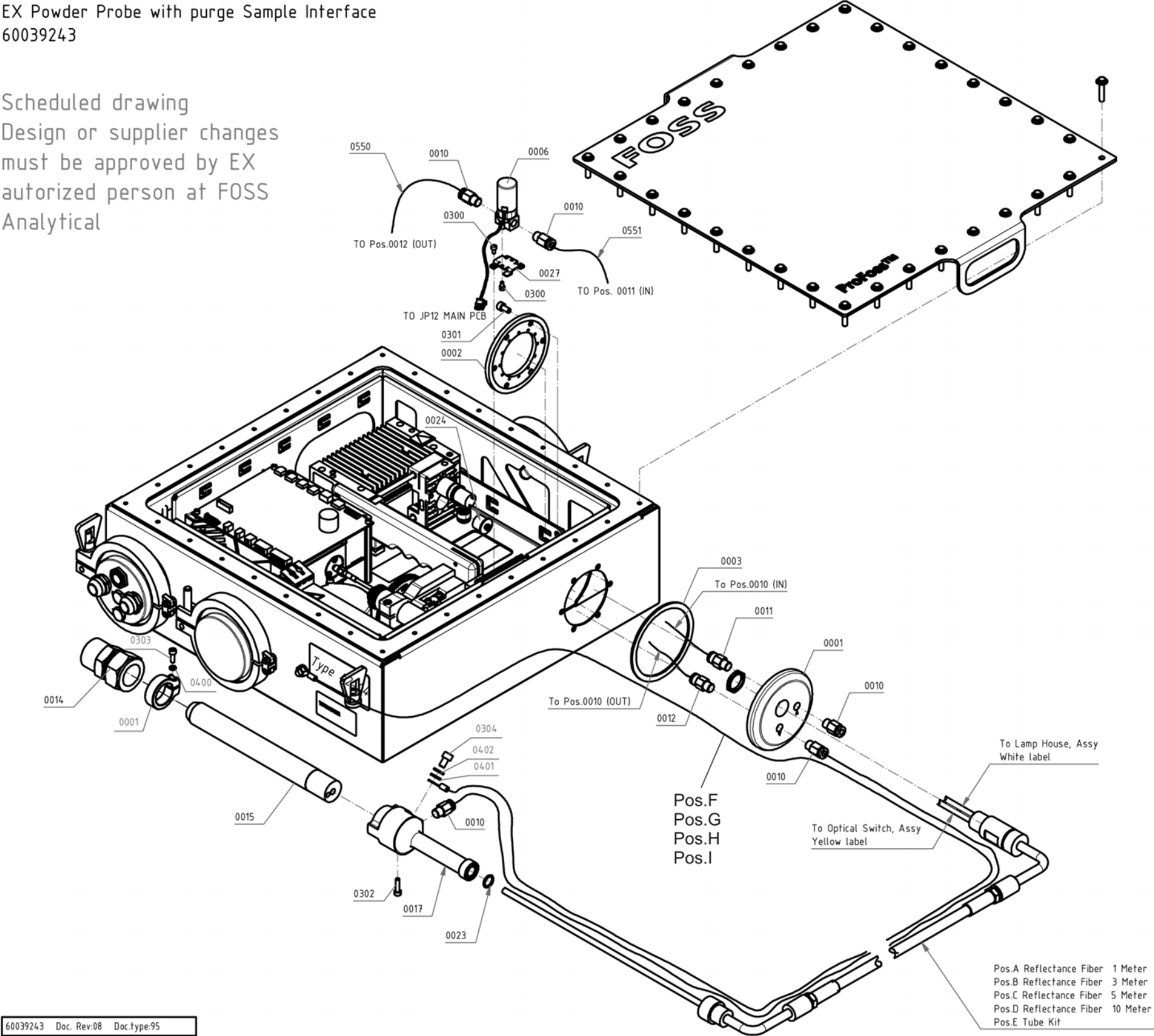


Fig. 11

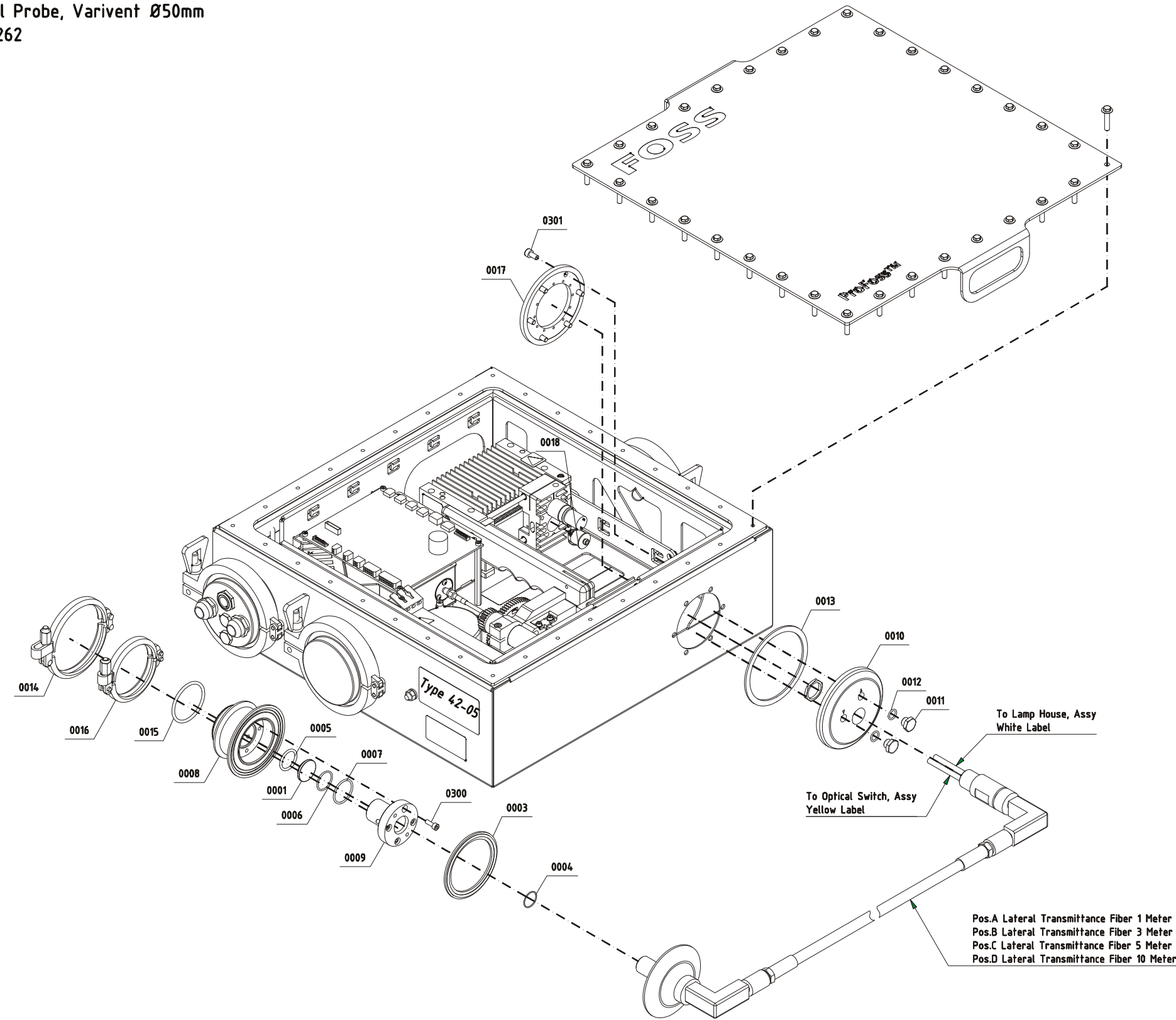
13 Lateral Probe, Varivent Ø50mm

Assembly No.: 60040262 Page: 710-1

Pos.	Part No.	Description	Note
1	60040240	Sapphire Window	
3	60040404	Tri clamp gasket	
4	01032298	O-ring ø17Xø1	
5	60040403	O-ring ø20xø2.5	
6	00702308	O-ring ø20xø1.5	
7	00054189	O-ring ø25.12xø1.78	
8	60040223	Immersion Probe	
12	00054353	O-ring ø9.10xø1.6	
13	60035598	Gasket, DL/WR interface	
14	60038446	Varinline, clamp hinged	
15	60031448	O-ring ID44xW3	
16	60042555	Varivent clamp with nut	
18	60031433	Fiber adapter	
300	00291724	Allen screw M4x12	
301	00231837	Allen screw M5x10	
A	60052077	Lateral Transmittance Fiber, 1 meter SP	
B	60052078	Lateral Transmittance Fiber, 3 meter SP	
C	60052079	Lateral Transmittance Fiber, 5 meter SP	
D	60052090	Lateral Transmittance Fiber, 10 meter SP	

