

FEEDER "TE" ROTARY (AIRLOCK)

OPEN END ROTOR/RECTANGULAR AND CIRCULAR FLANGE

APPLICATION: FLSmidth TE Rotary Feeders with open end rotors, are designed to meter dry, pulverized and granular materials OR to serve as airlocks for pneumatic conveying systems. Feeders are available in capacity ranges to meet most plant requirements for vacuum, pressure and general purpose applications.

SPECIFICATION: General

When installed in a pressure conveying system, the use of (optional) Lantern Rings and (standard) Air Purge is recommended when fine powdery material is being conveyed to prevent contamination of packing and bearing. The air purge should be set 2 to 4 PSIG (.14 to .28 Kg/cm²) above conveying line pressure.



Body and End Plates

The body and end plates are heavily ribbed and constructed of #50 cast iron. Motor support lugs are cast as an integral part of body and permit the mounting of the gearmotor directly on the unit, resulting in a compact package.

The end plates have integral cast outboard bearing supports and male-female joints between end plates and feeder body ensuring concentricity.

Rotor

All rotors are constructed of machine #50 cast iron and have six or eight vanes with four vanes in seal between inlet and outlet except for the 2" totally enclosed feeder (airlock) which has four vanes.

The rotor shaft has a tapered hub to reduce friction from trapped material between rotor and end plates. Anti-friction bearings are shielded, and mounted on rotor shaft outboard of the packing gland.

Beveling of the rotor vane is recommended if the material has a tendency to build up and smear.

Motor Mounts

All gearmotors are mounted directly to feeder body except the 2" and 5" (50 mm and 125 mm) TE Feeders which incorporate a single common steel base plate.

Motor Drive

All fractional gearmotors are TENV. All integral horsepower gearmotors are TEFC. All gearmotors are 3 phase, 230/460 Volts, 60 Hz.

Special Notes

All standard feeders (airlocks) are designed to handle material having a maximum temperature of 150° F (65° C). Above 150° F (65° C) requires additional periphery and end clearances. From 700° F to 900° F (371° C to 482° C) requires additional clearance and water cooled shaft. Above 900° F (482° C) and not in excess 1200° F (650° C) requires ductile iron construction, special bearings and water cooled rotor.

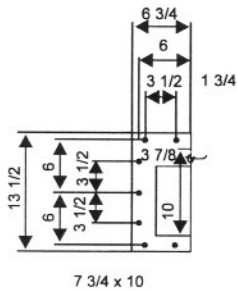
FEEDER (ONLY):

SIZE (Inches)	DISPLACEMENT Cu.Ft./Rev.	HP	Standard Rotor Part No.	Beveled Rotor Part No.	Approx. Wt. (lbs)
7 3/4 x 10	.15	3/4 - 1	132-68-4-0302-00	132-68-4-0302-02	180
8 x 10	.30	1	132-68-4-0303-00	132-68-4-0303-02	280
10 x 11 1/2	1.00	1 - 2	132-68-4-0404-00	132-68-4-0404-02	430
12 x 13	1.80	1 1/2 - 2	132-68-4-0401-00	132-68-4-0413-02	670
12 x 20	2.75	1 1/2 - 2	132-68-4-0402-00	132-68-4-0402-02	920
16 x 16	3.27	2 - 3	132-79-4-0502-00	132-79-4-0502-02	1350
16 x 27	5.19	2 - 3	132-79-4-5303-00	132-79-4-0503-02	1850

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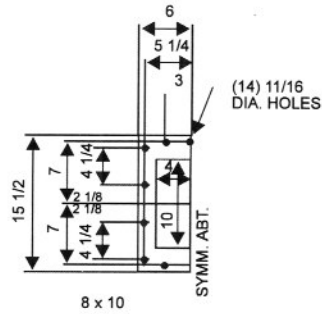
OPEN END ROTOR / RECTANGULAR FLANGE

