

# END BEARINGS

END BEARING      SHAFT SIZE

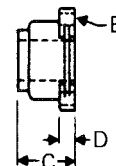
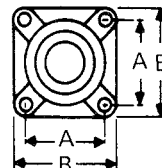
EB F 112 -BB

F = FLANGED  
P = PILLOW BLK.  
D = DISCH. TYPE

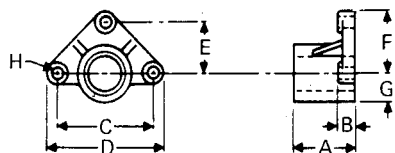
BB = BALL BEARING  
B = BABBITT  
R = ROLLER  
BR = BRONZE  
BG = BRONZE GRAPHITE  
PLUGS

## ROLLER BEARING FLANGE UNIT

Includes 1/8" Alemite Fitting

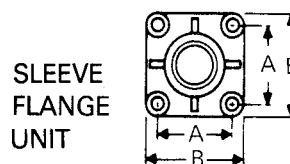


Bore	Part Number	A	B	C	D	E	Wt.
1-1/2	EBF112-R	4-1/8	5-3/8	3-1/2	1-3/16	1/2	10.0
2	EBF2-R	4-3/8	5-5/8	3-5/8	1-3/16	1/2	12.0
2-7/16	EBF2716-R	5-3/8	6-7/8	4-3/16	1-1/2	5/8	21.0
3	EBF3-R	6	7-3/4	4-11/16	1-5/8	3/4	28.0
3-7/16	EBF3716-R	7	9-1/4	5-1/4	1-7/8	3/4	46.0



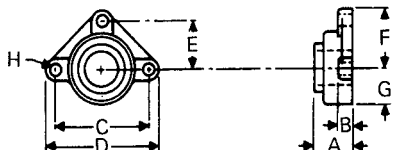
## BABBITT DISCHARGE UNIT

Bore	Part Number	A	B	C	D	E	F	G	H
1	EBD1-*	2	1/2	3-7/8	5-3/8	1-15/16	2-11/16	1	3/8
1-1/2	EBD112-*	3	3/4	5-5/8	7-1/4	2-13/16	3-5/8	1-1/4	1/2
2	EBD2-*	4	3/4	6-1/4	8	3-1/8	4	1-5/8	5/8
2-7/16	EBD2716-*	5	1	8	9-7/8	4	4-15/16	1-7/8	5/8
3	EBD3-*	6	1	8-1/2	11	4-1/4	5-1/2	2-1/8	3/4
3-7/16	EBD3716-*	7	1-1/4	9-1/2	12	4-3/4	6	2-1/2	3/4



## SLEEVE FLANGE UNIT

Bore	Part Number	A	B	C	D	E
1	EBF1-*	2-3/4	3-3/4	2	1/2	3/8
1-1/2	EBF112-*	4	5-3/8	3	1/2	1/2
2	EBF2-*	5-1/8	6-1/2	4	5/8	5/8
2-7/16	EBF2716-*	5-5/8	7-3/8	5	3/4	5/8
3	EBF3-*	6	7-3/4	6	3/4	3/4
3-7/16	EBF3716-*	6-3/4	9-1/4	7	3/4	3/4

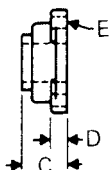
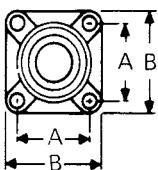


## BALL BEARING DISCHARGE UNIT

Bore	Part Number	A	B	C	D	E	F	G	H
1	EBD1-BB	1-3/8	1/2	3-7/8	5-3/8	1-15/16	2-11/16	2	3/8
1-1/2	EBD112-BB	2	5/16	5-5/8	7-1/4	2-13/16	3-5/8	2-1/2	1/2
2	EBD2-BB	2-1/8	5/8	6-1/4	8	3-1/8	4	3	1/2
2-7/16	EBD2716-BB	2-1/2	11/16	8	9-7/8	4	4-15/16	3-1/2	5/8
3	EBD3-BB	3-1/2	7/8	8-1/2	11	4-1/4	5-1/2	4	3/4
3-7/16	EBD3716-BB	4	1	9-1/2	12	4-3/4	6	4-1/2	3/4

## BALL BEARING FLANGE UNIT

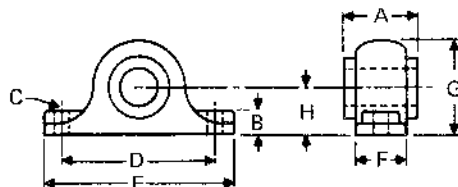
Includes 1/8" Alemite Fitting



Bore	Part Number	A	B	C	D	E	Wt.
1	EBF1-BB	2-3/4	3-3/4	1-3/8	1/2	3/8	3.0
1-1/2	EBF112-BB	4	5-1/8	2	9/16	1/2	4.0
2	EBF2-BB	5-1/8	6-1/2	2-3/8	11/16	5/8	10.0
2-7/16	EBF2716-BB	5-5/8	7	2-1/2	11/16	5/8	12.0
3	EBF3-BB	6	7-3/4	3-1/2	7/8	3/4	21.0
3-7/16	EBF3716-BB	6-3/4	8-7/16	4	1	3/4	28.0

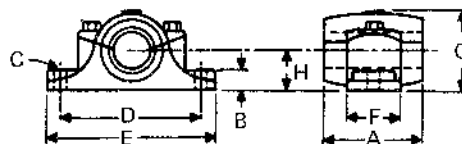
\*Specify (B) Babbitt (BR) Bronze  
(BG) Bronze Graphite Plugs

## ROLLER BEARING PILLOW BLOCK



Bore	Part Number	A	B	C	D	E	F	G	H
1-1/2	EBP112-R	3-3/8	1-1/4	1/2	6-1/4	7-7/8	2-3/8	4-1/4	2-1/8
2	EBP2-R	3-1/2	1-5/16	5/8	7	8-7/8	2-1/2	4-1/2	2-1/4
2-7/16	EBP2716-R	4	1-5/8	5/8	8-1/2	10-1/2	2-7/8	5-1/2	2-3/4
3	EBP3-R	4-1/2	1-7/8	3/4	9-1/2	12	3	6-1/4	3-1/8
3-7/16	EBP3716-R	5	2-1/4	7/8	11	14	3-5/8	7-1/2	3-3/4

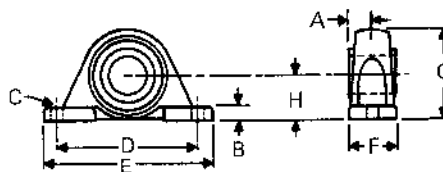
## BABBITTED PILLOW BLOCK



Bore	Part Number	A	B	C	D	E	F	G	H
1	EBP1-*	1-7/8	9/16	3/8	3-5/8	4-3/4	1-1/2	2	1
1-1/2	EBP112-*	2-7/8	11/16	1/2	4-7/8	6-1/4	2	2-3/4	1-3/8
2	EBP2-*	3-7/8	13/16	5/8	6	7-1/2	2-1/2	3-1/2	1-3/4
2-7/16	EBP2716-*	4-7/8	1	5/8	7	9-1/4	3	4-1/4	2-1/8
3	EBP3-*	5-7/8	1-1/8	3/4	8-1/2	10-3/4	3-1/2	5	2-1/2
3-7/16	EBP3716-*	6-7/8	1-3/8	7/8	9-1/4	12	4	5 3/4	2-7/8

\*Specify (B) Babbitt (BR) Bronze (BG) Bronze Graphite Plugs

## BALL BEARING PILLOW BLOCK



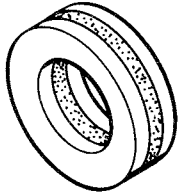
Bore	Part Number	A	B	C	D	E	F	G	H
1	EBP1-BB	13/16	3/4	3/8	4-1/8	5-1/2	1-3/8	2-13/16	1-7/16
1-1/2	EBP112-BB	1-3/16	1-3/16	1/2	5-1/2	7-1/4	2	4-3/16	2-1/8
2	EBP2-BB	1-5/16	1-7/16	5/8	6-7/8	8-7/8	2-3/8	4-9/16	2-1/2
2-7/16	EBP2716-BB	1-1/2	1-11/16	5/8	7-3/8	9-5/8	2-1/2	5-7/16	2-3/4
3	EBP3-BB	1-7/8	2-3/16	7/8	9	12	3-1/4	7	3-1/2
3-7/16	EBP3716-BB	2-1/16	2-1/2	7/8	11	14	3-7/16	8-3/16	4

## THRUST UNITS

### Thrust Washers

Thrust washers are intended for light thrust loads at the intake end of the conveyor. Precision steel washers transfer the conveyor load through a bronze washer to the conveyor end with a minimum of friction.

Provision should be made for frequent lubrication of this bearing and it is not recommended for conveyors carrying abrasive materials.



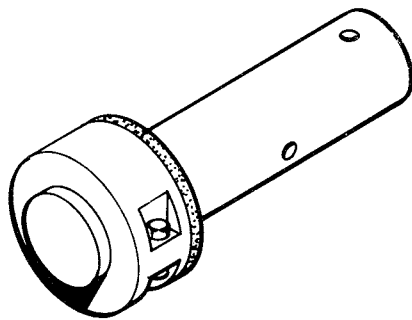
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### Thrust Collar

Thrust collars are intended for service similar to the thrust washer assembly at the discharge end of the conveyor.

A specially grooved shaft is fitted with a split iron set collar to transfer the thrust load through a bronze washer to the conveyor end bearing.

Since this unit is installed outside the conveyor, it may be used when conveying abrasive materials.

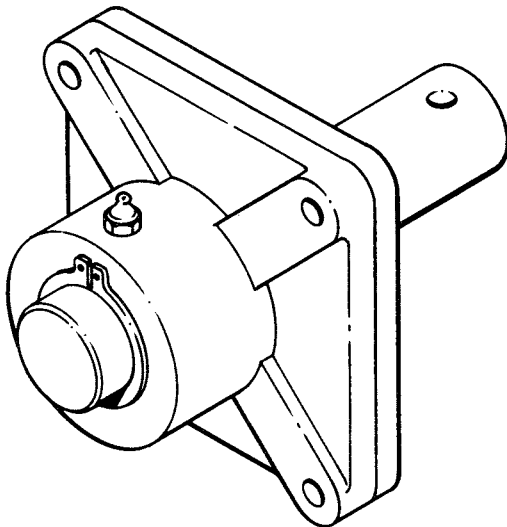


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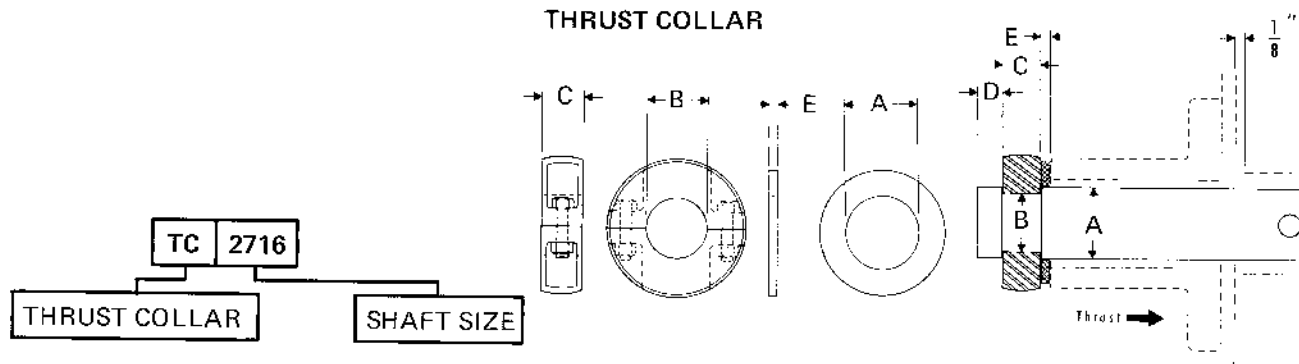
### Type RTB Roller Bearing

Type RTB roller bearing thrust units provide an economical anti-friction combination bearing for medium to heavy thrust loads.

This unit is unidirectional in thrust loading together with relatively great radial capacity. A separate seal plate is provided for the protection of the bearing from the conveyed material. This plate may be reversed to prevent contamination of the material. This bearing is furnished with a drive shaft, or end shaft.

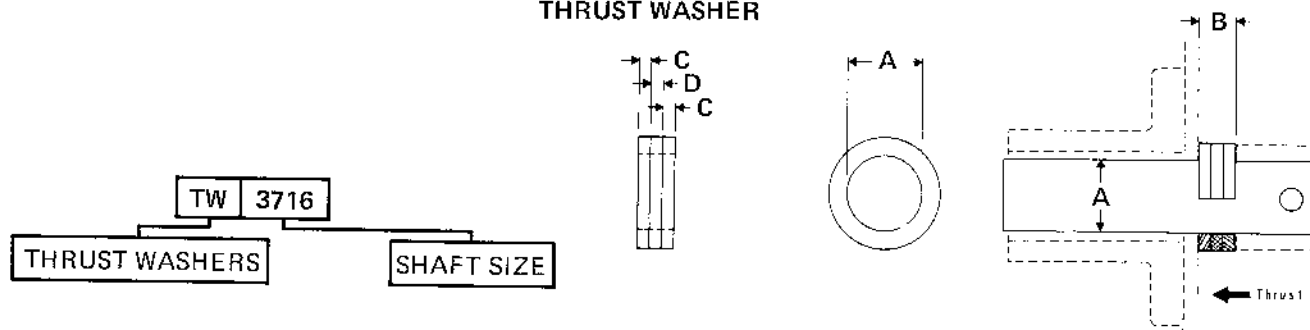


### THRUST COLLAR



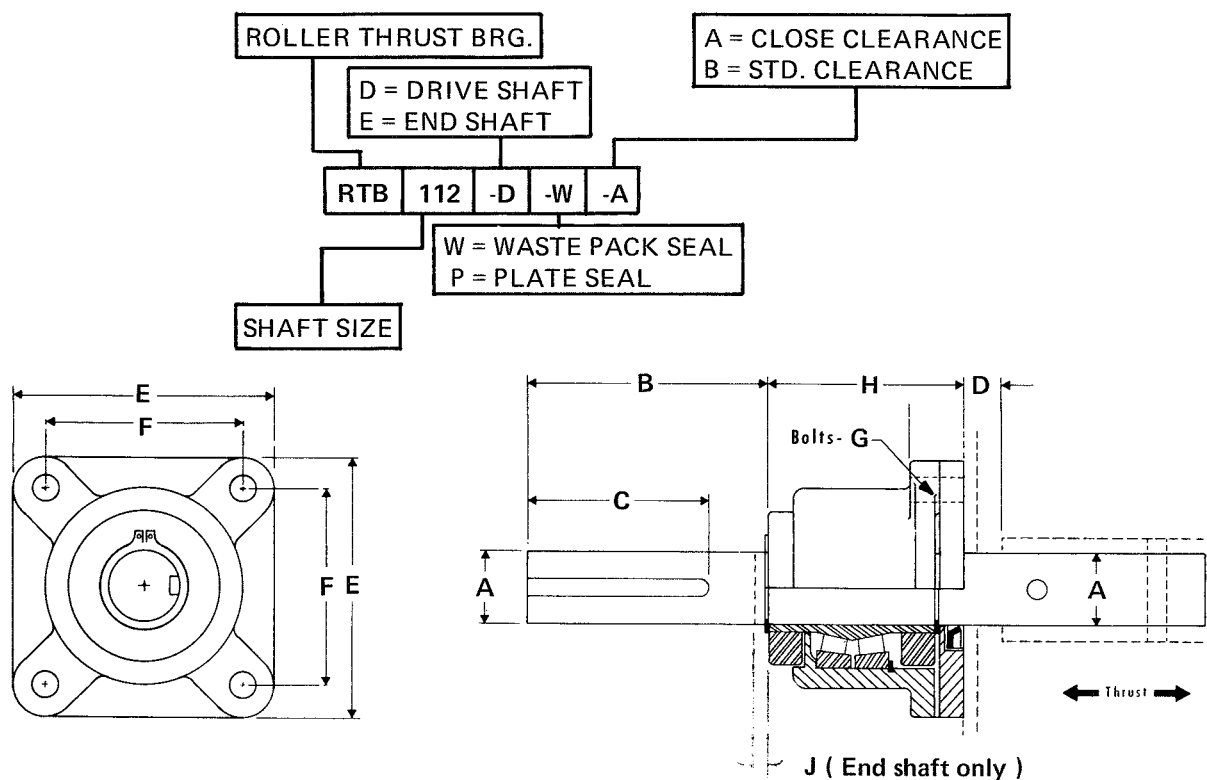
A Shaft Dia.	Part Number	B	C	D	E	Weight
1-1/2	TC 112	1-1/4	1-1/2	1/2	1/4	2
2	TC 2	1-3/4	1-1/2	1/2	1/4	2-1/2
2-7/16	TC 2716	2-3/16	1-7/8	5/8	3/8	3-1/2
3	TC 3	2-11/16	1-7/8	5/8	3/8	6
3-7/16	TC 3716	2-15/16	1-7/8	7/8	1/2	8

### THRUST WASHER



A Shaft Dia.	Part Number	B	C Steel	D Bronze	Total Weight
1	TW 1	5/8	1/4	1/8	1
1-1/2	TW 112	3/4	1/4	1/4	1
2	TW 2	3/4	1/4	1/4	1
2-7/16	TW 2716	7/8	1/4	3/8	1-1/2
3	TW 3	7/8	1/4	3/8	2
3-7/16	TW 3716	1	1/4	1/2	3

# ROLLER THRUST BEARING

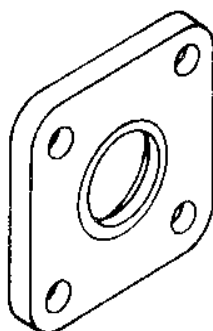
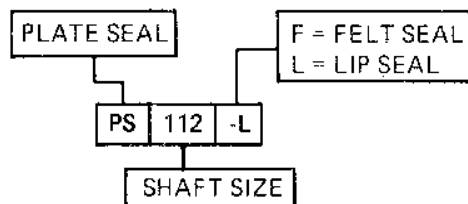


