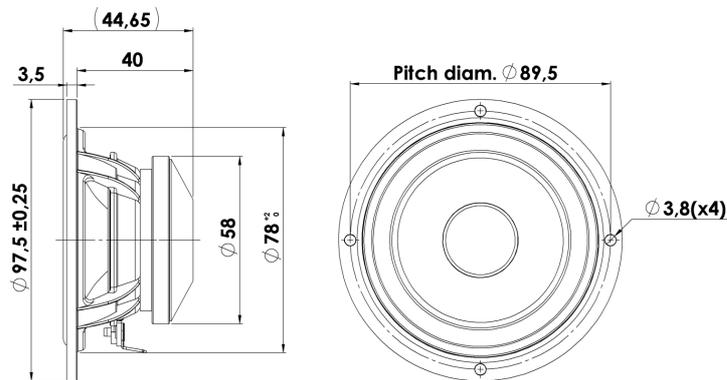




## FULLRANGE

## 10F/8424G00

The Discovery series offer traditional design, superior sound, a solid construction, and a wide range of variants. Combining these elements - plus a wealth of technical features and finesses - gives our customers the possibility of acquiring a tailor-made Scan-Speak solution with very good performance at a reasonable low price point!



### KEY FEATURES:

- Very wide Frequency Range
- Coated NRSC Fibre Glass Cone (patent)
- Compact Size, Neo magnet, Alu. Chassis
- High Sensitivity 87dB / 2,83V
- SBR Rubber Surround
- Copper Cap on Pole Piece

#### T-S Parameters

Resonance frequency [fs]	90 Hz
Mechanical Q factor [Qms]	3.49
Electrical Q factor [Qes]	0.41
Total Q factor [Qts]	0.37
Force factor [Bl]	4.8 Tm
Mechanical resistance [Rms]	0.45 kg/s
Moving mass [Mms]	2.77 g
Suspension compliance [Cms]	1.13 mm/N
Effective diaph. diameter [D]	68 mm
Effective piston area [Sd]	36 cm <sup>2</sup>
Equivalent volume [Vas]	2.1 l
Sensitivity (2.83V/1m)	86.6 dB
Ratio Bl/√Re	1.99 N/√W
Ratio fs/Qts	245 Hz

#### Notes:

IEC specs. refer to IEC 60268-5 third edition.  
All Scan-Speak products are RoHS compliant.  
Data are subject to change without notice.  
Datasheet updated: February 22, 2011.

#### Electrical Data

Nominal impedance [Zn]	8 Ω
Minimum impedance [Zmin]	6.5 Ω
Maximum impedance [Zo]	55.2 Ω
DC resistance [Re]	5.8 Ω
Voice coil inductance [Le]	0.13 mH

