BAKER SPD In-Line Choke

Introduction

The Baker SPD In-Line Choke is designed specifically for controlling gas and liquid flowline rates. Water and CO_2 systems are designed to control the rate of fluid injection. The stellite sleeve absorbs the cavitation and pitting action of the fluid as it takes the pressure drop. The sleeve design allows the thickest material around the disc holes and is funnel-shaped to direct the flow back into the center of the piping.

Sizes

1″ and 2″

Connections

Threaded
ANSI 600 and 900/1500 Flanged
Grooved
Union x Socket Weld
Union x Union
Socket Weld x Socket Weld

Materials

Body:	ASTM A216 WCB Steel or ASTM B148 Aluminum Bronze Grade 955D Alloy or CF8M (316) Stainless Steel or CF3M (316 L) Stainless Steel
Disc:	Ceramic Al_2O_3 for applications to 400 psi Δ Zirconia ZrO_2 for applications above 600 psi Δ
Body Seals:	Type 1, Grade 1 PTFE Fluorocarbon
Rotator Seals:	90 Durometer A Peroxide Cured Nitrile O-Ring with Type 1, Grade 1 PTFE Fluorocarbon Back-up Ring
Disc Pins:	Monel
Wearsleeve:	Stellite 6B

Actuation

Available upon request

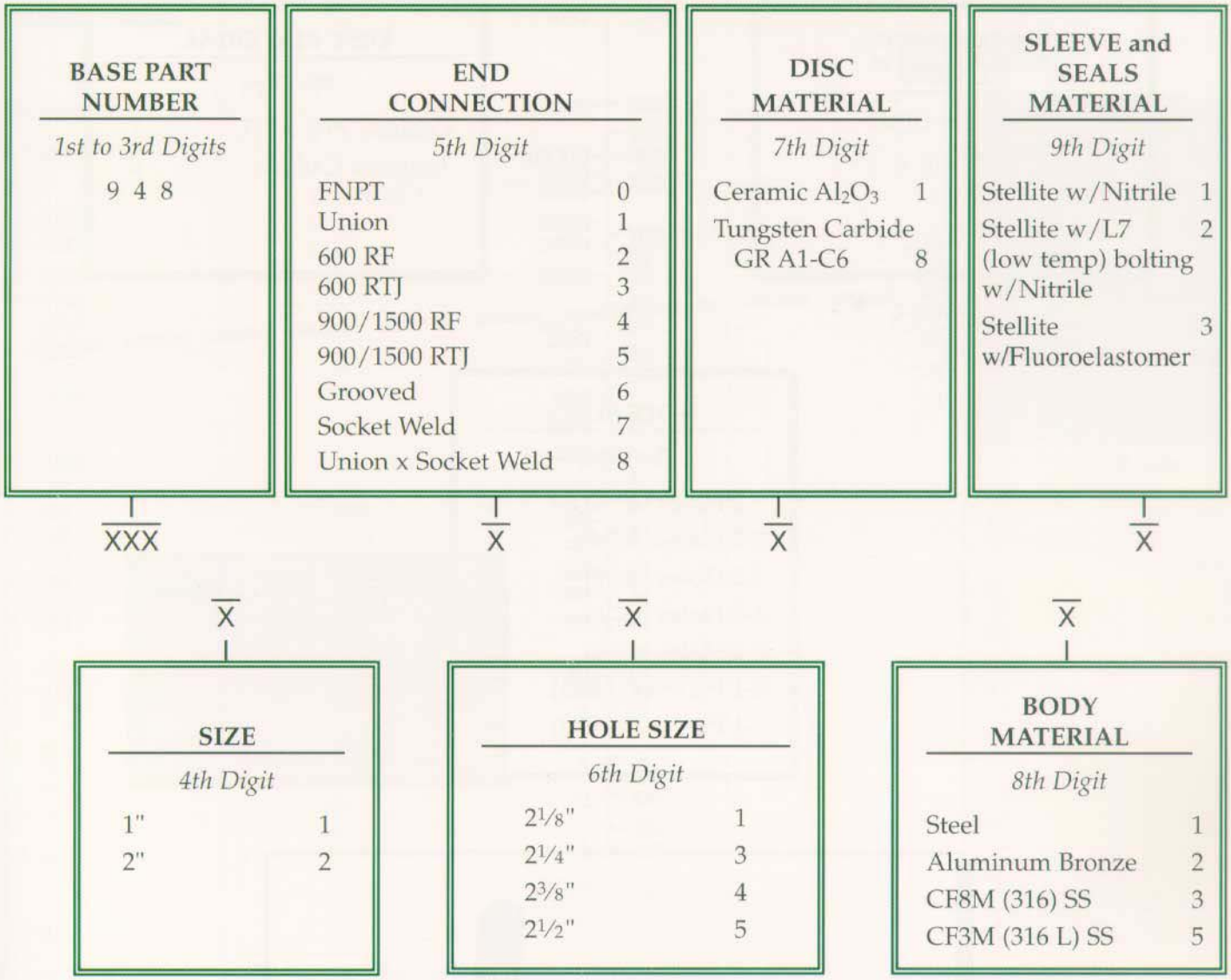
Pressure Rating

FNPT	3705 psi Working Pressure	5575 psi Test Pressure
ANSI 600	1480 psi Working Pressure	2225 psi Test Pressure
ANSI 900/1500	3705 psi Working Pressure	5575 psi Test Pressure

NOTE: The Baker Top Entry Choke is also available. See your Baker Top Entry brochure.