RECTANGULAR FLANGE MODEL



(14) 7/16
DIA. HOLES

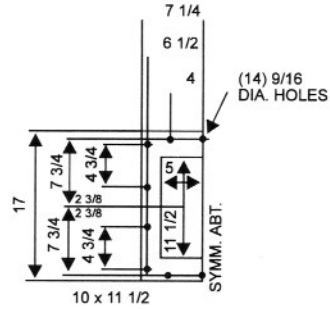
7 3/4 x 10



(14) 11/16
DIA. HOLES

8 x 10

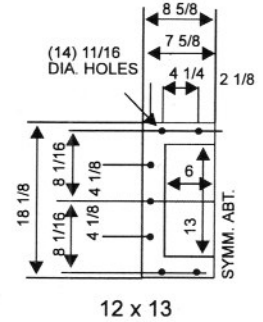
SYMM. ABT.



(14) 9/16
DIA. HOLES

10 x 11 1/2

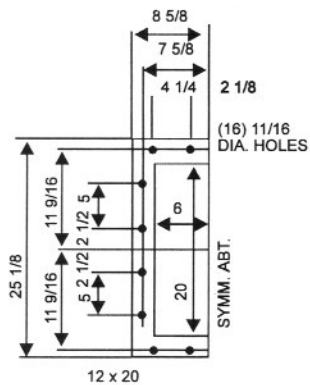
SYMM. ABT.



(14) 11/16
DIA. HOLES

12 x 13

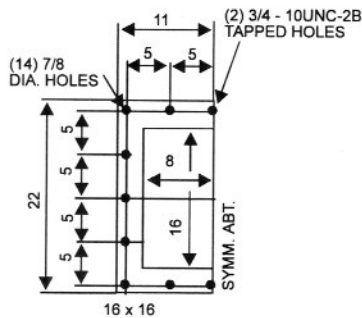
SYMM. ABT.



(16) 11/16
DIA. HOLES

12 x 20

SYMM. ABT.

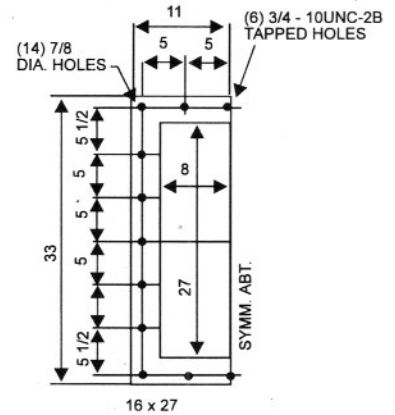


(14) 7/8
DIA. HOLES

16 x 16

(2) 3/4 - 10UNC-2B
TAPPED HOLES

SYMM. ABT.

