## **Detailed Specifications & Technical Data**



METRIC MEASUREMENT VERSION

## AX105205-S1 Modular Connectors - FX BRILLIANCE UNIVERSAL SC CONNECTOR



For more Information please call

1-800-Belden1

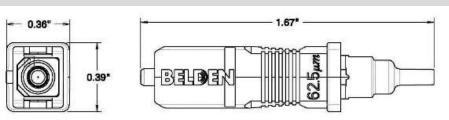


#### **General Description:**

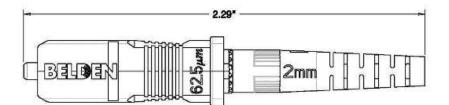
FX Brilliance Universal SC Field Installable Connector, Multimode, OM1, Beige Housing, 1/Pack, with support for 250 µm (using Breakout kit), 900 µm, 2 mm and 3 mm fiber (using jacketed boots). Includes 900 µm boot, other accessories (Breakout Kit & jacketed boots) sold separately.

#### Image

Image:



900 µm VERSION (OM1 SHOWN)



#### JACKETED VERSION (OM1 SHOWN)

### Usage (Overall)

Suitable Applications:	Field-termination of fiber optic cables within Patch Panels, Distribution Frames, Workstation Outlets for FTTD (Fiber to the Desk), drops for FTTH (Fiber to the home) and MDU (Multiple Dwelling Units).
Related Parts:	FX Brilliance Precision Installation Kit, Boots for 2mm and 3mm Jacketed Fiber, 250µm to 900µm break out kits.

## **Physical Characteristics (Connectivity)**

#### Materials Materials

laterials:							
Description	Material	Color					
Boot	Rubber	Black					
Protective Ferrule Cap	Plastic	Opaque					
Connector Body	Plastic	Beige					



