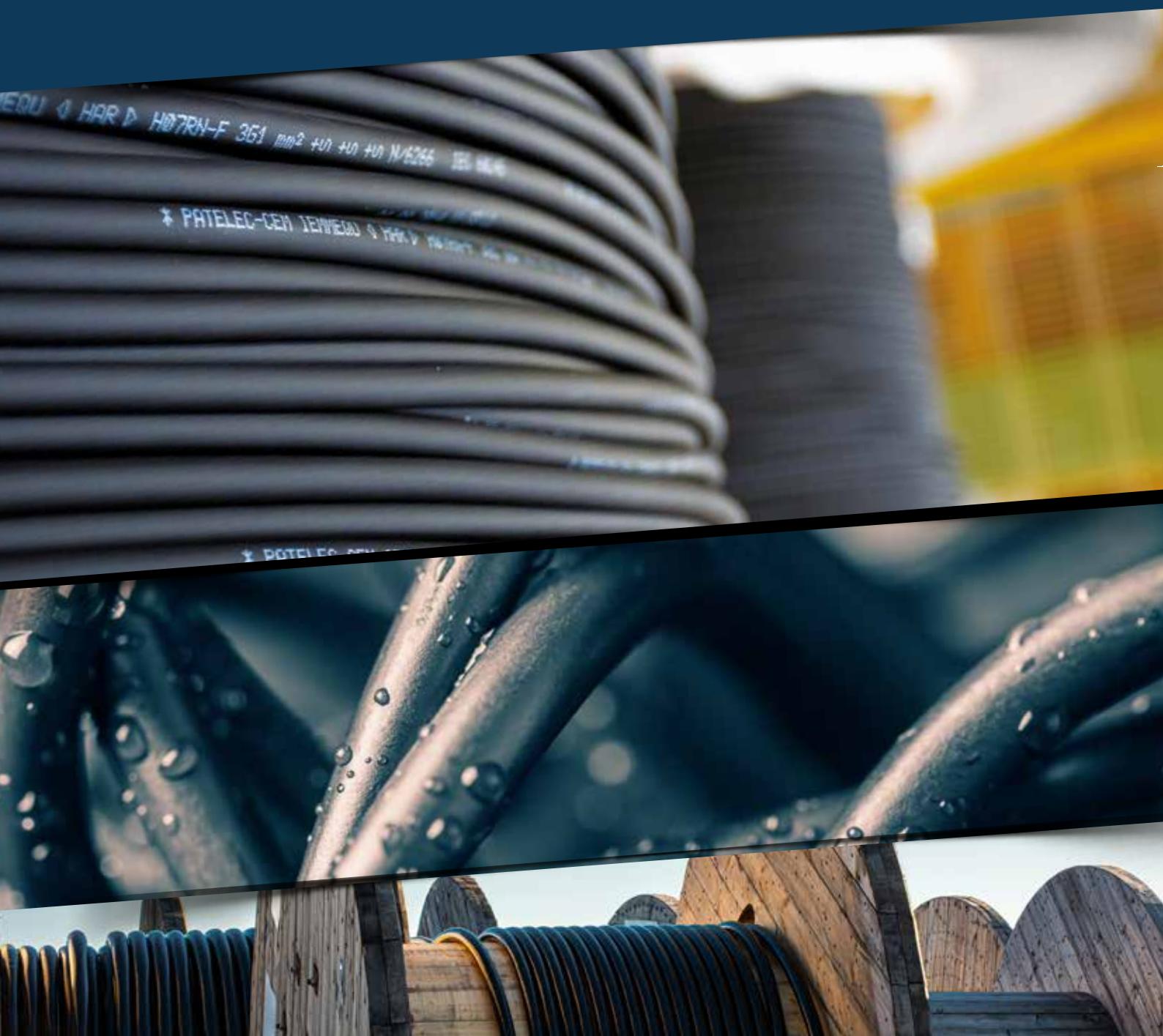




Rubber, Polyurethane & Other Thermoplastic Cables

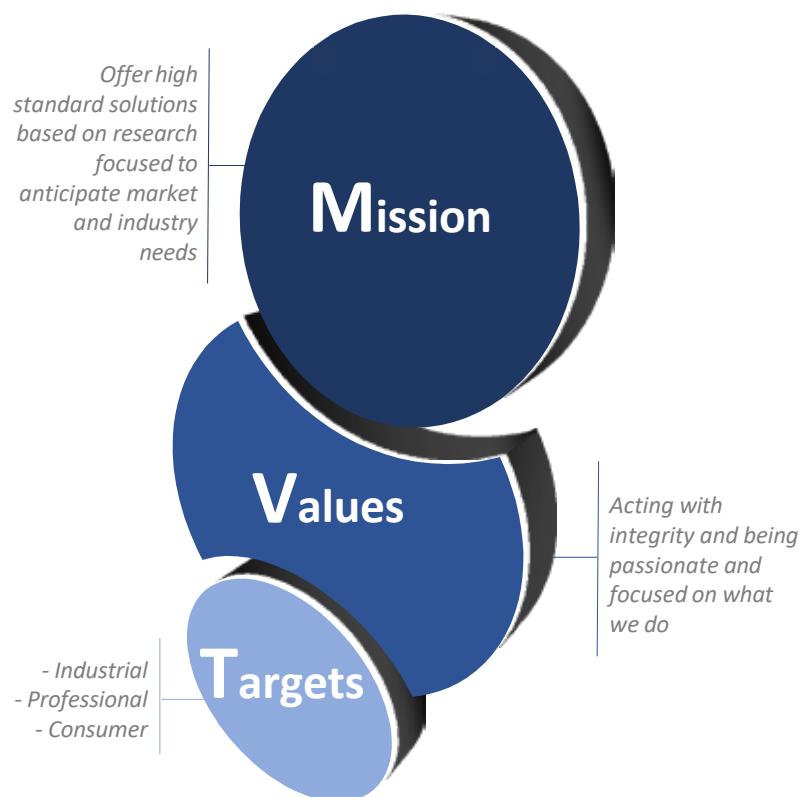


Global leader in the production of power cords and connection systems

Since 50s PATELEC GROUP has a consolidated technical experience in electrical powercords and cables production with worldwide homologations for industrial, professional and consumer applications. Internal vertical production, from copper and cables to powercords, enables us to serve the market with the greatest flexibility in terms of batch sizes per plug and cable type, thanks to a highly controlled production process. Our range includes customized low voltage cables, electrical powercords and electrical connection systems in order to offer to our customers a complete high-quality range.

Our strengths are:

- vertical and integrated production processes, from the copper rod to the assembling of electrical cables and power cords for specific applications
- high production capacity
- logistic solutions flexibility and worldwide homologations
- ability to produce customized products from small to mass production.



PATELEC GROUP HQ
Italy



PATELEC ELPENA
Poland



PATELEC NINGBO
China



PATELEC NINGBO
China





HIGH TECHNICAL KNOW HOW AND INNOVATION

PATELEC GROUP has a high technological know-how and a worldwide recognized experience in the production of electrical cables and power cords with a complete integrated vertical production. Patelec has been always investing in technology and innovation to ensure customized, certified products with high quality standards. By developing new conducting and insulation materials, Patelec continuously supports its customers in product development.

MARKETS AND APPLICATION

PATELEC is a perfect global partner, offering to the industrial, professional and consumer markets, a full range of products in terms of customer final applications and worldwide homologations. Our production covers a variety of markets: from power tools to cleaning products and pumps, electro-medical instruments, from white industry to the professional lighting market, from small to large consumer and professional appliances. Our strategic localization provides our customers located worldwide full control of manufacturing process, enables us to serve the market with the highest flexibility in terms of batch sizes per plug and cable type reducing the MOQ in case of small runners.





VERTICALIZED PROCESS AND FLEXIBILITY

Our internal vertical production, from copper rod to cords, ensures full quality control. The integrated process enables us to develop customized solutions and to supply innovative products, in accordance with markets needs, assuring the highest flexibility in terms of batch sizes per plug and cable type.



OUR GLOBAL SALES NETWORK

Our Commercial Team is available to technically support and assist customers in choosing the most suitable products according to their needs.

Patelec can rely on a well-established presence all over the world thanks to a global network. The current list of our agencies and sales managers can be found on our website:

www.patelec.eu

LET'S GO GREEN

Patelec is committed to limiting the environmental impact of our activities by a sustainable use of raw materials and natural resources. We want to do our part: we work to prevent pollution in all different processes involved in our industrial operations.



OUR ATTENTION TO THE ENVIRONMENT



*Our Group is committed to **limiting the environmental impact** of our activities through a sustainable use of natural resources and raw materials which are constantly analyzed by Patelec's laboratories in terms of harmful substances with continuous research.*

We work hard to prevent pollution in all different processes involved in our industrial operations with a continuous research.

We support our customers in developing ecological and avant-garde new products, respecting the existing environmental rules and trying to anticipate new regulations.

CERTIFICATION

Our quality system and our environmental management system are certified in compliance with **ISO 9001** and **ISO 14001**.

Our products meet all national and international standards for approval as well as safety requirements.

Achieving these worldwide certifications, demonstrates our commitment to delivering the highest-quality service to our clients and our ongoing investment in technology, development and procedures.



* updated certificates on request

HIGH ATTENTION IN TESTING PROCESS

Patelec has a worldwide recognized experience in the production of electrical cables and power cords with vertical integrated processes.

We are able to reproduce customer's field tests on cables and/or powercords in our laboratories, in addition to other tests such as cable structure, tensile load and elongation, flex endurance test, pull test and mechanical stress tests.

PATELEC CENTRALIZED AND UNIFIED PRODUCT CERTIFICATION CONCEPT

- Grants global quality assurance
- Offers production and supply chain flexibility, based on geographical diversification

Our Homologation Policy enables our clients to be global and to take advantage of export opportunities

HOMOLOGATIONS

PATELEC Homologation Policy enables our customers to be global and take advantage of export opportunities

CABLES



CPR



POWERCORDS



Nemko



SPECIAL CABLE LINES

PATELEC special product BRANDS have been developed to answer to specific applications needs.