BAKER SPD In-Line Choke

Assembly Product Number Scheme



BAKER SPD In-Line Choke

Repair Kit Product Number Scheme

BASE PART NUMBER
1st to 7th Digits
0 5 1 9 4 8 3

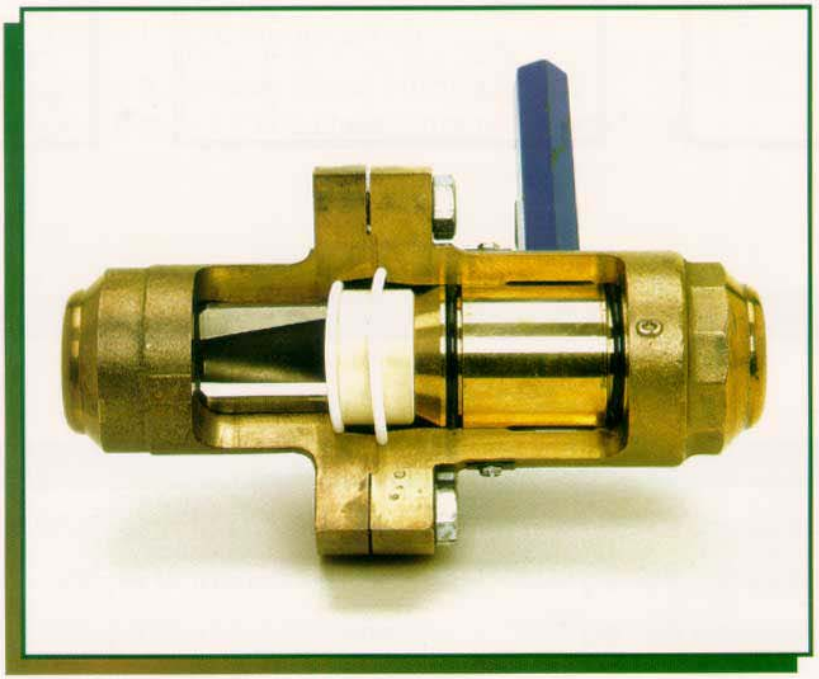
XXXXXXX

X

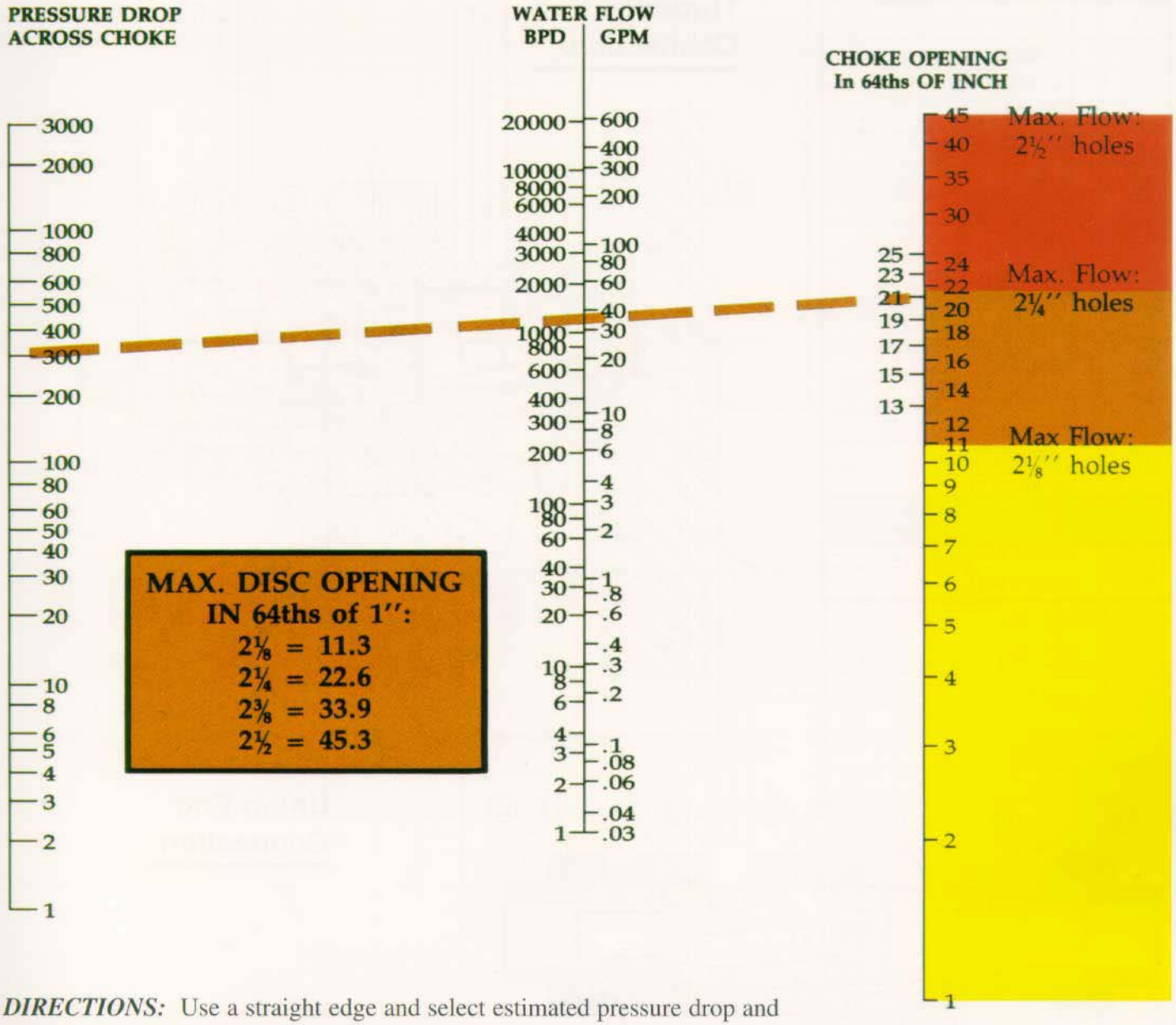
HOLE SIZES	
8th Digit	
1-2 Holes 1/8" Ø	1
2-2 Holes 1/4" Ø	2
3-2 Holes 3/8" Ø	3
4-2 Holes 1/2" Ø	4
5-2 Holes 5/8" Ø	5
6-1 Pie 54/64" (.844)	6
7-1 Pie 61/64" (.953)	7

DISC MATERIAL	
9th Digit	
Ceramic 99% $A1_20_3$	1
Tungsten Carbide GR A1-C6	8

X



BAKER SPD In-Line Choke – Flow Chart



DIRECTIONS: Use a straight edge and select estimated pressure drop and desired flow. Read the Choke Opening in 64th of an inch. Specify the smallest Disc Opening that will handle the flow.

EXAMPLE: 35 GPM or 1200 BPD at 300 ΔP is 21/64; use disc with 2-1/4" holes.