Lateral Probe, Varivent Ø50mm
60040262

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Fig. 12

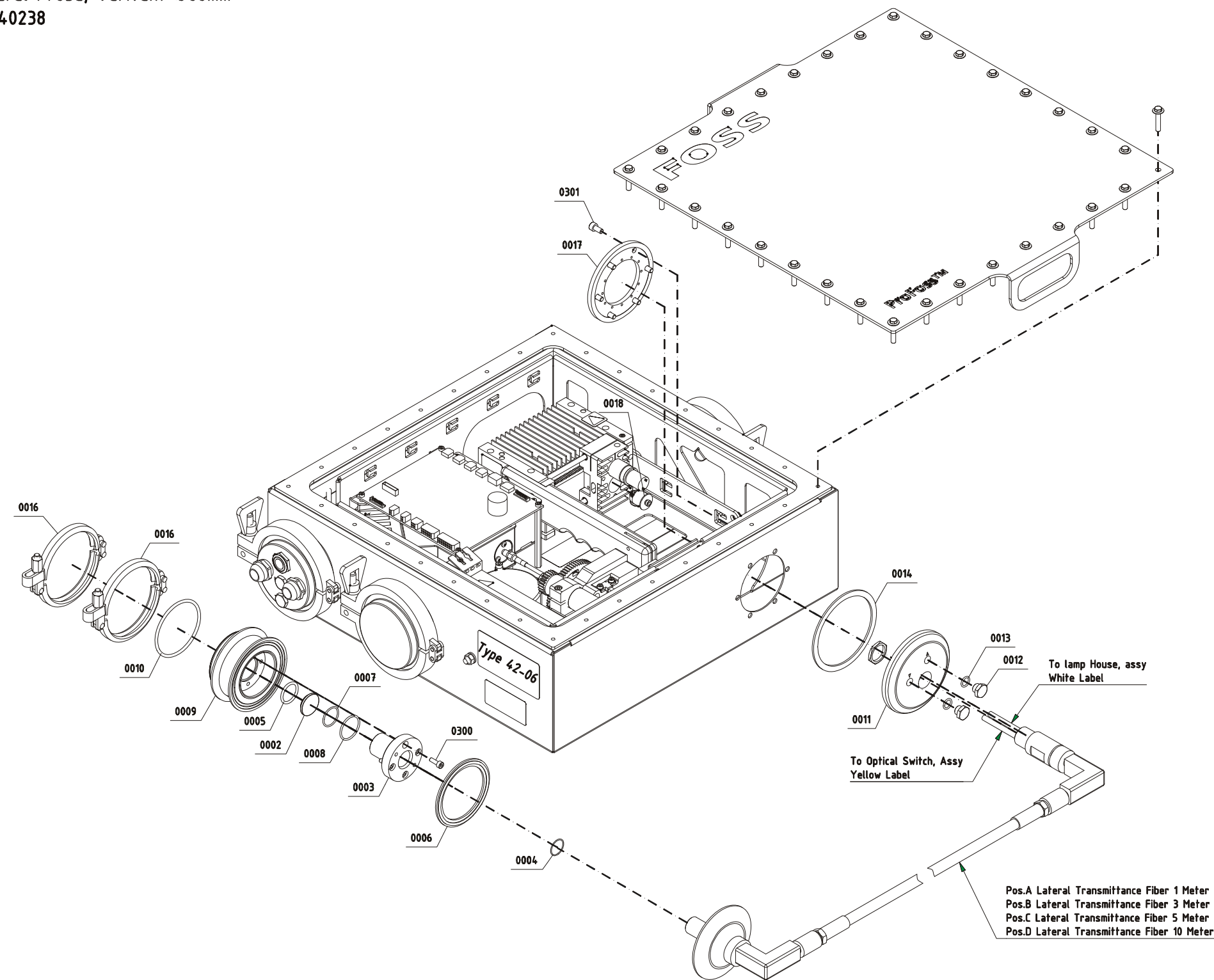
14 Lateral Probe, Varivent Ø68mm

Assembly No.: 60040238**Page: 720-1**

Pos.	Part No.	Description	Note
2	60040240	Sapphire Window	
4	01032298	O-ring ø17Xø1	
5	60040403	O-ring ø20xø2.5	
6	60040404	Tri clamp gasket	
7	00702308	O-ring ø20xø1.5	
8	00054189	O-ring ø25.12xø1.78	
9	60040242	Probe Housing	
10	60035791	O-ring ID62xW3	
13	00054353	O-ring ø9.10xø1.6	
14	60035598	Gasket, DL/WR interface	
16	60038446	Varinline, clamp hinged	
18	60031433	Fiber adapter	
300	00291724	Allen screw M4x12	
301	00231837	Allen screw M5x10	
A	60042545	Lateral Transmittance Fiber, 1 meter	
B	60042546	Lateral Transmittance Fiber, 3 meter	
C	60042547	Lateral Transmittance Fiber, 5 meter	
D	60042548	Lateral Transmittance Fiber, 10 meter	