 <p>POSEIDON®</p> <p>Designed for water and liquid applications and equipment, including deep immersion</p>	 <p>HERCULES</p> <p>Patent construction specially designed for extra heavy-duty applications, including oil and water</p>
 <p>GHELIOS®</p> <p>Special products developed for all applications that require low smoke generation and low toxicity</p>	 <p>GHELIOS® EVC</p> <p>Cable for electric vehicles</p>
 <p>THOREX®</p> <p>Specially designed for use in hazardous areas and suitable for ATEX environment</p>	 <p>ATHENART</p> <p>Patent construction for use in severe environmental conditions, ensuring high quality performances</p>

RUBBER CABLES

STANDARDS	H05BB-F	H05BN4-F	H05GG-F	H05RN-F	H05RR-F	H07BB-F	H07BN4-F	H07RN-F	H07RN8-F
	EN 50525-2-21								
	300V 500V	300V 500V	300V 500V	300V 500V	300V 500V	450V 750V	450V 750V	450V 750V	450V 750V
	+90°	+90°	+110°	+60°	+60°	+90°	+90°	+60°	+60°
	+250°	+250°	+250°	200°	200°	+250°	+250°	200°	200°
	5XD	5XD	5XD	5XD	5XD	5XD	5XD	5XD	5XD
		●	●	●			●	●	●
		●		●			●	●	●
				●				●	
				●				●	●
								●	●
	●	●		●		●	●	●	●
	●	●	●	●	●	●	●	●	●
				●				●	●
	●	●		●	●	●	●	●	●
	●	●	●	●	●	●	●	●	●
	●		●		●	●			
									●

POLYURETHANE & OTHER THERMOPLASTIC CABLES

STANDARDS	H05BQ-F	05BQH8-F	H07BQ-F	H05Z1Z1-F	H07BZ5-F
	EN 50525-2-21				
	300V 500V	300V 500V	450V 750V	300V 500V	450V 750V
	+90°	+90°	+90°	+60°	+90°
	+250°	+250°	+250°	+200°	+250°
	5XD	5XD	5XD	5XD	5XD
					●
				●	●
				● Dca, Cca	
			●		●
	●	●	●		●
	●	●	●	●	●
	●	●	●	●	●
	●	●	●	●	●
	●	●	●	●	●
	●	●	●	●	●
	●	●	●	●	●
		●	●		

MAIN CHARACTERISTICS

STANDARD

EN 50525-2-21



RATED VOLTAGE

450/750V



SHORT CIRCUIT TEMP.

MAX +200°C (EN59565-2)



CONDUCTOR OPERATING TEMP.

MAX +90°C (EN59565-1)



INTERNAL BENDING RADIUS

MIN 4xD

INSTALLATION



STORAGE TEMPERATURE

MAX +40°C



INSTALLATION & HANDLING

MIN -40°C (EN59565-2)



WATER RESISTANT



OUTDOOR FIX AND MOBILE

EN59565-2



INDOOR FIX AND MOBILE



UNDERGROUND TUBING



EXTRA-FLEXIBLE



OIL RESISTANT

EN 60811-404



FLAME RESISTANT

EN 60332-1-2



FIRE RESISTANT

EN 50399



COLD RESISTANT

-40°C - EN50363-2-1



HEAVY-DUTY



WATER IMMERSION



WATER IMMERSION

AD8



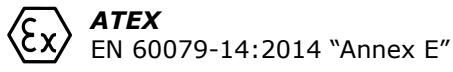
OZONE RESISTANT



UV RESISTANT

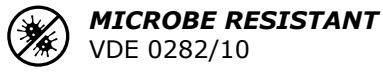


LEAD-FREE



ATEX

EN 60079-14:2014 "Annex E"



MICROBE RESISTANT

VDE 0282/10



HALOGEN FREE



SILICONE FREE



PAH FREE



RESISTANT TO ABRASION



ANTI FLASH



HYDROCARBON RESISTANT



FOR HAZARDOUS AREAS

SHEET INFORMATION

Please find below a little explanation how to read our catalogue

APPLICATIONS

Main usage features and examples of suitable industries by icons. Please refer to your Patelec contact for specific severe applications (oil and acid features)

CONSTRUCTION

Information about construction and material used

INSTALLATION

Suggested installation following the norm directive

PRODUCT NAME	CERTIFICATIONS
Type, lines, performance level	Norm references and approvals
H05RN-F H05RN-F - 300 / 500V Ordinary duty cable (EPR insulation and PCP or equivalent elastomer sheath)	
 <div style="display: flex; justify-content: space-around;"> </div> <div style="display: flex; justify-content: space-around;"> </div>	
MAIN CHARACTERISTICS	
STANDARD EN 50525-2-21	
RATED VOLTAGE 300/500V	
SHORT CIRCUIT TEMP. MAX +200°C (EN50565-2)	
CONDUCTOR OPERATING TEMP. MAX +60°C (EN50565-1)	
INTERNAL BENDING RADIUS MIN 3xD	
TECHNICAL FEATURES	
OIL RESISTANT EN 60811-404	
FLAME RESISTANT EN 60332-1-2	
COLD RESISTANT 35°C - EN50363-2-1	
OZONE RESISTANT	
LEAD-FREE	
SILICONE FREE	
APPLICATIONS	
	
CONSTRUCTION	
CONDUCTOR Red Copper Stranded	FLEXIBILITY Class 5 (EN60228) Class 6 (EN60228)
INNER SHEATH Ethylene-Propylene rubber E14	INNER SHEATH COLOR H.D. 308
OUTER SHEATH Synthetic Elastomeric EM2	OUTER SHEATH COLOUR Black *
SEPARATOR Paper	REINFORCEMENT -
MARKING PATELEC-CEM IEMMEQU <HAR> H05RN-F	
INSTALLATION	
STORAGE TEMPERATURE MAX +40°C	INDOOR MOBILE
INSTALLATION & HANDLING MIN -25°C (EN50565-2)	OUTDOOR FIX AND MOBILE EN50565-2
WATER RESISTANT	
* OTHER COLORS ON REQUEST	
18  www.patelec.eu • © 2010-2020 All rights reserved	

MAIN CHARACTERISTICS

Thechnical data about tension, temperature, dielectric strength and other relevant data

TECHNICAL FEATURES

Quick overview by icon of the product technical characteristics

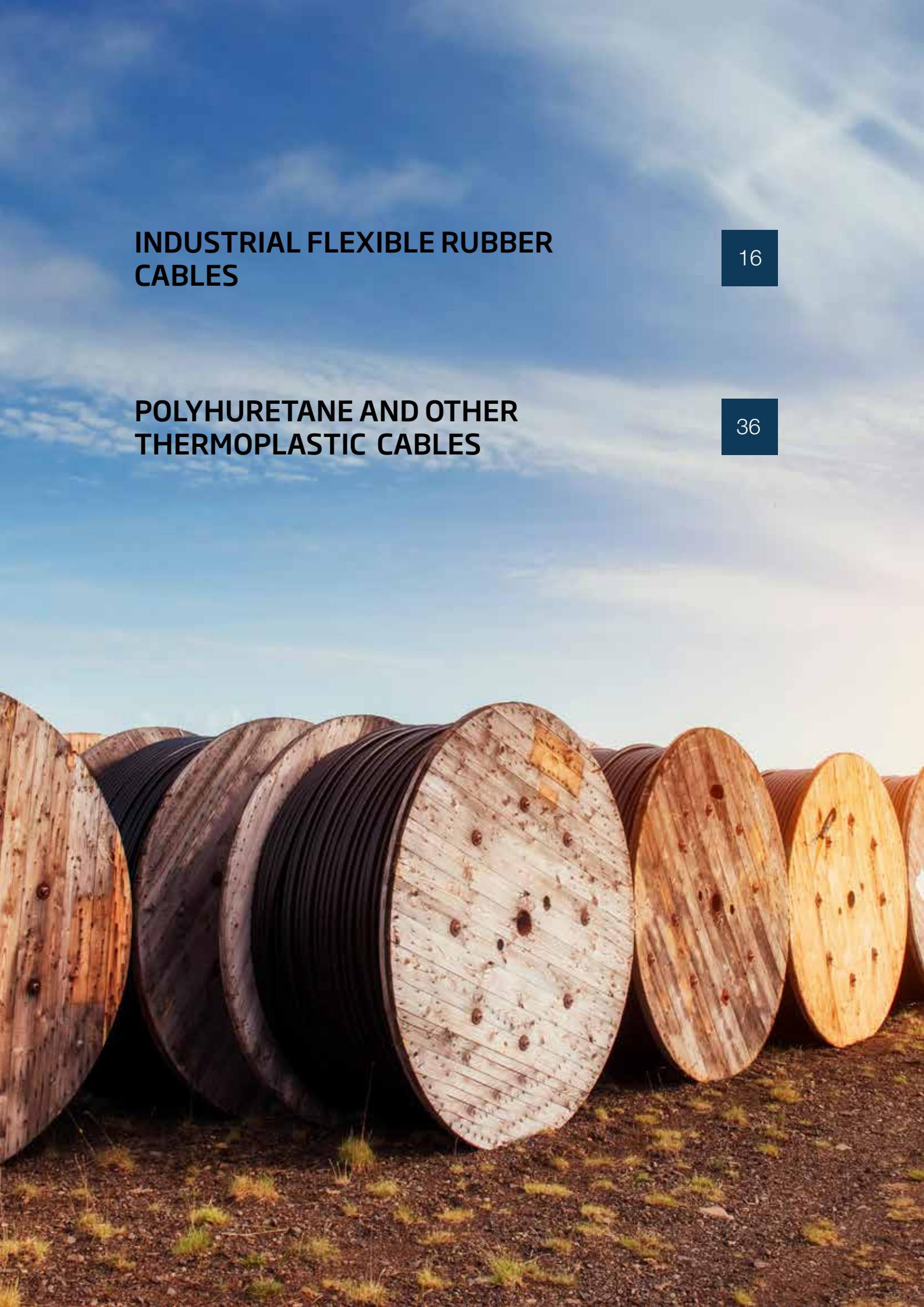
SYSTEM FOR DESIGNATION OF HARMONIZED CABLES

