

Orbis MU 41

Digital Flush Mount Delegate Microphone Unit

Order # 725.722



Optional CA OL loudspeaker module,
not included



Table installation – supplied without
gooseneck microphone

FEATURES

- High-quality flush mounting plate with metal housing and insert of optically hardened acrylic glass
- Round edges for flush mounting into tables
- Removable gooseneck microphone in different lengths, with Scudio® technology, 5-pin XLR connection with hidden lock
- Red LED on the gooseneck microphone displays ready-to-speak status
- Microphone button to turn the unit and microphone on or off
- Three-coloured backlit silicone microphone button:
White = microphone unit on
Green = microphone on
Red = request-to-speak entered, microphone still off
- Voice-controlled activation of the microphone possible
- Headphone output (3.5 mm stereo jack) and buttons to set volume or channel (Original or 1 foreign language channel)
- Two RJ45 sockets to connect to the control unit or to another microphone unit/system unit
- Phoenix® connector for external loudspeaker (the loudspeaker is automatically deactivated when the microphone is turned on)
- Configuration via Orbis CU control unit as semi-chairman microphone or press unit possible

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DESCRIPTION

The Orbis MU 41 flush mount delegate microphone unit is equipped with one microphone button in the mounting plate, with which the participant can turn the unit and microphone on or off. The ready-to-speak status of the microphone is displayed by the red LED on the gooseneck microphone and the green backlit microphone button.

Depending on the configuration of the Orbis CU control unit one of the following operating modes is possible:

Normal: Each participant can turn on his/her microphone unit until the maximum number of open microphones is achieved.

FiFo: Each participant can turn on his/her microphone. If the selected number of open microphones (NOM) is exceeded, the microphone of the participant who turned on his/her microphone first is turned off when another participant turns on his/her microphone.

Voice-controlled Activation: The microphone is turned on when the participant speaks into it, until the maximum number of open microphones is achieved.

The microphone unit's design follows the UN convention on the rights of persons with disabilities. It includes silicone buttons with tactile feedback and Braille marking. A headphone or induction loop for people with a hearing aid can be connected to the mini jack output. The volume of the headphone is adjusted with a separate control. Furthermore, by pressing the volume control the participant can toggle between two channels (e.g. original and 1 AUX-IN e.g. foreign language channel).

The microphone units are connected in a daisy chain to the Orbis CU control unit, i.e. the first microphone unit is connected to the control unit, the second microphone unit is connected to the first, the third microphone unit to the second and so on. For connection standard Cat5 cables are used. Thus, one cable ensures the audio transmission, power supply and control. The microphone units are very economical and use less than 1 watt in operation and at maximum volume.

Connection to a control unit without redundancy

A maximum of 50 microphones can be connected to one line of the Orbis CU control unit, i.e. a total of 100 microphone units can be operated with one Orbis CU control unit.

Connection to a control unit with redundancy

A maximum of 50 microphone units is connected in a ring to the Orbis CU control unit, i.e. the last microphone unit is connected to the previous microphone unit and the control unit. The redundancy provides maximum reliability. Should a defect in a cable occur at one side of the microphone unit, the microphone unit will not fail to operate, because it will still be supplied via the cable from the other side. The cable in question or a defect microphone unit as well can be replaced during operation without causing any problems with the other microphone units.

An optional external loudspeaker can be connected to the Phoenix® connector.

The rounded edges allow the microphone unit to be flush mounted into a table.

TECHNICAL SPECIFICATIONS

General

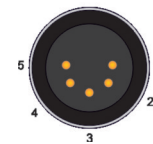
Voltage supply	via control unit.	Bus voltage (48 V DC)
Power consumption.		max. 1 W
Temperature range		
(humidity < 90%)		+10 °C to +40 °C [+50 °F to +104 °F]
Storage temperature		
(humidity < 90%)		-20 °C to +55 °C [-4 °F to +131 °F]