Lateral Probe, Varivent Ø68mm
60040238

Spare Parts
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Fig. 13

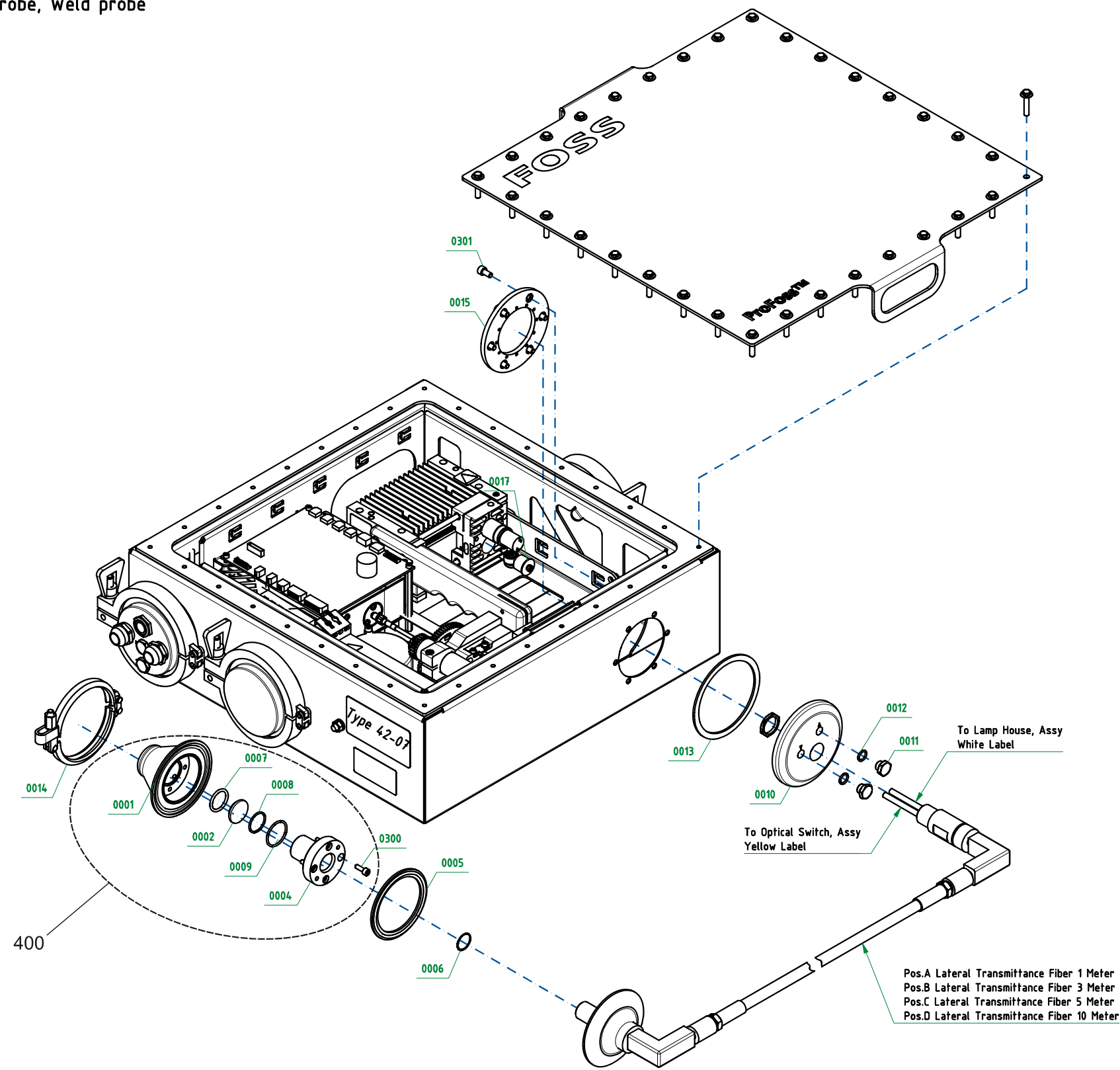
15 Lateral Probe, Weld probe

Assembly No.: 60042553 Page: 730-1

Pos.	Part No.	Description	Note
1	60042297	Immersion Probe, housing weld	
2	60040240	Sapphire Window	
5	60040404	Tri clamp gasket	
6	01032298	O-ring ø17Xø1	
7	60040403	O-ring ø20xø2.5	
8	00702308	O-ring ø20xø1.5	
9	00054189	O-ring ø25.12xø1.78	
12	00054353	O-ring ø9.10xø1.6	
13	60035598	Gasket, DL/WR interface	
14	60038446	Varinline, clamp hinged	
17	60031433	Fiber adapter	
300	00291724	Allen screw M4x12	
301	00231837	Allen screw M5x10	
400	60050631	Weld probe Cpl.	
A	60042545	Lateral Transmittance Fiber, 1 meter	
B	60042546	Lateral Transmittance Fiber, 3 meter	
C	60042547	Lateral Transmittance Fiber, 5 meter	
D	60042548	Lateral Transmittance Fiber, 10 meter	

