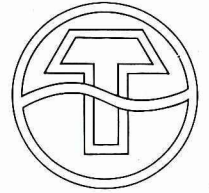


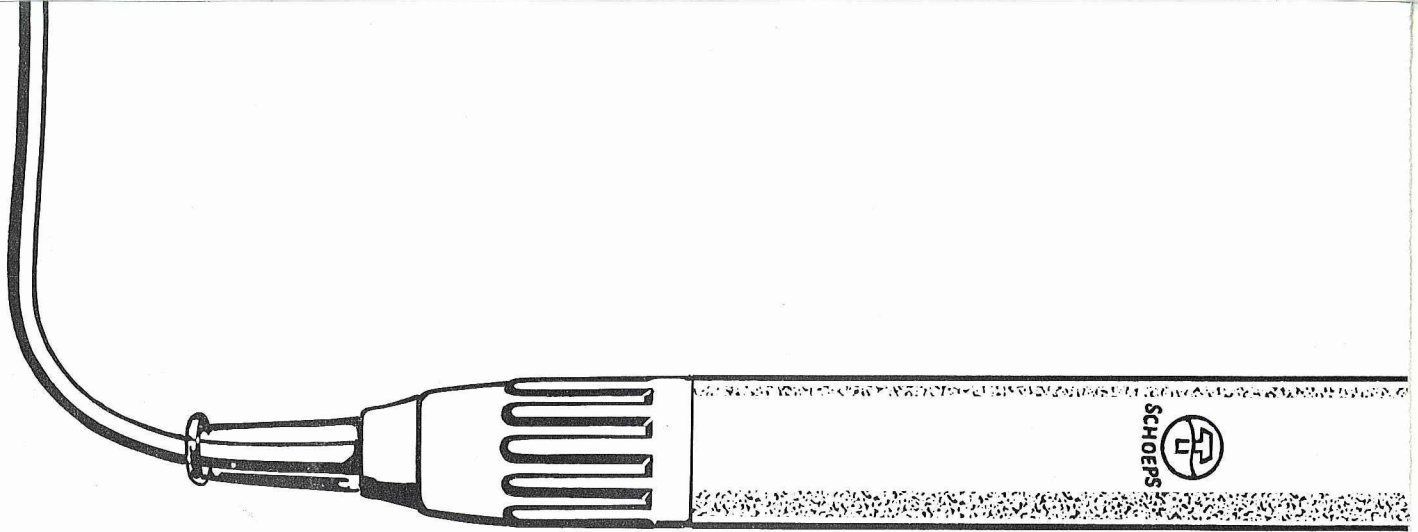
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SCHOEPS

STUDIO CONDENSER MICROPHONES COLETTE SERIES





COLETTE SERIES

Studio Condenser Microphones

- microphone amplifiers for all methods of powering
 - 12 V phantom powering
 - 12 V parallel powering
 - 48 V phantom powering
- many types of capsule are available offering a wide variety of directional patterns. All can be easily interchanged on all microphone amplifiers
- Special-purpose systems can be set up, with no loss in quality, using electrically active accessories between the capsule and amplifier. Connecting the active cable KC-, for example, results in a lightweight "miniature microphone"
- special accessories for the "miniature microphone"

Further special features

To avoid falsification of sound reproduction, all microphones have small dimensions. Nevertheless, a **high maximum output level** is achieved by means of an output stage **without transformer**. This corresponds to a **high maximum sound pressure level** although the sensitivity shows normal high values.

By virtue of the transformerless construction, the **output impedance is low** and practically independent of frequency. Sensitivity to interference from magnetic fields is also eliminated.