## METRIC MEASUREMENT VERSION

## AX105205-S1 Modular Connectors - FX BRILLIANCE UNIVERSAL SC CONNECTOR

Weight:	0.003 kg				
Included Parts					
Included Parts:		900 µm boot, protective ferrule cap			
Packaging					
Packaging:			Single (1) connector san		
. zonzymy.			Single (1) connector sal		
Mechanical Characteristics (Connec	tivity)				
Mechanical Specifications:	Specifications				
Parameters					
Interconnection Compatibility	Compliant with				
Durability (Multimode)	•		IB change, FOTP-21 IB change, FOTP-21		
Durability (Single-mode) Ferrule	Ceramic	s (nan 0.3 0	ib change, FUTP-21		
Field Assembly Time	40 seconds inc	cluding fiber	preparation		
Nominal Fiber OD	125 µm	sading indi	proparation		
Operating Temperature	-40°F to +167°	F (-40°C to	+75°C)		
Storage Temperature	-40°F to +140°				
Tensile strength on 2 mm Jacketed Fiber			1 0.2 dB change, FOTP-6		
Tensile strength on 250 um fiber			0.2 dB change, FOTP-6		
Tensile strength on 900 µm tight buffered fiber			•		
		,			
Applicable Specifications and Agen	cy Complia	nce (Ove	erall)		
Applicable Standards & Environmental I		(	,		
EU Directive 2002/95/EC (RoHS):	<b>u</b> -		Yes		
. ,			07/01/2006		
EU RoHS Compliance Date (mm/dd/yyyy):	EU RoHS Compliance Date (mm/dd/yyyy):				
MII Order #39 (China RoHS):			EUP 50		
Telecommunications Standards:		TIA 568-C.3			
Safoty Listing:			ACA		
Safety Listing:			ACA		
Safety Listing: Suitability			ACA		
			ACA Yes - Indoor		
Suitability Suitability - Indoor:	ootivitu)				
Suitability Suitability - Indoor: Transmission Characteristics (Conn	ectivity)				
Suitability Suitability - Indoor: Transmission Characteristics (Conn Transmission Specifications:			Yes - Indoor		
Suitability Suitability - Indoor: Transmission Characteristics (Conn Transmission Specifications: Fiber type Maximum Insertion Loss	Typical Insertio	on Loss Mi	Yes - Indoor inimum reflectance @ 1		
Suitability Suitability - Indoor: Transmission Characteristics (Conn Transmission Specifications: Fiber type Maximum Insertion Loss Multimode 0.50 dB		on Loss Mi	Yes - Indoor		
Suitability Suitability - Indoor: Transmission Characteristics (Conn Transmission Specifications: Fiber type Maximum Insertion Loss Multimode 0.50 dB Single-mode UPC 0.50 dB	Typical Insertion	on Loss Mi   -3    -5	Yes - Indoor inimum reflectance @ 1 0 dB		
Suitability Suitability - Indoor: Transmission Characteristics (Conn Transmission Specifications: Fiber type Maximum Insertion Loss Multimode 0.50 dB Single-mode UPC 0.50 dB	Typical Insertion 0.20 dB 0.30 dB	on Loss Mi   -3    -5	Yes - Indoor inimum reflectance @ 1 0 dB 0 dB		
Suitability Suitability Suitability - Indoor: Transmission Characteristics (Conn Transmission Specifications: Fiber type Maximum Insertion Loss Multimode 0.50 dB Single-mode UPC 0.50 dB Single-mode APC 0.50 dB	Typical Insertion 0.20 dB 0.30 dB	on Loss Mi   -3    -5	Yes - Indoor inimum reflectance @ 1 0 dB 0 dB		
Suitability Suitability - Indoor: Transmission Characteristics (Conn Transmission Specifications: Fiber type Maximum Insertion Loss Multimode 0.50 dB Single-mode UPC 0.50 dB Single-mode APC 0.50 dB Notes (Overall)	<b>Typical Insertio</b> 0.20 dB 0.30 dB 0.30 dB	on Loss Mi -3( -5( -6(	Yes - Indoor inimum reflectance @ 1 0 dB 0 dB 0 dB		
Suitability         Suitability - Indoor:         Transmission Characteristics (Composition Composition Specifications:         Fiber type       Maximum Insertion Loss         Multimode       0.50 dB         Single-mode UPC       0.50 dB         Single-mode APC       0.50 dB         Notes (Overall)       Notes: Refer to Installation Guide PX10523-	<b>Typical Insertio</b> 0.20 dB 0.30 dB 0.30 dB	on Loss Mi -3( -5( -6(	Yes - Indoor inimum reflectance @ 1 0 dB 0 dB 0 dB		
Suitability Suitability - Indoor: Transmission Characteristics (Conn Transmission Specifications: Fiber type Maximum Insertion Loss Multimode 0.50 dB Single-mode UPC 0.50 dB Single-mode APC 0.50 dB Notes (Overall) Notes: Refer to Installation Guide PX10523- Product Family	<b>Typical Insertio</b> 0.20 dB 0.30 dB 0.30 dB	on Loss Mi -3( -5( -6(	Yes - Indoor inimum reflectance @ 1 0 dB 0 dB 0 dB		
Suitability Suitability - Indoor: Transmission Characteristics (Conn Transmission Specifications: Fiber type Maximum Insertion Loss Multimode 0.50 dB Single-mode UPC 0.50 dB Single-mode APC 0.50 dB Notes (Overall) Notes: Refer to Installation Guide PX10523 Product Family Part Number List:	Typical Insertion	on Loss Mi -30 -50 -60 procedures.	Yes - Indoor inimum reflectance @ 1 0 dB 0 dB 0 dB . Fiber can be reterminate		
