## Standard polyester braided sleeving

#### • Helagaine HEGP

Helagaine HEGP braided sleeving is used in the automotive industry, in machine building, in panel building and in electrical appliances to provide abrasion protection. Its open structure prevents pockets of high temperature. HEGP fulfils the requirements of DIN5510-2 and is therefore also optimal for railway applications.

#### **Features and Benefits**

- Made from sturdy polyester
- Highly flexible
- High abrasion resistance
- Eases application by expanding when compressed
- High surface coverage (approx. 81%)
- 13 sizes for diameters from 1 66 mm for an optimal fit



Helagaine HEGP braided sleeving

Material	Polyester (PET)
Colour	Black (BK)
Operating Temperature	-50 °C to +150 °C, intermittent +220 °C
Melting Point	+250 °C
Flammability	UL94 V2, FMVSS 302
Specification	DIN 5510-2
	Ro

Temperature	intermittent +220 °C	
Melting Point	+250 °C	
Flammability	UL94 V2, FMVSS 302	
Specification	DIN 5510-2	
	halogenfree RO	F
		~



To prevent fraying, the sleeve can be cut with the hot cutting tool HSG0, see page 141.

Article-No.	Туре	Bundle Ø min.	Bundle Ø max.	Reel Length (m)
HEGP				
170-10300	HEGP03	1	5	200
170-10400	HEGP04	2	7	200
170-10500	HEGP05	3	9	200
170-10600	HEGP06	4	11	100
170-10800	HEGP08	5	12	100
170-11000	HEGP10	7	15	100
170-11200	HEGP12	8	17	100
170-11500	HEGP15	10	20	100
170-12000	HEGP20	14	26	50
170-12500	HEGP25	18	34	50
170-13000	HEGP30	20	40	50
170-14000	HEGP40	30	50	50
170-15000	HEGP50	40	66	50

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

## Standard polyester braided sleeving, expansion rate: 3:1

# • Helagaine HEGPX

Helagaine HEGPX is used whenever a higher expansion ratio is required. HEGPX is particularly suitable for use in the automotive and railway industry and in electrical appliances.

#### **Features and Benefits**

- Made from sturdy polyester
- Expansion ratio of 3:1
- Easier application over irregular shapes
- Highly flexible
- High abrasion resistance
- 7 sizes for diameters from 3 70 mm for an optimal fit



Helagaine HEGPX braided sleeving

Material	Polyester (PET)	
Colour	Black (BK)	
Operating Temperature	-50 °C to +150 °C, intermittent +220 °C	
Melting Point	+250 °C	
Flammability	UL94 V2, FMVSS 302	
Specification	DIN 5510-2	
	balogerfree	



To prevent fraying, the sleeve can be cut with the hot cutting tool HSG0, see page 141.

Article-No.	Туре	Bundle Ø min.	Bundle Ø max.	Reel Length (m)
170-00060	HEGPX06	3	10	200
170-00090	HEGPX09	5	16	100
170-00120	HEGPX12	6	19	100
170-00200	HEGPX20	13	32	100
170-00300	HEGPX30	19	45	50
170-00400	HEGPX40	32	70	50

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

Cuts in any lengths.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.





# Polyester braided sleeving, UL94V0 classification

# • Helagaine HEGPV0

HEGPV0 braided sleevings are used wherever fire protection is important such as in railway vehicles, machine tools, robotics and automatic equipment.
HEGPAV0 fulfill the requirements of DIN5510-2 and NFF-16 101.

#### **Features and Benefits**

- Made from sturdy polyester
- Self-extinguishing according to UL94 V0 for enhance fire protection
- Keeps out moisture and dirt
- Resistant to chemicals and acids
- High surface coverage



Helagaine HEGPV0 braided sleeving



To prevent fraying, the sleeve can be cut with the hot cutting tool HSG0, see page 141.

Material	Polyester (PBT)
Colour	Black with White Identification Yarn (BKIDWH)
Operating Temperature	-50 °C to +150 °C, intermittent +200 °C
Melting Point	+225 °C
Flammability	UL94 V0, FMVSS 302
Specification	NF F 16-101, DIN 5510-2
	RO

Article-No.	Туре	Bundle Ø min.	Bundle Ø max.	Reel Length (m)
170-30400	HEGPV004	3	7	100
170-30600	HEGPV006	5	11	100
170-30800	HEGPV008	7	13	100
170-31200	HEGPV012	11	17	50
170-31500	HEGPV015	13	20	50
170-32000	HEGPV020	18	25	50
170-33000	HEGPV030	27	40	50
170-34000	HEGPV040	35	50	50
170-35000	HEGPV050	40	60	50

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

## Polyester braided sleeving, expansion rate: 3:1, UL94V0 classification

#### • Helagaine HEGPV0X

Helagaine HEGPVOX braided sleeving is especially suitable wherever fire protection and higher expansion ratio are important. Helagaine HEGPV0X offers superior cable protection for railway vehicle construction, machine tools, robotics and automatic equipment.

