

Ø 3,2 TYP
[0.13]

100 mm TYP

1.0 m TYP
(nom.)

65 TYP
[2.56]

0,9 TYP
[0.04]

INPUT

TAP

VFL-01X02

FIBER MARKING
SEE NOTE 1

THROUGHPUT

TAP

FIBER MARKING
SEE NOTE 1

VFL-02X02

THROUGHPUT

PRODUCT MARKING
SEE NOTE 2

INPUT 2

FIBER MARKING
SEE NOTE 1

INPUT 1

NOTES:

- 'TAP' & 'INPUT 2' FIBERS WILL BE MARKED IN BLACK IMMEDIATELY AFTER THE EXIT OF THE FIBER FROM THE HOUSING TUBE END FOR APPROXIMATELY 6 INCHES LONG. THERE IS NO MARKING ON 'THROUGHPUT' & 'INPUT 1' FIBERS.
- UNLESS OTHERWISE SPECIFIED, COUPLER MARKING TO BE LASER-MARKED WITH 'CANSTAR', CANSTAR PART DESCRIPTOR, AND SERIAL NUMBER.
- SEE SHEET 2 FOR PART NUMBER ORDERING INFORMATION.
- SEE SHEET 3 FOR CANSTAR PART DESCRIPTORS.
- SEE SHEET 4 & 5, TABLE A-1 & A-2, FOR OPTICAL PERFORMANCE SPECIFICATIONS.
- SEE SHEET 5, TABLE B, FOR CONNECTORIZED COUPLER SPECIFICATIONS.
- CONTACT US FOR COUPLERS WITH CUSTOMER SPECIALTY FIBERS, OR WITH CUSTOM SPECS.

STANDARD SPECIFICATION

DIRECTIVITY	> = 50dB @ nom. λ (APPLICABLE 1X2 ONLY)
THERMAL STABILITY	< = 0.002dB/1° C OVER -40° C TO +85° C (NON-CONNECTORIZED)
PDIL	< = 0.2 dB pp @ nom. λ
OPTICAL FIBER	SMF-28 TM
LEAD TYPE	0.9 mm PTFE LOOSE TUBE
PACKAGING STYLE	T304 STAINLESS STEEL TUBE

spec ref	dr asir 2012/05/17			projection 	MM [INCH]	size	A4	scale	1.400				
tolerance std	eng asir 2012/07/05					ecn no	ELX-S-012130-1						
	chr -					product family	rel level	Released					
surface	TOLERANCES UNLESS OTHERWISE SPECIFIED	linear	0.X	±0.3	FCj	title	COUPLER, MXN, SINGLEMODE SINGLE WINDOW, 'FL' PACKAGE			dwg no	VFL-MXN01	rev	C
			0.XX	±0.05									
			0.XXX	±									
	angular	0°	±2°		www.fci.com	cat. no.	Product - Customer Drw			sheet 1 of 6			

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PART NUMBER ORDERING INFORMATION

← INPUT → ← OUTPUT → (SEE NOTE 1)

of Inputs
One - '1'
Two - '2'

V F L 0 0 0 0

of Outputs
Two - '2'

Fiber Type
SMF-28 TM - 'A'
Customer Supplied - '#'
Custom - 'Y'

Wavelengths
1300 nm - 'D'
1310 nm - 'E'
1550 nm - 'C'
Not Specified - 'X'

Operating Bandwidth
± 20 nm - '4'
Custom - 'Z'

Coupling Ratio
99:01 - '01'
98:02 - '02'
90:10 - '10'
80:20 - '20'
70:30 - '30'
60:40 - '40'
50:50 - '50'
Custom - 'ZZ'

Polish Type
'A' - Flat
'B' - PC
'C' - SPC
'D' - UPC
'E' - APC
'X' - No Specification
'Z' - Custom

Connector Type
'A' - SMA 905
'B' - SMA 906
'C' - ST
'D' - SC
'E' - FC
'K' - LC
'#' - Customer Supplied
'X' - No Connector
'Z' - Custom

Lead Length
'0' - NA
'1' - .25 m
'2' - .50 m
'3' - .75 m
'4' - 1.00 m
'5' - 1.25 m
'6' - 1.50 m
'7' - 1.75 m
'8' - 2.00 m
'9' - 2.25 m
'A' - 2.50 m
'B' - 2.75 m
'C' - 3.00 m
'D' - 3.25 m
'E' - 3.50 m
'F' - 3.75 m
'G' - 4.00 m
'H' - 4.25 m
'I' - 4.50 m
'J' - 4.75 m
'K' - 5.00 m
'L' - 5.25 m
'M' - 5.50 m
'N' - 5.75 m
'P' - 6.00 m
'Q' - 6.25 m
'R' - 6.50 m
'S' - 6.75 m
'T' - 7.00 m
'U' - 7.25 m
'V' - 7.50 m
'W' - 7.75 m
'X' - 8.00 m
'Y' - 8.25 m
'Z' - 8.50 m
'#' - Special



