

AXOPT™
AHT 50/125/242 Z0.9TAZ1.8 OM3 LM
(AXOPT™ MULTIMODE 50/125)
ARINC-802 QUALIFIED



- 1
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- 3
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1 Fiber	Core/Cladding	Silica Graded Index Multimode 50/125	125 ± 2 µm
	Primary buffer	High temperature Acrylate	245 ± 15 µm
2 Buffer		ETFE (Black)	0.925 ± 0.075 mm
3 Braided shield		Aramid Strength Member	1.15 mm nom.
4 Outer jacket		ETFE (Purple)	1.80 ± 0.1 mm
Attenuation (Following EN4641-301)		At 850 nm	5.0 dB/km max
		At 1300 nm	3.0 dB/km max
Numerical aperture		0.20 ± 0.015	
Overfilled modal bandwidth		At 850 nm	1500 MHz.Km min
		At 1300 nm	500 MHz.Km min
Operating temperature		-60°C to 135°C	

AXOPT™
AHT 62.5/125/242 Z0.9TAZ1.8 OM1 LM
(AXOPT™ MULTIMODE 62.5/125)



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1 Fiber	Core/Cladding	Silica Graded Index Multimode 62.5/125	125 ± 2 µm
	Primary buffer	High temperature Acrylate	245 ± 15 µm
2 Buffer		ETFE (Black)	0.925 ± 0.075 mm
3 Braided shield		Aramid Strength Member	1.15 mm nom.
4 Outer jacket		ETFE (Purple)	1.80 ± 0.1 mm
Attenuation (Following EN4641-301)		At 850 nm	4.0 dB/km max
		At 1300 nm	2.0 dB/km max
Numerical aperture		0.20 ± 0.015	
Overfilled modal bandwidth		At 850 nm	160 MHz.Km min
		At 1300 nm	500 MHz.Km min
Operating temperature		-60 °C to 135°C	

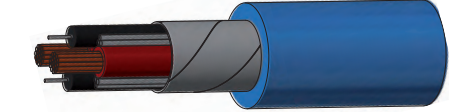
AXOPT™
AHT 9/125/242 Z0.9TAZ1.8 OS1 LM
(AXOPT™ SINGLE MODE 9/125)



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1 Fiber	Core/Cladding	Silica Graded Index Single mode 9/125	125 ± 2 µm
	Primary buffer	High temperature Acrylate	245 ± 15 µm
2 Buffer		ETFE (Black)	0.925 ± 0.075 mm
3 Braided shield		Aramid Strength Member	1.15 mm nom.
4 Outer jacket		ETFE (Purple)	1.80 ± 0.1 mm
Attenuation (Following EN4641-301)		At 1310 nm	1.0 dB/km max
		At 1550 nm	0.85 dB/km max
Cutoff wavelength		less 1260 nm	
Mode field diameter		At 1310 nm	8.8 ± 0.4 µm
		At 1550 nm	9.8 ± 0.5 µm
Operating temperature		-60 °C to 135°C	

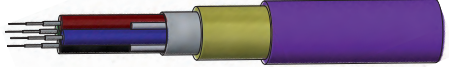
AXOPT™
HYBRID OPTICAL CABLE
SPECIAL DESIGN



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1 AXOPT™	Fiber	To be specified by customer
	Buffer	To be specified by customer
	Braided shield	To be specified by customer
	Outer jacket	To be specified by customer
2 Electrical Wire	To be specified by customer	
3 Filler	To be specified by customer	
4 Separating tape	PTFE	
5 Outer jacket	To be specified by customer	

AXOPT™
MULTI OPTICAL CABLE
SPECIAL DESIGN
(AXOPT™ MULTI-WAYS)



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1 AXOPT™	Fiber	To be specified by customer
	Buffer	To be specified by customer
2 Filler	PTFE	
3 Separating tape	PTFE	
4 Braided shield	Aramid Strength Member	
5 Outer jacket	To be specified by customer	



