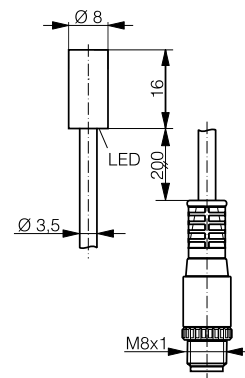
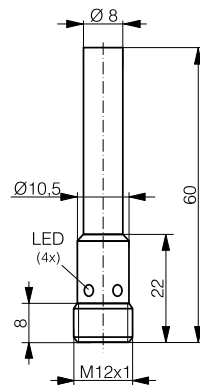
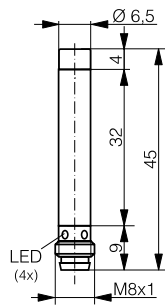


| HOUSING SIZE | Ø 6.5 | Ø 8 | |
|-----------------------|-------|-----|---|
| OPERATING DISTANCE MM | 4 | 1.5 | 2 |



INCREASED DISTANCE

INCREASED DISTANCE



- 1) Standard cable length 2 m. Non-standard cable lengths and types on request. Cable type see page 271.
- 2) see page 132
- 3) see page 133
- 4) see page 268

| TECHNICAL DATA | | | |
|---|---------------------|---------------------|---------------------------------|
| Housing material | Stainless steel V2A | Stainless steel V2A | Chrome-plated brass |
| Connection ¹⁾ | Connector S8 | Connector S12 | PVC cable type 2 / Connector S8 |
| Degree of protection | IP 67 | IP 67 | IP 67 |
| Mounting | Non-embeddable | Embeddable | Embeddable |
| Max. switching frequency | 3,500 Hz | 5,000 Hz | 3,000 Hz |
| Additional technical data ²⁾ | Table 1 | Table 1 | Table 1 |
| Wiring ³⁾ | Diagram 1 | Diagram 2 | Diagram 1 |
| LED | Built-in | Built-in | Built-in |
| Supply voltage range | 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC |
| Ambient temperature range | -25 ... +70 °C | -25 ... +70 °C | -25 ... +70 °C |
| Output current | ≤ 200 mA | ≤ 200 mA | ≤ 200 mA |
| Approvals | CE, CCC, UL, RoHS | CE, UL, RoHS | CE, UL, RoHS |

| PART REFERENCES: (BOLD: PREFERRED TYPES) | | | |
|--|--------------------------|--------------------------|--------------------------|
| NPN N.O. | DW-AS-631-065-001 | | |
| NPN N.C. | DW-AS-632-065-001 | | |
| PNP N.O. | DW-AS-633-065-001 | DW-AS-603-080-168 | DW-AV-623-080-236 |
| PNP N.C. | DW-AS-634-065-001 | | |
| Compatible connectors ⁴⁾ | A, B | G, H, M, N | A, B |

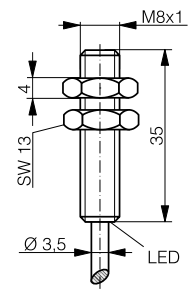
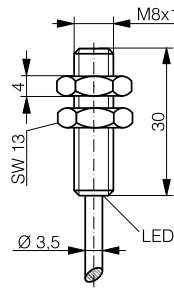
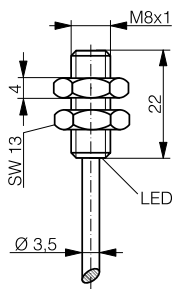
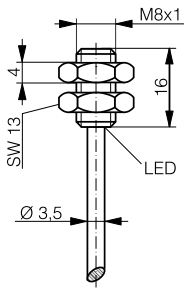
M8

1.5

1.5

1.5

1.5



| | | | |
|---------------------|---------------------|---------------------|---------------------|
| Stainless steel V2A | Stainless steel V2A | Stainless steel V2A | Stainless steel V2A |
| PVC cable type 2 | PVC cable type 2 | PVC cable type 2 | PVC cable type 2 |
| IP 67 | IP 67 | IP 67 | IP 67 |
| Embeddable | Embeddable | Embeddable | Embeddable |
| 5,000 Hz | 5,000 Hz | 5,000 Hz | 5,000 Hz |
| Table 1 | Table 1 | Table 1 | Table 1 |
| Diagram 1 | Diagram 1 | Diagram 1 | Diagram 1 |
| Built-in | Built-in | Built-in | Built-in |
| 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC |
| -25 ... +70 °C | -25 ... +70 °C | -25 ... +70 °C | -25 ... +70 °C |
| ≤ 200 mA | ≤ 200 mA | ≤ 200 mA | ≤ 200 mA |
| CE, UL, RoHS | CE, CCC, UL, RoHS | CE, CCC, UL, RoHS | CE, CCC, UL, RoHS |

| | | | |
|---------------------|-------------------------|-------------------------|---------------------|
| DW-AD-421-M8 | DW-AD-601-M8-121 | DW-AD-601-M8-122 | DW-AD-601-M8 |
| DW-AD-422-M8 | DW-AD-602-M8-121 | DW-AD-602-M8-122 | DW-AD-602-M8 |
| DW-AD-423-M8 | DW-AD-603-M8-121 | DW-AD-603-M8-122 | DW-AD-603-M8 |
| DW-AD-424-M8 | DW-AD-604-M8-121 | DW-AD-604-M8-122 | DW-AD-604-M8 |