Connections

System connection.	2x RJ45 socket (not for Ethernet)
Max. cable length	
Line CU – MU	80 m [87.49 yd] with AWG 24
Max. cable length	
Line MU – MU	80 m [87.49 yd] with AWG 24
Specification line cable.	CAT5 S/UTP, cross-section min. AWG 26
Specification line connector.	RJ45 acc. to EIA/TIA 568 B, shielded
Loudspeaker output.	Phoenix® connectors, contact spacing 5.08 mm [20"]
Min. output impedance	8 Ω
Frequency response	20 - 15,000 Hz
THD.	0.3% at 400 mW / 1 kHz / 8 Ω
Headphone output	Mini jack socket (3.5 mm stereo)
Min. output impedance	16 Ω, short-circuit proof
Frequency response	20 - 15,000 Hz
THD.	0.01% at 8 mW / 1 kHz / 16 Ω

Microphone

Connector	5-pin XLR male
	Pin 1 = GND (ground)
	Pin 2 = Audio +
	Pin 3 = Audio -
	Pin 4 = LED -
	Pin 5 = LED Power (+5 V)
AB powering	2.2 V (2.2 kΩ)



Classis GM 313 Q - GM 316 Q Microphone

Polar pattern	Cardioid
Frequency response	50 - 19,000 Hz
S/N ratio	69 dB(A) / 6μV(A)
Max. SPL	107 dB (equalised)

GM 115 Q Microphone

Polar pattern	Cardioid
Frequency response	100 - 15,000 Hz
Max. SPL	100 dB (equalised)

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OPTIONAL ACCESSORIES

Gooseneck microphones

- Classis GM 115 Q Condenser gooseneck microphone (electret), cardioid, matt black, 500 mm [19.69"]. Order # 726.095
- Classis GM 313 Q Condenser gooseneck microphone (electret), with Scudio® technology, cardioid, matt black, 300 mm [11.81"]. Order # 724.203
- Classis GM 314 Q same as above, but 400 mm [15.75"] Order # 724.211
- Classis GM 315 Q same as above, but 500 mm [19.69"] Order # 724.238
- Classis GM 316 Q same as above, but 600 mm [23.62"] Order # 724.351

Cables

- CA OC 1 System cable, CAT5 with RJ45 connector, 1 m [3.28 ft]. Order # 725.811
- CA OC 2 same as above, but 2.5 m [8.20 ft] Order # 725.838
- CA OC 5 same as above, but 5 m [16.4 ft]. Order # 725.846
- CA OC 10 same as above, but 10 m [32.81 ft]. Order # 725.854
- CA OC 20 same as above, but 20 m [65.62 ft]. Order # 725.862
- CA OC 50 same as above, but 50 m [54.68 yd] Order # 725.889
- IL 200 Induction loop, cable length 20 cm [7.87"], extension cable 77 cm [30.31"], mini stereo jack plug (3.5 mm) Order # 725.161

Loudspeaker

- CA OL Loudspeaker module for Orbis MU 41/43 and Orbis SU 63. . Order # 725.765

SUPPLIED ACCESSORIES

- 1 x Mounting bracket incl. adjusting screw

ARCHITECT'S SPECIFICATIONS

The wired digital built-in microphone unit shall be used as a delegate version without microphone. The high-quality mounting plate shall be provided with an insert made of optically hardened acrylic glass. Rounded corners shall ensure a flush-mount table installation. The 5-pin XLR connector with hidden lock shall connect gooseneck microphones with integrated LED ring in different lengths.

The microphone unit shall be provided with a soft touch button with tactile feedback for turning the microphone on/off or entering a request-to-speak. The button shall be backlit in three colours and labelled with braille writing.

Depending on the configuration of the control unit the following operating modes shall be available: normal - each participant can turn the microphone unit on or off; FiFo - the first microphone is turned off, when the maximum number of open microphones is exceeded; voice activation: as soon as someone speaks into the microphone, it is automatically turned on.

Via the control unit the delegate microphone unit shall also be configured as a chairman microphone unit with a fixed audio channel (max. 8 chairman microphone units in a system) or as a press unit (microphone cannot be turned on).

The microphone unit shall have a headphone output (3.5 mm stereo jack) and soft touch buttons for setting the volume and channel (original and 1 foreign language channel), as well as a Phoenix connector for an external loudspeaker.