1 2

3 4 5 6

7 8 9

		SPECIFICATION REFERENCE
H	1	Cable according to harmonized specification
A		Recognized national type of cable
		RATED VOLTAGE Uo/U
03	2	Uo/U = 300/300 V
05		Uo/U = 300/500 V
07		Uo/U = 450/750 V
		INSULATING MATERIALS
V	3	Poluvinyl-chloride
R		Syntetic rubber
G		EVA
Z1		Halogen Free
		SHEAT MATERIALS
V	4	Poluvinyl-chloride
B / R		Syntetic rubber
N		Polychloroprene
T		Textile braid
N4		Polychloroprene
N8		Polychloroprene
G		EVA
Q		Polyeurtherane
Z1		Halogen Free
		SPECIAL CONSTRUCTIONS AND SHAPES
H	5	Flat construction of divisible cables
H2		Flat construction of non-divisible cables
		TYPE OF CONDUCTOR
F	6	Flexible conductor
H		High flexible conductor
	7	NUMBERS OF CORES
		PROTECTIVE CONDUCTOR
G	8	with green-yellow wire
X		without green-yellow wire
	9	NOMINAL CROSS SECTION CONDUCTOR (mm²)



INDUSTRIAL FLEXIBLE RUBBER CABLES

16

POLYHURETANE AND OTHER THERMOPLASTIC CABLES

36

INDUSTRIAL FLEXIBLE RUBBER CABLES

RN-F

Ordinary duty cable
(EPR insulation and PCP or equivalent elastomer sheath)

18

RR-F

Ordinary duty cable
(EPR insulation and sheath)

24

BB-F

Ordinary duty cable heat resistant 90°C
(EPR insulation and sheath)

26

BN4-F

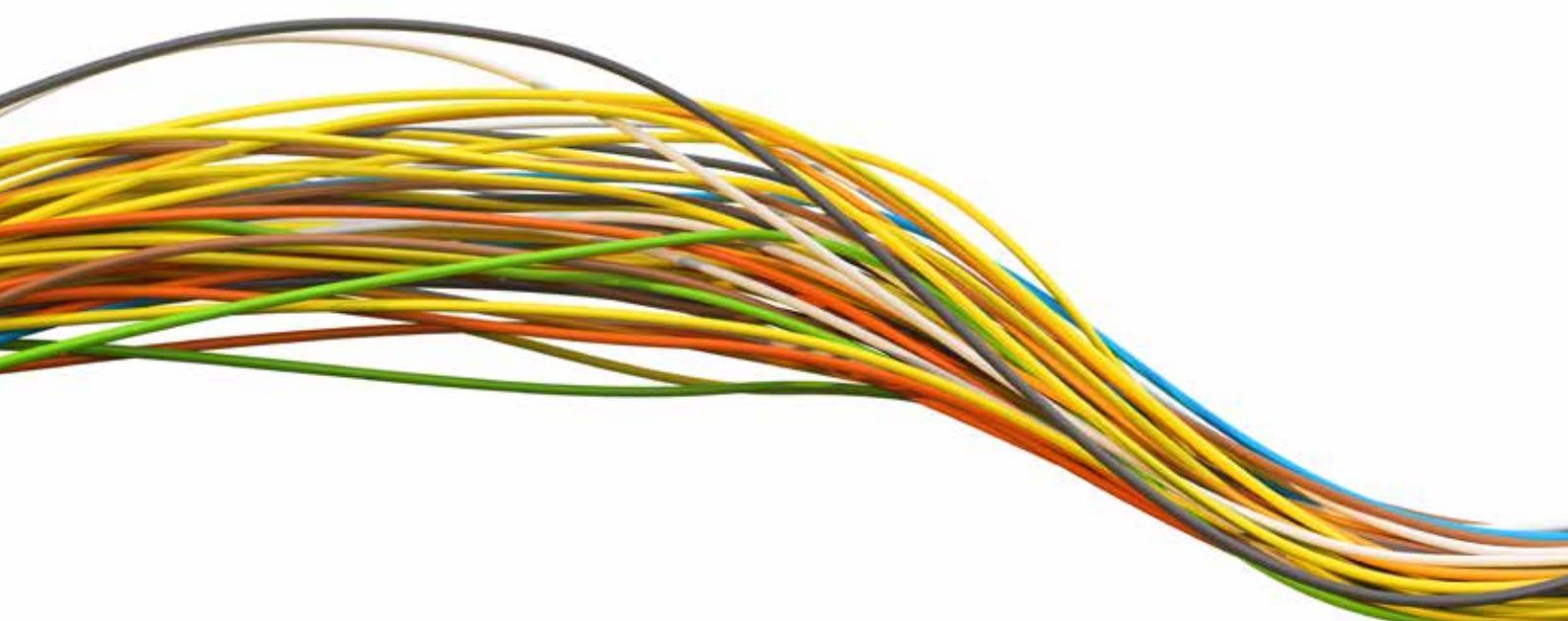
Ordinary duty cable heat resistant 90°C
(EPR insulation and PCP or equivalent elastomer sheath)

30

GG-F

Ordinary duty cable heat resistant 110°C
(EVA insulation and sheath)

34





H05RN-F

H05RN-F - 300 / 500V

Ordinary duty cable
(EPR insulation and PCP or equivalent elastomer sheath)



APPLICATIONS

H05RN-F use in domestic premises, kitchens and offices, for ordinary duty applications and supplying appliances where cables are subject to low mechanical stresses (e.g. vacuum cleaners, cooking appliances, soldering irons, toasters, domestic portable tools, hand held inspection lamps). Suitable for outdoors use. Oil and flame resistant.



PUMPS
INDUSTRY



INDUSTRIAL
ENVIRONMENT



BUILDING



PROFESSIONAL
LIGHTING



AGRICULTURE



APPLIANCES

CONSTRUCTION

CONDUCTOR

Red Copper Stranded

FLEXIBILITY

Class 5 (EN60228) Class 6 (EN60228)

INNER SHEATH

Ethylene-Propylene rubber EI4

INNER SHEATH COLOR

H.D. 308

OUTER SHEATH

Synthetic Elastomeric EM2

OUTER SHEATH COLOUR

Black *

SEPARATOR

Paper

MARKING

PATELEC-CEM IEMMEQU <HAR> H05RN-F

INSTALLATION



STORAGE TEMPERATURE

MAX +40°C



INDOOR MOBILE



INSTALLATION & HANDLING

MIN -25°C (EN50565-2)



OUTDOOR FIX AND MOBILE

EN50565-2



WATER RESISTANT

* OTHER COLORS ON REQUEST

MAIN CHARACTERISTICS

STANDARD
EN 50525-2-21

RATED VOLTAGE
300/500V

SHORT CIRCUIT TEMP.
MAX +200°C (EN59565-2)

CONDUCTOR OPERATING TEMP.
MAX +60°C (EN50565-1)

INTERNAL BENDING RADIUS
MIN 3xD

TECHNICAL FEATURES

OIL RESISTANT
EN 60811-404

FLAME RESISTANT
EN 60332-1-2

COLD RESISTANT
-35°C - EN50363-2-1

OZONE RESISTANT



LEAD-FREE



SILICONE FREE

H05RN-F

H05RN-F - 300 / 500V - EN 50525-2-21

Ordinary duty cable
(EPR insulation and PCP or equivalent elastomer sheath)

section	min cable diameter	max cable diameter	average thickness insulation	average thickness sheath	max wires diameter	electrical resistance	approximate weight cable
(mm ²)	(mm)	(mm)	(mm)	(mm)	(mm)	(Ω/km)	(kg/km)

2 CONDUCT

2x0,75	5,7	7,4	0,6	0,8	0,21	26	53
2x1	6,1	8,0	0,6	0,9	0,21	19,5	62

3 CONDUCT

3G0,75	6,2	8,1	0,6	0,9	0,21	26	65
3G1	6,5	8,5	0,6	0,9	0,21	19,5	76

4 CONDUCT

4G0,75	6,8	8,8	0,6	0,9	0,21	26	80
4G1	7,1	9,3	0,6	0,9	0,21	19,5	96

H07RN-F

H07RN-F - 450 / 750V

Heavy duty cable
(EPR insulation and PCP or equivalent elastomer sheath)



MAIN CHARACTERISTICS

STANDARD

EN 50525-2-21



RATED VOLTAGE

450/750V



SHORT CIRCUIT TEMP.

MAX +200°C (EN59565-2)



CONDUCTOR OPERATING TEMP.

MAX +60°C (EN50565-1)



INTERNAL BENDING RADIUS

MIN 3xD

APPLICATIONS

H07RN-F use in industrial and agricultural workshops, building sites, for heavy duty applications and supplying industrial and agricultural machines and appliances where cables are subject to medium mechanical stresses (e.g. heating plates, inspection lamps, electric tools such as drills, circular saws, and domestic electric tools) use in dry, humid or moist rooms.

Fixed installations e.g. on rough-cast in temporary buildings and huts for accommodation purposes. Suitable for outdoors use.

Oil and flame resistant.



