

Reference

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Harmonized European Cable Overview

Harmonized Wire Coding System
Licensing Bodies of CENELEC

Harmonized Hook-up Wire

Multi-Standard <HAR> Hook-up Wire

H05V-K: UL AWM Style 1007 & 1569, UL/CSA;
H07V-K: UL AWM Style 1015, UL MTW 1063, CSA

<HAR> Hook-up Wire

Type H05V-K & H07V-K

Halogen-free <HAR> Hook-up Wire

Type H05Z-K & H07Z-K

Harmonized Cordage

ÖLFLEX® POWER QUAD II

Oil-Resistant PVC Cordage with <HAR> & SJTO Approvals for Global Use

H05VV-F Cordage

Flexible European Cordage with PVC Jacket; <HAR>

ÖLFLEX® POWER IX

Heavy Duty, Neoprene Cordage with <HAR> and SOOW Approvals for Global Use

H07RN-F Cordage

Heavy Duty, Neoprene Flexible European Cordage; <HAR>

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European Hook-up
Wire & Cordage

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Quick Select Chart

Product	Material (insulation / jacket)	Approval	Description	Page
Multi-Standard <HAR> Hook-up Wire, H05V-K	PVC	H05V-K	<HAR> 500V 70°C IEC 60332.1.2 Flame	124
		UL 1007	UL AWM 300V 80°C VW-1	
		UL 1569	UL AWM 300V 105°C VW-1	
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		UL 1015	UL AWM 600V 105°C VW-1	
		UL 1063	UL MTW 600V 90°C VW-1	
<HAR> Hook-up Wire	PVC	H05V-K	<HAR> 500V 70°C IEC 60332.1.2 Flame	125
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ÖLFLEX® POWER QUAD II	PVC / PVC	UL/CSA SJTO, H05VV-F	Service Cord Oil Resistant 300V 90°C FT1	127
H05VV-F Cordage	PVC / PVC	H05VV-F	<HAR> 500V 70°C IEC 60332.1.2 Flame	128
ÖLFLEX® POWER IX	Rubber / Neoprene	UL/CSA SOOW, H07RNF	Service Cord Oil & Weather Resistant 600V 90°C FT2	129
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Harmonized European Cable Overview

Lapp's harmonized and CE-conforming cables are utilized on electronic and electrical equipment intended for use in Europe.

The development and implementation of common standards for the European marketplace facilitates export trade to European countries. An international safety standards agency called CENELEC (European Committee for Electrotechnical Standardization) was formed to develop electrical standards that would be universally acceptable to all CENELEC member nations, which are noted in the table below.

The electrical standards are classified as Harmonization Documents. Lapp's <HAR> cordage and hook-up wire conforms to Harmonization Documents HD-21 & HD-22:

- **HD-21** Specification for polyvinyl chloride-insulated wire and cables
- **HD-22** Specification for rubber-insulated flexible cords and cables

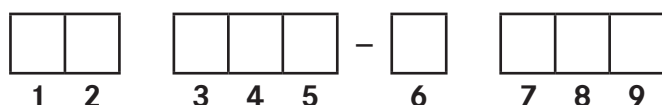
In order to identify a harmonized wire or cable, one of the following identification methods are required: (1) Printed letters <HAR> on either the overall jacket or the insulation, or (2) printed tape or identification threads.

Recommended applications as defined in the Harmonization Documents are as follows:

- **PVC Cord (H05VV-F)**
For use in offices, domestic premises and household appliances. Permitted for cooking and heating applications, provided cable does not contact hot parts and is not subjected to radiation. NOT SUITABLE FOR OUTDOOR USE.
- **Rubber Cord (H05RR-F / H07RN-F)**
For use when cable is subjected to mechanical stress in dry or damp areas. May be used as power supply cable for portable motors, appliances, domestic electric and electrical tools, and agricultural and utility water equipment. May be installed on plaster or directly on structural parts of heavy machinery.

The CE symbol (CE) identifies a product that conforms to a European Directive developed by the European Union. This compliance is necessary for exporting certain cable types to countries within the European community.

