



Understanding Hazardous Location Classifications and the SGX-32 Series Manual Pull Station

If your facility contains flammable gases, combustible dusts, or ignitable fibers, you may require an explosion-proof manual pull station.

Intro to Hazardous Area Classifications

Many industrial facilities work with materials that can ignite under certain conditions. A small spark can become a serious hazard when flammable gases, combustible dusts, or ignitable fibers are present. Examples include oil and gas facilities, chemical plants, grain elevators, food processing plants, mining operations, battery charging rooms, and marine terminals.

STEP 1: Determine the Hazard Class

Class I: Flammable gases and vapors. Examples include hydrogen, propane, methane, ethylene, and gasoline vapors. Class II: Combustible dusts such as grain dust, flour dust, coal dust, plastic dust, and metal dust. Class III: Ignitable fibers and flyings such as cotton fibers, textile lint, paper fibers, and wood fibers.

STEP 2: Determine the Division

Division 1 means the hazardous material is present during normal operation. Examples include fuel loading, hydrogen generation, grain handling, and chemical processing. Equipment installed in these areas must provide a high level of ignition protection.

STEP 3: Identify the Group

Group A: Acetylene (not SGX-32 listed). Group B: Hydrogen. Group C: Ethylene. Group D: Propane, Methane, and Gasoline Vapors. Group E: Combustible Metal Dust. Group F: Coal and Carbon Dust. Group G: Grain, Flour, Starch, Plastic, and Chemical Dust.

SGX-32 Hazard Classification Summary

Classification	Description	SGX-32 Coverage
Class I Group A	Acetylene	No
Class I Group B	Hydrogen	Yes
Class I Group C	Ethylene	Yes
Class I Group D	Propane/Methane/Gasoline Vapors	Yes
Class II Group E	Metal Dust	Yes
Class II Group F	Coal/Carbon Dust	Yes
Class II Group G	Grain/Flour/Chemical Dust	Yes
Class III	Fibers and Flyings	Yes

Is the SGX-32 Right for Your Facility?

- ✓ Hazardous gases or vapors are present
- ✓ Combustible dust is present
- ✓ Ignitable fibers or flyings are present
- ✓ The area is Division 1
- ✓ The classification is Class I Groups B,C,D; Class II Groups E,F,G; or Class III

SGX-32 Features

- Explosion-proof cast aluminum housing for harsh industrial environments.
- Class I Division 1 Groups B, C, D listed.
- Class II Division 1 Groups E, F, G listed.
- Class III Division 1 listed.
- NEMA 4X rated for outdoor weather and washdown service.
- UL Marine Listed for corrosive marine environments.
- Wide operating temperature range from -40°F to 150°F.
- DPDT switch for integration with fire alarm, shutdown, and notification systems.
- Single-action and dual-action models available.
- Key-reset security and multiple color options.
- Available with stainless steel option.

Applications, Certifications, and Specifications

Common Applications: Oil & Gas Facilities, Petrochemical Plants, LNG Facilities, Refineries, Grain Elevators, Food Processing Plants, Mining Operations, Coal Handling Facilities, Battery Charging Rooms, Marine Terminals, Chemical Processing Plants, and Manufacturing Facilities.

Item	Specification
Switch Type	DPDT
AC Rating	10A @ 125/250 VAC
DC Rating	0.5A @ 125 VDC
Temperature	-40°F to 150°F
Back Box and Cover	Cast Aluminum
Weather Rating	NEMA Type 4X,
Listings	UL, FM, UL Marine, CSFM, MEA
Conduit	Two 3/4 in. NPT Connections

SIGCOM SGX-32 Series

Reliable Emergency Activation for Hazardous Environments

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