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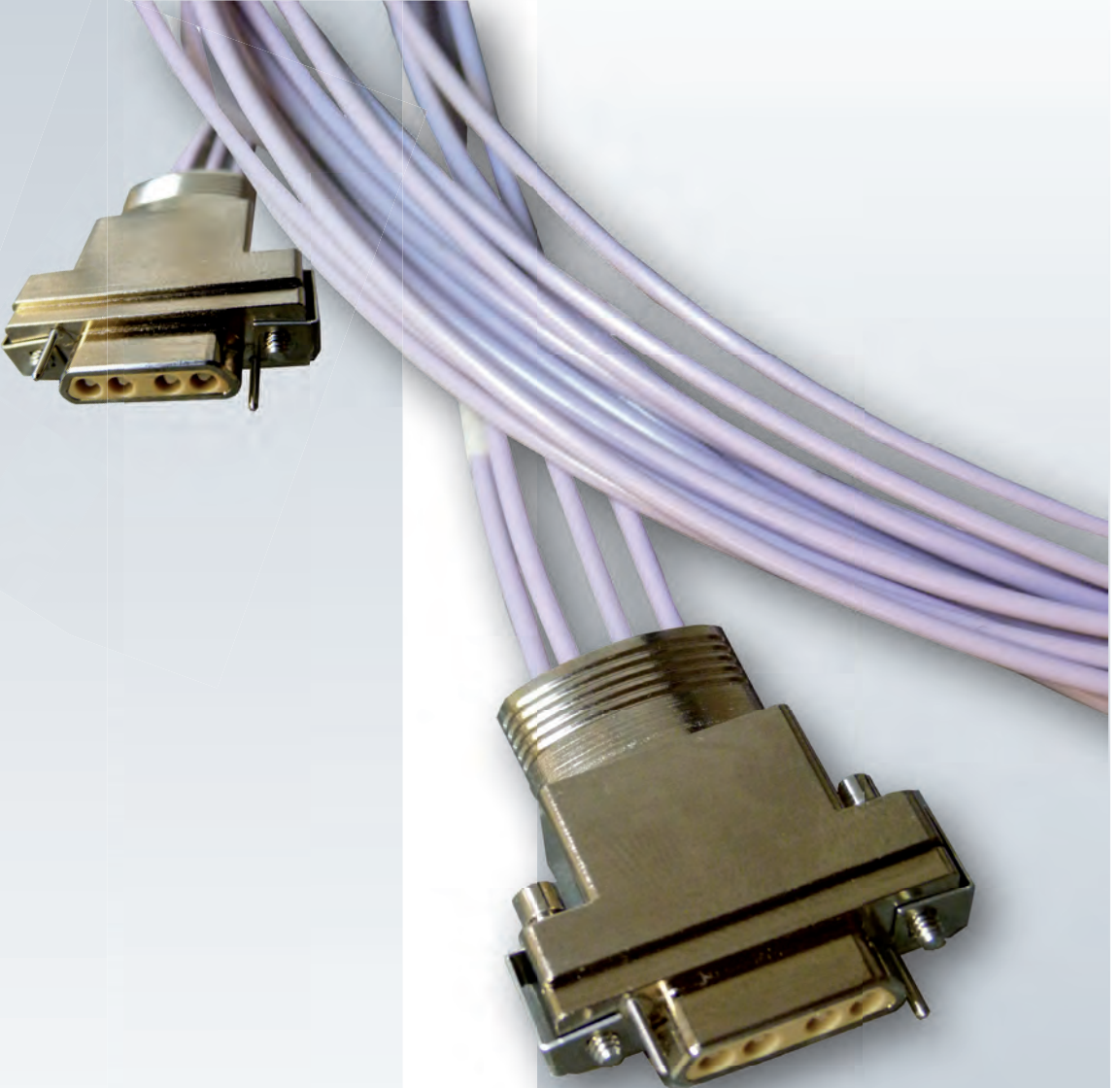
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AXOPT™

FIBER OPTIC CABLES & MICRO-D SOLUTIONS



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EXPERT IN INTERCONNECT SOLUTIONS

Headquartered in the beautiful Champagne region of France, Axon' Cable is a worldwide leader in specialist interconnects. The company is an acknowledged expert in the design and manufacture of custom designed cables and miniature connectors. Axon' Cable has drawn on this experience in Micro-D and high data rate links to develop optical cable assemblies.

