

## Plug-in Modules

### TELECOM OUTSIDE PLANT

#### Use

These are used in VX connection modules, modular connection blocks, boxes, and other products of the VX family to provide interchangeable continuity, protection or a variety of other functions.

The plug-in modules are easily removed and re-inserted by hand using a knob, and have the option of two access holes in the top for electrical testing using either pins or crocodile clips. During testing the circuit is unaffected.

#### Description

The modules consist of a casing of plastic material inside which there are two, three or five terminals, depending on the module.

They are designed to provide continuity and house protection or control devices as required.

They are filled with silicone grease, and gel is used in access holes if they are present.

The modules are available in colours which indicate their function, e.g. continuity modules are grey and protected modules are red.

Further information may be indicated by printing on the modules.

The modules incorporate an O-ring in the body which serves to seal the central contacts of the base unit when they are plugged into position.



## Ordering information

Description	Internal configuration	Plug-in module test-access type	Order number
VX-PM-P	Continuity	Pins	305939-000
VX-PM-PG03	260 V GDT	Pins	179884-000
VX-PM-PG04	230 V GDT	Pins	875326-000
VX-PM-XRC1	RC filter*	None	259997-000
VX-PM-XRF	RF filter**	None	071801-000

\* 0.68 µF/22 kOhm

\*\* Medium wave: 300 to 1600 kHz

For other configurations, please consult your local Tyco Electronics sales engineer.

## Specifications

### Contact characteristics

Current conducting capacity	20 A, 10 A per conductor for 10 minutes at least, without causing deformation to the module Note: if > 20 A up to 30 A is required, this is possible using a different GDT.
Insulation resistance*	
Dry atmosphere:	> $10^{12}$ Ω
Damp atmosphere:	> $10^{12}$ Ω
(ASTM D618, procedure F)	
Salt fog: (ASTM B117)	> $10^{10}$ Ω
Immersion in water: (15 days in 3% NaCl solution)	> $10^{10}$ Ω
Contact resistance	
$R_{\text{material}} + R_{\text{bridge contacts}} + R_{\text{wire contacts}}$	<10 mΩ
Increase in contact resistance	
After climatic tests:	<2.5 mΩ
After 50 reinsertions:	<2.5 mΩ
Dielectric strength:	>3,000 Vdc for 1 minute

### Mechanical characteristics

Protector ground contact	Tinned hard brass
Continuity contact	Tinned hard brass
Plug-in module body	VO fiber-glass reinforced polycarbonate
Plug-in module sealant**	Gel
"O" ring"	EPDM

\* Each line to earth is measured.

Does not apply to RF filter version.

\*\* Only for modules with test-access ports

Tyco and VX are trademarks of Tyco International.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, Tyco Electronics makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. Tyco Electronics' obligations shall only be as set forth in Tyco Electronics' Standard Terms and Conditions of Sale for this product and in no case will Tyco Electronics be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of Tyco Electronics products should make their own evaluation to determine the suitability of each such product for the specific application.

### Mondragon Telecommunications

Polígono industrial Mediterráneo  
C/. la Fila, parcela 1  
46550 Albuixech-Valencia, España  
Tel.: 34-96-141 70 72  
Fax: 34-96-141 74 15

### Tyco Electronics Raychem NV

Telecom Outside Plant  
Diestsesteenweg 692  
3010 Kessel-Lo, Belgium  
Tel.: 32-16 351 011  
Fax: 32-16 351 697  
[www.tycoelectronics.com](http://www.tycoelectronics.com)

### Tyco Electronics Corporation

8000 Purfoy, Rd.  
Fuquay-Varina, NC 27526, USA  
Tel.: 1-919-557 8600  
Fax: 1-919-557 8404