A Shaft Size	Part Number	B	C	D	E	F	G Bolts	H	J
1-1/2	RTB112*-P-A	4-1/4	2-3/4	1/2	5-3/8	4-1/8	1/2	4-1/8	1/2
1-1/2	RTB112*-W-A	4-1/4	2-3/4	1/2	5-3/8	4-1/8	1/2	5-1/8	1/2
1-1/2	RTB112*-P-B	4-1/4	2-3/4	1-1/4	5-3/8	4-1/8	1/2	4-1/4	1/2
1-1/2	RTB112*-W-B	4-1/4	2-3/4	1-1/4	5-3/8	4-1/8	1/2	5-3/8	1/2
2	RTB2*-P-A	4-3/4	3-1/4	1/2	5-5/8	4-3/8	1/2	4-1/4	1/2
2	RTB2*-W-A	4-3/4	3-1/4	1/2	5-5/8	4-3/8	1/2	5-3/8	1/2
2	RTB2*-P-B	4-3/4	3-1/4	1-1/4	5-5/8	4-3/8	1/2	4-3/8	1/2
2	RTB2*-W-B	4-3/4	3-1/4	1-1/4	5-5/8	4-3/8	1/2	5-1/2	1/2
2-7/16	RTB2716*-P-A	5-3/4	4-1/4	9/16	6-7/8	5-3/8	5/8	4-13/16	1/2
2-7/16	RTB2716*-W-A	5-3/4	4-1/4	9/16	6-7/8	5-3/8	5/8	5-15/16	1/2
2-7/16	RTB2716*-P-B	5-3/4	4-1/4	1-3/4	6-7/8	5-3/8	5/8	4-13/16	1/2
2-7/16	RTB2716*-W-B	5-3/4	4-1/4	1-3/4	6-7/8	5-3/8	5/8	5-15/16	1/2
3	RTB3*-P-A	6-1/4	4-3/4	5/8	7-3/4	6	3/4	5-5/16	1/2
3	RTB3*-W-A	6-1/4	4-3/4	5/8	7-3/4	6	3/4	6-7/16	1/2
3	RTB3*-P-B	6-1/4	4-3/4	1-3/4	7-3/4	6	3/4	5-5/16	1/2
3	RTB3*-W-B	6-1/4	4-3/4	1-3/4	7-3/4	6	3/4	6-7/16	1/2
3-7/16	RTB3716*-P-A	7-1/4	5-3/4	5/8	9-1/4	7	3/4	5-7/8	3/4
3-7/16	RTB3716*-W-A	7-1/4	5-3/4	5/8	9-1/4	7	3/4	7-1/2	3/4
3-7/16	RTB3716*-P-B	7-1/4	5-3/4	2-1/4	9-1/4	7	3/4	5-7/8	3/4
3-7/16	RTB3716*-W-B	7-1/4	5-3/4	2-1/4	9-1/4	7	3/4	7-1/2	3/4

\* D- Drive Shaft  
E- End Shaft

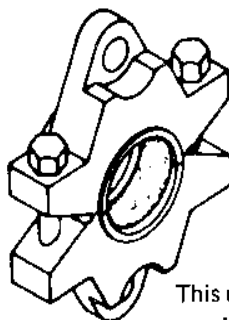
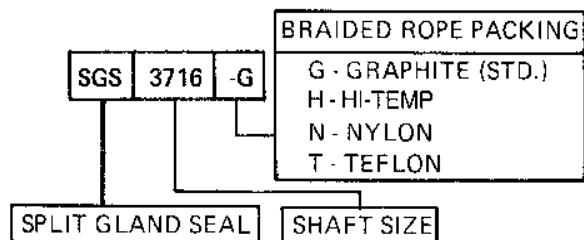
# SEALS

## PLATE SEAL



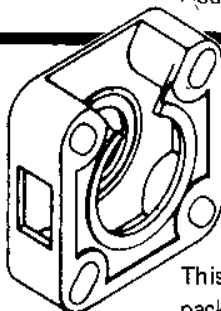
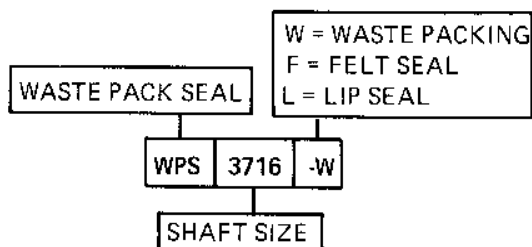
The plate seal is an economical, effective sealing device designed for exterior mounting between the end bearing and the conveyor housing end. Standard units include lip-type seals, but other types of commercial seal cartridges may also be used. The plate seal and the end bearing are attached by means of common bolts. The plate may also be attached independently when outboard bearing ends are used.

## SPLIT GLAND SEAL



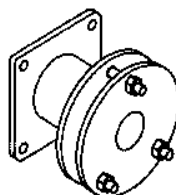
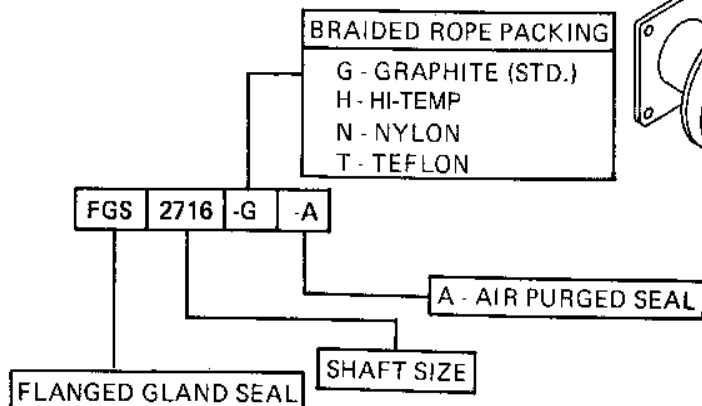
This unit, designed for interior or exterior mounting, provides an effective seal by compression of the packing. Packing pressure may be adjusted by means of two exposed nuts at the top half of the seal housing.

## WASTE PACK SEAL



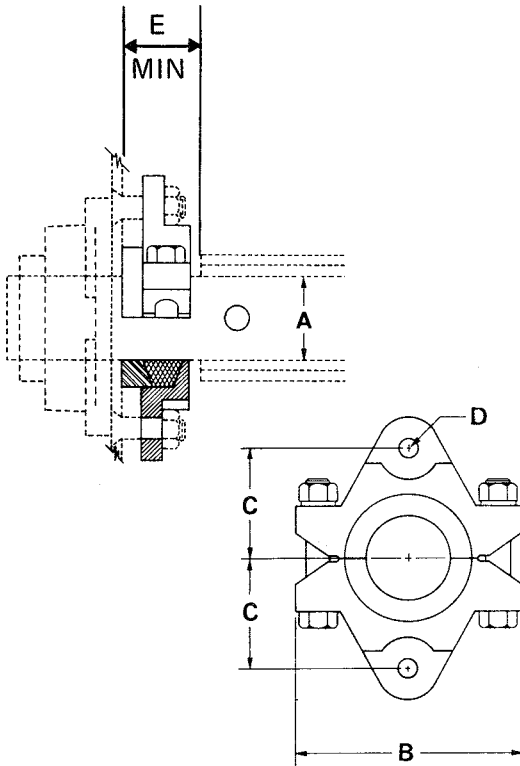
This universal type seal is designed for use with waste packing or cartridge-type lip or felt seals. An opening at the top of the housing facilitates waste repacking. The packing material is partially exposed for oiling. The waste pack seal is mounted outside between the end bearing and the conveyor end. It may also be mounted independently for use with the outboard bearing end.

## FLANGED GLAND SEAL



The flanged gland seal is a highly effective means of sealing the conveyor both internally and externally. This seal also is suitable for pressure or vacuum service. Mechanical compression of the packing material is accomplished by means of three compression bolts. Designed for use with outboard bearing ends. Also available in an air purged type.

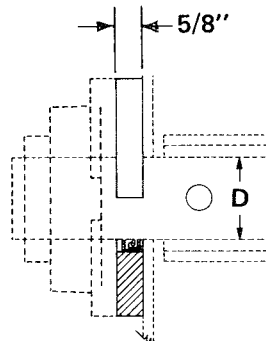
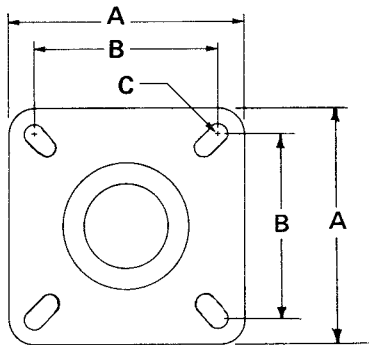
## SPLIT GLAND SEAL



A Shaft Dia.	Part Number*	B	C	D Bolts	E
1	SGS1-*	4-1/8	1-3/4	3/8	3
1-1/2	SGS112-*	4-5/8	2-3/16	1/2	3
2	SGS2-*	5-3/8	2-5/8	1/2	3
2-7/16	SGS2716-*	6-1/8	3-1/16	5/8	3
3	SGS3-*	6-3/4	3-9/16	5/8	3
3-7/16	SGS3716-*	8-3/4	4-1/8	3/4	4
3-15/16	SGS31516-*	9-1/2	4-1/2	3/4	4
4-7/16	SGS4716-*	10	4-5/8	3/4	4
4-15/16	SGS41516-*	10-1/2	4-3/4	3/4	4
5-7/16	SGS5716-*	12	5-5/8	3/4	4
5-15/16	SGS51516-*	12	5-5/8	3/4	4
6-7/16	SGS6716-*	13	5-3/4	3/4	4
6-15/16	SGS61516-*	13	5-3/4	3/4	4

\*Specify packing G-Graphite, H-Hi-Temp, N-Nylon, T-Teflon,

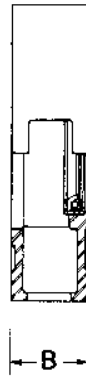
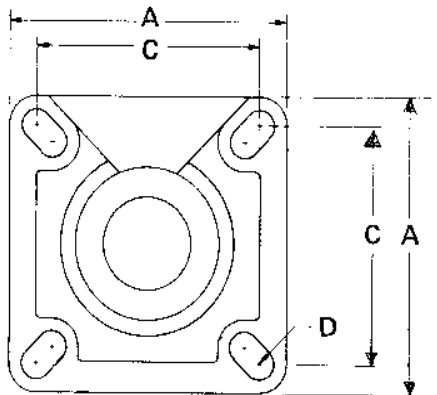
## PLATE SEAL



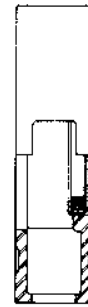
D Shaft Dia.	Part Number*	A	B		C-Bolts
			Min.	Max.	
1	PS1-*	4	2-3/4	2-3/4	3/8
1-1/2	PS112-*	5-3/8	4	4-1/8	1/2
2	PS2-*	6-1/2	4-3/8	5-1/8	5/8
2-7/16	PS2716-*	7-3/8	5-3/8	5-5/8	5/8
3	PS3-*	7-3/4	6	6	3/4
3-7/16	PS3716-*	9-1/4	6-3/4	7	3/4

\*Specify Seal L-Lip Seal F-Felt Seal

## WASTE PACK SEAL



With lip seal



With felt seal

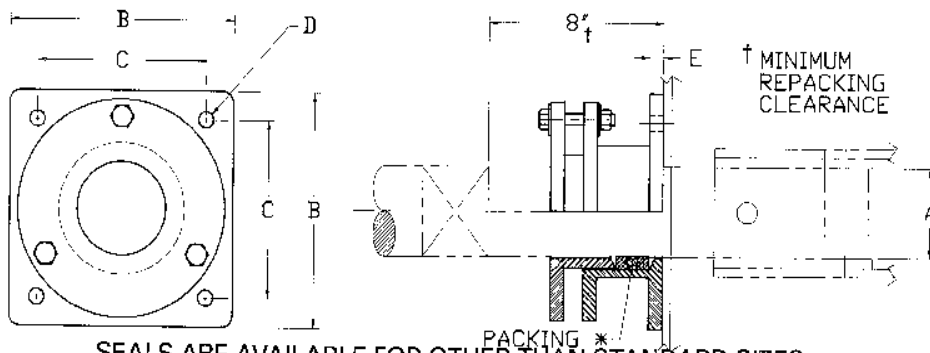


With waste packing

Shaft Dia.	Part Number *	A	B	C		D Bolts	Weight
				Minimum	Maximum		
1	WPS1*	3-3/4	1-3/4	2-3/4	2-3/4	3/8	4
1-1/2	WPS112*	5-3/8	1-3/4	4	4-1/8	1/2	6
2	WPS2*	6-1/2	1-3/4	4-3/8	5-1/8	5/8	8
2-7/16	WPS2716*	7-3/8	1-3/4	5-3/8	5-5/8	5/8	9
3	WPS3*	7-3/4	1-3/4	6	6	3/4	13
3-7/16	WPS3716*	9-1/4	2-1/4	6-3/4	7	3/4	17

NOTE: \* Specify seal, L (Lip), W (Waste Pack), F (Felt)

## FLANGED GLAND SEAL



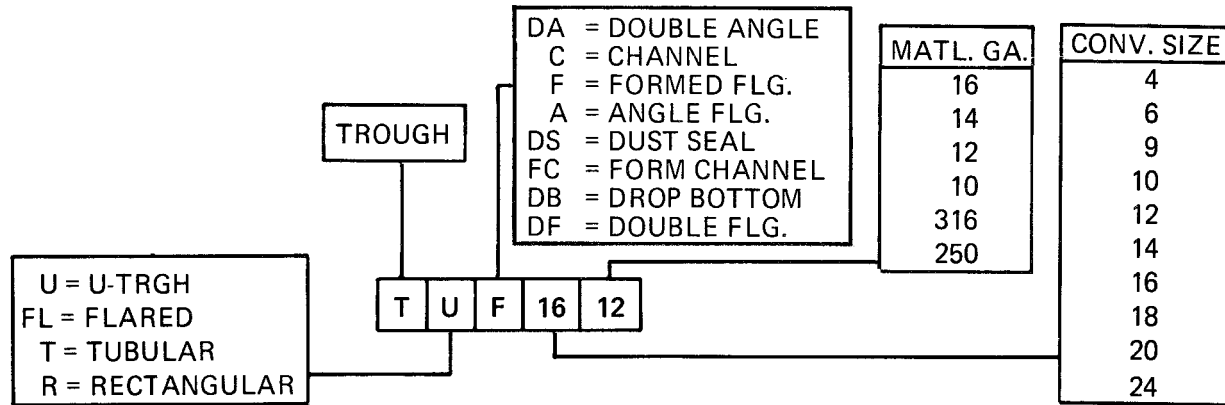
SEALS ARE AVAILABLE FOR OTHER THAN STANDARD SIZES

A Shaft Dia.	Part Number*	B	C	D Bolts	E	Weight
1	FGS1*	4	2-3/4	1/2	3/8	10
1-1/2	FGS112*	5-3/8	4	1/2	3/8	14
2	FGS2*	6-1/2	5-1/8	1/2	3/8	18
2-7/16	FGS2716*	7-3/8	5-5/8	1/2	3/8	21
3	FGS3*	7-3/4	6	1/2	3/8	27
3-7/16	FGS3716*	9-1/4	6-3/4	5/8	1/2	30
3-15/16	FGS31516*	10-1/4	7-3/4	5/8	1/2	35
4-7/16	FGS4716*	10-3/4	8-1/4	5/8	1/2	40
4-15/16	FGS41516*	11-1/2	9	5/8	1/2	45
5-7/16	FGS5716*	11-1/2	9	5/8	1/2	50

\*Specify packing G-Graphite, H-Hi-Temp, N-Nylon, T-Teflon, Add suffix "A" for air purged seal.  
We supply Graphite packing as our standard.



# CONVEYOR TROUGHS

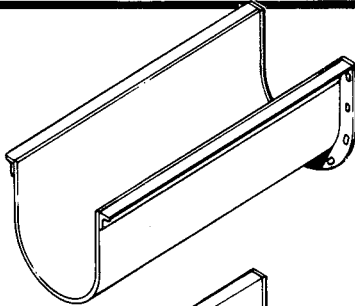


All KWS conveyor troughs are available in stainless steel. All troughs may also be furnished hot-dipped

galvanized. For specific alloy materials available, consult the Engineering Department.

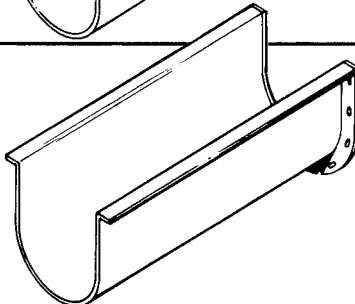
## U-TROUGH

### Angle Flange



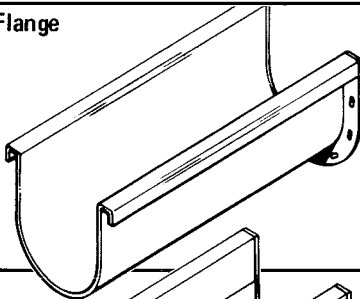
The most commonly employed U-trough is the angle-flanged type. The top flange is fabricated with heavy-duty structural steel angles welded flush with the top trough edge. End flanges are jig-welded to insure proper alignment with other trough sections.

### Formed Flange



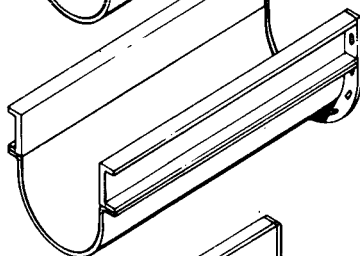
The top flange is formed from the same sheet as the trough, resulting in a lightweight, yet rigid, housing section. End flanges are jig-welded for perfect alignment with other sections.

### Double Formed Flange



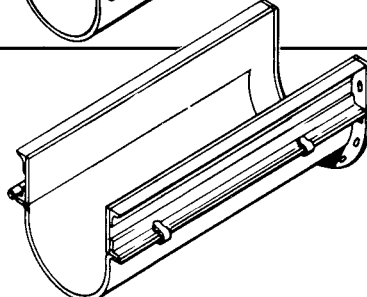
The top flange of the double-formed flange trough is also formed from the same sheet as the trough, and its unique design adds considerable strength and rigidity to the trough. The double-formed flange provides an effective dust-tight seal when used in conjunction with the flanged-type covers and appropriate gasket material.

### Channel



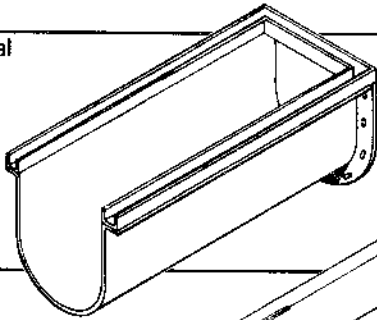
The channel U-trough is well suited for applications requiring long distances between conveyor supports. Upper trough sides are fabricated with structural steel channels to which the lower contoured section may be bolted or spring clamped. Useful for abrasive applications where frequent replacement of the lower formed section is anticipated.

### Drop Bottom



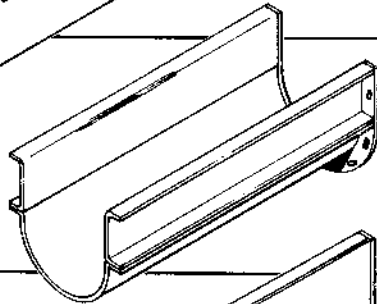
Intended for applications where quick, convenient access to the conveyor interior is required, the drop bottom trough consists of rigid upper side channels to which a lower contoured section is attached. One side of the lower formed section is hinged while the other is attached by use of spring clamps or other type of quick-opening device.

### Dust Seal



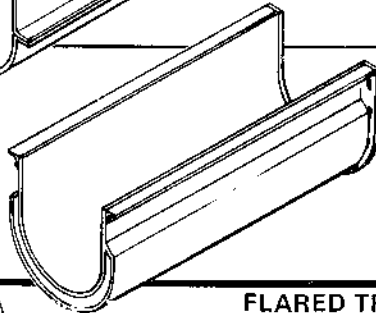
Dust seal conveyor troughs are produced with a continuous channel pocket extending along the sides and across the ends of each trough section. Special covers are required having formed flanges which project down into the channel pockets. After installation, sand, grease, the material being conveyed or other materials are placed in the channelled pockets to effect an efficient dust seal.

### Formed Channel



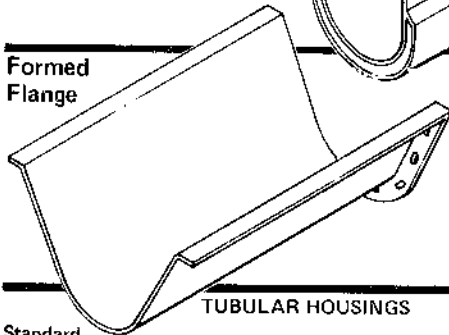
The formed channel U-trough is well suited for applications requiring long distances between conveyor supports. Upper trough sides are fabricated with formed steel channels to which the lower contoured section may be bolted or spring clamped. Useful for abrasive applications where frequent replacement of the lower formed section is anticipated.

