

EUROLENS

MIL-DTL-83526/20 & /21 Compatible
Expanded Beam Fiber Optic Connector

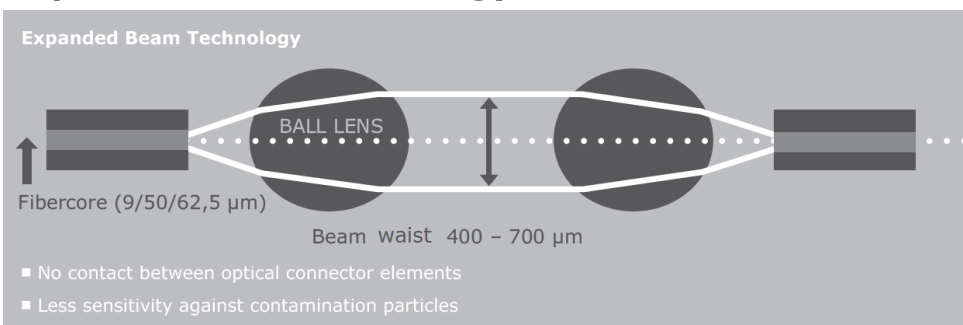


EUROLENS is a MIL-DTL-83526/20 & /21 compatible expanded beam fiber optic connector for military and industrial applications.

Amphenol Precision Optics (APO) offers an expanded beam fiber optic connector for harsh environment connections. The screw thread and the optimal strain relief offer best connectivity even in adverse conditions like cold, heat, mud, dust or high pressure. Specifically for tactical military ground systems, oil & gas-, mining-, offshore- and broadcast applications.

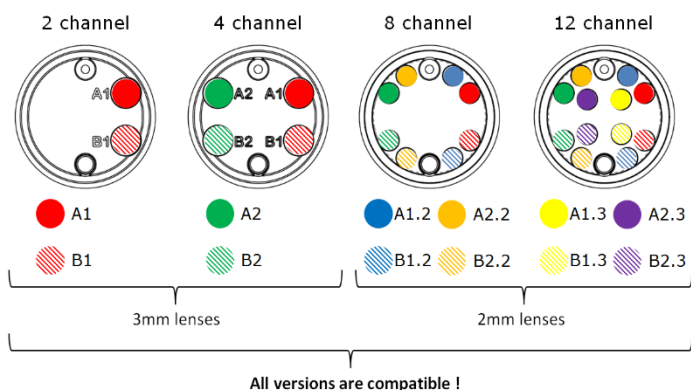
EUROLENS is hermaphroditic, which facilitates the concatenation of multiple cable assemblies to support varying distance requirements. The connector is available in single mode and multi mode versions and can be configured to support two to twelve fiber optic channels using a common insert. It has been designed to accept a wide variety of cables to suit any application. The lens connector uses spherical lenses to expand the light beam diameter.

Expanded Beam Technology



Expanded beam technology expands and collimates the optical signal through the connector interface path resulting in a diameter many times than the original beam. The optical beam is refocused into the core of the receiving fiber. This technology makes the connector very resistant to shock and environmental issues, minimizing the effects of dust and vibration. Because the lenses do not touch each other, the connector can be mated and demated for thousands of cycles.

Lens Arrangement



The EUROLENS system is the only expanded beam fiber optic connector system on the market where all 2 to 12 channel plugs and receptacles are fully compatible with each other.

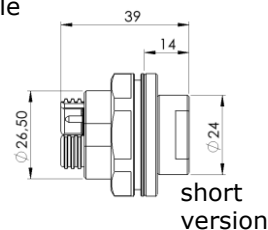
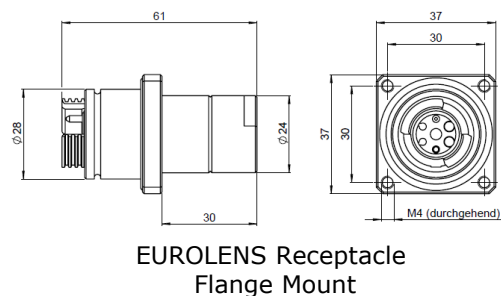
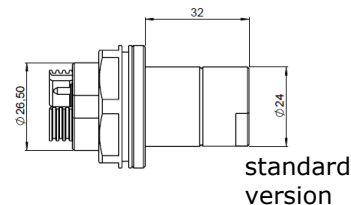
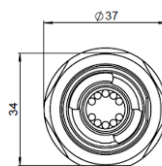
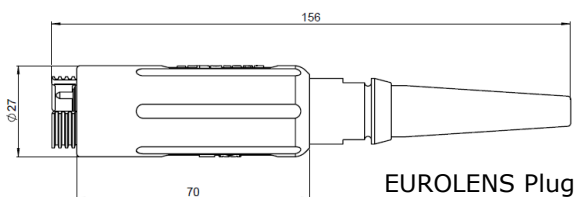
Insertion Loss depending on lens-combination

