

EXSH Instrument Housing Accessories

EXSH Instrument Housing Accessories User Guide

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LAND
AMETEK®



QUALITY CUSTOMER SOLUTIONS

Health and Safety Information



Read all of the instructions in this booklet - including all the **WARNINGS** and **CAUTIONS** - *before* using this product. If there is any instruction which you do not understand, **DO NOT USE THE PRODUCT.**

Safety Signs



WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or personal injury.



CAUTION

Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury to the user or users, or result in damage to the product or to property.

NOTE

Indicates a potentially hazardous situation which, if not avoided, could result in damage or loss of data.

Signs and Symbols used on equipment and Documentation



Caution, risk of electric shock.



Caution, attention to possibility of risk of damage to the product, process or surroundings. Refer to instruction manual.



Caution, hot surface.



Protective Conductor Terminal.



Observe precautions for handling electrostatic discharge sensitive devices.

Equipment Operation

Use of this instrument in a manner not specified by AMETEK Land may be hazardous. Read **and understand** the user documentation supplied **before** installing and operating the equipment.

The safety of any system incorporating this equipment is the responsibility of the assembler.

Protective Clothing, Face and Eye Protection

It is possible that this equipment is to be installed on, or near to, machinery or equipment operating at high temperatures and high pressures. Suitable protective clothing, along with face and eye protection must be worn. Refer to the health and safety guidelines for the machinery/equipment before installing this product. If in doubt, contact AMETEK Land.



Wear Protective Gloves



Wear Protective Clothing



Wear Eye Protection



Wear Ear Protection



Wear Safety Boots



Wear Face Protection

Electrical Power Supply

Before working on the electrical connections, all of the electrical power lines to the equipment must be isolated. All the electrical cables and signal cables must be connected exactly as indicated in these operating instructions. If in doubt, contact AMETEK Land.

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For further details on all AMETEK Land offices, distributors and representatives, please visit our website.

Storage

The equipment should be stored in its packaging, in a dry sheltered area.

Unpacking

Check all packages for external signs of damage. Check the contents against the packing note.

Lifting Instructions

Where items are too heavy to be lifted manually, use suitably rated lifting equipment. Refer to the Technical Specification for weights. All lifting should be carried out in accordance with local and national regulations.

Return of Damaged Goods

IMPORTANT If any item has been damaged in transit, this should be reported to the carrier and to the supplier immediately. Damage caused in transit is the responsibility of the carrier not the supplier.

DO NOT RETURN a damaged instrument to the sender as the carrier will not then consider a claim. Save the packing with the damaged article for inspection by the carrier.

Return of Goods for Repair

If you need to return goods for repair please contact our Customer Service Department for details of the correct returns procedure.

Any item returned to AMETEK Land should be adequately packaged to prevent damage during transit.

You must include a written report of the problem together with your own name and contact information, address, telephone number, email address etc.

Design and Manufacturing Standards

The Quality Management System of Land Instruments International is approved to BS EN ISO 9001 for the design, manufacture and on-site servicing of combustion, environmental monitoring and non-contact temperature measuring instrumentation.

Registered ISO9001 Management System approvals apply in the USA.

UK Calibration Laboratory: UKAS 0034.

USA Calibration Laboratory: ANAB Accredited ISO/IEC 17025.

National Accreditation Board for Testing and Calibration Laboratories approvals apply in India.

The Quality Management System of Land Instruments is also approved to BS EN ISO/IEC 80079-34 for the manufacture of Ex products.

Operation of radio transmitters, telephones or other electrical/electronic devices in close proximity to the equipment while the enclosure doors of the instrument or its peripherals are open, may cause interference and possible failure where the radiated emissions exceed the EMC directive.

The protection provided by this product may be invalidated if alterations or additions are made to the structural, electrical, mechanical, pneumatic, software or firmware components of this system. Such changes may also invalidate the standard terms of warranty.

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1

INTRODUCTION

1.1 Overview

This guide covers the specification and user parameters for the accessories to be used with the EXSH1, EXSH2 and GPSH range of Instrument Housings.

The Instrument Housing product nomenclature should be used in addition to the sections below to determine product compatibility.

Product Type	Window Transmission	Instrument Type	Power Input	Comms	Cable Entry Type	Finish	Cooling
EXSH1 ATEX, IECEx and UKEX	LW Germanium Window	SPOT Pyrometer	AC 95-240Vac	FO Fibre Optic (op pr)	M25 - Metric M25	MT - Bead Blast	1S - Single Skin (not cooled)
EXSH2 MET	SW/MW Sapphire Window	XXIR Thermal Imager	DC 24Vdc	FO1 Fibre Optic (op is)	34NPT - 3/4" NPT		2S - Double skinned (water/ air cooled)
GPSH General Purpose				CU Copper			

These accessories have been specifically designed for use with the EXSH1 and EXSH2 to ensure that the assemblies meet the requirements for installation in Ex areas (Hazardous Locations). This includes the use of controlled materials and dimensions and consideration of coatings and surface finishes to control electrostatic ignition risks. The fasteners have been selected to ensure that they do not bottom out into any blind holes tapped into the Flameproof enclosure, even in the event of the washers being omitted, to meet Ex design standards. This is particularly important for those screws marked in the guide with the warning icon. ⚠



WARNING: To avoid compromising the Ex protection, do not use any unauthorized accessories with EXSH1 / EXSH2, and do not modify any of the equipment or substitute any parts or fasteners without consulting Land Instruments for advice.



Sun shield assembly options available for the EXSH instrument housing.

Accessory	LW-XXIR-DC-CU	LW-XXIR-AC-(FO or FO1)	SW/MW-SPOT-DC-CU	SW/MW-SPOT-AC-(FO or FO1)
815282 EXSH Sun Shield 350 Assembly	✓	N/A	✓	N/A
815283 EXSH Sun Shield 450 Assembly	N/A	✓	N/A	✓

Mounting assemblies available for a range of application scenarios.

Accessory	LW-XXIR-DC-CU	LW-XXIR-AC-(FO or FO1)	SW/MW-SPOT-DC-CU	SW/MW-SPOT-AC-(FO or FO1)
Mounting Options (one per enclosure)				
815066 EXSH Wall Mount Bracket	✓	✓	✓	✓
815068 EXSH Pole Mount Bracket	✓	✓	✓	✓
815652 EXSH Handrail Bracket with Pan & Tilt	✓	✓	✓	✓
815392 EXSH Mounting Stand P&T	✓	✓	✓	✓

Purge options for the EXSH instrument housing.

Accessory	LW-XXIR-DC-CU	LW-XXIR-AC-(FO or FO1)	SW/MW-SPOT-DC-CU	SW/MW-SPOT-AC-(FO or FO1)
Purge Options				
815610 EXSH Enviromental Protection Tube	✓ (6deg)	✓ (6deg)	✓	✓
815385 EXSH Flange Mount Purge	N/A	N/A	✓	✓
815608 Ex Spoolpiece Assy DN50 PN10-16 - 98.4pcd	For use with 815385 EXSH Flange Mount Purge ONLY			
814049 EXSH Purge	✓	✓	✓	✓



WARNING: When using the window purge accessories, particular care must be taken in locations containing combustible dust, to avoid a risk of ignition from charging mechanisms such as fast moving particles along a surface. In addition the window purges must only be connected to a source of clean, dry, non-flammable and non-corrosive gas such as air or nitrogen.

Ensure the installation complies with all conditions of use contained in the EXSH certificates.



2

EXSH SUN SHIELD

2.1 Overview

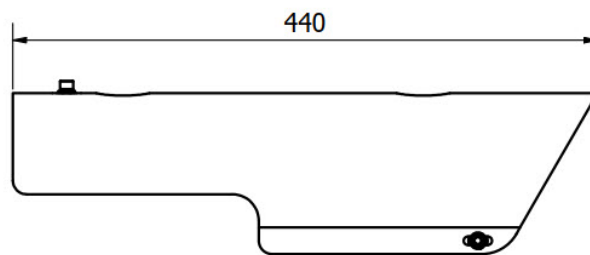
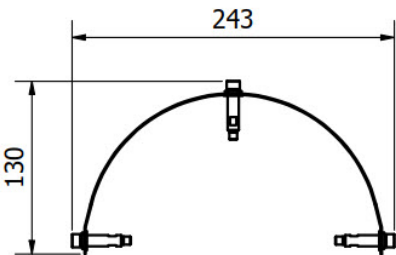
The Sun Shield Assemblies are designed to help provide protection from solar radiation.



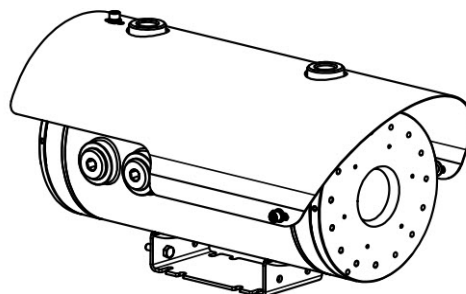
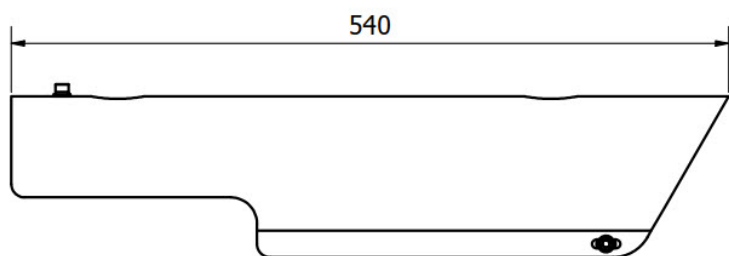
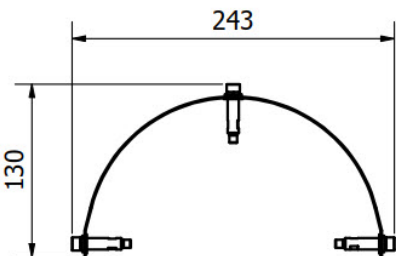
WARNING: Depending upon local ambient conditions, additional protection from direct sunlight or other thermal radiation may be required to prevent the EXSH Instrument Housing from exceeding its rated temperature.

