## **Tube Supports**



- Pipe, tube, and hose supports
- 1/4 to 1 in. and 6 to 25 mm outside diameter
- 316 stainless steel, carbon steel, and polypropylene
- Wall- and channel-mounted options
- Single and multiple lines



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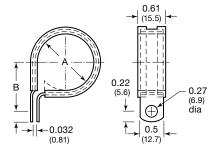


#### **P Clamp Supports**

- are an economical way to support tube or hose runs in a variety of sizes
- install easily to a wall or equipment frame using a single screw or bolt.

#### **Technical Data**

Component	Material	Temperature Rating
Clamp	316 SS/AMS 5524	-40 to 212°F
Cushion	Black EPDM/ SAE J200BC715 C12, C20	(-40 to 100°C)



#### **Ordering Information and Dimensions**

Dimensions, in inches (millimeters), are for reference only and are subject to change.

A, Tub	e Size	Ordering	В
in.	mm	Number	in. (mm)
1/4	6	SS-TBP4	0.53 (13.5)
3/8	10	SS-TBP6	0.59 (15.0)
1/2	12	SS-TBP8	0.65 (16.5)
3/4	20	SS-TBP12	0.84 (21.3)
1	25	SS-TBP16	0.95 (24.1)

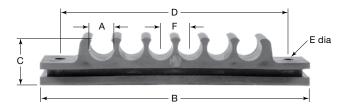
Contact your authorized Swagelok sales and service representative for additional sizes.

#### **Tube Support Strips**

- organize multiple tubing or hose runs
- offer push-in installation
- install easily to a wall or equipment frame using two screws or bolts.

#### **Technical Data**

Component	Material	Temperature Rating
Tube support strip	Polypropylone	–40 to 200°F
Tube support strip	Folypropylerie	(-40 to 93°C)



#### **Ordering Information and Dimensions**

Dimensions are for reference only and are subject to change.

A Tube Size		Ordering	Maximum Number of Tubing and Hose	Dimensions in. (mm)						
in.	mm	Number	Channels	В	С	D	E	F		
1/4	_	MS-TSS-4	10	4.50 (114)	0.50 (12.7)	4.05 (103)	0.18 (4.6)	0.31 (8.0)		
3/8	10	MS-TSS-6	10	5.62 (143)	0.61 (15.6)	5.15 (131)	0.18 (4.6)	0.43 (11.0)		
1/2	_	MS-TSS-8	6	5.25 (133)	0.93 (23.6)	4.56 (116)	0.24 (6.1)	0.57 (14.5)		

Contact your authorized Swagelok representative for additional sizes.

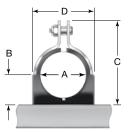
#### **Cushioned Clamp Tube Supports**



- provide channel-mounted tube support
- dampen shock and vibration
- resist galvanic corrosion.

#### **Technical Data**

Component	Material	Temperature Rating
Clamp	Electro-dichromate- finished carbon steel or 316 stainless steel	–50 to 275°F
Cushion	Thermoplastic polypropylene-based elastomer	(–45 to 135°C)





#### **Ordering Information and Dimensions**

Dimensions are for reference only and are subject to change.

A, Tube Size		Basic Ordering	<b>Dimensions,</b> in. (mm)					
in.	mm	Number	В	С	D			
1/4	_	TBC4	0.27 (6.9)	0.98 (24.9)	0.62 (15.7)			
3/8	10	TBC6	0.33 (8.4)	1.13 (28.7)	0.82 (20.8)			
1/2	_	TBC8	0.40 (10.2)	1.34 (34.0)	0.94 (23.9)			
3/4	20	TBC12	0.52 (13.2)	1.68 (42.7)	1.20 (30.5)			
1	25	TBC16	0.65 (16.5)	1.95 (49.5)	1.44 (36.6)			

Contact your authorized Swagelok representative for additional sizes. Clamp fits any 1 5/8 in. mounting channel.

