



FULL FUNCTIONALITY, SMALLEST SIZE

MINIATURE INDUCTIVE SENSORS

KEY ADVANTAGES

Classics, Extra Distance and Full Inox

- ✓ High quality ASIC sensors with IO-Link interface
- ✓ Smallest self-contained inductive sensors on the market
- ✓ Outstanding temperature stability from -25°C (-13°F) to +70°C (+158°F)
- ✓ High switching frequency up to 5000 Hz
- ✓ Electronics vacuum potted for optimum long-term reliability under high stress

Full Inox

- ✓ Extremely robust one-piece stainless-steel housing
- ✓ Corrosion resistant
- ✓ IP 68 and IP 69K, sea water resistant
- ✓ Pressure resistant up to 80 bar

| RANGE OVERVIEW | Housing size | Classics | Extra Distance | Full Inox |
|----------------|--------------|----------|----------------|-----------|
| MINIATURE | ∅ 3 mm | p. 71-72 | | |
| | M4 | p. 72-73 | | |
| | ∅ 4 mm | p. 73-75 | p. 75 | p. 75 |
| | M5 | p. 76-77 | p. 77 | p. 78 |
| | C5 | p. 78-79 | | |

FAMILY

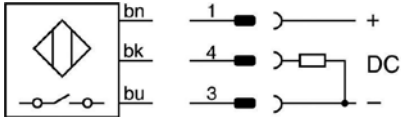
HOUSING SIZE MM

OPERATING DISTANCE MM

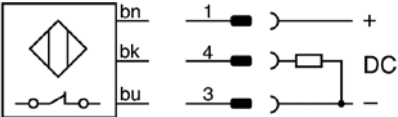
INDUCTIVE

WIRING DIAGRAMS

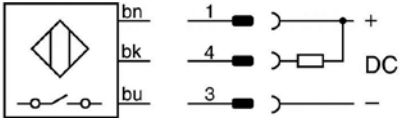
PNP NO



PNP NC



NPN NO

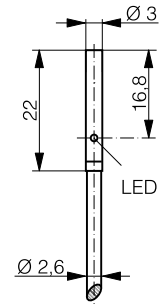
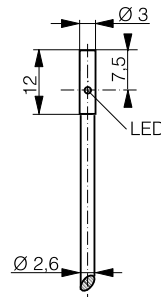
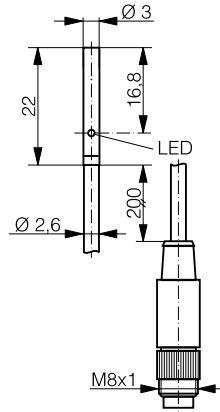
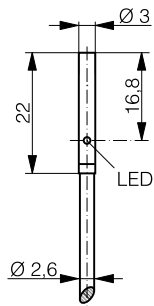


DATA

| |
|---------------------------|
| Housing material |
| Connection |
| Degree of protection |
| Mounting |
| Max. switching frequency |
| Supply voltage range |
| Ambient temperature range |
| Output current |
| PNP NO |
| NPN NO |
| PNP NC |
| Other types available |

MINIATURE

| | | | | |
|----------|----------|----------|----------|-----------|
| CLASSICS | CLASSICS | CLASSICS | CLASSICS | Inductive |
| Ø 3 | Ø 3 | Ø 3 | Ø 3 | |
| 0.6 | 0.6 | 1 | 1 | |



Photoelectric

Ultrasonic

Capacitive

Safety

RFID

Connectivity

Accessories

Glossary

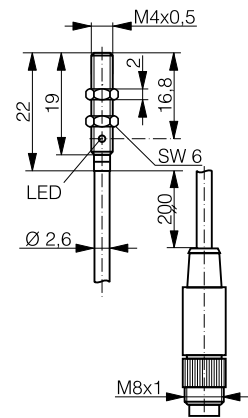
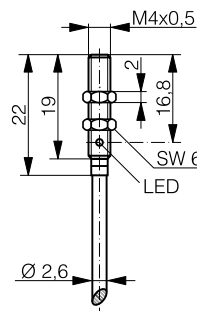
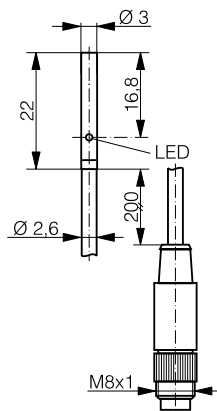
Index

