

**H05Z-K 90°C 1X0,5 RD**
**Article No.:** 4725041

Single conductor; 1X0.5; red; Ring;  $U_0/U$ : 300/500 V; Halogen-free compound; HAR-certified; Fixed Installation



## Details

### Benefits

- Made in accordance with harmonized European design H05Z-K, with <HAR> testing mark for proven reliability and quality.
- <HAR> cables are widely accepted and can be used in Europe.
- Halogen-free conductor insulation compound as well as low smoke gas emission and low corrosiveness of gases in the event of fire make the cable suitable for use in public areas.
- Classified fire behavior according to EU Directive 305/2011 (BauPVO/CPR) with article number selection on the LAPP website.
- Compact design for easy processing.
- Different conductor insulation colors available.
- Available as ring, on coils or in large disposable cardboard boxes.

### Application

- For wiring machine-internal circuits, subject to special fire protection requirements.
- Suitable for wiring inside control cabinets.
- For wiring lighting.
- For fixed and protected installation in an electrical installation pipe on or under plaster.

- Can be used for open installation on cable trays for equipotential bonding.
- Can be used in dry rooms.
- For operating temperatures from -40°C to +90°C.

### Notes

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

If applicable, the prices are solid metal prices without additional charges and VAT. Sales only to business customers.

Unless specified otherwise, the product values shown are rated values at room temperature. You can receive additional values, such as tolerances, upon request if they are available and have been released for publication.

The absence of PWIS raw materials does not protect against the potential risk of contamination with substances that interfere with the paint wetting during subsequent handling of the product(s) during transport, storage or further processing after delivery.

Trade product, not a LAPP product.

### Remarks

Trade product, not a LAPP product.

### Technical Data

#### General information

Product type	Single conductor
Copper index	32.3 lb/10000 ft
Single core packaging type	Ring
Length per PU	328.084 ft
Industry segment	Assembly Machines Lifts & Elevators Rolling Stock Ships & boats

#### Electrical parameters

Nominal voltage	$U_0/U$ : 300/500 V AC rms according to IEC
test voltage	2 kV
Current rating according to	VDE 0298-4

**Product design**

Harmonized product type	H05Z-K
Cable dimension	1X0.5
Nominal cross section conductor (mm <sup>2</sup> )	0.5 mm <sup>2</sup>
Conductor material	Bare Copper
Conductor design	IEC 60228 class 5: fine-wire
Number of cores	1
Shielded	No
Min. outer diameter	0.083 in
Max. outer diameter	0.102 in
Cable form	Round
Core insulation base material	Halogen-free compound
Single core color	red
Single conductor identification	Single-colored

**Product features**

Application area	Fixed Installation
For torsional load	No
Minimum bending radius, stationary	4 x outer diameter
Minimum bending radius in inch, fixed installation	0.409 in
Minimum bending radius with careful bending	2 x outer diameter
Temperature, fixed installation	-40 °C to 90 °C max. conductor temperature
Installation temperature min.	-5 °C
Max. assembly temperature	80 °C
Storage temperature max.	-5 °C
Storage temperature maximum	40 °C
Flame-retardant	Yes

Flame retardance according to	IEC 60332-1-2
low smoke density according to	IEC 61034-2
UV-resistant	No
weather resistant	No
Ozone-resistant	No
Halogenfree	Yes
Halogen-free according to	EN 50525-1 Annex B
Oil resistant	No
PWIS-free	Yes
PWIS-free according to	VDMA 24364-B2-L

#### Certifications and standards

CE marking	Yes
EAC certified	Yes
EAC certification number	EAЭC N RU Д-DE.АЮ64.В.00130/20, EAЭC N RU Д-DE.АЮ64.В.00142/20
VDE certified	No
HAR-certified	Yes
Product standard DIN / EN	EN 50525-3-41
CPR fire class	Eca
Resistance to flame propagation tested according to UN/ECE-R118	No

