



8 Fiber MPO to 4 x 2 Fiber MPO Duplex LCs Passive Optical Splitter Cable

MC6709309-xxx

Mellanox® MC6709309 is an MPO (8 fibers) to 4 duplex LCs (2 fibers) passive optical splitter cable designed for 100GbE to 4 x 25GbE cable assemblies connections, for example. Connecting this optical cable to Mellanox QSFP and SFP transceivers provides connectivity between devices using a QSFP port on one end and multiple SFP ports on the other end.

The fiber assembly, also referred to as a “splitter cable” or “breakout cable”, enables splitting the 4 channels in a quad-channel multi-mode transceiver into 4 separate single channels. This is used in data centers to link Top-of-Rack QSFP switch ports to single channel SFP ports in switches, servers, storage or other network appliances.

Rigorous cable production testing ensures best out-of-the-box installation experience, performance and durability. Mellanox optical solutions provide short, medium and long range scalability for all topologies, utilizing innovative optical technologies to enable extremely high signal integrity and reliability.

NOTE: Mellanox’s MC6709309 cables require special switch configuration. For more information, refer to the HW User Manual of the relevant switch and to the Mellanox-OS User Manual.

Table 1 - Cable Insertion Loss (Attenuation)

Part Number	MPO (dB)	LC (dB)	Total (dB)
MC6709309-005	0.82	0.52	1.33
MC6709309-010	0.83	0.53	1.36
MC6709309-020	0.86	0.56	1.42
MC6709309-030	0.89	0.59	1.48
MC6709309-050	0.95	0.65	1.60

Note: LC return loss (reflection) ≥ 25dB.

Table 2 - Cable Length Measurement

Part Number	Total Length (m)
MC6709309-005	5.0 -0/+0.1
MC6709309-010	10.0 -0/+0.1
MC6709309-020	20.0 -0/+0.2
MC6709309-030	30.0 -0/+0.2
MC6709309-050	50.0 -0/+0.5



LinkX™
CABLES
TRANSCEIVERS
COMPONENTS

HIGHLIGHTS

- Flexible round outer jacket for easier installation/routing
- Push-pull latching for quick release
- Tested to Telcordia GR-1435
- Connectors meet IEC Standards 61754-7 and TIA/EIA 604-5
- 50/125 um OM3
- Aqua color
- Low Smoke Zero Halogen (LSZH) rated
- Applications:
 - Switch-to-switch links
 - Server links to Top-of-Rack switches
 - Storage subsystems links (HDD, SSD, NVMe Flash, etc.)
 - Network appliances – security devices, network management systems, etc.

Mechanical Schematics

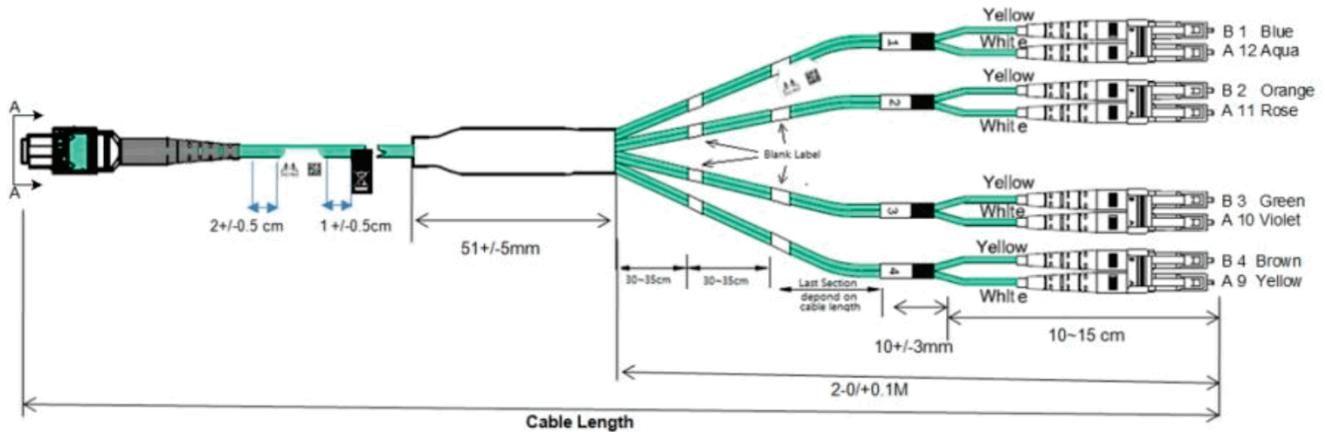


Figure 1. Channel Scheme

Pin of MPO	Fiber Color	Label Content	Duplex Clip Mark	Boot Color
1	Blue	1	B	Yellow
2	Orange	2	B	Yellow
3	Green	3	B	Yellow
4	Brown	4	B	Yellow
5	-	-	-	
6	-	-	-	
7	-	-	-	
8	-	-	-	
9	Yellow	4	A	White
10	Violet	3	A	White
11	Rose	2	A	White
12	Aqua	1	A	White

Table 3 - Part Numbers and Descriptions

OPN	Description
MC6709309-005	Mellanox® passive fiber hybrid cable, MPO to 8xLC, 5m
MC6709309-010	Mellanox® passive fiber hybrid cable, MPO to 8xLC, 10m
MC6709309-020	Mellanox® passive fiber hybrid cable, MPO to 8xLC, 20m
MC6709309-030	Mellanox® passive fiber hybrid cable, MPO to 8xLC, 30m
MC6709309-050	Mellanox® passive fiber hybrid cable, MPO to 8xLC, 50m

Warranty Information

Mellanox optical cables include a 1-year limited hardware warranty, which covers parts repair or replacement.