

PAS-W 20 kV

Covered conductor PAS-W 20 kV



Application

For pole installation as part of PAS-system.

Highest permissible conductor temperature:

- in continuous operation80 °C

- in a short circuit (duration up to 5 s)200 °C

Lowest recommended temperature during laying . . . -20 °C

Construction

Conductor - round, stranded and compacted watertight aluminium alloy conductor

Covering - black weather resistant XLPE compound

Standards

SFS 5791, EN 50397

Rated voltage

$U_0/U = 12/20$ kV

$U_m = 24$ kV

Marking

PAS, DRAKA, product name, year of manufacture, PEX

Basic cable data			PAS-W 35	PAS-W 50	PAS-W 70	PAS-W 95	PAS-W 120	PAS-W 150
Diameter over conductor (1)		mm	6,9	8,0	9,7	11,3	12,8	14,2
Diameter over covered conductor (1)		mm	11,5	12,7	14,3	16,1	17,6	18,9
Weight (1)	aluminium	kg/km	90	120	180	245	310	385
	cable	kg/km	160	200	270	350	425	510
Delivery data								
Standard delivery length		m	2000	2000	2000	2000	2000	2000
Drum			K11	K11	K12	K14	K16	K16
Total weight (1)		kg	375	455	630	815	1045	1215
Mechanical data (2)								
Minimum permissible bending radius during laying		m	0,16	0,18	0,20	0,22	0,25	0,27
Minimum permissible bending radius at final installation (3)		m	0,12	0,13	0,14	0,16	0,18	0,19
Minimum tensile strength of the conductor		kN	11,2	15,5	22,5	30,4	38	47,3
Initial modulus of elasticity of conductor		N/mm ²	61,000					
Final modulus of elasticity of conductor		N/mm ²	62,500					
Coefficient of linear expansion of conductor		1/°C	23 x 10 ⁻⁶					
Electrical data (2)								
Maximum DC resistance of conductor (20 °C)		Ω/km	0,986	0,720	0,493	0,363	0,288	0,236
AC resistance of conductor (80 °C) (1)		Ω/km	1,22	0,89	0,61	0,45	0,36	0,29
Current ratings (2)								
In air (conductor 80 °C)		A	200	245	310	370	430	485
Short circuit currents (2)								
Maximum permissible short circuit current for 1 second (4)		kA	3,2	4,3	6,4	8,6	11,0	13,5

(1) Approximate value.

(2) See the basic assumptions at general information of products.

(3) Final installation with careful single bending.

(4) Initial temperature of conductor before short circuit 40 °C, final temperature of conductor after short circuit 200 °C.