

# VeriFast<sup>™</sup> IA Integrators Guide

### **Mechanical**





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### **VeriFast IA Integrators Guide**

- Tips for effective ordering
- Show all current IA weld bodies available
- Explain installation, service and programming requirements
- Introduce and explain our controls solutions





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### **Tips for Effectively Ordering IA Weld Bodies**

- Use Series 3 or 4 bodies when possible. The larger sizes allow for more water flow (better cooling) and more pin retract force than Series 2 bodies. Use Series 2 only if design restraints require them. (e.g., center to center distance is small, or distance between a fastener and flange requires the smaller size.)
- Use 50 mm stroke bodies only if the additional stroke, or design restraints require them. (e.g., studs longer than 20mm, or a deep flange on the stamping)
- If there are similar nuts or studs in the area, extra attention must be required when ordering weld pins. (e.g., 7/16" and M12, or threaded and unthreaded nuts.)
- Use common components, especially consumables, when possible. This reduces stock and makes it less likely that parts are mistakenly interchanged.
- Order appropriate supply of spare components, especially consumables. These include weld pins, weld heads, upper electrodes, complete weld bodies. The actual number of spares required can vary greatly and depends on the equipment duty cycle.





### **Tips for Effectively Ordering Controls Solutions**

- First decision for selecting a controls solution is to decide if an analog or digital solution is desired. Each has its advantages and disadvantages. These are further explained later in this document.
- After the controls solution has been selected, be sure to order the correct number and type of cables necessary for complete connectivity. (e.g., 4, 5 or 8 pin tool cords, power cords.)
- Consider the 'big picture'. If there are multiple machines, or a large line, the controls solutions should be common across all operations. CenterLine can be very helpful if we are aware of the entire process. This may involve multiple integrators.







### **Pre – Installations Instructions**

- A minimum of 1 GPM water flow per body is required.
- 50 PSI air pressure is required.
- Remember all valves: retractable pin typically uses a double solenoid valve. A single solenoid valve is sufficient for blow-off.
- A separate regulator for blow-off is required. This provides only enough pressure to prevent the weld spatter from accumulating between the weld head and pin, as well as from getting inside the weld body.
- Be sure there is enough of the correct I/O, either discrete or analog for the installation. For analog: 1 input channel is required for each weld body. For digital (MicroView): 4 outputs and 12 inputs are required if all I/O is going to be used.



Please visit our website. Products/VeriFast IA/LVDT weld body user manuals <a href="https://www.cntrline.com/products/verifast-ia">https://www.cntrline.com/products/verifast-ia</a>



### **Installations Instructions**

- Weld bodies *must* be mounted properly:
  - Polish bottom of weld body and mounting surface with 3M Scotch-Brite pad
  - Apply Kopr-Shield compound between weld body and mounting surface
  - Use 'Nord-Lock' washers
  - Torque M6 or ¼" fasteners to 6 ft/lbs (8Nm)
- Weld bodies *must* be connected properly:
  - Use di-electric grease in all electrical connectors.
  - All electrical connectors must be properly tightened according to manufacturer specifications.
     Compromised electrical connections can lead to variations in the system.





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### **IA Weld Bodies**

22 mm Stroke Weld Through Bodies			
	Series 2	Series 3	Series 4
SXAR	ANR	✓	✓
SXTR	ANR	✓	✓
SXVR	✓	X	X
SXCR (tapered)	X	✓	X
SXGR (threaded)	X	~	X
Clamp Mount	ANR	✓	✓
<ul> <li>✓ - Available</li> <li>X – Not Available</li> <li>ANR - Available, but Not Recommended</li> </ul>			





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### **IA Weld Bodies**

	22 mm Stroke Insulated Bodies			
		Series 2	Series 3	Series 4
	SXKR	ANR	✓	✓
	SXQR	ANR	~	✓
	SXWR	✓	X	X
	SXHR (through lug)	ANR	<b>~</b>	✓
	SXJR (threaded lug)	ANR	<b>V</b>	✓
	<ul> <li>✓ - Available</li> <li>X – Not Available</li> <li>ANR - Available, but Not Recommended</li> </ul>			





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### **IA Weld Bodies**







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### **IA Weld Bodies**

### **New IA Bodies Released**

SZVR is a 69 mm stroke version of our IA body available in Series 3 and 4 only.



VeriFastφ IA SZVR Base Mount Weld Body – 69 mm Stroke You can find more information in our catalog

SXZR (Ber

4.93" (125.30 mm (for Series 2 and 3) 5.06" (128.52 mm SYVR (Base Mour

SXZR (Sidewinder) is also released. This 50 mm stroke body uses the cable as the core. It requires a unique IA coil that our supplier developed for us. It is **black**, instead of the **blue**, anodized block.







### **VeriFast Ordering Information**

The VeriFast IA Product Family can be found on our website

https://www.cntrline.com/products/verifast-ia

Electrodes Catalogue - Ver. 10.01 - Nov. 2023 Electrodes Catalog

Selection and Ordering Information And other supporting documentation







### **Additional Info**

- Use di-electric grease in all electrical connectors.
- All electrical connectors must be properly tightened according to manufactures specifications. Compromised electrical connections can lead to variations in the system.
- Custom IA Weld Bodies can be made. Contact CenterLine through your Account Manager or <u>customerservice@cntrline.com</u>
- When setting Weld Proceed or Set Down positions, the weld pin must *not* be at the top OR bottom of its stroke. The weld pin must move for proper fastener and set down detection.
- If using an OHMA cylinder, teach positions under close pressure, NOT intensify pressure.
- Weld head and pin must always be in good working condition. Replace when worn.
- The IA coil is sealed inside the weld body and is not user-serviceable. In the unlikely event that it fails, the weld body must be replaced.
- We offer a rebuild service. Contact CenterLine Service at: 519-734-0080 or 800-268-8184 or service@cntrline.com.





### **CENTERLINE (WINDSOR) LIMITED**

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## CONTACT US

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