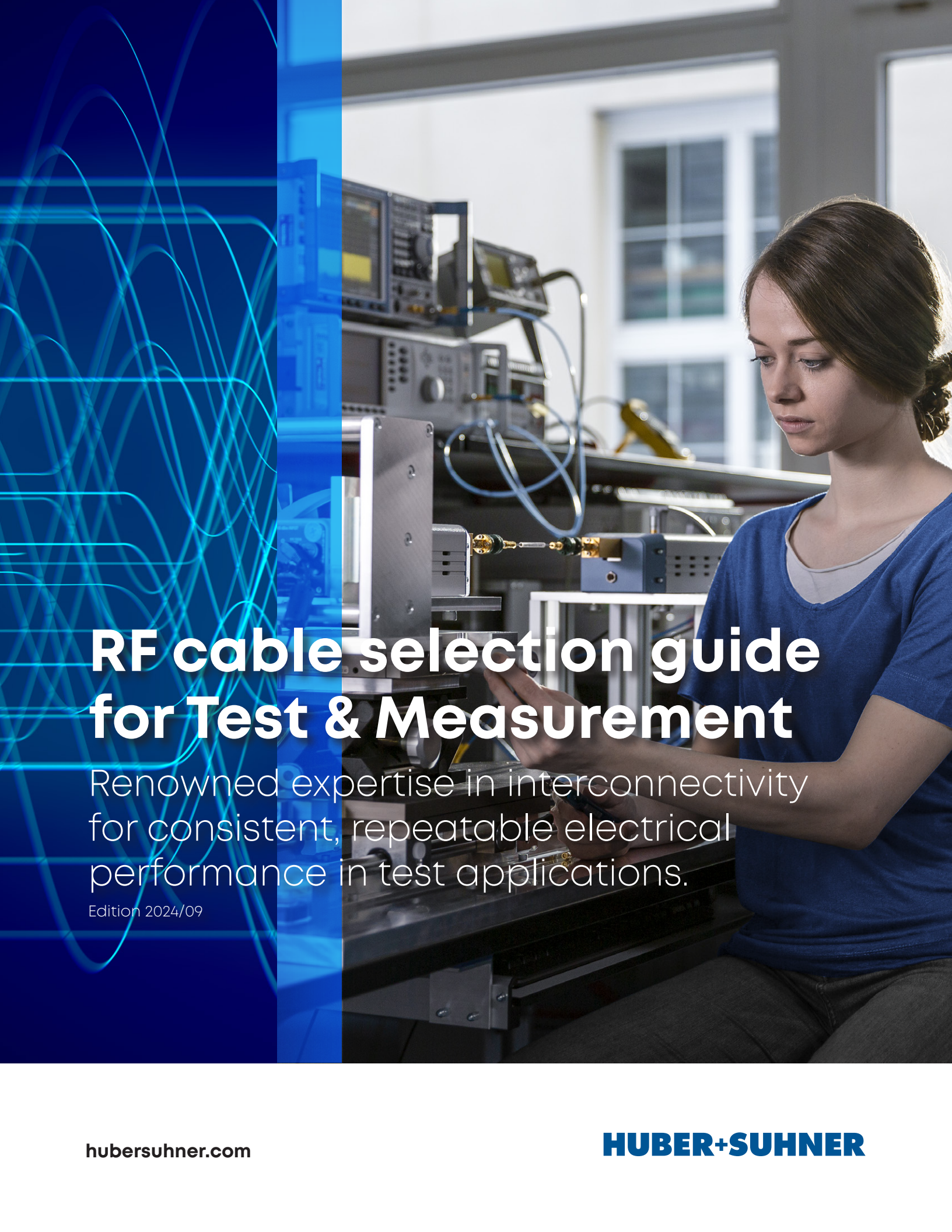


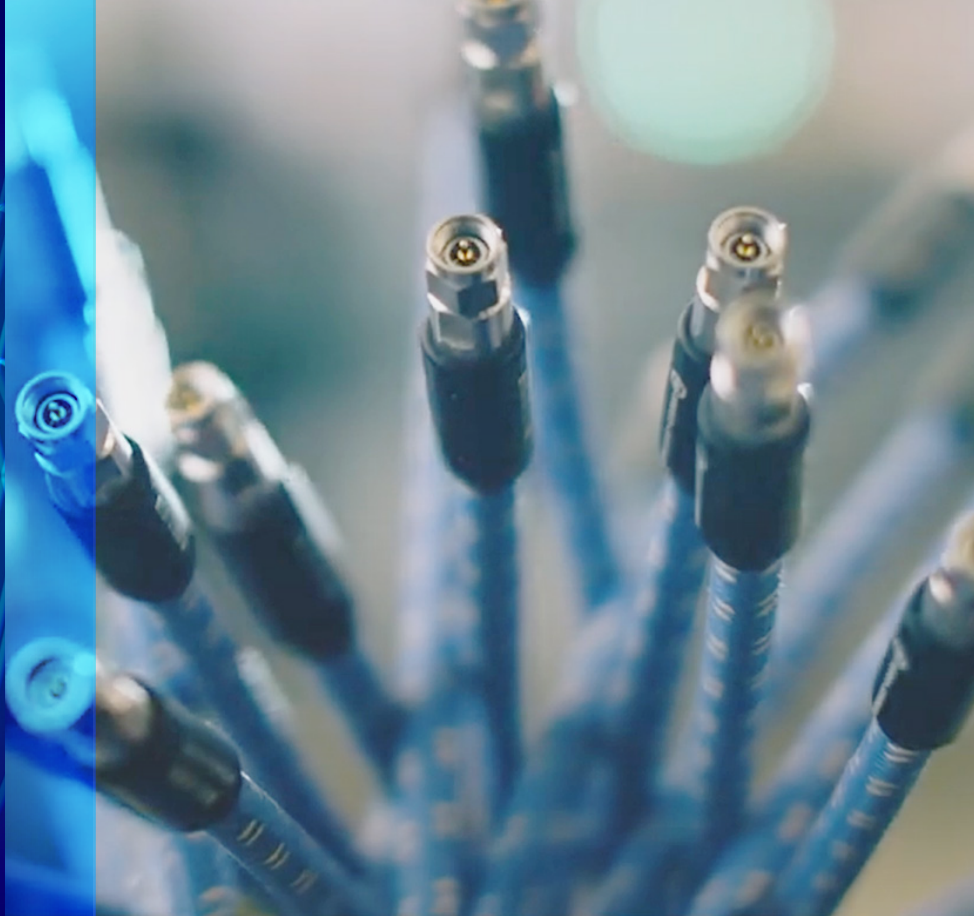


RF cable selection guide for Test & Measurement

