

# MODELS GED/GSD, eGED/eGSD, DFE/DFS, DDE/DDS

DIRECT DRIVE SIDEWALL PROPELLER FANS

#### LINE OVERVIEW

JencoFan's Direct Drive Sidewall Propeller Fan line is designed to exhaust or supply large volumes of air at relatively low static pressures. With 3 types of construction, the direct drive models are designed for use in a variety of applications for commercial, industrial and agricultural buildings such as manufacturing and assembly plants, warehouses, parking garages, gymnasiums, equipment rooms, distribution centers, foundries, boiler rooms, greenhouses and OEM applications. The direct drive models provide general ventilation for a wide variety of buildings and enclosed areas within buildings. Examples include factories, assembly plants, warehouses, gymnasiums, garages, jails, machine rooms and many others.

These Sidewall Propeller Fans are rated from 300 to 55,000 CFM with static pressures to 1" w.g. Models range from 10 to 60". A full line of accessories is available to meet any need or specification. See the below Model Comparison to find the right Direct Drive Sidewall Propeller Fan for your application.

Model GED is available in our Quickship program.

Most sizes are available for next day or 10-day shipping from stock.

#### MODEL COMPARISON

Construction Type	Model	Size Range	Performance
	GED GSD	10 to 20"	300 to 3,500 CFM up to 3/4" w.g.
	DFE DFS	10 to 30"	500 to 12,000 CFM up to 1" w.g.
	DDE DDS	24 to 60"	3,500 to 55,000 CFM up to 1" w.g

## **MOUNTING ARRANGEMENT OPTIONS**

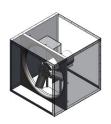
	Mounting Arrangement	Description
Wall Housing		Heavy-gauge, all galvanized G-90 steel housing provides a simple solution to installing a fan and all required accessories in a rough wall opening. It can be used in exhaust or supply applications and in fan sizes 10 through 60 inch.
Filtered Wall Housing		For installations where filtering is required. Heavy-gauge, all galvanized G-90 steel filtered wall housings are available in both supply and exhaust configurations. They are available in nine (9) sizes for fans ranging from size 14 to 60 inches. They are designed with the draw-thru concept to achieve the highest filter and fan efficiencies.
Wall Collar		Heavy-gauge, all G-90 galvanized mounting collar provides a simple solution to installing a fan in a rough wall opening when a rear safety guard is <b>NOT</b> required.

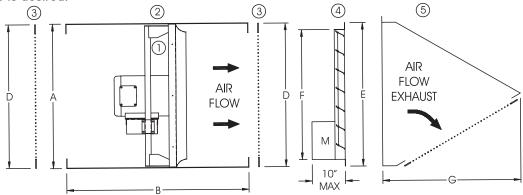
DD PROPS\_0617 June 2017



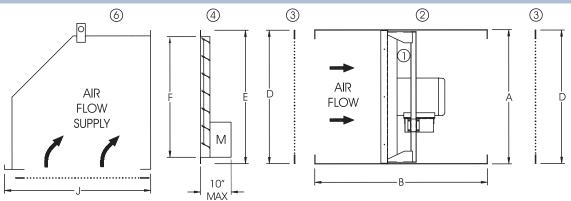
## WALL HOUSING MOUNTING OPTIONS

**WALL HOUSING**: This heavy-gauge, all galvanized G-90 steel (aluminum optional) housing provides a simple solution to installing a fan and all specified accessories in a rough wall opening. It can be used in exhaust or supply applications and maintains the proper clearance between the fan and damper. Depending on space and maintenance requirements, the wall housing may be installed projecting inside or outside of the building. All housings ship assembled with the fan to lessen job site installation costs. Wire motorside guard, damper or propeller side guard and rainhood may be attached to the flange. We strongly recommend a rainhood and motorized shutter for all supply applications and whenever additional weather resistance is desired.





