



## Service data bulletin

Instrument:EML224

Date: 26.04.2007

Created by: Geir Theodorsen

SUBJECT: EML224 Sensor illustrated.

From 2007 SKIPPER Electronics AS manufactures EML224 sensors configured for 5 different gate valves/tank.

For new installations:

Sensor complete EML, 40m cable, for gate valve SB-60-SA and DB-60-SA

Part number EML224SG-SA

Sensor complete EML, 40m cable, for tank combo ETNSTCL (TC-2018)

Part number EML224ST-SA

For retrofit installations:

Sensor complete EML, 40m cable, for gate valve PCSV60

Part number EML224SX-SA

Sensor complete EML, 40m cable, for SIMRAD NL tank and gate valve.

Part number EML224SN-SA

Sensor complete EML, 40m cable, for gate valve SB-100-SA and DB-100-SA

Part number EML224SDB-SA

Sensor complete EML, 40m cable, for gate valve SB-60-SA and DB-60-SA

Part number EML224SG-SA



EML224ST-SA

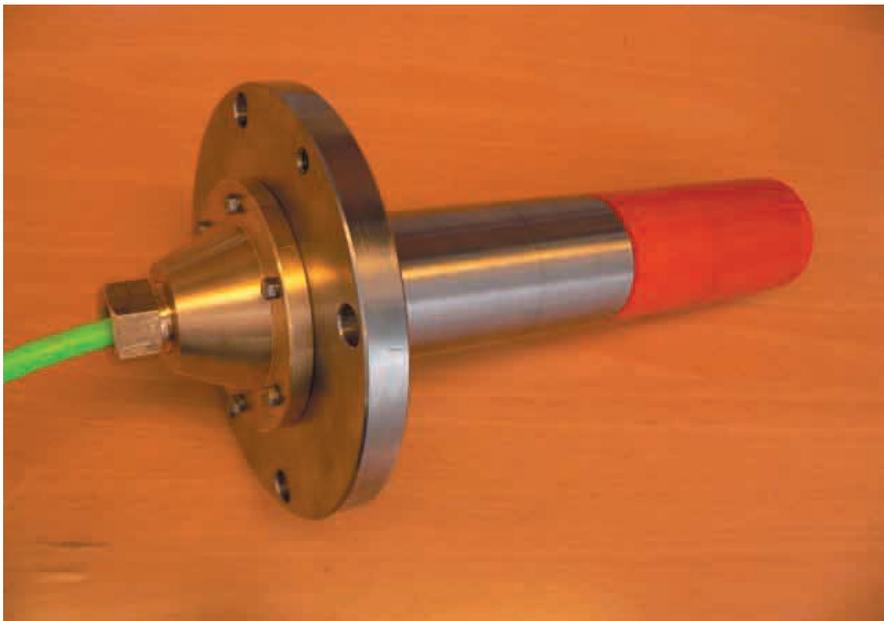
Sensor complete EML, 40m cable, for tank combo ETNSTCL (TC-2018)



EML224SX-SA

Sensor complete EML, 40m cable, for gate valve PCSV60

All sensors manufactured before 2006 may be replaced by part number EML224SX-SA



EML224SN-SA

Sensor complete EML, 40m cable, for SIMRAD NL tank and gate valve.



EML224SDB-SA

Sensor complete EML, 40m cable, for gate valve SB-100-SA and DB-100-SA



## HISTORY OF EML224 SENSORS

From the start of production in 1987 to 2005 the sensor and cable were separate items connected with a plug. These sensors may be identified by the grey cable.

