

# ALUKAFLEX PUR 450/750 V 1-CORE BLACK



## Application

Temporary installations on stages and exhibitions etc.

Conductor	Flexible aluminum conductor principally like IEC 60228 class 5
Separator	Foil around conductor
Conductor insulation	EPR rubber 90°C acc. to EN 50363-1
Sheath	Black thermoplastic polyurethane
Ambient temp. at installation	Min -40°C
Conductor temperature	Max 90°C
Short circuit temperature	Max 250°C
Min. bending radius	6xD fixed installed
Rated voltage	450/750 V
Test voltage	2,5 kV
Oil resistant	IEC 60811-404
UV resistant	ISO 4892
Halogen free	IEC 60754
CPR fire class	Eca, 1x95 – 1x500 mm <sup>2</sup> ; DoP nr 1186590
Meets RoHS and REACH	
Approval	CE acc. to Low Voltage Directive
Design	EN 50525-2-21 in applicable parts

# ALUKAFLEX PUR 450/750 V 1-CORE BLACK

## *Dimension • Weight*

No of conductors x cross section	Outer diameter mm	Weight kg/km
1x50	16,7	314
1x70	19,0	406
1x95	20,8	512
1x120	22,8	620
1x150	26,0	779
1x185	27,9	929
1x240	31,2	1172
1x300	34,7	1453
1x400	39,2	1866
1x500	42,9	2258

## *Current-carrying capacity acc. to IEC 60364-5-52, table B.52.13*

No of conductors x cross section	Three loaded conductors in trefoil, method F, ambient temperature 30°C	Three loaded conductors in flat, horizontal installation, spaced, method G, ambient temperature 30°C
1x50	159 A	210 A
1x70	206 A	271 A
1x95	253 A	332 A
1x120	296 A	387 A
1x150	343 A	448 A
1x185	395 A	515 A
1x240	471 A	611 A
1x300	547 A	708 A
1x400	663 A	856 A
1x500	770 A	991 A

## *Correction factor for current-carrying capacity at other temperatures than +30°C.*

10°C: 1,15 15°C: 1,12 20°C: 1,08 25°C: 1,04 35°C: 0,96 40°C: 0,91 45°C: 0,87  
 50°C: 0,82 55°C: 0,76 60°C: 0,71 65°C: 0,65 70°C: 0,58 75°C: 0,50 80°C: 0,41

# ALUKAFLEX PUR 450/750 V 1-CORE BLACK

## *Technical and electrical data*

<b>No of conductors x cross section area</b>	<b>Maximum pulling force during installation</b>	<b>Maximum short circuit current 1 s</b>	<b>Max conductor resistance at 20°C</b>
<b>1x50</b>	1500 N	4700 A	0,641 Ohm/km
<b>1x70</b>	2100 N	6600 A	0,443 ”
<b>1x95</b>	2850 N	8900 A	0,320 ”
<b>1x120</b>	3600 N	11300 A	0,253 ”
<b>1x150</b>	4500 N	14100 A	0,206 ”
<b>1x185</b>	5550 N	17400 A	0,164 ”
<b>1x240</b>	7200 N	22600 A	0,125 ”
<b>1x300</b>	9000 N	28200 A	0,100 ”
<b>1x400</b>	12000 N	37600 A	0,0778 ”
<b>1x500</b>	15000 N	47000 A	0,0605 ”