

ULTRASONIC SENSOR



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Series UPK

Key-Features:

- Measurement range up to 1200 mm
- Output: PNP, NPN, 0...10 V or 4...20 mA
- Protection class: IP67
- Temperature range: -20 °C to +70 °C
- M18 Housing
- Versions with plastic or stainless steel housing

TECHNICAL DATA

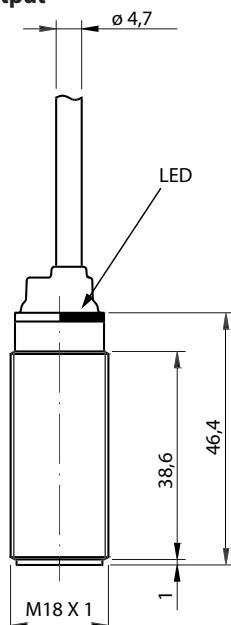
		UPK-300	UPK-800	UPK-1200
Measurement range	[mm]	40...300 ¹⁾	60...800 ¹⁾	80...1200 ¹⁾
Beam angle	[°]	7 ± 2	8 ± 2	
Switching frequency	[Hz]	8	4	5
Power supply	[VDC]	10...30		
max. ripple content	[%]	5		
Linearity	[%]	1		
Repeatability	[%]	1		
Resolution	[mm]	2		
Output		Switching output: PNP or NPN (NO/NC changeable via teach wire ²⁾) or Analog output: 0...10 V or 4...20 mA		
Output current	[mA]	100		
Output voltage drop		≤ 2.2 V at I = 100 mA		
Supply current (without load)		≤ 35 mA at Val = 30 V		
Leakage current		≤ 10 µA at 30 V		
Power-On delay	[ms]	≤ 100		
Temperature	[°C]	-20...+70		
Temperature drift of MR	[%]	≤ 5		
Short circuit protection		yes (auto-reset)		
Induction protection		yes		
Inverse-polarity protection		yes		
Weight		plastic version: with connector 65 g / with cable 75 g stainless steel version: with connector 80 g / with cable 140 g		
LEDs		yellow: output green: alignment		
Connection		connector M12 or cable 2 m		
Protection class		IP67		
EMC		IEC60947-5-2		
Housing		plastic version: PTB stainless steel version: V4A		
Membrane		epoxy-glass resin		

¹⁾ applies for metallic targets with a size of 100 x 100 mm (UPK-300) respectively 200 x 200 mm (UPK-800 and UPK-1200)

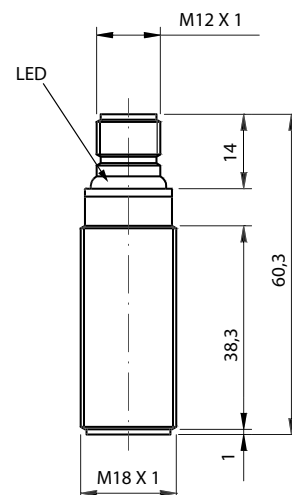
²⁾ see „Adjustment Option“

TECHNICAL DRAWING

Version with cable output

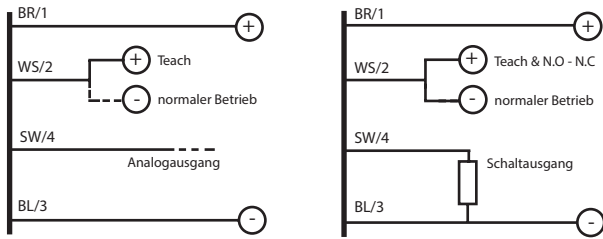


Version with connector output

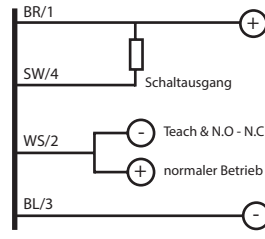


ELECTRICAL CONNECTION

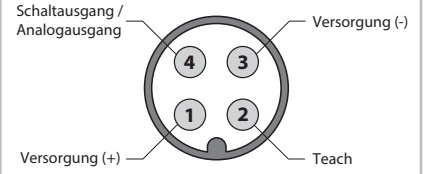
Circuit diagram analog output Circuit diagram PNP output



