

ArcSafe™ , ArcSafe™ -SW

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 models are an inexpensive investment to protect equipment, tooling, reduce or eliminate expensive downtime and maintenance issues.

ArcSafe Features:

- **Highly Repeatable** – Resets to $\pm .001"$ ($\pm .025$ 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:

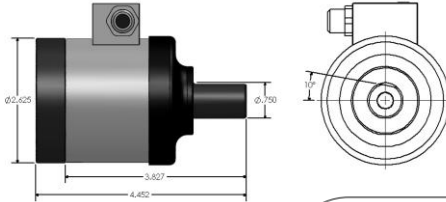
- **Highly Repeatable** – Resets to $\pm .001"$ ($\pm .025$ mm)
- **Provides added Protection in Mx, My, Mz and Fz Directions over solid mount designs.**
- **Rugged Design** – Hardened tool steel in contact and wear points.
- **Common Work Envelope** – interchangeability when changing out competitive 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.

Technical Specifications – ArcSafe, ArcSafe-SW, MultiClutch

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
AS-100	<u>FANUC</u> - 50IL
AS-300M	<u>FANUC</u> - S-5, JR55,SR510, S5, <u>KUKA</u> - KR-6, KR-15, <u>PANASONIC</u> - AW-005A, AW-500C, AW-500CL, AW-006A, AW010A, AW-8010,VR-005C, VR-006ALII, VR-006A, VR-006AL, VR-008A
AS-400M	<u>ABB</u> - IRB6, IRB140, IRB1400,IRB1500, IRB2000, IRB2400, <u>FANUC</u> - ARCMATE 100, 100i, 120i, 100iB, S-6, <u>MOTOMAN</u> - K6, SK6, SK16, SK20, UP6, UP20, <u>MILLER</u> - MRV-2, MRV-10 <u>OTC</u> – MRV-6, EX-V6, EX-V6L, EX-V16, DR4000, DR4200, DR4400
AS-700	<u>NACHI</u> – SC06F