

Technical Standards and Safety Authority 345 Carlingview Drive Toronto, Ontario M9W 6N9 www.tssa.org

Show facsimile of manufacturer's logo or trademark, as it will appear on the fitting, in the space below

Swagelok

, David H. Peace, Vice President of Engineering (Name and Position, e.g. President, Plant	Manager, Chief Engineer)	
of Swagelok Company		
(Name of Manufacti	irer)	
ocated at 29500 Solon Road, Solon, Ohio 44139 USA	(440) 248-4600	(440) 349-5970
(Plant Address)	(Telephone No.)	(Fax No.)
do solemnly declare that the fittings listed hereunder, which are s	ubject to the Technical Standard	7
and Pressure Vessels Regulation, comply with all of the required ASME B31.1 for unlisted components where applicable and AS		ate where applicable
(Title of recognized North America		its where applicable
which specifies the dimensions, materials of construction, pressure/tem		ng the fittings and service;
or are not covered by the provisions of a recognized North Americas supported by the attache pressure/temperature ratings and the basis for such ratings, the material further declare that the manufacture of these fittings is controlled by a quitout which has been verified by the following authority, BSI	d data which identifies the dimension orking of the fitting for identification	ons, material of construction and service.
The items covered by this declaration, for which I seek registration, are category	H. Other	type fittings. In support of
is application, the following information and/or test data are attached as follows	3-11-12-13-13-1	_ type inings. in support of
SO 9001:2015 Certificate, Attachment A, Attachment B, Product Cata	log and other supporting docum	ents
(drawings, calculations, test	reports, stc.)	
ne 13th day of November AD 20 17.	e_State	of Onto
ommissioner for Oaths:		
(Signature)  Jamie L. Ristau  Resident Portage County  Notary Public, State of Ohio  Ny Commission Expires: 03/06/201	s(Signature of t	Declarer)
FOR OFFICE USE	ONLY	
o the best of my knowledge and belief, the application meets the requireme echnical Standards and Safety Act, Boilers and Pressure Vessels Regula	nts of the	Cofficial of the Fire Commissioner
SA Standard B51 and is accepted for registration in Category		aha in
RN:	Mani	STERED 18
egistered by:	CRN 4	1102054 OHIOI
ated:	Signed:	DV8.2018
	Onto: / Ph/	A STATE OF THE PARTY OF THE PAR
OTE: This registration expires on:AN 3   2018		

Swagelok

Canadian Registration Number Submittal #FDH-2017 Category H: Swagelok Fluid Distribution Header

November 10, 2017 Page 1 of 3

# Attachment B. Scope of Registration for Swagelok Fluid Distribution Headers (FDH) (Category H)

## Product Scope

This document represents the scope of Swagelok® Fluid Distribution Headers covered by this submission for CRN approval. These products have been evaluated in accordance with ASME B31.1 for unlisted components and ASME B31.3 for unlisted components.

## **Summary Table**

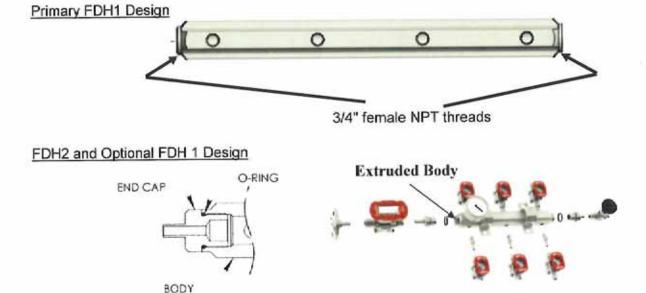
Product Series	Main Pressure Bearing Component	Main Pressure Bearing Material (Standard)	End Cap/Body Connections and Sizes	Maximum Allowable Working Pressure (psig)		Design Code of
				@100°F	@Max. Temp	Construction
FDH1 (1" pipe platform)	Body (Extrusion) ¾" female NPT ends Or End Caps on straight threads	316 SS bar (ASTM A479)	Inlet Connections: Swagelok tube fitting 1/2", 3/4", 1", 12mm, 25mm Female NPT 3/8", 1/2," 3/4" Swagelok Tube Adapter 3/8", 1/2", 3/4", 1"  Outlet Connections: Swagelok Tube Fitting 1/4", 1/2", 6mm, 10mm, 12 mm, 25 mm Female NPT 1/4", 3/8" 1/2" Swagelok Tube Adapter 1/4", 3/8", 1/2", 3/4"	3000 psig	2145 psi @ 400°F	ASME B31.1 (Unlisted Components) And ASME B31.3 (Unlisted Components)
FDH2 (2" pipe platform)	Body (Extrusion) and End Caps	316 SS bar (ASTM A479)	Inlet Connections Swagelok Tube Fitting 3/4", 1", 2", 25mm, 50mm, Female NPT 1/2," 3/4", 1" Swagelok Tube Adapter 3/4, 1", 2"  Outlet Connections Swagelok Tube Fitting 3/8", 1/2", 3/4", 1", 10mm, 12 mm, 25 mm Female NPT 3/8" 1/2", 3/4", 1" Swagelok Tube Adapter 3/8", 1/2",3/4"	1000 psig	715psi @ 400°F	