### Jacketed



For application on jacketed conveyor troughs consult KWS Engineering Department.

### Formed Flange



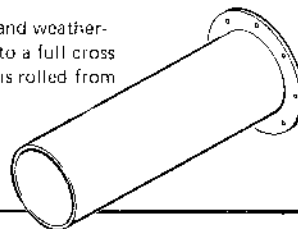
### FLARED TROUGH

Intended primarily for sticky or slightly viscous materials, the flared trough is most often employed with ribbon conveyors. Top flanges are formed from the same sheet as the housing. End flanges are jig-welded for perfect alignment with other sections.

### Standard

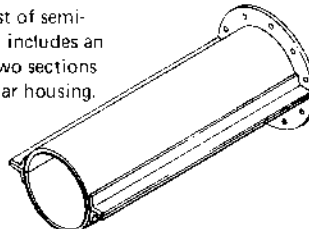
Tubular housings are inherently dust and weather-tight, rigid and may be readily loaded to a full cross section. The standard tubular housing is rolled from a single sheet and continuously welded at the seam.

### TUBULAR HOUSINGS



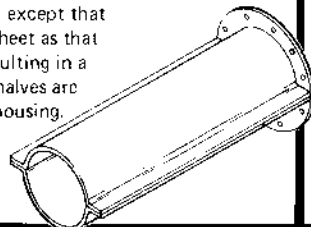
### Angle Flange

Angle flanged tubular housings consist of semi-circular formed halves, each of which includes an angle flange of structural steel. The two sections are bolted together to form the tubular housing.



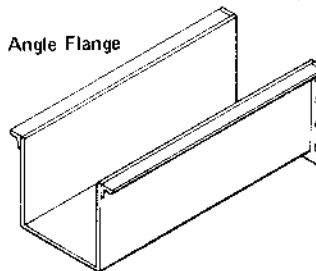
### Formed Flange

This type is similar to the angle flanged except that the flanges are formed from the same sheet as that of the contoured half sections, thus resulting in a rigid, lightweight tubular section. The halves are bolted together to form the complete housing.

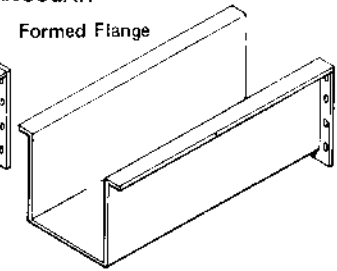


### RECTANGULAR

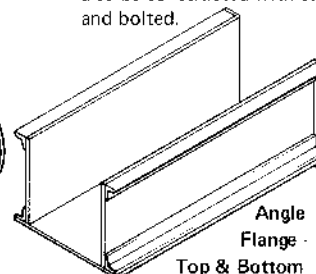
#### Angle Flange



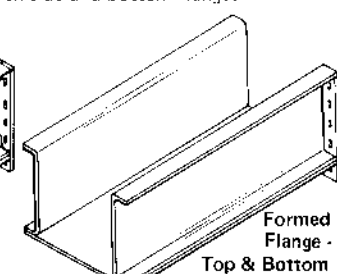
#### Formed Flange



Rectangular conveyor troughs are particularly applicable to the conveying of abrasive materials since conveyed material tends to form its own trough by sliding over the static material in the bottom and corners of the trough thus protecting it from severe wear. These troughs may be fabricated from one sheet with formed top flanges, or angle top flanges; they may also be constructed with each side and bottom flanged and bolted.

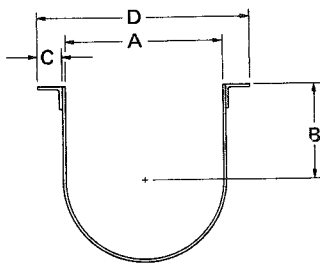


Angle Flange - Top & Bottom

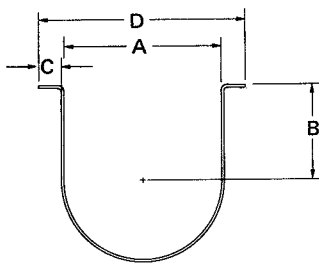


Formed Flange - Top & Bottom

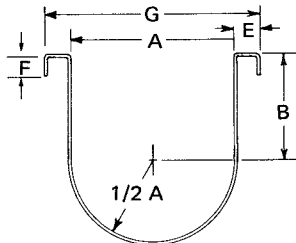
## U TROUGHS



Angle Flange



Formed Flange

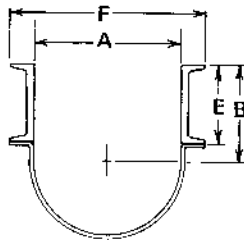


Double Formed Flange

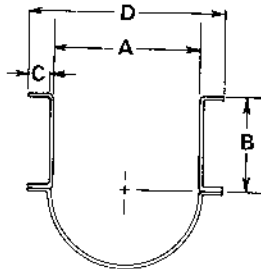
Conv. Dia.	Trough Thickness	Part Number Angle Flange	Wt. Per Length	Part Number Formed Flange	Wt. Per Length	Part Number Double Formed Flange	Wt. Per Length
4	16	TUA416	53	TUF416	41	TUDF416	41
	14	TUA414	60	TUF414	50	TUDF414	50
	12	TUA412	78	TUF412	70	TUDF412	70
	10	TUA410	98	TUF410	93	TUDF410	93
6	16	TUA616	67	TUF616	55	TUDF616	55
	14	TUA614	78	TUF614	67	TUDF614	67
	12	TUA612	98	TUF612	92	TUDF612	92
	10	TUA610	123	TUF610	117	TUDF610	117
9	14	TUA914	127	TUF914	99	TUDF914	99
	12	TUA912	156	TUF912	132	TUDF912	132
	10	TUA910	176	TUF910	164	TUDF910	164
	3/16	TUA9316	230	TUF9316	214	TUDF9316	214
10	14	TUA1014	152	TUF1014	118	TUDF1014	118
	12	TUA1012	187	TUF1012	158	TUDF1012	158
	10	TUA1010	211	TUF1010	196	TUDF1010	196
	3/16	TUA10316	276	TUF10316	256	TUDF10316	256
12	12	TUA1212	256	TUF1212	215	TUDF1212	215
	10	TUA1210	305	TUF1210	266	TUDF1210	266
	3/16	TUA12316	371	TUF12316	342	TUDF12316	342
	1/4	TUA12250	462	TUF12250	443	TUDF12250	443
14	12	TUA1412	276	TUF1412	234	TUDF1412	234
	10	TUA1410	330	TUF1410	292	TUDF1410	292
	3/16	TUA14316	407	TUF14316	378	TUDF14316	378
	1/4	TUA14250	515	TUF14250	496	TUDF14250	496
16	12	TUA1612	320	TUF1612	277	TUDF1612	277
	10	TUA1610	373	TUF1610	334	TUDF1610	334
	3/16	TUA16316	458	TUF16316	428	TUDF16316	428
	1/4	TUA16250	580	TUF16250	559	TUDF16250	559
18	12	TUA1812	373	TUF1812	334	TUDF1812	334
	10	TUA1810	443	TUF1810	408	TUDF1810	408
	3/16	TUA18316	558	TUF18316	534	TUDF18316	534
	1/4	TUA18250	684	TUF18250	672	TUDF18250	672
20	10	TUA2010	503	TUF2010	463	TUDF2010	463
	3/16	TUA20316	622	TUF20316	587	TUDF20316	587
	1/4	TUA20250	763	TUF20250	751	TUDF20250	751
24	10	TUA2410	550	TUF2410	553	TUDF2410	553
	3/16	TUA24316	702	TUF24316	702	TUDF24316	702
	1/4	TUA24250	899	TUF24250	899	TUDF24250	899

Conv. Dia.	Trough Thickness	A	B	C	D	E	F	G
4	16	5	3-5/8	1	7-1/8	1-1/8	1/2	7 1/4
	14				7-1/4	1-1/4		7 1/2
	12							
10								
6	16	7	4-1/2	1-1/4	9-5/8	1-3/8	5/8	9 3/4
	14				9-11/16	1-7/16		9 7/8
	12				9-3/4			
10					9-3/4			
9	14	10	6-1/8	1-1/2	13-3/16	1-11/16	5/8	13-3/8
	12				13-3/16			
	10				13 1/4			
3/16				13-3/8				
10	14	11	6-3/8	1-1/2	14-3/8	1-7/8	5/8	14 3/4
	12				14-1/2			
	10				14-5/8			
3/16				14-3/4				
12	12	13	7-3/4	2	17-3/16	2-1/8	5/8	17-1/4
	10				17-1/4			
	3/16				17-3/8			
1/4				17-1/2				
14	12	15	9-1/4	2	19-3/16	2-1/8	5/8	19-1/4
	10				19-1/4			
	3/16				19-3/8			
1/4				19-1/2				
16	12	17	10-5/8	2	21-3/16	2-1/8	5/8	21-1/4
	10				21-1/4			
	3/16				21-3/8			
1/4				21-1/2				
18	12	19	12-1/8	2-1/2	24-3/16	2-5/8	5/8	24-1/4
	10				24-1/4			
	3/16				24-3/8			
1/4				24-1/2				
20	10	21	13-1/2	2-1/2	26-1/4	2-5/8	5/8	26-1/4
	3/16				26-3/8			
	1/4				26-1/2			
24	10	25	16-1/2	2-1/2	30-1/4	2-5/8	5/8	30-1/4
	3/16				30-3/8			
	1/4				30-1/2			

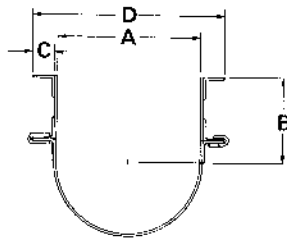
## U-TROUGH



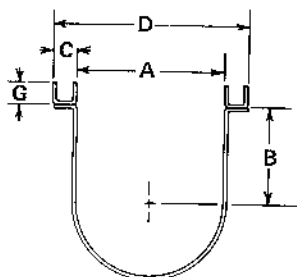
**Channel Trough**



**Formed Channel Trough**



**Drop Bottom Trough**

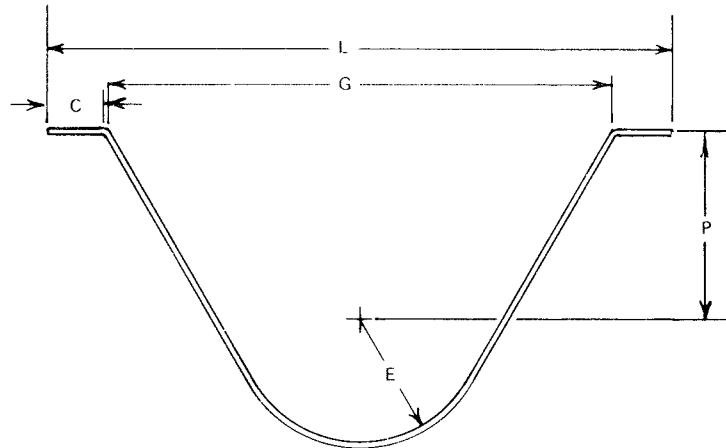


**Dust Seal Trough**

Screw Dia.	Trough Thickness	Part Number Channel Trough	Wt. Per Std. Length	Part Number Formed Channel Trough	Wt. Per Std. Length	Part Number Drop Bottom Trough	Wt. Per Std. Length	Part Number Dust Seal Trough	Wt. Per Std. Length
6	16	TUC614	149	TUFC614	149	TUDB616	106	TUDS616	
	14	TUC612	164	TUFC612	164	TUDB614	117	TUDS614	
	12	TUC610	178	TUFC610	178	TUDB612	140	TUDS612	
	3/16	TUC6316	203	TUFC6316	203	TUDB610	162	TUDS610	
9	14	TUC914	239	TUFC914	239	TUDB914	174	TUDS914	
	12	TUC912	259	TUFC912	259	TUDB912	203	TUDS912	
	10	TUC910	292	TUFC910	292	TUDB910	223	TUDS910	
	3/16	TUC9316	332	TUFC9316	332	TUDB9316	277	TUDS9316	
10	14	TUC1414	387	TUFC1414	387	TUDB1414	294	TUDS1414	
	12	TUC1412	415	TUFC1412	415	TUDB1412	339	TUDS1412	
	10	TUC1410	456	TUFC1410	456	TUDB1410	403	TUDS1410	
	3/16	TUC14316	526	TUFC14316	526	TUDB14316	493	TUDS14316	
12	12	TUC1212	333	TUFC1212	333	TUDB1212	277	TUDS1212	
	10	TUC1210	359	TUFC1210	359	TUDB1210	318	TUDS1210	
	3/16	TUC12316	403	TUFC12316	403	TUDB12316	373	TUDS12316	
	1/4	TUC12250	455	TUFC12250	455	TUDB12250	449	TUDS12250	
14	12	TUC1412	387	TUFC1412	387	TUDB1412	294	TUDS1412	
	10	TUC1410	415	TUFC1410	415	TUDB1410	339	TUDS1410	
	3/16	TUC14316	456	TUFC14316	456	TUDB14316	403	TUDS14316	
	1/4	TUC14250	526	TUFC14250	526	TUDB14250	493	TUDS14250	
16	12	TUC1612	472	TUFC1612	472	TUDB1612	331	TUDS1612	
	10	TUC1610	529	TUFC1610	529	TUDB1610	375	TUDS1610	
	3/16	TUC16316	596	TUFC16316	596	TUDB16316	446	TUDS16316	
	1/4	TUC16250	666	TUFC16250	666	TUDB16250	547	TUDS16250	
18	12	TUC1812	603	TUFC1812	603	TUDB1812	393	TUDS1812	
	10	TUC1810	666	TUFC1810	666	TUDB1810	451	TUDS1810	
	3/16	TUC18316	741	TUFC18316	741	TUDB18316	547	TUDS18316	
	1/4	TUC18250	803	TUFC18250	803	TUDB18250	652	TUDS18250	
20	12	TUC2012	619	TUFC2012	619	TUDB2012	403	TUDS2012	
	10	TUC2010	687	TUFC2010	687	TUDB2010	467	TUDS2010	
	3/16	TUC20316	769	TUFC20316	769	TUDB20316	501	TUDS20316	
	1/4	TUC20250	831	TUFC20250	831	TUDB20250	578	TUDS20250	
24	12	TUC2412	1002	TUFC2412	1002	TUDB2412	543	TUDS2412	
	10	TUC2410	1097	TUFC2410	1097	TUDB2410	667	TUDS2410	
	3/16	TUC24316	1097	TUFC24316	1097	TUDB24316	667	TUDS24316	
	1/4	TUC24250	1097	TUFC24250	1097	TUDB24250	831	TUDS24250	

Screw Dia.	Trough Thickness	A	B	C	D	E	F	G
6	16	7	4-1/2	1-1/4	9-5/8	4	10-1/4	1/2
	14				9-11/16			
	12				9-3/4			
	3/16				9-13/16			
9	14	10	6-1/8	1-1/2	13-3/16	6	13-3/4	3/4
	12				13-1/4			
	10				13-5/16			
	3/16				13-3/8			
10	14	11	6-3/8	1-1/2	13-1/2			
	12				14-3/16			
	10				14-1/4			
	3/16				14-5/16			
12	12	13	7-3/4	2	14-3/8			
	10				14-1/2			
	3/16				17-1/4	8	17-1/2	1
	1/4				17-5/16			
14	12	15	9-1/4	2	17-3/8			
	10				17-1/2			
	3/16				19-1/4	9	19-3/4	1
	1/4				19-5/16			
16	12	17	10-5/8	2	19-3/8			
	10				19-1/2			
	3/16				21-1/4	10	22-1/4	1
	1/4				21-5/16			
18	12	19	12-1/8	2-1/2	21-3/8			
	10				21-1/2			
	3/16				24-1/4	12	25	1
	1/4				24-5/16			
20	12	21	13-1/2	2-1/2	24-3/8			
	10				24-1/2			
	3/16				26-5/16	12	27	1
	1/4				26-3/8			
24	12	25	16-1/2	2 1/2	26-1/2			
	10				30-5/16	15	31-3/4	1
	3/16				30-3/8			
	1/4				30-1/2			

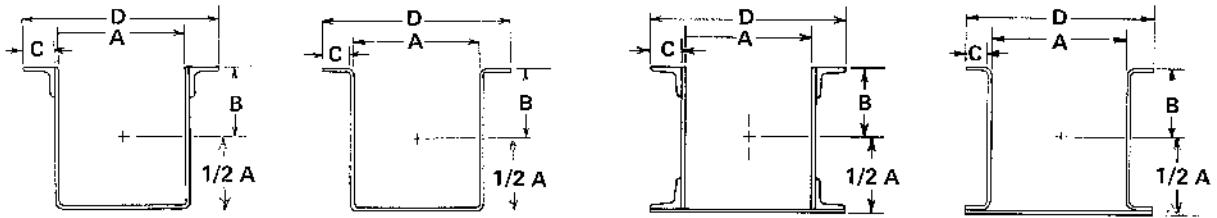
# FLARED TROUGH



Screw Dia.	Trough Thickness	Part Number	* Weight Per Foot	C	E	G	L	P
6	14	TFLF614	7.6	1-1/4	3-1/2	14	16-5/8	7
	12	TFLF612	10.6				16-5/8	
9	14	TFLF914	10	1-1/2	5	18	21-1/4	9
	10	TFLF910	17.9				21-1/4	
12	12	TFLF1212	16.9	2	6-1/2	22	26-1/4	10
	10	TFLF1210	21.7				26-1/4	
	3/16	TFLF12316	29.5				26-3/8	
14	12	TFLF1412	18.7	2	7-1/2	24	28-1/4	11
	10	TFLF1410	24.0				28-1/4	
	3/16	TFLF14316	32.7				28-3/8	
16	10	TFLF1610	26.2	2	8-1/2	28	32-1/4	11-1/2
	3/16	TFLF16316	35.7				32-3/8	
	1/4	TFLF16250	47.6				32-1/2	
18	3/16	TFLF18316	39.4	2-1/2	9-1/2	31	36-3/8	12-1/8
	1/4	TFLF18250	52.5				36-1/2	
20	3/16	TFLF20316	43.3	2-1/2	10-1/2	34	39-3/8	13-1/2
	1/4	TFLF20250	57.8				39-1/2	
24	3/16	TFLF24316	51.2	2-1/2	12-1/2	40	45-3/8	16-1/2
	1/4	TFLF24250	68.2				45-1/2	

