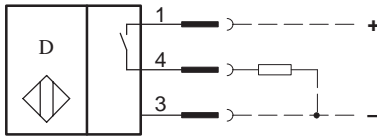
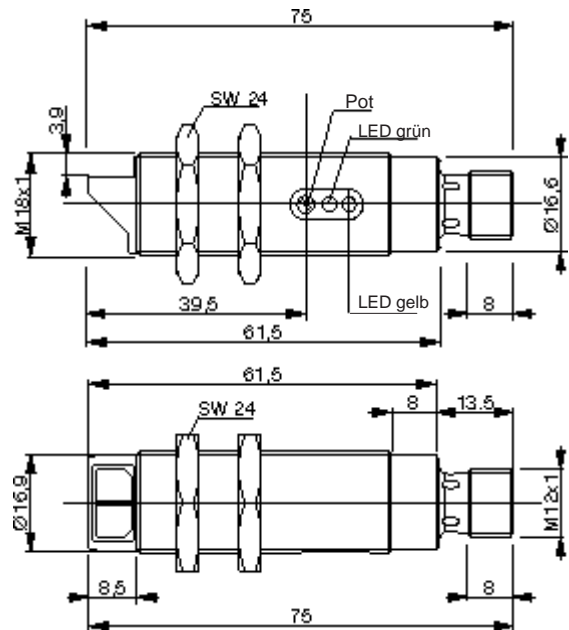
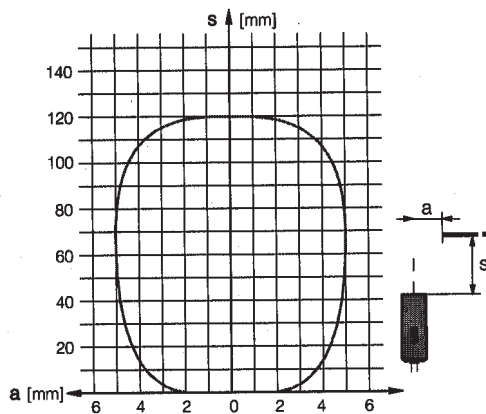


**Anschlußschema**



**Ansprechkurve**



**Pinbelegung des M12-Steckers**

| Aderfarbe | Kennung | Pinbelegung |
|-----------|---------|-------------|
| blau      | BU      | 3           |
| -         | -       | 2           |
| schwarz   | BK      | 4           |
| braun     | BN      | 1           |

**Kenndaten nach EN 60947-5-2**

**Elektrische Daten**

|                               |          |   |
|-------------------------------|----------|---|
| Betriebsspannung              | $U_B$    | 10 – 36V DC   |
| Verpolschutz                  |          | ja  |
| Ausgang                       |          | dauerkurzschlußfest, Anzeige: LED gelb                                  |
| Funktionsreserve              |          | LED grün  |
| Art des Kurzschlußschutzes    |          | taktend   |
| max. Schaltstrom              | $I$      | 200mA   |
| Spannungsfall                 | $U_d$    | $\leq 2V$   |
| Reststrom                     | $I_r$    | $\leq 0,1mA$  |
| Schutzart                     |          | IP 67 (nur im verschraubten Zustand mit den dazugehörigen Gegenstücken) |
| Umgebungstemperatur           |          | -20°C bis +55°C   |
| Fremdlichtfestigkeit          |          | Halogen 5kLux / Sonne 10kLux  |
| Erfassungsbereich             | $s_n$    | 10 – 120mm einstellbar  |
| Blindzone (bei $s_n = 60mm$ ) |          | < 1mm   |
| Normmeßplatte                 |          | 100 x 100mm, weiß   |
| Hysterese                     | $H$      | 10% (bei 120mm)   |
| Schaltfrequenz                | $f$      | 500Hz   |
| Einschaltverzug               | $t_{on}$ | 1ms   |
| Bereitschaftsverzug           | $t_v$    | 20ms  |
| Leerlaufstrom                 | $I_0$    | $\leq 30mA$   |

**Elektromagnetische Verträglichkeit (EMV)**

|                                       |               |            |         |
|---------------------------------------|---------------|------------|---------|
| Hochfrequenzbeeinflussungsfestigkeit  | IEC 60255-5   | 1kV        |         |
| Elektrostatische Entladungsfestigkeit | IEC 61000-4-3 | $10^4 V/m$ | Level 3 |
| Transientenfestigkeit                 | IEC 61000-4-2 | 4kV        | Level 2 |
|                                       | IEC 61000-4-4 | 2kV        | Level 3 |

**Materialien**

|                      |                     |
|----------------------|---------------------|
| Fenstermaterial      | Glas                |
| Gehäuse              | Messing, vernickelt |
| Anschlußart          | Stecker M12x1       |
| Sechskantmutter (2x) | Messing, vernickelt |

