

PNEUMATIC CONVEYING COMPONENTS & SPARE PARTS

DRY BULK MATERIAL HANDLING COMPONENTS. AFTER-MARKET SPARE PARTS. PNEUMATIC CONVEYING EQUIPMENT.



PNEUMATIC COMPONENTS

AIRLOCKS, PARTS & ACCESSORIES



Searching for the right solution? Magnum Systems offers a complete line of pneumatic conveying components and spare parts. Our customer service professionals have an average of 10 years in industry application experience, each with the knowledge and expertise necessary to bring top-flight service for an incredible range of products.

Rotary Airlock Valves

Available in various sizes and materials with replacement parts

Blowers and Fans

Complete assemblies as well as replacement units

Diverters Pneumatic or gravity applications **Bin Vents, Filter Receivers, Silos and Accessories** Complete assemblies and parts

Rail Car Accessories Airlift and manual discharge adapters

Valves Knife gates, slide gates, ball valves and butterfly valves

> Engineering, Design & Manufacturing to Keep the Line Moving

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SECTION 1 ROTARY VALVES

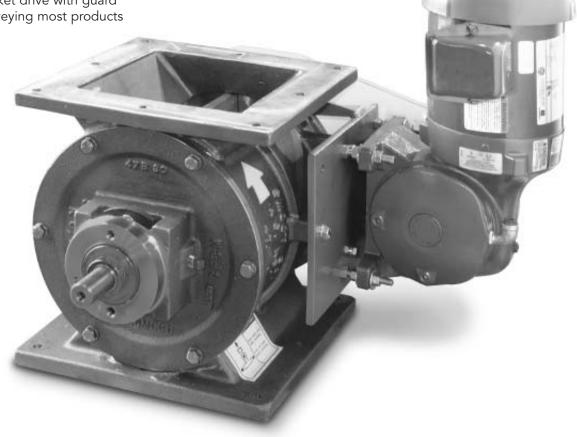
SECTION 1 ROTARY VALVES Type 1, Square Flange

PRODUCT DESCRIPTION

The Smoot Type 1 is a basic, yet versatile rotary valve. With a wide range of options and accessories, the Type 1 will operate efficiently in your system.

PRODUCT FEATURES

- Constructed with cast iron housing and end plates
- Open end rotor constructed of A-36 carbon steel
- Outboard bearings with three molyurethane U-cup packing rings per side
- Chain and sprocket drive with guard
- Suitable for conveying most products

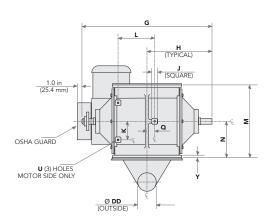


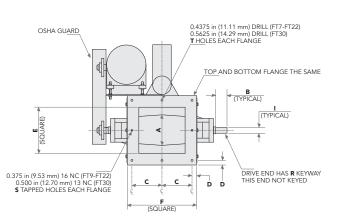
OPTIONS

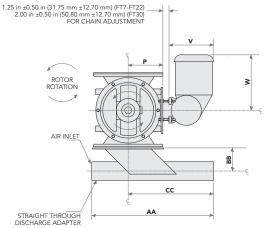
- Relieved tips and vane edge rotors
- High temperature modifications
- Shaft air purge
- Replaceable tips—abrasion resistant carbon steel or urethane flex-tip
- Reduced capacity rotors
- Zero speed switches
- Sand blast preparation and custom paint
- Motor mounting brackets
- Telfon and chrome coatings available

SAFETY NOTICE Design Engineers • Technicians • Installers SAFETY NOTICE The inlet and outlet of the rotary valve must have proper attachments to prevent anyone from being able to insert their hands, or foreign objects, into the valve when in operation.

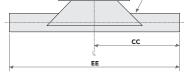
SECTION 1 **ROTARY VALVES** Type 1, Square Flange













	Feeder Dimensions (Type 1)										Feed	der Dir	nensio	o ns (Tyj	oe 1)		
	FT7	FT9	FT11	FT12	FT14	FT16	FT18	FT22		FT7	FT9	FT11	FT12	FT14	FT16	FT18	Γ
А	4-1/4	4-3/4	5-7/8	6-1/2	7-3/4	9	11	11-3/4	Р	5-3/8	6-1/4	7-1/4	7-1/2	8-7/8	10-1/8	11-9/16	
В	1-3/4	1-3/4	2	2-1/4	2-1/4	2-1/2	3-1/4	3-3/4	Q	1-1/18	0	1-3/4	0	1-13/16	0	5/16	Γ
С	4-3/4	5-1/4	5-3/4	6-1/2	5-1/4	5-1/2	6	5	R	1/8x1/4	1/8x1/4	1/8x1/4	1/8x1/4	3/16x3/8	3/16x3/8	5/16x5/8	Ę
D	3/4	3/4	3/4	1	5/8	3/4	1	1	S	—	2	2	2	4	4	4	
E	6	8	9	10	12	13	15	16	Т	8	6	6	6	8	8	8	
F	11	12	13	15	17	18	20	22	U	3/8-16	3/8-16	3/8-16	3/8-16	1/2-13	1/2-13	1/2-13	
G	18-3/4	21-3/8	24-9/16	28-1/8	29-11/16	33-1/4	39-5/8	39-7/8	Y	3/8	9/16	9/16	9/16	3/4	3/4	3/4	ſ
н	9-3/8	10-11/16	12-3/8	14-1/16	14-7/8	16-5/8	19-3/16	19-15/16			Net Cu	bic Feet	Disperse	d Per Rev	volution		
I	1	1	1-1/4	1-1/2	1-3/4	1-3/4	2-7/16	2-7/16		FT7	FT9	FT11	FT12	FT14	FT16	FT18	Γ
J	1	1	1-1/4	1-1/4	1-1/4	1-1/2	1-1/2	1-1/2	Open End	0.12	0.27	0.47	0.75	1.10	1.60	2.60	Γ
К	2-1/4	2-1/2	4	4	5-3/8	5-3/8	6	6	Rotor	0.12	0.27	0.47	0.75	1.10	1.00	2.00	
L	4	4-1/4	6-1/4	6-1/4	8	8	10-1/8	10-1/8			Ship	oping We	ight With	Motor (lbs.)		
М	9-7/8	12-1/2	14-5/8	15-3/4	17-5/8	19-5/8	21-3/4	25-7/8		FT7	FT9	FT11	FT12	FT14	FT16	FT18	
N	9-7/8	4-15/16	7-5/16	7-7/8	8-13/16	9-13/16	10-7/8	12-15/16		165	225	295	340	660	780	1060	Γ

For Electric Motor Dimensions, contact The Service Center.

 SAFETY NOTICE
 Design Engineers • Technicians • Installers
 SAFETY NOTICE

 The inlet and outlet of the rotary valve must have proper attachments to prevent anyone from being able to insert their hands, or foreign objects, into the valve when in operation.
 Prevent anyone from being able to insert their hands, or foreign objects, into the valve when in operation.

FT22 13-1/4 0 5/16x5/8 6 10 1/2-13 3/4

FT22

4.00

FT22 1400

SECTION 1 **ROTARY VALVES** Type 1, Round Flange

PRODUCT DESCRIPTION

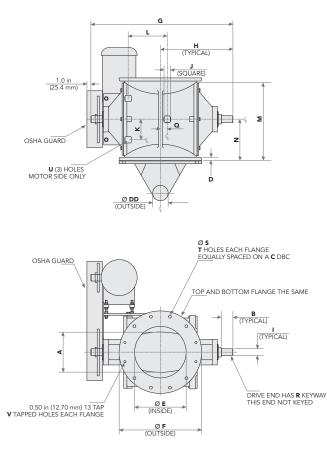
The Smoot Type 1 is a basic, yet versatile rotary valve. With a wide range of options and accessories, and multiple sizes in stock, the Type 1 will operate efficiently in your system.

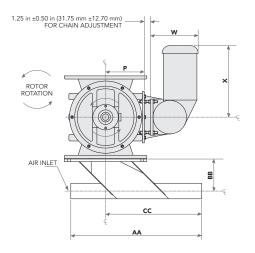


OPTIONS

- Relieved tips and vane edge rotors
- High temperature modifications
- Shaft air purge
- Replaceable tips—abrasion resistant carbon steel or urethane
- Reduced capacity rotors
- Zero speed switches
- Sand blast preparation and custom paint
- Motor mounting brackets
- Telfon and chrome coatings available

SECTION 1 **ROTARY VALVES** Type 1, Round Flange





Feeder Dimensions (Round Flange)							
	FTP12						
А	5-3/4	7-3/4					
В	1-3/4	2-1/4					
С	11-3/4	14-1/4					
D	5/8	5/8					
E	8	10					
F	13-1/2	16					
G	21-3/8	28-1/8					
Н	10-11/16	14-1/16					
I	1	1-1/2					
J	1	1-1/4					
К	2-1/2	4					
L	4-1/4	6-1/4					
М	12-7/8	15-7/8					
Ν	6-7/16	7-15/16					

Feeder Dimensions (Round Flange)									
	FTP9	FTP12							
Р	6-1/4	7-1/2							
Q	0	0							
R	1/8x1/4	1/8x1/4							
S	9/16	9/16							
Т	8	8							
U	3/8-16	3/8-16							
V	0	4							
Net Cu. Ft	. Dispersed Pe	r Revolution							
	FTP9	FTP12							
Open End Rotor	0.27	0.75							
Shipping	Shipping Weight With Motor (lbs.)								
	FTP9	FTP12							
	225	340							

For Electric Motor Dimensions, contact The Service Center.

SECTION 1 **ROTARY VALVES** Type 2, Square Flange

PRODUCT DESCRIPTION

The Smoot Type 2 rotary valve is designed to handle moderately abrasive materials. The Type 2 is constructed with a cast-iron housing with hard chrome plating on the interior machined surfaces to provide a long lasting, economical rotary valve.

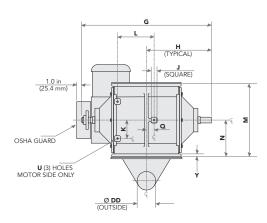
PRODUCT FEATURES

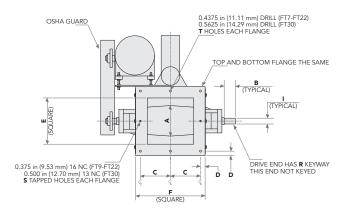
- Abrasion-resistant
- Constructed of cast iron housing with hard chrome plated on interior machined surfaces
- Closed end carbon steel rotor with replaceable hardened steel tips
- Includes HiPres Shaft Air Purge assembly, including filter, regulator, pressure gauge, NEMA 4 solenoid, hose and fittings

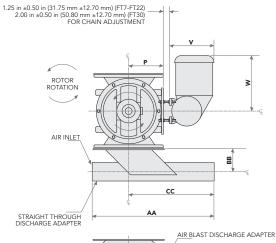
OPTIONS

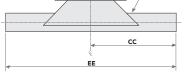
- Relieved tips and rotor shrouds
- High temperature modifications
- Reduced capacity rotors
- Low pressure cavity air purge
- Zero speed switches
- Sand blast preparation and custom paint
- Motor mounting brackets
- Telfon coated rotors available

SECTION 1 **ROTARY VALVES** Type 2, Square Flange











	Feeder Dimensions (Type 2)									Fee	der Di	mensio	ons (Ty	pe 2)			
	FT9	FT11	FT12	FT14	FT16	FT18	FT22	FT30		FT9	FT11	FT12	FT14	FT16	FT18	FT22	FT30
А	4-3/4	5-7/8	6-1/2	7-3/4	9	11	11-3/4	16-3/16	Р	6-1/4	7-1/4	7-1/2	8-7/8	10-1/8	11-9/16	13-1/4	17-1/2
В	1-3/4	2	2-1/4	2-1/4	2-1/2	3-1/4	3-3/4	2-5/8	Q	0	1-3/4	0	1-13/16	0	5/16	0	0
С	5-1/4	5-3/4	6-1/2	5-1/4	5-1/2	6	5	7	R	1/8x1/4	1/8x1/4	1/8x1/4	3/16x3/8	3/16x3/8	5/16x5/8	5/16x5/8	7/16x7/8
D	3/4	3/4	1	5/8	3/4	1	1	1-1/2	S	2	2	2	4	4	4	6	6
E	8	9	10	12	13	15	16	23	Т	6	6	6	8	8	8	10	10
F	12	13	15	17	18	20	22	31	U	3/8-16	3/8-16	3/8-16	1/2-13	1/2-13	1/2-13	1/2-13	5/8-11
G	21-3/8	24-9/16	28-1/8	29-11/16	33-1/4	39-5/8	39-7/8	50-3/4	Y	9/16	9/16	9/16	3/4	3/4	3/4	3/4	1
н	10-11/16	12-3/8	14-1/16	14-7/8	16-5/8	19-3/16	19-15/16	25-3/8			Net Cu	bic Feet	Disperse	d Per Re	volution		
I	1	1-1/4	1-1/2	1-3/4	1-3/4	2-7/16	2-7/16	3-3/8		FT9	FT11	FT12	FT14	FT16	FT18	FT22	FT30*
J	1	1-1/4	1-1/4	1-1/4	1-1/2	1-1/2	1-1/2	1-3/4	Closed End	0.21	0.41	0.64	0.96	1.40	2.30	3.60	9.20
К	2-1/2	4	4	5-3/8	5-3/8	6	6	6	Rotor	0.21	0.41	0.04	0.90	1.40	2.30	3.00	9.20
L	4-1/4	6-1/4	6-1/4	8	8	10-1/8	10-1/8	12-1/4		-	Shi	pping We	eight Wit	h Motor ((lbs.)		
М	12-1/2	14-5/8	15-3/4	17-5/8	19-5/8	21-3/4	25-7/8	37		FT9	FT11	FT12	FT14	FT16	FT18	FT22	FT30*
N	4-15/16	7-5/16	7-7/8	8-13/16	9-13/16	10-7/8	12-15/16	18-1/2		225	295	340	660	780	1060	1400	3800

I I

For Electric Motor Dimensions, contact The Service Center.

SECTION 1 **ROTARY VALVES** Type 2, Round Flange

PRODUCT DESCRIPTION

The Smoot Type 2 rotary valve is designed to handle moderately abrasive materials. The Type 2 is constructed with a cast iron housing with hard chrome plating on the interior machine surfaces to provide a long lasting, economical rotary valve.

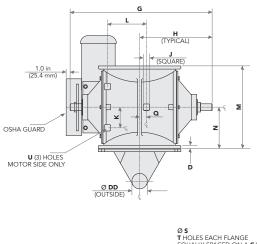
PRODUCT FEATURES

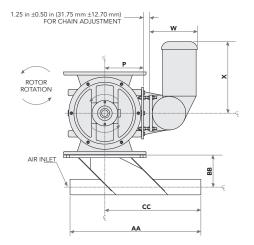
- Abrasion-resistant
- Constructed of cast iron housing with hard chrome plated on interior machined surfaces
- Closed end carbon steel rotor with replaceable hardened steel tips
- Includes HiPres Shaft Air Purge assembly, including filter, regulator, pressure gauge, NEMA 4 solenoid, hose and fittings

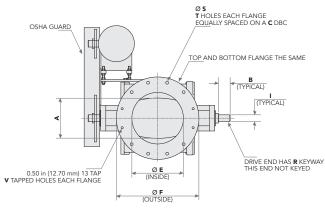
OPTIONS

- Relieved tips and rotor shrouds
- High temperature modifications
- Reduced capacity rotors
- Low pressure cavity air purge
- Zero speed switches
- Sand blast preparation and custom paint
- Motor mounting brackets
- Teflon rotors available

SECTION 1 **ROTARY VALVES** Type 2, Round Flange







Feeder Dimensions (Round Flange)							
	FTP12						
А	5-3/4	7-3/4					
В	1-3/4	2-1/4					
С	11-3/4	14-1/4					
D	5/8	5/8					
E	8	10					
F	13-1/2	16					
G	21-3/8	28-1/8					
н	10-11/16	14-1/16					
I	1	1-1/2					
J	1	1-1/4					
К	2-1/2	4					
L	4-1/4	6-1/4					
М	12-7/8	15-7/8					
Ν	6-7/16	7-15/16					

Feeder Dimensions (Round Flange)						
	FTP9	FTP12				
Р	6-1/4	7-1/2				
Q	0	0				
R	1/8x1/4	1/8x1/4				
S	9/16	9/16				
Т	8	8				
U	3/8-16	3/8-16				
V	0	4				
Net Cu. Ft	. Dispersed Pe	r Revolution				
	FTP9	FTP12				
Closed End Rotor	0.21	0.64				
Shipping	Weight With I	Notor (lbs.)				
	FTP9	FTP12				
	225	340				

For Electric Motor Dimensions, contact The Service Center.

 SAFETY NOTICE
 Design Engineers • Technicians • Installers
 SAFETY NOTICE

 The inlet and outlet of the rotary valve must have proper attachments to prevent anyone from being able to insert their hands, or foreign objects, into the valve when in operation.

SECTION 1 **ROTARY VALVES** Type 3, Square Flange

PRODUCT DESCRIPTION

The Smoot Type 3 rotary valve is built to handle your sticky or cakey materials and is ideal for semi-food grade applications. The Type 3 is constructed with an epoxy coating of the interior throat for maximum protection, a hard chrome bore, as well as a 304 stainless steel rotor to provide a durable and cost-effective alternative to complete stainless steel.

PRODUCT FEATURES

- Corrosion-resistant
- Constructed with cast iron housing
- Hard chrome plated interior machined surfaces
- Epoxy coated on interior throats
- Open end rotor constructed of 304 stainless steel
- Outboard bearings with 3 molyurethane U-cup packing rings per side
- Chain and sprocket drive with guard

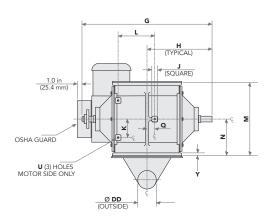


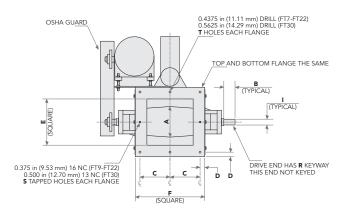
OPTIONS

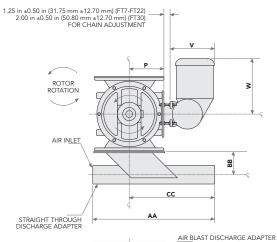
- Relieved tips and vane edges
- Chrome throats available for Hi-Temp applications
- Replaceable stainless steel or urethane tips
- Teflon rotor coatings

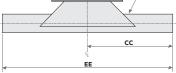
- Reduced capacity rotors
- Zero speed switches
- Sand blast preparation and custom paint
- Motor mounting brackets
- Shaft air purge

SECTION 1 **ROTARY VALVES** Type 3, Square Flange











	Feeder Dimensions (Type 3)											Fee	der Di	mensio	ons (Ty	pe 3)		
	FT7	FT9	FT11	FT12	FT14	FT16	FT18	FT22	ſ		FT7	FT9	FT11	FT12	FT14	FT16	FT18	FT22
А	4-1/4	4-3/4	5-7/8	6-1/2	7-3/4	9	11	11-3/4		Р	5-3/8	6-1/4	7-1/4	7-1/2	8-7/8	10-1/8	11-9/16	13-1/4
В	1-3/4	1-3/4	2	2-1/4	2-1/4	2-1/2	3-1/4	3-3/4		Q	1-1/18	0	1-3/4	0	1-13/16	0	5/16	0
С	4-3/4	5-1/4	5-3/4	6-1/2	5-1/4	5-1/2	6	5		R	1/8x1/4	1/8x1/4	1/8x1/4	1/8x1/4	3/16x3/8	3/16x3/8	5/16x5/8	5/16x5/8
D	3/4	3/4	3/4	1	5/8	3/4	1	1		S	—	2	2	2	4	4	4	6
E	6	8	9	10	12	13	15	16		Т	8	6	6	6	8	8	8	10
F	11	12	13	15	17	18	20	22		U	3/8-16	3/8-16	3/8-16	3/8-16	1/2-13	1/2-13	1/2-13	1/2-13
G	18-3/4	21-3/8	24-9/16	28-1/8	29-11/16	33-1/4	39-5/8	39-7/8		Y	3/8	9/16	9/16	9/16	3/4	3/4	3/4	3/4
н	9-3/8	10-11/16	12-3/8	14-1/16	14-7/8	16-5/8	19-3/16	19-15/16				Net Cu	bic Feet	Disperse	d Per Rev	volution		
I	1	1	1-1/4	1-1/2	1-3/4	1-3/4	2-7/16	2-7/16	ſ		FT7	FT9	FT11	FT12	FT14	FT16	FT18	FT22
J	1	1	1-1/4	1-1/4	1-1/4	1-1/2	1-1/2	1-1/2	ſ	Open End	0.12	0.27	0.47	0.75	1.10	1.60	2.60	4.00
к	2-1/4	2-1/2	4	4	5-3/8	5-3/8	6	6		Rotor	0.12	0.27	0.47	0.75	1.10	1.00	2.00	4.00
L	4	4-1/4	6-1/4	6-1/4	8	8	10-1/8	10-1/8				Ship	oping We	ight Witl	n Motor (lbs.)		
М	9-7/8	12-1/2	14-5/8	15-3/4	17-5/8	19-5/8	21-3/4	25-7/8	ſ		FT7	FT9	FT11	FT12	FT14	FT16	FT18	FT22
N	9-7/8	4-15/16	7-5/16	7-7/8	8-13/16	9-13/16	10-7/8	12-15/16			165	225	295	340	660	780	1060	1400

For Electric Motor Dimensions, contact The Service Center.

SECTION 1 **ROTARY VALVES** Type 3, Round Flange

PRODUCT DESCRIPTION

The Smoot Type 3 rotary valve is built to handle your sticky or cakey materials and is ideal for semi-food grade applications. The Type 3 is constructed with an epoxy coating of the interior throat for maximum protection, a hard chrome bore, as well as a 304 stainless steel rotor to provide a durable and cost-effective alternative to complete stainless steel.