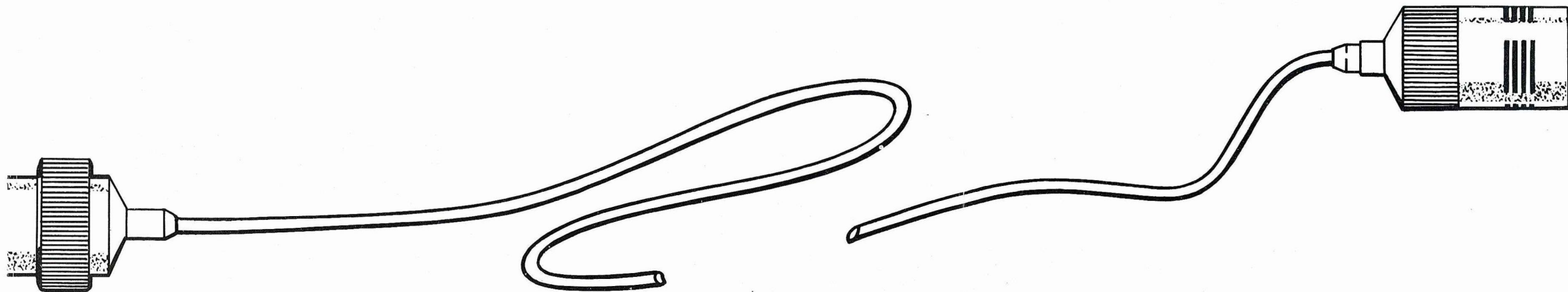
A further advantage is that all microphones – including those with 48 V supply voltage – operate with a **polarization voltage of 60 volts**.

Moreover, the **transducer is insulated relative to its casing**, ensuring high operational safety and also reducing the number of components in the high-ohmic input of the amplifier.

Among the transducers with single directional pattern, the hypercardioid has proved very successful, in particular for film and television work.

Directional patterns in the multi-pattern capsules are selected by changing the acoustic-mechanical elements. The advantages of this method are based on the utilization of one membrane only (German and foreign patents).

The technology of the Colette series guarantees reliability, even under extreme climatic conditions.