Inductive

Photoelectric

Optical fibers

Ultrasonic

Capacitive

Cables & connectors

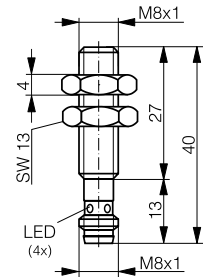
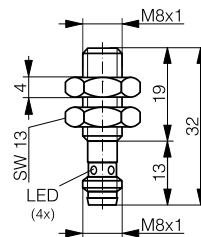
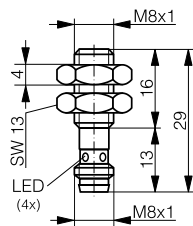
Accessories

Glossary

Index

| HOUSING SIZE | M8 | | |
|--------------|----|--|--|
|--------------|----|--|--|

| | | | |
|-----------------------|-----|-----|-----|
| OPERATING DISTANCE MM | 1.5 | 1.5 | 1.5 |
|-----------------------|-----|-----|-----|



- 1) Standard cable length 2 m. Non-standard cable lengths and types on request. Cable type see page 271.
- 2) see page 132
- 3) see page 133
- 4) see page 268

| TECHNICAL DATA | | | |
|----------------|--|--|--|
|----------------|--|--|--|

| | | | |
|---|---------------------|---------------------|---------------------|
| Housing material | Stainless steel V2A | Stainless steel V2A | Stainless steel V2A |
| Connection ¹⁾ | Connector S8 | Connector S8 | Connector S8 |
| Degree of protection | IP 67 | IP 67 | IP 67 |
| Mounting | Embeddable | Embeddable | Embeddable |
| Max. switching frequency | 5,000 Hz | 5,000 Hz | 5,000 Hz |
| Additional technical data ²⁾ | Table 1 | Table 1 | Table 1 |
| Wiring ³⁾ | Diagram 1 | Diagram 1 | Diagram 1 |
| LED | Built-in | Built-in | Built-in |
| Supply voltage range | 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC |
| Ambient temperature range | -25 ... +70 °C | -25 ... +70 °C | -25 ... +70 °C |
| Output current | ≤ 200 mA | ≤ 200 mA | ≤ 200 mA |
| Approvals | CE, UL, RoHS | CE, CCC, UL, RoHS | CE, CCC, UL, RoHS |

| PART REFERENCES: (BOLD: PREFERRED TYPES) | | | |
|--|--|--|--|
|--|--|--|--|

| | | | |
|-------------------------------------|-------------------------|-------------------------|-------------------------|
| NPN N.O. | DW-AS-421-M8-001 | DW-AS-601-M8-123 | DW-AS-601-M8-124 |
| NPN N.C. | DW-AS-422-M8-001 | DW-AS-602-M8-123 | DW-AS-602-M8-124 |
| PNP N.O. | DW-AS-423-M8-001 | DW-AS-603-M8-123 | DW-AS-603-M8-124 |
| PNP N.C. | DW-AS-424-M8-001 | DW-AS-604-M8-123 | DW-AS-604-M8-124 |
| Compatible connectors ⁴⁾ | A, B | A, B | A, B |

M8

1.5

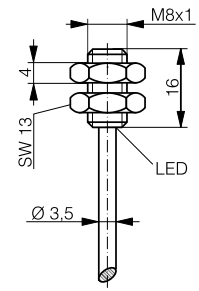
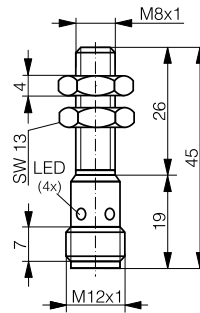
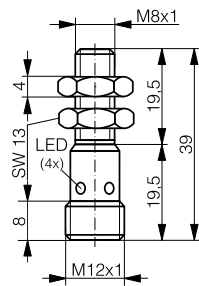
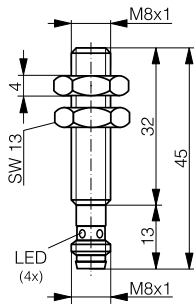
1.5

1.5

2



INCREASED DISTANCE



| Stainless steel V2A | Stainless steel V2A | Stainless steel V2A | Stainless steel V2A |
|---------------------|---------------------|---------------------|---------------------|
| Connector S8 | Connector S12 | Connector S12 | PVC cable type 2 |
| IP 67 | IP 67 | IP 67 | IP 67 |
| Embeddable | Embeddable | Embeddable | Embeddable |
| 5,000 Hz | 5,000 Hz | 5,000 Hz | 5,000 Hz |
| Table 1 | Table 1 | Table 1 | Table 1 |
| Diagram 1 | Diagram 2 | Diagram 2 | Diagram 1 |
| Built-in | Built-in | Built-in | Built-in |
| 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC |
| -25 ... +70 °C | -25 ... +70 °C | -25 ... +70 °C | -25 ... +70 °C |
| ≤ 200 mA | ≤ 200 mA | ≤ 200 mA | ≤ 200 mA |
| CE, CCC, UL, RoHS | CE, CCC, UL, RoHS | CE, CCC, UL, RoHS | CE, CCC, UL, RoHS |

| | | | |
|-------------------------|-------------------------|--------------------------------|-------------------------|
| DW-AS-601-M8-001 | DW-AS-601-M8-120 | DW-AS-601-M8 | DW-AD-621-M8-120 |
| DW-AS-602-M8-001 | | DW-AS-602-M8 | DW-AD-622-M8-120 |
| DW-AS-603-M8-001 | DW-AS-603-M8-120 | DW-AS-603-M8 | DW-AD-623-M8-120 |
| DW-AS-604-M8-001 | | DW-AS-604-M8 | DW-AD-624-M8-120 |
| A, B | G, H, M, N | G, H, M, N (N.O.); M, N (N.C.) | |