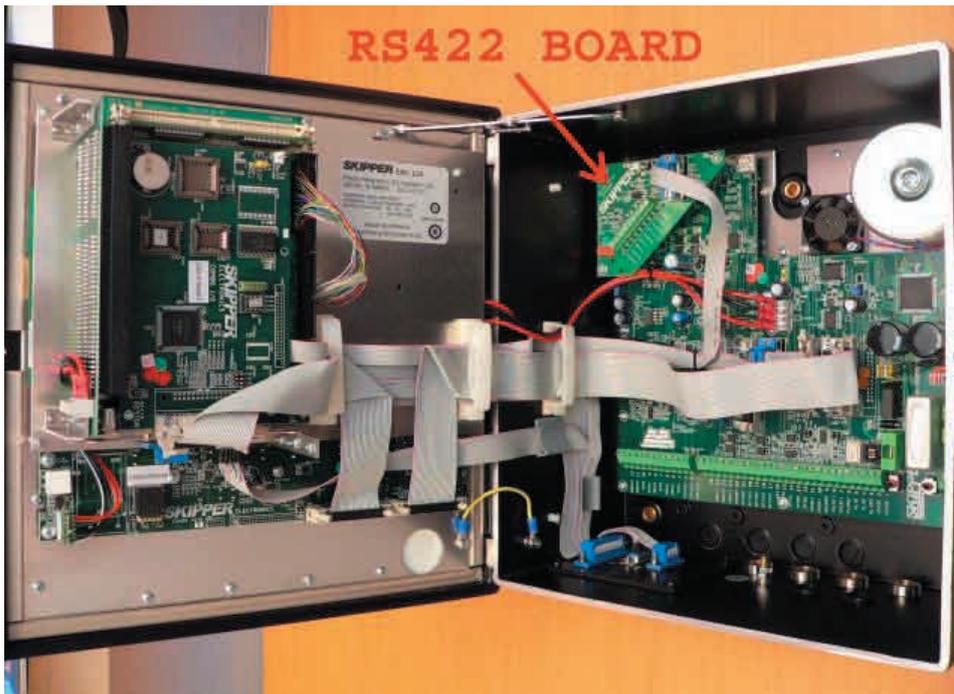
From 2005 the sensor and cable was one item. These may be identified by the green colour.



## CHANGE OF SENSOR WITH GREY CABLE

A sensor with grey cable going from sensor to junction box may be replaced by part number EML224SX-SA  
Note! There is different connections to Sensor power PCB in junction box.

In addition to this: Connection between Junction box and RS422 PCB in display unit is depended of version of RS422 board. (Ver A or X. See next pages)



RS422 BOARD VER A

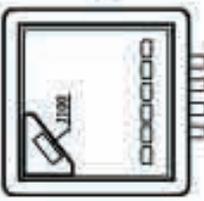
Connection diagram

Sensor power PCB in junction box (Not Sensor power2 PCB)

Junction Box ( with EML.224 Sensor Power Ver. A or B )

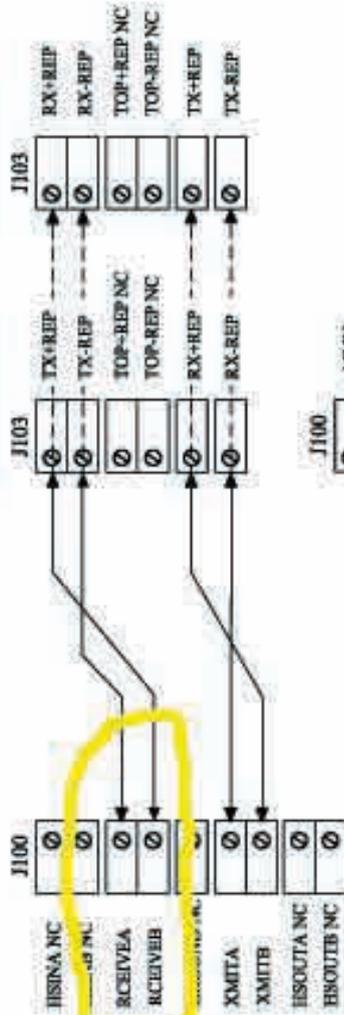


Display/Operator Unit

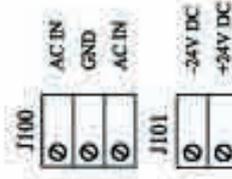


Interconnection

Sensor Power Ver. B \*



Sensor Power Ver. A \*



Junction Box ( with EML.224 Sensor Power Ver. A or B )

\* see marking on sensor power pcb

RS422 Terminal Adaptor Ver. A13

Please check!