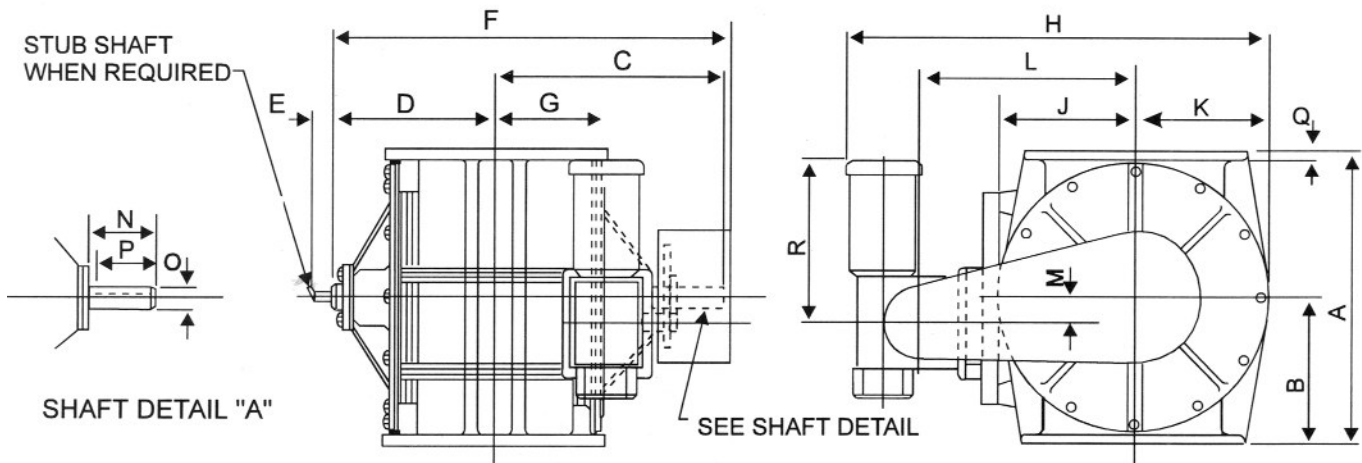


(14) 7/8
DIA. HOLES

16 x 27

SYMM. ABT.

(6) 3/4 - 10UNC-2B
TAPPED HOLES



STUB SHAFT
WHEN REQUIRED

SHAFT DETAIL "A"

SEE SHAFT DETAIL

FEEDER AND DRIVE ASSEMBLY

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RECTANGULAR FLANGE MODEL

SIZE IN INCHES	DISP. PER REV. IN CU. FT.	A	B	C	D	E	F	G	H	J	K
7 3/4 X 10	.15	8	4	13 1/2	10	2	23 3/4	5 5/8	28 1/8	7 3/4	6 3/4
8 X 10	.30	12 3/4	6 3/8	14 1/8	10 7/8	2	26 1/8	6 15/16	25 3/16	7 1/8	7
10 X 11 1/2	1.0	18	9	14 1/2	11 1/12	2	27	7 3/4	31 7/16	9 3/4	9 5/8
12 X 13	1.8	20 3/8	10 3/16	17	12 1/4	2	30 1/4	8 1/2	36 11/16	12 3/8	12 1/4
12 X 20	2.75	20 3/8	10 3/16	20 1/2	15 3/4	2	36 1/2	10 1/4	41 7/16	12 3/8	13 1/4
16 X 16	3.27	29	14 1/2	22 3/4	16 1/4	2	39 3/4	10 1/2	39 1/8	13 3/8	13 1/4
16 X 27	5.19	29	14 1/2	28 1/4	21 3/4	2	50 3/8	16 13/16	39 1/8	13 3/8	13 1/4

