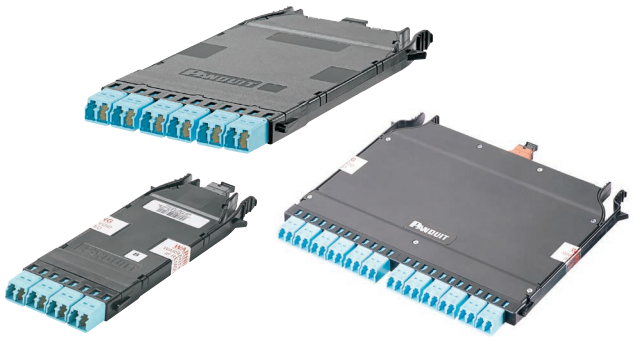
HD Flex™ Fiber Optic Cassettes

PANDUIT®
SPECIFICATION SHEET

technical information

HD Flex Fiber Optic Cassettes offer a wide array of deployment options to support both Ethernet and Fibre Channel networks. Cassettes are available in 4-port, 6-port, and 12-port configurations with several connector options on the front and back of the cassettes. Splice cassettes and adapter/coupler modules are also available.



applications

Allows system designers to tailor configuration, reach and breakout construction to application requirements; to minimize waste, optimize cable management, speed deployment, and improve flexibility and manageability for lower installation costs.

construction

Fiber types:	Multimode:	OM3 50/125µm OM4 50/125µm OM4+ Sig Core 50/125µm
	Singlemode:	OS2 9/125µm
Front connectivity:	LC, LC/APC Duplex Adapters (Shuttered) SC, SC/APC Duplex Adapters MPO Adapters (Key-up to Key-up, Key-up to Key-down)	
Rear connectivity:	MPO Adapter with MPO male connector MPO Adapters (Key-up to Key-up Method B, Key-up to Key-down Method A) 12-fiber and 24-fiber for splicing (ribbon, 250µm)	

environmental properties

Operating temperature:	0°C – 70°C (32°F – 158°F)
Storage and shipping temperature:	-40°C – 70°C (-40°F – 158°F)
Installation temperature:	0°C – 60°C (32°F – 140°F)

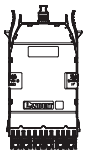
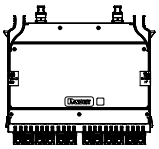
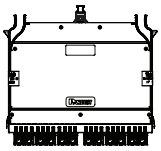
performance properties

Insertion loss:	Multimode:	Optimized Cassette and Breakout Cassette: 0.5dB standard max, 0.35dB typical max Ultra Low Loss Cassette and Breakout Cassette: 0.35dB standard max,0.25dB typical max Optimized Loss Splice Cassette: 0.15dB plus splice loss Ultra Low Loss Splice Cassette: 0.10dB plus splice loss
Insertion loss:	Singlemode:	Standard (1) 24F MPO Cassette: 1.20dB Standard Cassette and Breakout Cassette: 0.75dB Standard Loss Splice Cassette: 0.35dB plus splice loss
Return loss: (per fiber)	Multimode: Singlemode:	>35dB (LC) >55dB (LC) >65dB (LC/APC)
Connector durability:		Connectors meeting ANSI/TIA-586C.3 Durability: 500 mating cycles
Fiber count:		24 (cassette and tethered cassette) 24 (splice cassettes) 24 discrete splice, 48 ribbon splice (splice only)
Split sleeve material:		Zirconia ceramic

standards

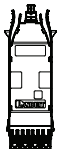
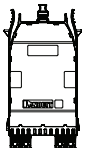
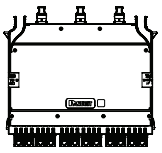
Meets or exceeds:	ISO/IEC 11801, ANSI/TIA-568-C.3, TIA-604-5 (FOCIS-5), TIA-604-10 (FOCIS-10), RoHS Compliant