Fan	A (S.Q.)	Wall Housing <sup>2</sup> B Length			Minimum	Flat Guard	Dampe 4	er	Rainhood Exhaust 45 Deg.	
Size	O.D.	GED & D	FE Only	DDE/	DDS	Wall Opening	3			45 Deg. <b>5</b>
		Exhaust	Supply	Exhaust	Supply Square D (Sc		D (SQ.)	E (O.D.)	F	G
10/12	17	26	26	N/A	N/A	17 1/2	16	14 1/2	12	16 3/4
14/16	21	26	26	N/A	N/A	21 1/2	20	18 1/2	16	20 1/4
18/20	25	26	26	N/A	N/A	25 1/2	24	22 1/2	20	24 1/4
24	31	44	44	44	44	31 1/2	30	28 1/2	26	28 1/2
30	37	44	44	44	44	37 1/2	36	34 1/2	32	34 1/2
36	43	N/A	N/A	44	44	43 1/2	42	40 1/2	38	40 1/2
42	49	N/A	N/A	44	44	49 1/2	48	46 1/2	44	44 1/2
48	55	N/A	N/A	44	44	55 1/2	54	52 1/2	50	49 1/2
54	61	N/A	N/A	44	44	61 1/2	60	58 1/2	56	55
60	67	N/A	N/A	44	44	67 1/2	66	64 1/2	62	69



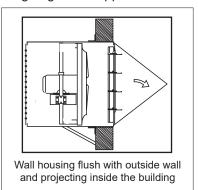
90 Deg. Supply Rainhood - Sizes 20 Thru 60

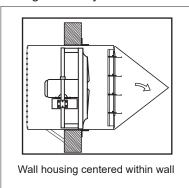
Fan Size	Width	Height	J	Gauge	Degree
20	22	22	27 3/4	18	90
24	27 1/4	26 1/2	38 1/2	18	90
30	32 1/2	33 1/2	44 1/2	18	90
36	38 1/2	39 1/4	49	18	90
42	44 1/2	45 1/4	56 1/2	18	90
48	50 1/2	51 1/2	62 1/2	18	90
54	56 3/4	57	73	18	90
60	62 3/4	63	73	18	90

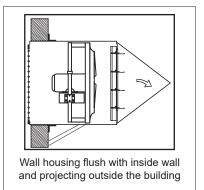


# WALL HOUSING STANDARD MOUNTING ARRANGEMENTS

The most common mounting arrangement (below left) leaves a clean building exterior and allows access to the fan, motor and drives from inside the building. Additional bracing angle, rod or cable (field provided) should be used in addition to the mounting angles to support the fan and wall housing assembly.



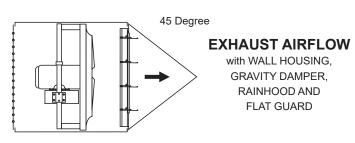


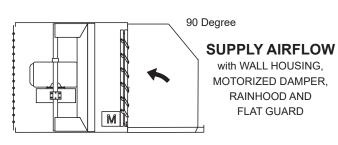


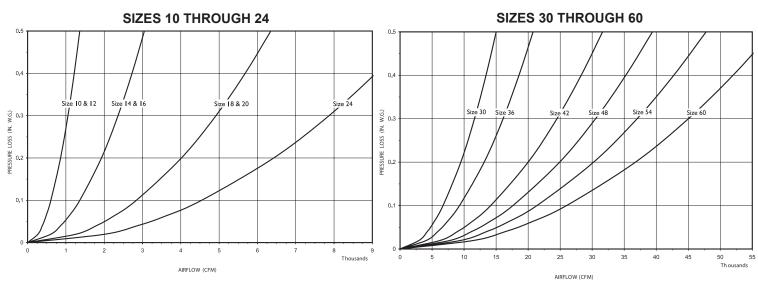
**NOTE:** Supply applications have the fan venturi spun on the opposite side of the fans shown above. The fans shown are exhaust. Rainhoods are required on supply applications and recommended on exhaust applications where additional weather protection is desired. Exhaust and/or supply fans installed as shown should be serviced from the interior of the building. Where service is required from the exterior of the building, consult the factory or representative for recommendations. All bracing shown is field provided. Field flashing and caulking of wall housing seams and unused mounting holes, will ensure a weather resistant installation.

