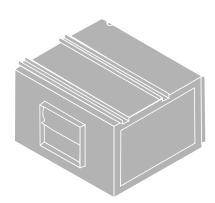




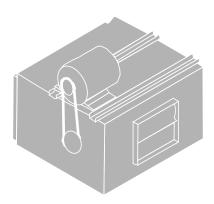


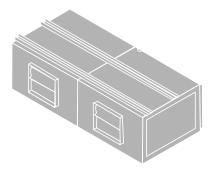
# DB

# **Duct Blowers/Cabinet Fans**



	Page
Introduction	
Construction Features	3
Specification and Dimension Data	
DB	4
TDB	5
DBX	6
SDB	7
Accessories	8-9





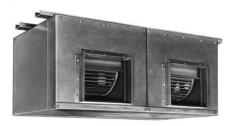
### Introduction

Loren Cook Company's DB product line provides maximum performance and durability in a belt drive duct fan. The product line consists of the DB, TDB, DBX and SDB. These four products provide AMCA certified performance in a wide variety of applications. Key features of each product are summarized below.



#### DB

- DB utilizes a single DWDI forward curved blower assembly with the motor located in the air stream.
- DB is licensed to bear the AMCA Certified Ratings Seal for Air and Sound Performance.
- DB capacity ranges from 400 CFM up to 9900 CFM, with static pressures from 0 to 2 inches w.g.



#### **TDB**

- TDB utilizes two DWDI forward curved blower assemblies with a common shaft and a single motor located in the air stream.
- TDB capacity ranges from 800 CFM up to 15,500 CFM, with static pressures from 0 to 2 inches w.g.



#### **DBX**

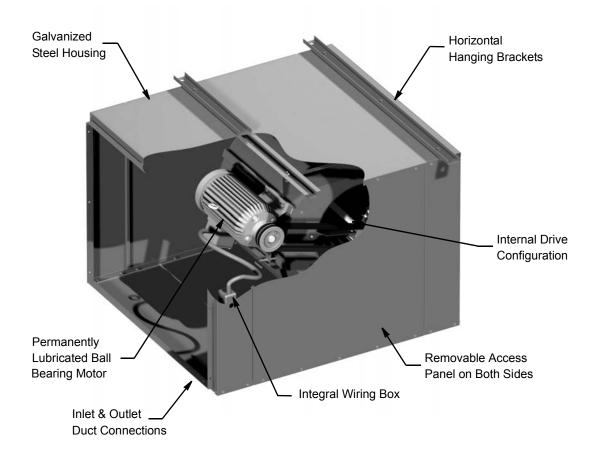
- DBX utilizes a single DWDI forward curved blower assembly with the motor located out of the air stream.
- DBX is licensed to bear the AMCA Certified Ratings Seal for Air and Sound Performance.
- DBX capacity ranges from 400 CFM up to 9,900 CFM, with static pressures from 0 to 2 inches w.g.

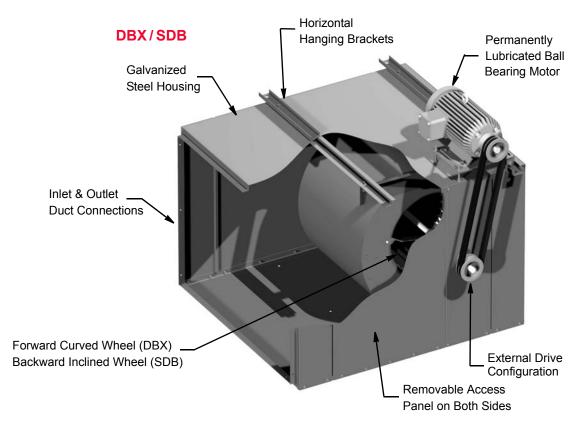


#### **SDB**

- SDB utilizes a single DWDI backward inclined blower assembly with the motor located out of the air stream.
- SDB is licensed to bear the AMCA Certified Ratings Seal for Air and Sound Performance.
- SDB capacity ranges from 600 CFM up to 15,200 CFM, with static pressures from 0 to 3 inches w.g.