HD Flex™ Fiber Optic Cassettes

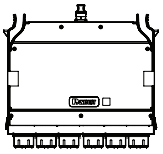




HD Flex Cassettes – Duplex LC, LC/APC	6-port, 12-fiber (1 MPO)	12-port, 24-fiber (2 MPOs)	12-port, 24-fiber (1 MPO24)
OM4 Fiber/Optimized Loss – LC			
Method A polarity.	FHCZO-12-10AS	FHCZO-24-10AS	–
Modified Method A polarity (pair flipped).	FHCZO-12-10AF	FHCZO-24-10AF	FHCZO-24F-10A
Universal polarity (B).	FHCZO-12-10U	FHCZO-24-10U	–
OM4+ Signature Core Fiber/Ultra Low Loss – LC			
Method A polarity.	FHCSA-12-10AS	FHCSA-24-10AS	–
Modified Method A polarity (pair flipped).	FHCSA-12-10AF	FHCSA-24-10AF	–
Universal polarity (B).	FHCSA-12-10U	FHCSA-24-10U	–
OM4 Fiber/Ultra Low Loss – LC			
Method A polarity.	FHCZA-12-10AS	FHCZA-24-10AS	–
Modified Method A polarity (pair flipped).	FHCZA-12-10AF	FHCZA-24-10AF	–
Universal polarity (B).	FHCZA-12-10U	FHCZA-24-10U	–
OM3 Fiber/Optimized Loss – LC			
Method A polarity.	FHCXO-12-10AS	FHCXO-24-10AS	–
Modified Method A polarity (pair flipped).	FHCXO-12-10AF	FHCXO-24-10AF	FHCXO-24F-10A
Universal polarity (B).	FHCXO-12-10U	FHCXO-24-10U	–
OS2 Fiber/Standard Loss – LC			
Method A polarity.	FHC9N-12-10AS	FHC9N-24-10AS	–
Modified Method A polarity (pair flipped).	FHC9N-12-10AF	FHC9N-24-10AF	FHC9N-24F-10A
Universal polarity (B).	FHC9N-12-10U	FHC9N-24-10U	–
OS2 Fiber/Standard Loss – LC/APC			
Method A polarity.	FHC9N-12-LAAS	FHC9N-24-LAAS	–
Modified Method A polarity (pair flipped).	FHC9N-12-LAAF	FHC9N-24-LAAF	FHC9N-24F-LAA
Universal polarity (B).	FHC9N-12-LAU	FHC9N-24-LAU	–

HD Flex™ Fiber Optic Cassettes

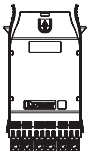




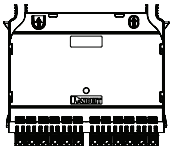
HD Flex 4-to-1 Breakout Cassettes	4-port, 8-fiber (1 MPO)	6-port, 8-fiber (1 MPO)	12-port, 24-fiber (3 MPO)
OM4 Fiber/Optimized Loss – LC			
Method B polarity.	FHC3ZO-08H-10B	FHC3ZO-08-10BN	FHC3ZO-24H-10B
OM4 Fiber/Ultra Low Loss – LC			
Method B polarity.	FHC3ZA-08H-10B	FHC3ZA-08-10BN	FHC3ZA-24H-10B
OM3 Fiber/Optimized Loss – LC			
Method B polarity.	FHC3XO-08H-10B	FHC3XO-08-10BN	FHC3XO-24H-10B
OS2 Fiber/Standard Loss – LC			
Method A polarity.	FHC39N-08H-10A	FHC39N-08-10AN	FHC39N-24H-10A
OS2 Fiber/Standard Loss – LC/APC			
Method A polarity – LC/APC.	FHC39N-08H-LAA	–	–



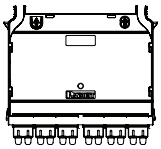
HD Flex Cassettes – Duplex SC, SC/APC	12-port, 12-fiber (1 MPO)
OM4 Fiber/Standard Loss – SC	
Method A polarity.	FHCZN-12-03AS
Modified Method A polarity (pair flipped).	FHCZN-12-03AF
Universal polarity (B).	FHCZN-12-03U
OM3 Fiber/Standard Loss – SC	
Method A polarity.	FHCXN-12-03AS
Modified Method A polarity (pair flipped).	FHCXN-12-03AF
Universal polarity (B).	FHCXN-12-03U
OS2 Fiber/Standard Loss – SC	
Method A polarity.	FHC9N-12-03AS
Modified Method A polarity (pair flipped).	FHC9N-12-03AF
Universal polarity (B).	FHC9N-12-03U
OS2 Fiber/Standard Loss – SC/APC	
Method A polarity.	FHC9N-12-3GAS
Modified Method A polarity (pair flipped).	FHC9N-12-3GAF
Universal polarity (B).	FHC9N-12-3GU

HD Flex™ Fiber Optic Cassettes



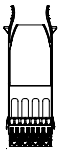
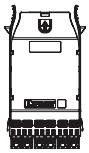


HD Flex Splice Cassettes – LC, LC/APC	6-port, 12-fiber	12-port, 24-fiber
OM4 Fiber/Optimized Loss – LC		
Pre-loaded with pigtails (250µm) and splice sleeves.	FHSZO-12-10P	–
Pre-loaded with flat ribbon pigtail and splice sleeve.	FHSZO-12-10R	–
OM4 Fiber/Ultra Low Loss – LC		
Pre-loaded with pigtails (250µm) and splice sleeves.	FHSZA-12-10P	FHSZA-24-10P
Pre-loaded with flat ribbon pigtails and splice sleeve(s).	FHSZA-12-10R	FHSZA-24-10R
OM3 Fiber/Optimized Loss – LC		
Pre-loaded with pigtails (250µm) and splice sleeves.	FHSXO-12-10P	–
Pre-loaded with flat ribbon pigtail and splice sleeve.	FHSXO-12-10R	–
OS2 Fiber/Standard Loss – LC		
Pre-loaded with pigtails (250µm) and splice sleeves.	FHS9N-12-10P	FHS9N-24-10P
Pre-loaded with flat ribbon pigtails and splice sleeve(s).	FHS9N-12-10R	FHS9N-24-10R
OS2 Fiber/Standard Loss – LC/APC		
Pre-loaded with pigtails (250µm) and splice sleeves.	FHS9N-12-LAP	FHS9N-24-LAP
Pre-loaded with flat ribbon pigtails and splice sleeve(s).	FHS9N-12-LAR	FHS9N-24-LAR
Splice Only Cassette – No front connectivity		
Packaged with 2 ribbon and 24 pigtail splice sleeves.	–	FHSN-24