# PRESSURE LOSS GUIDE FOR ACCESSORIES

Use the estimated pressure drop graphs to help select the proper exhaust or supply fan that will deliver the desired airflow. Enter the graph from the bottom at the specified CFM and move vertically upward to the fan curve for the desired size, then horizontally to the left and read the estimated static pressure drop resulting from these typical accessory packages. Add the accessory pressure loss to the system (or building) design static pressure loss to obtain the total static pressure loss to be used for the proper fan selection.





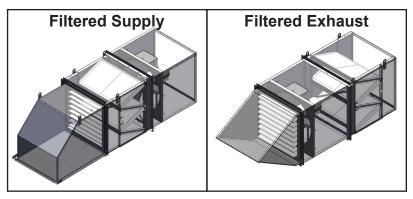




# FILTERED WALL HOUSING MOUNTING OPTIONS

Filtered wall housings are available in both supply and exhaust configurations. They are available in nine (9) sizes for fans ranging from size 14 to 60 inches. They are designed with the draw-thru concept to achieve the highest filter and fan efficiencies.

Standard construction is galvanized steel. Mounting flanges are factory installed for either flush exterior or flush interior. Permanent 2-inch (51 mm) washable filters are accessed through a bolted or hinged panel and can be easily removed for cleaning.



# FILTERED SUPPLY WALL HOUSING **Standard Features and Options** 1. Wall Housing Box (Standard) 2. Filter Box (Standard) · Bolted or Hinged Door • Includes 2 sets of flanges for 3 mounting filter box to wall housing. 3. Wall Mount Flanges • Set of 4 - shipped loose 5 4. Damper (Optional) Supply Type · Gravity, Motorized, or Center Pivot 5. Rain Hood (Optional) • 90 Degree - Supply Type

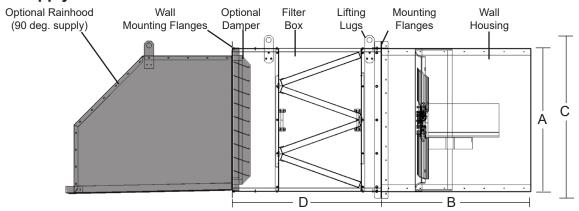
# FILTERED EXHAUST WALL HOUSING Standard Features and Options 1. Wall Housing Box (Standard) 2. Filter Box (Standard) • Bolted or Hinged Door • Includes 2 sets of flanges for mounting filter box to wall housing. 3. Wall Mount Flanges • Set of 4 - shipped loose 4. Damper (Optional) • Exhaust Type • Gravity, Motorized, or Center Pivot 5. Rain Hood (Optional) • 45 Degree - Exhaust Type



