beyerdynamic

MCS
MICROPHONE CONFERENCE SYSTEM

MCS 553
Digitally controlled System Microphone Unit

Order # 470.507

Features

- Shielded fully metal housing for under table mounting
- Mounting holes mechanically decoupled from housing to minimise acoustic coupling
- Use as chairman or delegate microphone unit possible
- Gooseneck microphone with non-glare Nextel® coating and quick-plug connection through the table (supplied with pop screen)
- Illuminated ring around the gooseneck indicates the ready-to-talk status
- Cover ring for mounting through table at the gooseneck position (aluminium coloured anodized)
- Connection for up to 3 external buttons (microphone, priority and clear)
- Connection for external LEDs such as microphone on (green) and request-to-talk (red)
- DIP-switches to address and programme the microphone unit
- Fixed connecting cable (3 m long) with 15-pin Sub-D-plug
- 15-pin Sub-D-socket for system connecting cable
- Connection for loudspeaker is possible if requested

Description

The MCS 553 system microphone unit consists of a gooseneck microphone and a terminal board for the connection of up to three buttons such as microphone, priority and clear button and two LEDs for microphone on (green) and request-to-talk (red). The customer can select the external operation buttons and LEDs. beyerdynamic recommends the use of a piezo button with integrated dual colour illuminated ring. The MCS 553 can be used as a chairman's microphone unit with three buttons or as a delegate microphone unit with one microphone button. The use depends upon the system configuration with the MCS Editor software. The ready-to-talk status of the microphone is indicated by a red illuminated ring. In the request-to-talk mode of the discussion system the microphone button is used to activate the request. Control voltages to power external LED indicators are available on the terminal board. These indicate microphone on and request to talk when released by the operator of PC or media control system. Dual colour or individual LED indicators may be used. If the microphone button is pressed again, the request to talk is cleared.
If the MCS 553 is used as a chairman's microphone unit, in addition to the microphone button it is possible to connect the priority and clear button. The chairman does not depend upon the limited number of open microphones (NOM). Using the priority button the chairman can intervene into the discussion and temporarily mute or clear the activated delegate microphone units depending upon the system configuration. Using the clear button all activated delegate microphone units are switched off.
The installation via 4 buffer holes ensures high protection against vibration.
With the cover ring the hole in the table is concealed perfectly, after the gooseneck microphone has been connected to the system unit under the table.

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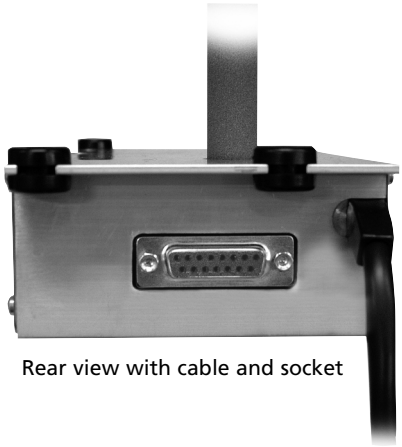
Architect's Specifications

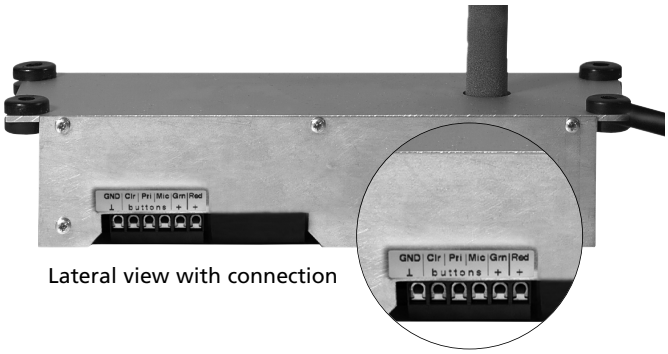
Digitally controlled discussion system microphone unit for the use as chairman or delegate microphone unit. 4 mounting holes for anti-vibration under table mounting. Connection of up to three external control buttons: microphone, priority and clear to terminal board as well as two external LEDs. Green illuminated LED indicates for microphone on. Red illuminated LED indicates request to talk. Programmable priority function of the chairman microphone unit for switching on only or switching on and clearing or muting of the delegate microphone units. Cardioid condenser gooseneck microphone (back electret) can be mounted through the table. Gooseneck microphone with Nextel®-coating. Total length 400 mm and diameter 8 mm. Illuminated ring to indicate the ready-to-talk condition. Cover ring in coloured, anodized aluminium. 15-pin Sub-D-socket. 3 m long system connecting cable with 15-pin Sub-D-plug for single cable connection. 6 DIP switches for button programming and addressing. Shielded fully metal housing.
Dimensions (WxHxD) 97 x 47 x 203 mm.

