

Direct Drive Airfoil Plug Fan

Chicago's direct drive airfoil plug fan offers a compact economical alternative to belt drive plug fans. Applications include packaged equipment for cooling, drying, dust collection, recirculation and aeration systems. For retrofit installations, the compact direct drive configuration allows greater system flexibility. When coupled with a variable frequency drive, performance is no longer limited to sycronous motor speeds.

Direct drive simplicity converts to lower initial cost and less operating expense, as there are no fan shafts, bearings, belts or guards to maintain. Plug fans utilize Chicago's quiet, efficient airfoil wheel with hyperbolic inlet cone. Exceptional rigidity is afforded by the heavy steel panel with flanged edges and gusseted motor base. Plug fans are designed for horizontal or vertical installation.

Chicago's direct drive line consists of plug fan sizes from 12-1/4 to 30 and static pressures to 12". Direct drive temperature maximum is typically limited to 180°F, or higher when equipped with factory cooling wheel and insulated plug panels. For elevated temperatures, ask about Chicago's belt drive or direct coupled fans.

The versatile plug fan design allows for use of either C-face or foot mounted motors. Fans are also available with steel housing, backward inclined wheels or other factory modifications.

CTEM CERTIFICA

Performance

Fan Size	RPM	Motor HP	1" SP	2" SP	3" SP	4" SP	5" SP	6" SP	7" SP	8" SP	Fan Weight
12-1/4	3500	5	3321	3160	2985	2792	2593	2388	2112		62
13-1/2	3500	5	4481	4307	4121	3920	3706	3487	3262	3001	80
15	3500	7.5	6192	6000	5800	5590	5364	5157	4919	4680	126
16-1/2	3500	15	8286	8083	7875	7660	7433	7190	6939	6681	148
18-1/4	1750	5	5278	4746	4152	3355					178
20	1750	5	7055	6490	5861	5193	4116				222
22-1/4	1750	7.5	10267	9619	8800	8069	7200	6081			266
24-1/5	1750	15	13825	13202	12296	11463	10644	9684	8489	7072	300
27	1750	20	18618	18000	17127	16104	15218	14310	13294	12076	337
30	1750	40	25960	25290	24562	23777	22922	21930	20720	19379	424

Notes:

Weight in lbs. less motor. Performances shown are for 100% width housed fans.

