



MAGNET SENSITIVITY TYPE LEVEL DETECTORS

530



- $\pm 5\text{mm}$ RESOLUTION
- HIGH RELIABILITY
- ANTICORROSIVE MATERIALS
- CAPABLE OF HIGH OPERATING PRESSURE
- COMPACT STRUCTURE TO LAST OPERATION LIFE
- SENSING ELEMENTS MOULDING ENCLOSED FOR EASY MAINTENANCE
- HIGH SAFETY DUE TO THE ELECTRICAL AND LIQUID ARE COMPLETELY INSULATED

MODEL SELECTIONS

AVAILABLE USAGE		ROOF MOUNTING FOR PROCESS TANKS			ASSEMBLED IN MAGNETIC LEVEL GAUGES	
EXTERNAL VIEW & DIMENSIONS (IN m/m)						
ITEMS	CODE	530A			530B	530C
① CONNECTION (See table 2) OR LINKAGE (See Fig.1/2)	-0	2" ANSI 150lb Flange			No accessory	
	-1	3" ANSI 150lb Flange			With 2 clamps for mounting on the float chamber	
	-2	4" ANSI 150lb Flange			With screws for mounting on the flag indicator	
	-3	To be specified			To be specified	
② ELECTRIC HOUSING (See table 1)	0	Not required, this version is a combined type, with 300mm length of lead wire				
	1	IP67, Aluminium alloy with polyester epoxy painted				
	2	EExd IIC T6, IP68, Aluminium alloy with polyester epoxy painted				
	3	EExd IIC T6, IP68, 316SS material				
	4	IP65, DIN CONNECTOR 43650-A / ISO 4400, PA+(G) made				
	5	To be specified				
③ DETECTING OUTPUT	0	Standard (46Ω±1Ω/cm)			→	
	1	To be specified			→	
④ CABLE ENTRY	-A	1/2"NPT			→	
	-B	3/4"NPT			→	
	-C	To be specified			→	
⑤ MATERIAL	CODE	CONN.	STEM (Size)	FLOAT (Size)	STEM	
	A	304SS	304SS (∅14)	316SS (∅49 x ^H 50)	Square pipe (304SS x ∅18)	
	B	316SS	316SS (∅14)	316SS (∅49 x ^H 50)	Round pipe (316SS x ∅17)	
	C	316SS	316SS (∅17 / ∅21)	316SS (∅70)	Square pipe with PVC sleeve	
	D	PP/PVC	PP / PVC (∅21) with SS inner pipe	PP (∅47 x ^H 50)	Round pipe with PVC sleeve	
	E	PVDF	PVDF (∅20) with SS inner pipe	PVDF (∅63 x ^H 70)	Square pipe with PE sleeve	
	F	To be specified				
⑥ OPERATING TEMP. / PRESSURE OR HEAT INSULATION	A	Less than 80°C / 10kg/cm ² G			Not required (Less than 120°C)	
	B	Less than 80°C / 20kg/cm ² G			With insulation blankets (for ≤150°C)	
	C	Less than 80°C / 30kg/cm ² G			With insulation blankets (for ≤250°C)	
	D	Less than 80°C / 40kg/cm ² G			With insulation blankets (for ≤350°C)	
	E	To be specified			To be specified	
⑦ E-LENGTH (UNSENSIBLE)	A	Standard length 50mm (Standard)			→	
	B	To be specified			→	
⑧ S-LENGTH (FOR MEASURING)	-010 ∨ -580	100 mm ∨ 5800 mm			-010 ∨ -600	100 mm ∨ 6000 mm
⑨ EXTRA TREATMENT	/A	Not required				
	/B	Special finished				
	/C	To be specified				

5 LEVEL

SPECIFICATIONS

ELECTRICAL

- Sensor : Reed switch
- Detecting output : $46\Omega \pm 1\Omega/\text{cm}$ or specified
- Measuring range : 600cm max.
- Detecting resolution : $\pm 5\text{mm}$
- Vibration : 50G max.
- Breakdown voltage : 200V DC
- Sensitivity interval : $20\pm 10\text{mm}$ Between sensor & magnet
- Moving speed : $\geq 0.1\text{sec/cycle}$
- Assembly : Plug-in style for series connection
- Connecting pin : 3 pins in gilded
- Moulding enclosed : Self-extinguishing PA+G
- Operating temperature : -20 to +105°C

