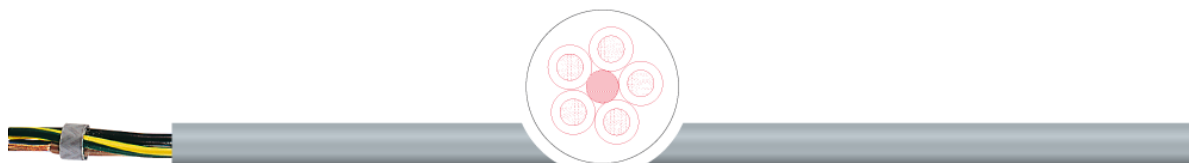


MULTINORM H05VV5-F HAR/UL/CSA

2-NORM (H)05VV5-F UL/CSA



300/500 V (IEC), 600 V (UL), niet-afgeschermd, HAR, UL/CSA, CPR Eca



TOEPASSING

als voedings-, besturings-, verbindings- en aansluitkabel in elektrische systemen, voor vaste installatie en flexibele toepassingen met vrije beweging zonder trekspanning en zonder gedwongen geleiding. Geschikt voor installatie in droge, vochtige en natte ruimtes (inclusief water-oliemengsels), maar niet buitenshuis zonder UV-bescherming en niet geschikt voor ondergrondse installatie.



SPECIALE EIGENSCHAPPEN

- Verhoogde oliebestendige speciale PVC buitenmantel, grotendeels bestand tegen zuren en logen in overeenstemming met EN 50363-4-1 en UL 1581 T50.182
- UL/CSA-goedkeuring tot 600 V maakt parallelle installatie mogelijk met andere kabels met dezelfde bedrijfsspanning.
- Internationale keurmerken (HAR/UL/CSA)

OPMERKINGEN

- RoHS conform
- Overeenkomstig de Laagspanningsrichtlijn 2014/35/EU
- LABS/siliconenvrij (tijdens productie)
- tot en met 2,5 mm²: MULTINORM H05VV5-F HAR/UL/CSA; vanaf 4 mm²: 2-NORM (H)05VV5-F UL/CSA
- Speciale versies, andere maatvoering en mantelkleuren zijn op aanvraag verkrijgbaar.

PRODUCTGEGEVENS

ONTWERP

| | |
|------------------------|--|
| Geleidermateriaal | blank koper, fijndradig |
| Geleiderklasse | volgens IEC 60228 cl. 5 |
| Isolatie geleider | PVC |
| Geleideridentificatie | volgens DIN VDE 0293 zwarte geleiders, genummerd; G: met GL/GN |
| Stranding | geleiders samengeslagen in lagen |
| Buitenmantel Materiaal | PVC |
| Buitenmantel kleur | grijs, RAL 7001 |

ELEKTRISCHE EIGENSCHAPPEN

| | |
|--------------------------|--|
| Nominale spanning AC IEC | U ₀ /U: HAR 300/500 V; UL/CSA 600 V |
| Testspanning | 3 kV |
| Geleiderweerstand | volgens IEC 60228 cl. 5 |
| Isolatiweerstand | min. 20 MΩ x km |
| Belastbaarheid | volgens DIN VDE, zie technische bijlage |

MECHANISCHE & DAGMATIGE EIGENSCHAPPEN

| | |
|--------------------------|----------|
| Min. buigradius vast | 4 x d |
| Min. buigradius bewegend | 12,5 x d |

THERMISCHE EIGENSCHAPPEN

| | |
|--|---|
| Operat. temp. vast min./max. [°C] | HAR: -40 °C / +70 °C; UL/CSA: -40 °C / +90 °C |
| Operat. temp. bewegend min/max [°C] | HAR: -5 °C / +70 °C; UL/CSA: -5 °C / +90 °C |
| Max. geleidertemperatuur in bedrijf [°C] | +70 °C in bedrijf; +150 °C bij kortsluiting |