\*Weight does not include plate end flanges

## RECTANGULAR TROUGHS



**Angle Flange**

**Formed Flange**

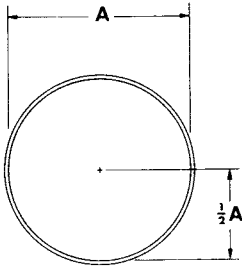
**Angle Flange  
Top & Bottom**

**Formed Flange  
Top & Bottom**

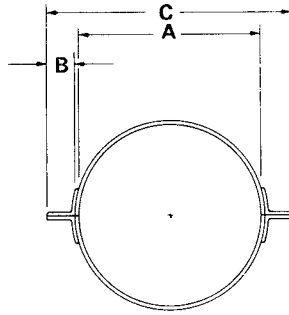
Screw Dia.	Trough Thickness	Angle Flanged Part Number	Wt. Per Std. Length	Formed Flange Part Number	Wt. Per Std. Length	Double Angle Part Number	Wt. Per Std. Length	Formed Channel Part Number	Wt. Per Std. Length
6	16	TRA616	89	TRF616	51	TRDA616	127	TRFC616	56
	14	TRA614	103	TRF614	66	TRDA614	143	TRFC614	72
9	14	TRA914	130	TRF914	98	TRDA914	162	TRFC914	107
	12	TRA912	161	TRF912	134	TRDA912	188	TRFC912	147
12	14	TRA1214	176	TRF1214	124	TRDA1214	228	TRFC1214	136
	12	TRA1212	218	TRF1212	170	TRDA1212	266	TRFC1212	187
	10	TRA1210	260	TRF1210	216	TRDA1210	304	TRFC1210	237
14	14	TRA1414	192	TRF1414	140	TRDA1414	244	TRFC1414	154
	12	TRA1412	240	TRF1412	192	TRDA1412	288	TRFC1412	211
	10	TRA1410	288	TRF1410	245	TRDA1410	331	TRFC1410	269
16	12	TRA1612	262	TRF1612	214	TRDA1612	310	TRFC1612	235
	10	TRA1610	316	TRF1610	273	TRDA1610	359	TRFC1610	300
	3/16	TRA16316	411	TRF16316	375	TRDA16316	447	TRFC16316	412
18	12	TRA1812	311	TRF1812	248	TRDA1812	374	TRFC1812	272
	10	TRA1810	373	TRF1810	315	TRDA1810	431	TRFC1810	346
	3/16	TRA18316	482	TRF18316	432	TRDA18316	532	TRFC18316	475
20	12	TRA2012	346	TRF2012	283	TRDA2012	409	TRFC2012	311
	10	TRA2010	418	TRF2010	360	TRDA2010	476	TRFC2010	396
	3/16	TRA20316	544	TRF20316	495	TRDA20316	593	TRFC20316	544
24	12	TRA2412	434	TRF2412	374	TRDA2412	494	TRFC2412	411
	10	TRA2410	530	TRF2410	475	TRDA2410	585	TRFC2410	522
	3/16	TRA24316	698	TRF24316	653	TRDA24316	743	TRFC24316	718

Screw Dia.	Trough Thickness	A	B	C	D
6	16	7	4-1/2	1-1/4	9-5/8
	14				9-11/16
9	14	10	6-1/8	1-1/2	13-3/16
	12				13-1/4
12	14	13	7-3/4	2	17-1/8
	12				17-1/4
	10				17-5/16
14	14	15	9-1/4	2	19-1/8
	12				19-1/4
	10				19-5/16
16	12	17	10-5/8	2	21-1/4
	10				21-5/16
	3/16				21-3/8
18	12	19	12-1/8	2-1/2	24-1/4
	10				24-5/16
	3/16				24-3/8
20	12	21	13-1/2	2-1/2	26-1/4
	10				26-3/8
	3/16				26-1/2
24	12	25	16-1/2	2-1/2	30-1/4
	10				30-3/8
	3/16				30-1/2

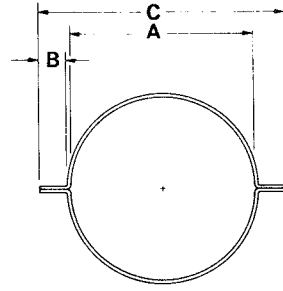
# TUBULAR TROUGHS



STANDARD



ANGLE FLANGE



FORMED FLANGE

Screw Dia.	Housing Thickness	Std. Housing Part Number	Wt.	Angle Flange Part Number	Wt.	Formed Flange Part Number	Wt.	A	B	C
4	16	TT416	35	TTA416	81	TTF416	43	5	1	7-1/8 7-3/16 7-1/4
	14	TT414	43	TTA414	89	TTF414	53			
	12	TT412	60	TTA412	106	TTF412	74			
6	16	TT616	50	TTA616	110	TTF616	60	7	1-1/4	9-5/8 9-11/16 9-3/4 9-13/16 9-7/8
	14	TT614	62	TTA614	122	TTF614	75			
	12	TT612	85	TTA612	145	TTF612	103			
	10	TT610	110	TTA610	187	TTF610	133			
	3/16	TT6316	145	TTA6316	205	TTF6316	168			
9	14	TT914	89	TTA914	161	TTF914	104	10	1-1/2	13-3/16 13-1/4 13-5/16 13-3/8 13-1/2
	12	TT912	122	TTA912	194	TTF912	143			
	10	TT910	155	TTA910	227	TTF910	182			
	3/16	TT9316	208	TTA9316	280	TTF9316	245			
	1/4	TT9250	275	TTA9250	347	TTF9250	324			
10	14	TT1014	97	TTA1014	169	TTF1014	112	11	1-1/2	14-3/16 14-1/4 14-5/16 14-3/8 14-1/2
	12	TT1012	133	TTA1012	205	TTF1012	154			
	10	TT1010	169	TTA1010	241	TTF1010	196			
	3/16	TT10316	227	TTA10316	299	TTF10316	264			
	1/4	TT10250	301	TTA10250	373	TTF10250	350			
12	12	TT1212	163	TTA1212	261	TTF1212	193	13	2	17-1/4 27-5/16 17-3/8 17-1/2
	10	TT1210	208	TTA1210	306	TTF1210	247			
	3/16	TT12316	275	TTA12316	373	TTF12316	328			
	1/4	TT12250	362	TTA12250	460	TTF12250	432			
14	12	TT1412	187	TTA1412	285	TTF1412	217	15	2	19-1/4 19-5/16 19-3/8 19-1/2
	10	TT1410	236	TTA1410	334	TTF1410	275			
	3/16	TT14316	316	TTA14316	414	TTF14316	369			
	1/4	TT14250	416	TTA14250	514	TTF14250	486			
16	12	TT1612	212	TTA1612	310	TTF1612	242	17	2	21-1/4 21-5/16 21-3/8 21-1/2
	10	TT1610	268	TTA1610	366	TTF1610	307			
	3/16	TT16316	358	TTA16316	456	TTF16316	411			
	1/4	TT16250	472	TTA16250	570	TTF16250	542			
18	12	TT1812	242	TTA1812	365	TTF1812	280	19	2-1/2	24-1/4 24-5/16 24-3/8 24-1/2
	10	TT1810	304	TTA1810	427	TTF1810	353			
	3/16	TT18316	405	TTA18316	528	TTF18316	472			
	1/4	TT18250	533	TTA18250	656	TTF18250	622			
20	10	TT2010	335	TTA2010	458	TTF2010	382	21	2-1/2	26-5/16 26-3/8 26-1/2
	3/16	TT20316	446	TTA20316	569	TTF20316	510			
	1/4	TT20250	586	TTA20250	709	TTF20250	672			
24	10	TT2410	399	TTA2410	522	TTF2410	446	25	2-1/2	30-5/16 30-3/8 30-1/2
	3/16	TT24316	531	TTA24316	654	TTF24316	595			
	1/4	TT24250	699	TTA24250	822	TTF24250	785			

# FLANGE GASKETS

U - U-TRGH  
F - FLARED  
R - RECTANGULAR  
T - TUBULAR

FLANGE GSKT.

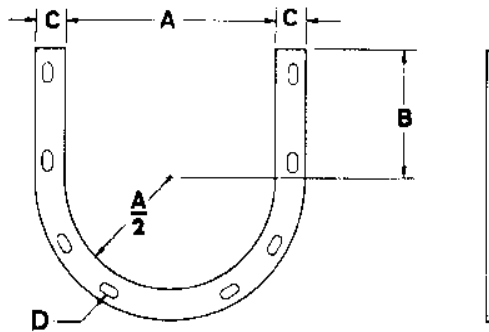
CONV. SIZE

GSKT. THICKNESS  
1/16 - 1/16"  
1/8 - 1/8" (STD.)  
3/16 - 3/16"  
1/4 - 1/4"

\* SPECIFY TYPE

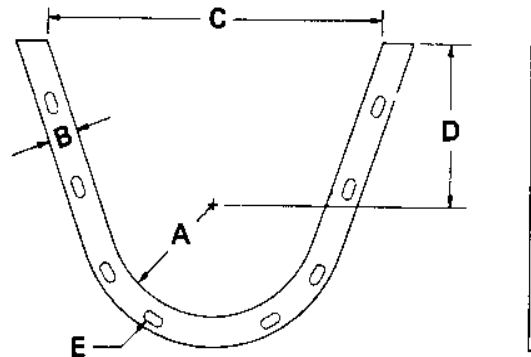
P - POLYURETHANE (STD.)  
R - RED RUBBER  
H - HI-TEMP  
F - FELT  
BN - BLACK NEOPRENE  
WN - WHITE NEOPRENE

FG U 12 -P- 1/8



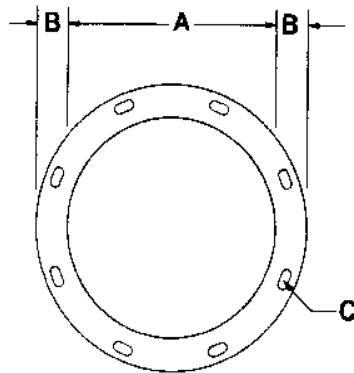
Screw Dia.	Part Number	A	B	C	D Bolts
4	FGU4*	5-1/4	3-5/8	1-1/4	3/8
6	FGU6*	7-1/4	4-1/2	1-3/8	3/8
9	FGU9*	10-1/4	6-1/8	1-3/4	3/8
10	FGU10*	11-1/4	6-3/8	1-3/4	3/8
12	FGU12*	13-1/4	7-3/4	2	1/2
14	FGU14*	15-1/4	9-1/4	2	1/2
16	FGU16*	17-1/4	10-5/8	2	5/8
18	FGU18*	19-1/4	12-1/8	2-1/2	5/8
20	FGU20*	21-1/4	13-1/2	2-1/2	5/8
24	FGU24*	25-1/4	16-1/2	2-1/2	5/8

\* Specify gasket material and thickness required.



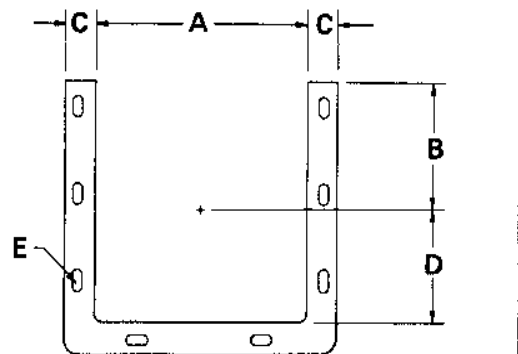
Screw Dia.	Part Number	A	B	C	D	E
6	FGF6*	3-1/2	1-3/8	14-1/4	7	3/8
9	FGF9*	5	1-3/4	18-1/4	9	3/8
12	FGF12*	6-1/2	2	22-1/4	10	1/2
14	FGF14*	7-1/2	2	24-1/4	11	1/2
16	FGF16*	8-1/2	2	28-1/4	11-1/2	5/8
18	FGF18*	9-1/2	2-1/2	31-1/4	12-1/8	5/8
20	FGF20*	10-1/2	2-1/2	34-1/4	13-1/2	5/8
24	FGF24*	12-1/2	2-1/2	40-1/4	16-1/2	5/8

\* Specify gasket material and thickness required.



Screw Dia.	Part Number	A	B	C
4	FGT4*	5-1/4	1	3/8
6	FGT6*	7-1/4	1-1/4	3/8
9	FGT9*	10-1/4	1-1/2	3/8
10	FGT10*	11-1/4	1-1/2	3/8
12	FGT12*	13-1/4	2	1/2
14	FGT14*	15-1/4	2	1/2
16	FGT16*	17-1/4	2	5/8
18	FGT18*	19-1/4	2-1/2	5/8
20	FGT20*	21-1/4	2-1/2	5/8
24	FGT24*	25-1/4	2-1/2	5/8

\* Specify gasket material and thickness required.

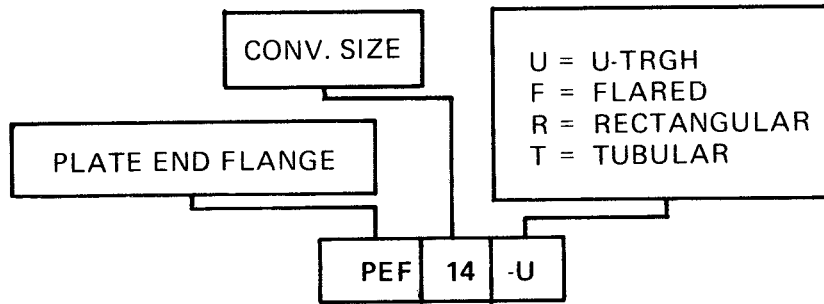


Screw Dia.	Part Number	A	B	C	D	E
6	FGR6*	7-1/4	4-1/2	1-1/4	3-5/8	3/8
9	FGR9*	10-1/4	6-1/8	1-1/2	5-1/8	3/8
12	FGR12*	13-1/4	7-3/4	2	6-5/8	1/2
14	FGR14*	15-1/4	9-1/4	2	7-5/8	1/2
16	FGR16*	17-1/4	10-5/8	2	8-5/8	5/8
18	FGR18*	19-1/4	12-1/8	2-1/2	9-5/8	5/8
20	FGR20*	21-1/4	13-1/2	2-1/2	10-5/8	5/8
24	FGR24*	25-1/4	16-1/2	2-1/2	12-5/8	5/8

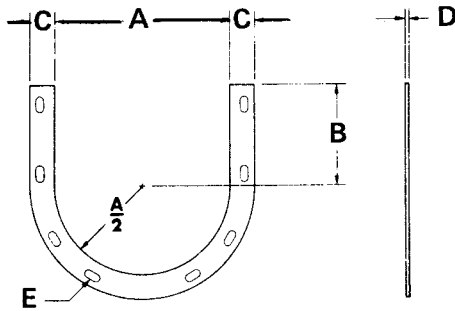
\* Specify gasket material and thickness required.



# PLATE END FLANGES

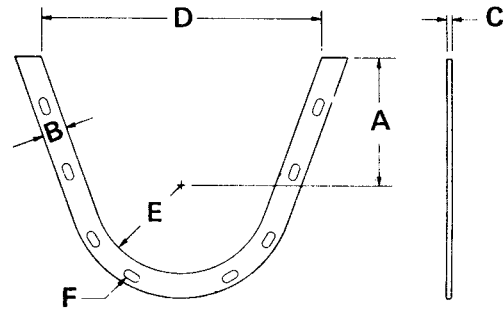


## U-Trough



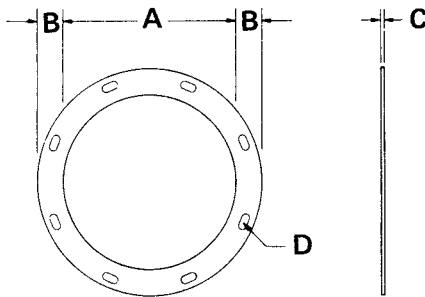
Screw Dia.	Part Number	Trough Thickness A		B	C	D	E Bolts	Wt.
		Thru 10 Ga.	3/16-1/4					
4	PEF4U	5-1/4	5-1/2	3-5/8	1-1/4	3/16	3/8	1
6	PEF6U	7-1/4	7-1/2	4-1/2	1-3/8	3/16	3/8	1.5
9	PEF9U	10-1/4	10-1/2	6-1/8	1-3/4	1/4	3/8	2.4
10	PEF10U	11-1/4	11-1/2	6-3/8	1-3/4	1/4	3/8	3.1
12	PEF12U	13-1/4	13-1/2	7-3/4	2	1/4	1/2	5.5
14	PEF14U	15-1/4	15-1/2	9-1/4	2	1/4	1/2	6.5
16	PEF16U	17-1/4	17-1/2	10-5/8	2	1/4	5/8	7.4
18	PEF18U	19-1/4	19-1/2	12-1/8	2-1/2	1/4	5/8	10.4
20	PEF20U	21-1/4	21-1/2	13-1/2	2-1/2	1/4	5/8	11.5
24	PEF24U	25-1/4	25-1/2	16-1/2	2-1/2	1/4	5/8	13.5

## Flared Trough



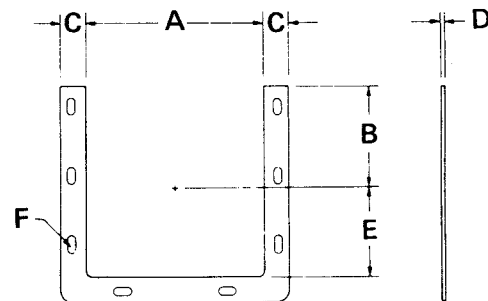
Screw Dia.	Part Number	A	B	C	Trough Thickness D		Trough Thickness E		F Bolts	Wt.
					Thru 10 Ga.	3/16-1/4	Thru 10 Ga.	3/16-1/4		
6	PEF6F	7	1-3/8	3/16	14-1/4	14-1/2	3-5/8	3-11/16	3/8	1.9
9	PEF9F	9	1-3/4	1/4	18-1/4	18-1/2	5-1/8	5-1/4	3/8	3.0
12	PEF12F	10	2	1/4	22-1/4	22-1/2	6-5/8	6-3/4	1/2	6.4
14	PEF14F	11	2	1/4	24-1/4	24-1/2	7-5/8	7-3/4	1/2	7.3
16	PEF16F	11-1/2	2	1/4	28-1/4	28-1/2	8-5/8	8-3/4	5/8	7.9
18	PEF18F	12-1/8	2-1/2	1/4	31-1/4	31-1/2	9-5/8	9-3/4	5/8	10.8
20	PEF20F	13-1/2	2-1/2	1/4	34-1/4	34-1/2	10-5/8	10-3/4	5/8	11.4
24	PEF24F	16-1/2	2-1/2	1/4	40-1/4	40-1/2	12-5/8	12-3/4	5/8	13.0

## Tubular Housing



Screw Dia.	Part Number	Trough Thickness A		B	C	D Bolts	Wt.
		Thru 10 Ga.	3/16-1/4				
4	PEF4T	5-1/4	5-1/2	1-1/2	3/16	3/8	1
6	PEF6T	7-1/4	7-1/2	1-1/2	3/16	3/8	1.8
9	PEF9T	10-1/4	10-1/2	1-3/4	1/4	3/8	3.0
10	PEF10T	11-1/4	11-1/2	1-3/4	1/4	3/8	3.2
12	PEF12T	13-1/4	13-1/2	2	1/4	1/2	6.9
14	PEF14T	15-1/4	15-1/2	2	1/4	1/2	7.8
16	PEF16T	17-1/4	17-1/2	2	1/4	5/8	8.7
18	PEF18T	19-1/4	19-1/2	2-1/2	1/4	5/8	12.3
20	PEF20T	21-1/4	21-1/2	2-1/2	1/4	5/8	13.4
24	PEF24T	25-1/4	25-1/2	2-1/2	1/4	5/8	15.6