Manufacturer: beyerdynamic GmbH, Germany
Type: MCS 553

Views

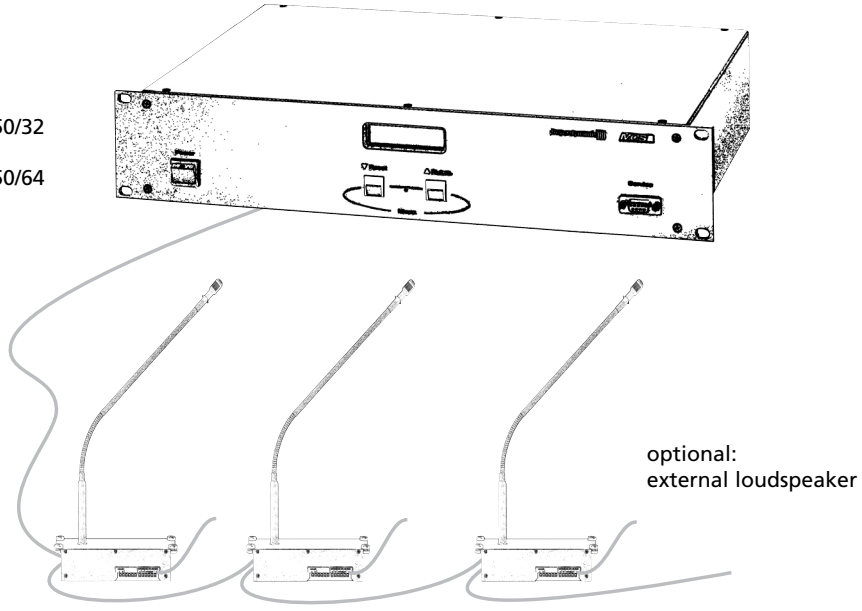


Rear view with cable and socket



Lateral view with connection

Cabling



MCS 50/32
or
MCS 50/64

optional:
external loudspeaker

beyerdynamic

TECHNICAL SPECIFICATIONS

System Microphone Unit MCS 553

Power supply	+24 V via microphone line
Power consumption	max. 74 mA
AF-frequency response	80 Hz to 19,000 Hz
T.H.D.	≤ 1%
Signal-to-noise ratio with microphone	59 dB related to 1 Pa
AF-Output (+6 dB)	balanced, microphone line
Limiter	compensates variations in speaking distance, cannot be switched off
6 DIP-switches (No. 1 to 5)	Address of the microphone units (Binary code)
DIP-switch No. 6	no function
Connections	1 x 3 m long cable with 15-pin Sub-D plug, microphone line, on request the cable can be supplied individually and in special lengths, prices and more information on request 1 x 15-pin Sub-D socket, microphone line 1 x jack socket for gooseneck microphone with LED ring
Removable terminal board with 6 connections for	Priority button Microphone button Clear button LED indication "Microphone on" (green) 24 V / 20 mA without drop resistance LED indication "Request-to-Speak" (red) 24 V / 20 mA without drop resistance On request it is possible to supply a terminal board with 12 connections for loudspeaker; price on request.
Dimensions (without microphone)	Length: 203 mm Width: 97 mm Height: 47 mm
Weight (with microphone and connecting cable)	860 g
Ambient temperature	0° to +50°C
Optional	Piezo button with dual colour LED ring (Order # 546.658) Piezo button with "Clear" description (Order # 546.674) Piezo button with "Priority" description (Order # 546.666)

Microphone

Transducer type	Condenser (back electret)
Operating principle	Pressure gradient
Polar pattern	Cardioid
Frequency response	100 Hz to 19,000 Hz
Open circuit voltage	20 mV / Pa
Nominal impedance	≤ 1.5 kΩ
Nominal output impedance	≥ 8 kΩ
Max. SPL, f = 1 kHz, k ≤ 1%, RL = 8 kΩ	120 dB
Noise voltage	20 µVs
Signal-to-noise ratio related to 1 Pa	60 dB
A-weighted equivalent SPL	26 dB
Connection	unbalanced with quick-plug connection ø 7.2
Supply voltage	10 V with drop resistance 10 kΩ
Power consumption	400 µA