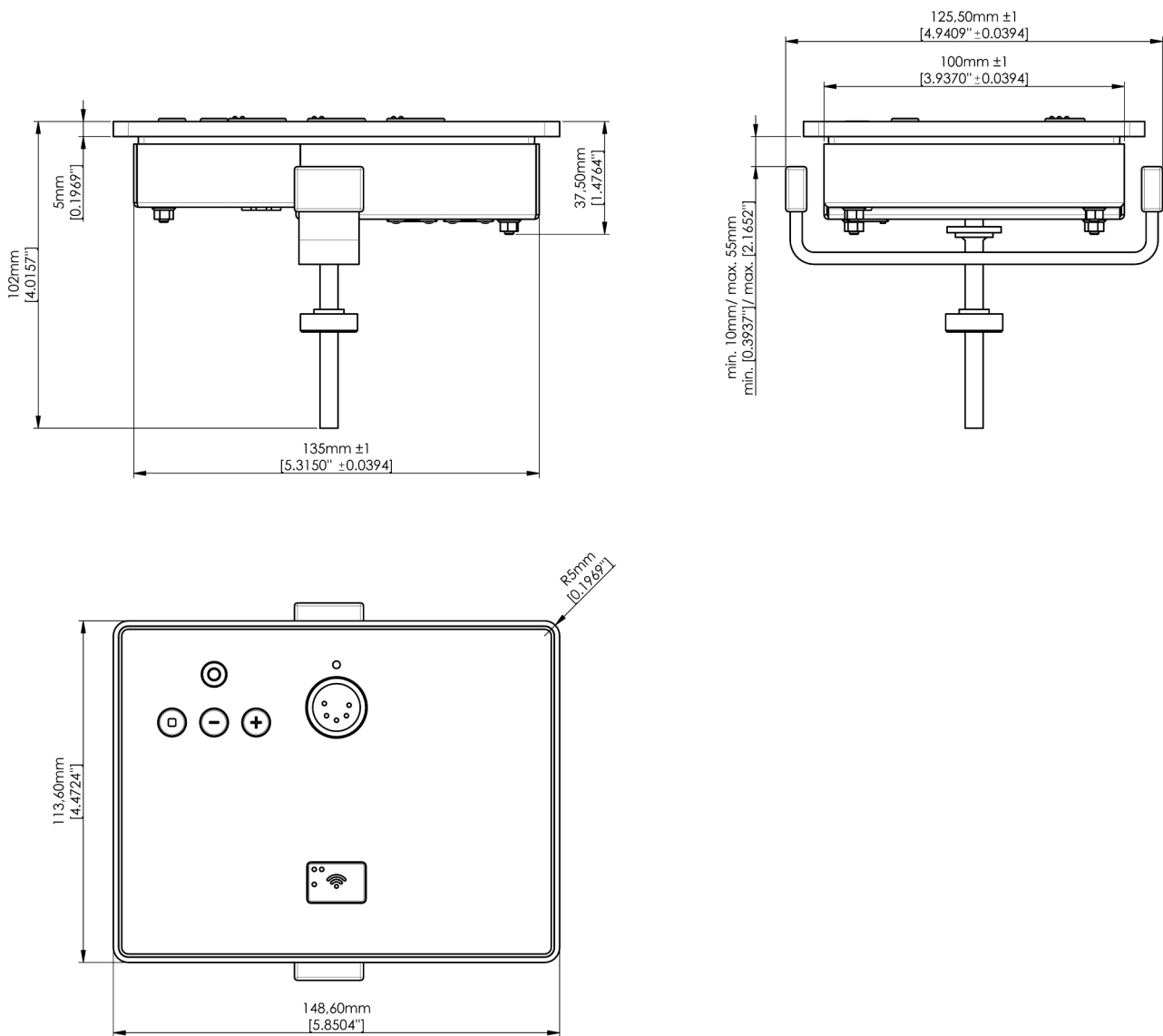
The microphone unit shall be connected via two RJ45 sockets to the control unit or another microphone/system unit.

Dimensions (LxWxH): 148 x 113 X 37 mm.