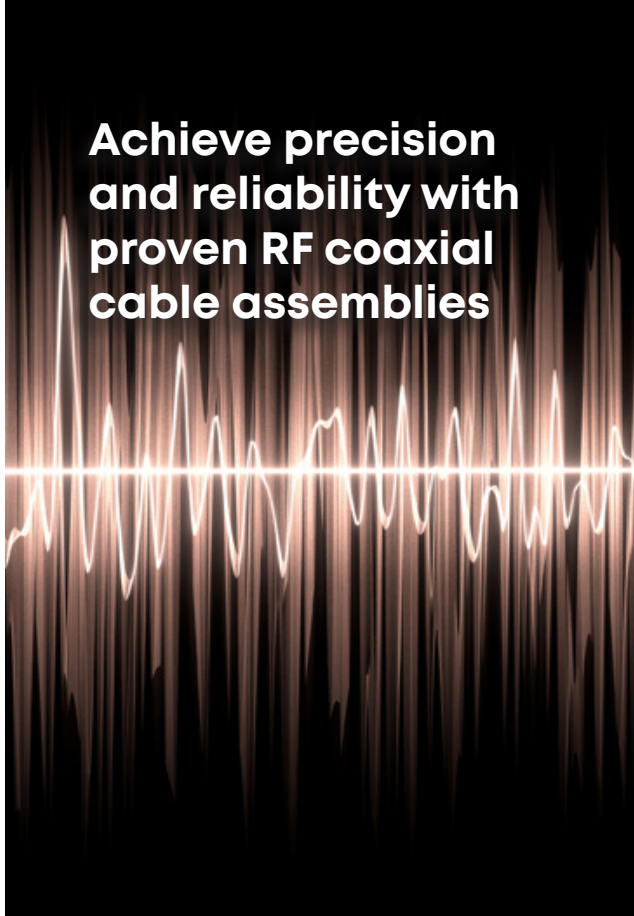
Renowned expertise in interconnectivity
for consistent, repeatable electrical
performance in test applications.