Lateral Probe, Weld probe
60042553

Spare Parts
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Fig. 14

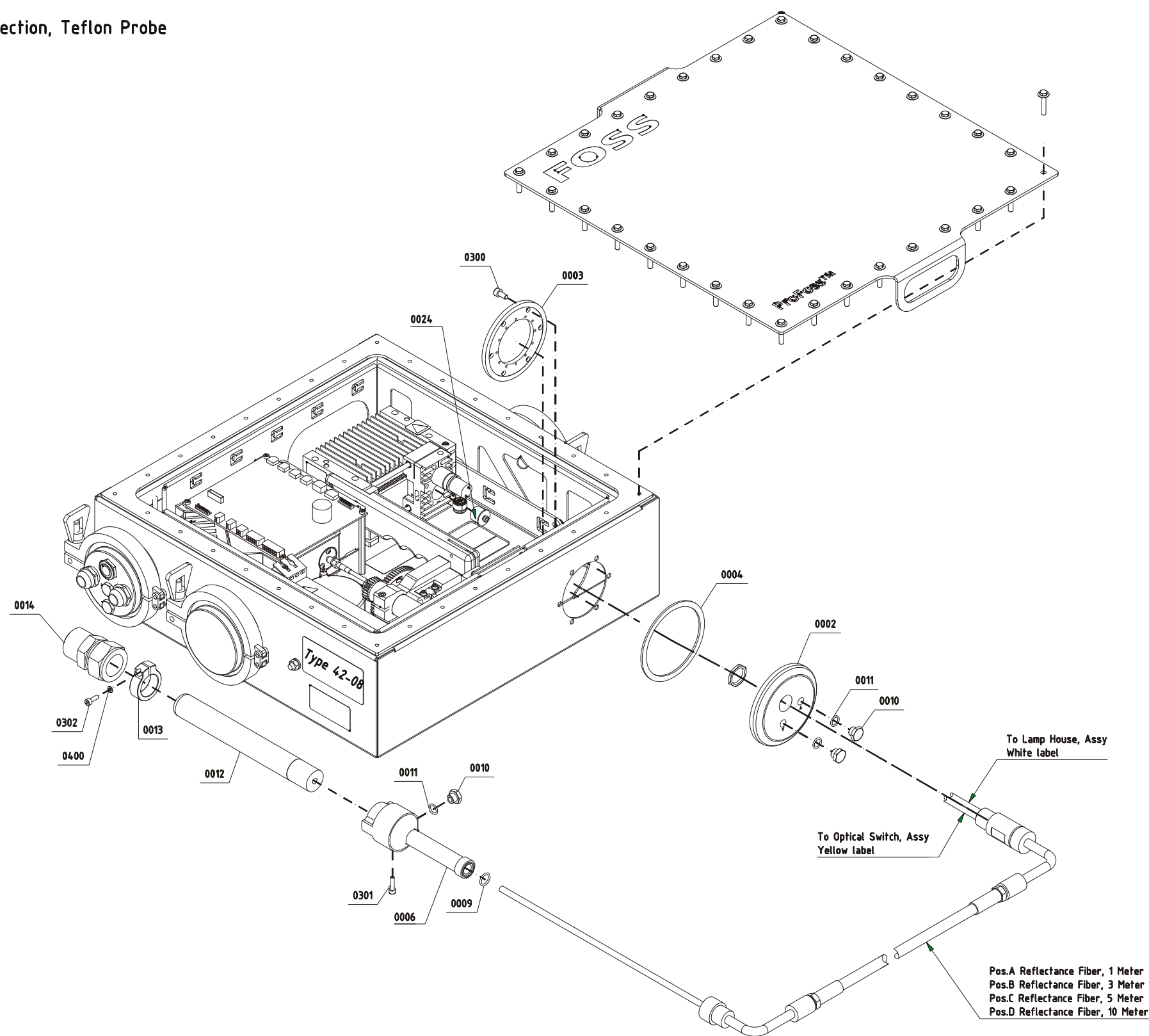
16 Immersion reflection, teflon probe

Assembly No.: 60044355 Page: 740-1

Pos.	Part No.	Description	Note
2	60036447	EX Spoon Probe Adapter	
4	60035598	Gasket, DL/WR interface	
9	00054031	O-ring ø11.11xø1.78	
11	00054353	O-ring ø9.10xø1.6	
12	60040383	Immersion Probe Teflon	
13	60040252	Probe Stop	
24	60031433	Fiber Adapter	
300	00231837	Allen screw M5x10	
302	00291724	Allen screw M4x12	
400	00109108	Spring washer	
A	60039223	Reflectance Fiber, 1 meter	
B	60039224	Reflectance Fiber, 3 meter	
C	60039225	Reflectance Fiber, 5 meter	
D	60039226	Reflectance Fiber, 10 meter	

Immersion Reflection, Teflon Probe
60044355

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60044355 Doc. Rev:03 Doc.type:95

