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product sheet

Rocking Armature range

R4/R9, M4/M9, M4, R3/M3/R10/M10

- Efficient, sensitive
- Reliable & rugged
- Lightweight construction
- From a specialist in design & manufacture
- Various terminations available:
Locknuts for spade or ring terminals
Tags for slide terminals or soldering
- Weather proofing
Sealed or Anodised

Hosiden Besson is the foremost specialist in the design, manufacture and worldwide supplier of rocking armature transducers. These transducers fall into two major types; receivers and microphones, in two basic sizes (*see technical information overleaf*).

This comprehensive range of capsules meet the majority of telephony applications, and we provide an exclusive service of design to cover all types of application that suit this technology.

The rocking armature technology provides an efficient, sensitive, highly reliable and rugged capsule of light weight construction, which can be used in all types of telephone handsets, aviator headsets, diving helmets and fist microphones where these inherent characteristics are of paramount importance.

Our quality control has gained us the respect for reliability from British Telecom, numerous overseas authorities and many leading manufacturers of commercial and military communication equipment.



R4/M4AWZ



R3AWZ

R4/M4/R9/M9
R3/M3/R10/M10



Types manufactured		
Standard		
Type	Impedance Z(ohms)	Remarks
R3	5-4800	Standard aluminium case
M3	5-4800	(untreated) terminals –
R4	5-4800	6BA nuts
M4	5-4800	
R3AWZ	300/2400	Fully tropicalised NATO code 5965-99-620-5675 (Z300)
R4AWZ	75/300/2400	Fully tropicalised NATO code 5965-99-940-2368 (Z300)
M4AWZ	75/300/2400	Fully tropicalised NATO code 5965-99-901-1184 (Z300)

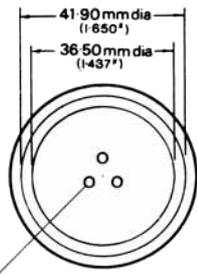
Types manufactured		
Standard		
Type	Impedance Z(ohms)	Remarks
R9	300/600	New type construction
M9	300/600	terminals – connection tabs
R10	300/600	2.8 x 0.5mm
M10	300/600	
3T	150	Receiver to BT spec. S506C
4T	150	Receiver to BT spec. S507F
2/3T	150	Inductive coupler for hard of hearing for use in Handset Nos. 15 & 16 series



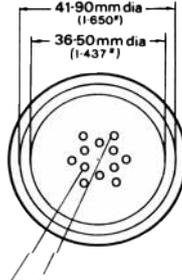
FM 00755

Technical data

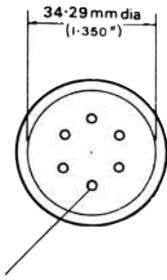
R4/R9, M4/M9, M4, R3/M3/R10/M10



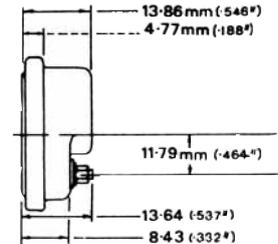
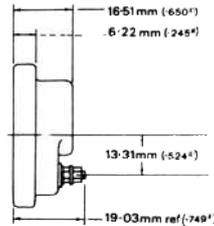
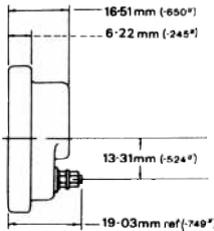
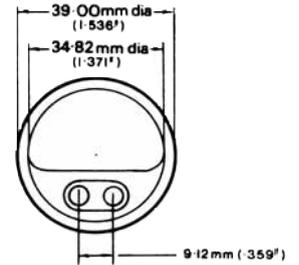
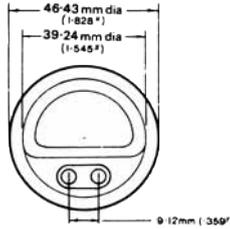
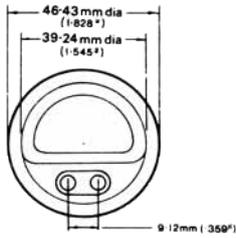
3 Holes 3.17mm (.125") Dia.
Equi-spaced on 7.92mm (.312") PCD.
(Holes for R9 not shown).



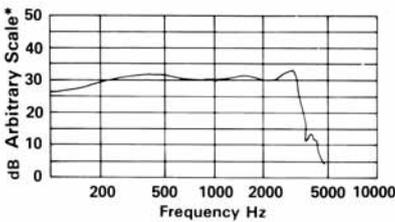
6 Holes 2.36 (.093") Dia.
Equi-spaced on a 13.74mm (.541") PCD as shown.



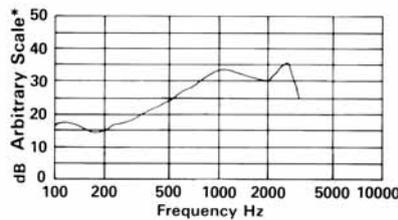
6 Holes 3.45mm (.136") Dia.
Equi-spaced on 19.05mm (.750") PCD.
(Hole for R10 & M10 not shown)



Frequency response Curves



Receiver R4*Z***(R3 similar with BT)



Microphone

Receivers

Frequency response ± 3 dB from 200 to 3500 Hz (see above)

Sensitivity 120dB SPL ± 2 dB/mW available power

Impedance (Z) Measured at 1000Hz, nominal $\pm 25\%$ to customers requirements (See ordering codes)

Overload capacity 4VA momentarily without damage

Power handling capacity 200mVA

Distortion Will not exceed 5% at 1mW

Output from normal speech N/A

DC resistance Dependent on normal impedance, for example: 21 ohms at Z150, 44 ohms at Z300

Insulation Not less than 10M Ω at 250V DC between the two terminals (linked) and the metal body of the unit

Microphones

Frequency response 3dB/Octave rise from 200 to 3500Hz (see above)

Sensitivity Varies according to impedance

Impedance (Z) As receiver

Overload capacity As receiver

Power handling capacity N/A

Distortion Will not exceed 2% at 94dB SPL*

Output from normal speech Varies according to impedance (eg. Z300 Ω approx. 0.5mV at 2.5cm)

DC resistance As receiver

Insulation As receiver

* When used in BT No. 3 or 16 handset

Alternative microphone types

With our policy of continuous innovation and development may we recommend contact with us before making a final choice.

Ordering codes

R4 AZ150
M4BZ300

Grade
A = BT spec. & BSI requirements.
B = High commercial spec.
AW = Tropical finish to NATO spec.

Receiver/Microphone type
R3,R4,R9,R10/M3,M4,M9,
M10

Use suffix P if pressure equalising hole is required

Impedance
5 - 4800 ohms

Weight range

15 - 50 grammes approximately according

Types R3, M3, R4 & M4 are fitted with 6BA terminal nuts.
Types R9, M9, R10 & M10 are fitted with connection tabs 2.8 x 0.5mm.

Specific capsule details can be supplied in request