Pfannenberg
ELECTRO-TECHNOLOGY FOR INDUSTRY

Signal Devices

PROTECT PRO 10 Series Audible Alarms

Overview

The PRO 10 Series alarms provide powerful audible signaling for demanding industrial applications. All versions share the core PROTECT platform, including rugged aluminum construction, up to 116 dB(A) sound output, 80 selectable tones, adjustable sound levels, and pre- and main-alarm capability.

Choose from standard industrial, functional-safety, hazardous-location, or combined hazardous-location/functional-safety versions.

Quick Comparison				
Version	***Industrial***	***SIL***	***Hazardous Location***	***Best For***
PRO 10	✓	—	—	General industrial applications
PRO 10-SIL	✓	✓	—	Functional-safety applications
PRO 10-3G/3D	✓	—	✓	Hazardous locations
PRO 10-3G/3D-SIL	✓	✓	✓	Safety systems in hazardous locations

PRO 10

Rugged Industrial Audible Alarm



23150630000

A powerful 116 dB industrial sounder for demanding indoor and outdoor applications. Offers 80 selectable tones, adjustable volume and a rugged aluminum housing.

Works well for...
- General industrial, machine, process and facility alarms

PRO 10-SIL

Functional-Safety Audible Alarm



23150630601

A PRO 10 sounder designed for safety-related applications requiring functional-safety capability up to SIL 2 / PL d.

Works well for...
- Safety systems, machine safety, critical process alarms

PRO 10-3G/3D

Hazardous-Location Audible Alarm



23150630007

A rugged audible alarm designed for hazardous areas where flammable gases or combustible dust may be present.

Works well for...
- Oil and gas, chemical, petrochemical and hazardous process areas

PRO 10-3G/3D-SIL

Hazardous-Location and Functional-Safety Audible Alarm



23150630017

Combines hazardous-location protection with SIL functional-safety capability for critical alarms in hazardous environments.

Works well for...
- Safety instrumented systems in hazardous locations

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PROTECT PRO 10 Series Audible Alarms Selection

Part Number	Price	Alarm Housing Color	Voltage Operating Range	Nominal Current Consumption[1]	Approvals / Certifications	Tone Type	Tone Frequency	Loudness Decibels	Weight	Drawing Link
PRO 10										
23150630000	$522.00	Red	10–60 VDC	355–400 mA	UL/cUL, CE	(80) selectable	340 Hz 2.9 kHz	116 dB at 1m	2680g [5.91 lb]	PDF
23150640000	$522.00		95–265 VAC 50/60 Hz	85–95 mA					2650g [5.84 lb]	PDF
PRO 10-SIL										
23150630601	$807.00	Red	10–60 VDC	355–400 mA	UL/cUL, CE, SIL 2 / PL d	(80) selectable	340 Hz 2.9 kHz	116 dB at 1m	2720g [6.00 lb]	PDF
23150640601	$807.00		95–265 VAC 50/60 Hz	85–95 mA					2770g [6.11 lb]	PDF
PRO 10-3G/3D										
23150630007	$949.00	Red	10–60 VDC	355–400 mA	UL/cUL (Hazardous Loc.), ATEX	(80) selectable	340 Hz 2.9 kHz	116 dB at 1m	2680g [5.91 lb]	PDF
23150640007	$949.00		95–265 VAC 50/60 Hz	85–95 mA					2650g [5.84 lb]	PDF
PRO 10-3G/3D-SIL										
23150630017	$1,661.00	Red	10–60 VDC	355–400 mA	UL/cUL (Hazardous Loc.), ATEX, SIL 2 / PL d	(80) selectable	340 Hz 2.9 kHz	116 dB at 1m	2720g [6.00 lb]	PDF
23150640017	$1,661.00		95–265 VAC 50/60 Hz	85–95 mA					2770g [6.11 lb]	PDF

[1] Power consumption dependent on operating voltage.

