

# Valve Unit TV 784

For installation together with TYFON® and SUPERTYFON® Whistles



**Valve Unit TV 784**

Ref. no. 24800362

## General Information

One of the most important parts assembled to a whistle is the valve. The new Valve Unit TV 784 designed for this purpose provides the following:

- Good air flow section with low electric power consumption.
- Electric heating provided by a 25W element with thermostat.
- Exchangeable flange choke for different pressures.
- Two solenoid coils for normal and emergency operation.
- Lanyard for stand-by operation.

Normally comes assembled to one of our Tyfon's but can also be purchased as stand-alone, for example as a complete spare part.

## Technical Data

Mains operation	230V AC 50/60 Hz
	110V AC 50/60 HZ
	24V DC
Power consumption	27 W
Emergency operation	230V AC 50/60 Hz
	110V AC 50/60 HZ
	24V DC
Power consumption	27 W
Heating	230V AC 50/60 Hz
	110V AC 50/60 HZ
	24V DC
Power consumption	25 W
Working pressure	0,3 - 3,0 MPa (different chokes)
Air consumption	8 - 100 l/s (for different whistle types)
Dimensions	See last page
Weight	3,8 kg

# Inspection, Troubleshooting and Repair

## Valve unit TV 784 and Tyfon MKT 150 /- Series

### Inspection:

Our MKT 150 /- series Tyfon with Valve unit TV784 is a maintenance free design, but periodic inspection is advisable to get an early indication of faults that might develop. At least annual check is recommended.

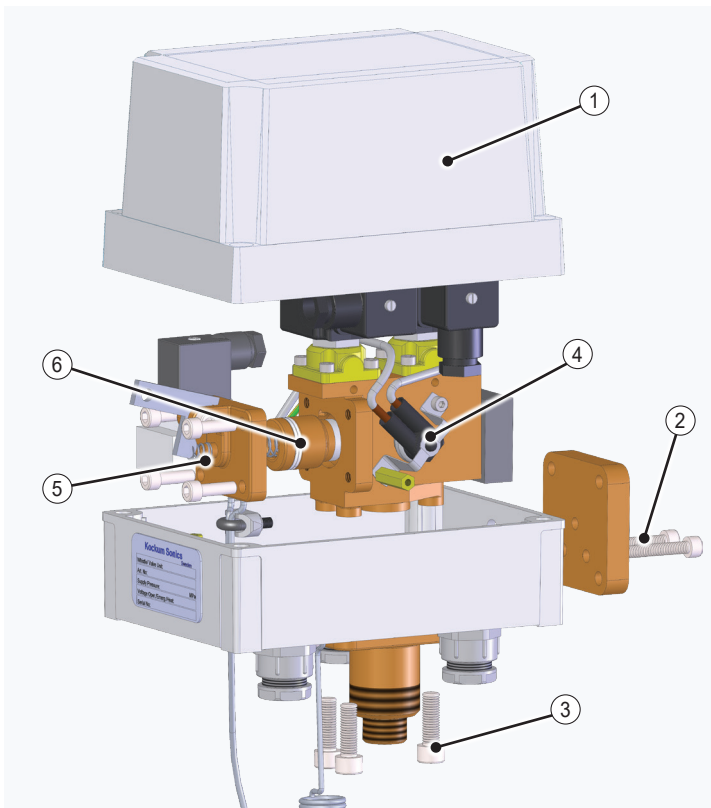
- Check mechanic attachments. All screw and pipe joints in place and correctly tightened? No air leakage?
- Check air filter (see picture 1)

### Troubleshooting:

- Horn not sounding?
  - Solenoids getting signal voltage? If not, check Tyfon control unit.
  - Valve unit getting air? Hand manoeuvre working but not electrical? Replace solenoid. Easily accessible by removing box cover (see picture 5).
  - Valve unit clearly blowing through solenoid vents but still no sound? Check main piston. (see picture 3 and 4). Shall compress and return smoothly. If not, try inserting some rust resolvent and compress the piston repeatedly until it does. If heavily stuck, valve unit will have to be opened (see picture 4 and 7). If piston found heavily corroded it should be replaced. Cylinder mostly can be refurbished with rust resolvent and very fine sandpaper.

\* If new valve unit; Check choking plate (see picture 4). Correct diameter or drilled at all?

- Horn sounding distorted?
  - Open housing (see picture 2). Check for dirt or damages in housing seat.
  - Check for damages in diaphragm.
- Delay at activation / deactivation?
  - Check valve main piston. (see picture 3 and 4)
  - Check for dirt or damages in housing seat. (see picture 2)
- Heating defective? (see picture 6)



To access valve units internal parts.