PRODUCT FEATURES

- Corrosion-resistant
- Constructed with cast iron housing
- Hard chrome plated interior machined surfaces
- Epoxy coated on interior throats
- Open end rotor constructed of 304 stainless steel
- Outboard bearings with 3 molyurethane u-cup packing rings per side
- Chain and sprocket drive with guard

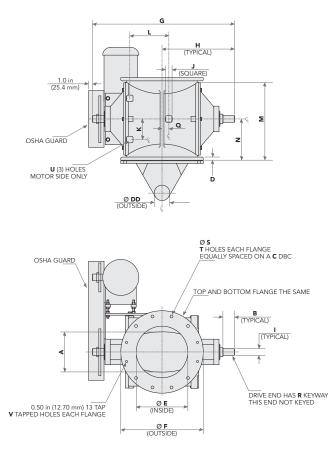


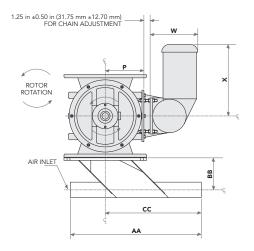
OPTIONS

- Relieved tips and vane edges
- Telfon and chrome coatings available
- Replaceable stainless steel or urethane tips
- Teflon rotor coatings

- Reduced capacity rotors
- Zero speed switches
- Sand blast preparation and custom paint
- Motor mounting brackets
- Shaft air purge

SECTION 1 **ROTARY VALVES** Type 3, Round Flange





Feeder Dimensions (Round Flange)							
	FTP12						
А	5-3/4	7-3/4					
В	1-3/4	2-1/4					
С	11-3/4	14-1/4					
D	5/8	5/8					
E	8	10					
F	13-1/2	16					
G	21-3/8	28-1/8					
Н	10-11/16	14-1/16					
I	1	1-1/2					
J	1	1-1/4					
К	2-1/2	4					
L	4-1/4	6-1/4					
М	12-7/8	15-7/8					
Ν	6-7/16	7-15/16					

Feeder Dimensions (Round Flange)									
	FTP9 FTP12								
Р	6-1/4	7-1/2							
Q	0	0							
R	1/8x1/4	1/8x1/4							
S	9/16	9/16							
Т	8	8							
U	3/8-16	3/8-16							
V	0	4							
Net Cu. Ft	. Dispersed Pe	r Revolution							
	FTP9	FTP12							
Open End Rotor	0.27	0.75							
Shipping	Shipping Weight With Motor (lbs.)								
	FTP9	FTP12							
	225	340							

For Electric Motor Dimensions, contact The Service Center.

SECTION 1 **ROTARY VALVES** Type 4, Square Flange

PRODUCT DESCRIPTION

The Smoot Type 4 takes stainless steel to the next level with complete stainless steel construction. The Type 4 is designed for mildly corrosive materials while maintaining the legendary Smoot toughness.

PRODUCT FEATURES

- Corrosion-resistant
- Housing and end plates constructed of 316 stainless steel
- Open end rotor constructed of 304 stainless steel
- Outboard bearings with 3 molyurethane U-cup packing rings per side
- Chain and sprocket drive with guard

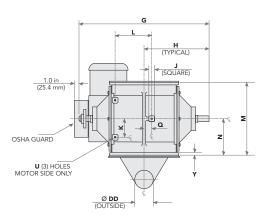


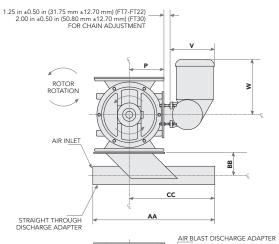
OPTIONS

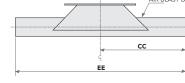
- Relieved tips and vane edges
- High temperature modifications
- Replaceable stainless steel or urethane tips
- Reduced capacity rotors

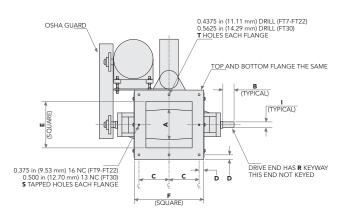
- Zero speed switches
- Motor mounting brackets
- Closed end rotors with or without replaceable tips
- Shaft air purge

SECTION 1 **ROTARY VALVES** Type 4, Square Flange









NOTE:
CENTER MOTOR MOUNTING HOLE IS NOT ALWAYS IN CENTER
OF CYLINDER HOUSING (FT7, FT11, FT14, FT18)
SEE DIMENSION O FOR OFFSET DISTANCE

Feeder Dimensions (Type 4)							
	FT9	FT12					
А	4-3/4	6-1/2					
В	1-3/4	2-1/4					
С	5-1/4	6-1/2					
D	3/4	1					
E	8	10					
F	12	15					
G	21-3/8	28-1/8					
Н	10-11/16	14-1/16					
I	1	1-1/2					
J	1	1-1/4					
К	2-1/2	4					
L	4-1/4	6-1/4					
М	12-1/2	15-3/4					
N	4-15/16	7-7/8					

	FT9	FT12
Р	6-1/4	7-1/2
Q	0	0
R	1/8x1/4	1/8x1/4
S	2	2
т	6	6
U	3/8-16	3/8-16
Y	9/16	9/16
Net Cubic Fe	eet Dispersed Pe	er Revolution
	FT9	FT12
Open End Rotor	0.27	0.75
Shipping	Weight With Me	otor (lbs.)
	FT9	FT12
	225	340

Feeder Dimensions (Type 4)

*Not included in the Pneu-Service Center's Quick Ship program.

For Electric Motor Dimensions, contact The Service Center.

SECTION 1 ROTARY VALVES Type 5, Square Flange

PRODUCT DESCRIPTION

The Smoot Type 5 is constructed with 316 stainless steel, and is designed to handle extremely corrosive and food grade materials with ease.



- Corrosion-resistant
- Housing and end plates constructed of 316 stainless steel
- Open end rotor constructed of 316 stainless steel • Outboard bearings with 3 molyurethane U-cup
- packing rings per side
- Chain and sprocket drive with guard



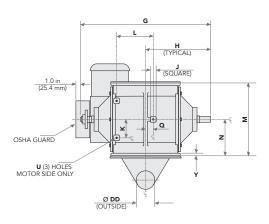
OPTIONS

- Relieved tips and vane edges
- High temperature modifications
- Replaceable stainless steel or urethane tips
- Reduced capacity rotors

- Zero speed switches
- Motor mounting brackets
- Closed end rotors with or without replaceable tips
- Shaft air purge

SAFETY NOTICE SAFETY NOTICE Design Engineers • Technicians • Installers The inlet and outlet of the rotary valve must have proper attachments to prevent anyone from being able to insert their hands, or foreign objects, into the valve when in operation.

SECTION 1 **ROTARY VALVES** Type 5, Square Flange



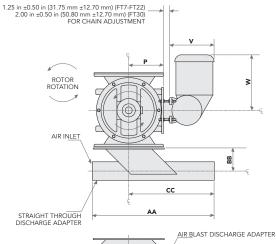
OSHA GUARD

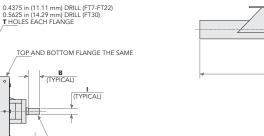
(SQUARE)

0.375 in (9.53 mm) 16 NC (FT9-FT22) 0.500 in (12.70 mm) 13 NC (FT30) **S** TAPPED HOLES EACH FLANGE

c

F (SQUARE) DD





DRIVE END HAS **R** KEYWAY THIS END NOT KEYED



EE

сс

Feeder Dimensions (Type 5)								
	FT9	FT12						
А	4-3/4	6-1/2						
В	1-3/4	2-1/4						
С	5-1/4	6-1/2						
D	3/4	1						
E	8	10						
F	12	15						
G	21-3/8	28-1/8						
Н	10-11/16	14-1/16						
I	1	1-1/2						
J	1	1-1/4						
К	2-1/2	4						
L	4-1/4	6-1/4						
М	12-1/2	15-3/4						
N	4-15/16	7-7/8						

	FT9	FT12						
Р	6-1/4	7-1/2						
Q	0	0						
R	1/8x1/4	1/8x1/4						
S	2	2						
Т	6	6						
U	3/8-16	3/8-16						
Y	9/16	9/16						
Net Cubic F	eet Dispersed Pe	er Revolution						
	FT9	FT12						
Open End Rotor	0.27	0.75						
Shipping	Shipping Weight With Motor (lbs.)							
	FT9	FT12						
	225	340						

Feeder Dimensions (Type 5)

*Not included in the Pneu-Service Center's Quick Ship program.

For Electric Motor Dimensions, contact The Service Center.

 SAFETY NOTICE
 Design Engineers • Technicians • Installers
 SAFETY NOTICE

 The inlet and outlet of the rotary valve must have proper attachments to prevent anyone from being able to insert their hands, or foreign objects, into the valve when in operation.
 Prevent anyone from being able to insert their hands, or foreign objects, into the valve when in operation.

For Ordering and Pricing Information, Call Toll Free 1.800.748.7000

SECTION 1 **ROTARY VALVES** Type 6, Square Flange

PRODUCT DESCRIPTION

The Smoot Type 6 rotary value is constructed to withstand the most abrasive of materials. The housing is constructed with rugged NiHard steel, a closed end rotor constructed of A36 carbon steel, and Stellite on wear surfaces. The Type 6 is designed to perform with the toughest of materials.

PRODUCT FEATURES

- Super abrasion-resistant design
- Cylinder constructed of cast NiHard
- Closed end rotor constructed of carbon steel with Stellite on wear surfaces
- Outboard bearings graphite rope packing
- Chain and sprocket drive with guard

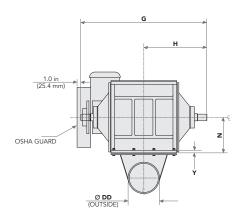


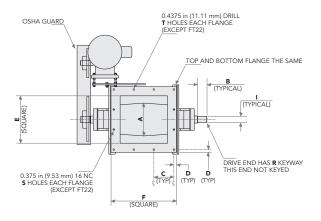
OPTIONS

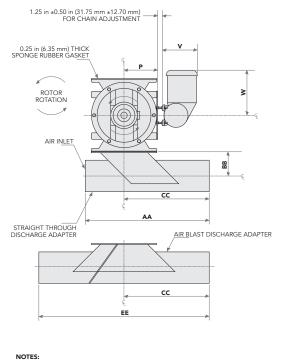
- High temperature modifications
- Shaft air purge
- Teflon rotor coatings
- Reduced capacity rotors

- Zero speed switches
- Sand blast preparation and custom paint
- Motor mounting brackets
- Low pressure cavity air purge

SECTION 1 **ROTARY VALVES** Type 6, Square Flange







1. FT22 TYPE 6 FEEDERS ARE SUPPLIED WITHOUT BOLT HOLES IN THE TOP AND BOTTOM FLANGES. (16) SMOOT MANUFACTURED CLAMPS ARE SUPPLIED WITH EACH FT22 TYPE 6 FEEDER AND ARE USED AT TIME OF INSTALLATION.

2. FT12 AND 16 TYPE 6 FEEDERS ARE SUPPLIED WITH CAST IRON ENDPLATES. FT22 TYPE 6 IS SUPPLIED WITH FABRICATED CARBON STEEL ENDPLATES.

Feeder Dimensions (Type 6)										
FT12 FT16 FT22										
А	6-1/2	9	11-3/4							
В	2-1/2	2-1/2	3-3/16							
С	6-1/2	5-1/2	_							
D	1	3/4	_							
E	10	13	16							
F	15	18	22							
G	31-1/2	34-5/8	40-11/16							
н	15-3/4	7-5/16	20-11/32							
I	1-5/8	1-3/4	2-7/16							
М	15-3/4	19-5/8	26							

Feeder Dimensions (Type 6)									
	FT12	FT16	FT22						
N	7-7/8	9-13/16	13						
Р	9-1/2	11-1/4	13-3/8						
R	3/16 x 3/8	3/16 x 3/8	5/16 x 5/8						
S	2	4	—						
Т	6	8	_						
Y	5/8	3/4	1						
Net C	ubic Feet Disp	ersed Per Revo	olution						
Closed End Rotor	0.70	1.60	3.95						
Ship	ping Weight W	/ith Motor (pou	ınds)						
Weight	374	858	1540						

For Electric Motor Dimensions, contact The Service Center.

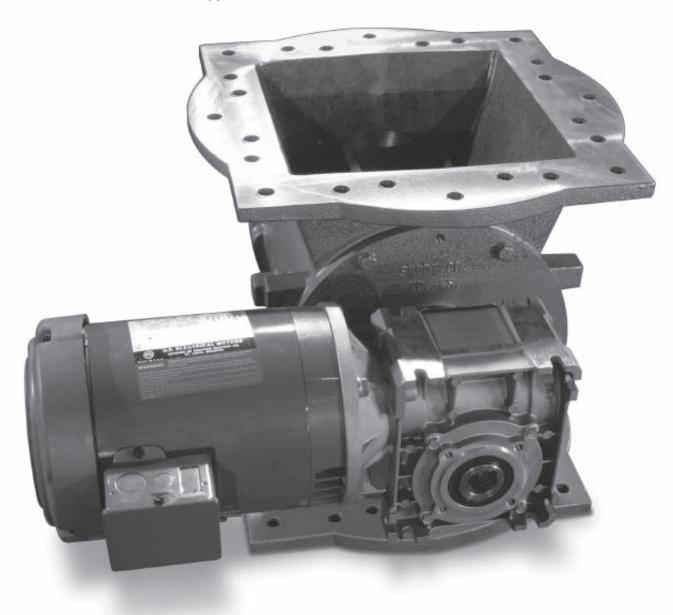
SECTION 1 ROTARY VALVES DC Series

PRODUCT DESCRIPTION

The new DC Series have been completely redesigned to provide more efficient and economical solutions for all dust collection applications.

PRODUCT FEATURES

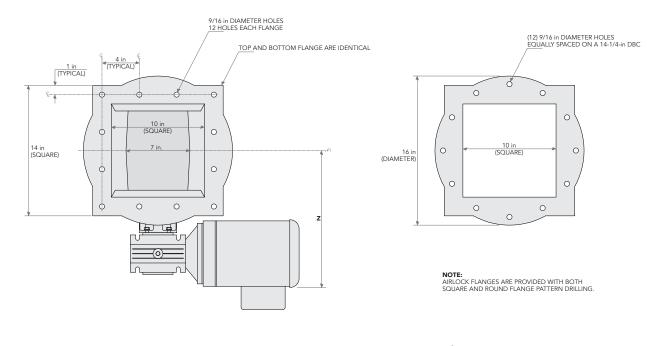
- New seal with integrated bearings for easy replacement
- Direct drive
- Affordable solution for dust collection applications

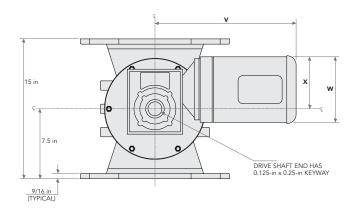


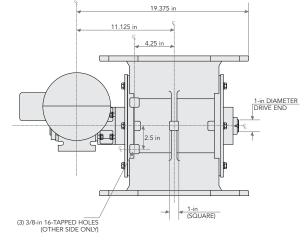
OPTIONS

- Relieved tips
- Urethane wipe tips

SECTION 1 **ROTARY VALVES** DC Series







	Motor Dimensions (DC Series)							
	v	w	Х	Z				
TEFC	15-5/16	7-9/32	5-7/32	14-3/16				
Expl. Proof	14-7/16	7-3/4	5-11/32	14-9/16				

SECTION 1 ROTARY VALVES WFI 394

PRODUCT DESCRIPTION

The WFI 394 was originally designed to be used on the discharge of Wheelabrator bag houses. This success is now seen on the discharge of all brand bag houses.

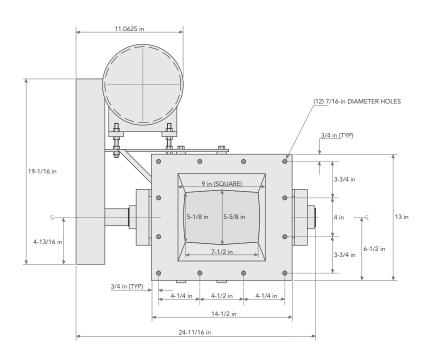
PRODUCT FEATURES

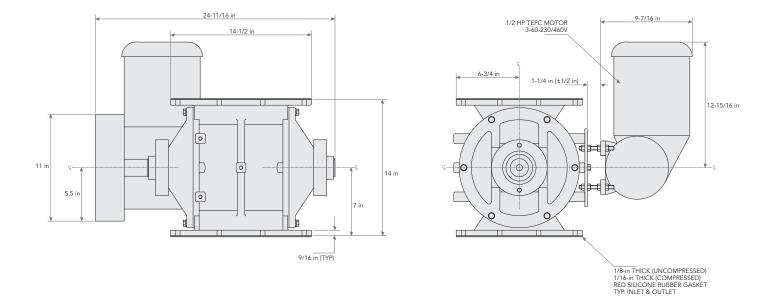
- Valve is available in two temperature ratings: <250°F or <650°F
- Chain drive
- Economical solution for dust collection applications
- Breakaway rotor sprocket to prevent motor damage



SAFETY NOTICE Design Engineers • Technicians • Installers SAFETY NOTICE The inlet and outlet of the rotary valve must have proper attachments to prevent anyone from being able to insert their hands, or foreign objects, into the valve when in operation.

SECTION 1 ROTARY VALVES WFI 394



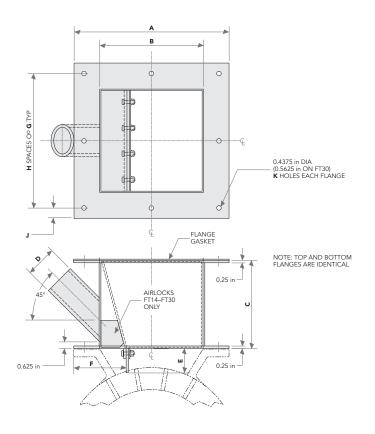


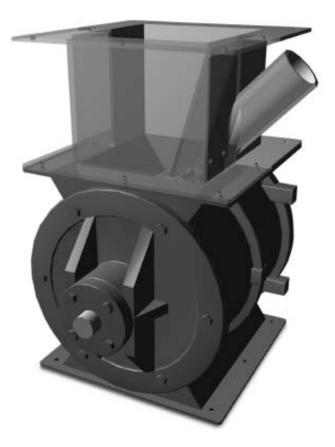
For Electric Motor Dimensions, contact The Pneu-Service Center.

SECTION 1 **ROTARY VALVES** Accessories – Vented Inlet Adapter

PRODUCT FEATURES

- For venting rotary valve "blow-by" air
- Compact vertical design
- With internal baffle and wiper kit
- Robust, heavy-duty stainless steel or carbon steel construction

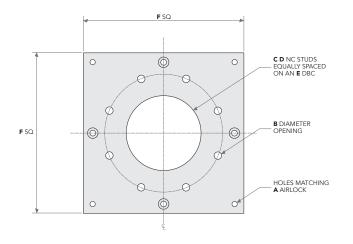


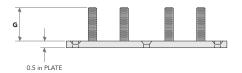


	Vented Inlet Adapter (VIA) Dimensions (inches)											
ROTARY VALVE FEEDER SIZE	A	в	с	D	E	F	G	н	J	к		
FT7	11	6	8-1/2	3 OD	1-15/16	4-1/8	4-3/4	2	3/4	8		
FT9	12	8	8-1/2	3 OD	2-1/4	4-3/8	5-1/4	2	3/4	8		
FT11	13	9	8-1/2	3 OD	2-1/2	4-1/4	5-3/4	2	3/4	8		
FT12	15	10	8-1/2	3 OD	2-5/8	5-1/16	6-1/2	2	1	8		
FT14	17	12	8-1/2	3 OD	2-5/8	5-3/4	5-1/4	3	5/8	12		
FT16	18	13	8-1/2	3 OD	2-11/16	5-3/4	5-1/2	3	3/4	12		
FT18	20	15	10	4 OD	3	6	6	3	1	12		
FT22	22	16	10	4 OD	2-13/16	7-1/4	5	4	1	16		
FT30	31	23	10	4 OD	5-1/8	9-1/8	7	4	1-1/2	16		

 SAFETY NOTICE
 Design Engineers • Technicians • Installers
 SAFETY NOTICE

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PRODUCT DESCRIPTION

The purpose of the Smoot Rotary Valve Flat Plate Adapter is to be able to mount a rotary valve to existing equipment with standard Class 150 pipe flange mounting dimensions.