APPLIANCES



PUMPS INDUSTRY



INDUSTRIAL ENVIRONMENT



BUILDING



PROFESSIONAL LIGHTING



AGRICULTURE

CONSTRUCTION

CONDUCTOR

Red Copper Stranded

FLEXIBILITY

Class 5 (EN60228) Class 6 (EN60228)

INNER SHEATH

Ethylene-Propylene rubber EI4

INNER SHEATH COLOR

H.D. 308

OUTER SHEATH

Synthetic Elastomeric EM2

OUTER SHEATH COLOUR

Black *

SEPARATOR

Paper

MARKING

PATELEC-CEM IEMMEQU <HAR> H07RN-F

INSTALLATION



STORAGE TEMPERATURE

MAX +40°C



OUTDOOR FIX AND MOBILE

EN50565-2



INSTALLATION & HANDLING

MIN -25°C (EN50565-2)



INDOOR MOBILE



WATER RESISTANT

* OTHER COLORS ON REQUEST

TECHNICAL FEATURES



OIL RESISTANT

EN 60811-404



FLAME RESISTANT

EN 60332-1-2



COLD RESISTANT

-35°C - EN50363-2-1



HEAVY-DUTY



OZONE RESISTANT



LEAD-FREE



SILICONE FREE

HO7RN-F

HO7RN-F - 450 / 750V - EN 50525-2-21

Heavy duty cable

(EPR insulation and PCP or equivalent elastomer sheath)

section	min cable diameter	max cable diameter	average thickness insulation	average thickness sheath	max wires diameter	electrical resistance	approximate weight cable
(mm ²)	(mm)	(mm)	(mm)	(mm)	(mm)	(Ω/km)	(kg/km)

2 CONDUCT

2x1	7,7	10	0,8	1,3	0,21	19,5	90
2x1,5	8,5	11	0,8	1,5	0,26	13,3	113
2x2,5	10,2	13,1	0,9	1,7	0,26	7,98	165
2x4	11,8	15,1	1	1,8	0,31	4,95	230
2x6	13,1	16,8	1	2	0,31	3,30	300

3 CONDUCT

3G1	8,3	10,7	0,8	1,4	0,21	19,5	107
3G1,5	9,2	11,9	0,8	1,6	0,26	13,3	135
3G2,5	10,9	14	0,9	1,8	0,26	7,98	195
3G4	12,7	16,2	1	1,9	0,31	4,95	270
3G6	14,1	18	1	2,1	0,31	3,30	360

4 CONDUCT

4G1	9,2	11,9	0,8	1,5	0,21	19,5	132
4G1,5	10,2	13,1	0,8	1,7	0,26	13,3	160
4G2,5	12,1	15,5	0,9	1,9	0,26	7,98	238
4G4	14	17,9	1	2	0,31	4,95	337
4G6	15,7	20	1	2,3	0,31	3,30	455

5 CONDUCT

5G1	10,2	13,1	0,8	1,6	0,21	19,5	167
5G1,5	11,2	14,4	0,8	1,8	0,26	13,3	213
5G2,5	13,3	17	0,9	2	0,26	7,98	305
5G4	15,6	19,9	1	2,2	0,31	4,95	450
5G6	17,5	22,2	1	2,5	0,31	3,30	585

H07RN8-F

H07RN8-F - 450 / 750V

Heavy duty cable
(EPR insulation and PCP or equivalent elastomer sheath)



MAIN CHARACTERISTICS

STANDARD
EN 50525-2-21

APPLICATIONS

H07RN-F use in industrial and agricultural workshops, building sites, for heavy duty applications and supplying industrial and agricultural machines and appliances where cables are subject to medium mechanical stresses (e.g. heating plates, inspection lamps, electric tools such as drills, circular saws, and domestic electric tools) use in dry, humid or moist rooms.

Fixed installations e.g. on rough-cast in temporary buildings and huts for accommodation purposes. Suitable for outdoors use.

Oil and flame resistant.



RATED VOLTAGE
450/750V

SHORT CIRCUIT TEMP.
MAX +200°C (EN59565-2)

CONDUCTOR OPERATING TEMP.
MAX +60°C (EN50565-1)

INTERNAL BENDING RADIUS
MIN 3xD

CONSTRUCTION

CONDUCTOR

Red Copper Stranded

FLEXIBILITY

Class 5 (EN60228) Class 6 (EN60228)

INNER SHEATH

Ethylene-Propylene rubber EI4

INNER SHEATH COLOR

H.D. 308

OUTER SHEATH

Synthetic Elastomeric EM2

OUTER SHEATH COLOUR

Black *

SEPARATOR

Paper

MARKING

PATELEC-CEM IEMMEQU <HAR> H07RN8-F

TECHNICAL FEATURES

OIL RESISTANT
EN 60811-404

FLAME RESISTANT
EN 60332-1-2

COLD RESISTANT
-35°C - EN50363-2-1

HEAVY-DUTY

OZONE RESISTANT

LEAD-FREE

SILICONE FREE

INSTALLATION



STORAGE TEMPERATURE
MAX +40°C



OUTDOOR FIX AND MOBILE
EN50565-2



INSTALLATION & HANDLING
MIN -25°C (EN50565-2)



INDOOR MOBILE



WATER RESISTANT

* OTHER COLORS ON REQUEST

HO7RN8-F

HO7RN8-F - 450 / 750V - EN 50525-2-21

Heavy duty cable
(EPR insulation and PCP or equivalent elastomer sheath)

section	min cable diameter	max cable diameter	average thickness insulation	average thickness sheath	max wires diameter	electrical resistance	approximate weight cable
	(mm ²)	(mm)	(mm)	(mm)	(mm)	(Ω/km)	(kg/km)

2 CONDUCT

2x1	7,7	10	0,8	1,3	0,21	19,5	90
2x1,5	8,5	11	0,8	1,5	0,26	13,3	113
2x2,5	10,2	13,1	0,9	1,7	0,26	7,98	165
2x4	11,8	15,1	1	1,8	0,31	4,95	230
2x6	13,1	16,8	1	2	0,31	3,30	300

3 CONDUCT

3G1	8,3	10,7	0,8	1,4	0,21	19,5	107
3G1,5	9,2	11,9	0,8	1,6	0,26	13,3	135
3G2,5	10,9	14	0,9	1,8	0,26	7,98	195
3G4	12,7	16,2	1	1,9	0,31	4,95	270
3G6	14,1	18	1	2,1	0,31	3,30	360

4 CONDUCT

4G1	9,2	11,9	0,8	1,5	0,21	19,5	132
4G1,5	10,2	13,1	0,8	1,7	0,26	13,3	160
4G2,5	12,1	15,5	0,9	1,9	0,26	7,98	238
4G4	14	17,9	1	2	0,31	4,95	337
4G6	15,7	20	1	2,3	0,31	3,30	455

5 CONDUCT

5G1	10,2	13,1	0,8	1,6	0,21	19,5	167
5G1,5	11,2	14,4	0,8	1,8	0,26	13,3	213
5G2,5	13,3	17	0,9	2	0,26	7,98	305
5G4	15,6	19,9	1	2,2	0,31	4,95	450
5G6	17,5	22,2	1	2,5	0,31	3,30	585

H05RR-F

H05RR-F - 300 / 500V

Ordinary duty cable
(EPR insulation and sheath)



MAIN CHARACTERISTICS

STANDARD
EN 50525-2-21



RATED VOLTAGE
300/500V



SHORT CIRCUIT TEMP.
MAX +200°C (EN59565-2)



CONDUCTOR OPERATING TEMP.
MAX +60°C (EN50565-1)



INTERNAL BENDING RADIUS
MIN 3xD

APPLICATIONS

H05RR-F use in domestic premises, kitchens and offices, for ordinary duty applications and supplying appliances where cables are subject to low mechanical stresses (e.g. vacuum cleaners, cooking appliances, soldering irons, toasters, domestic portable tools, hand held inspection lamps). Use outdoors for temporary periods of short duration.



BUILDING



PROFESSIONAL
LIGHTING



AGRICULTURE



APPLIANCES

CONSTRUCTION

CONDUCTOR

Red Copper Stranded

FLEXIBILITY

Class 5 (EN60228) Class 6 (EN60228)

INNER SHEATH

Ethylene-Propylene rubber EI4

INNER SHEATH COLOR

H.D. 308

OUTER SHEATH

Synthetic Elastomeric EM3

OUTER SHEATH COLOUR

Black *

SEPARATOR

Paper

MARKING

PATELEC-CEM IEMMEQU <HAR> H05RR-F

INSTALLATION



STORAGE TEMPERATURE
MAX +40°C



INDOOR MOBILE



INSTALLATION & HANDLING
MIN -25°C (EN50565-2)

* OTHER COLORS ON REQUEST

TECHNICAL FEATURES



OZONE RESISTANT



LEAD-FREE



HALOGEN FREE



SILICONE FREE

H05RR-F

H05RR-F - 300 / 500V - EN 50525-2-21

Ordinary duty cable
(EPR insulation and sheath)

section	min cable diameter	max cable diameter	average thickness insulation	average thickness sheath	max wires diameter	electrical resistance	approximate weight cable
	(mm ²)	(mm)	(mm)	(mm)	(mm)	(Ω/km)	(kg/km)

2 CONDUCT

2x0,75	5,7	7,4	0,6	0,8	0,21	26	53
2x1	6,1	8	0,6	0,9	0,21	19,5	62
2x1,5	7,6	9,8	0,8	1	0,26	13,3	96
2x2,5	9	11,6	0,9	1,1	0,26	7,98	137

3 CONDUCT

3G0,75	6,2	8,1	0,6	0,9	0,21	26	65
3G1	6,5	8,5	0,6	0,9	0,21	19,5	76
3G1,5	8	10,4	0,8	1	0,26	13,3	113
3G2,5	9,6	12,4	0,9	1,1	0,26	7,98	165

4 CONDUCT

4G0,75	6,8	8,8	0,6	0,9	0,21	26	80
4G1	7,1	9,3	0,6	0,9	0,21	19,5	96
4G1,5	9	11,6	0,8	1,1	0,26	13,3	140
4G2,5	10,7	13,8	0,9	1,2	0,26	7,98	208

5 CONDUCT

5G0,75	7,6	9,9	0,6	1	0,21	26	100
5G1	8	10,3	0,6	1	0,21	19,5	115
5G1,5	9,8	12,7	0,8	1,1	0,26	13,3	174
5G2,5	11,9	15,3	0,9	1,3	0,26	7,98	276

H05BB-F

H05BB-F - 300 / 500V

Ordinary duty cable heat resistant 90°C
(EPR insulation and sheath)



CE ▲HAR▲

MAIN CHARACTERISTICS

STANDARD
EN 50525-2-21



RATED VOLTAGE
300/500V



SHORT CIRCUIT TEMP.
MAX +250°C (EN59565-2)



CONDUCTOR OPERATING TEMP.
MAX +90°C (EN50565-1)



INTERNAL BENDING RADIUS
MIN 3xD

APPLICATIONS

H05BB-F use in domestic premises, kitchens and offices, for ordinary duty applications and supplying appliances where cables are subject to low mechanical stresses {e.g. vacuum cleaners, cooking appliances, soldering irons, toasters, domestic portable tools, hand held inspection lamps} use outdoors for temporary periods of short duration. Suitable for use to the maximum conductor temperature of 90°C.