**H05Z-K 90°C**

Article No.	Name	Nominal cross section conductor (mm <sup>2</sup> )	Single core color	Single core packaging type	Length per PU	Min. outer diameter	Max. outer diameter	Copper index
4725001	H05Z-K 90°C 1X0,5 GNYE	0.5 mm <sup>2</sup>	green/yellow	Ring	328.084 ft	0.083 in	0.102 in	32.3 lb/10000 ft
4725001S	H05Z-K 90°C 1X0,5 GNYE	0.5 mm <sup>2</sup>	green/yellow	Spool	820.21 ft	0.083 in	0.102 in	32.26 lb/10000 ft
4725002	H05Z-K 90°C 1X0,75 GNYE	0.75 mm <sup>2</sup>	green/yellow	Ring	328.084 ft	0.087 in	0.11 in	48.4 lb/10000 ft
4725002S	H05Z-K 90°C 1X0,75 GNYE	0.75 mm <sup>2</sup>	green/yellow	Spool	820.21 ft	0.087 in	0.11 in	48.38 lb/10000 ft
4725003	H05Z-K 90°C 1X1 GNYE	1 mm <sup>2</sup>	green/yellow	Ring	328.084 ft	0.094 in	0.114 in	64.5 lb/10000 ft
4725003S	H05Z-K 90°C 1X1 GNYE	1 mm <sup>2</sup>	green/yellow	Spool	820.21 ft	0.094 in	0.114 in	64.51 lb/10000 ft
4725011	H05Z-K 90°C 1X0,5 BK	0.5 mm <sup>2</sup>	black	Ring	328.084 ft	0.083 in	0.102 in	32.3 lb/10000 ft
4725011K	H05Z-K 90°C EMBOSS 1X0,5 BK	0.5 mm <sup>2</sup>	black	Large Cardboard Box	9,842.52 ft	0.083 in	0.102 in	32.25 lb/10000 ft
4725011S	H05Z-K 90°C 1X0,5 BK	0.5 mm <sup>2</sup>	black	Spool	820.21 ft	0.083 in	0.102 in	32.26 lb/10000 ft
4725012	H05Z-K 90°C 1X0,75 BK	0.75 mm <sup>2</sup>	black	Ring	328.084 ft	0.087 in	0.11 in	48.4 lb/10000 ft
4725012K	H05Z-K 90°C EMBOSS 1X0,75 BK	0.75 mm <sup>2</sup>	black	Large Cardboard Box	8,202.1 ft	0.087 in	0.11 in	48.38 lb/10000 ft
4725012S	H05Z-K 90°C 1X0,75 BK	0.75 mm <sup>2</sup>	black	Spool	820.21 ft	0.087 in	0.11 in	48.38 lb/10000 ft
4725013	H05Z-K 90°C 1X1 BK	1 mm <sup>2</sup>	black	Ring	328.084 ft	0.094 in	0.114 in	64.5 lb/10000 ft
4725013K	H05Z-K 90°C EMBOSS 1X1 BK	1 mm <sup>2</sup>	black	Large Cardboard Box	6,561.68 ft	0.094 in	0.114 in	64.51 lb/10000 ft
4725013S	H05Z-K 90°C 1X1 BK	1 mm <sup>2</sup>	black	Spool	820.21 ft	0.094 in	0.114 in	64.51 lb/10000 ft
4725021	H05Z-K 90°C 1X0,5 BU	0.5 mm <sup>2</sup>	blue	Ring	328.084 ft	0.083 in	0.102 in	32.3 lb/10000 ft
4725021K	H05Z-K 90°C EMBOSS 1X0,5 BU	0.5 mm <sup>2</sup>	blue	Large Cardboard Box	9,842.52 ft	0.083 in	0.102 in	32.25 lb/10000 ft
4725021S	H05Z-K 90°C 1X0,5 BU	0.5 mm <sup>2</sup>	blue	Spool	820.21 ft	0.083 in	0.102 in	32.26 lb/10000 ft
4725022	H05Z-K 90°C 1X0,75 BU	0.75 mm <sup>2</sup>	blue	Ring	328.084 ft	0.087 in	0.11 in	48.4 lb/10000 ft