Two versions are available:
815282 EXSH Sun Shield 350 Assembly
815283 EXSH Sun Shield 450 Assembly.
Please see Section 1 for compatibility.

815282 EXSH Sun Shield 350 Assembly



815283 EXSH Sun Shield 450 Assembly





Weight	815282 EXSH Sun Shield 350 Assembly - 0.2 kg Max
	815283 EXSH Sun Shield 450 Assembly - 0.25 kg Max
Material	Stainless Steel 1.4401/ 1.4404 (316/ 316L)

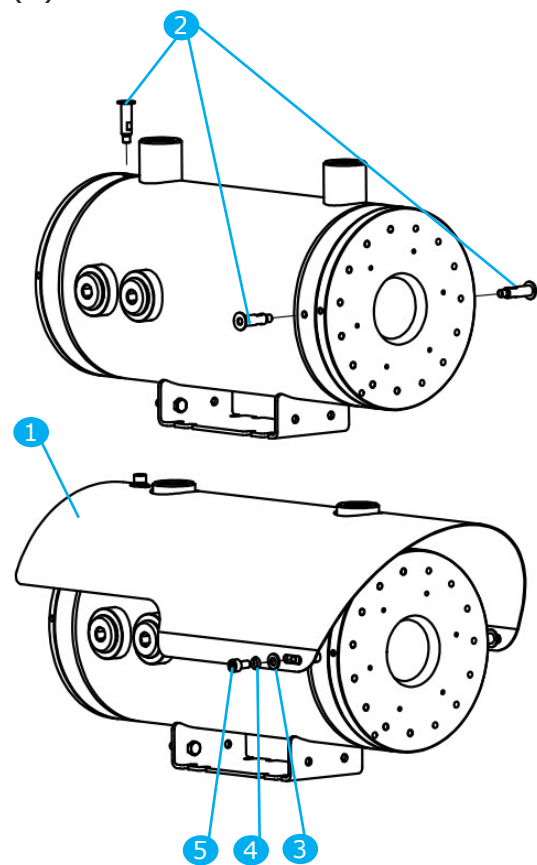
2.2 Assembly Process

Both versions of Sun Shield are supplied with the following:

- 1x Sun Shield (size dependant on Instrument housing) (1)
- 3x Sun Shield Spacer (2)
- 3x M6 Stainless Steel Washer (3)
- 3x M6 Stainless Steel Spring Washer (4)
- 3x M6x12 Stainless Steel Cap head Screw (5)

Sun Shield assembly process

- Assemble the Sun Shield Spacers (2) to the Instrument Housing. Apply a thread locking compound, such as Loctite 246 to the male thread prior to assembly. Tighten using a 7 mm spanner.
- Locate the Sun Shield (1) onto the Sun Shield Spacers (2) using the fixings provided (3, 4 and 5).
- Tighten screws to 9 Nm.





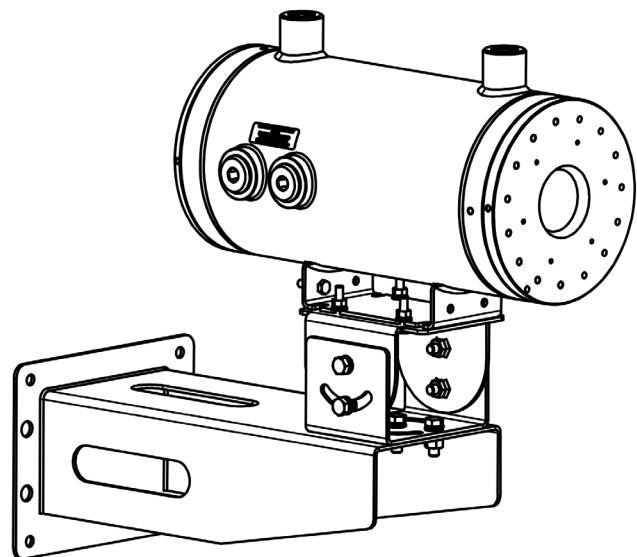
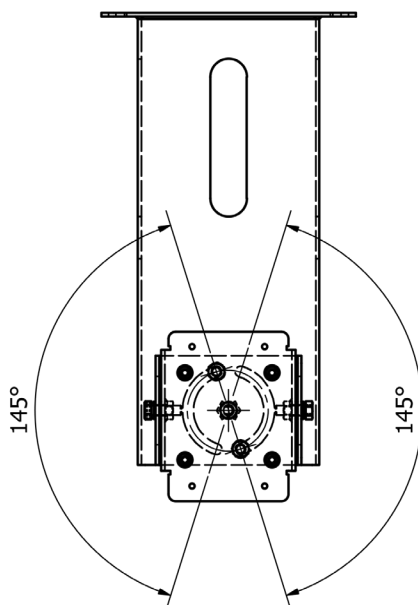
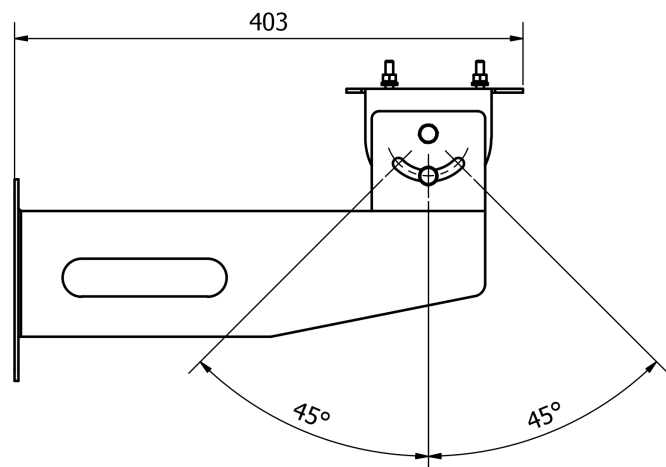
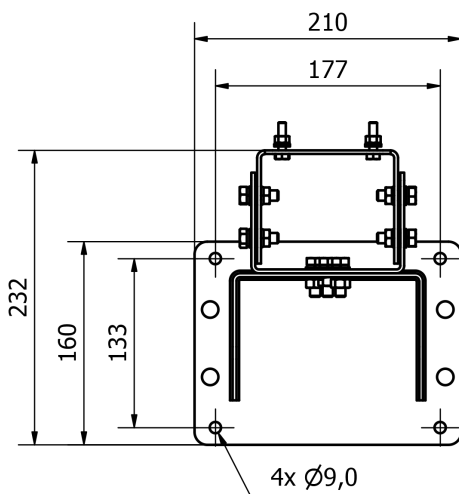
3

EXSH WALL MOUNT BRACKET

3.1 Overview

The 815066 EXSH Wall Mount Bracket is compatible with all EXSH and GPSH Instrument Housings.

The product is supplied with fixings to assemble the bracket to the Instrument Housing, however the wall fixings are customer supplied. See below for allowable bolt sizes.



EXSH Wall Mount Bracket shown with example Instrument Housing, for reference only



Weight	1 kg Max
Material	Stainless Steel 1.4401/ 1.4404 (316/ 316L)

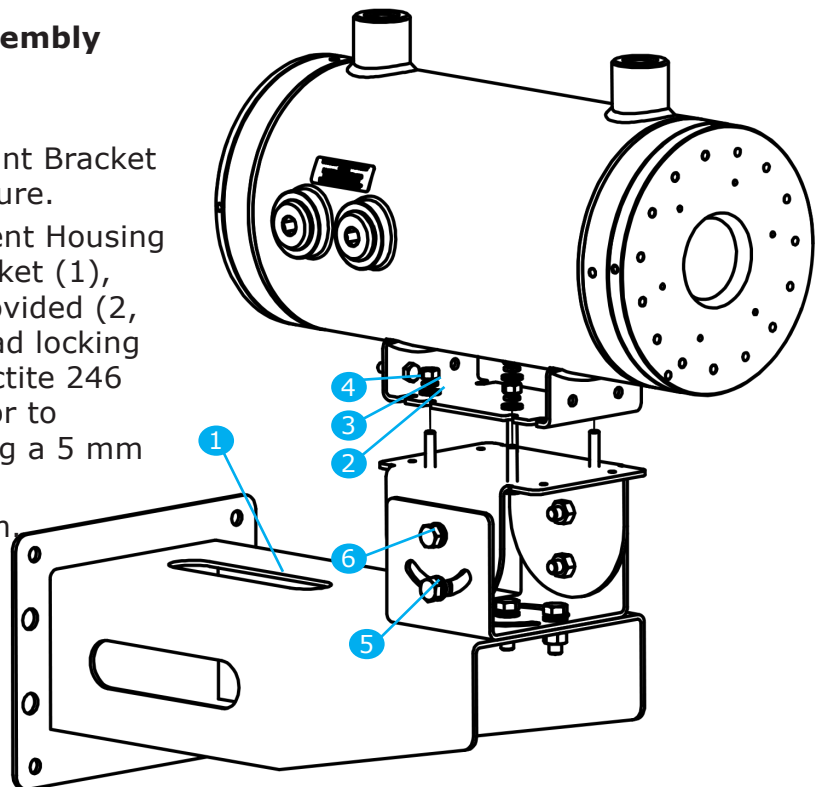
3.2 Assembly Process

The 815066 Wall Mount Bracket is supplied with the following:

- 1x Wall Mount Bracket (1)
- 4x M6 Stainless Steel Washer (2)
- 4x M6 Stainless Steel Spring Washer (3)
- 4x M6x12 Stainless Steel Cap head Screw (4)
- 2x M6x25 Stainless Steel Bolts (5)
- 2x M6x25 Stainless Steel Bolts (6)

Wall Mount Bracket assembly process

- Assemble the Wall Mount Bracket (1) to a suitable structure.
- Assemble the Instrument Housing to the Wall Mount Bracket (1), using the fasteners provided (2, 3 and 4). Apply a thread locking compound, such as Loctite 246 to the male thread prior to assembly. Tighten using a 5 mm allen key.
- Tighten screws to 9 Nm.