To order, select a basic ordering number and add a clamp material designator.

Example: S-TBC4

Clamp Material	Designator
Electro-dichromate- finished carbon steel	S-
316 stainless steel	SS-



#### **Bolted Plastic Clamp Supports**

- absorb shock and vibration
- resist many chemicals and corrosives
- reduce stress on system components
- enhance system reliability
- resist ultraviolet light
- make system easily accessible for installation and maintenance.

Bolted plastic clamp supports offer versatility for mounting tubing and pipe. Three configurations—single, stacking, and twin—are available.

Bolted plastic clamp supports offer three mounting options:

- Weld plate
- Mounting rail and rail nuts
- Strut nuts

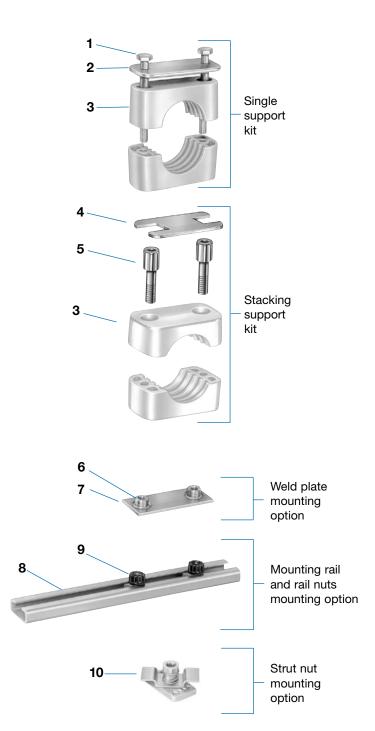
#### **Temperature Rating**

-22 to 194°F (-30 to 90°C)

#### **Materials of Construction**

	Component	Material/Specification
1	Hex head support bolts	304 SS <sup>①</sup>
2	Cover plate	304 SS/DIN 1.4301 SS <sup>①</sup>
3	Support body	Virgin polypropylene <sup>②</sup>
4	Lock plate	304 SS/DIN 1.4301 SS <sup>①</sup>
5	7/16 in. or 10 mm hex head stacking bolts	304 SS <sup>①</sup>
6	Weld nut	303 SS/DIN 1.4305 SS
7	Weld plate	304 SS/DIN 1.4301 SS <sup>①</sup>
8	Mounting rail	303 SS/DIN 1.4305 SS
9	Rail nut	CF8M/DIN 1.4408 SS
10	Strut nut	Zinc-plated steel <sup>3</sup>

 $<sup>\ \, \</sup>textcircled{\scriptsize 1}$  316 stainless steel bolts and plates are available (see Options).





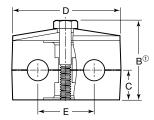
② Polyamide support bodies are available (see Options).

<sup>3 316</sup> stainless steel strut nuts are available (see Options).

#### **Single-Support Kits**

# F A A B<sup>0</sup>

#### **Twin-Support Kits**



#### **Ordering Information and Dimensions**

Dimensions are for reference only and are subject to change. For hose applications, consult your authorized Swagelok representative.

