

Signaling Devices for Cranes and Hoists

Warn and Protect Operators and Bystanders from Heavy Load and Moving Equipment Hazards



Ship to shore harbor cranes



Industrial overhead bridge cranes



Overhead rail yard gantry cranes



Construction tower cranes

Purpose

Cranes and hoists are workhorses of our mechanized world but these very dangerous pieces of equipment can contribute to crippling injuries or even death. It is vital to ensure the safety of all people who may be in the immediate areas where cranes and hoists are being operated. When hazards cannot be effectively eliminated or guarded against, a safety warning system comprised of audible and visual alarms will help mitigate risks by alerting personnel of the impending danger.

Pfannenberg offers audible and visual signaling devices that are specifically tailored to provide operator feedback, movement warning, and aviation safety of crane and hoist systems.

Signaling Applications for Cranes, Hoists, & Derricks

- Operator Feedback - direction of motion, reaching load capacity, over load capacity, poor load balance
- Wind Alarm
- Equipment in Motion Alarm
- Load in Motion Alarm
- Aviation Warning

Ancillary Signaling Applications

- Motor drive system status indication
- Control panel alarm systems

Standards and Regulations Relating to Crane Safety

- 29 CFR Part 1926.1419: Signals - General Requirements for Cranes and Derricks in Construction, Occupational Safety and Health Administration (OSHA).















Mobile reach-stacker container handlers



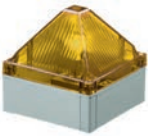



Signaling Devices for Cranes and Hoists

Horns, Sirens, Sounders - with or without flashing strobe light

- Electronic tone generators with no moving parts for long service life in harsh operating environments.
- User selectable tones with variable tone stages permit the same device to emit different alarms based on circumstance.
- Integrated flashing strobes with rated life in excess of 8,000,000 flashes and high intensity light output to match alarm severity.

Electronic Sounders with Integrated Flashing Strobe Light						
	Model PA X 1	Model PA X 5	Model PA X 10	Model PA X 20	DSF 5 / DSF 10	Model P22 DBF
Nominal SPL @ 1 m*	100 dB(A)	105 dB(A)	110 dB(A)	120 dB(A)	105 / 110 db(A)	80 dB(A)
Light intensity options (typical with clear lens)	44 cd, 5 Joules	47 cd, 5 Joules 92 cd, 10 Joules	129 cd, 10 Joules 190 cd, 15 Joules	129 cd, 10 Joules 190 cd, 15 Joules	140 cd, 13 Joules	Panel buzzer with Blinking LED array
Lens color options	clear, yellow, amber, red, green, blue, white					Red
Size (h x w x d)	6.8 x 4.3 x 3.2 inch	8.5 x 6.4 x 5.2 inch	10.6 x 8.4 x 6.1 inch	10.6 x 8.4 x 7.1 inch	10.4 x 5.2 x 5.6 inch	22.5 mm cutout
Electronic Sounders						
	Model PA 1	Model PA 5	Model PA 10	Model PA 20	DS 5 / DS 10	Series P28 Buzzers
Nominal SPL @ 1 m*	100 dB(A)	105 dB(A)	110 dB(A)	120 dB(A)	105 / 110 db(A)	91 / 102 dB(A)
Size (h x w x d)	3.4 x 4.3 x 3.2 inch	5.3 x 6.4 x 5.2 inch	6.7 x 8.4 x 6.1 inch	6.7 x 8.4 x 7.1 inch	5.2 x 5.2 x 5.6 inch	28 mm cutout
The following attributes and specifications are common to both sounders and flashing sounders in the same columns above:						
Noteworthy Attributes	UV-resistive and flame-retardant high-strength plastic housing made of a blend of ABS and polycarbonate. Quick and easy installation with 3/8-turn fasteners and integrated mounting flange. Choice of grey, red, or white housings. 10-year warranty.				Ultra rugged aluminum construction.	Panel buzzer
Tone Options	80 tones, 4 stages				31 tones, 4 stages	Various
Power Options	12 VDC, 24 VDC, 48 VDC, 24 VAC, 115 VAC, 230 VAC					
Ingress Protection	IP 66				IP 66, IP 67	Varies
* Maximum achievable sound pressure level is dependent upon selected tone output and supply voltage utilized.						

Flashing Strobe Lights and LED Beacons

Flashing Strobe Lights and LED Beacons						
	Model PY X S-05	Model PMF	Quadro F12	Quadro LED TL	POL 32	Series BR 50
Noteworthy Attributes	60 flash/min strobe for crane operator feedback, motion warning of crane or vehicle, etc. Other flash rates and sequences also available. Variety of lens color options.			Traffic-style light for operator feedback. Light sensor option to dim for night operation.	Aviation obstruction light for marking construction tower cranes to warn aircraft.	Stacklight provides status indication on motor drive control panels.
Light intensity options (typical with clear lens)	44 cd, 5 Joules strobe	1500 cd, 30 Joules 200 cd, 7 Joules strobes	140 cd, 13 Joules strobe	80 cd face-on LED	32 cd circumferential LED	circumferential LED, filament bulb, or strobe
Size	3.4 x 4.3 x 3.2 inch	5.9 dia. x 6.7 inch	5.1 x 5.1 x 5.1 inch	15.6 x 5.1 x 5.1 inch	4.6 dia x 9.4 inch	2.1 dia x varies inch