Skin contact should be avoided when operating these cables unless calculations show that the surface temperature does not exceed 50 °C.



PROFESSIONAL
LIGHTING



AGRICULTURE



APPLIANCES

CONSTRUCTION

CONDUCTOR

Red Copper Stranded

FLEXIBILITY

Class 5 (EN60228) Class 6 (EN60228)

INNER SHEATH

Ethylene-Propylene rubber EI7

INNER SHEATH COLOR

H.D. 308

OUTER SHEATH

Synthetic Elastomeric EM6

OUTER SHEATH COLOUR

Black *

SEPARATOR

Paper

MARKING

PATELEC-CEM IEMMEQU <HAR> H05BB-F

INSTALLATION



STORAGE TEMPERATURE
MAX +40°C



INDOOR MOBILE



INSTALLATION & HANDLING
MIN -40°C (EN50565-2)

* OTHER COLORS ON REQUEST

TECHNICAL FEATURES



COLD RESISTANT
-40°C - EN50363-2-1



OZONE RESISTANT



LEAD-FREE



HALOGEN FREE



SILICONE FREE

H05BB-F

H05BB-F - 300 / 500V - EN 50525-2-21

Ordinary duty cable heat resistant 90°C
(EPR insulation and sheath)

section	min cable diameter	max cable diameter	avarage thickness insulation	avarage thickness sheath	max wires diameter	electrical resistance	approximate weight cable
(mm ²)	(mm)	(mm)	(mm)	(mm)	(mm)	(Ω/km)	(kg/km)

2 CONDUCT

2x0,75	5,7	7,4	0,6	0,8	0,21	26	51
2x1	6,1	8	0,6	0,9	0,21	19,5	61
2x1,5	7,6	9,8	0,8	1	0,26	13,3	92
2x2,5	9	11,5	0,9	1,1	0,26	7,98	137

3 CONDUCT

3G0,75	6,2	8,1	0,6	0,9	0,21	26	63
3G1	6,5	8,5	0,6	0,9	0,21	19,5	74
3G1,5	8	10,4	0,8	1	0,26	13,3	111
3G2,5	9,6	12,4	0,9	1,1	0,26	7,98	167

4 CONDUCT

4G0,75	6,8	8,8	0,6	0,9	0,21	26	77
4G1	7,1	9,3	0,6	0,9	0,21	19,5	91
4G1,5	9	11,6	0,8	1,1	0,26	13,3	139
4G2,5	10,7	13,8	0,9	1,2	0,26	7,98	209

5 CONDUCT

5G0,75	7,6	9,9	0,6	1	0,21	26	94
5G1	8	10,3	0,6	1	0,21	19,5	109
5G1,5	9,8	12,7	0,8	1,1	0,26	13,3	162
5G2,5	11,9	15,3	0,9	1,3	0,26	7,98	253

H07BB-F

H07BB-F - 300 / 500V

Ordinary duty cable heat resistant 90°C
(EPR insulation and sheath)



APPLICATIONS

H07BB-F use in domestic premises, kitchens and offices, for ordinary duty applications and supplying appliances where cables are subject to low mechanical stresses {e.g. vacuum cleaners, cooking appliances, soldering irons, toasters, domestic portable tools, hand held inspection lamps) use outdoors for temporary periods of short duration. Suitable for use to the maximum conductor temperature of 90°C. Skin contact should be avoided when operating these cables unless calculations show that the surface temperature does not exceed 50 °C.



INDUSTRIAL ENVIRONMENT



BUILDING



PROFESSIONAL LIGHTING



AGRICULTURE



APPLIANCES

CONSTRUCTION

CONDUCTOR

Red Copper Stranded

FLEXIBILITY

Class 5 (EN60228) Class 6 (EN60228)

INNER SHEATH

Ethylene-Propylene rubber EI7

INNER SHEATH COLOR

H.D. 308

OUTER SHEATH

Synthetic Elastomeric EM6

OUTER SHEATH COLOUR

Black *

SEPARATOR

Paper

MARKING

PATELEC-CEM IEMMEQU <HAR> H07BB-F

MAIN CHARACTERISTICS

STANDARD

EN 50525-2-21



RATED VOLTAGE

450/750V



SHORT CIRCUIT TEMP.

MAX +250°C (EN59565-2)



CONDUCTOR OPERATING TEMP.

MAX +90°C (EN50565-1)



INTERNAL BENDING RADIUS

MIN 3xD

TECHNICAL FEATURES



COLD RESISTANT

-40°C - EN50363-2-1



OZONE RESISTANT



LEAD-FREE



HALOGEN FREE



SILICONE FREE

INSTALLATION



STORAGE TEMPERATURE

MAX +40°C



INDOOR MOBILE



INSTALLATION & HANDLING

MIN -40°C (EN50565-2)

* OTHER COLORS ON REQUEST

HO7BB-F

HO7BB-F - 450 / 750V - EN 50525-2-21

Ordinary duty cable heat resistant 90°C
(EPR insulation and sheath)

section	min cable diameter	max cable diameter	average thickness insulation	average thickness sheath	max wires diameter	electrical resistance	approximate weight cable
(mm ²)	(mm)	(mm)	(mm)	(mm)	(mm)	(Ω/km)	(kg/km)

2 CONDUCT

2x1	7,7	10	0,8	1,3	0,21	19,5	90
2x1,5	8,5	11	0,8	1,5	0,26	13,3	113
2x2,5	10,2	13,1	0,9	1,7	0,26	7,98	165
2x4	11,8	15,1	1	1,8	0,31	4,95	230
2x6	13,1	16,8	1	2	0,31	3,30	300

3 CONDUCT

3G1	8,3	10,7	0,8	1,4	0,21	19,5	107
3G1,5	9,2	11,9	0,8	1,6	0,26	13,3	135
3G2,5	10,9	14	0,9	1,8	0,26	7,98	195
3G4	12,7	16,2	1	1,9	0,31	4,95	270
3G6	14,1	18	1	2,1	0,31	3,30	360

4 CONDUCT

4G1	9,2	11,9	0,8	1,5	0,21	19,5	132
4G1,5	10,2	13,1	0,8	1,7	0,26	13,3	160
4G2,5	12,1	15,5	0,9	1,9	0,26	7,98	238
4G4	14	17,9	1	2	0,31	4,95	337
4G6	15,7	20	1	2,3	0,31	3,30	455

5 CONDUCT

5G1	10,2	13,1	0,8	1,6	0,21	19,5	167
5G1,5	11,2	14,4	0,8	1,8	0,26	13,3	213
5G2,5	13,3	17	0,9	2	0,26	7,98	305
5G4	15,6	19,9	1	2,2	0,31	4,95	450
5G6	17,5	22,2	1	2,5	0,31	3,30	585

H05BN4-F

H05BN4-F - 300 / 500V

Ordinary duty cable heat resistant 90°C
(EPR insulation and PCP or equivalent elastomer sheath)



MAIN CHARACTERISTICS

STANDARD
EN 50525-2-21



RATED VOLTAGE
300/500V



SHORT CIRCUIT TEMP.
MAX +250°C (EN59565-2)



CONDUCTOR OPERATING TEMP.
MAX +90°C (EN50565-1)



INTERNAL BENDING RADIUS
MIN 3xD

APPLICATIONS

H05BN4-F use in domestic premises, kitchens and offices, for ordinary duty applications and supplying appliances where cables are subject to low mechanical stresses {e.g. vacuum cleaners, cooking appliances, soldering irons, toasters, domestic portable tools, hand held inspection lamps} use outdoors for temporary periods of short duration. Suitable for use to the maximum conductor temperature of 90°C. Skin contact should be avoided when operating these cables unless calculations show that the surface temperature does not exceed 50 °C. Oil and flame resistant.



PUMPS
INDUSTRY



INDUSTRIAL
ENVIRONMENT



BUILDING



PROFESSIONAL
LIGHTING



AGRICULTURE



APPLIANCES

CONSTRUCTION

CONDUCTOR

Red Copper Stranded

FLEXIBILITY

Class 5 (EN60228) Class 6 (EN60228)

INNER SHEATH

Ethylene-Propylene rubber EI7

INNER SHEATH COLOR

H.D. 308

OUTER SHEATH

Synthetic Elastomeric EM7

OUTER SHEATH COLOUR

Black *

SEPARATOR

Paper

MARKING

PATELEC-CEM IEMMEQU <HAR> H05BN4-F

TECHNICAL FEATURES



OIL RESISTANT
EN 60811-404



FLAME RESISTANT
EN 60332-1-2



COLD RESISTANT
-40°C - EN50363-2-1



OZONE RESISTANT



LEAD-FREE



SILICONE FREE

INSTALLATION



STORAGE TEMPERATURE
MAX +40°C



INDOOR MOBILE



INSTALLATION & HANDLING
MIN -25°C (EN50565-2)



WATER RESISTANT

* OTHER COLORS ON REQUEST

H05BN4-F

H05BN4-F - 300 / 500V - EN 50525-2-21

Ordinary duty cable heat resistant 90°C

(EPR insulation and PCP or equivalent elastomer sheath)

section	min cable diameter	max cable diameter	average thickness insulation	average thickness sheath	max wires diameter	electrical resistance	approximate weight cable
(mm ²)	(mm)	(mm)	(mm)	(mm)	(mm)	(Ω/km)	(kg/km)

2 CONDUCT

2x0,75	5,7	7,4	0,6	0,8	0,21	26	58
2x1	6,1	8,0	0,6	0,9	0,21	19,5	69

3 CONDUCT

3G0,75	6,2	8,1	0,6	0,9	0,21	26	72
3G1	6,5	8,5	0,6	0,9	0,21	19,5	83

H07BN4-F

H07BN4-F - 450 / 750V

Heavy duty cable heat resistant 90°C
(EPR insulation and PCP or equivalent elastomer sheath)



<HAR>

MAIN CHARACTERISTICS

STANDARD
EN 50525-2-21

RATED VOLTAGE
450/750V

SHORT CIRCUIT TEMP.
MAX +250°C (EN59565-2)

CONDUCTOR OPERATING TEMP.
MAX +90°C (EN50565-1)

INTERNAL BENDING RADIUS
MIN 3xD

APPLICATIONS

H07BN4-F use in industrial and agricultural workshops, building sites, for heavy duty applications and supplying industrial and agricultural machines and appliances where cables are subject to medium mechanical stresses (e.g. heating plates, inspection lamps, electric tools such as drills, circular saws, and domestic electric tools) use in dry, humid or moist rooms; fixed installations e.g. on rough-cast in temporary buildings and huts for accommodation purposes Suitable for outdoors use.