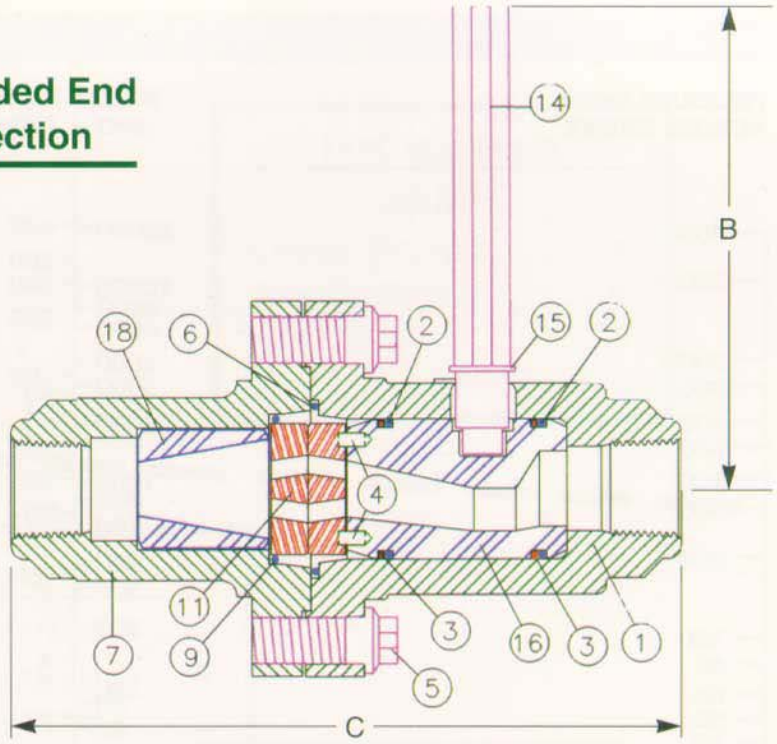
FOR MAXIMUM CHOKE LIFE USE THE SMALLEST DISC THAT WILL FLOW THE REQUIRED AMOUNT OF FLUID.

BAKER SPD In-Line Choke – Threaded & Union End

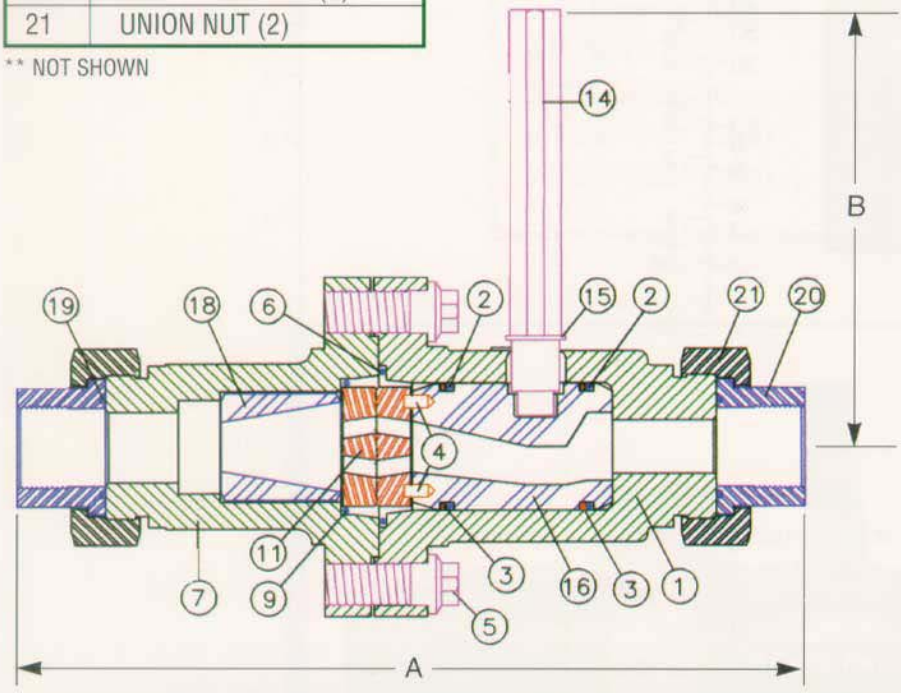
ITEM	DESCRIPTION
1	BODY
2	O-RING
3	BACK-UP RING
4	DOWEL PINS
5	CAP SCREW (2)
6	O-RING
7	OUTLET HUB
9	O-RING
11	DISC (2)
12	CALIBRATION BAND **
13	SCREWS **
14	HANDLE
15	INDICATOR
16	ROTATOR
17	LUBE FITTING **
18	WEAR SLEEVE
19	O-RING (2)
20	UNION ADAPTER (2)
21	UNION NUT (2)