Harmonized Wire Coding System



- | | |
|--|--|
| <p>1 Basic Type
H Harmonized type
A National type</p> <p>2 Working Voltage
03 300V
05 300/500V
07 450/750V</p> <p>3 Insulation
V PVC
R Rubber
S Silicone rubber
Z Halogen-free</p> <p>4 Sheath-Cladding
V PVC
R Rubber
N Chloroprene rubber
J Glass-filament braiding
T Textile braiding</p> <p>5 Special Features
H Ribbon cable, separable
H2 Ribbon cable, non-separable</p> | <p>6 Conductor Types
U Single wire
R Multi wire
K Fine wire (for stationary use)
F Fine wire (for flexible use)
H Super fine wire
Y Tinsel strand</p> <p>7 Number of Conductors</p> <p>8 Protective Conductor
X Without protective conductor
G With protective conductor</p> <p>9 Conductor Cross-Section
Area specified in mm²</p> |
|--|--|

Licensing Bodies of CENELEC

Austria	Österreichischer Verband für Elektrotechnik (OVE)
Belgium	Comité Electrotechnique Belge (CEB)
Czech Republic	Czech Office for Standards, Metrology & Testing (UNMZ)
Denmark	Fonden Dansk Standard (DS)
Finland	Kansallinen Standardisoimisjärjestö (SESKO)
France	Union Technique de l'Electricité (UTE)
Germany	Deutsche Kommission Elektrotechnik Elektronik (DKE)
Greece	Hellenic Organization for Standardization (ELOT)
Hungary	Magyar Szabványügyi Testület (MSZT)
Ireland	National Standards Authority of Ireland (NSAI)
Italy	Comitato Elettrotecnico Italiano (CEI)
Luxembourg	Institut Luxembourgeois de la Normalisation, de l'Accréditation, de la Sécurité et Qualité des Produits et Services (ILNAS)
Netherlands	Nederlands Elektrotechnisch Comité (NEC)
Portugal	Instituto Português da Qualidade (IPQ)
Spain	Asociación Española de Normalización y Certificación (AENOR)
Sweden	Svenska Elektriska Materiel Kontrollanstalten (SEMKO)
UK	British Standards Institution (BSI)

Multi-Standard <HAR> Hook-up Wire

H05V-K: UL AWM Style 1007 & 1569, UL/CSA; H07V-K: UL AWM Style 1015, UL MTW 1063, CSA



This internationally approved hook-up wire was designed to meet North American and European market requirements. It passes <HAR> H05V-K, <HAR> H07V-K, UL AWM, UL MTW (16 AWG & larger), CSA TEW & CE.

Recommended Applications

Panel and machine wiring for domestic and export usage; internal wiring of devices, electrical, and medical equipment

Approvals



Cable Attributes, see page 659			
OR-02	FR-02	FL-02	MP-01
OIL	FLAME	MOTION	MECHANICAL

For wiring material that conforms to H07V2-K, please call your Lapp sales representative.

Similar Cables

- <HAR> Hook-up Wire
- Halogen-free <HAR> Hook-up Wire

Technical Data

Temperature Range:

- <HAR>/IEC: -40°C to +70°C
- UL/CSA: -40°C to +105°C

Nominal Voltage:

- H05V-K:
 - <HAR>/IEC: 300/500V
 - UL/CSA: 300V
- H07V-K:
 - <HAR>/IEC: 450/750V
 - UL/CSA: 600V

Test Voltage:

- H05V-K: 2000V
- H07V-K: 2500V

Conductor Stranding:

Class 5 fine wire

Color Code:

- | | |
|------------------|---------------|
| 00: Green/Yellow | 07: Violet |
| 01: Black | 08: Pink |
| 02: Blue | 09: Orange |
| 03: Brown | 10: Yellow** |
| 04: Red | 11: Green** |
| 05: White | 14: Dark Blue |
| 06: Gray | |

Approvals:

- H05V-K
 - UL: AWM 1007 & 1569
 - Canada: CSA AWM I A/B
 - Additional: <HAR> H05V-K
- H07V-K:
 - UL: MTW per UL 1063 AWM 1015
 - Canada: TEW
 - Additional: <HAR> H07V-K CE & RoHS