# FILTERED WALL HOUSING MOUNTING OPTIONS Cont.

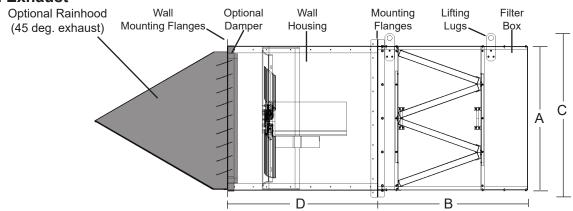
# **Filtered Wall Housing Dimensions**

#### **Filtered Supply**



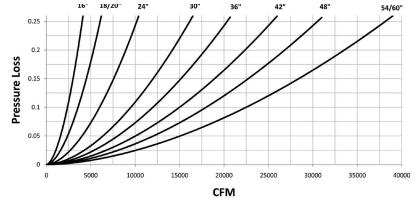
			Wall H	ousing		Minimum			Filter	Box
Fan	A (S.Q.)			ngth		Wall Opening			# of	Filter
Size	O.D.	GED & D	FE Only	DDE/	DDS	Man Oponing	С	D	Filters	Actual Dimensions
	0.5.	Exhaust	Supply	Exhaust	Supply	Square			i iitera	Actual Difficusions
14/16	21	26	26	N/A	N/A	21 1/2	21	39	2	19 5/8 x 19 5/8 x 1 7/8
18/20	25	26	26	N/A	N/A	25 1/2	25	44 1/8	3	19 5/8 x 24 5/8 x 1 7/8
24	31	44	44	44	44	31 1/2	31	41 1/8	4	19 5/8 x 24 5/8 x 1 7/8
30	37	44	44	44	44	37 1/2	37	44 1/8	8	15 5/8 x 24 5/8 x 1 7/8
36	43	N/A	N/A	44	44	43 1/2	43	44 1/8	8	19 5/8 x 24 5/8 x 1 7/8
42	49	N/A	N/A	44	44	49 1/2	49	44 1/8	10	19 5/8 x 24 5/8 x 1 7/8
48	55	N/A	N/A	44	44	55 1/2	55	40 1/2	12	19 5/8 x 24 5/8 x 1 7/8
54	61	N/A	N/A	44	44	61 1/2	61	44 1/8	15	19 5/8 x 24 5/8 x 1 7/8
60	67	N/A	N/A	44	44	67 1/2	67	44 1/8	15	19 5/8 x 24 5/8 x 1 7/8

#### Filtered Exhaust



# PRESSURE LOSS GUIDE FOR FILTER BOX

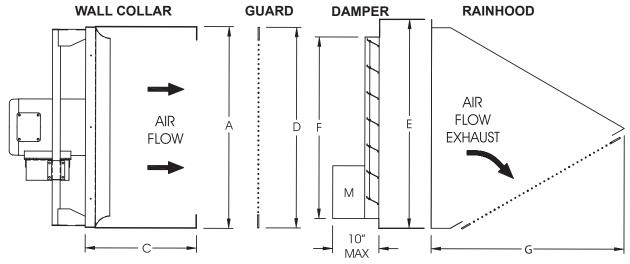
Use the estimated pressure drop graphs to help select the proper exhaust or supply fan that will deliver the desired airflow. Enter the graph from the bottom at the specified CFM and move vertically upward to the fan curve for the desired size, then horizontally to the left and read the estimated static pressure drop resulting from these typical accessory packages. Add the accessory pressure loss to the system (or building) design static pressure loss to obtain the total static pressure loss to be used for the proper fan selection.





# WALL COLLAR MOUNTING OPTIONS

**WALL COLLAR**: This heavy-gauge, all G-90 galvanized (aluminum optional) mounting collar provides a simple solution to installing a fan in a rough wall opening when a rear safety guard is **NOT** required. A front wire guard or shutter and rainhood can be attached to the front flanges. The wall collar can be used in exhaust or supply applications for all fan sizes and maintain the proper clearance between the fan and damper. The wall collar is mounted with the fan on the interior side of the building. All collars ship fully assembled with the fan to lessen job site installation costs. We strongly recommend a rainhood and motorized shutter for all supply applications and for additional weather protection.

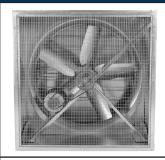


Fan Size	WALL	COLLAR	MINIMUM WALL OPENING	FLAT GUARD	DAMPE	ĒR	RAINHOOD Exhaust 45 Deg.
	Α	С	Square	D (SQ.)	E (O.D.)	F	G
10/12	17	16	17 1/2	16	14 1/2	12	16 3/4
14/16	21	16	21 1/2	20	18 1/2	16	20 1/4
18/20	25	16	25 1/2	24	22 1/2	20	24 1/4
24	31	21	31 1/2	30	28 1/2	26	28 1/2
30	37	21	37 1/2	36	34 1/2	32	34 1/2
36	43	21	43 1/2	42	40 1/2	38	40 1/2
42	49	21	49 1/2	48	46 1/2	44	44 1/2
48	55	21	55 1/2	54	52 1/2	50	49 1/2
54	61	21	61 1/2	60	58 1/2	56	55
60	67	21	67 1/2	66	64 1/2	62	69



# ACCESSORIES & OPTIONS FOR MOUNTING ARRANGEMENTS

#### **Accessory or Option**



#### **Safety Guards**

Safety Guards (Standard or Heavy-Duty Flat Guards) are strongly recommended to protect personnel from accidental injury and to prevent debris from entering the fan. OSHA approved guards are required in many installations including when the fans are within 7 feet of the floor or work/access area.



