REGISTERED



CRN: CSA- OC 21138. 56

Technical

Safety Authority gistration Process admiration proc

2202 2nd Ave.

Statutory Declaration (Registration of Fittings)

			_	TSK-100	
I. Dec	laration Information				
, Joel	l Feldman			In this space, show facsimile of	
Vice	President, Engineering		manufacturer's logo or trademark as it will appear on the fitting.		
	(company title, e.g. vice president)	2		
	must be in a position of authority in the manu	ifacturing plant where the fitting	is produced)	SWOOSIOK	
of: Swa	agelok Company (name of	i manufacturer)			
located	41 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		Solon, Ohio	44139 USA	
ocateu	(Plant Address - Apt/Street)		(City,Prov)	(Postal Code)	
do solen Vessel :	nnly declare that the fittings listed Safety Act (check one)	hereinunder, which are	subject to the Saska	atchewan Boller and Pressure	
(c	omply with the requirements of	ASME B31.1 and ASME	B31.3 whic	h specifies the dimensions,	
	1.5	(title of recognized North Amer	ican Standard)	20	
- IVI	laterials of construction, pressure	/ temperature ratings a	nd identification man	ang of the mangs, or	
O A	re not covered by the provisions	of a recognized North A	merican standard and	d are therefore manufactured	
	comply with	101		as supported by the attached	
da	ata which identifies the dimension	is, materials of construc	tion, pressure / temp	erature ratings and the basis	
fo	or such ratings, and the marking o	If the fittings for identific	ation.		
further	declare that the manufacturer of	these fittings is controlle	ed by a quality control	program which has been	
	by the following authority, BSI	•	. , .	g suitable for the manufacturer	
	fittings to the stated standard. Ti	he fittings covered by th			
	C. Valves	ie iitaigs covered by th	a occidiation, for wit	ich i seek registration, are	
		1-8		45 m 4 25	
	ort of this application, the following				
ISO 90	001:2015 Certificate, Attachr	nent A, Attachment	B, Catalog Inform	nation and other Support	
Docum	ients				
			-		
	laration	STEED STATE	ose tak nie sty		
DECLAR	RED before me at	In the	state	of Ohio	
his 🧲	29th day of Novem	Jamie L. Ristau	2018	20.50	
	Pal	Resident Portage Cour	ity	1-2-	
(print @	Jame - 4121	Motary Public, State of ()hlo (Signatura)	EC. Toll	
(branch		My Commission Expires: 03/	D8/2019 Hattire)		
(Siebalu	re of Commissioner of Oaths)	an	→ 5		
(organita	ile of Commissions of Cagus)				
	ce Use Only				
To the be	st of my knowledge and belief, the ar	oplication meets the requir	ements of the Boller ar	nd Pressure Vessel Safety Act and	
CSA B51,	Clause 4.2, and is accepted for regi	stration in Category	10 4 4 2	T / 20 3005	
للحي	A-0C21138-56	HOY.	01-2019	Feb. 22.2029	
(Kegistr	ration Number)		red — MM DD YYYY) platelio (Chieffinspector)	(Expiry Date – MM DD YYYY)	
		(FOI WILLY OFFI	Group	A. BANWATT	
		14.	anouh		

Swagelok

Canadian Registration Number Submittal #60BALL-2018 Category C: Swagelok 60 Series Ball Valves

Date: January 22, 2019 Page 1 of 5

Attachment B: Scope for Swagelok 60 Series Ball Valves (Category C)

This document represents the scope of the 60 Series Ball Valves covered by this submission for CRN approval. The Swagelok 60 Series Ball Valves were designed and evaluated in accordance with ASME B31.1-2016 for unlisted components and ASME B31.3-2016 for unlisted components.