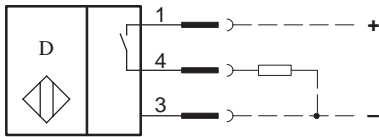
# Technical Data

## Diffuse reflective sensor with background suppression

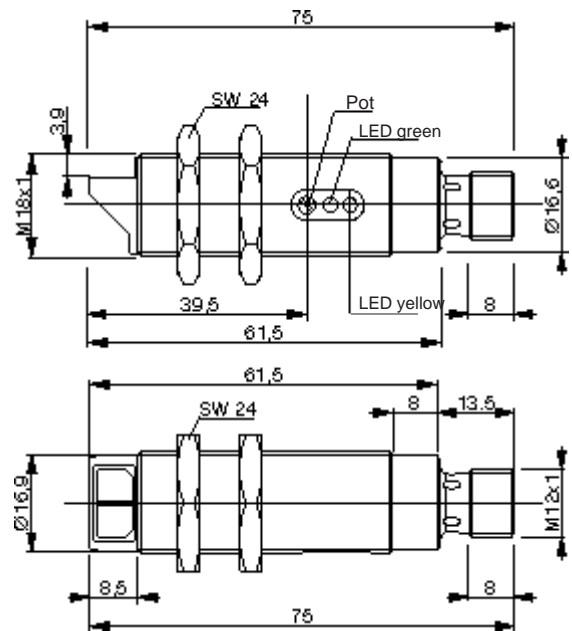
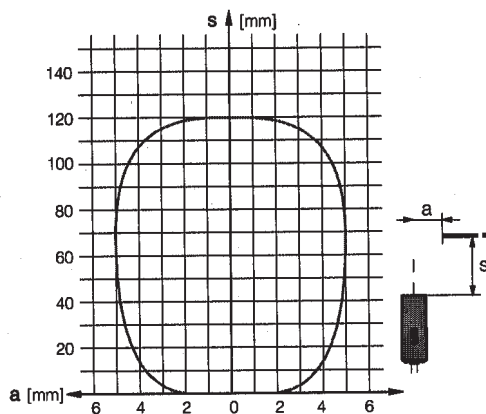
Type: **OM18RH-DHTP-0120-SDEW**

Part.-No.: **655.8916.002**

### Wiring Diagram



### Response diagram



### M12 connector and corresponding colours

| colour | code | pin number |
|--------|------|------------|
| blue   | BU   | 3          |
| -      | -    | 2          |
| black  | BK   | 4          |
| brown  | BN   | 1          |

### Technical Data according to EN 60947-5-2

#### Electrical Data

|                                  |          |   |
|----------------------------------|----------|---|
| Operational voltage range        | $U_B$    | 10 – 36V DC   |
| False polarity protection        |          | yes   |
| Output                           |          | permanent overload protection, Indication: LED yellow |
| Excess light indication          |          | LED green   |
| Short-circuit protection         |          | pulsed  |
| Max. rated output current        | $I$      | 200mA   |
| Voltage drop                     | $U_d$    | $\leq 2V$   |
| Off-state current                | $I_r$    | $\leq 0,1mA$  |
| Type of protection               |          | IP 67 (only in fully locked position with it's plugs) |
| Ambient air temperature          |          | -20°C ... +55°C                                       |
| Ambient light proof              |          | halogen 5kLux / sun 10kLux                            |
| Sensing range                    | $s_n$    | 10 – 120mm adjustable                                 |
| Blind zone (bei $s_n = 60mm$ )   |          | < 1mm   |
| Standard target                  |          | 100 x 100mm, white                                    |
| Differential travel (hysteresis) | $H$      | 10% (@ 120mm)   |
| Frequency of operating cycles    | $f$      | 500Hz   |
| Turn on time                     | $t_{on}$ | 1ms   |
| Time delay before availability   | $t_v$    | 20ms  |
| No-load supply current           | $I_0$    | $\leq 30mA$   |

#### Elektromagnetic compatibility (EMC)

|   |               |                    |         |
|---|---------------|--------------------|---------|
| Electromagnetic field test              | IEC 60255-5   | 1kV                |         |
| Electrostatic discharge test            | IEC 61000-4-3 | 10 <sup>V</sup> /m | Level 3 |
| Electrical fast transient immunity test | IEC 61000-4-2 | 4kV                | Level 2 |
|   | IEC 61000-4-4 | 2kV                | Level 3 |

#### Materials

|                  |                      |
|------------------|----------------------|
| Window           | glass                |
| Housing          | brass, nickel plated |
| Termination type | plug socket M12x1    |
| hexagon nut (2x) | brass, nickel plated |

24.09.01/0461

Data Sheets are subjects to change without further notice.