COLETTE SERIES													POWER SUPPLIES ⁵⁾		
Directional pattern ▶		○	○	◐	◑	⊕	○ ◐	○ ◑	⊕	⊕					
Capsule type ▶		MK 2	MK 3	MK 4	MK 4 S	MK 41	MK 5	MK 6	MK 8						
POWERING	Current	Output impedance	Amplifier type ³⁾	DESIGNATION OF COMPLETE MICROPHONE ⁵⁾ , for example: amplifier CMC 3 -- D + capsule MK 4 = microphone CMC 34 D or CMC 5 -- U g + MK 41 g = CMC 541 Ug ⁷⁾									Portable AC power supply for 1 microphone	Portable AC power supply for 2 microphones	Battery supply unit
12 V Phantom ¹⁾	about 10mA	about 20 ohms	CMC 3 --	CMC 32	CMC 33	CMC 34	CMC 34 S	CMC 341	CMC 35	CMC 36	CMC 38	NG 31	NG 32	BZ 31	
12 V Parallel	about 9mA	about 10 ohms	CMC 4 --	CMC 42	CMC 43	CMC 44	CMC 44 S	CMC 441	CMC 45	CMC 46	CMC 48	NG 41	NG 42	BZ 41	
48 V Phantom ²⁾	about 4mA	about 35 ohms	CMC 5 --	CMC 52	CMC 53	CMC 54	CMC 54 S	CMC 541	CMC 55	CMC 56	CMC 58	NG 51	NG 52	BZ 51	
Sound incidence				—	—	axial	axial	axial	axial	radial ⁴⁾	radial ⁴⁾				
Frequency range				20-20 000 Hz	20-20 000 Hz	40-20 000 Hz	80-20 000 Hz	40-20 000 Hz	40-20 000 Hz	40-16 000 Hz	40-16 000 Hz				
Sensitivity ³⁾ (1 kohm load, 1kHz)	about			1,2 mV/μbar 12 mV/Pa	1 mV/μbar 10 mV/Pa	1,2 mV/μbar 12 mV/Pa	1,3 mV/μbar 13 mV/Pa	1,3 mV/μbar 13 mV/Pa	1,0/1,2 mV/μbar 10/12 mV/Pa	0,9/1,0/1,0 mV/μbar 9/10/10 mV/Pa	1,0 mV/μbar 10 mV/Pa				
Equivalent noise level	re. 2 x 10 ⁻⁴ μbar, IEC 179	about		17 dB-A	18 dB-A	18 dB-A	17 dB-A	17 dB-A	18 dB-A	19 dB-A	19 dB-A				
Equivalent noise level	re. 2 x 10 ⁻⁴ μbar, DIN 45 405	about		24 dB	25 dB	25 dB	24 dB	24 dB	25 dB	26 dB	26 dB				
Signal/noise ratio (A-weighted)	re. 10 μbar = 1 Pa	about		77 dB	76 dB	76 dB	77 dB	77 dB	76 dB	75 dB	75 dB				
Max. sound pressure level for 0,5% total distortion	about			130 dB SPL	132 dB SPL	131 dB SPL	130 dB SPL	130 dB SPL	131 dB SPL	132 dB SPL	132 dB SPL				
Output voltage at max. sound pressure level ¹⁰⁾	about			850 mV for all types											
Recommended load				≥ 600 ohms for all types, floating											
Dimensions	about			∅ 0,79" x 5"	∅ 0,79" x 5"	∅ 0,79" x 5"	∅ 0,79" x 5"	∅ 0,79" x 5"	∅ 0,79" x 5,2"	∅ 0,79" x 5,67"	∅ 0,79" x 5,67"				
Weight	about			80 grams	80 grams	80 grams	80 grams	80 grams	80 grams	80 grams	80 grams				
Connectors				Tuchel or Cannon ⁵⁾											
STANDARD ACCESSORIES															
Microphone cables	KT 10 k — KT 20 k — KT 30 k, 33 ft. (10m) — 66ft. (20 m) — 100 ft. (30 m), Tuchel connectors with plastic jacket KT 10 U — KT 20 U — KT 30 U, 33 ft. (10m) — 66ft. (20 m) — 100 ft. (30 m), Cannon connectors														