Dimensions in inches

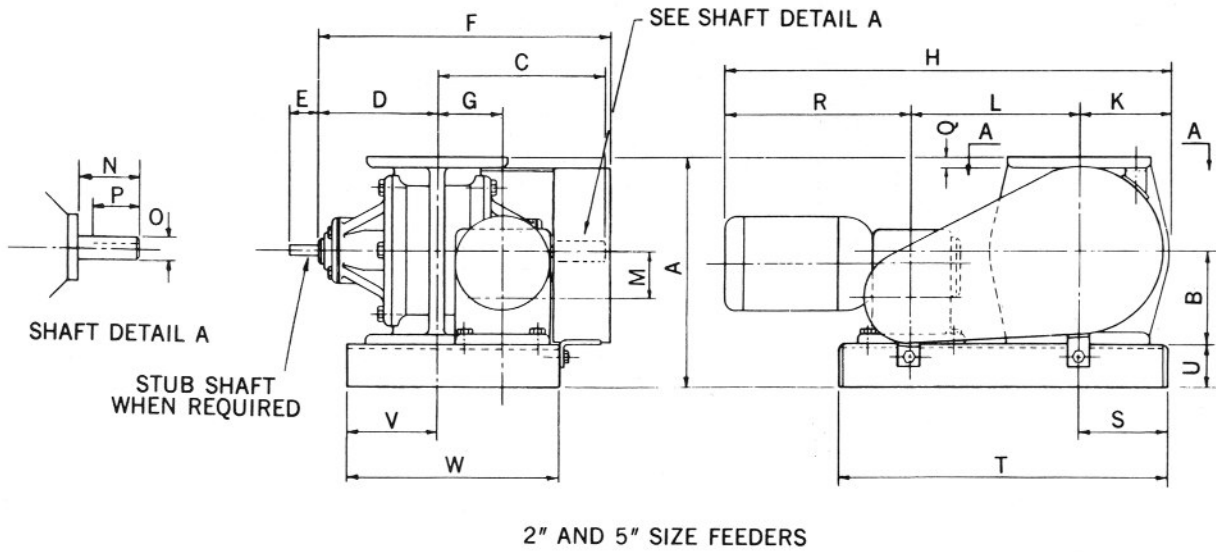
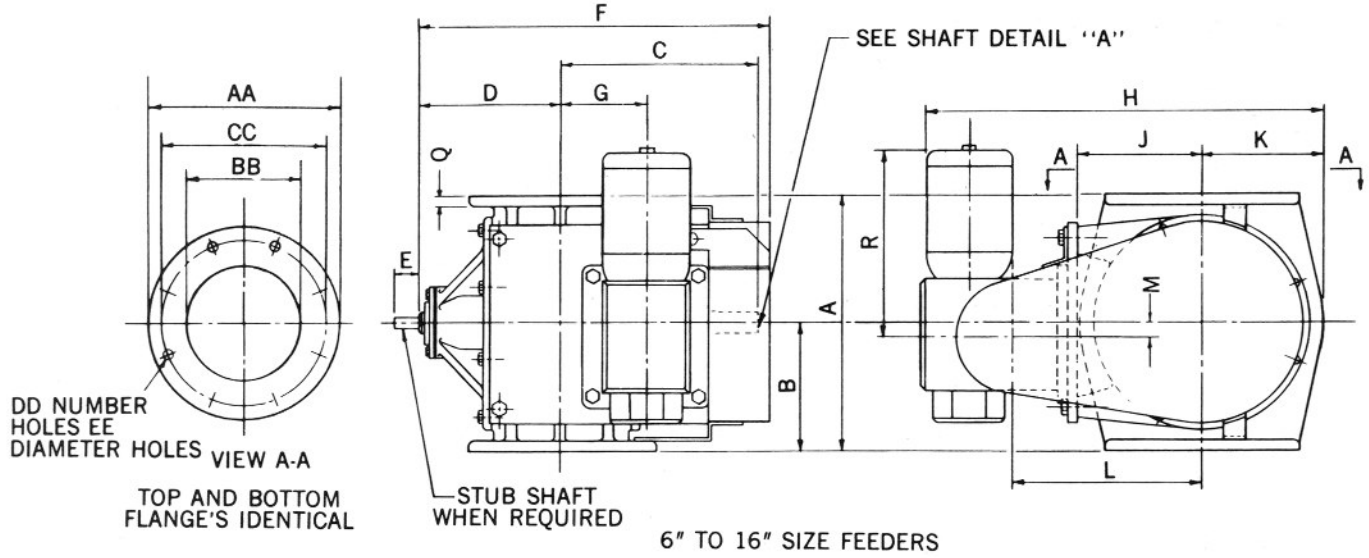
L	M	N	O	P	Q	R	WT. LBS.		PURGE AIR C.F.M.
							FEEDER AND DRIVE	FEEDER ONLY	
14 15/16	2	3 23/32	1.437	3/8 x 3/16 x 3 1/2	5/8	14	380	180	11.5
11 7/8	0	3 15/32	1.437	3/8 x 3/16 x 3 1/4	3/4	13 3/8	440	280	11.5
15	0	3 5/32	1.687	3/8 x 3/16 x 3 1/8	3/4	14 13/16	600	430	13.5
17 5/8	0	4 15/16	2.187	1/2 x 1/4 x 4 1/2	3/4	14 13/16	850	670	17.5
20 3/8	4 1/2	4 15/16	2.187	1/2 x 1/4 x 4 1/2	3/4	16 1/16	1150	920	17.5
18 5/8	2 1/2	6 21/32	2.187	1/2 x 1/4 x 6 3/8	1	16 1/16	1620	1350	20.0
18 5/8	2 1/2	6 21/32	2.187	1/2 x 1/4 x 6 3/8	1	16 1/16	2140	1850	20.0

