



Optical Splitters/Couplers

Langmatz optical splitters/couplers are available in various configurations and can be used for many applications. They convince with outstanding properties in all areas: low insertion loss (IL), high return loss (RL) as well as low PDL and WDL in a wide wavelength range and always high reliability. The compact design allows installation in splice cassettes.

Advantages

- Low insertion loss (IL) with high return loss (RL)
- Compact coupler design for installation in splice cassettes
- Broad wavelength spectrum
- Low wavelength-dependent loss (WDL)
- Low polarization-dependent loss (PDL)
- High reliability
- High durability
- Can be used at very low and very high temperatures



Optical Splitters/Couplers






by Langmatz

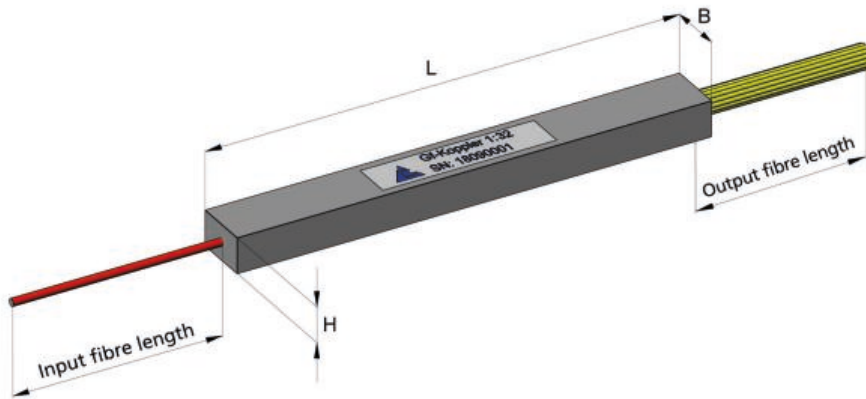
Technical data

Number of ports	1x8	1x32	2x4	2x16	2x32
Operating wavelength	1260 nm – 1650 nm				
Insertion loss [dB]	≤ 10.5	≤ 16.8	≤ 7.8	≤ 14.2	≤ 17.5
Return loss [dB]	≥ 55				
Deviation [dB]	≤ 0.8	≤ 1.5	≤ 1.0	≤ 1.5	≤ 1.8
PDL [dB]	≤ 0.25	≤ 0.3	≤ 0.2	≤ 0.3	≤ 0.3
Wavelength-dependent loss (WDL) [dB]	≤ 0.8	≤ 1.5	≤ 1.0	≤ 1.5	≤ 1.8
Directivity [dB]	≥ 55				
Operating temperature	-40 °C ~ 85 °C				
Storage temperature	-40 °C ~ 85 °C				
Dimensions (LxWxD) [mm]	55x7x4	60x7x4	55x4x4	60x7x4	60x7x4
Input fibre	250 µm	250 µm	900 µm	900 µm	900 µm
Output fibre	250 µm	250 µm	250 µm	250 µm	250 µm
Input fibre colour	red-coated	red-coated	blue, orange	blue, orange	blue, orange
Input ports	No	No	LC/APC 8° class B		
Output fibre colour	yellow-coated	yellow-coated	see table for used colour		
Input and output fibre length	at least 3.0 m	at least 3.0 m	950±10 mm, 2200±10 mm	950±10 mm, 2200±10 mm	950±10 mm, 2200±10 mm
Output termination [dB]	Reflection-free termination ≥ 35				
Fibre type	G.657.A1		G.657.A2		
Order Number	700857000	700857100	700857013	700857011	700857012
Order number with multi-fibre cassette, 10 mm	062450121	062450120	062450486	062450488	062450487

Output ribbon fibre – colour code

Type	Ribbon fibre	Colour code	Fibre identifiers								
			Fibre number								Colour
2x4	4 core Ribbon fibre x1		1	9	17	25	33	41	49	57	Red
			2	10	18	26	34	42	50	58	Green
2x16	8 core Ribbon fibre x2		3	11	19	27	35	43	51	59	Blue
			4	12	20	28	36	44	52	60	Yellow
			5	13	21	29	37	45	53	61	White
2x32	8 core Ribbon fibre x4		6	14	22	30	38	46	54	62	Grey
			7	15	23	31	39	47	55	63	Brown
			8	16	24	32	40	48	56	64	Violet

Dimensions



Delivery variants



Figure 1: Splitter/coupler 1:8 & 1:32 without connector, outputs all yellow

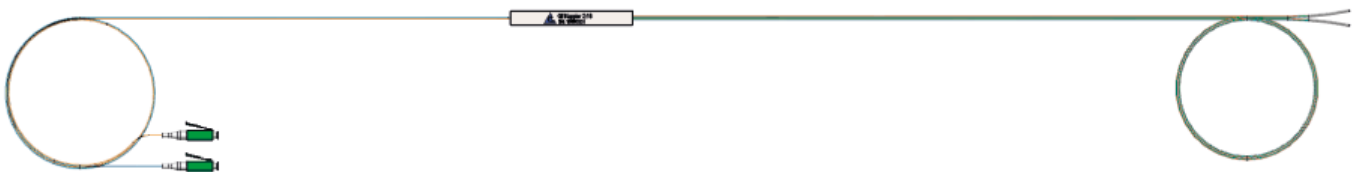


Figure 2: Splitter/coupler 2:4 & 2:16 & 2:32 with LC/APC 8° connector at input and 4-core or 8-core ribbon fibre

