

# TOPFLEX® 228-10-14 EMC\*-preferred type



HELUKABEL TOPFLEX 228-10-14 Art. Nr. 22819

CE

## Technical data

- Special PVC core and jacket compound
- **Core resistance** at 20°C  
max. 98 Ohm/km
- **Temperature range**  
flexing -10°C to +70°C  
fixed installation -30°C to +70°C
- **Nominal voltage** 350 V
- **Test voltage**  
core/core 2000 V  
core/screen 1000 V
- **Insulation resistance**  
min. 100 MOhm x km
- **Minimum bending radius**  
approx. 10 x cable Ø
- **Coupling resistance**  
max. 250 Ohm/km

### paired twisting-

starting with the outer layer

**colour code:** 8 to 21 x 2 x 0,18

Pair no.	Colour	Pair no.	Colour
1	bk-bn	12	bnye-bngn
2	rd-og	13	bnbu-bnvt
3	ye-gn	14	bngy-bnwh
4	bu-vt	15	gnbk-gnbn
5	gy-wh	16	gnrd-gnog
6	whbk-whbn	17	gnbu-gnvt
7	whrd-whog	18	gngy-gnwh
8	whye-whgn	19	yebk-yebn
9	whbu-whvt	20	yerd-yeog
10	whgy-bnbk	21	yebu-yevt
11	bnrd-bnog		

- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

## Cable structure

- Tinned copper conductors
- 7-strands, suitable for clamp-and-cut system
- Special PVC core insulation
- Colour coded acc. to table shown below
- Cores laid up in pairs, alt. longitudinally
- MYLAR\*-foil wrap
- Tinned copper braided screen approx. 85% coverage
- Special PVC outer jacket, grey RAL 7000
- Extensively oil resistant Chemical Resistance - see table Technical Informations

### Cores twisted-

starting with the outer layer

**Colour code:** Type 50 x 0,18

Core- no.	Colour	Core- no.	Colour	Core- no.	Colour
1	wh	18	gybn	35	gygn
2	bn	19	whpk	36	bnbk
3	gu	20	pkbn	37	gybu
4	ye	21	whbu	38	pkbu
5	gy	22	whbk	39	gyrd
6	pk	23	bnrd	40	pkrd
7	bu	24	whrd	41	gybk
8	rd	25	bnbu	42	pkbk
9	bk	26	yebk	43	bubk
10	vt	27	gnbk	44	rdbk
11	gywt	28	yerd	45	wh
12	rdbu	29	gnrd	46	bn
13	whgn	30	yebu	47	gn
14	bngn	31	gnbu	48	gy
15	whye	32	yepk	49	ye
16	yebn	33	pkgn	50	pk
17	whgy	34	yegy		

## Application

These cables are installed in machinery and industrial plants as a data transfer cable.

\* **EMC** = Electromagnetic compatibility

**Note** To optimise the EMC features we recommend a large round contact of the copper braiding on both ends.

bk = black  
bn = brown  
rd = red  
og = orange  
ye = yellow  
pk = pink

gn = green  
bu = blue  
vt = violet  
gy = grey  
wh = white

CE = The product is conformed with the EC Low-Voltage Directive 73/23/EEC and 93/68/EEC.

Part No.	No cores x cross-sec mm <sup>2</sup>	Outer Ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	Bending radius dyn. ca. mm stat. ca. mm
22810	8 x 2 x 0,18	8,5	56	66	180 80
22819	10 x 2 x 0,18	9,7	70	79	160 100
22811	13 x 2 x 0,18	10,5	83	102	170 110
22812	21 x 2 x 0,18	12,6	120	152	200 120
22814	50 x 0,18	12,0	140	191	180 100

We request with detail enquiry (no. of cores, cross-sections, lengths).  
For special types please use the form "Special Cable Enquiries".

PVC cables will be changed to lead free PVC successively.