#### Rainhoods or Weatherhoods

Designed to provide additional weather protection by partially shielding the wall opening and should be used for all supply applications and whenever additional weather resistance is desired. The galvanized (aluminum optional) hood attaches to the wall housing or wall collar flanges. Field flashing and caulking will reduce moisture penetration. Shown with optional birdscreen.



#### **Dampers**

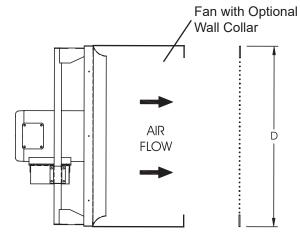
Used alone or in conjunction with the wall housing or wall collar, a complete line of dampers are available for exhaust or supply configurations.

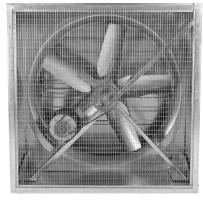


# ACCESSORIES & OPTIONS FOR MOUNTING ARRANGEMENTS Cont.

#### **Safety Guards**

Safety guards are strongly recommended to protect personnel from accidental injury and to prevent debris from entering the fan. OSHA approved guards are required in many installations including when the fans are within 7 feet of the floor or work/access area.



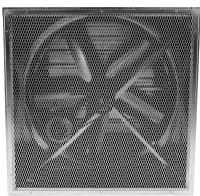


#### **Standard Duty Flat Wire Guard**

The removable safety guard satisfies OSHA requirements when used with the optional wall housing as a motor-side (rear) guard. The 16 ga. 1/2" X 1" welded wire mesh is mounted in a galvanized frame and attaches to the inward flanges of the wall housing.



Fan Size	D (SQ.)
10/12	16
14/16	20
18/20	24
24	30
30	36
36	42
42	48
48	54
54	60
60	66



#### **Heavy-Duty Flat Wire Guard**

The removable safety guard satisfies OSHA requirements when used with the optional wall housing as a motor-side (rear) guard. The H.D. expanded aluminum mesh is mounted in a galvanized frame and attaches to the inward flanges of the wall housing.



# **ACCESSORIES & OPTIONS**

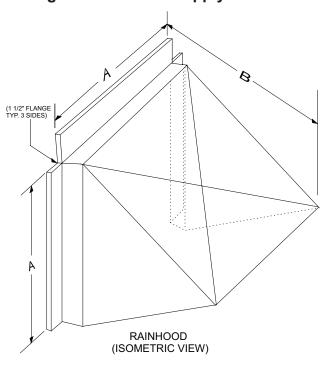
# FOR MOUNTING ARRANGEMENTS Cont.

#### **Rainhoods or Weatherhoods**

Designed to provide additional weather protection by partially shielding the wall opening and should be used for all supply applications and whenever additional weather resistance is desired. The galvanized (aluminum optional) hood attaches to the wall housing or wall collar flanges. Field flashing and caulking will reduce moisture penetration. Shown with optional birdscreen.

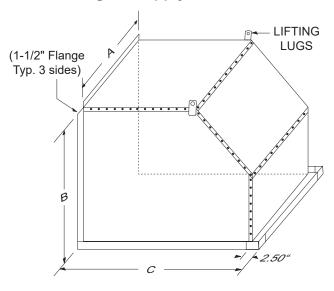


## 45 Degree Exhaust or Supply Sizes 10-16



Fan Size	Α	В	GAUGE (2)	AVG. WT.
10/12	14	16-1/4	18	15
14/16	18	20-1/4	18	20
18/20	22	24-1/2	18	25
24	28	28-1/2	18	30
30	34	34-1/2	18	40
36	40	40-1/2	18	50
42	46	46-1/2	18	60
48	52	49-1/2	16	70
54	58	58-1/2	16	120
60	64	64-1/2	16	175