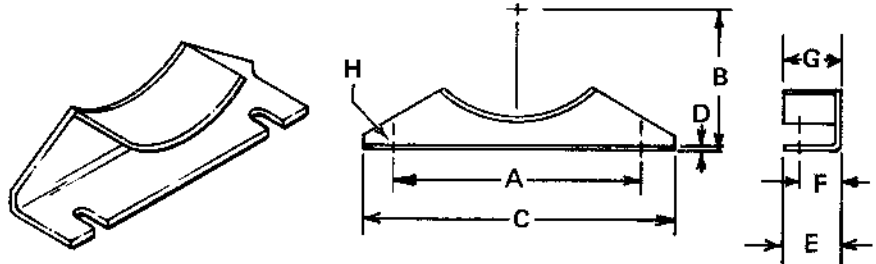
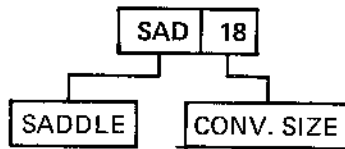
## Rectangular Trough



Screw Dia.	Part Number	Trough Thickness A		B	C	D	Trough Thickness E		F Bolts	Wt.
		Thru 10 Ga.	3/16-1/4				Thru 10 Ga.	3/16-1/4		
6	PEF6R	7-1/4	7-3/8	4-1/2	1-1/4	3/16	3-5/8	3-11/16	3/8	1.7
9	PEF9R	10-1/4	10-1/2	6-1/8	1-1/2	1/4	5-1/8	5-1/4	3/8	2.9
12	PEF12R	13-1/4	13-1/2	7-3/4	2	1/4	6-5/8	6-3/4	1/2	6.6
14	PEF14R	15-1/4	15-1/2	9-1/4	2	1/4	7-5/8	7-3/4	1/2	7.6
16	PEF16R	17-1/4	17-1/2	10-5/8	2	1/4	8-5/8	8-3/4	5/8	8.5
18	PEF18R	19-1/4	19-1/2	12-1/8	2-1/2	1/4	9-5/8	9-3/4	5/8	12.1
20	PEF20R	21-1/4	21-1/2	13-1/2	2-1/2	1/4	10-5/8	10-3/4	5/8	13.3
24	PEF24R	25-1/4	25-1/2	16-1/2	2-1/2	1/4	12-5/8	12-3/4	5/8	15.8

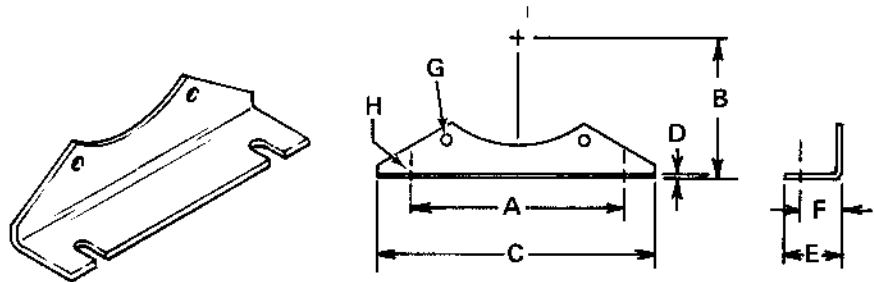
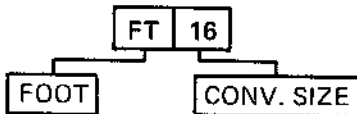
## Saddles & Feet

### SADDLE



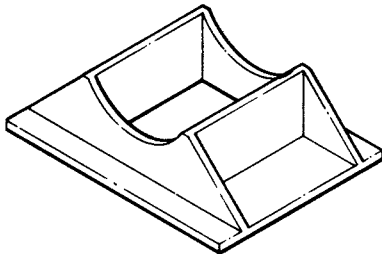
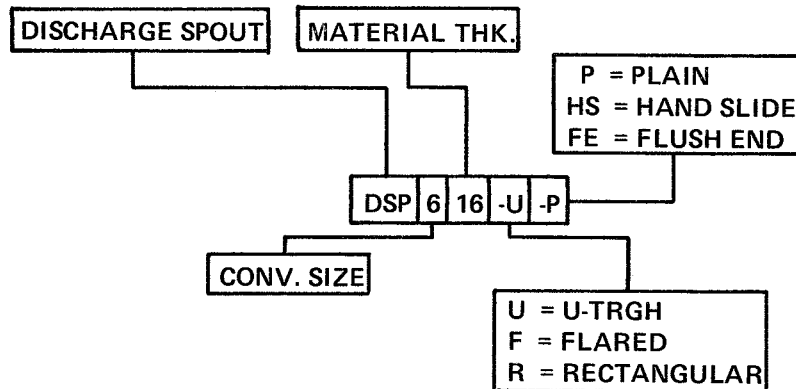
Screw Dia.	Part Number	A	B	C	D	E	F	G	H Bolts	Weight
4	SAD4	5-3/4	4-5/8	7-3/8	3/16	1-1/2	7/8	1-3/8	3/8	2.0
6	SAD6	8-1/8	5-5/8	10	3/16	1-1/2	13/16	1-3/4	3/8	3.0
9	SAD9	9-3/8	7-7/8	12	3/16	2-1/2	1-5/16	2	1/2	4.0
10	SAD10	9-1/2	8-7/8	12-3/8	3/16	2-1/2	1-9/16	2	1/2	5.0
12	SAD12	12-1/4	9-5/8	15	1/4	2-1/2	1-3/8	2-1/4	5/8	6.0
14	SAD14	13-1/2	10-7/8	16-1/2	1/4	2-1/2	1-3/8	2-3/4	5/8	8.0
16	SAD16	14-7/8	12	18	1/4	3	1-3/4	2-3/4	5/8	9.5
18	SAD18	16	13-3/8	19-1/8	1/4	3	1-3/4	2-3/4	5/8	11.0
20	SAD20	19-1/4	15	22-3/4	1/4	3-1/2	2	2-3/4	3/4	14.5
24	SAD24	20	18-1/8	24	1/4	4	2-1/4	2-3/4	3/4	17.0

### FLANGED FOOT



Screw Dia.	Part Number	A	B	C	D	E	F	G Bolts	H Bolts	Weight
4	FT4	5-3/4	4-5/8	7-3/8	3/16	1-1/2	7/8	3/8	3/8	1.5
6	FT6	8-1/8	5-5/8	10	3/16	1-1/2	13/16	3/8	3/8	2.0
9	FT9	9-3/8	7-7/8	12	3/16	2-1/2	1-5/16	3/8	1/2	3.0
10	FT10	9-1/2	8-7/8	12-3/8	3/16	2-1/2	1-9/16	3/8	5/8	5.0
12	FT12	12-1/4	9-5/8	15	1/4	2-1/2	1-5/8	1/2	5/8	6.0
14	FT14	13-1/2	10-7/8	16-1/2	1/4	2-1/2	1-3/8	1/2	5/8	7.0
16	FT16	14-7/8	12	18	1/4	3	1-3/4	5/8	5/8	7.5
18	FT18	16	13-3/8	19-1/8	1/4	3	1-3/4	5/8	5/8	9.5
20	FT20	19-1/4	15	22-3/4	1/4	3-1/2	2	5/8	3/4	12.5
24	FT24	20	18-1/8	24	1/4	4	2-1/4	5/8	3/4	14.5

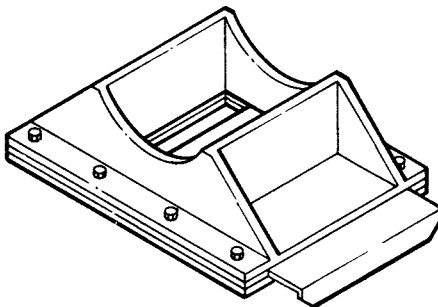
# DISCHARGE SPOUTS



## Fixed

Discharge spouts are shop welded to the conveyor trough.

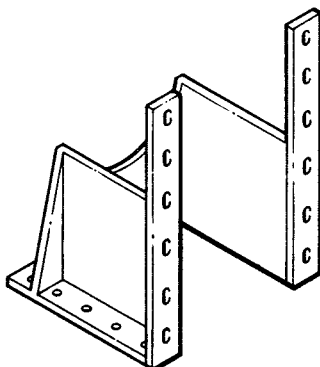
Gauges are proportioned to the size and material thickness of troughs.



## Fixed – Flat Slide

Fixed discharge spouts are available with hand slide gate assemblies.

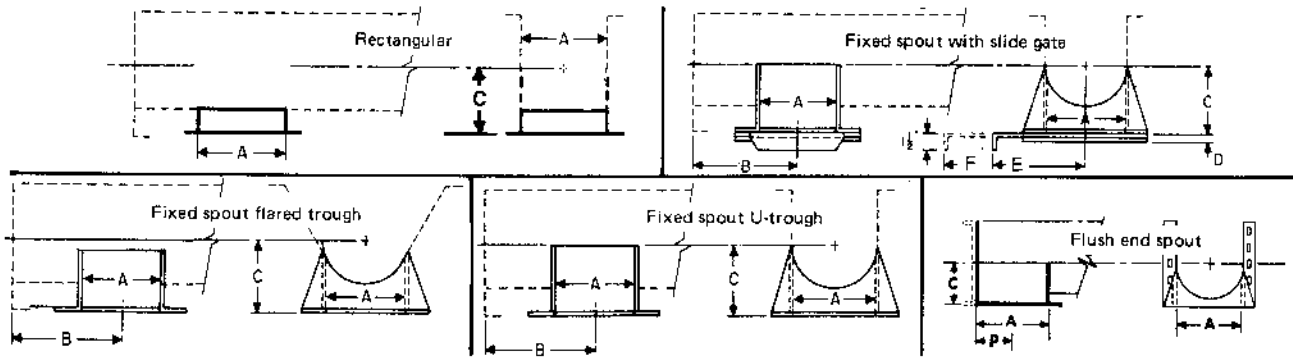
The slide gate assemblies are bolted to the discharge flange and may be assembled for either side or longitudinal opening. Slide gates are fabricated from the same gauge as the discharge spout.



## Flush End Discharge Spout

This spout is designed for use at the final discharge point. The end of the spout is comprised of a housing end with bottom flange drilled with standard discharge flange bolt pattern. Because it is located at the extreme end of the conveyor, there is no carryover of material past the final discharge point. The flush end arrangement eliminates the unnecessary extension of trough and interior components beyond the actual discharge point.

# DISCHARGE SPOUTS



Screw Diameter	A	B minimum	C	D	E	F	P
4	5	4-1/2	3-3/4	5/16	5-5/8	11	2-1/2
6	7	6	5	5/16	6-5/8	14	3-1/2
9	10	8	7-1/8	5/16	8	19	5
10	11	9	7-7/8	5/16	8-3/8	20	5-1/2
12	13	10-1/2	8-7/8	5/16	10-1/8	24	6-1/2
14	15	11-1/2	10-1/8	5/16	11-1/4	27	7-1/2
16	17	13-1/2	11-1/8	5/16	12-3/8	30	8-1/2
18	19	14-1/2	12-3/8	5/16	13-3/8	33	9-1/2
20	21	15-1/2	13-3/8	3/8	14-3/8	36	10-1/2
24	25	17-1/2	15-3/8	3/8	16-3/8	42	12-1/2

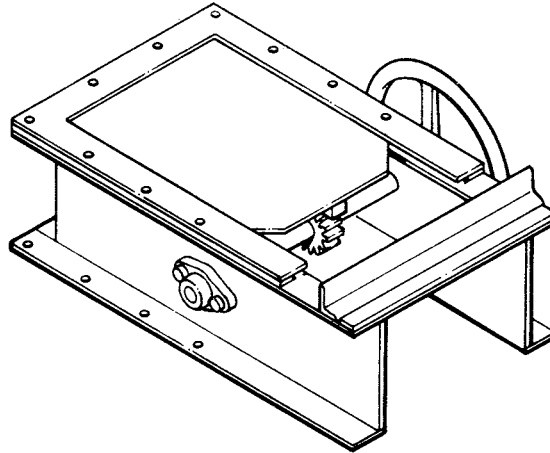
Screw Diam.	Trough Thickness ga.	Spout and Gate Thickness ga.	Part Number			Weight		
			Fixed Spout		Flush End Spout	Fixed Spout		Flush End Spout
			Plain	With Slide		Plain	Slide	
4	16-14	16	DSP416*P	DSP416*-HS	DSP416*-FE	1	6	1.5
	12	12	DSP412*P	DSP412*-HS	DSP412*-FE	3	7	2.25
6	16-14-12	16	DSP616*P	DSP616*-HS	DSP616*-FE	4	11	3.0
	3/16	12	DSP612*P	DSP612*-HS	DSP612*-FE	6	13	4.50
9	16-14-12-10	14	DSP914*P	DSP914*-HS	DSP914*-FE	8	18	6.0
	3/16-1/4	10	DSP910*P	DSP910*-HS	DSP910*-FE	13	22	9.75
10	16-14-12-10	14	DSP1014*P	DSP1014*-HS	DSP1014*-FE	10	21	7.5
	3/16-1/4	10	DSP1010*P	DSP1010*-HS	DSP1010*-FE	16	27	12.0
12	12-10	12	DSP1212*P	DSP1212*-HS	DSP1212*-FE	17	36	12.75
	3/16-1/4	3/16	DSP12316*P	DSP12316*-HS	DSP12316*-FE	29	48	21.75
14	12-10	12	DSP1412*P	DSP1412*-HS	DSP1412*-FE	22	46	16.50
	3/16-1/4	3/16	DSP14316*P	DSP14316*-HS	DSP14316*-FE	38	62	28.50
16	12-10	12	DSP1612*P	DSP1612*-HS	DSP1612*-FE	21	49	15.75
	3/16-1/4	3/16	DSP16316*P	DSP16316*-HS	DSP16316*-FE	40	68	30.0
18	12-10	12	DSP1812*P	DSP1812*-HS	DSP1812*-FE	32	69	24.0
	3/16-1/4	3/16	DSP18316*P	DSP18316*-HS	DSP18316*-FE	60	97	45.0
20	10	12	DSP2012*P	DSP2012*-HS	DSP2012*-FE	40	91	30.0
	3/16-1/4	3/16	DSP20316*P	DSP20316*-HS	DSP20316*-FE	67	118	50.25
24	10	12	DSP2412*P	DSP2412*-HS	DSP2412*-FE	52	116	39.0
	3/16-1/4	3/16	DSP24316*P	DSP24316*-HS	DSP24316*-FE	87	151	65.25

\*Specify Trough Style

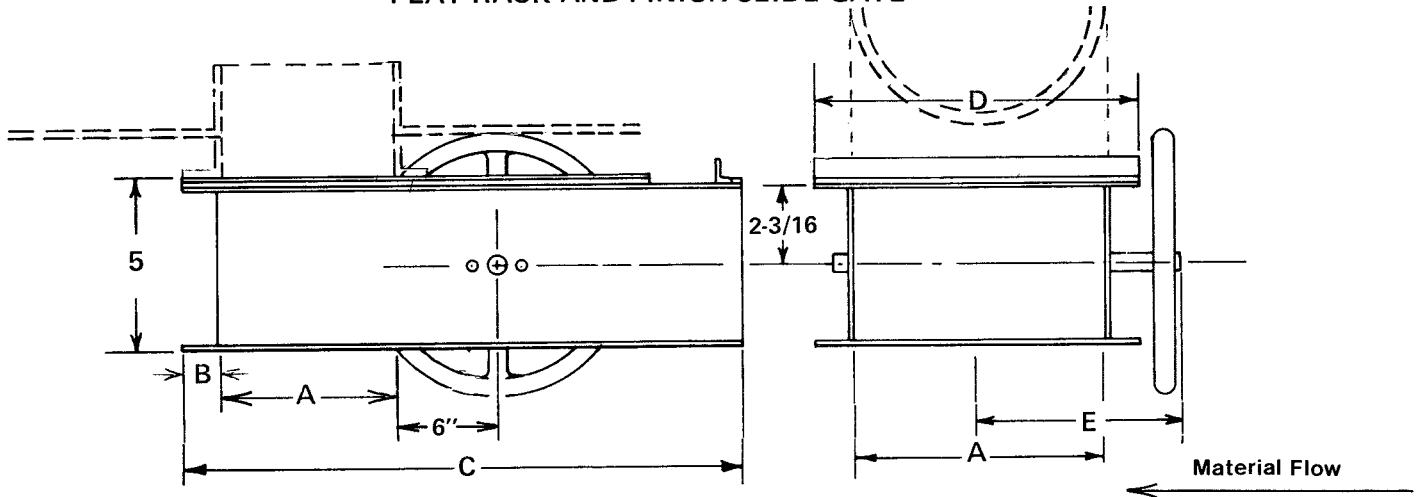
# RACK AND PINION GATES

KWS rack and pinion slide gates are manufactured from heavy gauge steel and incorporate cut steel rack and pinion gears for smooth, effortless operation.

Other outstanding features include standard flanged ball bearing handwheel shafts and adjustable gates.



FLAT RACK AND PINION SLIDE GATE



Conv. Dia.	Part Number	A	B	C	D	E
4	RPG4*F†	5	1-1/4	20-3/4	7-1/2	7
6	RPG6*F†	7	1-1/2	25	10	8
9	RPG9*F†	10	1-5/8	31	13-1/4	11
10	RPG10*F†	11	1-5/8	33-1/8	14-1/4	11-1/2
12	RPG12*F†	13	2-1/8	37-5/8	17-1/4	13
14	RPG14*F†	15	2-1/8	41-5/8	19-1/4	14
16	RPG16*F†	17	2-1/8	45-5/8	21-1/4	15
18	RPG18*F†	19	2-5/8	50-1/8	24-1/4	16-1/2
20	RPG20*F†	21	2-5/8	54-1/8	26-1/4	17-1/2
24	RPG24*F†	25	2-5/8	62-1/8	30-1/4	19-1/2

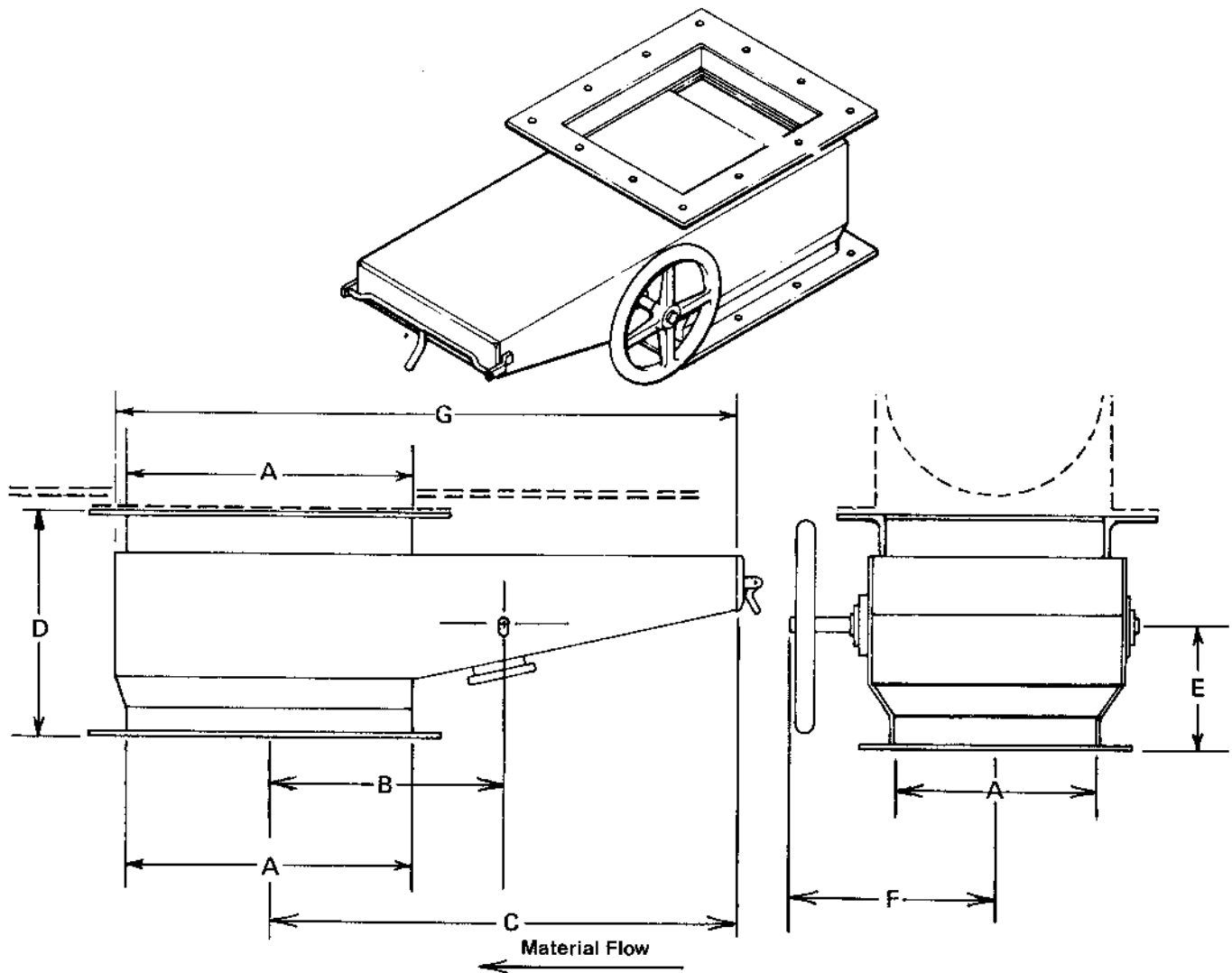
\* Specify metal thickness: 16 = 16 Ga. 14 = 14 Ga. 12 = 12 Ga. 10 = 10 Ga.  
316 = 3/16" Plt. 250 = 1/4" Plt.

