Duct-M

- Cased axial duct fan
- Until 125.000 m³/h
- IP55

Axial fans type Duct-M

Axial fan with long housing

Application

- General ventilation, cooling, climate control, harvesting of crops, ventilation in chemical processes and fire ventilation

Composition

- The steel housing is fully galvanized after manufacture. The flanges are an integral part of the housing and are provided with bolt holes
- The screw is of the type with adjustable blade angle when stationary. It is balanced according to ISO 1940-1986 - Grade G 6.3. The distance between the screw and the fan housing must not exceed 0.6% of the screw diameter. The propeller blades have an aerofoil profile
- The core and the propeller blades are cast from an aluminum alloy and are checked with X-rays for cavities and structural defects
- The motor is of the asynchronous cage anchor type, fully closed and with overheat protection
- Voltage: 230Vac 1ph 50Hz or 400Vac 3ph 50Hz
- Protection IP55 - Insulation class F
- Standard engine connection NOT brought to the outside (provide acces panel for accesibility to engine connections)

Options

- Outer Terminal Box (engine connection brought to the outsidet)
- ATEX II 2G IIB T4 version (**DUCT-M ATEX**)
- RWA fire fans 300°C/2h - 400°C/2h (**DUCT-M HT**)
- Two-speed engines
- Stainless steel version

Accessories

- Silencers, support feet, vibration dampers, counter flanges, flexible sleeves, round check valve, protective grilles, inlet cone
- Electronic speed controller, speed controller with transformer and frequency converters

Text for tender

- Cased axial fans used for large air capacities with relatively low pressures are required in duct mounted applications, **Cairox** type **DUCT-M**

Order example

- **DUCT-M 314/4M-A + FC-DU + AV + CF-DU**

Explanation:
DUCT-M = Type of cased axial fan
M = Type of case lenght; M = middle, S = Short; L = Long
31 = Hub size
4 = Number of poles; **2 -** 3000rpm; **4 -** 1500rpm; **6 -** 1000rpm; **8 -** 750rpm
M = Monophase; **T =** Threephase
A = Type of motor
FC-DU = Flexible connection
AV = Antivibration mounts
CF-DU = Coiunter flange

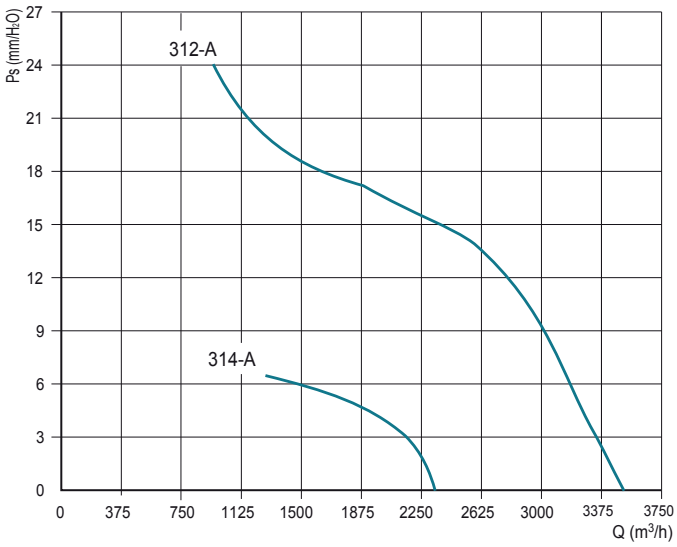
Prices

Prices are available upon request. Please include the following information in your price request in order to make you a compliant offer:

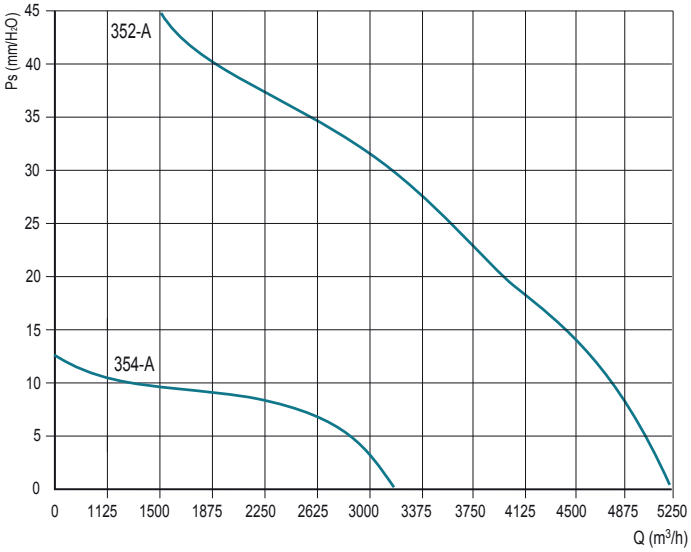
- Airflow rate [m³/h]
- External pressure drop required [Pa]
- Free intake or channel connection