Edition 2024/09

Reliable performance
at high speed,
at high frequencies,
and under all test
conditions over time



Achieve precision
and reliability with
proven RF coaxial
cable assemblies



High-performance cable assemblies designed for accuracy and repeatability

The best measurement setup is only as good as its weakest link. To ensure reliable and repeatable measurement results, it is essential to choose the right components with care.

HUBER+SUHNER provides an extensive range of high-quality components tailored to meet various needs in the field of test and measurement. These products are distinguished by their exceptional performance and stable characteristics, reflecting years of expertise in the development and manufacturing of radio frequency components.

The HUBER+SUHNER cost-effective product range for your test equipment empowers you to achieve the highest precision and reliability. Whether developing or manufacturing equipment for testing active or passive devices, our components deliver the ideal mix of quality, performance, and dependability, giving you a competitive edge.

Applications

- Network analyzers
- PCI extensions for instrumentation (PXI)
- Spectrum / signal analyzers
- Bit error testers
- Handhelds

SUCOFLEX® 500	Sucotest	Multiflex 53 / 86	MINIBEND®
			
• Applicable up to 70 GHz • Long service life (>100'000 flex cycles) • Excellent insertion and return loss • Outstanding phase and amplitude stability with flexure and movement	The Sucotest cable family is designed for high-frequency applications up to 110 GHz, offering flexibility and durability. These cables maintain excellent return loss, phase, and amplitude stability under bending, ideal for high-density, modular test setups.	Multiflex microwave cables provide a flexible alternative to semi-rigid cables, making them ideal for any application that requires flexible connections. They deliver reliable performance across frequency ranges of up to 100 GHz.	The MINIBEND series enables bending right behind the connector, making it perfect for tight spaces and applications up to 85 GHz.

Semi-rigid	Sucoform	TL-8A / TL-P	CT cable assemblies
			
• Applicable up to 110 GHz • Easily bendable to the desired shape while retaining its form after bending • Excellent return loss and RF leakage • Compact sizes allow for use in high-density applications	• Applicable up to 40 GHz • Hand-formable • Low intermodulation distortion levels (PIM)	TL-8A • Applicable up to 8 GHz • High mechanical endurance • Excellent insertion and return loss • High mating cycle • N connector with quick-lock nut TL-P • Applicable up to 4 GHz • Excellent PIM performance	The Constant over Temperature series, such as Multiflex, Sucoform, semi-rigid and MINIBEND, provide excellent phase and insertion loss stability with temperature change in a range between -55 °C and +125 °C, as well as outstanding return loss and shielding effectiveness. They support frequencies up to 70 GHz.

RF cable selection guide (ft)