Manufacturer: beyerdynamic
Type: Orbis MU 41

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DIMENSIONS



All dimensions in mm and [inch]

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beyerdynamic

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GM 31x Q GOOSENECK MICROPHONE



DESCRIPTION

The GM 31x gooseneck microphone is available as optional accessory to connect to the microphone unit.

Due to the cardioid polar pattern this microphone has a high gain before feedback and provides highest intelligibility of speech. The LED ring displays the ready-to-talk status of the microphone. Inside the microphone there is a filter to eliminate wind and pop noise.

The microphone features the innovative Scudio™ technology, making the microphones absolutely insensitive to wireless communication devices such as mobile phones.

The microphone is mounted on a 6 mm thick gooseneck and due to its mat black, non-glare surface almost invisible.

The following lengths are available:

GM 313 Q = 300 mm [11.81"]

GM 314 Q = 400 mm [15.75"]

GM 315 Q = 500 mm [19.69"]

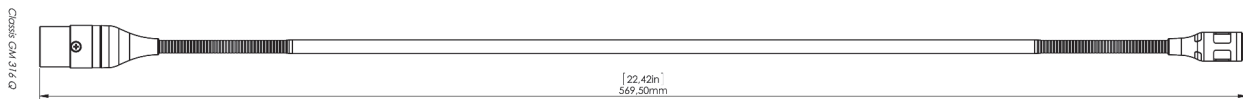
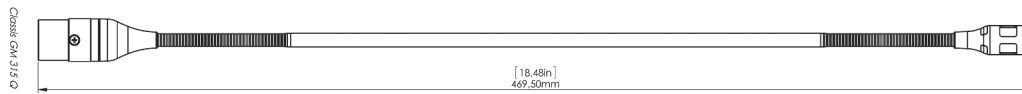
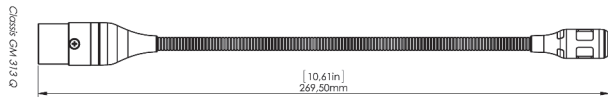
GM 316 Q = 600 mm [23.62"]

TECHNICAL SPECIFICATIONS

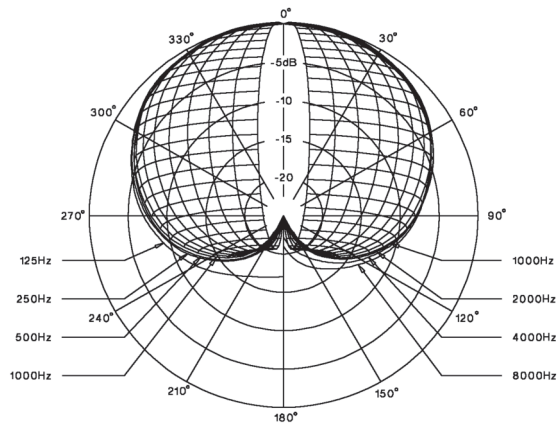
Transducer type	Condenser (electret)
Operating principle	Pressure gradient
Frequency response	50 - 19,000 Hz
Polar pattern	Cardioid
Open circuit voltage at 1 kHz	17 mV/Pa
Nominal impedance	< 200 Ohm
Load impedance	≥ 1 kOhm
Max. SPL	107 dB [SPL @ 1% THD]
Signal-to-noise ratio/Noise voltage	69 dB [A] / 6.0 μV [A]
Equivalent SPL	25 dB[A]
Microphone connection	5-pin XLR (male)
Head diameter with pop shield	approx. 26 mm [1.02"]
without pop shield	approx. 13.6 mm [0.56"]
Gooseneck diameter	6 mm [0.24"]
Total length	
GM 313 Q	270 mm [16.63"]
GM 314 Q	370 mm [14.57"]
GM 315 Q	470 mm [18.5"]
GM 316 Q	570 mm [22.44"]

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GM 31x Q MICROPHONE



POLAR PATTERN



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ARCHITECT'S SPECIFICATIONS

The cardioid condenser gooseneck microphone (electret) shall be connected to the Quinta desktop microphone unit. The LED ring integrated in the microphone head shall indicate the ready-to-speak status. The filter in the microphone basket shall suppress wind and pop noise. The Scudio® technology shall eliminate interferences from other wireless communication devices. The housing shall be coated with a non-glare mat black paint. The gooseneck diameter shall be 6 mm [0.24"]. The total length shall be 300 mm [11.81"] when connected to the microphone unit (measured from the table's edge). The delivery shall include a wind shield.