Summary Tables

Product	Main Pressure Bearing Componen	Pressure Bearing	Port Connections, Sizes*	Maximum Rated Pressure (Note 1)		Design Gode
Series				At 100°F	I Company	of Construction
		316SS (ASTM A479 or ASTM A351)	Swagelok Tube Fitting 1/4", 3/8" Famale NPT 1/8", 1/4" Female ISO 1/4" Tube Butt Weld 1/4", 3/8" Pipe Butt Weld 1/4", 3/8" Tube Socket Weld 1/4", 3/8" Male VCO Fitting 1/4" Male VCR Fitting 1/4"	3000 psig (4 bolt body) 2500 psig (8 bolt body)	800 psig @450°F (4 bolt body) 200 psig@600°F (8 bolt body)	
62	Body	WCB Carbon Steel (ASTM A218)	Swagelok Tube Fitting 1/4", 3/8" Female NPT 1/8", 1/4" Tube Butt Weld 1/4", 3/8" Pipe Butt Weld 1/4", 3/8" Tube Socket Weld 1/4", 3/8"	3000 psig (4 bolt body) 2500 psig (8 bolt body)	800 psig @450°F (4 bolt body) 200 psig @600°F (8 bolt body)	
		Brass C36000 or C35600 (ASTM B16)	Swagelok Tube Fitting 1/4", 3/8" Female NPT 1/8", 1/4"	2000 psig	100 psig @400*F	
		Alloy C276 bar (ASTM B574) or CW-12MW Cast (ASTM A494)	Swagelok Tube Fitting 1/4", 3/8" Female NPT 1/4"	1500 psig	1470 psig @150°F	
		Alloy 400 N04400 (ASTM B164)	Swagelok Tube Fitting 1/4", 3/8" Female NPT 1/4"	1500 psig	1470 psig @150°F	
		Titanium Grade 4 UNS R50700 (ASTM B348)	Swagelok Tube Fitting 1/4", 3/8" Female NPT 1/4"	1500 psig	1380 psig @150°F	ASME B31.1 (Unlisted
Feehnical H	tandards & Sá	(ASTM A479 or A8TM A551) iety Authority Vesseis	Swagelok Tube Fitting 1/2", 3/4" Female NPT 3/8", 1/2" Female ISO 1/2" Tube Butt Weld 1/2" Pipe Butt Weld 1/2" Tube Socket Weld 1/2", 3/4" Pipe Socket Weld 1/2" Male VCO Fitting 1/2" Male VCR Fitting 1/2"	2500 psig (4 bolt and 8 bolt bodies) 3000 psig (welded bodies)	800 psig @450°F (4 bolt body) 1000 psig @850°F (8 bolt body) 100 psig @450°F (welded)	Components) and ASME B31.3 (Unlisted Components)
	fety Prog Body		Swagelok Tube Fitting 1/2", 3/4" Female NPT 3/8", 1/2" Female ISO 1/2" Tube Butt Weld 1/2" Pipe Butt Weld 1/2" Tube Socket Weld 1/2", 3/4" Pipe Socket Weld 1/2"	2500 psig	800 psig @450*F (4 bolt body) 200 psig @800*F (8 bolt body)	:
	ĺ		Swagelok Tube Fitting 1/4", 3/8" Female NPT 1/8", 1/4"	1500 psig	100 psig @400°F	
		Alloy C276 bar (ASTM 8574) or CW-12MW Cast (ASTM A494)	Swagelok Tube Fitting 1/2" Female NPT 1/2	1500 psig	1470 psig @150°F	
	40	Alloy 400 N04400 (ASTM B164)	Swagelok Tube	1500 psig	1470 psig @150*F	
		Titanium Grade 4 UNS R50700 (ASTM B348)	Swagelok Tube Fitting 1/2" Female NPT 1/2"	1500 sig	1380 psig @150°F	

C.R.N.C.S.A.-OC.2/13 &. 17
Signed: OC. Canada M9W 1R3

Swagelok
Canadian Registration Number Submittal #60BALL-2018
Category C: Swagelok 60 Series Ball Valves

Date: January 22, 2019 Page 2 of 5

Product Series	Main Pressure Bearing Component	Main Pressure		Maximum Bated Pressure (Note 1)		Design Gode o
		Bearing	Port Connections, Sizes*	At 100°F	At Max temp	Construction
65	Body	316SS (ASTM A479 or ASTM A351)	Swagelok Tube Fitting 1" Female NPT 3/4", 1" Female ISO 3/4", 1" Pipe Butt Weld 3/4", 1" Tube Butt Weld 3/4", 1" Tube Socket Weld 1" Pipe Socket Weld 3/4", 1"	2500 psig (4 bolt and 8 bolt bodies) 3000 psig (Welded bodies)	800 psig @450°F (4 bolt body) 1000 psig @850°F (8 bolt body) 100 psig @450°F (welded)	
		WCB Carbon Slee! (ASTM A216)	Swagelok Tube Fitting 1" Female NPT 3/4", 1" Female ISO 3/4", 1" Pipe Butt Weld 3/4", 1" Tube Butt Weld 3/4", 1" Tube Socket Weld 1" Pipe Socket Weld 3/4", 1"	2500 psig	800 psig @450°F (4 bolt body) 200 psig @800°F (8 bolt body)	STORES STEEL STORES
		Brass C36000 or C35600 (ASTM B16)	Swagelok Tube Fitting 1" Female NPT 3/4", 1"	1500 psig	100 psig @400°F	0C 2113
		Alloy C276 bar (ASTM B574) or CW-12MW Cast (ASTM A494)	Female NPT 1"	1500 psig	1470 psig @150°F	thes also sales
		Alloy 400 N04400 (ASTM B104)	Swagelok Tube Fitting 1" Female NPT 1"	1500 psig	1470 psig @150*F	
		Titanium Grade 4 UNS R50700 (ASTM B348)	Fernale NPT 1"	1500 psig	1380 psig @150°F	
67	Body	31655 (ASTM A479 or ASTM A351)	Swagelok Tube Fitting 1-1/2" Female NPT 1-1/4", 1-1/2" Female ISO 1-1/4" Pine Butt Weld 1-1/2" Tube Butt Weld 1-1/2" Tube Socket Weld 1-1/4",1-1/2"	1500 psig (4 bolt body) 2000 psig (8 bolt body)	500 psig @450°F (4 bolt body) 500 psig @850°F (8 bolt body)	ASME B31.1 (Unlisted Components) and
		WCB Carbon Steel (ASTM A216)	Pipe Socket Weld 1-1/4", 1-1/2" Swagelok Tube Fitting 1-1/2" Female NPT 1-1/4", 1-1/2" Female ISO 1-1/4" Pipe Butt Weld 1-1/2" Tube Butt Weld 1-1/2" Tube Socket Weld 1-1/4", 1-1/2" Pipe Socket Weld 1-1/4", 1-1/2"	2200 psig	800 psig @ 450°F (4 bolt body) 200 psig @ 800°F (8 bolt body)	ASME B31.3 (Unlisted Components)
68	Body	316SS (ASTM A479 or ASTM A351)	Swagelok Tube Fitting 2" Female NPT 2" Female ISO 2" Pipe Butt Weld 2" Tube Butt Weld 2 Tube Socket Weld 2" Pipe Socket Weld 2"	1500 psig (4 bolt body) 2000 psig (8 bolt body)	500 psig @450°F (4 bolt body) 500 psig @850°F (8 bolt body)	
		WCB Carbon Steel (ASTM A216)	Swagelok Tube Fitting 2* Female NPT 2* Female ISO 2* Pipe Butt Weld 2* Tube Butt Weld 2 Tube Socket Weld 2*	2200 psig (4 bolt body) 2000 psig (8 bolt body)	800 @450°F (4 bolt body) 200 psig @800°F (8 bolt body)	
62, 63, 65 3-way)	Body		Pipe Socket Weld 2" Swagelok Tube Fitting 1/4", 3/8" 1/2" Female NPT 1/8", 1/4",1/2", 1" Female ISO 1/4", 1/2, 3/4", 1"	1000 psig	800 psig @450°F	5
57, 68 3-way)	Body	316SS (ASTM A479 or ASTM A351)	Swagelok Tube Fitting 1-1/2" 2" AT Female NPT 1-1/4", 1-1/2", 2" Female ISO 1-1/4", 1-1/2", 2" Tube Socket Weld 1-1/4", 1-1/2", 2" Pipe Socket Weld 1-1/4", 1-1/2", 2"	TACHMENT T	0 30 4636.	16

