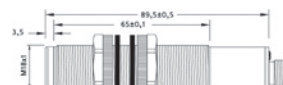
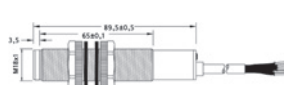
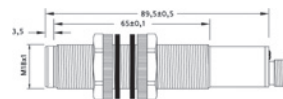
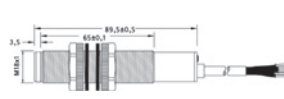
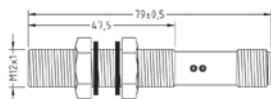


Ultrasonic Sensors (Type M12, M18)

Type	M12	M18		M18	
Detection range	25–200 mm	30–400 mm	30–400 mm	30–400 mm	30–400 mm
Output	1 x NO/NC	2 x NO/NC	Analogue	2 x NO/NC	Analogue
Type of connection	Connector M12	Cable 2 m	Cable 2 m	Connector M12	Connector M12
Special feature					



PNP	DC	NO/NC Type	6712101001 UN12I-DPE0-0200-S30	6711102005 UT18I-DPE0-0400-C30	6712102005 UT18I-DPE0-0400-S30
NPN	DC	NO/NC Type	6712201001 UN12I-DNE0-0200-S30	6711202005 UT18I-DNE0-0400-C30	6712202005 UT18I-DNE0-0400-S30
Analogue	DC	0–10 V Type 4–20 mA Type		6711402005 UT18I-D00U-0400-C30 6711302005 UT18I-D00I-0400-C30	6712402005 UT18I-D00U-0400-S30 6712302005 UT18I-D00I-0400-S30

Technical data

Rated operating voltage	U_B	12–30 VDC	12–30 VDC	15–30 VDC	12–30 VDC	15–30 VDC
Rated operating current	I_B	100 mA	500 mA	–	500 mA	–
Switching frequency (max)	F	20 Hz	15 Hz	–	15 Hz	–
Resolution		–	–	0.125 mm	–	0.125 mm
Linearity error		–	–	< 0.5 %	–	< 0.5 %
Response times		–	–	60 ms	–	60 ms
Repeatability		±0.3 %	±0.2 % ±1 mm	±0.2 % ±1 mm	±0.2 % ±1 mm	±0.2 % ±1 mm
Sound beam		12°	8°	8°	8°	8°
Short circuit-protection		Cyclic	Cyclic	Cyclic	Cyclic	Cyclic
Function/operating voltage indicator		LED/LED	LED/LED	LED/LED	LED/LED	LED/LED

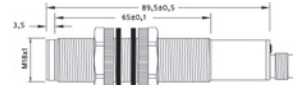
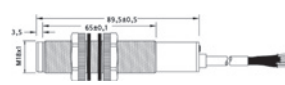
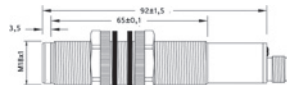
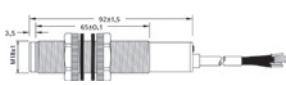
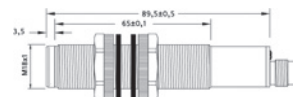
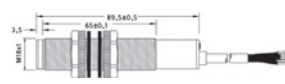
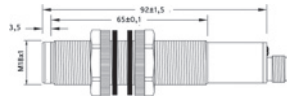
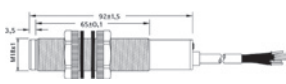
Mechanical data

Ambient temperature (min/max)		–20°C/+70°C	–15°C/+70°C	–15°C/+70°C	–15°C/+70°C	–15°C/+70°C
Protection class in accordance with IEC 529, EN 60529		IP67	IP67	IP67	IP67	IP67
Enclosure material		Stainless steel	PBT/GF30	PBT/GF30	PBT/GF30	PBT/GF30
Connection		M12 x 1	5 x 0.14 mm ²	4 x 0.14 mm ²	M12 x 1	M12 x 1

Please refer to Accessories for cable couplers and sensor tester.



M18		M18		M18		M18	
60–500 mm	60–500 mm	60–500 mm	60–500 mm	80–1600 mm	80–1600 mm	80–1600 mm	80–1600 mm
2 x NO/NC	Analogue	2 x NO/NC	Analogue	2 x NO/NC	Analogue	2 x NO/NC	Analogue
Cable 2 m	Cable 2 m	Connector M12	Connector M12	Cable 2 m	Cable 2 m	Connector M12	Connector M12