Illuminated ring

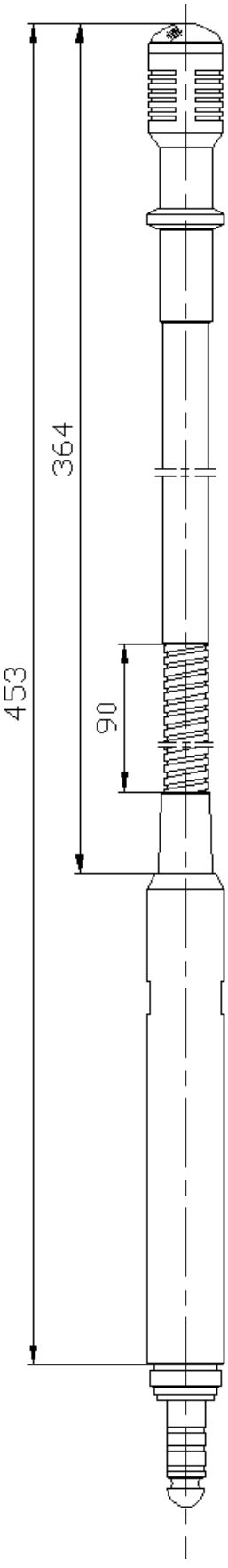
Supply voltage	24 V, drop resistance 3.3 kΩ
Power consumption	20 mA

Dimensions

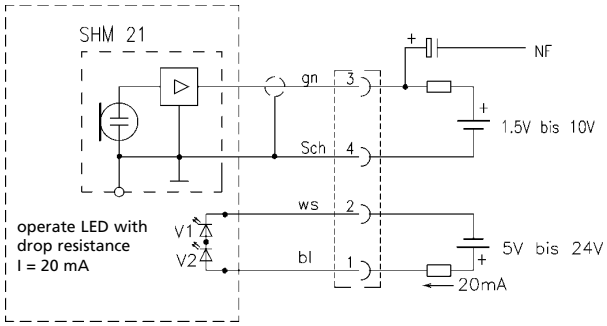
Length	400 mm
Head diameter	13.5 mm
Gooseneck diameter	8 mm
Gooseneck connection	M 13 x 1 external thread
Weight	174 g
Colour	Nextel®, stone grey (B 2)

The gooseneck microphone is available in different lengths and versions. Delivery period, price and more information available upon request.