Wall Mount Bracket alignment process



CAUTION

Ensure all moving parts are secure before loosening the fasteners.
Assembly weight greater than 20 kg.

Only set the Instrument Housing angle once the steps above have been completed.

- Loosen the two pre-assembled M6 bolts (5) on either side of the Wall Mount Bracket, using a 10 mm spanner. Manually adjust the Instrument Housing to the required angle.
- Re-tighten the bolts to 9 Nm.



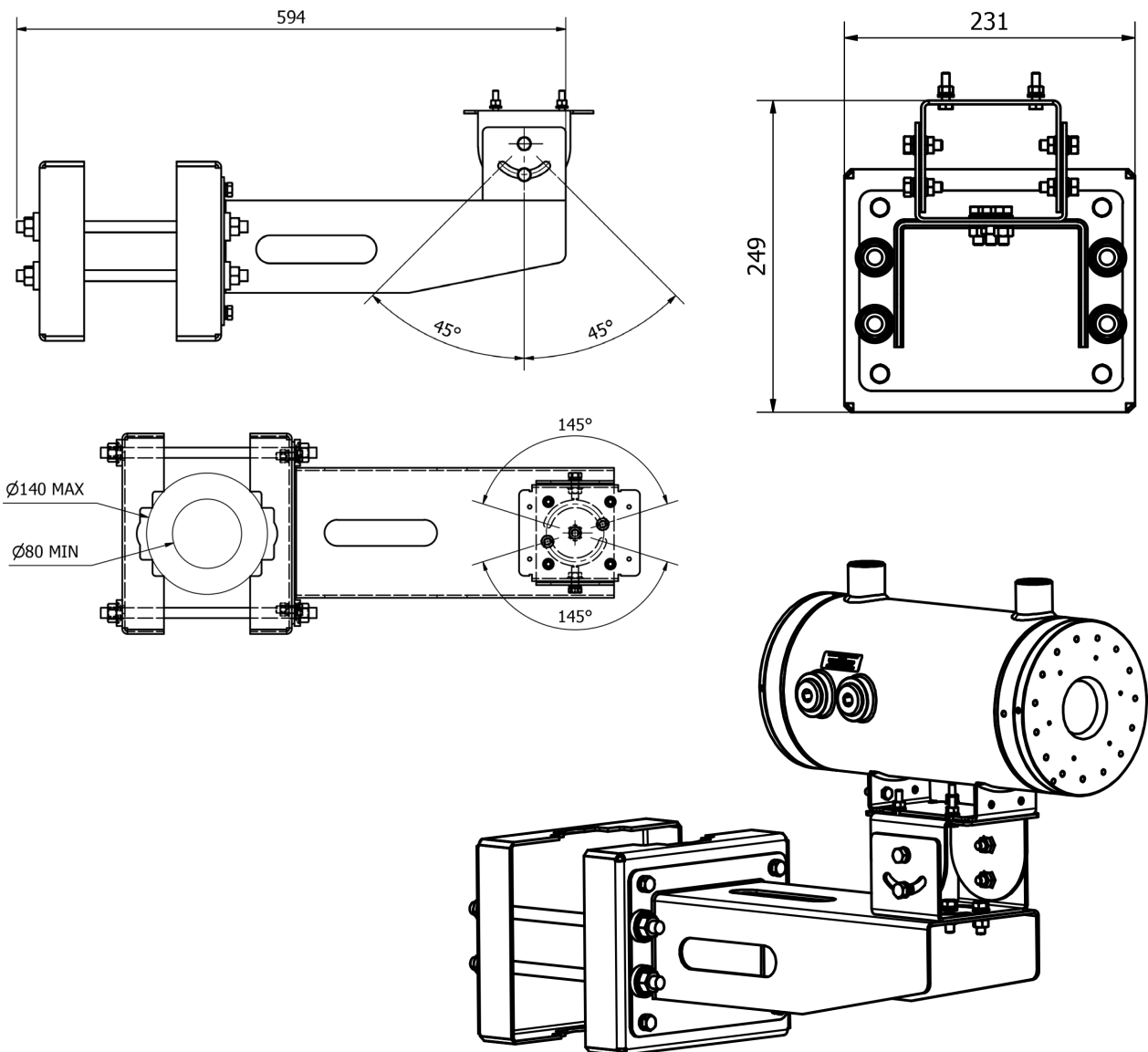
4

EXSH POLE MOUNT BRACKET

4.1 Overview

The 815068 EXSH Pole Mount Bracket is compatible with all EXSH and GPSH Instrument Housings.

The product is supplied with fixings to assemble the bracket to the Instrument Housing.



EXSH Pole Mount Bracket shown with example Instrument Housing, for reference only



Weight	2.2 kg Max
Material	Stainless Steel 1.4401/ 1.4404 (316/ 316L)

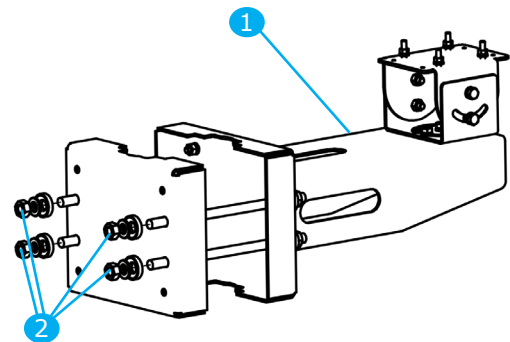
4.2 Assembly Process

The 815068 Pole Mount Bracket is supplied with the following:

- 1x Pole Mount Bracket (1)
- 4x M12 Stainless Steel fasteners (nuts, lock/ plain washers and threaded bar) (2)
- 4x M6 Stainless Steel fasteners (nuts, lock washers and plain washers) (3)
- 2x M6x20 Stainless Steel Cap head Screw (4)
- 2x M6x20 Stainless Steel Cap head Screw (5)
- 3x M6x20 Stainless Steel Cap head Screw (6)

EXSH Pole Mount Bracket with Pan & Tilt Assembly Process

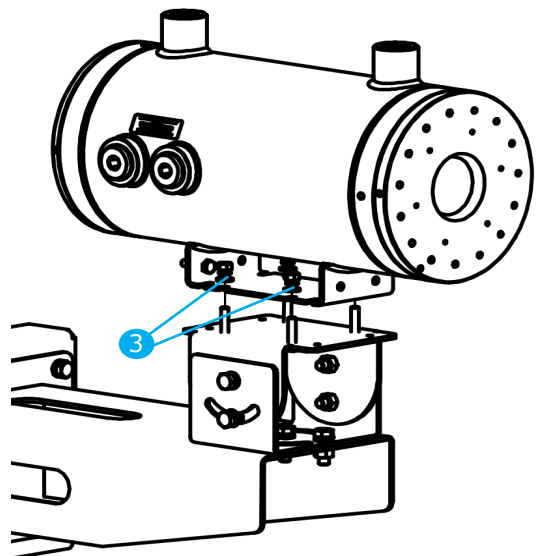
- Remove the 4x M12 fasteners and washers (2) and the 1x rear mounting plate, as shown in the image.
- Locate both sides of the Pole Mounting Bracket onto the rail. Feed the rear mounting plate onto the 4x M12 threaded bars.
- Re-assemble using the original fixings. Using two 19 mm spanners tighten the M12 bolts, clamping the assembly to the rail.



EXSH Pole Mount Bracket and Instrument Housing assembly process

Only set the Instrument Housing angle once the steps above have been completed.

- Assemble the Instrument Housing to the EXSH Pole Mount Bracket, using the fasteners provided (3). Apply a thread locking compound, such as Loctite 246 to the male thread prior to assembly. Tighten using a 5 mm allen key.
- Tighten screws to 9 Nm.





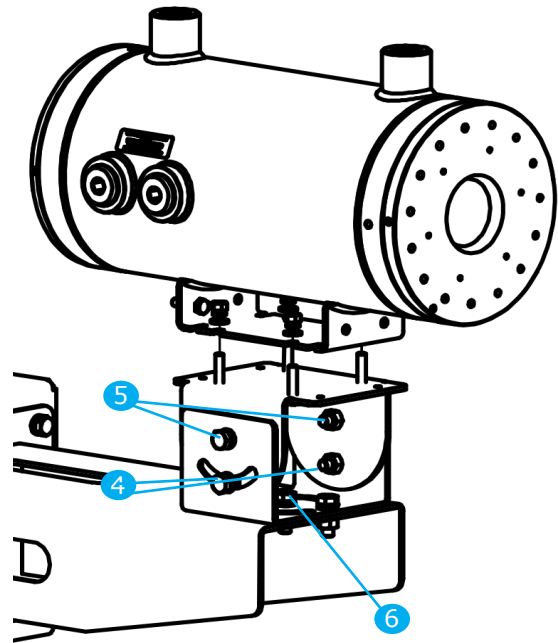
CAUTION

Ensure all moving parts are secure before loosening the fasteners.
Assembly weight greater than 20 kg.

Instrument Housing alignment process - vertical angle

Only set the Instrument Housing angle once the steps above have been completed.

- Loosen the two pre-assembled M6 bolts (4) on either side of the pan and tilt bracket using a 5 mm allen key. Manually adjust the Instrument Housing to the required angle.
(If the Pan and tilt bracket is too tight to adjust the position, loosen the two M6 Bolts (5)).
- Re-tighten the bolts to 9 Nm.



