Kockum Sonics

SUPERTYFON[®] MKT150/110 with Valve Unit TV 784

A high-power whistle according to IMO for vessels 200 m or more in length



General Information

Nowadays, each vessel from 12 metres and more (length over all) must be equipped with sound signal appliances which are type approved according to the IMO regulations. Hence, one part of the responsibility is the manufacturer's, but still one important part is the shipowner's regarding the choice of appropriate equipment for the vessel in question, the installation and use.

The reason behind the stipulated use of 1/3 octave band filters when measuring is connected to the theory of the hearing sense. A "complex" sound like that from TYFON® or SUPERTYFON consists of several harmonic components. Consequently, the total SPL value is considerably higher than the measured (stipulated) 1/3 octave value.

Positioning Whistles

For an all–round radiation and a limited noise level from the ship's whistles at the listening posts, the positioning of the ship's whistles is very important. For further information regarding installation regulations and "Combined Systems", see our leaflet "IMO Regulations, KSM 265".

Valve Unit

The VALVE UNIT TV 784 has a good air flow section, thermostatic heating, exchangeable choke flanges and filters. The apparatus is fitted with two coils for normal and emergency operation and lanyard as standard (see the separate leaflet Valve Unit TV 784, KSM 264).

Installation

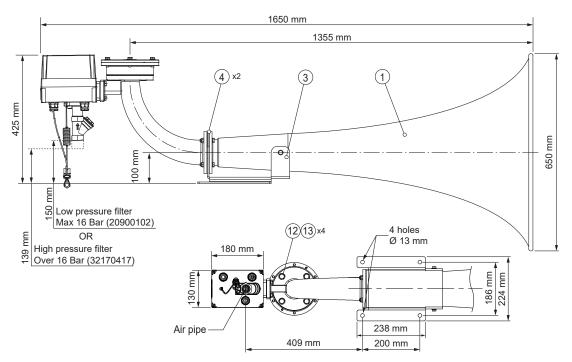
SUPERTYFON MKT150/110 is to be fixed with four M12 bolts to an outrigger or similar construction. To avoid functional trouble blow the supply pipe thoroughly clean before connecting to the signalling whistle.

If the pipe line above deck is longer than 100m, a primary FILTER like our TP 15/2 should be installed at the foot of the mast to protect the signalling apparatus from water condensate and rust particles. This filter is recommended to be drained regularly, approximately once a month. For more information on TP15/2, please see leaflet KSM260.

Technical Data

Frequency	110 Hz
Sound Pressure Level (1m)	
Total	149 dB
1/3 octave IMO limit	143 dB
Air consumption	60 - 70 l/s
Air supply pressure with choke regulation	0.6-3 MPa (6-30 bar)
Electric power	
Thermostatic heating	24 W
Valve	27 W
Protection class	IP56
Weight	52 kg

MKT 150/110: Spare Parts and Dimensions



Bottom view

Spare Parts MKT 150/110

Item	Name	Material	Ref. no.
1	Horn MKT 150/110	Glass-fibre reinforced Polyester / Galvanized cast iron	24800288
2	Bend	Galvanized cast iron. Marine enamel coated.	21800461
3	Base	Galvanized steel	21800679
4	Gasket (2 pcs)	TH3200	21801101
5*	Gasket (1 pcs)	TH3200	37710234
6*	Diaphragm set	Titanium/ Nitrile rubber	39880259
7	Choke flange (state pressure)	Brass	21768201
8	Filter 16b	Brass	20900102
	Filter 30b	Stainless steel	32170417
9*	Packing 62 x 62 x 1	TH3200	21765037
10	Screw M6S M8 x 25	Stainless steel	20801123
11	Lock washer FBB 8.1	Stainless steel	32780117
12	Screw M6S M10 x 30	Stainless steel	32570039
13	Lock washer FBB 10.2 x17	Stainless steel	32780159

Cable penetration Lanyard Pipe thread 1" 8 9 10 11 2

* Spare parts recommended to keep on ship.

Spare parts can be obtained from Kockum Sonics or their agents.

Pipe line dimensions

Working pressure MPa (overpressure)	Length of pipes in metres	Inside diam. of pipe, mm(inches)
below 2.0	Max 150 150 - 350	Min 29 (1 ¹ /4")* Min 35 (1 ¹ /2")*
above 2.0	Max 150 150 - 350	Min. 23 (1")* Min. 28 (1 ¹ /4")*

*Converting muff necessary for connection to signal apparatus.

Valve Unit TV 784

For complete info about TV 784 including spareparts and "Inspection, troubleshooting and repair" instructions, please see leaflet KSM264.

Air Pressure Choking

The basic condition for good performance and reliable function is the appropriate air pressure activating the diaphragm.

When ordering, please state the working pressure. If the connection pipe is dimensioned in accordance with the recommendations (see table), the pressure gauge reading at the air receiver in the engine room is adequate for choice of choke.