#### **Features and Benefits**

- Helagaine HEGPVOX braided sleeving made from polyester
- Self-extinguishing according to UL94 V0 for ehanced fire protection
- Easier application over irregular shapes due to expansion ratio of 3:1
- Good abrasion protection
- Keeps out moisture and dirt
- Resistant to acids



Helagaine flame-retardant UL94 VO braided sleeving.



To prevent fraying, the sleeve can be cut with the hot cutting tool HSG0, see page 141.

Material	Polyester (PBT)	
Colour	Black with White Identification Yarn (BKIDWH)	
Operating Temperature	-70 °C to +150 °C	
Melting Point	+225 °C	
Flammability	UL94 V0, FMVSS 302	
Specification	UL, NF F 16-101, DIN 5510-2	

Article-No.	Туре	Bundle Ø min.	Bundle Ø max.	Reel Length (m)
170-50030	HEGPV0X03	2	6	200
170-50060	HEGPV0X06	3	10	200
170-50090	HEGPV0X09	5	16	100
170-50120	HEGPV0X12	6	19	100
170-50200	HEGPV0X20	12	32	100
170-50300	HEGPV0X30	19	45	50
170-50400	HEGPV0X40	32	70	50
170-50500	HEGPV0X50	38	76	50

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

Cuts in any lengths.





Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.





# Polyamide braided sleeving for excellent abrasion resistance

#### • Helagaine HEGPA66

Helagaine HEGPA66 is particularly suitable for vehicle manufacturing as well as plant construction.

#### **Features and Benefits**

- Made from heavy-duty polyamide yarn
- Eases application by expanding when compressed
- High survace covering
- Excellent abrasion resistance



Helagaine HEGPA66 braided sleeving are made from Polyamid 6.6 and offer excellent abrasion resistance.



To prevent fraying, the sleeve can be cut with the hot cutting tool HSG0, see page 141.

Material	Polyamide 6.6 (PA66)	
Colour	Black (BK)	
Operating Temperature	-60 °C to +150 °C, intermittent +200 °C	
Melting Point	+255 °C	
Flammability	UL94 V2, FMVSS 302	
Specification	DIN 5510-2, NF F 16-101	
		halogenfree

Article-No.	Туре	Bundle Ø min.	Bundle Ø max.	Reel Length (m)
170-40400	HEGPA6604	3	6	200
170-40600	HEGPA6606	4	8	100
170-40800	HEGPA6608	5	10	100
170-41000	HEGPA6610	7	12	100
170-41200	HEGPA6612	8	14	100
170-41600	HEGPA6616	12	18	50
170-42000	HEGPA6620	15	23	50
170-42500	HEGPA6625	18	28	50
170-43000	HEGPA6630	25	32	50
170-44000	HEGPA6640	30	44	50
170-45000	HEGPA6650	40	55	50
170-46000	HEGPA6660	50	65	50

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

# Polyester braided sleeving for reducation of vibration noise

# • Helagaine HEGSAS

Helagaine HEGSAS braided sleeving is used primarily in the automotive sector and wherever vibration noise must be reduced. Helagaine HEGSAS can be supplied in pre-cut lengths on request

#### **Features and Benefits**

- Made of sturdy polyester
- Superior noise reduction
- Easier application over irregular shapes due to expansion ratio of 3:1
- High surface coverage
- Excellent abrasion resistance



With its special yarn structure, Helagaine HEGSAS is very effective in reducing vibration noise.



To prevent fraying, the sleeve can be cut with the hot cutting tool HSGO, see page 141.

Material	Polyester (PET)	
Colour	Black (BK)	
Operating Temperature	-50 °C to +150 °C, intermittent +200 °C	
Flammability	FMVSS 302	
		halogenfree

Article-No.	Туре	Bundle Ø min.	Bundle Ø max.	Reel Length (m)
170-60401	HEGSAS04	2	8	200
170-60600	HEGSAS06	4	11	200
170-60900	HEGSAS09	6	16	100
170-61200	HEGSAS12	8	20	100
170-61500	HEGSAS15	10	24	50
170-62000	HEGSAS20	13	30	50
170-63000	HEGSAS30	20	40	25
170-64000	HEGSAS40	30	50	25

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

Cuts in any lengths.