Part Number	Nominal Outer Diameter (inches) (mm)	Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	Part Number	Nominal Outer Diameter (inches) (mm)	Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)
H05V-K				8 AWG (10 mm²)			
22 AWG (0.50 mm²)				41608..	0.268	6.8	65
41804..	0.098	2.5	3	6 AWG (16 mm²)			
20 AWG (0.75 mm²)				41609..*	0.354	9.0	103
41805..	0.102	2.6	5	4 AWG (25 mm²)			
18 AWG (1.00 mm²)				41610..	0.402	10.2	161
41806..	0.110	2.8	6	2 AWG (35 mm²)			
H07V-K				41611..	0.461	11.7	226
16 AWG (1.50 mm²)				1 AWG (50 mm²)			
41604..	0.134	3.4	10	41612..	0.547	13.9	323
14 AWG (2.50 mm²)				2/0 AWG (70 mm²)			
41605..	0.157	4.0	16	41613..	0.630	16.0	452
12 AWG (4 mm²)				3/0 AWG (95 mm²)			
41606..	0.181	4.6	26	41614..	0.717	18.2	613
10 AWG (6 mm²)				4/0 AWG (120 mm²)			
41607..	0.201	5.1	39	41615..	0.780	19.8	774
			48				864

For Lapp part number, add the double digit color code (see above) to the part number prefix in the table; e.g.: 16 AWG H07V-K green/yellow = 4160400

* No <HAR> approval available for this size (X07V-K). ** For these colors no <HAR> approval for 1.5 mm² or larger.

Photographs are not to scale and are not true representations of the products in question. For current information go to our website. If not otherwise specified, all values relating to the product are nominal values.

<HAR> Hook-up Wire

Type H05V-K & H07V-K



This hook-up wire is <HAR> approved and conforms to European standards. It can be used to wire electronic and electrical equipment for export to Europe.

Recommended Applications

Panel and machine wiring for export usage; electronic equipment; medical equipment; wire bundling; MRO replacement or European equipment and machinery

Approvals



Cable Attributes, see page 659			
 OR-02	 FR-02	 FL-02	 MP-01
OIL	FLAME	MOTION	MECHANICAL

Similar Cables

- Multi-Standard Hook-up Wire
- Halogen-free <HAR> Hook-up Wire

Technical Data

Temperature Range: - for stationary use: -30°C to +80°C		Color Code: 00: Green/Yellow 07: Violet 01: Black 08: Pink 02: Blue 09: Orange 03: Brown 10: Transparent* 04: Red 11: Yellow* 05: White 12: Green* 06: Gray 14: Dark blue	
Nominal Voltage: - H05V-K: 300/500V - H07V-K: 450/750V		Approvals: <HAR> H05V-K & H07V-K CE & RoHS	
Test Voltage: - H05V-K: 2000V - H07V-K: 2500V			
Conductor Stranding: Class 5 fine wire			

Part Number	Nominal Outer Diameter (inches) (mm)	Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	Part Number	Nominal Outer Diameter (inches) (mm)	Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)
H05V-K				4 AWG (25 mm²)			
22 AWG (0.50 mm²)				4521..1	0.402	10.2	195
4510..1	0.099	2.5	3	2 AWG (35 mm²)			
20 AWG (0.75 mm²)				4521..2	0.461	11.7	226
4510..2	0.106	2.7	5	1 AWG (50 mm²)			
18 AWG (1.00 mm²)				4521..3	0.547	13.9	323
4510..3	0.110	2.8	6	2/0 AWG (70 mm²)			
H07V-K				4521..4	0.630	16.0	452
16 AWG (1.50 mm²)				3/0 AWG (95 mm²)			
4520..1	0.134	3.4	10	4521..5	0.717	18.2	613
14 AWG (2.50 mm²)				4/0 AWG (120 mm²)			
4520..2	0.161	4.1	16	4521..6	0.795	20.2	774
12 AWG (4 mm²)				300 KCMIL (150 mm²)			
4520..3	0.189	4.8	26	4521..7	0.886	22.5	968
10 AWG (6 mm²)				370 KCMIL (185 mm²)			
4520..4	0.209	5.3	39	4521..8	0.980	24.9	1193
8 AWG (10 mm²)				480 KCMIL (240 mm²)			
4520..5	0.268	6.8	65	4521..9	1.118	28.4	1548
6 AWG (16 mm²)							
4520..6	0.319	8.1	103				

For Lapp part number, add the double digit color code (see above) to the part number in the table; ex.: 16 AWG H07V-K green/yellow = 4520001

* For these colors no <HAR> approval for 1.5 mm² or larger.

