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Pressure Equipment Directive (PED), Pressure Equipment (Safety) Regulation (PE(S)R) and Transportation Pressure Equipment Directive (TPED) Classification Guide for LP Gas Products

Introduction

The Pressure Equipment Directive (PED) 2014/68/EU and the Pressure Equipment (Safety) Regulation 2016 (PE(S)R) requires pressure equipment destined for Europe and the United Kingdom to have a CE and UKCA mark indicating that the equipment meets all aspects of the respective directive. The PED and PE(S)R are directives that apply to the design, manufacture and conformity assessment of pressure equipment and pressure assemblies. All equipment covered by the directive must comply with essential safety requirements and meet the equivalent national laws of all member countries.

The Transportable Pressure Equipment Directive (TPED) 1999/36/EC was replaced in January 2012 by the Directive 2010/35/EU with a transition period for the old Directive which expired on December 2012.

Directive 2010/35/EU sets out detailed rules for transportable pressure equipment to improve their security and their guaranteed free movement inside the EU. All equipment covered by the directive must comply with essential safety requirements and meet the equivalent national laws of all member countries.

PED and PE(S)R Classification

To ensure that products destined for Europe meet the requirements of PED and PE(S)R, it is necessary to determine the proper classification. Pressure equipment can be classified in one of the following categories:

- SEP (Sound Engineering Practice)
- Category I
- Category II
- Category III
- Category IV



Figure 1. CE and UKCA Mark

TPED Classification

Examination of the new Directive 2010/35/EU implies that from January 2013 valve manufacturers are not allowed to place the π mark on their products. The assessment of tanks performed by the Tank Manufacturer is to be made including any valves and fittings installed. Consequent π marking to TPED requirements is to be made for the completed tank assembly.

Product Classification

Use the tables on the following pages to find the category of a specific product.

Note

Any specific type number, body size or body material not included in the Product Classification table is not available for sale into Europe. Products can only be processed per classification specified in the Products Classification table.

Due to Classification limitations, some products may not be available at full rated pressures. Be sure to check the Product Classification table for any limitations.

Documentation On-Line

Instruction Manuals are available at www.emerson.com/en-us/automation/valves-actuators-regulators/bulk-storage-transport-equipment for immediate viewing and download.

PED and PE(S)R Documentation

Documentation

Fisher™ products destined for Europe will contain an Instruction Manual in the language requested. If a language is not yet available or is not requested, then English, German and French Instruction Manuals will be included.

TYPE	DESCRIPTION	SIZE, IN. / DN	END CONNECTION	BODY MATERIAL	PED/PE(S)R CATEGORY	PSCD CODE
Main Valve						
1301F	Regulator	1/4	All	All	SEP	PSCD-206
133H	High-Pressure Regulators	2 / 50	NPT	Cast Iron	CAT I	PSCD-207
133L	Low-Pressure Regulators	2 / 50	NPT	Cast Iron	CAT I	PSCD-207
289H-2 and -4	Backpressure Regulator	2 / 50	NPT	Cast Iron	CAT I	PSCD-207
289H-41, -42 and -43	Backpressure Regulator	1 / 25	NPT	Aluminum	SEP	PSCD-206
299H	1-1/2 In. NPT Pilot Operated Internal Regulator	1-1/2, 2 / 40, 50	NPT	Cast Iron	CAT I	PSCD-207
627 and 627R	Regulator	3/4, 1 / 20, 25	NPT	Ductile Iron	SEP	PSCD-206
627	Regulator	2 / 50	NPT	Steel	CAT II	PSCD-208
63EGLP	Bulk Plant Relief Valve	4 / 100	Flange	Steel	CAT IV	PSCD-222
64, 64KB and 64SR	High-Pressure Regulators	1/2 / 15	NPT	Aluminum	SEP	PSCD-206
67CD, 67CH, 67CN and 67CW	High-Pressure Regulators	1/4 / 6	NPT	Aluminum	SEP	PSCD-206
749B	Change Over Manifold Regulator	1/2 / 15	NPT	Aluminum	SEP	PSCD-206
912, 912H and 912N	Regulators	1/4	NPT	Zinc	SEP	PSCD-206
MR98H	Backpressure Regulator	1/2, 3/4, 1 / 15, 20, 25	NPT	Cast Iron, Steel	SEP	PSCD-206
99	LPG Regulator	2 / 50	NPT	Cast Iron	CAT I	PSCD-207
61 Pilot	---	1/4	All	All	SEP	PSCD-206
C400 and C800 Series Including "F" suffixes	Internal Valves	1-1/4, 2, 3, 4 / 32, 50, 80, 100	All	Ductile Iron, Steel and Stainless Steel	CAT IV	PSCD-222
C477GFV	Foot Valve	2, 3 / 50, 80	NPT	Stainless Steel	CAT II	PSCD-208
F100, F101, F110, F110A, F130, F138, F170, F173, F173A, F173AW, F181, F183, F186-06-1 and F202	Excess Flow Valves	1 / 25 or less	NPT, POL	Brass	SEP	PSCD-206
F102, F105, F106, F107, F131, F132, F133, F134	Excess Flow Valves	1-1/4, 1-1/2, 2 / 32, 40, 50	NPT	Brass	CAT I	PSCD-207
F190 and F191	Excess Flow Valves	2 / 50	NPT	Steel-plated	CAT I	PSCD-207
F194, F195, F198, F199	Excess Flow Valves	3 / 80	NPT	Steel-plated	CAT II	PSCD-208
G100	Back Check Valves	3/4 / 20	NPT	Brass	SEP	PSCD-206
G101, G102, G105, G109, G112	Back Check Valves	1-1/4, 2 / 32, 50	NPT	Brass, Steel	CAT I	PSCD-207
G104, G106 and G107	Back Check Valves	3 / 80	NPT	Steel plated	CAT II	PSCD-208
G200 Series	Back Check, All Sizes	1-1/4, 2, 3 / 32, 50, 80	NPT	Ductile Iron	CAT II	PSCD-208