Article No.	Name	Nominal cross section conductor (mm <sup>2</sup> )	Single core color	Single core packaging type	Length per PU	Min. outer diameter	Max. outer diameter	Copper index
4725022K	H05Z-K 90°C EMBOSS 1X0,75 BU	0.75 mm <sup>2</sup>	blue	Large Cardboard Box	8,202.1 ft	0.087 in	0.11 in	48.38 lb/10000 ft
4725022S	H05Z-K 90°C 1X0,75 BU	0.75 mm <sup>2</sup>	blue	Spool	820.21 ft	0.087 in	0.11 in	48.38 lb/10000 ft
4725023	H05Z-K 90°C 1X1 BU	1 mm <sup>2</sup>	blue	Ring	328.084 ft	0.094 in	0.114 in	64.5 lb/10000 ft
4725023K	H05Z-K 90°C EMBOSS 1X1 BU	1 mm <sup>2</sup>	blue	Large Cardboard Box	6,561.68 ft	0.094 in	0.114 in	64.51 lb/10000 ft
4725023S	H05Z-K 90°C 1X1 BU	1 mm <sup>2</sup>	blue	Spool	820.21 ft	0.094 in	0.114 in	64.51 lb/10000 ft
4725031	H05Z-K 90°C 1X0,5 BN	0.5 mm <sup>2</sup>	brown	Ring	328.084 ft	0.083 in	0.102 in	32.3 lb/10000 ft
4725031S	H05Z-K 90°C 1X0,5 BN	0.5 mm <sup>2</sup>	brown	Spool	820.21 ft	0.083 in	0.102 in	32.26 lb/10000 ft
4725032	H05Z-K 90°C 1X0,75 BN	0.75 mm <sup>2</sup>	brown	Ring	328.084 ft	0.087 in	0.11 in	48.4 lb/10000 ft
4725032K	H05Z-K 90°C EMBOSS 1X0,75 BN	0.75 mm <sup>2</sup>	brown	Large Cardboard Box	8,202.1 ft	0.087 in	0.11 in	48.38 lb/10000 ft
4725032S	H05Z-K 90°C 1X0,75 BN	0.75 mm <sup>2</sup>	brown	Spool	820.21 ft	0.087 in	0.11 in	48.38 lb/10000 ft
4725033	H05Z-K 90°C 1X1 BN	1 mm <sup>2</sup>	brown	Ring	328.084 ft	0.094 in	0.114 in	64.5 lb/10000 ft
4725033K	H05Z-K 90°C EMBOSS 1X1 BN	1 mm <sup>2</sup>	brown	Large Cardboard Box	6,561.68 ft	0.094 in	0.114 in	64.51 lb/10000 ft
4725033S	H05Z-K 90°C 1X1 BN	1 mm <sup>2</sup>	brown	Spool	820.21 ft	0.094 in	0.114 in	64.51 lb/10000 ft
4725041	H05Z-K 90°C 1X0,5 RD	0.5 mm <sup>2</sup>	red	Ring	328.084 ft	0.083 in	0.102 in	32.3 lb/10000 ft
4725041S	H05Z-K 90°C 1X0,5 RD	0.5 mm <sup>2</sup>	red	Spool	820.21 ft	0.083 in	0.102 in	32.26 lb/10000 ft
4725042	H05Z-K 90°C 1X0,75 RD	0.75 mm <sup>2</sup>	red	Ring	328.084 ft	0.087 in	0.11 in	48.4 lb/10000 ft
4725042K	H05Z-K 90°C EMBOSS 1X0,75 RD	0.75 mm <sup>2</sup>	red	Large Cardboard Box	8,202.1 ft	0.087 in	0.11 in	48.38 lb/10000 ft
4725042S	H05Z-K 90°C 1X0,75 RD	0.75 mm <sup>2</sup>	red	Spool	820.21 ft	0.087 in	0.11 in	48.38 lb/10000 ft
4725043	H05Z-K 90°C 1X1 RD	1 mm <sup>2</sup>	red	Ring	328.084 ft	0.094 in	0.114 in	64.5 lb/10000 ft

