



model **09P**  
PROGRAMMING CABLE

technical datasheet



> features <

- Industry standard micro-plug
- Gold-plated contacts provide high durability
- Durable flexible cables
- High quality strain relief, tested to 10,000 bends
- Optional color dot marking
- Choice of connector styles and colors

> specifications <

**Mechanical Data**

- Insertion Force (socket/plug):
- 3 terminals . . . . . >2.5 N (0.5 lb.)
  - 4 terminals . . . . . >3.0 N (0.6 lb.)
  - 5 terminals . . . . . >4.0 N (0.9 lb.)
- Extraction Force (socket/plug):
- 3 terminals . . . . . <5.5 N (1.2 lb.)
  - 4 terminals . . . . . <8.0 N (1.8 lb.)
  - 5 terminals . . . . . <8.0 N (1.9 lb.)
- Bending of Cable . . . . . 10,000 times (1,4 $\emptyset$  mm cable)

**Electrical Data**

- Plug
- Cable resistance . . . . . <2  $\Omega$ /m (0.6  $\Omega$ /ft.)
  - Cable capacitance . . . . . <100 pF/m (30.4 pF/ft.)
  - Operating current . . . . . 500 mA max. (continuous)
  - Insulation resistance . . . . . >1 M $\Omega$

**Socket and Plug**

- Contact resistance . . . . . <150 m $\Omega$
- Contact resistance stability . . . . . <150 m $\Omega$  (pulling with 100 g (0.22 lb.) in all directions)

**Environmental Data**

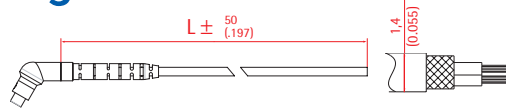
- Storage temperature range . . . . . -40°C to +60°C (-40°F to +140°F)
- Operational temp. range . . . . . -10°C to +55°C (14°F to +131°F)
- Humidity Conditions . . . . . 10% to 95% rh.

**Construction**

- Connector . . . . . Polyamide 6.6
  - Contact Tube . . . . . Gold-plated copper alloy
  - Cable . . . . .  $\emptyset$ 1,4 mm ( $\emptyset$ 0.055 in.)
- Specifications subject to change.

## II connector configuration

STYLE 1  
(PLUG WITH OPEN END)



STYLE 2  
(PLUG TO PLUG)



STYLE 3,  
4, 5 AND 6  
(PLUG TO  
MINI-DIN)



### CONNECTOR CONFIGURATION

- [ 1 ] 09 PLUG AT ONE END
- [ 2 ] 09 PLUG AT BOTH ENDS
- [ 3 ] 09 PLUG WITH LONG, RIBBED MINI-DIN CONNECTOR
- [ 4 ] 09 PLUG WITH SHORT, RIBBED MINI-DIN CONNECTOR
- [ 5 ] 09 PLUG WITH LONG, RIBBED 8 PIN MINI-DIN CONNECTOR (Y-STYLE CABLE)
- [ 6 ] 09 PLUG WITH LONG, SMOOTH MINI-DIN CONNECTOR

## III electrical configurations



STANDARD WIRING FOR  
CONNECTOR CONFIGURATION 1



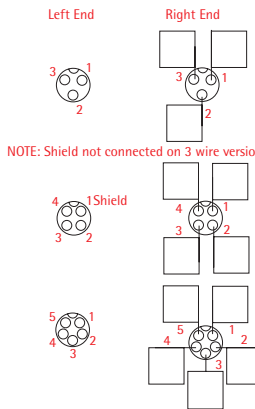
STANDARD WIRING FOR  
CONNECTOR CONFIGURATION 2



STANDARD WIRING FOR  
CONNECTOR CONFIGURATION 3, 4 AND 6



CUSTOM WIRING FOR  
CONNECTOR CONFIGURATION 1



CUSTOM WIRING FOR  
CONNECTOR CONFIGURATION 2



CUSTOM WIRING FOR  
CONNECTOR CONFIGURATION 3, 4 AND 6

Style 5 requires special configuration, please consult with your sales representative for more information.

## plug dimensions



## IVIV plug color/color dot markings on plug(s)



### PLUG COLOR

- [ 25 ] STANDARD COLOR: BLACK
- [ 36 ] RED
- [ 13 ] BLUE
- [ X X ] SPECIAL

### COLOR DOT MARKINGS ON PLUG(S)

- [ 07 ] RED
- [ 02 ] BLUE
- [ X X ] SPECIAL

## VI cable length

Refer to "connector configuration" in Section II.

### CABLE LENGTH (L)

- [ 01 ] 10 cm (4 in.)
- [ 02 ] 20 cm (8 in.)
- [ 03 ] 30 cm (12 in.)
- [ 04 ] 40 cm (16 in.)
- [ 05 ] 50 cm (20 in.)
- [ 10 ] 100 cm (40 in.)
- [ 15 ] 150 cm (60 in.)
- [ 20 ] 200 cm (80 in.)
- [ 25 ] 250 cm (100 in.)

Note: Custom cable length available upon request, subject to minimum order requirements, pricing varies with length. Contact your sales representative for details.

## VIII mini-DIN color

- [ 1 ] BLACK
- [ 2 ] GRAY
- [ 3 ] BLUE
- [ 4 ] RED

## > ordering <

How to order— Using the chart below, determine your order number by finding the correct sequence of code numbers and /or letters as shown at right. Details on each parameter can be found within the brochure in the section with the corresponding roman numeral.

	model	I	number of contacts	II	connector configuration	III	electrical configuration	IV	plug color	V	color dot marking on plug(s)	VI	cable length	VII	cable color	VIII	mini-DIN color	IX	special
09P	X	X	XX	XX	XX	XX	X	X	XX	X	X	XX							

PARAMETER	YOUR CHOICE	GUIDELINES/NOTES
I number of contacts		3, 4 or 5
II connector configuration		
III electrical configuration		[00] Standard [XX] Custom Configuration
IV plug color		
V color dot marking on plug(s)		
VI cable length		
VII cable color		[ 1] Black [ 2] Gray
VIII mini-DIN color		
IX special		[ S] Standard [XX] Special