

# SUCOFLEX® 100

## The high performance microwave cable assembly

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# SUCOFLEX® 100

## The high performance microwave cable assembly

### Product description

SUCOFLEX\_100 series flexible microwave cable assemblies offer superior electrical and mechanical performance for static and dynamic applications. This series is a high-end product designed to provide optimal performance up to 50 GHz, where stringent electrical requirements – in particular stability and low loss – are important. Their mechanical and climate resistance properties surpass those of standard flexible cables. This cable type is ideally suited to test and measurement applications (as test leads) and used in aerospace and defence systems.



### Features and benefits

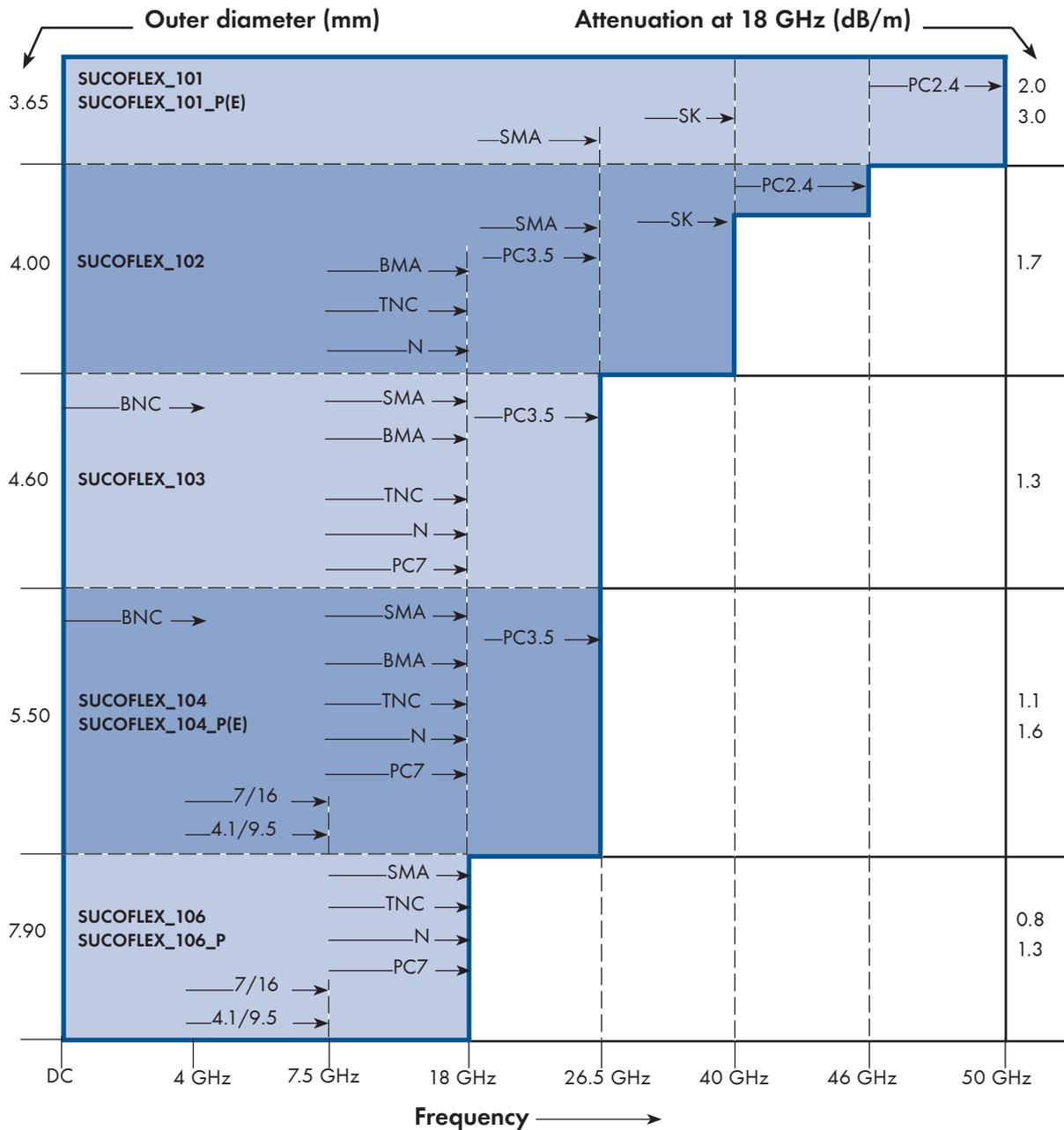
- The cable maintains stable electrical characteristics when exposed to bending and temperature, enabling reliable test results
- A balanced range of connectors is available, including types which feature NWA-specific interfaces
- Can be provided with various ruggedisations to protect the assembly against different environmental influences
- Available as assembly only

HUBER+SUHNER cable type	Operating frequency (GHz)	Temperature range		Outer dia. (mm)	Nominal attenuation 18 GHz, 25 °C (dB/m)	Bending radii		More information see page
		minimum (°C)	maximum (°C)			static (mm)	dyn. (mm)	
SUCOFLEX_101	50	-55	+125	3.65	2.0	11	20	94
SUCOFLEX_101_P	50	-55	+125	3.65	3.0	11	20	96
SUCOFLEX_101_PE	50	-40	+85	3.65	3.0	11	20	98
SUCOFLEX_102	46	-55	+125	4.00	1.7	12	20	102
SUCOFLEX_103	33	-55	+125	4.60	1.3	13	22	108
SUCOFLEX_104	26.5	-55	+125	5.50	1.1	16	25	112
SUCOFLEX_104_P	26.5	-55	+125	5.50	1.6	16	25	114
SUCOFLEX_104_PE	26.5	-40	+85	5.50	1.6	16	25	116
SUCOFLEX_106	18	-55	+125	7.90	0.8	24	40	122
SUCOFLEX_106_P	18	-55	+125	7.90	1.3	24	40	124

# SUCOFLEX® 100

## The high performance microwave cable assembly

### Cross references within product range



⇒ The number of available connector types may be limited in the case of the version featuring a stranded inner conductor (types SUCOFLEX\_101\_P(E), 104\_P(E), 106\_P).

# SUCOFLEX 101

## Variations

SUCOFLEX\_101 and 101\_P(E) for applications up to 50 GHz (K and lower L band). SUCOFLEX\_101 as standard cable in fixed installations, for internal cabling of equipment and similar uses; SUCOFLEX\_101\_PE with PUR jacket in applications in which the cable is continuously moved, that is, where maximum flexibility is demanded. Additionally protected by an A ruggedisation, the SUCOFLEX\_101\_PE becomes a flexible measurement and test cable up to 50 GHz! Suitable connectors for most applications include PC2.4 or SK. A direct connection for test and measurement cables to Agilent Technologies analysers is also available.

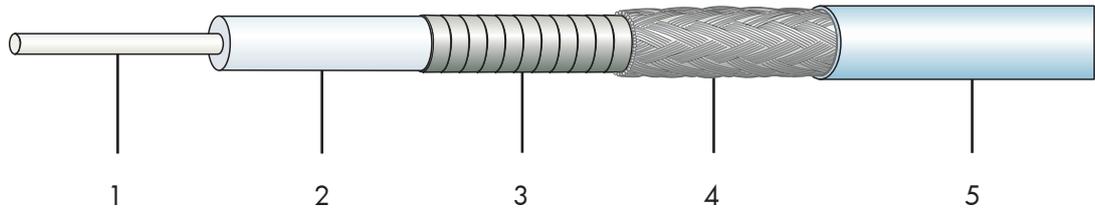
## Mechanical and general data

HUBER+SUHNER cable type	Cable	Rugge- disation	Temperature		Weight kg/100m	Outer diameter (mm)	Bending radii	
			min. (°C)	max. (°C)			static (mm)	dyn. (mm)
SUCOFLEX_101	101	-	-55	+125	3.6	3.65	11	20
SUCOFLEX_101_E	101_E	-	-40	+85	3.3	3.65	11	20
SUCOFLEX_101_EA	101_E	A	-40	+85	11.4	7.70	20	40
SUCOFLEX_101_P	101_P	-	-55	+125	3.3	3.65	11	20
SUCOFLEX_101_PE	101_PE	-	-40	+85	3.0	3.65	11	20
SUCOFLEX_101_PEA	101_PE	A	-40	+85	11.1	7.70	20	40

Further information about ruggedisation see pages 128 ff.

# SUCOFLEX\_101

## Cable design



	Description	Diameter
1. Centre conductor	Solid silver-plated copper wire	
2. Dielectric	Low density PTFE	
3. 1st outer conductor	Silver-plated copper tape, wrapped	
4. 2nd outer conductor	Silver-plated copper braid	
5. Jacket	Fluoroethylenepropylene, blue	3.65 mm

## Electrical cable data

Impedance			50 Ohm
Operating frequency			50 GHz
Capacitance			87 pF/m
Velocity of propagation			77 %
Time delay			4.3 ns/m
Nom. attenuation*	coefficient a	<b>0.4255</b>	coefficient b <b>0.0100</b>
Max. attenuation*	coefficient a	<b>0.4680</b>	coefficient b <b>0.0110</b>
Max. operating voltage			1.2 kVrms
Min. screening effectiveness up to 18 GHz			90 dB

\*Attenuation calculation  $\alpha_{25} = a \cdot \sqrt{f}(\text{GHz}) + b \cdot f(\text{GHz})$  (dB/m)

## General cable data

Temperature range	-55...+125 °C
Weight	3.6 kg/100m
Min. bending radius static	11 mm
Min. bending radius dynamic	20 mm

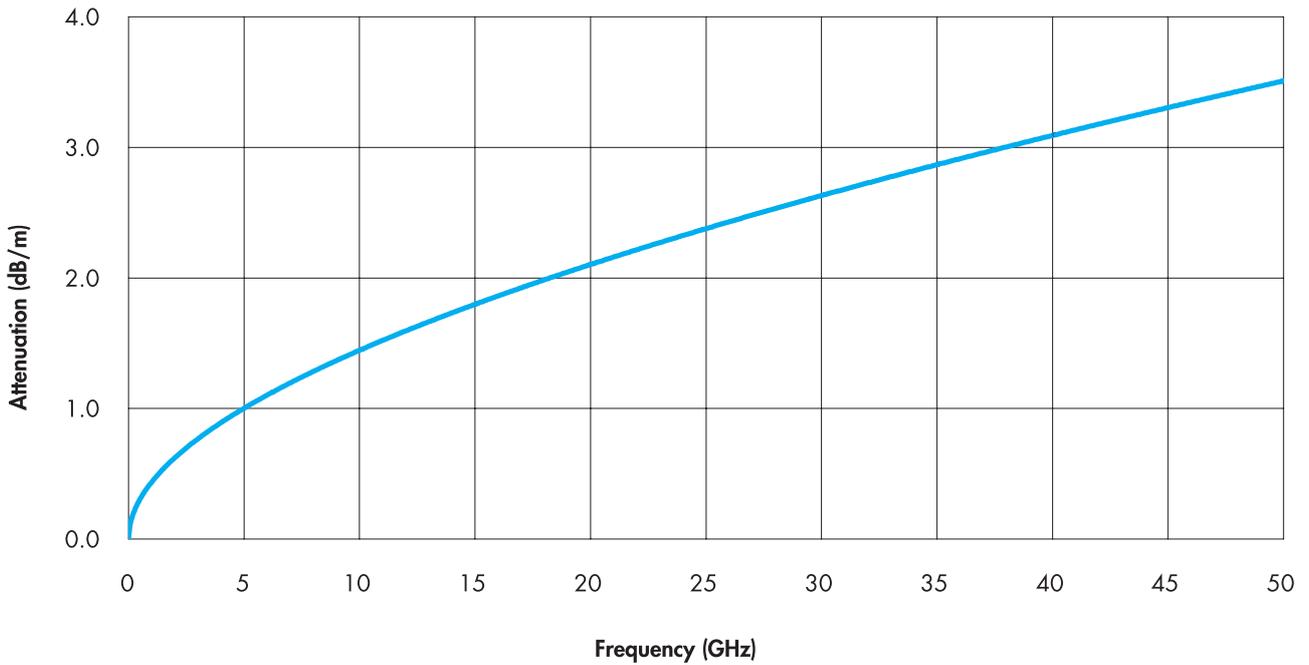
## Suitable connectors

Please refer to page 100

# SUCOFLEX\_101

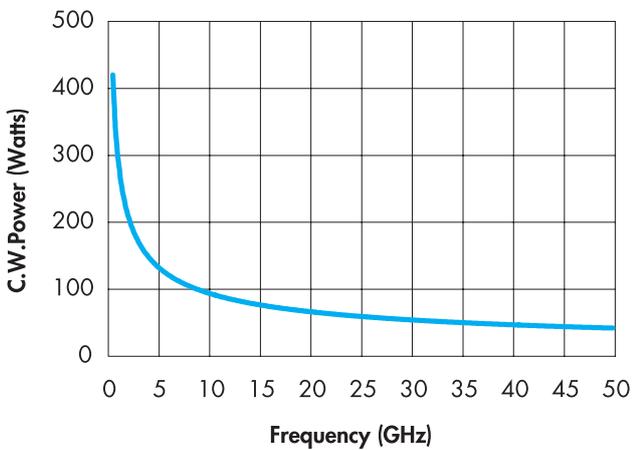
## Cable attenuation

Nominal values @ +25 °C ambient temperature

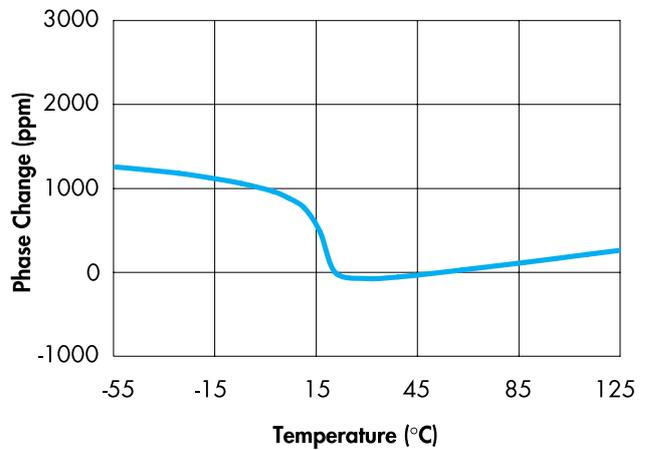


## Power handling

Maximum values @ +40 °C ambient temperature and sea level



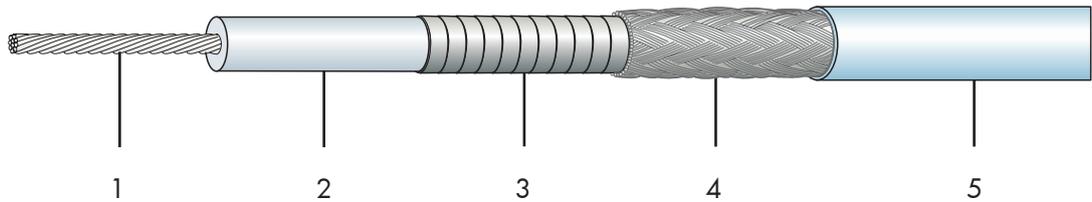
## Phase change vs. temperature



SUCOFLEX 100

# SUCOFLEX\_101\_P

## Cable design



	Description	Diameter
1. Centre conductor	Stranded silver-plated copper wire	
2. Dielectric	Low density PTFE	
3. 1st outer conductor	Silver-plated copper tape, wrapped	
4. 2nd outer conductor	Silver-plated copper braid	
5. Jacket	Fluoroethylenepropylene, blue	3.65 mm

## Electrical cable data

Impedance			50 Ohm
Operating frequency			50 GHz
Capacitance			87 pF/m
Velocity of propagation			77 %
Time delay			4.3 ns/m
Nom. attenuation*	coefficient a	<b>0.5758</b>	coefficient b <b>0.0285</b>
Max. attenuation*	coefficient a	<b>0.6334</b>	coefficient b <b>0.0313</b>
Max operating voltage			1.2 kVrms
Min. screening effectiveness up to 18 GHz			90 dB

\*Attenuation calculation  $\alpha_{25} = a \cdot \sqrt{f}(\text{GHz}) + b \cdot f(\text{GHz})$  (dB/m)

## General cable data

Temperature range	-55...+125 °C
Weight	3.3 kg/100m
Min. bending radius static	11 mm
Min. bending radius dynamic	20 mm

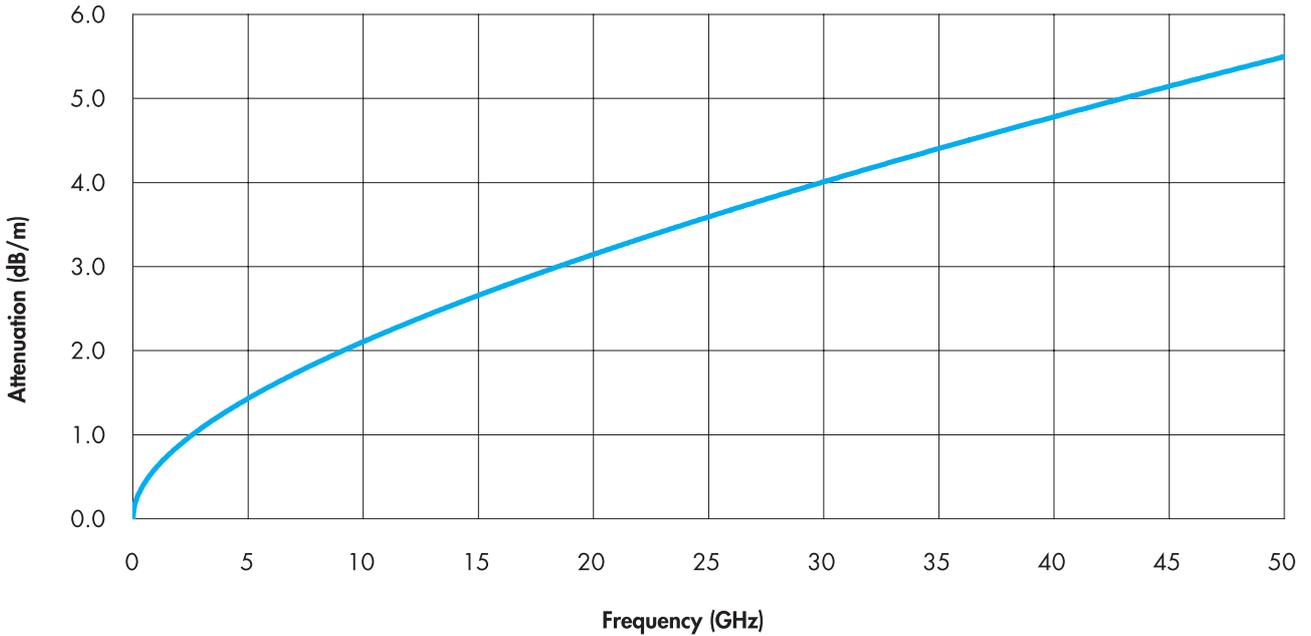
## Suitable connectors

Please refer to page 100

# SUCOFLEX\_101\_P

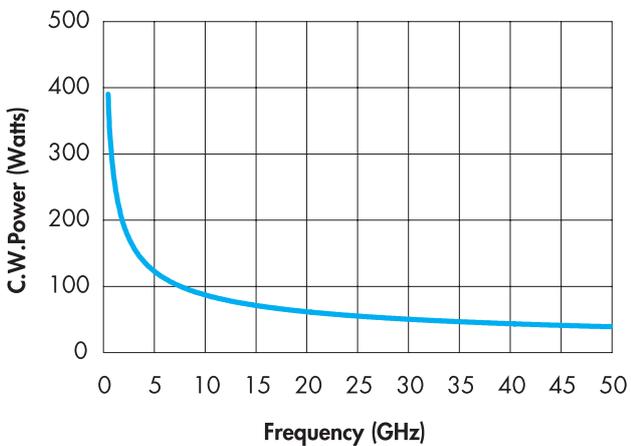
## Cable attenuation

Nominal values @ +25 °C ambient temperature

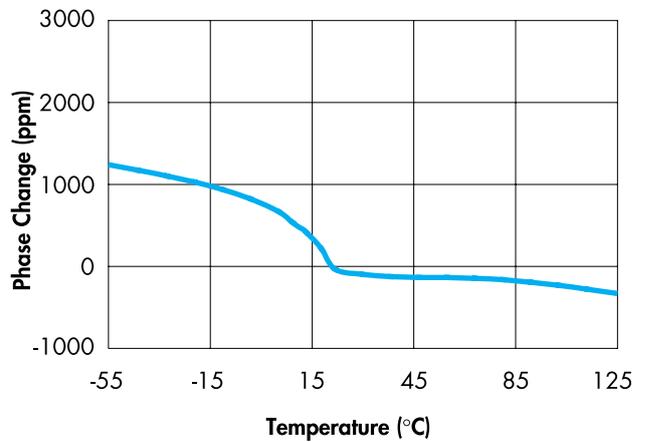


## Power handling

Maximum values @ +40 °C ambient temperature and sea level



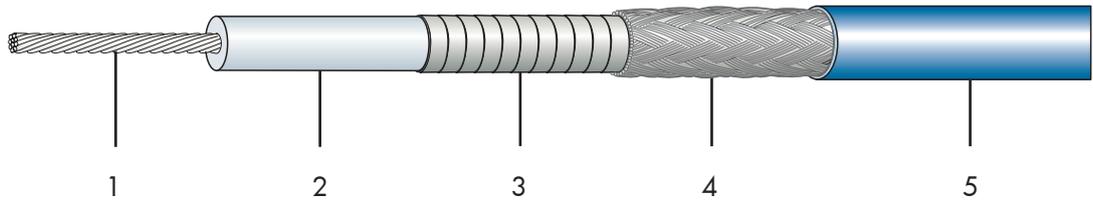
## Phase change vs. temperature



SUCOFLEX 100

# SUCOFLEX\_101\_PE

## Cable design



	Description	Diameter
1. Centre conductor	Stranded silver-plated copper wire	
2. Dielectric	Low density PTFE	
3. 1st outer conductor	Silver-plated copper tape, wrapped	
4. 2nd outer conductor	Silver-plated copper braid	
5. Jacket	Polyurethane, blue	3.65 mm

## Electrical cable data

Impedance			50 Ohm
Operating frequency			50 GHz
Capacitance			87 pF/m
Velocity of propagation			77 %
Time delay			4.3 ns/m
Nom. attenuation*	coefficient a	<b>0.5758</b>	coefficient b <b>0.0285</b>
Max. attenuation*	coefficient a	<b>0.6334</b>	coefficient b <b>0.0313</b>
Max operating voltage			1.2 kVrms
Min. screening effectiveness up to 18 GHz			90 dB

\*Attenuation calculation  $\alpha_{25} = a \cdot \sqrt{f}(\text{GHz}) + b \cdot f(\text{GHz})$  (dB/m)

## General cable data

Temperature range	-40...+85 °C
Weight	3.0 kg/100m
Min. bending radius static	11 mm
Min. bending radius dynamic	20 mm

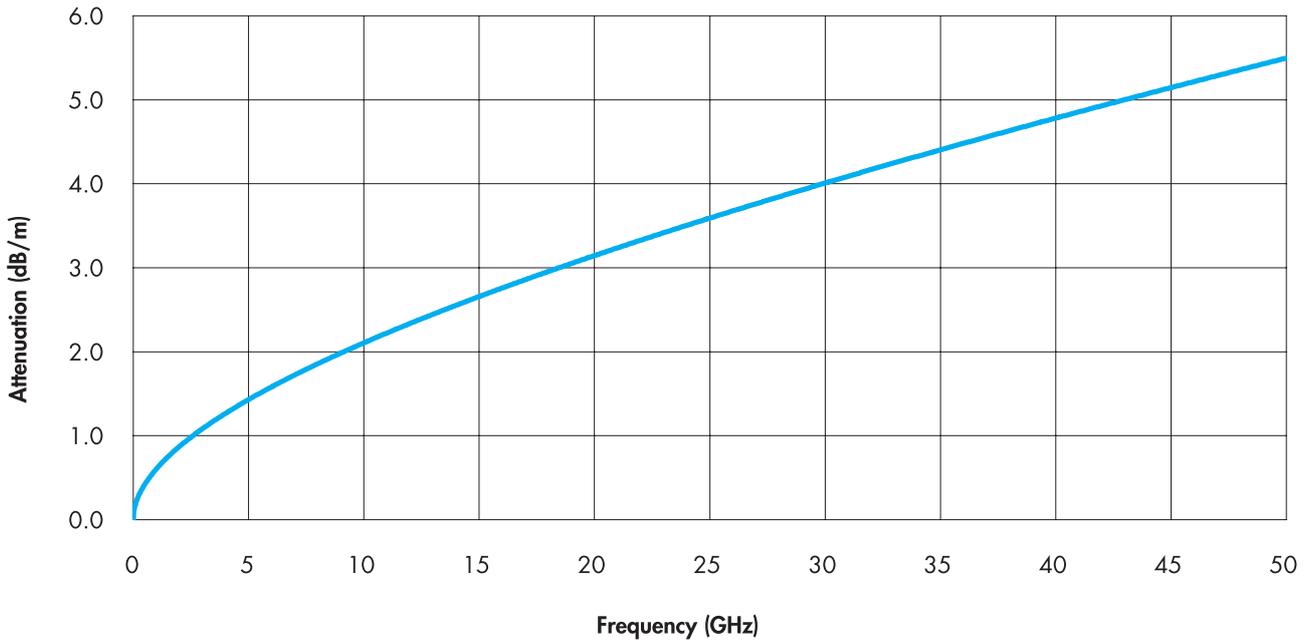
## Suitable connectors

Please refer to page 100

# SUCOFLEX\_101\_PE

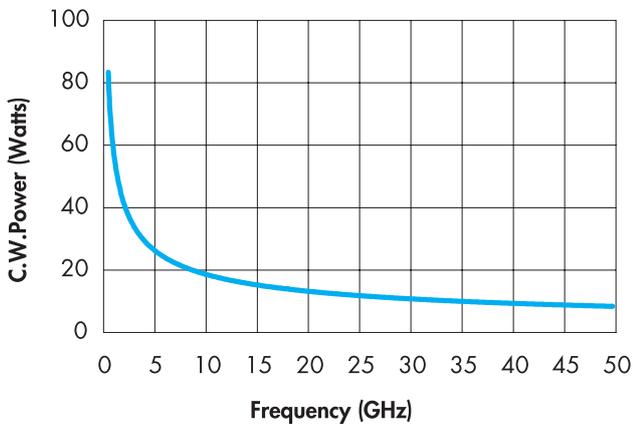
## Cable attenuation

Nominal values @ +25 °C ambient temperature

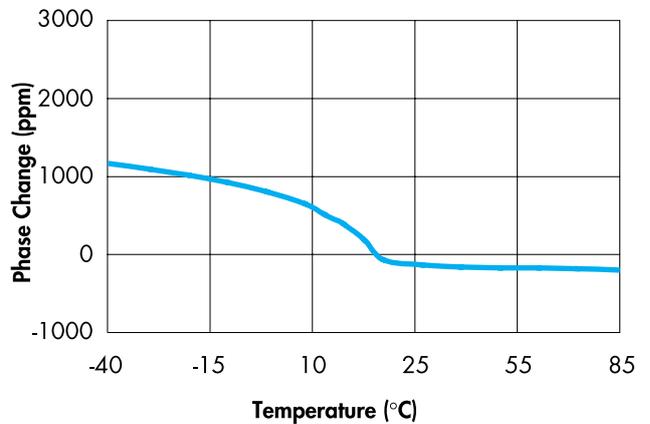


## Power handling

Maximum values @ +40 °C ambient temperature and sea level



## Phase change vs. temperature



SUCOFLEX 100

# SUCOFLEX 101

## Suitable connectors

HUBER+SUHNER connector type	SF 101(E)	SF 101EA	SF 101P(E)	SF 101PEA	Remarks	Weight (g)	Operating frequency (GHz)	VSWR <sup>1)</sup>	Fig.
11_DV-112				•	HP2.4	39.0	50.0	1.20	105
11_SK-110				•		16.0	40.0	1.20	110
21_SK-110				•		15.0	40.0	1.20	112
11_PC2.4-104	•					5.5	50.0	1.20	150
11_PC2.4-109		•				15.0	50.0	1.20	150
11_PC2.4-110				•		15.0	50.0	1.20	150
21_PC2.4-104	•					4.7	50.0	1.20	151
21_PC2.4-109		•				15.0	50.0	1.20	151
21_PC2.4-110				•		15.0	50.0	1.20	151
24_PC2.4-102	•				ML 38	4.1	50.0	1.20	152
11_SMA-153				•		5.7	18.0 26.5	1.12 1.20	170

### Connector patterns

11 Straight cable plug  
16 Right angle cable plug

21 Straight cable jack  
24 Straight panel bulkhead cable jack  
25 Straight panel cable jack, flange mount

1): VSWR per connector

ML xx: Mounting hole size refer to section "connector drawings", page 163

HP2.4: 2.4 mm connector for Agilent Technologies equipment

Note: For dimensioned sketches of connectors, please refer to pages 138 ff.