Photographs are not to scale and are not true representations of the products in question. For current information go to our website. If not otherwise specified, all values relating to the product are nominal values.

Halogen-free <HAR> Hook-up Wire

Type H05Z-K & H07Z-K



Construction

Conductors: Finely stranded bare copper

Insulation: Cross-linked, halogen-free

Recommended Applications

Wiring devices, switch gear cabinets, and distribution boxes; in tubes on, in, or under plaster; closed installation ducts; dry rooms; areas where human safety and damage to electronic components are a concern

Application Advantage

- Low smoke, zero halogen (LSZH)
- Flame retardant
- 13 standard color options
-

Approvals



Cable Attributes, see page 659

OR-01	FR-02	FL-02	MP-01
OIL	FLAME	MOTION	MECHANICAL

Similar Cables

- Multi-standard <HAR> Hook-up Wire
- <HAR> Hook-up Wire

Technical Data

Temperature Range: -15°C to +90°C

Nominal Voltage:

- H05Z-K: 300/500V
- H07Z-K: 450/750V

Test Voltage:

- H05Z-K: 2000V
- H07Z-K: 2500V

Conductor Stranding: Class 5 fine wire

Color Code:

00: Green/yellow	07: Violet
01: Black	08: Pink
02: Blue	09: Orange
03: Brown	11: Yellow*
04: Red	12: Green*
05: White	14: Dark blue
06: Gray	

Approvals:

Attributes: Low smoke / low smoke density acc. to IEC 61034
Flame retardant acc. to IEC 60332.1.2
Additional: <HAR> H05Z-K & H07Z-K
CE & RoHS

Part Number	Nominal Outer Diameter (inches) (mm)	Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	Part Number	Nominal Outer Diameter (inches) (mm)	Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)
H05Z-K				8 AWG (10 mm²)			
22 AWG (0.50 mm²)				4726..5	0.280	7.1	65
4725..1	0.102	2.6	3	6 AWG (16 mm²)			
20 AWG (0.75 mm²)				4726..6	0.331	8.4	103
4725..2	0.110	2.8	5	4 AWG (25 mm²)			
18 AWG (1.00 mm²)				4726..7	0.417	10.6	161
4725..3	0.114	2.9	6	2 AWG (35 mm²)			
H07Z-K				4726..8	0.476	12.1	226
16 AWG (1.50 mm²)				1 AWG (50 mm²)			
4726..1	0.138	3.5	10	4726..9	0.567	14.4	323
14 AWG (2.50 mm²)				2/0 AWG (70 mm²)			
4726..2	0.169	4.3	16	4727..1	0.654	16.6	452
12 AWG (4 mm²)				3/0 AWG (95 mm²)			
4726..3	0.193	4.9	26	4727..2	0.740	18.8	613
10 AWG (6 mm²)							
4726..4	0.217	5.5	39				

For Lapp part number, add the double digit color code (see above) to the part number in the table, e.g.: 16 AWG H07Z-K green/yellow = 4726001

* No <HAR> approval for these colors in sizes 16 AWG (1.5 mm²) and larger.

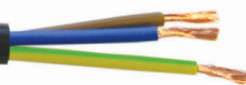
Photographs are not to scale and are not true representations of the products in question.

For current information go to our website. If not otherwise specified, all values relating to the product are nominal values.

ÖLFLEX® POWER QUAD II

Oil-Resistant PVC Cordage with <HAR> & SJTO Approvals for Global Use

LAPP KABEL STUTTGART ÖLFLEX® POWER QUAD II



ÖLFLEX® POWER QUAD II is a PVC cordage with UL/CSA SJTO and <HAR> H05VV-F approval. It has a very oil-resistant jacket and an international color code. ÖLFLEX® POWER QUAD II can be used in European, American, Asian, and Canadian cordage applications; one cable does the work of four.