6711102004		6712102004		6711102002		6712102002	
UT18I-DPE0-0500-C30		UT18I-DPE0-0500-S30		UT18I-DPE0-01.6-C30		UT18I-DPE0-01.6-S30	
6711202004		6712202004		6711202002		6712202002	
UT18I-DNE0-0500-C30		UT18I-DNE0-0500-S30		UT18I-DNE0-01.6-C30		UT18I-DNE0-01.6-S30	
	6711402004 UT18I-D00U-0500-C30 6711302004 UT18I-D00I-0500-C30		6712402004 UT18I-D00U-0500-S30 6712302004 UT18I-D00I-0500-S30		6711402002 UT18I-D00U-01.6-C30 6711302002 UT18I-D00I-01.6-C30		6712402002 UT18I-D00U-01.6-S30 6712302002 UT18I-D00I-01.6-S30

12–30 VDC	15–30 VDC	12–30 VDC	15–30 VDC	12–30 VDC	15–30 VDC	12–30 VDC	15–30 VDC
500 mA	–	500 mA	–	500 mA	–	500 mA	–
10 Hz	–	10 Hz	–	6 Hz	–	6 Hz	–
–	0.25 mm	–	0.25 mm	–	1 mm	–	1 mm
–	< 0.5 %	–	< 0.5 %	–	< 0.5 %	–	< 0.5 %
–	100 ms	–	100 ms	–	140 ms	–	140 ms
±0.2 % ±1 mm	±0.2 % ±1 mm	±0.2 % ±1 mm	±0.2 % ±1 mm	±0.2 % ±2 mm	±0.2 % ±2 mm	±0.2 % ±2 mm	±0.2 % ±2 mm
8°	8°	8°	8°	8°	8°	8°	8°
Cyclic	Cyclic	Cyclic	Cyclic	Cyclic	Cyclic	Cyclic	Cyclic
LED/LED	LED/LED	LED/LED	LED/LED	LED/LED	LED/LED	LED/LED	LED/LED

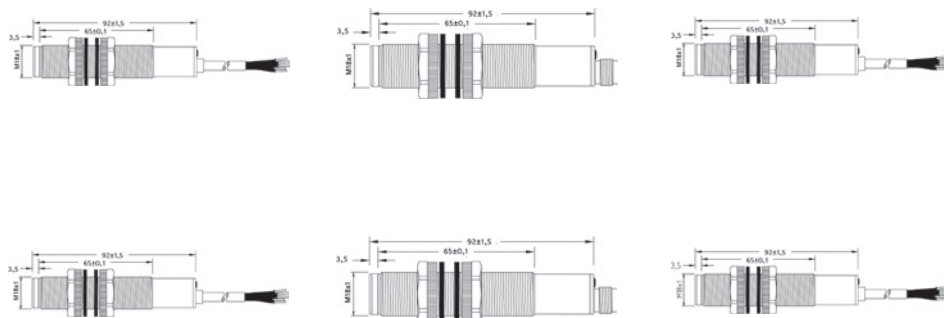
–15°C/+70°C	–15°C/+70°C	–15°C/+70°C	–15°C/+70°C	–15°C/+70°C	–15°C/+70°C	–15°C/+70°C	–15°C/+70°C
IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67
PBT/GF30	PBT/GF30	PBT/GF30	PBT/GF30	PBT/GF30	PBT/GF30	PBT/GF30	PBT/GF30
5 x 0.14 mm ²	4 x 0.14 mm ²	M12 x 1	M12 x 1	5 x 0.14 mm ²	4 x 0.14 mm ²	M12 x 1	M12 x 1

You will find detailed data sheets to the products under www.bernstein.eu



Ultrasonic Sensors (Type M18, M30)

Type	M18		M18		M18	
Detection range	100–800 mm	100–800 mm	100–800 mm	100–800 mm	200–2000 mm	200–2000 mm
Output	2 x NO/NC	Analogue	2 x NO/NC	Analogue	2 x NO/NC	Analogue
Type of connection	Cable 2 m	Cable 2 m	Connector M12	Connector M12	Cable 2 m	Cable 2 m
Special feature						



PNP	DC	NO/NC Type	6711102003 UT18I-DPE0-0800-C30		6712102003 UT18I-DPE0-0800-S30		6711102001 UT18I-DPE0-02.0-C30	
NPN	DC	NO/NC Type	6711202003 UT18I-DNE0-0800-C30		6712202003 UT18I-DNE0-0800-S30		6711202001 UT18I-DNE0-02.0-C30	
Analogue	DC	0–10 V Type 4–20 mA Type		6711402003 UT18I-D00U-0800-C30 6711302003 UT18I-D00I-0800-C30		6712402003 UT18I-D00U-0800-S30 6712302003 UT18I-D00I-0800-S30		6711402001 UT18I-D00U-02.0-C30 6711302001 UT18I-D00I-02.0-C30