Article No.	Name	Nominal cross section conductor (mm <sup>2</sup> )	Single core color	Single core packaging type	Length per PU	Min. outer diameter	Max. outer diameter	Copper index
4725043K	H05Z-K 90°C EMOSS 1X1 RD	1 mm <sup>2</sup>	red	Large Cardboard Box	6,561.68 ft	0.094 in	0.114 in	64.51 lb/10000 ft
4725043S	H05Z-K 90°C 1X1 RD	1 mm <sup>2</sup>	red	Spool	820.21 ft	0.094 in	0.114 in	64.51 lb/10000 ft
4725051	H05Z-K 90°C 1X0,5 WH	0.5 mm <sup>2</sup>	white	Ring	328.084 ft	0.083 in	0.102 in	32.3 lb/10000 ft
4725051S	H05Z-K 90°C 1X0,5 WH	0.5 mm <sup>2</sup>	white	Spool	820.21 ft	0.083 in	0.102 in	32.26 lb/10000 ft
4725052	H05Z-K 90°C 1X0,75 WH	0.75 mm <sup>2</sup>	white	Ring	328.084 ft	0.087 in	0.11 in	48.4 lb/10000 ft
4725052K	H05Z-K 90°C EMOSS 1X0,75 WH	0.75 mm <sup>2</sup>	white	Large Cardboard Box	8,202.1 ft	0.087 in	0.11 in	48.38 lb/10000 ft
4725052S	H05Z-K 90°C 1X0,75 WH	0.75 mm <sup>2</sup>	white	Spool	820.21 ft	0.087 in	0.11 in	48.38 lb/10000 ft
4725053	H05Z-K 90°C 1X1 WH	1 mm <sup>2</sup>	white	Ring	328.084 ft	0.094 in	0.114 in	64.5 lb/10000 ft
4725053K	H05Z-K 90°C EMOSS 1X1 WH	1 mm <sup>2</sup>	white	Large Cardboard Box	6,561.68 ft	0.094 in	0.114 in	64.51 lb/10000 ft
4725053S	H05Z-K 90°C 1X1 WH	1 mm <sup>2</sup>	white	Spool	820.21 ft	0.094 in	0.114 in	64.51 lb/10000 ft
4725061	H05Z-K 90°C 1X0,5 GY	0.5 mm <sup>2</sup>	gray	Ring	328.084 ft	0.083 in	0.102 in	32.3 lb/10000 ft
4725061S	H05Z-K 90°C 1X0,5 GY	0.5 mm <sup>2</sup>	gray	Spool	820.21 ft	0.083 in	0.102 in	32.26 lb/10000 ft
4725062	H05Z-K 90°C 1X0,75 GY	0.75 mm <sup>2</sup>	gray	Ring	328.084 ft	0.087 in	0.11 in	48.4 lb/10000 ft
4725062S	H05Z-K 90°C 1X0,75 GY	0.75 mm <sup>2</sup>	gray	Spool	820.21 ft	0.087 in	0.11 in	48.38 lb/10000 ft
4725063	H05Z-K 90°C 1X1 GY	1 mm <sup>2</sup>	gray	Ring	328.084 ft	0.094 in	0.114 in	64.5 lb/10000 ft
4725063K	H05Z-K 90°C EMOSS 1X1 GY	1 mm <sup>2</sup>	gray	Large Cardboard Box	6,561.68 ft	0.094 in	0.114 in	64.51 lb/10000 ft
4725063S	H05Z-K 90°C 1X1 GY	1 mm <sup>2</sup>	gray	Spool	820.21 ft	0.094 in	0.114 in	64.51 lb/10000 ft
4725071	H05Z-K 90°C 1X0,5 VT	0.5 mm <sup>2</sup>	violet	Ring	328.084 ft	0.083 in	0.102 in	32.3 lb/10000 ft
4725071S	H05Z-K 90°C 1X0,5 VT	0.5 mm <sup>2</sup>	violet	Spool	820.21 ft	0.083 in	0.102 in	32.26 lb/10000 ft

Article No.	Name	Nominal cross section conductor (mm <sup>2</sup> )	Single core color	Single core packaging type	Length per PU	Min. outer diameter	Max. outer diameter	Copper index
4725072	H05Z-K 90°C 1X0,75 VT	0.75 mm <sup>2</sup>	violet	Ring	328.084 ft	0.087 in	0.11 in	48.4 lb/10000 ft
4725072K	H05Z-K 90°C EMBOSS 1X0,75 VT	0.75 mm <sup>2</sup>	violet	Large Cardboard Box	8,202.1 ft	0.087 in	0.11 in	48.38 lb/10000 ft
4725072S	H05Z-K 90°C 1X0,75 VT	0.75 mm <sup>2</sup>	violet	Spool	820.21 ft	0.087 in	0.11 in	48.38 lb/10000 ft
4725073	H05Z-K 90°C 1X1 VT	1 mm <sup>2</sup>	violet	Ring	328.084 ft	0.094 in	0.114 in	64.5 lb/10000 ft
4725073S	H05Z-K 90°C 1X1 VT	1 mm <sup>2</sup>	violet	Spool	820.21 ft	0.094 in	0.114 in	64.51 lb/10000 ft
4725091	H05Z-K 90°C 1X0,5 OG	0.5 mm <sup>2</sup>	orange	Ring	328.084 ft	0.083 in	0.102 in	32.3 lb/10000 ft
4725091S	H05Z-K 90°C 1X0,5 OG	0.5 mm <sup>2</sup>	orange	Spool	820.21 ft	0.083 in	0.102 in	32.26 lb/10000 ft
4725092	H05Z-K 90°C 1X0,75 OG	0.75 mm <sup>2</sup>	orange	Ring	328.084 ft	0.083 in	0.11 in	48.4 lb/10000 ft
4725092K	H05Z-K 90°C EMBOSS 1X0,75 OG	0.75 mm <sup>2</sup>	orange	Large Cardboard Box	8,202.1 ft	0.083 in	0.11 in	48.38 lb/10000 ft
4725092S	H05Z-K 90°C 1X0,75 OG	0.75 mm <sup>2</sup>	orange	Spool	820.21 ft	0.087 in	0.11 in	48.38 lb/10000 ft
4725093	H05Z-K 90°C 1X1 OG	1 mm <sup>2</sup>	orange	Ring	328.084 ft	0.094 in	0.114 in	64.5 lb/10000 ft
4725093K	H05Z-K 90°C EMBOSS 1X1 OG	1 mm <sup>2</sup>	orange	Large Cardboard Box	6,561.68 ft	0.094 in	0.114 in	64.51 lb/10000 ft
4725093S	H05Z-K 90°C 1X1 OG	1 mm <sup>2</sup>	orange	Spool	820.21 ft	0.094 in	0.114 in	64.51 lb/10000 ft
4725111	H05Z-K 90°C 1X0,5 YE	0.5 mm <sup>2</sup>	yellow	Ring	328.084 ft	0.083 in	0.102 in	32.3 lb/10000 ft
4725111S	H05Z-K 90°C 1X0,5 YE	0.5 mm <sup>2</sup>	yellow	Spool	820.21 ft	0.083 in	0.102 in	32.26 lb/10000 ft
4725112	H05Z-K 90°C 1X0,75 YE	0.75 mm <sup>2</sup>	yellow	Ring	328.084 ft	0.087 in	0.11 in	48.4 lb/10000 ft
4725112S	H05Z-K 90°C 1X0,75 YE	0.75 mm <sup>2</sup>	yellow	Spool	820.21 ft	0.087 in	0.11 in	48.38 lb/10000 ft
4725113	H05Z-K 90°C 1X1 YE	1 mm <sup>2</sup>	yellow	Ring	328.084 ft	0.094 in	0.114 in	64.5 lb/10000 ft
4725121	H05Z-K 90°C 1X0,5 GN	0.5 mm <sup>2</sup>	green	Ring	328.084 ft	0.083 in	0.102 in	32.3 lb/10000 ft
4725121S	H05Z-K 90°C 1X0,5 GN	0.5 mm <sup>2</sup>	green	Spool	820.21 ft	0.083 in	0.102 in	32.26 lb/10000 ft

