



*to music with love...*



**HIQUPHON**

*to music with love...*

Thank you for buying this Hiquphon product

Yours sincerely

.....  
**Oskar Wroending (OW)**  
 Manager and single owner of

**HIQUPHON, Denmark**

Denmark is a Kingdom in Scandinavia, Europe  
and a member of the European Union

Hiquphon, Purkaervej 80, 9490 Pandrup, Denmark.  
Phone: +45 3086 1000

<http://www.hiquphon.eu>  
[info@hiquphon.dk](mailto:info@hiquphon.dk)

*Copyright (c) 1998...2023 All rights reserved.*



# OW 1-FS

Including magnetic oil (FS)

“classic black”

High-End

20 mm (3/4”) Soft Dome Tweeter  
by Hiquphon

Matched within 0.5 dB in frequency area 2 - 20 kHz

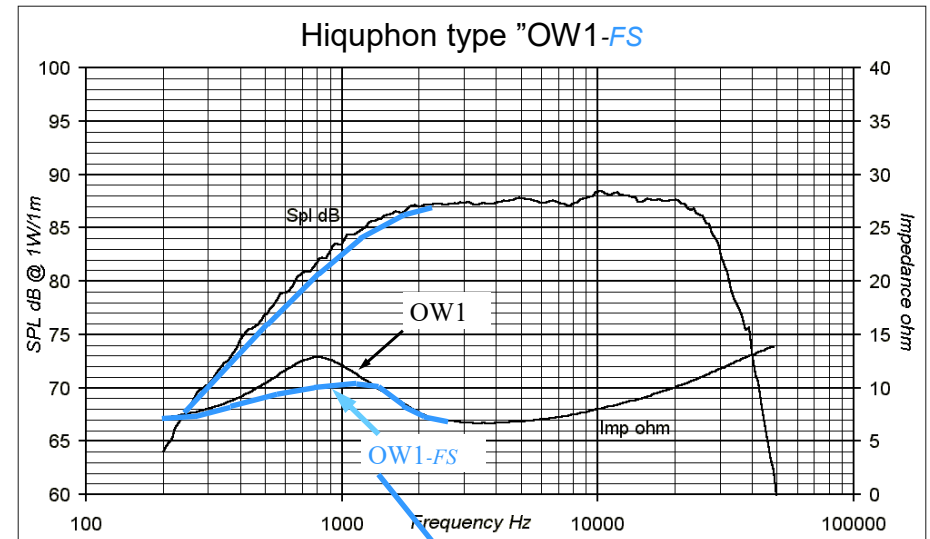
*OW1 is a soft dome tweeter (3/4”) offering unique broad banded frequency response and great analytic capability. A very musical dome tweeter!*

*A natural choice for 2-way as well as for 3-way high-end loudspeakers.*

*Because of its extremely broad banded response, OW1 is used in a great number of high-end 2-way loudspeaker designs.*

*Although designed for private home loudspeakers, OW1 has proven well suited and highly reputed as high-frequency transducer in studio monitors. Mainly because of its very neutral, linear and low distorted behavior, as well as its high production quality and close matching.*

Average acoustical data		
Nominal sensitivity SPL (1W/1m)	dB	87
Recommended frequency range *)	kHz	2.5 - 25
Frequency range nominal 87 dB -1 dB	kHz	1.5 - 22
Frequency range nominal 87 dB -3 dB	kHz	1.0 - 25
Nominal resonance frequency Fs +/-10%	Hz	1000
Nominal impedance (at 10 kHz)	ohm	8
Minimum impedance (at ~ 3.5 kHz)	ohm	6.7
DC resistance (at 0 Hz)	ohm	5.8
Peak impedance +/- 10% at Fs	ohm	14
Voice coil inductance	mH	0.03
Rated power *)	Watt	100
THD + N at 1W sinus / 2.5-25 kHz	%	<0.15
Acoustical center relative to front	mm	-11.3
Dome diaphragm diameter nominal	mm	20
Voice coil diameter nominal	mm	20
Voice coil winding height	mm	3
Air gap height	mm	1.2
Peak - peak movement max recomm.	mm	1.8
Flux gap density	Tesla	1.4
Effective cone area	mm <sup>2</sup>	380
Dynamic moving mass	mg	175
Measuring conditions: Temp / humidity	°C&%rH	20 / 50
*) Using crossover with 12 dB or higher		
Mechanical data		
Diameter flange (all over)	mm	94
All over height of unit	mm	41.5
Diameter body (Box hole: add 1 mm)	mm	68,5
Thickness flange	mm	3.7
3 screw holes on dividing circle dia.	mm	82.2
Diameter screw holes, countersunk	mm	4.3
Leads dimension max accepted	mm	2.5
Color, chassis, standard	#	black
Color, dome diaphragm	#	black
Gross weight	kg	0.36



## Special features OW 1-FS:

(FS version = damped with magnetic oil in air gap)

- Excellent frequency linearity 2 – 20 kHz +/- 1 dB (+/- 0.5 dB typical)
- Excellent phase linearity
- Smooth roll-off at high frequencies
- Low and well damped resonance frequency
- Well controlled damped low frequency response, soft raising
- Very broad-banded (1.0 kHz to 25 kHz nominal –3 dB or better)
- Fast transient response
- Very low distortion
- A-periodic damped moving system
- Exponential phase-correction horn-loaded
- Saturated, rounded magnet gap for low magnetic distortion
- Perfect sealed housing
- Heavy duty connectors for up till 2.5 mm lead wire, non-vibrating, air tight
- Large soldering joints using large-surface copper plated PCB inside
- Shock absorbing construction
- Selected as matched pairs within 0.5 dB between 2 kHz—20 kHz
- Original data curves supplied as part of the package
- Packed as two-in-a-box with original curves included, ready for resale.
- Beautiful sound capabilities
- Please observe that this tweeter is NOT magnetic shielded!

♥ *to music with love...*