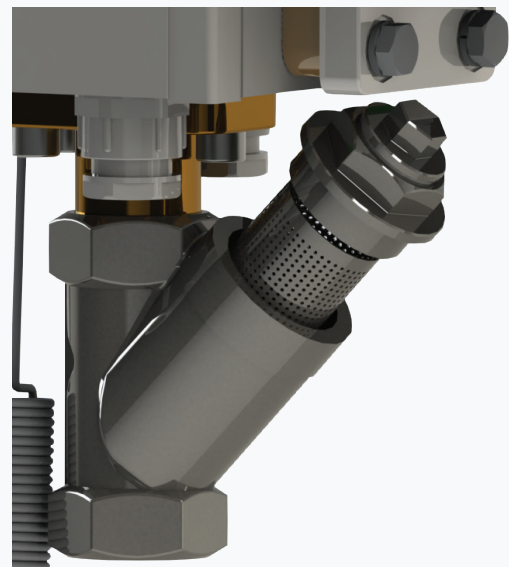
Access heater / thermostat unit:

1. Release and remove cover
2. Release and remove the flange
3. Release valve body
4. Heater / thermostat unit

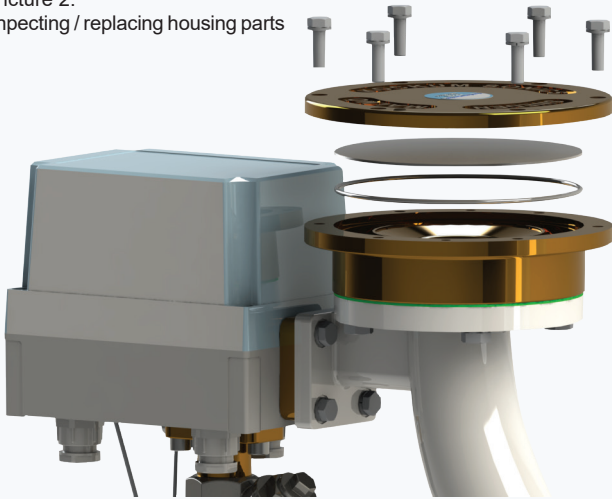
Access piston valve / cylinder:

5. Release valve lid
6. Piston valve / cylinder

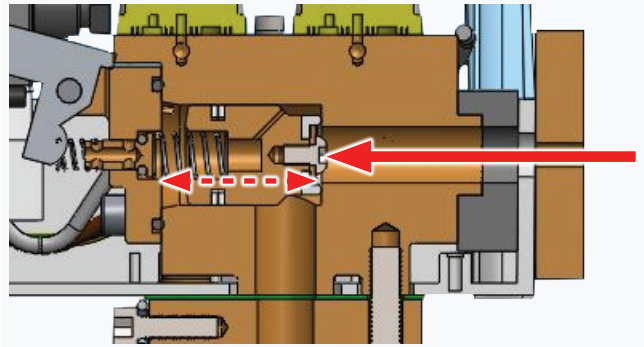
Picture 1.  
Checking / rinsing filter



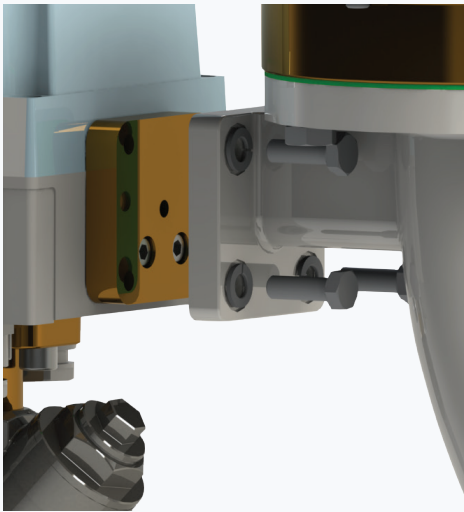
Picture 2.  
Inspecting / replacing housing parts