Manufacturer: beyerdynamic
Type: Classis GM 313 Q

The cardioid condenser gooseneck microphone (electret) shall be connected to the Quinta desktop microphone unit. The LED ring integrated in the microphone head shall indicate the ready-to-speak status. The filter in the microphone basket shall suppress wind and pop noise. The Scudio® technology shall eliminate interferences from other wireless communication devices. The housing shall be coated with a non-glare mat black paint. The microphone shall be provided of two goosenecks with a diameter of 6 mm [0.24"] and a rigid tube in between. The total length shall be 400 mm [15.75"] when connected to the microphone unit (measured from the table's edge). The delivery shall include a wind shield.

Manufacturer: beyerdynamic
Type: Classis GM 314 Q

The cardioid condenser gooseneck microphone (electret) shall be connected to the Quinta desktop microphone unit. The LED ring integrated in the microphone head shall indicate the ready-to-speak status. The filter in the microphone basket shall suppress wind and pop noise. The Scudio® technology shall eliminate interferences from other wireless communication devices. The housing shall be coated with a non-glare mat black paint. The microphone shall be provided of two goosenecks with a diameter of 6 mm [0.24"] and a rigid tube in between. The total length shall be 500 mm [19.69"] when connected to the microphone unit (measured from the table's edge). The delivery shall include a wind shield.

Manufacturer: beyerdynamic
Type: Classis GM 315 Q

The cardioid condenser gooseneck microphone (electret) shall be connected to the Quinta desktop microphone unit. The LED ring integrated in the microphone head shall indicate the ready-to-speak status. The filter in the microphone basket shall suppress wind and pop noise. The Scudio® technology shall eliminate interferences from other wireless communication devices. The housing shall be coated with a non-glare mat black paint. The microphone shall be provided of two goosenecks with a diameter of 6 mm [0.24"] and a rigid tube in between. The total length shall be 600 mm [23.62"] when connected to the microphone unit (measured from the table's edge). The delivery shall include a wind shield.

Manufacturer: beyerdynamic
Type: Classis GM 316 Q

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GM 115 Q GOOSENECK MICROPHONE



Classis GM 115 Q without pop shield



Classis GM 115 Q with pop shield

DESCRIPTION

The Classis GM 115 Q gooseneck microphone is used for direct connection to the Quinta or Orbis microphone units.

The microphone features a cardioid polar pattern with a high gain before feedback. The ready-to-speak status of the microphone is displayed by an LED ring. Inside the microphone grille there is a filter to eliminate wind or pop noise.

The microphone is mounted on a 6 mm thick gooseneck and due to its matt black, non-glare surface it discretely blends into the environment.

ARCHITECT'S SPECIFICATIONS

The condenser gooseneck microphone (electret) with cardioid polar pattern shall be used for direct connection to Quinta and Orbis microphone units. A filter inside the microphone grille shall eliminate wind or pop noise. It shall be protected against interference from wireless communication devices. The fully metal housing shall be matt black. The two flexible goosenecks (8 mm bottom, 6 mm top) shall have a rigid tube in between. The total length when mounted to a microphone unit shall be 500 mm (measured from the edge of the table). It shall be supplied with a wind shield.

