

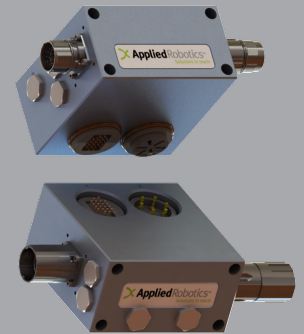
# XCHANGE™ Utility Module

## Heavy Duty Electrical Modules - Discrete

Electrical Modules pass electrical signals during an automatic tool changing operation.

### Advantages:

- Aluminum construction to prevent EMI
- Integrated PCB for Quality Assurance and Consistency
- Galvanic insulation between US (Signal Power) and UA (Actuator Power)
- Live Power Manager (LPM)
- Flexible User Connections - M23, Mil Spec (MS), etc.
- Easy maintenance via Board Terminals and Connectors
- Full management of the Tool Changer Signals and Passthru Signals (Including Single or Dual Channel Safety Signals)
- Quick and easy troubleshooting via LED Visualization
- Tool Identification via 4 Bit (Optional 8 Bit)
- Low Maintenance and Low MTTR
- IP Rating: IP65 (when Coupled)
- Single-Channel Safety Circuit ("TSM") or Dual Channel ("SCM") Safety Circuit Configuration (Optional)



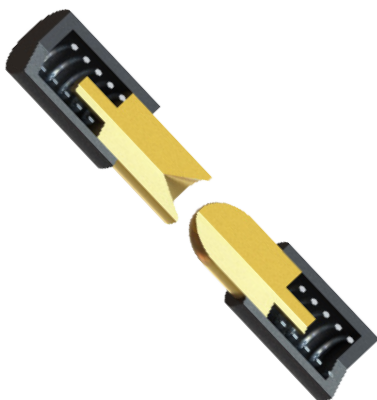
## SPECIFICATIONS

Model	Description	User Connection	Rated Current	Rated Voltage	Couple/Uncouple Sensor Interface, TSM and Tool IB Included	Weight** kg (lb)
			A	V (AC/DC)		
E-R-D-M23-31.05-000-N	Robot Adaptor - Discrete M23	2x 17 PIN, M23 "E" CW	5	125	Optional	1.08 (2.38)
E-T-D-M23-31.05-000-N	Tool Adaptor - Discrete M23	2x 17 SOC, M23 "P" CCW	5	125	Optional	1.17 (2.58)
E-R-D-MS-31.05-000-N	Robot Adaptor - Discrete MS	2x 17 PIN, MS3102E20-29P	5	500/700	Optional	1.08 (2.38)
E-T-D-MS-31.05-000-N	Tool Adaptor - Discrete MS	2x 17 SOC, MS3102E20-29S	5	500/700	Optional	1.17 (2.58)
E-R-D-M23-6.25/7.05-P-015-xxx	Robot Adaptor - Discrete M23 with Power	17 PIN, M23 "E" CW 6 PIN, M23 "E" CW	5 16	125 630	Yes	1.08 (2.38)
E-T-D-M23-6.25/9.05-015-xxx	Tool Adaptor - Discrete M23 with Power	17 SOC, M23 "P" CCW 6 SOC, M23 "P" CCW	5 16	400 48	Yes	1.17 (2.58)
E-R-D-MS-6.25/7.05-P-015-xxx	Robot Adaptor - Discrete MS with Power	17 PIN, MS3102E20-29P 6 PIN, MS3102A20-17P	5 22	500/700 500	Yes	1.08 (2.38)
E-T-D-MS-6.25/9.05-015-xxx	Tool Adaptor - Discrete MS with Power	17 SOC, MS3102E20-29S 6 SOC, MS3102A20-17S	5 22	500/700 500	Yes	1.17 (2.58)

\*Module weight may vary depending on specific configuration.