Date of issue: Juni 2012

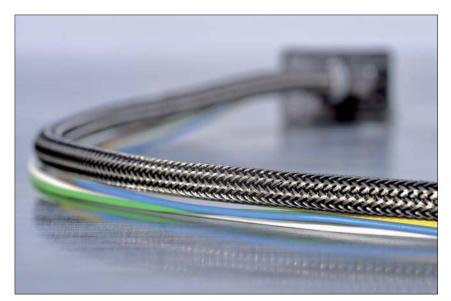
# Braided sleeving for electromagnetic protection

#### • Helagaine HEGEMIP

Helagaine HEGEMIP braided sleeving is used for highly sensitive electronics, such as electrical appliances and machines, radio equipment, military engineering and automobiles.

#### **Features and Benefits**

- Excellent electromagnetic protection
- Extremely flexible, expandable and easy to apply
- Superior abrasion protection
- No kinks or tears, even when bending the sleeve 90°
- Particularly suitable for applications with restricted space or requiring movement
- Fulfils the requirements of international EMI norm (10KHz to 1GHz)



HEGEMIP braided sleeving: reliable protection from electromagnetic radiation.

Material	Polyester (halogen free), Tin-plated copper (TNCU)
Colour	Tin-coloured and Black (TCBK)
Operating Temperature	-40 °C to +175 °C, intermittent +200 °C
Flammability	UL94 V2, FMVSS 302
EMI requirements	10 KHz to 1 GHz according to CISPR25 (DIN VDE 0879-2)
	hologenfree

Article-No.	Туре	Ø D	Bundle Ø min.	Bundle Ø max.	Reel Length (m)	Weight (g/m)
173-00400	HEGEMIP04	4	4	6.5	100	21.5
173-00600	HEGEMIP06	6	5	10	100	28.5
173-00800	HEGEMIP08	8	8	11.5	100	26.5
173-01000	HEGEMIP10	10	8	13	50	43.5
173-01200	HEGEMIP12	12	10	15	50	48.0
173-01400	HEGEMIP14	14	12	18	100	58.0
173-01600	HEGEMIP16	16	14	20	100	72.5
173-01800	HEGEMIP18	18	16	22	50	78.6
173-02000	HEGEMIP20	20	18	25	50	100.0

All dimensions in mm. Subject to technical changes.

# Braided sleeving for electromagnetic protection, UL94V0 classification

#### • Helagaine HEGEMIPV0

Helagaine HEGEMIPVO braided sleeving is used for protection of highly sensitive electronics in industries, wherever fire protection is important, such as mass transit, aerospace and military industry.

#### **Features and Benefits**

- Excellent electromagnetic protection
- Extremely flexible, expandable and easy to apply
- Self-extinguishing according to UL94 V0
- Superior abrasion protection
- No kinks or tears, even when bending the sleeve 90°
- Particularly suitable for applications with restricted space or requiring movement
- Fulfils the requirements of international EMI norm (10 KHz to 1 GHz)



HEGEMIPVO braided sleeving: EMI protection for enhanced flame protection.

Material	Polyester (PBT), Tin-plated copper (TNCU)
Colour	Tin-coloured and Black (TCBK)
Operating Temperature	-40 °C to +175 °C, intermittent +200 °C
Flammability	UL94 V0, FMVSS 302
EMI requirements	10 KHz to 1 GHz according to CISPR25 (DIN VDE 0879-2)

Article-No.	Туре	ØD	Bundle Ø min.	Bundle Ø max.	Reel Length (m)	Weight (g/m)
173-60400	HEGEMIPV004	4	4	6.5	100	_
173-60600	HEGEMIPV006	6	5	10	100	28.5
173-60800	HEGEMIPV008	8	8	11.5	100	26.5
173-61000	HEGEMIPV010	10	8	13	50	43.5
173-61200	HEGEMIPV012	12	10	15	50	48.0
173-61400	HEGEMIPV014	14	12	18	100	58.0
173-61600	HEGEMIPV016	16	14	20	100	72.5
173-61800	HEGEMIPV018	18	16	22	50	78.6
173-62000	HEGEMIPV020	20	18	25	50	100.0

All dimensions in mm. Subject to technical changes.

Cuts in any lengths.

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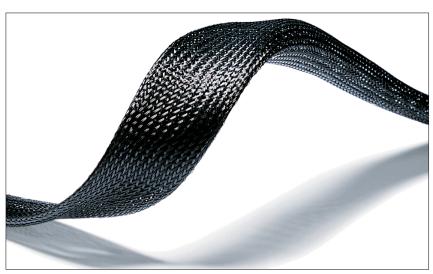
# Light weight standard polyester braided sleeving

#### • Helagaine HEGPL

Helagaine HEGPL is used primarily in automobile interiors, motor compartments, car bodies and underfloors.