Inductive

Photoelectric

Optical fibers

Ultrasonic

Capacitive

Cables & connectors

Accessories

Glossary

Index

| HOUSING SIZE | M8 | | |
|-----------------------|----|---|---|
| OPERATING DISTANCE MM | 2 | 2 | 2 |



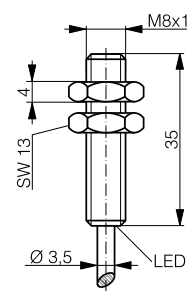
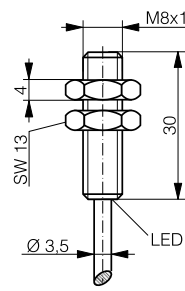
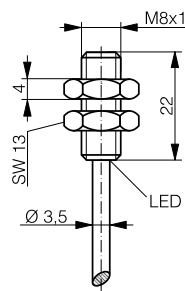
INCREASED DISTANCE



INCREASED DISTANCE



INCREASED DISTANCE



- 1) Standard cable length 2 m. Non-standard cable lengths and types on request. Cable type see page 271.
- 2) see page 132
- 3) see page 133
- 4) see page 268

TECHNICAL DATA

| | | | |
|---|---------------------|---------------------|---------------------|
| Housing material | Stainless steel V2A | Stainless steel V2A | Stainless steel V2A |
| Connection ¹⁾ | PVC cable type 2 | PVC cable type 2 | PVC cable type 2 |
| Degree of protection | IP 67 | IP 67 | IP 67 |
| Mounting | Embeddable | Embeddable | Embeddable |
| Max. switching frequency | 5,000 Hz | 5,000 Hz | 5,000 Hz |
| Additional technical data ²⁾ | Table 1 | Table 1 | Table 1 |
| Wiring ³⁾ | Diagram 1 | Diagram 1 | Diagram 1 |
| LED | Built-in | Built-in | Built-in |
| Supply voltage range | 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC |
| Ambient temperature range | -25 ... +70 °C | -25 ... +70 °C | -25 ... +70 °C |
| Output current | ≤ 200 mA | ≤ 200 mA | ≤ 200 mA |
| Approvals | CE, CCC, UL, RoHS | CE, CCC, UL, RoHS | CE, CCC, UL, RoHS |

PART REFERENCES: (BOLD: PREFERRED TYPES)

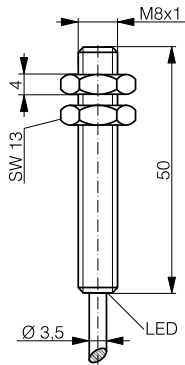
| | | | |
|-------------------------------------|-------------------------|-------------------------|---------------------|
| NPN N.O. | DW-AD-621-M8-121 | DW-AD-621-M8-122 | DW-AD-621-M8 |
| NPN N.C. | DW-AD-622-M8-121 | DW-AD-622-M8-122 | DW-AD-622-M8 |
| PNP N.O. | DW-AD-623-M8-121 | DW-AD-623-M8-122 | DW-AD-623-M8 |
| PNP N.C. | DW-AD-624-M8-121 | DW-AD-624-M8-122 | DW-AD-624-M8 |
| Compatible connectors ⁴⁾ | | | |

M8

2



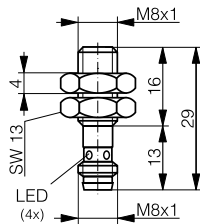
INCREASED DISTANCE



2



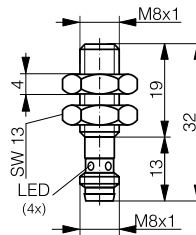
INCREASED DISTANCE



2



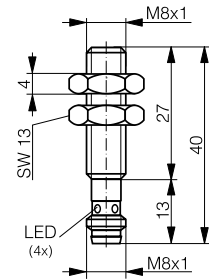
INCREASED DISTANCE



2



INCREASED DISTANCE



Stainless steel V2A
PVC cable type 2
IP 67
Embeddable
5,000 Hz
Table 1
Diagram 1
Built-in
10 ... 30 VDC
-25 ... +70 °C
≤ 200 mA
CE, CCC, UL, RoHS

Stainless steel V2A
Connector S8
IP 67
Embeddable
5,000 Hz
Table 1
Diagram 1
Built-in
10 ... 30 VDC
-25 ... +70 °C
≤ 200 mA
CE, CCC, UL, RoHS

Stainless steel V2A
Connector S8
IP 67
Embeddable
5,000 Hz
Table 1
Diagram 1
Built-in
10 ... 30 VDC
-25 ... +70 °C
≤ 200 mA
CE, CCC, UL, RoHS

Stainless steel V2A
Connector S8
IP 67
Embeddable
5,000 Hz
Table 1
Diagram 1
Built-in
10 ... 30 VDC
-25 ... +70 °C
≤ 200 mA
CE, CCC, UL, RoHS