#### DB





## **DB** Specifications and Dimension Data

# Forward Curved Wheel Duct Blower

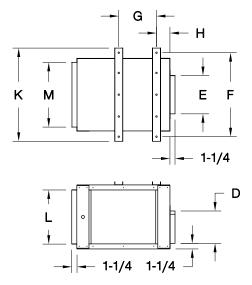




Loren Cook Company certifies that the DB shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.



Type DB is furnished standard with UL 705 and cUL705 listing (Power Ventilator/ZACT) when furnished with a TE motor.



Description - Fan shall be duct mounted, belt driven centrifugal cabinet fan.
Certifications - Fan shall be manufactured at an ISO 9001 certified facility.
Fan shall be listed by Underwriters Laboratories (UL 705) and UL listed for Canada (cUL 705). Fan shall bear the AMCA Certi fied Ratings Seal fo Sound and Air Performance.

Construction - The fan shall be of bolted construction utilizing corrosion resistant fasteners. Housing shall be minimum 18 gauge galvanized steel with two access doors and integral duct collars. Internal blower and motor assembly shall be mounted on rubber vibration isolators. Hanging brackets shall be provided for horizontal installation. Unit shall bear an engraved aluminum nameplate. Nameplate shall indicate design CFM, static pressure and maximum fan RPM. Unit shall be shipped in ISTA Certified Transit Tested Packaging.

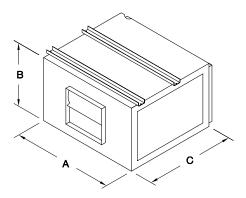
**Wheel -** Wheel shall be DWDI centrifugal forward curved type, constructed of painted steel. Wheel shall be balanced in accordance with AMCA Standard 204-96, Balance Quality and Vibration Levels for Fans.

**Motor** - Motor shall be heavy duty TEFC type with permanently lubricated sealed ball bearings and furnished at the specified voltage and phase.

**Bearings** - Bearings shall be permanently lubricated, sealed ball type selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed.

**Belts and Drives -** Belts shall be oil and heat resistant, non-static type. Drives shall be precision machined cast iron type, keyed and securely attached to the wheel and motor shafts. Drives shall be sized for 150% of the installed motor horsepower. The variable pitch motor drive shall be factory set to the specified fan RPM.

Product - Fan shall be model DB as manufactured by Loren Cook Company of Springfield, Missouri.



**DB** Dimension Data

Size	Α	В	С	D O.D.	E O.D.	F	G	Н	K	L O.D.	M O.D.	Ship. Wt.
DB-8	18-1/8	15-7/16	23	7-7/8	9-1/4	21	9-5/8	2-5/16	23	13-7/16	16-1/8	53
DB-9	21-1/8	18-1/8	25-3/4	10-5/16	11-7/8	24	11-3/4	2-11/16	26	16-1/8	19-1/8	70
DB-10	22-3/8	20-1/8	28-1/4	11-3/8	13-1/8	26	13-3/8	2-11/16	28	18-1/8	20-3/8	80
DB-13	27-1/8	23-3/16	31-1/4	13-7/16	15-5/8	30	16-1/8	2-11/16	32	21-3/16	25-1/8	108
DB-15	32-1/2	26-15/16	36-1/4	15-7/8	18-5/8	36	19-1/2	2-11/16	38	24-15/	30-1/2	205
DB-18	41	31-7/8	44-3/4	18-7/8	21-7/8	44	24	2-7/8	46	29-7/8	39	400

All dimensions in inches. Weights in pounds.

**Description -** Fan shall be duct mounted, belt driven, dual fan, single motor centrifugal cabinet fan.

Certifications - Fan shall be manufactured at an ISO 9001 certified facility. Fan shall be listed by Underwriters Laboratories (UL 70 5) and UL listed for Canada (cUL 705).

