

# ArcSafe™, ArcSafe™-SW, ArcSafe Solid Mount

## Robotic Collision Protection



The ArcSafe™ and the **NEW** ArcSafe™-SW provide maximum collision protection in robotic applications.

The **AMERICAN WELDQUIP** ArcSafe utilizes an integrated switch designed to prevent damage to the robotic end of arm equipment and/or tooling. In the event of a “crash” situation with the end of arm equipment the switch activates the E-Stop circuit, thus stopping the robot movement.

The **NEW ArcSafe-SW** is specifically designed for use in robotic application where the crash protection is integrated into the robotic software package. Most integrated robotic collision detection software systems take time to come to a complete stop - especially with high speed movements. This is where the ArcSafe-SW offers additional protection over solid mount type devices.

The built-in spring deflection feature allows the ArcSafe-SW to deflect the end of arm equipment in the event of a crash. This additional safe guard provides the extra protection required to reduce or eliminate bent goosenecks, cracked insulating disks, and damaged tooling.

The ArcSafe, ArcSafe-SW and Solid Mount models are an inexpensive investment to protect equipment, tooling, reduce or eliminate expensive downtime and maintenance issues.

### ArcSafe Features:

- **Highly Repeatable** – Resets to  $\pm .001"$  ( $\pm .025\text{mm}$ )
- **Rugged Design** – Hardened tool steel in contact and wear points.
- **Common Work Envelope** – interchangeability when changing out competitive brands.
- **Robust E-Stop Control Cable/Connector** – Heavy control cable and robust connector mean less downtime because of cable issues.
- **Protection in Mx, My, Mz and Fz Directions**
- **Arm Mounting Post** – Hardened tool steel and flat surface for fast and precise wedge pin mounting of torch arms.
- **Quick Field Replaceable Switch Assembly**
- **Easy Sensitivity Adjustment**
- **Air Assist** - Standard
- **Quick Installation** – Only four screws with common Allen Key Wrench.
- **Protective Seal Boot** – Keeps weld spatter out of mounting screws and other critical areas for reduced downtime and maintenance.

### ArcSafe-SW Features:

- **Highly Repeatable** – Resets to  $\pm .001"$  ( $\pm .025\text{mm}$ )
- **Provides added Protection in Mx, My, Mz and Fz Directions over solid mount designs.**
- **Rugged Design** – Hardened tool steel in contact and wear points.
- **Common Work Envelope** – interchangeability when changing out competitive brands.
- **Arm Mounting Post** – Hardened tool steel and flat surface for fast and precise wedge pin mounting of torch arms.
- **Air Assist** - Standard
- **Quick Installation** – Only four screws with common Allen Key Wrench.
- **Protective Seal Boot** – Keeps weld spatter out of mounting screws and other critical areas for reduced downtime and maintenance.

### ArcSafe Solid Mount Features:

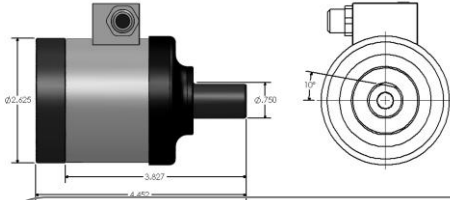
- **Highly Repeatable** – Resets to  $\pm .001"$  ( $\pm .025\text{mm}$ )
- **Rugged Design** – Hardened tool steel in contact and wear points.
- **Common Work Envelope** – interchangeability when changing out competitive brands.
- **Arm Mounting Post** – Hardened tool steel and flat surface for fast and precise wedge pin mounting of torch arms.
- **Quick Installation** – Only four screws with common Allen Key Wrench.

## Technical Specifications – ArcSafe, ArcSafe-SW

**Weight –** 1lb. 9 oz. (.709 KG)  
**Repeatability -** ± .001" (± .025mm)  
**Range Of Travel -** 20° Pivot, 360° Rotation  
 .50" (12.7mm) Compression

**Spring Force-**  
 Mx, My = 93 in-lbs  
 Mz = 168 in.lbs.  
 Fz = 172 lbs.

## Dimensional Drawings



## HOW TO ORDER

PART NUMBER	DESCRIPTION
AH1881	ArcSafe Robotic Collision Sensor
ASW2000	ArcSafe-SW for use with robotic collision detection software
AS-B-A	Solid Mount

## INSULATION DISKS

PART NUMBER	DESCRIPTION
<b>FOR USE WITH AH1881, ASW2000 &amp; SOLID MOUNT TORCH SYSTEM</b>	
AS-300M	FANUC - S-5, JR55,SR510, S5, KUKA - KR-6, KR-15, PANASONIC - AW-005A, AW-500C, AW-500CL, AW-006A, AW010A, AW-8010,VR-005C, VR-006ALII, VR-006A, VR-006AL, VR-008A
AS-325M	UNIVERSAL ROBOTICS - UR10
AS-400M	ABB- IRB6, 1400,1500, 2000, FANUC - ARCMATE 100, 100i, 120i, S-6, MOTOMAN- MH50-20, HP50-20, SK6, SK16, SK20, OTC - MRV-6, EXV6, EX-V6I, EX-V16, DR4000, DR4200, DR4400
AS-700	NACHI - SC06F, SC15F
AS-900	KAWASAKI - RS10L
AS-950	NACHI
<b>FOR USE WITH SOLID MOUNT AS-B-A SETUPS</b>	
AS-300-A	FANUC - S-5, JR55,SR510, S5, KUKA - KR-6, KR-15, PANASONIC - AW-005A, AW-500C, AW-500CL, AW-006A, AW010A, AW-8010,VR-005C, VR-006ALII, VR-006A, VR-006AL, VR-008A
AS-400-A	ABB- IRB6, 1400,1500, 2000, FANUC - ARCMATE 100, 100i, 120i, S-6, MOTOMAN- MH50-20, HP50-20, SK6, SK16, SK20, OTC - MRV-6, EXV6, EX-V6I, EX-V16, DR4000, DR4200, DR4400
AS-350-A	PANASONIC - TA SERIES
AS-500-A	ABB - IRB2600