PRODUCT FEATURES

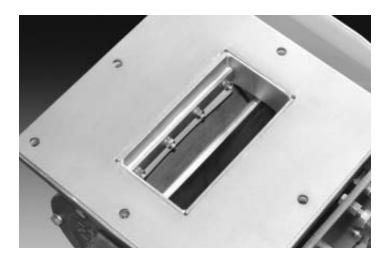
- Enables the rotary valve to be mounted to existing equipment
- Available in Class 150 or 1/2-inch plate flange mounting dimensions
- Constructed of 304 stainless or carbon steel

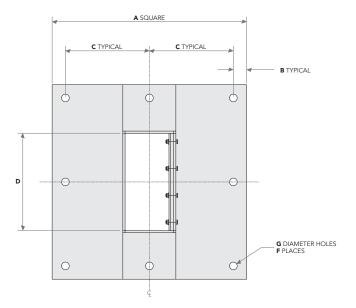
	Rotary Valve Flat Plate Adapter Dimensions (inches)										
ROTARY VALVE FEEDER SIZE	CLASS 150 FLANGE	B ¹	с	D	E	F	G(1) for Class 150 Thick Flanges	G(2) for 0.25-inch Thick Flanges			
FT7	5-inch pipe	5-1/16	8	10 x 3/4	8-1/2	11	2-1/4	1-3/4			
F17	6-inch pipe	6-1/16	8	10 x 3/4	9-1/2	11	2-1/4	1-3/4			
FT9	6-inch pipe	6-1/16	8	10 x 3/4	9-1/2	12	2-1/4	1-3/4			
F19	8-inch pipe	8	8	10 x 3/4	11-3/4	12-3/4 ²	2-1/4	1-3/4			
FT11	6-inch pipe	6-1/16	8	10 x 3/4	9-1/2	13	2-1/4	1-3/4			
FIII	8-inch pipe	8	8	10 x 3/4	11-3/4	13	2-1/4	1-3/4			
FT12	8-inch pipe	8	8	10 x 3/4	11-3/4	15	2-1/4	1-3/4			
FIIZ	10-inch pipe	10	12	9 x 7/8	14-1/4	15-3/4 ²	2-5/8	2			
FT14	10-inch pipe	10	12	9 x 7/8	14-1/4	17	2-5/8	2			
F114	12-inch pipe	12	12	9 x 7/8	17	18-3/4 ²	2-5/8	2			
FT16	10-inch pipe	10	12	9 x 7/8	14-1/4	18	2-5/8	2			
FIIO	12-inch pipe	12	12	9 x 7/8	17	18-1/2 ²	2-5/8	2			
FT10	12-inch pipe	12	12	9 x 7/8	17	20	2-5/8	2			
FT18	14-inch pipe	13-1/4	12	8 x 1	18-3/4	20-1/2 ²	2-3/4	2			
ET 22	14-inch pipe	13-1/4	12	8 x 1	18-3/4	22	2-3/4	2			
FT22	16-inch pipe	15-1/4	16	8 x 1	21-1/4	23	2-3/4	2			
FT20	18-inch pipe	17-1/4	16	7 x 1-1/8	22-3/4	31	3-1/4	2-1/4			
FT30	20-inch pipe	19-1/4	20	7 x 1-1/8	25	31	3-1/4	2-1/4			

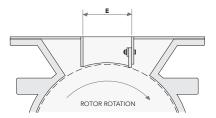
¹Opening is based on the I.D. of Sch40 pipe for 5-inch through 10-inch and of standard weight pipe on 12-inch through 20-inch.

²These flanges are slightly larger than the rotary valve flange to accomodate a larger Class 150 flange.

- Prevents product shear (between rotor tip and housing)
- Constructed of 304 stainless or carbon steel







Non-Adjustable Flow Pellet Valve Dimensions (inches)									
ROTARY VALVE FEEDER SIZE	A	В	с	D	E	F	G		
FT7	11	3/4	4-3/4	5-1/2	2-3/4	8	7/16		
FT9	12	3/4	5-1/4	7-1/4	3-3/4	8	7/16		
FT11	13	3/4	5-3/4	8	4-3/4	8	7/16		
FT12	15	1	6-1/2	9	4-3/4	8	7/16		
FT14	17	5/8	5-1/4	11	5-3/4	12	7/16		
FT16	18	3/4	5-1/2	11-3/4	7-3/4	12	7/16		
FT18	20	1	6	13-3/4	8-3/4	12	7/16		
FT22	22	1	5	14-3/4	9-3/4	16	7/16		
FT30	31	1-1/2	7	20-1/2	14	16	9/16		

 SAFETY NOTICE
 Design Engineers • Technicians • Installers
 SAFETY NOTICE

 The inlet and outlet of the rotary valve must have proper attachments to prevent anyone from being able to insert their hands, or foreign objects, into the valve when in operation.

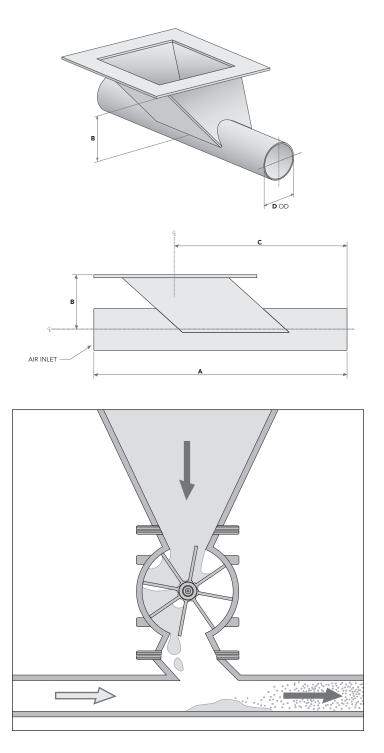
	Discharge Adapter (Straight Thru) Dimensions (inches)										
D	FT7				FT9			FT11			
(OD)	Α	В	С	A	В	С	Α	В	С		
1-1/2 pipe	19-7/8	4-1/4	13-3/4	—	_	—	—	_	—		
2 tube	20-3/8	4	13-1/2	22-3/8	5-1/2	16-1/4	23-3/8	6-3/8	17-3/4		
2-3/8 pipe	20-3/4	3-3/4	13-1/2	22-3/4	5-1/2	16-1/8	23-3/4	6-3/8	17-1/2		
3 tube	21-3/8	3-5/8	14-1/8	23-3/8	4-1/2	15-3/4	24-3/8	5-3/8	17-1/4		
3-1/2 pipe	21-7/8	4-1/8	14-7/8	23-7/8	4-1/2	15-3/4	24-7/8	5-3/8	17		
4 tube	22-3/8	4-1/8	15	24-3/8	4-1/4	16-1/4	25-3/8	4-3/8	16-3/4		
4-1/2 pipe	22-7/8	4-1/2	15-5/8	24-7/8	4-3/8	16-5/8	25-7/8	4-3/8	17-1/4		
5 tube	23-3/8	4-3/4	16-1/4	25-3/8	4-3/4	17-1/4	26-3/8	4-5/8	17-3/4		
5-9/16 pipe	23-7/8	5-3/8	17-1/8	25-7/8	5-1/4	18	27	4-7/8	18-1/4		
6 tube	24-3/8	5-3/4	17-3/4	26-3/8	5-3/8	18-3/8	27-3/8	5-1/8	18-3/4		
6-5/8 pipe	—	_	_	27	5-3/8	18-5/8	28	5-1/2	19-3/8		
8 tube	—	—	—	20-3/8	5-3/4	19-3/4	29-3/8	6-1/8	20-3/4		
8-5/8 pipe	—	—	—	—	—	—	30	6-1/2	21-3/8		

	Discharge Adapter (Straight Thru) Dimensions (inches)										
D		FT12			FT14			FT16			
(OD)	Α	В	С	Α	В	С	Α	В	С		
3 tube	25-3/8	6-1/2	18-5/8	27-3/8	8	21-3/8	—	_	-		
3-1/2 pipe	25-7/8	6-1/4	18-3/8	27-7/8	8	21-1/8	—	_	-		
4 tube	26-3/8	5-1/2	18-1/8	28-3/8	7	20-7/8	29-3/8	7-7/8	22-1/8		
4-1/2 pipe	26-7/8	5-1/4	17-7/8	28-7/8	7	20-5/8	29-7/8	7-7/8	21-7/8		
5 tube	27-3/8	4-5/8	18-1/4	29-3/8	6	20-3/8	30-3/8	6-7/8	21-5/8		
5-9/16 pipe	28	4-7/8	18-3/4	30	6	20	30-7/8	6-7/8	21-1/4		
6 tube	28-3/8	5-1/4	19-1/4	30-3/8	5-1/8	20-1/4	31-3/8	5-7/8	21-1/8		
6-5/8 pipe	29	5-1/2	19-7/8	31	5-1/2	20-3/4	32	5-5/8	21-3/8		
8 tube	30-3/8	6-1/8	21-1/4	32-3/8	6-1/8	22-1/4	33-3/8	6-3/8	22-3/4		
8-5/8 pipe	31	6-1/2	21-7/8	33	6-1/2	22-7/8	34	6-5/8	23-3/8		
10 tube	—	_	-	34-3/8	7-1/8	24-1/4	35-3/8	7-1/4	24-3/4		
10-3/4 pipe	—	_	—	35-1/8	7-1/2	25	36	7-5/8	25-1/2		
12 tube	—	_	-	—	—	-	37-3/8	8-7/8	27-1/4		
12-3/4 pipe	—	—	—	—	—	—	38	8-1/4	27		

	Discharge Adapter (Straight Thru) Dimensions (inches)										
D		FT18			FT22			FT30			
(OD)	Α	В	С	Α	В	С	Α	В	С		
4-1/2 pipe	32	9-9/16	24-3/4	33	10-3/8	27-11/16	—	_	—		
5 tube	32-1/2	8-3/4	24-1/2	33-3/8	9-1/2	25-3/4	48	15	35		
5-9/16 pipe	33-1/4	8-9/16	24-1/4	33-7/8	9-7/16	25-3/8	_	—	- 1		
6 tube	33-1/2	7-3/4	24	34-3/8	8-1/2	25-1/4	48	14-3/4	34		
6-5/8 pipe	33-5/8	7-9/16	23-5/8	35	8-7/16	24-7/8	48	14-1/2	34		
8 tube	33-5/8	6	23-3/4	36-3/8	6-5/8	24-1/4	48	12-3/4	32-7/16		
8-5/8 pipe	36-3/16	6-3/8	24-7/16	37	6-9/16	24-7/8	48	12-1/2	32-7/16		
10 tube	37-1/2	7	25-3/4	39-3/8	7-3/8	26-3/8	48	10-3/4	31-1/8		
10-3/4 pipe	38-1/4	7-3/8	26-1/2	39	7-3/4	27-1/8	48	10-1/2	31-1/8		
12 tube	39-1/2	8	27-3/4	40-3/8	8-3/8	28-1/4	48	8-3/4	30-11/16		
12-3/4 pipe	40-1/4	8-3/8	28-1/2	41	8-1/2	28-7/8	48	8-1/2	30-15/16		

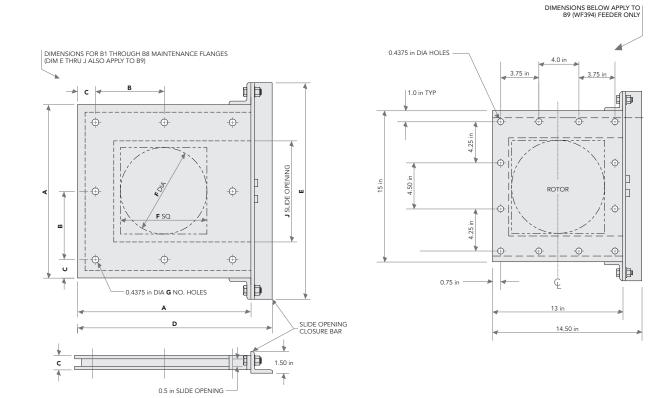
PRODUCT FEATURES

- Constructed of aluminum, carbon steel, or stainless steel
- Straight Thru design effectively directs material away from rotor pocket



SAFETY NOTICE Design Engineers • Technicians • Installers SAFETY NOTICE The inlet and outlet of the rotary valve must have proper attachments to prevent anyone from being able to insert their hands, or foreign objects, into the valve when in operation.

- Enables the stopping of material flow so downstream equipment can be removed
- Constructed of aluminum, carbon steel, or 304 stainless steel

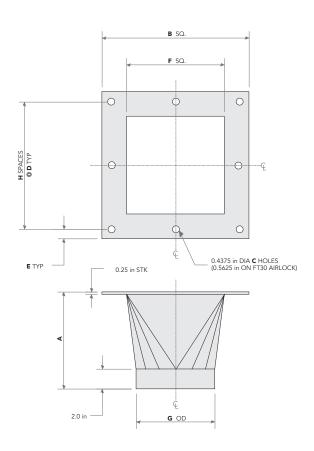


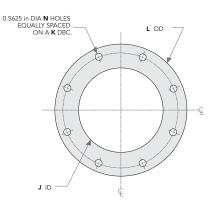
Maintenance Flange (Gate) Dimensions (inches)										
ROTARY VALVE FEEDER SIZE	н	J								
FT7	12	4-3/4	1-1/4	13-1/2	15	6	8	1	7	
FT9	13	5-1/4	1-1/4	14-1/2	16	8	8	1	9	
FT11	14	5-3/4	1-1/4	15-1/2	17	9	8	1	10	
FT12	16	6-1/2	1-1/2	17-1/2	19	10	8	1	11	
FT14	18	5-1/4	1-1/8	19-1/2	21	12	12	1	13	
FT16	19	5-1/2	1-1/4	20-1/2	22	13	12	1	14	
FT18	21	6	1-1/2	22-1/2	24	15	12	1	16	
FT22	23	5	1-1/2	24-1/2	26	16	16	1	17	
FT30	31	7	1-1/2	32-1/2	34	23	16	1	24-1/2	

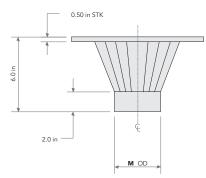
 SAFETY NOTICE
 Design Engineers • Technicians • Installers
 SAFETY NOTICE

 The inlet and outlet of the rotary valve must have proper attachments to prevent anyone from being able to insert their hands, or foreign objects, into the valve when in operation.

- Available in round ANSI Class 150 pipe flange dimensions with 9/16-inch bolting or standard ANSI hole diameter
- Available in rotary valve square flange dimensions
- Constructed of carbon steel, stainless steel or aluminum
- Available in customer specified lengths



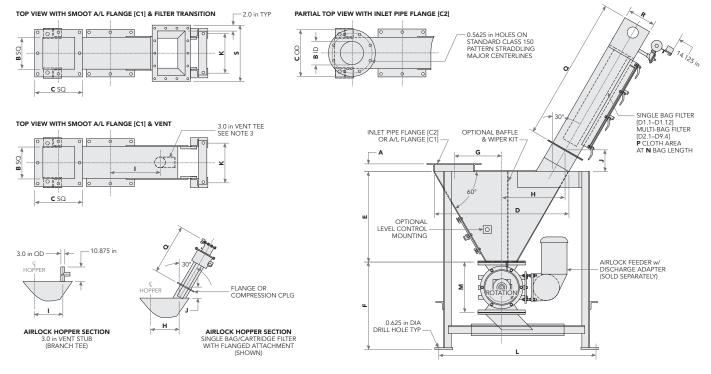




	Rotary Valve Flange											
SIZE	Α	В	С	D	E	F	G	н				
FT7	6	11	8	4-3/4	3/4	6	6,5,4	2				
FT9	7-3/4	12	8	5-1/4	3/4	8	8,6,5	2				
FT11	8-1/8	13	8	5-3/4	3/4	9	10,8,6	2				
FT12	9-1/8	15	8	6-1/2	1	10	10,8,6	2				
FT14	10	17	12	5-1/4	5/8	12	12,10,8	3				
FT16	9-1/2	18	12	5-1/2	3/4	13	14,12,10	3				
FT18	10	20	12	6	1	15	16,14,12	3				
FT22	11-1/2	22	16	5	1	16	16,14,12	4				
FT30	14-3/4	31	16	7	1-1/2	23	24,20,18	4				

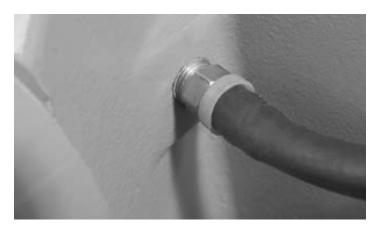
Round Flange							
SIZE	J	к	L	м	N		
6-in ASA	6	9-1/2	11	5,4	8		
8-in ASA	8	11-3/4	13-1/2	6,5	8		
10-in ASA	10	14-1/4	16	8,6	12		
12-in ASA	12	17	19	10,8	12		
14-in ASA	14	18-3/4	21	12,10	12		
16-in ASA	16	21-1/4	23-1/2	14,12	16		
18-in ASA	18	22-3/4	25	16,14	16		
20-in ASA	20	25	27-1/2	18,16	20		
24-in ASA	24	29-1/2	32	20,18	20		

- Constructed of aluminum, carbon steel or 304 stainless steel
- Isolated chamber vents rotary feeder "blow-by" air away from product feed, and prevents material bridging
- Dust laden "blow-by" air can be evacuated by existing dust collection systems, sock type filter, or stand alone reverse pulse jet unit
- May be used with one (1) or two (2) rotary valevs



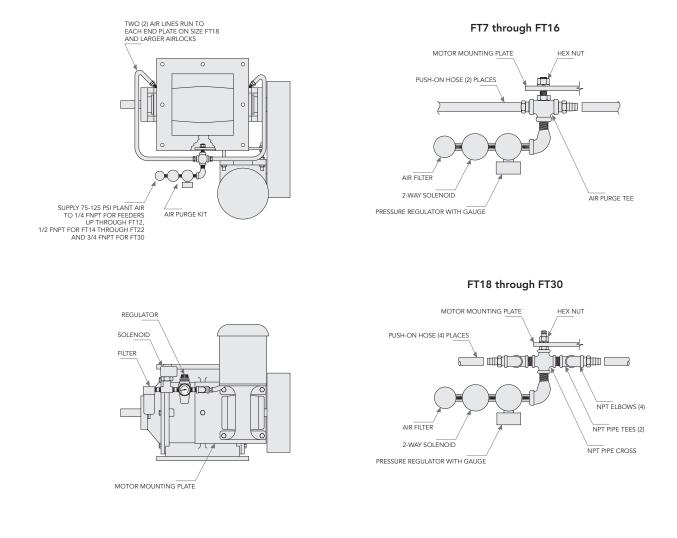
Rotary Valve Feeder Inlet Hopper Dimensions (inches)																												
ROTARY		INLET FLANGES										G																
VALVE	NUMBER OF BAGS		Pipe F	lange		Smoo	t A/L F	lange	D	E	F	A/L	Pipe	н	I	J	к	L	м									
FEEDER SIZE		SIZE	A	В	С	Α	В	С				Flange	Flange															
FT7	1	5	3-9/16	5	10	2-1/2	6-1/4	11-1/4	24-1/2	16-1/8	19	9-1/4	8-1/4	11-1/2	9	7-5/16	8-1/4	34-5/8	9-7/8									
FT9	1	6	3-11/16	6	11	2	8-1/4	12-1/4	34	23	22	13-1/4	12	16-1/4	7-1/4	7-5/16	10-1/4	40-3/8	12-1/2									
FT11	1	8	3-7/8	8	13-1/2	2	9-1/4	13-1/4	38-7/16	26	25	14-3/4	13-1/4	18-1/2	8-1/4	7-5/16	11-1/4	44-1/4	14-5/8									
	1									25	28	11-3/4		18-1/2		7-5/16												
FT12	2	8	3-7/8	8	13-1/2	2-1/2	2 10-1/4	4 15-1/4	1 38-1/2				4 13-1/4	17-9/16	7-1/4	7-1/16	12-1/4 44	44-3/4	15-3/4									
	3]												17-1/2	13-1	13-1/16												
	2													18-5/8		5-1/2												
FT14	3	10	10	10 4	4-1/16	10	16	2-1/2	12-1/4	17-1/4	42-5/16	26-3/8	31-7/8	15-3/16	14-3/16	20-1/4	6-15/16	11-9/16	14-1/4	46-3/4	17-5/8							
	4													16		7												
	2																						18-3/8		4-3/4			
FT16	3	12	4-5/16	12	19	2-1/2	13-1/4	18-1/4	42-11/16	26	35-1/2	12-3/8	14-3/8	20-15/16	6-1/4	10-3/4	16-1/4	53-5/8	19-5/8									
	4													15-3/4		6-1/4												
	3													22-1/4		9-5/16												
FT18	4 14	4 14	4 14	14	4-3/8	14	21	2-1/2	15-1/4	20-1/4	45-1/4	26-3/16	41-5/16	15-1/8	14-5/8		5-11/32			57-1/4	21-3/4							
	6													19-5/8		10-13/16												
FT22	4	16	4-9/16	16	23-1/2	3	16-1/4	22-1/4	46-1/2	26-7/16	43-9/16	14-5/8	14-1/4	18-1/16	5	7	19-1/4	59-1/2	25-7/8									
	6													19-1/16		10-1/16												
FT30	6	20	5	20	27-1/2	4	23-1/4	31-1/4	56-15/16	29-3/8	65-1/2	17	17-1/2	23-5/16	3	7	27-1/4	76-1/4	37									
1100	9		Ľ	20					00 10/10	_, 0,0	55 172		., ., _	19-7/8	Ŭ	9			<i><i>,</i></i>									

SECTION 1 **ROTARY VALVES** Accessories – Shaft Air Purge



PRODUCT DESCRIPTION

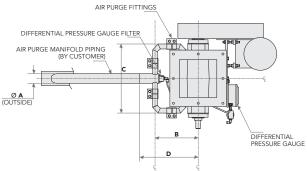
Shaft Air Purge uses high pressure plant air to prevent the material from coming in contact with the shaft seals, which extends the life of the rotary valve. Considered to be beneficial in almost all applications.

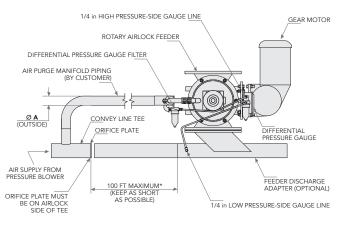


PRODUCT DESCRIPTION

This Smoot Patented design uses low pressure air from the convey blower, and purges the material from the cavity between the closed end shroud and housing end plates. This process dramatically reduces abrasion on the rotor, cylinder, and endplates.







*CONSULT SMOOT IF DIMENSION REQUIREMENTS ARE GREATER HAN 100 FEET

SAFETY NOTICE	Design Engineers • Technicians • Installers	SAFETY NOTICE
The inlet and outlet of the rotary valve must have proper attach	ments to prevent anyone from being able to insert their ha	ands, or foreign objects, into the valve when in operation.

Low Pressure Cavity Air Purge (dimensions in inches)								
FEEDER SIZE	A AIR PURGE LINE SIZE	В	с	D				
FT9	2-in tube	8-3/8	14-3/4	13-3/8				
FT11	2-in tube	10-1/2	20	15-3/4				
FT12	3-in tube	10-3/8	22-3/4	18-7/8				
FT14	3-in tube	11-1/8	23-1/4	21-3/8				
FT16	3-in tube	11-1/8	25-3/4	21-7/8				
FT18	3-in tube	18-3/4	30-11/16	24-7/16				
FT22	4-in tube	20-9/16	32-7/8	27-3/4				

SECTION 2 VALVES TABLE OF CONTENTS

SECTION 2 – Valves

V	Al	v	ES

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Three-Position Slide Diverter Valves	S2-4
Butterfly Valves	S2-5
Knife Gate Valves	S2-6







SECTION 2 VALVES Gravity Diverter Valve

PRODUCT DESCRIPTION

The Gravity Diverter Valve is designed to divert material to one of two destinations while in a gravity fall. The valve has a rectangular fabricated design and is rated for only 20-inch WC differential pressure.