Other connector types are available on request. Please contact your local HUBER+SUHNER partner.

# SUCOFLEX 102

## Variations

SUCOFLEX\_102 are ideal for applications up to 46 GHz or wherever the weight or the diameter are the critical factors to be taken into account. The connectors mainly used here are PC2.4 and SK, for "low frequency" applications also SMA, N and TNC. Typical applications include test laboratories and aircraft manufacture. The available ruggedisations are matched to the particular applications.

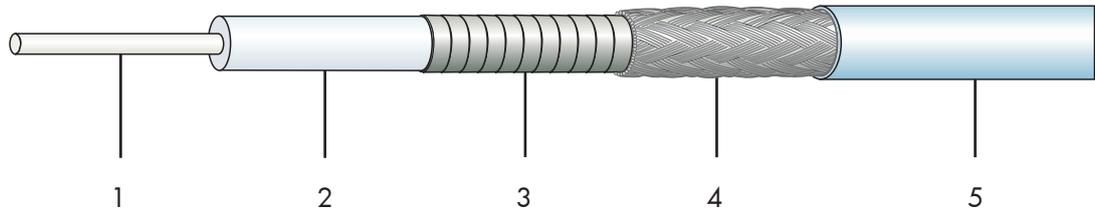
## Mechanical and general data

HUBER+SUHNER cable type	Cable	Rugge- disation	Temperature		Weight kg/100m	Outer diameter (mm)	Bending radii	
			min. (°C)	max. (°C)			static (mm)	dyn. (mm)
SUCOFLEX_102	102	-	-55	+125	4.0	4.00	12	20
SUCOFLEX_102_E	102_E	-	-40	+85	3.7	4.00	12	20
SUCOFLEX_102_EA	102_E	A	-40	+85	12.0	7.70	20	40
SUCOFLEX_102_D	102	D	-55	+125	4.5	4.75	15	30

Further information about ruggedisation see pages 128 ff.

# SUCOFLEX\_102

## Cable design



	Description	Diameter
1. Centre conductor	Solid silver-plated copper wire	
2. Dielectric	Low density PTFE	
3. 1st outer conductor	Silver-plated copper tape, wrapped	
4. 2nd outer conductor	Silver-plated copper braid	
5. Jacket	Fluoroethylenepropylene, blue	4.00 mm

## Electrical cable data

Impedance			50 Ohm
Operating frequency			46 GHz
Capacitance			87 pF/m
Velocity of propagation			77 %
Time delay			4.3 ns/m
Nom. attenuation*	coefficient a	<b>0.3700</b>	coefficient b <b>0.0071</b>
Max. attenuation*	coefficient a	<b>0.4070</b>	coefficient b <b>0.0078</b>
Max. operating voltage			1.4 kVrms
Min. screening effectiveness up to 18 GHz			90 dB

\*Attenuation calculation  $a_{25} = a \cdot \sqrt{f}(\text{GHz}) + b \cdot f(\text{GHz})$  (dB/m)

## General cable data

Temperature range	-55...+125 °C
Weight	4.0 kg/100m
Min. bending radius static	12 mm
Min. bending radius dynamic	20 mm

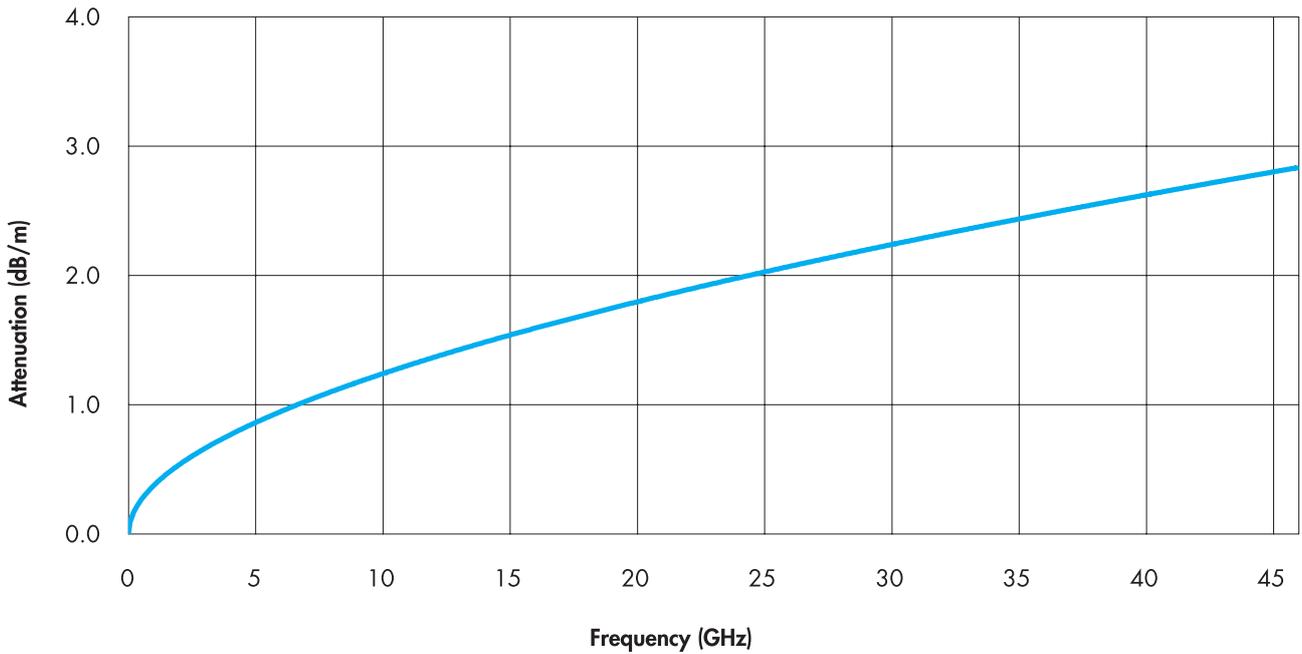
## Suitable connectors

Please refer to pages 104 ff

# SUCOFLEX\_102

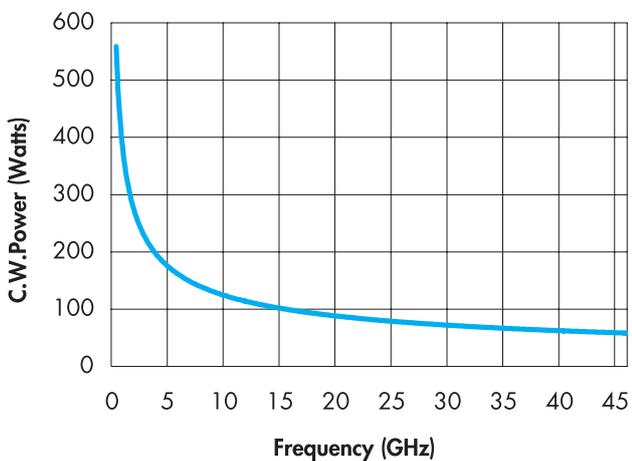
## Cable attenuation

Nominal values @ +25 °C ambient temperature

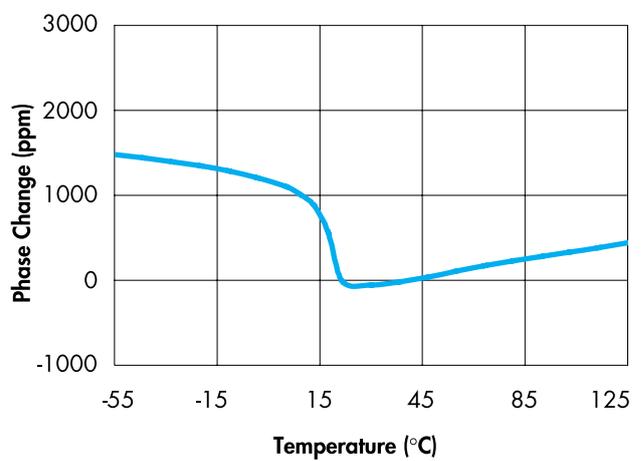


## Power handling

Maximum values @ +40 °C ambient temperature and sea level



## Phase change vs. temperature



SUCOFLEX 100

# SUCOFLEX 102

## Suitable connectors

HUBER+SUHNER connector type	102_(E)	102_EA	102_D	Remarks	Weight (g)	Operating frequency (GHz)	VSWR <sup>1)</sup>	Fig.
11_SK-252	•		•		6.8	40.0	1.20	110
11_SK-258		•			15.0	40.0	1.20	110
16_SK-252	•		•		8.0	40.0	1.20	111
16_SK-255		•			15.0	40.0	1.20	111
21_SK-252	•		•		5.6	40.0	1.20	112
21_SK-257		•			14.0	40.0	1.20	112
24_SK-251	•		•	ML 35	6.9	40.0	1.20	113
11_N-206	•		•		29.0	18.0	1.12	120
11_N-207	•		•	connector with combi nut	30.0	18.0	1.12	121
11_PC2.4-201	•		•		5.8	46.0	1.20	150
11_PC2.4-210		•			14.0	46.0	1.20	150
21_PC2.4-201	•		•		4.7	46.0	1.20	151
21_PC2.4-210		•			14.0	46.0	1.20	151
24_PC2.4-201	•		•	ML 38	7.2	46.0	1.20	152
11_PC3.5-203	•		•		6.5	26.5	1.16	160
21_PC3.5-203	•		•		5.4	26.5	1.16	161
11_SMA-218	•		•		5.4	18.0 26.5	1.12 1.20	170
11_SMA-262		•			15.0	18.0 26.5	1.12 1.20	170
16_SMA-254	•		•		7.8	18.0	1.12	174
21_SMA-204	•		•		4.0	18.0 26.5	1.12 1.20	175
24_SMA-210	•		•	ML 20	5.5	18.0 26.5	1.12 1.20	176
11_TNC-222	•		•		17.0	18.0	1.12	190
24_TNC-222	•		•	ML 4	24.0	18.0	1.12	198

# SUCOFLEX 102

## Suitable connectors

### Connector patterns

11 Straight cable plug

16 Right angle cable plug

21 Straight cable jack

24 Straight panel bulkhead cable jack

25 Straight panel cable jack, flange mount

1) VSWR per connector

ML xx: mounting hole size refer to section "connector drawings", page 163

*Note: For dimensioned sketches of connectors, please refer to pages 138 ff.*

*Other connector types are available on request. Please contact your local HUBER+SUHNER partner.*



# SUCOFLEX 103

## Variations

SUCOFLEX\_103 is the ideal solution for systems in which the attenuation to weight ratio is very important. Most ruggedisations and a large number of the common connector types complete this range.

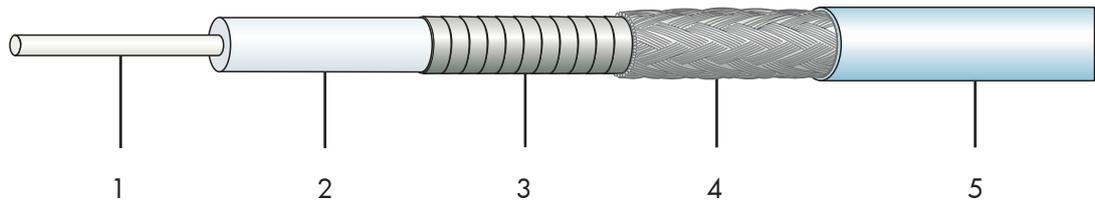
## Mechanical and general data

HUBER+SUHNER cable type	Cable	Ruggedisation	Temperature		Weight kg/100m	Outer diameter (mm)	Bending radii	
			min. (°C)	max. (°C)			static (mm)	dyn. (mm)
SUCOFLEX_103	103	-	-55	+125	5.3	4.60	13	22
SUCOFLEX_103_E	103_E	-	-40	+85	5.2	4.60	13	22
SUCOFLEX_103_EA	103_E	A	-40	+85	14.2	10.30	30	50
SUCOFLEX_103_B	103	B	-55	+125	16.0	10.00	45	45
SUCOFLEX_103_C	103	C	-25	+125	16.2	10.30	30	50
SUCOFLEX_103_D	103	D	-55	+125	6.3	5.10	20	30

Further information about ruggedisation see pages 128 ff.

# SUCOFLEX\_103

## Cable design



	Description	Diameter
1. Centre conductor	Solid silver-plated copper wire	
2. Dielectric	Low density PTFE	
3. 1st outer conductor	Silver-plated copper tape, wrapped	
4. 2nd outer conductor	Silver-plated copper braid	
5. Jacket	Fluoroethylenepropylene, blue	4.60 mm

## Electrical cable data

Impedance			50 Ohm
Operating frequency			33 GHz
Capacitance			87 pF/m
Velocity of propagation			77 %
Time delay			4.3 ns/m
Nom. attenuation*	coefficient a	<b>0.2836</b>	coefficient b <b>0.0071</b>
Max. attenuation*	coefficient a	<b>0.3112</b>	coefficient b <b>0.0078</b>
Max. operating voltage			2.0 kVrms
Min. screening effectiveness up to 18 GHz			90 dB

\*Attenuation calculation  $\alpha_{25} = a \cdot \sqrt{f}(\text{GHz}) + b \cdot f(\text{GHz})$  (dB/m)

## General cable data

Temperature range	-55...+125 °C
Weight	5.3 kg/100m
Min. bending radius static	13 mm
Min. bending radius dynamic	22 mm

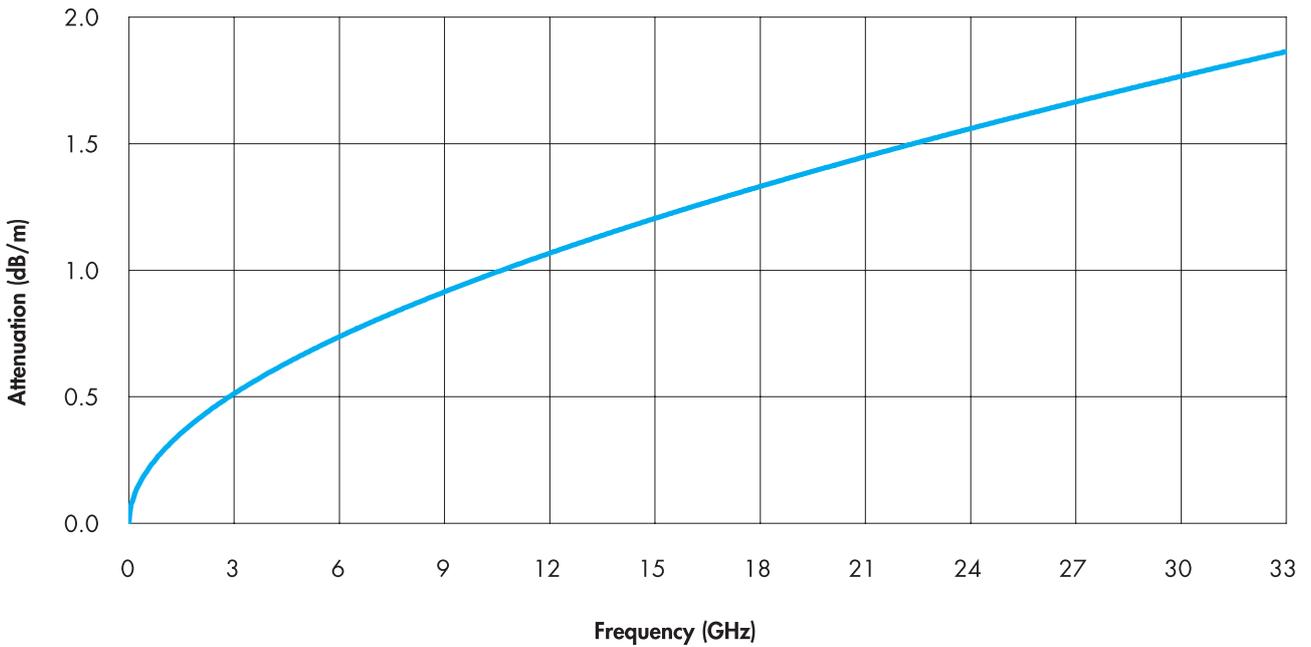
## Suitable connectors

Please refer to page 110

# SUCOFLEX\_103

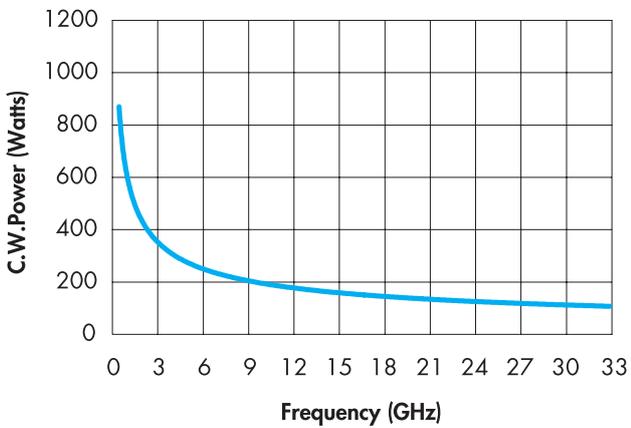
## Cable attenuation

Nominal values @ +25 °C ambient temperature

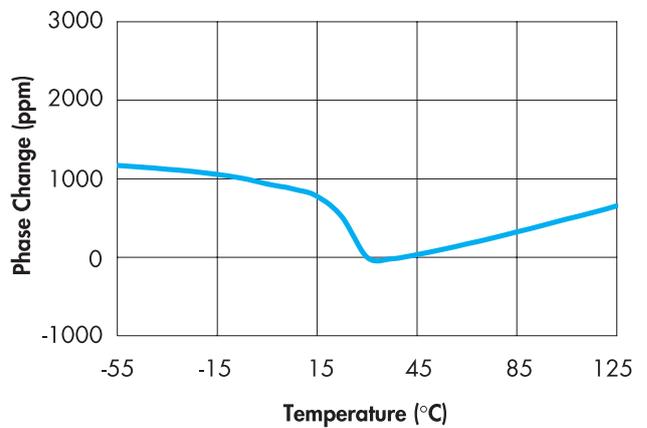


## Power handling

Maximum values @ +40 °C ambient temperature and sea level



## Phase change vs. temperature



SUCOFLEX 100

# SUCOFLEX 103

## Suitable connectors

HUBER+SUHNER connector type	103_(E)	103_EA	103_B	103_C	103_D	Remarks	Weight (g)	Operating frequency (GHz)	VSWR <sup>1)</sup>	Fig.
11_BNC-373	•	•	•	•	•		30.0	4.0	1.14	101
11_N-371	•	•	•	•	•		32.0	18.0	1.12	121
16_N-372	•	•	•	•	•	swept	40.0	18.0	1.12	128
24_N-352	•	•	•	•	•	ML 12	43.0	18.0	1.12	135
11_PC3.5-31	•	•	•	•	•		13.0	26.5	1.16	160
21_PC3.5-31	•	•	•	•	•		12.0	26.5	1.16	161
11_PC7-31	•	•	•	•	•		41.0	18.0	1.10	165
11_SMA-367	•	•	•	•	•	QL	8.1	18.0	1.12	171
11_SMA-371	•	•	•	•	•		8.3	18.0	1.12	170
16_SMA-371	•	•	•	•	•		9.4	18.0	1.12	174
21_SMA-371	•	•	•	•	•		6.9	18.0	1.12	175
24_SMA-371	•	•	•	•	•	ML 35	8.0	18.0	1.12	177
11_TNC-353	•	•	•	•	•		19.0	18.0	1.12	191
24_TNC-353	•	•	•	•	•	ML 4	31.0	18.0	1.12	198

### Connector patterns

11 Straight cable plug  
 16 Right angle cable plug  
 21 Straight cable jack

24 Straight panel bulkhead cable jack  
 25 Straight panel cable jack, flange mount

1) VSWR per connector

ML xx: Mounting hole size refer to section "connector drawings", page 163

swept: swept cable entry (cable-connector junction)

QL: Quick Lock refer to section "special solution", page 130

Note: For dimensioned sketches of connectors, please refer to pages 138 ff.

Other connector types are available on request. Please contact your local HUBER+SUHNER partner.

# SUCOFLEX 104

## Variations

SUCOFLEX\_104, 104\_P(E) cables that can be universally applied with the widest range of connector types, are available with most ruggedisations. In applications in which flexibility is the critical factor, the cable type SUCOFLEX\_104\_PE must be applied. In conjunction with the Q adaptor, which is a simple system for exchanging the connectors as well as the special connections for Agilent Technologies analysers, the two types constitute the ideal choice for use as test cables on network analysers. For assemblies used in EMC-critical applications, the M ruggedisation is available. This results in yet another considerable improvement of the high screening effectiveness below 100 MHz.

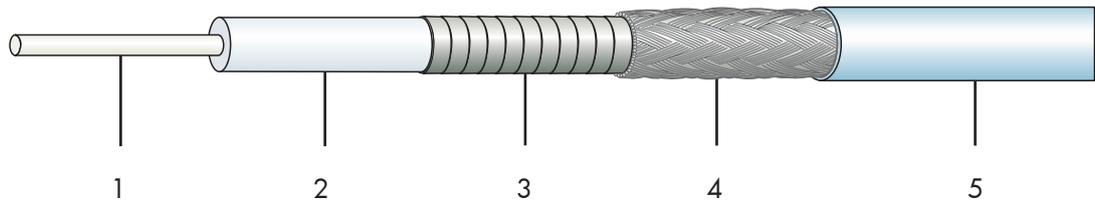
## Mechanical and general data

HUBER+SUHNER cable type	Cable	Ruggedisation	Temperature		Weight kg/100m	Outer diameter (mm)	Bending radii	
			min. (°C)	max. (°C)			static (mm)	dyn. (mm)
SUCOFLEX_104	104	-	-55	+125	8.4	5.50	16	25
SUCOFLEX_104_A	104	A	-40	+85	17.3	10.30	30	50
SUCOFLEX_104_E	104_E	-	-40	+85	8.3	5.50	16	25
SUCOFLEX_104_EA	104_E	A	-40	+85	17.2	10.30	30	50
SUCOFLEX_104_EM	104_E	M	-40	+85	12.1	7.70	40	80
SUCOFLEX_104_B	104	B	-55	+125	18.9	10.00	45	45
SUCOFLEX_104_C	104	C	-25	+125	19.3	10.30	30	50
SUCOFLEX_104_D	104	D	-55	+125	9.6	6.10	20	30
SUCOFLEX_104_G	104	G	-50	+100	22.6	13.70	60	100
SUCOFLEX_104_P	104_P	-	-55	+125	6.9	5.50	16	25
SUCOFLEX_104_PE	104_PE	-	-40	+85	6.8	5.50	16	25
SUCOFLEX_104_PEA	104_PE	A	-40	+85	17.1	10.30	30	50
SUCOFLEX_104_PB	104_P	B	-55	+125	18.7	10.00	45	45
SUCOFLEX_104_PEM	104_PE	M	-40	+85	13.6	7.70	40	80

Further information about ruggedisation see pages 128 ff.