Selection curves

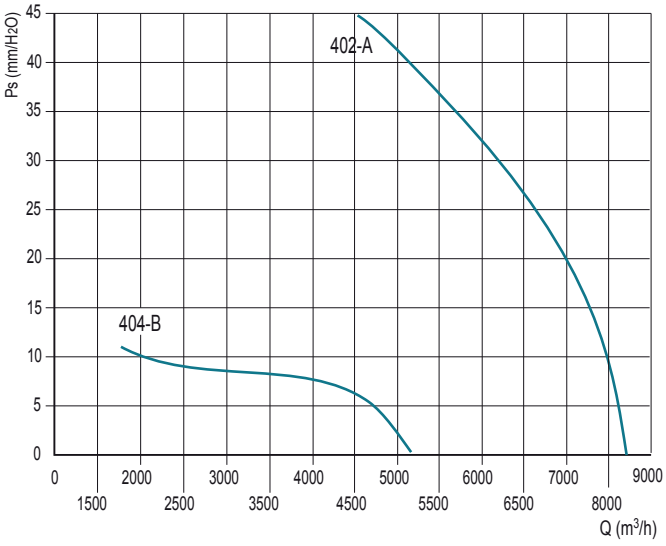
DUCT-M 310



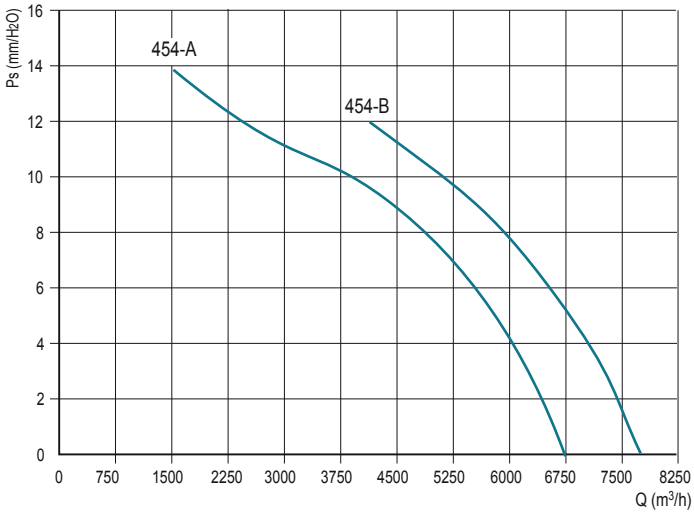
DUCT-M 350



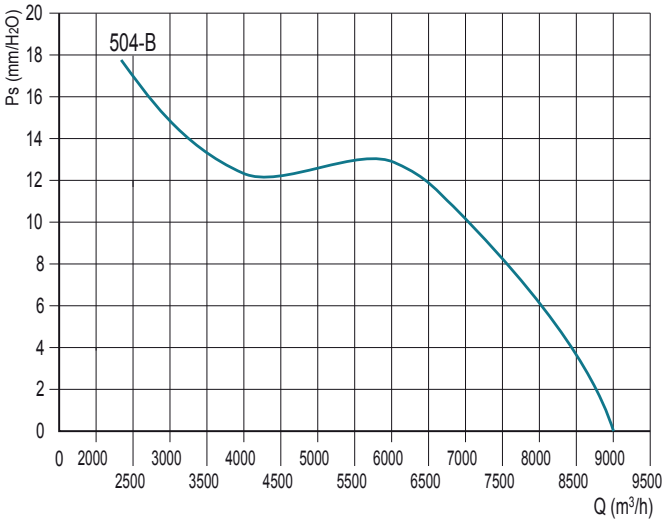
DUCT-M 400



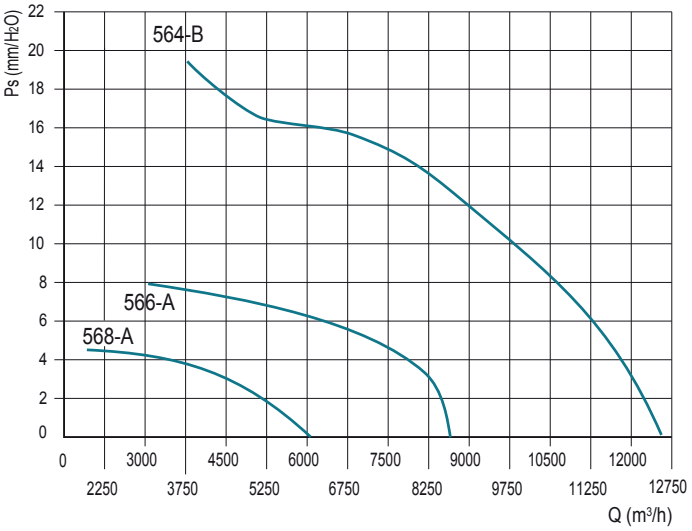
DUCT-M 450



DUCT-M 500

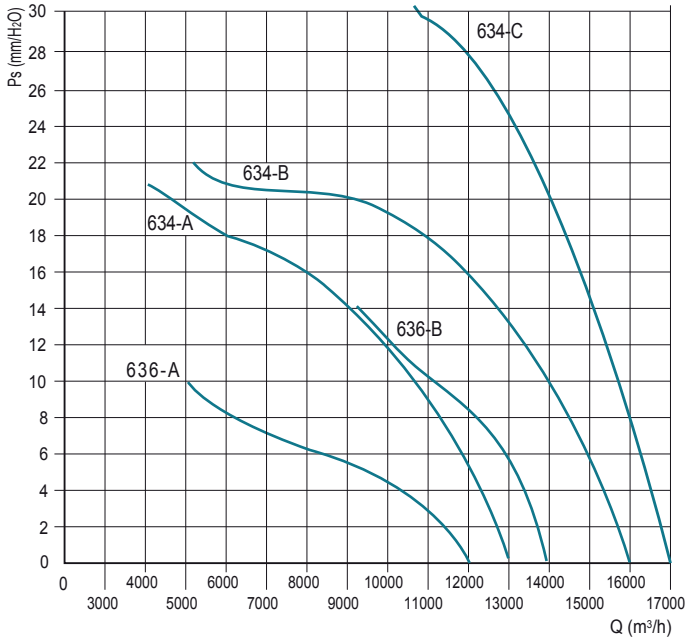


DUCT-M 560

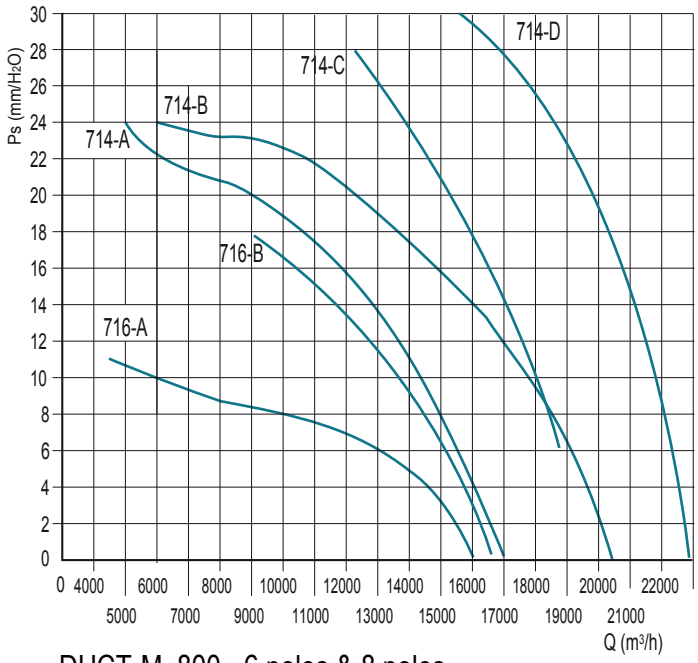


Selection curves