DW-AD-621-M8-177
DW-AD-622-M8-177
DW-AD-623-M8-177
DW-AD-624-M8-177

DW-AS-621-M8-129
DW-AS-622-M8-129
DW-AS-623-M8-129
DW-AS-624-M8-129

DW-AS-621-M8-123
DW-AS-622-M8-123
DW-AS-623-M8-123
DW-AS-624-M8-123

DW-AS-621-M8-124
DW-AS-622-M8-124
DW-AS-623-M8-124
DW-AS-624-M8-124

A, B

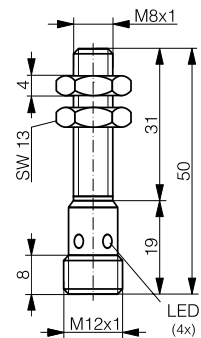
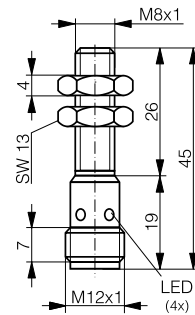
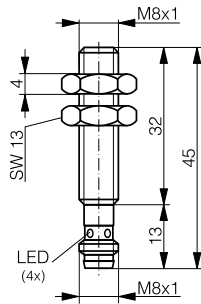
A, B

A, B

| HOUSING SIZE | M8 | | |
|-----------------------|----|---|---|
| OPERATING DISTANCE MM | 2 | 2 | 2 |



| INCREASED DISTANCE | INCREASED DISTANCE | INCREASED DISTANCE |
|--------------------|--------------------|--------------------|
|--------------------|--------------------|--------------------|



- 1) Standard cable length 2 m. Non-standard cable lengths and types on request. Cable type see page 271.
- 2) see page 132
- 3) see page 133
- 4) see page 268

TECHNICAL DATA

| | | | |
|---|---------------------|---------------------|---------------------|
| Housing material | Stainless steel V2A | Stainless steel V2A | Stainless steel V2A |
| Connection ¹⁾ | Connector S8 | Connector S12 | Connector S12 |
| Degree of protection | IP 67 | IP 67 | IP 67 |
| Mounting | Embeddable | Embeddable | Embeddable |
| Max. switching frequency | 5,000 Hz | 5,000 Hz | 5,000 Hz |
| Additional technical data ²⁾ | Table 1 | Table 1 | Table 1 |
| Wiring ³⁾ | Diagram 1 | Diagram 2 | Diagram 2 |
| LED | Built-in | Built-in | Built-in |
| Supply voltage range | 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC |
| Ambient temperature range | -25 ... +70 °C | -25 ... +70 °C | -25 ... +70 °C |
| Output current | ≤ 200 mA | ≤ 200 mA | ≤ 200 mA |
| Approvals | CE, CCC, UL, RoHS | CE, CCC, UL, RoHS | CE, CCC, UL, RoHS |

PART REFERENCES: (BOLD: PREFERRED TYPES)

| | | | |
|-------------------------------------|-------------------------|--------------------------------|--------------------------------|
| NPN N.O. | DW-AS-621-M8-001 | DW-AS-621-M8 | DW-AS-621-M8-193 |
| NPN N.C. | DW-AS-622-M8-001 | DW-AS-622-M8 | DW-AS-622-M8-193 |
| PNP N.O. | DW-AS-623-M8-001 | DW-AS-623-M8 | DW-AS-623-M8-193 |
| PNP N.C. | DW-AS-624-M8-001 | DW-AS-624-M8 | DW-AS-624-M8-193 |
| Compatible connectors ⁴⁾ | A, B | G, H, M, N (N.O.); M, N (N.C.) | G, H, M, N (N.O.); M, N (N.C.) |

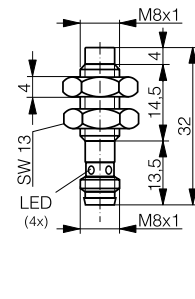
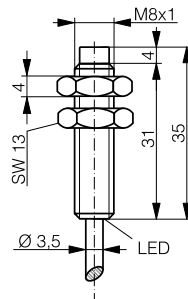
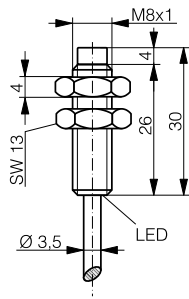
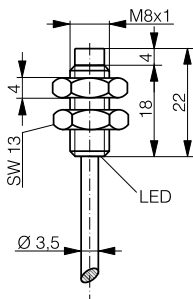
M8

2.5

2.5

2.5

2.5



Stainless steel V2A
PVC cable type 2
IP 67
Non-embeddable
4,500 Hz
Table 1
Diagram 1
Built-in
10 ... 30 VDC
-25 ... +70 °C
≤ 200 mA
CE, CCC, UL, RoHS

Stainless steel V2A
PVC cable type 2
IP 67
Non-embeddable
4,500 Hz
Table 1
Diagram 1
Built-in
10 ... 30 VDC
-25 ... +70 °C
≤ 200 mA
CE, CCC, UL, RoHS

Stainless steel V2A
PVC cable type 2
IP 67
Non-embeddable
4,500 Hz
Table 1
Diagram 1
Built-in
10 ... 30 VDC
-25 ... +70 °C
≤ 200 mA
CE, CCC, UL, RoHS

