

DATASHEET

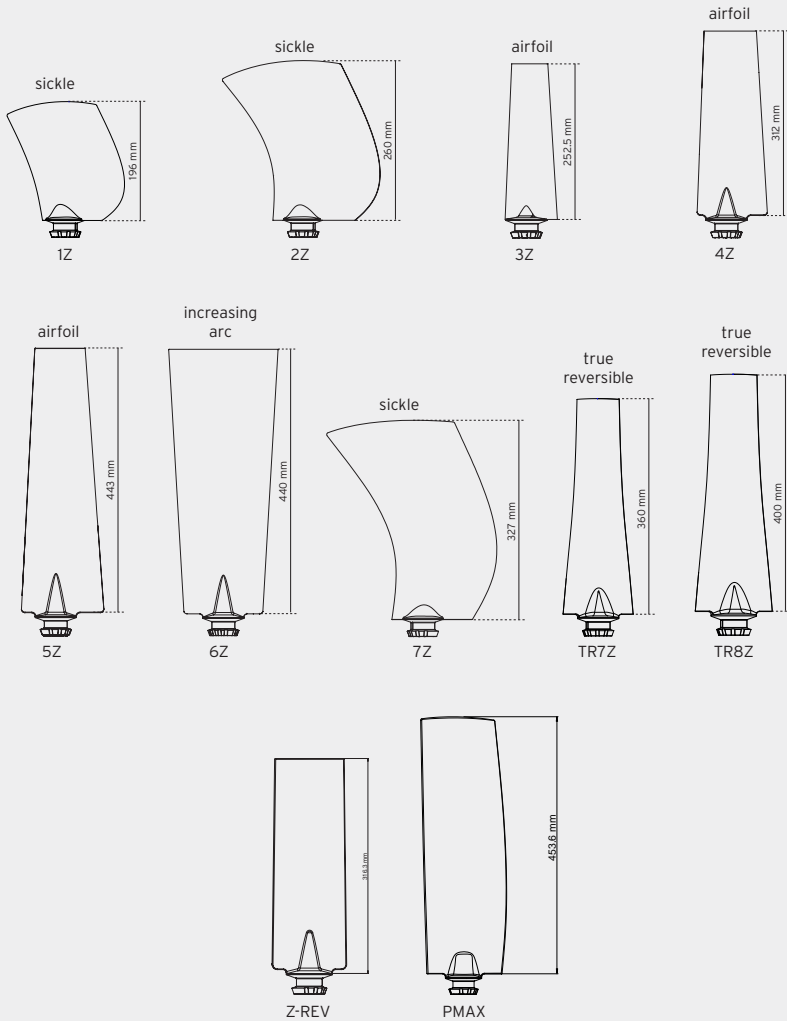
ENGLISH

OUR Z SERIES

The Z series is one of our broadest series; therefore it can be used in just about any air moving application. It covers diameters from 225 mm to 1261 mm. As with all Multi-Wing axial fans, the Z series is designed to have high efficiency and low noise level and to be corrosion resistant. It is robust yet light-weight resulting in less wear and stress on motors and bearings.

The Z series is widely used in the ventilation and cooling industry as well as in automotive applications where environmental requirements are more demanding. It also offers a suitable solution in applications that demand high performance in difficult flow conditions, where there is less focus on power consumption. The Z series also features reversible fans designed specifically for drying applications.

Blade profiles



Design Features

- 11 fan blades of different designs and sizes with adjustable pitch setting.
- 11 standard pitch angles ranging from 15° to 50°.
- Fan blades for both clockwise and counter-clockwise rotation.
- 7 hub sizes (5, 6, 7, 8, 9, 12 & 16 blades all symmetrically arranged), each available in a range of bore/fixing configurations.

Materials

The hub parts are as standard manufactured in a pressure die cast silumin alloy EN AC-AI Si12 Cu1 (Fe). The 5-blade hub is also available in a version manufactured in glass reinforced polypropylene (PPG). The fan blades are available in the following 6 materials to suit applications with different speeds and ambient temperatures.

PPG Glass reinforced polypropylene
Temperature range: -10°C to +90°C

PAG Glass reinforced polyamide
Temperature range: -40°C to +120°C

PAGI Glass reinforced polyamide, industrial quality
Temperature range: -40°C to +110°C

PAGAS Anti static glass reinforced polyamide
Temperature range: -40°C to +110°C

PAGST Vibration stabilised glassreinforced polyamide
Temperature range: -40°C to +110°C

AL Aluminium
Temperature range: -60°C to +245°C
Standard alloy for the fan blades is EN AC-AI Si12 Cu1 (Fe).

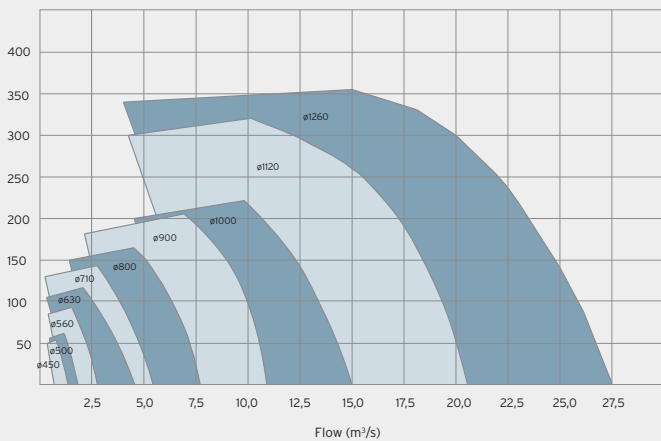
Please observe penalty factors for operation above listed max temperatures. For further information on high temperature operation please refer to Multi-Wing's Optimiser programme.