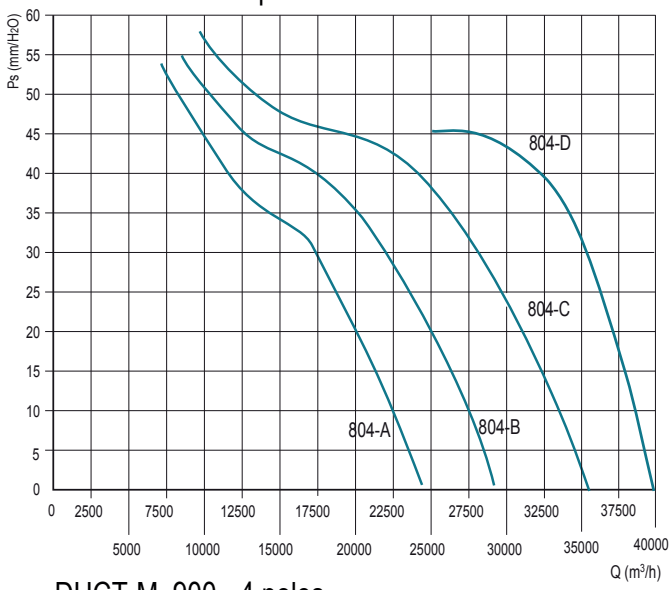
DUCT-M 630



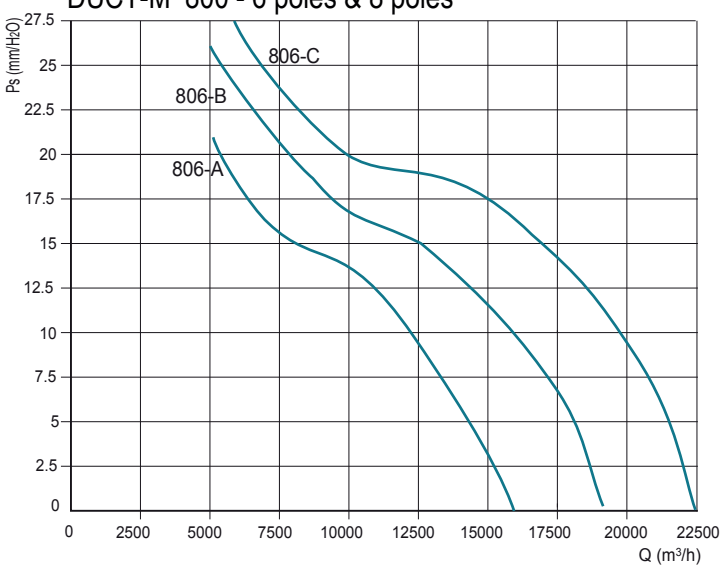
DUCT-M 710



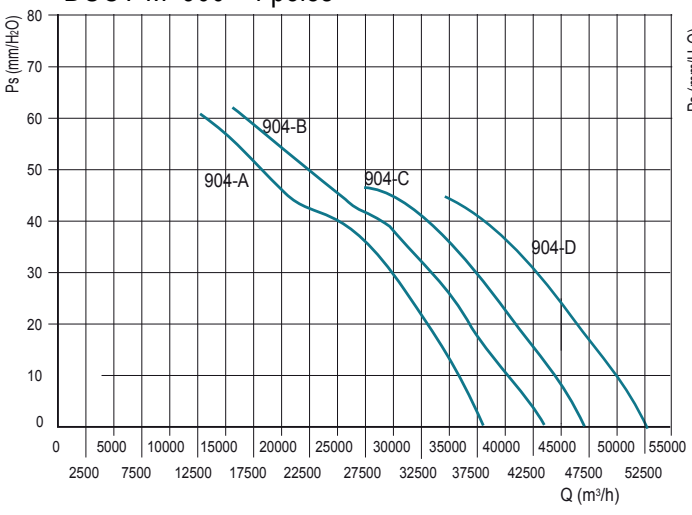
DUCT-M 800 - 4 poles



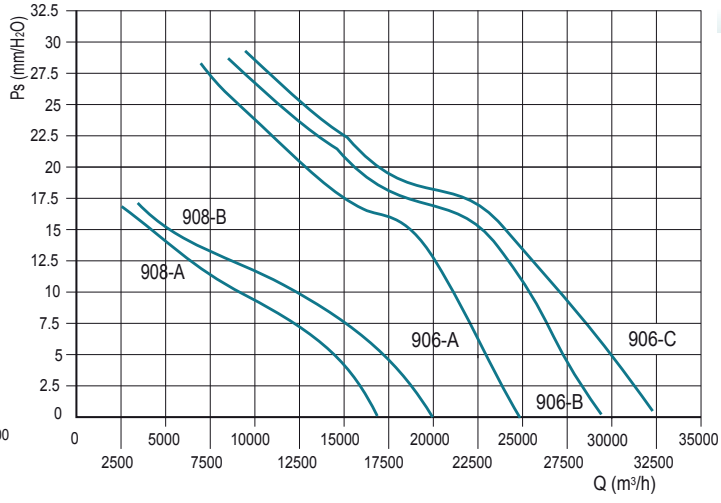
DUCT-M 800 - 6 poles & 8 poles



DUCT-M 900 - 4 poles

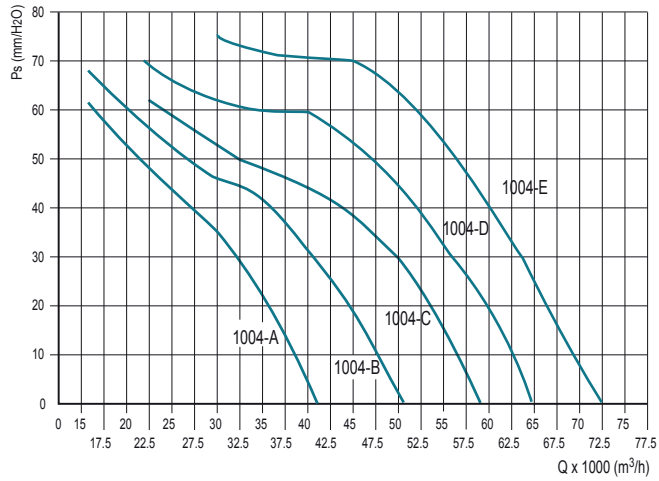


DUCT-M 900 - 6 poles & 8 poles

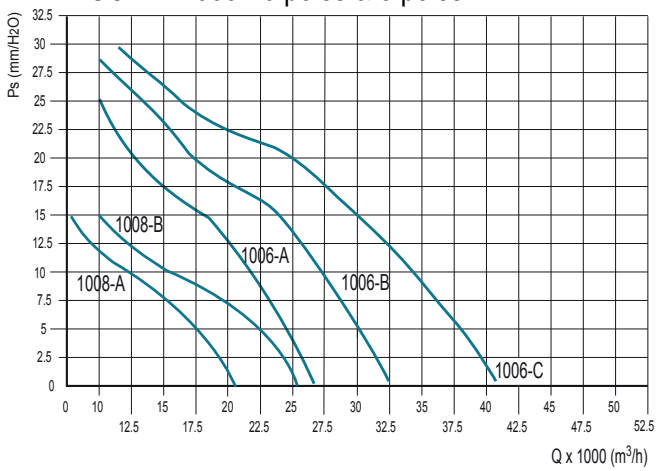