# 90 Degree Supply Sizes 18-60



Fan Size	A	В	С	GAUGE (2)	AVG. WT.
20	22	22	27-3/4	18	25
24	27-1/4	26-1/2	38-1/2	18	30
30	32-1/2	33-1/2	44-1/2	18	40
36	38-1/2	39-1/4	49	18	50
42	44-1/2	45-1/4	56-1/2	18	60
48	50-1/2	51-1/2	62-1/2	18	70
54	56-3/4	57	73	18	120
60	62-3/4	63	73	18	175



# ACCESSORIES & OPTIONS FOR MOUNTING ARRANGEMENTS Cont.

# **Damper Types (Shutters)**

#### **Heavy-Duty Galvanized Exhaust Motorized Shutter**



This damper has a flanged frame and is designed to fit the inside flanges of the optional wall housing or wall mounting collar. The frame and blades are constructed of galvanized steel and are rated to 3000 FPM with proper clearance as provided by all factory accessories. The damper body recesses into the opening for a flush appearance.

#### **Standard Duty Aluminum Exhaust Gravity Shutter**



This damper can greatly reduce the infiltration of outside air and although not completely watertight, will provide weather protection in an economical fashion. Constructed with a galvanized frame and aluminum blades this damper is rated to 2000 FPM with the proper clearance as provided by all factory accessories. The damper body is recessed into the opening for a flush appearance.

#### **Heavy-Duty Galvanized Supply Motorized Shutter**



The motorized option improves weather protection by providing a tighter closure seal and is recommended for all supply applications. Heavy-duty dampers are constructed with galvanized frames and blades and are rated to 3000 FPM. The damper body is not recessed providing extra clearance between the fan and damper blades.

#### Standard Duty Aluminum Supply Motorized Shutter



The motorized option improves weather protection by providing a tighter closure seal and is recommended for all supply applications. Standard duty dampers are constructed with galvanized frames and aluminum blades and are rated to 2000 FPM. The damper body is not recessed providing extra clearance between the fan and damper blades.

#### Center Pivot Motorized Damper - Supply or Exhaust



The flanged frame damper is designed to recess inside the flanges of the optional wall housing or wall mounting collar. The center pivot style damper provides superior weather resistance. Galvanized (optional aluminum) construction is rated to 3500 FPM with proper clearance as provided by all factory accessories.

# **Electric Damper Operators**

Electric damper operators provide more positive open and closed damper positions which helps increase weather resistance. Power open - spring close (POSC) motor and linkage kits are field installed (except for center pivot style) and are available in 24, 120/240, or 460 volts (single phase) and require approximately 0.5 amps at 120/1/60 power supply. Transformers are available for voltage reduction. For fan motors 5HP and larger, we recommend a factory tilt switch or "delay-on" timer in the control circuit (by others) to allow the damper to open prior to allowing fan operation, which will protect the damper blades and fan from damage when the fan is first energized.

10" MAX

MOTOR MOUNT

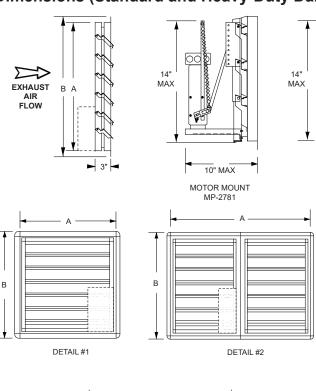
MA-220

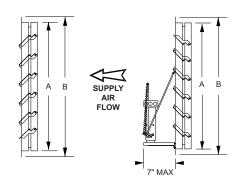


# **ACCESSORIES & OPTIONS**

# **FOR MOUNTING ARRANGEMENTS Cont.**

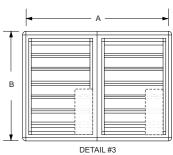
# **Dimensions (Standard and Heavy-Duty Dampers)**