	3mm ↔ 3mm	3mm ↔ 2mm	2mm ↔ 2mm
Typ. Loss MM @ 850/1300nm	≤ 0,8dB	≤ 1,5dB	≤ 0,8dB
Typ. Loss SM @ 1310nm / 1500nm	≤ 1,5dB	≤ 1,5dB	≤ 1,5dB

Technical Specifications

	Multimode	Singlemode
Insertion Loss, typical	<0,8 dB @850/1300nm	<1.5 dB @1310nm/1550nm
Return Loss (mated)	-	>31 dB
Operating temperature	-55°C to +85°C	
Storage temperature	-55°C to +85°C	
Mating cycles	3,000 cycles	
Strain relief	1,500 N	
Immersion	15m, water (Plug and Receptacle)	
Protection Class	IP67 (mated or with dust cap)	

Dimensions



EUROLENS
Family



EUROLENS Plug



EUROLENS Receptacle
Flange Mount



EUROLENS Receptacle
Jam Nut Mount

The EUROLENS-System is available with 2, 4, 8 and 12 channels in hard black anodized aluminum.

EUROLENS Part Number Scheme

X	X	X	X	-	X	X	X	X	-	X	X	X	X		
E	L														EUROLENS - Family
		S	0												Plug
		Z	0												Receptacle Jam-Nut Mount
		F	0												Receptacle Flange Mount
				S											Single Mode
				M											Multi Mode
					2	3									2 ch (Ø3mm lenses)
					4	3									4 ch (Ø3mm lenses)
					8	2									8 ch (Ø2mm lenses)
					C	2									12 ch (Ø2mm lenses)
							B								Ø126 µm Ferrule (bore hole)
								B	H						Receptacle Connector Shell
								B	C						Receptacle Connector Shell with Crimp
									K	0					Receptacle (short version)
									S	P					Spiral Boot (Ø4..6,5mm)
									S	8					Spiral Boot (Ø6,5..8,5mm)
									4	0					Rubber Boot (Ø3,5..4,5mm)
									5	0					Rubber Boot (Ø4,6..5,5mm)
									6	0					Rubber Boot (Ø5,6..6,5mm)
									7	0					Rubber Boot (Ø6,6..7,5mm)
										0	0				Standard
										X	X				Customized Version







Example:

E L S 0 - S 4 3 A - 6 0 0 0


EUROLENS plug, single mode, 4 channel, 125µm ferrule, 6mm strain relief boot, standard



Bootsets

Description	Part number	Design
Boot set for cable Ø3.5 – 4.5mm	EL01-04AS-4000	
Boot set for cable Ø4.6 – 5.5mm	EL01-04AS-5000	
Boot set for cable Ø5.6 – 6.5mm	EL01-04AS-6000 (2/4ch) EL01-08AS-6000 (8/12ch)	
Boot set for cable Ø6.6 – 7.5mm	EL01-04AS-7000 (2/4ch) EL01-08AS-7000 (8/12ch)	
Spiral boot set for cable Ø4.0 – 6.5mm	EL01-04AS-SP00 (2/4ch) EL01-08AS-SP00 (8/12ch)	
Spiral boot set for cable Ø6.5 – 8.5mm	EL01-04AS-S800 (2/4ch) EL01-08AS-S800 (8/12ch)	

Accessories

Description	Part number	Design
Ferrule Set (2-/4ch) (2 Ferrules)	E001-023B-FS00 (Ø126µm) other upon request	
Ferrule Set (8-/12ch) (4 Ferrules)	E001-042B-FS00 (Ø126µm) other upon request	
Crimping Set (2-/4ch)	EL02-04CS-0000	
Crimping Set (8-/12ch)	EL02-08CS-0000	
Crimping Tool EUROLENS	CZB0-0900-EL00	