On RS422 board in Display unit

On some older sensors

RX+ is connected to RCEIVB

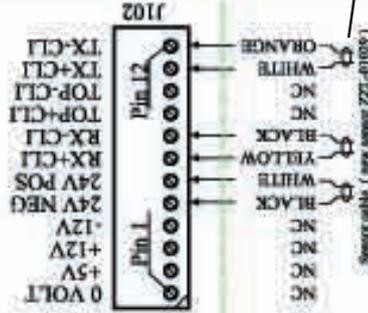
RX- is connected to GROUND NC

SENSOR CONNECTION

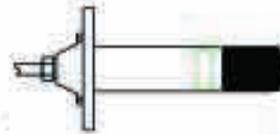
Junction Box

Connections for sensor cable is Junction box EML-224

EML.224 Sensor Power



Or yellow/orange



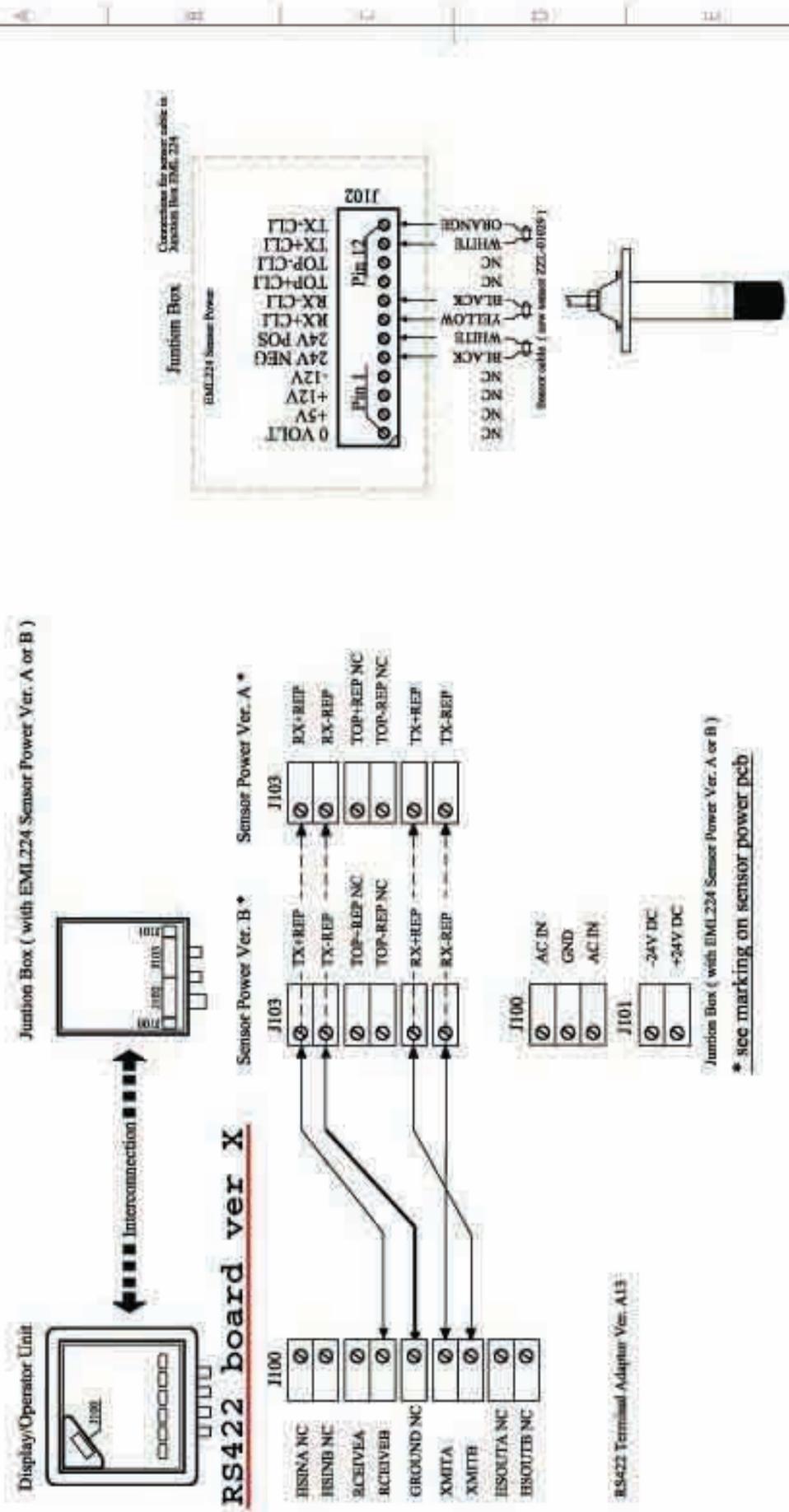
Sensor cable ( see sensor Z21-01029 )

Issued	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Designed by	Checked by	Approved by - date	File name
Arno Maira	SG	VF-2005.03.30	interconn5
			Date
			2005.03.30
			Scale
Shipper: Electronics A/S		New Sensor: Z21-01029	
		PH-0-001	Edition
			0
			Sheet
			1/1

# RS422 BOARD VER X

## Connection diagram

Sensor power PCB in junction box (Not Sensor power2 PCB)



Issued	Quantity	Title/Name, designation, material, dimension etc.	Article No./Reference
Designed by Arne Mørre	Checked by SG	Approved by - date VF-2805.83.30	File name interconnbus
		Date 2805.83.30	Scale
Shipper: Electronics A/S			Article No./Reference New Sensor ZLL-01029
Title/Name, designation, material, dimension etc. EMI P-003			Edition 0
Sheet 1/1			Scale 1/1