Instrument Housing alignment process - rotational angle

- Loosen the three pre-assembled M6 bolts (6) on the pan and tilt base using a 5 mm allen key. Manually adjust the Instrument Housing to the required angle.
- Re-tighten the bolts to 9 Nm.

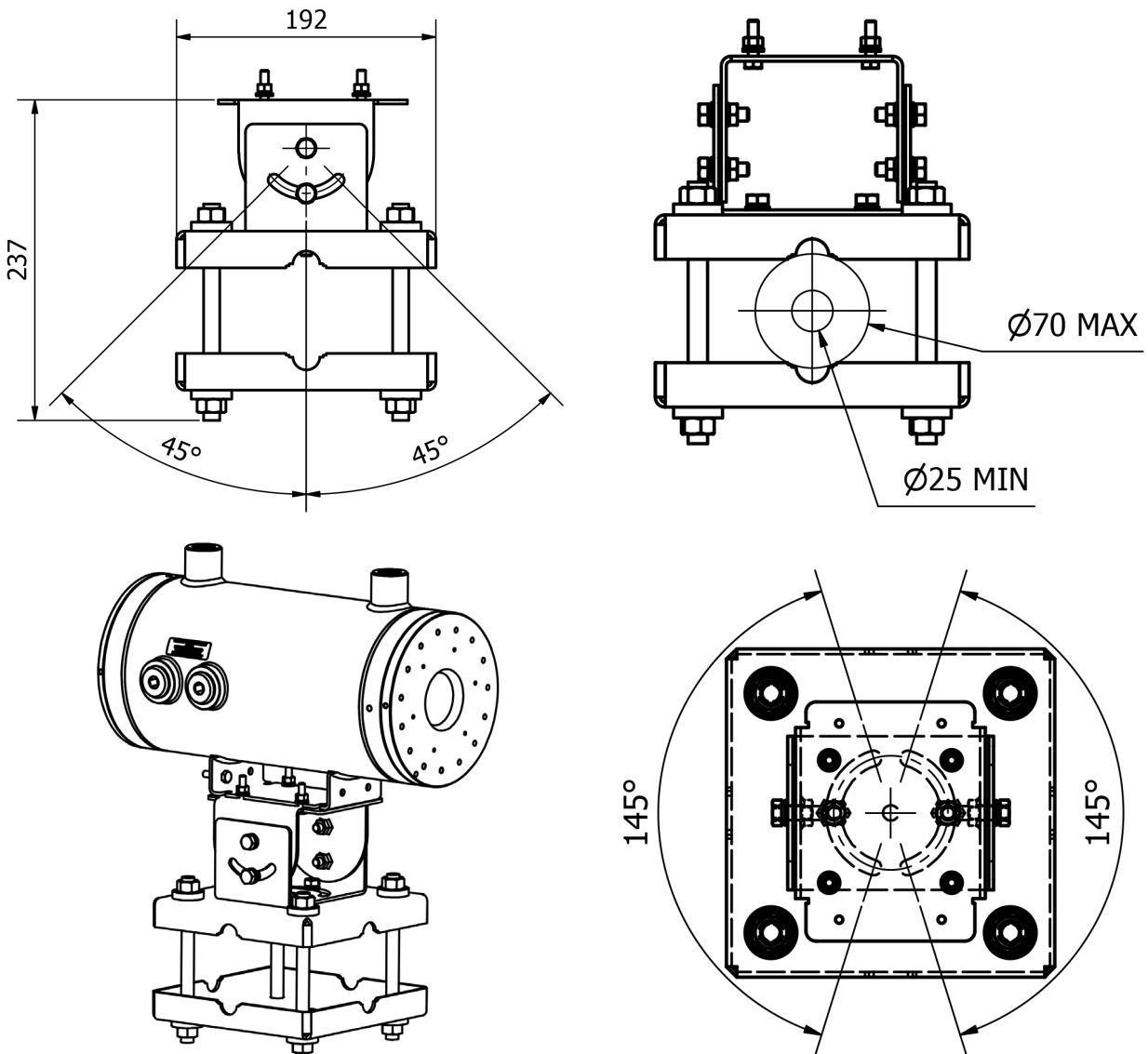


5

EXSH HANDRAIL BRACKET WITH PAN & TILT

5.1 Overview

The 815652 EXSH Handrail Bracket with Pan & Tilt is compatible with all EXSH and GPSH Instrument Housings. The product is supplied with fixings to assemble the bracket to the Instrument Housing.



EXSH Handrail Bracket with Pan & Tilt shown with example Instrument Housing, for reference only



Weight	3.5 kg Max
Material	Stainless Steel 1.4401/ 1.4404 (316/ 316L)

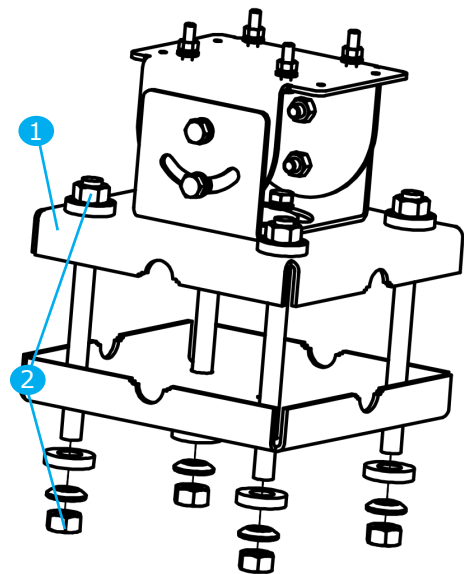
5.2 Assembly Process

The 815653 EXSH Handrail Bracket with Pan & Tilt is supplied with the following:

- 1x EXSH Handrail Bracket with Pan & Tilt (1)
- 8x M10 Stainless Steel fasteners (nuts, lock washers and plain washers) (2)
- 4x M6 Stainless Steel fasteners (nuts, lock washers and plain washers) (3)
- 2x M6x20 Stainless Steel Cap head Screw (4)
- 2x M6x20 Stainless Steel Cap head Screw (5)
- 3x M6x20 Stainless Steel Cap head Screw (6)

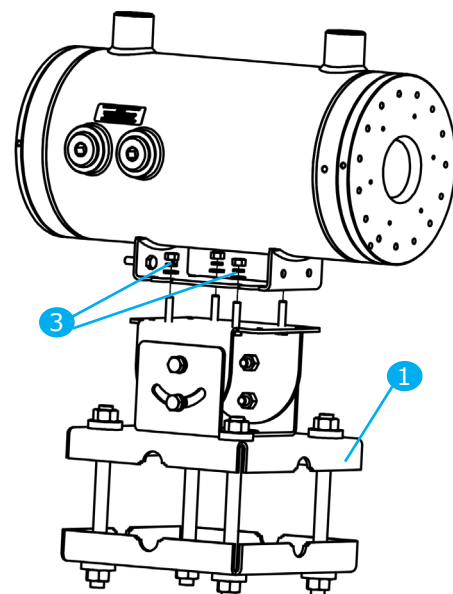
EXSH Handrail Bracket with Pan & Tilt Assembly Process

- Remove the 4x M10 fasteners (2) and the lower mounting plate, as shown in the image.
- Locate the top mounting plate assembly (with pan & tilt) onto the rail. Select the correct cut out orientation, depending on the rail orientation to the target.
- Re-assemble the lower mounting plate and fixings. Using two 17 mm spanners tighten the M10 bolts, clamping the assembly to the rail.



EXSH Handrail Bracket with Pan & Tilt and Instrument Housing assembly process

- **Only set the Instrument Housing angle once the steps above have been completed.**
- Assemble the Instrument Housing to the EXSH Handrail Bracket with Pan & Tilt (1), using the fasteners provided (3). Apply a thread locking compound, such as Loctite 246 to the male thread prior to assembly. Tighten using a 5 mm allen key.
- Tighten screws to 9 Nm.





CAUTION

Ensure all moving parts are secure before loosening the fasteners.
Assembly weight greater than 20 kg.

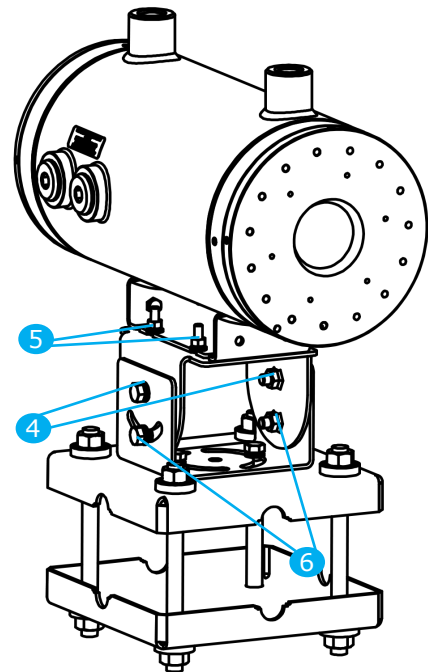
Instrument Housing alignment process - vertical angle

- **Only set the Instrument Housing angle once the steps above have been completed.**

- Loosen the two pre-assembled M6 bolts (4) on either side of the pan and tilt bracket using a 5 mm allen key. Manually adjust the Instrument Housing to the required angle.

(If the Pan and tilt bracket is too tight to adjust the position, loosen the two M6 Bolts (5)).

- Re-tighten the bolts to 9 Nm.



Instrument Housing alignment process - rotational angle

- Loosen the three pre-assembled M6 bolts (6) on the pan and tilt base using a 5 mm allen key. Manually adjust the Instrument Housing to the required angle.
- Re-tighten the bolts to 9 Nm.