Circuit diagram NPN output



Connector output, M12



AVAILABLE OUTPUTS

Version with switching output

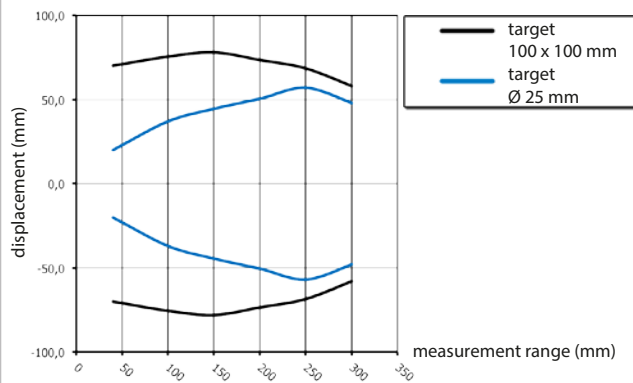


Version with analog output

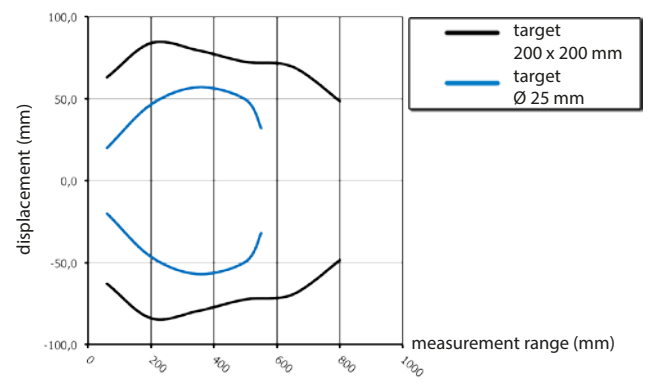


RESPONSE DIAGRAMS

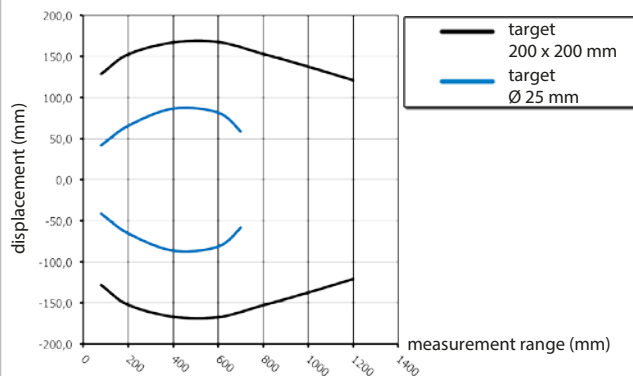
UPK-300



UPK-800

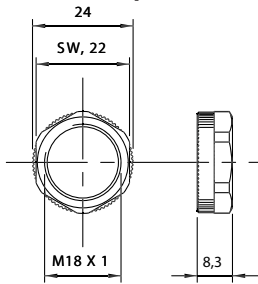


UPK-1200

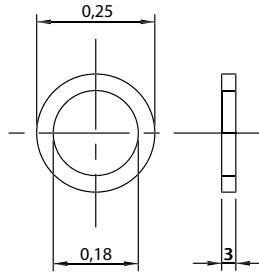


ACCESSORIES

Accessories plastic version

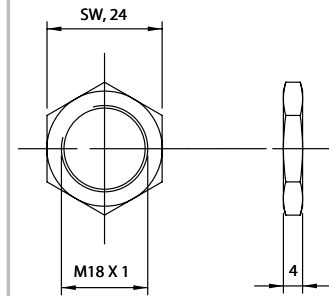


plastic clamping ring
(2x included in delivery)



plastic washer
(2x included in delivery)

Accessories stainless steel version



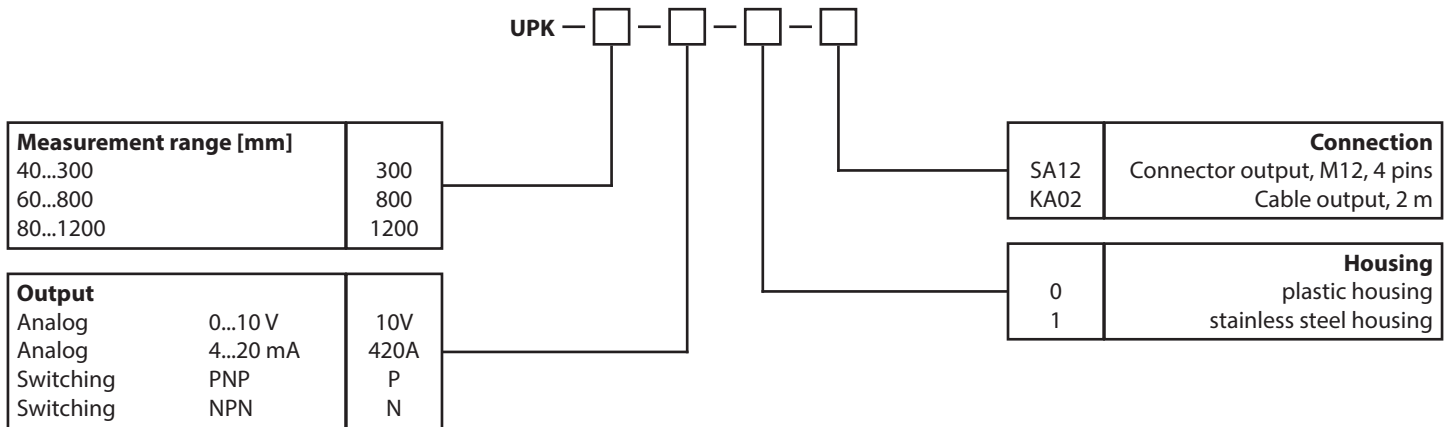
metallic clamping ring
(2x included in delivery)

ADJUSTMENT OPTION

NO/NC selection (PNP and NPN versions only)

- Connect the teach wire to +V (PNP models) or to GND (NPN models) for a time of at least 8 s
- The yellow LED blinks quickly until the teach wire is released, then blinks 5 times to confirm the change from NO to NC respectively NC to NO.

ORDER CODE



Subject to change without prior notice.

WayCon Positionsmesstechnik GmbH
email: info@waycon.de
internet: www.waycon.biz

WayCon
Positionsmesstechnik

Head Office
Mehlbeerenstr. 4
82024 Taufkirchen
Tel. +49 (0)89 67 97 13-0
Fax +49 (0)89 67 97 13-250

Office Köln
Auf der Pehle 1
50321 Brühl
Tel. +49 (0)2232 56 79 44
Fax +49 (0)2232 56 79 45