

UK6 Series / Ultrasonic Sensors

Switching / Measuring Sensors



- Construction type: M18x1
- Connection type: M12 connector, 4-pin and cable
- Housing material: Stainless steel AISI 316L / DIN 1.4404
- IP67 Ingress Protection
- Power supply: 10 - 30 V DC

Versions

CON- STRUCTION TYPE	HOUSING MATERIAL	CONNECTION TYPE	MEASURING RANGE	ANALOG 4 - 20 mA	ANALOG 0 - 10 V	1x DIGITAL PNP NO / NC	1x DIGITAL NPN NO / NC
UK6 SERIES							
M18x1	Plastic (PBT)	M12 connector	40 - 300 mm	UK6A/H2-0EUL	UK6A/H1-0EUL	UK6A/HP-0EUL	UK6A/HN-0EUL
			60 - 800 mm	UK6C/H2-0EUL	UK6C/H1-0EUL	UK6C/HP-0EUL	UK6C/HN-0EUL
		Cable	40 - 300 mm	UK6A/H2-0AUL	UK6A/H1-0AUL	UK6A/HP-0AUL	UK6A/HN-0AUL
			60 - 800 mm	UK6C/H2-0AUL	UK6C/H1-0AUL	UK6C/HP-0AUL	UK6C/HN-0AUL
	Stainless steel AISI 316L DIN 1.4404	M12 connector	40 - 300 mm	UK6A/H2-1EUL	UK6A/H1-1EUL	UK6A/HP-1EUL	UK6A/HN-1EUL
			60 - 800 mm	UK6C/H2-1EUL	UK6C/H1-1EUL	UK6C/HP-1EUL	UK6C/HN-1EUL
		Cable	40 - 300 mm	UK6A/H2-1AUL	UK6A/H1-1AUL	UK6A/HP-1AUL	UK6A/HN-1AUL
			60 - 800 mm	UK6C/H2-1AUL	UK6C/H1-1AUL	UK6C/HP-1AUL	UK6C/HN-1AUL

Technical data

	UK6A/Hx-0xUL	UK6C/Hx-1xUL
GENERAL DATA		
Measuring method	Ultrasonic	
Sensorfunction	Measure (analog), Switch (digital)	
Construction type	M18x1	
Connection type	M12 connector, 4-pin / Cable	
Temperature compensation	Yes (digital)	
Teach-in	External	

UK6 Series / Ultrasonic Sensors

Technical details

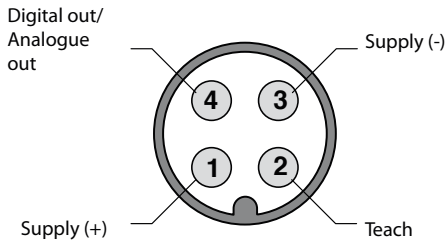
UK6A/Hx-0xUL

UK6C/Hx-1xUL

MEASUREMENT DATA		
Blind zone	40 mm	60 mm
Beam angle	$7^\circ \pm 2^\circ$	$8^\circ \pm 2^\circ$
Repeat accuracy	2 %	
Linearity error	$\leq 3\%$	
Response time (digital)	Plastichousing: 12 ms Steelhousing: 25 ms	80 ms
Temperature drift	$\leq 5\%$	
OUTPUTS		
Number of outputs	1	
Time delay before availability	$\leq 100\text{ ms}$	
Switching frequency	8 Hz	5 Hz
POWER SUPPLY		
Power supply	10 - 30 V DC	
No-load current	$\leq 35\text{ mA}$	
Short circuit protection	Yes	
Reverse polarity protection	Yes	
Over voltage pulses protection	Yes	
Ripple	5 %	
Voltage drop	2.2 V @ 100 mA	
Leakage current	10 μA @ 30 V DC	
PHYSICAL CHARACTERISTICS		
Housing material	Plastic (polybutyleneterephthalate) / Stainless steel AISI 316L / DIN 1.4404	
Optic material	Epoxy-glass resin	
Ingress protection	IP67	
Dimensions ($\varnothing \times L$)	18 x 60.4 mm (Plug) / 18 x 54.9 mm (Cable)	
Cable length	2000 mm (Cable)	
Weight	65 - 80 g (Plug) / 75 - 140 g (Cable)	
Tightening torque	1 Nm (Plastichousing) / 50 Nm (Steelhousing)	
ENVIRONMENTAL		
Operating temperature range	-20 - +70 °C	
Storage temperature range	-35 - +70 °C	
APPROVALS		
EMC	EN 60947-5-2	
cULus	Yes	

