

# HELUPOWER® 1000 HY-CARBO SWA

steel wire armoured, hydrocarbon resistant power & control cable 0.6/1 kV in acc. to IEC 60502



## Technical data

- LSLH Power & Control cable acc. to IEC 60502
- **Temperature range**  
fixed installation -20°C to +90°C  
short circuit temperature max. 250°C
- **Nominal voltage**  
U<sub>0</sub>/U 0,6/1 kV
- **Test voltage**  
3500 V AC for 5 min.  
8400 V DC for 5 min.
- **Minimum bending radius**  
fixed 12 x cable Ø
- **Insulation resistance**  
> 100 MΩxkm

## Cable structure

- Bare copper conductor, multiple wired acc. to DIN VDE 0295 cl. 2 / IEC 60228 cl. 2
- Core insulation: XLPE acc. to IEC 60502-1, BS 50290-2-29 and EN 50363-0
- Core identification acc. to HD 308 S2
- Inner sheath: PVC
- Armour: galvanized steel wire armour with galvanized steel conterspiral tape (if necessary) acc. to IEC 60502-1 TAB. 9
- Outer sheath: hydrocarbon resistant PVC
- Outer sheath colour: black

## Properties

- Hydrocarbon resistant
- Oil resistant
- Flame retardant
- Low Smoke Low Halogen (LSLH)
- Suitable for direct burial
- UV resistant

## Tests

- Flame retardant acc. to DIN VDE 482-332-1-2, DIN EN 60332-1-2, IEC 60332-1-2
- Flame test on bunched wires acc. to DIN VDE 0482-332-3-24 / DIN EN 60332-3-24 / IEC 60332-3-24 (Cat. C, 20 min.)
- Flame test on bunched wires acc. to DIN VDE 0482-332-3-22 / DIN EN 60332-3-22 / IEC 60332-3-22 (Cat. A, 40 min.)
- Low amount of halogen acid gas acc. to DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1
- UV and sunlight resistant acc. to UL 1581 sect. 1200

## Note

- Denomination RVFV RH or BS 5467
- Double / galvanized steel tape armouring (DSTA / GSTA) upon request
- Other core identification upon request

## Application

The HELUPOWER® 1000 HY-CARBO SWA is an armoured power and control cable with a reduced flame propagation and reduced emission of toxic/corrosive gases and opaque fumes in case of fire. The HELUPOWER® 1000 HY-CARBO SWA is suitable for use in civil/industrial environment, in fixed lay also directly buried in ground without protection. The armour provides a good mechanical protection also in heavy applications.

CE = Product complies to the Low-Voltage Directive 2014/35/EU.

Part no.	No. cores x cross-sec. mm <sup>2</sup>	Conductor resistance at 20°C	Current rating (A) in air at 30°C	Current rating (A) directly buried at 20°C	Diameter under armour approx. mm	Outer Ø app. mm	Copper weight kg / km	Weight app. kg / km
17002000	2 x 1,5	12,100	26,0	26,0	8,0	13,4	26,0	356
17002001	2 x 2,5	7,410	36,0	35,0	8,8	14,2	43,0	403
17002002	2 x 4	4,610	49,0	45,0	10,0	15,4	69,0	487
17002003	2 x 6	3,100	63,0	56,0	11,0	16,4	104,0	566
17002004	2 x 10	1,830	86,0	76,0	13,0	19,7	175,0	863
17002005	2 x 16	1,150	115,0	99,0	15,0	21,7	278,0	1085
17002006	2 x 25	0,727	149,0	128,0	18,4	25,8	440,0	1627
17002007	2 x 35	0,524	185,0	156,0	20,6	28,0	610,0	1958
17002008	2 x 50	0,387	225,0	193,0	23,6	31,0	826,0	2418

Continuation ►

# HELUPOWER® 1000 HY-CARBO SWA

steel wire armoured, hydrocarbon resistant power & control cable 0.6/1 kV in acc. to IEC 60502

