SERIES 54 · Inductive Proximity Sensor
Industrial Service
DC 3-wire PNP + solenoid out | 540041-71104533

SENSOR FEATURES
> DC 3-wire PNP sensor
> IP 67 rugged plastic housing
> Hermetically sealed
> Vibration, shock and corrosion resistant
> Compact design
> High visibility LED for power and switch status
> System cable supports power for sensor and solenoid

TECHNICAL DATA
General specifications
Switching function 2 x normally open (NO)
Output type PNP, 3-wire
Rated operating distance $s_n$ 3 mm
Installation Flush mountable
Output polarity DC
Assured operating distance $s_a$ 0 ... 2.43 mm

Nominal ratings
Operating voltage $U_B$ 10 ... 30 V DC
Switching frequency $f$ 0 ... 500 Hz
Hysteresis $H$ Typ. 5%
Reverse polarity protection All connections
Short-circuit protection Pulsing
Voltage drop $U_d$ $\leq$ 3 V
Operating current $I_L$ 0 ... 100 mA
Off-state current $I_{r0}$ 0 ... 0.5 mA typ. 0.1 μA at +25°C
No-load supply current $I_0$ $\leq$ 25 mA
Operating voltage display LED, green
Switching state indication LED, yellow

Functional safety related parameters
MTTFd 780 a
Mission Time (TM) 20 a
Diagnostic Coverage (DC) 0%

Ambient conditions
Ambient temperature $T_A$ 25 ... +70°C (-13 ... +158°F)

Mechanical specifications
Connection (system side) Rd24 x 1/8, 6-pin+PE
Connection (valve side) Socket connector, M12 x 1, 4-pin
Housing material PBT
Sensing face material PBT
Degree of protection IP67

Note Valve voltage limited to 26.4 V max.; valve power 6 W max.

Standard conformity
Standards EN 60947-5-2:2007
EN 60947-5-2/A1:2012
IEC 60947-5-2:2007
IEC 60947-5-2 AMD 1:2012

Approvals and certificates
UL approval cULus listed, general purpose
CCC approval Approval and marking not required for products rated $\leq$ 36 V

DIMENSIONS

ACTIVATORS
Activators sold separately
ACTIVATOR AND MOUNTING KITS

<table>
<thead>
<tr>
<th>Size</th>
<th>Description</th>
<th>Code</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 x 80 mm</td>
<td>NAMUR Mounting, non adjustable</td>
<td>54063A-14850536</td>
<td>Fits Bray S92/93 Sizes 63 to 128 and Series 98 - Metric</td>
</tr>
<tr>
<td>30 x 80 mm</td>
<td>NAMUR Mounting, non adjustable</td>
<td>54063A-14800536</td>
<td>Fits Bray S92/93 Sizes 63 to 128 - Imperial</td>
</tr>
<tr>
<td>30 x 130 mm</td>
<td>NAMUR Mounting, non adjustable</td>
<td>54160A-14850536</td>
<td>Fits Bray S92/93 Sizes 160 to 255 - Metric</td>
</tr>
<tr>
<td>30 x 130 mm</td>
<td>NAMUR Mounting, non adjustable</td>
<td>54160A-14800536</td>
<td>Fits Bray S92/93 Sizes 160 to 210 - Imperial</td>
</tr>
</tbody>
</table>

ACCESSORIES

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>090700-71155517</td>
<td>Sensor Cordset - single ended Rd24 female 6-pin + PE straight socket with screw terminal for field wiring. Field attachable.</td>
</tr>
<tr>
<td>090001-76159882</td>
<td>S-Connector Cordset (S62, S63) - M12 male right angle to Form B valve connector (DIN 43650), 2-pins+PE, 0.6 meters</td>
</tr>
<tr>
<td>090001-76160882</td>
<td>S-Connector Cordset (S60) - M12 male right angle to Form A valve connector (DIN 43650), 2-pins+PE, 0.3 meters</td>
</tr>
<tr>
<td>630250-21524536</td>
<td>Series 63 - Valve Solenoid, NAMUR mount 3/2 or 5/2, Form B connector (DIN 43560), IP65, single 24vdc coil</td>
</tr>
<tr>
<td>621250-21524536</td>
<td>Series 62 - Valve Solenoid, NAMUR mount 3/2 or 5/2, Form B connector (DIN 43560), IP65, single 24vdc coil</td>
</tr>
</tbody>
</table>

WIRING DIAGRAM

CONNECTOR PINOUT

All information herein is proprietary, confidential, and may not be copied or reproduced without the expressed written consent of Bray International, Inc. The technical data herein is for general information only. Product suitability should be based solely upon customer’s detailed knowledge and experience with their application.

Bray® is a registered trademark of Bray International, Inc. © 2017 Bray International. All rights reserved.

TM-BC-0903-554-00415EU-EN_2017-12-06