

DP300 Series Electronic Dummy Probe

The DP300 Series is an accurate and reliable electronic dummy probe for 2-wire optic and thermistor overfill protection systems.

Dummy probes are used when a tanker has fewer compartments than the number of channels on the gantry overfill monitor. Dummy probes provide a simulation signal to unused channels in order to obtain a permissive signal from the gantry monitor.

The DP300 Series can simulate up to 7 compartments and comes in both 5 channel and 7 channel models (not available in Australian market). If less channels are required simply terminate wires that are not required.



DP307 Model Shown

Key Features

- Designed in compliance with EN13922.
- Available with five channels (DP305) or seven channels (DP307).
- Power supply is intrinsically safe from industry standard 2 wire gantry monitor via gantry plug when truck is connected.
- IECEx, ATEX and UKEX certification for installation in zone 1 hazardous areas.
- Can be mounted in truck plug or junction box.
- IP67 rated.
- Compatible with 2 wire optic and thermistor overfill systems.
- Can be used as replacement in other industry standard overfill systems

Certification

IECEx Certificate: IECEx ITA 13.0024X

◊ Marking: Ex ia IIA T3 IP67

ATEX Certificate:

◊ Marking: ERO21ATEX0018X

CE 2813 Ex II 2 G Ex ia IIA T3 Gb

UKEX Certificate:

◊ Marking: EMA21IKEX0075X

UK 0518 Ex II 2 G Ex ia [ia Ga] IIA T3 Gb

IECEx/ATEX/UKEX Temperature: Ta= -25°C to 60°C

IECEx/ATEX/UKEX Parameters: Ui = 30V, Pi = 9W, li = 500mA,

Ci = 0μF, Li = 0mH

Specifications

Mounting	Can be installed in zone 1 hazardous areas. Mount inside Liquip TP series truck plug or equivalent truck plugs.
Materials of Construction	<ul style="list-style-type: none"> • Plastic Body • Encapsulated electronic circuit board potted with epoxy • TFE, 20 AWG Wire
Installation	Installation in zone 1 should be in accordance with applicable standards such as EN60079-14 and EN60079-25 or IEC60079-14 and IEC60079-25 or equivalent. All exposed cable ends shall be individually and appropriately terminated. E.g. Use heat shrink at end of each unused wire. After installation, carry out a wet test on the tanker probes with a gantry monitor or test unit to ensure correct installation.
Ordering Information	<ul style="list-style-type: none"> • DP305 - Dummy Probe with 5 Outputs • DP307 - Dummy Probe with 7 Outputs
Associated Equipment	<ul style="list-style-type: none"> • TP100 Series Truck Plug • LDP Series Overfill Sensors • RM140 Overfill Gantry Monitor

WIRING INSTRUCTIONS

WIRES FOR 5 CHANNEL

Length 200mm x 6 off

WIRE COLOUR	DESCRIPTION	WIRING ORDER
Black	Spare Output	Any Order
Black	Spare Output	Any Order
Black	Spare Output	Any Order
Black	Spare Output	Any Order
Black	Spare Output	Any Order
White	Ground	Compulsory

Unused wires shall be appropriately terminated.

WIRES FOR 7 CHANNEL

Length 200mm x 8 off

WIRE COLOUR	DESCRIPTION	WIRING ORDER
Black	Spare Output	Any Order
Black	Spare Output	Any Order
Black	Spare Output	Any Order
Black	Spare Output	Any Order
Black	Spare Output	Any Order
Black	Spare Output	Any Order
Black	Spare Output	Any Order
White	Ground	Compulsory

Unused wires shall be appropriately terminated.