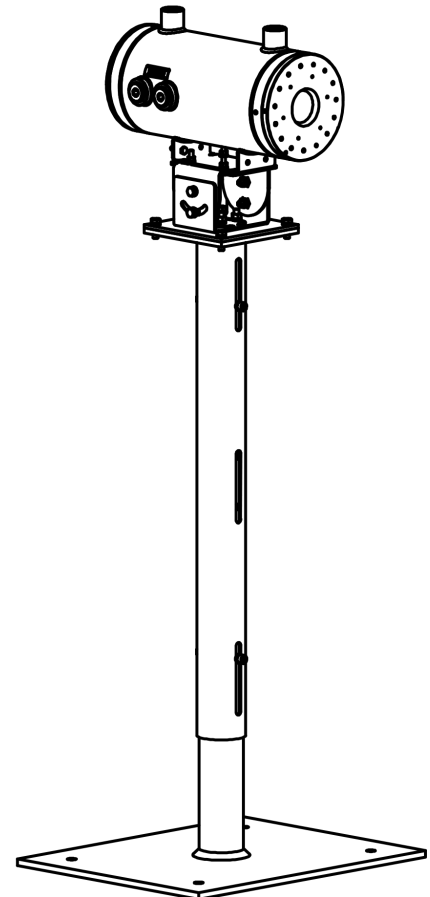
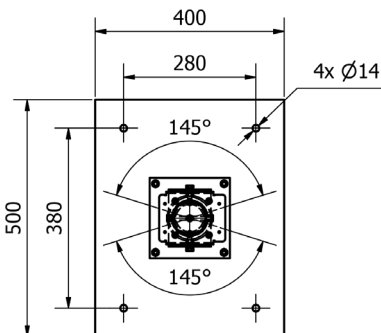
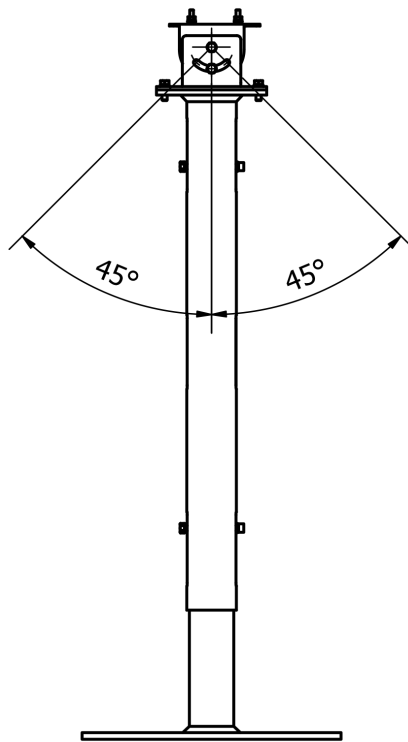
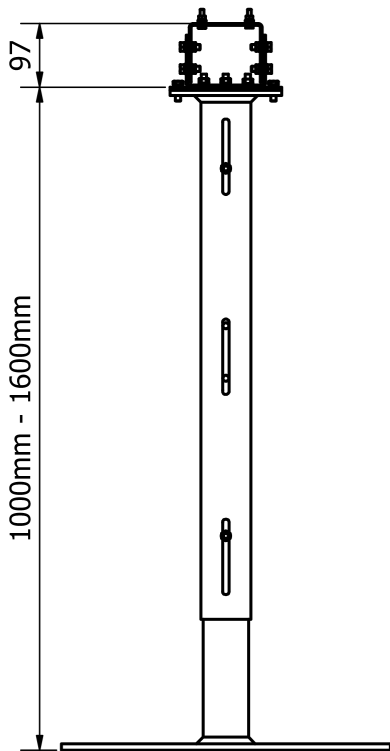


6

EXSH MOUNTING STAND PAN & TILT

6.1 Overview

The 815392 EXSH Mounting Stand Pan & Tilt is compatible with all EXSH and GPSH Instrument Housings. The product is supplied with fixings to assemble the stand to the Instrument Housing.



EXSH Mounting Stand Pan and Tilt shown with example Instrument Housing, for reference only

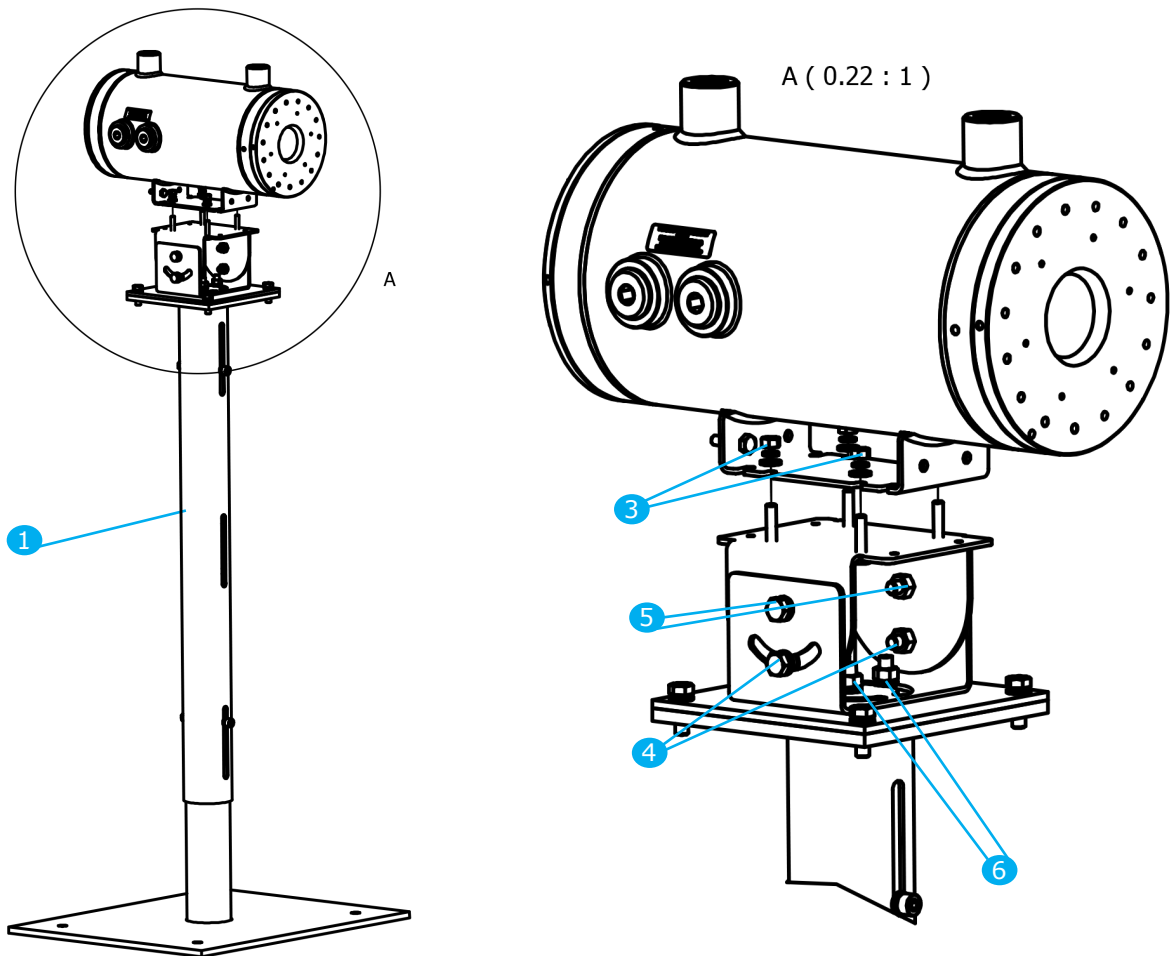
Weight	25 kg Max
Material	Stainless Steel 1.4401/ 1.4404 (316/ 316L)



6.2 Assembly Process

The 815392 EXSH Mounting Stand Pan & Tilt is supplied with the following:

- 1x EXSH Mounting Stand Pan & Tilt (1)
- 2x M8 Stainless Steel fasteners (bolts, nuts, lock/ plain washers) (2)
- 4x M6 Stainless Steel fasteners (nuts, lock washers and plain washers) (3)
- 2x M6x20 Stainless Steel Cap head Screw (4)
- 2x M6x20 Stainless Steel Cap head Screw (5)
- 3x M6x20 Stainless Steel Cap head Screw (6)



EXSH Mounting Stand Pan & Tilt and Instrument Housing assembly process

- **Only set the Instrument Housing angle, rotation and height once the steps below have been completed.**
- Assemble the Instrument Housing to the EXSH Mounting Stand P&T (1), using the fasteners provided (3). Apply a thread locking compound, such as Loctite 246 to the male thread prior to assembly. Tighten using a 5 mm allen key.
- Tighten screws to 9 Nm.



Instrument Housing alignment process



CAUTION

Ensure all moving parts are secure before loosening the fasteners.
Assembly weight greater than 20 kg.

Setting the vertical angle

- Loosen the two pre-assembled M6 bolts (4) on either side of the pan and tilt bracket using a 5 mm allen key. Manually adjust the Instrument Housing to the required angle.

(If the Pan and Tilt bracket is too tight to adjust the position, loosen the two M6 Bolts (5). A second person is required for this step to support the weight of the housing)

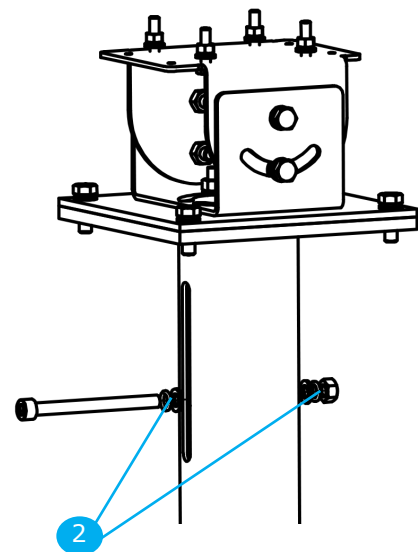
- Re-tighten the bolts to 9 Nm.

