

**COOL THINGS FOR THE ARTS**

# **MAIN SOLENOID ASSEMBLY**

## **LN2 Effects Equipment**



The Main Solenoid Assembly (MSA) makes it easier and safer to use Liquid Nitrogen (LN2) for special effects and industrial applications. The entire mechanism is enclosed in a 16"x 20" NEMA 1 box for easy wall mounting. All openings are gasketed or grommetted to minimize any moisture accumulation.

The assembly includes a solenoid to control LN2 flow from supply into the effects system, self-sealing, mechanical, pressure relief valves (PRVs) to protect both supply and effects sides from over-pressure conditions and a pressure sensor to detect under-pressure conditions so that all effects equipment operates within a suitable, safe pressure range. PRVs are tapped to receive NPT fittings so that waste gas can be piped away to a remote location.

Integrated pipe clamps allow Penguin Pipe™ or vacuum-jacketed hose to be connected securely to the enclosure. All air access to the closed-cell foam insulation are sealed to create an effective vapor barrier. Foam materials are extended to minimize "cold creep". Since some special effects require that a minimum pressure be maintained, an integrated pressure sensor constantly monitors system pressure notifying the system if pressure falls so that safe operations can be maintained.

Electrical connections for both the Main Solenoid Assembly and the Pressure Sensor are through two panel-mounted twist-lock receptacles for fast, secure assembly. Available for 120V and 220V.

### FEATURES

- ◆ All components are rated for industrial, cryogenic applications & mounted in a NEMA 1 enclosure
- ◆ The enclosure is filled with a insulation material insuring that exposed surfaces remain safe to the touch
- ◆ Includes an LN2 solenoid, "pre" & "post" PRVs and a low-pressure sensor
- ◆ Pressure is constantly monitored so that Burst effects can be disabled whenever system pressure is too low
- ◆ "Pre" and "Post" PRVs incorporate NPT threaded fittings so that exhaust gas can be piped away
- ◆ Designed for operation at 120VAC or 220VAC
- ◆ Penguin Pipe™ (or other vacuum-jacketed pipe) connections can be securely made into the enclosure



#### Assembly & Accessories

#20-32-2301 - Main Solenoid Assembly  
for 120VAC, 60Hz operation

#20-32-2302 - Main Solenoid Assembly  
for 240VAC, 50Hz operation

#20-15-0706 - Penguin Pipe wall mount bracket

#10-05-0611 - 10' Fog Capsule control cable

#10-05-0612 - 25' Fog Capsule control cable

#10-05-0613 - 50' Fog Capsule control cable

#10-05-0614 - 75' Fog Capsule control cable

#10-05-0615 - 100' Fog Capsule control cable

#10-05-0621 - 10' Pressure Sensor control cable

#10-05-0622 - 25' Pressure Sensor control cable

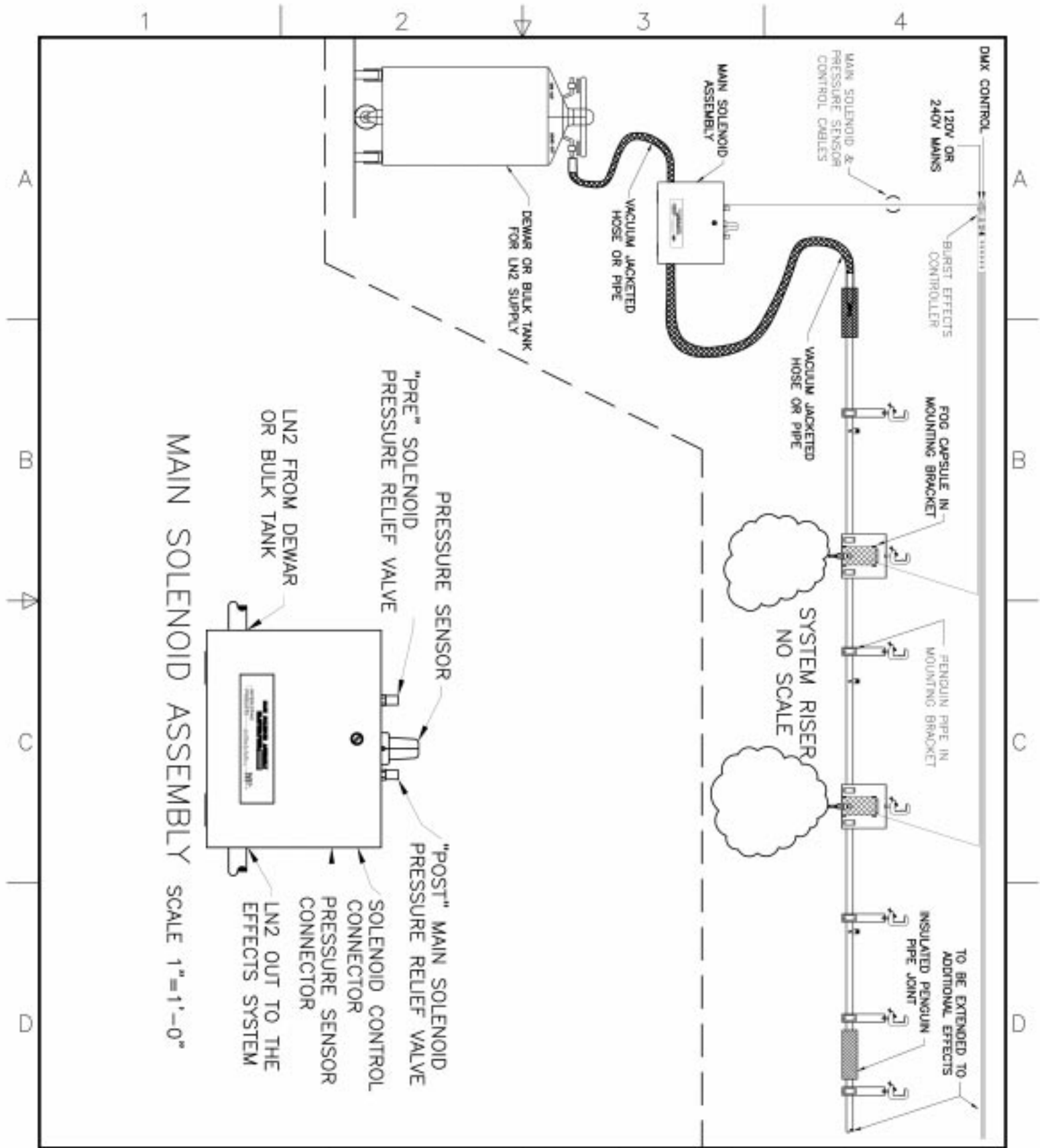
#10-05-0623 - 50' Pressure Sensor control cable

#10-05-0624 - 75' Pressure Sensor control cable

#10-05-0625 - 100' Pressure Sensor control cable

# INTERESTING PRODUCTS

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MAIN SOLENOID ASSEMBLY SCALE 1"=1'-0"

LN2 BURST SYSTEM	MAIN SOLENOID ASS & SYSTEM RISER	Date: 10/11/01	Scale: AS NOTED	Revision: A	THIS DOCUMENT AND THE SPECIFICATIONS DESCRIBED WITHIN ARE THE EXCLUSIVE PROPERTY OF INTERESTING PRODUCTS, INC. THEY ARE ISSUED IN STRICT CONFIDENCE AND SHALL NOT BE REPRODUCED, COPIED, OR USED WITHOUT THE PRIOR WRITTEN PERMISSION OF INTERESTING PRODUCTS, INC.
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