POWERTOOLS



PUMPS INDUSTRY



INDUSTRIAL ENVIRONMENT



BUILDING



PROFESSIONAL LIGHTING



AGRICULTURE

CONSTRUCTION

CONDUCTOR

Red Copper Stranded

FLEXIBILITY

Class 5 (EN60228) Class 6 (EN60228)

INNER SHEATH

Ethylene-Propylene rubber EI7

INNER SHEATH COLOR

H.D. 308

OUTER SHEATH

Synthetic Elastomeric EM7

OUTER SHEATH COLOUR

Black *

SEPARATOR

Paper

MARKING

PATELEC-CEM IEMMEQU <HAR> H07BN4-F

INSTALLATION



STORAGE TEMPERATURE

MAX +40°C



OUTDOOR FIX AND MOBILE

EN50565-2



INSTALLATION & HANDLING

MIN -25°C (EN50565-2)



INDOOR MOBILE



WATER RESISTANT

* OTHER COLORS ON REQUEST

TECHNICAL FEATURES

OIL RESISTANT
EN 60811-404

FLAME RESISTANT
EN 60332-1-2

COLD RESISTANT
-40°C - EN50363-2-1

HEAVY-DUTY

OZONE RESISTANT

LEAD-FREE

SILICONE FREE

HO7BN4-F

HO7BN4-F - 450 / 750V - EN 50525-2-21

Heavy duty cable heat resistant 90°C
(EPR insulation and PCP or equivalent elastomer sheath)

section	min cable diameter	max cable diameter	average thickness insulation	average thickness sheath	max wires diameter	electrical resistance	approximate weight cable
(mm ²)	(mm)	(mm)	(mm)	(mm)	(mm)	(Ω/km)	(kg/km)

2 CONDUCT

2x1	7,7	10	0,8	1,3	0,21	19,5	90
2x1,5	8,5	11	0,8	1,5	0,26	13,3	115
2x2,5	10,2	13,1	0,9	1,7	0,26	7,98	160
2x4	11,8	15,1	1	1,8	0,31	4,95	225

3 CONDUCT

3G1	8,3	10,7	0,8	1,4	0,21	19,5	110
3G1,5	9,2	11,9	0,8	1,6	0,26	13,3	140
3G2,5	10,9	14	0,9	1,8	0,26	7,98	205
3G4	12,7	16,2	1	1,9	0,31	4,95	285

4 CONDUCT

4G1	9,2	11,9	0,8	1,5	0,21	19,5	135
4G1,5	10,2	13,1	0,8	1,7	0,26	13,3	170
4G2,5	12,1	15,5	0,9	1,9	0,26	7,98	250
4G4	14	17,9	1	2	0,31	4,95	345

5 CONDUCT

5G1	10,2	13,1	0,8	1,6	0,21	19,5	165
5G1,5	11,2	14,4	0,8	1,8	0,26	13,3	210
5G2,5	13,3	17	0,9	2	0,26	7,98	305
5G4	15,6	19,9	1	2,2	0,31	4,95	430

H05GG-F

H05GG-F - 300 / 500V

Ordinary duty cable heat resistant 110°C
(EVA insulation and sheath)



CE ▲HAR▲

MAIN CHARACTERISTICS

STANDARD
EN 50525-2-21

RATED VOLTAGE
300/500V

SHORT CIRCUIT TEMP.
MAX +250°C (EN59565-2)

CONDUCTOR OPERATING TEMP.
MAX +110°C (EN50565-1)

INTERNAL BENDING RADIUS
MIN 3xD

APPLICATIONS

H05GG-F use in domestic premises, kitchens and offices, for ordinary duty applications and supplying appliances where cables are subject to low mechanical stresses (e.g. vacuum cleaners, cooking appliances, soldering irons, toasters, domestic portable tools, hand held inspection lamps) use outdoors for temporary periods of short duration. Skin contact should be avoided when operating these cables unless calculations show that the surface temperature does not exceed 50 °C. Oil resistant



BUILDING



PROFESSIONAL
LIGHTING



AGRICULTURE



POWERTOOLS



APPLIANCES

CONSTRUCTION

CONDUCTOR

Red Copper Stranded

FLEXIBILITY

Class 5 (EN60228) Class 6 (EN60228)

INNER SHEATH

Eva Rubber EI3

INNER SHEATH COLOR

H.D. 308

OUTER SHEATH

Eva Rubber EM3

OUTER SHEATH COLOUR

Black *

SEPARATOR

Paper

MARKING

PATELEC-CEM IEMMEQU <HAR> H05GG-F

INSTALLATION



STORAGE TEMPERATURE
MAX +40°C



INDOOR MOBILE



INSTALLATION & HANDLING
MIN -5°C (EN50565-2)

* OTHER COLORS ON REQUEST

TECHNICAL FEATURES

OIL RESISTANT
EN 60811-404



OZONE RESISTANT



LEAD-FREE



HALOGEN FREE



SILICONE FREE

H05GG-F

H05GG-F - 300 / 500V - EN 50525-2-21

Ordinary duty cable heat resistant 110°C
(EVA insulation and sheath)

section	min cable diameter	max cable diameter	average thickness insulation	average thickness sheath	max wires diameter	electrical resistance	approximate weight cable
(mm ²)	(mm)	(mm)	(mm)	(mm)	(mm)	(Ω/km)	(kg/km)

2 CONDUCT

2x0,75	5,7	7,4	0,6	0,8	0,21	26	58
2x1	6,1	8	0,6	0,9	0,21	19,5	69
2x1,5	7,6	9,8	0,8	1	0,26	13,3	100
2x2,5	9	11,6	0,9	1,1	0,26	7,98	145

3 CONDUCT

3G0,75	6,2	8,1	0,6	0,9	0,21	26	72
3G1	6,5	8,5	0,6	0,9	0,21	19,5	82
3G1,5	8	10,4	0,8	1	0,26	13,3	125
3G2,5	9,6	12,4	0,9	1,1	0,26	7,98	175

5 CONDUCT

5G0,75	7,6	9,9	0,6	1	0,21	26	105
5G1	8	10,3	0,6	1	0,21	19,5	120
5G1,5	9,8	12,7	0,8	1,1	0,26	13,3	180
5G2,5	11,9	15,3	0,9	1,3	0,26	7,98	260

4 CONDUCT

4G0,75	6,8	8,8	0,6	0,9	0,21	26	80
4G1	7,1	9,3	0,6	0,9	0,21	19,5	100
4G1,5	9	11,6	0,8	1,1	0,26	13,3	150
4G2,5	10,7	13,8	0,9	1,2	0,26	7,98	220

POLYURETHANE CABLES AND OTHER THERMOPLASTIC CABLES

BQ-F

Ordinary duty cable heat resistant 90°C
(EPR insulation and TPU sheath)

38

BQH8-F

Ordinary duty estensible cable heat resistant 90°C
(EPR insulation and TPU sheath)

42

GHELIOS®

Z1Z1

Ordinary duty cable Halogen Free
(Thermoplastic insulation and sheath low smoke emission)

44

GHELIOS® EVC-Cable

BZ5-F

Charging cables for electric vehicles

50





H05BQ-F

H05BQ-F - 300 / 500V

Ordinary duty cable heat resistant 90°C
(EPR insulation and TPU sheath)



MAIN CHARACTERISTICS

STANDARD
EN 50525-2-21

RATED VOLTAGE
300/500V

SHORT CIRCUIT TEMP.
MAX +250°C (EN59565-2)

CONDUCTOR OPERATING TEMP.
MAX +90°C (EN50565-1)

INTERNAL BENDING RADIUS
MIN 3xD

APPLICATIONS

H07BQ-F use in industrial and agricultural workshops, building sites, for heavy duty applications and supplying industrial and agricultural machines and appliances where cables are subject to medium mechanical stresses (e.g. heating plates, inspection lamps, electric tools such as drills, circular saws, and domestic electric tools) use in dry, humid or moist rooms; fixed installations e.g. on rough-cast in temporary buildings and huts for accommodation purposes Suitable for outdoors use



BUILDING

PROFESSIONAL
LIGHTING

AGRICULTURE



POWERTOOLS



INDUSTRIAL

MEDICAL
APPLIANCES

CONSTRUCTION

CONDUCTOR

Red Copper Stranded

FLEXIBILITY

Class 5 (EN60228) Class 6 (EN60228)

INNER SHEATH

Ethylene-Propylene rubber EI6

INNER SHEATH COLOR

H.D. 308

OUTER SHEATH

TMPU polyurethane

OUTER SHEATH COLOUR

Black *

SEPARATOR

Talc

MARKING

PATELEC-CEM IEMMEQU <HAR> H05BQ-F

TECHNICAL FEATURES

COLD RESISTANT
-40°C - EN50363-2-1

OZONE RESISTANT



LEAD-FREE

MICROBE RESISTANT
VDE 0282/10



HALOGEN FREE



SILICONE FREE

INSTALLATION



STORAGE TEMPERATURE
MAX +40°C



INDOOR MOBILE



INSTALLATION & HANDLING
MIN -40°C (EN50565-2)

