

Models DGX-P-MF / MSX-P-MF

Direct Drive, Mixed Flow Plenum Supply Fan

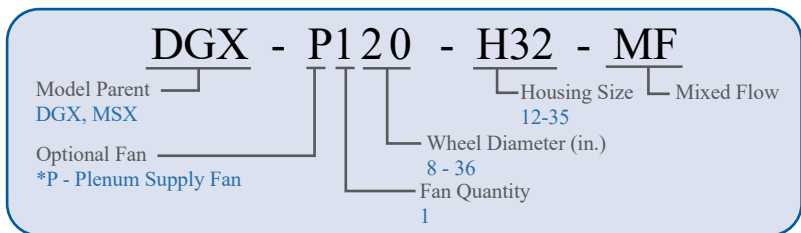
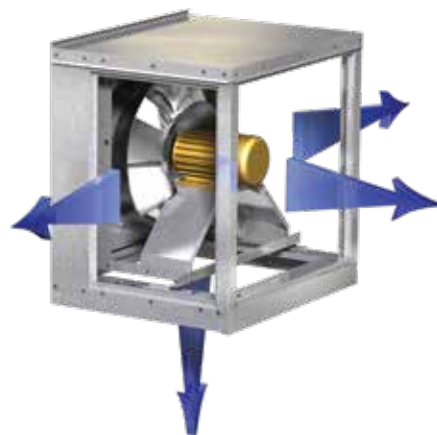
- **Mixed flow plenum supply fan**
- **Direct drive arrangement**
- **800 - 26,000 cfm**
- **Reduced sound power (LwA)**
- **Lower operating power**

Mixed flow fans, such as Greenheck models QEI and EQB, are hybrid designs incorporating the best features of axial propellers and centrifugal fans. These highly efficient and quiet fans are an industry-proven solution for inline applications. Greenheck's innovative new design utilizes a direct drive, mixed flow impeller in a plenum arrangement combining the benefits of mixed flow fans with installation flexibility.

When compared to other typical make-up air supply fans such as housed forward-curved or backward-curved plenum fans, Greenheck's new mixed flow plenum fans offer more efficient operation at lower sound levels. A sound power reduction of up to 6-8 decibels is achievable—the equivalent to a perceived sound reduction of up to 50%!

Direct Drive Technology

The direct drive arrangement on the mixed flow plenum supply fan for the DGX and MSX brings value-added benefits to the end-user. A variable frequency drive (VFD) is supplied, programmed and mounted by the factory to provide inherent soft-start capabilities. The absence of sheaves and belts help simplify air balancing in the field while reducing the maintenance requirements. These specifiable features make direct drive fans desirable to end-users!



Mixed Flow Supply Fan for Make-Up Air

Make-Up Air Supply Fan Comparison

The mixed flow plenum supply fan is an innovative addition to Greenheck's already diverse make-up air product line, which now offers three different supply fan options.

- **Direct drive, mixed flow plenum supply fan** - These fans are extremely efficient in low to medium pressure applications, substantially reducing required horsepower and operating cost!
- **Direct drive, backward-curved plenum supply fan** - More efficient when compared to a forward-curved supply fan and is suitable for up to 5 in. wg of total static pressure for high-pressure applications.
- **Belt driven, forward-curved supply fan** - An alternative to the mixed flow plenum with low external static pressures below 2 in. wg.

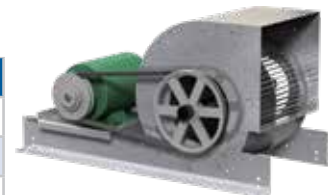
Supply Fan Operating Power

	Initial Cost	Housing 12 2,500 cfm at 2.5 in. wg	Housing 22 7,500 cfm at 2 in. wg	Housing 32 15,000 cfm at 1 in. wg
Forward-Curved	\$	2.32 hp	7.25 hp	11.61 hp
Mixed Flow	\$\$	1.87 hp	4.02 hp	5.32 hp
Backward-Curved	\$\$\$	1.74 hp	6.11 hp	10.53 hp

Available Features

	Forward-Curved	Backward-Curved	*Mixed Flow
Airflow	800-48,000 cfm	800-48,000 cfm	800-26,000 cfm
Max HP Limitation	50 hp	60 hp	15 hp
Typical Total Static Pressure Limit	3 in. wg	5 in. wg	3 in. wg
VFD by Factory	Optional	Standard	Standard
Drive Arrangement	Belt	Direct	Direct
Neoprene Isolation	Standard	Standard	Standard
Spring Isolation	Optional	-	-
Double-Wall Construction	Optional	Standard	Standard
Hinged Access	Optional	Standard	Standard
Direct-Fired Heating (DGX)	Standard	Standard	Standard
Electric Heating (MSX)	Optional	Optional	Optional
Steam Heating (MSX)	Optional	Optional	Optional
Hot Water Heating (MSX)	Optional	Optional	Optional
Chilled Water Cooling	Optional	Optional	Optional
Split DX Cooling	Optional	Optional	Optional
Evaporative Cooling	Optional	Optional	Optional
PDX Cooling	Optional	-	-
Discharge Location	Bottom, Top, Horizontal	Bottom, Top, Left, Right, Horizontal	Bottom, Left, Right, Horizontal

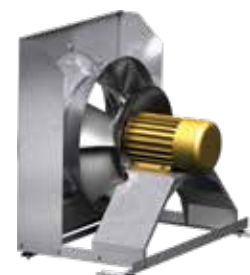
*Available on housing sizes 12, 22, 32 and 35 only.



Forward-Curved



Backward-Curved Plenum



Mixed Flow Plenum