We reserve the right to change the materials of manufacture. The values for the mechanical properties are mean values and can be subject to variations due to the use of different suppliers.

Selection guide

Static Pressure (Pa)

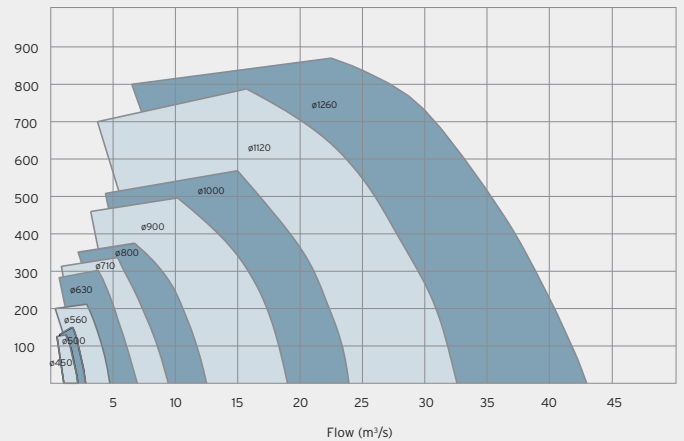
900 RPM



Selection guide

Static Pressure (Pa)

1400 RPM

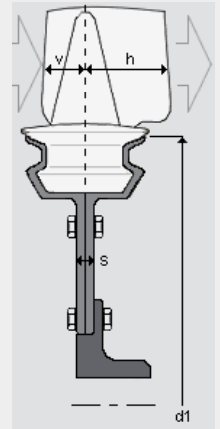


Diameters and axial extend

Position in hub	d1	s	Max. diameter for blade types										
			1Z	2Z	3Z	4Z*	5Z*	6Z	7Z	TR7Z	TR8Z	ZREV	PMAX
5	145	7	541	670	650	769	1031	1025	800	865	945	785	1065
6	178	7	574	703	683	802	1064	1058	833	898	978	818	1098
7	186	7	582	711	691	810	1072	1066	841	906	986	826	1106
8	266	7	660-662	789-791	771	890	1152	1146	921	986	1066	906	1186
9	200	7	596	725	705	824	1086	1080	855	920	1000	840	1120
12	280	9	673-676	805	785	904	1166	1160	935	1000	1080	920	1200
16	375	9	-	-	880	999	1261	1255	1030	1095	1175	1015	1295

All dimensions are in mm. The max. diameter may vary depending on the blade material and angle. Contact Multi-Wing or use the Optimiser to get specifics.

* Subtract 8mm from max. diameter in table above for 4Z/PAGAS and 4Z/PAGST, subtract 16mm from max. diameter for 5Z/AL, add 16mm to max. diameter for 4Z/AL.



Leading edge v±4												
Pitch	15°	20°	25°	27,5°	30°	32,5°	35°	37,5°	40°	45°	50°	
PMAX	-	-	37	-	41	43	45	47	49	53	56	
1Z	-	25	27	-	30	31	32	33	34	35	-	
2Z	-	33	36	-	39	40	42	43	44	46	-	
3Z	-	-	12	-	14	15	17	18	19	22	24	
4Z	-	12	15	-	19	21	23	24	26	29	-	
5Z	-	-	18	-	22	25	27	29	31	35	38	
6Z	-	10	14	16	18	21	23	-	-	-	-	
7Z	-	18	22	-	26	28	29	31	33	36	-	
TR7Z	-	-	29	-	33	35	37	39	40	44	-	
TR8Z	-	-	41	-	45	47	49	51	53	56	-	
ZREV	19	23	27	29	31	33	35	-	39	-	-	

All dimensions are in mm. The values are intended primarily as a guide and can be subject to variations depending on the material.

Trailing edge h±4												
Pitch	15°	20°	25°	27,5°	30°	32,5°	35°	37,5°	40°	45°	50°	
PMAX	-	-	50	-	54	56	57	59	61	63	65	
1Z	-	41	46	-	51	54	57	60	63	69	-	
2Z	-	52	58	-	64	68	72	76	80	88	-	
3Z	-	-	26	-	30	32	33	35	36	39	42	
4Z	-	30	35	-	40	42	44	46	49	52	-	
5Z	-	-	41	-	47	49	52	55	57	62	66	
6Z	-	40	44	47	48	51	53	-	-	-	-	
7Z	-	46	55	-	64	68	72	76	80	88	-	
TR7Z	-	-	29	-	33	35	37	39	40	44	-	
TR8Z	-	-	41	-	45	47	49	51	53	56	-	
ZREV	19	23	27	29	31	33	35	-	39	-	-	

All dimensions are in mm. The values are intended primarily as a guide and can be subject to variations depending on the material.