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NOTES:

- ORDERING OPTIONS FOR OUTPUTS ARE IDENTICAL TO INPUTS.
- NOMINAL LEAD LENGTH: 0.55 m
- SEE SHEET 5, TABLE B, FOR CONNECTOR SPECIFICATIONS.

spec ref		dr	asir	2012/05/17	projection 	MM [INCH]	size	A4	scale	N/A			
tolerance std		eng	asir	2012/07/05			ecn no	ELX-S-012130-1					
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	-	-			rel level	Released					
surface	linear	0.X	±0.3		FCI	title	COUPLER, MXN, SINGLEMODE SINGLE WINDOW, 'FL' PACKAGE			dwg no	VFL-MXN01	rev	C
		0.XX	±0.05										
		0.XXX	±										
	angular	0°	±2°		www.fci.com	cat. no.	Product - Customer Drw			sheet 2 of 6			

CANSTAR PART DESCRIPTOR

VFL - X - / XXX -

of Inputs
One - '01'
Two - '02'

of Outputs
Two - '02'

Wavelength
1300 nm - '130'
1310 nm - '131'
1550 nm - '155'

Tap Ratio
1% - '01'
2% - '02'
10% - '10'
20% - '20'
30% - '30'
40% - '40'
50% - '50'



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spec ref		dr	asir	2012/05/17	projection 	MM [INCH]	size	A4	scale	N/A	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng			asir	2012/07/05	ecn no		ELX-S-012130-1
				chr			-	-	rel level		Released
surface	linear	0.X	±0.3	FCI	title	COUPLER, MXN, SINGLEMODE SINGLE WINDOW, 'FL' PACKAGE	dwg no	VFL-MXN01	rev	C	
	angular	0°	±2°								www.fci.com

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TABLE A-1					
PART DESCRIPTOR	WAVELENGTH (nm)	COUPLING RATIO (%)	MAXIMUM EXCESS LOSS (dB)	THROUGHPORT INSERTION LOSS (dB)	TAP-PORT INSERTION LOSS (dB)
VFL-01X02-130/XXX-50	1300 ± 20	50 ± 3	0.3	3.6	3.6
VFL-01X02-130/XXX-40	1300 ± 20	40 ± 3	0.3	2.5	4.4
VFL-01X02-130/XXX-30	1300 ± 20	30 ± 3	0.2	1.8	5.6
VFL-01X02-130/XXX-20	1300 ± 20	20 ± 2	0.2	1.1	7.4
VFL-01X02-130/XXX-10	1300 ± 20	10 ± 1	0.2	0.6	11.0
VFL-01X02-130/XXX-02	1300 ± 20	2 ± 0.5	0.2	0.3	18.4
VFL-01X02-130/XXX-01	1300 ± 20	1 ± 0.2	0.2	0.2	22.0
VFL-01X02-131/XXX-50	1310 ± 20	50 ± 3	0.3	3.6	3.6
VFL-01X02-131/XXX-40	1310 ± 20	40 ± 3	0.3	2.5	4.4
VFL-01X02-131/XXX-30	1310 ± 20	30 ± 3	0.2	1.8	5.6
VFL-01X02-131/XXX-20	1310 ± 20	20 ± 2	0.2	1.1	7.4
VFL-01X02-131/XXX-10	1310 ± 20	10 ± 1	0.2	0.6	11.0
VFL-01X02-131/XXX-02	1310 ± 20	2 ± 0.5	0.2	0.3	18.4
VFL-01X02-131/XXX-01	1310 ± 20	1 ± 0.2	0.2	0.2	22.0
VFL-01X02-155/XXX-50	1550 ± 20	50 ± 3	0.3	3.6	3.6
VFL-01X02-155/XXX-40	1550 ± 20	40 ± 3	0.3	2.5	4.4
VFL-01X02-155/XXX-30	1550 ± 20	30 ± 3	0.2	1.8	5.6
VFL-01X02-155/XXX-20	1550 ± 20	20 ± 2	0.2	1.1	7.4
VFL-01X02-155/XXX-10	1550 ± 20	10 ± 1	0.2	0.6	11.0
VFL-01X02-155/XXX-02	1550 ± 20	2 ± 0.5	0.2	0.3	18.4
VFL-01X02-155/XXX-01	1550 ± 20	1 ± 0.2	0.2	0.2	22.0

spec ref		dr	asir	2012/05/17	projection 	MM [INCH]	size	A4	scale	N/A
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	asir	2012/07/05			ecn no	ELX-S-012130-1		
		chr	-	-			rel level	Released		
surface		appr	John Wang	2012/07/05	product family					
linear	0.X	±0.3		title	COUPLER, MXN, SINGLEMODE SINGLE WINDOW, 'FL' PACKAGE	dwg no	VFL-MXN01	rev	C	
	0.XX	±0.05								
	0.XXX	±								
angular	0°	±2°	www.fci.com	cat. no.	Product - Customer Drw		sheet 4 of 6			