	Pipe Kits		Tube Kits				Dimensions, in. (mm)				
Pipe Size A in.	Ordering Number	Tube Size A in.	Ordering Number	Tube Size A mm	Ordering Number	Group	<b>B</b> <sup>①</sup>	С	D	E	F
					Single Support <sup>②</sup>						
		1/4	304-S1-PP-4T	6	304-S1-PP-6TM						
			304-31-FF-41	8	304-S1-PP-8TM	1	1.30	0.51	1.34	0.79	1.06
-	_	3/8	304-S1-PP-6T	10	304-S1-PP-10TM	'	(33.0)	(13.0)	(34.0)	(20.0)	(27.0)
			304-51-PP-01	12	304-S1-PP-12TM						
		1/2	304-S3-PP-8T	15	304-S3-PP-15TM					1.30 (33.0)	
			304-53-PP-61	16	304-S3-PP-16TM		1.61 (40.9)	0.67 (17.0)	1.89 (48.0)		
1/2	304-S3-PP-8P	5/8	304-S3-PP-10T	18	304-S3-PP-18TM	3					1.38 (35.1)
1/2		3/4	304-S3-PP-12T	20	304-S3-PP-20TM	3					
		7/8	304-S3-PP-14T	22	304-S3-PP-22TM						
		1	304-S3-PP-16T	25	304-S3-PP-25TM						
3/4	304-S5-PP-12P	1 1/4	304-S5-PP-20T			5	2.56 (65.0)	1.14 (29.0)	2.76 (70.1)	2.05 (52.1)	
1	304-S5-PP-16P	ļ	00.0020.								2.28 (57.9)
1 1/4	304-S5-PP-20P	1 1/2	304-S5-PP-24T	-	_						(37.9)
1 1/2	304-S6-PP-24P	2	304-S6-PP-32T			6	2.84 (72.1)	1.28 (32.5)	3.39 (86.1)	2.60 (66.0)	2.60 (66.0)
					Twin Support <sup>3</sup>						
		1/4	304-S1T-PP-4T	6	304-S1T-PP-6TM						
		1/4	304-311-FF-41	8	304-S1T-PP-8TM	1	1.50	0.53	1.42	0.79	
		3/8	304-S1T-PP-6T	10	304-S1T-PP-10TM	'	(38.1)	(13.5)	(36.1)	(20.1)	
-	_	3/6	304-311-FF-01	12	304-S1T-PP-12TM						-
		1/2	304-S3T-PP-8T								
		3/4	304-S3T-PP-12T	] -	_	3	1.93 (49.0)	0.73 (18.5)	2.64 (67.1)	1.42 (36.1)	
		1	304-S3T-PP-16T				(.5.5)	(.5.5)	(0)	(55)	

- ① For overall height, add appropriate mounting option dimension.
- ② Threads for single fractional supports are 1/4-20, single metric supports are M6.
- ③ Threads for group 1 twin supports are 1/4-20, group 3 twin supports are 5/16-18.

#### Single-Support Stacking Kit

You can stack up to three single bolted plastic clamp supports. The top support uses a cover plate. The lower support(s) uses a lock plate. To order a stacking support kit, add **-ST** to the single tube kit ordering number.

Example: 304-S1-PP-4T-ST

#### **Mounting Configurations**

To order a bolted plastic clamp system, choose from the three mounting options listed.

#### **Weld Plate Mounting Option**

- Weld plates are available in standard and elongated lengths.
- Weld nuts are welded, not press fit, to the weld plate.

To order, select a support kit ordering number from the table on page 5.

Example: 304-S1-PP-4T

Identify the support kit group number listed in the table.

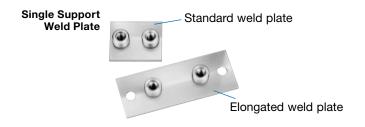
Example: Group 1

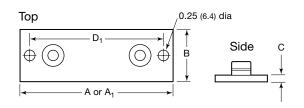
Select the corresponding weld plate ordering number.

Note: The Group number for the support kit and the weld

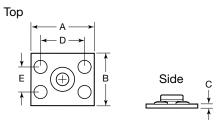
kit must be the same.

Example: 304-S1-WP









#### Weld Plate Ordering Information and Dimensions

Dimensions are for reference only and are subject to change.

