

## ► Safe protection zone monitoring, even for robotics applications: PSEnradar and PNOZmulti 2

### Safe radar systems

The new radar sensor PSEN rd1.2 and the new analysis unit PSEN rd1.x I/O PN are now available for safe protection zone monitoring in rugged application conditions. Thanks to the high safety category Cat. 3/PL d, not only outdoor applications and areas in wood and metal processing are safeguarded, but now also robot applications. With the new self-teaching background function, changes can now be made within the warning or protection zone during operation without requiring a new configuration.



Dust



Rain



Steam

The safe radar system together with the configurable safe small controllers PNOZmulti 2 offers a safe complete solution for protection zone monitoring – including conformity assessment. Additional interfaces such as Ethernet and PROFIsafe also enable simple use, e.g. in retrofit applications.



#### Your benefits at a glance

- High safety category Cat. 3/PL d enables safeguarding of robotic applications
- High flexibility thanks to optimised sensor alignment and individual protection zone configuration
- Openness for retrofit applications thanks to additional interfaces
- Insensitive to dust, dirt, rain, light, flying sparks, steam and vibrations
- Protection against encroachment from behind: To prevent the machine restarting when there are people in the danger zone



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PSEN rd1.x I/O PN analysing unit



PSEN rd1.1 sensor



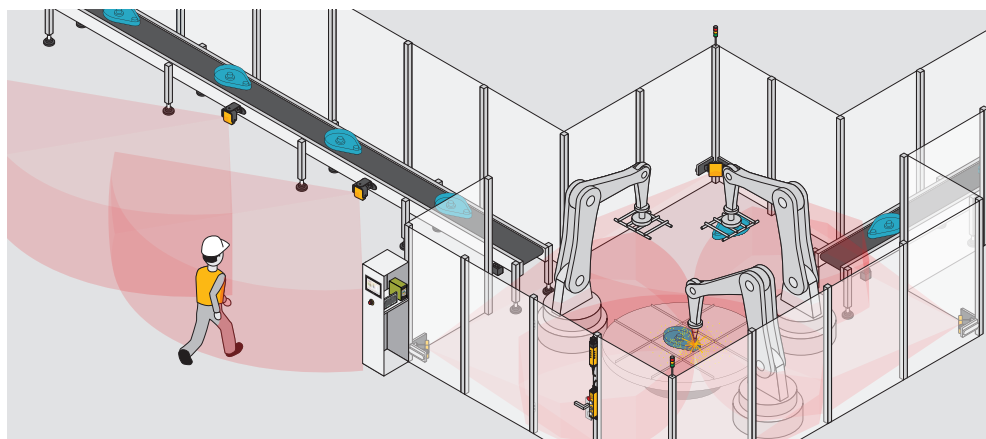
PSEN rd1.2 sensor



PNOZ m B0



Type	Common features	Order number
<b>PSEN rd1.x I/O PN analysing unit</b>	<ul style="list-style-type: none"> <li>▶ Series connection: up to 6 sensors</li> <li>▶ Zone sets: up to 32</li> <li>▶ OSSD outputs: up to 4</li> <li>▶ Reaction time: max. 100 ms</li> <li>▶ Connection type: Ethernet, PROFI-safe</li> <li>▶ Dimensions (H x W x D) in mm: 103 x 105 x 58</li> </ul>	6B000001
<b>PSEN rd1.1 sensor</b>	<ul style="list-style-type: none"> <li>▶ Opening angle: 110° horizontal, 30° vertical (wide) or 50° horizontal, 15° vertical (narrow)</li> <li>▶ Operating range: 4 m</li> <li>▶ Frequency: 24 GHz</li> <li>▶ Protection type: IP67</li> <li>▶ Can be used in applications up to SIL 2(IEC 61508), PL d (EN ISO 13849-1), category 3 if 2 sensors are used</li> <li>▶ Dimensions (H x W x D) in mm: 125 x 165 x 53</li> </ul>	6B000002
<b>PSEN rd1.2 sensor</b>	<ul style="list-style-type: none"> <li>▶ Opening angle: 20 – 100° horizontal, 20° vertical, configurable in 10° steps</li> <li>▶ Operating range: 5 m</li> <li>▶ Frequency: 60 GHz</li> <li>▶ Protection type: IP67</li> <li>▶ For use in applications up to                             <ul style="list-style-type: none"> <li>- SIL 2 (IEC 61508)</li> <li>- PL d (EN ISO 13849-1)</li> <li>- Category 3</li> </ul> </li> <li>▶ Dimensions (H x W x D) in mm: 135 x 158 x 105</li> </ul>	6B000003
<b>Accessories</b>	<ul style="list-style-type: none"> <li>▶ PSEN rd1.1 sensor shield kit</li> <li>▶ Cable/CA/M12-5AFX/A/005/XXXX/SH</li> <li>▶ Cable/CA/M12-5AFX/A/010/XXXX/SH</li> <li>▶ Cable/CA/M12-5AFX/A/015/XXXX/SH</li> <li>▶ Cable/CA/M12-5AFX/M12-5AM/A/003/XXXX/SH</li> <li>▶ Cable/CA/M12-5AFX/M12-5AM/A/005/XXXX/SH</li> <li>▶ Cable/CA/M12-5AFX/M12-5AM/A/010/XXXX/SH</li> <li>▶ Cable/CA/M12-5AFX/M12-5AM/A/015/XXXX/SH</li> <li>▶ Connector/CA/M12-5SMX/A/TR</li> <li>▶ PNOZ m B0</li> </ul>	6B000004 C1000044 C1000045 C1000046 C1000047 C1000048 C1000049 C1000050 C1000058 772 100



Safe complete solution with safeguarding of danger zones and protection against encroachment from behind (restart interlock).

We are represented internationally. Please refer to our homepage [www.pilz.com](http://www.pilz.com) for further details or contact our headquarters.

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