E-2000™ Compact Connector

VWL 064.505
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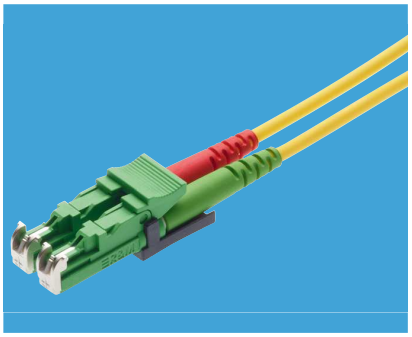


- Our Connectors are the key components for a low loss, broad-band data transmission in fiber optic networks.
- The constantly growing demand for higher data transmission capacities places exceptionally stringent qualitative criteria on present and future telecommunication networks. Interconnectivity components are the key for powerful fiber optic networks.
- Mechanical, optical and geometrical precision are the quality features necessary to reduce transmission losses to an absolute minimum at fiber transition. Our SM connectors are tuneable in 60° steps. Independent of the G rade all assemblies are 100% tested. Constant Quality Control ensures best performance.
- All tests on E-2000 connectors are done according to IEC 61753-1-1 Category U – uncontrolled environment.

Technical data sheet connector

Performance according IEC 61753-1

Optical performance, IL	Grade A*	Grade B	Grade C	Grade D
Insertion loss (IL) 97% IEC 61300-3-34	≤ 0.15dB	≤ 0.25dB	≤ 0.50dB	≤ 1dB
Insertion loss (IL) typical value IEC 61300-3-34	≤ 0.07dB	≤ 0.12dB	≤ 0.25dB	≤ 0.50dB
Grade-A* is not fully defined in IEC 61753-1.				

Optical performance, IL	Grade Am*	Grade Bm*
Insertion loss (IL) 100%	≤ 0.25dB	≤ 0.50dB
Insertion loss (IL) 95% IEC 61300-3-34	≤ 0.15dB	≤ 0.25dB
Insertion loss (IL) typical value IEC 61300-3-34	≤ 0.10dB	≤ 0.15dB
Grade-Am*/Bm* is not fully defined in IEC 61753-1.		

Optical performance, RL	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
Return loss (RL) IEC 61300-3-6	≥ 60dB mated ≥ 55dB unmated	≥ 45dB	≥ 35dB	≥ 26dB	≥ 20dB

Performance according definition R&M

Definition IL / RL @ R&M	Grade A*/1	Grade A*/2	Grade B/1	Grade B/2	Grade C/1
Insertion loss (IL) 97%	≤ 0.15dB	≤ 0.15dB	≤ 0.25dB	≤ 0.25dB	≤ 0.50dB
Insertion loss (IL) typical value	≤ 0.07dB	≤ 0.07dB	≤ 0.12dB	≤ 0.12dB	≤ 0.25dB
Return loss (RL)	≥ 80dB	≥ 50dB	≥ 65dB	≥ 45dB	≥ 60dB
Typical value	≥ 90dB	≥ 55dB	≥ 85dB	≥ 55dB	≥ 80dB
Laser power, mated IEC 61300-2-14, 30 min., 23°C	≤ 2W	≤ 300mW	≤ 1W	≤ 300mW	≤ 500mW

Definition IL / RL @ R&M	Grade C/2	Grade D/3	Grade Am/2	Grade Bm/3
Insertion loss (IL) 97%	≤ 0.50dB	≤ 1.00dB	≤ 0.25dB(100%)	≤ 0.50dB(100%)
Insertion loss (IL) typical value	≤ 0.25dB	≤ 0.50dB	≤ 0.10dB	≤ 0.15dB
Return loss (RL)	≥ 45dB	≥ 35dB	≥ 45dB	≥ 35dB
Typical value	≥ 55dB	≥ 45dB		
Laser power, mated IEC 61300-2-14, 30 min., 23°C	≤ 300mW			

Mechanical properties

Criteria	Date / value	Standard
Mating durability	1000x minimum	IEC 61300-2-2
Cable retention	2x 100N, 120s	IEC 61300-2-4
Fiber (Pigtail) retention	2x 5N, 60s	IEC 61300-2-4
Vibration	10-55Hz, 1 octave / min. 3 axis of 15 cycles, 0.5h / axis amplitude 0.75 mm	IEC 61300-2-1
Repeated bending patch cable	100 cycles -90° / 0° / +90° / 0° Load = 5N	IEC 61300-2-44
Repeated bending pigtail	100 cycles -90° / 0° / +90° / 0° Load = 0.2N	IEC 61300-2-44
Drop	1.5 m, 5 times	IEC 61300-2-12
Static side load patch cable	1N, 1h	IEC 61300-2-42
Static side load pigtail	0.2N, 5 min.	IEC 61300-2-42

