

Single Arm Backshell Series



Typical applications



Civil Aviation

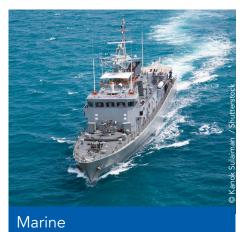


Military Aviation





Ground Vehicle





Rail Transportation

Features & Benefits

High Reliability

SELF- S LOCKING m

SUNBANK has designed and developed high-reliability, self-locking mechanisms to withstand high vibrations.

LIGHT Lightweight, aerospace grade lighter than Aluminum.

Lightweight, aerospace grade composite materials that are up to 40% lighter than Aluminum.

PLATING

Environmental

Available with electroless nickel plating meeting the requirements of AS85049 and RoHS/REACH compliant.

Solderability

Ground Lug option allows soldering directly to the body.

GROUNDING

Single Arm Series | Technical Features



Description

- Self locking coupling
- Ground Lug option with electroless Nickel plating
- Straight, 45° & 90° configurations

Technical features

Mechanical

- Material: PEI Aerospace grade
- Plating: Electroless Nickel (meets AS85049 requirements and RoHS/REACH compliant)
- Mechanical Testing: Meets or exceeds¹ AS85049 Light Duty requirement

1: Exceeds applies to light duty bend moment crtieria only

Environmental

- Operating temperature: -65°C to +200°C for plated configurations -65°C to +175°C for unplated configurations
- Salt spray²: 2000 hours
- Fluid immersion: In accordance with AS85409

2: Applies to plated configuration only

Electrical

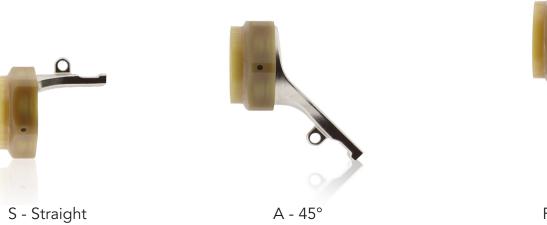
• Electrical continuity²: $< 2.5 \text{ m}\Omega$

Ordering information

| Product Series | 09 | F7 | S | 721 | ХВ | G |
|--|----|----|---|-----|----|---|
| MIL-DTL-38999 III | | | | | | |
| Angle S: Straight A: 45° R: 90° | | | | | | |
| Basic Part Number | | | | | | |
| Material and plating XB: Adapter body/no plating, base material (non-conductive), natural XM: Adapter body/no plating, base material (non-conductive), black XN: Electroless Nickel | | | | | | |
| Ground lug option (available with plated version only) Omit for no ground lug option | | | | | | |

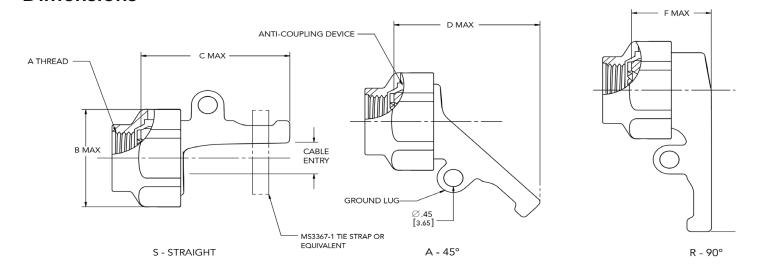
Single Arm Series | Dimensions

Range overview





Dimensions



| Shell size Code F7 | A thread Code F7 | B max | | C max | | D max | | E max | | F max | | Cable entry max | |
|-----------------------|---------------------|----------|----------------|----------|------|----------|------|----------|------|----------|------|--------------------|-------|
| | | | | | | | | | | | | | |
| | | 9 | M12 X 1.0 - 6H | 0.86 | 21.8 | 1.14 | 29.0 | 1.14 | 29.0 | 1.22 | 31.0 | .75 | 19.1 |
| 11 | M15 X 1.0- 6H | .98 | 24.9 | 1.14 | 29.0 | 1.14 | 29.0 | 1.29 | 32.8 | .75 | 19.1 | .38 | 9.65 |
| 13 | M18 X 1.0 - 6H | 1.16 | 29.5 | 1.20 | 30.5 | 1.14 | 29.0 | 1.62 | 41.1 | .75 | 19.1 | .50 | 12.70 |
| 15 | M22 X 1.0 - 6H | 1.28 | 32.5 | 1.38 | 35.1 | 1.64 | 41.7 | 1.66 | 42.2 | .75 | 19.1 | .63 | 16.00 |
| 17 | M25 X 1.0 - 6H | 1.41 | 35.8 | 1.38 | 35.1 | 1.64 | 41.7 | 1.72 | 43.7 | .75 | 19.1 | .75 | 19.05 |
| 19 | M28 X 1.0 - 6H | 1.52 | 38.6 | 1.44 | 36.6 | 1.74 | 44.2 | 1.72 | 43.7 | .75 | 19.1 | .81 | 20.57 |
| 21 | M31 X 1.0 - 6H | 1.64 | 41.7 | 1.57 | 39.9 | 1.74 | 44.2 | 1.79 | 45.5 | .75 | 19.1 | .94 | 23.88 |
| 23 | M34 X 1.0 - 6H | 1.77 | 45.0 | 1.69 | 42.9 | 1.74 | 44.2 | 1.85 | 47.0 | .75 | 19.1 | 1.06 | 26.92 |
| 25 | M37 X 1.0 - 6H | 1.89 | 48.0 | 1.83 | 46.5 | 1.95 | 49.5 | 1.91 | 48.5 | .75 | 19.1 | 1.19 | 30.23 |

Single Arm Series | Assembly Guide

Assembly



1: Attach plug connector to receptacle



2: Secure plug connector to receptacle then prepare wire bundle to feed through Single Arm



3: Position Single Arm and apply torque per AS85049 standard with standard hex torque wrench



4: Use a suitable cable tie that is appropriate for the application. Refer to Single Arm datasheet for recommended ties

Why us?

SOURIAU-SUNBANK's single arm product is designed to withstand 50% greater bending moment than standard AS85049 composite options. Our product is up to 40% lighter than Aluminum. Reducing weight will positively impact the overall mass of the electrical system, allowing the aircraft to exert less fuel. We have designed the single arm series to be the strongest of its kind, while also obtaining the maximum weight depletion achievable. **SOURIAU-SUNBANK is fully industrialized to support the complete line of the Single Arm family.** For over 100 years, our company has been servicing the aviation, defense, space, energy, and transportation industries. **SOURIAU-SUNBANK**'s success is attributed to our vast product offering, collaborative engineering, and manufacturing approach to helping our customers with sophisticated and complex designs while offering a universal platform to service all interconnect needs.

Reliable People, Reliable Solutions



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