MULTINORM H05VV5-F HAR/UL/CSA

2-NORM (H)05VV5-F UL/CSA

EIGENSCHAPPEN IN GEVAL VAN BRAND

Brandgedrag

Zelfdovend en vlamvertragend volgens IEC 60332-1; VW1; CSA FT1

STANDAARDS & GOEDKEURINGEN

Standaard

EN 50525-2-51 / VDE 0285-525-2-51; UL-typ 2517/2587 en CSA C22.2 Nr. 210.2-M90 AWM I A/B II A/B

Goedkeuringen

HAR: 300/500 V - 70 °C | UL/CSA 600 V - 90 °C

ARTIKELOVERZICHT

MULTINORM H05VV5-F HAR/UL/CSA

| Artikelnr. [JOBARCO] | Afmeting | Buiten-Ø [mm] | Cu Index [kg/km] | Gewicht [kg/km] |
|-------------------------|--------------------|------------------|---------------------|--------------------|
| T1000013 | 2 X 0,5 (AWG 21) | 5,8 | 9,6 | 46,0 |
| T1000016 | 3 G 0,5 (AWG 21) | 6,2 | 14,4 | 53,0 |
| T1000021 | 4 G 0,5 (AWG 21) | 6,7 | 19,2 | 63,0 |
| | 5 G 0,5 (AWG 21) | 7,5 | 24,0 | 77,0 |
| T1000032 | 7 G 0,5 (AWG 21) | 9,3 | 33,6 | 111,0 |
| | 12 G 0,5 (AWG 21) | 10,9 | 57,6 | 163,0 |
| | 18 G 0,5 (AWG 21) | 13,0 | 86,4 | 215,0 |
| T1000010 | 25 G 0,5 (AWG 21) | 15,2 | 120,0 | 348,0 |
| | 34 G 0,5 (AWG 21) | 17,7 | 163,0 | 508,0 |
| | 41 G 0,5 (AWG 21) | 19,5 | 197,0 | 570,0 |
| | 50 G 0,5 (AWG 21) | 21,3 | 240,0 | 715,0 |
| | 61 G 0,5 (AWG 21) | 23,9 | 293,0 | 840,0 |
| T1000057 | 2 X 0,75 (AWG 19) | 6,2 | 14,4 | 52,0 |
| T1000017 | 3 G 0,75 (AWG 19) | 6,6 | 21,6 | 64,0 |
| T1000022 | 4 G 0,75 (AWG 19) | 7,2 | 28,8 | 78,0 |
| T1000028 | 5 G 0,75 (AWG 19) | 8,1 | 36,0 | 98,0 |
| T1000185 | 7 G 0,75 (AWG 19) | 10,0 | 50,4 | 140,0 |
| | 8 G 0,75 (AWG 19) | 10,6 | 57,6 | 178,0 |
| T1000006 | 12 G 0,75 (AWG 19) | 11,9 | 86,4 | 210,0 |
| T1000113 | 18 G 0,75 (AWG 19) | 14,1 | 130,0 | 306,0 |
| T1000011 | 25 G 0,75 (AWG 19) | 16,6 | 180,0 | 431,0 |
| T1003524 | 34 G 0,75 (AWG 19) | 19,3 | 245,0 | 567,0 |
| T1003059 | 41 G 0,75 (AWG 19) | 21,2 | 296,0 | 680,0 |
| | 50 G 0,75 (AWG 19) | 23,1 | 360,0 | 824,0 |
| | 61 G 0,75 (AWG 19) | 25,9 | 439,0 | 1.070,0 |
| | 65 G 0,75 (AWG 19) | 27,2 | 468,0 | 1.140,0 |
| T1002830 | 2 X 1 (AWG 18) | 6,5 | 19,2 | 70,0 |
| T1000018 | 3 G 1 (AWG 18) | 6,9 | 28,8 | 75,0 |
| T1000023 | 4 G 1 (AWG 18) | 7,7 | 38,4 | 92,0 |
| T1000029 | 5 G 1 (AWG 18) | 8,5 | 48,0 | 116,0 |
| T1000033 | 7 G 1 (AWG 18) | 10,7 | 67,2 | 166,0 |
| T1001571 | 12 G 1 (AWG 18) | 12,6 | 115,0 | 256,0 |
| T1000008 | 18 G 1 (AWG 18) | 15,1 | 173,0 | 359,0 |
| T1002295 | 25 G 1 (AWG 18) | 17,6 | 240,0 | 527,0 |
| | 34 G 1 (AWG 18) | 20,5 | 326,0 | 694,0 |
| | 41 G 1 (AWG 18) | 22,6 | 394,0 | 813,0 |
| | 50 G 1 (AWG 18) | 24,6 | 480,0 | 1.005,0 |
| | 61 G 1 (AWG 18) | 27,5 | 586,0 | 1.265,0 |
| T1000019 | 2 X 1,5 (AWG 16) | 7,7 | 28,8 | 77,0 |
| T1000024 | 3 G 1,5 (AWG 16) | 8,2 | 43,2 | 97,0 |
| T1000030 | 4 G 1,5 (AWG 16) | 9,1 | 57,6 | 128,0 |
| T1000034 | 5 G 1,5 (AWG 16) | 10,0 | 72,0 | 149,0 |
| | 7 G 1,5 (AWG 16) | 12,6 | 101,0 | 216,0 |
| | 8 G 1,5 (AWG 16) | 13,3 | 115,2 | 290,2 |
| T1000007 | 12 G 1,5 (AWG 16) | 15,0 | 173,0 | 324,0 |
| T1001570 | 18 G 1,5 (AWG 16) | 17,9 | 259,0 | 485,0 |
| T1000012 | 25 G 1,5 (AWG 16) | 20,9 | 360,0 | 671,0 |
| | 34 G 1,5 (AWG 16) | 24,3 | 490,0 | 881,0 |
| T1003530 | 41 G 1,5 (AWG 16) | 26,9 | 591,0 | 1.085,0 |
| | 50 G 1,5 (AWG 16) | 29,5 | 720,0 | 1.381,0 |
| T1003531 | 61 G 1,5 (AWG 16) | 33,0 | 878,0 | 1.640,0 |
| T1000020 | 2 X 2,5 (AWG 14) | 9,1 | 48,0 | 110,0 |
| T1000025 | 3 G 2,5 (AWG 14) | 9,6 | 72,0 | 154,0 |
| T1000031 | 4 G 2,5 (AWG 14) | 10,7 | 96,0 | 198,0 |
| T1000035 | 5 G 2,5 (AWG 14) | 12,0 | 120,0 | 238,0 |
| | 7 G 2,5 (AWG 14) | 15,0 | 168,0 | 345,0 |

