



NICOMATIC

CREATIVE
INTERCONNECT
SOLUTIONS

Product
Datasheet



V SHIELD

THE NEXT GENERATION OF
FFC SHIELDING

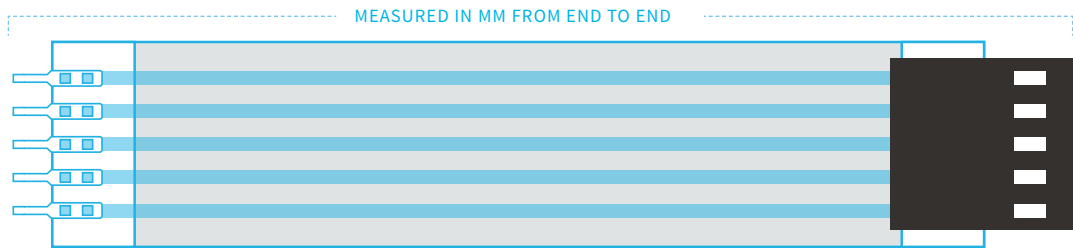
ADVANTAGES

- Available in Card Cable, MicroFlex and Jumper/Extension Cables
- Highly Flexible & Lightweight
- 2.54 mm, 1.27 mm and 1.25 mm for Card Cable, 2.00 mm for MicroFlex and 2.54 mm or 1.27 mm for Jumper / Extension Cable

FUNCTIONALITIES

- Perfect Shielding Option for Dynamic Flexing Situations
- Flex Life Up to 15 Million Flex Cycles
- Shielding Provides EMI/RFI and ESD Protection for Dynamic Flexing Applications

V SHIELD JUMPER CABLES PART NUMBERING SYSTEM



How to order



GLOSSARY

- step 1**
- Pitch**
127 - 1.27 mm
254 - 2.54 mm
- step 2**
- Material**
VS - V Shield
- step 3**
- | Number of conductors | Pitch (mm) |
|----------------------|--|
| 2 to 26* | 2.54 *27 to 36 available on request |
| 4 to 40 | 1.27 |
- step 4**
- | Conductor size (tinned) | Pitch (mm) |
|-------------------------|------------|
| E - 0.076 mm x 1.57 mm | 2.54 |
| D - 0.076 mm x 0.66 mm | 1.27 |
- Gold plating is NOT available for V Shield
- step 5**
- Length in mm (measured from end to end)** From 0060 to 2000: Other lengths possible. Contact us with a special request
- step 6**
- | Left End | Right End |
|---|--|
| Step 1 - Choose Contact
- Female, Male or Solder Tab
- Tin or Gold Plating | Step 2 - Choose Housing
- Single Row or Dual Row
- Standard Non Latching, Latching, Detent, Low Profile or Receptacle |
- step 7**
- | Left End | Right End |
|---|--|
| Step 1 - Choose Contact
- Female, Male or Solder Tab
- Tin or Gold Plating | Step 2 - Choose Housing
- Single Row or Dual Row
- Standard Non Latching, Latching, Detent, Low Profile or Receptacle |
- step 8**
- | EXT external ground | INT1 internal ground* | INT2 internal ground* |
|---------------------|---|---|
| | 1: ground to pin 1 and pin NN on <u>ONE</u> end | 1: ground to pin 1 & last pin on <u>BOTH</u> ends |

*For grounding to specific conductors, please contact sales.

V SHIELD CARD CABLES PART NUMBERING SYSTEM



How to order



GLOSSARY

- step 1**

Pitch

125 - 1.25 mm 254 - 2.54 mm

127 - 1.27 mm
- step 2**

Style

V5 only available for 2.54 pitch
- step 3**

Number of conductors

	Pitch (mm)	
2 to 26*	2.54	*27 to 36 available on request
4 to 45	1.27	
4 to 40	1.25	
- step 4**

Conductor size (tinned)

	Pitch (mm)	
A - 0.076 mm x 1.57 mm	2.54	
D - 0.076 mm x 0.66 mm	1.27	
C - 0.076 mm x 0.80 mm	1.25	

Gold plating is NOT available for V Shield
- step 5**

Length in mm (measured from end to end) From 0060 to 2000: Other lengths possible. Contact us with a special request
- step 6**

5 - Exposed length in mm
10 - Stiffener length in mm
- step 7**

EXT external ground	INT1 internal ground*	INT2 internal ground*
	1: ground to pin 1 and pin NN on <u>ONE</u> end	1: ground to pin 1 & last pin on <u>BOTH</u> ends

*For grounding to specific conductors, please contact sales.

DESCRIPTIONS

V SHIELD Technology

The innovative shielding technology applied during our in-house manufacturing process provides EMI/RFI & ESD protection to your specific application.

Nicomatic's shielded, lightweight & flexible solution is perfect for dynamic flexing situations, where signal protection is needed. The flexibility allows optimal routing of cables with minimal stress on joints in small space situations.

Testing shows a flex life of an impressive 15 million flex cycles at a bend diameter of 63.5 mm (2.5 inches).

