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Features

Knowles Electret FG - Microphone Capsule
 Directivity: Omnidirectional
 Differential Preamplifier
 Approximate Sensitivity: 500 mV / PA
 Approximate input-referred self-noise level (bandwidth: 30-50 kHz): 26 dB SPL
 Preamplifier Power Supply: 5 V / 25 mA provided by UltraSoundGate xx16Hnbnm
 Microphone Heating
 Heating Power Supply:
 - 5 V / 500 mA (provided by USB Power Adapter)
 - 19 V / 130 mA (provided by BATmode)
 40 kHz Test Signal Speaker
 Wind Protection Ring
 Combined Microphone and Testsignalspeaker Connector: Male XLR-5 Plug
 Heating Connector: Male XLR-3 Plug
 Rating: IP65
 Diameter 100mm (Wind Protection Ring) / Diameter 140mm (Mounting Plate)
 Installation in the Floor of the Nacelle of Wind Turbines via 100mm Drill-Hole
 Materials:
 - XLR Connectors - Stainless Steel
 - Housing - Aluminium
 Compatible with ProBat and the RENEBAT-Projects



DESIGNED BY:		Microphone GM90		G	—
DATE: 05.09.2024				F	—
SIZE A4				E	—
SCALE	WEIGHT (kg) N/A			DRAWING NUMBER 1.0	SHEET 1 of 4
This drawing is our property; it can't be reproduced or communicated without our written consent.				C	—
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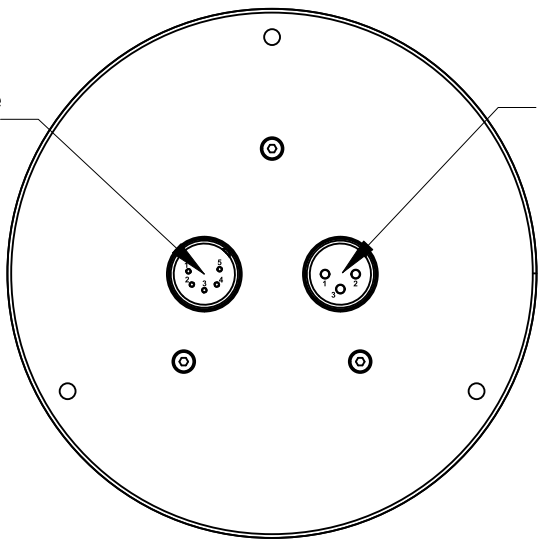
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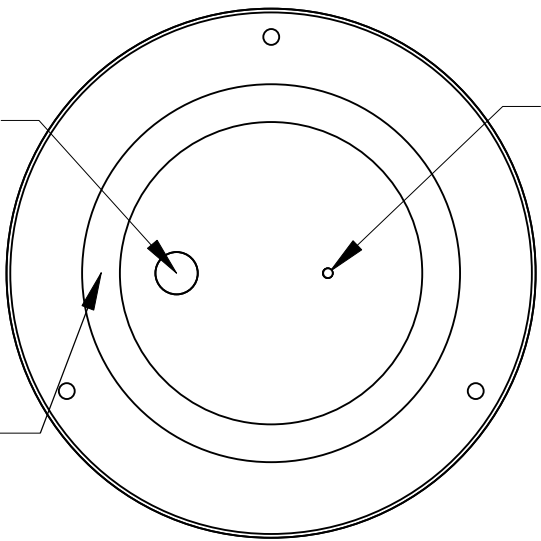
XLR-5 Microphone Connector



