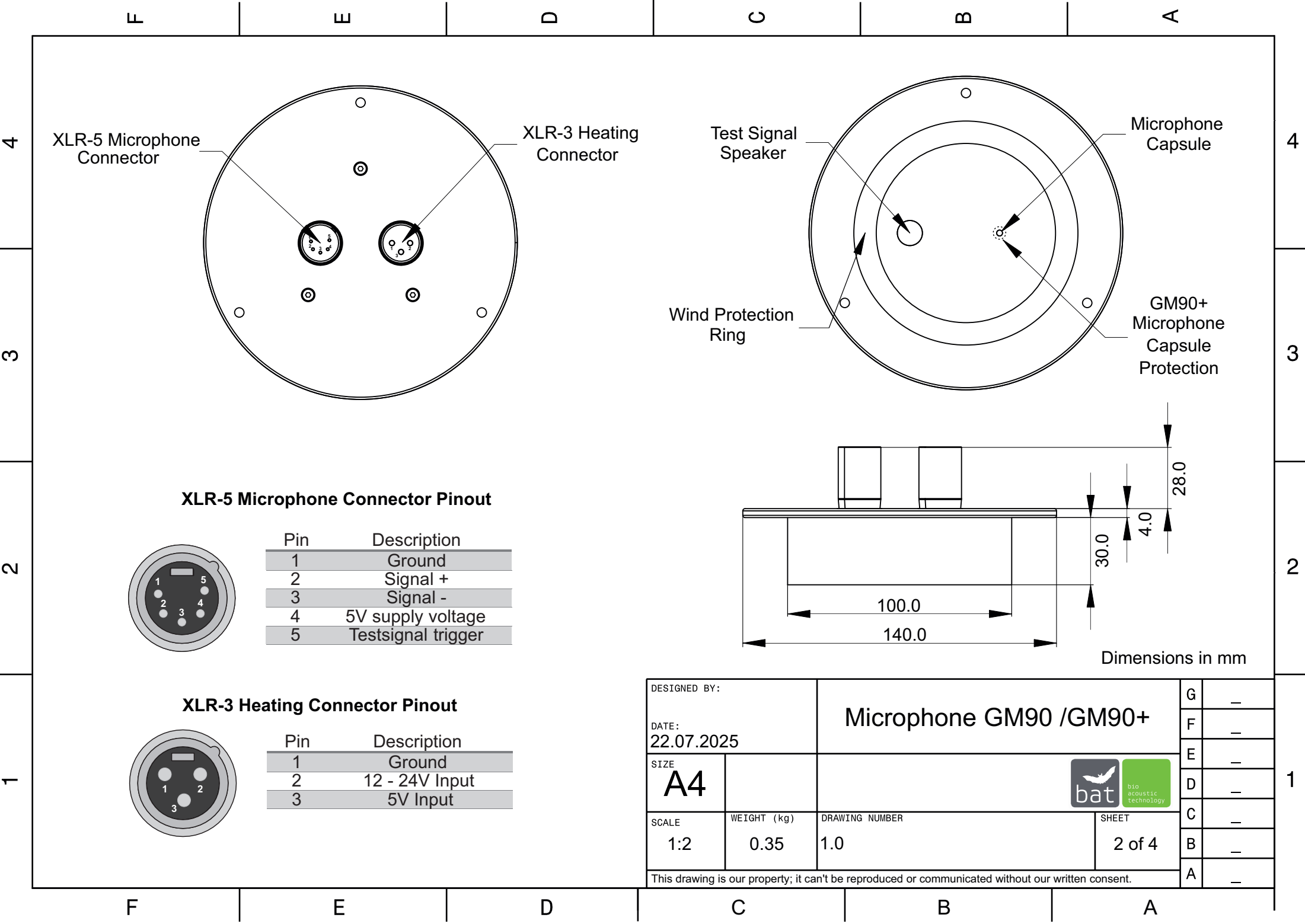


	F	E	D	C	B	A																																								
4	<div>Features</div> <div>Knowles Electret FG - Microphone Capsule</div> <div>Directivity: Omnidirectional</div> <div>Differential Preamplifier</div> <div>Approximate Sensitivity: 500 mV / PA</div> <div>Approximate input-referred self-noise level (bandwidth: 30-50 kHz): 26 dB SPL</div> <div>Preamplifier Power Supply: 5 V / 25 mA provided by UltraSoundGate xx16Hnbm</div> <div>Microphone Heating</div> <div>Heating Power Supply:</div> <div><div>- 5 V / 500 mA (provided by USB Power Adapter)</div><div>- 19 V / 130 mA (provided by BATmode)</div></div> <div>40 kHz Test Signal Speaker</div> <div>Wind Protection Ring</div> <div>Combined Microphone and Testsignalspeaker Connector: Male XLR-5 Plug</div> <div>Heating Connector: Male XLR-3 Plug</div> <div>Diameter 100mm (Wind Protection Ring) / Diameter 140mm (Mounting Plate)</div> <div>Installation in the Floor of the Nacelle of Wind Turbines via 100mm Drill-Hole</div> <div>Rating: IP65</div> <div>Materials:</div> <div><div>- XLR Connectors - Stainless Steel</div><div>- Housing - Aluminium</div></div> <div>GM90 compatible with ProBat and the RENEBAT-Projects</div> <div>GM90+ with microphone capsule protection</div>							4																																						
3								3																																						
2								2																																						
