GRAS 146AE

1/2" CCP





3.15 Hz - 20 kHz 18 dB(A) - 133 dB 50 mV/Pa -40 - +125°C 10 - 90% IP67 GRAS 146AE 1/2 125°C BNC

-40



Technology

GRAS 146AE	•
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD	• 125°C
LED LED TEDS LED TEDS LED 146AE 1P67	GRAS 146AE 1/2" (CCP) CCP CCP NVH
146AE GRAS 46AE -40 125°C	•
	•
GRAS (HALT)	 IP67 GRAS BNC IP67
HALT NVH 8g 60 -40°C +125°C 150 100 100	146AE RA0357 10 kHz
IP67 □□	
146AE IP67	GRAS 46AE IEC
146AE NVH	
•	IP55
•	□□□□□□ GoPro™ Picatinny
/CAE	□□□□□ 146AE



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• CCP

146AE BNC 4 mA

146AE IEEE 1451.4 TEDS v. 1.0

TEDS

GRAS 42AG

GRAS 42AP

www.grasacoustics.com/e-data

GRAS HALT

(HALT)

HALT

GRAS

GRAS GRAS

GRAS GRAS

GRAS GRAS DANAK ISO

17025



Specifications

Polarization/Connection		0 V / CCP		
Frequency range (±1 dB)	Hz	5 to 10 k		
Frequency range (±2 dB)	Hz	3.15 to 20 k		
Dynamic range lower limit with GRAS preamplifier	dB(A)	18		
Dynamic range upper limit with GRAS CCP preamplifier	dB	133		
Set sensitivity @ 250 Hz (±2 dB)	mV/Pa	50		
Set sensitivity @ 250 Hz (±2 dB)	t sensitivity @ 250 Hz (±2 dB) dB re 1V/Pa			
Output impedance	Ω	< 50		
Power supply min. to max.	mA	2 to 20		
Output Voltage Swing, min. @ 28 V CCP voltage supply	Vp	8		
DC bias voltage, typ.	V	16		
Microphone venting		Rear		
IEC 61094-4 Designation		WS2F		
Temperature range, operation	°C / °F	-40 to 125 / -40 to 257		
IEC 61672 compliance		Class 1		
Temperature range, storage	°C / °F	-40 to 85 / -40 to 185		
Temperature coefficient @250 Hz	dB/°C / dB/°F	0.01 / 0.006 (typically)		
Static pressure coefficient @250 Hz	dB/kPa	-0.003		
Humidity range non condensing	% RH	10 to 90		
Influence of axial vibration @1 m/s²	dB re 20 μPa	66		
TEDS UDID (IEEE 1451.4)		I27-0-0-0U		
Connector type		BNC		
CE/RoHS compliant/WEEE registered		Yes/Yes/Yes		
Weight	g / oz	35 / 1.23		
IP rating		IP67***		
Influence of humidity @250 Hz (10 -90% RH)		dB <-0.3		



GRAS HALT Test Parameters*

Humidity 90%	@50°C	48 hours
Drop - horizontal orientation of microphone, attached to 2 kg load	m	1.5
Drop - vertical, grid downwards, attached to 2 kg load	m	1.5
Drop - tumbling 1 meter	times	100
Vibration - horizontal and vertical	@8g	60 hours
IP rating**		IP67***

^{*} HALT "GRAS HALT"

IP IEC 60529:2013 DELTA FORCE Technology Venlighedsvej 4, 2970 Hørsholm, Danmark www.delta.dk



GRAS Sound & Vibration

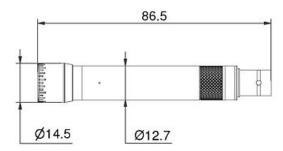


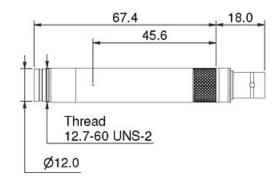
^{**} IEC 60529

^{***}IP67 1

Dimensions

Dimensions in mm





GS0847 146AE



Ordering info

Included items

GRAS RA0341

GRAS CA2300

Calibration Adapter

Optional items

G	RAS RA0357	Random Incidence Corrector for 146AE
GI	RAS RA0504	GoPro adapter
GI	RAS RA0340	Dust, Oil and Water resistant protection grid
GI	RAS RA0354	Dust, Oil and Water resistant protection grid, package with 5 PCS
GI	RAS AM0391-1	High-Temperature Windscreen for 146AE, Click-Mount
GI	RAS AM0391-2	High-Temperature Windscreen for 146AE, Click-Mount, 5 pcs
GI	RAS AA0102	3 m BNC-BNC waterproof cable
GI	RAS AA0103	10 m waterproof BNC-BNC cable
GI	RAS AA0107	1 m waterproof/high temperature BNC-BNC cable
GI	RAS AA0108	3 m waterproof/high temperature BNC-BNC cable
GI	RAS AA0109	10 m waterproof/high temperature BNC-BNC cable
GI	RAS AA0110	30 m waterproof/high temperature BNC-BNC cable

Accredited Calibration



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About GRAS Sound & Vibration

GRAS is a worldwide leader in the sound and vibration industry. We develop and manufacture state-of-the-art measurement microphones and related equipment for industries where acoustic measuring accuracy and repeatability are of the utmost importance. This includes applications and solutions for customers within the fields of aerospace, automotive, audiology, consumer electronics and other highly demanding industries. GRAS microphones are designed to live up to the high quality, durability and accuracy that our customers have come to expect, trust and require.

GRAS Sound & Vibration is represented through subsidiaries and distributors in more than 40 countries and is part of Axiometrix Solutions, a leading test solutions provider comprised of globally recognized measurement brands. Read more at www.grasacoustics.com

GRAS

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