_		В			Mot	or Type	
Fan Size	A Sq. Size	Sq. OD	Panels (Detail)	Exhau	ıst	Suppl	y
		Flange	, ,	Туре	Qty	Туре	Qty
10/12	12	14 1/2	1	MP-2781	1	MP-2781-S	1
14/16	16	18 1/2	1	MP-2781	1	MP-2781-S	1
18/20	20	22 1/2	1	MP-2781	1	MP-2781-S	1
24	26	28 1/2	1	MP-2781	1	MP-2781-S	1
30	32	34 1/2	1	MP-2781	1	MA-220-S	1
36	38	40 1/2	1	MA-220	1	MA-220-S	1
42	44	46 1/2	2	MA-220	1	MA-220-S	2
48	50	52 1/2	2	MA-220	1	MA-220-S	2
54	56	58 1/2	3	MA-220	2	MA-220-S	2
60	62	64 1/2	3	MA-220	2	MA-220-S	2

Heavy Duty Dampers required on all units with 7 1/2HP motors and above.

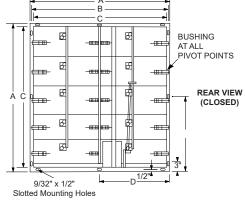


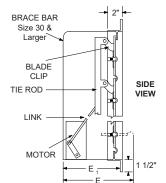
#### **Dimensions (Center Pivot Motorized Damper)**

E.u.	0			ا م ا	D	# of	G	
Fan Size	Opening Required	A O.D.	B (1)	C "Size"	(Center of Holes)	Panels	Closed (E-1)	Open (E-2)
24	27	29	24-1/2	26	-	1 x 1	7-1/4	8-1/2
30	33	35	30-1/2	32	-	1 x 1	10-1/4	13-3/4
36	39	41	36-1/2	38	19-1/2	1 x 1	10-1/4	13-3/4
42	45	47	42-1/2	44	22-1/2	1 x 1	10-1/4	13-3/4
48	51	53	48-1/2	50	25-1/2	2 x 1	10-1/4	13-3/4
54	57	59	54-1/2	56	28-1/2	2 x 1	10-1/4	12-3/4
60	63	65	60-1/2	62	31-1/2	2 x 1	10-1/4	12-3/4

Fan	Motor (2)							
Size	Power Supply	Max Amps	Stall Torque (in. lbs)					
24-48	120-240V 60Hz	0.3/0.6	25					
54-72	240V 60Hz	0.5	60					

<sup>(1)</sup> Minimum opening to clear pins.





<sup>(2)</sup> Motor is 60 Hz, single phase continuous duty with 104°F (40°C), maximum ambient temperature



# **ACCESSORIES & OPTIONS**

**Electrical Accessories** are available to simplify the installation and reduce the total project cost.

**Disconnect Switches** can be shipped loose or factory mounted and wired (except explosion proof and two speed) in NEMA 1, 3R, 4X, or other enclosures. Two-speed and explosion proof disconnects are available but may be subject to more stringent code requirements. It is the responsibility of the buyer and the installer to comply with all local and national codes.

**Aluminum Construction** is available for most models and typically includes propeller blades, fan panel, motor and drive support (large frame motors may have steel reinforcement) and accessories. When an explosion proof motor is specified, aluminum fan construction must be used for additional spark resistance.

**Extended Lube Lines** provide convenient access for routine bearing lubrication. Lubrication lines are installed from the fan shaft bearings to the exterior of the wall housing or sheet metal motorside guard and are provided with zerk fittings.

**Paints and Coatings** for protective and decorative purposes. Available coatings include: Epoxy, Synthetic Resin, and Heresite (air-dried phenolic). Contact your JencoFan representative or the factory for more information on available coatings and colors.

**Mounting Angles** facilitate the installation and a secure attachment of the wall housing or wall collar into the framed wall opening. Galvanized or aluminum angles are available and are pre-cut to the proper length. Additional bracing, mounting hardware, flashing and caulking are typically provided by the installer.

**Factory Wiring** can simplify jobsite installation and reduce the overall project cost. Optional services include wiring of motor, disconnect switch, damper actuator, and other custom controls. Please note that some wiring options may not be available for explosion proof, two speed and special motors.