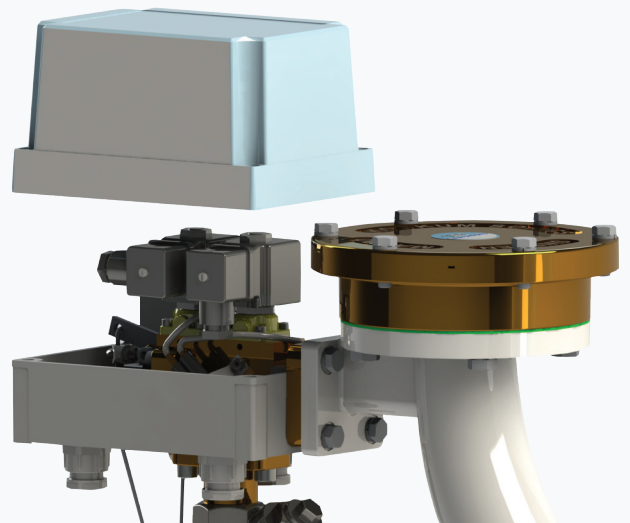
Picture 3.  
Checking piston mobility. Compress piston via air outlet



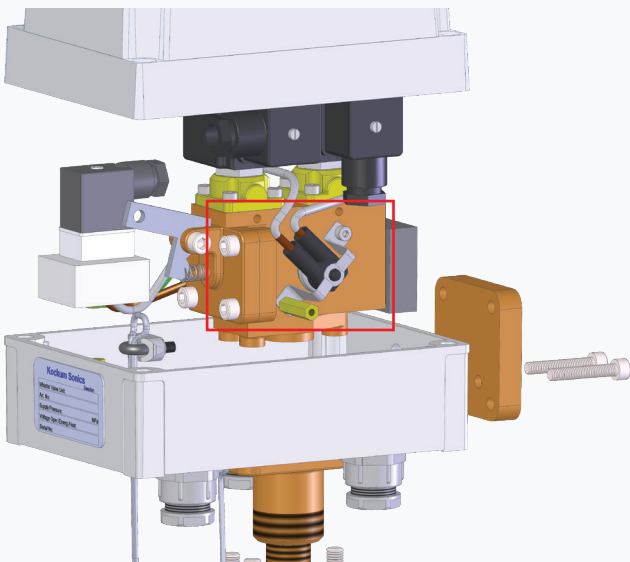
Picture 4.  
Releasing valve unit



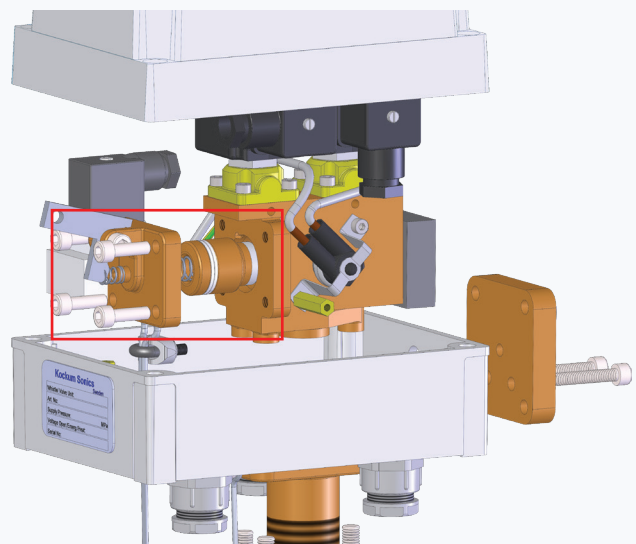
Picture 5.  
Open valve box lid



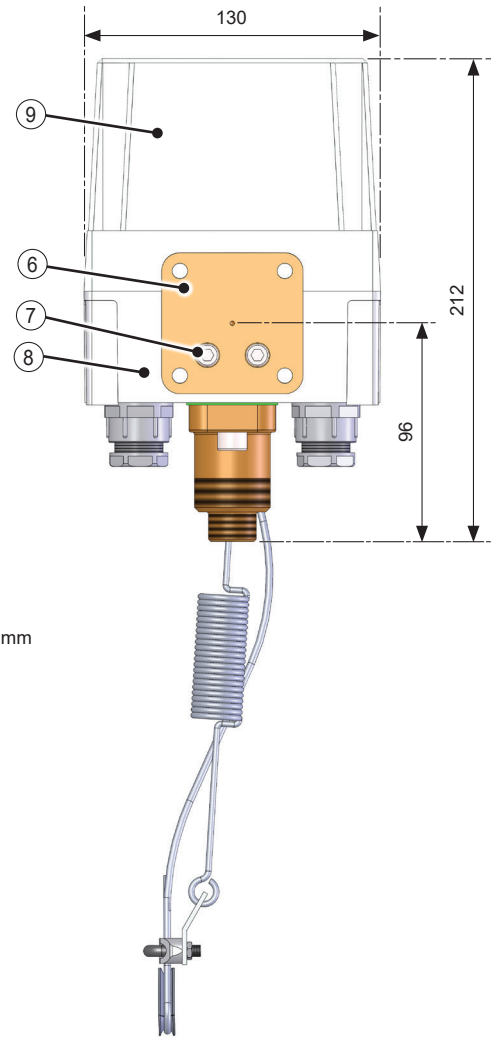
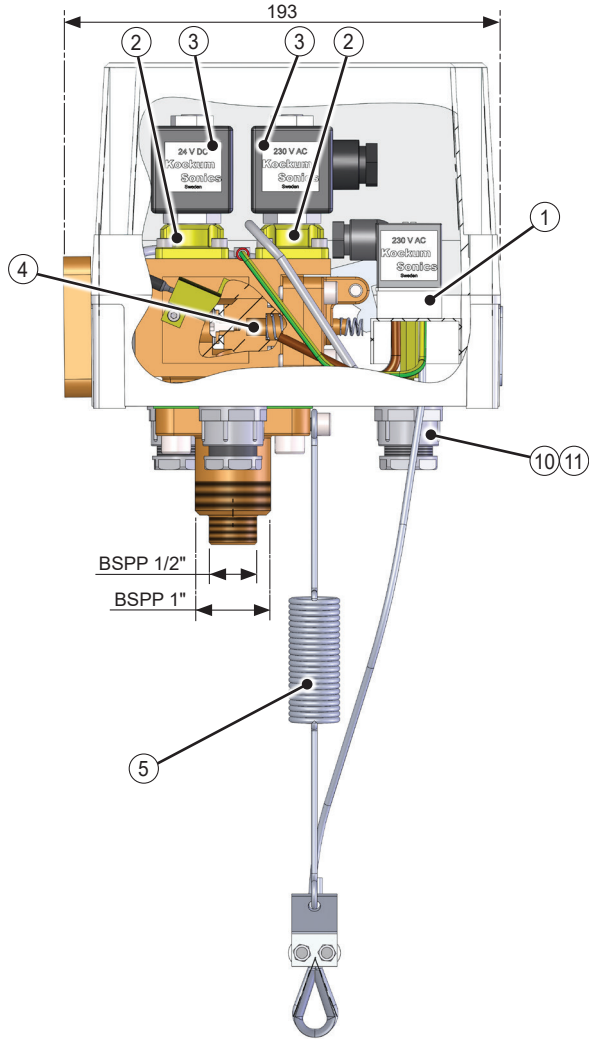
Picture 6.  
Accessing heater unit



Picture 7.  
Accessing piston



# Wiring Diagram, Spare Parts and Dimensions



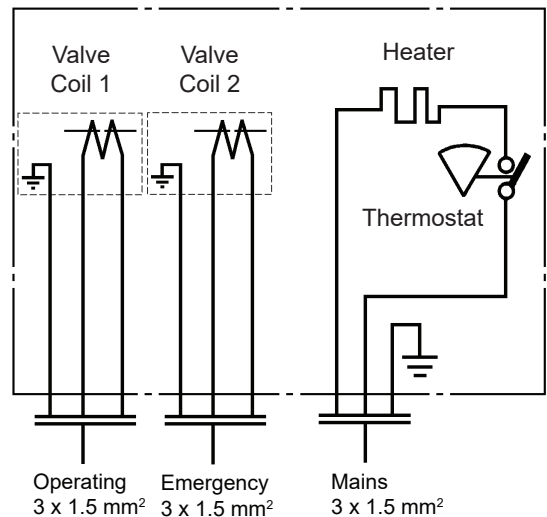
All units in mm

Spare Parts TV 784		
Item	Name	Ref. no.
*	Complete Valve unit	
1	Heating Complete	
	230VDC	24800072
	115VDC	24800073
	24VAC	24800074
2	Solenoid Valve Complete	
	230VAC	24510064
	115VAC	24510059
	24VDC	24510065
3	Solenoid Coil	
	230VAC	32170784
	115VAC	32170785
	24VDC	32170786
4 **	Piston Complete (including spring)	39880149
5	Lanyard device	24510042
6	Choke Flange	21800149
7	Screw insex M6x35	20801112
8	Box TV784	21800113
9	Cover TV784	24800021
10	Cable gland	20830066
11	Jam Nut	20830067

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

\* When ordering complete Valve unit, please state working pressure, voltages (main, emergency and heat) and which type of whistle to be used.

\*\* Spare part recommended to be kept on board.



Wiring diagram