Construction

Conductors: Finely stranded bare copper

Insulation: Specially formulated PVC

Jacket: PVC; black

Recommended Applications

Power cordage for domestic machinery; portable tools; data processing; control systems; commercial appliances

Approvals



Application Advantage

- International approvals: UL, CSA, HAR, CE
- One cable does the job of four, reducing inventory
- One specification for easy and safe installation
- Oil-resistant PVC jacket meets Oil Res I/II
- UV-resistant

Cable Attributes, see page 659

	OR-04		FR-02		FL-02		MP-02
OIL		FLAME		MOTION		MECHANICAL	

Similar Cables

- ÖLFLEX® POWER IX
- H05VV-F Cordage

Complete the Installation

	SKINTOP® Strain Relief: page 502		EPIC® Pin & Sleeve: page 461
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Technical Data

	Minimum Bend Radius:	4 x cable diameter		Color Code:	VDE 0293-308: Chart 6, page 696
	Temperature Range:			Approvals:	
	- UL/CSA SJTO:	-25°C to +90°C		UL:	SJTO per UL 62 AWM 21098
	- <HAR> H05VV-F:	-30°C to +70°C		Attributes:	UL Oil Res I/II Sunlight Resistant -25°C Cold Bend
	Nominal Voltage:			Canada:	cUL SJTO cRU AWM I/II A/B FT 1
	- UL/CSA SJTO:	300V		Additional:	<HAR> H05VV-F CE & RoHS
	- <HAR> H05VV-F:	500V			
	Test Voltage:	2000V			
	Conductor Stranding:	Class 5 fine wire			

Part Number	Number of Conductors (incl. ground)	Nominal Outer Diameter (inches)	Nominal Outer Diameter (mm)	Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® Non-Metallic PG Thread	Part Number	Number of Conductors (incl. ground)	Nominal Outer Diameter (inches)	Nominal Outer Diameter (mm)	Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® Non-Metallic PG Thread
18 AWG (17 AWG/1.00 mm²)							14 AWG (13 AWG/2.50 mm²)						
311802**	2	0.265	6.7	13	44	S2109	311403	3	0.407	10.3	45	101	S2113
311803	3	0.283	7.2	19	53	S2111	311404	4	0.447	11.4	60	130	S2113
311804	4	0.304	7.7	25	66	S2111	311405	5	0.496	12.6	75	150	S2116
311805	5	0.348	8.8	32	93	S2111							
16 AWG (15 AWG/1.50 mm²)													
311602**	2	0.305	7.7	19	62	S2111							
311603	3	0.332	8.4	28	73	S2111							
311604	4	0.364	9.2	37	84	S2111							
311605	5	0.405	10.3	46	99	S2113							

* AWG in parentheses above will be written on cable legend per the latest UL 62 requirements

** 2c cable does not include ground.

Recommended SKINTOP® assumes minimal OD variance. Additional configurations are available, please see our SKINTOP® Section. Photographs are not to scale and are not true representations of the products in question. For current information go to our website. If not otherwise specified, all values relating to the product are nominal values.

H05VV-F Cordage

Flexible European Cordage with PVC Jacket; <HAR>



H05VV-F is a PVC cordage that meets <HAR> H05VV-F approval. It is designed for power supply use on European equipment.

Recommended Applications

Power cordage for European machinery; portable tools; data processing; control systems; commercial appliances; MRO repair for European machinery

Construction

Conductors: Finely stranded bare copper

Insulation: PVC

Jacket: PVC; black

Application Advantage

- Meets <HAR> directives for power cordage
- MRO replacement cable for European machinery
- UV-resistant

Approvals



Cable Attributes, see page 659			
OR-01	FR-01	FL-01	MP-01
OIL	FLAME	MOTION	MECHANICAL

Similar Cables

- ÖLFLEX® POWER QUAD II
- H07RN-F Cordage

Complete the Installation



SKINTOP®
Strain Relief:
page 502



EPIC®
Pin & Sleeve:
page 461

Technical Data

Minimum Bend Radius:	5 x cable diameter	Conductor Stranding:	Class 5 fine wire
Temperature Range:	-30°C to +70°C	Color Code:	VDE 0293-308: Chart 6, page 696
Nominal Voltage:	300/500V	Approvals:	<HAR> H05VV-F CE & RoHS
Test Voltage:	3000V		