Jumper Cable

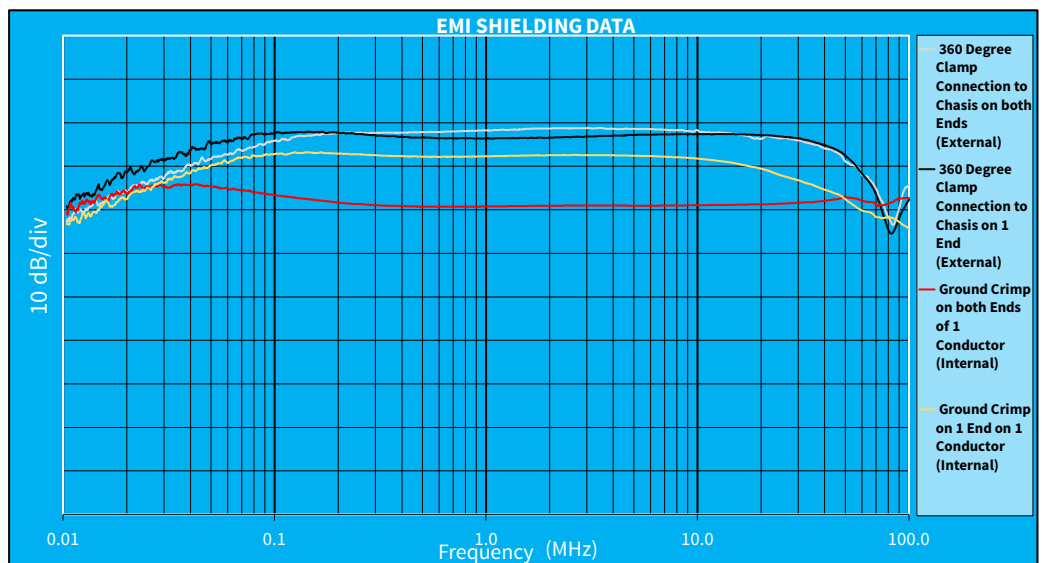
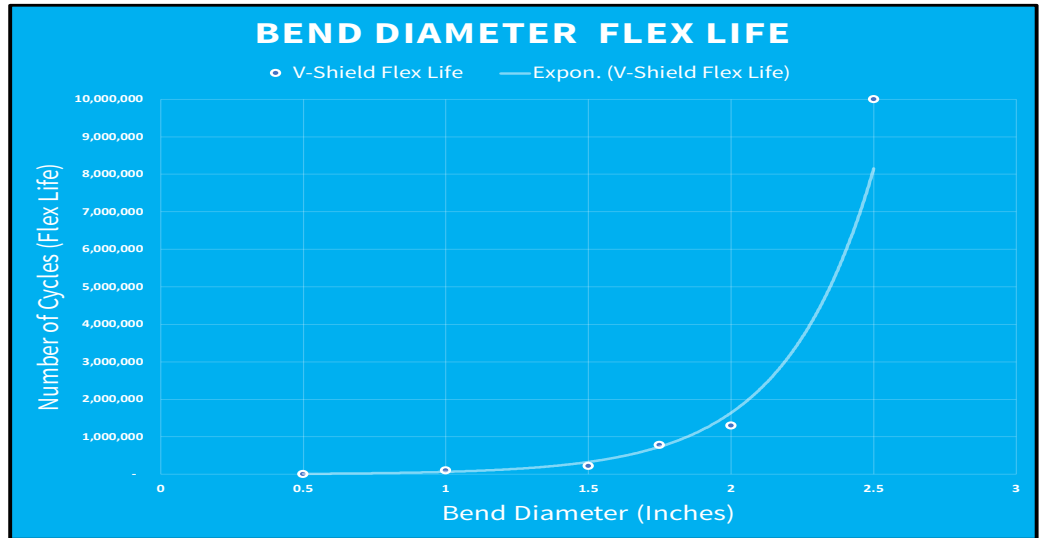
Our CrimpFlex™ jumper cables are dedicated to connections from board to board in 2 market standard pitches, 1.27mm and 2.54mm. Using a total Nicomatic solution is a guarantee for higher reliability and longer life-time of the end product. Both the 1.27 & 2.54 mm Jumper Cables can be externally or internally grounded to any conductor.

Card Cable

Our North American manufactured card cable is available from 1.25 to 2.54 mm pitch. FFCs are soldered directly or mated with ZIF/LIF standard connectors. Available in any length from 60 to 2000 mm, contact us with other lengths.

MicroFlex

Our shielded & flexible flat polyester cable harness with a screw fixing for high-vibration environments. Mates with our CMM 220 connector for high mechanical resistance. Tested to meet MIL-DTL-55302F standards & provides up to 60% weight reduction versus round cable.



CARD CABLE PART NUMBER	125V3NNCLLLL-510510	127V3NNDLLL-510510	254V3NNALLL-510510
Pitch	1.25 mm	1.27 mm	2.54 mm
Cable Width	(N+1) 1.25	(N+1) 1.27	(N+1) 2.54
Conductor Width	0.80	0.66	1.57
Conductor Thickness	0.076	0.076	0.076
Exposed Length	5	5	5
Stiffener Length	10	10	10
Margin	0.85	0.94	1.68
Conductor Material	Tin plated copper	Tin plated copper	Tin plated copper
Voltage (max.)	300 V	300 V	300 V
Temperature	-55°C to +105°C	-55°C to +105°C	-55°C to +105°C
UL Flame Rating	VW-1	VW-1	VW-1
Dielectric Strength	5 000 V	5 000 V	5 000 V
Insulation Resistance	5 000 Mega Ohm	5 000 Mega Ohm	5 000 Mega Ohm

Current Rating Value Dependant on ZIF/LIF Connector Performance, Ambient Temperature, and Altitude

OTHER INFORMATION

Shielding effectiveness is nontransferable and results are situational dependent. In most cases Nicomatic recommends having external grounding to chassis or frame on both ends of the cable. The specific circumstances of a user's application, measurement methods and criteria may not correspond to this test method. The user's shield performance greatly depends on the user's application and noise problem. Contact us with your specific application questions.

RoHs & REACH Compliant



→ www.nicomatic.com

INSTRUCTION & DRAWINGS

available on :

www.Nicomatic.com

FOR MORE INFORMATION

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