Suitability Suitability Suitability - Indoor: Transmission Characteristics (Conn Transmission Specifications:           Fiber type         Maximum Insertion Loss           Multimode         0.50 dB           Single-mode UPC         0.50 dB           Single-mode UPC         0.50 dB           Single-mode APC         0.50 dB           Notes:         Refer to Installation Guide PX105234           Product Family         Part Number List:           Description         Description	Typical Insertion	on Loss Mi -30 -50 -60 procedures.	Yes - Indoor inimum reflectance @ 1 0 dB 0 dB 0 dB . Fiber can be reterminate Belden Part Number		
Suitability Suitability Suitability - Indoor: Transmission Characteristics (Conn Transmission Specifications:           Fiber type         Maximum Insertion Loss           Multimode         0.50 dB           Single-mode UPC         0.50 dB           Single-mode UPC         0.50 dB           Single-mode APC         0.50 dB           Notes (Overall)         Notes: Refer to Installation Guide PX105234           Product Family         Part Number List:           Description         FX Brilliance Universal SC for OM1 Contract	Typical Insertion 0.20 dB 0.30 dB 0.30 dB 4 for installation	on Loss Mi -3( -5( -6) procedures. Color Beige	Yes - Indoor inimum reflectance @ 1 0 dB 0 dB 0 dB . Fiber can be reterminate Belden Part Number AX105205-B25		
Suitability Suitability Suitability Suitability - Indoor: Transmission Characteristics (Conn Transmission Specifications:           Fiber type         Maximum Insertion Loss           Multimode         0.50 dB           Single-mode UPC         0.50 dB           Single-mode UPC         0.50 dB           Single-mode APC         0.50 dB           Notes (Overall)         Notes: Refer to Installation Guide PX105234           Product Family         Part Number List:           Description         FX Brilliance Universal SC for OM1 Contract FX Brilliance Universal SC for OM1 Sample	Typical Insertion 0.20 dB 0.30 dB 0.30 dB 4 for installation tor 25/PK 1/PK	on Loss Mi -30 -50 -60 procedures. Color Beige Beige	Yes - Indoor inimum reflectance @ 1 0 dB 0 dB 0 dB . Fiber can be reterminate Belden Part Number AX105205-B25 AX105205-S1		
Suitability Suitability Suitability Suitability - Indoor: Transmission Characteristics (Conn Transmission Specifications:           Fiber type         Maximum Insertion Loss           Multimode         0.50 dB           Single-mode UPC         0.50 dB           Single-mode UPC         0.50 dB           Single-mode APC         0.50 dB           Notes (Overall)         Notes: Refer to Installation Guide PX105234           Product Family Part Number List:         Description           FX Brilliance Universal SC for OM1 Contract FX Brilliance Universal SC for OM1 Sample FX Brilliance Universal SC for OM2 Contract	Typical Insertion 0.20 dB 0.30 dB 0.30 dB 4 for installation tor 25/PK 1/PK tor 25/PK	on Loss Mi -3( -5( -6) procedures. procedures. Color Beige Beige Black	Yes - Indoor inimum reflectance @ 1 0 dB 0 dB 0 dB . Fiber can be reterminat Belden Part Number AX105205-B25 AX105205-S1 AX105206-B25		
Suitability         Suitability - Indoor:         Transmission Characteristics (Connormality of the second s	Typical Insertion 0.20 dB 0.30 dB 0.30 dB 4 for installation tor 25/PK 1/PK tor 25/PK 1/PK	on Loss Mi -3( -5( -6) procedures. Procedures. Beige Beige Black Black	Yes - Indoor inimum reflectance @ 1 0 dB 0 dB 0 dB . Fiber can be reterminat Belden Part Number AX105205-B25 AX105205-S1 AX105206-B25 AX105206-S1		
Suitability         Suitability - Indoor:         Transmission Characteristics (Connormality of the second s	Typical Insertion 0.20 dB 0.30 dB 0.30 dB 4 for installation tor 25/PK 1/PK tor 25/PK 1/PK 1/PK 1/PK 1/PK	on Loss Mi -3( -5( -6) procedures. procedures. Color Beige Beige Black Black Aqua	Yes - Indoor inimum reflectance @ 1 0 dB 0 dB 0 dB . Fiber can be reterminat Belden Part Number AX105205-B25 AX105205-S1 AX105206-B25 AX105206-S1 AX105206-S1 AX105207-B25		
Suitability Suitability Suitability - Indoor: Transmission Characteristics (Conn Transmission Specifications:           Fiber type         Maximum Insertion Loss           Multimode         0.50 dB           Single-mode UPC         0.50 dB           Single-mode UPC         0.50 dB           Single-mode APC         0.50 dB           Notes         (Overall)           Notes:         Refer to Installation Guide PX10523/           Product Family         Part Number List:           Description         FX Brilliance Universal SC for OM1 Contract           FX Brilliance Universal SC for OM2 Contract         FX Brilliance Universal SC for OM2 Sample           FX Brilliance Universal SC for OM3/OM4 Cott         FX Brilliance Universal SC for OM3/OM4 Cott	Typical Insertion 0.20 dB 0.30 dB 0.30 dB 4 for installation tor 25/PK 1/PK tor 25/PK 1/PK 1/PK ntractor 25/PK mple 1/PK	on Loss Mi -3( -5( -6) procedures. Procedures. Beige Bige Bige Black Black Aqua Aqua	Yes - Indoor inimum reflectance @ 1 0 dB 0 dB 0 dB . Fiber can be reterminate Belden Part Number AX105205-B25 AX105205-S1 AX105206-B25 AX105206-S1 AX105207-B25 AX105207-S1		
