

Slope Switch Programmable with Display

-10°...+10° / -45°...+45° / -85°...+85°, 2 Axis (X/Y)

Features:

- 4 x Transistor Output Signal
- Indication of slope
- compact and robust design
- Hysteresis- / Windows Mode
- M12-connector or cable
- wide voltage range

Brief Description:

The electronic slope switches and sensors are trendsetting control units for various industrial applications. Thanks to the robust design, stationary as well as mobile applications are possible.

The digital electronic in combination with the sensing element creates very precise measured values and enable a reliable monitoring of the adjusted switchpoints i.e. angles. The monitoring of an angle range (windows mode) is also possible.

The programming can be done with the teach buttons and by means of the integrated LED-display inside the housing.

The output signal can be programmed with several parameters:

- 4 switchpoints on the X/Y-axis
- hysteresis or windows mode
- switching logic NO/NC
- on-/ off-delay times
- calibration function



General Data:

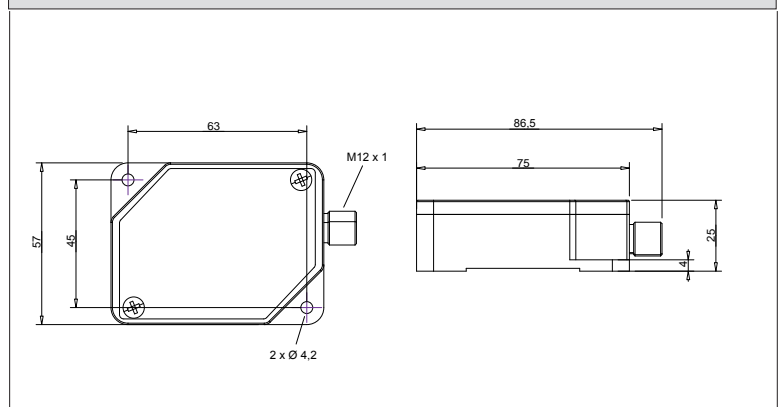
Supply Voltage	9...30 VDC
Degree of Protection	IP67

Ordering Data:

Range	Type	Part Number
-10° ... +10°	DNS-10-D2	507 02 010
-45° ... +45°	DNS-45-D2	507 02 045
-85° ... +85°	DNS-85-D2	507 02 085

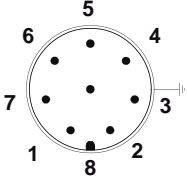
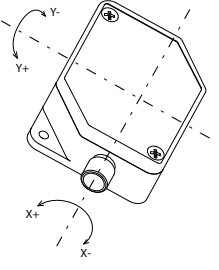
* more versions on request

Dimension:




subject to modifications without notice

Technical Data:

Electrical Data:		Plug: 																											
Supply Voltage +Ub	9-30 VDC (short circuit and reverse polarity save)																												
Current Consumption	< 30 mA (without load)																												
Switching Outputs	4 x PNP Transistor																												
Output Voltage	approx. +Ub-1,5 V																												
Max. Current Output	500 mA each (max. 1A together)																												
Plug	M12x1, 8-poles (cable on request)																												
Mechanical Data:			<table border="1"> <thead> <tr> <th>Pin</th> <th>Plug M12x1</th> <th>cable color</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>nc</td> <td>white</td> </tr> <tr> <td>2</td> <td>+Ub</td> <td>brown</td> </tr> <tr> <td>3</td> <td>OUT 1</td> <td>green</td> </tr> <tr> <td>4</td> <td>OUT 2</td> <td>yellow</td> </tr> <tr> <td>5</td> <td>OUT 3</td> <td>grey</td> </tr> <tr> <td>6</td> <td>OUT 4</td> <td>pink</td> </tr> <tr> <td>7</td> <td>GND</td> <td>blue</td> </tr> <tr> <td>8</td> <td>PROG</td> <td>red</td> </tr> </tbody> </table>	Pin	Plug M12x1	cable color	1	nc	white	2	+Ub	brown	3	OUT 1	green	4	OUT 2	yellow	5	OUT 3	grey	6	OUT 4	pink	7	GND	blue	8	PROG
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Material Body	Aluminium Diecast coated																												
Degree of Protection	IP 67 (with plug on)																												
Size	approx. 64x58x36 mm																												
Programming Parameter (OUT1...OUT4):		Axis: 																											
Switchpoint	0-100%																												
Resetpoint	0-100%																												
Switching Window	0-100%																												
Switching Logic	NO / NC																												
Delay Time ON/OFF	0-10 sec. with Steps of 100 msec.																												
Accuracy:																													
Repeatability of Sensor	0,01° (typ. at 0°)																												
Resolution Sensor / internal Display	0,001° / 3 digits (0,1°)																												
Temperature Behavior X-Axis; Y-Axis	0,008°/°C for -25°C...25°C...85°C (typ.)																												
Longterm Stability of Sensor	approx. 0,036° in 10 years (acc. to HTB-Test)																												
Environmental Conditions:																													
Operating Temperature	-25 ... +85°C																												
Schock	20.000 g, 0,1 ms																												
Display (internal):																													
LED green / yellow	Status / Programming / Out 1,2,3,4																												
LED-Display with 3 digits	Programming and indication of inclination																												

Accessories:

Cable:	Order-No.	
cable 2/5/10m with plug straight	HKS-S115-PU-2/5/10	
cable 2/5/10m with plug 90°	HKS-S116-PU-2/5/10	
Plug straight without cable	KKS-S115-00	