Stainless steel V2A
Connector S8
IP 67
Non-embeddable
4,500 Hz
Table 1
Diagram 1
Built-in
10 ... 30 VDC
-25 ... +70 °C
≤ 200 mA
CE, CCC, UL, RoHS

DW-AD-611-M8-121
DW-AD-612-M8-121
DW-AD-613-M8-121
DW-AD-614-M8-121

DW-AD-611-M8-122
DW-AD-612-M8-122
DW-AD-613-M8-122
DW-AD-614-M8-122

DW-AD-611-M8
DW-AD-612-M8
DW-AD-613-M8
DW-AD-614-M8

DW-AS-611-M8-123
DW-AS-612-M8-123
DW-AS-613-M8-123
DW-AS-614-M8-123

A, B

Inductive

Photoelectric

Optical fibers

Ultrasonic

Capacitive

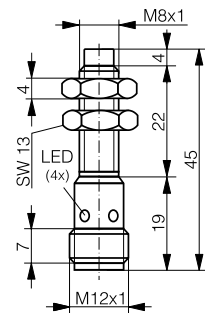
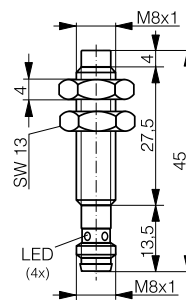
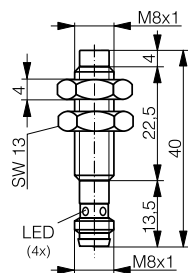
Cables & connectors

Accessories

Glossary

Index

| HOUSING SIZE | M8 | | |
|-----------------------|-----|-----|-----|
| OPERATING DISTANCE MM | 2.5 | 2.5 | 2.5 |



- 1) Standard cable length 2 m. Non-standard cable lengths and types on request. Cable type see page 271.
- 2) see page 132
- 3) see page 133
- 4) see page 268

TECHNICAL DATA

| | | | |
|---|---------------------|---------------------|---------------------|
| Housing material | Stainless steel V2A | Stainless steel V2A | Stainless steel V2A |
| Connection ¹⁾ | Connector S8 | Connector S8 | Connector S12 |
| Degree of protection | IP 67 | IP 67 | IP 67 |
| Mounting | Non-embeddable | Non-embeddable | Non-embeddable |
| Max. switching frequency | 4,500 Hz | 4,500 Hz | 4,500 Hz |
| Additional technical data ²⁾ | Table 1 | Table 1 | Table 1 |
| Wiring ³⁾ | Diagram 1 | Diagram 1 | Diagram 2 |
| LED | Built-in | Built-in | Built-in |
| Supply voltage range | 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC |
| Ambient temperature range | -25 ... +70 °C | -25 ... +70 °C | -25 ... +70 °C |
| Output current | ≤ 200 mA | ≤ 200 mA | ≤ 200 mA |
| Approvals | CE, CCC, UL, RoHS | CE, CCC, UL, RoHS | CE, CCC, UL, RoHS |

PART REFERENCES: (BOLD: PREFERRED TYPES)

| | | | |
|-------------------------------------|-------------------------|-------------------------|--------------------------------|
| NPN N.O. | DW-AS-611-M8-124 | DW-AS-611-M8-001 | DW-AS-611-M8 |
| NPN N.C. | DW-AS-612-M8-124 | DW-AS-612-M8-001 | DW-AS-612-M8 |
| PNP N.O. | DW-AS-613-M8-124 | DW-AS-613-M8-001 | DW-AS-613-M8 |
| PNP N.C. | DW-AS-614-M8-124 | DW-AS-614-M8-001 | DW-AS-614-M8 |
| Compatible connectors ⁴⁾ | A, B | A, B | G, H, M, N (N.O.); M, N (N.C.) |

M8

3

3

3

3

3



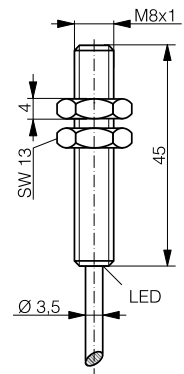
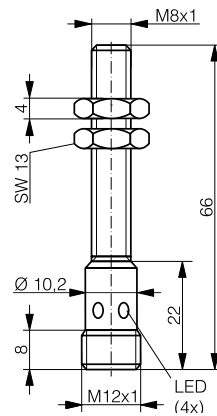
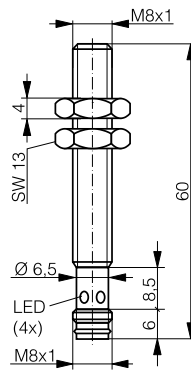
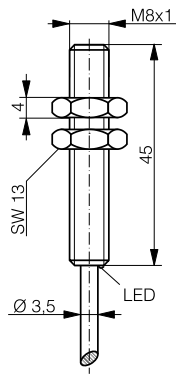
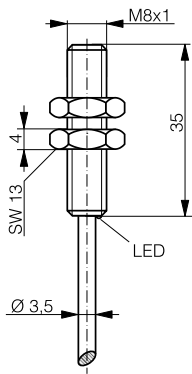
LONG DISTANCE