Suitability Suitability Suitability - Indoor: Transmission Characteristics (Conn Transmission Specifications:           Fiber type         Maximum Insertion Loss           Multimode         0.50 dB           Single-mode UPC         0.50 dB           Single-mode UPC         0.50 dB           Single-mode APC         0.50 dB           Notes         (0.50 dB)           Product Family         Part Number List:           Description         FX Brilliance Universal SC for OM1 Contract           FX Brilliance Universal SC for OM2 Contract         FX Brilliance Universal SC for OM2 Sample           FX Brilliance Universal SC for OM3/OM4 Cot         FX Brilliance Universal SC for OM3/OM4 Cot           FX Brilliance Universal SC for OM3/OM4 Sa         FX Brilliance Universal SC for OM3/OM4 Sa	Typical Insertion 0.20 dB 0.30 dB 0.30 dB 4 for installation tor 25/PK 1/PK tor 25/PK 1/PK ntractor 25/PK ntractor 25/PK mple 1/PK tor 25/PK	on Loss Mi -30 -50 -60 procedures. Procedures. Beige Beige Black Black Aqua Aqua Erika Violet	Yes - Indoor inimum reflectance @ 1 0 dB 0 dB 0 dB . Fiber can be reterminate Belden Part Number AX105205-B25 AX105205-S1 AX105206-B25 AX105206-B25 AX105207-B25 AX105207-S1 i AX105253-B25		
Suitability         Suitability - Indoor:         Transmission Characteristics (Conn Transmission Specifications:         Fiber type       Maximum Insertion Loss         Multimode       0.50 dB         Single-mode UPC       0.50 dB         Single-mode APC       0.50 dB         Notes       (Overall)         Notes:       Refer to Installation Guide PX105234         Product Family       Part Number List:         Description       FX Brilliance Universal SC for OM1 Contract FX Brilliance Universal SC for OM2 Contract FX Brilliance Universal SC for OM2 Sample         FX Brilliance Universal SC for OM3/OM4 Cot FX Brilliance Universal SC for OM3/OM4 Sa FX Brilliance Universal SC for OM4 Contract FX Brilliance Universal SC for OM4 Sample	Typical Insertion 0.20 dB 0.30 dB 0.30 dB 4 for installation tor 25/PK 1/PK tor 25/PK 1/PK ntractor 25/PK ntractor 25/PK tor 25/PK tor 25/PK 1/PK	on Loss Mi -30 -50 -60 procedures. Procedures. Beige Black Black Black Aqua Aqua Erika Violet Erika Violet	Yes - Indoor inimum reflectance @ 1 0 dB 0 dB 0 dB . Fiber can be reterminate Belden Part Number AX105205-B25 AX105205-S1 AX105206-B25 AX105206-S1 AX105206-S1 AX105207-B25 AX105207-S1 i AX105253-B25 i AX105253-S1		
Suitability         Suitability - Indoor:         Transmission Characteristics (Conn Transmission Specifications:         Fiber type       Maximum Insertion Loss         Multimode       0.50 dB         Single-mode UPC       0.50 dB         Single-mode UPC       0.50 dB         Single-mode APC       0.50 dB         Notes       (Overall)         Notes: Refer to Installation Guide PX105234         Product Family         Part Number List:       Description         FX Brilliance Universal SC for OM1 Contract       FX Brilliance Universal SC for OM2 contract         FX Brilliance Universal SC for OM2 contract       FX Brilliance Universal SC for OM3/OM4 Contract         FX Brilliance Universal SC for OM3/OM4 Sa       FX Brilliance Universal SC for OM4 contract         FX Brilliance Universal SC for OM4 contract       FX Brilliance Universal SC for OM4 contract         FX Brilliance Universal SC for OM4 sample       FX Brilliance Universal SC for OM4 sample	Typical Insertion 0.20 dB 0.30 dB 0.30 dB 4 for installation for 25/PK 1/PK tor 25/PK 1/PK tor 25/PK 1/PK tor 25/PK tor 25/PK 1/PK tor 25/PK	on Loss Mi -30 -50 -60 procedures. Procedures. Beige Black Black Black Aqua Aqua Erika Violet Erika Violet Blue	Yes - Indoor inimum reflectance @ 1 0 dB 0 dB		
Suitability         Suitability - Indoor:         Transmission Characteristics (Conn Transmission Specifications:         Fiber type       Maximum Insertion Loss         Multimode       0.50 dB         Single-mode UPC       0.50 dB         Single-mode APC       0.50 dB         Notes       (Overall)         Notes:       Refer to Installation Guide PX105234         Product Family       Part Number List:         Description       FX Brilliance Universal SC for OM1 Contract FX Brilliance Universal SC for OM2 Contract FX Brilliance Universal SC for OM2 Sample         FX Brilliance Universal SC for OM3/OM4 Cot FX Brilliance Universal SC for OM3/OM4 Sa FX Brilliance Universal SC for OM4 Contract FX Brilliance Universal SC for OM4 Sample	Typical Insertion 0.20 dB 0.30 dB 0.30 dB 4 for installation tor 25/PK 1/PK tor 25/PK 1/PK tor 25/PK 1/PK tor 25/PK 1/PK tor 25/PK 1/PK tor 25/PK 1/PK	on Loss Mi -31 -51 -61 procedures. Beige Black Black Black Aqua Erika Violet Blue Blue	Yes - Indoor inimum reflectance @ 1 0 dB 0 dB 0 dB . Fiber can be reterminat Belden Part Number AX105205-B25 AX105205-S1 AX105206-B25 AX105206-S1 AX105206-S1 AX105207-B25 AX105207-S1 i AX105253-B25 i AX105253-S1		

