



MAGNET SENSITIVITY TYPE LEVEL TRANSMITTERS

533

FEATURES

- LCD DISPLAY FOR LEVEL & VOLUME MEASURING
- FIELD CALIBRATION IS POSSIBLE
- ELECTRONIC DAMPER IS APT TO SET AT FIELD SITE
- ECONOMICAL & PRACTICAL
- HIGH RELIABILITY
- ANTICORROSIVE MATERIALS
- CAPABLE OF HIGH OPERATING PRESSURE
- COMPACT STRUCTURE TO LAST OPERATION
- SENSING ELEMENTS MOULDING ENCLOSED FOR EASY MAINTENANCE
- HIGH SAFETY AND THE ELECTRICAL / LIQUID IS COMPLETELY INSULATED



SIGNAL CONVERTER

LCD DISPLAY

LCD display	5 Digits (99999) , 9mm(0.35")
Programming display	8 Digits (99999999) , 5mm(0.2")
Display updated	2 sec / cycle for rate (adjustable)
Decimal setting	Selectable from keys
Measure unit	%, m, cm, mm, feet, inch

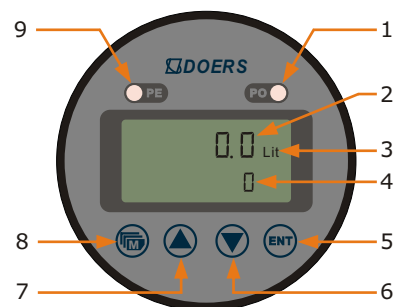
ANALOG OUTPUT

Output signal	4 ~ 20mA DC loop powered
Maximum load	600 ohms at 24VDC for current output type

GENERAL

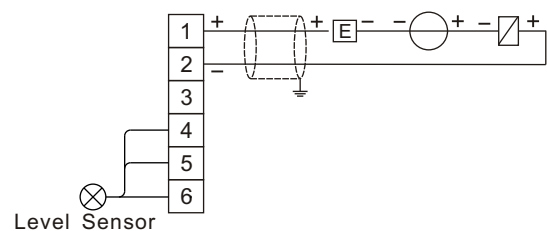
Zero / Span	Can be adjusted by engineer mode
Damping rate	1~9 sec adjustable
Power supply	10~36VDC 2-wire system for loop powered type
Accuracy	±0.10%F.S. (Without sensor error)
Linearity	Better than 0.5%
Output response time	Six seconds (typical)
Device output ripple	Less than 0.25% of full scale for a fully stable sensor input
Housing of Converter	ADC with epoxy coating or specified
Storage temperature range	14 to 140°F (-10 to 60°C)

FRONT WINDOW VIEW



1. output message
2. Level range
3. Measuring unit : %, m, cm, mm, feet, inch
4. Units for programming
5. ENT Key : Button used to confirm setting or go back to menus
6. Down Key : Button used to decrease values or go next to menus
7. UP Key : Button used to increase values or go to prior menu
8. Menu Key : Button used to switch different display modes or menus
9. Error message for loop power

WIRING CONNECTIONS



LEVEL

MODEL SELECTIONS

AVAILABLE USAGE		ROOF MOUNTING FOR PROCESS TANKS	ASSEMBLED IN MAGNETIC LEVEL GAUGES	
EXTERNAL VIEW & DIMENSIONS (IN m/m)				
			533A	533B
① CONNECTION (See table2) OR LINKAGE (See Fig.1/2)	CODE			
	-0	2" ANSI 150lb Flange	Not any accessories	
	-1	3" ANSI 150lb Flange	With 2 clamps on the float chamber	
	-2	4" ANSI 150lb Flange	With screws mount the flag indicator	
	-3	To be specified	To be specified	
② ELECTRIC HOUSING				
	1	IP67 . Aluminium alloy made with polyester epoxy painted		
	2	EExd II B T4 , IP67 , Aluminium alloy made with polyester epoxy painted		
	3	EExd II B T4 , IP67 , 1.4301(304SS) material		
	4	To be specified		
③ OUTPUT SIGNAL				
	0	4~20mA DC , 2-wire system		→
	1	To be specified		→
④ CABLE ENTRY				
	-A	1/2" NPT		→
	-B	To be specified		→
⑤ MATERIAL OF TUBE / FLOAT				
	A	304SS (1.4301)		→
	B	316SS (1.4571)		→
	C	PVC		→
	D	PP		→
	E	PVDF		→
	F	To be specified		→
⑥ OPTIONAL FLOAT CHAMBER OR HEAT INSULATION				
	A	Not required	Not required (Less than 120°C)	
	B	With float chamber for waves-proof	With insulation blankets (for ≤150°C)	
	C	With type-C external cage (for ≤250°C)	With insulation blankets (for ≤250°C)	
	D	With type-D external cage (for ≤350°C)	With insulation blankets (for ≤350°C)	
	E	To be specified	To be specified	
⑦ E-LENGTH (DEAD BAND)				
	A	Standard length 50mm (Standard)		→
	B	To be specified		→
⑧ S-LENGTH (FOR MEASURING)				
	-010	10 cm	-010	10 cm
	∩	∩	∩	∩
	-580	580 cm	-600	600 cm
⑨ INDICATOR (OPTIONAL)				
	A	Not required		
	B	LCD display		
	C	To be specified		

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SPECIFICATIONS

ELECTRIC HOUSING

Table 1

ITEMS	CODE	A	B	C
EXTERNAL VIEW & DIMENSIONS(mm)				We accept special orders to fit your requirements and OEM versions .
	STYLE	Without LCD indicator	With LCD indicator	
ENCLOSURE		EExd II B T4 , IP67		
CABLE ENTRY	STANDARD	1/2" NPT(F)		
	SPECIFIED	With a 3/4" NPT (F) transfer adapter		
MATERIAL	STANDARD	Low copper Aluminium alloy		
	SPECIFIED	304SS (1.4301) or 316SS (1.4571)		
STANDARD FINISH		Polyester epoxy painted		