PRODUCT FEATURES

- Internal edges have been eliminated
- 4-inch to 30-inch sizes in carbon steel or stainless steel
- Available with double acting air cylinder or manual lever
- Clean-in-place panel
- Polymer shaft seal
- Comes in two-way or three-way valves
- Removable access door for replacing vane or seal without removal of valve
- Tool-less knob option available
- Square-to-round transitions available



SECTION 2 VALVES Hopper-Top Diverter Valves – Series II

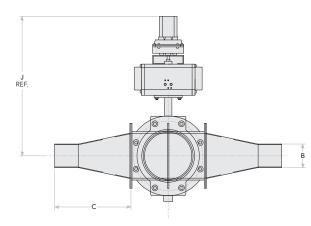


PRODUCT DESCRIPTION

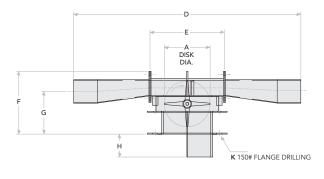
The Hopper-Top Diverter Valve Series II is used to divert material from the convey line into a scale hopper or bin, while simultaneously allowing the conveying air to continue to be vented down the convey line. The unique transition design makes use of an 8-inch, resilient seated butterfly valve for diverting or bypassing the selected bin without leakage from the convey line while maintaining a minimal stack up height.

PRODUCT FEATURES

- Carbon steel or stainless steel housing contruction
- NEMA 4, 4X, or 7/9
- Disk available in nickel-plated ductile iron, aluminum/bronze disk with stainless-steel shaft, or 316 stainless steel disk and shaft
- Valve body available in cast iron, aluminum/bronze, or 304 stainless steel
- Seat construction available in EPDM food-grade, white buna-n food-grade, or viton GF
- Most types of limit switches are available
- Valve alignment holes conform to 125-150# ASA pipe flange
- Minimum 80 PSI plant air required



PLAN VIEW



ELEVATION VIEW

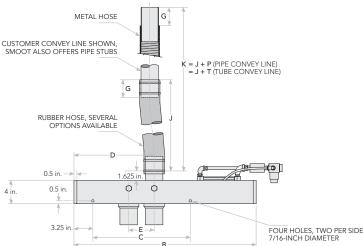
	Hopper-Top Diverter Valve — Series II Dimensions (inches)											
CONVEY LINE SIZE	A	В	с	D	E	F	G	н	J	к		
2T	8	2	12-15/16	38-7/16	12-5/8	10-5/8	8-1/4	3-7/8	23-5/8	8		
2P	8	2-3/8	12-15/16	38-7/16	12-5/8	10-5/8	8-1/8	3-7/8	23-5/8	8		
3T	8	3	12-15/16	38-7/16	12-5/8	10-5/8	7-3/4	3-7/8	23-5/8	8		
3P	8	3-1/2	12-15/16	38-7/16	12-5/8	10-5/8	7-9/16	3-7/8	23-5/8	8		
4T	8	4	12-15/16	38-7/16	12-5/8	10-5/8	7-1/4	3-7/8	23-5/8	8		
4P	8	4-1/2	12-15/16	38-7/16	12-5/8	10-5/8	7	3-7/8	23-5/8	8		
5T	10	5	11-1/2	38-7/16	15-7/16	11-3/4	7-7/8	3-7/8	25-15/16	10		
5P	10	5-9/16	11-1/2	38-7/16	15-7/16	11-3/4	7-3/4	3-7/8	25-15/16	10		
6T	12	6	9-5/16	38-7/16	19-3/4	13-15/16	9-5/8	7-1/8	28-1/2	12		
6P	12	6-5/8	9-5/16	38-7/16	19-3/4	13-15/16	9-3/16	7-1/8	28-1/2	12		

SECTION 2 VALVES Two-Position Slide Diverter Valves

PRODUCT DESCRIPTION

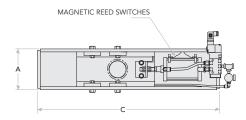
The Smoot valves are bi-directional and will divert or converge product in both pressure and vacuum systems. The valve is built to handle pellets, powders, granules and any product that can be conveyed pneumatically.





PRODUCT FEATURES

- Smoot patent #4157848
- 14° diversion angle for minimal pressure loss
- Air energized sealing rings
- Available in carbon steel or stainless steel product contact
- Dilute phase, standard or high temperature
- High pressure dense phase up to 100 psi
- Black or white FDA rubber and metal hose
- NEMA 1, NEMA 4, NEMA 7 or NEMA 9 limit switches and solenoids

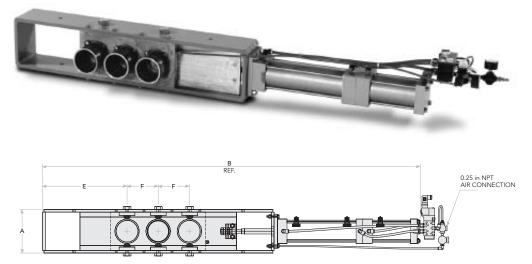


				Two-Po	sition Sl	ide Dive	erter Va	lve (SD\	/)				
CUSTOMER		Dimensions (inches)											WEIGHT
CONVEY LINE SIZE	А	В	с	D	E	F*	G	H*	J*	P*	T*	BORE	(pounds)
2-inch line	6	27-3/4	11-3/8	10-5/16	3-1/32	4	2-3/4	9-1/8	21	4	10	3	58
2.5-inch line	7	34-7/16	16-3/4	13-25/32	4-3/8	4	2-3/4	9-1/8	25	4	10	3-1/2	86
3-inch line	7	34-7/16	16-3/4	13-25/32	4-3/8	4	2-3/4	9-1/8	29	4	10	3-1/2	86
4-inch line	8	41-1/16	22-1/16	17-1/8	5-23/32	4-1/2	3-3/4	10-5/8	38	5	11	4	112
5-inch line	9	46-5/16	26-1/16	19-5/8	6-23/32	4-1/2	3-3/4	11-5/8	44	5	11	5	137
6-inch line	10	51-1/2	30-3/16	22-7/32	7-3/4	5-1/2	4-3/4	14-5/8	53	6	14	5	175
8-inch line	12	61-3/4	38-3/16	27-7/32	9-3/4	6-3/4	5-3/4	19-3/4	67	6	14	6	215
10-inch line	14-1/2	73-1/2	46-11/16	32-29/32	11-7/8	7	5-3/4	20	82	7	17	6	255
12-inch line	16-1/2	82-1/8	54-11/16	37-9/32	13-7/8	7	5-3/4	20-1/8	96	7	17	7	275

SECTION 2 VALVES Three-Position Slide Diverter Valves

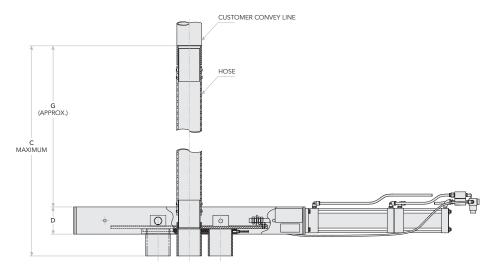
PRODUCT DESCRIPTION

This patented Smoot valve is legendary for its reliability. It features a unique sealing method using regulated compressed air applied to the sealing rings which results in an airtight seal between the inlet and outlet ports.



PRODUCT FEATURES

- Unique model design features minimal line deflection and full port flow for low pressure drop
- Pipe or tube sizes 2 in. through 6 in. available
- Bi-directional (Divert or Converge)
- Air tight / dust tight
- Pressure or Vacuum
 Applications
- Carbon steel (standard) or stainless steel product contact points



		Three		Slide Diver ensions (inc	ter Valve (ches)	(SDV)					
CUSTOMER							G				
CONVEY LINE SIZE	A	В	с	D	E	F	RUBBER HOSE	METAL HOSE (PIPE)	METAL HOSE (TUBE)		
2-inch line	6	42-3/4	46	5	8-13/16	3-1/32	28	32	38		
3-inch line	7	55-3/4	54	5	12-1/8	4-5/8	36	40	46		
4-inch line	8	69-5/16	68	5	15-1/2	5-23/32	48	53	59		
5-inch line	9	79-5/16	76	5	18	6-23/32	56	61	67		
6-inch line	10	90-5/16	91	6	20-5/8	7-3/4	66	72	80		

SECTION 2 VALVES Butterfly Valves

PRODUCT DESCRIPTION

Butterfly Valves are designed to control a material or airflow in pneumatic or gravity flow convey lines. The casting is spherically machined to provide a bubble-tight shut off with minimum torque thus increasing seat life.

PRODUCT FEATURES

- Cast Ductile Iron and Stainless Steel bodies are manufactured for most applications. They are available in both wafer and lug style designs. Standard design allows most butterfly valves to sandwich mount between two ANSI 150lb flange patterns of their respective size.
- Stems are heavy duty, two-piece design for easy maintenance. Pins retain stem in body at all times allowing removal of handle or actuator while under full line pressure.
- Elastomer—reinforced with phenolic backing ring—enables valve to be used on pressure or vacuum service. Seat can be field replaced. This special double seal design eliminates the need for flange gaskets.
- The primary stem seal is backed up by three stem-seal O-rings molded into seat liner.
- Disc is streamlined for maximum flow and minimum seat wear. The elimination of bolts, pins, etc., as stem connectors results in ease of assembly and less maintenance.
- Two bronze or Teflon[®] bushings are standard on 2" to 12". Sizes above 12" have full length bushing on upper and lower stems.
- Rectangular drive ensures proper stem-to-disc assembly; no pins or bolts are exposed to flow.
- A unique patented lip—integral to the body—prevents the liner from moving down stream, eliminating seat and flange leakage. This allows the lug valve to be used in dead-end service applications at full rated pressure without the use of downstream flange.
- High-temperature and rough-duty valves also are available upon request.

ACTUATOR AND ACCESSORIES AVAILABLE

- Manual Valves available with 10-Position locking lever handle or hand wheel operation.
- Automated valves available with pneumatic, electric or hydraulic actuators.
- Limit Switches and Solenoid Valves
- Beacon/Position indicator standard on most pneumatic actuated models
- All electrical components meet or exceed NEMA and IP Specifications as requested.
- Fail safe models
- Positioner models can include infinite variable style and/or vacuum modulation controls.
- Speed Controls available
- Manual Over Ride can be installed on automated valves.
- Compact designs assist in new application installations
- Smoot offers a wide variety of manufacturers and sizes to meet most application requirements.





SECTION 2 VALVES Knife Gate Valves

PRODUCT DESCRIPTION

The knife gate is designed to control a material flow in pneumatic, hydraulic, and gravity flow convey lines. Their robust design was originally designed for slurry system control in the pulp and paper industries. The shearing action of these gates will cut through most solids and columns of material when handling bulk solids, while cleaning the seat as it closes. When 100% open the knife will recess allowing product to flow freely.





PRODUCT FEATURES

- Gates are available in sizes from 2 inches to 48 inches in diameter.
- CF8 (304SS), CF8M (316SS) and cast-iron body valves available.
- Designed for mounting between ANSI 150-lb flange pattern.
- Gate knife material is available in stainless steel AISI 304 and 316.
- Metal, EPDM, Viton and PTFE seats are available to handle most process requirements.
- Standard valves are supplied with a hand-wheel for manual operation.
- Optional manual operators include lever, bevel gear and chain wheels.
- Controlled automation actuators include pneumatic, electric and hydraulic.
- Control solenoid and limit switches available when required.
- Pre-plumbed and wired to a central terminal box ready for installation upon request.
- Special valve construction and configurations are available upon request.

Smoot offers Knife Gate Valves in a wide variety of sizes and brands. Call for pricing and availability.

SECTION 3 FILTER & BAG HOUSE COMPONENTS TABLE OF CONTENTS

SECTION 3 – Filter & Bag House Components

S

Square Filters	
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Bags & Cages	3-5
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For Ordering and Pricing Information, Call Toll Free 1.800.748.7000

PRODUCT DESCRIPTION

The standard configuration is for a Style II high-pressure pulsejet filter using 16 oz/yd² felted Dacron Polyester filter bags designed to be removed from the bottom of the tube sheet. The unit will have:

- Compressed air header
- Rated for 17-inch W.C.
- Mineral reinforced nylon bag cups and venturiis
- Stainless steel bag clamps
- Diaphragm valves pre-plumbed to solenoids
- Smart timer board with built-in LED readout, switch & 4-20 mA output capability of differential
- pressure readingsNEMA 4 solenoid valves standard
- Timer and solenoids mounted in a NEMA 4 enclosures
- 1 ea. hinged side access door
- Filter bag catch grate
- Materials of construction: carbon steel (standard)

When using Filter Elements instead of bags, elements are 8 oz/yd² spun bound polyester. The standard element is 45-pleat construction, with wide pleat speacing available.

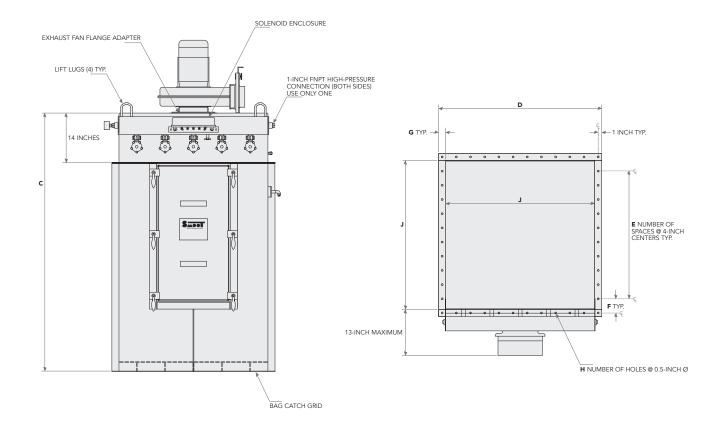


PRODUCT OPTIONS

- Stainless steel construction available upon request
- 60° and 70° hopper (Style III) available
- PTFE coating to bags
- High temperature (375°F)*
- NEMA 7/9 enclosure
- 304 stainless steel product contact
- Top load bags and cages

*High temperature includes: Paint changed to high temp paint, bags changed to 14 oz/yd² Nomex, Diaphragm valves changed to Viton, Poly-flo tubing from diaphragm to solenoids changed to copper tubing, door gasket changed to red silicone.

SECTION 3 FILTER & BAG HOUSE COMPONENTS Square Filters



				Dime	ensions &	. Orderin	g Inform	ation					
NUMBER	CAGE/BAG	FILTER	FILTER	R AREA	WEIGHT	HEIGHT		FLANGE SPECIFICATIONS					
OF BAGS	LENGTH (INCHES)	MODEL NUMBER	BAG	45-PLEAT CARTRIDGE	(POUNDS)	C (INCHES)	D (INCHES)	E (QUANTITY)	F (INCHES)	G (INCHES)	H (QUANTITY)	J (INCHES)	
	36	36BV9	37.5	240	674	61							
9	48	48BV9	51.3	267*	739	73	30	5	4	2	28	26	
7	60	60BV9	65.2	361*	787	85	30	5	4	2	20	20	
	72	72BV9	79.0	480*	834	97							
	36	36BV16	66.6	427	907	61							
16	48	48BV16	91.3	474*	993	73	- 38	7	4	2	36	34	
10	60	60BV16	115.9	641*	1067	85		/	4	2	50	34	
	72	72BV16	140.5	855*	1140	97	1						
	36	36BV25	104.1	668	1119	61							
25	48	48BV25	142.6	742*	1230	73	46	9	4			42	
25	60	60BV25	181.0	1002*	1323	85	40	7	4	2	44	42	
	72	72BV25	219.5	1336*	1416	97							
	36	36BV36	150.0	962	1332	61							
24	48	48BV36	205.3	1068*	1464	73		11	4		50	FO	
36	60	60BV36	260.7	1443*	1578	85	54	11	4	2	52	50	
	72	72BV36	316.1	1923*	1692	97							

*Sizes of longer cartridges that may be available. Consult Smoot with your specific application information.

PRODUCT DESCRIPTION

The standard configuration is for a Style III high-pressure pulsejet filter using 16 oz/yd² felted Dacron Polyester filter bags designed to be removed from the bottom of the tube sheet. The unit will have:

- Compressed air header
- Rated for 8.5 PSIG Positive; 17-inch Hg Gauge negative
- Mineral reinforced nylon bag cups and venturiis
- Stainless steel bag clamps
- diaphragm valves pre-plumbed to solenoids
- Smart timer board with built-in LED readout, switch & 4-20 mA output capability of differential pressure readings
- Timer and solenoids mounted in a NEMA 4 enclosure
- 1 ea. hinged food grade side access door
- 60° hopper
- Materials of construction: carbon steel (standard)

When using Filter Elements instead of bags, elements are 8 oz/yd² spun bound polyester. The standard element is 45-pleat construction, with wide pleat speacing available.

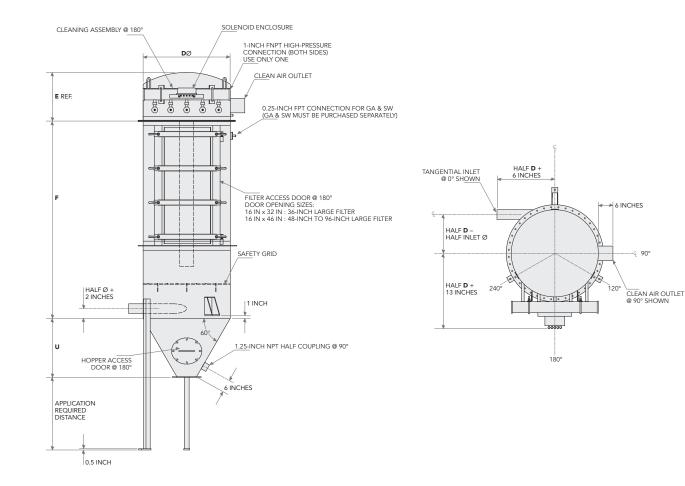


- Stainless steel construction available upon request
- 70° hopper available
- Support structure (Up to 54 inches clear)
- PTFE coating to bags
- High temperature (375°F)*
- NEMA 7/9 enclosure
- 304 Stainless Steel gas contact
- Top load bags and cages

*High temperature includes: Paint changed to high temp paint, bags changed to 14 oz/yd² Nomex, Diaphragm valves changed to Viton, Poly-flo tubing from diaphragm to solenoids changed to copper tubing, door gasket changed to red silicone.



SECTION 3 FILTER & BAG HOUSE COMPONENTS Round Filters



				Dimensio	ons & Ord	dering Inf	ormation				
NUMBER	CAGE/BAG	FILTER	FILTER	R AREA	WEIGHT	HEIGHT		FLANGE	DIMENSION	S (INCHES)	
OF BAGS	LENGTH	MODEL NUMBER	BAG	45-PLEAT CARTRIDGE	(POUNDS)	F (INCHES)	D	E	G	н	I
	36	36FR7	30.0	187.0	754	59					
7	48	48FR7	41.0	207.0	847	71	24	17	24-3/4	8-3/8	14-1/2
,	60	60FR7	52.0	280.0	894	83	24	17	24-3/4		14-172
	72	72FR7	63.0	374.0	940	95					
	36	36FR14	60.0	374.0	1151	59					
	48	48FR14	82.0	415.0	1270	71					
14	60	60FR14	104.0	561.0	1342	83	36	20	24-3/4	11-3/8	19-11/16
	72	72FR14	126.0	748.0	1415	95					
	84	84FR14	148.0	831.0	1487	107					
	36	36FR21	123.0	621.0	1648	59					
	48	48FR21	156.0	987.0	1735	71					
21	60	60FR21	189.0	1122.0	1821	83	44	23-1/8	26-3/4	13-3/8	23-3/16
	72	72FR21	222.0	1246.0	1908	95					
	84	84FR21	255.0	N/A	1994	107					
	36	36FR32	188.0	950.0	2152	59					
	48	48FR32	239.0	1282.0	2269	71]				
32	60	60FR32	289.0	1710.0	2386	83	54	26	31-3/4	15-7/8	27-1/2
	72	72FR32	339.0	1900.0	2503	95					
	84	84BV32	390.0	N/A	2620	107					

PRODUCT DESCRIPTION

Smoot offers virtually all types of replacement filter bags and support cages for dust collectors and filtration equipment for any type, size, style or manufacturer. Filter medias offered include Cotton, Polyester, Polypropylene, P-84 Laminates, PTFE Membrane and Ryton to name a few.

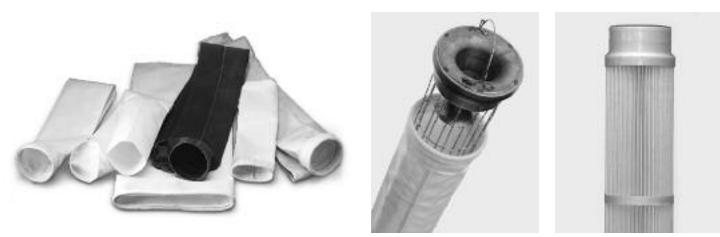
Pleated filter bags and cartridges offer an alternative to optimizing your current dust collector or pneumatic receiver. They will also provide better filtration efficiencies over bags in most applications providing 3 to 5 times the filtration surface area. Additionally, pleated bags and cartridges are easier to clean than conventional filter bags because they are surface loaded, meaning the dust particles do not penetrate the media surface. Surface loading also reduces the pressure drop making pulse cleaning more efficient and economical to operate.

Replacement filter bags, cages and cartridge filters for horizontal and vertical dust collectors and pneumatic receivers for other OEM units can be purchased through Smoot. Manufacturer units we service outside of Smoot include American Air Filter[®], Donaldson[®], Farr[®], Flex-Kleen[®], MAC[®], Pneumafil[®], Scientific Dust Collectors[®], Torit[®], Wheelabrator[®] and most domestic and foreign OEM equipment.