PROTECT PRO 10 Series Audible Alarms Specifications

Version	PRO 10	PRO 10-SIL	PRO 10-3G/3D	PRO 10-3G/3D-SIL
Sound Level Reduction	-4 / -10 / -16 / -22 / -26 / -30 dB, internally or externally selectable		-4 / -10 / -16 / -22 / -26 / -30 dB, internally or externally selectable (Max. volume rated T3 only)	
Alarm Tones	80 selectable / 3 additional tones externally selectable			
Sound Time-Out	60s / 15 min / 45 min / none	Not permitted for safety-related use — continuous (no timeout) only; DIP S11-1 and S11-2 must remain ON	60s / 15 min / 45 min / none	Not permitted for safety-related use — continuous (no timeout) only; DIP S11-1 and S11-2 must remain ON
Operating Temperature	-40 to +55 °C [-40 to +131 °F]			
Storage Temperature	-40 to +70 °C [-40 to +158 °F]			
Relative Humidity	90% max.			
Degree Of Protection	IP66 / IP67, UL Type 4/4X		IP66, UL Type 4/4X (Ex certification covers IP66; IP67 not part of Ex rating)	
Impact Rating	IK09			
Protection Class	I (must be earth grounded)			
Overvoltage Category	II			
Duty Cycle	100%			
Housing Material	Aluminum			
Installation Attitude	Any (sound funnel must not face upward)		Any (sound funnel must not face upward); dust deposits must be removed regularly	
Cable Entry	2x M20 x 1.5			
Cable Gland Sealing Range	6–13mm (cable gland included)		ATEX / UL-certified gland required	
Wire Size	0.14–2.5 mm² fine stranded (24–14 AWG) / 4 mm² solid (12 AWG)			

Specifications continued next page

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PROTECT PRO 10 Series Audible Alarms Specifications – (cont'd)				
Version	***PRO 10***	***PRO 10-SIL***	***PRO 10-3G/3D***	***PRO 10-3G/3D-SIL***
Agency Approvals	UL/cUL File S7256 (Audible Signal Appliance / Fire Alarm & General Signaling); **10–60 VDC Versions Only:** CE — CPR (EU) 305/2011, Notified Body 0786; VdS G225036; EN 54-3 (Tones 2, 9, 15, 57, 60, 104, 128, 131, 146)	UL/cUL File S7256; SIL 2 / PL d per IEC 61508	UL/cUL File E542096 (Cat. UXVF/ UXVF7 — Hazardous Locations); ATEX PDG 24.0009 X (Zone 2 Gas/ Zone 22 Dust); NEC/CEC Zone: Class I Zone 2 AEx ec IIC T4...T3 Gc, Zone 22 AEx tc IIIB T135°C Dc; Equivalent: Class I Div.2 Gr. A, B, C, D; Class II Div.2	UL/cUL File E542096 (Cat. UXVF/ UXVU — Hazardous Locations); ATEX PDG 24.0010 X (Zone 2 Gas/Zone 22 Dust); NEC/CEC Zone: Class I Zone 2 AEx ec IIC T4...T3 Gc, Zone 22 AEx tc IIIB T135°C Dc; Equivalent: Class I Div.2 Gr. A, B, C, D; Class II Div.2 Gr. F, G; Class III Div.2
Functional-Safety & Hazardous-Location Specific Specifications				
Type Of Protection (Ex)	—		Ex ec / Ex tc	
Temperature Class (Gas / Dust)	—		T4...T3 (Gas) / T135°C (Dust) — T4 requires sound level ≤ -4 dB; Max. volume rated T3 only	
Equipotential Bonding Connection	—		Yes — min. 4 mm² cross-section, 2.5 N·m tightening torque	
Cable Gland Included	Yes (1x, standard) 6–13mm sealing range		Customer supplied based on install M20x1.5 thread	
Diagnostic/Monitoring Circuit — Rated Voltage	—	12/24/48 VDC; 115/230 VAC, 50/60 Hz	—	12/24/48 VDC; 115/230 VAC, 50/60 Hz
Diagnostic/Monitoring Circuit — Current Consumption	—	15–25 mA DC (varies by voltage) / 23-25 mA AC	—	15-25 mA DC (varies by voltage) / 23-25 mA AC
Fault Message (Alarm) Output	—	Solid-state relay, MAX 230 VAC / 80 mA switching capacity, RDSON < 35Ω	—	Solid-state relay, MAX 230 VAC / 80 mA switching capacity, RDSON < 35Ω
Safety Integrity Level	—	SIL 2 / PL d per IEC 61508 & ISO 13849-1 (1oo1 architecture, Type B subsystem, MTTFd > 100 years); PFD/PFH values vary by system integration — see Pfannenberg Safety Manual	—	SIL 2 / PL d per IEC 61508 & ISO 13849-1 (1oo1 architecture, Type B subsystem, MTTFd > 100 years); PFD/PFH values vary by system integration — see Pfannenberg Safety Manual