XLR-3 Heating Connector

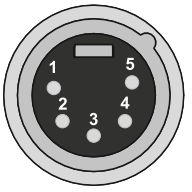
Test Signal Speaker

Wind Protection Ring



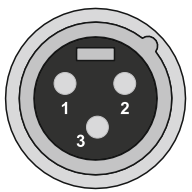
Microphone Capsule

XLR-5 Microphone Connector Pinout

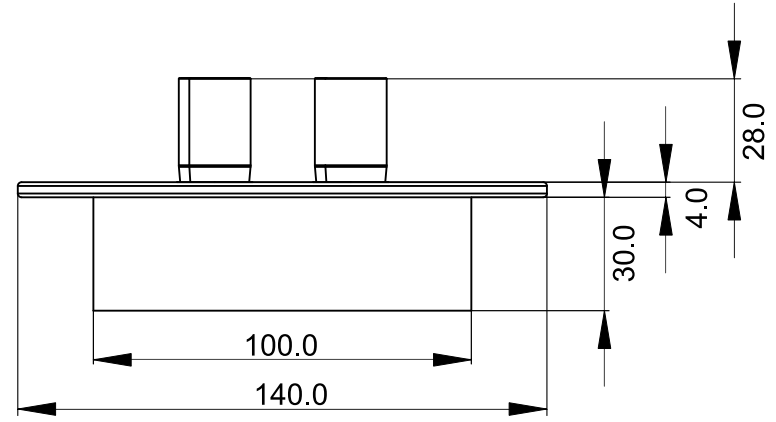


Pin	Description
1	Ground
2	Signal +
3	Signal -
4	5V supply voltage
5	Testsignal trigger

XLR-3 Heating Connector Pinout



Pin	Description
1	Ground
2	12 - 24V Input
3	5V Input



Dimensions in mm

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DATE: 05.09.2024				F	—
SIZE A4	WEIGHT (kg) N/A	DRAWING NUMBER 1.0	SHEET 2 of 4	E	—
				D	—
SCALE 1:2			C	—	
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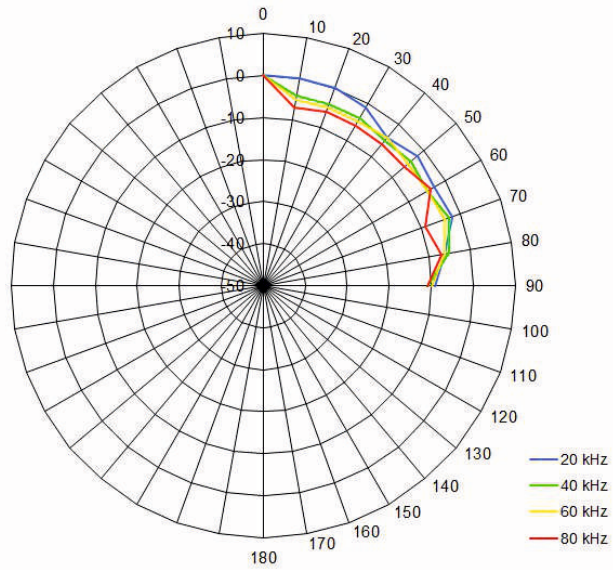
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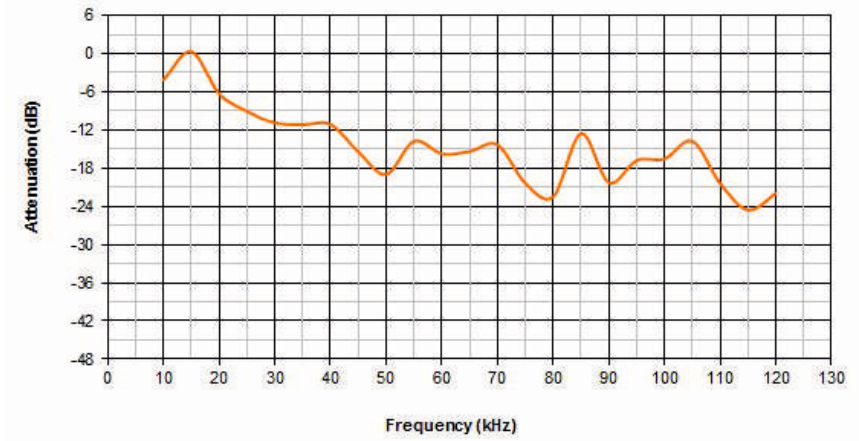
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Directivity