LONG DISTANCE

LONG DISTANCE

LONG DISTANCE

ALL-METAL / 100 BAR



| | | | | |
|-------------------------|-------------------------|-------------------------|-------------------------|---------------------|
| Cr-plated nickel silver | Cr-plated nickel silver | Cr-plated nickel silver | Cr-plated nickel silver | Stainless steel V2A |
| PVC cable type 2 | PVC cable type 2 | Connector S8 | Connector S12 | PUR cable type 3 |
| IP 67 | IP 67 | IP 67 | IP 67 | IP 68 |
| Embeddable | Embeddable | Embeddable | Embeddable | Embeddable |
| 1,000 Hz | 1,000 Hz | 1,000 Hz | 1,000 Hz | 1,000 Hz |
| Table 1 | Table 1 | Table 1 | Table 1 | Table 1 |
| Diagram 1 | Diagram 1 | Diagram 1 | Diagram 2 | Diagram 1 |
| Built-in | Built-in | Built-in | Built-in | Built-in |
| 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC |
| -25 ... +70 °C | -25 ... +70 °C | -25 ... +70 °C | -25 ... +70 °C | -25 ... +70 °C |
| ≤ 200 mA | ≤ 200 mA | ≤ 200 mA | ≤ 200 mA | ≤ 200 mA |
| CE, UL, RoHS | CE, UL, RoHS | CE, UL, RoHS | CE, UL, RoHS | CE, UL, RoHS |

| | | | | |
|-------------------------|---------------------|-------------------------|--------------------------------|---------------------|
| DW-AD-501-M8-750 | DW-AD-501-M8 | DW-AS-501-M8-001 | DW-AS-501-M8 | DW-AD-701-M8 |
| DW-AD-502-M8-750 | DW-AD-502-M8 | DW-AS-502-M8-001 | DW-AS-502-M8 | DW-AD-702-M8 |
| DW-AD-503-M8-750 | DW-AD-503-M8 | DW-AS-503-M8-001 | DW-AS-503-M8 | DW-AD-703-M8 |
| DW-AD-504-M8-750 | DW-AD-504-M8 | DW-AS-504-M8-001 | DW-AS-504-M8 | DW-AD-704-M8 |
| | | A, B | G, H, M, N (N.O.); M, N (N.C.) | |

Inductive

Photoelectric

Optical fibers

Ultrasonic

Capacitive

Cables & connectors

Accessories

Glossary

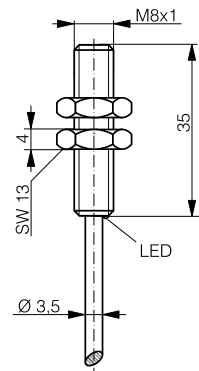
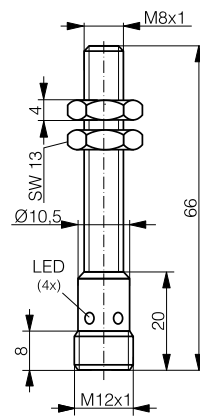
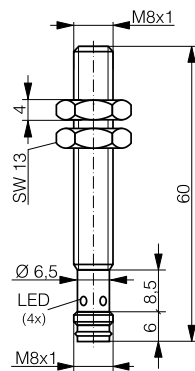
Index

| HOUSING SIZE | M8 | | |
|--------------|----|--|--|
|--------------|----|--|--|

| OPERATING DISTANCE MM | 3 | 3 | 4 |
|-----------------------|---|---|---|
|-----------------------|---|---|---|



| | | |
|---------------------|---------------------|--------------|
| ALL-METAL / 100 BAR | ALL-METAL / 100 BAR | 4 X DISTANCE |
|---------------------|---------------------|--------------|



- 1) Standard cable length 2 m. Non-standard cable lengths and types on request. Cable type see page 271.
- 2) see page 132
- 3) see page 133
- 4) see page 268

TECHNICAL DATA

| Housing material | Stainless steel V2A | Stainless steel V2A | Cr-plated nickel silver |
|---|---------------------|---------------------|-------------------------|
| Connection ¹⁾ | Connector S8 | Connector S12 | PVC cable type 2 |
| Degree of protection | IP 67 | IP 67 | IP 67 |
| Mounting | Embeddable | Embeddable | Embeddable |
| Max. switching frequency | 1,000 Hz | 1,000 Hz | 500 Hz |
| Additional technical data ²⁾ | Table 1 | Table 1 | Table 1 |
| Wiring ³⁾ | Diagram 1 | Diagram 2 | Diagram 1 |
| LED | Built-in | Built-in | Built-in |
| Supply voltage range | 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC |
| Ambient temperature range | -25 ... +70 °C | -25 ... +70 °C | -25 ... +70 °C |
| Output current | ≤ 200 mA | ≤ 200 mA | ≤ 200 mA |
| Approvals | CE, UL, RoHS | CE, UL, RoHS | CE, UL, RoHS |

PART REFERENCES: (BOLD: PREFERRED TYPES)

| | | | |
|-------------------------------------|-------------------------|--------------------------------|-------------------------|
| NPN N.O. | DW-AS-701-M8-001 | DW-AS-701-M8 | DW-AD-521-M8-750 |
| NPN N.C. | DW-AS-702-M8-001 | DW-AS-702-M8 | DW-AD-522-M8-750 |
| PNP N.O. | DW-AS-703-M8-001 | DW-AS-703-M8 | DW-AD-523-M8-750 |
| PNP N.C. | DW-AS-704-M8-001 | DW-AS-704-M8 | DW-AD-524-M8-750 |
| Compatible connectors ⁴⁾ | A, B | G, H, M, N (N.O.); M, N (N.C.) | |