Output attenuator	MDZ 10 ⁹⁾ attenuates the output at 1 kohm load by 10 dB														
Speech filter	E 5 ³⁾ for bass roll-off, fundamental attenuation 12 dB, below 1 kHz — 6 dB/oct.														
Close-talking guards	B 20	nylon web basket		ditto	B 20 S for extreme cases				B 5	out of foam material	W 20 or W 5 for MK 6 and MK 8				
Wind guards	W 20	nylon web basket		ditto	W 20 S for extreme cases				W 5	out of foam material					
Stand couplings	SG 20 ⁴⁾	for 1 microphone			SG 22 ⁴⁾	twin coupling									
Elastic suspensions	A 20 ⁴⁾	for 1 microphone		ditto	A 20 S ⁴⁾	stiffer e.g. for mike with SKC 200			A 22 ⁴⁾	twin suspension					
Holder to align a microphone hanging on cable	H 20														
Table stands / base	T 20	tripod			TA 20	tripod with elastic suspension,	ditto	TA 22	with twin suspension						
	T 5	heavy model 1600 grams,		threaded stud 3/8"	BF 250	shock absorbing base, 4000 grams,		threaded stud 3/8"							
Table mounting flange	F 5	not wired		threaded stud 3/8"	F 3	with internally wired connectors									
Screw clamp	Z 10 threaded stud 3/8"														
Goosenecks	S 6/285 ⁶⁾	11,2" (285 mm), not wired,			S 3/250	9,8" (250 mm), wired, fits into	F 3 or	SS 12 ⁴⁾	(straight coupling)						
Signal-light unit	LS 5 colours: red/green														
SPECIAL ACCESSORIES															
Active Colette-cable	KC 5	16,5 ft (5 m)		Gooseneck, not wired	SC 150	5,9" (150 mm) internal thread 3/8"		Miniature table stand	TC incl. SGC						
Active gooseneck	SKC 200	7,9" (200 mm)		Miniature stand coupling	SGC	internal thread 3/8"		Stereophonic bracket for 2 mini mikes	STC ⁶⁾	spacing 6,7" (170 mm), angle 110°					
Active Colette tubes	RC 700 (0,7 m)/RC 1200 (1,2 m) incl. RG 8			Miniature holder to align a microphone hanging on cable	HC			Microphone to be fixed on instruments	CM 02	— see separate information					
Mounting for tubes by RG 8 on STR -- and BF 250				Elastic suspension for boom	ACA	internal thread 3/8"		Clip-on microphone	CM 03	— see separate information					

① Special type with positive supply pole grounded on request (letter "p" added before connector designation⁵⁾, e.g. CMC 34 pD).

② If the available 48 V phantom powering cannot supply the necessary 4 mA — including our NT 51 and NT 52 — then microphones of our CMT 50 series must be used instead (0.7 mA each).

③ On request, any microphone amplifier can be delivered with its sensitivity increased by about 5 dB (marking: blue dot on the amplifier). Phantom powered microphones can also be delivered with built-in pad (10 dB attenuation; marking: red dot on the amplifier).

