



Sample Cylinders and Condensate Pots

SC, MSC and CP Series

Contents

Sample Cylinders (SC1 Series)

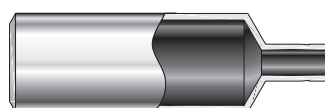
- ❖ Working pressure up to 5000 psig (344 bar)
- ❖ Internal volume from 40 to 3785 cm (1 gal)
- ❖ Single-ended and double-ended



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Miniature Sample Cylinders (MSC Series)

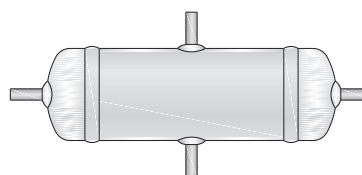
- ❖ Working pressure up to 1000 psig (68.9 bar)
- ❖ Internal volume include 10, 25, and 50 cm³
- ❖ Single-ended and double-ended



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Condensate Pots (CP1 Series)

- ❖ Working pressure up to 6000 psig (413 bar)
- ❖ Working temperature from -65°F to 850°F (-53°C to 454°C)
- ❖ Six configurations for selected



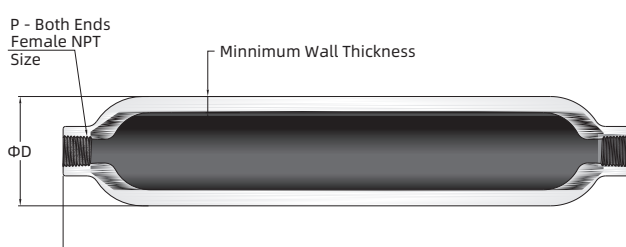
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Sample Cylinders

SC1 Series

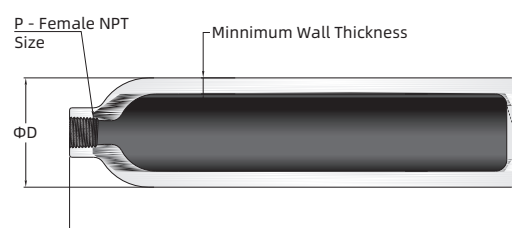
Features

- ❖ Working pressure up to 5000 psig (344 bar)
- ❖ Internal volume from 40 to 3785 cm³ (1 gal)
- ❖ Single-ended and double-ended
- ❖ Seamless tubing body provides consistent wall thickness, size and capacity
- ❖ Heavy wall end connections provide strength and resist flaring
- ❖ 316L and 304L and alloy 400 stainless steel materials available



- ❖ Volume from 40 to 3785 cm³ (1 gal)
- ❖ 304L and 316L stainless steel double-ended cylinders are available

Double-ended Cylinders



- ❖ 150, 300 and 500 cm³ volume meet a variety of sampling needs

Single-ended Cylinders

Pressure-Temperature Ratings

Material	316 S.S.	316L S.S., 304L S.S.	Alloy 400	304L S.S.
Temperature, °F(°C)	Working pressure, psig (bar)			
-65(-53) to 100 (37)	5000(344)	1800(124)	1800(124)	500(34.4)
200 (93)	3960(272)	1360(93.7)	1580(108)	
300 (148)	3570(245)	1230(84.7)	1490 (102)	
400 (204)	3290(226)	1130 (77.8)	1430(98.5)	
500 (260)	3060 (210)	1050(72.3)	1420(97.8)	
600 (315)	2920 (201)	1000 (68.9)		
650 (343)	2870(197)	980 (67.5)		
700 (371)	2810(193)	970(66.8)		
750 (398)	2750(189)	950(65.4)	1410 (97.1)	
800 (426)	2700(186)	930(64.0)	—	
850 (454)	2640(181)	—	—	