Construction - The fan shall be of bolted construction utilizing corrosion resistant fasteners. Housing shall be minimum 18 gauge galvanized steel with two access doors and integral duct collars. Internal blower and motor assembly shall be mounted on rubber vibration isolators. Hanging brackets shall be provided for horizontal installation. Unit shall bear an engraved aluminum nameplate. Nameplate shall indicate design CFM, static pressure and maximum fan RPM. Unit shall be shipped in ISTA Certified Transit Tested Packaging.

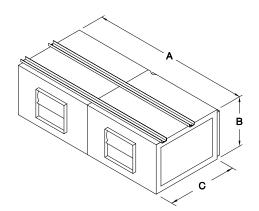
**Wheel -** Wheels shall be DWDI centrifugal forward curved type, constructed of plated steel. Wheels shall be balanced in accordance with AMCA Standard 204-96, Balance Quality and Vibration Levels for Fans.

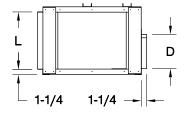
**Motor** - Motor shall be heavy duty TEFC type with permanently lubricated sealed ball bearings and furnished at the specified voltage and phase.

**Bearings -** Bearings shall be permanently lubricated, sealed ball type selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed.

**Belts and Drives** - Belts shall be oil and heat resistant, nonstatic type. Drives shall be precision machined cast iron type, keyed and securely attached to the wheel and motor shafts. Drives shall be sized for 150% of the installed motor horsepower. The variable pitch motor drive shall be factory set to the specified fan RPM.

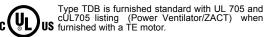
**Product** - Fan shall be model TDB as manufactured by Loren Cook Company of Springfield, Missouri.

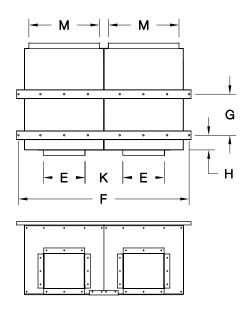




#### Forward Curved Wheel Twin Duct Blower







TDR	Dimer	neinn	Data

		- C. LC.											
Size	Α	В	С	D O.D.	E O.D.	F	G	н	K	L O.D.	M O.D.	Max. H.P.	Ship. Weight
TDB-8	36-5/8	15-7/16	23	7-7/8	9-1/4	38	9-5/8	3-5/16	9-1/4	13-7/16	16-1/8	1	135
TDB-9	42-5/8	18-1/8	25-3/4	10-5/16	11-7/8	44	11-3/4	3-11/16	9-5/8	16-1/8	19-1/8	2	175
TDB-10	45-1/8	20-1/8	28-1/4	11-3/8	13-1/8	46-1/2	13-3/8	3-11/16	9-5/8	18-1/8	20-3/8	2	225
TDB-13	54-5/8	23-3/16	31-1/4	13-7/16	15-5/8	56	16-1/8	3-11/16	11-7/8	21-3/16	25-1/8	3	350
TDB-15	65-3/8	26-15/16	36-1/4	15-7/8	18-5/8	66-3/4	19-1/2	3-11/16	14-1/4	24-15/16	30-1/2	5	425
TDB-18	82-3/8	31-7/8	44-3/4	18-7/8	21-7/8	83-3/4	24	3-7/8	19-1/2	29-7/8	39	7-1/2	750

All dimensions in inches. Weights in pounds.

## **DBX** Specifications and Dimension Data

# Forward Curved Wheel External Belt Drive Duct Blower

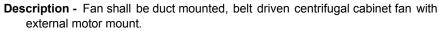




Loren Cook Company certifies that the DBX shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.



Type DB X is furnished standard with UL 70 5 and cUL705 listing (Power Ventilator/ZACT) when furnished with factory supplied motor.



**Certifications** - Fan shall be manufactured at an ISO 900 1 certified facility. Fan shall be listed by Underwriters Laboratories (UL 705) and UL listed for Canada (cUL 705). Fan shall bear the AMCA Certified Ratings Seal for Sound and Air Performance.

