

XDS-1230™ Gen1 EXTENDED DISCHARGE SYSTEM SKID UTILIZING 3M™ NOVEC™ 1230 FIRE PROTECTION FLUID



200# NOVEC-1230 Extended Discharge Skid w/ Valving, Solenoid(s), Flow Control Output, and External Nitrogen Drivers

Description

The NOVEC-1230 extended discharge skid is an electrically activated, pneumatically powered NOVEC-1230 storage / discharge / flow control system. The system, when combined with discharge piping, atomizing nozzles, and a primary discharge - comprises the extended discharge portion of an engineered extended discharge clean agent fire protection system. The system includes a NOVEC-1230 storage cylinder filled to a design specified amount of agent. The output of the cylinder includes a flow control manifold which allows flow rates of 2.0# to 65.0#. The external nitrogen driver(s) provide continuous pressure into the NOVEC-1230 storage cylinder via regulated flow. The system is electrically activated via one (1) 24VDC solenoid. The solenoid is activated at the same time as the primary discharge system which eliminates the need for electrical or mechanical timing components.

XDS-1230™ NOVEC-1230 Extended Discharge System
Component Data Sheet (Gen1)
U.S. Patent No. 11298573
International Patent App. 2021/025929

NOTICE: THE XDS FIRE EXTENDED DISCHARGE SYSTEM IS AN ENGINEERED, PERFORMANCE BASED SYSTEM AS DEFINED BY NFPA 2001, 5.7.2. THE SYSTEM UTILIZES CUSTOM COMPONENTS AND IS NOT CURRENTLY LISTED. THE SYSTEM IS PATENTED IN THE US AND OTHER COUNTRIES. TOGETHER WITH A PRIMARY DISCHARGE SYSTEM, THE EXTENDED DISCHARGE SYSTEM COMPRISES A COMPLETE ENGINEERED EXTENDED DISCHARGE SYSTEM DESIGNED TO MEET ENGINEERED PERFORMANCE BASED RESULTS. FOR ADDITIONAL INFORMATION CONTACT XDS FIRE, INC. at www.xdsfire.com.

DATA SHEET



Specifications

NOVEC-1230 Cylinder	
Material	Welded Carbon Steel @ 0.30"
Specification:	DOT4BW-500
Internal Volume:	13 cubic feet
Exterior Finish:	Red Gloss Baked Polyurethane
Interior Finish:	Epoxy coated
Storage Temperature Range	Minimum: 32°F (0°C)
	Maximum: 130°F (54.4°C)
Fill Range	Minimum: 455 lbs.
	Maximum: 910 lbs.
Fill Increment	1.0 lbs.

NOVEC-1230 Valve	
Material:	Brass
Actuation:	Pneumatic Control Head (Powered by Nitrogen Cylinder – See Below)

NOVEC-1230 Flow Control	
Material:	Steel
Flow Range	Minimum: ~2.0 lbs. / min.*
	Maximum: ~65 lbs. / min.*
* The extended discharge system has been successfully deployed in multiple projects with the noted rates and is currently being refined to provide expanded flow rates.	

Nitrogen Cylinder (2300 / 4890)	
Material:	Carbon Steel
Specification:	DOT3AA-2300
Internal Volume:	2300 / 4893 cubic inches
Charge Pressure:	1,800 psig (128 - 136 barg)
Exterior Finish:	Black Semi-Gloss Paint
Tare Weight:	102 / 270 lbs. (85 kg)

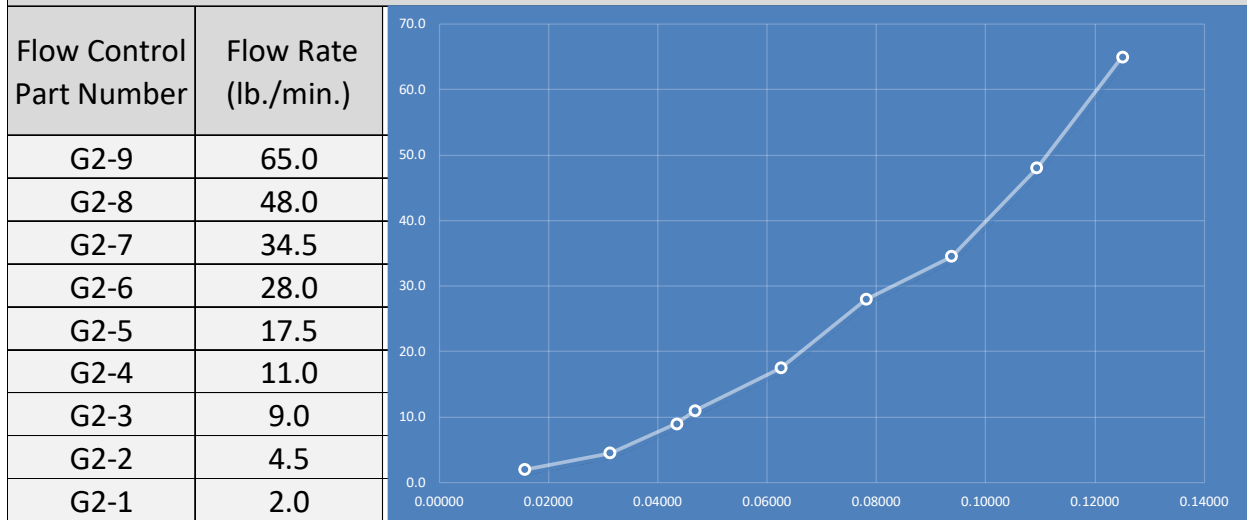
Nitrogen Valve	
Material:	Brass
Actuation:	Solenoid
Voltage:	24VDC solenoid
Current:	2A Momentary @ 24 VDC

Bracket(s)	
Material:	Steel
Finish:	Black Semi-Gloss Paint

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XDS-1230™ Extended Discharge System Gen1 Flow Rate Chart



Notes:

1. All data is property of XDS FIRE, INC. / Chris van der Stokker and protected by U.S. Patent No. 11,298,573.
2. This table provides flow rate of NOVEC-1230™ for the given system orifice part number.
3. Orifice flow rate is dependent upon and must be matched to nozzle quantity and nozzle orifice diameter.
4. Reference "Minimum Nozzle Quantity" Chart to determine minimum nozzles and nozzle orifice diameter(s).
5. All flow rates are based upon 1/2" stainless steel tubing and Swagelok™ fittings.

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