TECHNICAL GUIDANCE

DIR110NN
TANK SIDE INDICATOR

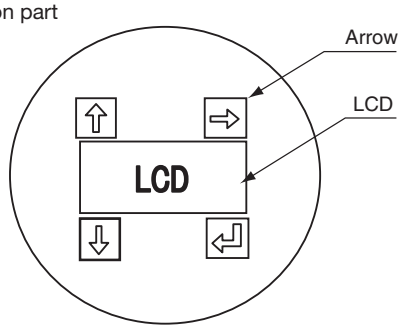
GENERAL

DIR110NN is a tank side indicator for tank gauges.
Connected to Tokyo Keiso's tank top servo operated tank gauge FW9000NN series, DIR110NN indicates liquid level, temperature and other operation status. Required data for tank related are displayed on it at the tank side, resulting in easier tank control and management with time saving.
In addition to indicating functions, maximum 6 points relay output are prepared. This function makes easier connection to higher level computer and/or peripheral equipments.
By accessing magnet sensors, shown as arrows on the indicator, various data are pre-settable for operating FW9000NN.

STANDARD SPECIFICATION

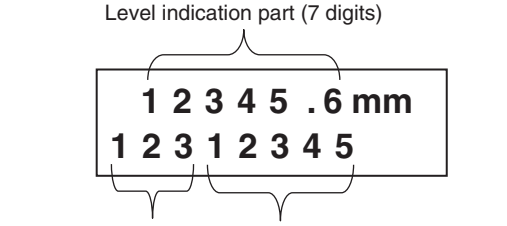
● CONNECTABLE TRANSMITTER
: Servo operated tank gauge FW9000NN series made by Tokyo Keiso Co., Ltd. which has standard serial datacoded output.

● Indication part

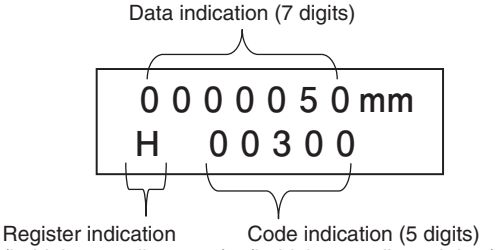


● Details of LCD presentation

・Operation mode



・Parameter mode



・ ADDITIONAL FUNCTION
: Relay output(prepared in DIR111NN□)
Relay contact output, up to 6 points, is prepared. These contacts are used for control of tank peripheral instrument, such as valves, remotely from control room through communication line via FW9000NN.



・ OUTPUT Number of contact : up to 6 (if 2 contacts in FW9000NN are used, 4 contacts are allowed to use in DIR111NN)
Contact : SPDT(1a1b)
Capacity : 250 V AC/3A, 30 V DC/3A (resistive load)
・ INPUT Number of contact : up to 6
Contact type : semiconductor type/ mechanical type
Semiconductor type : ON resistance; less than 500 Ω
ON voltage ; less than 1.5 V
ON current ; approx.5 mA
OFF resistance ; > 100 k Ω
OFF voltage ; less than 12 V
Mechanical type : rating 30 V DC/10 mA
・ CONSTRUCTION
Explosionproof

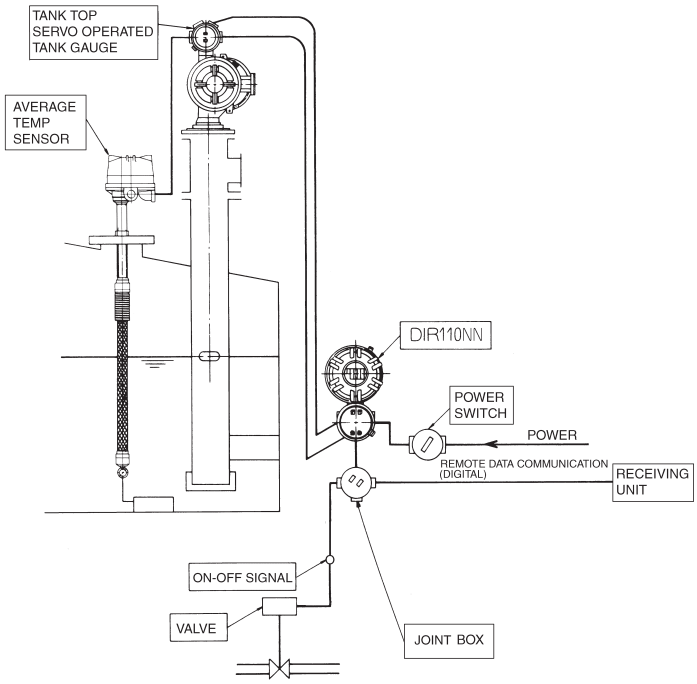
	Explosionproof specifications	Certificate number
TIIS	Ex d Ⅱ C T6	TC14584
CML	Ex db Ⅱ C T6 Gb	CML 23JPN1319X
	Ex db Ⅱ C T6 Gb	IECEx CML 22.0060X CML 22ATEX1409X