AX105209-S1

AX105214-B25

AX105215-B25

AX101100

AX101101

AX104695

AX104696

Green

Black

Black

N/A

N/A

N/A

N/A

FX Brilliance Universal SC/APC for OS2 Sample 1/PK

Breakout Kit 6 fibers for Central Tube Loose Tube Cable

Breakout Kit 12 fibers for Central Tube Loose Tube Cable

FX Brilliance Universal 2mm Boot 25/PK

FX Brilliance Universal 3mm Boot 25/PK

Breakout Kit 6 fibers

Breakout Kit 12 fibers

Put Ups and Colors:

# **Detailed Specifications & Technical Data**



## AX105205-S1 Modular Connectors - FX BRILLIANCE UNIVERSAL SC CONNECTOR

Item #	Putup	Ship Weight	Color	Notes	Item Desc
AX105205-S1	1 EA	0.005 KG			FX BR UNIVERSAL SC OM1 1/PK

Revision Date: 09-14-2017 Revision Number: 0

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Authorized Distributor

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<u>AX105205-S1</u> <u>AX105207-S1</u> <u>AX105208-B25</u> <u>AX105206-S1</u> <u>AX105208-S1</u> <u>AX105206-B25</u> <u>AX105207-B25</u> AX105209-S1 AX105209-B25 AX105214-B25