| | | | |
|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Stainless steel V2A | Stainless steel V2A | Stainless steel V2A | Stainless steel V2A |
| PUR cable | PUR cable / Connector S8 | PUR cable | PUR cable |
| IP 67 | IP 67 | IP 67 | IP 67 |
| Embeddable | Embeddable | Embeddable | Embeddable |
| 5000 Hz | 5000 Hz | 8000 Hz | 3000 Hz |
| 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC |
| -25 ... +70°C / -13 ... +158°F | -25 ... +70°C / -13 ... +158°F | -25 ... +70°C / -13 ... +158°F | -25 ... +70°C / -13 ... +158°F |
| ≤ 100 mA | ≤ 100 mA | ≤ 100 mA | ≤ 100 mA |
| DW-AD-603-03 | DW-AV-603-03-276 | DW-AD-623-03-960 | DW-AD-623-03 |
| DW-AD-601-03 | DW-AV-601-03-276 | DW-AD-621-03-960 | DW-AD-621-03 |
| DW-AD-604-03 | | | |
| NPN NC | PNP NC, NPN NC | | PNP NC, NPN NC |

MINIATURE

INDUCTIVE

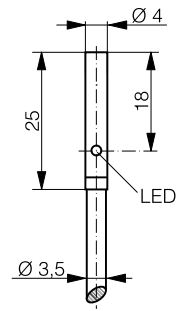
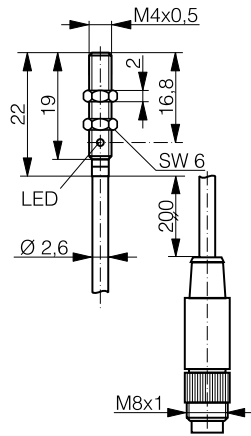
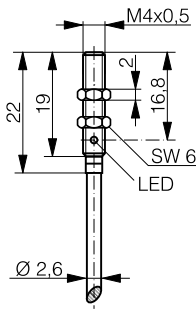
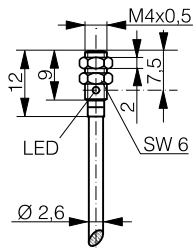
| FAMILY | CLASSICS | CLASSICS | CLASSICS |
|-----------------------|----------|----------|----------|
| HOUSING SIZE MM | Ø 3 | M4 | M4 |
| OPERATING DISTANCE MM | 1 | 0.6 | 0.6 |



| DATA | | | |
|---------------------------|--------------------------------|--------------------------------|--------------------------------|
| Housing material | Stainless steel V2A | Stainless steel V2A | Stainless steel V2A |
| Connection | PUR cable / Connector S8 | PUR cable | PUR cable / Connector S8 |
| Degree of protection | IP 67 | IP 67 | IP 67 |
| Mounting | Embeddable | Embeddable | Embeddable |
| Max. switching frequency | 3000 Hz | 5000 Hz | 5000 Hz |
| Supply voltage range | 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC |
| Ambient temperature range | -25 ... +70°C / -13 ... +158°F | -25 ... +70°C / -13 ... +158°F | -25 ... +70°C / -13 ... +158°F |
| Output current | ≤ 100 mA | ≤ 100 mA | ≤ 100 mA |
| PNP NO | DW-AV-623-03-276 | DW-AD-603-M4 | DW-AV-603-M4-276 |
| NPN NO | DW-AV-621-03-276 | DW-AD-601-M4 | DW-AV-601-M4-276 |
| PNP NC | | DW-AD-604-M4 | |
| Other types available | PNP NC, NPN NC | NPN NC | PNP NC, NPN NC |

MINIATURE

| CLASSICS | CLASSICS | CLASSICS | CLASSICS |
|----------|----------|----------|----------|
| M4 | M4 | M4 | Ø 4 |
| 1 | 1 | 1 | 0.8 |



