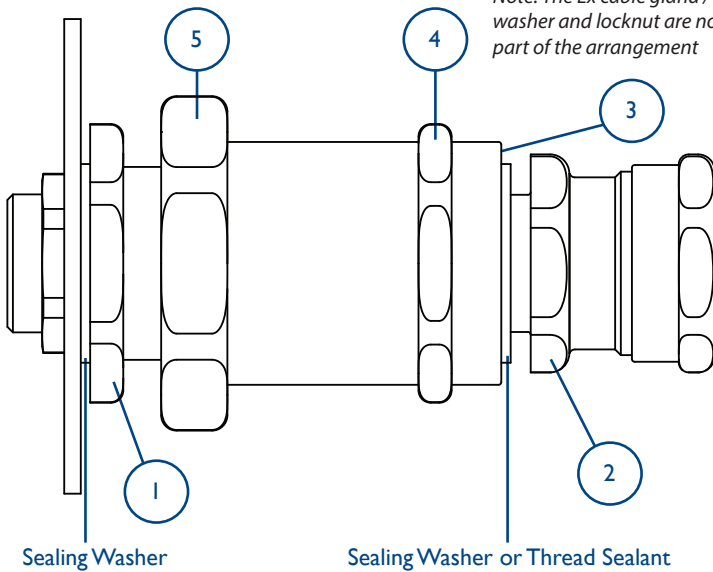


Assembly Instructions for: 490 Male to Female Swivel Inline Union with Lockstop

Operating temperature range -60°C +100°C

Depending upon the required IP rating, an IP washer or thread sealant may be required on / between the equipment and union / union and cable gland to maintain the equipment IP rating.



Note: The Ex cable gland / conduit, sealing washer and locknut are not supplied as part of the arrangement

Certification Details

Type: 490 Swivel Inline Union with Lockstop
Exeb I Mb, Exdb I Mb,
Exeb IIC Gb, Exdb IIC Gb, Extb IIIC Db
Sira 11ATEX1347U (Ex) I M2 / II 2 GD IP66
IECEx SIR11.0152U
IEx 15.0207U
EAC (Ex) TC RU C-GB.AA87.B.00430
c CSA us No: 1731876
Class I Zone 1 AExd IIC Gb, AExe IIC Gb,
Zone 21 AExtb IIIC Db

TYPICAL DIMENSIONS

Male Thread Size	Thread Pitch (mm)	Female Thread Size	Thread Pitch (mm)	Thread Length (mm)	Typical A/F (mm)	Typical A/C (mm)
M16	1.5	M16	1.5	16	36	39.5
M20	1.5	M20	1.5	16	36	39.5
M25	1.5	M25	1.5	16	46	50.5
M32	1.5	M32	1.5	16	46	50.5
M40	1.5	M40	1.5	16	65	70.8
M50	1.5	M50	1.5	16	65	70.8
M63	1.5	M63	1.5	16	95	104.0
M75	1.5	M75	1.5	16	95	104.0

Before Assembly:

Ensure that the thread in the enclosure and on the cable gland/conduit fitting is the same size, pitch and form as the union, ensuring that for parallel threads the thread engagement is at least 5 full threads and 8mm axial engagement as a minimum. Using suitably sized spanners, fit a spanner to the hexagon section ④ on the union body as shown to hold the fitting and place a spanner or wrench onto the lockstop nut ⑤. Turn the second spanner anti-clockwise until the lockstop nut ⑤ is free to rotate by hand. The union is now ready for installation.

- When aluminium versions are used, thread lubrication may be required in accordance with IEC 60079-14.

Schedule of Limitations

- These swivel unions are component certified only and must be certified as part of the associated electrical apparatus.
- These swivel unions shall not be used where the service temperature is outside the temperature range -60°C to +100°C.
- Blanking elements shall not be used with these swivel unions.
- The M16 size swivel unions shall only be for Group I applications where there is low risk of impact.
- These swivel unions shall not be used for the direct inter-connection of enclosures.
- These swivel unions shall not be used with conduit in Group I installations.
- Only one swivel union shall be used with any single cable entry on the associated equipment.
- When required, the front and rear threads of these unions shall be suitably sealed to maintain the ingress protection rating of the associated equipment to which they are attached e.g. if a union is fitted into (Ex t) protection by enclosure equipment for use in explosive dust atmospheres and the front thread is not sealed using a washer, then to maintain the required IP6* rating, the enclosure shall offer a minimum of 5 full threads of contact in accordance with EN 60079-31.

For Increased Safety Enclosures

1. Ensure the union thread form is compatible with the enclosure thread and the equipment fitted to the union.
2. Ensure that the area around the enclosure entry thread is clean and flat and the entry thread is square to the enclosure face.
3. If the enclosure contains a clearance hole entry, the maximum clearance permitted between the enclosure entry and the union male thread nominal size is 0.7mm and a suitable sealing washer shall be fitted to the entry thread.

Step 1

Fit a suitable sealing washer to the entry thread. Screw the swivel male threaded section ① into the enclosure threaded wall or fit into clearance hole and secure with a locknut using a suitably sized spanner or wrench until tight.

Step 2

Fit the cable gland or conduit ② into the female threaded section of the union ③ and hand tighten, using a spanner fitted to the hexagon on the union body ④ to stop rotation, complete the gland / conduit tightening sequence with a suitably sized spanner or wrench.

Step 3

When the wiring is completed, the swivel lockstop nut ⑤ may be tightened with a suitably sized spanner or wrench while a spanner is attached to the hexagon of the body of the union ④ to restrict the movement of the swivel fitting.

For Exd Flameproof Enclosures

1. Ensure the union thread form is compatible with the enclosure thread and the equipment fitted to the union.
2. Ensure that the area around the enclosure entry thread is clean and flat and the entry thread is square to the enclosure face.
3. Ensure that the enclosure threaded entry is the same size and thread form as the male threaded section of the union and that at least 5 full threads engagement - 8mm axial engagement will be achieved between the male and female threads.

Step 1

Screw the swivel male threaded section ① into the enclosure threaded hole using a suitably sized spanner or wrench until tight.

Step 2

Fit the cable gland or conduit ② into the female threaded section of the union ③ and hand tighten, using a spanner fitted to the hexagon on the union body ④ to stop rotation, complete the tightening sequence with a suitably sized spanner or wrench.

Step 3

When the wiring is completed, the swivel lockstop nut ⑤ may be tightened with a suitably sized spanner or wrench while a spanner is attached to the hexagon of the body of the union ④ to restrict the movement of the swivel fitting.

EU Declaration of Conformity in accordance with European Directive 2014/34/EU

Manufacturer: Hawke International

Address: Oxford Street West, Ashton-under-Lyne, OL7 0NA, United Kingdom

Equipment Type: 490 Male to Female Inline Swivel Union with Lockstop (Group I and II)

Provisions of the Directive fulfilled by the Equipment:

Group I Category I M2 Exeb I Mb, Exdb I Mb

Group II Category 2GD Exeb IIC Gb, Exdb IIC Gb, Extb IIIC Db – IP66

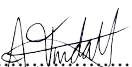
Notified Body for EU-Type Examination: SIRA Certification Service Chester 0518

EU-type Examination Certificate: Sira11ATEX1347U

Notified Body for production: SIRA Certification Service 0518 Chester UK

Harmonised Standards used: EN 60079-0:2012+A11:2013, EN60079-1:2014, EN60079-7:2015, EN60079-31:2014.

On behalf of the above named company, I declare that, on the date the equipment accompanied by this declaration is placed on the market, the equipment conforms with all technical and regulatory requirements of the above listed directives.


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A. Tindall
Technical Manager