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Fig. 15

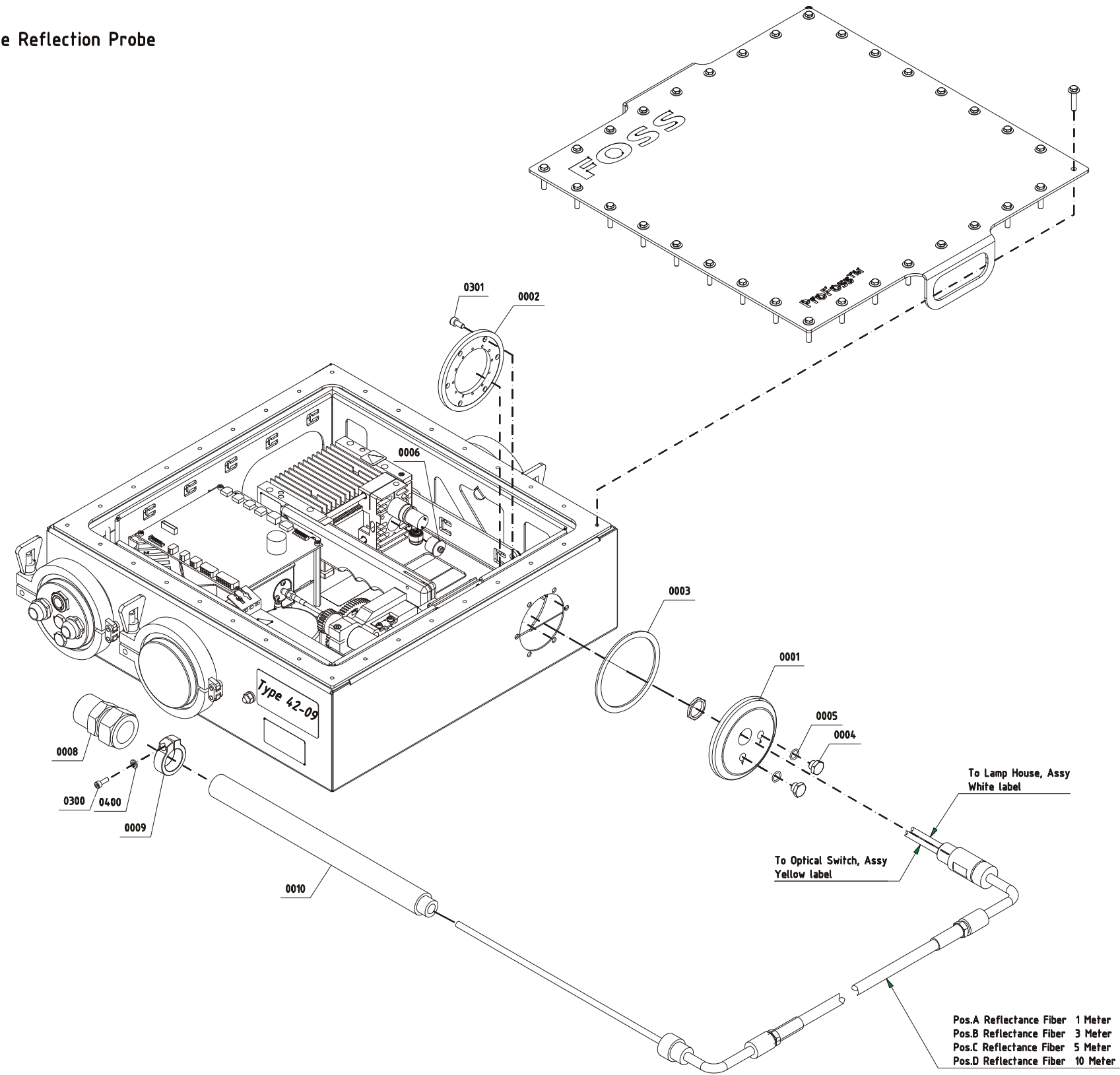
17 Interactance reflection Probe

Assembly No.: 60045450 Page: 750-1

Pos.	Part No.	Description	Note
1	60036447	EX Spoon probe adapter	
3	60035598	Gasket, DL/WR interface	
5	00054353	O-ring ø9.10xø1.6	
6	60031433	Fiber adapter	
8	60039245	Swangelok	
9	60040252	Probe stop	
10	60045155	Micro Reflection Probe	
300	00291724	Allen screw M4x12	
301	00231837	Allen screw M5x10	
400	00109108	Springwasher	
A	60039223	Reflectance Fiber, 1 meter	
B	60039224	Reflectance Fiber, 3 meter	
C	60039225	Reflectance Fiber, 5 meter	
D	60039226	Reflectance Fiber, 10 meter	

Interactance Reflection Probe
60045450

Spare Parts
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Fig. 16

18 Sanitary Probe, Varivent fitting Ø68mm

Assembly No.: 60040248 **Page:** 900-1

Pos.	Part No.	Description	Note
3	60040406	O-ring Ø025.00xØ3.00	
4	60040416	O-ring Ø031.47xØ1.78	
7	60040252	Probe stop	
9	60038433	Varinline blanking plate	
10	60035819	Flange, Weld, Flat Surface	
11	60035791	O-ring ID62xW3	
12	60038446	Varinline, clamp hinged	
300	00291724	Allen screw M4x12	
400	00109108	Springwasher	