④ The reference axis of the microphone (axis of maximum sensitivity) is marked by a red dot on the front of the capsule.

⑤ Designation of the connectors of microphones as well as amplifiers, power supply units etc.:

"D" for Tuchel (for instance CMC 341 D)

"U" for Cannon (for instance CMC 341 U)

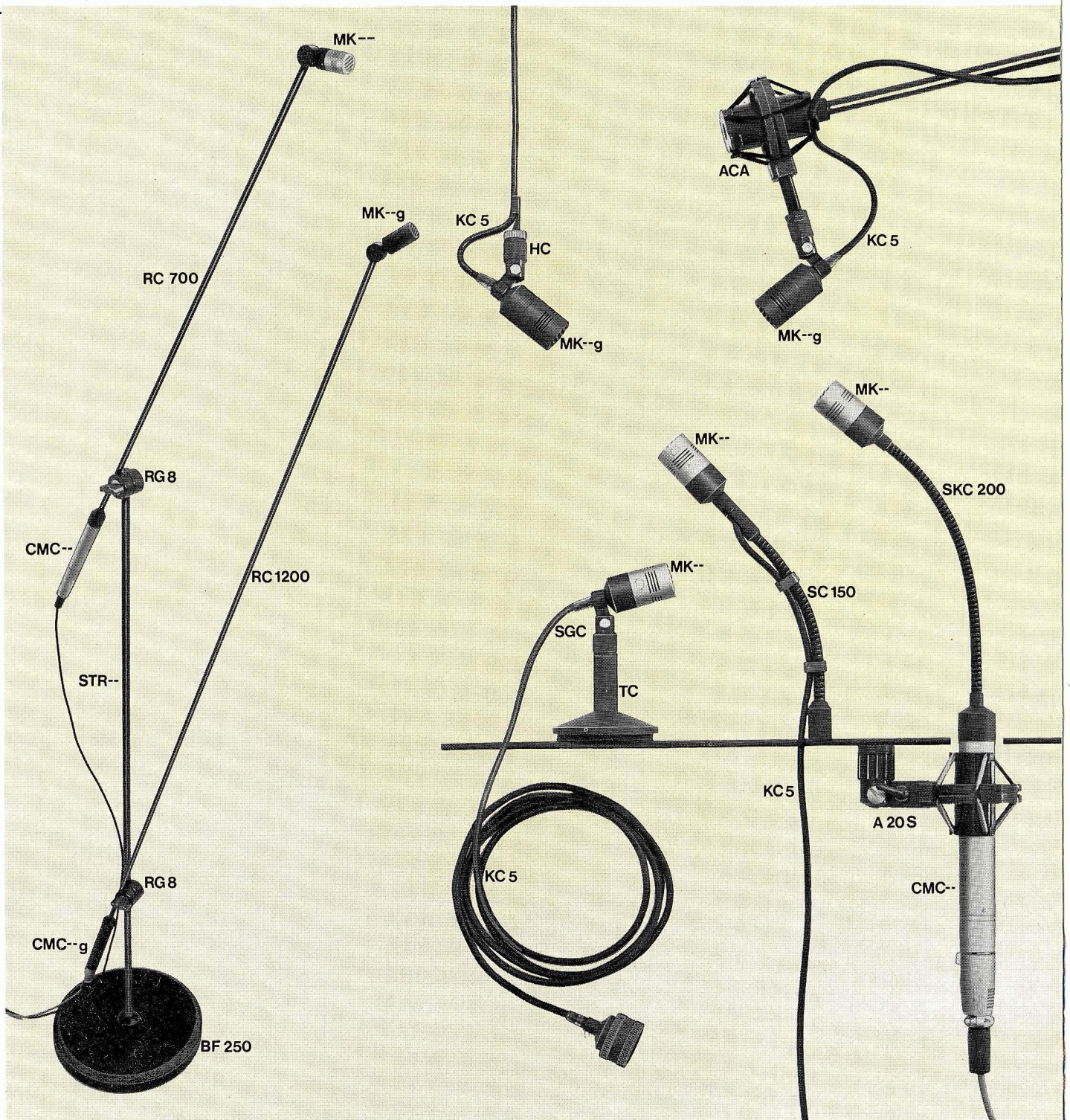
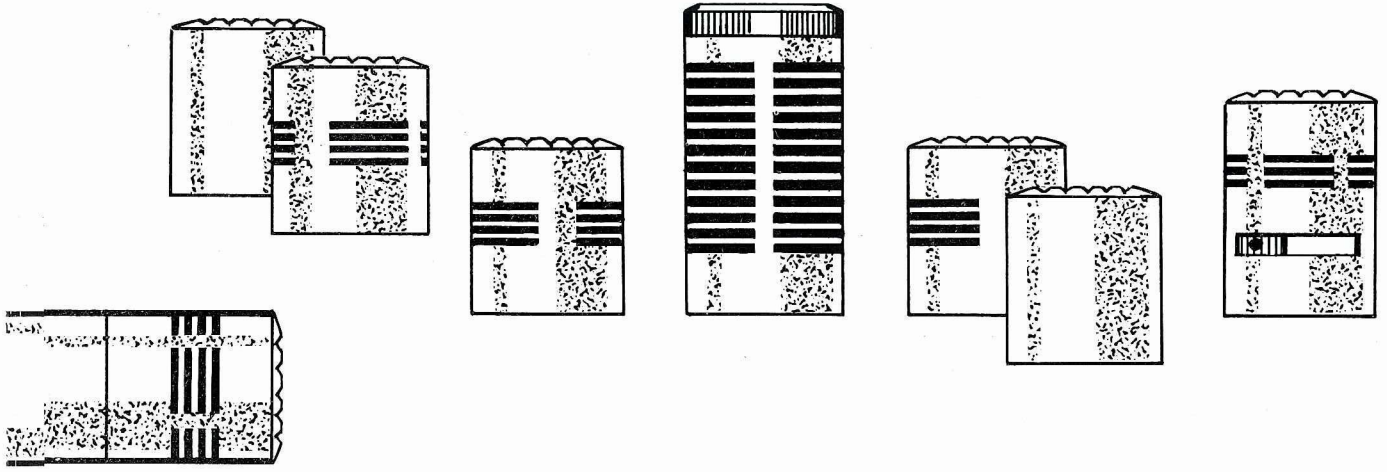
⑥ With threaded adapter for thread studs: 3/8", 1/2" and 5/8" — 27 NS

