

HD Flex™ Fiber Cabling System Ordering Guide



HD Flex[™] Ordering Guide



Panduit HD Flex™ Fiber Cabling System: Built for Next-Generation Density Demands.

The HD Flex™ Fiber Cabling System is engineered to provide the highest levels of density and serviceability for high-performance data centers. The system is purposely designed to enable organizations to easily scale up density and execute moves, adds and changes quickly and safely, without disrupting adjacent circuits. Technicians can take advantage of the unique benefits provided by the HD Flex™ Cabling System.

- Innovative cable management that positions trunk cables away from the rear
 of the enclosure, providing enhanced access for moves, adds, and changes
- Split trays inside the enclosure support safe moves, adds, and changes
- Cassettes accessible from the front or back to streamline installation and migrations from 10G to 40G/100G Ethernet
- Convertible enclosures and panels between 6-port and 12-port cassettes and FAPs

Accessories and Ordering Information

HD Flex[™] 6-Port Fiber Enclosures, Panels, and Cassettes





Part Number	Description
Enclosures	
FLEX1U06	1 RU HD Flex™ 6-Port Enclosure.
FLEX2U06	2 RU HD Flex™ 6-Port Enclosure.
FLEX4U06	4 RU HD Flex™ 6-Port Enclosure.
Panels	
FLEX1UPN06	1 RU HD Flex™ 6-Port Panel.
FLEX2UPN06	2RU HD Flex™ 6-Port Panel.
FLEX4UPN06	4 RU HD Flex™ 6-Port Panel.
Zero RU Cassette Holder and Bracket	
FLEX-0RUBR06	HD Flex™ 0 RU 6-Port Bracket and Cassette Holder.
FLEX-0RUCH06	HD Flex™ 0 RU 6-Port Cassette Holder.

HD Flex™ Fiber Optic Cassettes



Part Number	Description		
HD Flex™ Cassettes – Duplex I	· · · · · · · · · · · · · · · · · · ·		
6-port, 12-fiber (1 MPO)			
OM4 Fiber/Optimized Loss (0.	OM4 Fiber/Optimized Loss (0.50 dB)		
FHCZO-12-10AS	Method A Polarity		
FHCZO-12-10AF	Modified Method A Polarity (Pair flipped)		
FHCZO-12-10BN	Method B Polarity		
OM4 Fiber/Ultra Low Loss (0.35 dB)			
FHCZA-12-10AS	Method A Polarity		
FHCZA-12-10AF	Modified Method A Polarity (Pair flipped)		
FHCZA-12-10BN	Method B Polarity		
OM3 Fiber/Optimized Loss (0.50 dB)			
FHCXO-12-10AS	Method A Polarity		
FHCXO-12-10AF	Modified Method A Polarity (Pair flipped)		
FHCXO-12-10BN	Method B Polarity		
OS2 Fiber/Standard Loss (0.75 dB)			
FHC9N-12-10AS	Method A Polarity		
FHC9N-12-10AF	Modified Method A Polarity (Pair flipped)		

HD Flex™ Fiber Optic Conversion Cassettes



Description		
HD Flex™ 4-to-1 Conversion Cassettes		
4-port, 8-fiber ((1) 8F MPO)		
50 dB)		
Method B Polarity		
OM4 Fiber/Ultra Low Loss (0.35 dB)		
Method B Polarity		
OM3 Fiber/Optimized Loss (0.50 dB)		
Method B Polarity		
OS2 Fiber/Standard Loss (0.75 dB)		
Method B Polarity		

Change B to A in part numbers for Method A conversion cassettes.

