

## Product Highlights

- Operating temperature up to +150°C (+302°F)
- Excellent abrasion resistance
- Highly flexible and easy to install
- Expandable design for custom fit
- Lightweight and breathable textile design
- Available with fray resistant end-treatment for cut lengths

## Typical Applications

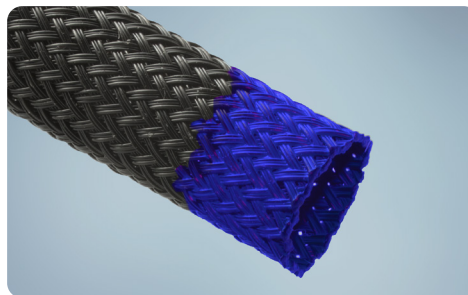
- Hose & Tubing Applications
- Cable Assemblies
- Wire Harnesses



**FlexGuard® 2120** is a lightweight and flexible braided sleeve designed to provide mechanical protection for most common automotive applications. Constructed of PA (polyamide) monofilament guard strands and PET (polyethylene terephthalate) support strands, this dual-monofilament blend provides an excellent balance of abrasion protection, temperature resistance, and installability.

For typical applications, FlexGuard 2120 is designed with a standard construction to provide excellent mechanical protection, effectively extending the service life of hose and tubing applications as well as wire harnesses and other critical components.

With the ability to expand many times larger than its diameter, FlexGuard 2120 is easy to install, can adapt to a wide range of application sizes and profiles, as well as accommodate large pre-installed connectors. The breathable textile construction allows fluids drainage and heat dissipation as well as prevents condensation.



*Also available in a dipped end version (FlexGuard 2120LD) designed specifically for fray resistance. Dipped ends are only visible under ultraviolet (UV) light.*



Our manufacturing sites are certified ISO 9001, IATF 16949, or AS/EN 9100, ISO 14001 and ISO 45001 (Selected Sites)

To facilitate installation and optimize fit for standard tube hose and cable sizes, multiple variations of FlexGuard 2120 have been created (Examples: FG2120X, FG2120Y, FG2120Z). Please contact your local sales rep to see if one of these products is more suitable for your application.

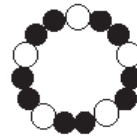
# Performance Data – FlexGuard® 2120

Property	Test Method	Result
Operating Temperature		-50°C to +150°C (-58°F to +302°F)
Heat Aging 240hrs @+175°C	ISO 6722	Neither visible degradation nor loss of flexibility Shrinkage < 10%
Flammability	FMVSS 302 D45 1333	Pass Self extinguishing Type B
Fluid Resistance	D47 1924	No visible degradation or alteration after being exposed to the following test cycles: <ul style="list-style-type: none"> <li>• Immersion for 15s at 23°C, followed by a drying period of: <ul style="list-style-type: none"> <li>– 24h at 150°C: motor oil, automatic transmission fluid, manual transmission oil.</li> <li>– 24h at 23°C: zinc chloride, brake fluid.</li> </ul> </li> <li>• Immersion for 48h at 70°C, followed by a drying period of: <ul style="list-style-type: none"> <li>– 24h at 23°C: Urea of clean up Ad blue.</li> </ul> </li> <li>• Immersion for 24h: <ul style="list-style-type: none"> <li>– At 40°C, followed by a drying period of 4h at 23°C: for gazole, unloaded petrol 98, Std fuel C + 15% methanol, E85 bio ethanol.</li> <li>– At 70°C, followed by a drying period of 4h at 23°C, for windscreen washer.</li> <li>– At 118°C, by a drying period of 4h at 23°C, for engine coolant.</li> </ul> </li> </ul>

All numeric performance data shows average or typical values. Please consult your sales representative for product drawings, test reports and OEM approvals.

## Construction and Typical Product Characteristics

<b>Guard Strands</b>	PA (polyamide) monofilament (Shown in white)
<b>Support Strands</b>	PET (polyethylene terephthalate) monofilament (Shown in black)



End view (enlarged diameter) of FlexGuard 2120 showing guard strands (larger, white) and support strands (smaller, black) in a typical configuration.

## Standard Sizes

Commercial Part Number	Nominal diameter (mm)	Recommended Application Range (mm)	
		Min Ø	Max Ø
FlexGuard 2120 3-C	3	2	6
FlexGuard 2120 6-C	6	4	8
FlexGuard 2120 8-C	8	6	10
FlexGuard 2120 10-C	10	8	13
FlexGuard 2120 13-C	13	6	19
FlexGuard 2120 16-C	16	13	22
FlexGuard 2120 19-C	19	16	29
FlexGuard 2120 25-C	25	19	38
FlexGuard 2120 32-C	32	25	45
FlexGuard 2120 38-C	38	32	51
FlexGuard 2120 51-C	51	38	76
FlexGuard 2120 76-C	76	51	89

C = Color Code: Black - 0 | Orange - 3 | Natural - 9 | Red - 2

\* Application based variables will influence the sleeve size required. Routing geometry and application type may present installation and fit challenges that should be considered. Max and Min values above are for guidance only. There may be multiple variations of this braid designed to facilitate installation and optimize fit. Proper sleeve sizing should be confirmed by the end user. Please consult your local sales representative for recommendations and support.

## Availability

Standard sizes are listed here. Additional sizes could be available upon request.

Available in spools and custom cut lengths. Recommended cut lengths are in 5mm increments. Please see regional drawings for cut length tolerances.

Standard colors listed below table. Additional colors may be available.

Please consult your local sales representative for regional packaging details and standards.

United States: (1) 800 926 2472 • México: (52) 442 101 8100 • Brazil: (55) 19 3116 1600

EMEA: (33) 3 44 39 06 06 • Japan: (81) 45 330 0300 • China: (86) 21 6182 7560

Southeast Asia: (66) 35 276 400 • Korea: (82) 44 861 6368 • India: (91) 124 4784565

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