** NOT SHOWN

Threaded End Connection

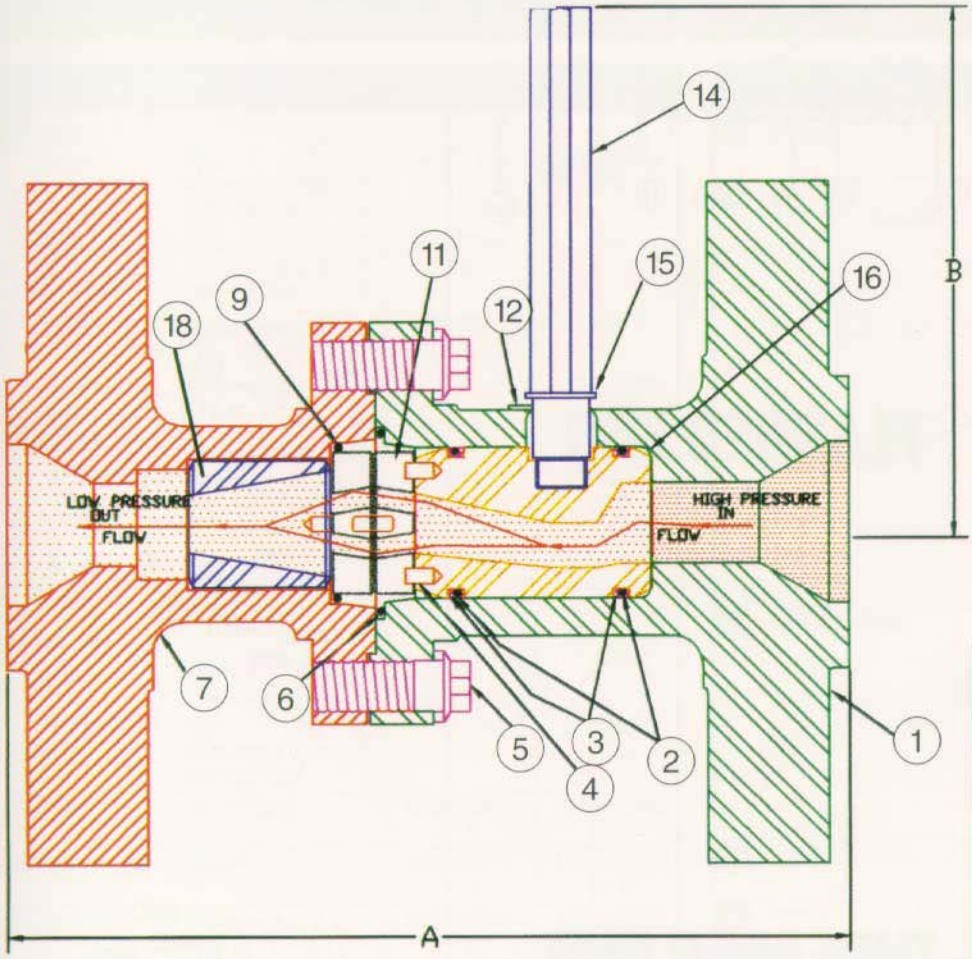


Union End Connection



DESCRIPTION	DIM A (INCHES)	DIM B (INCHES)	DIM C (INCHES)	CONNECTIONS	WORKING PRESSURE (psi)	TEMPERATURE (°F) RATING
1" IN-LINE CHOKE	11 7/16"	6 9/16"	8 7/8"	NPT	3705	-20° TO +250° F
2" IN-LINE CHOKE	12 9/16"	6 9/16"	10"	NPT	3705	-20° TO +250° F