† H - Handwheel - Supplied as Std. Assy.

C - Chainwheel

R - Ropewheel

# FLAT DUST TITE RACK AND PINION GATE



Conv. Size	Part Number	A	B	C	D	E	F	G
4	RPG4*FD†	5	6	14-1/2	7-1/2	4-1/8	7	18
6	RPG6*FD†	7	7-1/2	18	9	5-3/8	8	22-1/2
9	RPG9*FD†	10	9	22-1/2	10	6-3/8	11	28-1/2
10	RPG10*FD†	11	10	24-1/2	10-1/2	6-7/8	11-1/2	31
12	RPG12*FD†	13	11-1/2	28	10-1/2	6	13	35-1/2
14	RPG14*FD†	15	12-1/2	31	10-1/2	6	14	39-1/2
16	RPG16*FD†	17	13-1/2	34	10-1/2	6	15	43-1/2
18	RPG18*FD†	19	15	37-1/2	11-1/2	6-1/4	16-1/2	48
20	RPG20*FD†	21	16	40-1/2	12	6-3/4	17-1/2	52
24	RPG24*FD†	25	18	44-1/2	13	7-3/4	19-1/2	58

\* Specify metal thickness: 16 = 16 Ga. 14 = 14 Ga. 12 = 12 Ga. 10 = 10 Ga. 316 = 3/16 Plt.

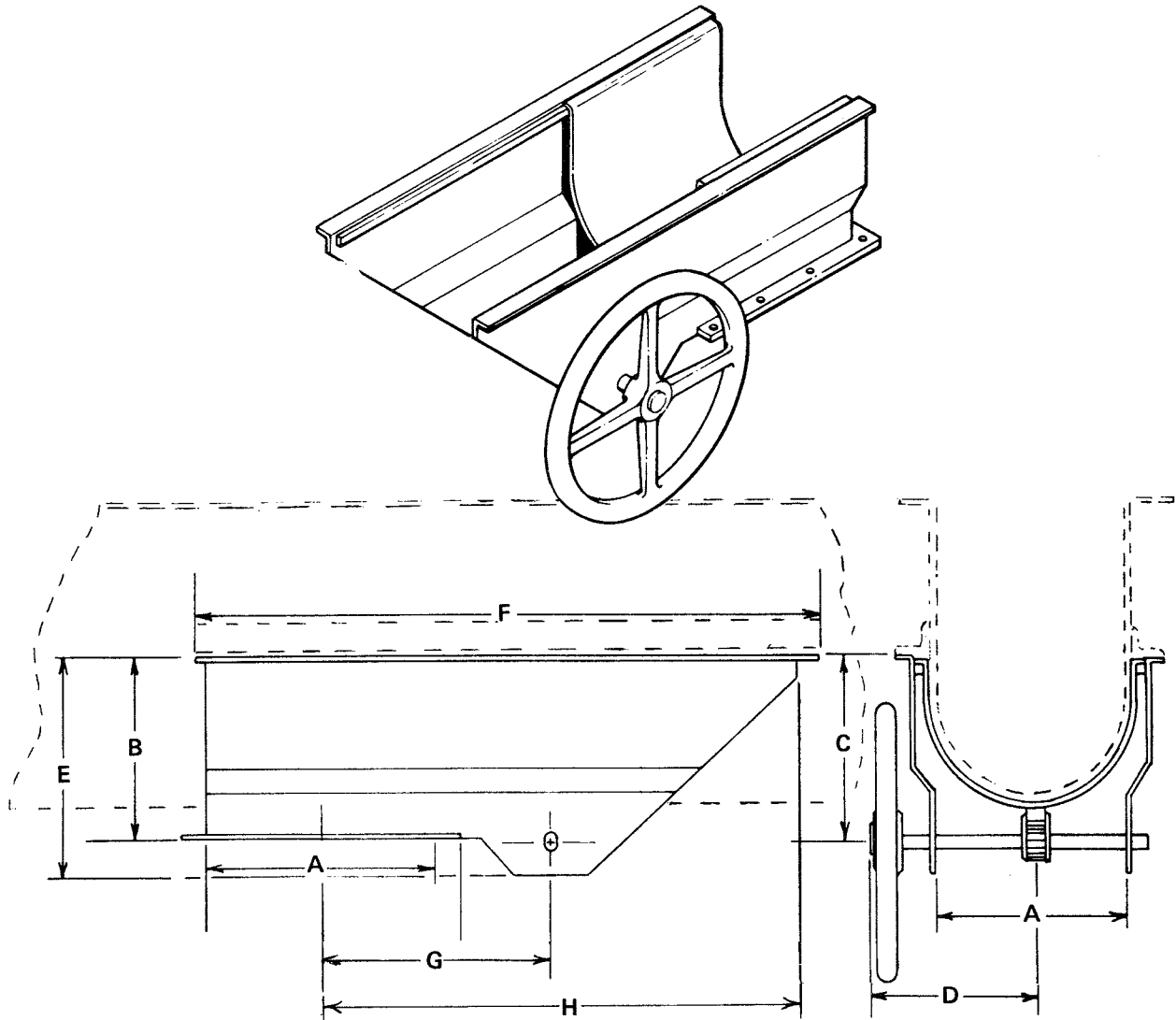
250 = 1/4 Plt.

† H - Handwheel - Supplied as Std. Assy.

C - Chainwheel

R - Ropewheel

CURVED GATE FURNISHED ONLY WHEN MOUNTED ON TROUGH BY KWS  
CURVED SLIDE RACK AND PINION GATE

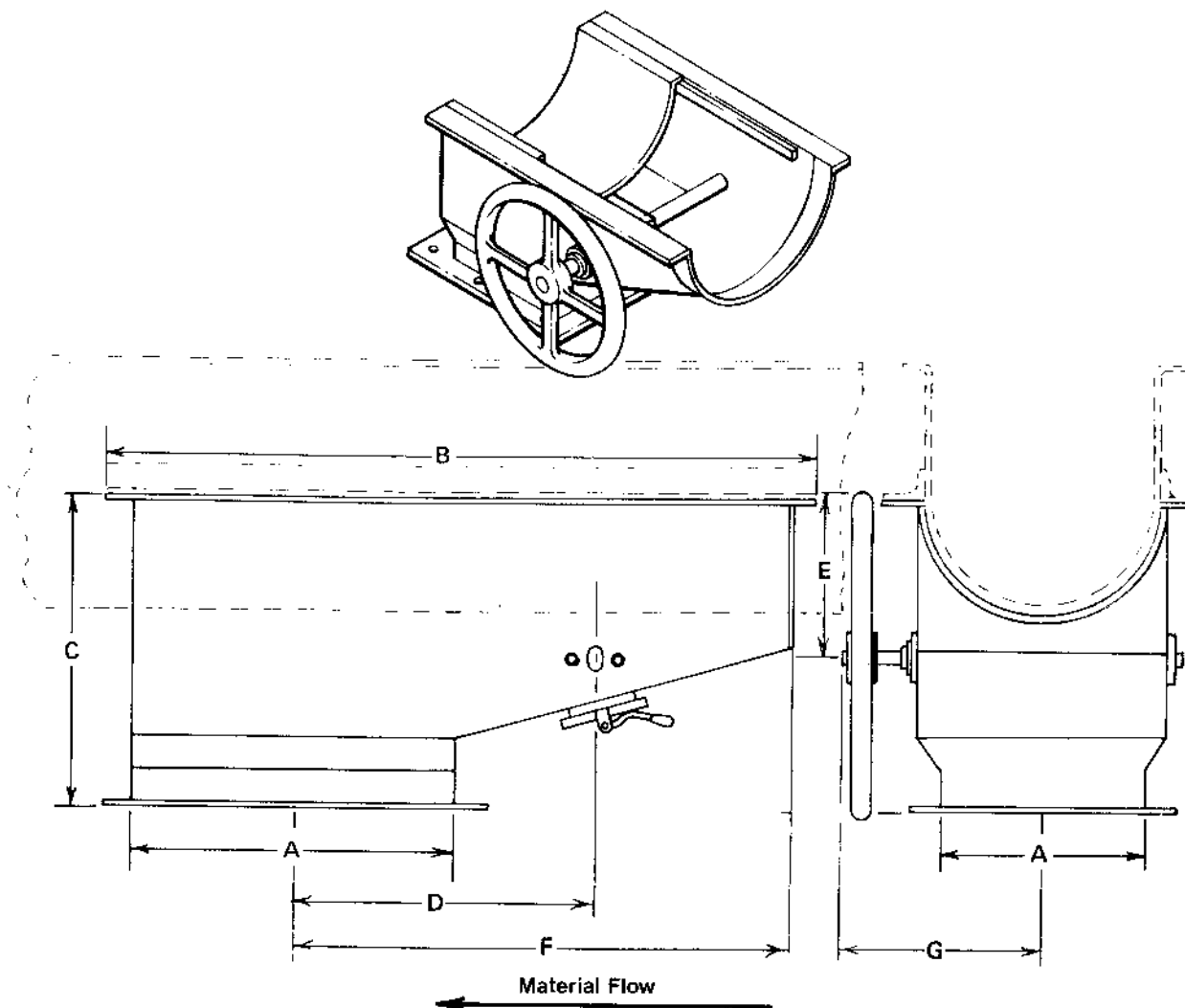


Conv. Size	Part Number	A	B	C	D	E	F	G	H
4	RPG4*C† RPG4*C†	5	3-3/4	4-1/8 4-1/4	7	6	20	8-1/2	15-1/2
6	RPG6*C† RPG6*C†	7	5	5-1/4 5-1/4	8	7	24	9-1/2	18-1/2
9	RPG9*C† RPG9*C†	10	7-1/8	7-1/8 7-1/4	11	9	30	11	23
10	RPG10*C† RPG10*C†	11	7-7/8	7-5/8 7-11/16	11-1/2	9-1/2	32	11-1/2	24-1/2
12	RPG12*C† RPG12*C†	13	8-7/8	8-15/16 9	13	10-3/4	36	12-1/2	27-1/2
14	RPG14*C† RPG14*C†	15	10-1/8	9-7/8 10	14	11-3/4	40	13-1/2	30-1/2
16	RPG16*C† RPG16*C†	17	11-1/8	10-7/8 11	15	12-3/4	44	14-1/2	33-1/2
18	RPG18*C† RPG18*C†	19	12-3/8	12-7/16 12-9/16	16-1/2	14-1/4	48	15-1/2	36-1/2
20	RPG20*C† RPG20*C†	21	13-3/8	13-1/2 13-5/8	17-1/2	15-1/4	52	16-1/2	39-1/2
24	RPG24*C† RPG24*C†	25	15-3/8	15-1/2 15-5/8	19-1/2	17-1/4	60	18-1/2	45-1/2

\* Specify metal thickness: 16 = 16 Ga. 14 = 14 Ga. 12 = 12 Ga. 10 = 10 Ga. 316 = 3/16 Plt. 250 = 1/4" Plt.

† \* Handwheel (H) supplied as standard assembly. Chainwheel (C) or Ropewheel (R) available also.

**CURVED GATE FURNISHED ONLY WHEN MOUNTED ON TROUGH BY KWS  
CURVED DUST TITE RACK AND PINION GATE**



Conv. Size	Part Number	A	B	C	D	E	F	G
4	RPG4*CD† RPG4*CD†	5	19	7-1/2	7-1/2	4-1/2	14-1/2	7
6	RPG6*CD† RPG6*CD†	7	23	10	8-1/2	5-9/16	17-1/2	8
9	RPG9*CD† RPG9*CD†	10	29	12-1/2	10	7-1/16	22	11
10	RPG10*CD† RPG10*CD†	11	31	13	10-1/2	7-5/8	23-1/2	11-1/2
12	RPG12*CD† RPG12*CD†	13	35	15	11-1/2	9	26-1/2	13
14	RPG14*CD† RPG14*CD†	15	39	15-1/2	12-1/2	10	29-1/2	14
16	RPG16*CD† RPG16*CD†	17	43	16-1/2	13-1/2	11	32-1/2	15
18	RPG18*CD† RPG18*CD†	*19	47	18-1/2	14-1/2	12-1/2	35-1/2	16-1/2
20	RPG20*CD† RPG20*CD†	21	51	20	15-1/2	13-1/2	38-1/2	17-1/2
24	RPG24*CD† RPG24*CD†	25	59	23	17-1/2	15-1/2	44-1/2	19-1/2

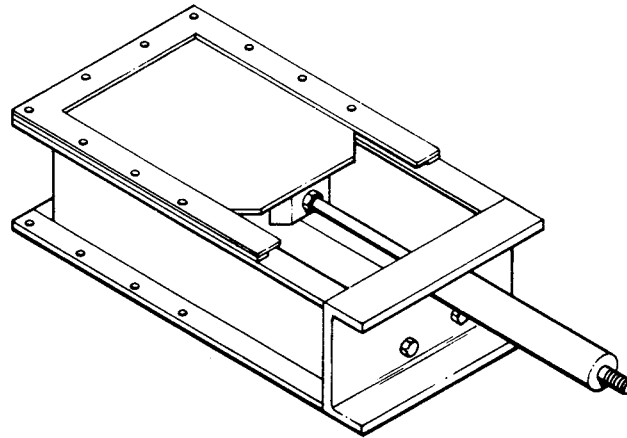
\* Specify metal thickness: 16 = 16 Ga. 14 = 14 Ga. 12 = 12 Ga. 10 = 10 Ga. 316 = 3/16 Plt. 250 = 1/4" Plt.

† \* Handwheel (H) supplied as standard assembly. Chainwheel (C) or Ropewheel (R) available also.

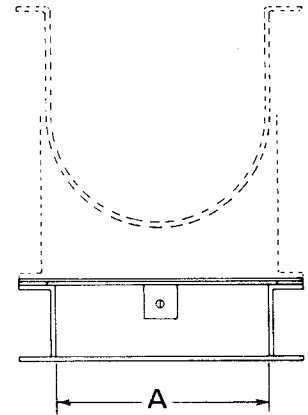
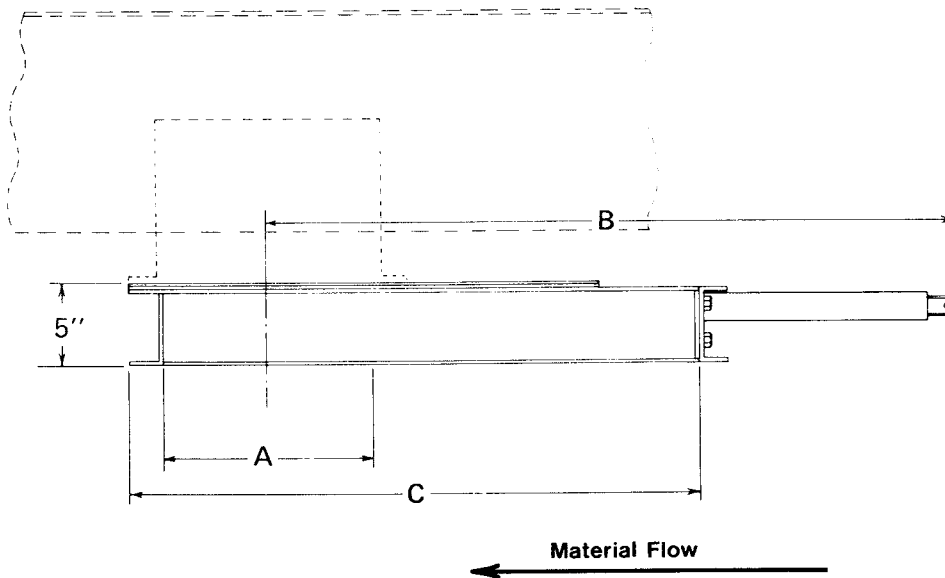
NOTE: 4" thru 16" use a single rack and pinion gear. 18" thru 24" use a double rack and pinion gear.