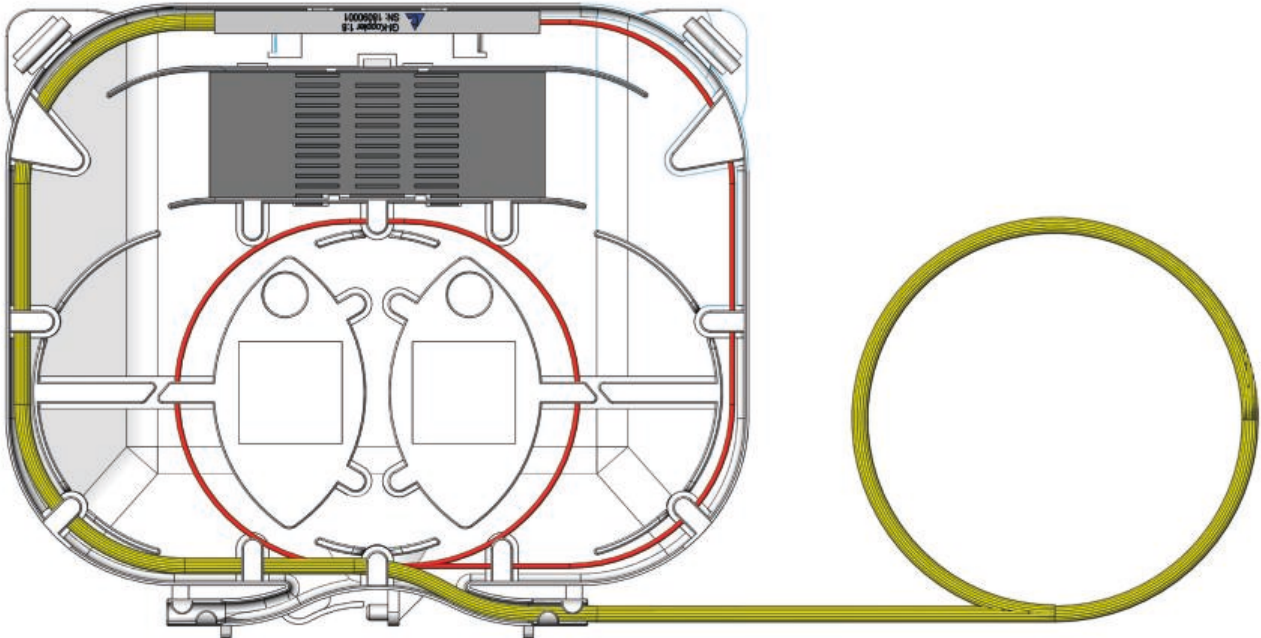


Figure 3: Splitter/coupler 1:8 or 1:32 inserted in multi-fibre cassette (MFC), 10 mm

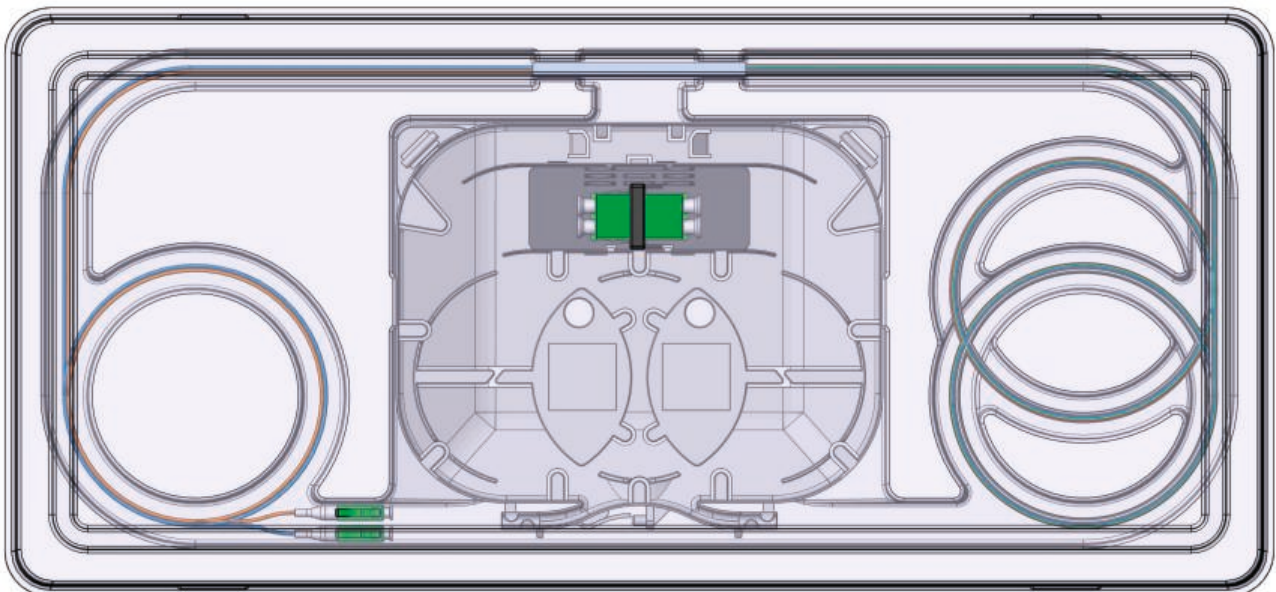


Figure 4: Splitter/coupler: 4 & 2:16 & 2:32 with input port assembled LC/APC 8° connector and adapter with enclosed multi-fibre cassette (MFC), 10 mm