

May 2026

Types H733 and H833 Internal Relief Valves

Introduction

This datasheet provides specifications and parts list for the variants of the Fisher™ Type H833 Relief Valve including the UL® listed Types H733-250 and H733-265. Refer to the Type H733/H833 Instruction Manual, D450335T012, for information on how to properly install, maintain and test the relief valve.

Product Description

Types H733 and H833 relief valves are used for a variety of compressed gases in mobile applications. The Type H733 is UL® listed for Propane and often used with Anhydrous Ammonia (NH₃). The valves are typically installed in ASME tanks and Department of Transportation (DOT) cargo tanks (see Figure 1). Contact the factory regarding selection of compatible sealing materials. ASME setpoints and flow capacities are available and all units are provided with serial numbers.

Specifications

Body Size, Tank Connection

3 NPT Male

Maximum Inlet Pressure (Body Rating)⁽¹⁾

480 psig / 33.1 bar

Rain Cap and Installation Tool

Type P298 Rain Cap;

Type P305 (2-1/2 in. / 64 mm Hex bar) Wrench

Start-to-discharge Pressure and Spring Range

100 to 400 psig / 6.9 to 27.6 bar

Approximate Unit Weight

7.5 lbs / 3 kg

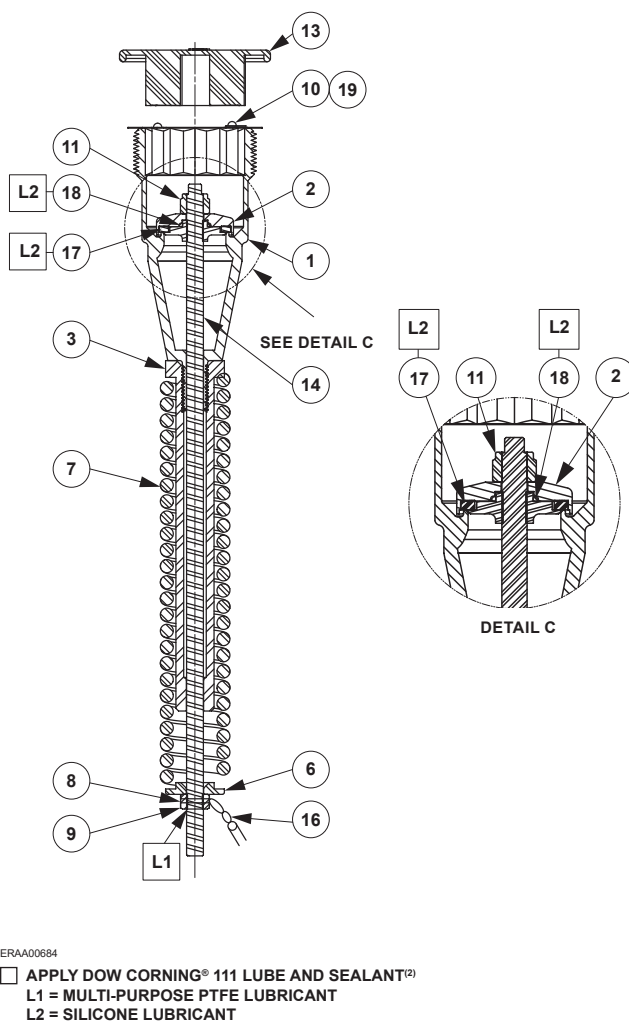


Figure 1. Type H733/H833 Relief Valve

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1. The pressure/temperature limits in this Datasheet and any applicable standard or code limitation should not be exceeded.

2. Lubricant/Sealants must be selected such that they meet the temperature requirements.

Types H733 and H833

Parts List

KEY	DESCRIPTION	MATERIAL	PART NUMBER
1	Body	ASME SA351 CF8M	T21135T0012
2	Annealed Top Disc	ASME SA479 S30400	ERAA00678A0
3	Guide Bushing	304 Stainless Steel	ERAA14941A0
6	Annealed Spring Seat	ASME SA479 S30400	T12669T0022
7	Spring (Model Type and Set Point Range)		
	(-1) 100 to 150 psig / 6.9 to 10.3 barg	17-7PH Stainless Steel	GE00925T012
	(-2) 151 to 200 psig / 10.4 to 13.8 barg	17-7PH Stainless Steel	GE00978T012
	(-3) 201 to 275 psig / 13.9 to 19.0 barg	302 Stainless Steel	ERAA00950A0
	(-4) 276 to 330 psig / 19.0 to 22.8 barg	17-7PH Stainless Steel	GE00929T012
	(-5) 331 to 400 psig / 22.8 to 27.6 barg	17-7PH Stainless Steel	GE00930T012
8	Hex Nut	316 Stainless Steel	T1208735252
9	Passivated Roll Pin	S42000 AISI	1H483928992
10	Drive Screw	18-8 Stainless Steel	1A6767X0012
11	Lock Nut	Stainless Steel	1D5309X0052
13	Rain Cap	Ethylene propylene (EPDM)	T40635T0012
14	Bottom Disc/Stem Weld Assembly		
14A	Annealed Stem	ASME SA479 S30400	ERAA01041A0
14B	Annealed Bottom Disc	ASME SA479 S30400	ERAA01041A0

KEY	DESCRIPTION	MATERIAL	PART NUMBER
16	Seal and Wire	Lead Seal and 304 Stainless Steel Wire	1D884799012
17	Main Seal (Model Type)		
	H733-250, H733-265, H833-*	Nitrile (NBR)	ERAA00675A0
	H833V-*	Fluorocarbon (FKM)	ERAA00675A1
	H833E-*	Ethylene propylene (EPDM)	ERAA00675A2
	H833N-*	Neoprene (CR)	ERAA00675A4
	H833K-*	Perfluoroelastomer (FFKM)	ERAA00675A3
18	O-ring (Model Type)		
	H733-250, H733-265, H833-*	Nitrile (NBR)	ERAA00671A0
	H833V-*	Fluorocarbon (FKM)	ERAA00671A1
	H833E-*	Ethylene propylene (EPDM)	ERAA00671A2
	H833N-*	Neoprene (CR)	ERAA00671A4
	H833K-*	Perfluoroelastomer (FFKM)	ERAA00671A3
21	Lube and Sealant	Dow Corning® 111	1M528206992

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* Denotes variable between 1 to 5 that corresponds to spring range (see key 7).

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