



DVM International B.V.

## Data sheet LVD-D2-series 2-channel inductive loop vehicle detector

### Mechanical data

Material	Black ABS blend
Dimensions (W x H x D)	78 x 41 x 80 mm / 3,07 x 1,61 x 3,14 inch
Mounting	11 pin or DIN-rail
Connector	Single rear mount 11-pin
Options	Mounting DIN-rail base

### Electrical data

Supply voltages	230 VAC/50 Hz, 120 VAC/60 Hz, 12-24 V AC/DC
Voltage tolerance AC	+10% / -15%
Voltage tolerance DC	± 15%
Power consumption	4,5 VA
Self-tuning inductance range	50 µH - 1.000 µH (ideal is 100-300 µH)
Operating frequency	20 kHz - 170 kHz
Frequency range	Two step adjustable on face plate, Frequency determined by loop geometry
Sensitivity range	Four step adjustable on face plate
Loop resistance	< 8 Ω including feed line
Relay 1 and Relay 2	Max. 240 V / 5A, Normally Open
Reaction time	10 ms
Max. detectable vehicle speed	50 km/h - 31 mph with correct loop

### Functions

Operating modes	1	Limited / Permanent presence, max. 10 min.
	2	Automatic sensitivity boost OFF / ON
	3	Pulse on detect / Presence on detect
	4	AB-logic, both Pulse and Presence

### Settings and indications

DIP-switch settings		1	Frequency Loop 1 in two steps
		2	Frequency Loop 2 in two steps
		3+4	Sensitivity Loop 2 in four steps
		5+6	Sensitivity Loop 1 in four steps
		7	Automatic Sensitivity Boost (ASB) OFF/ON
		8	Presence, OFF = limited, ON = permanent
Jumpers (inside housing)	LK1: AB-logic	1+2	Presence AB-logic
		2+3	Pulse AB-logic
		Open	No AB-logic (default)
	LK5		Loop 2: Open=Pulse, Closed=Presence (default)
LK6		Loop 1: Open=Pulse, Closed=Presence (default)	
Indications	Red LED		Power
	Green LED 1 and LED 2 Loop- indication	Loop indicator with following functions:	
		1	Tuning - ON steady for 2 seconds, then off
		2	Fault - flashing ON and OFF
	3	Undetect: OFF steady, detect: ON steady	
Reset button	After changing DIP-switch or Jumper settings or after changing loop geometry push Reset button to initiate automatic tuning cycle		

**Wiring details**

Supply voltage	1	}230 VAC/50 Hz, 120 VAC/60 Hz, or 12-24 V AC/DC
Neutral	2	
Relay 2	3	Loop 2, Common
Not used	4	
Relay 1	5	Loop 1, Common
Relay 2	6	Loop 2, Normally Open (NO) contact
Loop 1	7	}Twist this pair
Loop 1	8	
Loop 2	9	}Twist this pair
Loop 2	10	
Relay 2	11	Loop 2, Normally Open (NO) contact

**Ambient conditions**

Protection category	IP20
Operating temperature	-20 °C to +65 °C / -4 °F to 149 °F
Storage temperature	-40 °C to +85 °C / -40 °F to 185 °F
Relative air humidity	< 95%, non-condensing

**Available typenumbers**

230 VAC (50 Hz)	LVD-D2-230
120 VAC (60 Hz)	LVD-D2-120
12-24 V AC/DC	LVD-D2-1224

**Applicable certificates**

ISO9001, ISO14001, OHSAS18001, RoHS, CE
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**Functionally-(\*) and Pin-(\*\*)compatible with the following loop detectors**

DIABLO Controls	DSP-20
TENET Shenzhen	PD-0232, PD-0234

**Functionally-(\*) but not Pin-(\*\*)compatible with the following loop detectors**

AGD Systems	AGD520-500-01, AGD520-517-001, AGD520-310-001
AOPU Industries	TLD-410
BEA Industrial	10MATRIXS-Series
Bft Automation	LD-200, LD202
BIRCHER-REGLOMAT	ProLoop 2.2 (11 pin)
CAME	SMA-2, SMA-230
CAPSYS	STB en STE series
CARLO GAVAZZI	LDP2TA2B series
ELDAT	ILD2, ILD22
ELSEMA	LD-262
EMX Industries	ULT-MPV-2U
FEIG Industries	VEK MNE2 A t/m G
NOBLE Optic Co.	LD-200, LD-202, LD-205, LD-206
NORTECH International	PD232, PD234, PD260, PD270
PEPPERL+FUCHS	LC10-2-D
PROCON Electronics	LD200
RENO A&E	AX2 series
SWARCO Traffic Systems (Weiss Electric)	IG326
WITT Sensoric	Loop 2C-11
ZOMTECH	LD-260

- \*) Functionally compatible means that the basic functions are present, like: pulse on detect, pulse on un-detect, limited presence, frequency shift, sensitivity in steps, automatic sensitivity (ASB). Some types may have more possibilities or wider ranges (frequency, sensitivity, etc.). Just functionally compatible means that the wiring must be (partly) adapted.
- \*\*\*) Pin-compatible means that the wiring is identical. So, you can just plug this detector in the socket of the brands and type numbers mentioned. The wiring does not need to be adapted.

Note:

Note DVM International B.V. is not responsible for possible errors in the list with compatible detectors above. You always have to check yourself the exact specifications of the detector to be replaced. We appreciate your passing errors so that we can improve the specifications.



Loop detectors	<a href="http://www.loopdetectors.store">www.loopdetectors.store</a>
Detecteurs a boucle	<a href="http://www.detecteursaboucle.store">www.detecteursaboucle.store</a>
Schleifendetektoren	<a href="http://www.schleifendetektoren.store">www.schleifendetektoren.store</a>
Detectores de bucle	<a href="http://www.detectoresdebucle.store">www.detectoresdebucle.store</a>
Detectores de laço	<a href="http://www.detectoresdelaco.store">www.detectoresdelaco.store</a>
Rilevatori a spira	<a href="http://www.rilevatoriaspira.store">www.rilevatoriaspira.store</a>
Detektory pętli	<a href="http://www.detektorypetli.store">www.detektorypetli.store</a>
Lusdetektoren	<a href="http://www.lusdetektoren.store">www.lusdetektoren.store</a>
Smyčkové detektory	<a href="http://www.smyckovedetektory.store">www.smyckovedetektory.store</a>