Technical data

Rated operating voltage	U_B	12–30 VDC	15–30 VDC	12–30 VDC	15–30 VDC	12–30 VDC	15–30 VDC
Rated operating current	I_B	500 mA	–	500 mA	–	500 mA	–
Switching frequency (max)	F	10 Hz	–	10 Hz	–	5 Hz	–
Resolution		–	0.25 mm	–	0.25 mm	–	1 mm
Linearity error		–	< 0.5 %	–	< 0.5 %	–	< 0.5 %
Response times		–	100 ms	–	100 ms	–	200 ms
Repeatability		$\pm 0.2 \% \pm 1 \text{ mm}$	$\pm 0.2 \% \pm 1 \text{ mm}$	$\pm 0.2 \% \pm 1 \text{ mm}$	$\pm 0.2 \% \pm 1 \text{ mm}$	$\pm 0.2 \% \pm 2 \text{ mm}$	$\pm 0.2 \% \pm 2 \text{ mm}$
Sound beam		8°	8°	8°	8°	8°	8°
Short circuit-protection		Cyclic	Cyclic	Cyclic	Cyclic	Cyclic	Cyclic
Function/operating voltage indicator		LED/LED	LED/LED	LED/LED	LED/LED	LED/LED	LED/LED

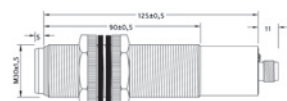
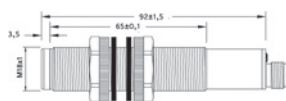
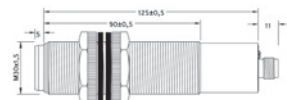
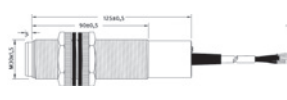
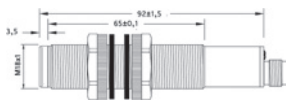
Mechanical data

Ambient temperature (min/max)		–15°C/+70°C	–15°C/+70°C	–15°C/+70°C	–15°C/+70°C	–15°C/+70°C	–15°C/+70°C
Protection class in accordance with IEC 529, EN 60529		IP67	IP67	IP67	IP67	IP67	IP67
Enclosure material		PBT/GF30	PBT/GF30	PBT/GF30	PBT/GF30	PBT/GF30	PBT/GF30
Connection		5 x 0.14 mm ²	4 x 0.14 mm ²	M12 x 1	M12 x 1	5 x 0.14 mm ²	4 x 0.14 mm ²

Please refer to Accessories for cable couplers and sensor tester.



M18		M30		M30	
200–2000 mm	200–2000 mm	300–3500 mm	300–3500 mm	300–3500 mm	300–3500 mm
2 x NO/NC	Analogue	2 x NO/NC	Analogue	2 x NO/NC	Analogue
Connector M12	Connector M12	Cable 2 m	Cable 2 m	Connector M12	Connector M12



6712102001		6711103001		6712103001	
UT18I-DPE0-02.0-S30		UT30I-DPE0-03.5-C30		UT30I-DPE0-03.5-S30	
6712202001		6711203001		6712203001	
UT18I-DNE0-02.0-S30		UT30I-DNE0-03.5-C30		UT30I-DNE0-03.5-S30	
	6712402001 UT18I-D00U-02.0-S30 6712302001 UT18I-D00I-02.0-S30		6711403001 UT30I-D00U-03.5-C30 6711303001 UT30I-D00I-03.5-C30		6712403001 UT30I-D00U-03.5-S30 6712303001 UT30I-D00I-03.5-S30

12–30 VDC	15–30 VDC	12–30 VDC	15–30 VDC	12–30 VDC	15–30 VDC
500 mA	–	500 mA	–	500 mA	–
5 Hz	–	2.5 Hz	–	2.5 Hz	–
–	1 mm	–	1 mm	–	1 mm
–	< 0.5 %	–	< 0.5 %	–	< 0.5 %
–	200 ms	–	400 ms	–	400 ms
±0.2 % ±2 mm	±0.2 % ±2 mm	±0.2 % ±2 mm	±0.2 % ±2 mm	±0.2 % ±2 mm	±0.2 % ±2 mm
8°	8°	8°	8°	8°	8°
Cyclic	Cyclic	Cyclic	Cyclic	Cyclic	Cyclic
LED/LED	LED/LED	LED/LED	LED/LED	LED/LED	LED/LED

–15°C/+70°C	–15°C/+70°C	–15°C/+70°C	–15°C/+70°C	–15°C/+70°C	–15°C/+70°C
IP67	IP67	IP67	IP67	IP67	IP67
PBT/GF30	PBT/GF30	PBT/GF30	PBT/GF30	PBT/GF30	PBT/GF30
M12 x 1	M12 x 1	5 x 0.14 mm ²	4 x 0.14 mm ²	M12 x 1	M12 x 1