WIRING DIAGRAM (6 CHANNEL MONITOR)

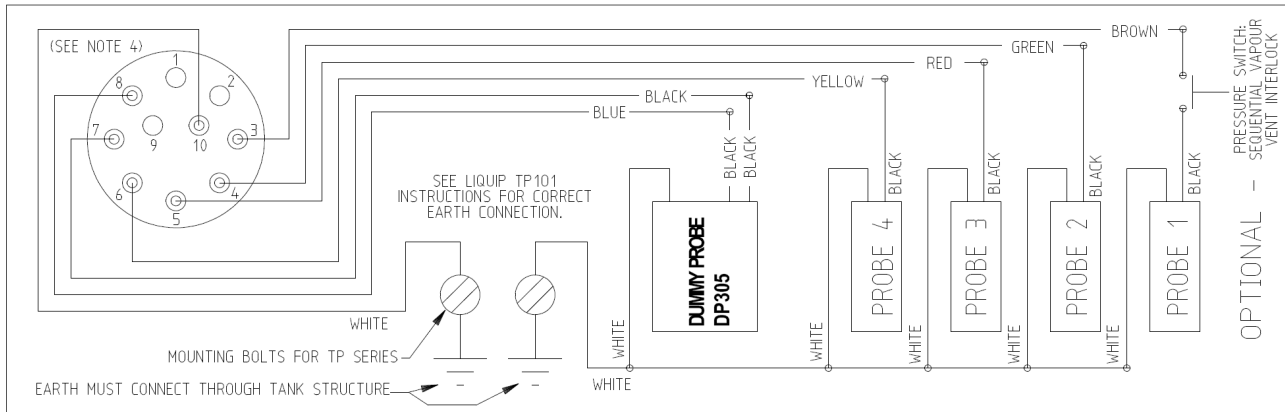
The following table lists all possible combinations of tankers using a 6 channel monitor.

TRUCK PLUG PIN#	1 COMPT TANK	2 COMPT TANK	3 COMPT TANK	4 COMPT TANK (See Diagram)	5 COMPT TANK
1	Not Used	Not Used	Not Used	Not Used	Not Used
2	Not Used	Not Used	Not Used	Not Used	Not Used
3	LDP Probe	LDP Probe	LDP Probe	LDP Probe	LDP Probe
4	DP305-Black	LDP Probe	LDP Probe	LDP Probe	LDP Probe
5	DP305-Black	DP305-Black	LDP Probe	LDP Probe	LDP Probe
6	DP305-Black	DP305-Black	DP305-Black	LDP Probe	LDP Probe
7	DP305-Black	DP305-Black	DP305-Black	DP305-Black	LDP Probe
8	DP305-Black	DP305-Black	DP305-Black	DP305-Black	DP305-Black
9*					
10	Ground-White	Ground-White	Ground-White	Ground-White	Ground-White

***See "Ground Boss" wiring to ensure static dissipation from tank.**



4 COMPARTMENTS



Wiring Diagram for a 4 Compartment Tanker using a 6 Channel Monitor

Where 8 channel monitors are being used, wire as above except start from pin 1 and use DP307.

The following table lists all possible combinations of tankers:

TRUCK PLUG PIN#	1 COMPT TANK	2 COMPT TANK	3 COMPT TANK	4 COMPT TANK	5 COMPT TANK	6 COMPT TANK	7 COMPT TANK
1	LDP Probe	LDP Probe	LDP Probe	LDP Probe	LDP Probe	LDP Probe	LDP Probe
2	DP307-Black	LDP Probe	LDP Probe	LDP Probe	LDP Probe	LDP Probe	LDP Probe
3	DP307-Black	DP307-Black	LDP Probe	LDP Probe	LDP Probe	LDP Probe	LDP Probe
4	DP307-Black	DP307-Black	DP307-Black	LDP Probe	LDP Probe	LDP Probe	LDP Probe
5	DP307-Black	DP307-Black	DP307-Black	DP307-Black	LDP Probe	LDP Probe	LDP Probe
6	DP307-Black	DP307-Black	DP307-Black	DP307-Black	DP307-Black	LDP Probe	LDP Probe
7	DP307-Black	DP307-Black	DP307-Black	DP307-Black	DP307-Black	DP307-Black	LDP Probe
8	DP307-Black	DP307-Black	DP307-Black	DP307-Black	DP307-Black	DP307-Black	DP307-Black
9*							
10	Ground-White	Ground-White	Ground-White	Ground-White	Ground-White	Ground-White	Ground-White

*See "Ground Boss" wiring to ensure static dissipation from tank.

