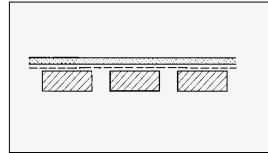
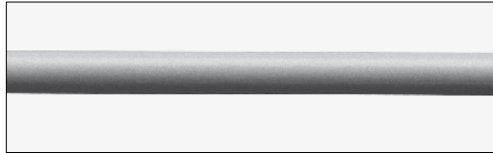


Protective hoses

Protective hoses for glass fibres

Type SZ



Types:

SZ 111S
SZ 211S

Application:

Protective hose for light conductors in medical and industrial applications, e.g. endoscopy, measuring technology and control engineering

Properties:

- highly flexible, with limited bending radius
- high tensile strength and very low expansion
- resistant to torsion and transversal pressure
- autoclaveable, lightproof and liquid-tight
- smooth interior surface – completely free of burr

Design:

- flat wire spiral with fibre glass braiding and grey silicone coating (version for medical applications)
- round cross-section

Materials:

- stainless steel (1.4301)
- aluminium (3.3555)

Versions:

- type SZ 111S – standard version
- type SZ 211S – special version, extremely lightweight, German patent DE 43 20 350 C1

Protective hoses

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Operating temperature:

From -60° C to +180° C; up to +134° C for steam sterilisation

Production lengths:

Measured in extended position
d: 1.0 - 3.5 approx. 90 % > 50 m, remainder > 15 m
4 - 8 approx. 80 % > 40 m, remainder > 10 m
10 - 13 approx. 70 % > 20 m, remainder > 7 m

Supplied in the following forms:

On drums or as bundle

Order specifications:

- special protective hose for stainless-steel light conductors
Type SZ 111S
- special protective hose for aluminium light conductors
Type SZ 111S
- special protective hose for stainless-steel light conductors
Type SZ 211S

Protective hoses

Protective hoses for glass fibres

Type SZ 111S

DN	Inside diameter		Outside diameter		Minimum bending radius	Weight approx.
	Perm. tolerance	Perm. tolerance	Perm. tolerance	Perm. tolerance		
–	d	d	D	D	r _{min}	–
–	mm	mm	mm	mm	mm	kg/m
1	1.0	-0.15	2.9	+0.2 / -0.1	5	0.015
2	1.5	-0.15	3.5	+0.2 / -0.1	6	0.019
3	2.5	-0.15	4.4	+0.2 / -0.1	14	0.030
3	3.0	-0.15	5.3	+0.2 / -0.1	20	0.045
4	3.5	-0.15	5.8	±0.2	20	0.050
4	4.0	-0.15	6.5	±0.3	25	0.065
5	4.5	-0.15	7.0	±0.3	25	0.070
5	5.0	-0.15	7.5	±0.3	25	0.080
6	6.0	-0.15	8.9	±0.3	35	0.110
7	6.5	-0.15	9.6	±0.3	35	0.130
7	7.0	-0.15	10.1	±0.3	45	0.140
8	8.0	±0.1	11.6	±0.3	45	0.190
10	10.0	±0.1	13.6	±0.4	65	0.240
11	11.4	±0.1	15.6	±0.4	75	0.325
12	12.0	±0.1	16.2	±0.4	75	0.350

Special version made of aluminium

DN	Inside diameter		Outside diameter		Minimum bending radius	Weight approx.
	Perm. tolerance	Perm. tolerance	Perm. tolerance	Perm. tolerance		
–	d	d	D	D	r _{min}	–
–	mm	mm	mm	mm	mm	kg/m
3	2.5	-0.15	4.6	+0.2 / -0.1	15	0.018
4	4.0	+0.15 / -0.15	6.5	±0.3	25	0.028
5	4.6	-0.15	7.1	±0.3	25	0.036
6	6.0	±0.15	8.9	±0.3	35	0.058

Please quote when ordering: type of hose, material, nominal diameter (DN), length

Protective hoses

Protective hoses DBP for glass fibres

Type SZ 211S

DN	Inside diameter		Outside diameter		Minimum bending radius	Weight approx.
	Perm. tolerance	Perm. tolerance	Perm. tolerance	Perm. tolerance		
–	d	d	D	D	r _{min}	–
–	mm	mm	mm	mm	mm	kg/m
3	2.7	±0.15	4.4	+0.2 / -0.1	7	0.020
3	3.3	±0.15	5.3	+0.2 / -0.1	9	0.030
4	3.8	±0.15	5.8	±0.2	11	0.030
5	4.5	±0.15	6.5	±0.3	13	0.040
5	5.0	±0.15	7.0	±0.3	14	0.040
6	5.5	±0.15	7.5	±0.3	16	0.045
7	6.5	±0.15	8.9	±0.3	22	0.065
7	7.2	±0.2	9.6	±0.3	23	0.070
8	7.7	±0.2	10.1	±0.3	25	0.075
9	9.0	±0.2	11.6	±0.3	29	0.085
11	10.6	±0.2	13.6	±0.4	42	0.160
12	12.4	±0.2	15.6	±0.4	55	0.190
13	13.0	±0.2	16.2	±0.4	59	0.195

Please quote when ordering: type of hose, material, nominal diameter (DN), length