・ POWER SUPPLY : 100–240 V AC, 50/60Hz
・ CABLE ENTRY TIIS : Max.4 pieces Nominal dia.1/2 to 1 inch
At least 1/2 inch entry is At least 1/2 inch entry is necessarily assigned at one place
G (=PF)
CML: Max.4 pieces Nominal dia.1/2 to 1 inch
M(F) or NPT(F)
・ CABLE TERMINATION : Plug type terminal connection (terminal No. to be referred to Approval drawing)
・ POWER CONSUMPTION : 20 VA
・ AMBIENT TEMPERATURE : –40 to +60 degC (–20 to +55 degC: TIIS –20 to +60 degC: CML)
・ INSTALLATION : On to 2 inches pipe
・ HOUSING MATERIAL : Aluminum casting (AC2A)
・ MASS : 10 kg

MODEL CODE

Model code			Description
DIR11			
Additional function	0		Indication only
	1		Relay input-output
Construction		NNW	Weather proof
		NNE	Flame proof (JPNEx TIIS)
		NNEJ	Flame proof (JPNEx CML)
		NNEE	Flame proof (IECEx/ATEX CML)

APPLICATION



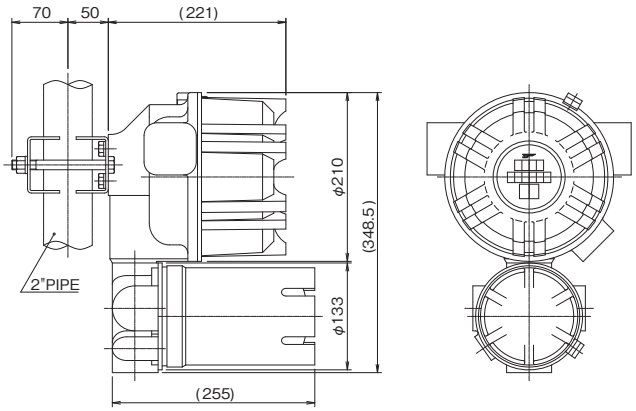
ORDERING INFORMATION

Specify following items for your inquiry or ordering.

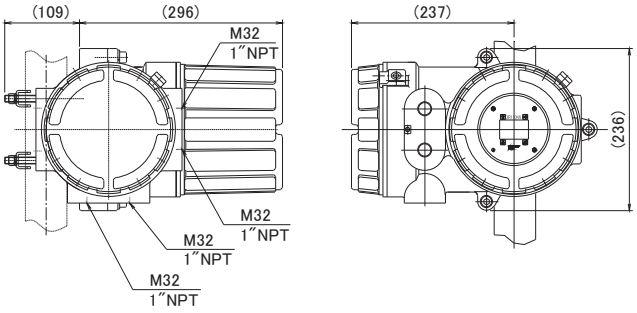
Model code	DIR11□NN□
Cable entry	□ G Screw □ NPT Screw □ M Screw
Cable glands	□ to be included - - - - - ➤ Cable diameter___mm
Tank gauge	□ FW9000NN
Number of input-output points of relay contact	Output___ points Input___ points
Specify others if required	

DIMENSION

TIIS



CML



* Specification is subject to change without notice.

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