Dimensions in inches

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CIRCULAR FLANGE MODEL



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CIRCULAR FLANGE MODEL

Size in Inches	Displ. per Rev. in Cu. Ft.	A	B	C	D	E	F	G	H	J	K	L	M	N
2	.014	7 1/2	3 3/4	7	5	2	12 1/4	1 3/8	26 5/8	-	5 1/16	10	7/8	2 1/8
5	.18	13	6 1/2	11 1/2	8 1/4	2	20 3/16	4 1/2	31	-	6 1/4	11 5/16	3 1/4	3 1/2
6	.26	14	7	12	8 3/4	2	21 5/16	5 1/8	23 9/16	6 5/8	6 1/2	11 1/16	0	3 1/2
8	.57	17 3/4	8 7/8	13 3/4	10	2	24 3/4	7 1/16	28 3/16	8 5/8	8 1/2	13 3/8	0	4
10	1.26	21 1/2	10 3/4	15 3/4	11	2	27 3/4	7 1/8	33 3/16	10 5/8	10 1/2	15 7/8	0	5
12	2.30	25 1/2	12 3/4	16 3/4	12	2	29 3/4	8 1/8	37 3/16	12 5/8	12 1/2	17 7/8	0	5
16	3.50	32	16	19 1/4	14 1/2	2	34 3/4	9 7/16	39 3/4	13 3/4	13 1/2	19	3	5

O	P	Q	R	S	T	U	V	W	AA	BB	CC	DD	EE	Weight in Pounds		Purge Air SCFM
														Feeder and Drive	Feeder Only	
.625	3/16 x 3/32 x 2 Lg.	1/2	12 1/8	4 1/2	18 5/8	3	4 3/16	8 1/4	6	2	4 3/4	4	11/16	200	40	5.0
1.437	3/8 x 3/16 x 3 3/8 Lg.	3/4	13 3/16	6	23	3	8 1/2	14 3/4	10	5	8 1/2	8	11/16	380	180	11.5
1.437	3/8 x 3/16 x 3 1/4 Lg.	3/4	12 9/16	-	-	-	-	-	11	6	9 1/2	8	11/16	370	210	11.5
1.687	3/8 x 3/16 x 4 Lg.	3/4	13 5/8	-	-	-	-	-	13 1/2	8	11 3/4	8	11/16	470	300	13.5
1.687	3/8 x 3/16 x 5 Lg.	7/8	14 13/16	-	-	-	-	-	16	10	14 1/4	12	11/16	700	520	13.5
1.687	3/8 x 3/16 x 5 Lg.	1	14 3/16	-	-	-	-	-	19	12	17	12	11/16	940	760	13.5
2.187	1/2 x 1/4 x 4 7/8 Lg.	1 1/8	16 1/16	-	-	-	-	-	23 1/2	16	21 1/4	16	13/16	1280	1100	17.5

Feeder displacement listed at 100% efficiency

Dimensions in inches

Gear motor, electrical characteristics - 3 Phase, 60 cycle, 230/460 Volt

A. FEEDER (only)

Size Diam. (inches)	Displacement Cu. Ft./Rev.	Standard Rotor Part No.	Beveled Rotor Part No.	HP
2	.014	132-68-4-0003-00	132-68-4-0003-03	1/2
5	.18	132-68-4-0004-00	132-69-4-0008-00	3/4
6	.26	132-68-4-0002-00	132-69-4-0009-00	3/4 - 1
8	.57	132-68-4-0102-00	132-69-4-0110-00	1 - 1 1/2
10	1.26	132-68-4-0101-00	132-69-4-0101-02	1 - 2
12	2.30	132-68-4-0201-00	132-69-4-0209-00	1 1/2 - 2
16	3.50	132-68-4-0204-00	132-68-4-0204-02	2 - 3