HD Flex™ Fiber Optic Cassettes (continued)



Part Number	Description		
HD Flex™ LC Splice Cassettes			
OM4 Fiber/Optimized Loss (0.15 dB max. connector IL plus splice loss)			
FHSZO-12-10P	Preloaded with 12 pigtails (250µm) and 12 splice sleeves.		
FHSZO-12-10R	Preloaded with 12-fiber ribbon pigtail and 1 ribbon fiber splice sleeve.		
OM4 Fiber/Ultra Low Loss (0.10 dB max. connector IL plus splice loss)			
FHSZA-12-10P	Preloaded with 12 pigtails (250µm) and 12 splice sleeves.		
FHSZA-12-10R	Preloaded with 12-fiber ribbon pigtail and 1 ribbon fiber splice sleeve.		
OM3 Fiber/Optimized Loss (0.15 dB max. connector IL plus splice loss)			
FHSXO-12-10P	Preloaded with 12 pigtails (250µm) and 12 splice sleeves.		
FHSXO-12-10R	Preloaded with 12-fiber ribbon pigtail and 1 ribbon fiber splice sleeve.		
OS2 Fiber/Standard Loss (0.35	dB max. connector IL plus splice loss)		
FHS9N-12-10P	Preloaded with 12 pigtails (250µm) and 12 splice sleeves.		
FHS9N-12-10R	Preloaded with 12-fiber ribbon pigtail and 1 ribbon fiber splice sleeve.		
HD Flex™ LC and MPO Fiber A	dapter Panels and Blanking Panels		
LC Fiber Adapter Panels			
FHSXN-12-10N	6 LC Duplex Multimode Adapters in Aqua with Zirconia sleeves.		
FHS9N-12-10N	6 LC Duplex Singlemode Adapters in Blue with Zirconia sleeves.		
MPO Fiber Adapter Panels			
FHMP-6-ABL	6 MPO Type A Adapters (Key-Up to Key-Down) in Black.		
FHMP-6-BCG	6 MPO Type B Adapters (Key-Up to Key-Up) in Charcoal Gray.		

6 MPO Type A Adapters (Key-Up to Key-Down) in Red.

HD $\mathsf{Flex}^{\scriptscriptstyle\mathsf{TM}}$ Blanking Panel for 6-port enclosures and panels.





Accessories and Ordering Information

FHMP-6-ARD

Blanking Panels FHSBBL06W

HD Flex™ 12-Port Fiber Enclosures, Panels, and Cassettes



Part Number	Description
Enclosures	
FLEX1U12	1 RU HD Flex™ 12-Port Enclosure.
FLEX2U12	2 RU HD Flex™ 12-Port Enclosure.
FLEX4U12	4 RU HD Flex™ 12-Port Enclosure.
Panels	
FLEX1UPN12	1 RU HD Flex™ 12-Port Panel.
FLEX2UPN12	2RU HD Flex™ 12-Port Panel.
FLEX4UPN12	4 RU HD Flex™ 12-Port Panel.
Zero RU Cassette Holder and Bracket	
FLEX-0RUBR12	HD Flex™ 0 RU 12-Port Bracket and Cassette Holder.
FLEX-0RUCH12	HD Flex™ 0 RU 12-Port Cassette Holder.

HD Flex[™] Ordering Guide

HD Flex™ Fiber Optic Cassettes





Part N	umber	
12-port. 24-fiber (2 MPOs)	12-port. 24-fiber (1 MPO)	Description
HD Flex™ Cassettes -	Duplex LC	
OM4 Fiber/Optimized	Loss (0.50 dB)	
FHCZO-24-10AS	FHCZO-24F-10AS	Method A Polarity
FHCZO-24-10AF	FHCZO-24F-10AF	Modified Method A Polarity (Pair flipped)
FHCZO-24-10BN	-	Method B Polarity
OM4 Fiber/Ultra Low	Loss (0.35 dB)	
FHCZA-24-10AS	_	Method A Polarity
FHCZA-24-10AF	-	Modified Method A Polarity (Pair flipped)
FHCZA-24-10BN	-	Method B Polarity
OM3 Fiber/Optimized	Loss (0.50 dB)	
FHCXO-24-10AS	FHCXO-24F-10AS	Method A Polarity
FHCXO-24-10AF	FHCXO-24F-10AF	Modified Method A Polarity (Pair flipped)
FHCXO-24-10BN	-	Method B Polarity
OS2 Fiber/Standard Loss (0.75 dB)		
FHC9N-24-10AS	FHC9N-24F-10AS	Method A Polarity
_	-	Modified Method A Polarity (Pair flipped)