# SUCOFLEX\_104

## Cable design



	Description	Diameter
1. Centre conductor	Solid silver-plated copper wire	
2. Dielectric	Low density PTFE	
3. 1st outer conductor	Silver-plated copper tape, wrapped	
4. 2nd outer conductor	Silver-plated copper braid	
5. Jacket	Fluoroethylenepropylene, blue	5.50 mm

## Electrical cable data

Impedance			50 Ohm
Operating frequency			26.5 GHz
Capacitance			87 pF/m
Velocity of propagation			77 %
Time delay			4.3 ns/m
Nom. attenuation*	coefficient a	<b>0.2291</b>	coefficient b <b>0.0071</b>
Max. attenuation*	coefficient a	<b>0.2520</b>	coefficient b <b>0.0078</b>
Max. operating voltage			2.6 kVrms
Min. screening effectiveness up to 18 GHz			90 dB

\*Attenuation calculation  $a_{25} = a \cdot \sqrt{f}(\text{GHz}) + b \cdot f(\text{GHz})$  (dB/m)

## General cable data

Temperature range	-55...+125 °C
Weight	8.4 kg/100m
Min. bending radius static	16 mm
Min. bending radius dynamic	25 mm

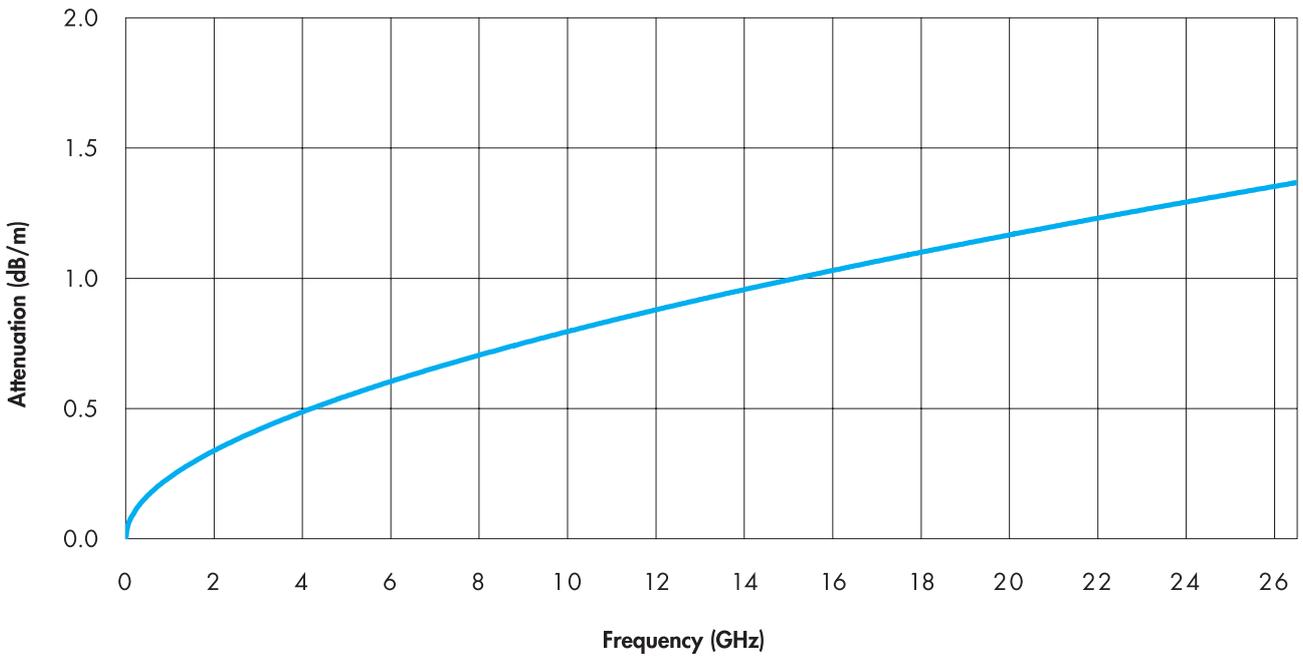
## Suitable connectors

Please refer to pages 118 ff

# SUCOFLEX\_104

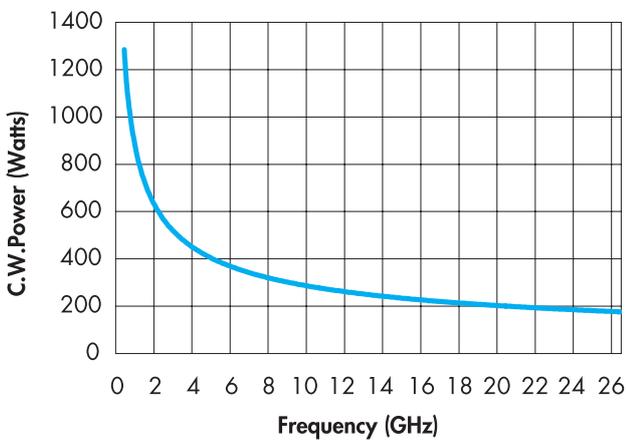
## Cable attenuation

Nominal values @ +25 °C ambient temperature

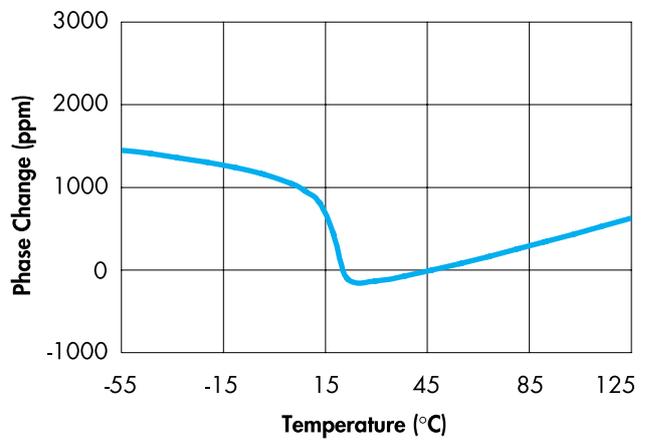


## Power handling

Maximum values @ +40 °C ambient temperature and sea level



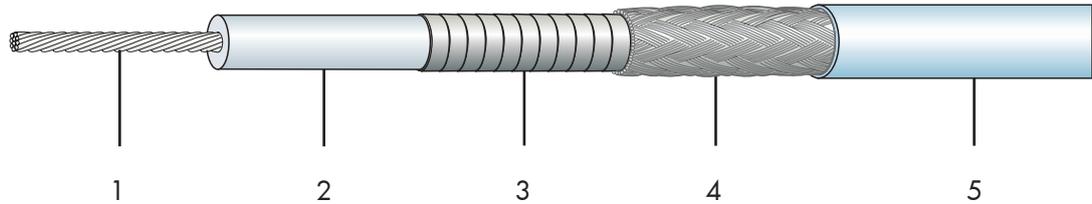
## Phase change vs. temperature



SUCOFLEX 100

# SUCOFLEX\_104\_P

## Cable design



	Description	Diameter
1. Centre conductor	Stranded silver-plated copper wire	
2. Dielectric	Low density PTFE	
3. 1st outer conductor	Silver-plated copper tape, wrapped	
4. 2nd outer conductor	Silver-plated copper braid	
5. Jacket	Fluoroethylenepropylene, blue	5.50 mm

## Electrical cable data

Impedance			50 Ohm
Operating frequency			26.5 GHz
Capacitance			87 pF/m
Velocity of propagation			77 %
Time delay			4.3 ns/m
Nom. attenuation*	coefficient a	<b>0.2930</b>	coefficient b <b>0.0175</b>
Max. attenuation*	coefficient a	<b>0.3223</b>	coefficient b <b>0.0192</b>
Max. operating voltage			2.4 kVrms
Min. Screening effectiveness up to 18 GHz			90 dB

\*Attenuation calculation  $a_{25} = a \cdot \sqrt{f}(\text{GHz}) + b \cdot f(\text{GHz})$  (dB/m)

## General cable data

Temperature range	-55...+125 °C
Weight	6.9 kg/100m
Min. bending radius static	16 mm
Min. bending radius dynamic	25 mm

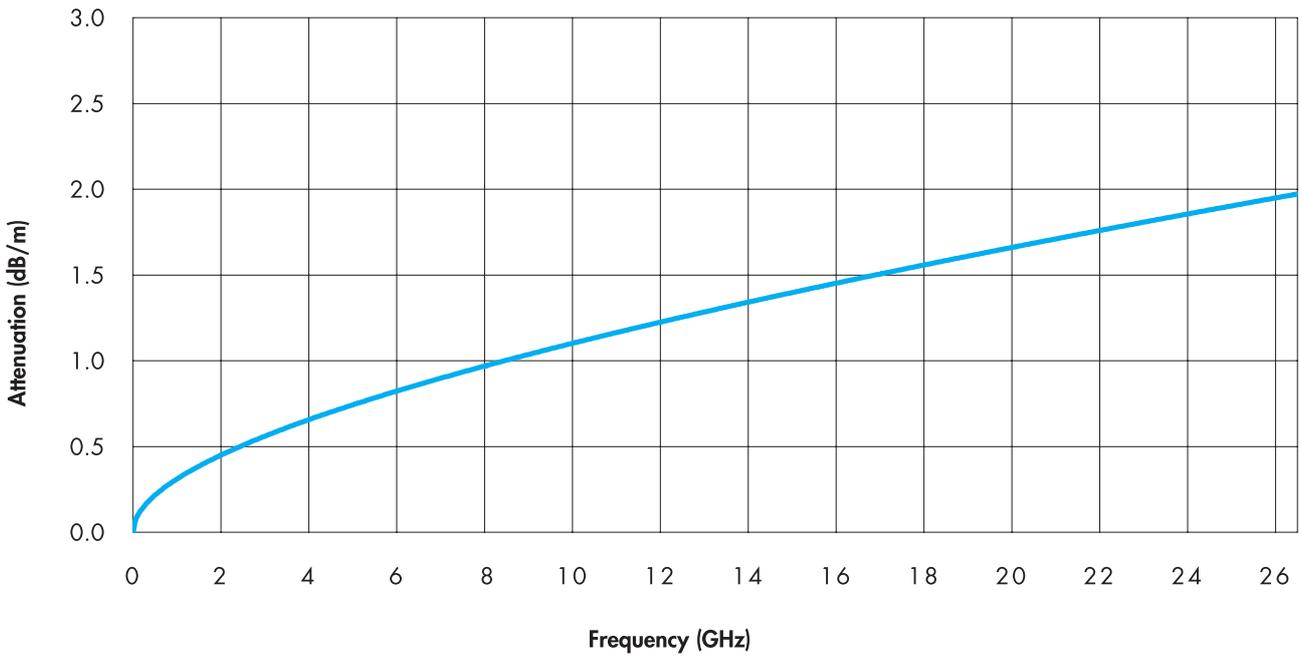
## Suitable connectors

Please refer to pages 118 ff

# SUCOFLEX\_104\_P

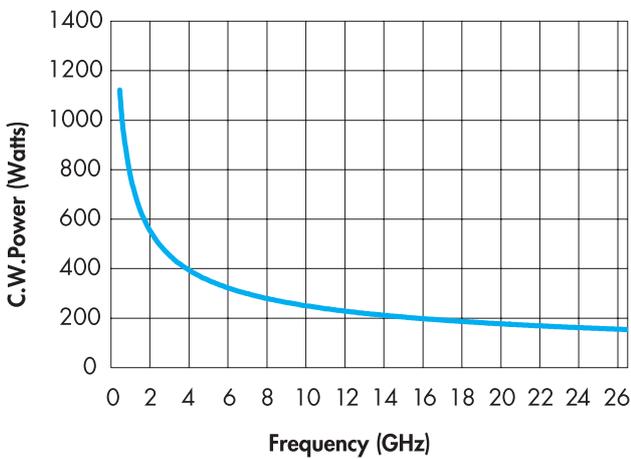
## Cable attenuation

Nominal values @ +25 °C ambient temperature

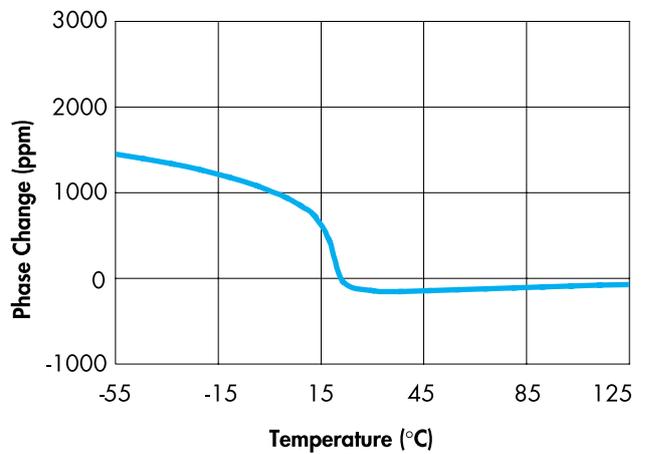


## Power handling

Maximum values @ +40 °C ambient temperature and sea level

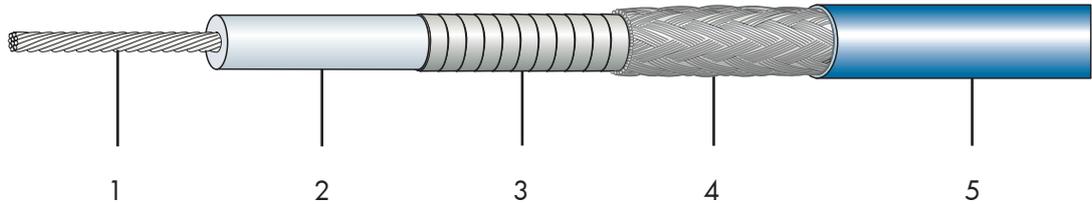


## Phase change vs. temperature



# SUCOFLEX\_104\_PE

## Cable design



	Description	Diameter
1. Centre conductor	Stranded silver-plated copper wire	
2. Dielectric	Low density PTFE	
3. 1st outer conductor	Silver-plated copper tape, wrapped	
4. 2nd outer conductor	Silver-plated copper braid	
5. Jacket	Polyurethane, blue	5.50 mm

## Electrical cable data

Impedance			50 Ohm
Operating frequency			26.5 GHz
Capacitance			87 pF/m
Velocity of propagation			77 %
Time delay			4.3 ns/m
Nom. attenuation*	coefficient a	<b>0.2930</b>	coefficient b <b>0.0175</b>
Max. attenuation*	coefficient a	<b>0.3223</b>	coefficient b <b>0.0192</b>
Max. operating voltage			2.4 kVrms
Min. screening effectiveness up to 18 GHz			90 dB

\*Attenuation calculation

$$a_{25} = a \cdot \sqrt{f}(\text{GHz}) + b \cdot f(\text{GHz}) \quad (\text{dB/m})$$

## General cable data

Temperature range	-40...+85 °C
Weight	6.8 kg/100m
Min. bending radius static	16 mm
Min. bending radius dynamic	25 mm

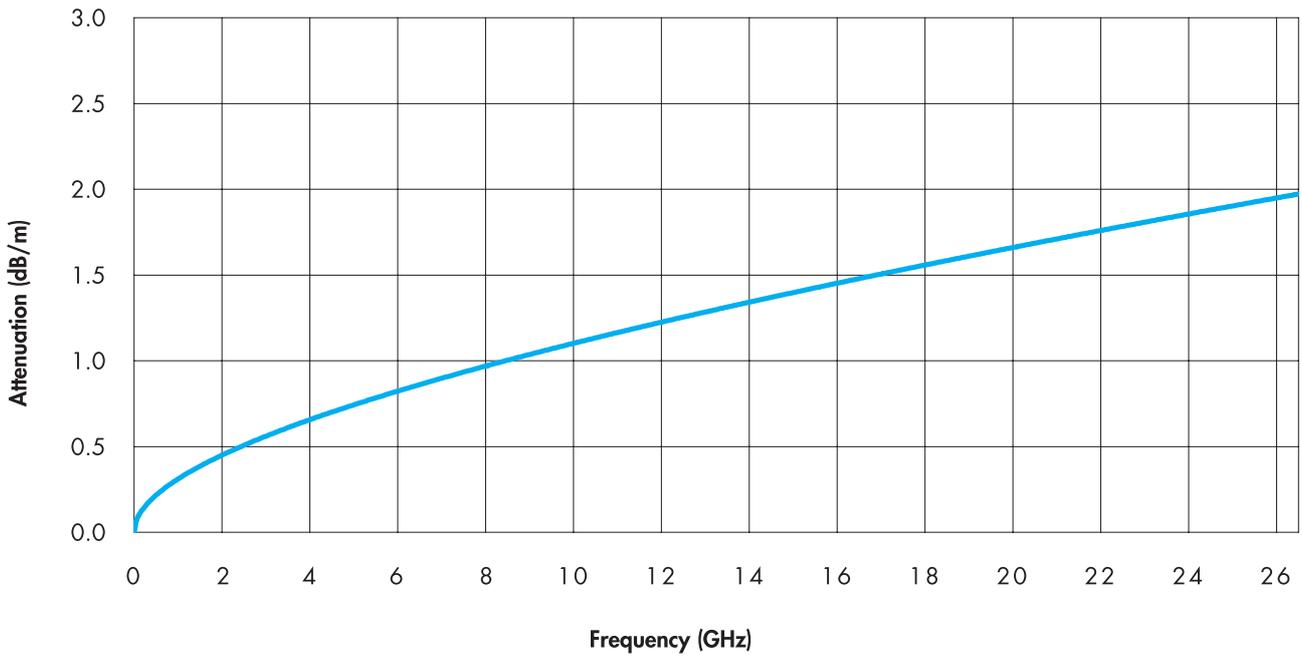
## Suitable connectors

Please refer to pages 118 ff

# SUCOFLEX\_104\_PE

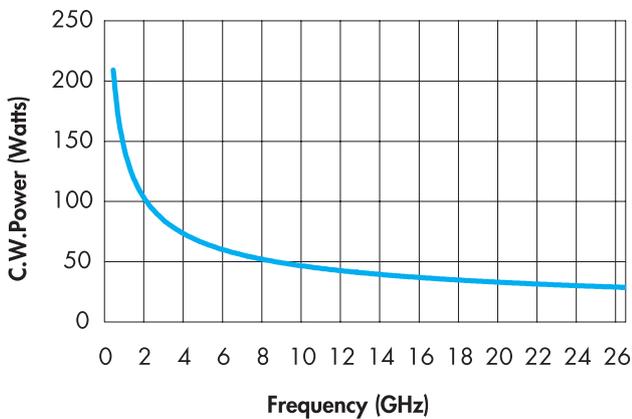
## Cable attenuation

Nominal values @ +25 °C ambient temperature

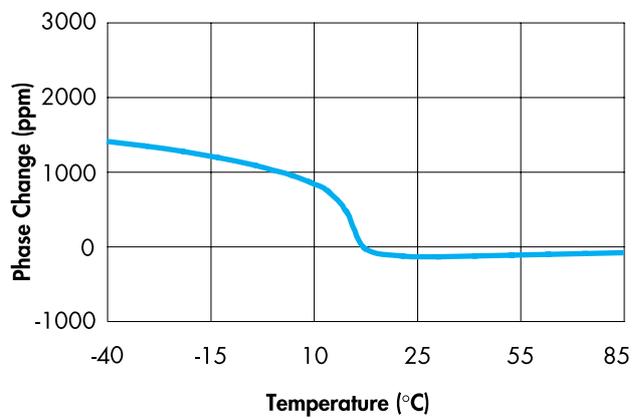


## Power handling

Maximum values @ +40 °C ambient temperature and sea level



## Phase change vs. temperature



# SUCOFLEX 104

## Suitable connectors

HUBER+SUHNER connector type	SF_104_(E)	SF_104_(A)(EA)	SF_104_(B)	SF_104_(C)	SF_104_(D)	SF_104_(EM)	SF_104_(G)	SF_104_(P)(PE)	SF_104_(PA)(PEA)	SF_104_(PB)	SF_104_(PEM)	Remarks	Weight (g)	Operating frequency (GHz)	VSWR <sup>1)</sup>	Fig.
11_BNC-451	•	•	•	•	•	•	•						30.0	4.0	1.14	101
11_BNC-452								•	•	•	•		30.0	4.0	1.14	101
11_DV-41								•	•	•		HP3.5	37.0	26.5	1.16	105
11_DV-42	•	•	•	•	•		•					HP3.5	37.0	26.5	1.16	105
11_N-47	•	•	•	•	•	•	•	•	•	•	•		31.0	15.0	1.12	
11_N-451	•	•	•	•	•	•	•						40.0	18.0	1.12	122
11_N-452								•	•	•	•		41.0	18.0	1.12	122
11_N-453								•	•	•	•	PM	37.0	18.0	1.16	125
11_N-454	•	•	•	•	•	•	•	•	•	•	•	MIL	32.0	15.0	1.12	
11_N-456	•	•	•	•	•	•	•					MIL	40.0	18.0	1.12	123
11_N-457								•	•	•	•	MIL	41.0	18.0	1.12	123
11_N-459	•	•	•	•	•			•	•	•		QL	32.0	15.0	1.12	
11_N-461								•	•	•	•	SUCOTRIM	57.0	18.0	1.15	127
16_N-44	•	•	•	•	•	•	•					connector with combi nut	37.0	12.4	1.14	
16_N-45	•	•	•	•	•	•	•					MIL	37.0	12.4	1.14	
16_N-457								•	•	•	•	connector with combi nut	87.0	12.4	1.14	
21_N-47	•	•	•	•	•	•	•						30.0	11.0	1.12	
21_N-451	•	•	•	•	•	•	•						32.0	18.0	1.12	134
21_N-452								•	•	•	•		32.0	18.0	1.12	134
24_N-47	•	•	•	•	•	•	•					ML 12	37.0	11.0	1.12	
24_N-451	•	•	•	•	•	•	•					ML 12	43.0	18.0	1.12	135
24_N-452								•	•	•	•	ML 12	43.0	18.0	1.12	135
11_PC3.5-42	•	•	•	•	•	•	•						13.0	18.0	1.12	
11_PC3.5-43								•	•	•	•		13.0	26.5	1.16	160
														18.0	1.12	160
														26.5	1.16	160

# SUCOFLEX 104

## Suitable connectors

HUBER+SUHNER connector type	SF_104_(E)	SF_104_(A)(EA)	SF_104_(B)	SF_104_(C)	SF_104_(D)	SF_104_(EM)	SF_104_(G)	SF_104_(P)(PE)	SF_104_(PA)(PEA)	SF_104_(PB)	SF_104_(PEM)	Remarks	Weight (g)	Operating frequency (GHz)	VSWR1)	Fig.
21_PC3.5-42	•	•	•	•	•	•	•						12.0	18.0 26.5	1.12 1.16	161
21_PC3.5-43								•	•	•	•		12.0	18.0 26.5	1.12 1.16	161
11_PC7-41	•	•	•	•	•	•	•						40.0	18.0	1.10	165
11_PC7-42								•	•	•	•		41.0	18.0	1.10	165
Q	•	•	•	•									40.0	n/a	n/a	n/a
PQ								•	•	•			41.0	n/a	n/a	n/a
11_SMA-451	•	•	•	•	•	•	•	•	•	•	•		8.2	18.0	1.12	170
11_SMA-452								•	•	•		PM	12.0	18.0	1.16	172
11_SMA-456	•	•	•	•	•	•	•	•	•	•	•	MIL	8.2	18.0	1.12	170
11_SMA-457								•	•	•	•	SUCOTRIM	32.0	18.0	1.15	173
11_SMA-468	•	•	•	•	•			•	•	•		QL	8.2	18.0	1.12	171
16_SMA-451	•	•	•	•	•	•	•						8.8	18.0	1.12	174
16_SMA-452								•	•	•	•		11.0	18.0	1.12	174
16_SMA-456	•	•	•	•	•	•	•					MIL	8.7	18.0	1.12	174
21_SMA-451	•	•	•	•	•	•	•	•	•	•	•		6.8	18.0	1.12	175
24_SMA-451	•	•	•	•	•	•	•	•	•	•	•	ML 35	7.9	18.0	1.12	177
11_TNC-417								•	•	•		QL	19.0	12.4 18.0	1.14 1.18	195
11_TNC-418	•	•	•	•	•							QL	19.0	12.4 18.0	1.14 1.18	195
11_TNC-456								•	•	•	•		19.0	18.0	1.12	191
11_TNC-457	•	•	•	•	•	•	•						19.0	18.0	1.12	191
11_TNC-458								•	•	•			22.0	18.0	1.16	193
11_TNC-459								•	•	•		SUCOTRIM	36.0	18.0	1.15	194
16_TNC-454	•	•	•	•	•	•	•						23.0	18.0	1.14	196
24_TNC-456								•	•	•	•	ML 4	37.0	18.0	1.12	199
24_TNC-457	•	•	•	•	•	•	•					ML 4	19.0	18.0	1.12	198
25_TNC-452	•	•	•	•	•	•	•					ML 8	22.0	18.0	1.12	200

# SUCOFLEX 104

## Suitable connectors

HUBER+SUHNER connector type	104_(E)	104_A(EA)	104_B	104_C	SF 104_D	104EM	104_G	104_P(PE)	104_PA(PEA)	104_PB	104_PEM	Remarks	Weight (g)	Operating frequency (GHz)	VSWR <sup>1)</sup>	Fig.
11_4195-41	•	•	•	•	•	•	•						55.0	7.5	1.12	210
24_4195-41	•	•	•	•	•	•	•						64.0	7.5	1.12	211
11_716-401	•	•		•	•								113.0	7.5	1.12	220
11_716-402								•	•				118.0	7.5	1.12	220
21_716-401	•	•		•	•								105.0	7.5	1.12	222
21_716-402								•	•				111.0	7.5	1.12	222
25_716-401	•	•	•	•	•	•	•						116.0	7.5	1.12	224

### Connector patterns

11 Straight cable plug  
 16 Right angle cable plug  
 21 Straight cable jack

24 Straight panel bulkhead cable jack  
 25 Straight panel cable jack, flange mount

- 1) VSWR per connector  
 ML xx: Mounting hole size xx refer to section "connector drawings", page 163  
 MIL: Connector with safety holes and hex nut for military and airframe applications  
 QL: Quick lock refer to section "special solutions", page 130  
 PM: Phase matching connector  
 HP3.5: 3.5 mm connection for Agilent Technologies equipment  
 SUCOTRIM: with integrated phase trimmer refer to section "special solutions", page 131

Note: For dimensioned sketches of connectors, please refer to pages 138 ff.