M8

4

4

4

4

4



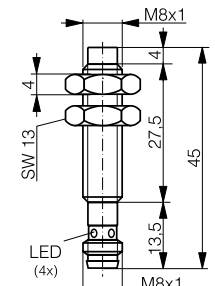
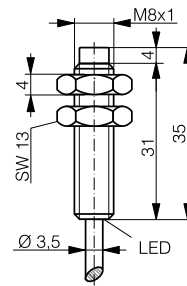
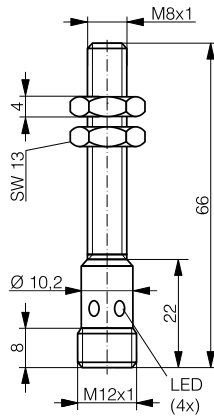
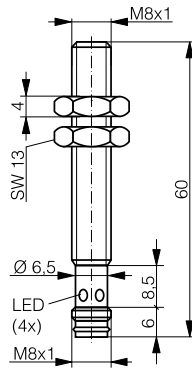
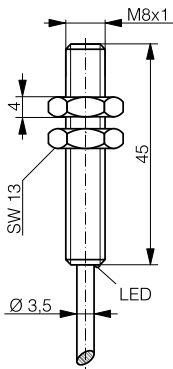
4 X DISTANCE

4 X DISTANCE

4 X DISTANCE

INCREASED DISTANCE

INCREASED DISTANCE



| | | | | |
|-------------------------|-------------------------|-------------------------|---------------------|---------------------|
| Cr-plated nickel silver | Cr-plated nickel silver | Cr-plated nickel silver | Stainless steel V2A | Stainless steel V2A |
| PVC cable type 2 | Connector S8 | Connector S12 | PVC cable type 2 | Connector S8 |
| IP 67 | IP 67 | IP 67 | IP 67 | IP 67 |
| Embeddable | Embeddable | Embeddable | Non-embeddable | Non-embeddable |
| 500 Hz | 500 Hz | 500 Hz | 3,500 Hz | 3,500 Hz |
| Table 1 | Table 1 | Table 1 | Table 1 | Table 1 |
| Diagram 1 | Diagram 1 | Diagram 2 | Diagram 1 | Diagram 1 |
| Built-in | Built-in | Built-in | Built-in | Built-in |
| 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC |
| -25 ... +70 °C | -25 ... +70 °C | -25 ... +70 °C | -25 ... +70 °C | -25 ... +70 °C |
| ≤ 200 mA | ≤ 200 mA | ≤ 200 mA | ≤ 200 mA | ≤ 200 mA |
| CE, UL, RoHS | CE, UL, RoHS | CE, UL, RoHS | CE, CCC, UL, RoHS | CE, CCC, UL, RoHS |

| | | | | |
|---------------------|-------------------------|--------------------------------|---------------------|-------------------------|
| DW-AD-521-M8 | DW-AS-521-M8-001 | DW-AS-521-M8 | DW-AD-631-M8 | DW-AS-631-M8-001 |
| DW-AD-522-M8 | DW-AS-522-M8-001 | DW-AS-522-M8 | DW-AD-632-M8 | DW-AS-632-M8-001 |
| DW-AD-523-M8 | DW-AS-523-M8-001 | DW-AS-523-M8 | DW-AD-633-M8 | DW-AS-633-M8-001 |
| DW-AD-524-M8 | DW-AS-524-M8-001 | DW-AS-524-M8 | DW-AD-634-M8 | DW-AS-634-M8-001 |
| | A, B | G, H, M, N (N.O.); M, N (N.C.) | | A, B |

Inductive

Photoelectric

Optical fibers

Ultrasonic

Capacitive

Cables & connectors

Accessories

Glossary

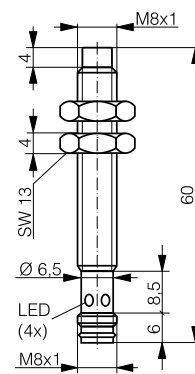
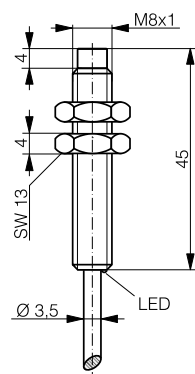
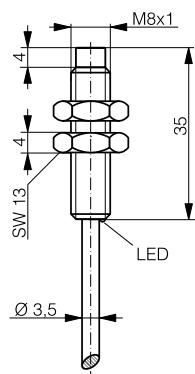
Index

| HOUSING SIZE | M8 | | |
|--------------|----|--|--|
|--------------|----|--|--|

| OPERATING DISTANCE MM | 6 | 6 | 6 |
|-----------------------|---|---|---|
|-----------------------|---|---|---|



LONG DISTANCE LONG DISTANCE LONG DISTANCE



- 1) Standard cable length 2 m. Non-standard cable lengths and types on request. Cable type see page 271.
- 2) see page 132
- 3) see page 133
- 4) see page 268