MULTINORM H05VV5-F HAR/UL/CSA

2-NORM (H)05VV5-F UL/CSA

MULTINORM H05VV5-F HAR/UL/CSA

| Artikelnr. [JOBARCO] | Afmeting | Buiten-Ø [mm] | Cu Index [kg/km] | Gewicht [kg/km] |
|-------------------------|-------------------|------------------|---------------------|--------------------|
| | 8 G 2,5 (AWG 14) | 15,7 | 192,0 | 460,0 |
| T1001572 | 12 G 2,5 (AWG 14) | 17,8 | 288,0 | 531,0 |
| T1001997 | 18 G 2,5 (AWG 14) | 21,3 | 432,0 | 781,0 |
| T1003142 | 25 G 2,5 (AWG 14) | 25,0 | 600,0 | 1.070,0 |
| | 34 G 2,5 (AWG 14) | 28,9 | 816,0 | 1.529,0 |
| | 50 G 2,5 (AWG 14) | 35,2 | 1.200,0 | 2.290,0 |
| | 61 G 2,5 (AWG 14) | 39,5 | 1.464,0 | 2.724,0 |

2-NORM (H)05VV5-F UL/CSA

| Artikelnr. [JOBARCO] | Afmeting | Buiten-Ø [mm] | Cu Index [kg/km] | Gewicht [kg/km] |
|-------------------------|--------------------|------------------|---------------------|--------------------|
| | 2 X 0,5 (AWG 20) | 5,8 | 9,6 | 45,0 |
| | 3 G 0,5 (AWG 20) | 6,1 | 14,4 | 54,0 |
| | 4 G 0,5 (AWG 20) | 6,6 | 19,2 | 65,0 |
| | 5 G 0,5 (AWG 20) | 7,2 | 24,0 | 78,0 |
| | 7 G 0,5 (AWG 20) | 7,9 | 33,6 | 97,0 |
| | 12 G 0,5 (AWG 20) | 10,2 | 57,6 | 164,0 |
| | 18 G 0,5 (AWG 20) | 12,1 | 86,4 | 234,0 |
| | 25 G 0,5 (AWG 20) | 13,9 | 120,0 | 313,0 |
| | 34 G 0,5 (AWG 20) | 16,0 | 163,0 | 418,0 |
| | 2 X 0,75 (AWG 19) | 6,2 | 14,4 | 54,0 |
| | 3 G 0,75 (AWG 19) | 6,5 | 21,6 | 65,0 |
| | 4 G 0,75 (AWG 19) | 7,1 | 28,8 | 80,0 |
| | 5 G 0,75 (AWG 19) | 7,8 | 36,0 | 97,0 |
| | 7 G 0,75 (AWG 19) | 8,5 | 50,4 | 121,0 |
| | 12 G 0,75 (AWG 19) | 11,0 | 86,4 | 204,0 |
| | 18 G 0,75 (AWG 19) | 13,0 | 130,0 | 292,0 |
| | 25 G 0,75 (AWG 19) | 15,1 | 180,0 | 397,0 |
| | 34 G 0,75 (AWG 19) | 17,4 | 245,0 | 531,0 |
| | 2 X 1 (AWG 18) | 6,4 | 19,2 | 58,0 |
| | 3 G 1 (AWG 18) | 6,8 | 28,8 | 68,0 |