BAKER SPD In-Line Choke – Flanged End

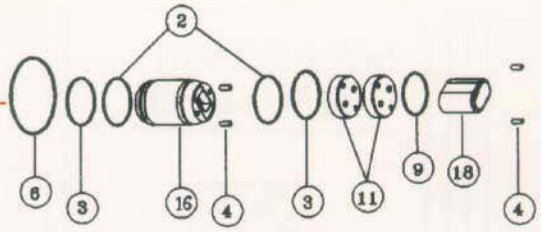


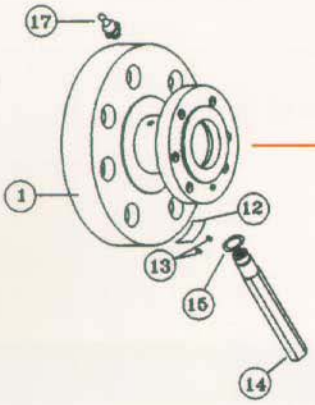
ITEM	DESCRIPTION
1	BODY
2	O-RING
3	BACK-UP RING
4	DOWEL PIN, DISK
5	CAP SCREW (2)
6	O-RING
7	OUTLET HUB
9	O-RING
11	DISC
12	CALIBRATION BAND
13	SCREWS**
14	HANDLE
15	INDICATOR
16	ROTATOR
17	LUBE FITTING**
18	WEAR SLEEVE

**NOT SHOWN

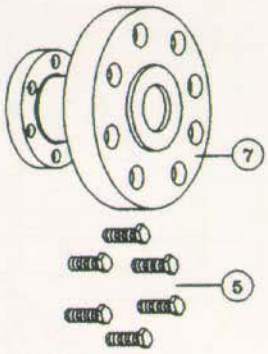
DESCRIPTION	DIM A (INCHES)	DIM B (INCHES)	CONNECTIONS	WORKING PRESSURE (PSI)	TEMPERATURE (°F) RATING
2" IN-LINE CHOKE	10½"	6 9/16"	400/600 RF 900/1500 RF	1,480 3,750	-20° TO +250° F
2" IN-LINE CHOKE	10⅝"	6 9/16"	400/600 RTJ 900/1500 RTJ	1,480 3,705	-20° TO +250° F

