

# Plug & Play™ Universal Harness, SMF-28® Ultra Single-mode (OS2)

12 fibres, MTP® Connector to 6 LC Duplex Connectors, 1500 mm  
leg length, 2 m

CORNING

Plug & Play™ Universal Systems Harnesses have a pinned (male) MTP® connector on one end that connects to a Plug & Play™ Universal Systems trunk or extender trunk, while the other end is equipped with single or dual fibre connectors. The assembly uses Data Centre Interconnect Cable, a round FRNC interconnect cable with a small outside diameter, which allows for easy routing without preferential bend concerns. The LC duplex and SC duplex connectors are terminated on 2.0 mm legs to provide a ruggedized solution; additionally, many ranges of length requirements are available to ease fibre routing. Used with the Plug & Play™ Universal Systems trunks or extender trunks, the LC duplex harness provide quick installation in applications where up-jacketed legs are needed for direct installation into electronic equipment. They also provide a routing solution that is less dense than traditional jumpers since the MTP Connector end of the harness that routes through the rack or cabinet is much smaller than the equivalent six 2-fibre patch cords.



Part Number: H890412GEZ-NZ002M

## Features and Benefits

MTP® connector meets requirements of ANSI  
HIPPI-6400 and IEC 61754-7 and TIA/EIA-604 (FOCIS)

Round, 3 mm indoor cable with 12 fibres in and dielectric  
strength members

Short breakout legs on LC Duplex, SC Duplex or ST®  
Compatible connectors reduce cable congestion in front  
of active device ports

Low-smoke and halogen-free (LSZH) to IEC 61034 (EN  
50286) and IEC 60754-1

Flame retardant and non-corrosive (FRNC) to IEC  
60332-3C (EN50266-2-4) and IEC 60754-2 (EN50267)

Ultra bend fibre allows for cable management in higher  
density areas with limited risk of attenuation due to bend-  
ing

Factory-terminated solutions provide improved system  
performance, component compatibility and consistent  
quality

The patented Universal wired modular system compo-  
nents enable fast and simple networking moves, adds  
and changes without polarity concerns associated with  
special polarity-compensating components

Plug & Play™ Universal Systems provides a simple  
migration path between 2-fiber and parallel optics appli-  
cations

# Plug & Play™ Universal Harness, SMF-28® Ultra Single-mode (OS2)

12 fibres, MTP® Connector to 6 LC Duplex Connectors, 1500 mm  
leg length, 2 m

CORNING

## Features and Benefits

Test protocol delivered with each component

## Standards

**Intermateability** TIA/EIA-604-5 / TIA/  
EIA-604-10

## Specifications

### General Specifications

Flame rating	LSZH™/FRNC
Fibre Category	SMF-28® Ultra fibre

### Temperature Range

Operation	0 °C to 60 °C
Installation and assembly	0 °C to 50 °C
Storage	-25 °C to 70 °C

### Design - Connector A

Connector Type	MTP® (pinned)
Ferrule Material	Composite
Polish	APC
Housing material	Composite
Housing Colour	green
Boot type	Individual
Boot colour	black
Keyed (security)	No

### Mechanical Specifications - Connector A

Durability	≤ 0.2 dB 200 rematings, FOTP-21
Tensile strength jacketed cable	44 N

# Plug & Play™ Universal Harness, SMF-28® Ultra Single-mode (OS2)

12 fibres, MTP® Connector to 6 LC Duplex Connectors, 1500 mm  
leg length, 2 m

CORNING

## Optical Specifications - Connector A

Insertion loss, max.	0.75 dB
Reflectance, typical	≤ -65 dB

## Design - Connector B

Connector Type	LC Duplex
Ferrule Material	Ceramic
Polish	UPC
Housing material	Composite
Housing Colour	blue
Boot type	Individual
Boot colour	blue
Keyed (security)	No

## Mechanical Specifications - Connector B

Durability	≤ 0.2 dB 500 rematings, FOTP-21
Tensile strength jacketed cable	44 N

## Optical Specifications - Connector B

Insertion loss, max.	0.5 dB
Reflectance, typical	≤ -55 dB

## Cable design

Fibre Count	12
Outer diameter	3.5 mm
Outer jacket colour	yellow
Outer jacket material	LSZH™/FRNC
Min. Bend Radius Installation	53 mm
Min. Bend Radius Operation	35 mm
Crush resistance (reversible)	750 N/10 cm
Tensile strength	200 N

# Plug & Play™ Universal Harness, SMF-28® Ultra Single-mode (OS2)

12 fibres, MTP® Connector to 6 LC Duplex Connectors, 1500 mm  
leg length, 2 m

CORNING

## Furcation - Connector A

Legs Count	1
Leg length	500 mm
Leg diameter	3.5 mm
Fibre Count	12

## Furcation - Connector B

Legs Count	12
Leg length	1,500 mm
Leg diameter	2 mm
Fibre Count	12
Plug Type	PnP harness plug style
Plug Dimensions	74 x 14 x 14 mm

## Fibre Specifications

### Optical Characteristics (cabled)

Fibre name	SMF-28® Ultra TB Cable Optical Fibre
Mode-Field Diameter at 1310 nm	9.2 µm
Fibre code	Z
Coating diameter	242 µm
Cladding diameter	125 µm
Wavelengths	1310 nm / 1383 nm / 1550 nm
Maximum attenuation	0.38 dB/km / 0.38 dB/km / 0.25 dB/km
Serial 1 gigabit ethernet	5000 m / -
Serial 10 gigabit ethernet	10000 m / 40000 m
Cable cutoff wavelength	1260 nm
Dispersion in the range 1285 to 1330 nm	≤ 3.5 ps / (nm * km)
Dispersion @ 1550 nm	≤ 18 ps / (nm * km)
PMD Link Design Value	≤ 0.04 PS / √km
PMD maximum individual fibre	≤ 0.1 PS / √km
Fibre compliance	ITU-T G.652.D and ITU-T G.657.A1

Notes: 1) Contact a Corning Customer Care Representative for additional information

# Plug & Play™ Universal Harness, SMF-28® Ultra Single-mode (OS2)

12 fibres, MTP® Connector to 6 LC Duplex Connectors, 1500 mm  
leg length, 2 m

CORNING

## Ordering Information

Part Number	H890412GEZ-NZ002M
Product Description	Plug & Play™ Universal Harness, SMF-28® Ultra OS2, 12 fibres, MTP® Connector to 6 LC Duplex Connectors, 1500 mm leg length, 2 m
Length	2 m

## Shipping Information

Units Per Delivery	1/1
--------------------	-----

**Corning Optical Communications GmbH & Co. KG · Leipziger Strasse 121 · 10117 Berlin, GERMANY**  
**00 800 2676 4641 · FAX: +49 30 5303 2335 · [www.corning.com/opcomm/emea](http://www.corning.com/opcomm/emea)**

A complete listing of the trademarks of Corning Optical Communications is available at [www.corning.com/opcomm/emea/trade-marks](http://www.corning.com/opcomm/emea/trade-marks). Corning Optical Communications is ISO 9001 and ISO 14001 certified. © 2016 Corning Optical Communications. All rights reserved.