| | 4 G 1 (AWG 18) | 7,4 | 38,4 | 86,0 |
| | 5 G 1 (AWG 18) | 8,2 | 48,0 | 105,0 |
| | 7 G 1 (AWG 18) | 8,9 | 67,2 | 136,0 |
| | 12 G 1 (AWG 18) | 11,7 | 115,0 | 227,0 |
| | 18 G 1 (AWG 18) | 13,8 | 173,0 | 336,0 |
| | 25 G 1 (AWG 18) | 15,9 | 240,0 | 464,0 |
| | 34 G 1 (AWG 18) | 18,4 | 326,0 | 618,0 |
| | 41 G 1 (AWG 18) | 21,8 | 394,0 | 842,0 |
| | 2 X 1,5 (AWG 16) | 7,0 | 28,8 | 73,0 |
| | 3 G 1,5 (AWG 16) | 7,6 | 43,2 | 90,0 |
| | 4 G 1,5 (AWG 16) | 8,2 | 57,6 | 111,0 |
| | 5 G 1,5 (AWG 16) | 9,0 | 72,0 | 131,0 |
| T1003811 | 7 G 1,5 (AWG 16) | 10,1 | 101,0 | 172,0 |
| | 9 G 1,5 (AWG 16) | 12,8 | 129,6 | 244,0 |
| T1003812 | 12 G 1,5 (AWG 16) | 13,3 | 173,0 | 324,0 |
| | 18 G 1,5 (AWG 16) | 16,0 | 259,0 | 485,0 |
| | 25 G 1,5 (AWG 16) | 19,0 | 360,0 | 625,0 |
| | 34 G 1,5 (AWG 16) | 21,9 | 490,0 | 881,0 |
| | 2 X 2,5 (AWG 14) | 8,2 | 48,0 | 99,0 |
| | 3 G 2,5 (AWG 14) | 8,6 | 72,0 | 126,0 |
| | 4 G 2,5 (AWG 14) | 9,4 | 96,0 | 157,0 |
| | 5 G 2,5 (AWG 14) | 10,4 | 120,0 | 194,0 |
| | 7 G 2,5 (AWG 14) | 11,6 | 168,0 | 250,0 |
| | 12 G 2,5 (AWG 14) | 16,0 | 288,0 | 452,0 |
| | 18 G 2,5 (AWG 14) | 19,2 | 432,0 | 681,0 |
| | 25 G 2,5 (AWG 14) | 23,2 | 600,0 | 956,0 |
| | 34 G 2,5 (AWG 14) | 24,4 | 816,0 | 1.236,0 |
| T1003120 | 3 G 4 (AWG 12) | 11,0 | 115,0 | 232,0 |
| T1001840 | 4 G 4 (AWG 12) | 12,5 | 154,0 | 298,0 |
| T1001647 | 5 G 4 (AWG 12) | 13,3 | 192,0 | 358,0 |
| T1003084 | 7 G 4 (AWG 12) | 15,0 | 269,0 | 460,0 |
| | 2 X 6 (AWG 10) | 10,6 | 115,0 | 200,0 |
| T1003569 | 3 G 6 (AWG 10) | 12,9 | 173,0 | 360,0 |
| T1002410 | 4 G 6 (AWG 10) | 12,4 | 231,0 | 402,0 |
| T1001627 | 5 G 6 (AWG 10) | 15,9 | 288,0 | 484,0 |
| T1003570 | 7 G 6 (AWG 10) | 17,6 | 403,0 | 540,0 |
| T1003571 | 3 G 10 (AWG 8) | 16,3 | 288,0 | 535,0 |
| T1001715 | 4 G 10 (AWG 8) | 17,4 | 384,0 | 653,0 |