ELECTRIC HOUSING

Table 1

ITEMS		CODE	1	2	3	4
EXTERNAL VIEW & DIMENSIONS (mm)						
ENCLOSURE			IP67	EExd IIB T4 IP68	EExd IIB T4 IP68	IP65
CABLE ENTRY	STANDARD		1/2"NPT(F)	1/2"NPT(F)	1/2"NPT(F)	1/2"NPT(F)
	SPECIFIED		With transfer adapter	3/4"NPT(F) or with transfer adapter	With transfer adapter	PG09 , PG11
MATERIAL	STANDARD		Aluminium alloy ADC-12	Low copper Aluminium alloy	304SS(1.4301)	PA+fibreglass
	SPECIFIED		Bakelite / PC	304SS(1.4301)	316SS(1.4571)	————
STANDARD FINISH			Polyester epoxy painted	Polyester epoxy painted	————	————
WIRING CONNECTION						

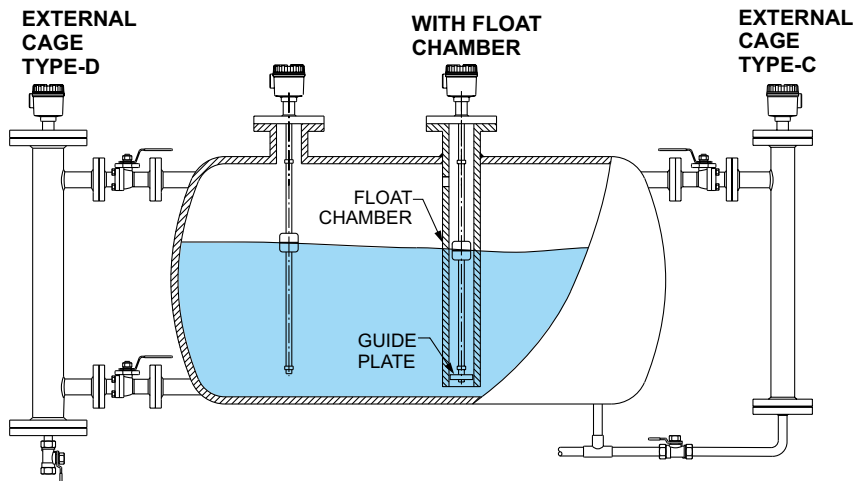
CONNECTION SIZING FOR 530A

Table 2

CODE	CONNECTION	FLOAT	AVAILABLE NOZZLE SIZE	STEM DIA.	SP. GR.	MAX. OPERATING TEMP. / PRESSURE	MATERIALS
0	2" (50A)	$\varnothing 50 \times 48$	$\geq 52\text{mm}$	$\varnothing 14\text{mm}$	≥ 0.53	$\leq 100^\circ\text{C} / 3\text{MPa}$	304SS / 316SS (1.4301 / 1.4571)
	2" (50A)	$\varnothing 47 \times 50$	$\geq 52\text{mm}$	$\varnothing 21\text{mm}$	≥ 0.5	$\leq 80^\circ\text{C} / 0.5\text{MPa}$	PVC / PP
1	3" (80A)	$\varnothing 60 \times 115$	$\geq 62\text{mm}$	$\varnothing 22\text{mm}$	≥ 0.5	$\leq 80^\circ\text{C} / 0.5\text{MPa}$	PVC / PP / PVDF
	3" (80A)	$\varnothing 74 \times 105$	$\geq 78\text{mm}$	$\varnothing 22\text{mm}$	≥ 0.5	$\leq 100^\circ\text{C} / 3\text{MPa}$	316SS(1.4571)
2	4" (100A)	$\varnothing 86 \times 115$	$\geq 102\text{mm}$	$\varnothing 22\text{mm}$	≥ 0.5	$\leq 80^\circ\text{C} / 0.5\text{MPa}$	PVC / PP / PVDF
3	SPECIFIED	The difference according to float diameter and material					

INSTRUCTIONS

INSTALLATION EXAMPLE FOR 530A



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.

ASSEMBLED IN GAUGE CHAMBER FOR 530B / 530C

530B-1	530C-1	530B-2	530C-2
<p>Two clamps are offered for installing the detector to the chamber of magnetic level gauge</p>		<p>Fixed screws are offered for combining the detector and flag indicator</p>	

The specifications are subject to change without prior notice.

DOERS TECHNOLOGY CORPORATION

4F, NO. 1, LANE 11, TZU-CHIANG STREET, TU-CHENG INDUSTRIAL PARK, TAIPEI COUNTY, TAIWAN 23678

Website : www.doers.com.tw

E-mail : doers.tech@msa.hinet.net

TEL : 886-2-22682689

FAX : 886-2-22681248