Vertically integrated, Axon' is able to manufacture optimized fiber optics cables adapted to high performance optical Micro-D based connectors. Our engineers have designed AXOPT™ interconnects to help you switch from electrical to optical devices.

AXOPT™ OPTICAL CABLES

- Lightweight
- Electromagnetic immunity
- Tight structure for a safer connection
- Resistance to harsh environment
- Tensile strength: > 200 N
- UV laser marking
- Operating temperatures: -60 to +135°C

AXOPT™ MICRO-D CONNECTORS

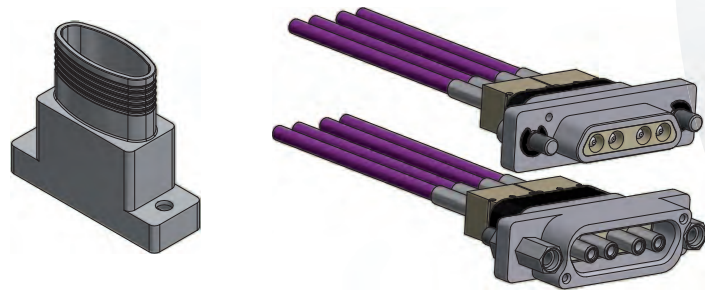
- Qualification based on MIL-DTL-83513 / ARINC801 & MIL-PRF 29504
- Micro-D based connectors for space saving
- Vibration: 20 g
 - Discontinuity: <0.5 dB, duration <50µs
 - Transmittance change: <0.5dB max
- Shock: 50 g's
 - Discontinuity: <0.5dB, duration <100ms
 - Transmittance change: <0.5dB max
- 500 cycles mating demating
- Thermal shock: 50 cycles -55 to +125°C with ±0.5dB change
- Cable retention: 68N for 1mn
- Contact retention: 53N without mechanical failure
- Signal cutting when contact pulling 10N max
- Operating temperature up to 125°C

APPLICATIONS

- Milaero
- Space

Optical Micro-D Pigtail connectors

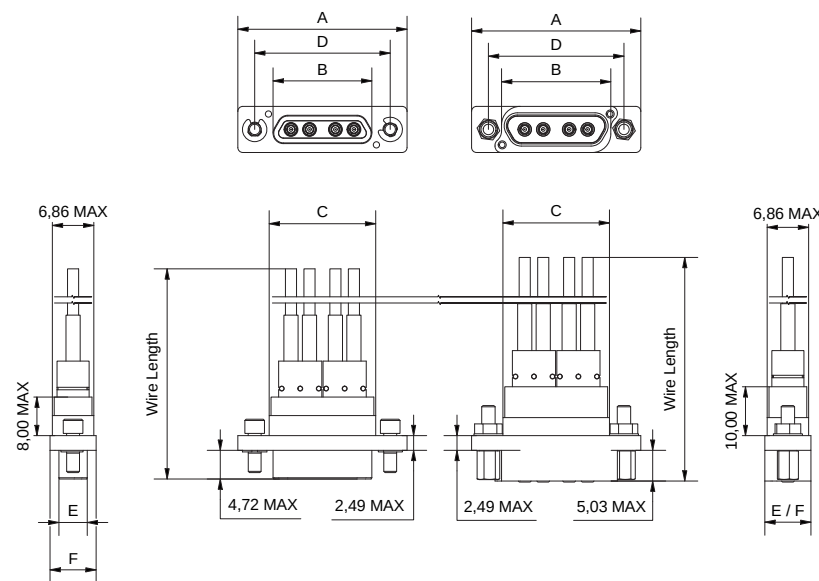
STANDARD HARDWARE STYLE



General characteristics

- → Standard jackscrews and jackposts from Micro-D connector range
- → Equivalent to Micro-D connector sizes
- → With or without backshell
- → Panel mounting available
- → Removable contacts for maintenance (cleaning, contact replacement...)
- → Custom design on request