				Typ. insertion loss (dB/ft)						CW power (W)									
Cable type	Outer diameter (inch)	Frequency range (GHz)	VOP (%)	@ 3 GHz	@ 18 GHz	@ 40 GHz	@ 50 GHz	@ 67 GHz	@110 GHz	@ 1 GHz sea level / 40 °C	@ 18 GHz sea level / 40 °C	Min. temp. (°C)	Max. temp. (°C)	Min. bending radius (static) (inch)	Dynamic applications	Phase stable vs. Temp.	Phase stable vs. Flexure	Passive inter-modulation	Cable assembly only
SUCOFLEX 526	0.22	27	77	0.130	0.340	-	-	-	-	907	214	-55	125	0.63	•		•		•
SUCOFLEX 526 E	0.22	27	77	0.130	0.340	-	-	-	-	600	141	-40	85	0.63	•		•		•
SUCOFLEX 526 S	0.30	27	77	0.130	0.340	-	-	-	-	800	189	-55	125	1.00	•		•		•
SUCOFLEX 540	0.16	40	77	0.210	0.520	0.800	-	-	-	394	93	-55	125	0.47	•		•		•
SUCOFLEX 540 E	0.16	40	77	0.210	0.520	0.800	-	-	-	240	57	-40	85	0.47	•		•		•
SUCOFLEX 540 S	0.25	40	77	0.210	0.520	0.800	-	-	-	394	93	-55	125	1.00	•		•		•
SUCOFLEX 550	0.15	50	77	0.240	0.610	0.950	1.070	-	-	296	70	-55	125	0.43	•		•		•
SUCOFLEX 550 E	0.15	50	77	0.240	0.610	0.950	1.070	-	-	200	47	-40	85	0.43	•		•		•
SUCOFLEX 550 S	0.24	50	77	0.240	0.610	0.950	1.070	-	-	296	70	-55	125	1.00	•		•		•
SUCOFLEX 570	0.13	70	77	0.350	0.890	1.360	1.540	1.810	-	171	40	-55	125	0.43	•		•		•
SUCOFLEX 570 E	0.13	70	77	0.350	0.890	1.360	1.540	1.810	-	115	27	-40	85	0.43	•		•		•
SUCOFLEX 570S	0.23	70	77	0.350	0.890	1.360	1.540	1.810	-	135	32	-55	125	1.00	•		•		•
MICROBEND	0.08	85	70	0.553	1.422	2.204	2.497	2.95	-	111	26	-55	200	0.06					•
MICROBEND L	0.08	85	76	0.433	1.080	1.634	1.837	2.143	-	140	33	-55	200	0.20					
MINIBEND® CT	0.10	70	81	0.529	1.384	2.173	2.473	2.939	-	201	47	-55	200	0.20	•	•			•
MINIBEND	0.10	65	70	0.397	1.040	1.633	1.859	-	-	173	41	-55	200	0.20					•
MINIBEND L	0.11	50	76	0.328	0.822	1.249	1.406	-	-	288	68	-55	200	0.20					•
MINI141	0.15	40	76	0.203	0.517	0.795	-	-	-	590	139	-55	200	0.33					•
MINI141 H (32021E)	0.15	45	77	0.233	0.589	0.901	-	-	-	510	120	-55	200	0.33	•				•
MINI141 CT	0.15	40	80	0.290	0.798	1.299	-	-	-	275	65	-55	200	0.33		•	•		•
Multiflex 53 -02	0.07	100	70	0.604	1.584	2.489	2.835	3.370	-	30	7	-55	165	0.12	•				•
Multiflex 86_HE	0.10	100	71	0.405	1.086	1.735	-	-	-	140	33	-65	165	0.24					
Multiflex 141	0.16	33	71	0.223	0.636	-	-	-	-	373	88	-65	165	0.39					
Multiflex 141 CT	0.17	33	84	0.175	0.493	-	-	-	-	457	108	-65	200	0.47		•			•
Multiflex 210 CT	0.20	30	84	0.147	0.425	-	-	-	-	628	148	-65	200	1.08		•			•
Multiflex 318 CT	0.30	18	84	0.098	0.304	-	-	-	-	1350	318	-65	200	1.67		•			•
Sucoform_47_CU	0.05	40	71	0.634	1.68	2.67	-	-	-	32	8	-65	165	0.13					
Sucoform 86	0.08	40	71	0.368	1.032	1.699		-	-	94	38	-65	165	0.24					
Sucoform 141	0.14	33	71	0.224	0.678	-	-	-	-	484	114	-65	165	0.31					
Sucoform_250-01	0.25	18	71	0.139	0.442	-	-	-	-	920	217	-65	165	1.18					
Sucoform 141 CT	0.14	30	83	0.197	0.585	-	-	-	-	360	85	-65	200	0.31		•			
Sucoform 86 CT	0.08	40	80	0.333	0.970	1.637	-	-	-	165	39	-65	200	0.24		•			
SR_47	0.05	107	70	0.586	1.563	2.489	2.847	3.405	-	32	8	-55	100	0.13					
SR_86	0.09	40	70	0.345	0.974	1.611	-	-	-	130	31	-55	125	0.13					
SR_118	0.12	40	80	0.208	0.535	0.830	-	-	-	598	141	-55	125	0.38					
SR_141	0.14	33	70	0.208	0.639	-	-	-	-	450	106	-55	125	0.25					
SR_250	0.25	18	70	0.133	0.455	-	-	-	-	1400	330	-55	100	0.37					
SR_141 CT	0.14	33	83	0.198	0.549	-	-	-	-	364	86	-55	200	0.39		•			
SR_86 CT	0.09	40	80	0.297	0.790	1.253	-	-	-	133	31	-55	200	0.13		•			
Sucotest 18	0.18	18	77	0.513	1.331	-	-	-	-	700	165	-55	+105	13	•				•
Sucotest 18A	0.40	18	77	0.560	1.558	-	-	-	-	597	141	-55	+85	30	•				•
Sucotest 110	0.167	110	70	3.6	7.4	10.8	12.2	14.2	18.7	37	3	-40	85	0.98	•		•		•
TL-8A	0.405	8	81	0.7	-	-	-	-	-	52	-	-40	85	2.16	•				•
TL-P	0.405	4	71	0.9	-	-	-	-	-	560	-	-15	65	4.33	•			•	•