Selection curves

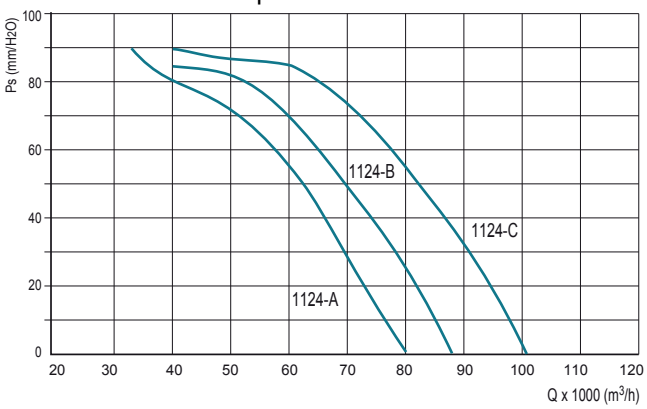
DUCT - M 1000 - 4 poles



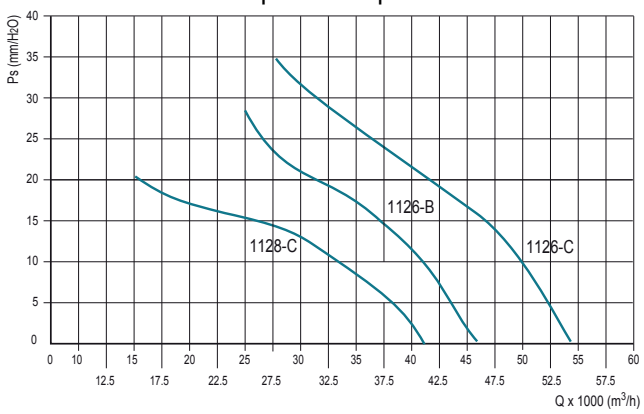
DUCT-M 1000 - 6 poles & 8 poles



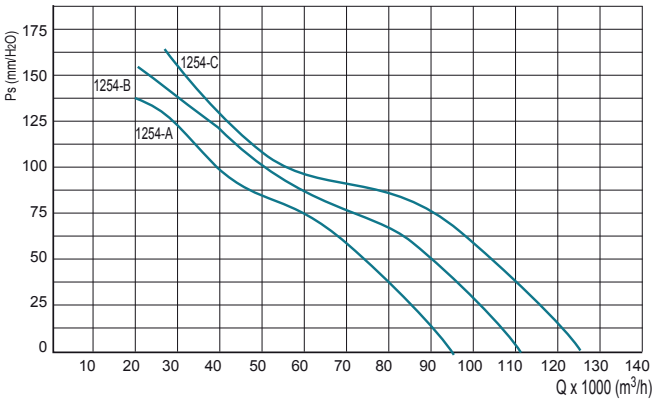
DUCT-M 1120 - 4 poles



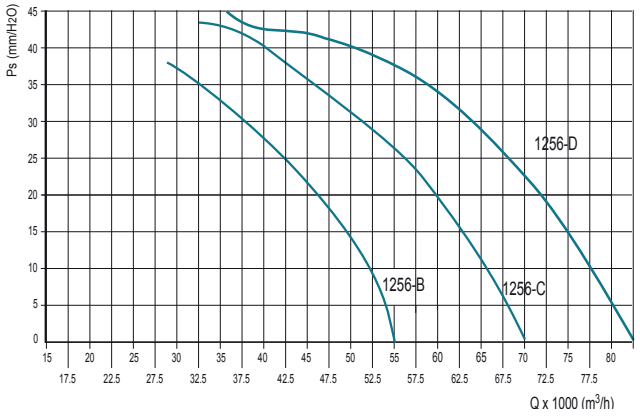
DUCT-M 1120 - 6 poles & 8 poles



DUCT-M 1250- 4 poles

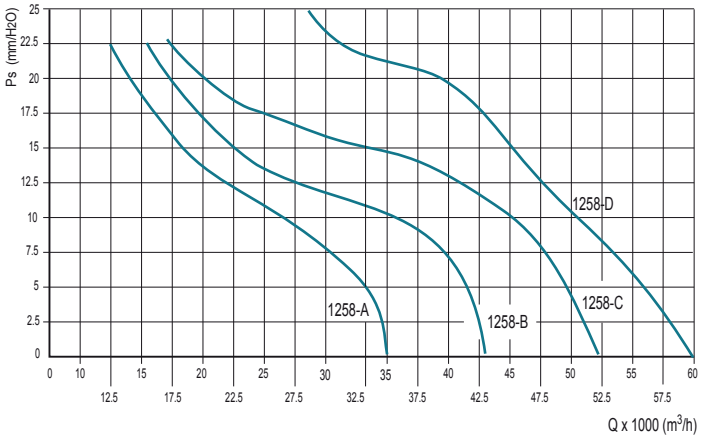


DUCT-M 1250 - 6 poles