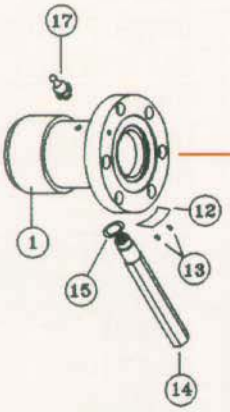
BAKER SPD In-Line Choke



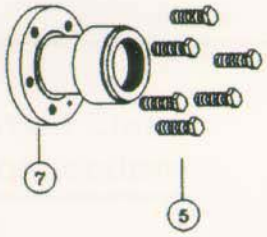


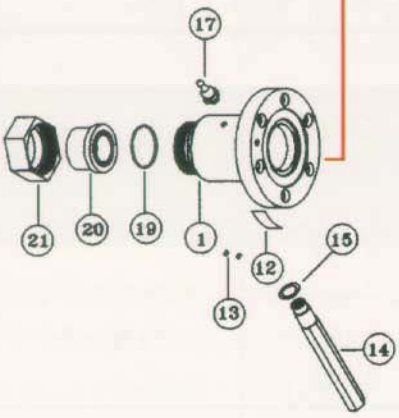
FLANGED END



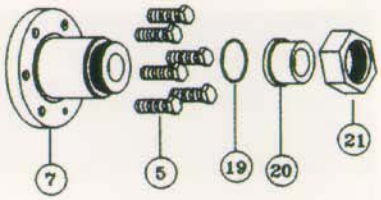


THREADED END





UNION END



BAKER SPD Parts and Weights

In-Line Choke

	DESCRIPTION			1"	2"
1	Body				
	Threaded	Steel	2	0519371X0	0519373X0
		Aluminum Bronze	6	7 lb	8 lb
		Stainless Steel	8		
	Union End	Steel	2	0519372X0	O/A
		Aluminum Bronze	6	8 lb	
		Stainless Steel	8		
	Socket Weld	316 L Stainless Steel		051987080	O/A
				8 lb	
	Grooved End	Aluminum Bronze		O/A	051984060
					8 lb
	Flanged				
	RF ANSI 600	Steel	2	O/A	0519374X0
		Aluminum Bronze	6		12 lb
		Stainless Steel	8		
	RTJ ANSI 600	Steel	2	O/A	0519460X0
		Aluminum Bronze	6		12 lb
		Stainless Steel	8		
	RF ANSI 1500	Steel	2	O/A	0519375X0
		Aluminum Bronze	6		20 lb
		Stainless Steel	8		
	RTJ ANSI 1500	Steel	2		0519458X0
		Aluminum Bronze	6		20 lb
		Stainless Steel	8		
2	O-Ring	90 DPC Nitrile		WWB223P40	WWB223P40
				0.1 lb	0.1 lb
3	Back-Up Ring	Teflon®		WWD223T10	WWD223T10
				0.1 lb	0.1 lb
4	Dowel Pin	Monel		WWLA060HH	WWLA060HH
				0.1 lb	0.1 lb
5	Cap Screw			WWG31H1H6	WWG31H1H6
				0.1 lb	0.1 lb
6	O-Ring	Teflon®		WWB227T10	WWB227T10
				0.1 lb	0.1 lb
7	Hub Assembly				
	Threaded	Steel	2	0519379X1	0519381X1
		Aluminum Bronze	6	7 lb	8 lb
		Stainless Steel	8		
	Union End	Steel	2	0519380X1	O/A
		Aluminum Bronze	6	8 lb	
		Stainless Steel	8		
	Socket Weld	Stainless Steel 316 L		051987681	O/A
				8 lb	
	Grooved End	Aluminum Bronze		O/A	051983960
					8 lb
	Flanged				
	RF ANSI 600	Steel	2	O/A	0519376X1
		Aluminum Bronze	6		12 lb
		Stainless Steel	8		
	RTJ ANSI 600	Steel	2	O/A	0519461X1
		Aluminum Bronze	6		12 lb
		Stainless Steel	8		
	RF ANSI 1500	Steel	2	O/A	0519377X1
		Aluminum Bronze	6		20 lb
		Stainless Steel	8		
	RTJ ANSI 1500	Steel	2		0519459X1
		Aluminum Bronze	6		20 lb
		Stainless Steel	8		

	DESCRIPTION				1"	2"
9	O-Ring				WWB224T10	WWB224T10
					0.1 lb	0.1 lb
11	Disc					
		Ceramic	.125	1/8"	051938322	051938322
					0.3 oz	0.3 oz
			.250	1/4"	051938324	051938324
					0.3 oz	0.3 oz
			.375	3/8"	051938326	051938326
					0.3 oz	0.3 oz
			.500	1/2"	051938328	051938328
					0.3 oz	0.3 oz
		Tungsten Carbide	.125	1/8"	051938342	051938342
					0.3 oz	0.3 oz
			.250	1/4"	051938344	051938344
					0.3 oz	0.3 oz
			.375	3/8"	051938346	051938346
					0.3 oz	0.3 oz
			.500	1/2"	051938348	051938348
					0.3 oz	0.3 oz
12	Calibration Band					
			.125	1/8"	051938402	051938402
					0.3 oz	0.3 oz
			.250	1/4"	051938404	051938404
					0.3 oz	0.3 oz
			.375	3/8"	051938406	051938406
					0.3 oz	0.3 oz
			.500	1/2"	051938408	051938408
					0.3 oz	0.3 oz
13	Screw				WWGG0618F	WWGG0618F
					0.3 oz	0.3 oz
14	Handle				051938500	051938500
					1 lb	1 lb
15	Indicator	Truarc Ring			WWC510075	WWC510075
					0.1 oz	0.1 oz
16	Rotator					
		Steel	2		0519386X0	0519386X0
		Aluminum Bronze	6		2 lb	2 lb
		Stainless Steel	8			
17	Lube Fitting				WWW00C000	WWW00C000
					0.1 lb	0.1 lb
18	Wear Sleeve				W51938201	W51938201
					1 lb	1 lb
19	O-Ring	90 DPC			WWB125P40	WWB125P40
					0.1 lb	0.1 lb
20	Union Adapter	316 SS	8			
		316 L SS NPT	9		05193990X	05194050X
					1 lb	1 lb
		316 L SS Socket Weld			051957909	O/A
					1 lb	
21	Union Nut					
		Steel with QPQ Coating			051940000	051940600
					1 lb	2 lb

Note: Redress kit for 1" and 2" In-Line Chokes; P/N 051948400;
Contains: Item 2, 3, 6, 9

Repair Kit for 1" and 2" In-Line Chokes; P/N 0519483XX;
Contains: Item 2, 3, 6, 9, 11

O/A – On Application