Part Number	Number of Conductors (incl. ground)	Nominal Outer Diameter (inches) (mm)	Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® Non-Metallic PG Thread	Part Number	Number of Conductors (incl. ground)	Nominal Outer Diameter (inches) (mm)	Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® Non-Metallic PG Thread
19 AWG (0.75 mm²)						16 AWG (1.50 mm²)					
1601103*	2	0.252 6.4	10	35	S1109	1601114*	2	0.303 7.7	19	57	S1111
1601102	3	0.268 6.8	15	42	S1109	1601111	3	0.335 8.5	29	71	S1111
16011263	4	0.291 7.4	20	50	S1111	16011163	4	0.374 9.5	39	90	S1111
18 AWG (1.00 mm²)						16011233	5	0.417 10.6	49	112	S1113
1601109	3	0.283 7.2	20	50	S1111	14 AWG (2.50 mm²)					
16011193	4	0.307 7.8	26	62	S1111	1601121*	2	0.366 9.3	33	85	S1111
16011293	5	0.346 8.8	33	76	S1111	1601125	3	0.394 10.0	49	106	S1113
						16011353	4	0.433 11.0	65	132	S1113
						16011123	5	0.484 12.3	81	163	S1116

* 2c cable does not include ground.

Recommended SKINTOP® assumes minimal OD variance. Additional configurations are available, please see our SKINTOP® Section. Photographs are not to scale and are not true representations of the products in question. For current information go to our website. If not otherwise specified, all values relating to the product are nominal values.

ÖLFLEX® POWER IX

Heavy Duty, Neoprene Cordage with <HAR> and SOOW Approvals for Global Use

LAPP KABEL STUTTGART ÖLFLEX® POWER IX



ÖLFLEX® POWER IX is a neoprene cordage with UL/CSA SOOW and <HAR> H07RN-F approval. It has an international color code and a jacket which is resistant to oil, chemicals, and abrasion. ÖLFLEX® POWER IX can be used in European, American, Asian, and Canadian cordage applications; one cable does the work of four.

Recommended Applications

Power cordage for domestic and exported machinery; portable tools; data processing; control systems; commercial appliances

Approvals



Construction

Conductors: Finely stranded bare copper

Insulation: Rubber

Jacket: Neoprene

Application Advantage

- International approvals: UL, CSA, <HAR>, CE
- One cable does the job of four, reducing inventory
- One specification for easy and safe installation
- Oil-, chemical-, and abrasion-resistant jacket
- Ideal for high-stress applications in dry and damp environments
- UV-resistant, outdoor use

Cable Attributes, see page 659

 OR-02	 FR-01	 FL-02	 MP-02
OIL	FLAME	MOTION	MECHANICAL

Similar Cables

- ÖLFLEX® POWER QUAD II
- H07RN-F Cordage

Complete the Installation



SKINTOP®
Strain Relief:
page 502



EPIC®
Pin & Sleeve:
page 461

Technical Data

 Minimum Bend Radius:	7.5 x cable diameter	 Conductor Stranding:	Class 5 fine wire
 Temperature Range:		 Color Code:	VDE 0293-308: Chart 6, page 696
- UL/CSA SOOW:	-40°C to +90°C	 Approvals:	UL: SOOW per UL 62
- <HAR> H07RN-F:	-25°C to +60°C		Attributes: -40°C Cold Bend
 Nominal Voltage:			Sunlight Resistant
- UL/CSA:	600V		Canada: c(UL) SOOW
- <HAR> H07RN-F:	450/750V		Additional: <HAR> H07RN-F
 Test Voltage:	2000V		CE & RoHS

Part Number	Number of Conductors (incl. ground)	Nominal Outer Diameter (inches) (mm)	Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® Non-Metallic PG Thread	Part Number	Number of Conductors (incl. ground)	Nominal Outer Diameter (inches) (mm)	Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® Non-Metallic PG Thread
18 AWG (17 AWG/1.00 mm²)						10 AWG (9 AWG/6 mm²)					
321803	3	0.380 9.7	17	84	S2113	321003	3	0.670 17.0	90	304	S2121
321804	4	0.410 10.4	23	96	S2113	321004	4	0.720 18.3	135	366	S2129
14 AWG (13 AWG/2.50 mm²)						321005	5	0.790 20.1	157	442	S2129
321404	4	0.590 15.0	57	216	S2121	8 AWG (7 AWG/10 mm²)					
12 AWG (11 AWG/4 mm²)						320803	3	0.900 22.9	173	537	S2129
321204	4	0.670 17.0	90	300	S2121	320804	4	0.980 24.9	231	652	S2136
321205	5	0.740 18.8	112	355	S2129						