HD Flex™ Fiber Optic Conversion Cassettes



Part Number	Description		
HD Flex™ 4-to-1 Conversion Ca	HD Flex™ 4-to-1 Conversion Cassettes		
12-port, 24-fiber ((3) 8F MPOs)			
OM4 Fiber/Optimized Loss (0.50 dB)			
FHC3ZO-24H-10B	Method B Polarity		
OM4 Fiber/Ultra Low Loss (0.35 dB)			
FHC3ZA-24H-10B	Method B Polarity		
OM3 Fiber/Optimized Loss (0.50 dB)			
FHC3XO-24H-10B	Method B Polarity		
OS2 Fiber/Standard Loss (0.75 dB)			
FHC39N-24H-10B	Method B Polarity		

Change B to A in part numbers for Method A conversion cassettes.

Accessories



Part Number	Description
Cable Manage	ment Accessories
FLEX-FCM1UA	1 RU HD Flex™ Front Cable Manager.
FLEX-FCM2UA	2 RU HD Flex™ Front Cable Manager.
FLEX-FCM4UA	4 RU HD Flex™ Front Cable Manager.
FLEX-PLATE1U	1 RU HD Flex™ Enclosure Trunk Slack Plate.
FLEX-PLATE4U	4 RU HD Flex™ Enclosure Trunk Slack Plate.
FLEX-CLIP12	HD Flex™ Trunk Transition Clip (qty 2); 12-position.
FLEX-CLIP18	HD Flex™ Trunk Transition Clip (qty 2); 18-position.
FLEX-CM12S	HD Flex™ Universal Rear Cable Manager. Includes two 12-position transition managers and one screw mount transition bracket.
FLEX-CM18S	HD Flex™ Universal Rear Cable Manager. Includes two 18-position transition managers and one screw mount transition bracket.
FLEX-CM12C	HD Flex™ Rear Cable Manager for use with PatchRunner™ Cable Manager (PEV12). Includes four 12-position transition managers and one transition clip plate.
FLEX-CM18C	HD Flex™ Rear Cable Manager for use with PatchRunner™ Cable Manager (PEV12). Includes four 18-position transition managers and one transition clip plate.

HD Flex™ Trunk Assemblies

part number

Example: FXUYL7E7EAAM030 = OM3, 24-fiber, indoor small diameter trunk cable, LSZH, PanMPO™ Female to PanMPO™ Female, polarity A, pulling eye, 30 meters.

CHARACTER

EXAMPLE



























1 - Fiber

F = Fiber

2 - Fiber Type

9 = OS2 9/125um

 $X = OM3 50/125 \mu m$

Z = OM4 50/125um

3 - Fiber Count

T = 12 fiber

U= 24 fiber

4 - Cable Type

Y = Indoor small diameter trunk cable

5 - Jacket Type

L = Low Smoke Zero Halogen (LSZH)

P = Plenum (OFNP)

6 - Connector Type (End 'A')

5 = Singlemode MPO Female

6 = Singlemode MPO Male

7 = Multimode PanMPO Female

8 = Multimode PanMPO Male

7 - Connector Variant (End 'A')

5 = 39" Breakout with transition

8 - Connector Type (End 'B')

5 = Singlemode MPO Female

6 = Singlemode MPO Male

7 = Multimode PanMPO Female

8 = Multimode PanMPO Male

9 - Connector Variant (End 'B')