# PNEUMATIC GATES



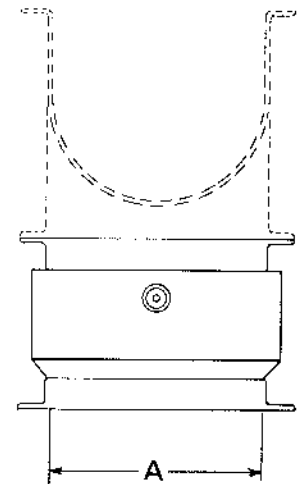
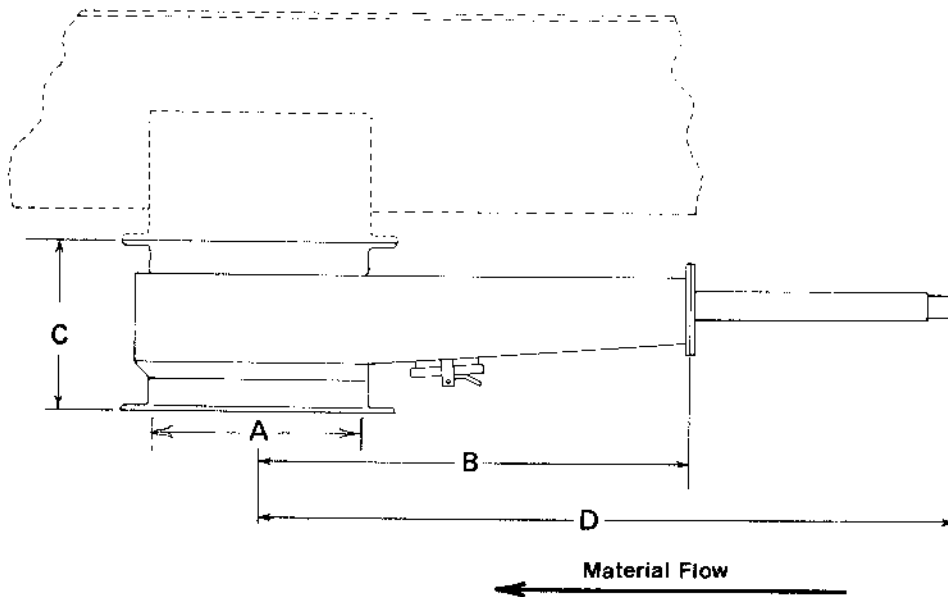
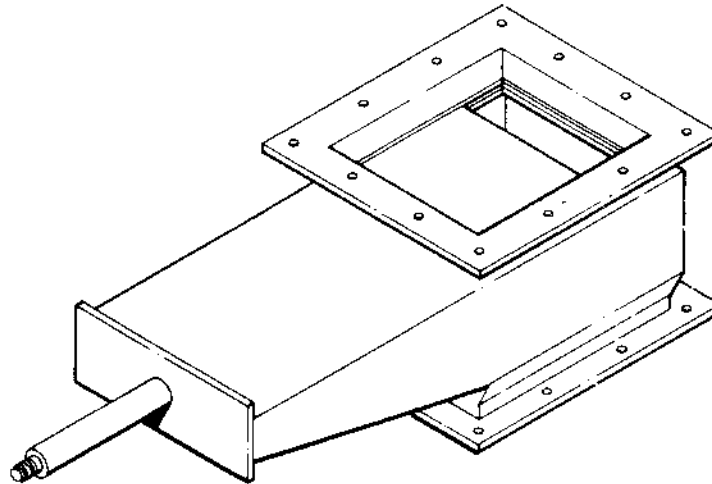
FLAT PNEUMATIC SLIDE GATE



Conv. Dia.	Part Number	A	B	C
4	PG4*F	5	21-7/8	16-3/8
6	PG6*F	7	27-5/8	21-3/8
9	PG9*F	10	38	28-3/8
10	PG10*F	11	39-3/8	30-3/8
12	PG12*F	13	45	35-1/2
14	PG14*F	15	50	39-3/8
16	PG16*F	17	55	43-3/8
18	PG18*F	19	60-1/2	48-3/8
20	PG20*F	21	65-1/2	52-3/8
24	PG24*F	25	75-1/2	60-3/8

\* Specify metal thickness: 16 = 16 Ga. 14 = 14 Ga.  
12 = 12 Ga. 10 = 10 Ga. 316 = 3/16 Plt. 250 = 1/4" Plt.

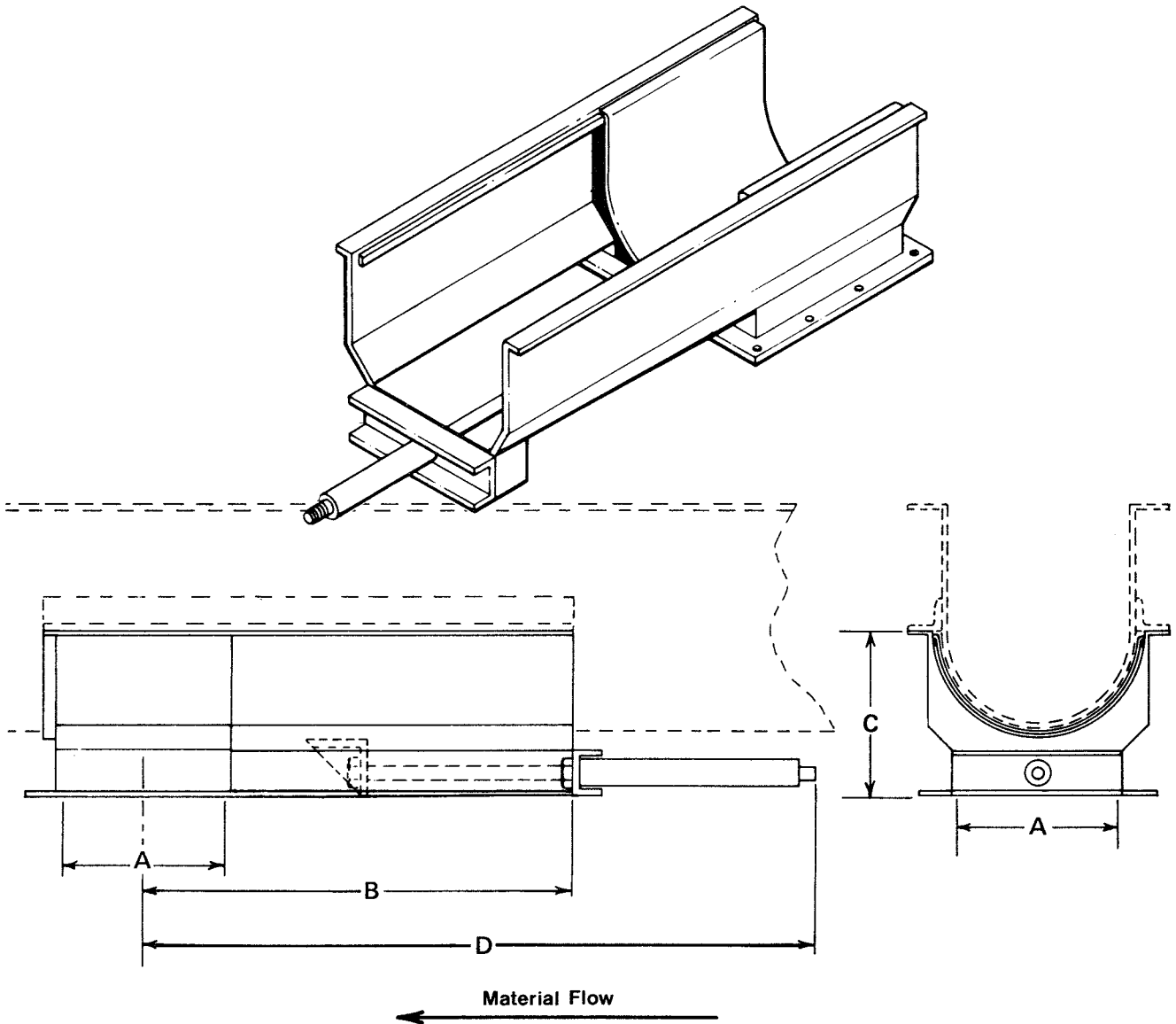
# FLAT DUST-TIGHT PNEUMATIC SLIDE GATE



Conv. Size	Part Number	A	B	C	D
4	PG4*FD	5	12	7-1/2	20-7/16
6	PG6*FD	7	16-1/8	9	26-9/16
9	PG9*FD	10	22-3/4	10	37-3/4
10	PG10*FD	11	23-1/2	10-1/2	38-1/2
12	PG12*FD	13	27	10-1/2	44
14	PG14*FD	15	30	10-1/2	49
16	PG16*FD	17	33	10-1/2	54
18	PG18*FD	19	36-1/2	11-1/2	59-1/2
20	PG20*FD	21	39-1/2	12	64-1/2
24	PG24*FD	25	45-1/2	13	74-1/2

\* Specify metal thickness: 16 = 16 Ga. 14 = 14 Ga. 12 = 12 Ga. 10 = 10 Ga. 316 = 3/16" 250 = 1/4"

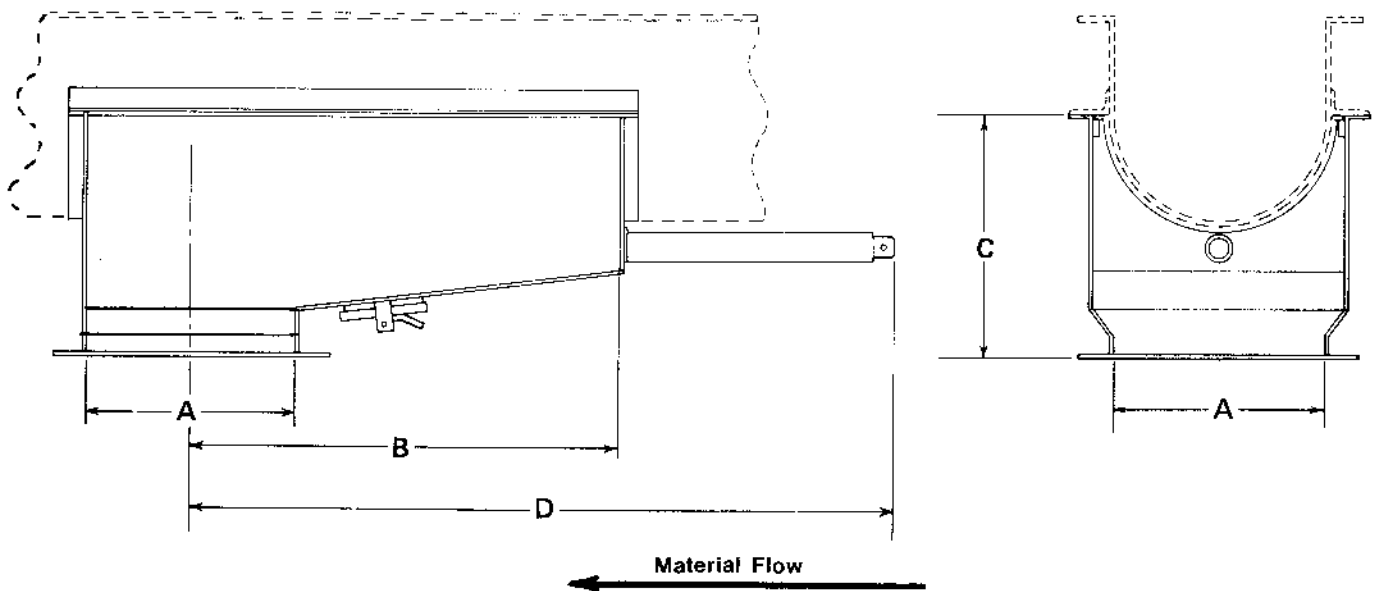
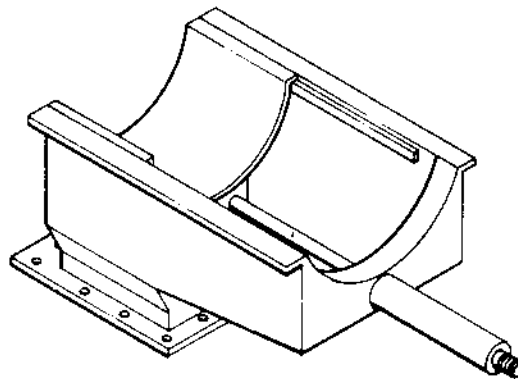
CURVED GATE FURNISHED ONLY WHEN MOUNTED ON TROUGH BY KWS  
CURVED PNEUMATIC SLIDE GATE



Conv. Size	Part Number	A	B	C	D
4	PG4*C	5	12-5/8	3-3/4	21-7/8
6	PG6*C	7	16-3/8	5	27-5/8
9	PG9*C	10	21-7/8	7-1/8	38
10	PG10*C	11	23-1/4	7-7/8	39-3/8
12	PG12*C	13	26-7/8	8-7/8	45
14	PG14*C	15	29-3/4	10-1/8	50
16	PG16*C	17	32-3/4	11-1/8	55
18	PG18*C	19	36-1/4	12-3/8	60-1/2
20	PG20*C	21	39-1/4	13-3/8	65-1/2
24	PG24*C	25	45-1/4	15-3/8	75-1/2

\* Specify metal thickness: 16 = 16 Ga. 14 = 14 Ga. 12 = 12 Ga.  
10 = 10 Ga. 316 = 3/16 Plt. 250 = 1/4" Plt.

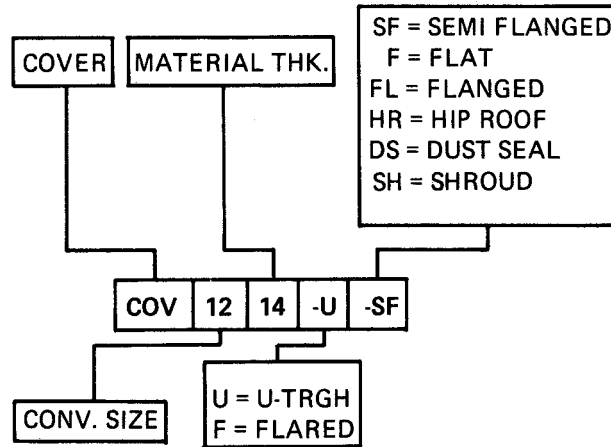
**CURVED GATE FURNISHED ONLY WHEN MOUNTED ON TROUGH BY KWS  
CURVED DUST-TIGHT PNEUMATIC SLIDE GATE**



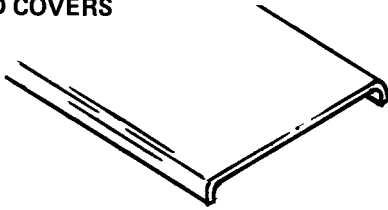
Conv Size	Part Number	A	B	C	D
4	PG4*CD	5	12-5/8	7-1/2	22-1/8
6	PG6*CD	7	16-3/8	10	27-7/8
9	PG9*CD	10	21-7/8	12-1/2	38-1/4
10	PG10*CD	11	23-1/4	13	39-5/8
12	PG12*CD	13	26-7/8	15	45-1/4
14	PG14*CD	15	29-3/4	15-1/2	50-1/4
16	PG16*CD	17	32-3/4	16-1/2	55-1/4
18	PG18*CD	19	36-1/4	18-1/2	60-3/4
20	PG20*CD	21	39-1/4	20	65-3/4
24	PG24*CD	25	45-1/4	23	75-3/4

\* Specify metal thickness: 16 = 16 Ga. 14 = 14 Ga. 12 = 12 Ga.  
10 = 10 Ga. 316 = 3/16 Plt. 250 = 1/4" Plt.

# COVERS

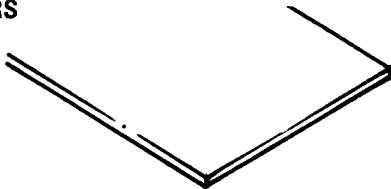


## FLANGED COVERS



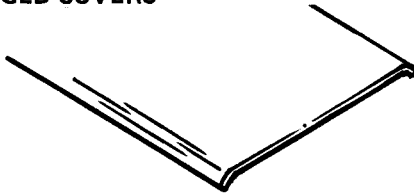
Flanged covers are turned down approximately 3/4" on each side. Flanges provide a limited degree of weather and dust proofing and also may be gasketed for more complete dust or non-critical weather-proof operation. They are secured by means of bolts or screw or toggle clamps.

## FLAT COVERS



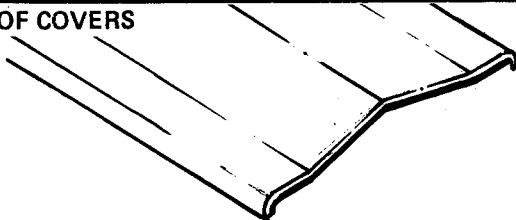
Flat covers fit flush with housing top flanges. They may be bolted, spring clamped or attached with screw or toggle clamps. Although flat covers are intended primarily for interior applications, they also may be gasketed for moderate dust-proof operation.

## SEMIFLANGED COVERS



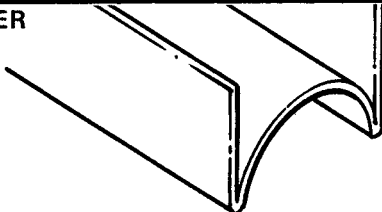
Semiflanged covers are intended for indoor or general use. Cover edges are slightly flanged to make it more rigid. A butt-strap is provided at one end which overlaps the succeeding cover section to cover the joint between sections. Covers may be fastened to the trough flange with spring, clamps, screw clamps or toggle clamps.

## HIP ROOF COVERS



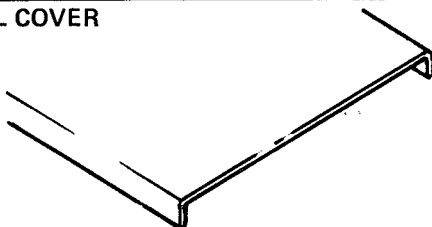
Ridged or hip roof covers are designed for outside applications. The center peak of the cover sheds rain or snow. Both sides of the cover are flanged to provide additional weather-proofing. These covers also may be gasketed for more severe weatherproof operation. Covers may be bolted or attached by means of screw or toggle clamps.

## SHROUD COVER



The shroud cover is designed for use with standard U-trough when a tubular cross-section is required. Standard covers frequently are used with the shroud cover to prevent accumulation of foreign matter or moisture in the pockets formed by the contour of the shroud and the sides of the housing.

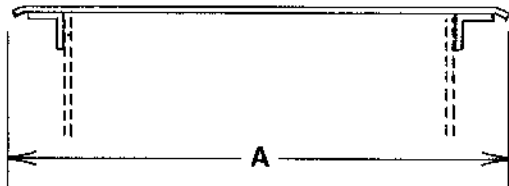
## DUST SEAL COVER



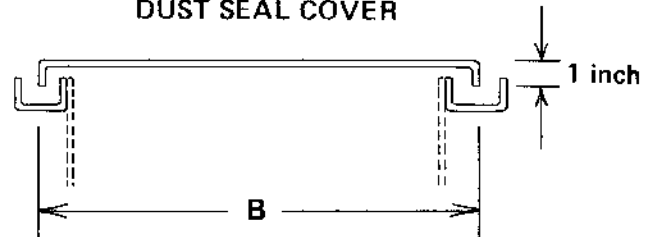
Dust seal covers are flanged down on all four sides to match channel sections fabricated in the special dust seal troughs.

Channels may be filled with sand or other materials to provide the desired seal effect.