#### **Features and Benefits**

- Made from sturdy polyester
- Expansion ratio of 3:1
- Easier application over irregular shapes
- Highly flexible
- High abrasion resistance



Helagaine HEGPL Braided Sleeving



To prevent fraying, the sleeve can be cut with the hot cutting tool HSG0, see page 141.

Material	Polyester (PET)
Colour	Black (BK)
Operating Temperature	-50 °C to +150 °C, intermittent +220 °C
Melting Point	+250 °C
Flammability	UL94 V2, FMVSS 302, Type B
	halogenfree

Article-No.	Туре	Bundle Ø min.	Bundle Ø max.	Reel Length (m)
170-80503	HEGPL03	3	8	1000
170-80506	HEGPL06	5	12	400
170-80512	HEGPL12	8	21	300
170-80520	HEGPL20	12	30	300
170-80530	HEGPL30	18	55	200
170-80540	HEGPL40	24	66	150
170-80550	HEGPL50	30	82	150

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

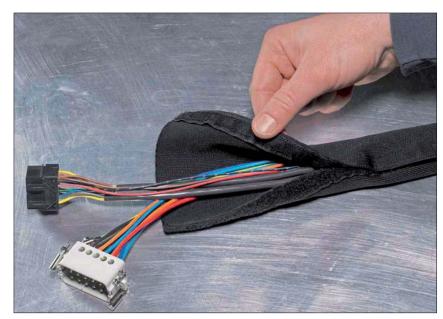
# Re-sealable protective sleeving for post-termination cable organisation

#### • HELAHOOK

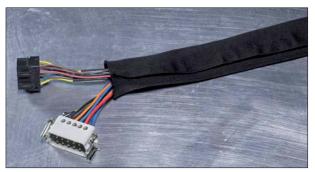
HELAHOOK is used in industrial machines, electrical appliances, shipbuilding, railway vehicles and in the aerospace industry. HELAHOOK is also employed in automobiles or commercial vehicles. It is the ideal solution for post-termination cable organisation and wherever repeated use is a necessity.

#### **Features and Benefits**

- Re-sealable cable protection made from polyester
- Very elastic, fits snuggly around the cables
- Hook and loop sealing system can be used for retro-fitting
- Abrasion resistant



HELAHOOK protective sleeving allows for retrospective fitting and repeated use.



HELAHOOK provides excellent abrasion resistance.

Material	Polyester (PET)
Colour	Black (BK)
Operating Temperature	-50 °C to +150 °C, continuous
Flammability	UL94 V2, FMVSS 302
Specification	NF F 16-101
	halogenfree

Article-No.	Туре	Bundle Ø min.	Bundle Ø max.	Reel Length (m)
170-05100	HELAHOOK10	3	15	25
170-05150	HELAHOOK15	10	20	25
170-05200	HELAHOOK20	15	30	25
170-05250	HELAHOOK25	20	40	25
170-05300	HELAHOOK30	25	50	25

All dimensions in mm. Subject to technical changes.

Cuts in any lengths are available on request.



Date of issue: Juni 2012

#### Polyester self-closing sleeving

#### • Helagaine Twist-In

Helagaine Twist-In has many applications in engineering, electronics and electrical installations.

#### **Features and Benefits**

- Self-closing sleeve made form polyester
- Ideal fo retro-fitting
- Very easy, quick installation and removal
- Quick and easy access to bundle for inspection, maintenance and assembly
- Small range of sizes covers a wide range of applications



Helagaine Twist-In gives easy access to cables and wires for inspection, maintenance and assembly.



To prevent fraying, the sleeve can be cut with the hot cutting tool HSG0, see page 141.

Material	Polyester (PET)	
Colour	Black (BK)	
Operating Temperature	-70 °C to +125 °C	
Melting Point	+255 °C	
Flammability	FMVSS 302, self-extinguishing	AB Cours
		halogenfree

			Bundle	Bundle	Weight	Reel Length
Article-No.	Туре	Material	Ø min.	Ø max.	(g/m)	(m)
170-01000	Twist-In 05	PET	4	5	10.25	150
170-01001	Twist-In 08	PET	5	8	13.30	100
170-01002	Twist-In 13	PET	10	13	21.20	50
170-01004	Twist-In 19	PET	16	19	28.70	25
170-01005	Twist-In 25	PET	19	25	42.20	25
170-01006	Twist-In 29	PET	25	29	44.00	15
170-01007	Twist-In 32	PET	29	32	48.10	15
170-01008	Twist-In 38	PET	32	38	58.00	15

All dimensions in mm. Subject to technical changes.