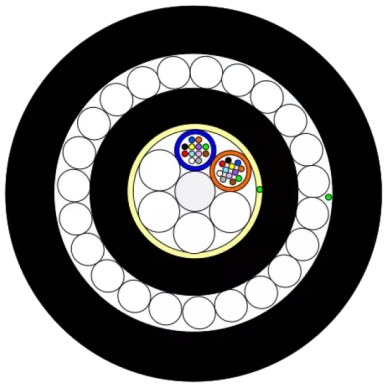
# FLOWGUARD™ - Fire Resistant - Multibundle Cables

**FLOWGUARD LSZH 2X12 SM-D SP1905 BK**

**Aginode Ref:** 10563593



Multi micro-modules cable with dielectric FRP armour:

This FLOWGUARD™ (ref. SP1905) is designed for indoor/outdoor installation in railways/tunnel infrastructure or public buildings when circuit integrity during fire is a key point.

The FRP armour provides a high rodent protection. This cable has an outstanding fire behaviour.

This cable can be operated under a wide temperature range.

FLOWGUARD™ is fire resistant (circuit integrity) following EN50200 during 120minutes.

Waterproof dry core structure.

## STANDARDS

EN 50200
EN 50399
IEC 60332-1
IEC 60332-3
IEC 60754-2
IEC 60794
IEC 61034

## Design

The FLOWGUARD™ LSZH* cable has a central strength member (FRP : Fibre Reinforced Plastic), with bundles around. The design is reinforced by a first layer of aramid yarns, a LSZH* inner sheath, a FRP composed armour and a LSZH* outer steath.

A ripcord is placed beneath the inner and outer sheath for an easy access to the micro-modules.

## Technical performances

The cable performances are specified in the following tables.

## Additional details

This cable is provided as a standard with a black sheath and FOTAG bundle color coding.

*All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Aginode is indicative only and shall not be binding on Aginode or be treated as constituting a representation on the part of Aginode.*

## Euroclass

$B2^{ca}$ s1a d1 a1

# Marking

Aginode FLOWGUARD FIBRE OPTIC CABLE LSZH - SP1905 - XXxYY - TN - metric

XX = Fibre Count YY = Fibre Type  TN = Traceability Number

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# FLOWGUARD LSZH 2X12 SM-D SP1905 BK

## Characteristics

| | |
|---|---|
| **구조적 특성** | |
| Additional strength member | Aramide |
| Armour type | FRP |
| 색상 | 검은색 |
| 구조 | 멀티 번들 튜브 |
| Fiber optic type | SM |
| Halogen free | IEC 60754-1 |
| Material used for longitudinal water tightness | 팽창사 |
| Metal free | Yes |
| 피복 | 저연 할로겐 프리 난연 |
| Strength member | FRP 센터 보강재 |
| **치수** | |
| 무게(근사치) | 172 kg/km |
| Nominal outer diameter (mm) | 12.4 mm |
| Number of optical fibres | 24 |
| Number of tubes | 2 |
| **기계적 특성** | |
| Crush resistance (IEC 60794-1-E3) | 300 N/cm |
| Maximum installation tension | 5000 N |
| Mechanical resistance to impacts | 10 impacts of 3 N.m |
| **Transmission characteristics** | |
| Attenuation, max. 1310 nm (cabled) | 0.36 dB/1000m |
| Attenuation, max. 1550 nm (cabled) | 0.23 dB/1000m |
| **사용 특성** | |
| Bending factor when laying | 20 (xD) |
| Fire resistant | UNE-EN50200 PH120 |
| Fire retardant | IEC 60332-3 |
| 난연 | IEC 60332-1 |
| Installation temperature, range | -5...40 °C |
| Installation type | Indoor/Outdoor |

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| | |
|---|---|
| Minimum static operating bending radius | 200 mm |
| 操作温度范围 | -40...70 °C |
| Rodent protection | FRP |
| 연기밀도 | IEC 61034-2 |
| Storage temperature, range | -40...70 °C |

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