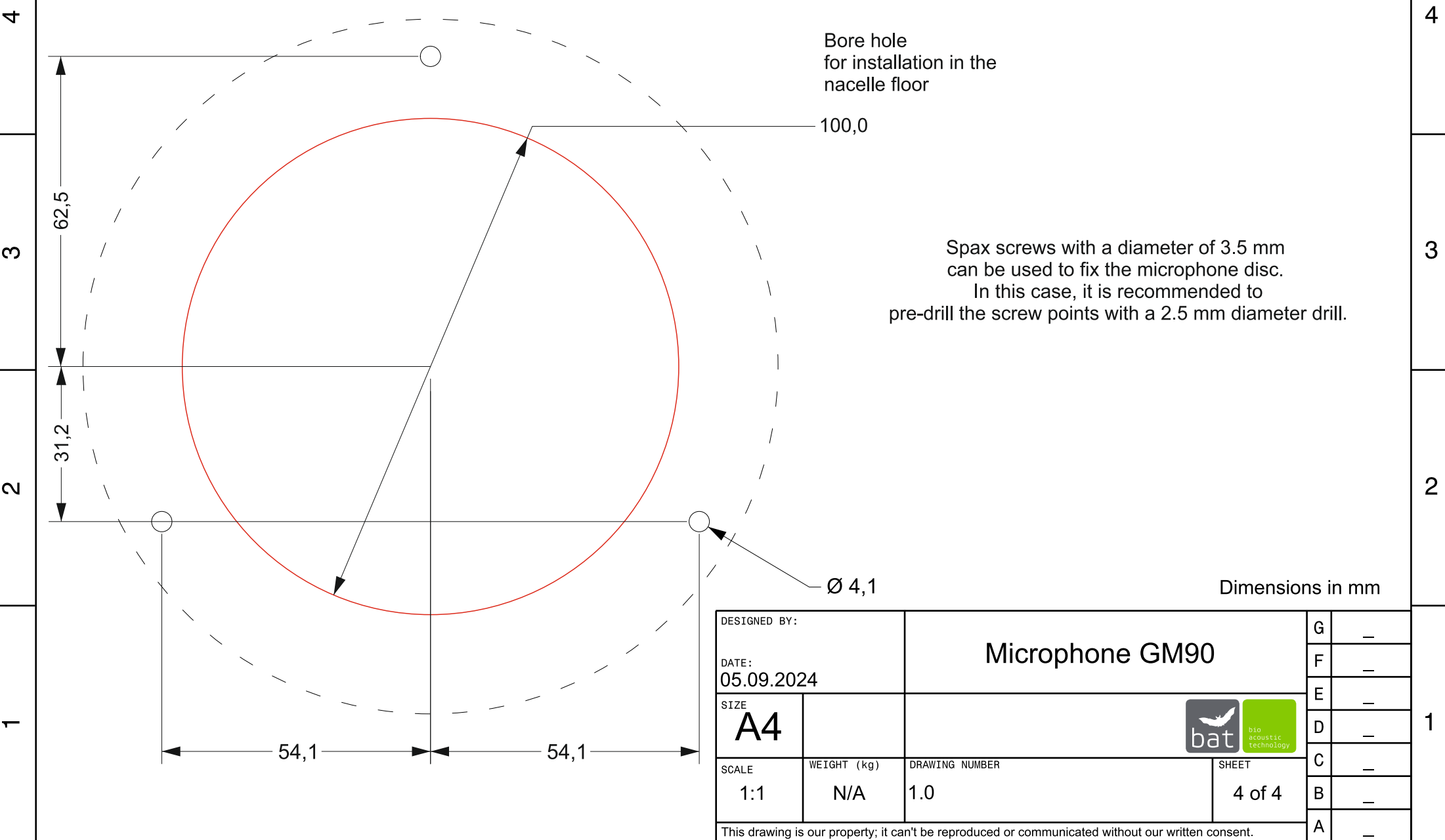
Frequency Response



DESIGNED BY:		Microphone GM90		G	—
DATE: 05.09.2024				F	—
SIZE A4				E	—
SCALE	WEIGHT (kg) N/A			D	—
	DRAWING NUMBER 1.0	SHEET 3 of 4	C	—	
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				A	—

F E D C B A

Drilling Plan




Bore hole
for installation in the
nacelle floor

100,0

Spax screws with a diameter of 3.5 mm
can be used to fix the microphone disc.
In this case, it is recommended to
pre-drill the screw points with a 2.5 mm diameter drill.

Ø 4,1

Dimensions in mm

DESIGNED BY:		Microphone GM90		G	—
DATE: 05.09.2024				F	—
SIZE A4				E	—
SCALE 1:1	WEIGHT (kg) N/A			DRAWING NUMBER 1.0	SHEET 4 of 4
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				B	—
				A	—

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