All filter bags and cartridge filters meet or exceed government requirements and industry standards.







SECTION 3 FILTER & BAG HOUSE COMPONENTS Replacement Parts



Diaphragm Valve with Solenoid Flanged Style





Diaphragm Valve

Compression Style

Vacuum Gauge

Magnehelic Gauge



Pressure Gauge

PRODUCT DESCRIPTION

Smoot offers a full line of replacement parts and components for filters, bin vents, bag houses and most filtration equipment.

- Diaphragm valves
- Solenoid valves
- Diaphragm and solenoid valve repair kits
- Compressed air header tanks
- Bulkhead fittings
- Pressure gauges
- Compressed air pressure controllers
- Compressed air water separation and drying
- Pulse timing controller boards
- Complete timer box assemblies available with NEMA 4, NEMA 4X and NEMA 7/9 classified and rated enclosures
- Magnehelic gauges
- Photohelic gauges
- Bag cups and venturis
- Level indicators and other ancillary products

Contact your Smoot Service Center representative for assurance with part identification and trouble-shooting when required.



Pulse Jet Filter Timer Assembly with Integral Photohelic Switch & Gauge

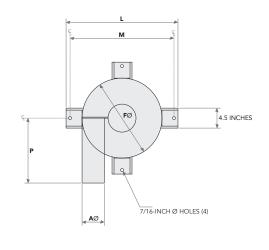
SECTION 3 FILTER & BAG HOUSE COMPONENTS Cyclones

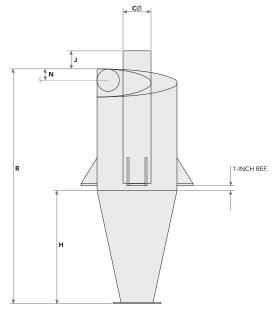
PRODUCT DESCRIPTION

Cyclones are most commonly used for the separation of product and materials from a gas/air stream. Once completed, the material is discharged through the bottom of the cyclone and the gas/air exhausts through the top.

PRODUCT FEATURES

- High efficiency design for maximum material/air separation
- Constructed of aluminum, carbon steel or 304 stainless steel
- Bottom flange fabricated to mate Smoot rotary valves, ANSI flange pattern drilling or existing equipment





				Cyclone [Dimensions				
AØ	В	cø	FØ	н	J	L	м	N	Р
3	33	3-1/2	11	12	3-1/2	19	17	1-15/16	10-7/8
3-1/2	38	4	12-3/4	15	3-1/2	20-3/4	18-3/4	2-3/8	11-3/4
4	44	5	14	20	3-1/2	22	20	2-9/16	12-1/2
4-1/2	45	5-9/16	16	20	4-1/2	24	22	2-7/8	14
5	51-1/2	6	18	24	4-1/2	26	24	2-13/16	15-1/8
5-9/16	58-1/2	6-5/8	20	28	4-1/2	28	26	3-1/2	16-1/4
6	65	8	21-1/2	32	4-1/2	29-1/2	27-1/2	3-3/4	17-1/4
6-5/8	70	8	22-1/2	34	4-1/2	30-1/2	28-1/2	4-1/4	18-1/2

SECTION 4 – Blower Packages and Blower Components

BLOWER PACKAGES	
Pressure Blower Packages.	
Vacuum Blower Packages	54-2
REPLACEMENT PARTS	
Positive Displacement Blowers	
Filter Elements for Inlet & Inline Filters	
Pressure and Vacuum Relief Valves	
Pressure and Vacuum Gauges	
Temperature Switches and Gauges	
Sound Enclosures	S4-4



For Ordering and Pricing Information, Call Toll Free 1.800.748.7000

PACKAGE DESCRIPTION

The workhorse of the pneumatic conveying industry today, the Positive Displacement Blower Package offers a cost effective reliable means of generating consistent airflows from 60 to 8,000 ICFM with pressures up to 25 PSIG. With nearly 50 years of industry experience, Smoot's package design provides a package with easy maintenance access and reduced noise generation to meet even the most strident customer's needs.

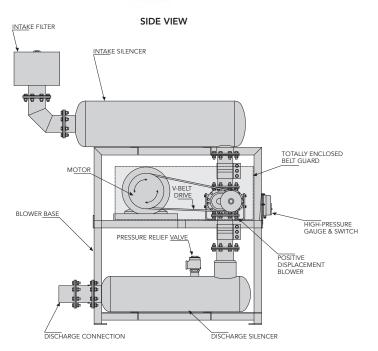


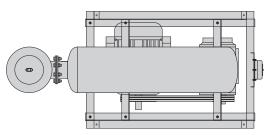
PACKAGE FEATURES

- Premium grade inlet and discharge silencers
- Intake air filter. Pleated polyester element with pre filter and rain hood
- Spring loaded pressure relief valve for mechanical safety relief
- Check valve to prevent material from backing up into the blower in shut down
- Tubular carbon steel base construction, painted
- V-Belt drive package with guard
- Built around positive displacement pressure blowers
- Combination pressure gauge and NEMA 4 pressure switch
- Includes a TEFC motor on an easily adjustable base

PACKAGE OPTIONS

- PD blower manufacturers utilized include MD-Tuthill, Roots, Gardner-Denver, Aerzen, Kaeser and others
- Temperature gauges and sensors
- Pressure transmitters to send a continuous 4-20mA indication of the current pressure level to a remote location
- Sound enclosures to dampen noise to even lower levels if needed
- Variable speed drive packages for easy adjustment of airflows





TOP VIEW

PACKAGE FEATURES

- Premium grade discharge silencer
- Inline air filter. Pleated polyester element with pre filter and vacuum rated canister
- Spring loaded vacuum relief valve for mechanical safety relief
- Vacuum breaker valve for efficient operation of system
- Tubular carbon steel base construction, painted
- V-Belt drive package with cover
- Built around positive displacement blowers
- Combination vacuum gauge and NEMA 4 vacuum switch
- Includes a TEFC motor on an easily adjustable base

PACKAGE OPTIONS

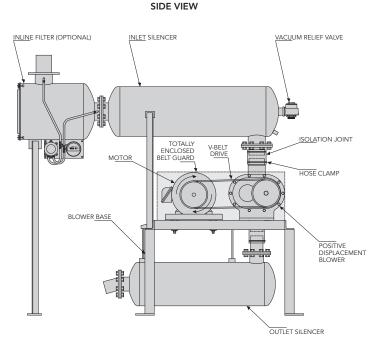
- PD blower manufacturers utilized include MD-Tuthill, Roots, Gardner-Denver, Aerzen, Kaeser and others
- Temperature gauges and sensors
- Vacuum transmitters to send a continuous 4-20mA indication of the current vacuum level to a remote location
- Sound enclosures to dampen noise to even lower levels if needed
- Variable speed drive packages for easy adjustment of airflows

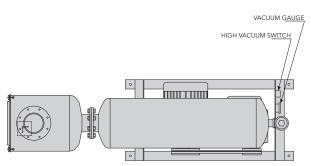
PACKAGE DESCRIPTION

The workhorse of the pneumatic conveying industry today, the Positive Displacement Blower Package offers a cost effective reliable means of generating consistent airflows from 60 to 8,000 ICFM with vacuum levels up to 17 inches Hg. With nearly 50 years of industry experience, Smoot's package design provides a package with easy maintenance access and reduced noise generation to meet even the most strident customer's needs.





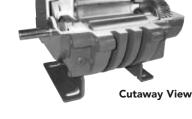




SECTION 4 **BLOWER PACKAGES** & BLOWER COMPONENTS Replacement Parts

POSITIVE DISPLACEMENT BLOWERS

- All major makes and models are available (Duroflow[®], MD Pneumatics[®], ROOTS[®], Sutorbilt[®]).
- Standard, medium and heavy-duty models available.
- For operation in nonstandard conditions, contact the Smoot Service Center.
- A blower replacement for your application.



INLINE FILTER HOUSINGS AND REPLACEMENT ELEMENTS

- Durable heavy gauge base with low pressure drop yoke and pipe design.
- Larger units reinforced with gussets for machine with extreme vibration.
- Interchangeable elements.
- Low entry velocity air gap between base and cover.
- Several element sizes available at a given connection size providing a choice according to the severity of application.
- Stainless steel, hot dip galvanized and epoxy coated housings available.
- Replacement filters elements available for all manufacturers.
- Custom filters quoted upon request.

PRESSURE AND VACUUM RELIEF VALVES

- Cast iron with bronze nozzle, disc and guide.
- Large seat area/guide area ratio.
- Disc pivot design insures top valve performance.
- Reversible lift lever.
- Flat bronze valve seats are lapped for optimum performance.
- Every valve tested for vacuum/pressure settings and leakage.
- All adjustments are factory sealed to prevent tampering.





SECTION 4 **BLOWER PACKAGES** & BLOWER COMPONENTS Replacement Parts



PRESSURE AND VACUUM GAUGES

- Broad line of gauges for demanding pressure and vacuum applications.
- Standard liquid fill is glycerin.
- Silicon and mineral oils available.
- Specify dial size and mounting configuration when ordering.

TEMPERATURE SWITCHES AND GAUGES

- Complete line of point level switches and continuous transmitters
- Gauge face and LED readouts available
- -40°F to +500°F range availability
- Specify required range and mounting when ordering



SOUND ENCLOSURES

- Designed to reduce noise levels of positive displacement blowers, industrial fans and other rotating equipment
- Noise reduction designs to meet or exceed OSHA, MSHA or specific plant maximum noise levels accepted
- Painted and/or Galvanized carbon steel materials of construction
- Stainless steel or aluminum construction available upon request
- Indoor and outdoor enclosures designs available
- Exhaust fans and heaters provided when required
- Contact Smoot and we'll assist with a solution to any noise reduction challenges you may encounter

SECTION 5 – Convey Line & Convey Line Accessories

COUPLINGS

Compression-Style Coupling Compression-Style Coupling with Side Bands High-Pressure Couplings for Plain-End Pipe High-Pressure Couplings for Grooved-End Pipe Quick-Connect, Cam-and-Groove Couplings	
TUBING AND PIPE	
Tubing & Pipe — Straight Lengths	
Internal-Spiral-Grooved Pipe and Tube	
Directional, Shot-Peened Pipe	
Standard Short- and Long-Radius Elbows	
Convey Line Sight Glasses	
90° Wearback Elbows	
90° Wearback Elbows with Replaceable Channel	
Wear-Resistant, Ceramic-Wrapped Elbows	
Standard and Special Welded Fabrications	
Flexible Hose, Rubber — 688 SB Bulk Commodity	S5-17
Flexible Hose, Rubber — 690 SB Bulk Commodity	
Flexible Hose, PVC	
Flexible Hose Accessories	
Flexible Hose Assemblies	
Hose Stations	
Vacuum Breaker Valves	
Vacuum Modulating Valves	



For Ordering and Pricing Information, Call Toll Free 1.800.748.7000

SECTION 5 **CONVEY LINE** & CONVEY LINE ACCESSORIES Compression-Style Couplings

COMPRESSION-STYLE COUPLING

Compression Couplings provide a positive seal for dilute phase pressure and vacuum pneumatic convey lines when joining plain end tubing, pipe, elbows and other line components. These couplings are available in different bolt count arrangements, with a wide variety of gaskets for use in a vast range of applications. Whether your application is low pressure conveying Aggregates, Food Products or Chemicals we can

assist you in the identification of the right compression coupling arrangement for your needs. Remember when ordering these couplings for a Vacuum system to include the Gasket Protector to extend the coupling life. This style of compression coupling is generally used in systems with pressures of 15 PSI or less. The assembly and disassembly of these couplings is fast and easy.

PRODUCT FEATURES

- Provides equalized pressure seal
- Provided ready to install
- Available in galvanized steel, aluminum or stainless steel
- Includes inner sleeve for positive seal and extra rigidity
- Available with black neoprene, white neoprene, high temperature as well as other gasket material
- Available from 0.75-inch to 24-inch, tubing and pipe



COMPRESSION-STYLE COUPLING

Dual-locking side bands grip the pipe and allow higher operating pressures than standard compression couplings usually allow. These are especially effective in resisting line end pull and providing a superior connection when excessive vibration may be present. They have also proved to be extremely useful when repairing sections of convey lines, while also providing a positive seal. As found in the standard compression coupling assembly and disassembly is fast and easy.

PRODUCT FEATURES

- Provide vastly improved axial force holding power to connect or repair pipe and tube
- Allows higher operating pressure then normally suggested for compression type coupling
- Especially effective where line vibration is a problem
- Available from 2-inch O.D through 24-inch O.D. nominal pipe or tubing sizes
- Complete coupling, or conversion kits available for existing couplings



SECTION 5 **CONVEY LINE** & CONVEY LINE ACCESSORIES High-Pressure Couplings



HIGH-PRESSURE COUPLING FOR PLAIN-END PIPE

Specially designed for plain-end steel and stainless-steel pipe. Gripping teeth provide a strong component for joining plain and beveled end (including Schedule 80 steel pipe). Not to be used on plastic pipe, pipe with brittle linings, cast or ductile iron pipe, nor any pipe with a surface hardness greater than 150 Brinell.

PRODUCT FEATURES

- Encased in a durable ductile iron housing
- Curved, case-hardened steel jaws grip into pipe when nuts are tightened—to full torque specification—and it requires no pipe end preparation
- Available in pipe sizes 1-inch through 4-inch

HIGH-PRESSURE COUPLING FOR GROOVED-END PIPES

The Style 177 couplings are easily installed without the need to disassemble the bolts, nuts, gasket and housings making installation faster, easier and safer than any other—welded, flanged or standard grooved couplings. Crews can assemble a grooved joint by inserting the new installation-ready coupling onto the ends of a pipe, fitting, valve or accessory and tightening the nuts using standard hand tools or an impact gun. No loose components means a safer, cleaner and more efficient jobsite, where installers do not need to disassemble the coupling in order to install.

PRODUCT FEATURES

- Encased in a durable ductile iron housing
- Designed with cross-ribbed construction to provide a strong component for pressure piping systems
- Sizes 3/4-inch to 12-inch (20 mm to 300 mm) are two-piece housings
- Sizes 14-inch to 22-inch (350 mm to 550 mm) are cast in four identical segments, with larger sizes cast in six segments

QUICK-CONNECT, CAM-AND-GROOVE COUPLINGS

Smoot Company distributes high quality quick connect/disconnect style couplings, sometimes referred to as "QD" Couplings, and their respective replacement parts. We present proven solutions at competitive pricing for most all QD Coupling applications available on the market today. If you need assistance when specifying or ordering QD Couplings our knowledgeable sales staff will assist you through the selection process.

PRODUCT FEATURES

- Sizes available from 1/2-inch through 12-inch for many types
- Constructed of cast brass, aluminum,
- stainless steel, malleable iron or forged brass.
- Operating temperatures up to 450°F
- Operating pressures up to 350 psig

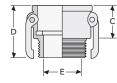
STANDARD CONSTRUCTION MATERIALS

- Cast Brass
- Aluminum
- Cast Drass
 316 Stainless Steel
- Malleable Iron
- Polypropylene
- Forged Brass
- **OPTIONAL CONSTRUCTION MATERIALS** CONTACT THE SERVICE CENTER FOR PRICING
- Hard-Coat Aluminum
- Hastalloy®C • Carpenter 20®
- Anodized Alumimum

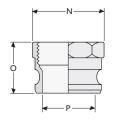
Monel

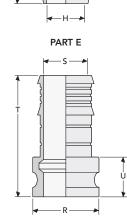
		MAXIMUM WORKING PRESSURE	SIZE IN INCHES										
MATERIAL	GASKET		1/2 to 3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	5	6	
		250 psi	X	Х	X	X	Х						
ALUMINUM (not for use above 300°F)	Standard gasket +225°F	150 psi						X					
	Viton gasket +350°F*	125 psi							Х				
	(Teflon® gaskets also available)	100 psi								X			
		75 psi									X	X	
	Standard gasket +225°F	350 psi	X	Х	X	X	Χ						
FORGED BRASS	Viton gasket +350°F**	250 psi						X	Х				
	Teflon gasket +450°F**	100 psi								X			
		200 psi	X	Х	X	X	Х						
	Standard gasket +225°F	150 psi						X					
CAST BRASS	Viton gasket +350°F*	125 psi							Х				
	(Teflon gaskets also available)	100 psi								X			
		75 psi									X	X	
	Standard gasket +225°F; Viton gasket +350°F*	125 psi				X	Χ						
MALLEABLE IRON	(Teflon gaskets also available)	100 psi						X	Х	X			
	Standard gasket +225°F	250 psi	X	Х	X	X	Х						
STAINLESS STEEL	Viton gasket +350°F**	200 psi							Х				
	Teflon gasket +450°F**	100 psi								X			
		250 psi	X	Х	X	X	Х						
	Standard gasket +225°F	200 psi						X					
MONEL	Viton gasket +350°F**	150 psi								X			
	Teflon gasket +450°F**	100 psi										x	
	Standard gasket +70°F	100 psi	X	Х	X	X	Х						
POLYPROPYLENE	Standard gasket +200°F	50 psi	X	X	X	X	X						

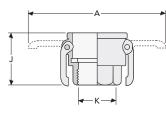
For temperatures in excess of +225°F consult the Service Center for pressure ratings. **For temperatures in excess of +300°F consult the Service Center for pressure ratings.

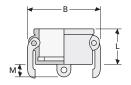


PART A



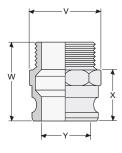


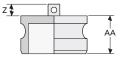




DUST PLUG

PART F





	Couplers Typical dimensions in inches for aluminum*												
SIZE	A	В	С	D	E	F	G	Н	J	К	L	М	
1/2	2-11/16	1-1/2	1-15/16	1-15/16	9/16	1-3/16	3-7/16	5/16	1-27/32	23/32	1-1/4	7/16	
3/4	4-1/2	2-7/8	1-3/8	2-1/16	3/4	1-5/16	3-3/4	1/2	2-1/16	59/64	1-1/4	5/8	
1	4-5/8	2-3/16	1-9/16	2-7/16	1	1-9/16	4-1/16	3/4	2-15/32	1-5/32	1-11/16	9/16	
1-1/4	7-3/16	3-3/16	2-3/16	2-3/16	1-1/4	1-13/16	4-1/16	1	2-29/32	1-1/4	2-1/16	5/8	
1-1/2	7-1/2	3-1/2	1-7/8	2-3/4	1-3/8	1-13/16	4-9/16	1-11/16	2-3/4	1-5/8	2	3/4	
2	9-7/8	3-7/8	1-3/16	3-1/8	2	2-1/8	4-15/16	1-11/16	3-11/32	2	3	3/4	
2-1/2	8-7/16	4-7/16	2-1/4	3-1/2	2-3/8	2-5/8	5-7/16	2-3/16	3-3/8	2-3/8	3-1/16	3/4	
3	9-13/16	5-5/8	2-3/8	3-9/16	2-7/8	2-5/16	6-7/8	2-5/8	3-1/2	2-7/8	3-1/4	3/4	
4	10-5/16	6-3/4	2-7/16	4	3-15/16	2-7/8	7-3/16	3-9/16	4	3-11/16	2-5/8	3/4	
5	11-15/16	7-3/4	2-1/2	4	4-3/4	2-7/16	7-5/16	4-5/8	4-1/16	4-3/4	2-11/16	7/8	
6	16-5/16	10-1/8	2-11/16	4-3/4	5-15/16	2-5/8	8-5/16	5-9/16	4-1/4	5-11/16	3-11/16	1-1/8	
8	20-1/4	12-7/16	3-15/16	5-11/16	7-7/8	3-15/16	11-7/16	7-1/2	6-1/16	7-3/4	4-3/8	1-5/8	

	Adapters Typical dimensions in inches for aluminum*												
SIZE	N	0	Р	R	S	Т	U	V	W	Х	Y	Z	AA
1/2	1	1-9/16	9/16	1-3/16	5/16	3-3/8	1-5/8	1	1-7/8	1-9/32	9/16	19/32	1-1/32
3/4	1-3/8	1-17/32	3/4	1-7/8	5/16	4-3/16	1-3/4	1-3/8	2-3/16	1-3/8	3/4	7/16	1-1/8
1	1-15/16	2-1/8	1-1/8	1-3/4	3/4	4-7/8	2	1-9/16	2-9/16	1-11/16	31/32	9/16	1-1/4
1-1/4	2-15/16	2-1/8	1-1/8	2	1	5-1/4	2-3/8	1-15/16	3	2-1/8	1-1/8	5/8	1-3/8
1-1/2	2-9/32	2-3/16	1-3/8	2-7/32	1-1/4	4-5/8	2-1/4	2-1/4	3-3/32	2-3/16	1-3/8	11/16	1-3/4
2	2-11/16	2-7/16	1-25/32	5-5/8	1-11/16	5-3/8	2-3/8	2-11/16	3-3/8	2-7/16	1-3/4	3/4	2-1/16
2-1/2	3-5/16	2-11/16	2-5/32	3-5/16	2-5/32	6	2-5/8	3-1/16	3-7/8	2-11/16	2-5/32	11/16	1-7/8
3	3-15/16	2-3/4	2-7/8	4	2-5/8	6-11/16	2-11/16	3-15/16	3-15/16	2-3/4	2-7/8	7/8	2-1/8
4	5	3-1/16	3-7/8	5-3/16	3-5/8	5-1/2	2-3/4	4-7/8	4-1/2	3-1/16	3-27/32	7/8	2-3/8
5	6	3-15/16	4-7/8	6	4-5/8	7-7/16	3-1/8	6	4-17/32	3	4-3/4	1	2-1/4
6	-	3-9/32	5-31/32	7-5/32	5-9/16	8-7/8	3-1/16	—	4-23/32	2-31/32	5-15/16	1-1/4	2-5/8
8	9-1/2	5-1/2	7-9/16	9-15/16	7-3/4	11-7/8	3-7/8	9-1/2	6-1/4	4-1/2	7-3/4	1-5/8	4-1/16

*For the dimensions associated with other available materials, please contact the Service Center.