* OTHER COLORS ON REQUEST

H05BQ-F

H05BQ-F - 300 / 500V - EN 50525-2-21

Ordinary duty cable heat resistant 90°C
(EPR insulation and TPU sheath)

section	min cable diameter	max cable diameter	average thickness insulation	average thickness sheath	max wires diameter	electrical resistance	approximate weight cable
(mm ²)	(mm)	(mm)	(mm)	(mm)	(mm)	(Ω/km)	(kg/km)

2 CONDUCT

2x0,75	5,7	7,4	0,6	0,8	0,21	26	45
2x1	6,1	8,0	0,6	0,9	0,21	19,5	55

3 CONDUCT

3G0,75	6,2	8,1	0,6	0,9	0,21	26	58
3G1	6,5	8,5	0,6	0,9	0,21	19,5	67

H07BQ-F

H07BQ-F - 450 / 750V

Heavy duty cable heat resistant 90°C
(EPR insulation and TPU sheath)



< HAR >

MAIN CHARACTERISTICS

STANDARD
EN 50525-2-21

RATED VOLTAGE
450/750V

SHORT CIRCUIT TEMP.
MAX +250°C (EN59565-2)

CONDUCTOR OPERATING TEMP.
MAX +90°C (EN50565-1)

INTERNAL BENDING RADIUS
MIN 3xD

APPLICATIONS

H07BQ-F is used in industrial and agricultural workshops, building sites, for heavy duty applications and supplying industrial and agricultural machines and appliances where cables are subject to medium mechanical stresses (e.g. heating plates, inspection lamps, electric tools such as drills, circular saws, and domestic electric tools) use in dry, humid or moist rooms; fixed installations e.g. on rough-cast in temporary buildings and huts for accommodation purposes Suitable for outdoors use



INDUSTRIAL ENVIRONMENT



BUILDING



PROFESSIONAL LIGHTING



AGRICULTURE



POWERTOOLS



MEDICAL APPLIANCES

CONSTRUCTION

CONDUCTOR

Red Copper Stranded

FLEXIBILITY

Class 5 (EN60228) Class 6 (EN60228)

INNER SHEATH

Ethylene-Propylene rubber EI6

INNER SHEATH COLOR

H.D. 308

OUTER SHEATH

TMU polyurethane

OUTER SHEATH COLOUR

Black *

SEPARATOR

Talc

MARKING

PATELEC-CEM IEMMEQU <HAR> H07BQ-F

INSTALLATION



STORAGE TEMPERATURE

MAX +40°C



OUTDOOR FIX AND MOBILE

EN50565-2



INSTALLATION & HANDLING

MIN -40°C (EN50565-2)



INDOOR MOBILE

* OTHER COLORS ON REQUEST

TECHNICAL FEATURES

COLD RESISTANT
-40°C - EN50363-2-1

HEAVY-DUTY

OZONE RESISTANT

LEAD-FREE

MICROBE RESISTANT
VDE 0282/10

HALOGEN FREE

SILICONE FREE

H07BQ-F

H07BQ-F - 450 / 750V - EN 50525-2-21

Heavy duty cable heat resistant 90°C
(EPR insulation and TPU sheath)

section	min cable diameter	max cable diameter	average thickness insulation	average thickness sheath	max wires diameter	electrical resistance	approximate weight cable
(mm ²)	(mm)	(mm)	(mm)	(mm)	(mm)	(Ω/km)	(kg/km)

2 CONDUCT

2x1	6,9	9	0,8	0,9	0,21	19,5	68
2x1,5	7,6	9,8	0,8	1	0,26	13,3	85
2x2,5	9	11,6	0,9	1,1	0,26	7,98	124

3 CONDUCT

3G1	7,3	9,5	0,8	0,9	0,21	19,5	83
3G1,5	8	10,4	0,8	1	0,26	13,3	103
3G2,5	9,6	12,4	0,9	1,1	0,26	7,98	152

4 CONDUCT

4G1	8,2	10,7	0,8	1	0,21	19,5	105
4G1,5	9	11,6	0,8	1,1	0,26	13,3	133
4G2,5	10,7	13,8	0,9	1,2	0,26	7,98	197

5 CONDUCT

5G1	9,2	11,9	0,8	1,1	0,21	19,5	133
5G1,5	9,8	12,7	0,8	1,1	0,26	13,3	164
5G2,5	11,9	15,3	0,9	1,3	0,26	7,98	247

05BQH8-F

05BQH8-F - 300 / 500V

Ordinary duty estensible cable heat resistant 90°C
(EPR insulation and TPU sheath)



MAIN CHARACTERISTICS

STANDARD
EN 50525-2-21



RATED VOLTAGE
300/500V



SHORT CIRCUIT TEMP.
MAX +250°C (EN59565-2)



CONDUCTOR OPERATING TEMP.
MAX +90°C (EN50565-1)



INTERNAL BENDING RADIUS
MIN 3xD

APPLICATIONS

05BQH8-F Use in domestic premises, kitchens and offices, for ordinary duty applications and supplying appliances where cables are subject to low mechanical stresses {e.g. vacuum cleaners, cooking appliances, soldering irons, toasters, domestic portable tools, hand held inspection lamps) use outdoors for temporary periods of short duration. Suitable for use to the maximum conductor temperature of 90°C.

Skin contact should be avoided when operating these cables unless calculations show that the surface temperature does not exceed 50 °C.



BUILDING



PROFESSIONAL
LIGHTING



AGRICULTURE



APPLIANCES



MEDICAL
APPLIANCES

CONSTRUCTION

CONDUCTOR

Red Copper Stranded

FLEXIBILITY

Class 5 (EN60228) Class 6 (EN60228)

INNER SHEATH

Ethylene-Propylene rubber EI6

INNER SHEATH COLOR

H.D. 308

OUTER SHEATH

TMPU polyurethane

OUTER SHEATH COLOUR

Black *

SEPARATOR

Talc

MARKING

PATELEC-CEM IEMMEQU <HAR> 05BQH8-F

TECHNICAL FEATURES



COLD RESISTANT
-40°C - EN50363-2-1



OZONE RESISTANT



LEAD-FREE



MICROBE RESISTANT
VDE 0282/10



HALOGEN FREE



SILICONE FREE

INSTALLATION



STORAGE TEMPERATURE
MAX +40°C



INDOOR MOBILE



INSTALLATION & HANDLING
MIN -40°C (EN50565-2)

* OTHER COLORS ON REQUEST

05BQH8-F

05BQH8-F - 300 / 500V - EN 50525-2-21

Ordinary duty extensible cable heat resistant 90°C
(EPR insulation and TPU sheath)

section	min cable diameter	max cable diameter	average thickness insulation	average thickness sheath	max wires diameter	electrical resistance	approximate weight cable
(mm ²)	(mm)	(mm)	(mm)	(mm)	(mm)	(Ω/km)	(kg/km)

2 CONDUCT

2x1	6,9	9	0,8	0,9	0,21	19,5	68
2x1,5	7,6	9,8	0,8	1	0,26	13,3	85
2x2,5	9	11,6	0,9	1,1	0,26	7,98	124

3 CONDUCT

3G1	7,3	9,5	0,8	0,9	0,21	19,5	83
3G1,5	8	10,4	0,8	1	0,26	13,3	103
3G2,5	9,6	12,4	0,9	1,1	0,26	7,98	152

4 CONDUCT

4G1	8,2	10,7	0,8	1	0,21	19,5	105
4G1,5	9	11,6	0,8	1,1	0,26	13,3	133
4G2,5	10,7	13,8	0,9	1,2	0,26	7,98	197

5 CONDUCT

5G1	9,2	11,9	0,8	1,1	0,21	19,5	133
5G1,5	9,8	12,7	0,8	1,1	0,26	13,3	164
5G2,5	11,9	15,3	0,9	1,3	0,26	7,98	247

GHELIOS®

H05Z1Z1-F GHELIOS® - 300 / 500V Eca

Ordinary duty cable Halogen free
(Themoplastic insulation and sheath low smoke emission)



MAIN CHARACTERISTICS

STANDARD

EN 50525-2-21 - EN 50575



RATED VOLTAGE

450/750V



SHORT CIRCUIT TEMP.

MAX +200°C (EN59565-2)



CONDUCTOR OPERATING TEMP.

MAX +90°C (EN50565-1)



INTERNAL BENDING RADIUS

MIN 5xD

APPLICATIONS

H05Z1Z1-F GHELIOS®

use in locations where a low level of emission of smoke and corrosive gases are required in case of fire or burning;
use in domestic premises and offices, for ordinary duty applications and household appliances, including in damp premises;
(e.g. vacuum cleaners, washing machines, spin dryers, and refrigerators);
use outdoors for temporary periods of short duration.



BUILDING



PROFESSIONAL
LIGHTING



AGRICULTURE



APPLIANCES



INDUSTRIAL
ENVIRONMENT

CONSTRUCTION

CONDUCTOR

Red Copper Stranded

FLEXIBILITY

Class 5 (EN60228)

INNER SHEATH

Thermoplastic HF TI6

INNER SHEATH COLOR

H.D. 308

OUTER SHEATH

Thermoplastic HF Tm7

OUTER SHEATH COLOUR

White *

SEPARATOR

Talc

MARKING

PATELEC-CEM IEMMEQU <HAR> H05Z1Z1-F GHELIOS® Eca

INSTALLATION



STORAGE TEMPERATURE

MAX +40°C



INSTALLATION & HANDLING

MIN -5°C (EN50565-2)

* OTHER COLORS ON REQUEST

TECHNICAL FEATURES



FLAME RESISTANT

EN 60332-1-2



OZONE RESISTANT



LEAD-FREE



HALOGEN FREE



SILICONE FREE

section	min cable diameter	max cable diameter	avarage thickness insulation	avarage thickness sheath	max wires diameter	electrical resistance	approximate weight cable
(mm ²)	(mm)	(mm)	(mm)	(mm)	(mm)	(Ω/km)	(kg/km)

2 CONDUCT

2x0,5	5,7	7,2	0,6	0,8	0,21	26	53
2x1	5,9	7,5	0,6	0,8	0,21	19,5	62
2x1,5	6,8	8,6	0,7	0,8	0,26	13,3	96
2x2,5	8,4	10,6	0,8	1,0	0,26	7,98	137

3 CONDUCT

3G0,75	6,0	7,6	0,6	0,9	0,21	26	65
3G1	6,3	8,0	0,6	0,8	0,21	19,5	76
3G1,5	7,4	9,4	0,7	0,8	0,26	13,3	113
3G2,5	9,2	11,4	,08	1,0	0,26	7,98	165

4 CONDUCT

4G0,75	6,6	8,3	0,6	0,8	0,21	26	80
4G1	7,1	9,0	0,6	0,9	0,21	19,5	96
4G1,5	8,4	10,5	0,7	1,0	0,26	13,3	140
4G2,5	9,1	12,5	0,8	1,1	0,26	7,98	208

5 CONDUCT

5G0,75	7,4	9,3	0,6	0,9	0,21	26	100
5G1	7,8	9,8	0,6	0,9	0,21	19,5	115
5G1,5	9,3	11,6	0,7	1,1	0,26	13,3	174
5G2,5	11,2	13,9	0,8	1,2	0,26	7,98	276

GHELIOS®

H05Z1Z1-F GHELIOS® - 300 / 500V Dca

Ordinary duty cable Halogen free
(Themoplastic insulation and sheath low smoke emission)



MAIN CHARACTERISTICS

STANDARD

EN 50525-2-21 - EN 50575



RATED VOLTAGE

450/750V



SHORT CIRCUIT TEMP.