Other connector types are available on request. Please contact your local HUBER+SUHNER partner.

# SUCOFLEX 106

## Variations

SUCOFLEX\_106 and 106\_P are used in applications where special consideration must be given to low attenuation or high power handling capacity. Wherever phase stability is additionally demanded, the only suitable type that remains is the SUCOFLEX\_106\_P. Most ruggedisations can be used in conjunction with these cables, and also the main connector series. Connectors of the DIN 716 series are available for SUCOFLEX\_106 especially for high-performance mobile radio applications.

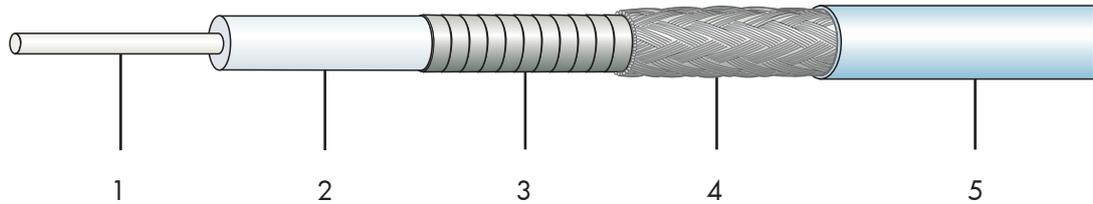
## Mechanical and general data

HUBER+SUHNER cable type	Cable	Ruggedisation	Temperature		Weight kg/100m	Outer diameter (mm)	Bending radii	
			min. (°C)	max. (°C)			static (mm)	dyn. (mm)
SUCOFLEX_106	106	-	-55	+125	15.7	7.90	24	40
SUCOFLEX_106_A	106	A	-40	+85	21.5	13.20	50	70
SUCOFLEX_106_B	106	B	-55	+125	26.2	12.80	60	60
SUCOFLEX_106_C	106	C	-25	+125	21.5	13.20	50	70
SUCOFLEX_106_D	106	D	-55	+125	17.5	8.30	26	45
SUCOFLEX_106_G	106	G	-50	+100	34.2	16.70	60	100
SUCOFLEX_106_P	106_P	-	-55	+125	15.8	7.90	24	40
SUCOFLEX_106_PA	106_P	A	-40	+85	21.6	13.20	50	70
SUCOFLEX_106_PB	106_P	B	-55	+125	26.3	12.80	60	60
SUCOFLEX_106_PD	106_P	D	-55	+125	17.6	8.30	26	45
SUCOFLEX_106_PG	106_P	G	-50	+100	34.3	16.70	60	100

Further information about ruggedisation see pages 128 ff.

# SUCOFLEX\_106

## Cable design



	Description	Diameter
1. Centre conductor	Solid silver-plated copper wire	
2. Dielectric	Low density PTFE	
3. 1st outer conductor	Silver-plated copper tape, wrapped	
4. 2nd outer conductor	Silver-plated copper braid	
5. Jacket	Fluoroethylenepropylene, blue	7.90 mm

## Electrical cable data

Impedance			50 Ohm
Operating frequency			18 GHz
Capacitance			87 pF/m
Velocity of propagation			77 %
Time delay			4.3 ns/m
Nom. attenuation*	coefficient a	<b>0.1500</b>	coefficient b <b>0.0071</b>
Max. attenuation*	coefficient a	<b>0.1650</b>	coefficient b <b>0.0078</b>
Max. operating voltage			3.8 kVrms
Min. screening effectiveness up to 18 GHz			90 dB

\*Attenuation calculation  $\alpha_{25} = a \cdot \sqrt{f}(\text{GHz}) + b \cdot f(\text{GHz})$  (dB/m)

## General cable data

Temperature range	-55...+125 °C
Weight	15.7 kg/100m
Min. bending radius static	24 mm
Min. bending radius dynamic	40 mm

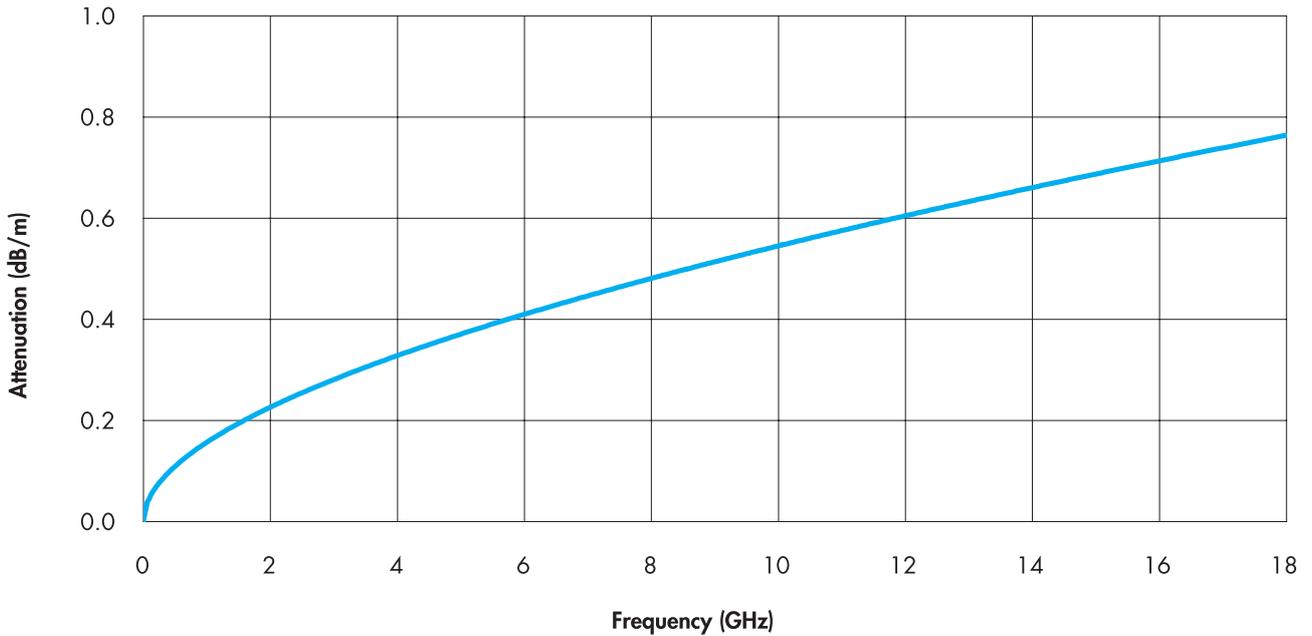
## Suitable connectors

Please refer to pages 126 ff

# SUCOFLEX\_106

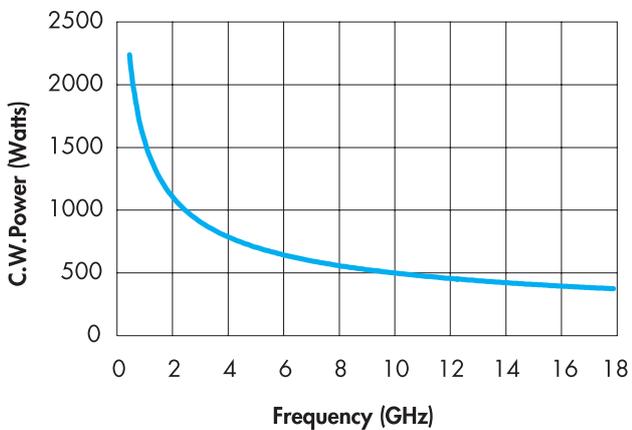
## Cable attenuation

Nominal values @ +25 °C ambient temperature

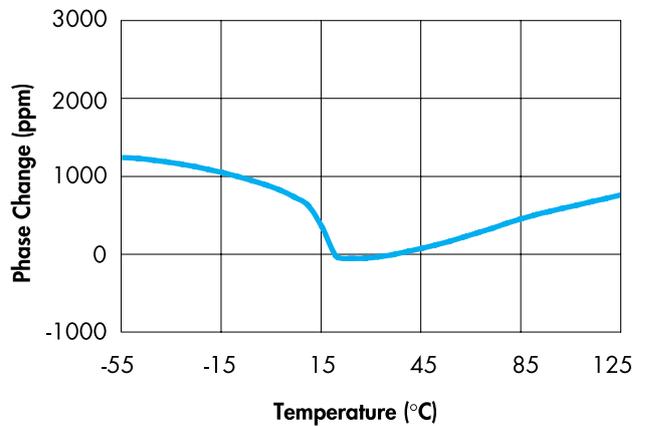


## Power handling

Maximum values @ +40 °C ambient temperature and sea level



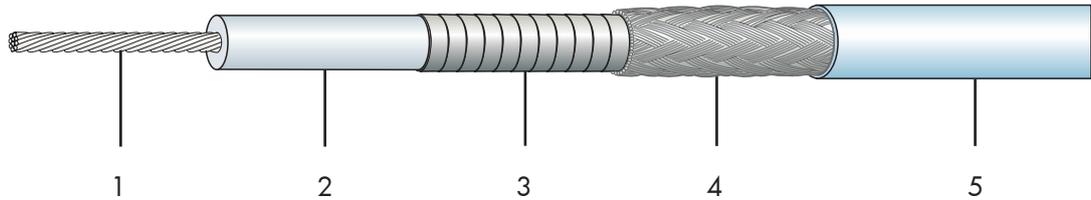
## Phase change vs. temperature



SUCOFLEX 100

# SUCOFLEX\_106\_P

## Cable design



	Description	Diameter
1. Centre conductor	Stranded silver-plated copper wire	
2. Dielectric	Low density PTFE	
3. 1st outer conductor	Silver-plated copper tape, wrapped	
4. 2nd outer conductor	Silver-plated copper braid	
5. Jacket	Fluoroethylenepropylene, blue	7.90 mm

## Electrical cable data

Impedance			50 Ohm
Operating frequency			18 GHz
Capacitance			87 pF/m
Velocity of propagation			77 %
Time delay			4.3 ns/m
Nom. attenuation*	coefficient a	<b>0.1910</b>	coefficient b <b>0.0255</b>
Max. attenuation*	coefficient a	<b>0.2101</b>	coefficient b <b>0.0280</b>
Max. operating voltage			3.2 kVrms
Min. screening effectiveness up to 18 GHz			90 dB

\*Attenuation calculation

$$a_{25} = a \cdot \sqrt{f(\text{GHz})} + b \cdot f(\text{GHz}) \quad (\text{dB/m})$$

## General cable data

Temperature range	-55...+125 °C
Weight	15.8 kg/100m
Min. bending radius static	24 mm
Min. bending radius dynamic	40 mm

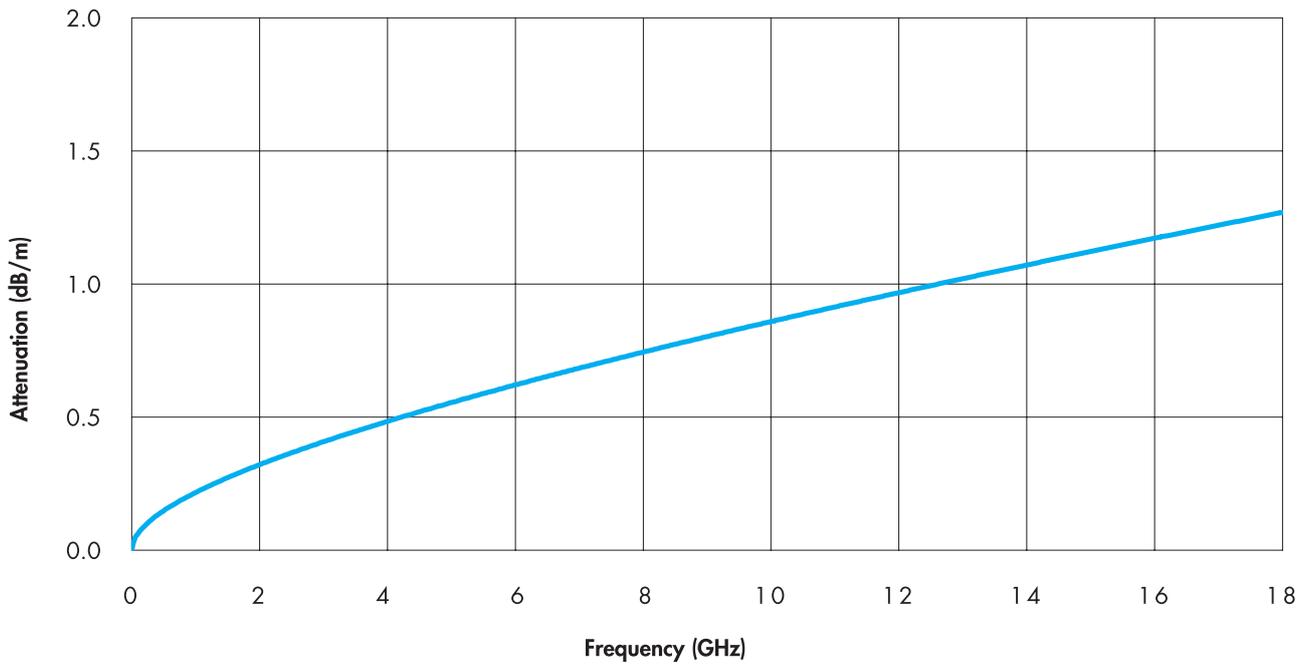
## Suitable connectors

Please refer to pages 126 ff

# SUCOFLEX\_106\_P

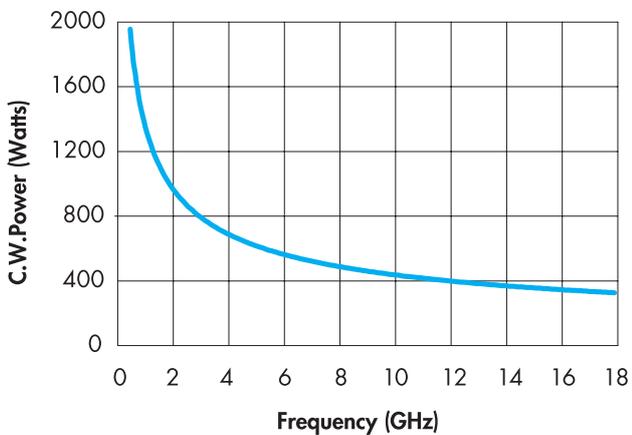
## Cable attenuation

Nominal values @ +25 °C ambient temperature

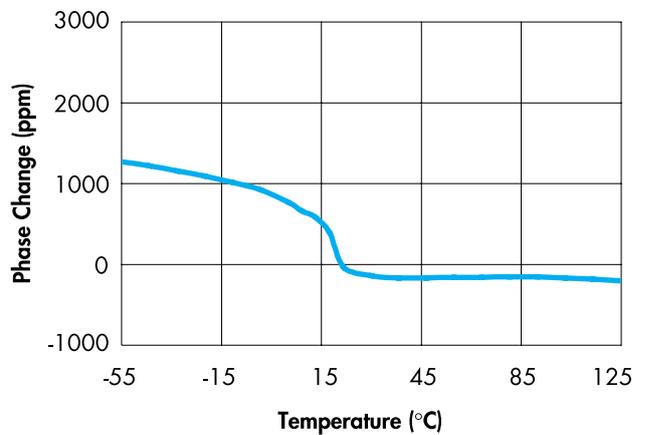


## Power handling

Maximum values @ +40 °C ambient temperature and sea level



## Phase change vs. temperature



SUCOFLEX 100

# SUCOFLEX 106

## Suitable connectors

HUBER+SUHNER connector type	106	106_A	106_B	106_C	106_D	106_G	106_P	106_PA	106_PB	106_PD	106_PG	Remarks	Weight (g)	Operating frequency (GHz)	VSWR <sup>1)</sup>	Fig.
11_N-651	•	•	•	•	•	•							52.0	18.0	1.12	122
11_N-654							•		•	•	•	SUCOTRIM	68.0	18.0	1.15	127
11_N-656							•	•	•	•	•		52.0	18.0	1.12	122
16_N-651	•		•		•	•							87.0	11.0	1.12	131
16_N-653		•		•									93.0	11.0	1.12	131
16_N-656							•		•	•	•	MIL	87.0	11.0	1.12	132
24_N-651	•	•	•	•	•	•						ML 12	55.0	18.0	1.12	135
24_N-652							•		•	•	•	ML 12	58.0	18.0	1.12	135
11_PC7-651	•	•	•	•	•	•							51.0	18.0	1.12	165
11_PC7-652							•	•	•	•	•		51.0	18.0	1.12	165
11_SMA-652	•	•	•	•	•	•							38.0	18.0	1.12	170
11_SMA-653							•		•	•	•		40.0	18.0	1.12	170
11_SMA-654							•		•	•	•	SUCOTRIM	42.0	18.0	1.15	173
16_SMA-652	•		•		•	•							18.0	18.0	1.18	174
21_SMA-651	•	•	•	•	•	•							37.0	18.0	1.12	175
21_SMA-652							•		•	•	•		23.0	18.0	1.12	175
24_SMA-651							•			•	•	ML 35	48.0	18.0	1.12	177
11_TNC-651		•		•									49.0	18.0	1.16	192
11_TNC-653	•		•		•								28.0	18.0	1.12	191
11_TNC-654							•		•	•	•		32.0	18.0	1.12	191
11_TNC-655							•		•	•	•	SUCOTRIM	57.0	18.0	1.15	194
16_TNC-651	•		•		•	•							76.0	18.0	1.18	197
16_TNC-653		•		•									80.0	18.0	1.18	197
16_TNC-655							•		•	•	•		78.0	18.0	1.22	197
24_TNC-651		•		•								ML 4	47.0	18.0	1.16	199
24_TNC-653	•		•		•	•						ML 4	24.0	18.0	1.12	199
24_TNC-654							•		•	•	•	ML 4	26.0	18.0	1.12	199
11_716-61	•	•	•	•	•	•							115.0	7.5	1.12	221
21_716-61	•	•	•	•	•	•							105.0	7.5	1.12	223
11_4195-602	•	•	•	•	•	•							57.0	2.0	1.10	210
														14.0	1.12	210

# SUCOFLEX 106

## Suitable connectors

### Connector patterns

11 Straight cable plug  
16 Right angle cable plug  
21 Straight cable jack

24 Straight panel bulkhead cable jack  
25 Straight panel cable jack, flange mount

1) *VSWR per connector*

ML xx: *Mounting hole size xx refer to section "Connector drawings", page 163*

MIL: *Connector with safety holes and hex nut for military and airframe applications*

SUCOTRIM: *with integrated phase trimmer refer to section Special solutions, page 131*

Note: *For dimensioned sketches of connectors, please refer to pages 138 ff.*

*Other connector types are available on request. Please contact your local HUBER+SUHNER partner.*

# SUCOFLEX 100

## Variations of ruggedisation

Type	for SUCOFLEX ...	Description
A	101(E), 101_P(E), 102(E)	<p>Consists of steel coil (flat wire), steel braid and polyurethane (PUR) jacket. Up to +85 °C, this ruggedisation offers excellent protection against compression, tension, torsion, abrasion and other mechanical forces acting upon the cable.</p> <p>Typical applications</p> <ul style="list-style-type: none"> <li>• Test and measurement cables</li> <li>• Laboratory cables</li> <li>• Protected line replaceable units (LRU)</li> </ul>
	103(E), 104(E), 104_P(E), 106, 106P	<p>Consists of steel spring (round wire), steel braid and polyurethane (PUR) jacket. Up to +85 °C, this ruggedisation offers excellent protection against compression, tension, abrasion and other mechanical forces acting upon the cable.</p> <p>Typical applications</p> <ul style="list-style-type: none"> <li>• Laboratory cables</li> <li>• Protected line replaceable units (LRU)</li> </ul>
B	103, 104, 104_P, 106	<p>Consists of a flexible hose of stainless steel. The ruggedisation protects the cable against compression, abrasion, mechanical injuries and open fire and hot objects (e.g. soldering irons). The continuous temperature is limited by the cable to +165 °C, and in the immediate proximity of the connectors to the maximum connector temperature.</p> <p>Typical applications</p> <ul style="list-style-type: none"> <li>• Test and measurement cables in industrial environments</li> </ul>
C	103, 104, 104_P, 106	<p>Is identical to the ruggedisation A except for the jacket, which consists of RADOX® instead of PUR. RADOX® is flame resistant up to +135 °C, but low abrasion resistant.</p> <p>Typical applications:</p> <ul style="list-style-type: none"> <li>• Test and measurement cables</li> </ul>

# SUCOFLEX 100

## Variations of ruggedisation

Type	for SUCOFLEX ...	Description
D	102, 103, 104, 106, 106_P, 302, 304	<p>Consists of an aramid yarn braid impregnated with silicon varnish. The ruggedisation protects the cable against abrasion and brief high temperatures.</p> <p><i>Typical applications</i></p> <ul style="list-style-type: none"> <li>• Aircraft cabling</li> <li>• Ship cabling</li> <li>• Antenna feeders</li> </ul>
G	104, 106	<p>Consists of a flexible, double-layer rubber hose with textile ply (NEOPRENE). High resistance to abrasion, torsion, chemicals and oils characterises this ruggedisation. Provided with water tight cable entries, this is the ideal ruggedisation for outdoor applications. Applicable up to +100 °C.</p> <p><i>Typical application</i></p> <ul style="list-style-type: none"> <li>• Antenna cables in rough environments e.g. on shipborne applications</li> </ul>
M	104E, 104_PE	<p>Consists of an additional soft magnetic band (<math>\mu</math>-metal), braiding and an LSFH jacket (Low Smoke Free of Halogen). The ruggedisation protects the cable against electromagnetic radiation for EMC applications up to max. +85 °C.</p> <p><i>Typical applications</i></p> <ul style="list-style-type: none"> <li>• Test and measurement cables in low frequency applications</li> </ul>

Technical data	Ruggedisation						
	A	B	C	D	G	M	
Surface material	PUR	Stainless steel	RADOX	*)	NEOPREN	LSFH	
Colour	blue, black	natural	blue	blue	black	black	
Max. crush resistance	kN/m	80	80	80	–	10	–
Torsional stiffness	Nm <sup>2</sup> /°	8.5x10 <sup>-4</sup>	3.2x10 <sup>-5</sup>	1.7x10 <sup>-3</sup>	–	2.2x10 <sup>-3</sup>	–
Max. tensile force							
Ruggedisation	N	1500	1000	1500	–	400	–
Cable-connector junction	N	400	500	400	–	400	–

\*) Aramid yarn braiding impregnated with silicon varnish.

# SUCOFLEX 100 - Special solutions

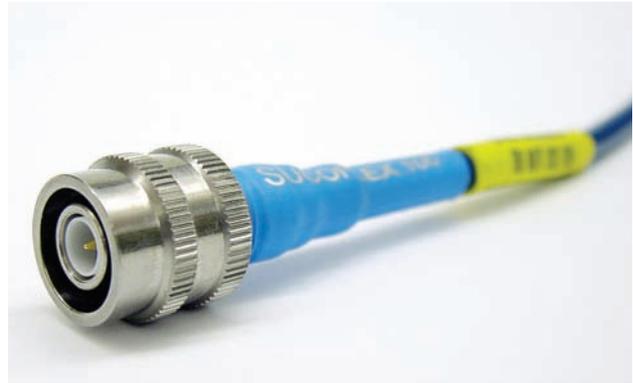
## Quick-lock screw connectors for microwave test cables

On test panels and in test laboratories, test cables are increasingly used which must meet high RF requirements and allow quick connection with the object to be tested.

A specially designed nut ensures that a perfect RF connection is established after a three-quarter turn. This enormously reduces the testing time when a large number of objects must be tested.

In order to avoid confusions, the nut of Quick-Lock screw connectors has a special design. In addition, these connectors are provided with a yellow sleeve with a black marking.

The connector nuts are made of steel. This guarantees over 1000 mating cycles.