RF cable selection guide (m)

				Typ. insertion loss (dB/m)						CW power (W)									
Cable type	Outer diameter (mm)	Frequency range (GHz)	VOP (%)	@ 3 GHz	@ 18 GHz	@ 40 GHz	@ 50 GHz	@ 67 GHz	@110 GHz	@ 1 GHz sea level / 40 °C	@ 18 GHz sea level / 40 °C	Min. temp. (°C)	Max. temp. (°C)	Min. bending radius (static) (mm)	Dynamic applications	Phase stable vs. Temp.	Phase stable vs. Flexure	Passive inter-modulation	Cable assembly only
SUCOFLEX 526	5.5	27	77	0.427	1.115	-	-	-	-	907	214	-55	125	16.0	•		•		•
SUCOFLEX 526 E	5.5	27	77	0.427	1.115	-	-	-	-	600	141	-40	85	16.0	•		•		•
SUCOFLEX 526 S	7.7	26.5	77	0.427	1.115	-	-	-	-	800	189	-55	125	25.4	•		•		•
SUCOFLEX 540	4.0	40.0	77	0.689	1.706	2.625	-	-	-	394	93	-55	125	12.0	•		•		•
SUCOFLEX 540 E	4.0	40.0	77	0.689	1.706	2.625	-	-	-	240	57	-40	85	12.0	•		•		•
SUCOFLEX 540 S	6.4	40	77	0.689	1.706	2.625	-	-	-	394	93	-55	125	25.4	•		•		•
SUCOFLEX 550	3.7	50	77	0.787	2.001	3.117	3.510	-	-	296	70	-55	125	11.0	•		•		•
SUCOFLEX 550 E	3.7	50	77	0.787	2.001	3.117	3.510	-	-	200	47	-40	85	11.0	•		•		•
SUCOFLEX 550 S	6.1	50	77	0.787	2.001	3.117	3.510	-	-	296	70	-55	125	25.4	•		•		•
SUCOFLEX 570	3.3	70	77	1.148	2.920	4.462	5.052	5.938	-	171	40	-55	125	11.0	•		•		•
SUCOFLEX 570 E	3.3	70	77	1.148	2.920	4.462	5.052	5.938	-	115	27	-40	85	11.0	•		•		•
SUCOFLEX 570S	5.8	70	77	1.148	2.920	4.462	5.052	5.938	-	135	32	-55	125	25.4	•		•		•
MICROBEND	2.00	85	70	1.815	4.67	7.23	8.193	9.673	-	111	26	-55	200	1.5					•
MICROBEND L	2.00	85	76	1.42	3.54	5.36	6.027	7.032	-	-	33	-55	200	5.1					
MINIBEND CT	2.50	70	81	1.74	4.54	7.13	8.115	9.642	-	201	47	-55	200	5.1	•	•			•
MINIBEND	2.50	65	70	1.3	3.41	5.357	6.098	-	-	173	41	-55	200	5.1					•
MINIBEND L	2.70	50	76	1.075	2.697	4.099	4.614	-	-	288	68	-55	200	5.1					•
MINI141	3.70	40	76	0.667	1.698	2.609	-	-	-	590	139	-55	200	8.4					•