Construction - The fan shall be of bolted construction utilizing corrosion resistant fasteners. Housing shall be minimum 18 gauge galvanized steel with two access doors and integral duct collars. Internal blower assembly shall be mounted on rubber vibration isolators. Motor shall be out of the air stream. Hanging brackets shall be provided for horizontal installation. Unit shall bear an engraved aluminum nameplate. Nameplate shall indicate design CFM, static pressure and maximum fan RPM. Unit shall be shipped in ISTA Certified Transit Tested Packaging.

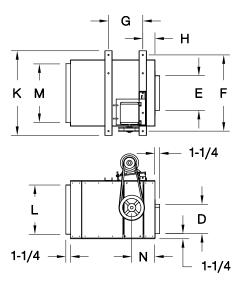
Wheel - Wheel shall be DWDI centrifugal forward curved type, constructed of plated steel. Wheel shall be balanced in accordance with AMCA Standard 204-96, Balance Quality and Vibration Levels for Fans.

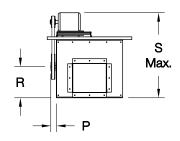
**Motor** - Motor shall be heavy duty type with permanently lubricated sealed ball bearings and furnished at the specified voltage and phase.

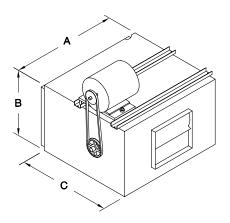
**Bearings** - Bearings shall be permanently lubricated, sealed ball type selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed.

**Belts and Drives -** Belts shall be oil and heat resistant, nonstatic type. Drives shall be precision machined cast iron type, keyed and securely attached to the wheel and motor shafts. Drives shall be sized for 150% of the installed motor horsepower. The variable pitch motor drive shall be factory set to the specified fan RPM.

**Product** - Fan shall be model DBX as manufactured by Loren Cook Company of Springfield, Missouri.







**DBX** Dimension Data

Size	Α	В	С	D O.D.	E O.D.	F	G	н	K	L O.D.	M O.D.	N	Р	R	S	Ship. Weight
DBX-8	18-1/8	15-7/16	23	7-7/8	9-1/4	21	9-5/8	2-5/16	23	13-7/16	16-1/8	6-3/8	2-3/8	8-1/4	24-9/16	53
DBX-9	21-1/8	18-1/8	25-3/4	10-5/16	11-7/8	24	11-3/4	2-11/16	26	16-1/8	19-1/8	7-3/16	2-3/8	9-7/8	27-1/4	70
DBX-10	22-3/8	20-1/8	28-1/4	11-3/8	13-1/8	26	13-3/8	2-11/16	28	18-1/8	20-3/8	7-15/16	4	10-7/8	30-1/16	80
DBX-13	27-1/8	23-3/16	31-1/4	13-7/16	15-5/8	30	16-1/8	2-11/16	32	21-3/16	25-1/8	9-1/8	4	12-23/32	35-9/16	108
DBX-15	32-1/2	26-15/16	36-1/4	15-7/8	18-5/8	36	19-1/2	2-11/16	38	24-15/16	30-1/2	10-1/2	4	14-27/32	39-5/16	205
DBX-18	41	31-7/8	44-3/4	18-7/8	21-7/8	44	24	2-7/8	46	29-7/8	39	12-3/8	4	17-9/16	44-1/4	400

All dimensions in inches.

**Description -** Fan shall be duct mounted, belt driven centrifugal cabinet fan with external motor mount.

**Certifications** - Fan shall be manufactured at an ISO 9001 certified facility. Fan shall be listed by Underwriters Laboratories (UL 70 5) and UL listed for Canada (cUL 705). Fan shall bear the AMCA Certified Ratings Seal for Sound and Air Performance.

Construction - The fan shall be of bolted construction utilizing corrosion resistant fasteners. Housing shall be minimum 18 gauge galvanized steel with two access do ors and integral duct collars. Internal blower assembly shall be mounted on rubber vibration isolators. Motor shall be out of the airstream. Hanging brackets shall be provided for horizontal installation. Unit shall bear an engraved aluminum nameplate. Nameplate shall indicate design CFM, static pressure and maximum fan RPM. Unit shall be shipped in ISTA Certified Transit Tested Packaging.