## Technical connector data

HUBER+SUHNER connector type	103_E	103_EA	103_B	103_C	104_E	104_EA	104_B	104_C	104_PE	104_PEA	104_PB	Frequency (GHz)	VSWR
11_SMA-367	•	•	•	•								18.0	1.12
11_SMA-468					•	•	•	•	•	•	•	18.0	1.12
11_TNC-417									•	•	•	12.4 18.0	1.14 1.18
11_TNC-418					•	•	•	•				12.4 18.0	1.14 1.18
11_N-459					•	•	•	•	•	•	•	15.0 18.0	1.12 1.16

# SUCOFLEX 100 - Special solutions

## Phase trimmer "SUCOTRIM"

In phase sensitive applications, the need may arise after installation to match the phase position of pre-matched assemblies a second time by a very easy method.

SUCOTRIM phase trimmer allows the phase to be adjusted to suit the requirements by simple turning of a screw. Adjustment is possible across a wide range and virtually without affecting the insertion- and return loss of the assembly. The phase trimmer is not an additional adaptor that is included in the signal transmission chain, but an integral constituent of a connector.

No additional special tools are required for adjusting the phase. Upon adjustment, the trimmer is locked by means of a jam nut to prevent it from working loose as a result of vibration or other influences. This counternut can be tightened and loosened by means of two off-the-shelf open-end spanners. The compact design of the SUCOTRIM phase trimmer ensures easy and reliable handling. The SUCOTRIM is available for special phase stable cable types SUCOFLEX\_104\_P(E) and SUCOFLEX\_106\_P.



## Phase trimmer types

SUCOFLEX_104_P(E)	11_SMA-457, 11_TNC-459, 11_N-461
SUCOFLEX_106_P	11_SMA-654, 11_TNC-655, 11_N-654

## Electrical data

Max. operating frequency	18.0 GHz
Min. phase variation	64° @ 18 GHz (3.55° x f (GHz))
Phase variation per turn	10.8° @ 18 GHz (0.6° x f (GHz))

## Mechanical data

Type of phase variation	Continuous by fine-pitch thread
Locking method	Jam nut (counternut)
Locking tools	Two open end-spanners, AF.14 and AF.15
Nom. possible length variation	± 2 mm
Available ruggedisation	All types for SF 104P(E) and SF 106P

## Ambient conditions

Temperature range	-55 °C .... +125 °C
Humidity	max. 85%, non-condensating

# SUCOFLEX 100

## Electrical length and phase matching

### General

Basically, a distinction must be made between the following terms

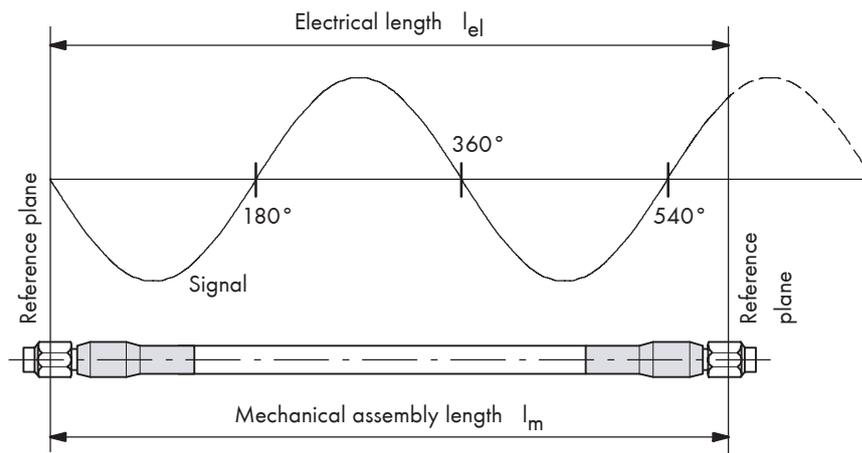
Electrical length  
Phase matching

Phase change  
Time delay

### Electrical length

#### Definition

The term "electrical length" refers to the length of an assembly stated in wavelength or preferably in electrical degrees. In this connection, the term "absolute phase" is sometimes also used.



#### Determination

The electrical length  $l_{el}$  is calculated in the following way

$$\phi_{25} = 1.2 \cdot f \cdot l_m \cdot \sqrt{\epsilon_r}$$

where  $f$  must be entered in GHz and  $l_m$  in mm. The nominal value of  $\epsilon_r$  is 1.68.

#### Example

Assembly SUCOFLEX\_104, 1000 mm length, operating frequency range 10 GHz. Thus, the electrical length amounts to

$$\phi_{25} = 1.2 \cdot f \cdot l_m \cdot \sqrt{\epsilon_r} = 1.2 \cdot 10 \cdot 1000 \cdot \sqrt{1.68} = 15553.7 \text{ deg}$$

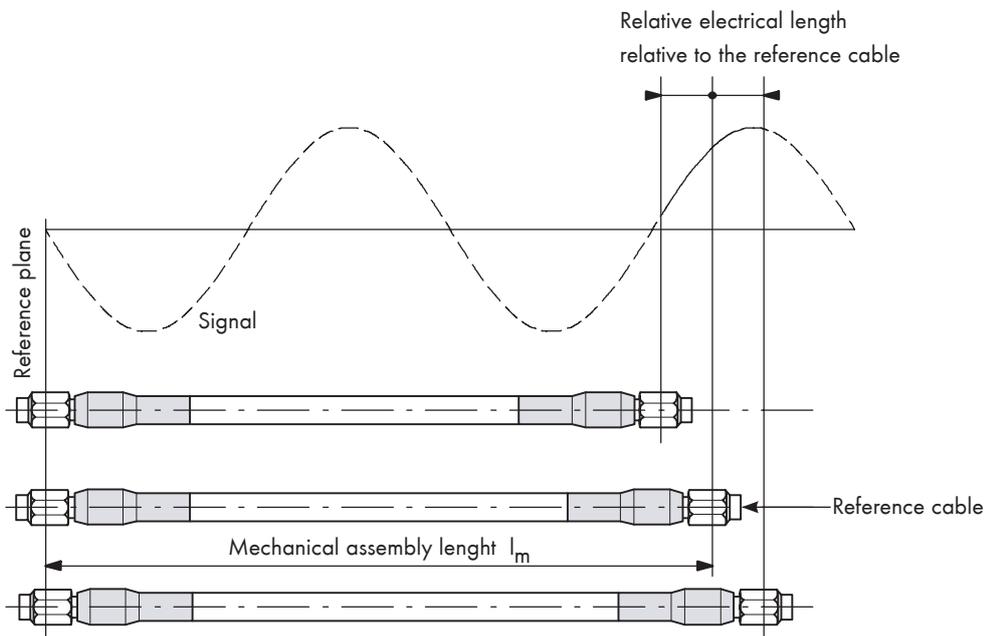
This calculation does not take the connectors into account; merely an approximation is supplied.

# SUCOFLEX 100

## Phase matching

### Definition

The term "phase matching" refers to the relative electrical length of an assembly compared with a reference cable or a given electrical length.



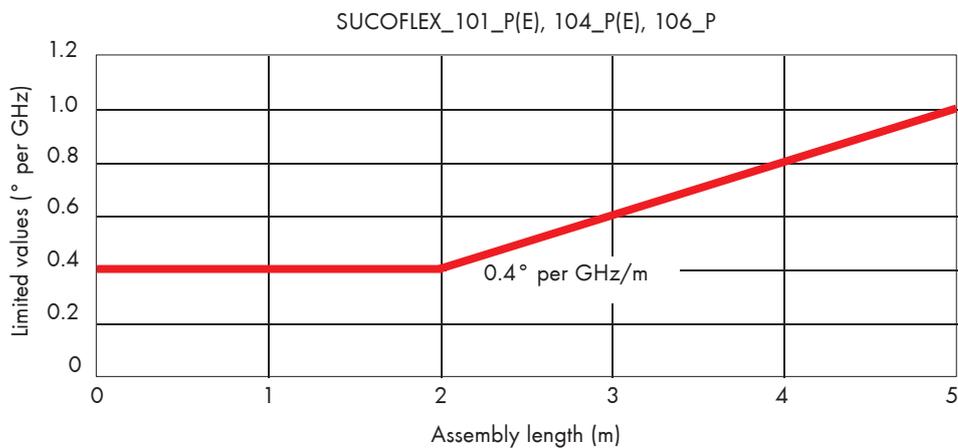
### Availability

All SUCOFLEX P-type microwave cable assemblies are available as phase-matched sets. Their outstanding thermal and mechanical phase stability makes them the ideal choice for applications requiring high stability. Any required matching values are available on request, although they are limited. The reproducibility of the electrical characteristics of the connectors in addition to thermal and mechanical influences limit the matching range attainable in practice to  $\pm 0.2^\circ$  per GHz/m, equivalent to a mechanical length of  $\pm 0.13$  mm. In long assemblies, the thermal and mechanical influencing factors have a greater impact, resulting in a rise of the lower limit of matchability as the length increases (see graph next page). In day-to-day practice, we find that it is better to speak of a specification window than of a tolerance. As a consequence, a statement such as "within  $0.4^\circ$  per GHz/m" makes more sense than " $\pm 0.2^\circ$  per GHz/m". This applies in particular to assembly sets consisting of more than two individual assemblies.

# SUCOFLEX 100

## Limiting values for phase matching

The best guaranteeable values for SUCOFLEX\_101\_P(E), 104\_P(E) and 106\_P are within 0.4° per GHz/m ( $\pm 0.2^\circ$  per GHz/m). For detailed information, see the following graph:



## Important note

For obtaining matching values better than 1° per GHz/m ( $\pm 0.5^\circ$  per GHz/m), a special connector 11\_SMA-372, 11\_SMA-452, 11\_N-453 or 11\_TNC-458 should be used for each cable. For applications where the phase during or after the installation process should be changed, special connectors with integrated phase trimmer SUCOTRIM are available for cable types SUCOFLEX\_104\_P(E) and SUCOFLEX\_106\_P (types 11\_N-461, 11\_N-654, 11\_SMA-457, 11\_SMA-654, 11\_TNC-459 or 11\_TNC-655).

## Phase change vs. bending

HUBER+SUHNER cable type	Phase change @ 18 GHz	Diameter mandrel
SUCOFLEX_101_P(E)	5°	35 mm
SUCOFLEX_104_P(E)	10°	55 mm
SUCOFLEX_106_P	10°	79 mm

## Test method (IEC 60966-1, para. 8.6.2.1)

The cable assembly which is of a "U" shape is connected to the NWA. During recording of the phase of the transmitting signal, the cable is wound around a mandrel for 180°, unwound to the starting position, wound counter-clockwise for 180° around the mandrel and again unwound to its starting position. The initial position of the mandrel is chosen so that only the straight parts of the "U" will be bent during the test.

*In case of questions or critical applications, please contact your local HUBER+SUHNER partner.*

# SUCOFLEX 100 - stock assemblies

## SUCOFLEX\_101\_PEA (armoured)

HUBER+SUHNER assembly type	Item no.	Length (mm)	Max. frequency GHz	Nom. insertion loss dB @ 25 °C	Max. insertion loss dB @ 25 °C	VSWR ≤
SUCOFLEX_101_PEA/HP2.4/11_SK-155	23005075	570	46.0	3.24	3.54	1.44
SUCOFLEX_101_PEA/HP2.4/21_SK-155	23005076	570	46.0	3.24	3.54	1.44
SUCOFLEX_101_PEA/HP2.4/11_PC2.4-106	23005073	570	50.0	3.42	3.73	1.44
SUCOFLEX_101_PEA/HP2.4/21_PC2.4-106	23005074	570	50.0	3.42	3.73	1.44
SUCOFLEX_101_PEA/2x11_SK-155	23005069	570	46.0	3.24	3.54	1.44
SUCOFLEX_101_PEA/2x21_SK-155	23005066	570	46.0	3.24	3.54	1.44
SUCOFLEX_101_PEA/11_SK-155/21_SK-155	23005070	570	46.0	3.24	3.54	1.44
SUCOFLEX_101_PEA/21_SK-155/11_PC2.4-106	23005071	570	46.0	3.24	3.54	1.44
SUCOFLEX_101_PEA/21_SK-155/21_PC2.4-106	23005072	570	46.0	3.24	3.54	1.44

## SUCOFLEX\_102

HUBER+SUHNER assembly type	Item no.	Length (mm)	Max. frequency GHz	Nom. insertion loss dB @ 25 °C	Max. insertion loss dB @ 25 °C	VSWR ≤
SUCOFLEX_102/2×11_SK-252	22649802	500	46.0	1.69	1.83	1.44
SUCOFLEX_102/2×11_SK-252	22649803	1000	46.0	3.11	3.39	1.44

## SUCOFLEX\_103

HUBER+SUHNER assembly type	Item no.	Length (mm)	Max. frequency GHz	Nom. insertion loss dB @ 25 °C	Max. insertion loss dB @ 25 °C	VSWR ≤
SUCOFLEX_103/2×11_SMA-371	22648908	500	18.0	0.84	0.90	1.25
SUCOFLEX_103/2×11_SMA-371	22648909	1000	18.0	1.50	1.63	1.25

### Connector patterns

11 Straight cable plug  
 16 Right angle cable plug  
 21 Straight cable jack

24 Straight panel bulkhead cable jack  
 25 Straight panel cable jack, flange mount

# SUCOFLEX 100 - stock assemblies

## SUCOFLEX\_104

HUBER+SUHNER assembly type	Item no.	Length (mm)	Max. frequency GHz	Nom. insertion loss dB @ 25 °C	Max. insertion loss dB @ 25 °C	VSWR ≤
SUCOFLEX_104/2×11_N-47	22648912	500	18.0	0.72	0.77	1.35
SUCOFLEX_104/2×11_SMA-451	22642642	500	18.0	0.72	0.77	1.25
SUCOFLEX_104/2×11_PC3.5-42	22648910	500	26.5	0.89	0.96	1.35
SUCOFLEX_104/ 11_SMA-451/11_N-47	22648916	1000	18.0	1.27	1.38	1.30
SUCOFLEX_104/2×11_N-47	22642645	1000	18.0	1.27	1.38	1.35
SUCOFLEX_104/2×11_SMA-451	22642590	1000	18.0	1.27	1.38	1.25
SUCOFLEX_104/2×11_PC3.5-42	22648911	1000	26.5	1.57	1.71	1.35
SUCOFLEX_104/2×11_N-47	22648913	1500	18.0	1.82	1.98	1.35
SUCOFLEX_104/2×11_SMA-451	22642643	1500	18.0	1.82	1.98	1.25
SUCOFLEX_104/ 11_SMA-451/11_N-47	22648917	2000	18.0	2.37	2.59	1.30
SUCOFLEX_104/2×11_N-47	22648914	2000	18.0	2.37	2.59	1.35
SUCOFLEX_104/2×11_SMA-451	22642644	2000	18.0	2.37	2.59	1.25
SUCOFLEX_104/2×11_N-47	22648915	3000	18.0	3.47	3.80	1.35
SUCOFLEX_104/2×11_N-47	22654052	5000	18.0	5.67	6.22	1.35
SUCOFLEX_104/2×11_SMA-451	23016200	570	18.0	0.80	0.86	1.25
SUCOFLEX_104/2×11_SMA-451	23032336	5000	18.0	5.67	6.16	1.25
SUCOFLEX_104/11_SMA-451/ 16_SMA-451	23016199	570	18.0	0.82	0.88	1.25

## SUCOFLEX\_104\_P

HUBER+SUHNER assembly type	Item no.	Length (mm)	Max. frequency GHz	Nom. insertion loss dB @ 25 °C	Max. insertion loss dB @ 25 °C	VSWR ≤
SUCOFLEX_104_P/2×11_SMA-451	23015797	500	18.0	0.95	1.03	1.25
SUCOFLEX_104_P/2×11_SMA-451	22644134	1000	18.0	1.73	1.88	1.25
SUCOFLEX_104_P/2×11_SMA-451	22644135	2000	18.0	3.29	3.60	1.25

### Connector patterns

11 Straight cable plug  
16 Right angle cable plug  
21 Straight cable jack

24 Straight panel bulkhead cable jack  
25 Straight panel cable jack, flange mount

# SUCOFLEX 100 - stock assemblies

## SUCOFLEX\_104\_A (armoured)

HUBER+SUHNER assembly type	Item no.	Length (mm)	Max. frequency GHz	Nom. insertion loss dB @ 25 °C	Max. insertion loss dB @ 25 °C	VSWR ≤
SUCOFLEX_104_A/2×11_N-47	22644089	1000	18.0	1.27	1.38	1.35
SUCOFLEX_104_A/2×11_SMA-451	22644087	1000	18.0	1.27	1.38	1.25
SUCOFLEX_104_A/2×Q/1000	22644137	1000	18.0	1.27	1.38	n/a
SUCOFLEX_104_A/11_N-47/ 11_716-401	22654044	1500	7.5	1.13	1.23	1.25
SUCOFLEX_104_A/11_N-47/ 21_716-401	22654047	1500	7.5	1.13	1.23	1.25
SUCOFLEX_104_A/11_N-47/ 21_N-47	22655933	1500	15.0	1.65	1.79	1.25
SUCOFLEX_104_A/11_N-47/ 24_N-47	22654038	1500	15.0	1.65	1.79	1.25
SUCOFLEX_104_A/2×11_N-47	22654041	1500	18.0	1.82	1.98	1.35
SUCOFLEX_104_A/2×Q/2000	22644138	2000	18.0	2.37	2.59	n/a
SUCOFLEX_104_A/11_N-47/ 21_716-401	22654048	3000	7.5	2.15	2.36	1.25
SUCOFLEX_104_A/11_N-47/ 21_N-47	22655934	3000	15.0	3.14	3.43	1.25
SUCOFLEX_104_A/2×11_N-47	22654042	3000	18.0	3.47	3.80	1.35

## SUCOFLEX\_104\_PEA (armoured)

HUBER+SUHNER assembly type	Item no.	Length (mm)	Max. frequency GHz	Nom. insertion loss dB @ 25 °C	Max. insertion loss dB @ 25 °C	VSWR ≤
SUCOFLEX_104_PEA/ 2×11_N-452	23005059	1000	18.0	1.73	1.88	1.25
SUCOFLEX_104_PEA/ 11_N-452/21_716-402	23005084	1500	7.5	1.51	1.65	1.25
SUCOFLEX_104_PEA/ 11_N-452/21_N-452	23005077	1500	18.0	2.51	2.74	1.25
SUCOFLEX_104_PEA/ 2×11_N-452	23005080	1500	18.0	2.51	2.74	1.25

### Connector patterns

11 Straight cable plug  
16 Right angle cable plug  
21 Straight cable jack

24 Straight panel bulkhead cable jack  
25 Straight panel cable jack, flange mount

# SUCOFLEX 100

## Connector drawings

BNC/DV

Depending on the particular cable entry or the selected ruggedisation, the connectors may have a different visual appearance as shown here!

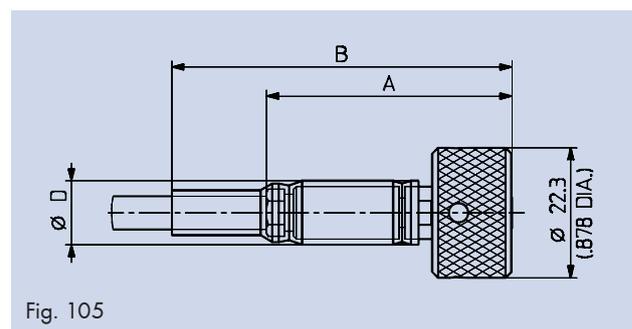
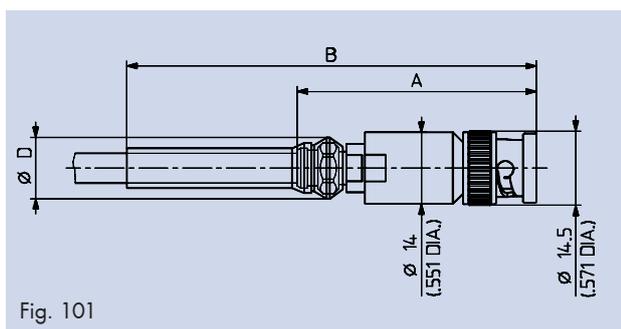
The connectors are shown to the correct scale relative to one another so that their basic versions can be easily compared. The basic version is the appropriate connector for a given cable type without any ruggedisation.

It is not possible to derive a matching connector type from the cable type stated in the following tables. For this purpose, please compare the tables for the individual cable types in the "Variation" sections on pages 93 ff.

Mounting holes are specified on page 163.

## Dimensioned sketches - connector drawings

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disation	A		B		C		D		Fig.
			mm	inches	mm	inches	mm	inches	mm	inches	
11_BNC-373	103(E)		46.5	1.831	80.0	3.150			10.0	0.394	101
	103(E)	A/C	72.5	2.854	84.0	3.307			14.5	0.571	
	103	B	64.0	2.520	84.0	3.307			15.0	0.591	
	103	D	46.5	1.831	80.0	3.150			10.0	0.394	
11_BNC-451	104(E),104P(E)		46.5	1.831	80.0	3.150			11.0	0.433	
11_BNC-452	104(E),104P(E)	A/C	62.0	2.441	74.0	2.913			14.5	0.571	
	104, 104P	B	64.0	2.520	84.0	3.307			15.0	0.591	
	104, 104P	D	46.5	1.831	80.0	3.150			11.0	0.433	
	104(E),104P(E)	M	71.0	2.795	75.0	2.953			14.0	0.551	
	104, 104P	G	77.0	3.031	84.0	3.307			17.5	0.689	
11_DV-112	101P(E)	A	36.5	1.437	74.0	2.913			12.0	0.472	105
11_DV-41	104P(E)		42.0	1.654	60.0	2.362			10.0	0.394	
	104P(E)	A/C	62.5	2.461	78.0	3.071			14.5	0.571	
	104P	B	64.5	2.539	108.0	4.252			15.0	0.591	
11_DV-42	104(E)		37.0	1.457	60.0	2.362			10.0	0.394	
	104(E)	A/C	57.5	2.264	78.0	3.071			14.5	0.571	
	104	B	60.0	2.362	108.0	4.252			15.0	0.591	
	104	D	42.0	1.654	60.0	2.362			11.0	0.433	
	104	G	66.5	2.618	88.0	3.456			17.5	0.689	



# SUCOFLEX 100

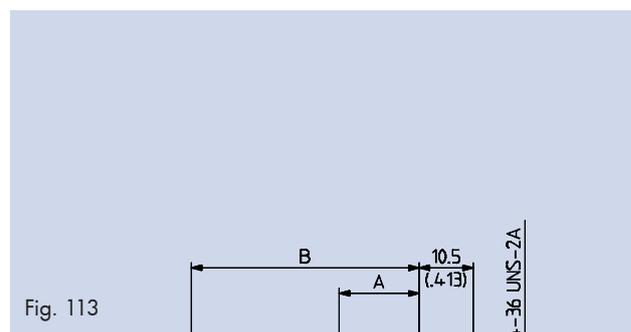
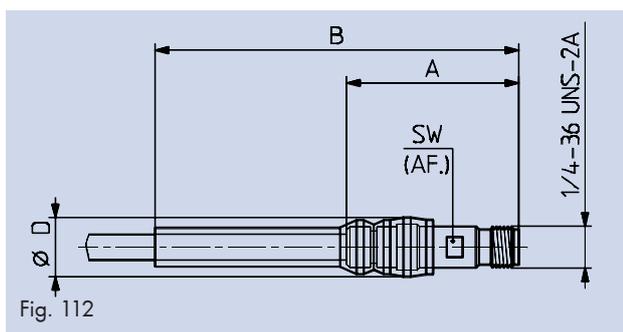
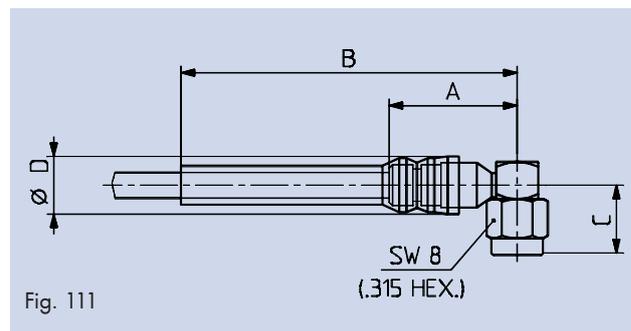
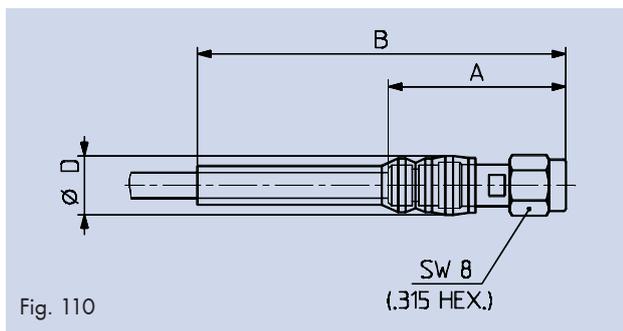
## Dimensioned sketches - connector drawings

SK

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disation	A		B		C		D		Fig.
			mm	inches	mm	inches	mm	inches	mm	inches	
11_SK-110	101P(E)	A	36.5	1.437	74.0	2.913			12.0	0.472	110
11_SK-252	102(E)		27.0	1.063	56.0	2.205			9.5	0.374	
	102	D	27.0	1.063	56.0	2.205			9.5	0.374	
11_SK-258	102(E)	A	36.5	1.437	72.0	2.835			12.0	0.472	111
16_SK-252	102		19.5	0.768	52.0	2.047	10.7	0.421	9.5	0.374	
	102	D	19.5	0.768	52.0	2.047	10.7	0.421	9.5	0.374	
16_SK-255	102(E)	A	32.0	1.260	70.0	2.756	12.2	0.480	12.0	0.472	113
24_SK-251	102(E)		15.5	0.610	46.0	1.811			9.5	0.374	
	102	D	15.5	0.610	46.0	1.811			9.5	0.374	

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disation	A		B		D		SW (AF.)		Fig.
			mm	inches	mm	inches	mm	inches	mm	inches	
21_SK-110	101P(E)	A	35.5	1.398	73.0	2.874	12.0	0.472	8.0	0.315	112
21_SK-252	102(E)		26.0	1.024	54.0	2.126	9.5	0.374	5.5	0.217	
	102	D	26.0	1.024	54.0	2.126	9.5	0.374	5.5	0.217	
21_SK-257	102(E)	A	36.5	1.437	72.0	2.835	12.0	0.472	8.0	0.315	

Mechanical compatibility: SK connectors can be mated with the connectors of the PC3.5 and SMA series even if they are not fully compatible.



