

# Volex 400G OSFP to QSFP56 Passive DAC Breakout Cable



Volex's OSFP to 2x/4x QSFP56 passive breakout Direct Attach Cable features 8 50Gbps channels with PAM-4 modulation for each of the transmitting and receiving directions. The breakout cable is offered in a 400Gbps (OSFP) to 2x 200Gbps (2x QSFP56) or 4x 100Gbps (4x QSFP56) configurations. The cable assembly meets IEEE 802.3cd 50GBase-CR and 100GBase-CR2 standard with substantial signal integrity margin providing high performance and bandwidth interconnect solutions for high-density applications.

As next-gen data centers deploy faster speed in a tighter space, they need high performance cables that reduce power consumption, provide reliable operation and are low cost. This breakout cable assembly is designed to meet the next-gen data center needs offering smallest cable outer diameter and bend radius and highest flexibility while meeting or exceeding the MSA signal integrity specification.



Near zero power consumption and no heat generated



Complete cable assembly uniquely terminated at the factory to provide the most reliable operation



100% tested for signal integrity with serial number traceability

## FEATURES AND SPECIFICATIONS

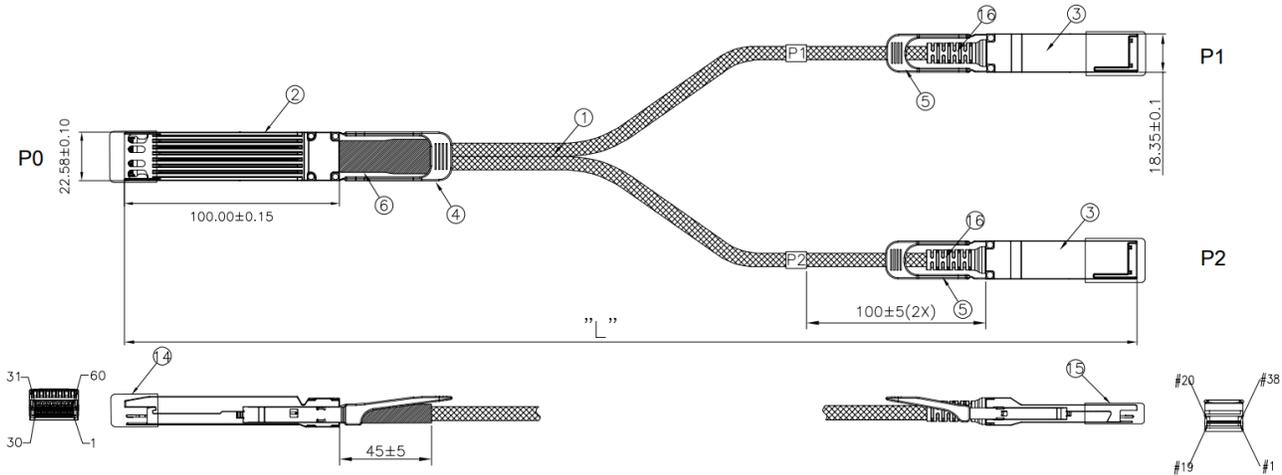
<b>Product Type</b>	400Gbps OSFP to 2x/4x QSFP56 Passive DAC Breakout Cable
<b>Conductor Treatment</b>	Laser stripped conductors
<b>Cable Type</b>	High speed twinax cable, 16-pair differential, 100 +/-5 ohms
<b>Cable Colour</b>	Black
<b>Cable Jacket</b>	PVC or Plastic braided mesh
<b>Packaging</b>	Anti-Static PE bag
<b>Power Supply Voltage</b>	3.3V
<b>Power Consumption</b>	Near zero
<b>Temperature Range</b>	0 - 70°C
<b>Retention Force</b>	>90N for QSFP; >125N for OSFP
<b>Insertion Force</b>	<60N for QSFP; < 40N for OSFP
<b>EEPROM</b>	Each connector module contains an EEPROM to provide product information to the host system
<b>Cable Termination</b>	100% factory tested including comprehensive signal integrity verification and serial number traceability using advanced Manufacturing Execution Systems

Volex reserves the right to change specifications and availability without prior notice.

Applications	Standards Compliance
<ul style="list-style-type: none"> <li>Switches, Servers, Routers, Storage Arrays</li> <li>Networking Equipment</li> <li>Data Centres</li> <li>Telecommunication Central Offices</li> <li>Test and Measurement Equipment</li> </ul>	<ul style="list-style-type: none"> <li>IEEE 802.3cd, InfiniBand HDR</li> <li>OSFP MSA Rev 5.0 /SFF-8665, SFF-8661,</li> <li>SFF-8636, SFF-8679, CMIS 5.0</li> <li>EIA-364</li> <li>UL 94, 1581, VW1, File No. E510564</li> <li>RoHS</li> </ul>

## Mechanical Drawing

OSFP to 2x QSFP56 configuration shown



Volex P/N (OSFP to 2x QSFP56)	Volex P/N (OSFP to 4x QSFP56)	Cable Length (M)	Gauge (AWG)	Cable OD (mm) (2x/4x)
DG50BDG05BS	DK50BDG05BS	0.50	30	6.8/5.3
DG50BDG10BS	DK50BDG10BS	1.00	30	6.8/5.3
DG50BDG15BS	DK50BDG15BS	1.50	30	6.8/5.3
DG50BDG20BS	DK50BDG20BS	2.00	30	6.8/5.3
DG58BDG25BS*	DK58BDG25BS	2.50	28	7.9/6.5
DG56BDG30BS*	DK56BDG30BS	3.00	26	8.5/6.8

0.5 – 3.0m lengths available with 30AWG-26AWG conductor sizes to achieve maximum performance.

### Options Available

- Custom colours for cable jacket
- Custom colours for pull tab
- Custom EEPROM mapping

\*\*\* - Maximum cable reach of passive DAC will be shorter in InfiniBand HDR application.

Volex Worldwide CONTACT INFO		
<b>Americas</b> Tel: +1 512 608 2402	<b>EMEA</b> Tel: +44 7768 924844	
<b>China</b> Tel: +86 159 5019 6906	<b>Asia Pacific</b> Tel: +65 6904 1545	<b>India</b> Tel: +91 99406 10637

Contact us at [sales@volex.com](mailto:sales@volex.com)  
for assistance in finding the right solution for your needs.