Wheel - Wheel shall be DWDI centrifugal backward inclined, constructed of 100% aluminum, including a precision machined cast aluminum hub. Wheel inlet shall overlap an aerodynamic aluminum inlet cone to provide maximum performance and efficiency. Wheel shall be balanced in accordance with AMCA Standard 204-96, Balance Quality and Vibration Levels for Fans.

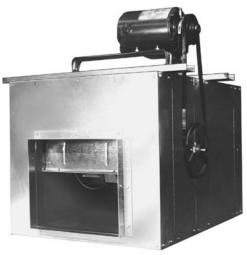
**Motor** - Motor shall be heavy duty type with permanently lubricated sealed ball bearings and furnished at the specified voltage and phase.

**Bearings -** Bearings shall be designed and individually tested specifically for use in air handling applications. Construction shall be heavy duty regreasable ball type in a cast iron housing selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed.

**Belts and Drives -** Belts shall be oil and heat resistant, nonstatic type. Drives shall be precision machined cast iron type, keyed and securely attached to the wheel and motor shafts. Drives shall be sized for 150% of the installed motor horsepower. The variable pitch motor drive shall be factory set to the specified fan RPM.

**Product** - Fan shall be model SDB as manufactured by Loren Cook Company of Springfield, Missouri.

# Backward Inclined Wheel Single Duct Blower

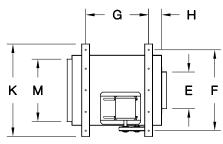


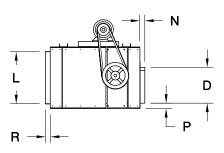


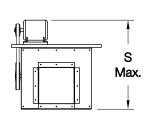
Loren Cook Company certifies that the SDB shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and A MCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

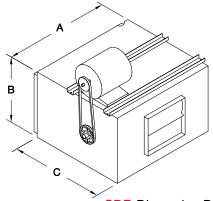


Type SDB is furnished standard with UL 705 and cUL705 listing (P ower V entilator/ZACT) when furnished with factory supplied motor.









**SDB** Dimension Data

Size	Α	В	С	D O.D.	E O.D.	F	G	Н	K	L O.D.	M O.D.	N	Р	R	s	Т	U	٧	Max. HP	Ship Wt.
100	22-3/8	20-1/8	28-1/4	11-3/8	13-1/8	26	13-3/8	2-11/16	28	18-1/8	20-3/8	7-15/16	4	10-7/8	30-1/16	1-1/4	1-1/4	1-1/4	1	80
120	22-3/8	20-1/8	28-1/4	11-3/8	13-1/8	26	13-3/8	2-11/16	28	18-1/8	20-3/8	7-15/16	4	10-7/8	32-1/2	1-1/4	1-1/4	1-1/4	1-1/2	80
135	27-1/8	23-3/16	31-1/4	13-7/16	15-5/8	30	16-1/8	2-11/16	32	21-3/16	25-1/8	9-1/8	4	12-23/	35-9/16	1-1/4	1-1/4	1-1/4	2	108
150	32-1/2	26-15/	36-1/4	15-7/8	18-5/8	36	19-1/2	2-11/16	38	24-15/	30-1/2	10-1/2	4	14-27/	39-5/16	1-1/4	1-1/4	1-1/4	3	205
180	41	31-7/8	44-3/4	18-7/8	21-7/8	44	24	2-7/8	46	29-7/8	39	12-3/8	4	17-9/16	44-1/4	1-1/4	1-1/4	1-1/4	5	400
210	49	40-1/4	44-1/2	24-3/4	24-3/4	50	29-3/8	2-5/8	52	36-1/4	45	13	5-1/4	22-5/8	52-1/4	1-3/8	2-1/8	1-1/2	5	600
245	53	43-3/4	51-1/16	27-1/4	27-1/4	54	29-1/8	2-5/8	56	39-3/4	49	14-15/	5-3/4	24-11/	57-3/8	1-3/8	2-1/8	1-1/2	7-1/2	800

All dimensions in inches. Weights in pounds.

