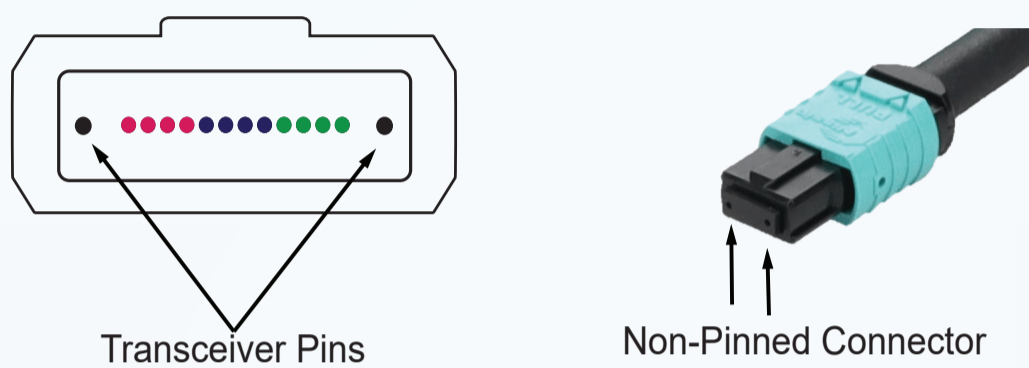


# MPO Cable for Parallel Series Transceivers

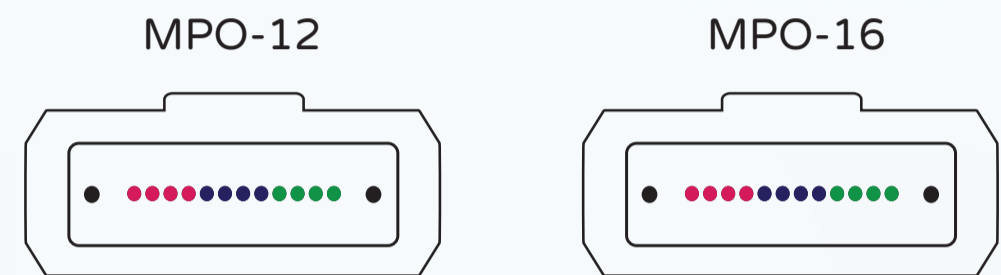
## 1. Pinned or Un-Pinned

Transceiver interfaces have guide pins for MPO Connectors. Non-pinned or female MPO connectors must be used at the transceiver.



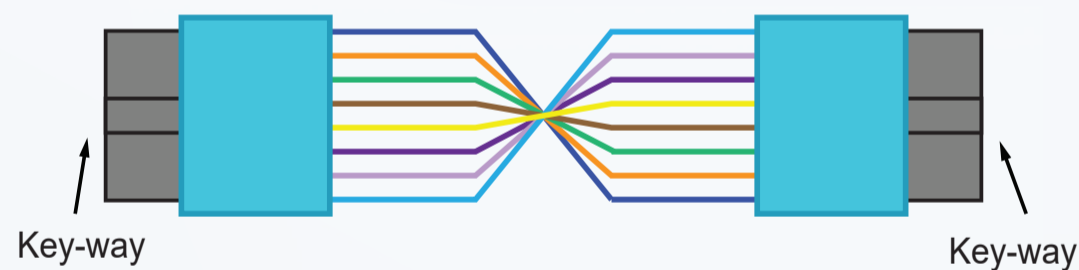
## 2. MPO-12 or MPO-16

MPO-12 connectors transmit with 4 fibers and receive with 4 in parallel series transceivers. MPO-16 have an offset keyway and transmit with 8 fibers, while receiving with 8 fibers. MPO-12 and MPO-16 are not interchangeable.



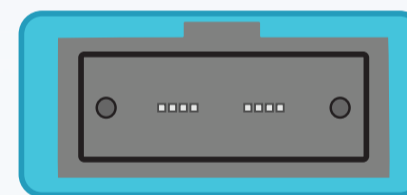
## 3. Polarity

Connecting two transceivers back-to-back in a single fiber span requires Type B or crossover patch cables. Cross-over patch cables are installed with the key-way up on each end.



## 4. Fiber Polish

The end-face polish of each fiber is polished in manufacturing to deliver the required back reflection performance. New transceivers for AI and ML environments now require angle-polish or APC multi-mode MPO connectors. Single-mode MPO connectors are APC by default.



PC MPO Connectors  
Aqua housing  
< -35dB Back Reflection



APC MPO Connectors  
Green Housing  
(SMF MPO connectors will have either green or yellow)  
< -65dB Back Reflection

## 5. Transceivers by Connector Type

### MMF MPO-12 APC

QSFP-DD SR4  
OSFP SR4  
OSFP 2xSR4

### SMF MPO-12 APC

QSFP28 PSM4  
QSFP28 PLR4  
QSFP56 DR4  
QSFP-DD DR4  
QSFP-DD DR4+  
OSFP DR4  
OSFP PLR4

### MMF MPO-12 PC

QSFP28 SR4  
QSFP56 SR4  
QSFP-DD SR4.2

### MMF MPO-16 APC

QSFP-DD SR8  
OSFP SR8