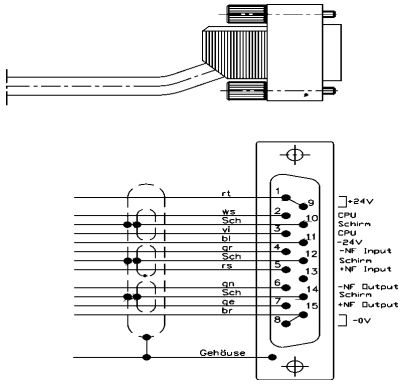
SHM 214 Microphone



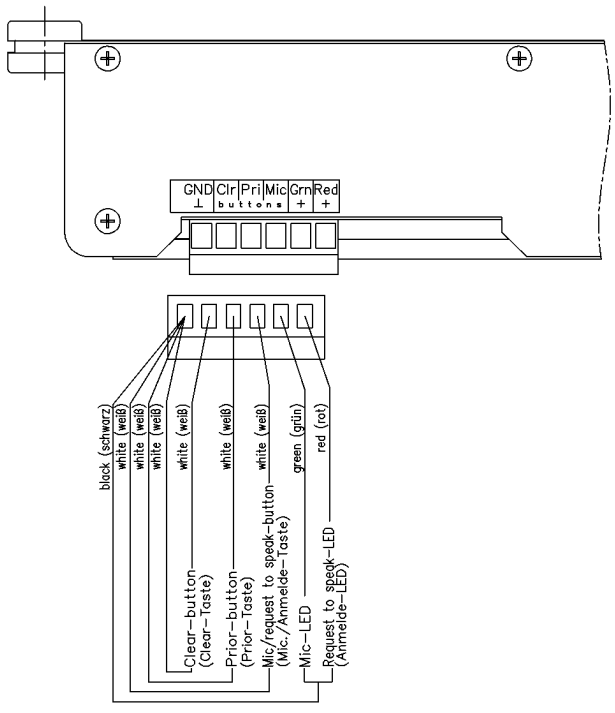
SHM 214 Wiring Diagram



System Connection

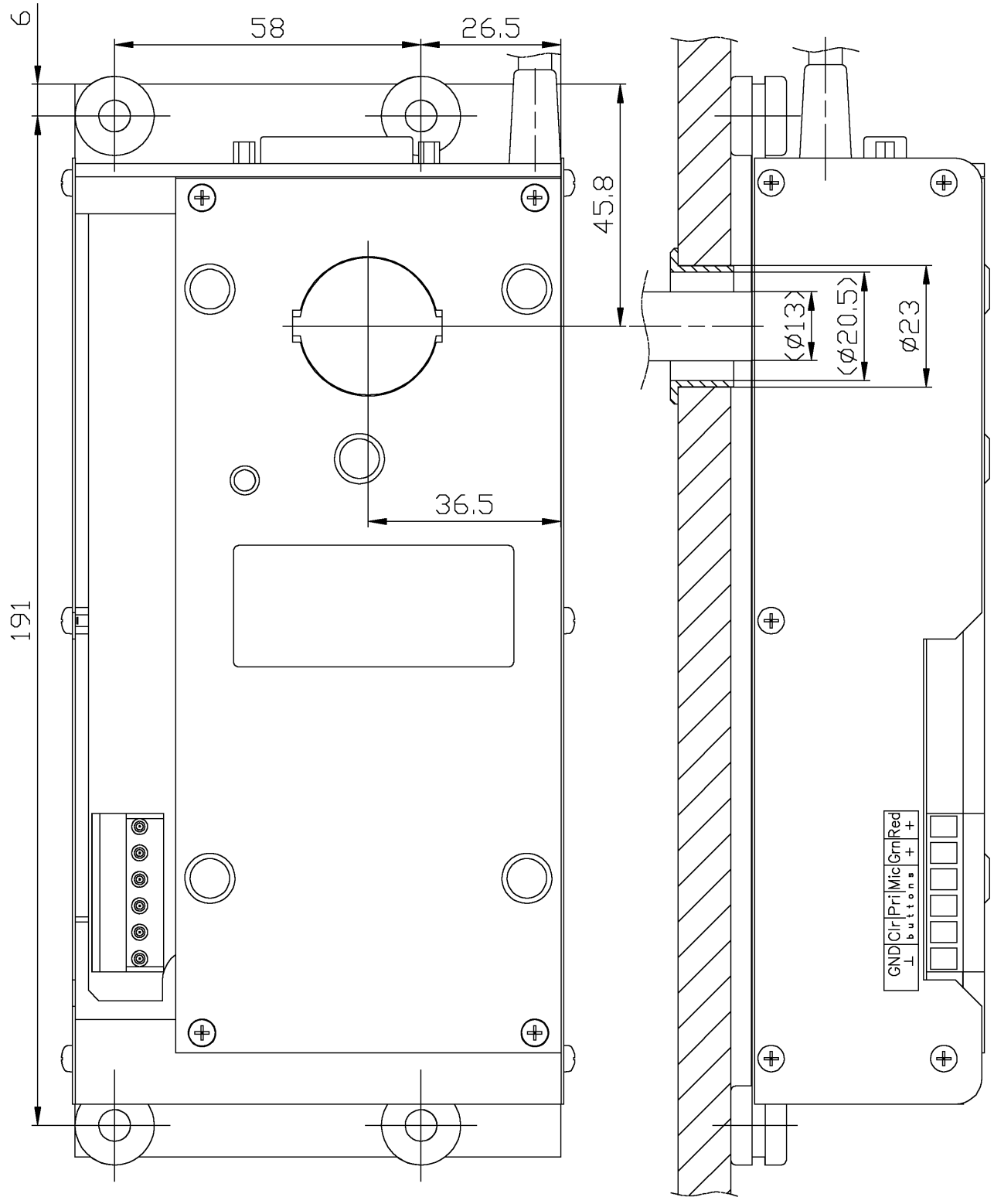


External Connections



Measured in mm

DIMENSIONS CASING



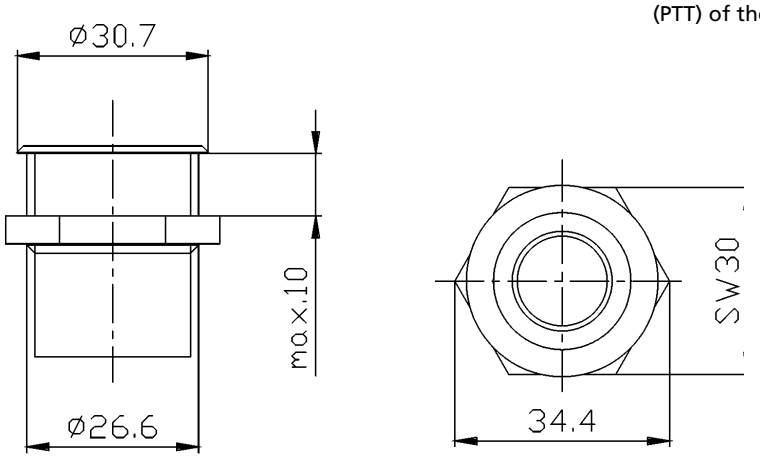
Measured in mm

BUTTONS

Control buttons can be selected and installed by the customer or system fitter. In addition to optical aspects functional aspects have to be taken into account when an external operation button is used. It is important that the button is mechanically quiet in operation.

beyerdynamic recommends to use a piezo button with integrated dual colour ring. In addition to this, two piezo buttons without illuminated ring with "Clear" and "Prior" description for the chairman microphone unit are recommended. Piezo buttons have no mechanical parts. Therefore, there is no self-noise or abrasion. The rugged metal housing avoids damage through rough handling and is completely sealed so that no dust, dirt or liquid can enter the housing. The buttons are easy to clean with proprietary cleansers.
Piezo buttons must not be used for the Push-To-Talk function (PTT) of the microphone unit.