MALE ADAPTERS / FEMALE THREAD

- BSP and BST threads available on request
- Also available in 8-inch and 10-inch sizes



SIZE		ORDER N	UMBER BY	METAL S	ELECTION	
INCHES	CB CAST BRASS	AL ALUMINUM*	SS 316 STAINLESS	MI MALLEABLE IRON	PP POLYPROPYLENE	BR FORGED BRASS
1/2	5ACB	5AAL	5ASS	5AMI	N/A	5ABR
3/4	7ACB	7AAL	7ASS	7AMI	7APP	7ABR
1	10ACB	10AAL	10ASS	10AMI	10APP	10ABR
1-1/4	12ACB	12AAL	12ASS	12AMI	12APP	12ABR
1-1/2	15ACB	15AAL	15ASS	15AMI	15APP	15ABR
2	20ACB	20AAL	20ASS	20AMI	20APP	20ABR
2-1/2	25ACB	25AAL	25ASS	25AMI	N/A	25ABR
3	30ACB	30AAL	30ASS	30AMI	30APP	30ABR
4	40ACB	40AAL	40ASS	40AMI	N/A	40ABR
5	50ACB	50AAL	50ASS	50AMI	N/A	N/A
6	60ACB	60AAL	60ASS	60AMI	N/A	N/A

FEMALE COUPLERS / MALE THREAD

- BSP and BST threads available on request
- Also available in 8-inch and 10-inch sizes
- Aluminum couplers are standard with stainless-steel handles; brass handles available on request



SIZE		ORDER NUMBER BY METAL SELECTION									
INCHES	CB CAST BRASS	AL ALUMINUM*	SS 316 STAINLESS	MI MALLEABLE IRON	PP POLYPROPYLENE	BR FORGED BRASS					
1/2	5BCB	5BAL	5BSS	5BMI	N/A	5BBR					
3/4	7BCB	7BAL	7BSS	7BMI	7BPP	7BBR					
1	10BCB	10BAL	10BSS	10BMI	10BPP	10BBR					
1-1/4	12BCB	12BAL	12BSS	12BMI	12BPP	12BBR					
1-1/2	15BCB	15BAL	15BSS	15BMI	15BPP	15BBR					
2	20BCB	20BAL	20BSS	20BMI	20BPP	20BBR					
2-1/2	25BCB	25BAL	25BSS	25BMI	N/A	25BBR					
3	30BCB	30BAL	30BSS	30BMI	30BPP	30BBR					
4	40BCB	40BAL	40BSS	40BMI	N/A	40BBR					
5	50BCB	50BAL	50BSS	50BMI	N/A	N/A					
6	60BCB	60BAL	60BSS	60BMI	N/A	N/A					

FEMALE COUPLERS / HOSE SHANK

- Also available in 8-inch and 10-inch sizes
- Aluminum couplers are standard with stainless-steel handles; brass handles available on request



SIZE		ORDER NUMBER BY METAL SELECTION									
INCHES	CB CAST BRASS	AL ALUMINUM*	SS 316 STAINLESS	MI MALLEABLE IRON	PP POLYPROPYLENE	BR FORGED BRASS					
1/2	5CCB	5CAL	5CSS	5CMI	N/A	5CBR					
3/4	7CCB	7CAL	7CSS	7CMI	7CPP	7CBR					
1	10CCB	10CAL	10CSS	10CMI	10CPP	10CBR					
1-1/4	12CCB	12CAL	12CSS	12CMI	12CPP	12CBR					
1-1/2	15CCB	15CAL	15CSS	15CMI	15CPP	15CBR					
2	20CCB	20CAL	20CSS	20CMI	20CPP	20CBR					
2-1/2	25CCB	25CAL	25CSS	25CMI	N/A	25CBR					
3	30CCB	30CAL [†]	30CSS	30CMI	30CPP	30CBR					
4	40CCB	40CAL [†]	40CSS	40CMI	N/A	40CBR					
5	50CCB	50CAL	50CSS	50CMI	N/A	N/A					
6	60CCB	60CAL	60CSS	60CMI	N/A	N/A					

[†]3-inch and 4-inch aluminum are provided with machined shanks

FEMALE COUPLERS / FEMALE THREAD

- BSP and BST threads available on request
- Also available in 8-inch and 10-inch sizes
- Aluminum couplers are standard with stainless-steel handles; brass handles available on request



SIZE		ORDER N	UMBER BY	METAL S	ELECTION	
INCHES	CB CAST BRASS	AL ALUMINUM*	SS 316 STAINLESS	MI MALLEABLE IRON	PP POLYPROPYLENE	BR FORGED BRASS
1/2	5DCB	5DAL	5DSS	5DMI	N/A	5DBR
3/4	7DCB	7DAL	7DSS	7DMI	7DPP	7DBR
1	10DCB	10DAL	10DSS	10DMI	10DPP	10DBR
1-1/4	12DCB	12DAL	12DSS	12DMI	12DPP	12DBR
1-1/2	15DCB	15DAL	15DSS	15DMI	15DPP	15DBR
2	20DCB	20DAL	20DSS	20DMI	20DPP	20DBR
2-1/2	25DCB	25DAL	25DSS	25DMI	N/A	25DBR
3	30DCB	30DAL	30DSS	30DMI	30DPP	30DBR
4	40DCB	40DAL	40DSS	40DMI	N/A	40DBR
5	50DCB	50DAL	50DSS	50DMI	N/A	N/A
6	60DCB	60DAL	60DSS	60DMI	N/A	N/A

SIZE			UMBER BY	METAL S	ELECTION	
INCHES	CAST BRASS	AL ALUMINUM*	SS 316 STAINLESS	MI MALLEABLE IRON	PP POLYPROPYLENE	BR FORGED BRASS
1/2	5ECB	5EAL	5ESS	5EMI	N/A	5EBR
3/4	7ECB	7EAL	7ESS	7EMI	7EPP	7EBR
1	10ECB	10EAL	10ESS	10EMI	10EPP	10EBR
1-1/4	12ECB	12EAL	12ESS	12EMI	12EPP	12EBR
1-1/2	15ECB	15EAL	15ESS	15EMI	15EPP	15EBR
2	20ECB	20EAL	20ESS	20EMI	20EPP	20EBR
2-1/2	25ECB	25EAL	25ESS	25EMI	N/A	25EBR
3	30ECB	30EAL [†]	30ESS	30EMI	30EPP	30EBR
4	40ECB	40EAL [†]	40ESS	40EMI	N/A	40EBR
5	50ECB	50EAL	50ESS	50EMI	N/A	N/A
6	60ECB	60EAL	60ESS	60EMI	N/A	N/A
		+2 . 1				

[†]3-inch and 4-inch aluminum are provided with machined shanks

SIZE		ORDER NUMBER BY METAL SELECTION									
INCHES	CB CAST BRASS	AL ALUMINUM*	SS 316 STAINLESS	MI MALLEABLE IRON	PP POLYPROPYLENE	BR FORGED BRASS					
1/2	5FCB	5FAL	5FSS	5FMI	N/A	5FBR					
3/4	7FCB	7FAL	7FSS	7FMI	7FPP	7FBR					
1	10FCB	10FAL	10FSS	10FMI	10FPP	10FBR					
1-1/4	12FCB	12FAL	12FSS	12FMI	12FPP	12FBR					
1-1/2	15FCB	15FAL	15FSS	15FMI	15FPP	15FBR					
2	20FCB	20FAL	20FSS	20FMI	20FPP	20FBR					
2-1/2	25FCB	25FAL	25FSS	25FMI	N/A	25FBR					
3	30FCB	30FAL	30FSS	30FMI	30FPP	30FBR					
4	40FCB	40FAL	40FSS	40FMI	N/A	40FBR					
5	50FCB	50FAL	50FSS	50FMI	N/A	N/A					
6	60FCB	60FAL	60FSS	60FMI	N/A	N/A					

SIZE		ORDER NUMBER BY METAL SELECTION									
INCHES	CB	AL	SS	MI	PP	BR					
INCITED	CAST BRASS	ALUMINUM*	316 STAINLESS	MALLEABLE IRON	POLYPROPYLENE	FORGED BRASS					
1/2	5DPCB	5DPAL	5DPSS	5DPMI	N/A	5DPBR					
3/4	7DPCB	7DPAL	7DPSS	7DPMI	7DPPP	7DPBR					
1	10DPCB	10DPAL	10DPSS	10DPMI	10DPPP	10DPBR					
1-1/4	12DPCB	12DPAL	12DPSS	12DPMI	12DPPP	12DPBR					
1-1/2	15DPCB	15DPAL	15DPSS	15DPMI	15DPPP	15DPBR					
2	20DPCB	20DPAL	20DPSS	20DPMI	20DPPP	20DPBR					
2-1/2	25DPCB	25DPAL	25DPSS	25DPMI	N/A	25DPBR					
3	30DPCB	30DPAL	30DPSS	30DPMI	30DPPP	30DPBR					
4	40DPCB	40DPAL	40DPSS	40DPMI	N/A	40DPBR					
5	50DPCB	50DPAL	50DPSS	50DPMI	N/A	N/A					
6	60DPCB	60DPAL	60DPSS	60DPMI	N/A	N/A					

MALE ADAPTERS / HOSE SHANK

• Also available in 8-inch and 10-inch sizes



MALE ADAPTERS / MALE THREAD

- BSP and BST threads available on request
- Also available in 8-inch and 10-inch sizes



DUST PLUG

- For use with couplers
- Not for use in pressure applications
- Also available in 8-inch and 10-inch sizes



SIZE		ORDER N	UMBER BY	METAL S	ELECTION	
INCHES	CB CAST BRASS	AL ALUMINUM*	SS 316 STAINLESS	MI MALLEABLE IRON	PP POLYPROPYLENE	BR FORGED BRASS
1/2	5DCCB	5DCAL	5DCSS	5DCMI	N/A	5DCBR
3/4	7DCCB	7DCAL	7DCSS	7DCMI	7DCPP	7DCBR
1	10DCCB	10DCAL	10DCSS	10DCMI	10DCPP	10DCBR
1-1/4	12DCCB	12DCAL	12DCSS	12DCMI	12DCPP	12DCBR
1-1/2	15DCCB	15DCAL	15DCSS	15DCMI	15DCPP	15DCBR
2	20DCCB	20DCAL	20DCSS	20DCMI	20DPCP	20DCBR
2-1/2	25DCCB	25DCAL	25DCSS	25DCMI	N/A	25DCBR
3	30DCCB	30DCAL	30DCSS	30DCMI	30DCPP	30DCBR
4	40DCCB	40DCAL	40DCSS	40DCMI	N/A	40DCBR
5	50DCCB	50DCAL	50DCSS	50DCMI	N/A	N/A
6	60DCCB	60DCAL	60DCSS	60DCMI	N/A	N/A

DUST CAP

- For use with adapters
- Not for use in pressure applications
- Also available in 8-inch and 10-inch sizes
- Aluminum couplers are standard with stainless-steel handles; brass handles available on request



For Electric Motor Dimensions, contact The Service Center.

COUPLINGS FOR BUTT WELD (BW) OR SOCKET WELD (SW) — ADAPTERS

- Specify tube size or pipe size schedule
- Also available in 8-inch and 10-inch sizes



SIZE	BUTT	WELD AD	APTER	SOCKET WELD ADAPTER			
INCHES	BR FORGED BRASS	AL ALUMINUM	SS 316 STAINLESS	BR FORGED BRASS	AL ALUMINUM	SS 316 STAINLESS	
1	10ABWBR	10ABWAL	10ABWSS	10ASWBR	10ASWAL	10ASWSS	
1-1/2	15ABWBR	15ABWAL	15ABWSS	15ASWBR	15ASWAL	15ASWSS	
2	20ABWBR	20ABWAL	20ABWSS	20ASWBR	20ASWAL	20ASWSS	
2-1/2	25ABWBR	25ABWAL	25ABWSS	25ASWBR	25ASWAL	25ASWSS	
3	30ABWBR	30ABWAL	30ABWSS	30ASWBR	30ASWAL	30ASWSS	
4	40ABWBR	40ABWAL	40ABWSS	40ASWBR	40ASWAL	40ASWSS	
5	50ABWBR	50ABWAL	50ABWSS	50ASWBR	50ASWAL	50ASWSS	
6	60ABWBR	60ABWAL	60ABWSS	60ASWBR	60ASWAL	60ASWSS	

COUPLINGS FOR BUTT WELD (BW) OR SOCKET WELD (SW) — COUPLERS

- Specify tube size or pipe size schedule
- Also available in 8-inch and 10-inch sizes



SIZE	BUTT	WELD CO	UPLER	SOCKET WELD COUPLER			
INCHES	BR FORGED BRASS	AL ALUMINUM	SS 316 STAINLESS	BR FORGED BRASS	AL ALUMINUM	SS 316 STAINLESS	
1	10DBWBR	10DBWAL	10DBWSS	10DSWBR	10DSWAL	10DSWSS	
1-1/2	15DBWBR	15DBWAL	15DBWSS	15DSWBR	15DSWAL	15DSWSS	
2	20DBWBR	20DBWAL	20DBWSS	20DSWBR	20DSWAL	20DSWSS	
2-1/2	25DBWBR	25DBWAL	25DBWSS	25DSWBR	25DSWAL	25DSWSS	
3	30DBWBR	30DBWAL	30DBWSS	30DSWBR	30DSWAL	30DSWSS	
4	40DBWBR	40DBWAL	40DBWSS	40DSWBR	40DSWAL	40DSWSS	
5	50DBWBR	50DBWAL	50DBWSS	50DSWBR	50DSWAL	50DSWSS	
6	60DBWBR	60DBWAL	60DBWSS	60DSWBR	60DSWAL	60DSWSS	

COUPLINGS FOR DRY PRODUCTS — ADAPTERS (STRAIGHT THREAD)



SIZE	ADAPTERS (STRAIGHT THREAD)			
INCHES	BR FORGED BRASS	AL ALUMINUM	SS 316 STAINLESS	
1	10ASBR	10ASAL	10ASSS	
1-1/2	15ASBR	15ASAL	15ASSS	
2	20ASBR	20ASAL	20ASSS	
2-1/2	25ASBR	25ASAL	25ASSS	
3	30ASBR	30ASAL	30ASSS	
4	40ASBR	40ASAL	40ASSS	
5	50ASBR	50ASAL	50ASSS	
6	60ASBR	60ASAL	60ASSS	
3 x 2	3020ASBR	N/A	N/A	
4 x 3	4030ASBR	4030ASAL	N/A	

COUPLINGS FOR DRY PRODUCTS — COUPLERS (STRAIGHT THREAD)



	COUPLER	LERS (STRAIGHT THREAD)			
SIZE INCHES	BR FORGED BRASS	AL	SS 316 STAINLESS		
2	20DSBR	20DSAL	20DSSS		
3	30DSBR	30DSAL	30DSSS		
4	40DSBR	40DSAL	40DSSS		
5	50DSBR	50DSAL	50DSSS		
6	60DSBR	60DSAL	60DSSS		

SIZE		FLA ADAPTERS	
INCHES	BR FORGED BRASS	AL ALUMINUM	SS 316 STAINLESS
1	10FLABR	10FLAAL	10FLASS
1-1/2	15FLABR	15FLAAL	15FLASS
2	20FLABR	20FLAAL	20FLASS
2-1/2	25FLABR	25FLAAL	25FLASS
3	30FLABR	30FLAAL	30FLASS
4	40FLABR	40FLAAL	40FLASS
6	60FLABR	60FLAAL	60FLASS
8	80FLABR	80FLAAL	80FLASS

BR

FORGED BRASS

10FLBBR

15ELBBR

20FLBBR

25FLBBR

30FLBBR 40FLBBR

60FLBBR

80FLBBR

LAT ADAPTERS

AL ALUMINUM

20LATAL

30LATAL

401 ATAL

60LATAL

FLB COUPLERS

AL ALUMINUM

10FLBAL

15FLBAL

20FLBAL

25FL

HEAVY-DUTY BRASS COUPLINGS

DUST CAP

5DCXB

7DCXB

10DCXB

12DCXB

15DCXB

20DCXB

25DCXB

30DCXB

40DCXB

DUST PLUG

5DPXB

7DPXB

10DPXB

12DPXB

15DPXB

20DPXB

25DPXB

30DPXB

40DPXB

ASA FLANGE COUPLINGS — FLA ADAPTERS

- Standard with 150-lb, flat-face flange and bolt hole patterns for FLA parts
- Other flange configurations available on request



ASA FLANGE COUPLINGS — FLB COUPLERS

- Standard with 150-lb, flat-face flange and bolt hole patterns for FLB parts
- Other flange configurations available on request



TANK TRUCK FLANGE COUPLINGS -LAT ADAPTERS

- Available in aluminum only
- Bolt hole patterns for LAT parts available on request

CIZE	LBT COUPLERS
SIZE INCHES	AL ALUMINUM
2	20LBTAL
3	30LBTAL
4	40LBTAL
6	60LBTAL

PART A

MALE

5AXB

7AXB

10AXB

12AXB

15AXB

20AXB

25AXB

30AXB

40AXB

PART D

FEMALE

5DXB

7DXB

10DXB

12DXB

15DXB

20DXB

25DXB

30DXB

40DXB

SIZE

INCHES

1

1-1/2

2

2-1/2

3

4 6

8

SIZE

INCHES 2

3

4

6

SIZE

INCHES

1/2

3/4

1

1-1/4

1-1/2

2

2-1/2

3 4



GASKET

5GSKBUHD

7GSKBUHD

10GSKBUHD

12GSKBUHD

15GSKBUHD

20GSKBUHD

25GSKBUHD

30GSKBUHD

40GSKBUHD

TANK TRUCK FLANGE COUPLINGS -LBT COUPLERS

- Available in aluminum only
- Bolt hole patterns for LBT parts available on request

HEAVY-DUTY BRASS COUPLINGS -SPECIAL DESIGN

• Not interchangable with standard cam-and-groove couplings

25FLBAL	25FLBSS	
30FLBAL	30FLBSS	
40FLBAL	40FLBSS	
60FLBAL	60FLBSS	
80FLBAL	80FLBSS	

SS

316 STAINLESS

10FLBSS

15ELBSS

20FLBSS

SECTION 5 **CONVEY LINE** & CONVEY LINE ACCESSORIES Tubing and Pipe

TUBING AND PIPE — STRAIGHT LENGTHS

- Available in cut-to-length; 20-ft to 40-ft random lengths
- Available in:
 - aluminum
 - carbon steel
 - galvanized steel
 - stainless steel



PIPE AND TUBING MATERIAL SPECIFICATIONS			
MATERIAL	FORM	ITEM NUMBER	DESCRIPTION
	ALLOY 6063	ASTM B-221	
ALUMINUM	STRAIGHTS	ASTM T-6	
	BENDS	ASTM T-1	
CARBON	PIPE	ASTM A-53	Seamless, welded black and galvanized steel pipe
STEEL	TUBE	ASTM A-513	Electric resistance welded carbon and alloy steel for use as mechanical tubing
STAINLESS	PIPE	ASTM A-312	Seamless and welded stainless steel pipe intended for high-temperature and general corrosive service. Twenty-four grades available, including 304, 316, 304L and 316L
STEEL	TUBE	ASTM A-249	Stainless steel tubing for general corrosion resisting and low- or high-temperature service
	COATED PIPE	ASTM A-53	Galvanized coated pipe
GALVANIZED STEEL	COATED TUBE	ASTM A-513	Galvanized coated tube
	TUBE	ASTM	Galvanized tube

SECTION 5 **CONVEY LINE** & CONVEY LINE ACCESSORIES Tubing and Pipe



INTERNAL-SPIRAL-GROOVED PIPE AND TUBE

- Grooved internal surfaces disrupt boundry layer of flow, encouraging product tumble rather than sliding flow and reducing "angel hair" in plastic pellets.
- Available in aluminum or stainless steel tube and pipe
- Available 2-inch O.D. through 8-inch I.P.S.
- Sandblast and shot peened treatment also available
- Maximum length available is 20 feet



DIRECTIONAL SHOT-PEENED PIPE

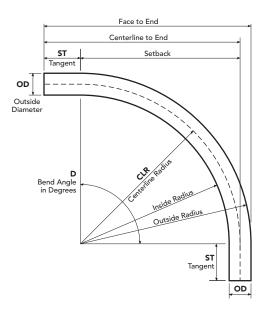
Directional Shot-Peening the interior of a pipe or tube is performed to help reduce fines and streamers when conveying plastic pellets or resins in a "Dilute Phase" conveying process. After the interior of a pipe receives a shot-peening treatment the interior would have a "dimpled" roughness, this causes the air used in the convey process to create a turbulence in the line, specifically along the inner wall. This turbulence will reduce the product being conveyed from sliding down the wall of the convey line thus reducing "Fines", "Snake Skins" and "Streamers".

Note: Shot-Peen treated pipe should only be used in "Dilute Phase" conveying systems, and is not recommended for "Dense Phase" convey systems.

SECTION 5 **CONVEY LINE** & CONVEY LINE ACCESSORIES Elbows — Long and Short Radius

STANDARD SHORT AND LONG RADIUS ELBOWS

- Pipe and tube bends up to 180 degrees, at a wide variety of bend radii
- Ceramic lined for abrasive applications
- Available in:
 - aluminum
 - carbon steel
 - galvanized steel
 - stainless steel
- Special construction available upon request
- The Service Center has an extensive inventory of tube bends available for three-day shipment. Most popular bend sizes are stocked in carbon-steel, aluminim and stainless-steel materials.



