



ESD WRISTBAND SELECTION CHART

Environmental Type

Band	Field Service	Standard Industrial	Critical
Metal	х	х	х
Elastic	х	х	
Disposable	х	X (visitors)	

Single-Wire

Dual-Wire

Wristband	Jewel Elastic MagSnaps	Elastic Adjustable Wristbands	Service Engineer's Wristband	Adjustable Metal Wristband	Anti-allergenic Adjustable Fabric Wristband
Band Material	Silver impregnated elastic nylon	Elasticated fabric with conductive fibres on inside	Expandable metal	Expandable metal	Polyester with conductive fibre on inside
Coil Cord	MagSnap / Banana Plug	4mm / 10mm Stud	10mm Stud	4mm / 10mm Stud	10mm Stud
Closure Type	Patented cam-lock	Friction-Grip	N/A	N/A	Cam-lock
Other Feature	Replaceable band	Replaceable blue band	Improved durability	Improved durability	Anti-allergenic
Color	Black / Grey	Yellow / Red / Light Blue / Dark Blue	Black	Black	Yellow / Red / Light Blue / Dark Blue
Part Numbers	<u>229903</u> - <u>229908</u>	<u>229700</u> - <u>229830</u>	229625	<u>229605</u> - <u>229620</u>	<u>229600</u> - <u>229770</u>

Jewel Cloth Dual-Wire MagSanp Wristbands	Jewel Metal Dual-Wire MagSnaps
Woven Silveron *fabric infused with monofilament conductive fiber	Expandable metal
MagSnap	MagSnap
Cam-lock opposite buckle	N/A
Adjustable	Superior skin contact
Dark Blue	Black
<u>229923</u> - <u>229925</u>	<u>229926</u> - <u>229934</u>

Vermason Wrist Straps - Designed for Europe

Per EN 61340-5-2: "Where no ESD handling precautions are taken, a high proportion of electronic apparatus failure can be attributed to ESD damage. Discharges of static electricity from conductors or charged insulators cause melting and evaporation of fine tracks on integrated circuit chips. In addition, electric fields from charged conductors and insulators causing electrical breakdown on insulation between features on integrated circuits. This figure could in theory be reduced to zero by adopting the precautions described in EN 61340-5-1." In Part 5.2, Scope 1.1 it is noted that "damage from human contact is still the most common source even in today's automated society."

Per EN 61340-5-2 paragraph 5.2.7: "Wrist Strap describes the combination of the wrist band, which should fit around the wrist making good skin contact, and the wrist cord which bonds the wearer to an earth bonding point (EBP)"; paragraph 5.2.4 states that personal grounding via a Wrist Strap to an EBP should be used as the primary means of grounding.

However, the safety of users is paramount and Wrist Straps and other grounding devices should not be used if there is possible exposure to electrical

voltages in excess of 250 V a.c. 500 V d.c. See the Ioniser section (page 37) as a means to neutralise electrostatic charges.

Fulfilling paragraph 5.1.1 EN 61340-5-2, In the event an operator comes in contact with the normal mains electricity supplies, a one megohm resistor is used in Vermason Wrist Straps to limit the current flowing through the person to less than 0,5 mA.

In addition, other Vermason Wrist Strap safety features conforming with EN 61340-5-2 are:

- "The ground cord should release with a force of between 5 N and 25 N (0.51kg and 2.55 kg), preferably at the wrist band end."
- "The outer visible surface of the wristband should not be highly conductive (metallic)."
- "The discrete resistance must be at the wrist end of the wrist cord" (paragraph 5.3.4).
- "The resistor style should be such that in the event of a failure of the resistor, the failure mode is to open circuit."