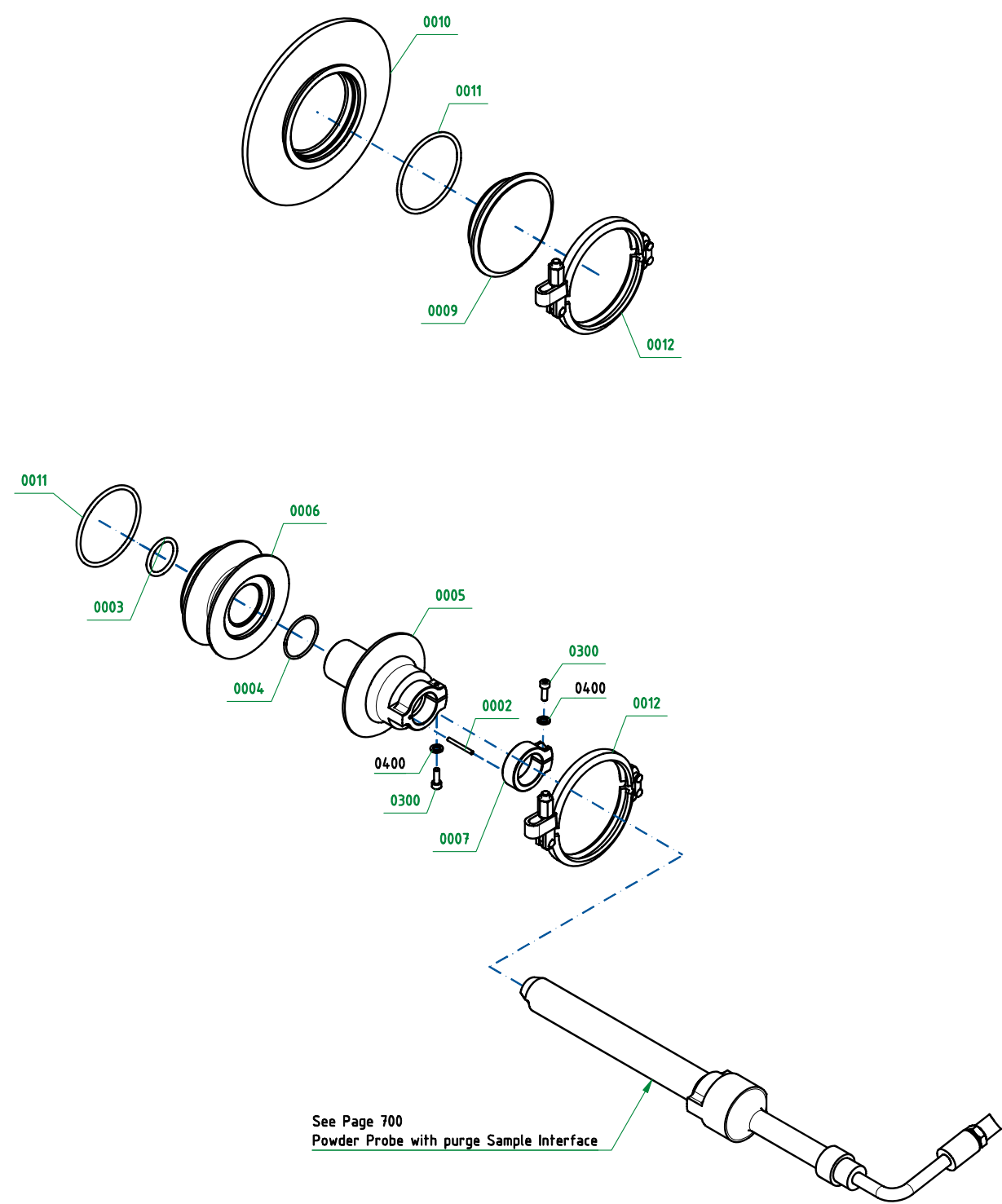
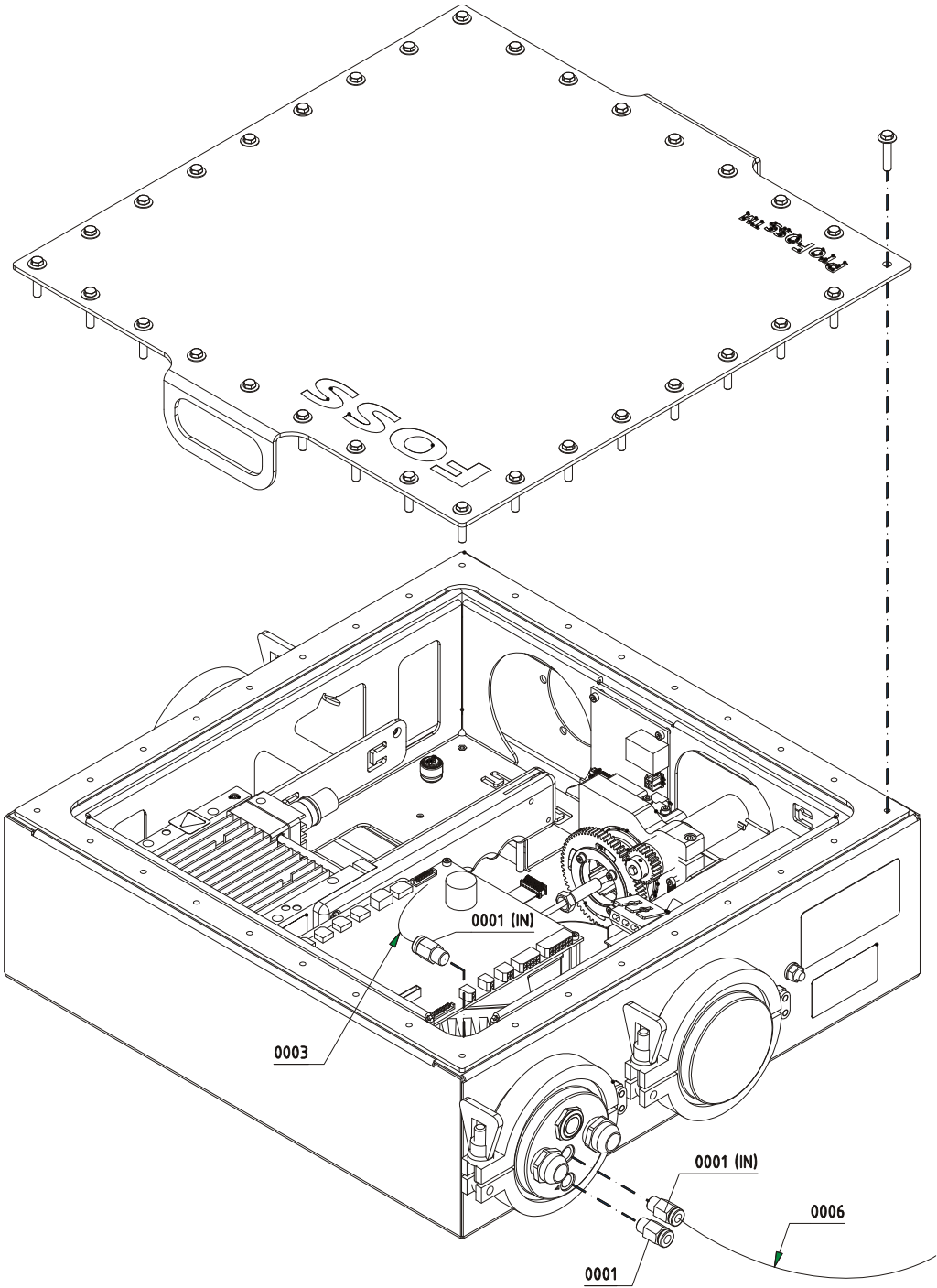


