

## Coarse Wavelength Division Multiplexer – CWDM mux or demux, 4 channels (reduced size)

### Features

- Devices may be used as multiplexer or demultiplexer
- Micro-hybrid construction in a sealed metal housing
- Epoxy-free optical path
- Extremely small component dimensions: 17.1 x 12.5 x 6.5 mm<sup>3</sup>, other dimensions on request
- Fiber packaging: loose tube or 250 µm coating

### Applications

- Combines / separates 4 channels with a 20 nm spacing
- Optimized package for CFP transceiver modules
- According to 40 Gbps IEEE 802.3ba standard

### Specifications

Parameters	Coarse Wavelength Division Multiplexer – mux/demux (all values refer to single mode)		
<b>Channels</b>	4		
<b>Center Wavelength [nm]</b>	1271 / 1291 / 1311 / 1331 other wavelength upon request; please contact CUBO		
<b>Optical Bandwidth</b>	> 13 nm (higher bandwidth on request)		
<b>Insertion Loss *</b>	4 channel CWDM	Standard < 2.0 dB	Premium < 1.5 dB
<b>Isolation **</b>	adjacent channel	> 30 dB	
	non-adjacent channel	> 40 dB	
	Isolation Spectral Range	1260-1460 nm	
<b>Return Loss *</b>	> 45 dB (50 dB typ.)		
<b>Directivity</b>	> 50 dB		
<b>Polarization Dependent Loss</b>	< 0.2 dB		
<b>Max. optical power</b>	250 mW		
<b>Operating Temperature</b>	-5°C to 75°C		
<b>Storage Temperature</b>	-40°C to 85°C (when removed from plastic package)		
<b>Package Dimensions</b>	17.1 x 12.5 x 6.5 mm <sup>3</sup>		

\* With passband, valid over full temperature range and at all states of polarization but without connector losses.

\*\* Valid over full temperature range and at all wavelengths across the channel.

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### Ordering Information

Please select an option from each configuration table and write the corresponding codes in the applicable boxes to create the part number.

Ordering example: **C-40-A-C-S-R-12-1-A-15**

C -  -  -  -  -  -  - 1 2 -  -  -

no. of channels	code	mux or demux code		grade		fiber length		Connector in/out*	
4	40	No distinction*	A	Standard	S	0.5 m	A	none	0
		* uniform losses, works as mux or demux		Premium	P			SC/PC	1
								FC/PC	2
								SC/APC**	3
								FC/APC**	4
								LC/PC	5
								MU/PC	6
								E2000	7
								E2000/HRL**	8
								ST/PC	9

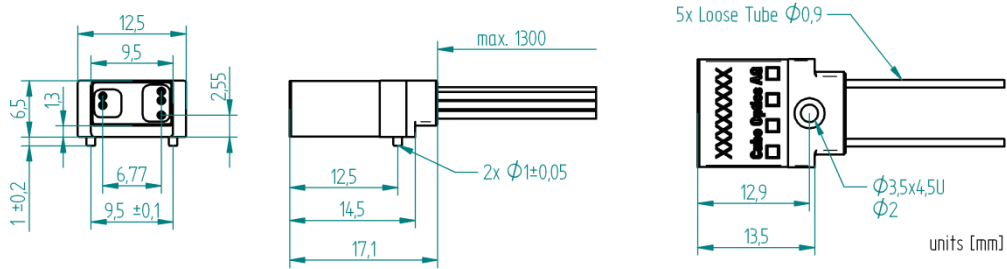
housing	code	fiber type an packaging	
Reduced size	R	Corning SMF-28™ (9,125,250 μm) 900 μm loose tube	1
		Corning SMF-28™ (9,125,250 μm) 250 μm coating	2
		Corning SMF-28™ (9,125,250 μm) 250 μm coating color coded fiber ports	C

Center wavelengths (nm)	code
1271 / 1291 / 1311 / 1331	C

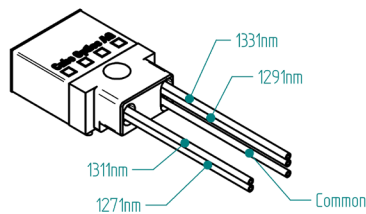
connectors only available in combination with loose tube fiber protection  
\* device regarded as demultiplexer  
\*\* 8° angular polishing

Further configuration on request!

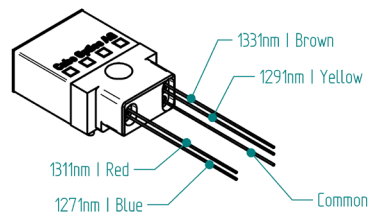
### Reduced size 4 channel housing



All housing dimensions +/-0,2 if not otherwise specified.



Port assignment for optional colour coded fibres:



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