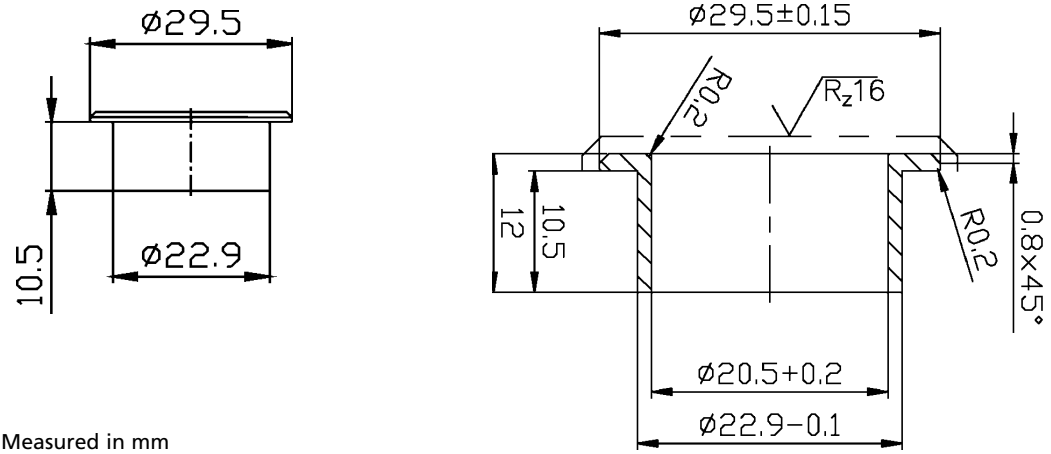
Dimensions Piezo Button



COVER RING

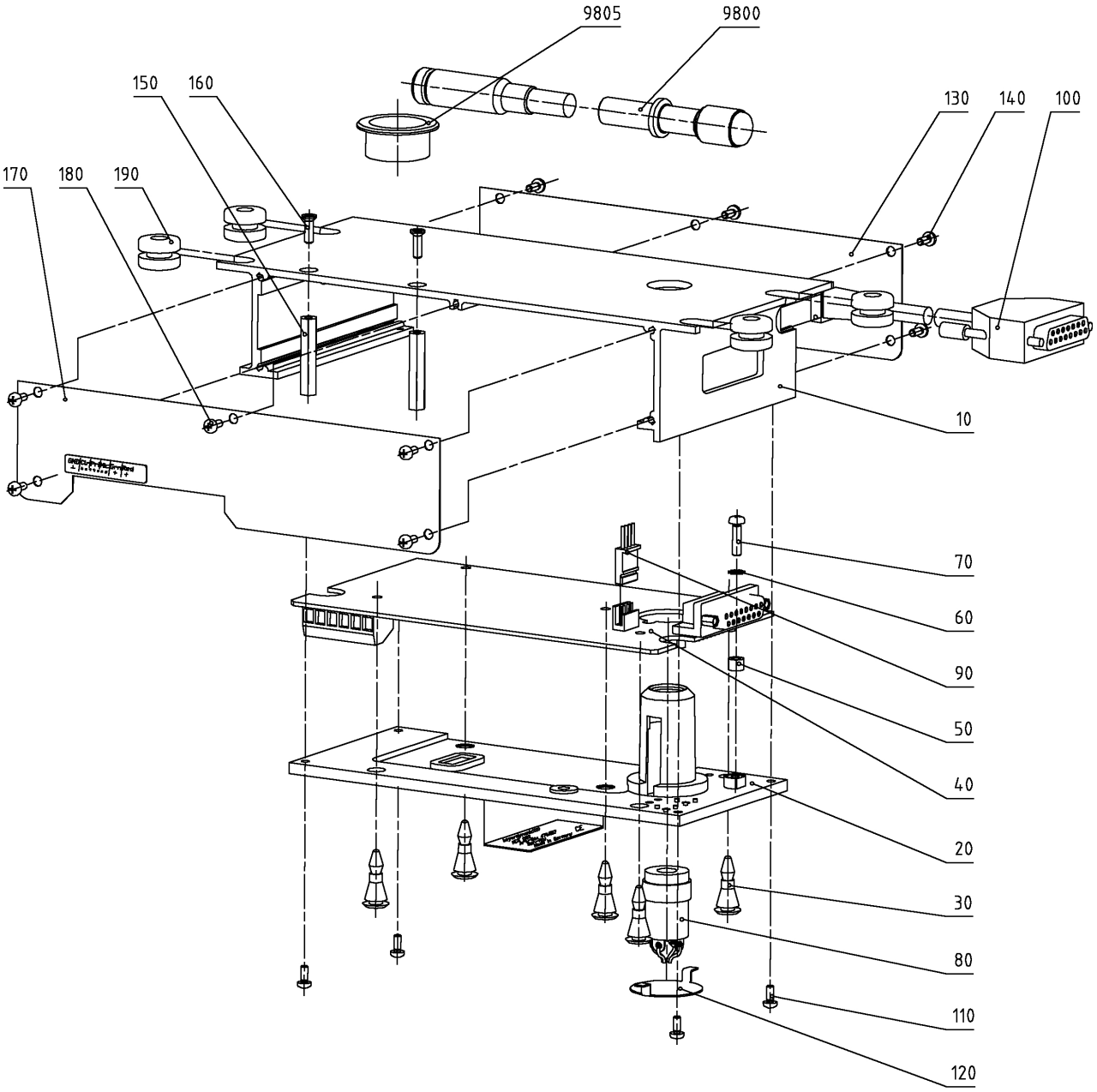
With the cover ring (surface: brushed aluminium) the hole in the table is concealed perfectly, after the gooseneck microphone has been connected to the system unit under the table.

Dimensions Cover Ring



Measured in mm

Exploded View



Illu. No.	Part No.	Drawing No.	Description
10	565.164	BN17-656/B	Housing
20	562.874	BN55-65/I	Bottom
30	551.473	6.80.096	Spacing piece
40	563.757	B24-703.08-00	MCS plate
50	539.627	5.5x1.1x4	Sleeve
60	187.135	DIN 6797-A3.2	Studded disc
70	535.001	DIN 7500-CM3x12	Oval head screw
80	533.793	BN76-62/A	Socket
90	535.710	B7-655.00-00	Connecting cable
100	553.530	B7-676.00-00	Connecting cable
110	528.862	M2.5x6 Torx	Oval head screw
120	533.815	BN54-211/A	Shielding cover
130	544.604	BN56-980/A	Plate
140	528.862	M2.5x6 Torx	Oval head screw
150	565.334	5.30.328	Spacing bolt
160	563.226	DIN 7500-MM3x8	Countersunk screw
170	565.172	BN56-980/B	Plate
180	528.862	M2.5x6 Torx	Oval head screw
190	145.874	HV 1210 PVC	Bush
9800	464.651	SHM 214 YLN	Gooseneck microphone
9805	546.313	BN37-134/A	Sleeve

Photos are non-contractual. Contents subject to change without notice.