TYPE	DESCRIPTION	SIZE, IN. / DN	END CONNECTION	BODY MATERIAL	PED/PE(S)R CATEGORY	PSCD CODE
HSRL	Second-Stage Regulator	3/4, 1 / 20, 25	NPT	Cast Iron	SEP	PSCD-206
H284, H884, H5114, H8114	Relief Valve, 2 In. NPT	2 / 50	NPT	Brass, Stainless Steel	CAT IV	PSCD-222
H722, H822	Relief Valve, 2 In. NPT	2 / 50	NPT	Stainless Steel	CAT IV	PSCD-222
H733, H833	Relief Valve, 3 In. NPT	3 / 80	NPT	Stainless Steel	CAT IV	PSCD-222
N100A-08-1 and N100A-08-2	Bypass Valve	1 / 25 or less	NPT	Ductile Iron	SEP	PSCD-206
N110-06-1 and N110-06-2, N110-08-1 and N110-08-2	Bypass Valve	1 / 25 or less	NPT	Ductile Iron	SEP	PSCD-206
N120-06 and N120-08	Back Pressure Valves	1 / 25 or less	NPT	Ductile Iron	SEP	PSCD-206
N301-04, -06, -08	Globe Valve	1/2, 3/4, 1 / 15, 20, 25	NPT	Ductile Iron	SEP	PSCD-206
N310-10 through -16	Globe Valve	1-1/4, 1-1/2, 2, / 32, 40, 50	NPT	Ductile Iron	CAT II	PSCD-208
N350-04, N350-06, N450-04, N450-06	Economy Globe or Angle Valve	1/2, 3/4, 1 / 15, 20, 25	NPT	Ductile Iron	SEP	PSCD-206
N401-04, -06, -08	Angle Valve	1/2, 3/4, 1 / 15, 20, 25	NPT	Ductile Iron	SEP	PSCD-206
N410-10 through -16	Angle Valve	1-1/4, 1-1/2, 2 / 32, 40, 50	NPT	Ductile Iron	CAT II	PSCD-208
R110/21	Manifold, 1/4 Flare x 1/4 MNPT	1/4	NPT	Brass and Aluminum	SEP	PSCD-206
R120/21 and R130-21	Manifold, 1/4 x 1/4 FNPT	1/4	NPT	Brass and Aluminum	SEP	PSCD-206
R122H	Regulator, First-Stage High Pressure	1/4	NPT	Aluminum	SEP	PSCD-206
R222	Second-Stage Regulator	1/2 / 15	NPT	Aluminum	SEP	PSCD-206
R232A	Regulator, Two-Stage, 9.5-13 in. w.c.	1/4	NPT	Brass and Aluminum	SEP	PSCD-206
R352	Second-Stage Regulator	3/4, 1 / 20, 25	NPT	Aluminum	SEP	PSCD-206
R622	Second-Stage Regulator	1/2, 3/4 / 15, 20	NPT	Brass and Aluminum	SEP	PSCD-206
R622E	Reg, 2 psi Serv, 1/2 x 1/2 in. Body	1/2, 3/4 / 15, 20	NPT	Brass and Aluminum	SEP	PSCD-206
R622E	Reg, 2 psi Serv, 1/2 x 1/2 in. Body	1/2, 3/4 / 15, 20	NPT	Brass and Aluminum	SEP	PSCD-206
R622H	First-Stage Regulator	1/2, 3/4 / 15, 20	NPT or POL	Brass and Aluminum	SEP	PSCD-206
R632A	Integral Two-Stage	1/4	NPT or POL	Brass and Aluminum	SEP	PSCD-206
R642	Second-Stage Regulator	3/4 / 20	NPT	Aluminum	SEP	PSCD-206
R652	Second-Stage Regulator	3/4 / 20	NPT	Brass and Aluminum	SEP	PSCD-206
R961/21	A.C. REG., R110 and 912	1/4	NPT	Brass and Aluminum	SEP	PSCD-206
R962/31	A.C. REG., R110 and R622	1/4	NPT	Brass and Aluminum	SEP	PSCD-206
R966	Changeover Regulator	1/4	NPT	Brass and Aluminum	SEP	PSCD-206
S202	Regulator	1-1/2, 2 / 40, 50	NPT	Cast Iron	CAT I	PSCD-207

The Following Products Are Not PED Approved:

- 1805 Relief Valves
- 630 Regulators
- D Series Filler Valves
- H Series Relief Valves Except Those Noted Above
- J Series Gauges
- K Series Pigtailes
- M Series Adaptors
- N100A-10, N100A-12, N100-16 and N100-20 Bypass Valves
- N310-24, -24F, N410-24, -24F and N456
- N480 and N481
- N551 ESV
- N562, N563 ESV
- S302G Regulators

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