Manufacturer: beyerdynamic
Type: Classis GM 115 Q

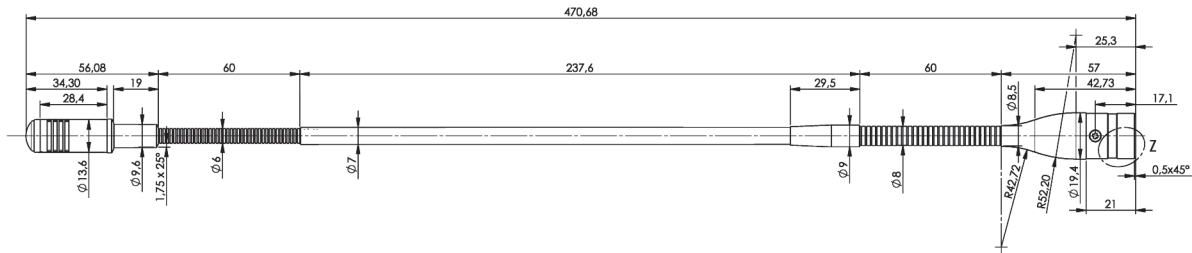
TECHNICAL SPECIFICATIONS

Transducer type	Condenser (electret)
Operating principle	Pressure gradient
Frequency response	
Close miking	40 - 13,000 Hz
Distant miking (distance 1 m)	200 - 13,000 Hz
Polar pattern	Cardioid
Open circuit voltage at 1 kHz	-17.8 mV/Pa = -35 dBV ±3 dB*
Nominal impedance	2.2 kΩ
Max. SPL	112 dB [SPL @ 1% THD]*
Signal-to-noise ratio	62 dB [A, rms]*
Equivalent SPL	32 dB [A, rms]*
Power supply	1.5 - 9 V DC
Microphone connection	5-pin XLR (male)
Head diameter with pop shield	approx. 25 mm [0.98"]
without pop shield	approx. 14 mm [0.55"]
Gooseneck diameter	approx. 7 mm [0.28"]
Total length	approx. 470 mm [18.5"]
Weight	approx. 110 g [3.8 oz]

*depending on the connected electronics

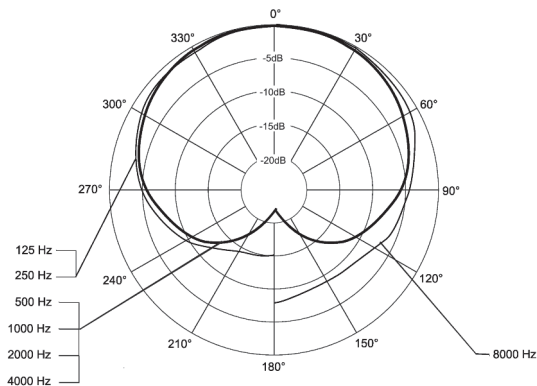
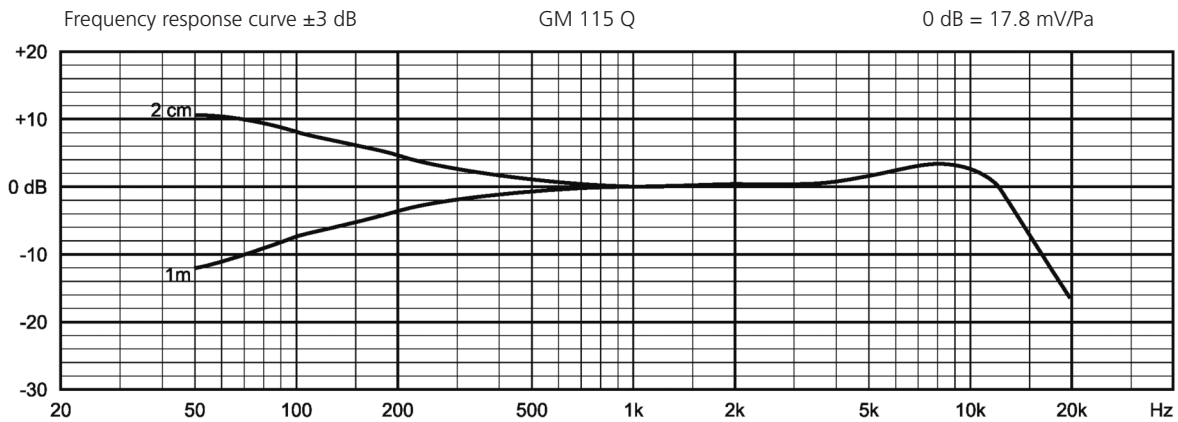
Orbis MU 41

DIMENSIONS



FREQUENCY RESPONSE & POLAR PATTERN

This polar pattern and frequency response curve (measuring tolerance ± 3 dB) correspond to a typical production sample for this microphone.



WIRING DIAGRAM