1	<table><tr><td colspan="2">DESIGNED BY:</td><td colspan="2" rowspan="2">Microphone GM90 /GM90+</td><td>G</td><td>—</td></tr><tr><td colspan="2">DATE: 22.07.2025</td><td>F</td><td>—</td></tr><tr><td>SIZE A4</td><td></td><td colspan="2" rowspan="2"></td><td>E</td><td>—</td></tr><tr><td></td><td></td><td>D</td><td>—</td></tr><tr><td>SCALE</td><td>WEIGHT (kg) 0.35</td><td colspan="2">DRAWING NUMBER 1.0</td><td>C</td><td>—</td></tr><tr><td></td><td></td><td colspan="2" rowspan="2">SHEET 1 of 4</td><td>B</td><td>—</td></tr><tr><td colspan="4">This drawing is our property; it can't be reproduced or communicated without our written consent.</td><td>A</td><td>—</td></tr></table>						DESIGNED BY:		Microphone GM90 /GM90+		G	—	DATE: 22.07.2025		F	—	SIZE A4		 		E	—			D	—	SCALE	WEIGHT (kg) 0.35	DRAWING NUMBER 1.0		C	—			SHEET 1 of 4		B	—	This drawing is our property; it can't be reproduced or communicated without our written consent.				A	—		1
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XLR-5 Microphone Connector

XLR-3 Heating Connector

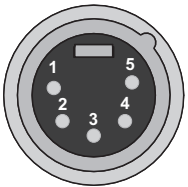
Test Signal Speaker

Microphone Capsule

Wind Protection Ring

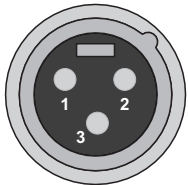
GM90+ Microphone Capsule Protection

XLR-5 Microphone Connector Pinout

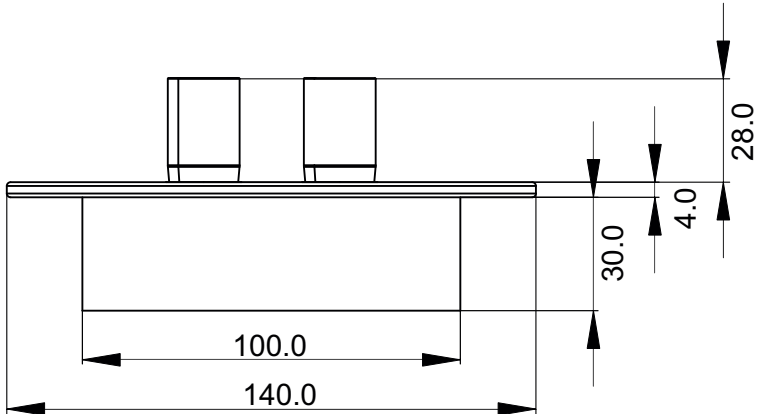


Pin	Description
1	Ground
2	Signal +
3	Signal -
4	5V supply voltage
5	Testsignal trigger



