

Dispersion Compensating Modules (DCM)

Fibrain dispersion compensating modules (DCMs) are required in long-haul link to compensate for the degrading impact of chromatic dispersion on signal quality. Chromatic dispersion is an optical effect which considerably deteriorates the quality high speed optical signals (8 Gbps and faster) and, as a rule of thumb, links longer than 70 km long should be dispersion compensated. Fibrain DCM modules are characterized by low insertion loss, low polarization dependent loss and wide operating spectral range.

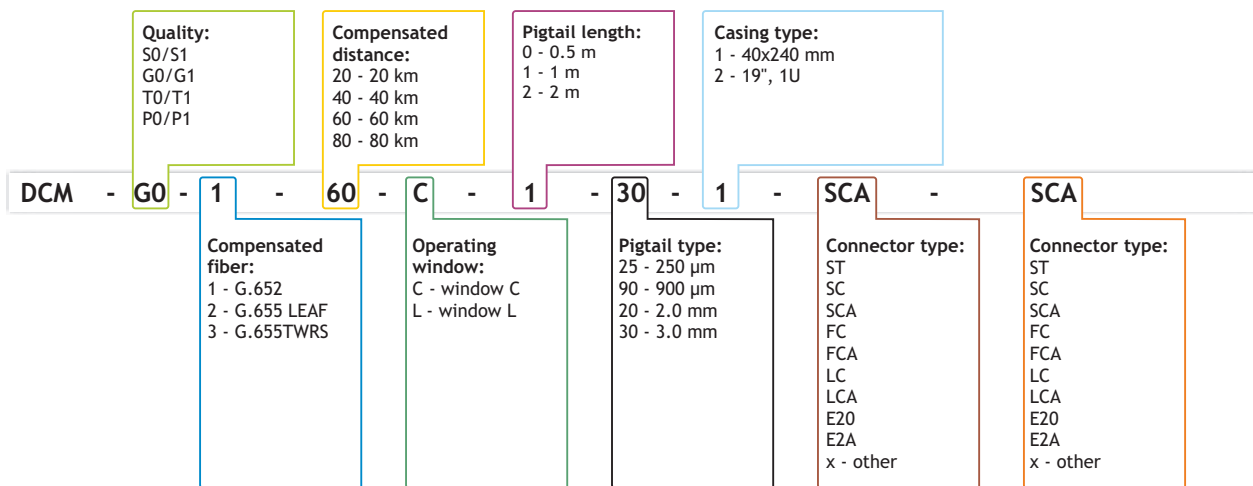
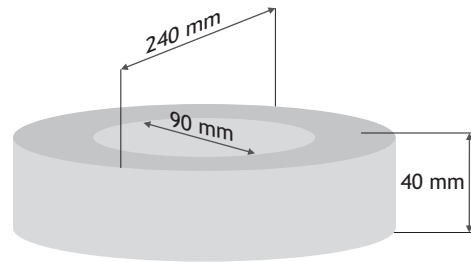
Applications:

- long haul networks,
- CWDM and DWDM transmission,
- CATV transmission.

Features:

- low insertion loss,
- low PDL loss,
- wide bandwidth,
- dispersion slope matched to transmission fiber.

Technical specification				
Compensated distance [km]	Dispersion @1550 nm +/--3%	Insertion loss [dB]	PMD [ps]	PDL [dB]
20	-340	≤ 2.9	≤ 0.1	≤ 0.5
40	-680	≤ 4.8	≤ 0.1	≤ 0.7
60	-1020	≤ 6.8	≤ 0.1	≤ 0.9
80	-1360	≤ 8.7	≤ 0.1	≤ 1.1
100	-1700	≤ 10.7	≤ 0.1	≤ 1.2
120	-2040	≤ 12.9	≤ 0.1	≤ 1.3
140	-2380	≤ 14.8	≤ 0.1	≤ 1.4
Min. spectral operating range: 1525-1565 nm				
Operating temperature range: -5°C to +70°C				



DCM-G0-1-60-C-1-30-1-SCA-SCA

Example: DCM dispersion compensating module, for G.652 transmission fiber, 60 km compensated distance, C window, with 1 m 3.0 mm pigtails, SC APC connectors