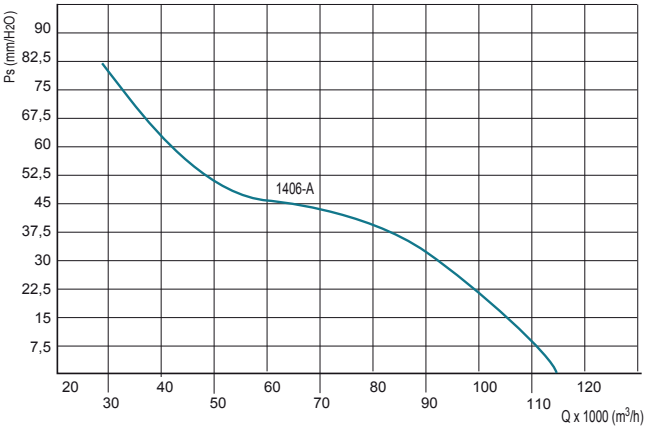


Selection curves

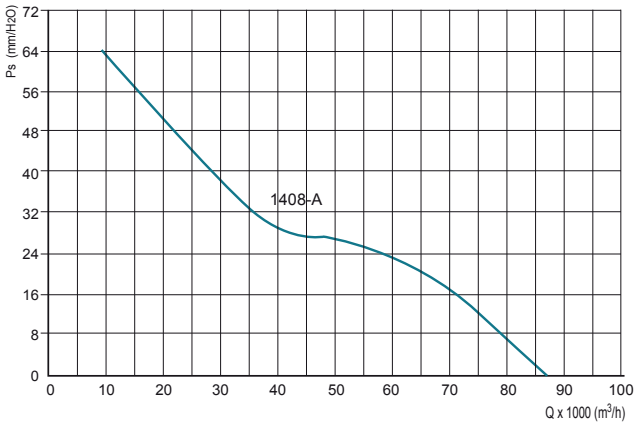
DUCT-M 1250 - 8 poles



DUCT-M 1400 - 6 poles



DUCT-M 1400 - 8 poles



- Performance shown in the selection curves refer to air at 15°C temperature and 0 metres above sea level and they were obtained in installation type D with no grid nor accessories
- 1 mm H_2O = 9,8 Pa