AWG in parentheses above with be written on cable legend per the latest UL 62 requirements

Recommended SKINTOP® assumes minimal OD variance. Additional configurations are available, please see our SKINTOP® Section. Photographs are not to scale and are not true representations of the products in question. For current information go to our website. If not otherwise specified, all values relating to the product are nominal values.

H07RN-F Cordage

Heavy Duty, Neoprene Flexible European Cordage; <HAR>



H07RN-F is a neoprene cordage that meets <HAR> H07RN-F approval. It has an international color code and a jacket which is resistant to oil, chemicals, and abrasion.

Recommended Applications

Power cordage for European machinery; portable tools; data processing; control systems; commercial appliances; MRO replacement for European machinery

Approvals



Construction

Conductors: Finely stranded bare copper

Insulation: Rubber

Jacket: Neoprene

Application Advantage

- Oil-, chemical-, and abrasion-resistant jacket
- Ideal for high-stress applications in dry and damp environments
- MRO replacement for European machinery
- UV-resistant, outdoor use

Cable Attributes, see page 659

OR-01	FR-01	FL-01	MP-02
OIL	FLAME	MOTION	MECHANICAL

Similar Cables

- ÖLFLEX® POWER QUAD II
- ÖLFLEX® POWER IX

Complete the Installation



SKINTOP®
Strain Relief:
page 502



EPIC®
Pin & Sleeve:
page 461

Technical Data

Minimum Bend Radius:	10 x cable diameter	Conductor Stranding:	Class 5 fine wire
Temperature Range:	-25°C to +60°C	Color Code:	VDE 0293-308: Chart 6, page 696
Nominal Voltage:	450/750V	Approvals:	<HAR> H07RN-F CE & RoHS
Test Voltage:	2500V		

Part Number	Number of Conductors (incl. ground)	Nominal Outer Diameter (inches)	Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	Part Number	Number of Conductors (incl. ground)	Nominal Outer Diameter (inches)	Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)
18 AWG (1.00 mm²)					8 AWG (10 mm²)				
1600117	3	0.327 - 0.421	20	87	1600121	3	0.752 - 0.953	194	591
16 AWG (1.50 mm²)					16001083	4	0.823 - 1.043	259	712
1600103	3	0.362 - 0.469	29	111	16001093	5	0.902 - 1.146	323	874
16001233	4	0.402 - 0.516	39	134	6 AWG (16 mm²)				
16001043	5	0.441 - 0.567	49	161	16001103	4	0.937 - 1.185	413	904
14 AWG (2.50 mm²)					16001113	5	1.039 - 1.311	517	1129
1600118	3	0.429 - 0.551	49	158	4 AWG (25 mm²)				
16001053	4	0.476 - 0.610	65	195	16001123	4	1.138 - 1.441	646	1341
16001293	5	0.524 - 0.669	81	198	16001133	5	1.260 - 1.591	807	1660
12 AWG (4 mm²)					2 AWG (35 mm²)				
1600119	3	0.500 - 0.638	77	215	16001143	4	1.280 - 1.618	904	1777
16001063	4	0.551 - 0.705	104	265	1 AWG (50 mm²)				
16001303	5	0.614 - 0.783	130	326	16001153	4	1.484 - 1.870	1291	2443
10 AWG (6 mm²)					2/0 AWG (70 mm²)				
1600120	3	0.555 - 0.709	117	242	16001163	4	1.681 - 2.126	1807	3246
16001073	4	0.618 - 0.787	155	319	3/0 AWG (95 mm²)				
16001313	5	0.689 - 0.874	194	511	16001283	4	1.906 - 2.402	2452	4247

Photographs are not to scale and are not true representations of the products in question.

For current information go to our website. If not otherwise specified, all values relating to the product are nominal values.