#### Power Handling

100h RMS noise test (IEC 17.1)	15 W
Long-term max power (IEC 17.3)	30 W

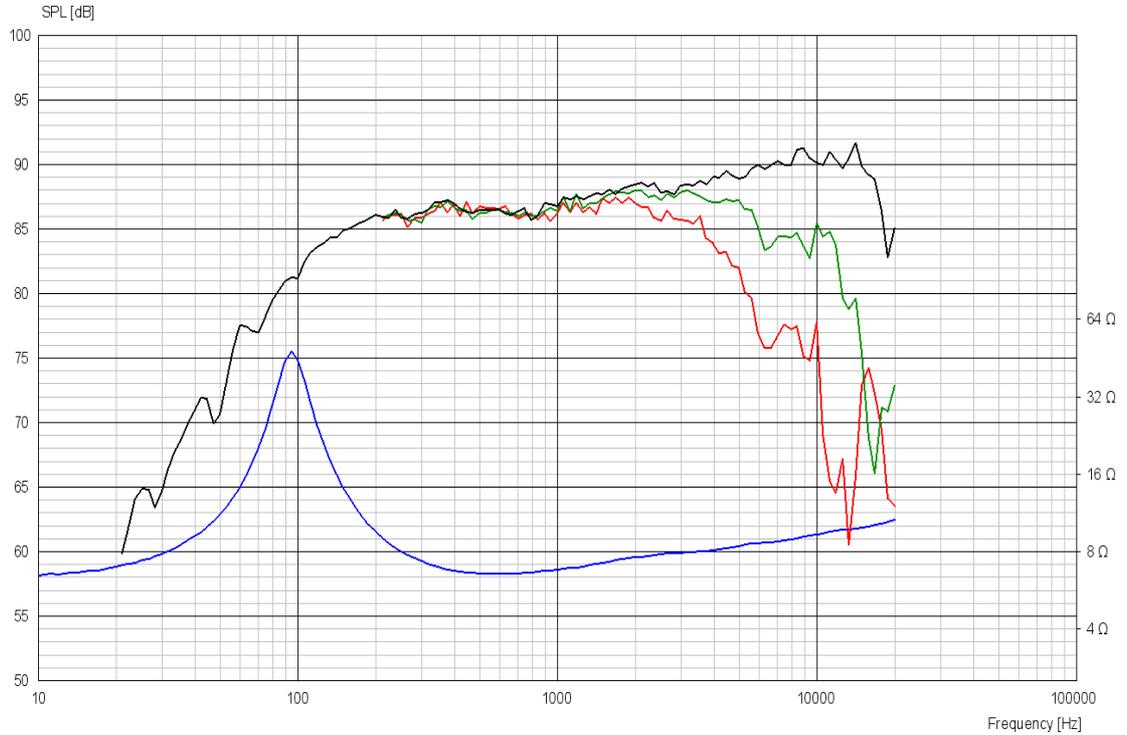
#### Voice Coil and Magnet Data

Voice coil diameter	20 mm
Voice coil height	9.2 mm
Voice coil layers	2
Height of gap	4 mm
Linear excursion	± 2.6 mm
Max mech. excursion	± 7 mm
Unit weight	0.3 kg

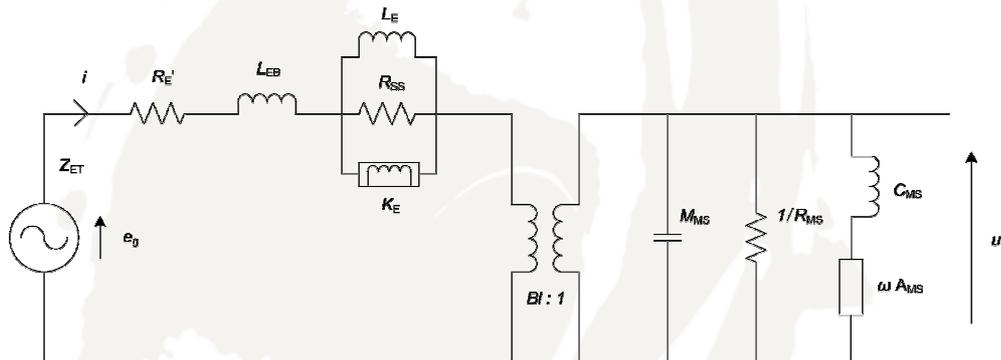


FULLRANGE

10F/8424G00



### Advanced Parameters (Preliminary)



**Electrical data:**

Resistance [Re']	5.70 Ω
Free inductance [L <sub>eb</sub> ]	0.0323 mH
Bound inductance [L <sub>e</sub> ]	0.346 mH
Semi-inductance [K <sub>e</sub> ]	0.0342 SH
Shunt resistance [R <sub>ss</sub> ]	4.72 Ω

**Mechanical Data**

Force Factor [Bl]	4.43 Tm
Moving mass [M <sub>ms</sub> ]	2.93 g
Compliance [C <sub>ms</sub> ]	1.02 mm/N
Mechanical resistance [R <sub>ms</sub> ]	0.260 kg/s
Admittance [A <sub>ms</sub> ]	0.167 mm/N