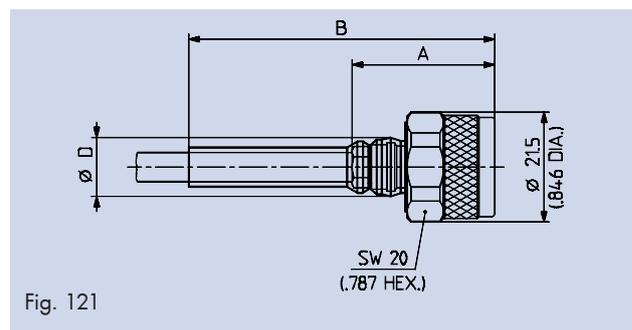
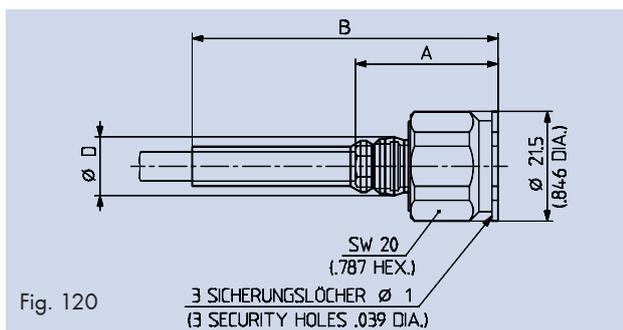
SUCOFLEX 100

# SUCOFLEX 100

## Dimensioned sketches - connector drawings

N

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disation	A		B		C		D		Fig.
			mm	inches	mm	inches	mm	inches	mm	inches	
11_N-206	102(E)		28.5	1.122	61.0	2.402			9.5	0.374	120
	102	D	28.5	1.122	61.0	2.402			9.5	0.374	
11_N-207	102(E)		28.5	1.122	61.0	2.402			9.5	0.374	120
	102	D	28.5	1.122	61.0	2.402			9.5	0.374	
11_N-371	103(E)		27.5	1.083	60.0	2.362			10.5	0.413	121
	103(E)	A/C	51.0	2.008	88.0	3.465			13.5	0.531	
	103	B	50.0	1.969	88.0	3.465			15.0	0.591	
	103	D	32.5	1.280	65.0	2.559			10.0	0.394	
11_N-47	104(E),104P(E)		28.0	1.102	59.0	2.323			10.5	0.413	121
	104(E),104P(E)	A/C	48.5	1.909	77.0	3.031			14.5	0.571	
	104, 104P	B	50.5	1.988	87.0	3.425			15.0	0.591	
	104, 104P	D	33.0	1.299	59.0	2.323			11.0	0.433	
	104(E),104P(E)	M	78.0	3.071	77.0	3.031			14.0	0.551	
11_N-451	104(E)		45.0	1.772	78.0	3.071			11.0	0.433	122
	104(E)	A/C	60.5	2.382	87.0	3.425			14.5	0.571	
	104	B	62.5	2.461	99.0	3.898			15.0	0.591	
	104	D	45.0	1.772	78.0	3.071			11.0	0.433	
	104(E)	M	69.0	2.717	89.0	3.504			14.0	0.551	
	104	G	75.5	2.972	99.0	3.898			17.5	0.689	
11_N-452	104P(E)		46.5	1.831	74.0	2.913			11.0	0.433	122
	104P(E)	A/C	62.0	2.441	92.0	3.622			14.5	0.571	
	104P	B	64.0	2.520	102.0	4.016			15.0	0.591	
	104P	D	46.5	1.831	74.0	2.913			11.0	0.433	
	104P(E)	M	71.0	2.795	92.0	3.622			14.0	0.551	
	104P	G	77.0	3.031	102.0	4.016			17.5	0.689	
11_N-454	104(E),104P(E)		28.0	1.102	59.0	2.323			10.5	0.413	120
	104(E), 104P	A/C	48.5	1.909	77.0	3.031			14.5	0.571	
	104, 104P	B	50.5	1.988	87.0	3.425			15.0	0.591	
	104, 104P	D	33.0	1.299	59.0	2.323			11.0	0.433	
	104(E),104P(E)	M	78.0	3.071	77.0	3.031			14.0	0.551	
104, 104P	G	63.5	2.500	87.0	3.425			17.5	0.689		

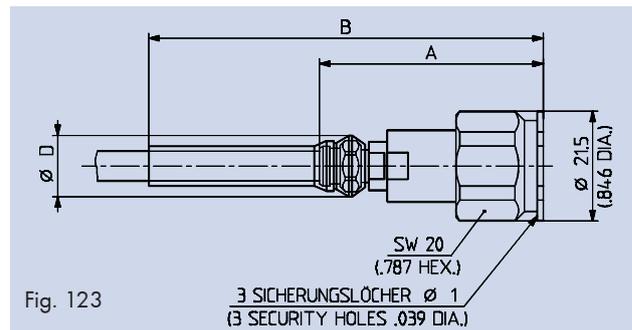
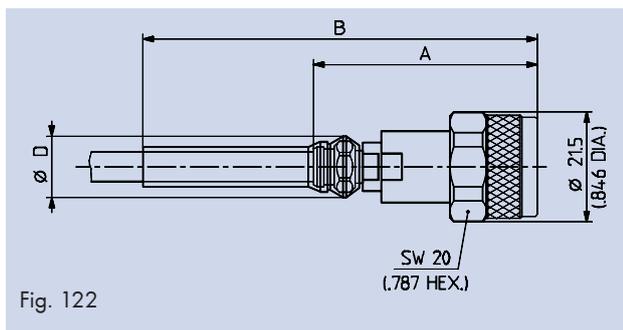


# SUCOFLEX 100

## Dimensioned sketches - connector drawings

N

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disation	A		B		C		D		Fig.
			mm	inches	mm	inches	mm	inches	mm	inches	
11_N-456	104(E)		45.0	1.772	78.0	3.071			11.0	0.433	123
	104(E)	A/C	60.5	2.382	87.0	3.425			14.5	0.571	
	104	B	62.5	2.461	99.0	3.898			15.0	0.591	
	104	D	45.0	1.772	78.0	3.071			11.0	0.433	
	104(E)	EM	69.0	2.717	89.0	3.504			14.0	0.551	
	104	G	75.5	2.972	99.0	3.898			17.5	0.689	
11_N-457	104P(E)		46.5	1.831	74.0	2.913			11.0	0.433	
	104P(E)	A/C	62.0	2.441	92.0	3.622			14.5	0.571	
	104P	B	64.0	2.520	102.0	4.016			15.0	0.591	
	104P	D	46.5	1.831	74.0	2.913			11.0	0.433	
	104P(E)	M	71.0	2.795	92.0	3.622			14.0	0.551	
	104P	G	77.0	3.031	102.0	4.016			17.5	0.689	
11_N-651	106		57.5	2.264	95.0	3.740			14.5	0.571	122
	106	A/C	71.5	2.815	115.0	4.528			21.0	0.827	
	106	B	44.5	1.752	105.0	4.134			19.0	0.748	
	106	D	57.5	2.264	95.0	3.740			14.5	0.571	
	106	G	83.5	3.287	100.0	3.937			21.5	0.846	
11_N-656	106		57.5	2.264	95.0	3.740			14.5	0.571	
	106	A/C	71.5	2.815	115.0	4.528			21.0	0.827	
	106	B	76.5	3.012	105.0	4.134			19.0	0.748	
	106	D	57.5	2.264	95.0	3.740			14.5	0.571	
	106	G	80.5	3.169	100.0	3.937			21.5	0.846	



SUCOFLEX 100

# SUCOFLEX 100

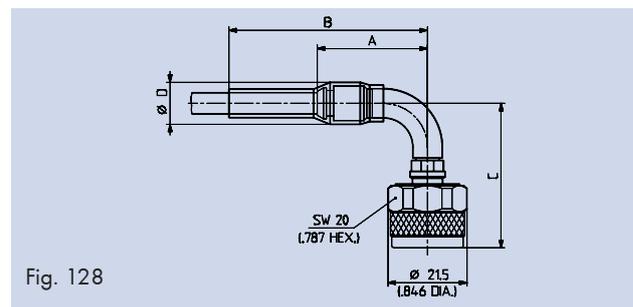
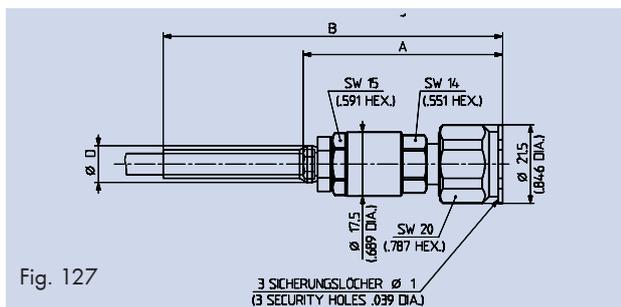
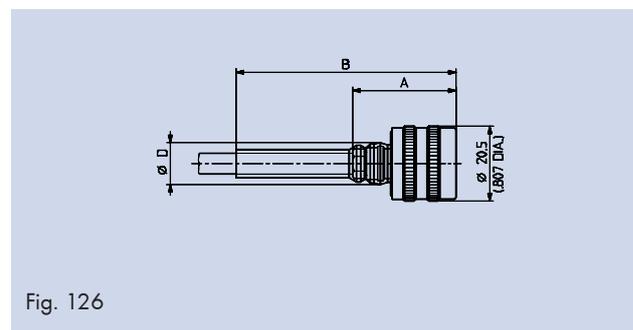
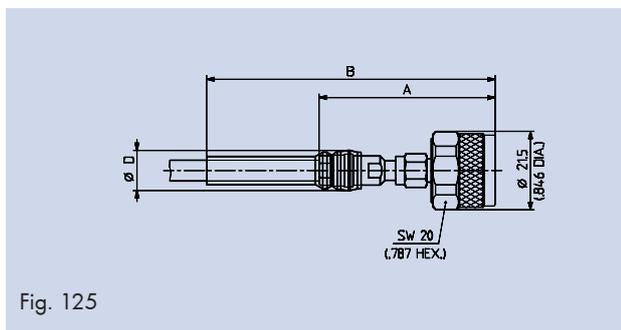
## Dimensioned sketches - connector drawings

N

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disation	A		B		C		D		Fig.
			mm	inches	mm	inches	mm	inches	mm	inches	
11_N-453 <sup>1)</sup>	104P(E)		48.5	1.909	72.0	2.835			10.0	0.394	125
	104P(E)	A/C	69.0	2.717	90.0	3.543			14.5	0.571	
	104P	B	71.0	2.795	100.0	3.937			15.0	0.571	
	104P	G	84.0	3.307	100.0	3.937			17.5	0.689	
11_N-459	104, 104P(E)		28.0	1.102	59.0	2.323			10.5	0.413	126
	104, 104P(E)	A/C	48.5	1.909	77.0	3.031			14.5	0.571	
	104, 104P	B	50.5	1.988	87.0	3.425			15.0	0.591	
	104, 104P	D	33.0	1.299	60.0	2.362			11.0	0.433	
11_N-461 <sup>2)</sup>	104P(E)		59.5	2.343	92.0	3.622			11.0	0.433	127
	104P(E)	A/C	75.0	2.953	110.0	4.330			14.5	0.571	
	104P	B	77.0	3.031	120.0	4.724			15.0	0.591	
	104P	D	59.5	2.343	92.0	3.622			11.0	0.433	
	104P	G	90.0	3.543	120.0	4.724			18.5	0.728	
11_N-654 <sup>2)</sup>	106P		67.5	2.657	120.0	4.724			14.5	0.571	128
	106P	B	86.5	3.406	130.0	5.118			19.0	0.748	
	106P	D	67.5	2.657	120.0	4.724			14.5	0.571	
	106P	G	90.5	3.563	125.0	4.921			21.5	0.846	
16_N-372	103(E)		29.5	1.161	55.0	2.165	45.0	1.772	9.0	0.354	128
	103(E)	A/C	39.0	1.535	75.0	2.953	45.0	1.772	14.5	0.571	
	103	B	39.0	1.535	74.0	2.913	45.0	1.772	14.0	0.551	
	103	D	29.5	1.161	55.0	2.165	45.0	1.772	9.0	0.354	

1) Note: In case of phase matching, dimensions A and B can be maximal 3.85 mm longer.

2) Note: In case of phase matching, dimensions A and B can be maximal  $\pm 2$  mm longer.

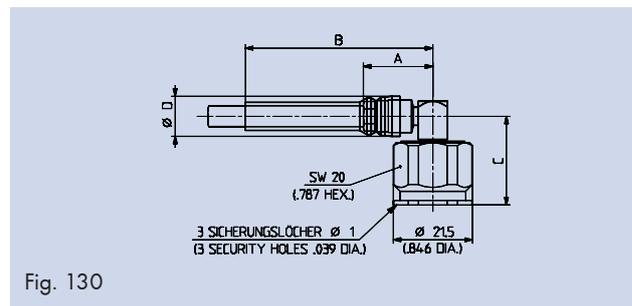
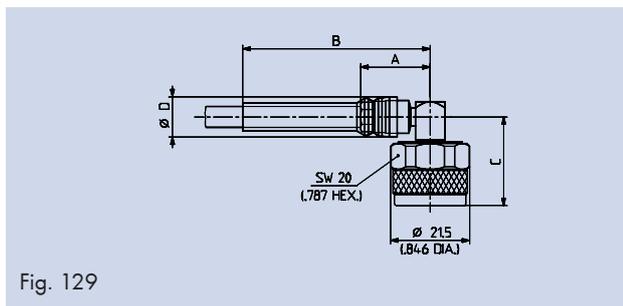


# SUCOFLEX 100

## Dimensioned sketches - connector drawings

N

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disation	A		B		C		D		Fig.
			mm	inches	mm	inches	mm	inches	mm	inches	
16_N-44	104(E)		19.0	0.748	45.0	1.772	24.5	0.965	9.5	0.374	129
	104(E)	A/C	39.5	1.555	63.0	2.480	24.5	0.965	14.5	0.571	
	104	B	41.5	1.634	82.0	3.228	24.5	0.965	15.0	0.591	
	104	D	23.5	0.925	57.0	2.244	24.5	0.965	11.0	0.433	
	104(E)	M	48.0	1.890	63.0	2.480	24.5	0.965	14.0	0.551	
	104	G	54.5	2.146	86.0	3.386	24.5	0.965	17.5	0.689	
16_N-457	104P(E)		25.0	0.984	47.0	1.850	24.5	0.965	9.5	0.374	
	104P(E)	A/C	45.5	1.791	69.0	2.717	24.5	0.965	14.5	0.571	
	104P	B	47.5	1.870	88.0	3.465	24.5	0.965	14.5	0.571	
	104P	D	30.0	1.181	63.0	2.480	24.5	0.965	11.0	0.433	
	104P(E)	M	54.0	2.126	69.0	2.717	24.5	0.965	14.0	0.551	
	104P	G	60.5	2.382	91.0	3.583	24.5	0.965	18.5	0.728	
16_N-45	104(E)		19.0	0.748	45.0	1.772	24.5	0.965	9.5	0.374	130
	104(E)	A/C	39.5	1.555	63.0	2.480	24.5	0.965	14.5	0.571	
	104	B	41.5	1.634	82.0	3.228	24.5	0.965	15.0	0.591	
	104	D	23.5	0.925	57.0	2.244	24.5	0.965	11.0	0.433	
	104	M	48.0	1.890	63.0	2.480	24.5	0.965	14.0	0.551	
	104(E)	G	54.5	2.146	86.0	3.386	24.5	0.965	17.5	0.689	



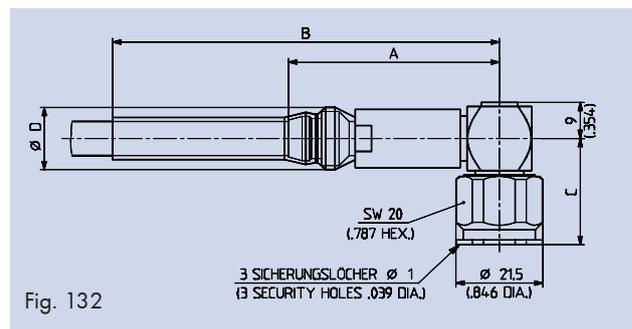
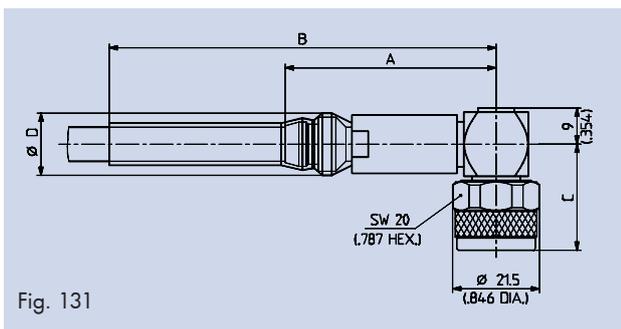
SUCOFLEX 100

# SUCOFLEX 100

## Dimensioned sketches - connector drawings

N

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disation	A		B		C		D		Fig.
			mm	inches	mm	inches	mm	inches	mm	inches	
16_N-651	106		52.2	2.067	92.0	3.622	26.5	1.043	14.5	0.571	131
	106	B	66.0	2.598	112.0	4.409	26.5	1.043	19.0	0.748	
	106	D	52.5	2.067	92.0	3.622	26.5	1.043	14.5	0.571	
	106	G	75.5	2.972	107.0	4.213	26.5	1.043	21.5	0.846	
16_N-653	106	A/C	66.0	2.598	97.0	3.819	26.5	1.043	20.0	0.787	
16_N-656	106P		52.5	2.067	92.0	3.622	26.5	1.043	14.5	0.571	132
	106P	B	66.0	2.598	112.0	4.409	26.5	1.043	19.0	0.748	
	106P	D	52.5	2.067	92.0	3.622	26.5	1.043	14.5	0.571	

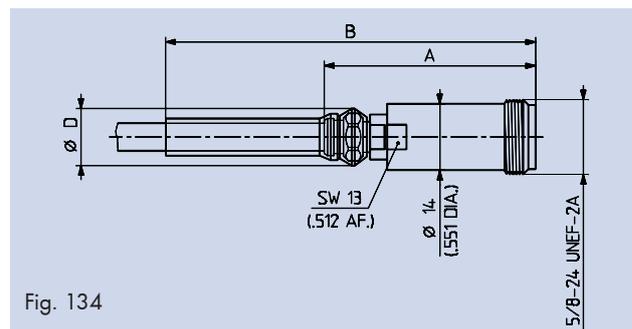
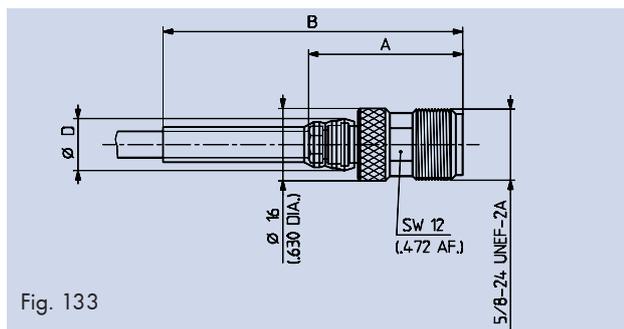


# SUCOFLEX 100

## Dimensioned sketches - connector drawings

N

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disation	A		B		C		D		Fig.
			mm	inches	mm	inches	mm	inches	mm	inches	
21_N-47	104(E)		33.5	1.319	67.0	2.638			10.0	0.394	133
	104(E)	A/C	54.0	2.126	85.0	3.346			14.5	0.571	
	104	B	56.0	2.205	95.0	3.740			15.0	0.591	
	104	D	38.5	1.516	70.0	2.756			11.0	0.433	
	104	M	36.0	1.417	85.0	3.346			14.0	0.551	
	104(E)	G	69.0	2.717	101.0	3.976			17.5	0.689	
21_N-451	104(E)		44.0	1.732	76.0	2.992			11.0	0.433	134
	104(E)	A/C	59.5	2.343	87.0	3.425			14.5	0.571	
	104	B	61.5	2.421	96.0	3.780			14.5	0.571	
	104	D	44.0	1.732	76.0	2.992			11.0	0.433	
	104(E)	M	68.5	2.697	91.0	3.583			14.0	0.551	
	104	G	74.5	2.933	100.0	3.937			18.5	0.728	
21_N-452	104P(E)		45.0	1.772	77.0	3.031			11.0	0.433	134
	104P(E)	A/C	60.5	2.382	88.0	3.465			14.5	0.571	
	104P	B	62.5	2.461	97.0	3.819			14.5	0.571	
	104P	D	45.0	1.772	77.0	3.031			11.0	0.433	
	104P(E)	M	69.5	2.736	91.0	3.583			14.0	0.551	
	104P	G	75.5	2.972	101.0	3.976			18.5	0.728	



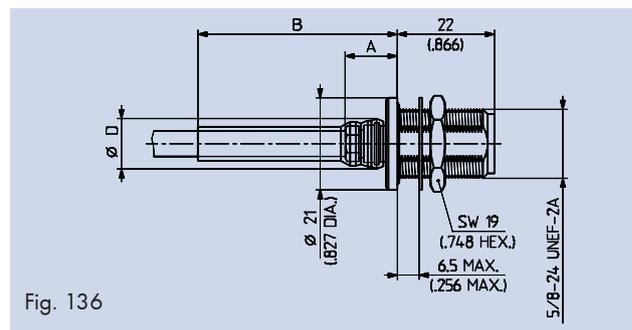
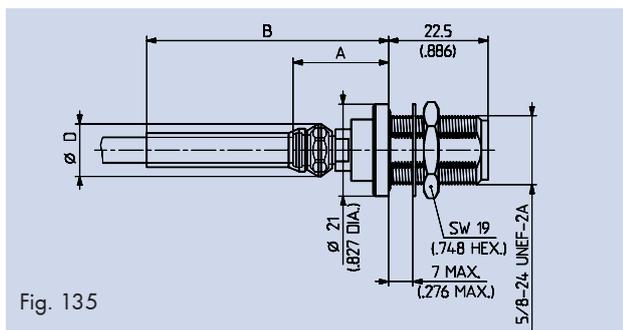
SUCOFLEX 100

# SUCOFLEX 100

## Dimensioned sketches - connector drawings

N

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disation	A		B		C		D		Fig.
			mm	inches	mm	inches	mm	inches	mm	inches	
24_N-352	103(E)		21.0	0.827	53.5	2.106			11.0	0.433	135
	103(E)	A/C	38.0	1.496	79.5	3.130			14.5	0.571	
	103	B	39.0	1.535	79.5	3.130			15.0	0.591	
	103	D	21.0	0.827	53.5	2.106			11.0	0.433	
24_N-47	104(E)		11.5	0.453	46.5	1.831			9.0	0.354	136
	104(E)	A/C	32.0	1.260	55.0	2.165			14.5	0.571	
	104	B	34.0	1.339	74.0	2.913			15.0	0.591	
	104	D	16.5	0.650	46.0	1.811			11.0	0.433	
	104(E)	M	40.5	1.594	64.0	2.520			14.0	0.551	
24_N-451	104(E)		21.5	0.846	54.0	2.126			11.0	0.433	135
	104(E)	A/C	37.0	1.457	68.0	2.677			14.5	0.571	
	104	B	39.0	1.535	78.0	3.071			15.0	0.591	
	104	D	21.5	0.846	54.0	2.126			11.0	0.433	
	104(E)	M	46.0	1.811	68.0	2.677			14.0	0.551	
	104	G	52.0	2.047	78.0	3.071			17.5	0.689	
24_N-452	104P(E)		22.5	0.886	50.0	1.969			11.0	0.433	135
	104P(E)	A/C	38.0	1.496	68.0	2.677			14.5	0.571	
	104P	B	40.0	1.575	78.0	3.071			15.0	0.591	
	104P	D	22.5	0.886	50.0	1.969			11.0	0.433	
	104P(E)	M	47.0	1.850	68.0	2.677			14.0	0.551	
	104P	G	53.0	2.087	78.0	3.071			18.5	0.728	
	104P		53.0	2.087	78.0	3.071			18.5	0.728	
24_N-651	106		35.5	1.398	77.5	3.051			14.5	0.571	135
	106	A/C	49.5	1.949	107.5	4.232			21.0	0.827	
	106	B	54.5	2.146	87.5	3.445			19.0	0.748	
	106	D	35.5	1.398	77.5	3.051			14.5	0.571	
	106	G	58.5	2.303	89.5	3.524			21.5	0.846	
24_N-652	106P		24.0	0.945	77.5	3.051			14.5	0.571	135
	106P	B	43.0	1.693	87.5	3.445			19.0	0.748	
	106P	G	47.0	1.850	82.5	3.248			21.5	0.846	