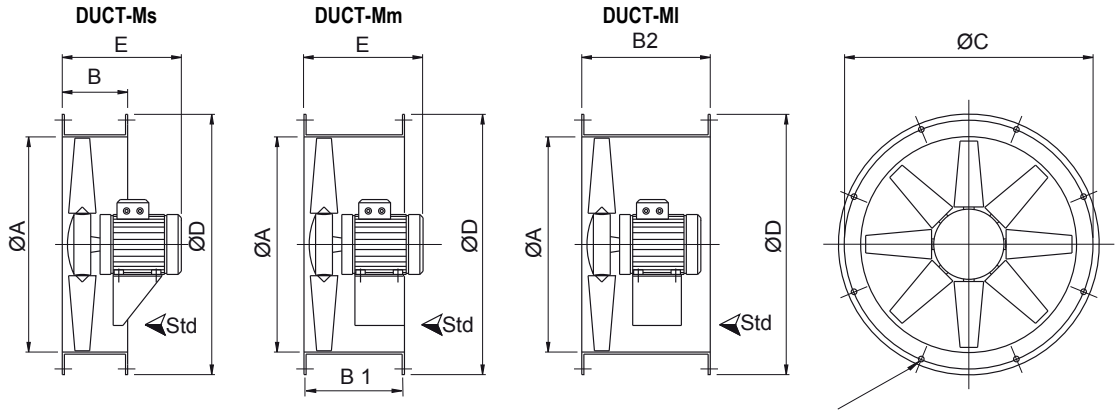
Technical data					
Type	Flow rate [m³/h]	Power [kW]	Max. current [A]	Mot [H]	Sound pressure [dB(A)]
2 poles (3000 rpm) - single-phase (1Ph-230V 50 Hz)					
312/A M	3500	0,25	1,7	63	70
2 poles (3000 rpm) - three-phase (3Ph-400V 50 Hz)					
312/A T	3500	0,25	0,7	63	70
352/A T	5250	0,55	1,6	71	74
402/A T	8200	1,1	2,6	80	79
4 poles (1500 rpm) - single-phase (1Ph-230V 50 Hz)					
314/A M	2300	0,09	1	56	52
354/A M	3200	0,09	1	56	56
4 poles (1500 rpm) - three-phase (3h-400V 50 Hz)					
314/A T	2300	0,09	0,4	56	52
354/A T	3200	0,09	0,4	56	56
404/B T	5200	0,18	0,6	63	62
454/A T	6500	0,25	0,8	71	65
454/B T	7600	0,37	1,2	71	66
504/B T	9000	0,55	1,6	80	69
564/B T	12500	0,75	2	80	72
634/A T	13000	0,75	2	80	75
634/B T	16000	1,1	2,8	90	76
634/C T	17000	2,2	5	100	76
714/A T	17000	1,5	3,5	90	77
714/B T	20500	2,2	5	100	77
714/C T	18500	2,2	5	100	77
714/D T	23500	3	6,5	100	79
804/A T	24000	3	6,5	100	78
804/B T	29000	4	8,2	112	79
804/C T	35000	5,5	11	132	80
804/D T	40000	7,5	15	132	80
904/A T	38000	5,5	11	132	85
904/B T	43000	7,5	15	132	86
904/C T	47000	7,5	15	132	86
904/D T	52500	9,2	18	132	86
1004/A T	41000	5,5	11	132	88
1004/B T	50000	7,5	15	132	89
1004/C T	59000	11	21	160	89
1004/D T	65000	15	27,8	160	90
1004/E T	72500	18,5	32,6	180	90
1124/A T	80000	18,5	32,6	180	93
1124/B T	87000	22	38,8	180	94
1124/C T	100000	30	53	200	94
1254/A T	95000	22	38,8	180	97
1254/B T	110000	30	53	200	98
1254/C T	125000	37	64	225	98
6 poles (1000 rpm) - three-phase (3Ph-400V 50 Hz)					
560/A T	8500	0,25	1	71	62
636/A T	12500	0,37	1,3	80	66
636/B T	14000	0,75	2,2	90	65
716/A T	16000	0,75	2,2	90	67
716/B T	17000	1,1	3	90	66
806/A T	16000	0,75	2,2	90	68
806/B T	19000	1,1	3	90	68
806/C T	22500	1,5	4	100	69
906/A T	25000	1,5	4	100	75
906/B T	29000	2,2	5	112	75
906/C T	32000	2,2	5	112	75
1006/A T	27000	1,5	4	100	79
1006/B T	33000	2,2	5	112	79
1006/C T	41000	3	7	132	80
1126/B T	45000	4	9	132	83
1126/C T	54000	5,5	12	132	83
1256/B T	61000	7,5	15	160	87
1256/C T	73000	11	22	160	88
1256/D T	85000	11	22	160	88
1406/A T	115000	18,5	35	200	91
8 poles (750 rpm) - three-phase (3Ph-400V 50 Hz)					
568/A T	6000	0,12	0,7	71	56
908/A T	17000	0,75	2,3	100	69
908/B T	20500	0,75	2,3	100	69
1008/A T	20500	0,75	2,3	100	74
1008/B T	25000	1,1	3,4	100	74
1128/C T	40500	2,2	5,5	132	77
1258/A T	34500	2,2	5,5	132	81
1258/B T	43000	3	7,3	132	81
1258/C T	52000	4	9,3	160	82
1258/D T	59000	4	9,3	160	82
1408/A T	87000	7,5	14,7	160	85