XLR-3 Heating Connector Pinout



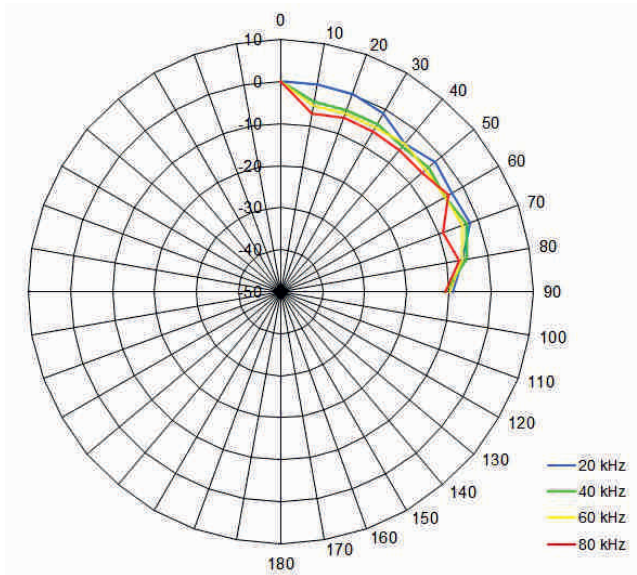
Pin	Description
1	Ground
2	12 - 24V Input
3	5V Input



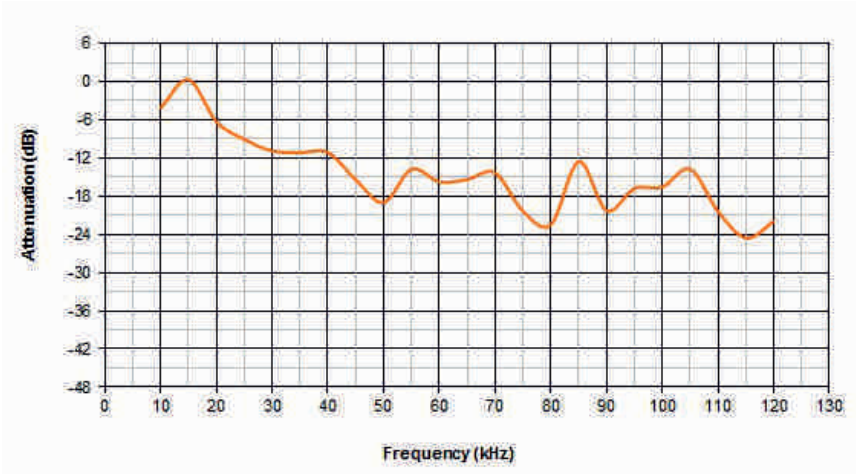
Dimensions in mm


DESIGNED BY:		Microphone GM90 /GM90+		G	—
DATE: 22.07.2025				F	—
SIZE A4		 		E	—
				D	—
SCALE 1:2	WEIGHT (kg) 0.35	DRAWING NUMBER 1.0		C	—
				B	—
		SHEET 2 of 4		A	—
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Directivity without microphone capusule protection



Frequency Response without microphone capusule protection



DESIGNED BY:		Microphone GM90 /GM90+		G	—
DATE: 22.07.2025				F	—
SIZE A4				E	—
				D	—
SCALE	WEIGHT (kg) 0.35			C	—
		DRAWING NUMBER 1.0	SHEET 3 of 4	B	—
This drawing is our property; it can't be reproduced or communicated without our written consent.				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 /GM90+		G	—	
DATE: 22.07.2025				F	—	
SIZE A4				E	—	
				D	—	
SCALE 1:1	WEIGHT (kg) 0.35	DRAWING NUMBER 1.0		SHEET 4 of 4	C	—
This drawing is our property; it can't be reproduced or communicated without our written consent.				B	—	
				A	—	

F

E

D

C

B

A

4

3

2

1

4

3

2

1