Dimensions

Materials Grade/Cylinder Specification	Working pressure, psig (bar)	Internal Volume cm³± 5%	P - Female NPT	Dimension,in.(mm)				
				ΦD	L	Minimum wall thickness	Weight lb (kg)	
Single-Ended								
304L S.S.	500(34.4)	150	1/4	2.00(50.8)	4.88(124)	0.093(2.4)	1.10(0.50)	
		300			8.62(219)		1.80(0.82)	
		500			13.6(345)		2.70(1.23)	
Double-Ended								
304L S.S.	1800(124)	40	1/8	1.25(31.8)	3.88(98.6)	0.070(1.8)	0.31(0.14)	
		50	1/4	1.50(38.1)	3.75(95.2)		0.093(2.4)	0.38(0.17)
		75			5.32(135)			0.62(0.28)
		150	1/4	2.00(50.8)	5.25(133)			0.94(0.43)
		300			8.94(227)			1.80(0.82)
		400			11.4(290)			2.10(0.95)
		500			13.8(351)		2.60(1.18)	
304L S.S.	1800(124)	1000	1/4 or 1/2	3.50(88.9)	10.9(277)	0.180(4.6)	6.50(2.90)	
		2250		4.00(102)	17.2(437)	0.206(5.2)	14.00(6.40)	
		3785 (1 gal)			26.7(678)		21.00(9.50)	
316L S.S.	1800(124)	150	1/4	2.00(50.8)	5.25(133)	0.093(2.4)	0.94(0.43)	
		300			8.94(227)		1.80(0.82)	
		500			13.8(351)		2.60(1.20)	
316L S.S.	5000(344)	150	1/4 or 1/2	1.90(48.2)	8.00(203)	0.240(6.1)	3.00(1.40)	
		300			14.5(368)		5.60(2.50)	
		500			23.5(597)		9.10(4.10)	
Alloy 400	1800(124)	150	114	2.00(50.8)	5.25(133)	0.093(2.4)	0.94(0.43)	
		300			8.94(227)		1.80(0.82)	
		500			13.8(351)		2.90(1.3)	

PTFE Coating or Electropolishing

- ❖ Internal PTFE coating, which provides a non-stick surface to aid in cleaning, can be supplied in any sample cylinder.
To order, add **-T** to the cylinder ordering number.
Example: **SC118-DFNPT4-300-316L-T**
- ❖ Electropolishing provide a clean inside surface with a high degree of passivation.
To order, add **-P** to the cylinder ordering number.
Example: **SC118-DFNPT4-300-316L-P**
- ❖ For rupture disc units and rupture disc tees please contact the Hikelok authorized representative

How to Order

SC118 — DFNPT4 — 300 — 316L — T						
Series	Working pressure	End Type	End Connection	Internal Volume	Material	Inner Surface
SC1	5 500 psig	D Double-Ended	FNPT2 1/8" Female NPT	40 40ml	316L 316L S.S.	no
	18 1800 psig		FNPT4 1/4" Female NPT	50 50ml	304L 304L S.S.	T PTFE coating
	50 5000 psig	S Single-Ended	FNPT8 1/2" Female NPT	75 75ml	A400 Alloy 400	P Electropolishing
				150 150ml		A Sulfur passivation
				300 300ml		
				400 400ml		
				500 500ml		
				1000 1000ml		
				2250 2250ml		
				3785 3785ml		

Rupture Disc Units

- Hikelok rupture disc units protect sample cylinders from overpressurization by venting the cylinder contents to atmosphere. The rupture disc is welded to a body that is threaded into a valve body and sealed by an elastomer O-ring. The rupture disc can be easily replaced without removing the valve from the cylinder



Materials of Construction

Component	Material Grade/ASTM Specification
Body, inlet ring	316 S.S./A479
Rupture disc	Alloy 600/B168
O-ring	Fluorocarbon FKM

Ordering Information

Nominal Burst Pressure at 70°F (20°C)	Ordering Number
2850 psig ± 150 psig 196 bar ± 10.3 bar	RDU-2850-316
1900 psig ± 100 psig 130 bar ± 6.8 bar	RDU-1900-316

Nonrotating-Stem Needle Valves with Rupture Disc Units



Ordering Information and Dimensions

End connections		Flow Pattern	Valve Ordering Number	Orifice in. (mm)
Inlet	Outlet			
With 2850 psig (196 bar) Rupture Disc				
1/4" male NPT	1/4" female NPT	Straight	NV7-NPT4-FNPT4-2850-316	0.218 (5.5)
		Angle	NV7-NPT4-FNPT4-A1-2850-316	
1/2" male NPT			NV7-NPT8-FNPT4-A1-2850-316	
With 1900 psig (130 bar) Rupture Disc				
1/4" male NPT	1/4" female NPT	Straight	NV7-NPT4-FNPT4-1900-316	0.218 (5.5)
		Angle	NV7-NPT4-FNPT4-A1-1900-316	
1/2" male NPT			NV7-NPT8-FNPT4-A1-1900-316	