HD Flex Splice Cassettes – Duplex SC, SC/APC	12-port, 12-fiber
OM4 Fiber/Ultra Low Loss – SC	
Pre-loaded with pigtails (250µm) and splice sleeves.	FHSZA-12-03P
Pre-loaded with flat ribbon pigtail and splice sleeve.	FHSZA-12-03R
OS2 Fiber/Standard Loss – SC	
Pre-loaded with pigtails (250µm) and splice sleeves.	FHS9N-12-03P
Pre-loaded with flat ribbon pigtail and splice sleeve.	FHS9N-12-03R
OS2 Fiber/Standard Loss – SC/APC	
Pre-loaded with pigtails (250µm) and splice sleeves.	FHS9N-12-3AP
Pre-loaded with flat ribbon pigtail and splice sleeve.	FHS9N-12-3AR

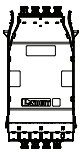
HD Flex™ Fiber Optic Cassettes

HD Flex LC and MPO Fiber Adapter Panels	4-port	6-port
LC Fiber Adapter Panels		
LC duplex multimode adapters in Aqua.	FHSXN-08-10N	FHSXN-12-10N
LC duplex singlemode adapters in Blue.	FHS9N-08-10N	FHS9N-12-10N
LC/APC duplex singlemode adapters in APC Green.	FHS9N-08-LAN	FHS9N-12-LAN
MPO Fiber Adapter Panels		
MPO Type A adapters (Key-up to Key-down) in Black.	FHMP-4-ABL	FHMP-6-ABL
MPO Type B adapters (Key-up to Key-up) in Charcoal Gray.	FHMP-4-BCG	FHMP-6-BCG
MPO Type A adapters (Key-up to Key-down) in Red.	FHMP-4-ARD	FHMP-6-ARD

HD Flex Dark Fiber Conversion Cassettes	6-port
OM4 Fiber/Ultra Low Loss (0.35dB)	
24-fiber (3×MPO8 to 2×MPO12), Method A.	FH4ZU-24-NMNMA
24-fiber (3×MPO8 to 2×MPO12), Method B.	FH4ZU-24-NMNMB
48-fiber (6×MPO8 to 4×MPO12), Method A.	FH4ZU-48-NMNMA
48-fiber (6×MPO8 to 4×MPO12), Method B.	FH4ZU-48-NMNMB

HD Flex™ Fiber Optic Cassettes



HD Flex Mesh/Shuffle Cassettes	6-port
OM4 Fiber/Optimized Loss (0.7dB)	
32-fiber 4×MPO8 to 4×MPO8.	FHMZO-32-M
OM3 Fiber/Optimized Loss (0.7dB)	
32-fiber 4×MPO8 to 4×MPO8.	FHMXO-32-M
OS2 Fiber/Standard Loss (1.0dB)	
32-fiber 4×MPO8 to 4×MPO8.	FHM9N-32-M

HD Flex Blank/Filler Panels	4-port	6-port	12-port
Blank/filler panels.	FHSBBL04W	FHSBBL06W	FHSBBL12W

WORLDWIDE SUBSIDIARIES AND SALES OFFICES

PANDUIT US/CANADA
Phone: 800.777.3300

PANDUIT EUROPE LTD.
London, UK
Phone: 44.20.8601.7200

PANDUIT SINGAPORE PTE. LTD.
Republic of Singapore
Phone: 65.6305.7575

PANDUIT JAPAN
Tokyo, Japan
Phone: 81.3.6863.6000

PANDUIT LATIN AMERICA
Guadalajara, Mexico
Phone: 52.33.3777.6000

PANDUIT AUSTRALIA PTY. LTD.
Victoria, Australia
Phone: 61.3.9794.9020

For a copy of Panduit product warranties, log on to www.panduit.com/warranty

For more information
Visit us at www.panduit.com
Contact Customer Service by email: cs@panduit.com
or by phone: 800.777.3300

© 2023 Panduit Corp.
ALL RIGHTS RESERVED.

FBSP190.CN1-WW-ENG
8/2023