Canadian Registration Number Submittal #FDH-2017 Category H: Swagelok Fluid Distribution Header

#### Product Illustrations



#### Configurations

The Swagelok Fluid Distribution Header (FDH) is a pre-engineered and fully documented piping assembly that can act as a distribution manifold or collection manifold in gas or liquid applications. The main pressure-bearing component is an extruded manifold body that may or may not include an end-cap at the inlet and outlet ends, as explained below. When end caps are used, they are connected to the body with straight threads and O-ring seals.

FDH assemblies are available in two sizes – the FDH1 is a one-inch pipe platform and the FDH2 is a two-inch pipe platform. The FDH can be ordered with two to 18 branch outlets, where valves and other system components are connected to the branch outlets with tapered pipe threads. Swagelok offers a variety of system components to connect to the manifold body and/or end cap assemblies.

The pressure rating of the total piping assembly is the lowest pressure rating of any valve or other system component connected to the body. The scope of this registration is only for the extruded body with 3/4" NPT ends or the extruded body and end cap assemblies.

#### **Product Options**:

Fluid distribution headers are common components for a variety of gas and liquid applications. A wide variety of product options such as clamps or various system components can be attached to manifold body and end-cap assemblies to create subsystems for conveying systems or gases. These options do not affect the pressure or temperature ratings of the body or body and end cap assemblies within the scope of this CRN registration..

# Attachment A. Swagelok Manufacturing Locations

This document lists the Swagelok locations where end item or component level manufacturing activities take place.

Swagelok Company	Swagelok Company (Falon 1)
29500 Solon Road	348 Bishop Road
Solon, Ohio 44139	Highland Heights, Ohio 44143
USA	USA
Swagelok Company (Highland)	Swagelok Company (Falon 2)
318 Bishop Road	358 Bishop Road
Highland Heights, Ohio 44143	Highland Heights, Ohio 44143
USA	USA
Swagelok Company (OFC)	Swagelok Company (HPF)
29495 F.A. Lennon Drive	6050 Cochran Road
Solon, Ohio 44139	Solon, Ohio 44139
USA	USA
Swagelok Company (Atlantic)	Swagelok Company (Snow Metal)
26651 Curtiss Wright Parkway	6060 Cochran Road
Willoughby Hills, Ohio 44092	Solon, Ohio 44139
USA	USA
Swagelok Company (Micro) 26653 Curtiss Wright Parkway Willoughby Hills, Ohio 44092 USA	Swagelok Company (Alfred) 29500 Ambina Drive Solon, Ohio 44139
Swagelok Hose Services Company (SHSC)	Swagelok Company (Strongsville)
29900 Solon Industrial Parkway	15400 Foltz Road
Solon, Ohio 44139	Strongsville, Ohio 44119
Swagelok (China) Fluid System Technologies Ltd.	Swagelok Company A.G. (European Technology
Changshu Export Process Zone	Center)
Changshu Economic Development Zone	St. GallerstraBe 84
Changshu, Jiangshu	Lachen, Switzerland 8853
215513 China	Switzerland
Swagelok Limited Tromode IM4 4RA Isle of Man	