#### **Accessories**

#### **Disconnect Switches**

**NEMA 1** (Lockable) - In door, general purpose with lockable switch.

NEMA 1 - Indoor, general purpose.

**NEMA 3R** - Exterior mount, weather resistant.

**NEMA 4** - Water tight, dust tight.

NEMA 1 (Heavy Duty) - Indoor heavy duty.



NEMA 1 (Lockable)



NEMA 1



NEMA 3R

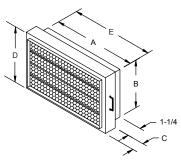


NEMA 4

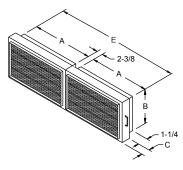


NEMA 1 (Heavy Duty)

# DB, DBX, SDB Filter



#### **TDB Filter**



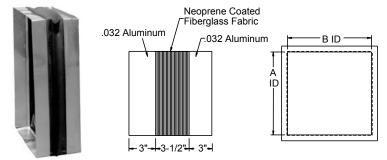
Filter Unit	Α	В	С	D	E	Filter Area Sq. In.	Filter Drawer Weight
F-8	15-7/8	13-3/16	6	15-7/16	18-1/8	532	15
F-9	18-7/8	15-7/8	6	18-1/8	21-1/8	664	17
F-10	20-1/8	17-7/8	6	20-1/8	22-3/8	726	18
F-13	24-7/8	20-15/16	9	23-3/16	27-1/8	1337	35
F-15	30-1/4	24-11/16	11	26-15/16	32-1/2	1999	47
F-18	38-3/4	29-5/8	12	31-7/8	41	3056	61

All dimensions in inches. Weights in pounds. The filter comes complete with a ductwork housing and a removable filter drawer with handle.

Filter Unit	A	В	С	D	E	Filter Size Sq. In.	Filter Weight
F-9	18-7/8	15-7/8	6	18-1/8	42-5/8	1328	34
F-10	20-1/8	17-7/8	6	20-1/8	45-1/8	1452	36
F-13	24-7/8	20-15/16	9	23-3/16	54-5/8	2674	70
F-15	30-1/4	24-11/16	11	26-15/16	65-3/8	3998	94
F-18	38-3/4	29-5/8	12	31-7/8	82-3/8	6112	122

All dimensions in inches. Weights in pounds.

#### **Flexible Duct Connector**



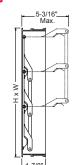
Size	INL	.ET	OUT	LET
Size	Dim A	Dim B	Dim A	Dim B
8	13-5/8	16-5/16	8-1/16	9-7/16
9	16-5/16	19-5/16	10-1/2	12-1/16
10	18-5/16	20-9/16	11-9/16	13-5/16
13	21-3/8	25-5/16	13-5/8	15-13/16
15	25-1/8	30-11/16	16-1/16	18-3/16
18	30-1/16	39-3/16	19-1/16	22-1/16

All dimensions in inches

Flex Duct Connectors are available for the inlet or outlet of the DB. These connectors provide a flexible connection between the fan and the attached ductwork. This reduces the transmission of noise and vibration to the ductwork as well as allowing for slight misalignment and easy removal of the fan without disturbing the rigid ductwork. Flex Duct Connectors consist of reinforced neoprene fabric and aluminum bands.

#### **Automatic Backdraft Damper**





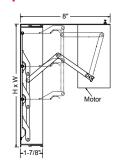
Automatic Backdraft Dampers feature an extruded aluminum frame, aluminum blades and aluminum hinge pins with brass bushings. These dampers are shipped loose for field installation.

Size	H x W
8	7-7/8 x 9-1/4
9	10-5/16 x 11-7/8
10	11-3/8 x 13-1/8
13	13-7/16 x 15-5/8
15	15-7/8 x 18-5/8
18	18-7/8 x 21-7/8

All dimensions in inches.