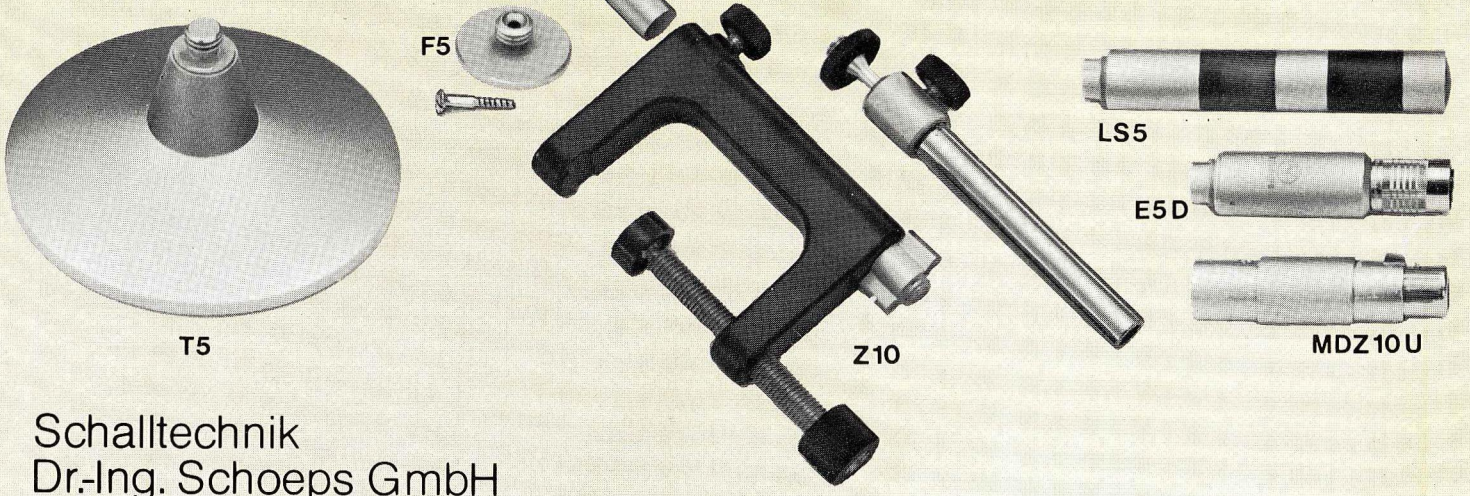
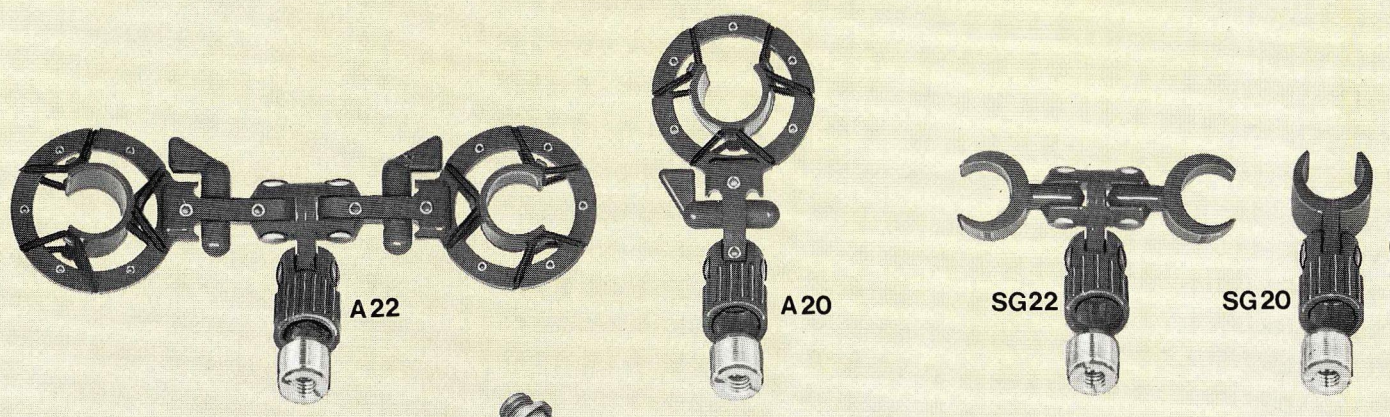
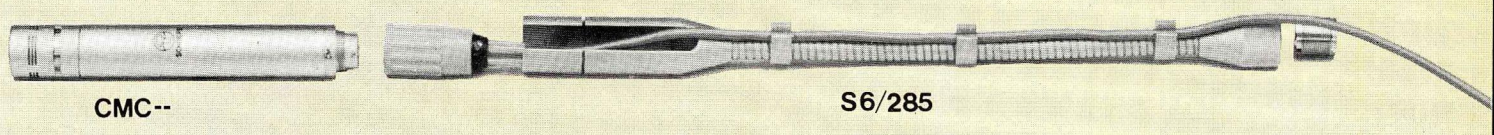
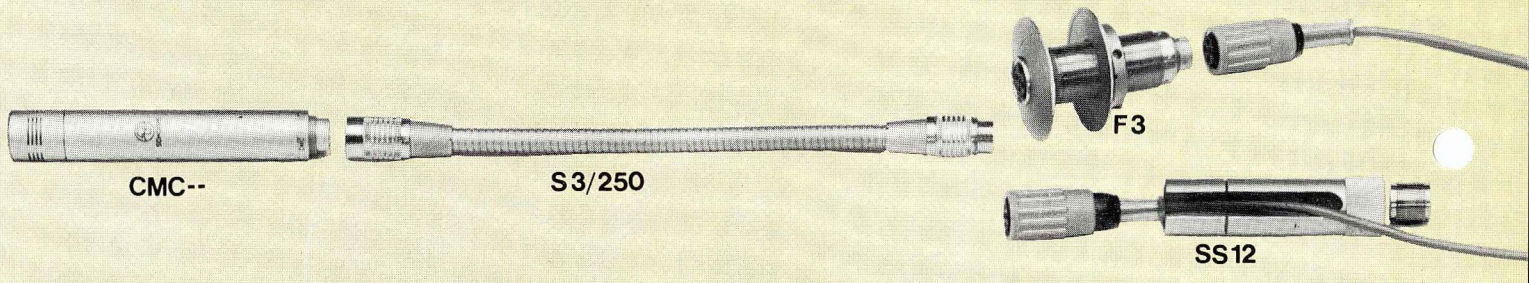
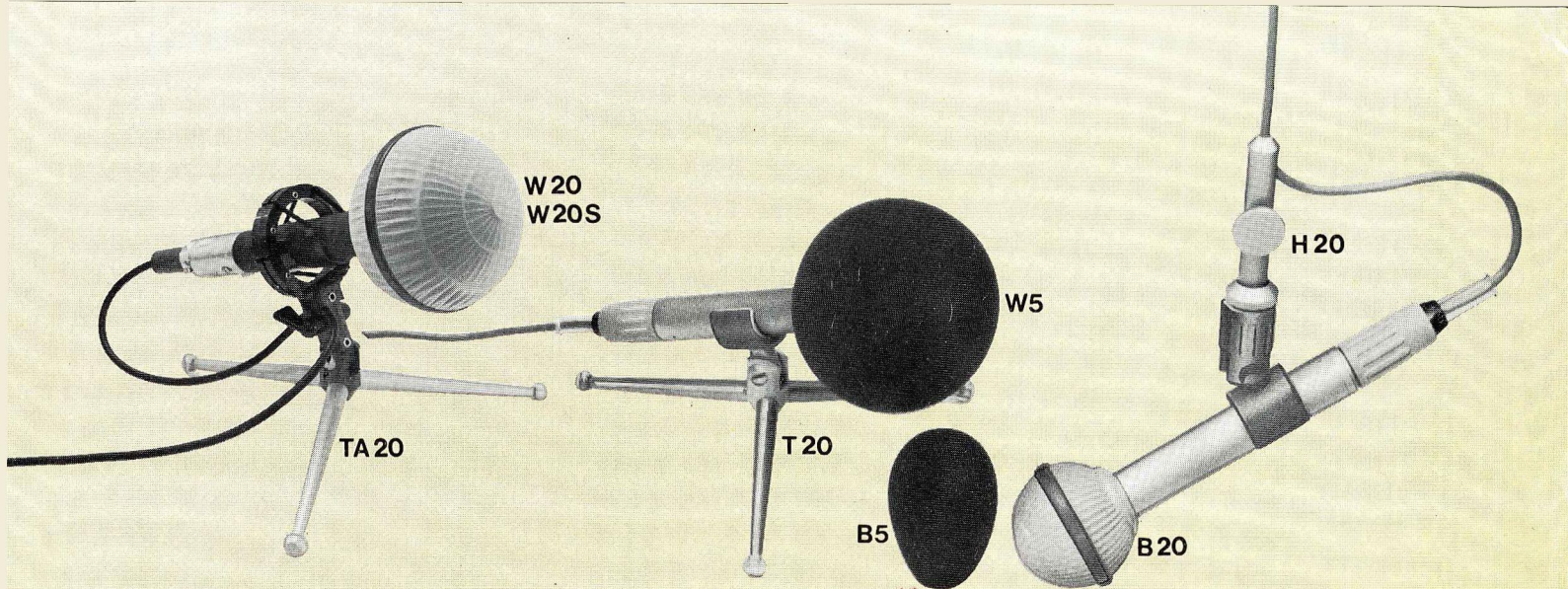
⑦ The standard surface finish is nickel; dark TV finish on request (letter "g" added to type designation).

⑧ All pressure transducers, even with this relatively small size, show some tendency for very high frequency pickup to become "directionalized". The MK 2 capsule has essentially flat (on axis) direct field response up to 20 kHz; the MK 3 is designed for use in the reverberant sound field and therefore shows a substantial high frequency emphasis on axis when used at shorter distances. The omnidirectional characteristics of our multi-pattern capsules are also true pressure transducers, designed for direct field placement.

⑨ Even at the highest sound pressure levels found in most practical situations, it is scarcely possible for Colette series microphones to become overloaded. But the signal voltages resulting from high sound pressure levels could overload the equipment to which the microphone is connected, especially if the equipment is not designed for condenser microphones. Very low frequency interference resulting from air currents could also overload such equipment and give the mistaken impression that the microphone needs a more effective windscreen. To avoid these problems, we offer an in-line attenuator, the MDZ 10, as an accessory. Connected at the modulation output of the microphone power supply, it provides a 10 dB "pad". (With phantom powered microphones it can also be put between the power supply and the microphone amplifier.) Unlike pads between capsule and amplifier, the MDZ 10 causes no loss of signal-to-noise ratio in the microphone.

When the MDZ 10 is used, the minimum recommended load impedance is 200 Ohms rather than 600 Ohms.





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