

# 1-AES

## PE insulated bundled overhead line

Standard: TP PRAKAB 02/03

### Usage:

Can be used for fixed installation as overhead power lines up to 1000 V inclusive. Not suitable for direct burial.



### Construction:

- 1 Aluminium conductor with increased breaking load, round stranded compacted (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



**Rated voltage:** 0.6/1 kV



**Test voltage:** 4000 Veff



### Temperature range:

laying temperature: min. -5 °C  
 operating temperature: -50 °C to +90 °C  
 conductor temperature: max. +90 °C  
 short-circuit temperature: max. +200 °C/5 s



**Bending radius (min.):** 18 x core-Ø



### 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



### Test certificate:

EZÚ Czech Republic,  
 EVPÚ Slovak Republic,  
 GOST Russia

Number of cores x nominal cross section (mm <sup>2</sup> )	Max. conductor resistance (Ω/km)	Min. breaking load of conductor strand (kN)	Current rating in the air <sup>1)</sup> (A)	Outer diameter (mm) ca.	Metal weight (kg/km)	Total weight (kg/km) ca.	Standard lengths/packing (m)
<b>1-AES</b>							
2 x 16 RM	1.910	2.5	64	15.5	96	145	1000 T
4 x 16 RM	1.910	2.5	64	9.1	192	290	1000 T
1 x 25 RM	1.200	4.0	94	17.6	75	105	1000 T
2 x 25 RM	1.200	4.0	94	17.9	150	210	1000 T
4 x 25 RM	1.200	4.0	94	21.2	300	435	1000 T
4 x 25 + 25 RM/RM	1.200/1.200	4.0/4.0	94/94	24.6	375	315	1000 T
4 x 35 RM	0.868	5.5	113	24.1	420	525	1000 T
4 x 35 + 25 RM/RM	0.868/1.200	5.5/4.0	113/94	27.6	495	630	1000 T
4 x 50 RM	0.641	8.0	140	27.8	600	740	1000 T
4 x 50 + 25 RM/RM	0.641/1.200	8.0/4.0	140/94	29.6	675	845	1000 T
4 x 50 + 2 x 16 RM/RM	0.641/1.910	8.0/5.5	140/64	32.2	696	880	1000 T
4 x 70 RM	0.443	10.7	178	31.8	840	1,030	1000 T
4 x 70 + 25 RM/RM	0.443/1.200	10.7/4.0	178/94	33.3	915	1,150	1000 T
4 x 70 + 2 x 16 RM/RM	0.443/1.910	10.7/5.5	178/64	35.6	936	1,180	1000 T
4 x 95 RM	0.320	13.7	220	37.2	1,140	1,345	1000 T
4 x 95 + 25 RM/RM	0.320/1.200	13.7/4.0	220/94	38.1	1,215	1,450	1000 T
4 x 95 + 2 x 16 RM/RM	0.320/1.910	13.7/2.5	220/64	40.6	1,236	1,505	1000 T
4 x 120 RM	0.253	16.5	265	40.6	1,440	1,680	1000 T
4 x 120 + 25 RM/RM	0.253/1.200	16.5/4.0	265/94	41.6	1,515	1,765	1000 T
4 x 120 + 2 x 16 RM/RM	0.253/1.910	16.5/2.5	265/64	45.5	1,536	1,810	1000 T

1) basic rated current acc. to TP PRAKAB 02/03

Subject to technical changes.