Miniature Sample Cylinders

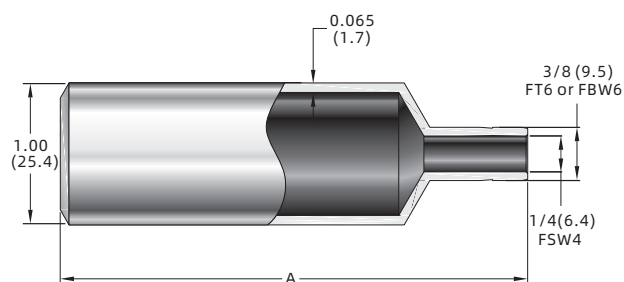
MSC Series

Features

- ❖ Working pressure up to 1000 psig (68.9 bar)
- ❖ Internal volume include 10, 25, and 50 cm³
- ❖ Single-ended and double-ended
- ❖ Seamless tubing body provides consistent wall thickness, size and capacity
- ❖ Volume is closely controlled
- ❖ Full-penetration butt weld construction
- ❖ 316L and 304L and materials available



Dimensions



Cylinder Model	Internal Volume cm3	Volume Tolerance	Pressure Rating psig (bar)	A in. (mm)	Average Weight oz (g)
Single-ended	10	±10%	1000 (68.9)	2.19 (55.6)	2.2 (62)
	25	±5%		3.69 (93.7)	3.2 (91)
	50			6.25 (159)	5.6 (159)
Double-ended	10	±10%		2.75 (69.8)	1.9 (54)
	25	±5%		4.25 (108)	3.3 (94)
	50			6.81 (55.6)	5.1 (145)

How to Order

MSC — SFT6 — 10 — 316L				
Series	Cylinder Model	End Type	Internal Volume	Material
MSC	S Single-ended	FT6 3/8" Fractional Tube Adapter	10 10ml	316L 316L S.S.
	D Double-ended		25 25ml	304L 304L S.S.
			50 50ml	

- ❖ 3/8 (9.5) OD for tube fitting or butt weld connection;
- 1/4 (6.4) ID for tube socket weld connection.

Condensate Pots

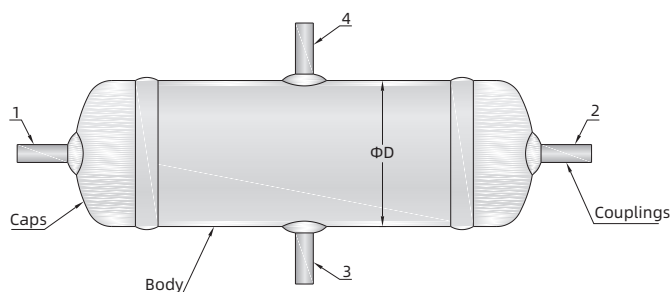
CP1 Series

Features

- ❖ Maximum working pressure up to 6000 psig (413 bar)
- ❖ Working temperature from -65°F to 850°F (-53°C to 454°C)
- ❖ 304 and 316 stainless steel material
- ❖ Socket weld connection according to ASME B16.11
- ❖ Butt welding ends according to ASME B16.9
- ❖ NPT according to ASME B1.20.1 taper pipe thread
- ❖ Variety of end connections



Standard Materials of Construction



Material	Body	Cap
316 S.S.	TP316 / A312	F316 / A182
316L S.S.	TP316L / A312	F316L / A182
304 S.S.	TP304 / A312	F304 / A182
304L S.S.	TP304L / A312	F304L / A182
CS	A106	A105

Dimensions

Pipe	D (mm)	L (mm)	Capacity (L)
NPS 4	114.3	360	2.6

Configuration

Schematic	Designator	Schematic	Designator	Schematic	Designator
	2A		2B		3A
	3B		4A		4B

How to Order

CP1 — 3B — FNPT8 — MSW14 — CL1500 — 316

Series	Configuration	Port 1 Type	Port 1 Size	Port 2/3 /4 Type	Port 2/3 /4 Size	ASME Class	Body Material
CP1	2A	FNPT Female NPT	2 1/8 in.	Same as port 1 type and port 1 size		CL150	316 316 S.S.
	2B	NPT Male NPT	4 1/4 in.			CL300	316L 316L S.S.
	3A	FBT Female BSPT	8 1/2 in. or 8 mm	If port2/3/4 and port 1 are the same, eliminate the port 2/3/4 designator		CL600	304 304 S.S.
	3B	MBT Male BSPT	10 10 mm			CL900	304L 304L S.S.
	4A	FBP Female BSPP	12 3/4 in. or 12 mm			CL1500	CS Steel
	4B	MBP Male BSPP (for BG)	14 14 mm			CL2500	
		FSW Fractional Tube Socket Weld	16 1 in. or 16 mm				
		MSW Metric Tube Socket Weld					
		FBW Fractional Tube Butt Weld					
		MBW Metric Tube Butt Weld					
		PSW Pipe Socket Weld					
		PBW Pipe Butt Weld					