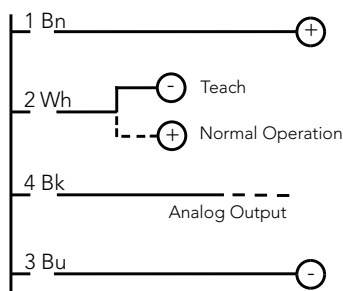
UK6 Series / Ultrasonic Sensors

Connector M18x1

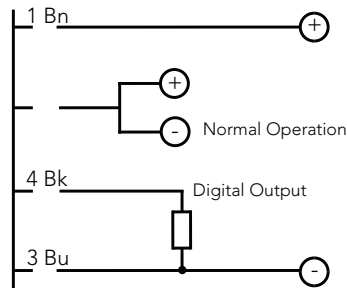


Electrical diagrams

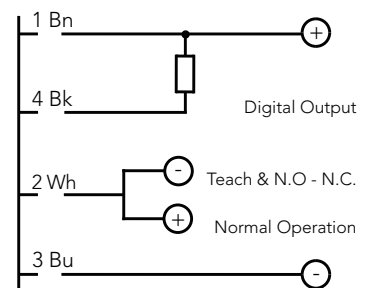
Analog



PNP NO/NC



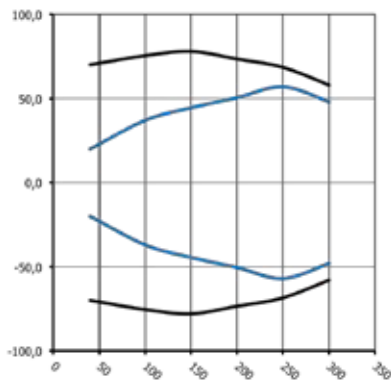
NPN NO/NC



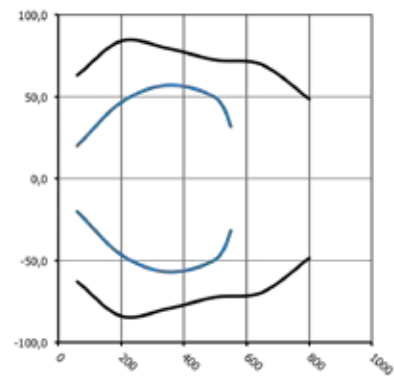
BN: braun / BK: schwarz / BU: blau / WH: weiß

Sensing area

UK6A/**_**



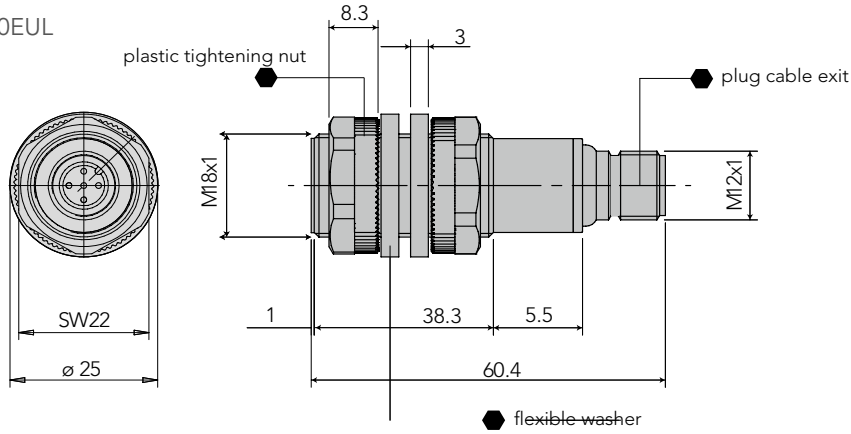
UK6C/**_**



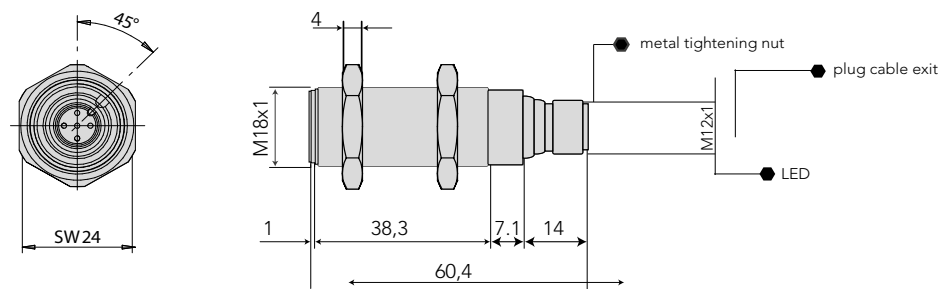
UK6 Series / Ultrasonic Sensors

Dimensions

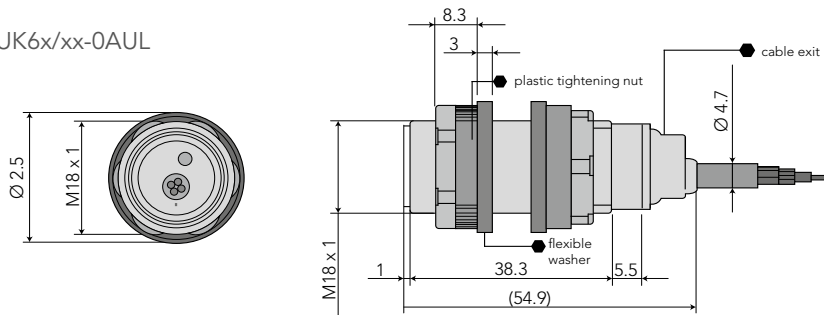
UK6x/xx-0EUL



UK6x/xx-1EUL



UK6x/xx-0AUL



UK6x/xx-1AUL