	Ordering Number										
	Star	ndard	Elongated		Dimensions, in. (mm)						
Group	Fractional	Metric	Fractional	Metric	Α	<b>A</b> <sub>1</sub> <sup>①</sup>	В	С	D	<b>D</b> <sub>1</sub> <sup>①</sup>	E
	Single Support Weld Plate										
1	304-S1-WP	304-S1-WPM	304-S1-WPE	304-S1-WPEM	1.42 (36.1)	2.52 (64.0)				1.97 (50.0)	
3	304-S3-WP	304-S3-WPM	304-S3-WPE	304-S3-WPEM	1.97 (50.0)	3.07 (78.0)	1.18	0.12		2.52 (64.0)	_
5	304-S5-WP		304-S5-WPE		2.83 (71.9)	3.94 (100)	(30.0)	(3.0)	_	3.87 (98.3)	
6	304-S6-WP	_	304-S6-WPE		3.46 (87.9)	4.57 (116)				3.94 (100)	
	Twin Support Weld Plate										
1	304-S1T-WP	304-S1T-WPM			1.46 (37.1)		1.18	0.12 (3.0)	0.84 (21.3)		0.56 (14.2)
3	304-S3T-WP	304-S3T-WPM	_	_	2.76 (70.1)	_	(30.0)	0.20 (5.1)	2.04 (51.8)	_	0.45 (11.4)

① Elongated weld plate only.



#### **Mounting Rail and Rail Nuts Mounting Option**

- Rail nuts can be added or removed anywhere along the rail span.
- Neoprene cap holds nuts and support body in place.
- Two rail nuts are required for single support kits; one rail nut is required for twin support kits.

To order, select a support kit ordering number.

Example: 304-S1-PP-4T

Then, select a mounting rail ordering number.

Example: 303-S0-R-3.3

Then, select the corresponding (fractional or metric) rail nut

ordering number.

Example: 2 pc SS-S0-RN

#### Mounting Rail Ordering Information

Length, ft (m)	Ordering Number
3.3 (1)	303-S0-R-3.3
6.6 (2)	303-S0-R-6.6

## 

#### Rail Nuts Ordering Information

	Ordering Number					
Group	Fractional	Metric				
Single	uired)					
All	SS-S0-RN	SS-S0-RNM				
Twin (one nut required)						
1	SS-S0-RN	SS-S0-RNM				
3	SS-S3T-RN	_				

#### **Strut Nuts Mounting Option**

- Strut nuts are for use on 1 5/8 in. (41.3 mm) strut rail mounting systems.
- Strut nuts can be added or removed anywhere along the strut rail span.
- Two strut nuts are required for single support kits; one strut nut is required for twin.

To order, select a support kit ordering number.

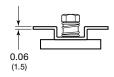
Example: **304-S1-PP-4T** 

Then, select the corresponding (fractional or metric) strut nut

ordering number(s).

Example: 2 pc S-S0-SN





#### Strut Nuts Ordering Information

	Ordering Number	
Group	Fractional	Metric
Single (two nuts required)		
All	SS-S0-SN	SS-S0-SNM
Twin (one nut required)		
1	SS-S0-SN	SS-S0-SNM
3	SS-S3T-SN	_

#### **Options**

#### **Blind Support Body (Undrilled)**

To order, replace the tube size designator in the support kit ordering number with **BL**.

Example: 304-S1-PP-BL

#### 316 Stainless Steel Bolts and Plates

To order, replace 304 with 316 in the support kit ordering

number.

Examples: **316**-S1-PP-4T **316**-S1-WP

#### **Polyamide Support Body**

A polyamide support body is available for use in temperatures from –40 to 284°F (–40 to 140°C). To order, replace **PP** with **PA** in the support kit ordering number.

Example: 304-S1-PA-4T

#### 316 Stainless Steel Strut Nuts

To order, replace **S** with **SS** in the strut nuts ordering number.

Example: SS-S0-SN

#### Safe Product Selection

When selecting a product, the total system design must be considered to ensure safe, trouble-free performance. Function, material compatibility, adequate ratings, proper installation, operation, and maintenance are the responsibilities of the system designer and user.

Caution: Do not mix or interchange parts with those of other manufacturers.

#### **Warranty Information**

Swagelok products are backed by The Swagelok Limited Lifetime Warranty. For a copy, visit swagelok.com or contact your authorized Swagelok representative.