Part no.	No.cores x cross-sec. mm²	Conductor resistance at 20°C	Current rating (A) in air at 30°C	Current rating (A) directly buried at 20°C	Diameter under armour approx. mm	Outer Ø app. mm	Copper weight kg / km	Weight app. kg / km
17002009	2 x 70	0,268	0,0	0,0	27,6	35,6	1193,0	3179
17002010	3 x 1,5	12,100	10,0	9,0	8,5	13,9	40,0	381
17002011	3 x 2,5	7,410	23,0	22,0	9,3	14,7	65,0	440
17002012	3 x 4	4,610	42,0	37,0	10,6	16,0	104,0	545
17002013	3 x 6	3,100	54,0	47,0	11,7	17,1	156,0	641
17002014	3 x 10	1,830	75,0	63,0	13,9	20,6	262,0	997
17002015	3 x 16	1,150	100,0	83,0	16,0	22,7	417,0	1267
17002016	3 x 25	0,727	127,0	107,0	19,7	27,1	659,0	1895
17002017	3 x 35	0,524	158,0	131,0	22,1	29,5	915,0	2325
17002018	3 x 50	0,387	192,0	162,0	25,3	32,9	1238,0	2902
17002019	3 x 70	0,268	246,0	200,0	30,0	38,8	1790,0	4160
17002020	3 x 95	0,193	298,0	237,0	34,2	43,4	2483,0	5280
17002021	3 x 120	0,153	346,0	274,0	37,8	47,2	3114,0	6304
17002022	3 x 150	0,124	399,0	313,0	42,8	53,6	3871,0	8150
17002023	3 x 185	0,0991	456,0	352,0	47,5	58,5	4835,0	9743
17002024	3 x 240	0,0754	538,0	414,0	54,0	65,4	6383,0	12246
17002025	3 x 300	0,0601	621,0	0,0	59,6	71,4	7971,0	14735
17002026	3 x 400	0,047	0,0	0,0	66,7	78,9	10210,0	18080
17002030	4 x 1,5	12,100	23,0	22,0	9,3	14,7	53,0	428
17002031	4 x 2,5	7,410	32,0	29,0	10,2	15,6	86,0	497
17002032	4 x 4	4,610	42,0	37,0	11,7	17,1	139,0	615
17002033	4 x 6	3,080	54,0	47,0	12,9	19,6	208,0	867
17002034	4 x 10	1,830	75,0	63,0	15,3	22,0	349,0	1140
17002035	4 x 16	1,150	100,0	83,0	17,7	25,1	556,0	1617
17002036	4 x 25	0,727	127,0	107,0	21,8	29,2	879,0	2225
17002037	4 x 35	0,524	158,0	131,0	24,5	32,1	1220,0	2781
17002038	4 x 50	0,387	192,0	162,0	28,1	36,1	1651,0	3511
17002039	4 x 70	0,268	246,0	200,0	33,4	42,6	2387,0	5029
17002040	4 x 95	0,193	298,0	237,0	38,0	47,4	3310,0	6399
17002041	4 x 120	0,153	346,0	274,0	42,5	53,3	4152,0	8240
17002042	4 x 150	0,124	399,0	313,0	47,6	58,6	5162,0	9890
17002043	4 x 185	0,0991	456,0	352,0	52,9	64,3	6446,0	11919
17002044	4 x 240	0,0754	538,0	414,0	60,1	71,9	8510,0	15036
17002045	4 x 300	0,0601	621,0	0,0	66,4	78,6	10627,0	18120
17002046	4 x 400	0,047	0,0	0,0	74,7	88,8	13610,0	23600
17001980	5 x 1,5	12,100	23,0	22,0	10,1	15,5	66,0	476
17001981	5 x 2,5	7,410	32,0	29,0	11,2	16,6	108,0	566
17001982	5 x 4	4,610	42,0	37,0	12,8	19,5	173,0	832
17001983	5 x 6	3,080	54,0	47,0	14,2	20,9	259,0	988
17001984	5 x 10	1,830	75,0	63,0	16,9	23,6	437,0	1320
17001985	5 x 16	1,150	100,0	83,0	19,6	27,0	694,0	1887
17001986	5 x 25	0,727	127,0	107,0	24,1	31,5	1099,0	2613
17001987	5 x 35	0,524	158,0	131,0	27,1	34,9	1524,0	3283
17001988	5 x 50	0,387	192,0	162,0	31,6	40,6	2064,0	4506
17001989	5 x 70	0,268	0,0	0,0	37,0	46,4	2983,0	5985
17001990	5 x 95	0,193	0,0	0,0	42,5	53,1	4138,0	8178
17001991	5 x 120	0,153	0,0	0,0	47,1	58,1	5190,0	9824
17001992	5 x 150	0,124	0,0	0,0	52,8	64,2	6452,0	11870
17001993	5 x 185	0,0991	0,0	0,0	59,1	70,9	8058,0	14419
17001994	5 x 240	0,0754	0,0	0,0	66,7	78,9	10638,0	18101
17001995	5 x 300	0,0601	0,0	0,0	74,1	88,0	13284,0	23029
17001996	5 x 400	0,047	0,0	0,0	83,0	97,1	17011,0	28270
17002027	7 x 1,5	12,100	13,0	16,0	11,0	16,4	93,0	523
17002028	10 x 1,5	12,100	13,0	16,0	14,0	20,7	132,0	816
17002029	12 x 1,5	12,100	11,0	13,0	14,5	21,2	159,0	870
17002324	14 x 1,5	12,100	11,0	13,0	15,3	22,0	185,0	950
17002325	16 x 1,5	12,100	11,0	13,0	16,1	22,8	212,0	1023
17002047	19 x 1,5	12,100	9,0	12,0	17,0	23,7	251,0	1096
17002326	24 x 1,5	12,100	11,0	13,0	20,0	27,4	317,0	1483
17002048	27 x 1,5	12,100	0,0	0,0	20,5	27,9	357,0	1551
17002049	37 x 1,5	12,100	0,0	0,0	23,0	30,4	489,0	1852
17002050	7 x 2,5	7,410	18,0	21,0	12,2	18,3	151,0	726
17002051	10 x 2,5	7,410	18,0	21,0	15,6	22,3	216,0	975
17002052	12 x 2,5	7,410	14,0	18,0	16,1	22,8	259,0	1048
1702052	12 x 2,5	7,410	14,0	18,0	16,1	22,8	259,0	1048
17002053	19 x 2,5	7,410	12,0	14,0	19,0	26,4	410,0	1510
17002054	27 x 2,5	7,410	0,0	0,0	22,9	30,3	583,0	1920
17002055	37 x 2,5	7,410	0,0	0,0	25,8	33,4	798,0	2335
17002249	7 x 4	7,410	0,0	0,0	14,0	20,7	242,0	941

Dimensions and specifications may be changed without prior notice.