MAX +200°C (EN59565-2)



CONDUCTOR OPERATING TEMP.

MAX +90°C (EN50565-1)



INTERNAL BENDING RADIUS

MIN 5xD

APPLICATIONS

H05Z1Z1-F GHELIOS®

use in locations where a low level of emission of smoke and corrosive gases are required in case of fire or burning;
use in domestic premises and offices, for ordinary duty applications and household appliances, including in damp premises;
(e.g. vacuum cleaners, washing machines, spin dryers, and refrigerators);
use outdoors for temporary periods of short duration.
Use in buildings subject to fire resistanc requirements for general applications.



BUILDING



PROFESSIONAL
LIGHTING



AGRICULTURE



APPLIANCES



INDUSTRIAL
ENVIRONMENT

CONSTRUCTION

CONDUCTOR

Red Copper Stranded

FLEXIBILITY

Class 5 (EN60228)

INNER SHEATH

Thermoplastic HF TI6

INNER SHEATH COLOR

H.D. 308

OUTER SHEATH

Thermoplastic HF TM7

OUTER SHEATH COLOUR

Black *

SEPARATOR

Talc

MARKING

PATELEC-CEM IEMMEQU <HAR> H05Z1Z1-F GHELIOS® Dca

INSTALLATION



STORAGE TEMPERATURE

MAX +40°C



INSTALLATION & HANDLING

MIN -5°C (EN50565-2)

* OTHER COLORS ON REQUEST

TECHNICAL FEATURES



FLAME RESISTANT

EN 60332-1-2



FIRE RESISTANT

EN 50399



OZONE RESISTANT



LEAD-FREE



HALOGEN FREE



SILICONE FREE

Ordinary duty cable Halogen free

(Themoplastic insulation and sheath low smoke emission)

section	min cable diameter	max cable diameter	average thickness insulation	average thickness sheath	max wires diameter	electrical resistance	approximate weight cable
(mm²)	(mm)	(mm)	(mm)	(mm)	(mm)	(Ω/km)	(kg/km)

2 CONDUCT

2x1,5	6,8	8,6	0,7	0,8	0,26	13,3	96
2x2,5	8,4	10,6	0,8	1,0	0,26	7,98	137

3 CONDUCT

3G1,5	7,4	9,4	0,7	0,8	0,26	13,3	113
3G2,5	9,2	11,4	0,8	1,0	0,26	7,98	165

4 CONDUCT

4G1,5	8,4	10,5	0,7	1	0,26	13,3	140
4G2,5	9,1	12,5	0,8	1,1	0,26	7,98	208

5 CONDUCT

5G1,5	9,3	11,6	0,7	1,1	0,26	13,3	174
5G2,5	11,2	13,9	0,8	1,2	0,26	7,98	276

GHELIOS®

H05Z1Z1-F GHELIOS® - 300 / 500V Cca

Ordinary duty cable Halogen free
(Themoplastic insulation and sheath low smoke emission)



MAIN CHARACTERISTICS

STANDARD

EN 50525-2-21 - EN 50575



RATED VOLTAGE

450/750V



SHORT CIRCUIT TEMP.

MAX +200°C (EN59565-2)



CONDUCTOR OPERATING TEMP.

MAX +90°C (EN50565-1)



INTERNAL BENDING RADIUS

MIN 5xD

APPLICATIONS

H05Z1Z1-F GHELIOS®

use in locations where a low level of emission of smoke and corrosive gases are required in case of fire or burning;
use in domestic premises and offices, for ordinary duty applications and household appliances, including in damp premises;
(e.g. vacuum cleaners, washing machines, spin dryers, and refrigerators);
use outdoors for temporary periods of short duration.
Use in buildings subject to fire resistanc requirements for general applications.



BUILDING



PROFESSIONAL
LIGHTING



AGRICULTURE



APPLIANCES



INDUSTRIAL
ENVIRONMENT

CONSTRUCTION

CONDUCTOR

Red Copper Stranded

FLEXIBILITY

Class 5 (EN60228)

INNER SHEATH

Thermoplastic HF TI6

INNER SHEATH COLOR

H.D. 308

OUTER SHEATH

Thermoplastic HF TM7

OUTER SHEATH COLOUR

Black *

SEPARATOR

Talc

MARKING

PATELEC-CEM IEMMEQU <HAR> H05Z1Z1-F GHELIOS® Cca

INSTALLATION



STORAGE TEMPERATURE

MAX +40°C



INSTALLATION & HANDLING

MIN -5°C (EN50565-2)

* OTHER COLORS ON REQUEST

TECHNICAL FEATURES



FLAME RESISTANT

EN 60332-1-2



FIRE RESISTANT

EN 50399



OZONE RESISTANT



LEAD-FREE



HALOGEN FREE



SILICONE FREE

Ordinary duty cable Halogen free

(Themoplastic insulation and sheath low smoke emission)

section	min cable diameter	max cable diameter	average thickness insulation	average thickness sheath	max wires diameter	electrical resistance	approximate weight cable
(mm²)	(mm)	(mm)	(mm)	(mm)	(mm)	(Ω/km)	(kg/km)

2 CONDUCT

2x1,5	6,8	8,6	0,7	0,8	0,26	13,3	96
2x2,5	8,4	10,6	0,8	1,0	0,26	7,98	137

3 CONDUCT

3G1,5	7,4	9,4	0,7	0,8	0,26	13,3	113
3G2,5	9,2	11,4	0,8	1,0	0,26	7,98	165

4 CONDUCT

4G1,5	8,4	10,5	0,7	1	0,26	13,3	140
4G2,5	9,1	12,5	0,8	1,1	0,26	7,98	208

5 CONDUCT

5G1,5	9,3	11,6	0,7	1,1	0,26	13,3	174
5G2,5	11,2	13,9	0,8	1,2	0,26	7,98	276

GHELIOS® EVC-Cable

H07BZ5-F GHELIOS® EVC-Cable - 450 / 750V

Charging cables for electric vehicles



MAIN CHARACTERISTICS

STANDARD
EN 50620

RATED VOLTAGE
450/750V

SHORT CIRCUIT TEMP.
MAX +200°C (EN59565-2)

CONDUCTOR OPERATING TEMP.
MAX +90°C (EN50565-1)

INTERNAL BENDING RADIUS
MIN 5xD

CONSTRUCTION

CONDUCTOR

Red Copper Stranded

FLEXIBILITY

Class 5 (EN60228) Class 6 (EN60228)

INNER SHEATH

Ethylene-Propylene rubber EVI-2

INNER SHEATH COLOR

H.D. 308

OUTER SHEATH

TMPU EVM-1

OUTER SHEATH COLOUR

Green *

SEPARATOR

Polver

SIGNAL

1 or 2

MARKING

PATELEC-CEM IEMMEQU <HAR> H07BZ5-F GHELIOS® EVC CABLE

INSTALLATION



STORAGE TEMPERATURE
MAX +40°C



OUTDOOR FIX AND MOBILE
EN50565-2



INSTALLATION & HANDLING
MIN -35°C (EN50565-2)



INDOOR MOBILE



WATER RESISTANT

TECHNICAL FEATURES

OIL RESISTANT
EN 60811-404

FLAME RESISTANT
EN 60332-1-2

COLD RESISTANT
-40°C - EN50363-2-1

HEAVY-DUTY

HYDROCARBONS FREE

CHEMICAL FREE

OZONE RESISTANT



SILICONE FREE



LEAD-FREE



HALOGEN FREE

* OTHER CLORS ON REQUEST

GHELIOS® EVC-Cable

H07BZ5-F GHELIOS® EVC-Cable - 450 / 750V

Charging cables for electric vehicles

section	min cable diameter	max cable diameter	average thickness insulation	average thickness sheath	max wires diameter	electrical resistance	approximate weight cable
	(mm²)	(mm)	(mm)	(mm)	(mm)	(Ω/km)	(kg/km)

3 CONDUCT + SIGNAL

3G1,5	8,20	10,50	0,70	1,50	0,26	13,30	135
3G2,5	9,30	11,90	0,70	1,60	0,26	7,88	170
3G4	10,80	13,80	0,70	1,70	0,31	4,95	240
3G6	12,30	15,70	0,70	1,90	0,31	3,30	370

4 CONDUCT + SIGNAL

4G2,5	10,20	13,10	0,70	1,70	0,26	7,88	190
4G4	11,90	15,20	0,70	1,90	0,31	4,95	270
4G6	13,50	17,30	0,70	2,00	0,31	3,30	370

5 CONDUCT + SIGNAL

5G2,5	11,70	15,00	0,70	1,80	0,26	7,88	270
5G4	13,50	17,30	0,70	2,00	0,31	4,95	370
5G6	15,40	19,70	0,70	2,20	0,31	3,30	550

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that our customers can rely on our products and services