- Inductive
- Photoelectric
- Ultrasonic
- Capacitive
- Safety
- RFID
- Connectivity
- Accessories
- Glossary
- Index

| | | | |
|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Stainless steel V2A | Stainless steel V2A | Stainless steel V2A | Stainless steel V2A |
| PUR cable | PUR cable | PUR cable / Connector S8 | PVC cable |
| IP 67 | IP 67 | IP 67 | IP 67 |
| Embeddable | Embeddable | Embeddable | Embeddable |
| 8000 Hz | 3000 Hz | 3000 Hz | 5000 Hz |
| 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC |
| -25 ... +70°C / -13 ... +158°F | -25 ... +70°C / -13 ... +158°F | -25 ... +70°C / -13 ... +158°F | -25 ... +70°C / -13 ... +158°F |
| ≤ 100 mA | ≤ 100 mA | ≤ 100 mA | ≤ 200 mA |
| DW-AD-623-M4-960 | DW-AD-623-M4 | DW-AV-623-M4-276 | DW-AD-603-04 |
| DW-AD-621-M4-960 | DW-AD-621-M4 | DW-AV-621-M4-276 | DW-AD-601-04 |
| | | | DW-AD-604-04 |
| | PNP NC, NPN NC | PNP NC, NPN NC | NPN NC |

MINIATURE

FAMILY

CLASSICS

CLASSICS

CLASSICS

HOUSING SIZE MM

Ø 4

Ø 4

Ø 4

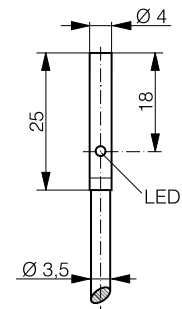
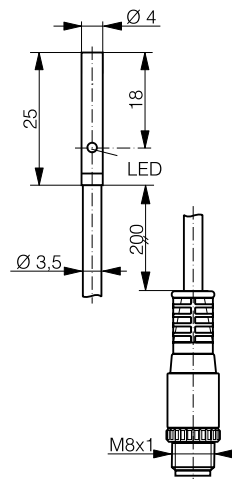
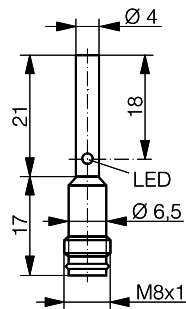
OPERATING DISTANCE MM

0.8

0.8

1.5

INDUCTIVE

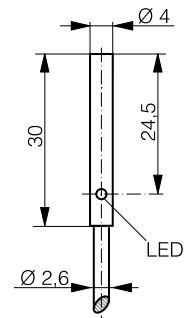
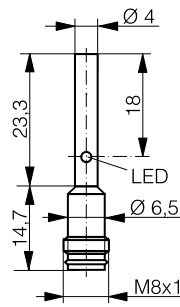
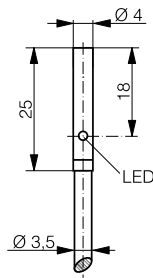
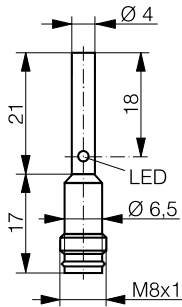


DATA

| | | | |
|---------------------------|--------------------------------|--------------------------------|--------------------------------|
| Housing material | Stainless steel V2A | Stainless steel V2A | Stainless steel V2A |
| Connection | Connector S8 | PVC cable / Connector S8 | PVC cable |
| Degree of protection | IP 67 | IP 67 | IP 67 |
| Mounting | Embeddable | Embeddable | Embeddable |
| Max. switching frequency | 5000 Hz | 5000 Hz | 3000 Hz |
| Supply voltage range | 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC |
| Ambient temperature range | -25 ... +70°C / -13 ... +158°F | -25 ... +70°C / -13 ... +158°F | -25 ... +70°C / -13 ... +158°F |
| Output current | ≤ 200 mA | ≤ 200 mA | ≤ 200 mA |
| PNP NO | DW-AS-603-04 | DW-AV-603-04-236 | DW-AD-623-04 |
| NPN NO | DW-AS-601-04 | DW-AV-601-04-236 | DW-AD-621-04 |
| PNP NC | | | DW-AD-624-04 |
| Other types available | PNP NC, NPN NC | PNP NC, NPN NC | NPN NC |

