

1-AES

PE insulated bundled overhead line

DESIGN



- 1 | Aluminium conductor with increased breaking load, round stranded compressed (RM)
- 2 | Core insulation (PE black, UV- resistant); 2 or 4 cores of equal cross section are stranded together in right-hand lay, additionally 1 or 2 cores of reduced cross section can be co-stranded

APPLICATION

Can be used for fixed installation as overhead power lines up to 1,000 V inclusive. Not suitable for direct burial.

TECHNICAL DATA


Standard:

TP PRAKAB 02/03 – 2. edition


Rated voltage:

0.6/1 kV


Test voltage:

4 kV/50 Hz


Temperature range:

laying temperature: min. -5 °C
 operating temperature: -50 °C up to +70 °C
 conductor temperature: max. +70 °C
 short-circuit temperature: max. +160 °C/5 s


Bending radius (min.):

18 x Ø of cable


Core identification:

1, 2 resp. 3 raised longitudinal ribs on the surface of the cores. The surface of the neutral conductor is smooth and marked with earth markings


Certificate:

EZÚ Czech Republic

Number of cores x nominal cross section (mm ²)	Max. conductor resistance (Ω/km)	Min. breaking load of conductor strand (kN)	Current rating in the air ¹⁾ (A)	Outer diameter (mm) ca.	Total weight (kg/km) ca.	Standard lengths/packing (m)
1-AES						
2 x 16 RM	1.910	2.5	64	15.5	145	1,000 D
4 x 16 RM	1.910	2.5	64	17.9	290	1,000 D
1 x 25 RM	1.200	4.0	94	17.6	105	1,000 D
2 x 25 RM	1.200	4.0	94	16.0	210	1,000 D
4 x 25 RM	1.200	4.0	94	21.2	435	1,000 D
4 x 25 + 25 RM/RM	1.200/1.200	4.0/4.0	94/94	24.6	315	1,000 D
4 x 35 RM	0.868	5.5	113	24.1	525	1,000 D
4 x 35 + 25 RM/RM	0.868/1.200	5.5/4.0	113/94	27.6	630	1,000 D
4 x 50 RM	0.641	8.0	140	27.8	740	1,000 D
4 x 50 + 25 RM/RM	0.641/1.200	8.0/4.0	140/94	29.6	845	1,000 D
4 x 50 + 2 x 16 RM/RM	0.641/1.910	8.0/5.5	140/64	32.2	880	1,000 D
4 x 70 RM	0.443	10.7	178	31.8	1,030	1,000 D
4 x 70 + 25 RM/RM	0.443/1.200	10.7/4.0	178/94	33.3	1,150	1,000 D
4 x 70 + 2 x 16 RM/RM	0.443/1.910	10.7/5.5	178/64	35.6	1,180	1,000 D
4 x 95 RM	0.320	13.7	220	37.2	1,350	1,000 D
4 x 95 + 25 RM/RM	0.320/1.200	13.7/4.0	220/94	38.1	1,450	1,000 D
4 x 95 + 2 x 16 RM/RM	0.320/1.910	13.7/2.5	220/64	40.6	1,510	1,000 D
4 x 120 RM	0.253	16.5	265	40.6	1,680	1,000 D
4 x 120 + 25 RM/RM	0.253/1.200	16.5/4.0	265/94	41.6	1,770	1,000 D
4 x 120 + 2 x 16 RM/RM	0.253/1.910	16.5/2.5	265/64	45.5	1,810	1,000 D

1) basic rated current acc. to TP PRAKAB 02/03 – 2. edition
 Subject to technical changes.