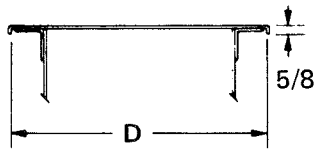
SEMI FLANGED COVER



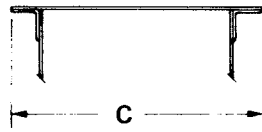
DUST SEAL COVER



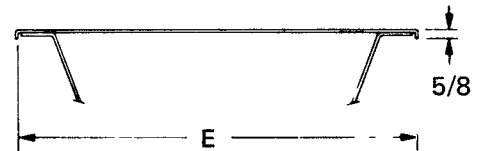
Screw Dia.	Part Number Semi-Flanged Cover	Wt. Per Ft.	Part Number Dust Seal Covers	Wt. Per Ft.	(Approx.) A	B
4	COV 416 U-SF COV 414 U-SF	1.9 2.4	COV 416 U DS COV 414 U DS	2.4 3.0	8-3/8	6
6	COV 616 U-SF COV 614 U-SF	2.4 3.0	COV 616 U DS COV 614 U DS	3.0 3.8	10-7/8	8-1/4
9	COV 914 U-SF COV 912 U-SF	3.8 5.3	COV 916 U DS COV 914 U DS	3.6 4.5	14-3/8	11-1/2
10	COV 1014 U-SF COV 1012 U-SF	4.1 5.7	COV 1016 U DS COV 1014 U DS	4.0 5.0	15-3/8	12-1/2
12	COV 1214 U-SF COV 1212 U-SF	5.3 7.4	COV 1214 U DS COV 1212 U DS	4.4 6.2	18-1/4	15
14	COV 1414 U-SF COV 1412 U-SF	5.6 7.8	COV 1414 U DS COV 1412 U DS	5.0 7.0	20-1/4	17
16	COV 1614 U-SF COV 1612 U-SF	6.3 8.8	COV 1614 U DS COV 1612 U DS	5.6 7.8	22-1/4	19
18	COV 1812 U-SF COV 1810 U-SF	9.8 13.7	COV 1814 U DS COV 1812 U DS	6.2 8.7	25-1/4	21-1/2
20	COV 2012 U-SF COV 2010 U-SF	10.5 14.7	COV 2014 U DS COV 2012 U DS	6.6 9.2	27-1/4	23-1/2
24	COV 2412 U-SF COV 2410 U-SF	12.1 16.9	COV 2414 U DS COV 2412 U DS	7.2 10.1	31-1/4	27-1/2



FLANGED

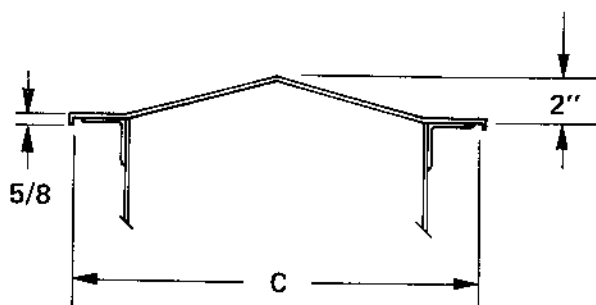


FLAT

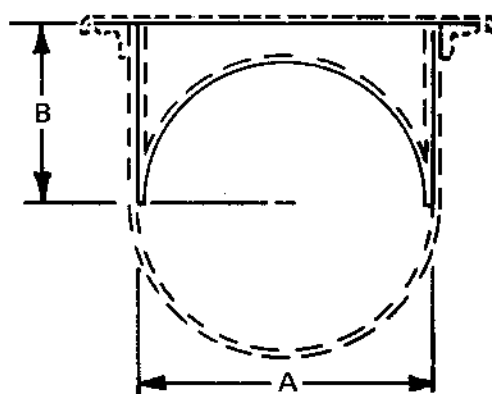


FOR FLARED TROUGHS

Screw Dia.	Cover Thickness	Flanged		Flat		Flanged For Flared Trough		C	D	E
		Part Number	Wt. Per Ft.	Part Number	Wt. Per Ft.	Part Number	Wt. Per Ft.			
4	16 Ga.	COV416UFL	2.0	COV416UF	1.6	X	X	7-3/4	8	X
6	16	COV616UFL	2.4	COV616UF	2.0	COV616FFL	3.9	9-3/4	10-1/2	17-3/8
9	16	COV916UFL	3.2	COV916UF	3.0	COV916FFL	5.0	13-1/4	14	22
	10	COV910UFL	7.2	COV910UF	6.2	COV910FFL	9.6			
10	16	COV1016UFL	3.4	COV1016UF	3.2	X	X	14-1/4	15	X
	10	COV1010UFL	7.7	COV1010UF	6.6					
12	14	COV1214UFL	5.0	COV1214UF	4.5	COV1214FFL	7.4	17-1/4	18	27
	10	COV1210UFL	9.1	COV1210UF	8.0	COV1210FFL	13.3			
14	14	COV1414UFL	5.6	COV1414UF	5.0	COV1414FFL	7.9	19-1/4	20	29
	10	COV1410UFL	10.0	COV1410UF	9.0	COV1410FFL	14.3			
16	14	COV1614UFL	6.1	COV1614UF	5.5	COV1614FFL	9.0	21-1/4	22	33
	10	COV1610UFL	11.0	COV1610UF	9.9	COV1610FFL	16.1			
18	14	COV1814UFL	7.1	COV1814UF	6.3	COV1814FFL	10.4	24-1/4	25	37
	10	COV1810UFL	12.4	COV1810UF	11.3	COV1810FFL	18.0			
20	14	COV2014UFL	7.5	COV2014UF	7.0	COV2014FFL	11.3	26-1/4	27	40
	10	COV2010UFL	13.4	COV2010UF	12.3	COV2010FFL	19.5			
24	12	COV2412UFL	11.8	COV2412UF	11.0	COV2412FFL	17.0	30-1/4	31	46
	10	COV2410UFL	15.2	COV2410UF	14.2	COV2410FFL	21.8			



HIP ROOF



SHROUD

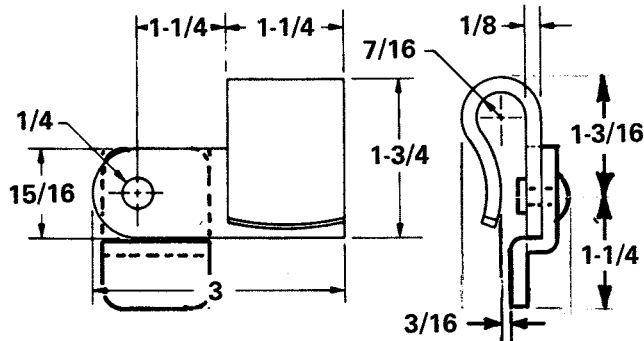
Screw Dia.	Cover Thickness	Hip Roof		Shroud		A	B	C
		Part Number	Wt. Per Ft.	Part Number	Wt. Per Ft.*			
4	14 Ga.	COV414UHR	2.0	COV614USH	3.5	5	3-5/8	8
6	14	COV614UHR	3.5	COV614USH	4.2	7	4-1/2	10-1/2
9	14	COV914UHR	4.4	COV914USH	5.9	10	6-1/8	14
	12	COV912UHR	5.8	COV912USH	8.3			
10	14	COV1014UHR	4.6	COV1014USH	6.6	11	6-3/8	15
	12	COV1012UHR	6.2	COV1012USH	9.2			
12	14	COV1214UHR	5.4	COV1214USH	7.6	13	7-3/4	18
	10	COV1210UHR	9.7	COV1210USH	13.6			
14	14	COV1414UHR	6.0	COV1414USH	8.9	15	9-1/4	20
	10	COV1410UHR	10.8	COV1410USH	16.1			
16	14	COV1614UHR	6.5	COV1614USH	10.0	17	10-5/8	22
	10	COV1610UHR	11.8	COV1610USH	18.0			
18	12	COV1812UHR	9.7	COV1812USH	16.6	19	12-1/8	25
	10	COV1810UHR	12.4	COV1810USH	21.3			
20	12	COV2012UHR	10.6	COV2012USH	18.5	21	13-1/2	27
	10	COV2010UHR	13.4	COV2010USH	23.8			
24	12	COV2412UHR	11.8	COV2412USH	21.1	25	16-1/2	31
	10	COV2410UHR	15.2	COV2410USH	27.1			

\*Weight does not include end plates.



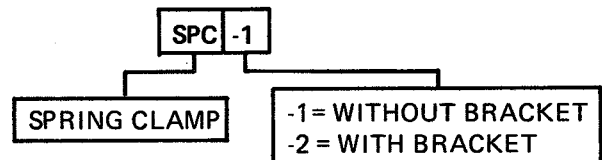
# Clamps

## SPRING CLAMP

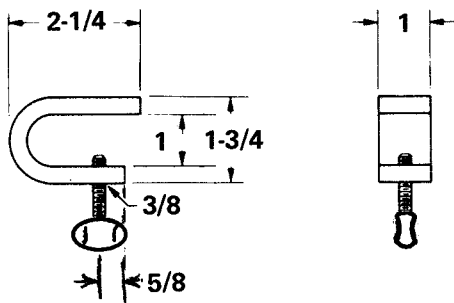


KWS steel spring clamps are manufactured from heavy-gauge steel with precision dies. Clamps are of the pivot type and are attached to the conveyor housing top flange by means of rivets. Designed for attaching flat covers, the spring clamps are adjustable and may be used with covers having rubber or other types of gaskets.

## SPRING CLAMP

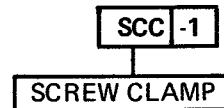


## SCREW CLAMP

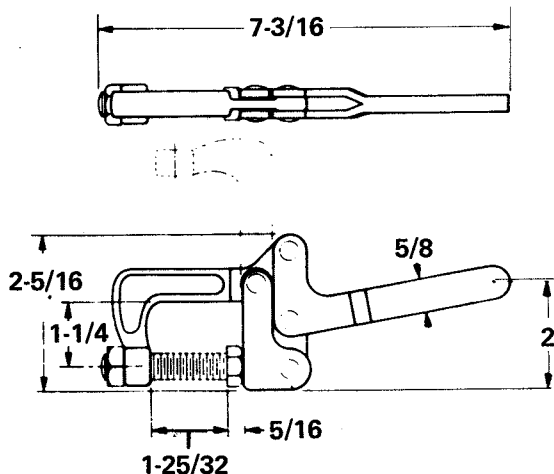


Steel screw clamps may be used with flanged or flat covers for all conveyor sizes through 24". Screw clamps provide a simple, yet completely secure, means of attaching covers.

## SCREW CLAMPS

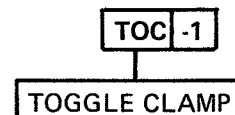


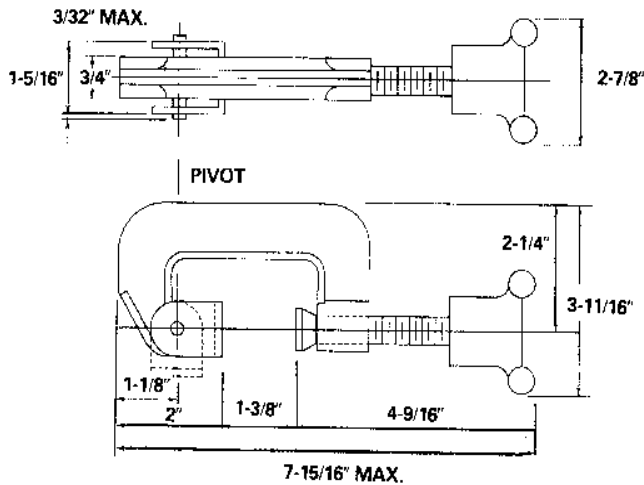
## TOGGLE CLAMP



Toggle clamps are designed for attaching covers to conveyors where quick accessibility is required. The toggle clamp is attached by welding the front or top of the base to the conveyor. The hold-down bar moves a full 90° to clear the working area. Adjustable spindle allows adjustment for all conveyor sizes. Plastic handle moves 50°. The clamp provides a holding pressure of 800 lbs., yet weighs less than a pound.

## TOGGLE CLAMPS





Under laboratory test conditions 17.5 lbs. ft. torque applied results in a compressive load of 1,560 lbs. without failure.

## HEAVY-DUTY SWIVEL SCREW CLAMP

**DEPENDABLE AND DURABLE.** Our KWS-SP-SC swivel screw clamps are ideal for a multitude of applications. These heavy-duty clamps are constructed from stainless steel and aluminum for durability and years of corrosion-resistant service.

**VERSATILE.** Our heavy-duty swivel screw clamps are perfect for many material handling applications. On drop bottom troughs they provide dependable holding power with a minimum number of clamps. Of course, they are ideal for securing trough covers too.

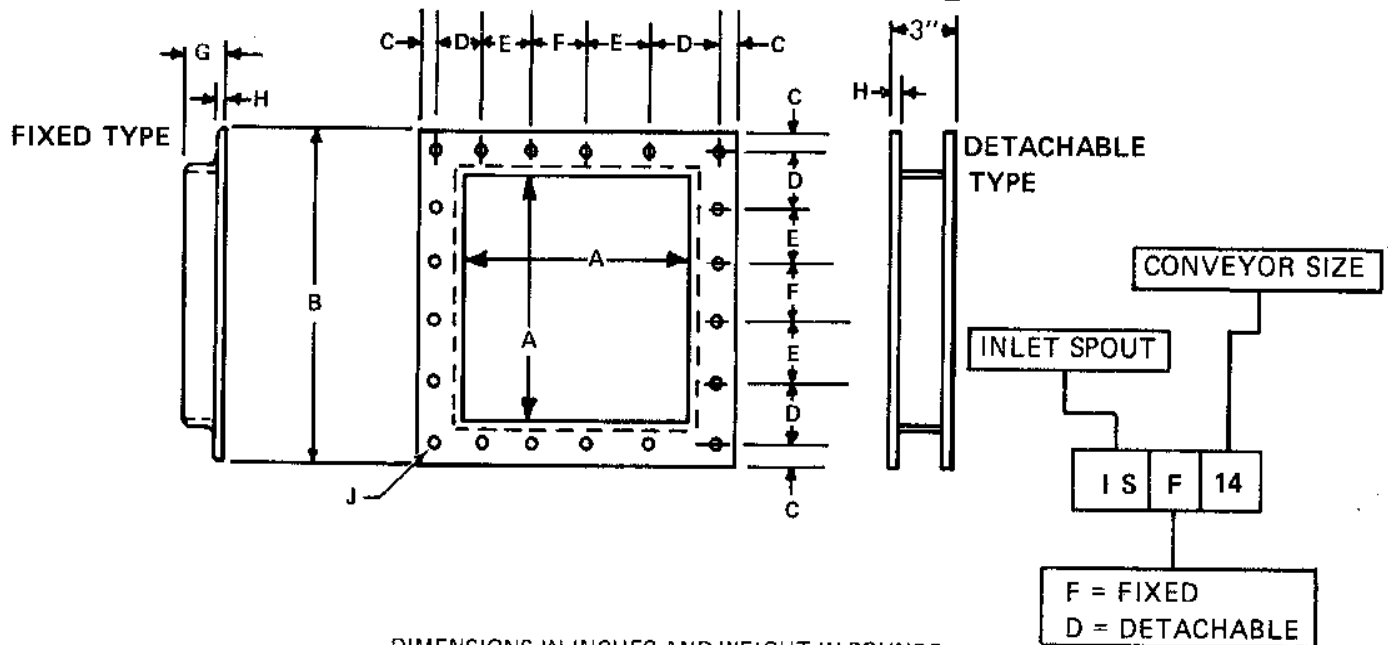
**CONVENIENT.** Quick and easy access is provided by our swivel screw clamps.

### SWIVEL SCREW CLAMP

KWS-SP-SC

WEIGHT 1 LB.

## CONVEYOR INLETS



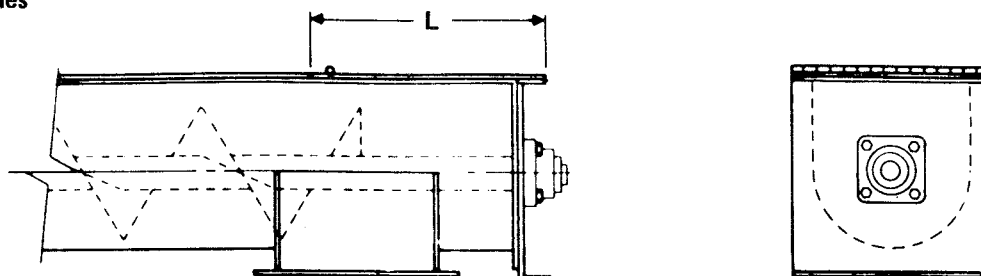
DIMENSIONS IN INCHES AND WEIGHT IN POUNDS.

Conveyor Diameter	Part Number	Weight	A	B		C		D	E	F	G	H	J
				Fixed Inlet	Detachable Inlet	Fixed Inlet	Detachable Inlet						
4	IS*4	1.8	5	7-1/2	7-1/2	3/8	3/8	2-1/4	-	2-1/4	1-1/4	1/8	1/4
6	IS*6	5.0	7	10	10	11/16	11/16	2-13/16	-	3	1-1/2	3/16	3/8
9	IS*9	6.8	10	13	13-1/4	1/2	5/8	4	-	4	1-1/2	3/16	3/8
10	IS*10	7.4	11	14	14-1/4	1/2	5/8	4-5/16	-	4-3/8	1-1/2	3/16	3/8
12	IS*12	12.1	13	17	17-1/4	3/4	7/8	5-1/8	-	5-1/4	2	3/16	3/8
14	IS*14	13.7	15	19	19-1/4	3/4	7/8	3-1/2	3-1/2	3-1/2	2	3/16	3/8
16	IS*16	15.3	17	21	21-1/4	3/4	7/8	3-3/4	4	4	2	1/4	3/8
18	IS*18	29.0	19	24	24-1/4	1	1-1/8	4-7/16	4-3/8	4-3/8	2-1/2	1/4	1/2
20	IS*20	31.8	21	26	26-1/4	1	1-1/8	4-7/8	4-3/4	4-3/4	2-1/2	1/4	1/2
24	IS*24	37.2	25	30	30-1/4	1	1-1/8	5-5/8	5-5/8	5-1/2	2-1/2	1/4	1/2

\* F - FIXED, D - DETACHABLE

## TROUGH COVER - Accessories

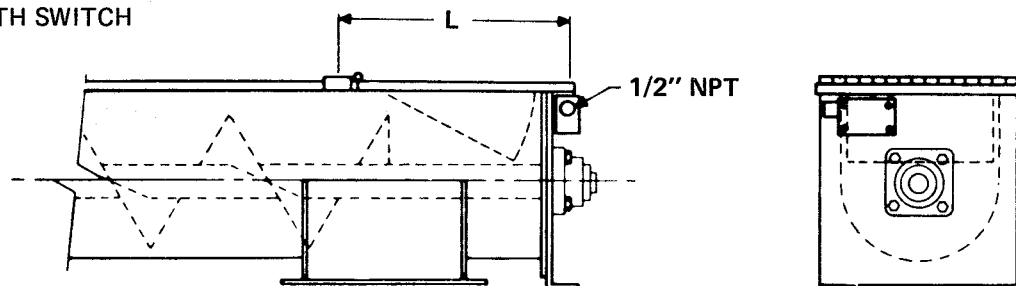
### OVERLOAD RELIEF



In the event that storage facility, processing equipment or subsequent conveyors become full, the material is forced upward against the hinged relief and discharged, thus preventing overload damage to the conveyor and accessories.

Relief doors are available for bolting to existing conveyor covers or may be shop assembled to any type of standard or special conveyor cover. Length "L" is equal to 1-1/2 times the conveyor diameter.

### OVERLOAD RELIEF WITH SWITCH

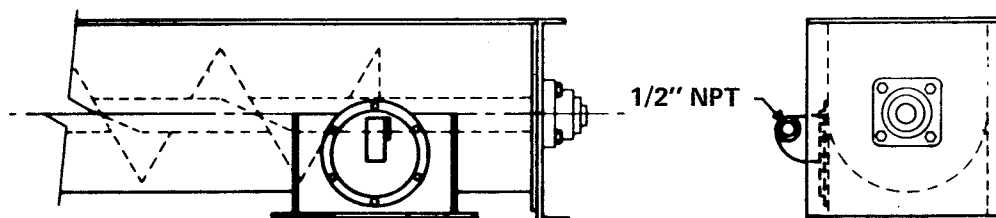


This protective device provides immediate relief upon overload and closes or opens an electrical circuit which may stop the conveyor, sound an alarm, or both.

When the surplus of material flows from the conveyor the overload relief closes and returns the switch to safe position, thus restarting the conveyor.

The electrical switch is available in standard, weather tight or explosion proof construction. This assembly is available for installation on existing conveyors, or may be shop assembled during fabrication of new conveyors. Length "L" is equal to 1-1/2 times the conveyor diameter.

### OVERLOAD PRESSURE SWITCH



When it is undesirable to allow material to spill from the above relief devices during overload, this pressure type switch may be installed on the discharge spout to open or close an electrical circuit which may stop the conveyor, sound an alarm, or both.

This device may also be used to advantage in any intermediate discharge spouts to indicate a full condition or to open another pneumatically operated discharge gate. Switches are available for field installation on existing conveyors, or may be shop assembled during fabrication of new equipment.