TECHNICAL DATA

| | | | |
|---|---------------------|---------------------|---------------------|
| Housing material | Chrome-plated brass | Chrome-plated brass | Chrome-plated brass |
| Connection ¹⁾ | PVC cable type 2 | PVC cable type 2 | Connector S8 |
| Degree of protection | IP 67 | IP 67 | IP 67 |
| Mounting | Non-embeddable | Non-embeddable | Non-embeddable |
| Max. switching frequency | 500 Hz | 500 Hz | 500 Hz |
| Additional technical data ²⁾ | Table 1 | Table 1 | Table 1 |
| Wiring ³⁾ | Diagram 1 | Diagram 1 | Diagram 1 |
| LED | Built-in | Built-in | Built-in |
| Supply voltage range | 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC |
| Ambient temperature range | -25 ... +70 °C | -25 ... +70 °C | -25 ... +70 °C |
| Output current | ≤ 200 mA | ≤ 200 mA | ≤ 200 mA |
| Approvals | CE, UL, RoHS | CE, UL, RoHS | CE, UL, RoHS |

PART REFERENCES: (BOLD: PREFERRED TYPES)

| | | | |
|-------------------------------------|-------------------------|---------------------|-------------------------|
| NPN N.O. | DW-AD-511-M8-750 | DW-AD-511-M8 | DW-AS-511-M8-001 |
| NPN N.C. | DW-AD-512-M8-750 | DW-AD-512-M8 | DW-AS-512-M8-001 |
| PNP N.O. | DW-AD-513-M8-750 | DW-AD-513-M8 | DW-AS-513-M8-001 |
| PNP N.C. | DW-AD-514-M8-750 | DW-AD-514-M8 | DW-AS-514-M8-001 |
| Compatible connectors ⁴⁾ | | | A, B |

M8

8 X 8

6

6

6

6

1.5

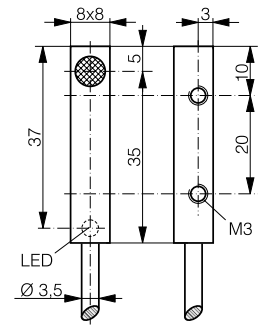
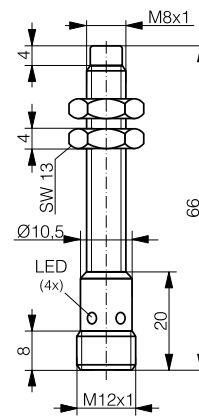
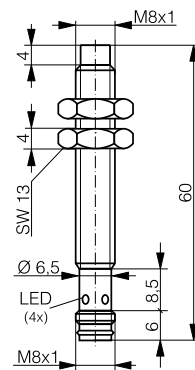
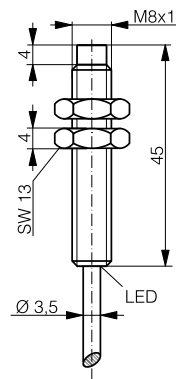
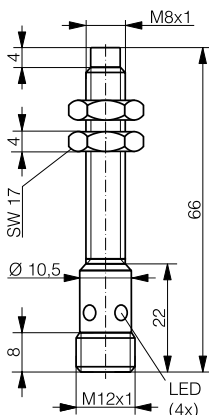


LONG DISTANCE

ALL-METAL / 100 BAR

ALL-METAL / 100 BAR

ALL-METAL / 100 BAR



| | | | | |
|---------------------|---------------------|---------------------|---------------------|---------------------|
| Chrome-plated brass | Stainless steel V2A | Stainless steel V2A | Stainless steel V2A | Nickel-plated brass |
| Connector S12 | PUR cable type 3 | Connector S8 | Connector S12 | PVC cable type 2 |
| IP 67 | IP 68 | IP 67 | IP 67 | IP 67 |
| Non-embeddable | Non-embeddable | Non-embeddable | Non-embeddable | Embeddable |
| 500 Hz | 700 Hz | 700 Hz | 700 Hz | 5,000 Hz |
| Table 1 | Table 1 | Table 1 | Table 1 | Table 1 |
| Diagram 2 | Diagram 1 | Diagram 1 | Diagram 2 | Diagram 1 |
| Built-in | Built-in | Built-in | Built-in | Built-in |
| 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC | 10 ... 30 VDC |
| -25 ... +70 °C | -25 ... +70 °C | -25 ... +70 °C | -25 ... +70 °C | -25 ... +70 °C |
| ≤ 200 mA | ≤ 200 mA | ≤ 200 mA | ≤ 200 mA | ≤ 200 mA |
| CE, UL, RoHS | CE, UL, RoHS | CE, UL, RoHS | CE, UL, RoHS | CE, UL, RoHS |

| | | | | |
|--------------------------------|---------------------|-------------------------|--------------------------------|---------------------|
| DW-AS-511-M8 | DW-AD-711-M8 | DW-AS-711-M8-001 | DW-AS-711-M8 | DW-AD-601-C8 |
| DW-AS-512-M8 | DW-AD-712-M8 | DW-AS-712-M8-001 | DW-AS-712-M8 | DW-AD-602-C8 |
| DW-AS-513-M8 | DW-AD-713-M8 | DW-AS-713-M8-001 | DW-AS-713-M8 | DW-AD-603-C8 |
| DW-AS-514-M8 | DW-AD-714-M8 | DW-AS-714-M8-001 | DW-AS-714-M8 | DW-AD-604-C8 |
| G, H, M, N (N.O.); M, N (N.C.) | | A, B | G, H, M, N (N.O.); M, N (N.C.) | |

Inductive

Photoelectric

Optical fibers

Ultrasonic

Capacitive

Cables & connectors

Accessories

Glossary

Index