Article No.	Name	Nominal cross section conductor (mm <sup>2</sup> )	Single core color	Single core packaging type	Length per PU	Min. outer diameter	Max. outer diameter	Copper index
4725122	H05Z-K 90°C 1X0,75 GN	0.75 mm <sup>2</sup>	green	Ring	328.084 ft	0.087 in	0.11 in	48.4 lb/10000 ft
4725122S	H05Z-K 90°C 1X0,75 GN	0.75 mm <sup>2</sup>	green	Spool	820.21 ft	0.087 in	0.11 in	48.38 lb/10000 ft
4725123	H05Z-K 90°C 1X1 GN	1 mm <sup>2</sup>	green	Ring	328.084 ft	0.094 in	0.114 in	64.5 lb/10000 ft
4725141	H05Z-K 90°C 1X0,5 DBU	0.5 mm <sup>2</sup>	dark blue	Ring	328.084 ft	0.083 in	0.102 in	32.3 lb/10000 ft
4725141K	H05Z-K 90°C EMBOSS 1X0,5 DBU	0.5 mm <sup>2</sup>	dark blue	Large Cardboard Box	9,842.52 ft	0.083 in	0.102 in	32.25 lb/10000 ft
4725141S	H05Z-K 90°C 1X0,5 DBU	0.5 mm <sup>2</sup>	dark blue	Spool	820.21 ft	0.083 in	0.102 in	32.26 lb/10000 ft
4725142	H05Z-K 90°C 1X0,75 DBU	0.75 mm <sup>2</sup>	dark blue	Ring	328.084 ft	0.087 in	0.11 in	48.4 lb/10000 ft
4725142K	H05Z-K 90°C EMBOSS 1X0,75 DBU	0.75 mm <sup>2</sup>	dark blue	Large Cardboard Box	8,202.1 ft	0.083 in	0.11 in	48.4 lb/10000 ft
4725142S	H05Z-K 90°C 1X0,75 DBU	0.75 mm <sup>2</sup>	dark blue	Spool	820.21 ft	0.087 in	0.11 in	48.38 lb/10000 ft
4725143	H05Z-K 90°C 1X1 DBU	1 mm <sup>2</sup>	dark blue	Ring	328.084 ft	0.094 in	0.114 in	64.5 lb/10000 ft
4725143K	H05Z-K 90°C EMBOSS 1X1 DBU	1 mm <sup>2</sup>	dark blue	Large Cardboard Box	6,561.68 ft	0.094 in	0.114 in	64.51 lb/10000 ft
4725143S	H05Z-K 90°C 1X1 DBU	1 mm <sup>2</sup>	dark blue	Spool	820.21 ft	0.094 in	0.114 in	64.51 lb/10000 ft

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