



FBG Specification

Parameter	Low reflectivity	Medium reflectivity	High reflectivity
Order number	Femto.20.N.SMAC Femto.20.M.SMAC Femto.20.W.SMAC	Femto.50.N.SMAC Femto.50.M.SMAC Femto.50.W.SMAC	Femto.70.N.SMAC Femto.70.M.SMAC
Item description	Single FBG 20% Narrow Mid Wide	Single FBG 50% Narrow Mid Wide	Single FBG 70% Narrow Mid
Wavelength	1460-1640		
Wavelength accuracy	+/- 0,3nm		
Reflectivity	>20%	>50%	>70%
FWHM	Narrow 0,25nm Mid 0,40nm Wide 0,70nm	Narrow 0,25nm Mid 0,40nm Wide 0,70nm	Narrow 0,25nm Mid 0,40nm
SLRS	>15 dB		
Length	Narrow 7mm Mid 4mm Wide 2mm	Narrow 7mm Mid 5mm Wide 2mm	Narrow 7mm Mid 6mm
Tensile strength	> 3%		
Fiber length	2m		
FBG position	center		

Fiber Specification

Parameter	Single Mode Acrylate
Attenuation @1550nm	<0,22dB/km
Cutoff wavelength	<1260nm
Mode field diameter @1550nm	10,4µm
Numerical aperture	0,14
Cladding diameter	125µm
Coating type	Acrylate
Coating diameter	245µm
Max temperature	85°C (high temperature acrylate up to 180°C)

FEMTO Grating arrays and FEMTO*Plus* Grating arrays

are produced according to customer specifications. FBG spacing from 0,1mm to several 100m.

In co-operation with engionic Group company engionic Fiber Optics GmbH, which is specialized in the assembly of fiber optic light guides and sensors, calibrated and assembled sensors and complete sensing solutions, including the sensor and interrogation system, can be provided.



FBG Specification

Parameter	Low reflectivity	Medium reflectivity	High reflectivity
Order number	Femto.20.N.SMPI Femto.20.M.SMPI Femto.20.W.SMPI	Femto.50.N.SMPI Femto.50.M.SMPI Femto.50.W.SMPI	Femto.70.N.SMPI Femto.70.M.SMPI
Item description	Single FBG 20% Narrow Mid Wide	Single FBG 50% Narrow Mid Wide	Single FBG 70% Narrow Mid
Wavelength	1460-1640		
Wavelength accuracy	+/- 0,3nm		
Reflectivity	>20%	>50%	>70%
FWHM	Narrow 0,25nm Mid 0,40nm Wide 0,70nm	Narrow 0,25nm Mid 0,40nm Wide 0,70nm	Narrow 0,25nm Mid 0,40nm
SLRS	>15 dB		
Length	Narrow 7mm Mid 4mm Wide 2mm	Narrow 7mm Mid 5mm Wide 2mm	Narrow 7mm Mid 6mm
Tensile strength	> 3%		
Fiber length	2m		
FBG position	center		

Fiber Specification

Parameter	Single Mode Polyimide
Attenuation @1550nm	<0,4dB/km
Cutoff wavelength	<1300nm
Mode field diameter @1550nm	9,8µm
Numerical aperture	0,12
Cladding diameter	125µm
Coating type	Polyimide
Coating diameter	155µm
Max temperature	300°C (short term 400°C)

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FBG Specification

Parameter	Low reflectivity	Medium reflectivity	High reflectivity
Order number	Femto.20.N.PCPI Femto.20.M.PCPI Femto.20.W.PCPI	Femto.50.N.PCPI Femto.50.M.PCPI Femto.50.W.PCPI	Femto.70.N.PCPI Femto.70.M.PCPI
Item description	Single FBG 20% Narrow Mid Wide	Single FBG 50% Narrow Mid Wide	Single FBG 70% Narrow Mid
Wavelength	1460-1640		
Wavelength accuracy	+/- 0,3nm		
Reflectivity	>20%	>50%	>70%
FWHM	Narrow 0,25nm Mid 0,40nm Wide 0,70nm	Narrow 0,25nm Mid 0,40nm Wide 0,70nm	Narrow 0,25nm Mid 0,40nm
SLRS	>15 dB		
Length	Narrow 7mm Mid 4mm Wide 2mm	Narrow 7mm Mid 5mm Wide 2mm	Narrow 7mm Mid 6mm
Tensile strength	> 3%		
Fiber length	2m		
FBG position	center		

Fiber Specification

Parameter	Pure Core Polyimide
Attenuation @1550nm	<0,8dB/km
Cutoff wavelength	<1290nm
Mode field diameter @1550nm	9,0µm
Numerical aperture	0,13
Cladding diameter	125µm
Coating type	Polyimide
Coating diameter	155µm
Max temperature	300°C (short term 400°C)

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are produced according to customer specifications. FBG spacing from 0,1mm to several 100m.

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