MULTINORM H05VV5-F HAR/UL/CSA

2-NORM (H)05VV5-F UL/CSA

2-NORM (H)05VV5-F UL/CSA

| Artikelnr. [JOBARCO] | Afmeting | Buiten-Ø [mm] | Cu Index [kg/km] | Gewicht [kg/km] |
|-------------------------|-------------------|------------------|---------------------|--------------------|
| T1003196 | 5 G 10 (AWG 8) | 19,1 | 480,0 | 709,0 |
| | 7 G 10 (AWG 8) | 21,0 | 672,0 | 917,0 |
| T1001873 | 3 G 16 (AWG 6) | 19,8 | 461,0 | 810,0 |
| | 4 G 16 (AWG 6) | 21,9 | 615,0 | 1.045,0 |
| T1003573 | 5 G 16 (AWG 6) | 24,3 | 768,0 | 1.260,0 |
| T1001893 | 3 G 25 (AWG 4) | 24,8 | 720,0 | 1.180,0 |
| | 4 G 25 (AWG 4) | 25,6 | 960,0 | 1.501,0 |
| | 5 G 25 (AWG 4) | 28,8 | 1.200,0 | 1.853,0 |
| T1001892 | 3 G 35 (AWG 2) | 28,8 | 1.008,0 | 1.590,0 |
| | 4 G 35 (AWG 2) | 29,5 | 1.344,0 | 2.123,0 |
| T1003577 | 5 G 35 (AWG 2) | 32,4 | 1.680,0 | 2.612,0 |
| | 4 G 50 (AWG 1) | 35,7 | 1.920,0 | 2.898,0 |
| | 4 G 70 (AWG 2/0) | 43,0 | 2.688,0 | 4.011,0 |
| | 4 G 95 (AWG 3/0) | 47,2 | 3.648,0 | 5.430,0 |
| | 4 G 120 (AWG 4/0) | 54,2 | 4.608,0 | 6.290,0 |