Setting the rotational angle

- Loosen the three pre-assembled M6 bolts (6) on the Pan and Tilt base using a 5 mm allen key. Manually adjust the Instrument Housing to the required angle.
- Re-tighten the bolts to 9 Nm.

Setting the height

- Loosen the two pre-assembled M8 bolts (2) on the pole using a 5 mm allen key and 13 mm spanner.
- If the required height is within the slot limit, there is no requirement to fully remove the M8 bolts (2). Adjust to the required height and re-tighten the bolts.
- If required, fully remove the M8 bolts and fasteners (2). Lift to the required height, re-insert the M8 bolts and re-tighten the bolts.
- Both M8 bolts must always be used.
- **Do not** modify the EXSH Mounting Stand Pan & Tilt.



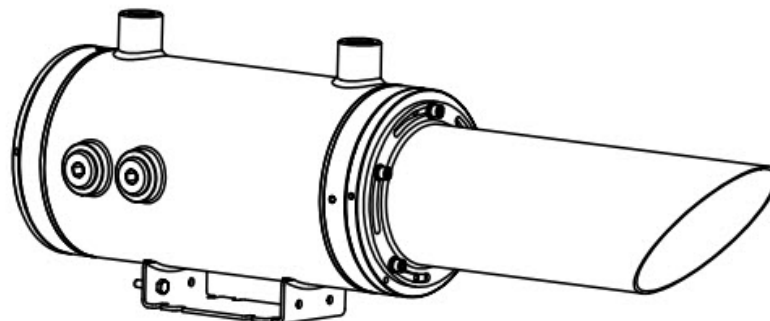
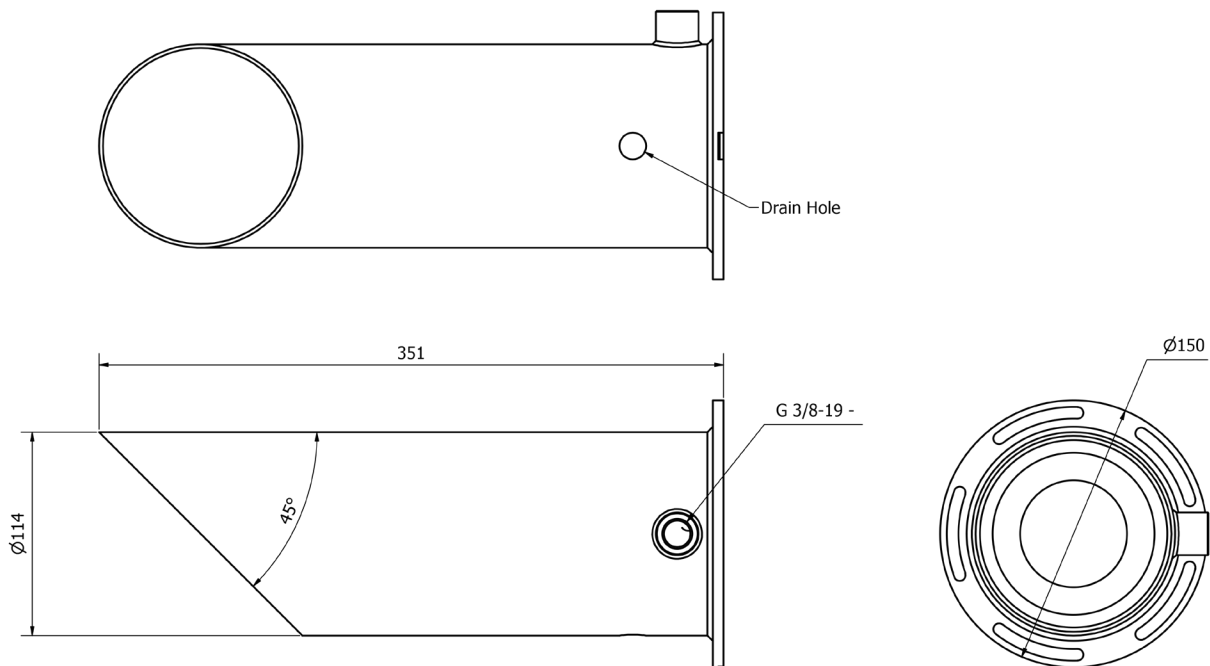


7

EXSH ENVIROMENTAL PROTECTION TUBE

7.1 Overview

The 815610 EXSH Enviromental Protection Tube is compatible with all EXSH and GPSH Instrument Housings. The product is supplied with fixings to assemble the Enviromental Protection Tube to the Instrument Housing.



EXSH Enviromental Protection Tube shown with example Instrument Housing, for reference only.

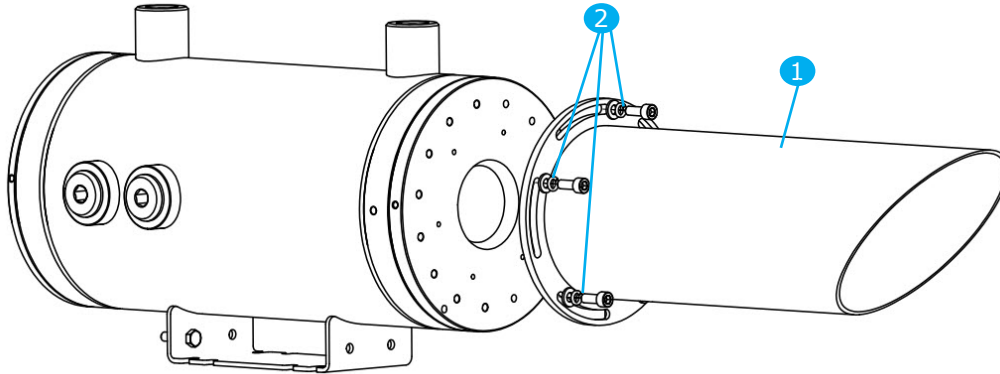
Weight	1 kg Max
Material	Stainless Steel 1.4401/ 1.4404 (316/ 316L)



7.2 Assembly Process

The 815610 EXSH Environmental Protection Tube is supplied with the following:

- 1x EXSH Environmental Protection Tube (1)
- 5x M6 Stainless Steel fasteners (M6 x 16 screws, lock washers and plain washers) (2)



EXSH Environmental Protection Tube and Instrument Housing assembly process

- The Environmental Protection Tube has slotted features, located around the mounting flange. Align the Tube with the window flange and orientate until the 45 degree chamfer is vertically aligned with the Instrument Housing.
- Assemble using the fasteners provided (2). Tighten using a 5 mm allen key.
- Tighten screws to 9 Nm.

7.3 Air Purge Specification

The air purge unit uses a stream of clean air to ensure that the lens is free from condensation, dirt and other deposits. The purge is extremely efficient and accepts a wide range of air entry adapters and fittings, suitable for use with fan or compressed air supplies. To achieve high standards of cleanliness, the air supply should comply with ISO 8573-1.

Inlet Pressure: 0.4 bar (5.8 psi)
Flow rate: 150 l/min to 350 l/min (5.3 cfm to 12.4 cfm)

NOTE

This is advisory. Required flow rate depends on location and environmental conditions. Intermittent bursts of 350 l/min might be required with lower flow rates.



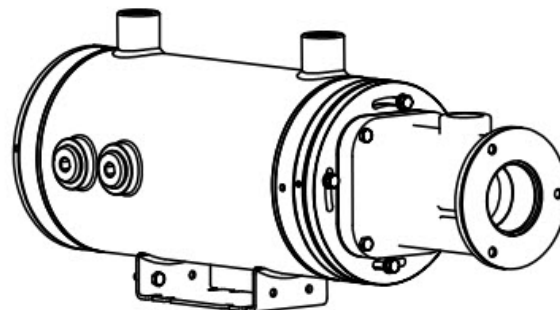
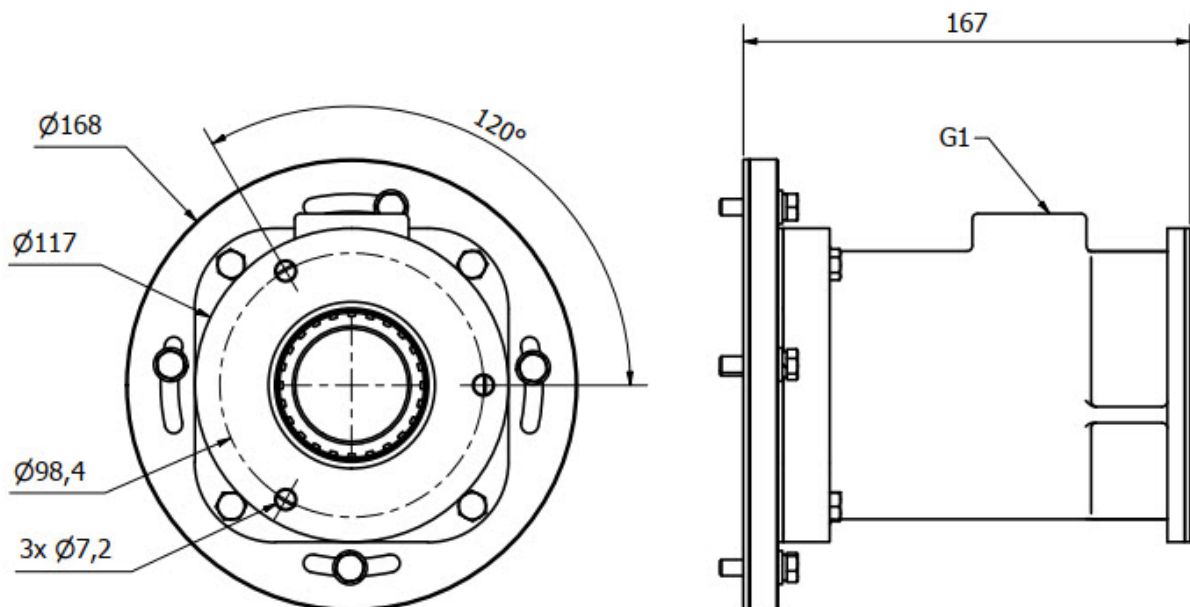
8

EXSH FLANGE MOUNT PURGE

8.1 Overview

The 815358 EXSH Flange Mount Purge is compatible with the EXSH and GPSH Instrument Housings. However, only the Ex SPOT Instrument is compatible with the Flange Mount Purge.

