

## 8.1 Technical details

<b>Technical details</b>	
Application range	<b>Standard/Failsafe</b>
Maximum achievable category in accordance with <b>EN 954-1</b>	<b>4</b>
Maximum achievable SIL value	<b>SIL3</b>
Module's device code	<b>0221h</b>
<b>Electrical data</b>	
Internal supply voltage	
Supply voltage range of module supply	<b>4.9 - 5.1 V</b>
Current and power consumption from module supply	
Module's current consumption without FO connection	<b>450 mA</b>
FO connection's current consumption	<b>120 mA</b>
Module's power consumption without FO connection	<b>2.25 W</b>
FO connection's power consumption	<b>0.60 W</b>
Max. power dissipation of the module	<b>2.25 W</b>
Potential isolation between module supply and <b>PROFIBUS DP</b>	<b>700 V</b>
Potential isolation between module supply and SafetyBUS p	<b>700 V</b>
<b>SafetyBUS p</b>	
Application range	<b>Failsafe applications</b>
Device address	<b>32d ... 95d</b>
Max. transmission rate	<b>500 kBit/s</b>
Cable runs	<b>3,500 m</b>
Transmission type	<b>differential two-wire cable</b>
Connection	<b>Male 9-pin D-SUB connector</b>
<b>PROFIBUS DP</b>	
Application range	<b>Standard applications Failsafe applications with local enable principle</b>
Device type	<b>Slave</b>
Station address	<b>0 ... 126d</b>
Set via	<b>DIP switch</b>
Maximum data length of the fieldbus interface: Input	<b>64 Byte</b>
Maximum data length of the fieldbus interface: Output	<b>64 Byte</b>
Maximum data length of the fieldbus interface: Diagnostics	<b>64 Byte</b>
Transmission rates	<b>1.5 MBit/s, 12 MBit/s, 185.5 kBit/s, 19.2 kBit/s, 3 MBit/s, 45.45 kBit/s, 500 kBit/s, 6 MBit/s, 9.6 kBit/s, 93.75 kBit/s</b>
Set via	<b>automatic</b>
Connection	<b>Female 9-pin D-SUB connector</b>
Protocol	<b>DPV0</b>
Operating modes	<b>AutoBaud, Freeze Mode, Set Slave Address, Sync Mode</b>
Certification	<b>PNO</b>
Description file	<b>PILZ092F.GSD</b>
Manufacturer's ID	<b>092Fh</b>
<b>USB</b>	
Connection	<b>Mini-B connector</b>

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Environmental data	
Climatic suitability	EN 60068-2-14, EN 60068-2-1, EN 60068-2-2, EN 60068-2-30, EN 60068-2-78
Ambient temperature	0 - 60 °C
Storage temperature	-40 - 70 °C coated version (-T)
Climatic suitability in accordance with EN 60068-2-78	-25 - 70 °C
Condensation	-40 - 70 °C coated version (-T)
Max. operating height above sea level	93 % r. h. at 40 °C
EMC	no
Vibration to EN 60068-2-6	yes coated version (-T)
Frequency	5000 m coated version (-T)
Max. acceleration	EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-6-2, EN 61000-6-4
Shock stress	10 - 150 Hz
EN 60068-2-27	1g
EN 60068-2-29	15g
Protection type	11 ms
Mounting (e.g. cabinet)	10g
Housing	16 ms
Airgap creepage in accordance with EN 60664-1	IP54
Overvoltage category	IP20
Pollution degree	II
Mechanical data	
Housing material	
Front	PC
Bottom	PC
Dimensions	
Height	128.4 mm
Width	75.2 mm
Depth	79.4 mm
Weight	170 g

Safety characteristic data						
Unit	Operating mode	EN ISO 13849-1 PL	EN 954-1 Category	EN IEC 62061 SIL CL	PFH [1/h]	t <sub>M</sub> [year]
Logic	---	PL e (Cat. 4)	Cat. 4	SIL CL 3	2.88E-09	20

All the units used within a safety function must be considered when calculating the safety characteristic data.

## 8.2 Order reference

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Order reference	
Description	Order no.
PSSu H SB DP (Head module with SafetyBUS p interface and PROFIBUS DP interface)	312 025
PSSu H SB DP-T (Head module with SafetyBUS p interface and PROFIBUS DP interface, coated version)	314 025