

**RE90P-12**  
**RE90P-18**  
**Condenser Cardioid**  
**Gooseneck Microphone**



**Key Features:**

- RF Shield provides superior RFI/GSM shielding.
- Small size - unobtrusive for podium applications.
- Frequency and cardioid polar response uniform across the range, for natural sound and high resistance to feedback.
- Low, 200-ohm output allows long cable runs.
- Optional CPSM podium shock mount provides more than 15 dB of mechanical shock isolation at 200 Hz.



**General Description:**

The Electro-Voice RE90P-12 and RE90P-18 podium microphones are phantom-powered “back-electret” miniature condenser gooseneck microphones. The back-electret feature provides greater sensitivity, wider frequency response, and superior immunity from handling noise than a diaphragm-electret microphone. The RE90P-12 and RE90P-18 are highly-shielded from RFI/GSM interference, and are mechanically designed for quick, easy mounting to a lectern, pulpit or podium equipped with a bulkhead female XLR-type 3-pin receptacle. For permanent installation, optional fixed (FMK flange-mount kit) and shock-mounted (CPSM shock-mount kit) accessories are also available. The RE90P-12 and RE90P-18 are designed for sound reinforcement applications. The frequency response is tailored for full-range sound reproduction with natural sound pick-up optimized for close-up use. The small diameter gooseneck has two supple joints and a rigid center tube. The rigid tube prevents unsightly twisting of the gooseneck but permits the user to exactly position the microphone. The electronics housing has a 3/4 – inch diameter base terminated with an XLR-type 3-pin connector which allows the microphone to be plugged directly into an existing panel-mount XLR-type receptacle. The electronics’ output circuit utilizes a transformerless balanced construction with a low-output impedance, which is typically 200 ohms. This permits very long cable runs without degrading the microphone performance. The RE90P-12 and RE90P-18 are designed to be phantom powered with a wide voltage range, 9-52 V dc (DIN Standard 45 596).

**Technical Specifications:**

Generation Element:	Condenser, back electret
Frequency Response:	100 Hz to 15,000 Hz (see chart)
Polar Pattern: (see chart)	Cardioid
Sensitivity, Open Circuit Voltage, 1 kHz:	4.5mV/Pascal
Dynamic Range:	102 dB SPL
Equivalent Output Noise:	<28 dB SPL “A” weighted (0 dB=20 micropascals)
Output Impedance, 1 kHz:	200 ohms
Power Requirements:	9 to 52 Volt Phantom Supply
Current Consumption:	<5 mA with P48v supply
Polarity:	A positive pressure on the diaphragm produces a positive voltage on output pin 2 (+)
Finish:	Nonreflecting Black
Environmental Conditions:	Relative Humidity 0-50%: -29° to 74°C (-20° to 165°F) Relative Humidity 0 to 95%: -29° to 57°C (-20° to 135°F)
Mounting:	Male XLR-type 3-pin Connector
Dimensions, Gooseneck and Head Length:	RE90P-12 = 280.7 mm (11.05”) RE90P-18 = 443.2 mm (17.45”)
Dimensions, Other:	Max. Head Diameter = 12.7 mm (0.5”) Gooseneck Diameter = 6.4 mm (0.25”) Elect. Module Dia. = 20 mm (0.79”) Connector Diameter = 19 mm (0.75”)
Net Weight:	RE90P-12 = 182 g (6.4 oz.) RE90P-18 = 244 g (8.6 oz.)
Shipping Weight:	RE90P-12 = 182 g (6.4 oz.) RE90P-18 = 244 g (8.6 oz.)
Accessories Included:	Windscreen
Optional Accessories:	FMK Flange-Mount Kit CPSM Shock-Mount Kit



## Application Notes:

The RE90P-12 and RE90P-18 gooseneck microphones are designed for sound reinforcement applications requiring high quality, wide response and a uniform polar pattern in a slender, adjustable gooseneck microphone. The RE90P-12 and RE90P-18 can be employed on lecterns, podiums, and on mixing consoles as a talk-back microphone or other applications which require a quick plug-in gooseneck microphone. Applications of close or normal miking of speech at podiums, lecterns or pulpits normally require a windscreen to control breath noise and P-popping or, in some cases, wind noise from circulating air. A small two-stage foam windscreen is included with the RE90P-12 and RE90P-18 mics. This two-stage filtering provides greater isolation from P-pop noise in a smaller package. In some locations, there is a desire to permanently attach the foam windscreen to the microphone to prevent loss. Included with the microphone are two strips of double-sided tape (the second strip is a spare). To permanently attach the foam windscreen, first crack and peel off the protective back layer of one strip of tape. Apply the tape to the transducer by wrapping it around the gooseneck adapter. The eight screened ports on the transducer should be well above the tape so as to not disturb the sound reception. Next remove the protective front layer of the attached tape. Now, pull the windscreen down over the tape, stopping when the end of the foam is even with the flexible gooseneck. **Caution: the windscreen foam is delicate and therefore easily ripped by applying too much force.**