5 = 39" Breakout with transition

10-Construction/Performance

A = Singlemode Polarity A - Standard IL

X = Multimode Polarity A - Optimized IL

Y = Multimode Polarity B - Optimized IL

K = Multimode Polarity A - Ultra Low IL

L = Multimode Polarity B - Ultra Low IL

11 - Other

N = No pulling eye (15 - 100ft, 5 - 30m)

A = Pulling eye end A (>100ft, > 30m)

12 - Unit of Length

F = Feet (OFNP)

M = Meters (LSZH)

13, 14, 15 - Cable Assembly Length

015 - 300ft 1ft increments to 100ft, 5ft increments to 300ft

005 - 100m, 1m increments

HD Flex™ Harness Assemblies

part number

Example: FZTRP8QQSSNF003 = Fiber OM4, 12-fiber, round, plenum rated, PanMPO male to LC duplex LC harness with 61cm equal breakout, standard IL, no pulling eye, 3 feet

CHARACTER

EXAMPLE

1

2 Z

3 Т

4 R

5 Р 6 8

7 Ν

8 Q

9 S 10 11 Ν

0

12 F

13 0

14 0

15 3



1 - Fiber Product

F = Fiber

2 - Fiber Type

9 = Singlemode

X = OM3

Z = OM4

3 - Fiber Count

T = 12-fiber

8 = 8-fiber

4 - Cable Type R = Round

5 - Jacket Type

L = Low Smoke Zero Halogen (LSZH)

P = Optical Fiber Nonconductive Plenum (OFNP)

6 - Connector Type End "A"

5 = Singlemode MPO Female

6 = Singlemode MPO Male 7 = Mulitmode PanMPO™ Female

8 = Multimode PanMPO™ Male

7 - Connector Variant

N = No variant

8 - Connector Type End "B"

Q = Push/Pull Duplex LC

9 - Connector Variant

S = 24-inch (61 cm)

10- Performance/Construction

S = Standard IL / Standard Fanout (Singlemode)

O = Optimized IL / Standard Fanout (Multimode)

Q = Standard IL / 4-to-1 Conversion (Singlemode)

V = Optimized IL / 4-to-1 Conversion (Multimode N = Ultra Low IL/Standard Fanout

(OM4 Only) 11 - Other

N = No variant

12 - Unit of Length

M = Meters

F = Feet

13, 14, 15 - Length

Meters: 001 to 010, 1.5, 2.5, 3.5, 4.5

Feet: 003 to 030

HD Flex™ Patch Cords

part number

Example: FX2ERQ1Q1SNM005 = Fiber, OM3, 2-fiber, 1.6mm cable, riser rated, LC push-pull connector to LC push-pull connector, standard IL, 5 meters

CHARACTER

EXAMPLE



























1 - Fiber Product

F = Fiber

2 - Fiber Type

 $X = OM3 50/125 \mu m$

 $Z = OM4 50/125 \mu m$

 $9 = OS1/OS2 9/125 \mu m$

3 - Fiber Count

2 = 2-fiber

4 - Cable Type

E = 1.6mm

5 - Jacket Type

L = LSZH (Low Smoke Zero Halogen)

R = OFNR (Riser)

6 - Connector Type

Q = LC Push-Pull connector

7 - Connector Variant

1 = 1st Gen (Low Profile Duplex LC)

8 - Connector Type

Q = LC Push-Pull connector

9 - Connector Variant

1 = 1st Gen (Low Profile Duplex LC)

10 - Performance/Construction

S = Standard IL/Straight Through (A-B)

O = Optimized IL/Straight Through (A-B)

N = Ultra IL/Straight Through (A-B)