The product is supplied with fixings to assemble the EXSH Flange Mount Purge to the Instrument Housing.



EXSH Flange Mount Purge shown with example Instrument Housing, for reference only.

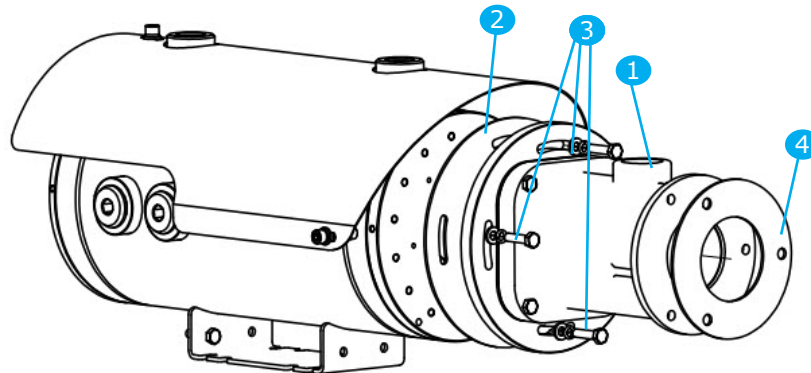
Weight	1.5 kg Max
Material	Aluminium alloy, stainless steel, Flexitallic Gasket Type SF2800 (aramid fibre bound with Nitrile rubber)



8.2 Assembly Process

The 815358 EXSH Flange Mount Purge is supplied with the following:

- 1x EXSH Flange Mount Purge (1)
- 1x ExHazloc FMP Gasket (2)
- 4x M6 Stainless Steel fasteners (M6 x 25 screws, lock washers and plain washers) (3)
- 1x ExHazLoc Purge Gasket (4)



EXSH Flange Mount Purge and Instrument Housing assembly process

- The EXSH Flange Mount Purge (1) has slotted features, located around the mounting flange. Align the Purge with the window flange and orientate until the G1 air inlet is vertically aligned with the Instrument Housing.
- Ensure that the FMP Gasket (2) is positioned to line up with the slots of the Flange Mount Purge (1).
- Assemble using the fasteners provided (3). Tighten using a 10 mm spanner or socket.
- Tighten screws to 9 Nm.

EXSH Flange Mount Purge to Process assembly process

- Customers may use their own fasteners, provided they M6 and are manufactured from A2/ A4 Stainless Steel. Ensure that the ExHazLoc Purge Gasket (4) is placed between the mounting flange and the process for sealing.

8.3 Air Purge Specification

The air purge unit uses a stream of clean air to ensure that the lens is free from condensation, dirt and other deposits. The purge is extremely efficient and accepts a wide range of air entry adapters and fittings, suitable for use with fan or compressed air supplies. To achieve high standards of cleanliness, the air supply should comply with ISO 8573-1.

Inlet Pressure: 3.5 mbar (0.05 psi)
Flow rate: <60 l/min (2 cfm)



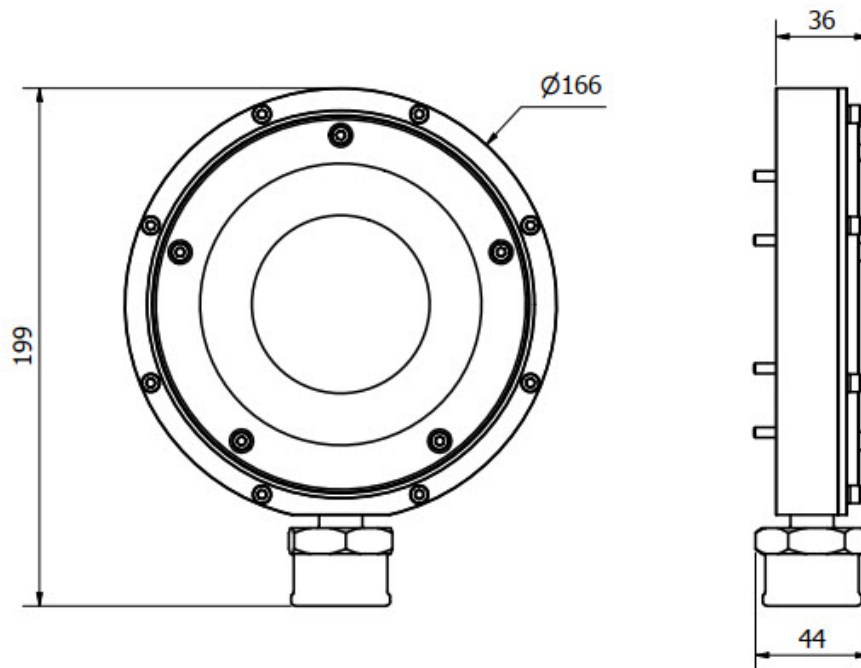
9

EXSH PURGE

9.1 Overview

The 814049 EXSH Purge is compatible with the EXSH and GPSH Instrument Housings.

The product is supplied with fixings and a gasket to assemble the EXSH Purge to the Instrument Housing.



EXSH Purge shown with example Instrument Housing, for reference only.

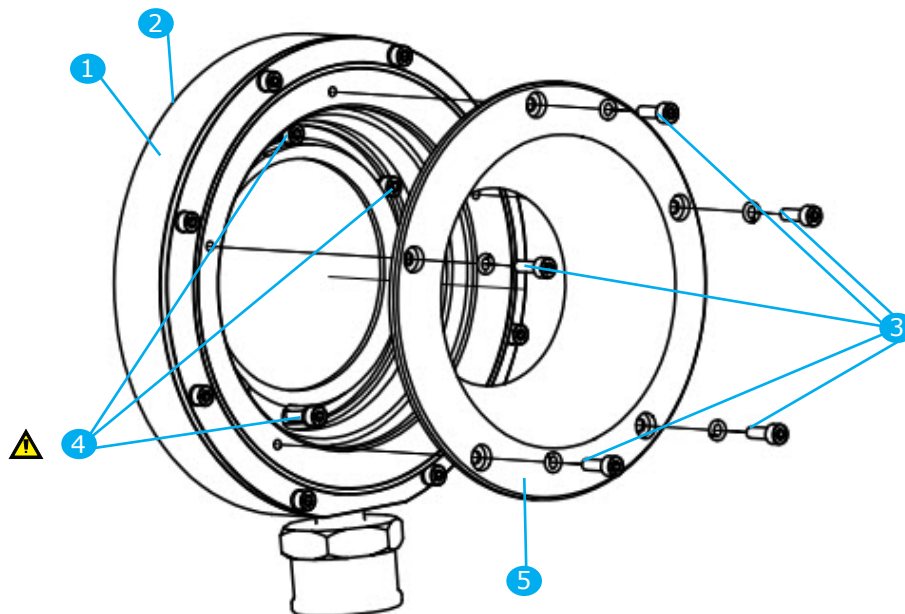
Weight	1 kg Max
Material	Aluminium alloy (Black Anodised) stainless steel, Flexitallic SF2800 (aramid fibre bound with Nitrile rubber)



9.2 Assembly Process

The 814049 EXSH Purge is supplied with the following:

- 1x EXSH Purge (1)
- 1x ExHazloc Purge Gasket (2)
- 5x M4 Stainless Steel fasteners (M4 x12 screws, lock washers and plain washers) (3)
- 6x M4 Stainless Steel fasteners (M4 x12 screws, lock washers and plain washers) (4)
- 1x EXSH Purge Outer Cover (5)

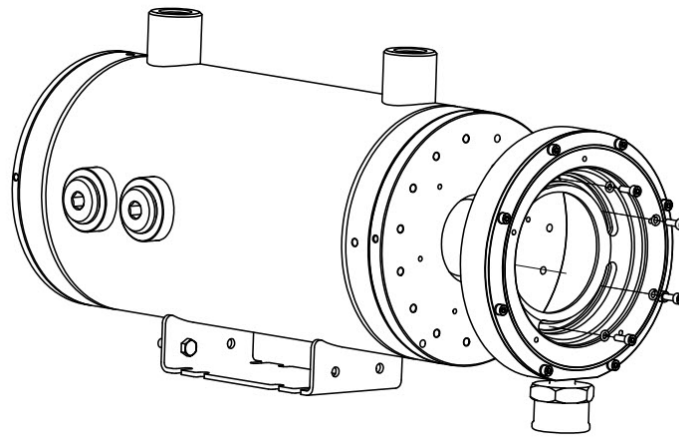


EXSH Purge and Instrument Housing assembly process

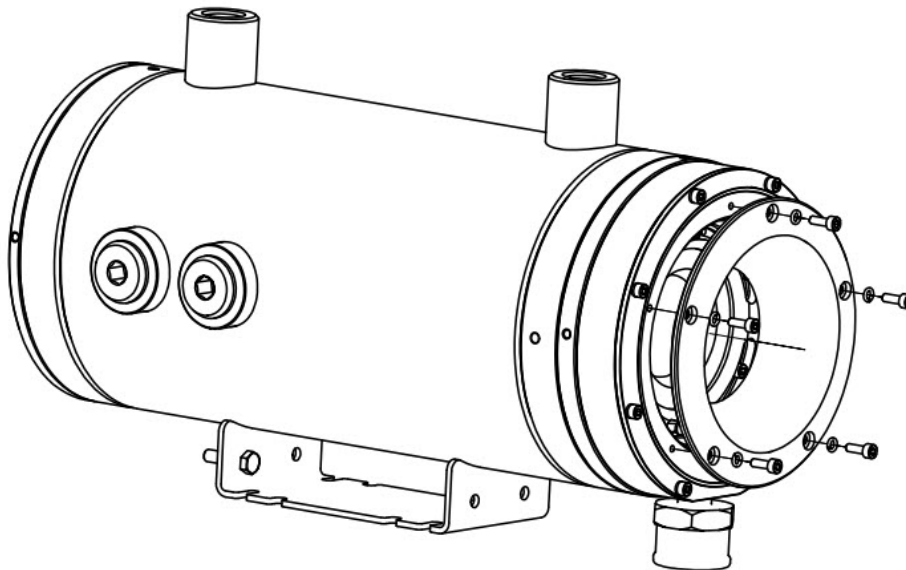


WARNING: 814049 Purge screws into the pressure bearing area of the front window flange. To avoid compromising the Ex protection of the EXSH Housing, follow these instructions carefully and do not modify, omit or substitute any parts or fasteners.

