

Cable type

BASKETHEAVYFLEX 300/500 V
GRDGÖU for gravity-fed collector basket operation

Main application

For vertical operation with high mechanical stress, suitable to be collected in gravity-fed collector basket

Construction

Conductor:	Tinned copper conductor, flexible cl.5 IEC 60228 Specially designed for mobile application
Insulation:	EPR compound better than 3GI3 Specially developed compound with improved mechanical characteristics
Cores identification:	Black with printed numbers+1 green/yellow Each cores consecutively numbered (the triple with green/yellow core in the outer layer)
Triples:	Three cores layed-up with suitable tape(s) Textile filler in the interstices to maintain good geometrical characteristics
Central strainer:	Made of aramidic yarns To be used as support element with a minimum tensile strength of 10 kN
Laying-up:	Short lay length for better flexibility ≤ 8 times the laying-up bundle diameter, three cores design with protective earth cores split in 3 interstitial areas
Separation (if any):	Tape(s)
Outer sheath:	Special CSP compound High density specially developed compound UV resistant, lubricants resistant
Marking:	PALAZZO - BASKETHEAVYFLEX 300/500 V n of triples x cross section

Parameters

Electrical	Rated voltage	U ₀ /U= 300/500 V
	Maximum permissible operating voltage in AC systems	U _m = 550 V
	AC test voltage over 5 minutes	2,0 kV
Thermal	Fully flexible operation	- 25 °C
	Fixed installation	- 40 °C
	Maximum permissible operating temperature of the conductor	90 °C
	Short-circuit temperature of the conductor	250 °C
Mechanical	Tensile load	Up to 15 N/mm ² with minimum 2000 N
	Travel speed	Up to 160 m/min
Chemical	Resistance to oil	According to VDE / IEC standard
	Weather resistance	Unrestricted use outdoor and indoor, UV resistant, moisture resistant.



Flexible cables for gravity-fed collector in basket in line with **DIN VDE 0250 part. 814**

Table 1: BASKETHEAVYFLEX 300/500 V GRDGÖU

N. of cores and nominal section n-mm ²	Conductor		Overall diameter		Net weight approx. kg/km	Maximum permissible tensile force N	Current carrying capacity at 30 °C					Short circuit current 80 ° to 200 °C kA
	D.C. resist. at 20 °C Ohm/km	nom. diam. mm	min. mm	max. mm			Laid straight A	Suspended in free air A	Spiral or 1 layer A	2 layer A	3 layer A	
8x3x2.5	8,21	2,1	36,0	41,0	2450	900	-	-	-	-	-	0,32
12x3x2.5	8,21	2,1	39,5	44,5	3230	1350	-	-	-	-	-	0,32
14x3x2.5	8,21	2,1	44,0	49,0	3560	1575	-	-	-	-	-	0,32
16x3x2.5	8,21	2,1	46,5	51,5	3970	1800	-	-	-	-	-	0,32
18x3x2.5	8,21	2,1	48,5	53,5	4370	2025	-	-	-	-	-	0,32
8x3x3.3	6,11	2,6	36,0	41,0	2660	1190	-	-	-	-	-	0,42
12x3x3.3	6,11	2,6	39,5	44,5	3510	1790	-	-	-	-	-	0,42
14x3x3.3	6,11	2,6	44,0	49,0	3930	2080	-	-	-	-	-	0,42
16x3x3.3	6,11	2,6	46,5	51,5	4320	2380	-	-	-	-	-	0,42
18x3x3.3	6,11	2,6	48,5	53,5	4760	2680	-	-	-	-	-	0,42