# SUCOFLEX 100

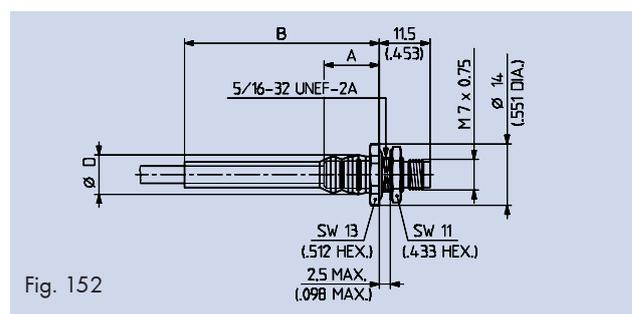
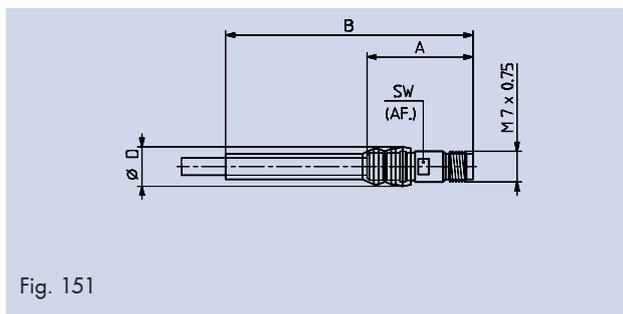
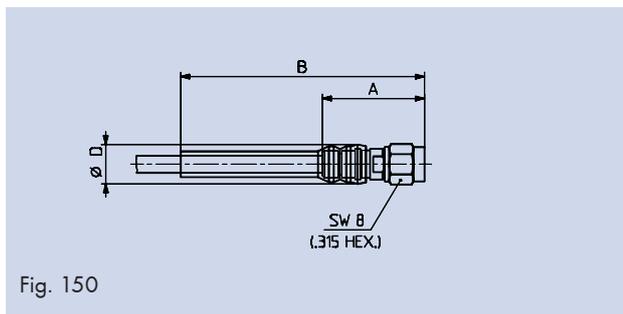
## Dimensioned sketches - connector drawings

PC2.4

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disation	A		B		C		D		Fig.
			mm	inches	mm	inches	mm	inches	mm	inches	
11_PC2.4-104	101(E)		23.0	0.906	55.0	2.165			9.5	0.374	150
11_PC2.4-109	101(E)	A	36.0	1.417	72.0	2.835			12.0	0.472	
11_PC2.4-110	101P(E)	A	36.0	1.417	72.0	2.835			12.0	0.472	
11_PC2.4-201	102(E)		23.0	0.906	55.0	2.165			9.5	0.374	
	102	D	23.0	0.906	55.0	2.165			9.5	0.374	
11_PC2.4-210	102(E)	A	36.0	1.417	72.0	2.835			12.0	0.472	

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disation	A		B		D		SW (AF.)		Fig.
			mm	inches	mm	inches	mm	inches	mm	inches	
21_PC2.4-104	101(E)		24.0	0.945	56.0	2.205	9.5	0.374	6.0	0.236	151
21_PC2.4-109	101(E)	A	37.0	1.457	72.0	2.835	12.0	0.472	8.0	0.315	
21_PC2.4-110	101P(E)	A	36.5	1.437	74.0	2.913	12.0	0.472	8.0	0.315	
21_PC2.4-201	102(E)		24.0	0.945	56.0	2.205	9.5	0.374	6.0	0.236	
	102	D	24.0	0.945	56.0	2.205	9.5	0.374	6.0	0.236	
21_PC2.4-210	102(E)	A	37.0	1.457	72.0	2.835	12.0	0.472	8.0	0.315	

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disation	A		B		C		D		Fig.
			mm	inches	mm	inches	mm	inches	mm	inches	
24_PC2.4-102	101(E)		24.0	0.945	56.0	2.205			9.5	0.374	152
24_PC2.4-201	102(E)		24.0	0.945	56.0	2.205			9.5	0.374	
	102	D	24.0	0.945	56.0	2.205			9.5	0.374	



SUCOFLEX 100

# SUCOFLEX 100

## Dimensioned sketches - connector drawings

PC3.5

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disation	A		B		C		D		Fig.
			mm	inches	mm	inches	mm	inches	mm	inches	
11_PC3.5-203	102(E)		26.0	1.024	58.0	2.283			9.5	0.374	160
	102	D	26.0	1.024	58.0	2.283			9.5	0.374	
11_PC3.5-31	103(E)		28.5	1.122	61.0	2.402			10.0	0.394	
	103(E)	A/C	52.0	2.047	89.0	3.504			13.5	0.531	
	103	B	51.0	2.008	89.0	3.504			15.0	0.591	
	103	D	33.5	1.319	61.0	2.402			11.0	0.433	
11_PC3.5-42	104(E)		28.5	1.122	56.0	2.205			10.5	0.413	
	104(E)	A/C	49.0	1.929	74.0	2.913			14.5	0.571	
	104	B	51.0	2.008	84.0	3.307			15.0	0.591	
	104	D	33.5	1.319	56.0	2.205			11.0	0.433	
	104(E)	M	58.0	2.283	74.0	2.913			14.0	0.551	
	104	G	64.0	2.520	84.0	3.307			17.5	0.689	
11_PC3.5-43	104P(E)		31.0	1.220	59.0	2.323			10.5	0.413	
	104P(E)	A/C	51.5	2.028	77.0	3.031			14.5	0.571	
	104P	B	53.0	2.087	87.0	3.425			15.0	0.591	
	104P	D	36.0	1.417	59.0	2.323			11.0	0.433	
	104P(E)	M	60.5	2.382	77.0	3.031			14.0	0.551	
	104P	G	58.0	2.283	84.0	3.307			17.5	0.689	

*Mechanical compatibility:*

*PC3.5 connectors can be mated with the connectors of the SK and SMA series even if they are not fully compatible.*

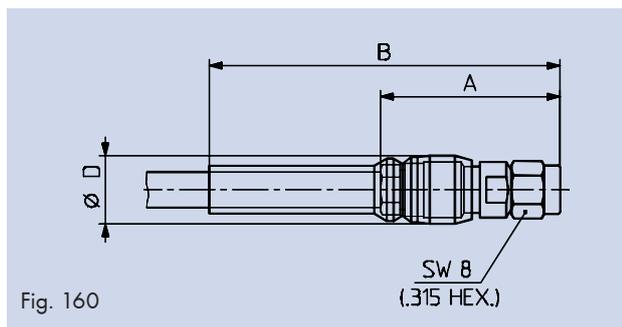


Fig. 160

# SUCOFLEX 100

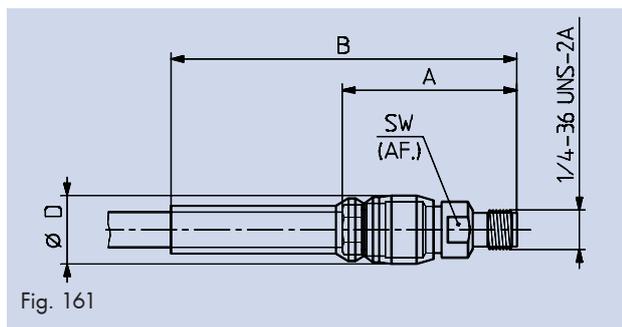
## Dimensioned sketches - connector drawings

PC3.5

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disation	A		B		D		SW (AF.)		Fig.
			mm	inches	mm	inches	mm	inches	mm	inches	
21_PC3.5-203	102(E)		26.0	1.024	58.0	2.283	9.5	0.374	7.0	0.276	161
	102	D	26.0	1.024	58.0	2.283	9.5	0.374	7.0	0.276	
21_PC3.5-31	103(E)		28.0	1.102	60.0	2.362	10.0	0.394	8.0	0.315	
	103(E)	A/C	51.0	2.008	88.0	3.465	13.5	0.531	8.0	0.315	
	103	B	50.5	1.988	88.0	3.465	15.0	0.591	8.0	0.315	
	103	D	33.0	1.299	60.0	2.362	11.0	0.433	8.0	0.315	
21_PC3.5-42	104(E)		28.0	1.102	60.0	2.362	10.0	0.394	8.0	0.315	
	104(E)	A/C	48.5	1.909	78.0	3.071	14.5	0.571	8.0	0.315	
	104	B	50.5	1.988	88.0	3.465	15.0	0.591	8.0	0.315	
	104	D	33.0	1.299	60.0	2.362	11.0	0.433	8.0	0.315	
	104(E)	M	57.5	2.264	78.0	3.071	14.0	0.551	8.0	0.315	
	104	G	63.5	2.500	88.0	3.465	17.5	0.689	8.0	0.315	
21_PC3.5-43	104P(E)		31.0	1.220	59.0	2.323	10.0	0.394	8.0	0.315	
	104P(E)	A/C	51.5	2.028	77.0	3.031	14.5	0.571	8.0	0.315	
	104P	B	53.5	2.106	87.0	3.425	15.0	0.591	8.0	0.315	
	104P	D	36.0	1.417	59.0	2.323	11.0	0.433	8.0	0.315	
	104P(E)	M	60.5	2.382	77.0	3.031	14.0	0.551	8.0	0.315	
	104P	G	66.5	2.618	87.0	3.425	17.5	0.689	8.0	0.315	

*Mechanical compatibility:*

*PC3.5 connectors can be mated with the connectors of the SK and SMA series even if they are not fully compatible.*



# SUCOFLEX 100

## Dimensioned sketches - connector drawings

PC7

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disation	A		B		C		D		Fig.
			mm	inches	mm	inches	mm	inches	mm	inches	
11_PC7-31	103(E)		41.0	1.614	79.0	3.110			10.5	0.413	165
	103(E)	A/C	59.0	2.323	98.0	3.858			14.5	0.571	
	103	B	58.5	2.303	98.0	3.858			14.5	0.571	
	103	D	41.0	1.614	79.0	3.110			10.5	0.413	
11_PC7-41	104(E)		41.0	1.614	70.0	2.756			11.0	0.433	
	104(E)	A/C	56.5	2.224	88.0	3.465			14.5	0.571	
	104	B	58.5	2.303	98.0	3.858			15.0	0.591	
	104	D	41.0	1.614	70.0	2.756			11.0	0.433	
	104(E)	M	65.0	2.559	88.0	3.465			14.0	0.551	
	104	G	65.5	2.579	98.0	3.858			17.5	0.689	
11_PC7-42	104P(E)		42.0	1.654	71.0	2.795			11.0	0.433	
	104P(E)	A/C	57.5	2.264	89.0	3.504			14.5	0.571	
	104P	B	59.5	2.343	99.0	3.898			15.0	0.591	
	104P	D	42.0	1.654	71.0	2.795			11.0	0.433	
	104P(E)	M	66.0	2.598	89.0	3.504			14.0	0.551	
	104P	G	66.5	2.618	99.0	3.898			17.5	0.689	
11_PC7-651	106		54.0	2.126	107.0	4.213			14.5	0.571	
	106	A/C	68.0	2.677	117.0	4.606			21.0	0.827	
	106	B	73.0	2.874	117.0	4.606			19.0	0.748	
	106	D	54.0	2.126	107.0	4.213			14.5	0.571	
	106	G	77.0	3.031	112.0	4.409			21.5	0.846	
11_PC7-652	106P		54.0	2.126	107.0	4.213			14.5	0.571	
	106P	A/C	68.0	2.677	117.0	4.606			21.0	0.827	
	106P	B	73.0	2.874	117.0	4.606			19.0	0.748	
	106P	D	54.0	2.126	107.0	4.213			14.5	0.571	
	106P	G	77.0	3.031	112.0	4.409			21.5	0.846	

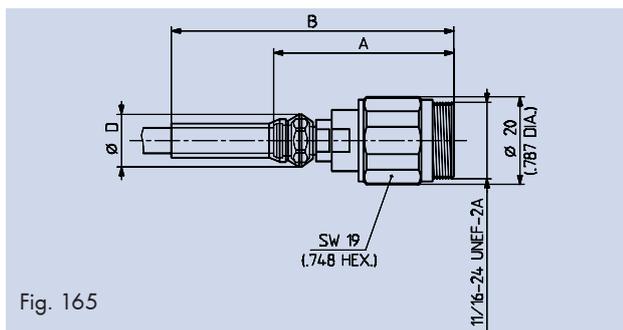


Fig. 165

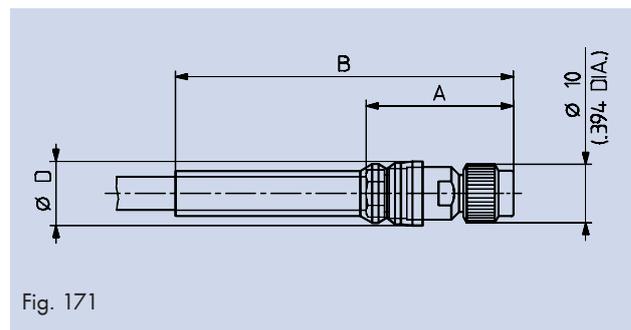
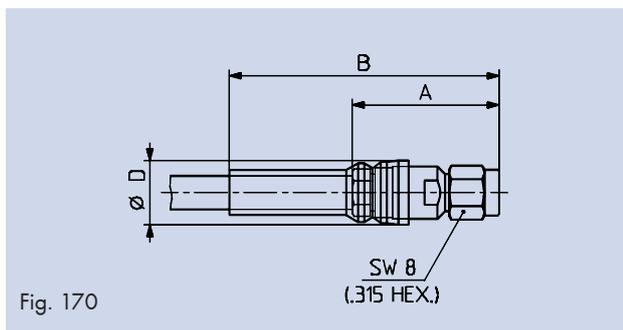
# SUCOFLEX 100

## Dimensioned sketches - connector drawings

SMA

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disation	A		B		C		D		Fig.
			mm	inches	mm	inches	mm	inches	mm	inches	
11_SMA-153	101P(E)		27.0	1.063	58.0	2.283			10.0	0.394	170
11_SMA-218	102(E)		26.0	1.024	55.0	2.165			8.0	0.315	
	102	D	26.0	1.024	55.0	2.165			8.0	0.315	
11_SMA-262	102(E)	A	36.0	1.417	74.0	2.913			12.0	0.472	171
11_SMA-367	103(E)		25.0	0.984	51.0	2.008			10.0	0.394	
	103(E)	A/C	51.0	2.008	78.0	3.071			13.5	0.531	
	103	B	48.0	1.890	78.0	3.071			15.0	0.591	
	103	D	25.0	0.984	51.0	2.008			10.0	0.394	171
11_SMA-371	103(E)		25.0	0.984	51.0	2.008			10.0	0.394	
	103	A/C	51.0	2.008	78.0	3.071			13.5	0.531	
	103	B	48.0	1.890	78.0	3.071			15.0	0.591	
	103	D	30.0	1.181	51.0	2.008			11.0	0.433	170
11_SMA-451	104(E),104P(E)		25.0	0.984	51.0	2.008			10.0	0.394	
11_SMA-456 <sup>1)</sup>	104(E),104P(E)	A/C	45.5	1.791	69.5	2.736			14.5	0.571	
	104, 104P	B	47.5	1.870	88.0	3.465			15.0	0.591	
	104, 104P	D	30.0	1.181	51.0	2.008			11.0	0.433	
	104(E),104P(E)	M	54.5	2.146	69.5	2.736			14.0	0.551	171
	104, 104P	G	66.5	2.618	94.0	3.701			17.5	0.689	
11_SMA-652	106, 106P		58.5	2.303	102.0	4.016			15.0	0.591	
11_SMA-653	106	A/C	73.0	2.874	122.0	4.803			22.0	0.866	
	106	B	72.0	2.835	112.0	4.409			19.0	0.748	
	106, 106P	D	58.5	2.303	102.0	4.016			15.0	0.591	171
	106	G	81.5	3.209	107.0	4.213			22.5	0.886	
11_SMA-468	104(E)		25.0	0.984	51.0	2.008			10.0	0.394	
	104(E)	A/C	45.5	1.791	69.5	2.736			14.5	0.571	
	104	B	47.5	1.870	88.0	3.465			15.0	0.591	171
	104	D	25.0	0.984	51.0	2.008			10.0	0.394	

1) Note: Connector 11\_SMA-456 with 3 safety holes ( $\varnothing$  1 mm)



SUCOFLEX 100

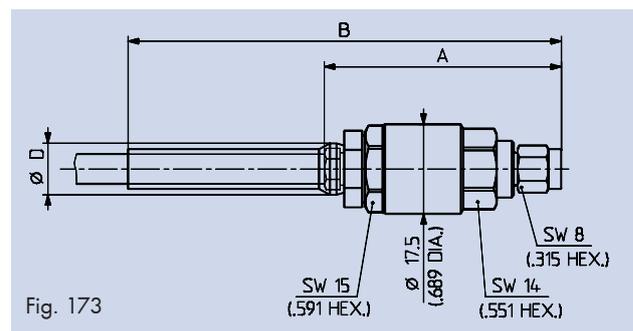
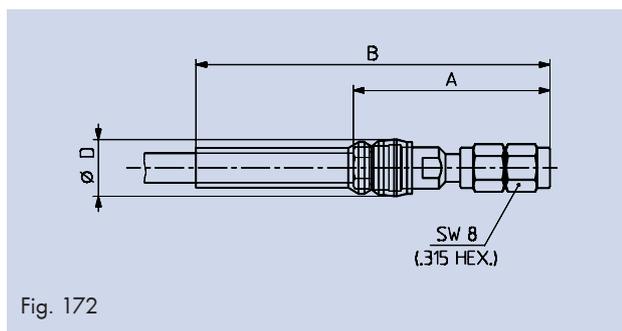
# SUCOFLEX 100

## Dimensioned sketches - connector drawings

SMA

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disaiton	A		B		C		D		Fig.
			mm	inches	mm	inches	mm	inches	mm	inches	
11_SMA-452 <sup>1)</sup>	104P(E)		30.0	1.181	58.0	2.283			11.0	0.433	172
	104P(E)	A/C	46.0	1.811	67.5	2.657			14.5	0.571	
	104P	B	48.0	1.890	88.5	3.484			15.0	0.591	
	104P	D	30.0	1.181	58.0	2.283			11.0	0.433	
	104P	G	66.0	2.598	94.5	3.720			17.5	0.689	
11_SMA-457 <sup>2)</sup>	104P(E)		51.0	2.008	84.0	3.307			11.0	0.433	173
	104P(E)	A/C	66.5	2.618	102.0	4.016			14.5	0.571	
	104P	B	68.5	2.697	112.0	4.409			15.0	0.591	
	104P	D	51.0	2.008	84.0	3.307			11.0	0.433	
	104P	G	81.5	3.209	112.0	4.409			18.5	0.728	
11_SMA-654 <sup>2)</sup>	106P		59.0	2.323	112.0	4.409			14.5	0.571	
	106P	B	78.0	3.071	122.0	4.803			19.0	0.748	
	106P	D	59.0	2.323	112.0	4.409			14.5	0.571	
	106P	G	82.0	3.229	117.0	4.606			21.5	0.846	

- 1) Note: In case of phase matching, dimensions A and B can be maximal 8.35 mm longer.  
 2) Note: In case of phase matching, dimensions A and B can be maximal  $\pm 2$  mm.



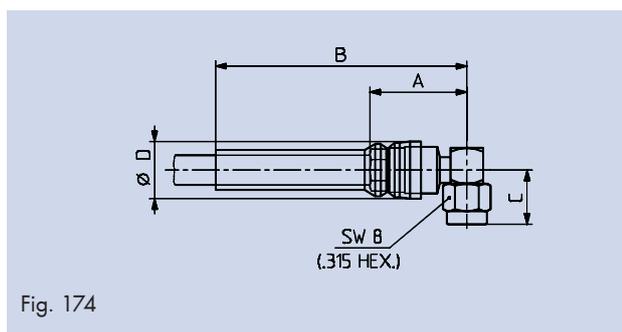
# SUCOFLEX 100

## Dimensioned sketches - connector drawings

SMA

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disation	A		B		C		D		Fig.
			mm	inches	mm	inches	mm	inches	mm	inches	
16_SMA-254	102(E)		21.5	0.846	53.0	2.087	10.5	0.413	9.5	0.374	174
	102	D	21.5	0.846	53.0	2.087	10.5	0.413	9.5	0.374	
16_SMA-371	103(E)		20.0	0.787	46.0	1.811	10.5	0.413	10.0	0.394	
	103(E)	A/C	23.0	0.906	74.0	2.913	10.5	0.413	13.5	0.531	
	103	B	43.0	1.693	74.0	2.913	10.5	0.413	15.0	0.591	
	103	D	25.5	1.004	46.0	1.811	10.5	0.413	10.0	0.394	
16_SMA-451	104(E)		19.0	0.748	47.0	1.850	10.5	0.413	10.0	0.394	
16_SMA-456 <sup>1)</sup>	104(E)	A/C	39.5	1.555	65.0	2.559	10.5	0.413	14.5	0.571	
	104	B	41.5	1.634	75.0	2.953	10.5	0.413	15.0	0.591	
	104	D	24.0	0.945	47.0	1.850	10.5	0.413	11.0	0.433	
	104(E)	M	48.0	1.890	65.0	2.559	10.5	0.413	14.0	0.551	
	104	G	54.5	2.146	86.0	3.386	10.5	0.413	17.5	0.689	
16_SMA-452	104P(E)		25.0	0.984	58.0	2.283	10.5	0.413	9.5	0.374	
	104P(E)	A/C	45.5	1.791	76.0	2.992	10.5	0.413	14.5	0.571	
	104P	B	47.5	1.870	86.0	3.386	10.5	0.413	15.0	0.591	
	104P	D	30.0	1.181	58.0	2.283	10.5	0.413	11.0	0.433	
	104P(E)	M	54.5	2.146	76.0	2.992	10.5	0.413	14.0	0.551	
16_SMA-652	106		39.5	1.555	83.0	3.268	10.5	0.413	14.5	0.571	
	106	B	58.5	2.303	104.0	4.094	10.5	0.413	15.0	0.591	
	106	D	39.5	1.555	84.0	3.307	10.5	0.413	15.0	0.591	
	106	G	57.5	2.264	99.0	3.898	10.5	0.413	15.0	0.591	

1) Note: Connector 16\_SMA-456 with 3 safety holes ( $\varnothing$  1 mm).