ELBOW BEND AVAILABILITY (MEASUREMENTS IN INCHES)				
TUBE SIZE			COMMON CENTERLINE RADII (CLR)	
1	—	1.0	4	2.25 • 3 • 3.5 • 4 • 6
_	1	1.315	4	1.75 • 2 • 2.875 • 3 • 4 • 5
1-1/8	—	1.125	4	3 • 5
1-1/4	—	1.25	4	3 • 4 • 5 • 7.25
—	1-1/4	1.660	4	3.5 • 4 • 6.25
1-1/2	—	1.5	4	2 • 2.5 • 3 • 4 • 5 • 6 • 7.5 • 9 • 12 • 15 • 18 • 24 • 30 • 36 • 48
1-3/4	—	1.75	4	2.5 • 8 • 9 • 12 • 15 • 17 • 24 • 30 • 36 • 48
—	1-1/2	1.9	4	5 • 6 • 7.5 • 9 • 10 • 12 • 15 • 18 • 24 • 30 • 36 • 48
2	—	2.0	4	5 • 6 • 8 • 8.5 • 9 • 10 • 12 • 15 • 18 • 24 • 30 • 36 • 48
2-1/8	—	2.125	4-1/2	5 • 12 • 24 • 30 • 36
2-1/4	—	2.25	4-1/2	3 • 9 • 12 • 15 • 17 • 24 • 30 • 36 • 48
_	2	2.375	4	6 • 7.5 • 9 • 10 • 12 • 15 • 17 • 24 • 30 • 36 • 48
2-1/2	—	2.5	5	4 • 6 • 9 • 12 • 15 • 17 • 24 • 30 • 36 • 48
2-3/4	—	2.75	5-1/2	9 • 21 • 17 • 30 • 36 • 48
_	2-1/2	2.875	5	9 • 12 • 12.5 • 15 • 17 • 24 • 30 • 36 • 48 • 60
3	—	3.0	6	7.5 • 9 • 10 • 12 • 15 • 18 • 24 • 30 • 36 • 48 • 60
3-1/4	—	3.25	6-1/2	15 • 17 • 30
3-1/2	3	3.5	7 tube, 6 pipe	6 • 8.75 • 9 • 12 • 15 • 16 • 18 • 20 • 24 • 30 • 36 • 48
3-3/4	—	3.75	7-1/2	17 • 24 • 32 • 36 • 48
4	3-1/2	4.0	8 tube, 7 pipe	6 • 10 • 12 • 16 • 18 • 20 • 24 • 30 • 32 • 36 • 48 • 60
4-1/4	—	4.25	8-1/2	16 • 30 • 36 • 48 • 60
4-1/2	4	4.5	9 tube, 8 pipe	9 • 12 • 16 • 18 • 20 • 24 • 30 • 32 • 36 • 48 • 60
4-3/4	—	4.75	9-1/2	36 • 48 • 60 • 72
5	—	5.0	10	12.5 • 17 • 22 • 24 • 30 • 36 • 42 • 48 • 60 • 72
—	5	5.563	10	15 • 20 • 24 • 30 • 36 • 42 • 48 • 60 • 72
5-1/2	—	5.5	11	30 • 36 • 42 • 48 • 60 • 72
6	—	6.0	12	15 • 18 • 24 • 30 • 36 • 42 • 48 • 60 • 72
—	6	6.625	12	18 • 24 • 30 • 36 • 42 • 48 • 60 • 72
8	—	8.0	16	48 • 60 • 72
_	8	8.625	16	24 • 32 • 40 • 48 • 60 • 72

FOR 90° BENDS

- Face-to-End =
- CLR + Tangent + (1/2) OD
- Centerline-to-End = CLR + Tangent
- Setback = CLR (Centerline Radius)

FOR OTHER BENDS

- Setback = CLR x (Tangent) 1/2 bend angle
- Centerline-to-End = Setback + Tangent

NOTES

- Order Bends Stat: by outside diameter, wall thickness, alloy, degree of bend, centerline radius and tangent
- Wall Thickness: 16-ga. (0.063), 14-ga. (0.083) and 11-ga. (0.120) tubing. Schedules 5, 10 and 40 pipe. Other wall thicknesses available on request.

MATERIAL	METAL SPE	CIFICATION		
	PIPE	TUBING		
ALUMINUM	6063-T1 Extruded	6063-T1 Extruded		
STAINLESS STEEL	T304 ASTM A312	T304 ASTM A249		
CARBON STEEL	ASTM A53	ASTM A513		
GALVANIZED STEEL	Galv. A53	Galv. A513		

10.75

10

20

40 • 50

SECTION 5 **CONVEY LINE** & CONVEY LINE ACCESSORIES Convey Line Sight Glasses



TUBE OR PIPE INSERTED IN CLEAR ACRYLIC

3.0″	1.5″	7.0″	1.5″	3.0″
•				-

TUBE WITH ALUMINUM ENDS — SIZE IN INCHES				
PART NUMBER	OVERALL O.D. OUTSIDE DIAMETER A	TUBE O.D. OUTSIDE DIAMETER B	TUBE I.D. INSIDE DIAMETER C	
1-1/2-OD-16	1.750	1.500	1.375	
2-OD-16	2.250	2.000	1.875	
2-OD-11	2.250	2.000	1.750	
2-1/4-OD-16	2.250	2.250	2.125	
2-1/2-OD-16	2.750	2.500	2.375	
2-1/2-OD-11	2.750	2.500	2.250	
3-OD-16	3.250	3.000	2.875	
3-OD-11	3.250	3.000	2.750	
3-1/2-OD-16	3.750	3.500	3.375	
3-1/2-OD-11	3.750	3.500	2.250	
4-OD-16	4.250	4.000	3.875	
4-OD-11	4.250	4.000	3.750	
4-1/2-OD-16	4.750	4.500	1.375	
4-1/2-OD-16	4.750	4.500	4.250	
5-OD-14	5.250	5.000	4.875	
5-OD-11	5.250	5.000	4.750	
6-OD-11	6.500	6.000	5.750	

PIPE WITH STEEL ENDS — SIZE IN INCHES				
PART NUMBER	OVERALL O.D. OUTSIDE DIAMETER A	TUBE O.D. OUTSIDE DIAMETER B	TUBE I.D. INSIDE DIAMETER C	
SG-2-IPS	2.500	2.375	2.000	
SG-2-1/2-IPS	3.000	2.875	2.500	

PIPE WITH ALUMINUM ENDS — SIZE IN INCHES				
PART NUMBER	OVERALL O.D. OUTSIDE DIAMETER A	TUBE O.D. OUTSIDE DIAMETER B	TUBE I.D. INSIDE DIAMETER C	
SG-2-AP	2.500	2.375	2.000	
SG-2-1/2-AP	3.000	2.875	2.500	

CONVEY LINE SIGHT GLASSES

- Allows viewing of material flow
- Smooth, straight-through interior
- Air-tight seal
- Viewing area available in:
 - acrylic
 - Pyrex®
- Pipe or tube available in:
 - aluminum
 - carbon steel
 - stainless steel
- Permanently attached grounding strip eliminates build up of static electricity

CLEAR ACRYLIC INSERTED IN PIPE



PIPE WITH STEEL ENDS — SIZE IN INCHES											
PART NUMBER	OVERALL O.D. OUTSIDE DIAMETER A	GLASS O.D. OUTSIDE DIAMETER B	TUBE I.D. INSIDE DIAMETER C								
SG-3-IPS	3.500	3.250	3.000								
SG-3-1/2-IPS	4.000	3.750	3.500								
SG-4-IPS	4.500	4.250	4.000								
SG-5-IPS	5.563	5.250	5.000								
SG-6-IPS	6.625	6.500	6.000								

PIPE WITH ALUMINUM ENDS — SIZE IN INCHES											
PART NUMBER	OVERALL O.D. OUTSIDE DIAMETER A	GLASS O.D. OUTSIDE DIAMETER B	TUBE I.D. INSIDE DIAMETER C								
SG-3-AP	3.500	3.250	3.000								
SG-3-1/2-AP	4.000	3.750	3.500								
SG-4-AP	4.500	4.250	4.000								
SG-5-AP	5.563	5.250	5.000								
SG-6-AP	6.625	6.500	6.000								

ALL CONVEY LINE SIGHT GLASSES

MATERIAL	SPECIFICATION					
ALUMINUM TUBING	6063-T1 and 6063-T6					
SIGHT GLASS	Cast acrylic resin					
STEEL PIPE	Schedule 40					
ALUMINUM PIPE	Schedule 40 (Schedules 5 and 10 also available)					

SECTION 5 **CONVEY LINE** & CONVEY LINE ACCESSORIES Wearback Elbows

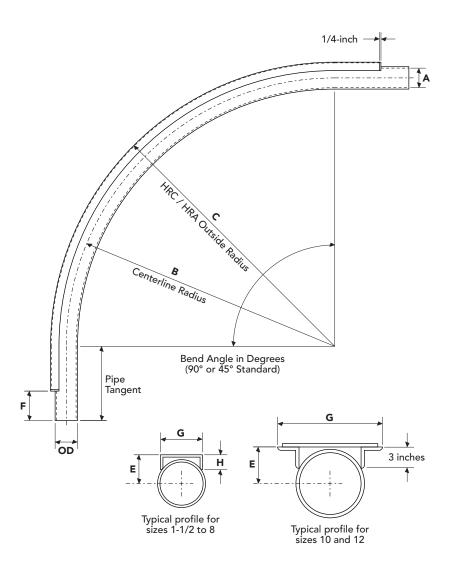
90° WEARBACK ELBOWS

Designed for abrasive applications.

PRODUCT FEATURES

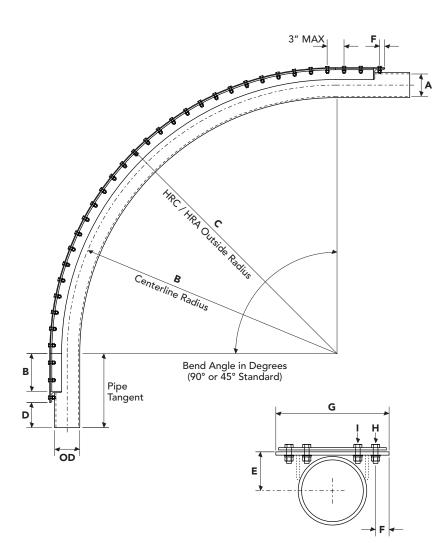
- Long-radius design for minimal pressure loss with granular product
- Wear-through capable design retains product in hollow channel
- Available in Schedules 40 and 80
- Available in standard or induction-hardened construction

Note: Wearback Elbows will provide improved life expectancy over standard elbows without wearbacks. However, Smoot cannot make any specific guarantees regarding the wear life.



PART NUMBER		FOR	MED 90° EL	BOW		WEARBA	CK PARTS	DIMENSIONS					
	A PIPE SIZE	PIPE OUTSIDE DIAMETER	в	TANC	GENT	C HRC / HRA OUTSIDE RADIUS	90° HRF WIDTH	E	F	G			
			PIPE CLR	CHANNEL	PIPE						н		
64-49-1	1-1/2	1.900	18	3-13/16	8-13/16	19.5	not required	1-1/2	4-3/4	1-1/2	3/4		
64-49-2	2	2.375	24	4-3/4	10-1/4	25.8	not required	1-13/16	5-1/4	2	1		
64-49-3	3	3.500	36	7	12-1/2	38.5	not required	2-1/2	5-1/4	3	1-7/16		
64-49-4	4	4.500	48	9	16	50.8	not required	2-13/16	6-3/4	4	1-5/8		
64-49-5	5	5.563	48	11-1/8	18-5/8	51.7	not required	3-11/16	7-1/4	4	1-5/8		
64-49-6	6	6.625	60	13-1/4	20-1/4	64.1	not required	4-1/8	6-3/4	5	1-3/4		
64-49-7	8	6.625	72	17-1/4	25-1/4	76.8	not required	4-13/16	7-3/4	7	2-1/8		
64-49-8	10	10.75	96	21-1/2	33-1/2	101.9	14	5-7/8	11-3/4	15	3		
64-49-9	12	12.75	96	25-1/2	38-1/2	103.0	15	7	12-3/4	16	3		

SECTION 5 **CONVEY LINE** & CONVEY LINE ACCESSORIES Wearback Elbows



90° WEARBACK ELBOWS WITH REPLACEABLE-CHANNEL

Designed for abrasive applications. Replace the wearback plate and not the entire elbow.

PRODUCT FEATURES

- Long-radius design for minimal pressure loss with granular product
- Available with hollow, ceramic or cement-filled channels for maximum wear capability
- Available in Schedules 40 and 80
- Available in standard or induction-hardened construction

Note: Wearback Elbows will provide improved life expectancy over standard elbows without wearbacks. However, Smoot cannot make any specific guarantees regarding the wear life.

PART NUMBERS FORMED 90° ELBOW					w	DIMENSIONS						QUANTITY				
FILL FILL	CEMENT	AIR FILL ASSEMBLY	A PIPE SIZE	B CHANNEL TANGENT (2 X OD)	PIPE OD OUTSIDE DIAMETER	C CLR	TANO	GENT	c	D	E	F	G	H SIDE BOLTS	I END BOLTS	J TOTAL BOLTS
	ASSEMBLY						ANGLE	PIPE								
64-59-1A	64-59-1B	64-59-1C	1-1/2	3.8	1.900	18	3-13/16	8-13/16	19.71	4	1-1/2	7/16	3-5/8	30	4	30
64-59-2A	64-59-2B	64-59-2C	2	4.75	2.375	24	4-3/4	10-1/4	26.19	4	2	11/16	5-1/8	38	4	38
64-59-3A	64-59-3B	64-59-3C	3	7.00	3.500	36	7	12-1/2	38.56	4	2-3/8	5/8	6	54	4	54
64-59-4A	64-59-4B	64-59-4C	4	9.00	4.500	48	9	16	51.16	5	3	1	8	70	8	74
64-59-5A	64-59-5B	64-59-5C	5	11.13	5.563	48	11-1/8	18-5/8	51.86	5	3-3/4	1-1/16	10	74	8	78
64-59-6A	64-59-6B	64-59-6C	6	13.25	6.625	60	13-1/4	20-1/4	64.56	5	4-7/16	7/8	10	90	8	94
64-59-7A	64-59-7B	64-59-7C	8	17.25	8.625	72	17-1/4	25-1/4	77.26	6	5-1/8	15/16	11-1/2	108	8	112
64-59-8A	64-59-8B	64-59-8C	10	21.50	10.75	96	21-1/2	33-1/2	102.06	10	5-15/16	7/8	13	140	8	144
64-59-9A	64-59-9B	64-59-9C	12	25.50	12.75	96	25-1/2	38-1/2	103.36	10	7-1/4	1-5/16	17	148	12	156

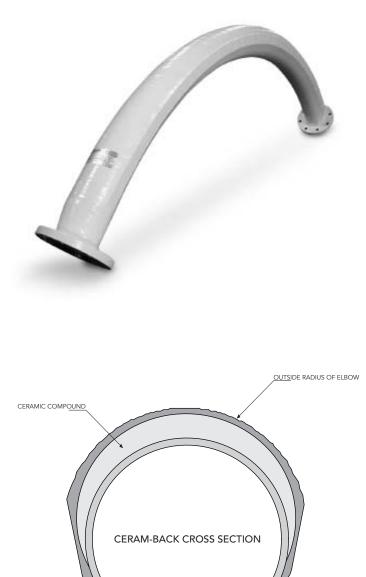
SECTION 5 **CONVEY LINE** & CONVEY LINE ACCESSORIES Wear-Resistant, <u>Ceramic-Wrapper Elbows</u>

CERAM-BACK[®] WEAR-RESISTANT, CERAMIC-WRAPPED ELBOWS

Designed to eliminate unwanted costs such as maintenance, loss of material and downtime. These elbows replace a conventional elbow and are manufactured to remain on a system much longer, thus reducing costs and raising production. The Ceram-Back[®] Elbow has a jacket across the back of the core elbow which is approximately 1/2-inch of ceramic compound. This extremelyhard, ceramic jacket and core elbow is then wrapped with an exterior material to maintain the hoop strength. Once the core elbow has worn through, the abrasion is transferred to the ceramic outer jacket. The core also acts as a static conductor. Plain ends, flanges, and custom ends are available.

PRODUCT FEATURES

- Elbow has a 1/4-inch ceramic compound jacket across the core elbow
- Ceramic compound has a Mohs hardness of 9+, second only to diamond (10 on the Mohs scale)
- Ceramic jacket and core elbow is wrapped with an exterior material to maintain hoop strength
- Easily replaces existing elbows
- Available in any degree and standard CLRs
- Pipe or tube available in:
 - aluminum
 - carbon steel
 - stainless steel
 - galvanized steel
- Various ends available upon request



INTERIOR SUBSTRATE

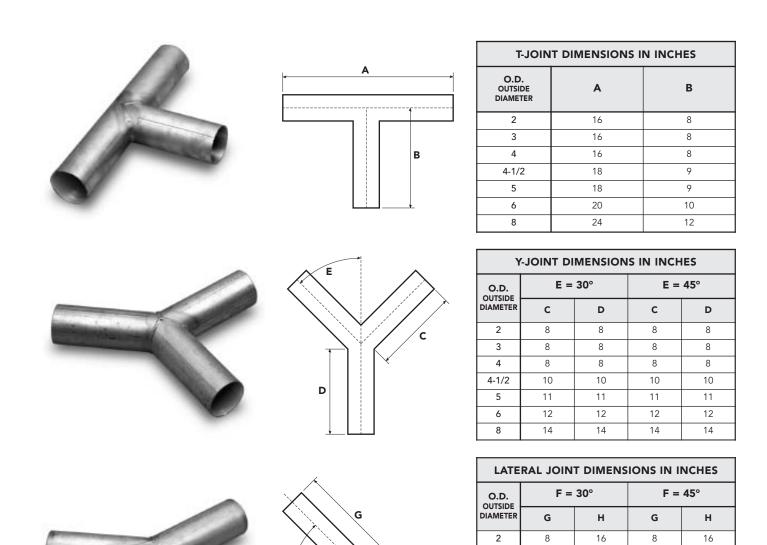
REINFORCEMENT TO

MAINTAIN EXTERIOR HOOP STRENGTH

SECTION 5 **CONVEY LINE** & CONVEY LINE ACCESSORIES Standard and Special Welded Fabrications

STANDARD AND SPECIAL WELDED FABRICATIONS

- Pipe or tube available in:
 - carbon steel
 - stainless steel
 - galvanized steel
 - aluminum



Н

4-1/2

SECTION 5 **CONVEY LINE** & CONVEY LINE ACCESSORIES Flexibles Hoses & Accessories

FLEXIBLE RUBBER HOSE — 688 SB BULK COMMODITY

Designed for the transfer of bulk food product via vacuum, gravity of pneumatic systems where abrasion resistance is required.

PRODUCT FEATURES

- Type D₃ natural rubber tube (black)
- Standard thickness is 3/16 inch, with 3/8-inch available on request
- Available 2-inch to 6-inch outside diameter
- Synthetic, high-tensile textile reinforcment with wire helix
- Available with straight ends, enlarged ends available on request



FLEXIBLE RUBBER HOSE — 690 SB BULK COMMODITY

Designed for the transfer of bulk food product via vacuum, gravity of pneumatic systems where FDA sanitary tubing is required.

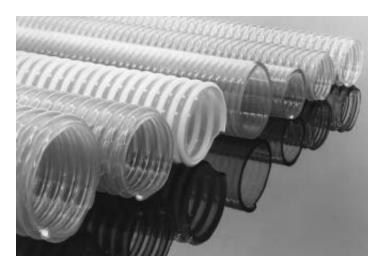
PRODUCT FEATURES

- Type D₃ food-grade, natural rubber tube, white with grey exterior
- Standard thickness is 3/16 inch, with 3/8-inch available on request
- Available 2-inch to 6-inch outside diameter
- Synthetic, high-tensile textile reinforcment with wire helix
- Available with straight ends, enlarged ends available on request

Note: Not recommended for vinegar, mustard or other compounds containing acetic acid.



SECTION 5 **CONVEY LINE** & CONVEY LINE ACCESSORIES Flexibles Hoses & Accessories



FLEXIBLE PVC HOSE

Designed to handle most bulk conveying system requirements.

PRODUCT FEATURES

- Suitable for vacuum or pressure service
- Ideal for conveying pellet, granular or powder materials
- Available in clear or high-density PVC
- Static dissipation ground wire also available



FLEXIBLE HOSE ACCESSORIES

Hose clamps designed for a wide variety of flexible hose applications, engineered for excellent grip and hold capacities.

PRODUCT FEATURES

- Made of galvanized steel saddle, nuts and washers with electroplated spiral-thread bolts
- Double-spiral bolt clamps for 1-1/2-inch to 10-inch hose sizes
- Optional stainless-steel construction available

FLEXIBLE HOSE ASSEMBLIES

Custom-designed assemblies built to the customer's specifications.