11 - Connector Variant

N = No variant

12 - Unit of Length

M = Meters

F = Feet

13, 14, 15 - Length

001 - 050 in 1 meter increments

1/2 meter increments available between 1 and 10 meters, ex 3.5

Foot-length increments available from 1 to 25 feet in Riser-rated jacket only

QuickNet™ 24F MPO Trunk Assemblies

part number

CHARACTER

EXAMPLE

1 F 2 Z 3 U

4 Y F

5 P 6 :

5

8 E 5

10 X 12 F

0

14 5



1 - Fiber Product

F = Fiber

2 - Fiber Type

9 = Singlemode

X = OM3

Z = OM4

3 - Fiber Count

U = 24-fiber

4 - Cable Type

Y = Small diameter indoor

5 - Jacket Type

P = Plenum

L = LSZH

6 - Connector (End "A")

E = 24F MPO female

F = 24F MPO male

7 - Connector Variant

5 = HD Flex transition, 1m breakout

8 - Connector (End "B")

E = 24F MPO female

F = 24F MPO male

9 - Connector Variant

5 = HD Flex transition, 1m breakout

10- Polarity/Performance

A = Singlemode, Method A, Standard IL

X = Multimode, Method A, Optimized IL

Y = Multimode, Method B, Optimized IL

11 - Pulling Eye

A = Pulling eye

N = No pulling eye

12 - Length, Unit of Measure

F = Feet (Plenum)

M = Meters (LSZH)

13, 14, 15 – Assembly Length

F = 015 to 300 feet (Plenum)

M = 001 to 030 meters (LSZH)

HD Flex[™] Ordering Guide

OuickNet[™] 24F MPO Interconnect Assemblies

3

U

part number

CHARACTER

EXAMPLE

1 F Z

R

5

Ρ

6 Ε Ν Ε

Ν

10 11 X Ν

12 F

13 0

14 1

15

5

1 - Fiber Product

F = Fiber

2 - Fiber Type

9 = Singlemode

X = OM3

Z = OM4

3 - Fiber Count

U = 24-fiber

4 - Cable Type

R = Round, 3.6mm indoor

5 - Jacket Type

P = Plenum

L = LSZH

6 - Connector (End "A")

E = 24F MPO female

F = 24F MPO male

7 - Connector Variant

N = No variant

8 - Connector (End "B")

E = 24F MPO female

F = 24F MPO male

9 - Connector Variant

N = No variant

10- Polarity/Performance

A = Singlemode, Method A, Standard IL

X = Multimode, Method A, Optimized IL

Y = Multimode, Method B, Optimized IL

11 - Pulling Eye

N = No pulling eye

12 - Length, Unit of Measure

F = Feet (Plenum)

M = Meters (LSZH)

13, 14, 15 - Assembly Length

F = 003 to 100 feet (Plenum)

M = 001 to 030 meters (LSZH)

QuickNet™ 24F MPO to (2) 12F MPO Harness Assemblies

part number

CHARACTER EXAMPLE

1 F

2 Z 3 U

4 R 5 Ρ 6 Ε

7 Ν 8 7

9 4

10 X

11 Ν

12

F

13 14 5 0

15 0



1 - Fiber Product

F = Fiber

2 - Fiber Type

9 = Singlemode

X = OM3

Z = OM4

3 - Fiber Count

U = 24-fiber

4 - Cable Type

R = Round, 3.6mm indoor

5 - Jacket Type

P = Plenum

L = LSZH

6 - Connector (End "A")

E = 24F MPO female

F = 24F MPO male

7 - Connector Variant

N = No variant

8 - Connector (End "B")

5 = Singlemode, (2) 12F MPO Female 7 = Multimode, (2) 12F PanMPO™ Female Connector

9 - Connector Variant

4 = HD Flex[™] Transition, 24" breakout

10- Polarity/Performance

A = Singlemode, Method A, Standard IL

X = Multimode, Method A, Optimized IL

Y = Multimode, Method B, Optimized IL

11 - Pulling Eye

N = No pulling eye

12 - Length, Unit of Measure

F = Feet (Plenum)

M = Meters (LSZH)

13, 14, 15 - Assembly Length

F = 003 to 100 feet (Plenum)

M = 001 to 030 meters (LSZH)