## Architects' and Engineers' Specifications:

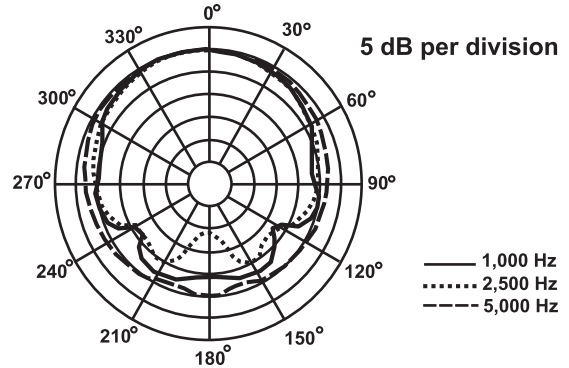
### RE90P-12

The microphone shall be a single-D cardioid back-electret condenser type with frequency response of 100 to 15,000 Hz. The microphone shall produce a high degree of output signal quality despite the possible near-field presence of RF (radio frequency) devices such as cell phones. The microphone shall have a 200-ohm nominal balanced output, with an output level of 4.5mV/pascal. The microphone shall have a back-electret generating element whose output shall not be appreciably affected by temperature extremes from -17.8°C (0°F) to 54.4°C (130°F) and/or by humidity extremes. Dimensions shall be 20 mm (0.79 in.) diameter and 418 mm (16.5 in.) long. The microphone shall include a 302-mm (11.9-in.) gooseneck with professional XLR-type 3-pin style terminating connector and an external windscreen. The microphone shall be of metal construction. The Electro-Voice RE90P-12 is specified.

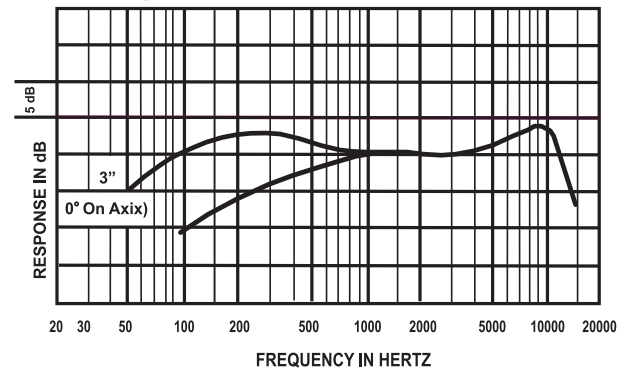
### RE90P-18

The microphone shall be a single-D cardioid back-electret condenser type with frequency response of 100 to 15,000 Hz. The microphone shall produce a high degree of output signal quality despite the possible near-field presence of RF (radio frequency) devices such as cell phones. The microphone shall have a 200-ohm nominal balanced output, with an output level of 4.5mV/pascal. The microphone shall have a back-electret generating element whose output shall not be appreciably affected by temperature extremes from -17.8°C (0°F) to 54.4°C (130°F) and/or by humidity extremes. Dimensions shall be 20 mm (0.79 in.) diameter and 571 mm (22.50 in.) long. The microphone shall include a 454-mm (17.9-in.) gooseneck with professional XLR-type 3-pin style terminating connector and an external windscreen. The microphone shall be of metal construction. The Electro-Voice RE90P-18 is specified.

## Frequency Response:



## Polar Response:



## Mounting Accessories:

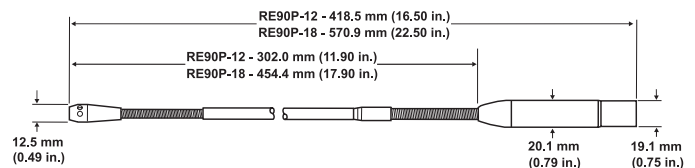
### CPSM Shock-Mount Kit

The Electro-Voice CPSM shock mount effectively isolates the mounted RE90P-12 and RE90P-18 podium microphones from shock-induced vibrations that would be experienced on podiums, pulpits, table and desktops, plus it provides theft-resistant security. Compared to hard mounting, the CPSM shock mount provides 15 dB (over 5 times) of shock isolation at 200 Hz.

### FMK Flange-Mount Kit

For installations which do not require a shock mount, the FMK flange mount is designed for quick installation on podiums, pulpits, table and desk tops, and provides theft-resistant security.

## Dimension Drawing



## Warranty:

Please refer to the Limited Warranty information found at: [www.electrovoice.com](http://www.electrovoice.com)

# Electro-Voice

12000 Portland Avenue South, Burnsville, MN 55337  
Phone: 952/884-4051, Fax: 952/884-0043

[www.electrovoice.com](http://www.electrovoice.com)

© Bosch Communications Systems

08/2011

Part Number F.01U.179.668 Rev 08



U.S.A. and Canada only. For customer orders, contact Customer Service at: **800/392-3497 Fax: 800/955-6831**

Europe, Africa, and Middle East only. For customer orders, contact Customer Service at: **+ 49 9421-706 0 Fax: + 49 9421-706 265**

Other International locations. For customer orders, Contact Customer Service at: **+ 1 952 884-4051 Fax: + 1 952 887-9212**

For warranty repair or service information, contact the Service Repair department at: **800/685-2606**

For technical assistance, contact Technical Support at: **866/78AUDIO**

Specifications subject to change without notice.