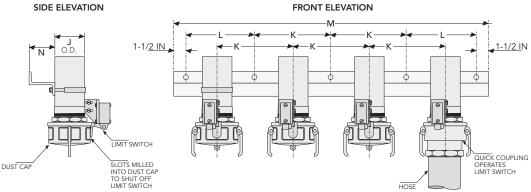
PRODUCT FEATURES

- Rubber hose assembly available with thin-wallstyle Quick Connectors or integral-hose-shankstyle hose connectors
- Lengths up to 50 feet

SECTION 5 CONVEY LINE & CONVEY LINE ACCESSORIES Flexibles Hoses & Accessories

HOSE STATIONS

- Comes standard with activating limit switch
- Modified dust cap for coverage without limit switch activations
- Product contact materials available:
 - carbon steel
 - stainless steel
 - aluminum



HOSE STATION MODEL NUMBER NOMENCLATURE							
SERIES NUMBER	NO. OF POSITIONS	DIMENSIONS	PIPE OR TUBE STYLE	ASSEMBLY MATERIAL	QUICK CONNECT	LIMIT SWITCHES	HOSE STYLE
A62	В	C	D	E	F	G	H

B S	PECIFICATIONS
MODEL NUMBER DASH B	NUMBER OF UNIT POSITIONS REQUIRED
BO	1 position no mounting bracket
B1	2 positions
B2	3 positions
B3	4 positions
B4	5 positions
B5	6 positions
B6	7 positions
B7	8 positions
B8	9 positions
B9	10 positions
B10	11 positions
B11	12 positions

E SPECIFICATIONS

MATERIAL FOR

UNIT ASSEMBLY

CONTRUCTION

304 stainless stee

carbon steel

aluminum

MODEL

NUMBER

DASH E

F1

E2

E3

D SPECIFICATIONS							
MODEL NUMBER DASH D	MATERIAL OF PIPE OR TUBE						
D1	14-ga (0.083) wall or less tube						
D2	11-ga (0.120) wall tube						
D3	Schedule 80 pipe						
D4	Schedule 40 pipe						
D5	Schedule 10 pipe						
D6	Schedule 5 pipe						

F SPECIFICATIONS

MATERIAL FOR

QUICK CONNECT

CONSTRUCTION

aluminum

brass

stainless steel

MODEL

NUMBER

DASH F

F1

F3

MODEL NUMBER DASH G	LIMIT SWITCH CONFIGURATION
G1	Without limit switches
G2	Limit switches, each with one set of N.O. contacts and N.C. contacts
G3	Limit switches, each with two sets of N.O. contacts and N.C. contacts
G4	Same as G2 with additional explosion-proof enclosure
G5	Same as G3 with additional explosion-proof enclosure

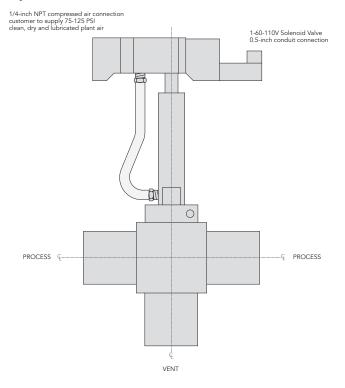
	H SPECIFICATIONS							
MODEL NUMBER DASH H	MATERIAL FOR HOSE CONSTRUCTION							
H1	No hose supplied with hose station							
H2	Metal hose with abrasion-resistant steel interior, galvanized exterior							
H3	Metal hose with stainless-steel interior, galvanized exterior							
H4	Metal hose with stainless-steel interior and exterior							
H5	H5 Rubber hose with black neoprene							
H6	Rubber hose with white neoprene							

	C SPECIFICATIONS																									
MODEL	J	к	L	HOSE								B	s = NUM	BER	OF HOS	E U	NIT STATI	ON	S							
NUMBER		UNIT	END	LENGTH	2		3		4		5		6		7		8		9		10		11		12	
DASH C	DIAMETER	SPACING	MOUNTS	LENGIN	М	Ν	М	Ν	М	Ν	M	N	М	Ν	М	Ν	М	Ν	М	Ν	М	Ν	M	N	М	N
C1	2	6-1/2	5-1/16	7′ 6″	13-1/8	4	19-5/8	4	26-1/8	4	32-5/8	4	39-1/8	4	45-5/8	4	52-1/8	4	55-5/8	4	65-1/8	4	71-5/8	4	78-1/2	4
C2	2-3/8	6-1/2	5-1/4	7′ 6″	13-1/2	4	20	4	26-1/2	4	33	4	39-1/2	4	46	4	52-1/2	4	59	4	65-1/2	4	72	4	78-1/2	4
C3	3	8-1/4	6-7/16	7′ 6″	15-7/8	4	24-1/8	4	32-3/8	4	40-5/8	4	48-7/8	4	57-1/8	4	65-3/8	4	73-5/8	4	81-7/8	4	90-1/8	4	98-3/8	4
C4	3-1/2	8-1/4	6-11/16	7′ 6″	16-3/8	4	24-5/8	4	32-7/8	4	41-1/8	4	49-3/8	4	57-5/8	4	65-7/16	4	74-1/8	4	82-3/8	4	90-5/8	4	98-7/8	4
C5	4	9-1/4	7-7/16	10' 0"	17-7/8	4	27-1/8	4	36-3/8	4	45-5/8	4	54-7/8	4	64-1/8	4	73-3/8	4	82-5/8	4	91-7/8	4	101-1/8	6	110-3/8	6
C6	4-1/2	9-1/4	7-11/16	10' 0"	18-3/8	4	27-5/8	4	36-1/8	4	46-1/8	4	55-3/8	4	64-5/8	4	73-7/8	4	83-1/8	4	92-3/8	4	101-5/8	6	110-7/8	6
C7	5	10-1/4	8-9/16	10' 0"	20-1/8	4	30-5/8	4	41-1/8	4	51-5/8	4	62-1/8	4	72-5/8	4	83-1/8	4	93-5/8	4	104-1/8	6	114-5/8	6	125-1/8	6
C8	5-9/16	10-1/4	8-27/32	10' 0"	20-11/16	4	31-3/16	4	41-11/16	4	52-3/16	4	62-11/16	4	73-3/16	4	83-11/16	4	94-3/16	4	104-11/16	6	115-3/16	6	125-1/2	2 6
C9	6	14	10-13/16	15' 0"	24-5/8	4	38-5/8	4	51-5/8	4	66-5/8	4	80-5/8	4	94-5/8	6	108-5/8	6	122-5/8	6	136-5/8	6				
C10	6-5/8	14	11-1/4	15' 0"	25-1/4	4	39-1/4	4	53-1/4	4	67-1/4	4	81-1/4	4	95-1/4	6	109-1/4	6	123-1/4	6	137-1/4	6				
C11	8	17	13-5/16	15' 0"	29-5/8	4	46-5/8	4	63-5/8	4	80-5/8	6	97-5/8	6	114-5/8	6	131-5/8	6								
C12	8-5/8	17	13-5/8	15' 0"	30-1/4	4	47-1/4	4	64-1/4	4	81-1/4	6	98-1/4	6	115-1/4	6	132-1/4	6								

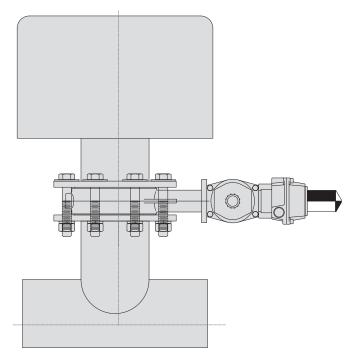
HOSE STATION MODEL NUMBER SAMPLE: A62-B2-C5-D2-E2-F1-G2-H2

The above sample model number would describe a Series 62, three-position Hose Station assembly for a 4-inch outside-diameter line with 11-gauge wall tube, carbon-steel product area, aluminum quick connect, water-tight limit switches each with one set of N.O. contacts and one set of N.C. contacts. This assembly would include a 10-foot metal hose with a stainless-steel interior and a galvanized exterior.

Style 1 vacuum breaker



Style 2 vacuum breaker and modulating valve



VACUUM BREAKER VALVES

Used in Vacuum Dilute Phase Conveying Systems for controlling vacuum while allowing the vacuum pump to remain running.

PRODUCT FEATURES

- Aluminum and stainless steel construction, Style 1 vacuum breaker
- Carbon steel, aluminum and stainless steel construction available for Style 2 vacuum breaker
- Pneumatic actuated
- Available with NEMA 4X, 7 and 9 electrical components
- 2-, 3- and 4-inch valves will be fitted with a Style 1 vacuum breaker
- 5-, 6- and 8-inch valves will be fitted with a Style 2 vacuum breaker
- Custom configurations available on request

VACUUM MODULATING VALVES

Used in Vacuum Dilute Phase Conveying Systems to control and maintain a consistent vacuum within the onvey line.

PRODUCT FEATURES

- Carbon steel, aluminum and stainless steel construction available
- Inlet filter to keep fugitive dust from entering the line
- Pneumatic actuated with infinite variable positioner
- Available with NEMA 4X, 7 and 9 electrical components
- 2-inch to 8-inch line connections; specify tube or pipe size when placing order
- Custom configurations available on request

Note: Customer to supply 80-120 PSI clean, dry and lubricated plant air. Customer will need to provide vacuum transmitter and controls for modulating valve operation.

SECTION 6 MATERIAL UNLOADING TABLE OF CONTENTS

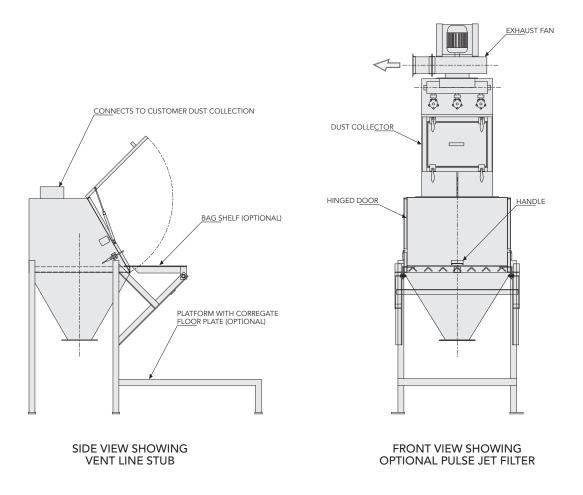
SECTION 6 – Material Unloading

BAG DUMP HOPPER Bag Dump Hopper	
BULK BAG DISCHARGE IBC2000 Bulk Bag Unloader	
RAIL CAR UNLOADERSInlet Hatch FilterDry-Flo Rail Car Discharge AdapterCenter Flow Rail Car Discharge AdapterAirlift Rail Car Discharge Adapter13x24 Rail Car Discharge Adapter24x30 Center Flow Rail Car Discharge Adapter	
MATERIAL FLOW DEVICES Air Pad Flow Aid Assembly Air Jet Flow Aid Assembly	



BAG DUMP HOPPER

- Available with vent stub to connect to your existing dust collection system
- Available with self-contained bin vent with exhaust fan for locally induced dust collection
- Stainless steel construction
- Epoxy-coated carbon steel and food-grade construction available upon request
- Standard discharge flange configured for installation of Smoot rotary valve; alternative discharge flange connections are available
- NEMA 4 classified electrical components standard; NEMA 7/9 components also are available
- Available with or without working platform



SECTION 6 **MATERIAL** UNLOADING Bulk Bag Discharge



IBC2000 BULK BAG UNLOADER

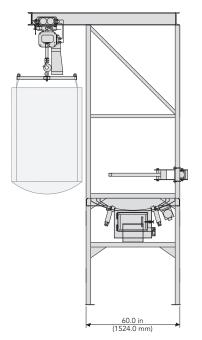
Constructed of heavy duty tubular steel with a compact footprint, the wide range of options means it can easily be modified to handle your specific requirements.

PRODUCT FEATURES

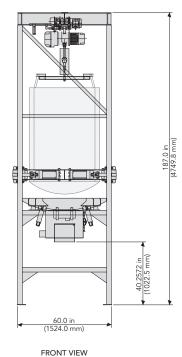
- Adaptable to nearly any discharge or deweigh application
- Constructed of heavy duty tubular steel
- Compact footprint of 60 in. by 60 in.
- 100 lb. to 4,000 lb. capacity

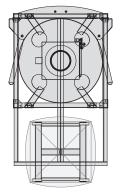
PRODUCT OPTIONS

- Stainless steel contact points
- Bag thumpers
- Bag massagers
- Vibrators
- Agitators
- Gravity flow spouts
- Hoist and trolle



SIDE VIEW





TOP VIEW

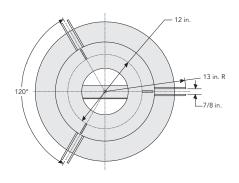
For Ordering and Pricing Information, Call Toll Free 1.800.748.7000

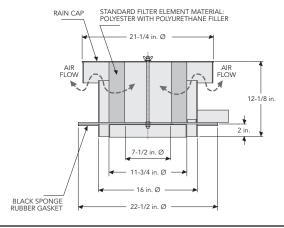
INLET HATCH FILTER

In most cases you will need to open one hatch when unloading a railcar to avoid implosion or collapse when unloading. The Smoot Inlet Hatch Filter was designed to restrict foreign objects or airborne particles from entering the railcar while the hatch is open.

PRODUCT FEATURES

- Aluminum construction
- Rated capacity: 1,100 CFM





DRY-FLO RAIL CAR DISCHARGE ADAPTER

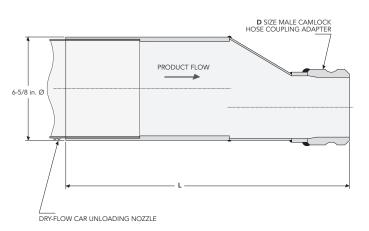
This adapter was designed for the General America Transportation Corporation's Dry-Flo railcar, but it will work on other cars as well. If your railcar is of a different manufacturer, consult that manufacturer's instruction manual for the proper unloading procedure.

PRODUCT FEATURES

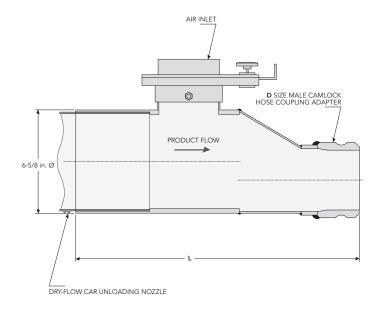
Aluminum construction

MODEL NUMBER	D (INCHES)	L (INCHES)	SHIPPING WEIGHT (POUNDS)
34A-1-2	2	15-7/8	15
34A-1-3	3	14-1/16	15
34A-1-4	4	12-5/8	16
34A-1-5	5	12	18
34A-1-6	6	10-3/4	20

Note: Dimension L may vary slightly depending on the type of Quick Coupler Adapter used in manufacture.



SECTION 6 **MATERIAL** UNLOADING Rail Car Unloaders



CENTER FLOW RAIL CAR DISCHARGE ADAPTER

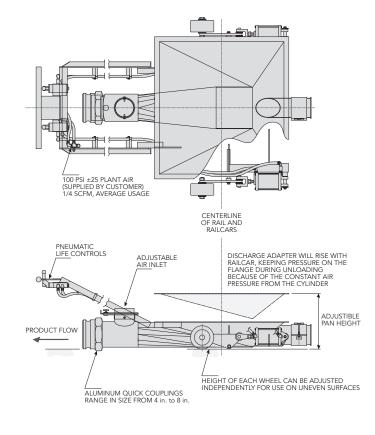
This adapter was designed for the ACF Center Flow Pneumatic outlet, but it will work on other cars as well. If your railcar is of a different manufacturer, consult that manufacturer's instruction manual for the proper unloading procedure.

PRODUCT FEATURES

• Aluminum construction

MODEL NUMBER	D (INCHES)	L (INCHES)	SHIPPING WEIGHT (POUNDS)
34A-2-2	2	23-1/8	16
34A-2-3	3	21-5/16	16
34A-2-4	4	19-7/8	17
34A-2-5	5	19-15/16	19
34A-2-6	6	19	21

Note: Dimension L may vary slightly depending on the type of Quick Coupler Adapter used in manufacture.



AIRLIFT RAIL CAR DISCHARGE ADAPTER

When manual adapters take to much time and manpower to connect for railcar unloading, the Smoot Airlift Adapter can be the solution to overcoming these problems. Airlift Adapters provide you versatility for movement not found in Bootlift style fixed pit unloaders which also require tedious railcar spotting prior to use.

PRODUCT FEATURES

- Carbon Steel standard construction
- Stainless steel product contact areas available
- NEMA 4 electrical component classification
- NEMA 4X, 7 & 9 classified components available upon request
- Many standard sizes for all applications available, contact your Smoot Representative for details

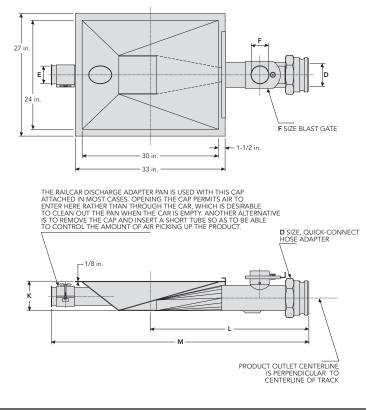
24X30 CENTER FLOW RAIL CAR DISCHARGE ADAPTER

These discharge adapters fit 24x30 center flow enterprise gate equipped rail cars.

PRODUCT FEATURES

- Carbon steel construction (standard)
- Recommended two adapters per installation
- Four vise grip C-clamps supplied per adapter

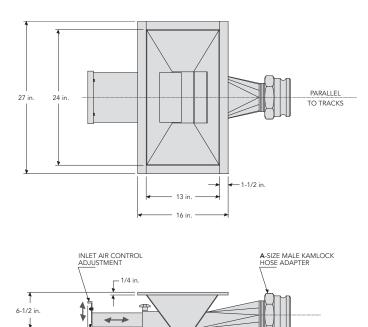
	Dimensions (inches)										
MODEL NUMBER	D LINE SIZE	E VENT SIZE	F	к	L	М					
B1	4	3	4	6-1/2	34	56					
B2	5	4	4	6-1/2	34	56					
B3	6	5	5	6-1/2	36	56					
B4	8	6	6	7-1/2	42	59-1/2					



13X24 RAIL CAR DISCHARGE ADAPTER

- Carbon steel construction (standard)
- Recommended two adapters per installation.
- Four vise grip C-clamps supplied per adapter.

MODEL NUMBER	A LINE SIZE (INCHES)	SHIPPING WEIGHT (POUNDS)
34E-1A-4	4	10
34E-1A-5	5	10
34E-1A-6	6	12
34E-1A-8	8	12



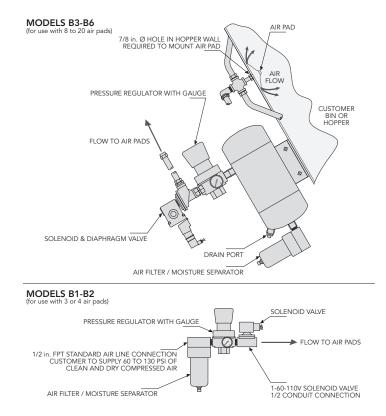
AIR INI ET TUBE

- 35 in

SLIDE IN AND OUT TO ADJUST PRODUCT FLOW

AIR INI FT

SECTION 6 **MATERIAL** UNLOADING Material Flow Devices

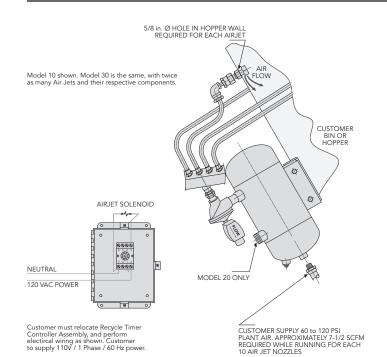


AIR PAD FLOW AID ASSEMBLY

The Air Pad Discharge works on the principal of using aeration along the bin wall in addition to a gentle vibration to fluidize a pulverulent type product. This causes the product to flow by gravity in a semi fluid state out the discharge outlet of a bin hopper.

PRODUCT FEATURES

- Available in 3 to 20 air pad assemblies
- On/Off timer for interval and duration adjustments
- NEMA 4 enclosure standard, NEMA 7/9 available
- Air usage is 10-20 CFM @ 20-30 psig per air pad



AIR JET FLOW AID ASSEMBLY The Air Jet Discharge works on the principal of

using quick pulses of air along the hopper wall to separate and fluidize products. This promotes the product to flow by gravity in a semi fluid state towards the discharge outlet of the hopper.

PRODUCT FEATURES

- Works off plant air supply 60 to 120 PSI
- Available in 10 or 20 air jets units
- NEMA 4 enclosure standard, NEMA 7/9 available
- On/Off timer for interval and duration adjustments

PNEUMATIC **CONVEYING** COMPONENTS & SPARE PARTS



Smoot, a brand of Magnum Systems, has been a leading provider of pneumatic conveying systems and components for more than 47 years. This includes dense and dilute phase pneumatic conveying systems, railcar and truck unloading, and the ability to handle some of the most abrasive materials in the world. Our engineering and service staff have the application experience and knowledge that have lead to successful design and installations across the world.

MARKETSSERVED

- Chemical
- Food
- Pharmaceutical
- Aggregates
- Industrial Minerals
- Power
- Plastics
- Agriculture

TECHNICAL SERVICES

Smoot's engineering and technical staff's experience encompasses all phases of dry material pneumatic system design, modification, expansion, control and operation:

- Feasibility studies
- Project scheduling
- Capital requirements
- Mechanical and electrical engineering
- Component modifications
- Ancillary equipment procurement
- Control systems and data interface
- Project/site management
- Installation services
- Training programs

MAJOR PRODUCTS

- Dilute phase pneumatic conveying systems
- Dense phase pneumatic conveying systems
- Railcar unloading pneumatic conveying systems
- Rotary airlocks
- Pneumatic blowers
- Slide diverter valves
- Butterfly valves
- Hopper-top diverter valves
- Diverter valves
- Slide gate valves
- Air filtration

A leader in the design and manufacture of pneumatic conveying systems and equipment. Established 1960.



PARTS AVAILABLE

Rotary Airlock Valves	Available in ten standard models, with a variety of adapters, valves, flanges, feeders,				
	hoppers and replacement parts.				
Blowers and Fans	Complete assemblies as well as replacement units for regenerative and positive replacement				
	blowers with a variety of customized choices.				
Diverters	For pneumatic or gravity applications. Available in stainless steel, carbon steel or aluminum.				
Valves	Knife gates, slide gates, ball valves and butterfly valves in standard or custom materials and sizes				
Bin Vents, Filter Receivers	Complete assemblies and parts in a variety of standard or custom materials and sizes.				
Rail Car Accessories	Airlift and manual discharge adapters, as well as pneumatic hopper car vibrators.				
	A wide selection of sizes and styles available in stainless steel, carbon steel or aluminum.				
Pipe, Tubing and Elbows	Parts in a variety of standard or custom materials and sizes.				
Filters, Bags and Cages	Parts in a variety of standard or custom materials and sizes.				
Hose and Hose Assemblies	Parts in a variety of standard or custom materials and sizes.				
Couplings	Parts in a variety of standard or custom materials and sizes.				
Filter Elements	Parts in a variety of standard or custom materials and sizes.				
Flex Sleeves	Parts in a variety of standard or custom materials and sizes.				
Cyclones	Cylone and cyclonette separator assemblies and parts in stainless steel, carbon steel or aluminu				
Level Indicators	Complete systems and parts in a variety of standard or custom materials and sizes.				
Flow Aid Devices	Assemblies and parts in a variety of standard or custom materials and sizes.				
Bag Dump Stations	Complete systems and parts in a variety of standard or custom materials and sizes.				
Replacement Motors	Assemblies and parts in a variety of standard or custom materials and sizes.				
Hose Switch Stations	Assemblies and parts in a variety of standard or custom materials and sizes.				

We accept the following Credit Cards:



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