

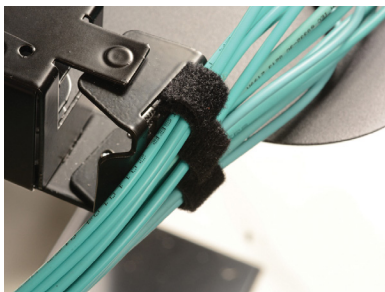
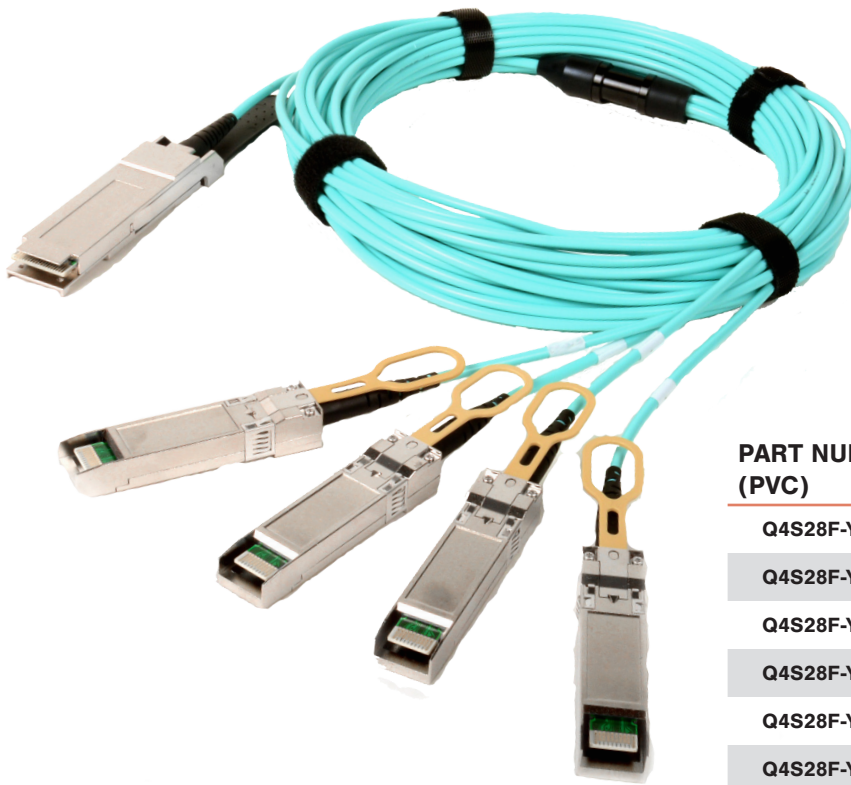
# Active Optical Cables

## QSFP28 100G Breakout

Siemon 100G QSFP28 to 4x SFP28 Breakout Active Optical Cable (AOC) assemblies offer a highly reliable and cost-effective alternative to transceiver assemblies available in lengths ranging from 0.5M to 100M, beyond the range of Direct Attach Copper Cables (DAC). These high performance and low power consumption AOCs are Ethernet, InfiniBand and MSA compliant with a robust construction, including a high-strength pull tab latching system which reduces plug loss and ensure more secure installations.

These 100G QSFP28 to 4x SFP28 Breakout assemblies are capable of transmitting data up to 4 x 25 Gb/s, offering an easy installation with a flexible, multimode fiber cable. AOCs eliminate the interoperability issues of transceiver assemblies to achieve proper parameter optimization and are equipped with Digital Diagnostic Monitoring, allowing I2C real-time supervision of operating parameters and transmits warnings if those parameters exceed specification.

Typical AOC applications include point-to-point connections within data centers, high performance computing and storage racks. The versatile connections can be rack-to-rack within the same or another row, and their hot swappable and high-density design allows use within a wide range of top-of-rack and other data center architectures.