Fig. 17

19 Compressed Air Cooling Kit

Assembly No.: 60038416 Page: 910-1

Pos.	Part No.	Description	Note
1	60038420	Quick connect air line fitting	
3	60042164	Tube ø6/4 blue	
6	60042164	Tube ø6/4 blue	



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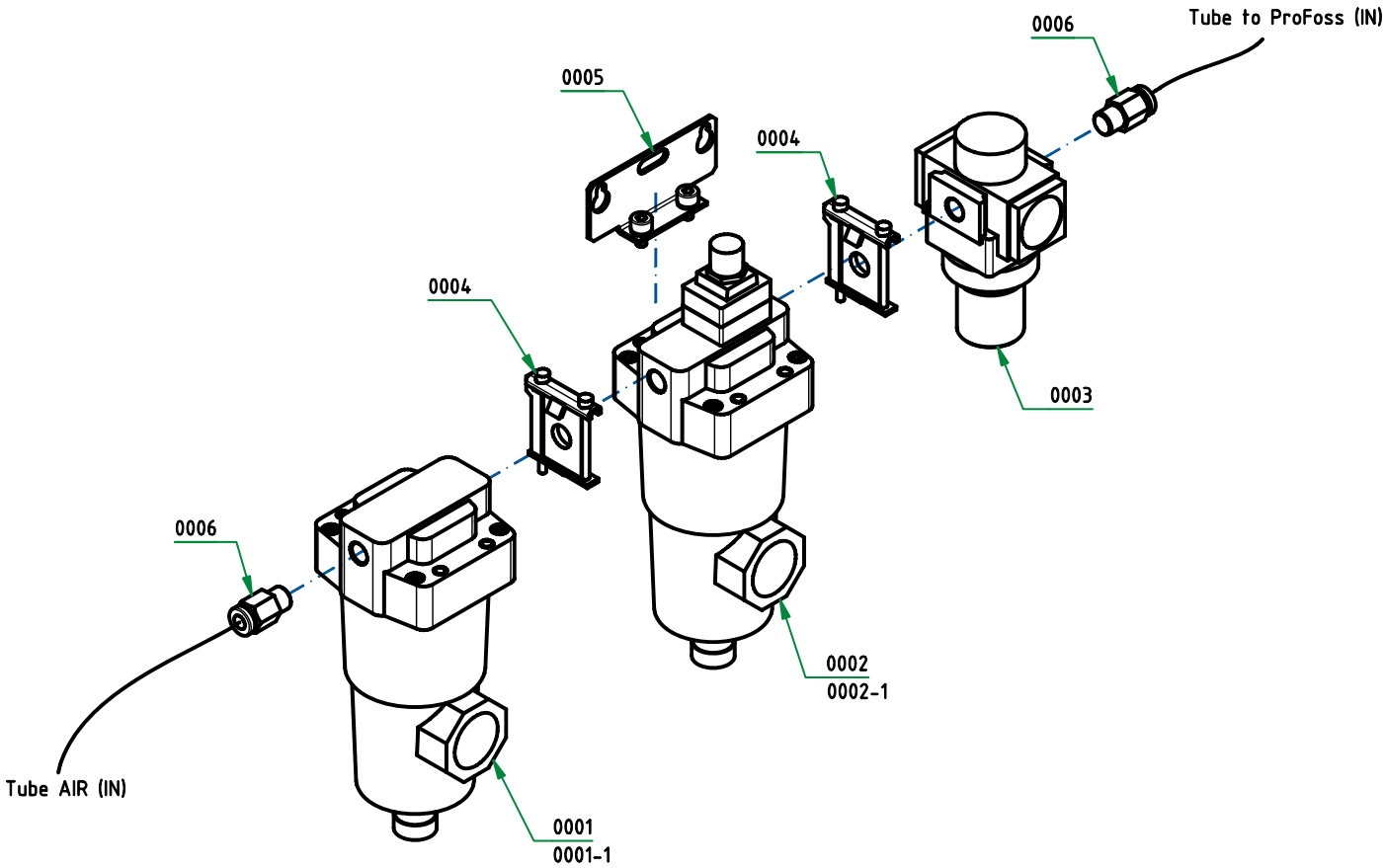
910

Fig. 18

20 Air cleaner filter kit

Assembly No.: 60039031 Page: 920-1

Pos.	Part No.	Description	Note
1	60039915	Water Separator	
1-1	60046531	Replacement Filter AMG-EL 150	
2	60039916	Micro Mist Separator With Pre-filter	
2-1	60046530	Replacement Filter 1-MH-EL-150	
3	60044295	Regulator ARP20-F01E-1	
4	60039918	Spacer	
5	60039917	Bracket Assembly	
6	60038420	Quick connect air line fitting	