Sound data									
2 poles									
[Hz]	63	125	250	500	1k	2k	4k	8k	Tot.
312/A - 0,25 kW	52	61	62	63	64	62	56	47	70
4 poles									
[Hz]	63	125	250	500	1k	2k	4k	8k	Tot.
314/A - 0,12 kW	34	43	45	46	47	44	38	29	52
354/A - 0,12 kW	38	47	49	50	51	48	42	33	56
504/B - 0,58 kW	51	60	62	62	63	60	55	45	69
564/B - 0,75 kW	54	63	65	66	67	64	58	49	72
634/A - 0,75 kW	57	66	68	69	70	67	61	52	75
634/B - 1,1 kW	53	67	69	69	70	67	62	52	76
634/C - 2,2 kW	53	66	69	69	70	67	62	52	76
714/A - 1,5 kW	59	68	70	70	71	68	63	53	77
714/B - 2,2 kW	60	68	70	71	72	69	63	54	77
714/C - 2,2 kW	59	68	70	70	71	68	63	53	77
714/D - 3 kW	59	68	70	71	72	69	63	54	77
804/A - 3 kW	60	70	71	72	73	70	64	55	78
804/B - 4 kW	60	70	71	72	73	70	64	55	79
804/C - 5,5 kW	61	70	72	73	74	71	65	56	80
804/D - 7,5 kW	61	70	72	73	74	71	65	56	80
904/A - 5,5 kW	67	76	78	79	80	77	71	62	85
904/B - 7,5 kW	68	77	79	79	80	77	72	62	86
904/C - 7,5 kW	68	77	79	79	80	77	72	62	86
904/D - 9,2 kW	68	77	79	79	80	77	72	62	86
1004/A - 5,5 kW	70	79	82	82	83	80	74	65	88
1004/B - 7,5 kW	71	80	82	83	84	81	75	66	89
1004/C - 11 kW	71	80	82	83	84	81	75	66	89
1004/D - 15 kW	72	81	83	83	84	81	75	66	90
1004/E - 18,5 kW	72	81	83	83	84	81	76	66	90
1124/A - 18,5 kW	75	84	86	87	88	85	79	70	93
1124/B - 22 kW	76	85	87	87	88	85	80	70	94
1124/C - 30 kW	76	85	87	87	88	85	80	70	94
1254/A - 22 kW	79	88	90	91	92	89	83	74	97
1254/B - 31 kW	80	88	91	91	92	89	84	74	98
1254/C - 37 kW	80	88	91	91	92	89	84	74	98
6 poles									
[Hz]	63	125	250	500	1k	2k	4k	8k	Tot.
566/A - 0,25 kW	44	53	55	55	46	54	48	39	62
636/A - 0,37 kW	48	57	59	59	60	57	52	62	66
636/B - 0,75 kW	47	56	58	58	60	57	51	42	65
716/A - 0,75 kW	49	58	60	60	61	58	53	43	67
716/B - 1,1 kW	48	57	57	60	61	58	52	43	66
806/A - 0,75 kW	50	53	61	61	62	59	54	44	68
806/B - 1,1 kW	50	53	61	61	62	52	54	44	68
806/C - 1,5 kW	50	59	63	62	63	60	54	45	69
906/A - 1,5 kW	56	65	63	68	69	66	60	51	74
906/B - 2,2 kW	57	66	68	68	69	66	61	51	75
906/C - 2,2 kW	57	66	67	68	69	66	61	51	75
1006/A - 1,5 kW	61	70	72	72	73	70	65	55	79
1006/B - 2,2 kW	61	70	72	72	73	71	65	56	79
1006/C - 3 kW	61	70	73	73	74	71	65	56	80
1126/B - 4 kW	65	74	76	76	77	74	69	60	83
1126/C - 5,5 kW	68	77	79	80	81	78	72	63	86
1256/B - 7,5 kW	69	78	80	80	81	78	73	63	87
1256/C - 11 kW	70	78	80	81	82	79	73	64	88
1256/D - 11 kW	70	78	80	81	82	79	73	64	88
1406/A - 18,5 kW	73	82	84	84	85	82	77	67	91
8 poles									
[Hz]	63	125	250	500	1k	2k	4k	8k	Tot.
568/A - 0,12 kW	38	47	49	49	50	48	42	33	56
908/A - 0,75 kW	51	60	62	63	64	61	55	46	69
908/B - 0,75 kW	51	60	62	63	64	61	55	46	69
1008/A - 0,75 kW	55	64	66	67	68	65	60	50	74
1008/B - 1,1 kW	56	64	67	67	68	65	60	50	74
1128/C - 2,2 kW	59	68	70	71	72	69	63	54	77
1258/A - 2,2 kW	63	72	74	75	76	73	67	58	81
1258/B - 3 kW	63	72	74	75	76	73	67	58	81
1258/C - 4 kW	63	72	75	75	76	73	68	58	82
1258/D - 4 kW	63	72	75	75	76	73	68	58	82
1408/A - 7,5 kW	67	76	78	82	79	76	71	61	85

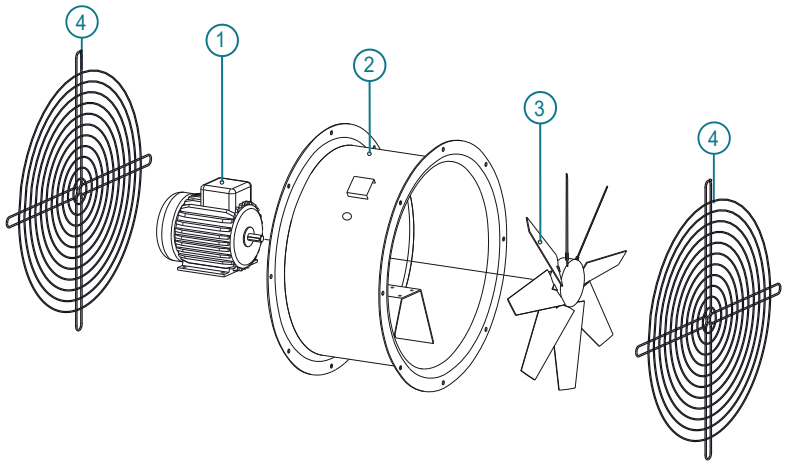
Sound pressure level is measured in free field at 3 m from the fan, in any direction, with ducted inlet and outlet.