MINI141 H (32021E)	3.70	45	77	0.764	1.93	2.957	-	-	-	510	120	-55	200	8.4	•				•
MINI141 CT	3.70	40	80	0.95	2.618	4.261	-	-	-	275	65	-55	200	8.4		•	•		•
Multiflex 53 -02	1.74	100	70	1.98	5.20	8.17	9.30	11.06	-	30	7	-55	165	3	•				•
Multiflex 86	2.65	40	71	1.33	3.56	5.69	-	-	-	140	33	-65	165	6					
Multiflex 141	4.1	33	71	0.73	2.09	-	-	-	-	373	88	-65	165	10					
Multiflex 141 CT	4.2	33	84	0.57	1.62	-	-	-	-	457	108	-65	200	12		•			•
Multiflex 210 CT	5.0	30	84	0.48	1.40	-	-	-	-	628	148	-65	200	27.50		•			•
Multiflex 318 CT	7.5	18	84	0.32	1.00	-	-	-	-	1350	318	-65	200	42.50		•			•
Sucoform_47_CU	1.2	40	71	2.080	5.518	8.750	-	-	-	32	8	-65	165	3					
Sucoform 86	2.1	40	71	1.207	3.386	5.574	-	-	-	94	38	-65	165	6					
Sucoform 141	3.6	33	71	0.735	2.224	-	-	-	-	484	114	-65	165	8					
Sucoform_250-01	6.3	18	71	0.456	1.450	-	-	-	-	920	217	-65	165	30					
Sucoform 141 CT	3.58	30	83	0.646	1.919	-	-	-	-	360	85	-65	200	8		•			
Sucoform 86 CT	2.15	40	80	1.093	3.182	5.371	-	-	-	165	39	-65	200	6		•			
SR_47	1.2	107	69.5	1.923	5.128	8.166	9.341	11.170	-	32	8	-55	100	3.18					
SR_86	2.2	40	69.5	1.132	3.196	5.285	-	-	-	130	31	-55	125	3.18					
SR_118	3.0	40	80	0.682	1.755	2.723	-	-	-	598	141	-55	125	9.53					
SR_141	3.6	33	69.5	0.682	2.096	-	-	-	-	450	106	-55	125	6.35					
SR_250	6.4	18	69.5	0.436	1.493	-	-	-	-	1400	330	-55	100	10					
SR_141 CT	3.58	33	83	0.650	1.801	-	-	-	-	364	86	-55	200	10		•			
SR_86 CT	2.20	40	80	0.974	2.592	4.111	-	-	-	133	31	-55	200	3.18		•			
Sucotest 18	4.6	18	77	0.513	1.331	-	-	-	-	700	165	-55	+105	13	•				•
Sucotest 18A	10.2	18	77	0.560	1.558	-	-	-	-	597	141	-55	+85	30	•				•
Sucotest 110	4.25	110	70	3.6	7.4	10.8	12.2	14.2	18.7	37	3	-40	85	25	•		•		•
TL-8A	10.3	8	81	0.7	-	-	-	-	-	52	-	-40	85	55	•				•
TL-P	10.3	4	71	0.9	-	-	-	-	-	560	-	-15	65	110	•			•	•



Connecting – today and beyond

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