

Ultrasonic proximity sensors

Scanning range Sd	30...150 mm	30...150 mm
Special characteristics	<ul style="list-style-type: none"> • Small blind range • ≤ 0,5 mm repeatability 	<ul style="list-style-type: none"> • Small blind range • ≤ 0,5 mm repeatability
<p>Ultrasonic proximity sensors enable the detection of different objects - irrespective of color and transparency. The sensor's potentiometer enables the user to adjust the sensor for a specific sensing distance, eliminating background interference.</p>		
PNP make function (NO)	UNDK 30P1713/S14	UNDK 30P1713
PNP break function (NC)	UNDK 30P3713/S14	UNDK 30P3713
NPN make function (NO)	UNDK 30N1713/S14	UNDK 30N1713
NPN break function (NC)	UNDK 30N3713/S14	UNDK 30N3713
technical data		
scanning range far limit Sde	45...150 mm	45...150 mm
sonic beam angle	8°	8°
sonic frequency	300 kHz	300 kHz
hysteresis	5% Sde	5% Sde
voltage supply range	12 - 30 VDC	12 - 30 VDC
residual ripple	< 10% VS	< 10% Vs
supply current	< 30 mA	< 30 mA
max. switching current	200 mA	200 mA
voltage drop	≤ 2 VDC	≤ 2 VDC
short circuit protection	yes	yes
reverse polarity protection	yes	yes
response time t_{on}/t_{off}	≤ 10...20 ms	≤ 10...20 ms
repeatability	≤ 0,5 mm	≤ 0,5 mm
temperature drift	0,18% Sde/K	0,18% Sde/K
temperature range	-25...+60 °C	-25...+60 °C
housing material	polyester	polyester
protection class	IP 67	IP 67
switching state indication	green LED	green LED
adjustment aid	yes	yes
synchronization	yes	yes
options		
multiplex version	UNDK 30xx813/S14	UNDK 30xx813
connector options	ES 14, ES 33A, ES 34A	

60...300 mm	60...300 mm	
<ul style="list-style-type: none"> • With synchronization output • ≤ 0,5 mm repeatability 	<ul style="list-style-type: none"> • With synchronization output • ≤ 0,5 mm repeatability 	
UNDK 30P1712/S14	UNDK 30P1712	
UNDK 30P3712/S14	UNDK 30P3712	
UNDK 30N1712/S14	UNDK 30N1712	
UNDK 30N3712/S14	UNDK 30N3712	
technical data		
scanning range far limit Sde	80...300 mm	80...300 mm
sonic beam angle	8°	8°
sonic frequency	400 kHz	400 kHz
hysteresis	4% Sde	4% Sde
voltage supply range	12 - 30 VDC	12 - 30 VDC
residual ripple	< 10% Vs	< 10% Vs
supply current	< 30 mA	< 30 mA
max. switching current	200 mA	200 mA
voltage drop	≤ 2 VDC	≤ 2 VDC
short circuit protection	yes	yes
reverse polarity protection	yes	yes
response time t_{on}/t_{off}	≤ 25...50 ms	≤ 25...50 ms
repeatability	≤ 0,5 mm	≤ 0,5 mm
temperature drift	0,18% Sde/K	0,18% Sde/K
temperature range	-25...+60 °C	-25...+60 °C
housing material	polyester	polyester
protection class	IP 67	IP 67
switching state indication	green LED	green LED
adjustment aid	yes	yes
synchronization	yes	yes
options		
multiplex version	UNDK 30xx812/S14	UNDK 30xx812
connector options	ES 14, ES 33A, ES 34A	
		<p>Part number key for multiplex versions</p> <p>UNDK 30xx812/S14</p> <p>P = PNP 1 = NO</p> <p>N = NPN 3 = NC</p>