MINIATURE

| CLASSICS | EXTRA DISTANCE | EXTRA DISTANCE | FULL INOX |
|----------|----------------|----------------|-----------|
| Ø 4 | Ø 4 | Ø 4 | Ø 4 |
| 1.5 | 2.5 | 2.5 | 3 |



Inductive

Photoelectric

Ultrasonic

Capacitive

Safety

RFID

Connectivity

Accessories

Glossary

Index

| CLASSICS | EXTRA DISTANCE | EXTRA DISTANCE | FULL INOX |
|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Stainless steel V2A | Nickel silver | Nickel silver | Stainless steel V2A |
| Connector S8 | PVC cable | Connector S8 | PVC cable |
| IP 67 | IP 67 | IP 67 | IP 67 |
| Embeddable | Embeddable | Embeddable | Non-embeddable |
| 3000 Hz | 800 Hz | 800 Hz | 1200 Hz |
| 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC |
| -25 ... +70°C / -13 ... +158°F | -25 ... +70°C / -13 ... +158°F | -25 ... +70°C / -13 ... +158°F | -25 ... +70°C / -13 ... +158°F |
| ≤ 200 mA | ≤ 200 mA | ≤ 200 mA | ≤ 200 mA |
| DW-AS-623-04 | DW-AD-503-04 | DW-AS-503-04 | DW-AD-713-04 |
| DW-AS-621-04 | DW-AD-501-04 | DW-AS-501-04 | DW-AD-711-04 |
| | | DW-AS-504-04 | |
| PNP NC, NPN NC | PNP NC, NPN NC | NPN NC | |

MINIATURE

FAMILY

CLASSICS

CLASSICS

CLASSICS

HOUSING SIZE MM

M5

M5

M5

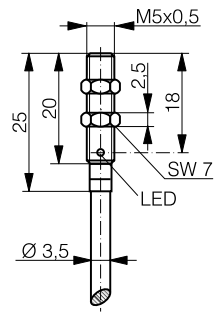
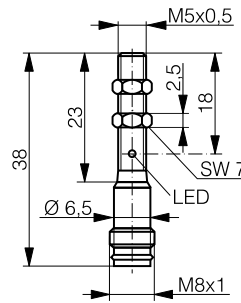
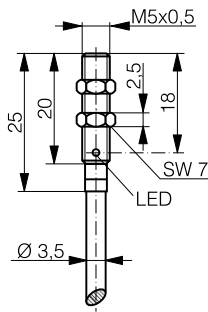
OPERATING DISTANCE MM

0.8

0.8

1.5

INDUCTIVE



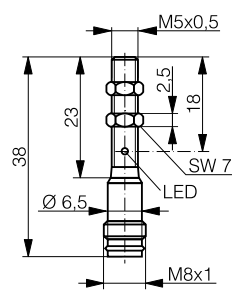
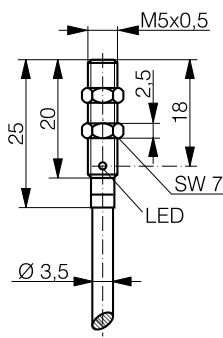
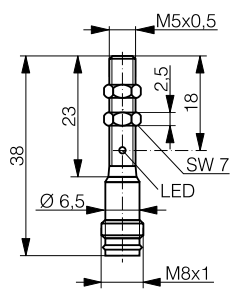
DATA

| | | | |
|---------------------------|--------------------------------|--------------------------------|--------------------------------|
| Housing material | Stainless steel V2A | Stainless steel V2A | Stainless steel V2A |
| Connection | PVC cable | Connector S8 | PVC cable |
| Degree of protection | IP 67 | IP 67 | IP 67 |
| Mounting | Embeddable | Embeddable | Embeddable |
| Max. switching frequency | 5000 Hz | 5000 Hz | 3000 Hz |
| Supply voltage range | 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC |
| Ambient temperature range | -25 ... +70°C / -13 ... +158°F | -25 ... +70°C / -13 ... +158°F | -25 ... +70°C / -13 ... +158°F |
| Output current | ≤ 200 mA | ≤ 200 mA | ≤ 200 mA |
| PNP NO | DW-AD-603-M5 | DW-AS-603-M5 | DW-AD-623-M5 |
| NPN NO | DW-AD-601-M5 | DW-AS-601-M5 | DW-AD-621-M5 |
| PNP NC | DW-AD-604-M5 | DW-AS-604-M5 | DW-AD-624-M5 |
| Other types available | NPN NC | NPN NC | NPN NC |

| CLASSICS | EXTRA DISTANCE | EXTRA DISTANCE | Inductive |
|----------|----------------|----------------|-----------|
| M5 | M5 | M5 | |
| 1.5 | 2.5 | 2.5 | |