Octave band centre frequency									
2 poles									
[Hz]	63	125	250	500	1k	2k	4k	8k	Tot.
312/A - 0,25 kW	52	61	62	63	64	62	56	47	70
4 poles									
[Hz]	63	125	250	500	1k	2k	4k	8k	Tot.
314/A - 0,12 kW	34	43	45	46	47	44	38	29	52
354/A - 0,12 kW	38	47	49	50	51	48	42	33	56
504/B - 0,58 kW	51	60	62	62	63	60	55	45	69
564/B - 0,75 kW	54	63	65	66	67	64	58	49	72
634/A - 0,75 kW	57	66	68	69	70	67	61	52	75
634/B - 1,1 kW	53	67	69	69	70	67	62	52	76
634/C - 2,2 kW	53	66	69	69	70	67	62	52	76
714/A - 1,5 kW	59	68	70	70	71	68	63	53	77
714/B - 2,2 kW	60	68	70	71	72	69	63	54	77
714/C - 2,2 kW	59	68	70	70	71	68	63	53	77
714/D - 3 kW	59	68	70	71	72	69	63	54	77
804/A - 3 kW	60	70	71	72	73	70	64	55	78
804/B - 4 kW	60	70	71	72	73	70	64	55	79
804/C - 5,5 kW	61	70	72	73	74	71	65	56	80
804/D - 7,5 kW	61	70	72	73	74	71	65	56	80
904/A - 5,5 kW	67	76	78	79	80	77	71	62	85
904/B - 7,5 kW	68	77	79	79	80	77	72	62	86
904/C - 7,5 kW	68	77	79	79	80	77	72	62	86
904/D - 9,2 kW	68	77	79	79	80	77	72	62	86
1004/A - 5,5 kW	70	79	82	82	83	80	74	65	88
1004/B - 7,5 kW	71	80	82	83	84	81	75	66	89
1004/C - 11 kW	71	80	82	83	84	81	75	66	89
1004/D - 15 kW	72	81	83	83	84	81	75	66	90
1004/E - 18,5 kW	72	81	83	83	84	81	76	66	90
1124/A - 18,5 kW	75	84	86	87	88	85	79	70	93
1124/B - 22 kW	76	85	87	87	88	85	80	70	94
1124/C - 30 kW	76	85	87	87	88	85	80	70	94
1254/A - 22 kW	79	88	90	91	92	89	83	74	97
1254/B - 31 kW	80	88	91	91	92	89	84	74	98
1254/C - 37 kW	80	88	91	91	92	89	84	74	98
6 poles									
[Hz]	63	125	250	500	1k	2k	4k	8k	Tot.
566/A - 0,25 kW	44	53	55	55	46	54	48	39	62
636/A - 0,37 kW	48	57	59	59	60	57	52	62	66
636/B - 0,75 kW	47	56	58	58	60	57	51	42	65
716/A - 0,75 kW	49	58	60	60	61	58	53	43	67
716/B - 1,1 kW	48	57	57	60	61	58	52	43	66
806/A - 0,75 kW	50	53	61	61	62	59	54	44	68
806/B - 1,1 kW	50	53	61	61	62	52	54	44	68
806/C - 1,5 kW	50	59	63	62	63	60	54	45	69
906/A - 1,5 kW	56	65	63	68	69	66	60	51	74
906/B - 2,2 kW	57	66	68	68	69	66	61	51	75
906/C - 2,2 kW	57	66	67	68	69	66	61	51	75
1006/A - 1,5 kW	61	70	72	72	73	70	65	55	79
1006/B - 2,2 kW	61	70	72	72	73	71	65	56	79
1006/C - 3 kW	61	70	73	73	74	71	65	56	80
1126/B - 4 kW	65	74	76	76	77	74	69	60	83
1126/C - 5,5 kW	68	77	79	80	81	78	72	63	86
1256/B - 7,5 kW	69	78	80	80	81	78	73	63	87
1256/C - 11 kW	70	78	80	81	82	79	73	64	88
1256/D - 11 kW	70	78	80	81	82	79	73	64	88
1406/A - 18,5 kW	73	82	84	84	85	82	77	67	91
8 poles									
[Hz]	63	125	250	500	1k	2k	4k	8k	Tot.
568/A - 0,12 kW	38	47	49	49	50	48	42	33	56
908/A - 0,75 kW	51	60	62	63	64	61	55	46	69
908/B - 0,75 kW	51	60	62	63	64	61	55	46	69
1008/A - 0,75 kW	55	64	66	67	68	65	60	50	74
1008/B - 1,1 kW	56	64	67	67	68	65	60	50	74
1128/C - 2,2 kW	59	68	70	71	72	69	63	54	77
1258/A - 2,2 kW	63	72	74	75	76	73	67	58	81
1258/B - 3 kW	63	72	74	75	76	73	67	58	81
1258/C - 4 kW	63	72	75	75	76	73	68	58	82
1258/D - 4 kW	63	72	75	75	76	73	68	58	82
1408/A - 7,5 kW	67	76	78	82	79	76	71	61	85

Sound pressure level is measured in free field at 3 m from the fan, in any direction, with ducted inlet and outlet.



Dimensions												
	ØA [mm]	B [mm]	B1 [mm]	B2 [mm]	C [mm]	ØD	E [mm]	F [mm]	G [mm]	Kg (Ms)	Kg (Mm)	Kg (Ml)
31	310	260	260	400	355	390	250/320	8	10	13/17	13/17	13/19
35	360	260	260	400	395	430	250/320	8	10	14/19	14/19	14/22
40	410	260	260	400	450	490	300/380	8	12	16/24	16/24	19/27
45	460	260	260	450	500	540	350/390	8	12	21/30	21/30	23/33
50	510	260	260	450	560	600	350/390	12	12	24/35	24/35	27/38
56	570	260	260	450	620	655	350/390	12	12	28/37	28/37	34/43
63	640	260	350	500	690	725	400/490	12	12	34/51	37/54	44/61
71	710	260	350	600	770	805	400/490	16	12	41/62	44/67	53/77
80	810	350	450	600	860	905	450/610	16	12	50/105	54/110	60/115
90	910	350	450	700	970	1010	450/690	16	16	80/162	87/169	105/187
100	1010	-	560	800	1070	1115	700/830	16	16	92/235	107/250	123/266
112	1130	-	560	800	1190	1235	700/880	20	16	120/250	136/260	157/360
125	1260	-	560	800	1320	1365	700/1000	20	16	-	169/356	192/450
140	1400	-	800	100	1470	1520	900/1000	20	16	-	380/480	426/526



1 - Motor
2 - Casing
3 - Impeller
4 - Grid (mandatory for free air)