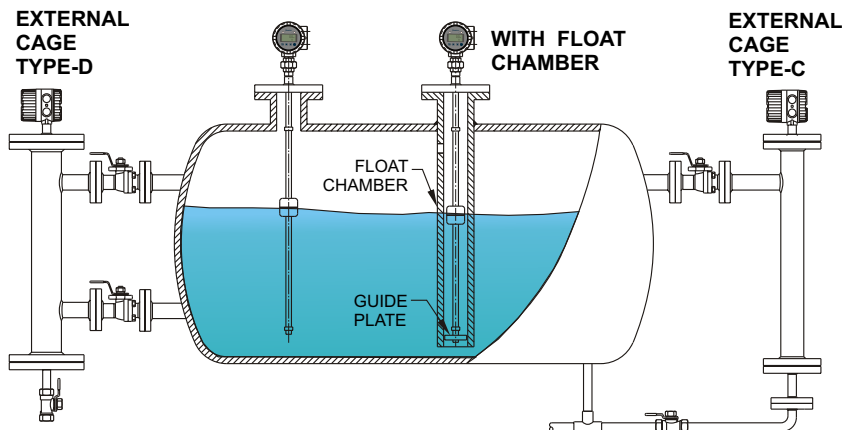
CONNECTION SIZING FOR 533A

Table 2

CODE	CONNECTION	FLOAT	AVAILABLE NOZZLE SIZE	STEM DIA.	SP. GR.	MAX. OPERATING TEMP. / PRESSURE	MATERIALS
0	2" (50A)	Ø50x ^h 48	≥52mm	Ø14mm	≥0.53	≤100°C / 3MPa	304SS / 316SS (1.4301 / 1.4571)
	2" (50A)	Ø47x ^h 50	≥52mm	Ø21mm	≥0.5	≤80°C / 0.5MPa	PVC / PP
1	3" (80A)	Ø60x ^h 115	≥62mm	Ø22mm	≥0.5	≤80°C / 0.5MPa	PVC / PP / PVDF
	3" (80A)	Ø74x ^h 105	≥78mm	Ø22mm	≥0.5	≤100°C / 3MPa	316SS (1.4571)
2	4" (100A)	Ø86x ^h 115	≥102mm	Ø22mm	≥0.5	≤80°C / 0.5MPa	PVC / PP / PVDF
3	SPECIFIED	According to the difference of float diameter and materials					

INSTRUCTIONS

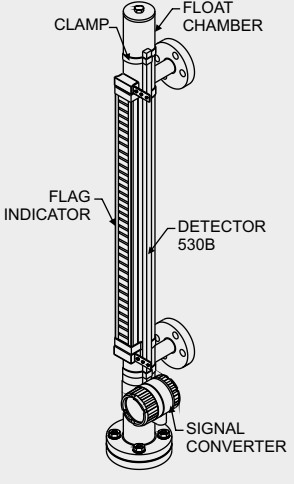
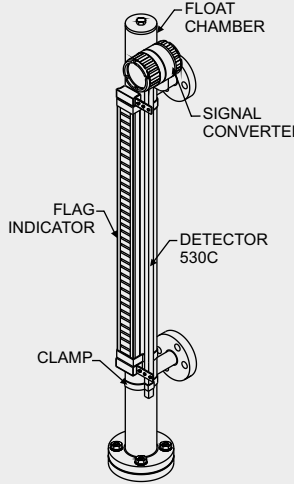
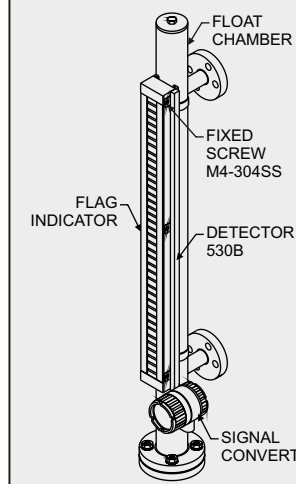
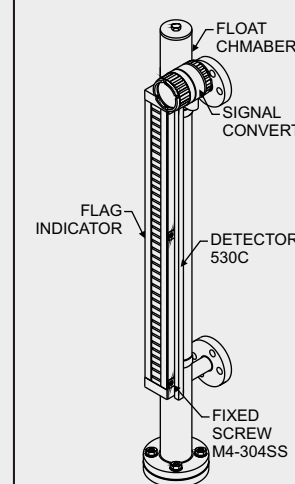
INSTALLATION EXAMPLE FOR 533A



1. When moving the stem , avoid deforming or violently shaking.
2. Do not install the detector near the fluid inlet and outlet.
3. Avoid installing the level transmitter near either motor or solenoid valve .
4. When there are some intense flows or waves in the vessel , the float chamber must be installed or remove the level transmitter and install it in the external cage.
5. Cable entry must be a lot higher than the maximum height of conduit to avoid water flowing backwards .
6. The perpendicular angle of the stem should not be greater than $\pm 5^\circ$.

7. The detailed specifications of float chamber / external cage provided if necessary. Please offer your requirements or contact our department of sales.

METHODS TO ASSEMBLE 533B / 533C TO GAUGE CHAMBER

533B-1	533C-1	533B-2	533C-2
			
<p>Prepare two clamps , and clamp the detector to the chamber of magnetic level gauge .</p>		<p>Combine the detector with flag indicator by using fixed screws .</p>	

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The specifications are subject to change without prior notice.