**Small Diameter Bundles**  
AOC's thin diameter allow for smaller bundles which promotes better airflow.

### STANDARDS COMPLIANCE

- QSFP28 MSA
- SFP28 MSA
- SFF8431 Electrical
- SFF8432 Mechanical
- IEEE P802.3bm
- 100GBASE-SR4
- RoHS
- CML Compatible Electrical I/O
- CAUI-4

PART NUMBER (PVC)	PART NUMBER (LSOH)	LENGTH
Q4S28F-Y00.5M13	Q4S28F-V00.5M13	0.5m (1.64 ft.)
Q4S28F-Y01.0M13	Q4S28F-V01.0M13	1.0m (3.28 ft.)
Q4S28F-Y01.5M13	Q4S28F-V01.5M13	1.5m (4.92 ft.)
Q4S28F-Y02.0M13	Q4S28F-V02.0M13	2.0m (6.56 ft.)
Q4S28F-Y03.0M13	Q4S28F-V03.0M13	3.0m (9.87 ft.)
Q4S28F-Y05.0M13	Q4S28F-V05.0M13	5.0m (16.40 ft.)
Q4S28F-Y07.0M13	Q4S28F-V07.0M13	7.0m (22.97 in.)
Q4S28F-Y10.0M13	Q4S28F-V10.0M13	10.0m (32.80 ft.)
Q4S28F-Y15.0M13	Q4S28F-V15.0M13	15.0m (49.21 ft.)
Q4S28F-Y20.0M13	Q4S28F-V20.0M13	20.0m (65.62 ft.)
Q4S28F-Y25.0M13	Q4S28F-V25.0M13	25.0m (82.02 ft.)
Q4S28F-T30.0M13	Q4S28F-V30.0M13	30.0m (98.43 ft.)
Q4S28F-Y40.0M13	Q4S28F-V40.0M13	40.0m (131.23 ft.)
Q4S28F-Y50.0M13	Q4S28F-V50.0M13	50.0m (164.04 ft.)
Q4S28F-X0100M13	Q4S28F-T0100M13	100.0m (328.08 ft.)

# Product Information

## ABSOLUTE MAXIMUM RATINGS

	MIN	MAX
Module Supply Voltage	0.5V	3.6V
Storage Temperature	-40°C (-40°F)	100°C (212°F)
Relative Humidity - Storage	0%	95%
Relative Humidity - Operating	0%	85%

## ELECTRICAL SPECIFICATIONS

Module Supply Voltage	3.14V to 3.46V (3.3V typical)
Case Operating Temperature	0°C (32°F) to 70°C (158°F) (25°C (77°F) typical)
Single Module Supply Current	300mA Max.
Maximum Power Consumption Per End	1.04W
Bit Rate Per Channel	25.78Gb/s (typical)

## RECEIVER ELECTRICAL INTERFACE

Rx Data Differential Output Voltage	300mV to 900mV (700mV typical)
Rx Data Differential Output Impedance	90Ω to 110Ω (100Ω typical)

## MECHANICAL SPECIFICATIONS

Minimum Bend Radius	30mm
Cable Diameter	3.0mm ± 0.15
Fiber Type	OM3 multimode <70m OM4 multimode ≥70m

## TRANSMITTER ELECTRICAL INTERFACE

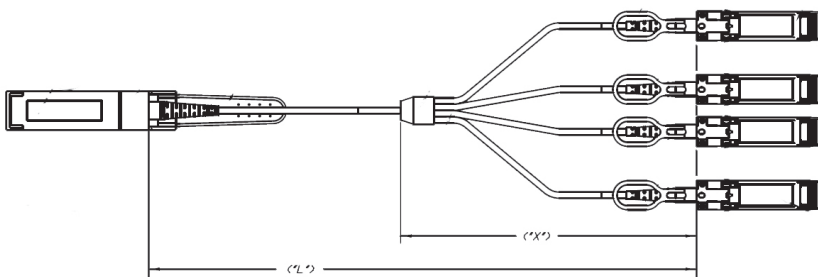
Tx Data Differential Input Voltage	180mV to 900mV
Tx Data Differential Input Impedance	90Ω to 110Ω (100Ω typical)

## CHANNEL PARAMETERS

Channels	4 Lanes, bi-directional
Data Rate	25.78 Gbp/s channel max
Operating Wavelength	850nm

## OVERALL DIMENSIONS

L	X
0.5m	0.40m
1.0m	0.67m
1.5m	1.00m
2.0m	1.33m
3.0m	2.00m
5.0m and above	3.00m



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