TABLE A-2					
PART DESCRIPTOR	WAVELENGTH (nm)	COUPLING RATIO (%)	MAXIMUM EXCESS LOSS (dB)	THROUGHPORT INSERTION LOSS (dB)	TAP-PORT INSERTION LOSS (dB)
VFL-02X02-130/XXX-50	1300 ± 20	50 ± 3	0.3	3.6	3.6
VFL-02X02-130/XXX-40	1300 ± 20	40 ± 3	0.3	2.5	4.4
VFL-02X02-130/XXX-30	1300 ± 20	30 ± 3	0.2	1.8	5.6
VFL-02X02-130/XXX-20	1300 ± 20	20 ± 2	0.2	1.1	7.4
VFL-02X02-130/XXX-10	1300 ± 20	10 ± 1	0.2	0.6	11.0
VFL-02X02-130/XXX-02	1300 ± 20	2 ± 0.5	0.2	0.3	18.4
VFL-02X02-130/XXX-01	1300 ± 20	1 ± 0.2	0.2	0.2	22.0
VFL-02X02-131/XXX-50	1310 ± 20	50 ± 3	0.3	3.6	3.6
VFL-02X02-131/XXX-40	1310 ± 20	40 ± 3	0.3	2.5	4.4
VFL-02X02-131/XXX-30	1310 ± 20	30 ± 3	0.2	1.8	5.6
VFL-02X02-131/XXX-20	1310 ± 20	20 ± 2	0.2	1.1	7.4
VFL-02X02-131/XXX-10	1310 ± 20	10 ± 1	0.2	0.6	11.0
VFL-02X02-131/XXX-02	1310 ± 20	2 ± 0.5	0.2	0.3	18.4
VFL-02X02-131/XXX-01	1310 ± 20	1 ± 0.2	0.2	0.2	22.0
VFL-02X02-155/XXX-50	1550 ± 20	50 ± 3	0.3	3.6	3.6
VFL-02X02-155/XXX-40	1550 ± 20	40 ± 3	0.3	2.5	4.4
VFL-02X02-155/XXX-30	1550 ± 20	30 ± 3	0.2	1.8	5.6
VFL-02X02-155/XXX-20	1550 ± 20	20 ± 2	0.2	1.1	7.4
VFL-02X02-155/XXX-10	1550 ± 20	10 ± 1	0.2	0.6	11.0
VFL-02X02-155/XXX-02	1550 ± 20	2 ± 0.5	0.2	0.3	18.4
VFL-02X02-155/XXX-01	1550 ± 20	1 ± 0.2	0.2	0.2	22.0

spec ref		dr	asir	2012/05/17	projection 	MM [INCH]	size	A4	scale	N/A
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	asir	2012/07/05			ecn no	ELX-S-012130-1		
		chr	-	-				rel level	Released	
surface		linear	0.X	±0.3	FCi	title	COUPLER, MXN, SINGLEMODE SINGLE WINDOW, 'FL' PACKAGE	dwg no	VFL-MXN01	rev
	angular	0°	±2°	www.fci.com						

A

B

C

D

A

B

C

D

TABLE B			
CONNECTOR TYPE	POLISH TYPE	INSERTION LOSS / CONNECTOR (dB)	BACK REFLECTION (dB)
ST	PC	< = 0.35	> 40
	SPC	< = 0.35	> 45
	UPC	< = 0.35	> 50
	APC	Not Specified	Not Specified
FC	PC	< = 0.35	> 40
	SPC	< = 0.35	> 45
	UPC	< = 0.35	> 50
	APC	< = 0.5	> 60
SC	PC	< = 0.35	> 40
	SPC	< = 0.35	> 45
	UPC	< = 0.35	> 50
	APC	< = 0.5	> 60
LC	PC	< = 0.35	> 40
	SPC	< = 0.35	> 45
	UPC	< = 0.35	> 50
	APC	< = 0.5	> 60

NOTES:

- 1. PLEASE REFER TO COUPLER SPECIFICATION FOR INSERTION LOSS VALUES, AND ADD CONNECTOR INSERTION LOSS FROM TABLE.
- 2. LEAD LENGTH TOLERANCE: +10cm / -0cm OF NOMINAL LENGTH.
- 3. TEMPERATURE RANGE: -20° C TO +70° C



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spec ref		dr asir 2012/05/17		projection 	MM [INCH]	size A4	scale N/A	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED					eng asir 2012/07/05	ecn no ELX-S-012130-1	rel level Released
						chr - -		
		appr John Wang 2012/07/05		product family				
surface <input checked="" type="checkbox"/>	linear	0.X	±0.3		title COUPLER, MXN, SINGLEMODE SINGLE WINDOW, 'FL' PACKAGE	dwg no VFL-MXN01	rev C	
		0.XX	±0.05					
		0.XXX	±					
	angular	0°	±2°	www.fci.com	cat. no.	Product - Customer Drw	sheet 6 of 6	