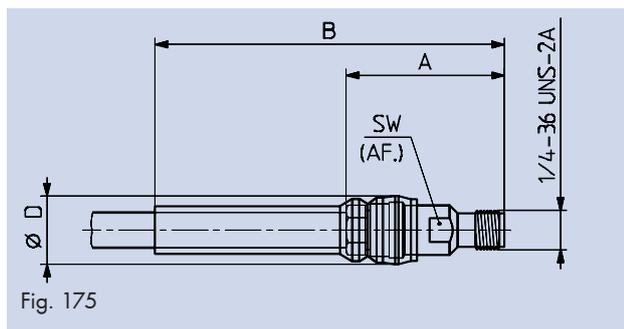


# SUCOFLEX 100

## Dimensioned sketches - connector drawings

SMA

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disation	A		B		D		SW (AF.)		Fig.
			mm	inches	mm	inches	mm	inches	mm	inches	
21_SMA-204	102(E)		24.5	0.965	56.0	2.205	9.0	0.354	5.5	0.217	175
	102	D	24.5	0.965	56.0	2.205	9.0	0.354	5.5	0.217	
21_SMA-371	103(E)		25.5	1.004	56.0	2.205	10.0	0.394	7.0	0.276	
	103(E)	A/C	48.5	1.909	84.0	3.307	13.5	0.531	7.0	0.276	
	103	B	48.0	1.890	83.0	3.268	15.0	0.591	7.0	0.276	
	103	D	30.5	1.201	56.0	2.205	10.0	0.394	7.0	0.276	
21_SMA-451	104(E),104P(E)		25.5	1.004	49.0	1.929	10.0	0.394	7.0	0.276	
	104(E),104P(E)	A/C	46.0	1.811	67.0	2.638	14.5	0.571	7.0	0.276	
	104, 104P	B	48.0	1.890	77.0	3.031	15.0	0.591	7.0	0.276	
	104, 104P	D	30.5	1.201	49.0	1.929	11.0	0.433	7.0	0.276	
	104(E),104P(E)	M	54.5	2.146	67.0	2.638	14.0	0.551	7.0	0.276	
	104, 104P	G	61.0	2.402	77.0	3.031	17.5	0.689	7.0	0.276	
21_SMA-651	106		57.5	2.264	96.0	3.780	15.0	0.591	13.0	0.512	
	106	A/C	71.5	2.815	117.0	4.606	21.0	0.827	13.0	0.512	
	106	B	76.5	3.012	107.0	4.213	19.0	0.748	13.0	0.512	
	106	D	57.5	2.264	96.0	3.780	15.0	0.591	13.0	0.512	
	106	G	80.5	3.169	102.0	4.016	21.5	0.846	13.0	0.512	
21_SMA-652	106P		48.5	1.909	93.0	3.661	14.5	0.571	11.0	0.433	
	106P	B	67.5	2.657	103.0	4.055	18.5	0.728	11.0	0.433	
	106P	G	72.0	2.835	98.0	3.858	21.5	0.846	11.0	0.433	

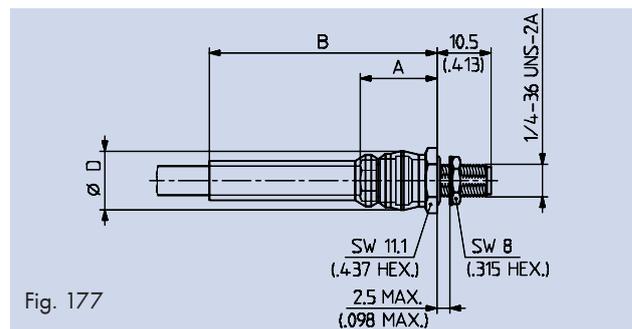
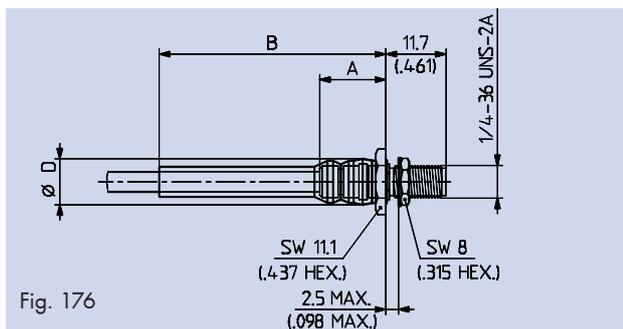


# SUCOFLEX 100

## Dimensioned sketches - connector drawings

SMA

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disation	A		B		C		D		Fig.
			mm	inches	mm	inches	mm	inches	mm	inches	
24_SMA-210	102(E)		13.0	0.512	44.0	1.732			9.0	0.354	176
	102	D	13.0	0.512	44.0	1.732			9.0	0.354	
24_SMA-371	103(E)		15.0	0.591	44.0	1.732			10.5	0.413	177
	103(E)	A/C	38.0	1.496	72.0	2.835			13.5	0.531	
	103	B	37.5	1.476	72.0	2.835			15.0	0.591	
	103	D	20.0	0.787	44.0	1.732			11.0	0.433	
24_SMA-451	104(E),104P(E)		15.0	0.591	46.0	1.811			10.5	0.413	177
	104(E),104P(E)	A/C	35.5	1.398	64.0	2.520			14.5	0.571	
	104, 104P	B	37.5	1.476	74.0	2.913			15.0	0.591	
	104, 104P	D	20.0	0.787	46.0	1.811			11.0	0.433	
	104(E),104P(E)	M	54.5	2.146	75.0	2.953			14.0	0.551	
	104, 104P	G	50.5	1.988	74.0	2.913			17.5	0.689	
24_SMA-651	106P		49.0	1.929	120.0	4.724			14.5	0.571	177
	106P	D	49.0	1.929	120.0	4.724			14.5	0.571	



SUCOFLEX 100

# SUCOFLEX 100

## Dimensioned sketches - connector drawings

TNC

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disation	A		B		C		D		Fig.
			mm	inches	mm	inches	mm	inches	mm	inches	
11_TNC-222	102(E)		27.0	1.063	61.0	2.402			9.5	0.374	190
	102	D	27.0	1.063	61.0	2.402			9.5	0.374	
11_TNC-353	103(E)		28.0	1.102	30.0	1.181			10.5	0.413	191
	103(E)	A/C	51.5	2.028	88.0	3.456			13.5	0.531	
	103	B	50.0	1.969	88.0	3.456			15.0	0.591	
	103	D	33.0	1.299	60.0	2.362			11.0	0.433	
11_TNC-456	104(E),104P(E)		28.0	1.102	62.0	2.441			9.0	0.354	191
11_TNC-457	104(E),104P(E)	A/C	48.5	1.909	80.0	3.150			14.5	0.571	
	104, 104P	B	50.5	1.988	90.0	3.543			15.0	0.591	
	104, 104P	D	33.0	1.299	62.0	2.441			11.0	0.433	
	104(E),104P(E)	M	57.5	2.264	80.0	3.150			14.0	0.551	
	104, 104P	G	63.5	2.500	90.0	3.543			17.5	0.689	
11_TNC-651	106	A/C	80.0	3.150	126.0	4.961			21.0	0.827	192
11_TNC-653	106, 106P		44.5	1.752	92.0	3.622			14.5	0.571	191
11_TNC-654	106, 106P	B	58.0	2.283	102.0	4.016			19.0	0.748	
	106	D	44.5	1.752	92.0	3.622			14.5	0.571	
	106, 106P	G	67.5	2.657	97.0	3.819			21.5	0.846	

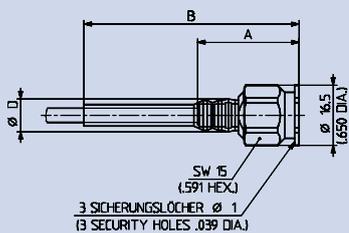


Fig. 190

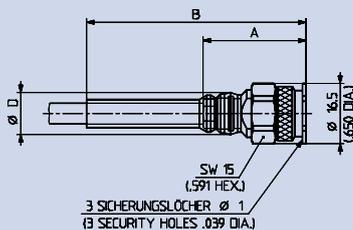


Fig. 191

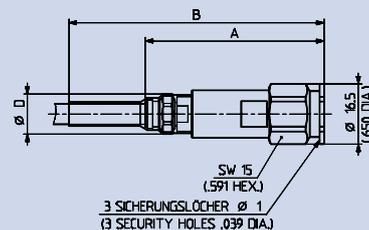


Fig. 192

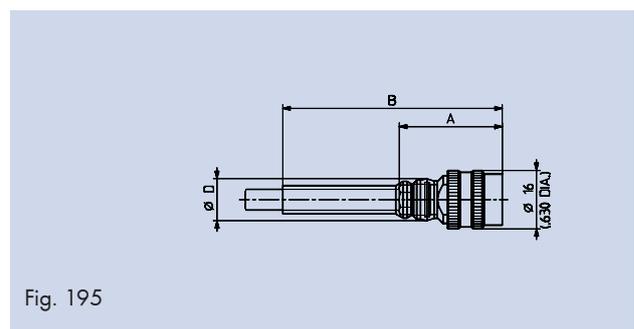
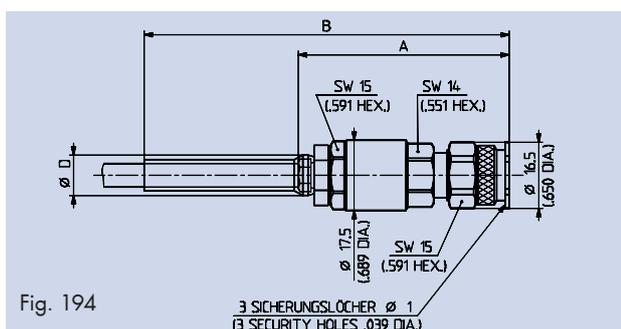
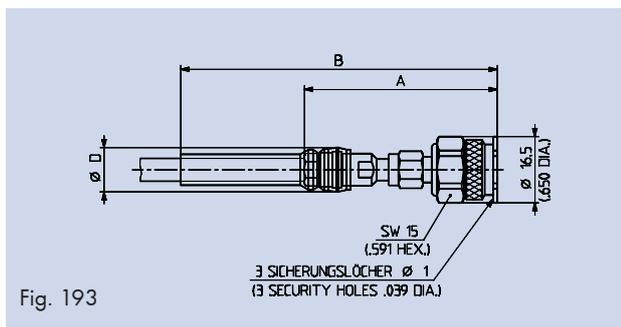
# SUCOFLEX 100

## Dimensioned sketches - connector drawings

TNC

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disation	A		B		C		D		Fig.
			mm	inches	mm	inches	mm	inches	mm	inches	
11 TNC-458 <sup>1)</sup>	104P(E)		48.0	1.890	80.0	3.150			9.0	0.354	193
	104P(E)	A/C	68.0	2.677	98.0	3.858			14.5	0.571	
	104P	B	70.0	2.756	108.0	4.252			15.0	0.591	
	104P	G	83.0	3.268	108.0	4.252			17.5	0.689	
11 TNC-459 <sup>2)</sup>	104P(E)		57.5	2.264	90.0	3.543			11.0	0.433	194
	104P(E)	A/C	73.0	2.874	108.0	4.252			14.5	0.571	
	104P	B	75.0	2.953	118.0	4.646			15.0	0.591	
	104P	D	57.5	2.264	90.0	3.543			11.0	0.433	
	104P	G	88.0	3.465	118.0	4.646			18.5	0.728	
11 TNC-655 <sup>2)</sup>	106P		65.5	2.579	118.0	4.646			14.5	0.571	195
	106P	B	84.5	3.327	128.0	5.040			19.0	0.748	
	106P	D	65.5	2.579	118.0	4.646			14.5	0.571	
	106P	G	88.5	3.484	123.0	4.843			21.5	0.846	
11 TNC-417	104(E),104P(E)		28.0	1.102	62.0	2.441			9.0	0.354	195
11 TNC-418	104(E),104P(E)	A/C	48.5	1.909	80.0	3.150			14.5	0.571	
	104, 104P	B	50.5	1.988	90.0	3.543			15.0	0.591	
	104, 104P	D	28.0	1.102	62.0	2.441			9.0	0.354	

- 1) Note: In case of phase matching, dimensions A and B can be maximal 0.85 mm longer.
- 2) Note: In case of phase matching, dimensions A and B can be maximal ±2 mm.



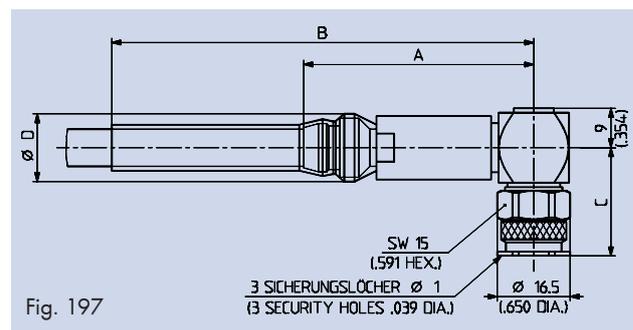
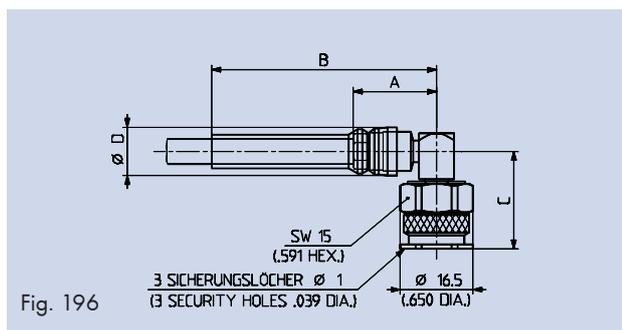
SUCOFLEX 100

# SUCOFLEX 100

## Dimensioned sketches - connector drawings

TNC

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disation	A		B		C		D		Fig.
			mm	inches	mm	inches	mm	inches	mm	inches	
16_TNC-454	104(E)		19.0	0.748	45.0	1.772	22.5	0.886	9.5	0.374	196
	104(E)	A/C	39.5	1.555	63.0	2.480	22.5	0.886	14.5	0.571	
	104	B	41.5	1.634	82.0	3.228	22.5	0.886	15.0	0.591	
	104	D	23.5	0.925	57.0	2.244	22.5	0.886	11.0	0.433	
	104(E)	M	48.0	1.890	63.0	2.480	22.5	0.886	14.0	0.551	
	104	G	54.5	2.146	86.0	3.386	22.5	0.886	17.5	0.689	
16_TNC-651	106		52.5	2.067	92.0	3.622	25.0	0.984	14.5	0.571	197
	106	B	66.0	2.598	112.0	4.409	25.0	0.984	19.0	0.748	
	106	D	52.5	2.067	92.0	3.622	25.0	0.984	14.5	0.571	
	106	G	75.5	2.972	107.0	4.213	25.0	0.984	21.5	0.846	
16_TNC-655	106P		52.5	2.067	92.0	3.622	25.0	0.984	14.5	0.571	197
	106P	B	66.0	2.598	112.0	4.409	25.0	0.984	19.0	0.748	
	106P	D	52.5	2.067	92.0	3.622	25.0	0.984	14.5	0.571	
	106P	G	75.5	2.972	107.0	4.213	25.0	0.984	21.5	0.846	
16_TNC-653	106	A/C	66.0	2.598	97.0	3.819	25.0	0.984	20.0	0.787	

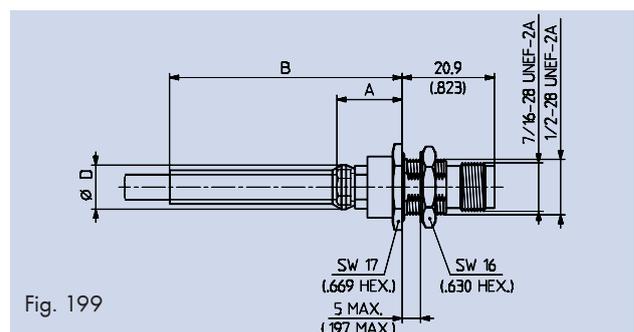
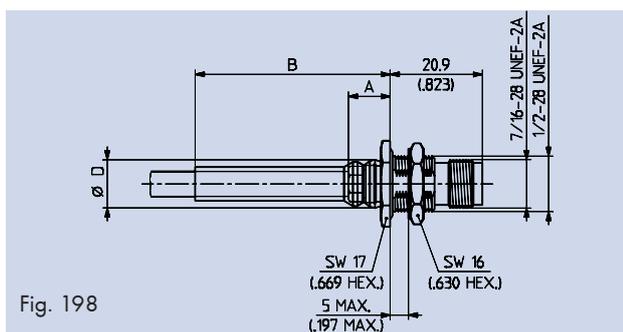


# SUCOFLEX 100

## Dimensioned sketches - connector drawings

TNC

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disation	A		B		C		D		Fig.
			mm	inches	mm	inches	mm	inches	mm	inches	
24_TNC-222	102(E)		35.5	1.398	66.0	2.598			9.5	0.374	
	102	D	34.0	1.339	66.0	2.598			9.5	0.374	
24_TNC-353	103(E)		11.5	0.453	44.0	1.732			10.5	0.413	198
	103(E)	A/C	35.0	1.378	72.0	2.835			13.5	0.531	
	103	B	34.0	1.339	72.0	2.835			15.0	0.591	
	103	D	16.5	0.650	44.0	1.732			10.0	0.394	
24_TNC-456	104P(E)		15.0	0.591	52.0	2.047			9.5	0.374	199
	104P(E)	A/C	35.5	1.398	70.0	2.756			14.5	0.571	
	104P	B	37.5	1.476	80.0	3.150			15.0	0.591	
	104P(E)	M	44.0	1.732	70.0	2.756			14.0	0.551	
	104P	G	50.5	1.988	80.0	3.150			17.5	0.689	
24_TNC-457	104(E)		9.5	0.374	40.0	1.575			9.0	0.374	198
	104(E)	A/C	30.5	1.201	58.0	2.283			14.5	0.571	
	104	B	32.0	1.260	68.0	2.677			15.0	0.591	
	104	D	14.5	0.571	40.0	1.575			13.0	0.512	
	104(E)	M	39.0	1.535	58.0	2.283			14.0	0.551	
	104	G	45.0	1.772	68.0	2.677			17.5	0.689	
24_TNC-651	106	A/C	61.0	2.402	110.0	4.331			21.0	0.827	199
24_TNC-653	106		24.5	0.965	74.0	2.913			14.5	0.571	
	106	B	38.0	1.496	84.0	3.307			19.0	0.748	
	106	D	24.5	0.965	74.0	2.913			14.5	0.571	
	106	G	47.5	1.870	79.0	3.110			21.5	0.846	
24_TNC-654	106P		24.5	0.965	74.0	2.913			14.5	0.571	
	106P	D	24.5	0.965	74.0	2.913			14.5	0.571	
	106P	G	47.5	1.870	79.0	3.110			21.5	0.846	



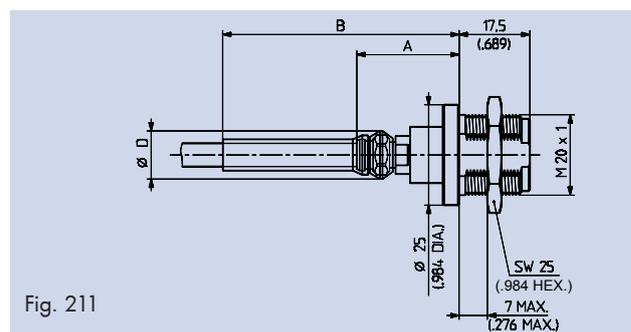
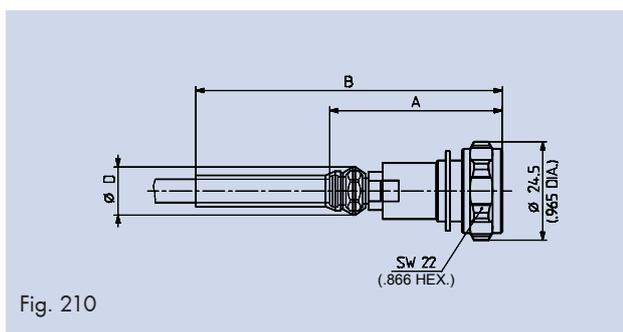
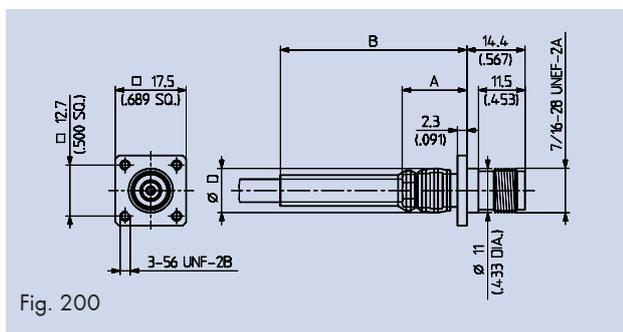
SUCOFLEX 100

# SUCOFLEX 100

## Dimensioned sketches - connector drawings

TNC/4195

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disation	A mm inches	B mm inches	C mm inches	D mm inches	Fig.
25_TNC-452	104(E)		16.0 0.630	49.0 1.929		10.5 0.413	200
	104(E)	A/C	36.5 1.437	67.0 2.638		14.5 0.571	
	104	B	38.5 1.516	77.0 3.031		15.0 0.591	
	104	D	21.0 0.827	49.0 1.929		11.0 0.433	
	104(E)	M	45.5 1.791	67.0 2.638		14.0 0.551	
	104	G	51.5 2.028	77.0 3.031		17.5 0.689	
11_4195-41	104(E)		42.5 1.673	75.0 2.953		11.0 0.433	210
	104(E)	A/C	58.0 2.283	93.0 3.661		14.5 0.571	
	104	B	60.0 2.362	103.0 4.055		15.0 0.591	
	104	D	42.5 1.673	75.0 2.953		11.0 0.433	
	104(E)	M	66.5 2.618	93.0 3.661		14.0 0.551	
	104	G	73.0 2.874	103.0 4.055		17.5 0.689	
11_4195-602	106		59.0 2.323	113.0 4.448		14.5 0.571	210
	106	A/C	87.0 3.426	133.0 5.236		21.0 0.827	
	106	B	72.5 2.855	133.0 5.236		19.0 0.748	
	106	D	59.0 2.323	113.0 4.448		14.5 0.571	
	106	G	82.0 3.229	118.0 4.645		21.5 0.846	
24_4195-41	104(E)		25.5 1.004	57.0 2.244		11.0 0.433	211
	104(E)	A/C	41.0 1.614	75.0 2.953		14.5 0.571	
	104	B	43.0 1.693	85.0 3.346		15.0 0.591	
	104	D	25.5 1.004	57.0 2.244		11.0 0.433	
	104(E)	M	49.5 1.949	75.0 2.953		14.0 0.551	
	104	G	56.0 2.205	85.0 3.346		17.5 0.689	

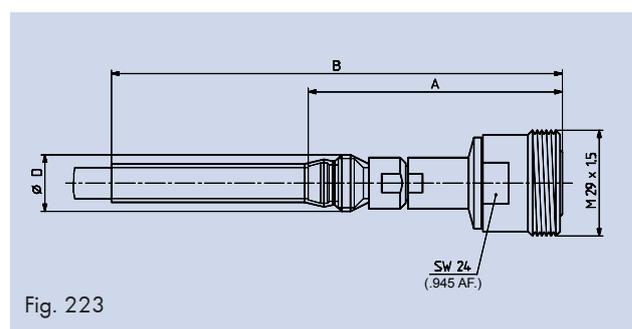
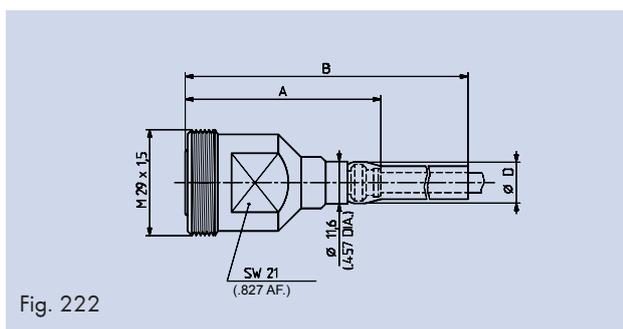
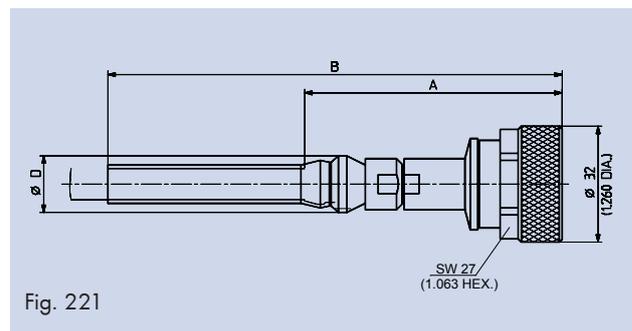
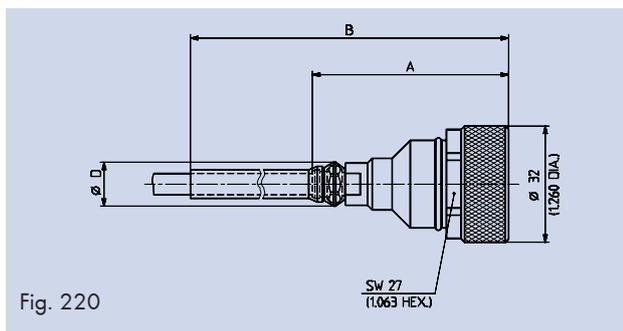


# SUCOFLEX 100

## Dimensioned sketches - connector drawings

716

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disation	A		B		C		D		Fig.
			mm	inches	mm	inches	mm	inches	mm	inches	
11_716-401	104(E)		53.5	2.106	86.0	3.386			11.0	0.433	220
	104	A/C	69.0	2.717	104.0	4.094			14.5	0.571	
	104	D	53.5	2.106	86.0	3.386			11.0	0.433	
11_716-402	104P(E)		57.5	2.264	90.0	3.543			11.0	0.433	220
	104P	A/C	73.0	2.874	108.0	4.252			14.5	0.571	
	104P	D	57.5	2.264	90.0	3.543			11.0	0.433	
11_716-61	106		70.0	2.756	123.0	4.843			14.5	0.571	221
	106	A/C	84.0	3.307	143.0	5.630			21.0	0.827	
	106	B	83.5	3.287	133.0	5.236			19.0	0.748	
	106	D	70.0	2.756	123.0	4.843			14.5	0.571	
	106	G	93.0	3.661	128.0	5.039			21.5	0.846	
21_716-401	104(E)		53.0	2.087	86.0	3.386			11.0	0.433	222
	104	A/C	68.5	2.697	104.0	4.094			14.5	0.571	
	104	D	53.0	2.087	86.0	3.386			11.0	0.433	
21_716-402	104P(E)		57.0	2.244	90.0	3.543			11.0	0.433	222
	104P	A/C	72.5	2.854	108.0	4.252			14.5	0.571	
	104P	D	57.0	2.244	90.0	3.543			11.0	0.433	
21_716-61	106		69.5	2.736	122.0	4.803			14.5	0.571	223
	106	A/C	83.5	3.287	142.0	5.591			21.0	0.827	
	106	B	83.0	3.268	132.0	5.157			19.0	0.748	
	106	D	69.5	2.736	122.0	4.803			14.5	0.571	
	106	G	92.5	3.462	127.0	5.000			21.5	0.846	



SUCOFLEX 100

# SUCOFLEX 100

## Dimensioned sketches - connector drawings

716

HUBER+SUHNER connector type	Cable SUCOFLEX	Rugge- disation	A		B		C		D		Fig.
			mm	inches	mm	inches	mm	inches	mm	inches	
25_716-401	104(E)		39.0	1.535	70.0	2.756			11.0	0.433	224
	104(E)	A/C	54.5	2.146	88.0	3.465			14.5	0.571	
	104	B	56.5	2.224	98.0	3.858			15.0	0.591	
	104	D	39.0	1.535	70.0	2.756			11.0	0.433	
	104(E)	M	63.0	2.480	88.0	3.465			14.0	0.551	
	104	G	69.5	2.736	98.0	3.858			17.5	0.689	

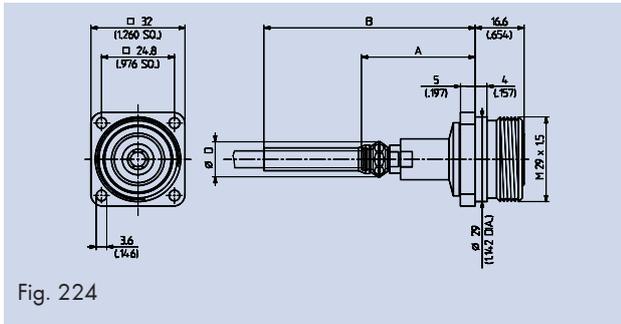


Fig. 224

# SUCOFLEX 100

## Mounting holes