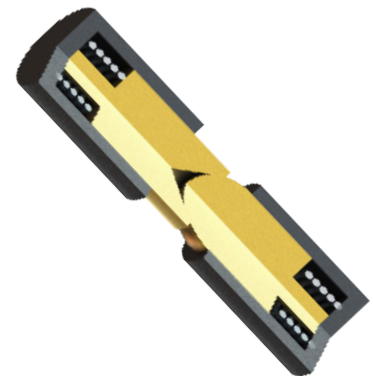
Operating Temperature: **5 - 60 °C (40 - 140 °F)**  
Noise Emissions (Sound Pressure): **≤ 70 dB(A) in any direction**

## FEATURES



Applied Robotics XCHANGE™ electrical modules use spring loaded contact probes for their many benefits:

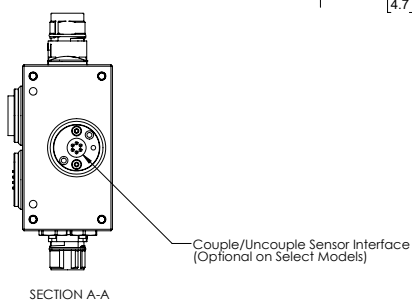
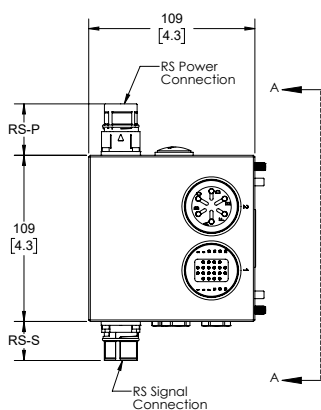
- Low contact resistance
- High mating cycles
- Limited debris buildup
- Minimal maintenance



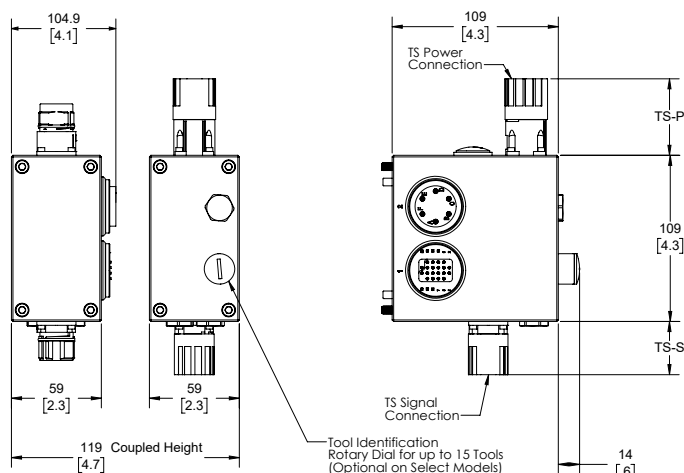
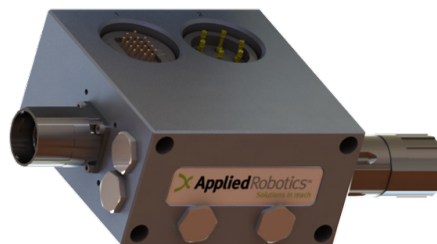
\* Images are visual representations only.

# PRODUCT INFORMATION

## ROBOT ADAPTOR MODULE



## TOOL ADAPTOR MODULE



### Mounting Hardware Included

MODEL	RS-P	RS-S	TS-P	TS-S
<b>M23</b>	25 (1.0)	25.6 (1.0)	34.9 (1.4)	34.9 (1.4)
<b>MS</b>	39.8 (1.6)	39.8 (1.6)	39.8 (1.6)	39.8 (1.6)
<b>M23 with Power</b>	33.8 (1.3)	25.6 (1.0)	50.2 (2.0)	34.9 (1.4)
<b>MS with Power</b>	39.8 (1.6)	39.8 (1.6)	39.8 (1.6)	39.8 (1.6)

\* Dimensions are in millimeters (inches).

\*\* All dimensions are descriptive and subject to variation for technical upgrading. We reserve the right to make variations without prior notification.



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01.2023\_Rev.03\_EU