#### **Motorized Backdraft Damper**





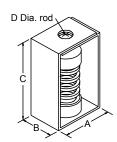
Motorized Backdraft Dampers feature an extruded aluminum frame, aluminum blades and aluminum hinge pins with brass bushings. These dampers are shipped loose for field installation.

Size	H x W
8	7-7/8 x 9-1/4
9	10-5/16 x 11-7/8
10	11-3/8 x 13-1/8
13	13-7/16 x 15-5/8
15	15-7/8 x 18-5/8
18	18-7/8 x 21-7/8

All dimensions in inches.

#### **Spring Isolator - Ceiling Mounted**



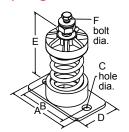


	Unit	Rated Load (lbs.)	Spring. Rate (lbs./in.)	Α	В	С	D	Approx. Ship Wt. Lbs.
Γ	SC-35	35	23	3-11/16	2-1/4	5-1/4	1/2	2
Γ	SC-70	70	51	3-11/16	2-1/4	5-1/4	1/2	2
Γ	SC-125	125	100	3-11/16	2-1/4	5-1/4	1/2	2
	SC-245	245	206	3-11/16	2-1/4	5-1/4	1/2	2

All dimensions in inches.

#### Free Standing Spring Isolator - Floor Mounted



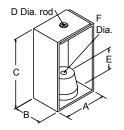


Unit	Rated Load (lbs.)	Spring. Rate (lbs./in.)	Α	В	С	D	Е	F	Approx. Ship Wt. Lbs.
SF-70	70	51	2-5/8	**	11/16	2-5/8	3-1/2	3/8	2
SF-120	120	98	4-1/2	3-1/2	9/16	2-1/2	3-1/2	3/8	2
SF-220	220	196	4-1/2	3-1/2	9/16	2-1/2	3-1/2	3/8	2

All dimensions in inches. Isolators listed are designed to provide a minimum of 50 percent of overload capacity. A single hole is provided at the center of the plate.

#### Rubber-in-Shear Isolator - Ceiling Mounted

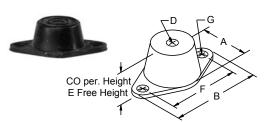




Unit	Rated Load (lbs.)	Α	В	С	D	E	F	Approx. Ship Wt. Lbs.
RC-75	75	2-5/32	1-1/2	2-23/32	11/16	15/32	3/8	1
RC-125	125	2-5/32	1-1/2	2-23/32	11/16	15/32	3/8	1
RC-175	175	3-5/32	2-1/4	5-11/16	3/4	1-31/64	3/4	2
RC-300	300	3-5/32	2-1/4	5-11/16	3/4	1-31/64	3/4	2

All dimensions in inches.

#### **Rubber-in-Shear Isolator - Floor Mounted**

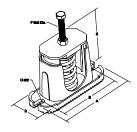


Unit	Rated Load (lbs.)	Α	В	С	D	E	F	G	Approx. Ship Wt. Lbs.
RF-55	55	1-13/16	3-3/16	1-7/64	5/16 NC	1-1/2	2-3/8	11/32	1
RF-120	120	2-3/8	3-7/8	1-1/4	3/8 NC	1-3/4	3	11/32	1
RF-220	220	2-3/8	3-7/8	1-1/4	3/8 NC	1-3/4	3	11/32	1

All dimensions in inches.

#### **Housed Spring Isolator - Floor Mounted**





Ū	Unit	Rated Load (lbs.)	Spring. Rate (lbs./in.)	Α	В	С	D	E	F	Approx. Ship Wt. Lbs.
H	F-120	120	98	6-1/8	5-5/8	5/16	2-1/8	3-1/2	3/8	2
H	F-220	220	196	6-1/8	5-5/8	5/16	2-1/8	3-1/2	3/8	2

All dimensions in inches. Isolators listed are designed to provide a minimum of 50 percent of overload capacity.



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