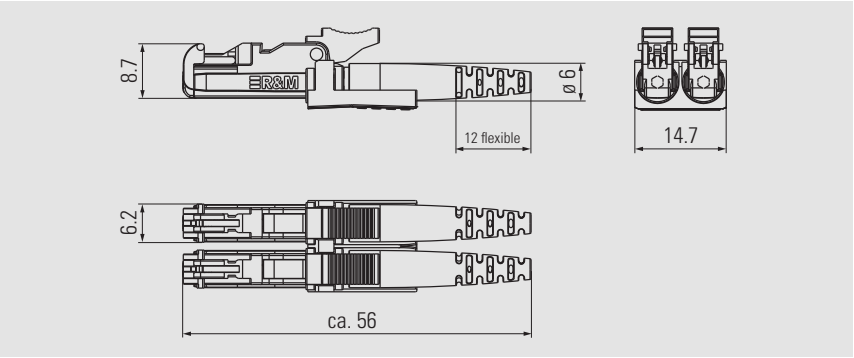
Climatic class

Criteria	Date / value	Standard
Cold	-25°C, 96h	IEC 61300-2-17
Dry heat	+70°C, 96h	IEC 61300-2-18
Change of temperature	-25°C to +70°C, 12 cycles	IEC 61300-2-22

Long term endurance

Criteria	Date / value	Standard
Heat resistance	+70°C, 1000h	IEC 61300-2-18
Damp heat	+40°C at 93%, 96h	IEC 61300-2-19

Dimensionen duplex connector



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Technical data sheet adapter

Performance gemäss IEC 61753-1

Optical performance, IL	Grade B	Grade C	Grade M
Sleeve material	Ceramic	Ceramic	Ceramic
Insertion loss (IL) delta IEC 61300-3-4	0.1dB	0.2dB	0.2dB

Mechanical properties

Criteria	Date / value	Standard
Mating durability	1000x minimum	IEC 61300-2-2
Pull out force	70N	IEC 61300-2-6

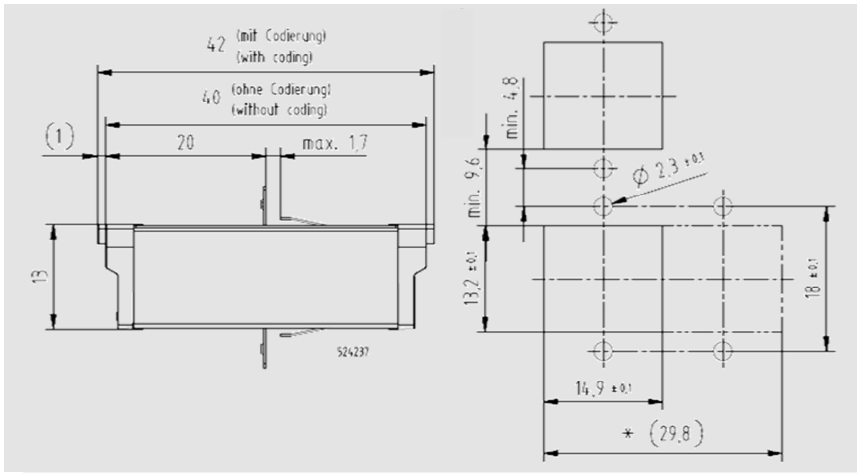
Climatic class

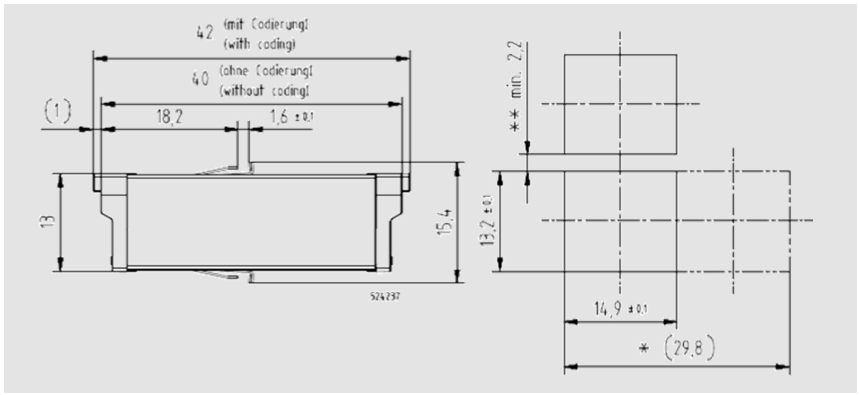
Criteria	Date / value	Standard
Cold	-25°C, 96h	IEC 61300-2-17
Dry heat	+70°C, 96h	IEC 61300-2-18
Change of temperature	-25°C to +70°C, 12 cycles	IEC 61300-2-22

Long term endurance

Criteria	Date / value	Standard
Heat resistance	+70°C, 1000h	IEC 61300-2-18
Damp heat	+40°C at 93%, 96h	IEC 61300-2-19

Dimensions duplex adaptors





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