Swagelok

Canadian Registration Number Submittal #60BALL-2018 Category C: Swagelok 60 Series Ball Valves

* Fractional port connection sizes shown. Equivalent metric size ranges are also in scope, and have the same pressure/temperature ratings

Note 1: Pressure ratings shown are the maximum possible for the combination of valve series and body material. Seat and flange seals will affect ratings; please refer to product literature.

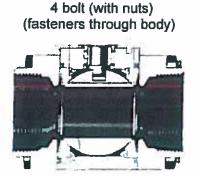
Product Illustration



Configurations

The pressure retaining components of the 60 Series ball valve bodies can be categorized into three main types of assemblies based on the method used to attach the flanges to the body:

8 bolt







Date: January 22, 2019

Page 3 of 5

The 4 bolt type assemblies are available in all body materials.

The 8 bolt type assemblies are available in Stainless Steel and Carbon Steel only.

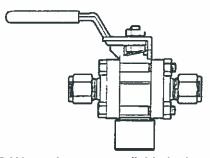
The welded assemblies are available in Stainless Steel only.



Swagelok

Canadian Registration Number Submittal #60BALL-2018 Category C: Swagelok 60 Series Ball Valves Date: January 22, 2019 Page 4 of 5

60 Series 3-Way Valves



3-Way valves are available in the 4-bolt type assembly and Stainless Steel material only.

Product Options:

The product options listed below affect pressure and/or temperature ratings shown in the above Summary Table, but in all cases the ratings are less than those shown in the table.

Flange Seal Material Options

Fluorocarbon, FKM Buna N Buna C Ethylene Propylene Neoprene Grafoil PTFE

Stem Seai Material Options

PTFE, virgin
Fluorocarbon, FKM
Buna C
Ethylene Propylene
Grafoil
PEEK (virgin, coated, or reinforced)

Seat Material Options

PTFE, virgin
PTFE, reinforced
PTFE, carbon glass filled
PEEK (virgin, coated, or reinforced)
UHMWPE
Inconel X-750





Additional options that do not increase the pressure and/or temperature ratings may be made available within the scope of this approval. Examples of these would include the following:

Handle options
Actuators (e.g. pneumatic, electric)
Panel mounting
Low dead space inserts

All of the above options, those that affect pressure and/or temperature ratings and those that do not, are within the scope of this approval.



Canadian Registration Number Submittal #60BALL-2018 Category C: Swagelok 60 Series Ball Valves

Date: January 22, 2019 Page 5 of 5

Quality System

The Swagelok Company quality system complies with the requirements of ISO 9001:2015. The Swagelok Company maintains BSI Certificate of Registration Number FM 01729, which applies to all locations listed on the Certificate.

References

The product catalog-does not represent the full scope of registration, but rather details some of the most common options.

60 Series Ball Valve Catalog MS-01-146, Rev U



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 Ballafletcher Road Fromode M4 4RA sle of Man	10F6		
ATTACHMENT TO C.R.N.C.SA-OC.	OC21138.5		

178 Rexdate Boulevard, Toronto, ON Canada M9W 1R3