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Fig. 19

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Part No.	Page	Pos. No.	Description
00039172	150-1	23	Pull Spring
00054031	700-1	23	O-ring
00054189	710-1	7	O-ring ø25.12xø1.78
	720-1	8	
	730-1	9	
00054353	710-1	12	O-ring ø9.10xø1.6
	720-1	13	
	730-1	12	
	750-1	5	
	200-1	9	O-ring ø9.10xø1.6
00109108	700-1	400	Springwasher
	750-1	400	
	900-1	400	
00140525	100-1	200	Allen screw
00201160	150-1	202	Allen screw
00227348	200-1	201	Allen screw M3x6
	600-1	300	
	650-1	300	
00231837	300-1	202	Allen screw M5x10
	350-1	10	
	400-1	9	
	710-1	301	
	720-1	301	
	730-1	301	
	750-1	301	
00291724	700-1	303	Allen screw M4x12
	710-1	300	
	720-1	300	
	730-1	300	
	750-1	300	
	900-1	300	
00589432	200-1	11	Pcb assy Main Racm PCB
00590570	250-1	10	Pcb assy Main PCB ProTec
00702308	710-1	6	O-ring ø20xø1.5
	720-1	7	
	730-1	8	
01032298	710-1	4	O-ring ø17Xø1
	720-1	4	
	730-1	6	
55320015	300-1	200	Screw M3x30
	350-1	200	
	400-1	20	
60023887	200-1	458	Cable, Chas-ID
60031433	700-1	24	Fiber adapter

Part No.	Page	Pos. No.	Description
	710-1	18	
	720-1	18	
	730-1	17	
	750-1	6	
60031448	300-1	6	O-ring ID44xW3
	350-1	7	
	400-1	6	
	600-1	4	
	650-1	5	
	710-1	15	
60031462	100-1	8	Lamp 12v/20w
60031655	100-1	2	Gear Rack Modul
60035143	250-1	1	Optical Switch, assy
60035586	350-1	1	WR Clamp Sample interface
60035595	350-1	2	Ringlight window reflection
	400-1	1	
60035598	300-1	8	Gasket, DL/WR interface
	350-1	9	
	400-1	8	
	700-1	3	
	710-1	13	
	720-1	14	
	730-1	13	
	750-1	3	
60035600	300-1	13	Ringlight direct
60035681	300-1	1	DL Hygeine Sample Interface
60035780	300-1	12	Sample Collection Fiber
	350-1	14	
	400-1	12	
60035781	100-1	452	Lamp Referance Fiber
60035789	200-1	22	Tri clamp
60035791	350-1	15	O-ring ID62xW3
	400-1	13	
	600-1	5	
	650-1	6	
	720-1	10	
	900-1	11	
60035809	250-1	2	Lamp House, Assy
60035819	650-1	1	Flange, Weld, Flat Surface
	900-1	10	
60035868	100-1	451-2	Lamp switch motor Cpl.
60036166	250-1	46	Spectrometer, short wave
60036183	250-1	3	Spectrometer, lomg wave

Part No.	Page	Pos. No.	Description
60036447	750-1	1	EX Spoon probe adapter
60037115	200-1	451	Cable Main PCB Power assy
60037128	400-1	15	WR Clamp Sample Interface - long
60037140	200-1	452	Flat cable assy, CAN-Bus
60037415	200-1	21	ATEX Cable gland M16x1,5
60037424	200-1	459	Cable assy, PS-RACM
60037425	200-1	450	Fan assy.
60037509	200-1	454	Switch with Cable Assy
60037751	100-1	450	Lamp Socket w. cable
60037808	300-1	10	Sapphire Glass Window
	350-1	11	
	400-1	10	
	600-1	3	
	650-1	4	
60037871	250-1	3-3	Fiber, long wave
60037971	700-1	6	Solenoid, complete
60038163	200-1	4	Lid Seal
60038164	200-1	17	Fixation connector
60038237	200-1	20	Seal for support
60038396	250-1	8	Weld flange assembly
60038402	700-1	11	Quick connect air line
60038403	700-1	12	Quick connect air
60038420	700-1	10	Quick connect air line fitting
	910-1	1	
	920-1	6	
60038433	900-1	9	Varinline blanking plate
60038445	200-1	203	Screw M05.0x025 w/flange
60038446	600-1	7	Varinline, clamp hinged
	650-1	9	
	710-1	14	
	720-1	16	
	730-1	14	
	900-1	12	
60038889	200-1	7	Power Supply
60038921	200-1	457	LAN Cable
60039232	700-1	15	Probe Connector Probe
60039245	700-1	14	Straight fittings
60039861	150-1	450	Motor w.cable
60039915	920-1	1	Water Separator
60039916	920-1	2	Micro Mist Separator With Pre-filter
60039917	920-1	5	Bracket Assembly
60039918	920-1	4	Spacer
60039929	150-1	12	Spurgear Module 1 z70
60040017	200-1	456	Manins Cable 3 Meter
60040223	710-1	8	Immersion Probe

Part No.	Page	Pos. No.	Description
60040240	710-1	1	Sapphire Window
	720-1	2	
	730-1	2	
60040242	720-1	9	Probe Housing
60040252	700-1	5	Probe stop
	750-1	9	
	900-1	7	
60040403	710-1	5	O-ring ø20xø2.5
	720-1	5	
	730-1	7	
60040404	710-1	3	Tri clamp gasket
	720-1	6	
	730-1	5	
60040406	900-1	3	O-ring Ø025.00xØ3.00
60040416	900-1	4	O-ring Ø031.47xØ1.78
60041642	600-1	6	O-ring ø042.00xø1.00
	650-1	7	
60042164	700-1	550	Tube ø6/4 blue
	700-1	551	
	910-1	3	
	910-1	6	
60042297	730-1	1	Immersion Probe, housing weld
60042555	710-1	16	Varivent clamp with nut
60044295	920-1	3	Regulator ARP20-F01E-1
60044593	250-1	46-3	Fiber, short wave
60045155	750-1	10	Micro Reflection Probe
60046359	150-1	450-2	Opto reader w pin, Optical switch
60046390	100-1	451-1	Opto reader OPTO 1, Lamp house
60046415	100-1	451-13	Opto reader OPTO 2 , lamp house
60046530	920-1	2-1	Replacement parts AMH-EL-150
60046531	920-1	1-1	Replacement parts AMG-EL-150