Photoelectric
Ultrasonic
Capacitive



Safety
RFID

| CLASSICS | EXTRA DISTANCE | EXTRA DISTANCE | Connectivity |
|--------------------------------|--------------------------------|--------------------------------|--------------|
| Stainless steel V2A | Nickel silver | Nickel silver | |
| Connector S8 | PVC cable | Connector S8 | |
| IP 67 | IP 67 | IP 67 | Accessories |
| Embeddable | Embeddable | Embeddable | |
| 3000 Hz | 800 Hz | 800 Hz | |
| 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC | Glossary |
| -25 ... +70°C / -13 ... +158°F | -25 ... +70°C / -13 ... +158°F | -25 ... +70°C / -13 ... +158°F | |
| ≤ 200 mA | ≤ 200 mA | ≤ 200 mA | |
| DW-AS-623-M5 | DW-AD-503-M5 | DW-AS-503-M5 | Index |
| DW-AS-621-M5 | DW-AD-501-M5 | DW-AS-501-M5 | |
| DW-AS-624-M5 | DW-AD-504-M5 | DW-AS-504-M5 | |
| NPN NC | NPN NC | NPN NC | |

MINIATURE

FAMILY

FULL INOX

CLASSICS

HOUSING SIZE MM

M5

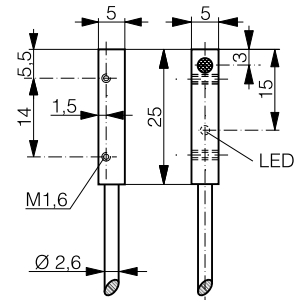
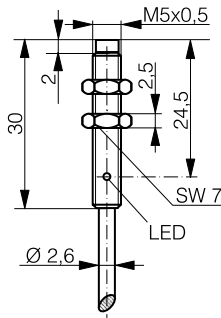
□ 5 x 5

OPERATING DISTANCE MM

3

0.8

INDUCTIVE



DATA

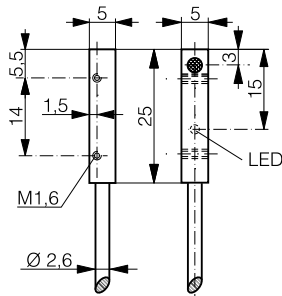
| | | |
|---------------------------|--------------------------------|--------------------------------|
| Housing material | Stainless steel V2A | Chrome-plated brass |
| Connection | PVC cable | PUR cable |
| Degree of protection | IP 67 | IP 67 |
| Mounting | Non-embeddable | Embeddable |
| Max. switching frequency | 1200 Hz | 5000 Hz |
| Supply voltage range | 10 ... 30 VDC | 10 ... 30 VDC |
| Ambient temperature range | -25 ... +70°C / -13 ... +158°F | -25 ... +70°C / -13 ... +158°F |
| Output current | ≤ 200 mA | ≤ 200 mA |
| PNP NO | DW-AD-713-M5 | DW-AD-603-C5 |
| NPN NO | DW-AD-711-M5 | DW-AD-601-C5 |
| PNP NC | | DW-AD-604-C5 |
| Other types available | | NPN NC |

MINIATURE

CLASSICS

□ 5 x 5

1.5



Inductive

Photoelectric

Ultrasonic

Capacitive

Safety

RFID

Connectivity

Accessories

Glossary

Index

Chrome-plated brass

PUR cable

IP 67

Embeddable

3000 Hz

10 ... 30 VDC

-25 ... +70°C / -13 ... +158°F

≤ 200 mA

DW-AD-623-C5

DW-AD-621-C5

DW-AD-624-C5

NPN NC