Dimensions



CONNECTOR SIZE	A	B MAX		C	D	F	E MAX	
	± 0.25	MALE	FEMALE	-0.46/+0.25	± 0.13	± 0.25	MALE	FEMALE
09 S / 09 P	19.69	8.48	10.16	9.91	14.35	7.57	4.69	7.82
15 S / 15 P	23.50	12.29	14.00	13.72	18.16	7.57	4.69	7.82
21 S / 21 P	27.31	16.10	17.81	17.53	21.97	7.57	4.69	7.82
25 S / 25 P	29.85	18.64	20.35	20.07	24.51	7.57	4.69	7.82
31 S / 31 P	33.66	22.45	24.16	23.88	28.32	7.57	4.69	7.82
37 S / 37 P	37.47	26.26	27.96	27.69	32.13	7.57	4.69	7.82

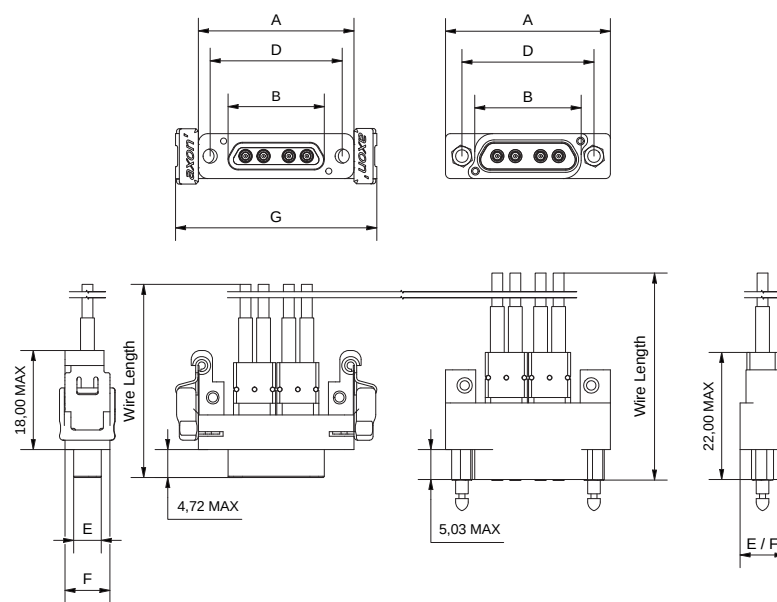
D-CLICK HARDWARE STYLE



General characteristics

- → D-click hardware for fast locking
- → Equivalent to Micro-D connector sizes
- → With or without backshell
- → Removable contacts for maintenance (cleaning, contact replacement...)
- → Custom design on request
- → Panel mounting available

Dimensions



CONNECTOR SIZE	A	B MAX		C	D	F	E MAX	
	± 0.25	MALE	FEMALE	-0.46/+0.25	± 0.13	± 0.25	MALE	FEMALE
09 S / 09 P	19.69	8.48	10.16	9.91	14.35	7.57	4.69	7.82
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31 S / 31 P	33.66	22.45	24.16	23.88	28.32	7.57	4.69	7.82
37 S / 37 P	37.47	26.26	27.96	27.69	32.13	7.57	4.69	7.82

POSSIBLE CONTACTS ARRANGEMENTS

09		
15		
21		
25		
31		
37		

NUMBER OF OPTICAL LINES	NUMBER OF SIGNAL LINES	CONNECTOR SIZE
1	0	9
	2	9
	4	15
	12	21
	16	25
2	20	31
	28	37
	0	9
	2	15
	8	21
3	12	25
	16	31
	20	37
	0	15
	4	21
4	8	25
	12	31
	16	37
	0	21
	2	25
5	8	31
	12	37
	0	25
	4	31
	8	37
6	0	31
	4	37
7	0	37



HAND POLISHING ON OPTICAL CONTACT IN THE AXON' OPTICAL LABORATORY