- Remove the EXSH Purge Outer Cover (5) to access the mounting fasteners. Remove the 5 off M4 fasteners (3), keep them for re-assembly.
- The EXSH Purge (1) has slotted features, located around the mounting flange. Align the Purge with the window flange and orientate until the G3/8 Pipe adaptor is vertically aligned with the Instrument Housing.
- Ensure that the Purge Gasket (2) is positioned to line up with the slots of the Flange mount Purge (1).
- Assemble using the fasteners provided (4). Tighten using a 3 mm allen key, to 6 Nm.



- Replace the EXSH Purge Outer Cover (5) and re-assemble using the 5 off M4 fasteners (3). Tighten using a 3 mm allen key, to 6 Nm.



9.3 Air Purge Specification

The air purge unit uses a stream of clean air to ensure that the lens is free from condensation, dirt and other deposits. The purge is extremely efficient and accepts a wide range of air entry adapters and fittings, suitable for use with fan or compressed air supplies. To achieve high standards of cleanliness, the air supply should comply with ISO 8573-1.

Inlet Pressure: 1 bar (14.5psi)
Flow rate: 150 l/min to 350 l/min (5.3cfm to 12.4cfm)

NOTE

This is advisory. Required flow rate depends on location and environmental conditions. Intermittent bursts of 350l/min might be required with lower flow rates.

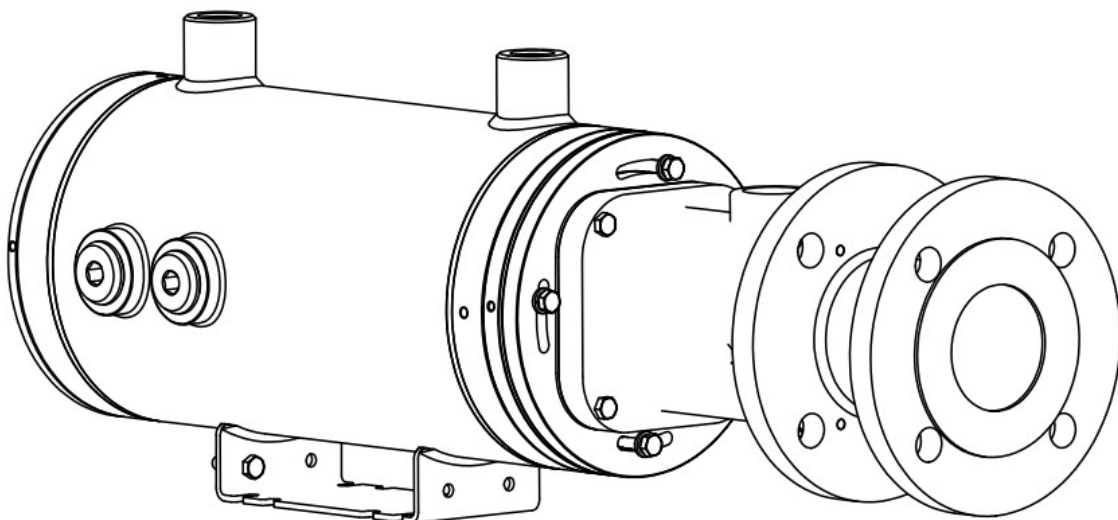
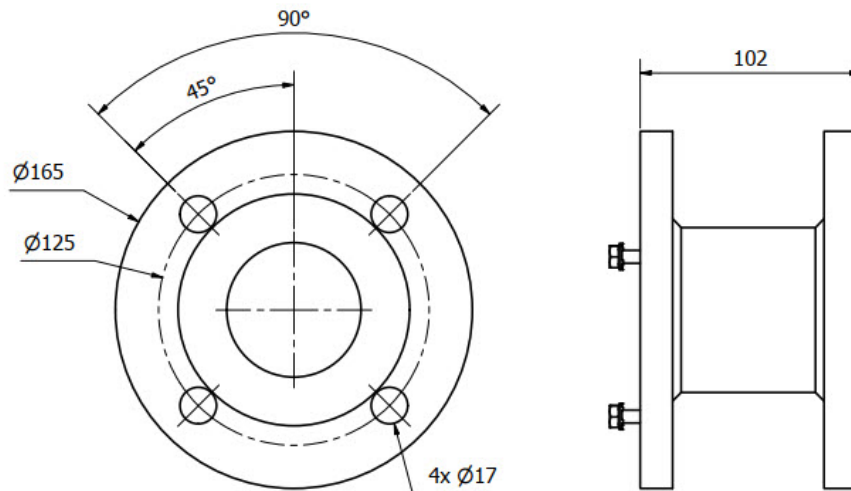


10

EX SPOOLPIECE ASSEMBLY DN50 PN10-16

10.1 Overview

The 815608 Ex Spoolpiece Assembly DN50 PN10-16 is only compatible with the 815358 EXSH Flange Mount Purge. The product is supplied with fixings to assemble the EX Spoolpiece to the EXSH Flange Mount Purge.



Ex Spoolpiece Assy DN50 PN10-16 - 98.4pcd shown with example Instrument Housing and EXSH Flange Mount Purge, for reference only.

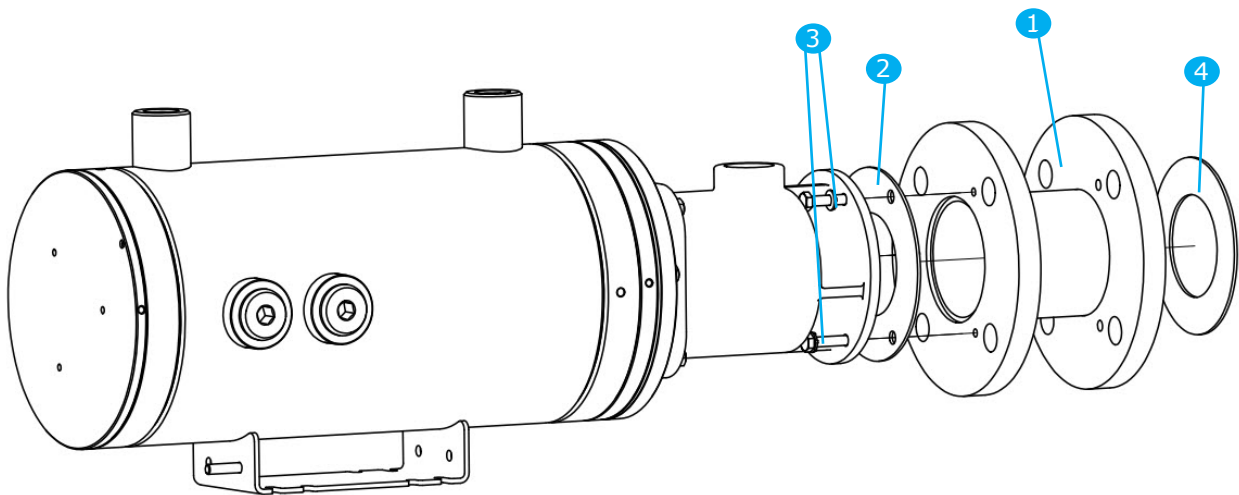
Weight	4.5 kg Max
Material	Stainless Steel 1.4401/ 1.4404 (316/ 316L)



10.2 Assembly Process

The 815608 Ex Spoolpiece Assembly DN50 PN10-16 is supplied with the following:

- 1x Ex Spoolpiece Assembly DN50 PN10-16 (1)
- 1x ExHazLoc Purge Gasket (2) (Taken from 815358 EXSH Flange Mount Purge)
- 3x M6 Stainless Steel fasteners (screws and serrated washers) (3)
- 1x DN50 PN10 Gasket (4)



Ex Spoolpiece Assembly DN50 PN10-16 and EXSH Flange Mount Purge

- Assemble the M6 fasteners (3) through the mounting holes located on the EXSH Flange Mount Purge.
- Locate the ExHazLoc Purge Gasket (2) and fit over the M6 fasteners (3).
- Locate the Ex Spoolpiece Assembly DN50 PN10-16 (1) and align with the M6 fasteners (3). Ensure that the hole pattern on the Ex Spoolpiece Assy DN50 PN10-16 aligns with the mating holes on the process.
- Hand tighten the M6 fasteners, then using a 10 mm spanner tighten all the M6 Fasteners.
- Ensure the DN50 PN10 Gasket (4) is in place before assembling to the process.



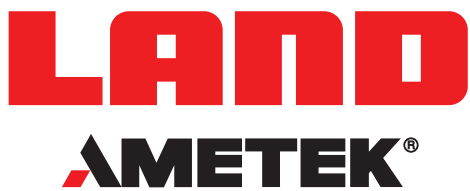
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NOTES





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