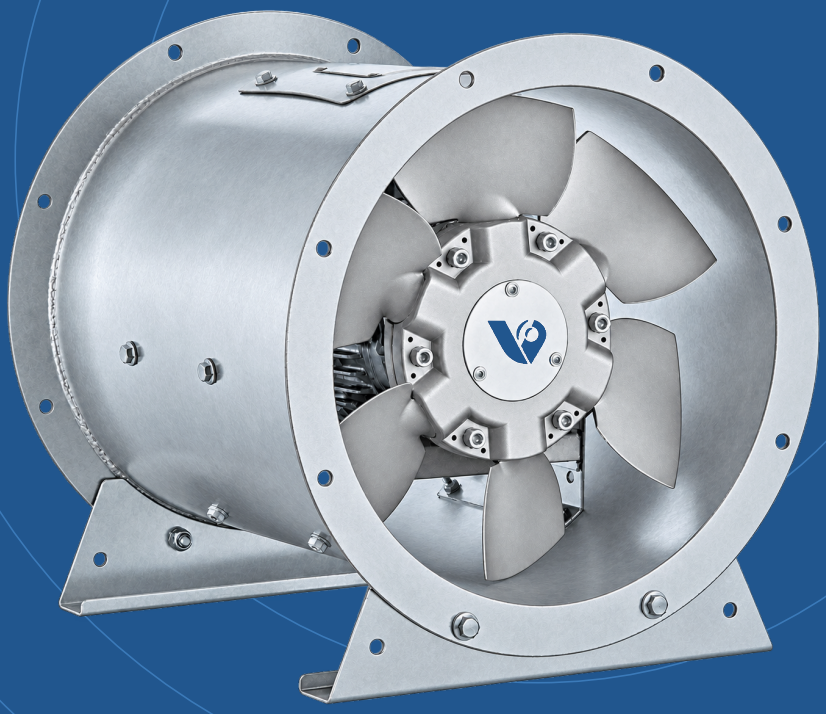
VLF-T SERIES

Tube axial flow fans

VLF-T

ADJUSTABLE-PITCH AIRFOIL BLADES

HOT-DIP GALVANIZED CASING



355-1250
Fan diameter / mm

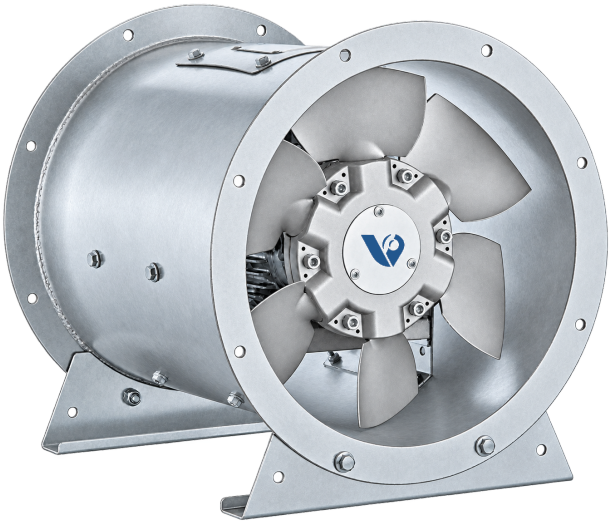
49
Main configurations

50 Hz
Three-phase AC

info@voltvent.com | voltvent.com

01 / PRODUCT OVERVIEW

Configure the airflow you need.



01 Adjustable-pitch impeller

Aluminium alloy airfoil blades provide configurable performance. The series range includes 3, 6 and 9 blades across eleven diameters.

02 Flanged galvanized casing

A hot-dip galvanized steel casing connects to ductwork through circular flanges. An access cover supports inspection and maintenance.

03 Duty-based motor selection

FSP selects a blade angle and motor for the required airflow and pressure. Single-speed and two-speed pole configurations are included.

SELECTION & PERFORMANCE

49 configurations. 605 angle curves.

Each configuration identifies fan diameter, blade count and motor poles. The performance section shows every listed blade-angle pressure curve for that configuration. Select the final blade angle and motor in FSP at the required duty; these family curves are not motor-specific operating approvals.

Selection parameter	Catalogue basis
Fan diameter / blade counts	355-1250 mm / 3, 6 and 9 blades
Electrical supply	400 V / 3 phase / 50 Hz
Pole configurations	2P, 4P, 6P, 2-4P and 4-8P
Motor insulation / protection	Class F / IP55 / IE2
Transported-air limit	+55 °C / listed variant records

Performance data. The approved product photo is shown with its background removed and illustrates a six-blade assembly.

02 / TECHNICAL DATA / 01

Compare the configurations.

400 V / 3 PHASE / 50 Hz

Configuration diameter/blades/poles	Angles deg.	Motor range / kW	Reference airflow envelope / m^3/h	Reserve %	Curve page
VLF-T 355/6/2P	10-28	0.18-2.2	1 000-6 860	10	06
VLF-T 400/6/2P	8-34	0.75-3	1 330-9 950	10	06
VLF-T 450/6/2P	8-28	1.1-4	2 400-13 500	10	06
VLF-T 500/6/2P	8-28	2.2-5.5	3 500-18 300	0.5	06
VLF-T 560/6/2P	8-22	4-7.5	4 000-24 000	6	07
VLF-T 630/6/2P	8-20	4-7.5	7 000-31 320	0	07
VLF-T 400/6/4P	8-34	0.37-0.37	665-4 975	10	07
VLF-T 450/6/4P	8-38	0.37-0.55	1 200-8 212	7	07
VLF-T 500/6/4P	8-36	0.55-1.1	1 750-11 800	10	08
VLF-T 560/6/4P	8-36	0.55-2.2	2 000-17 140	10	08
VLF-T 630/6/4P	8-38	0.75-4	3 500-25 200	10	08
VLF-T 710/3/4P	8-32	0.75-3	1 600-27 500	10	08
VLF-T 710/6/4P	8-32	1.1-4	1 800-31 200	1	09
VLF-T 800/6/4P	8-32	2.2-7.5	4 500-42 500	3	09
VLF-T 800/9/4P	8-30	2.2-11	7 500-43 000	10	09
VLF-T 900/6/4P	8-32	4-15	6 000-60 800	10	09
VLF-T 900/9/4P	8-32	4-18.5	11 000-63 300	10	10

Airflow envelope: minimum and maximum listed curve-domain endpoints across blade angles, rounded to whole m^3/h. This is not a duty point or a guaranteed continuous motor-supported operating range. Select the final angle and motor in FSP.

Motor range: product motor-power limits, not a fixed model rating. FSP chooses a listed motor using duty absorbed power and the model-specific reserve. For two-speed entries, the supplied curves describe the high-speed condition only; low-speed curves are not inferred.

All variants: Class F, IP55, IE2; motor working range -20 to +55 °C and maximum transported air +55 °C. Selected motor nameplate current and unit weight are not supplied.

02 / TECHNICAL DATA / 02

Compare the configurations.

400 V / 3 PHASE / 50 Hz

Configuration diameter/blades/poles	Angles deg.	Motor range / kW	Reference airflow envelope / m^3/h	Reserve %	Curve page
VLF-T 1000/6/4P	8-32	5.5-22	14 000-82 600	3	10
VLF-T 1000/9/4P	8-32	7.5-30	15 000-86 000	10	10
VLF-T 1250/6/4P	8-32	15-45	25 000-155 000	1	10
VLF-T 1250/9/4P	8-24	18.5-45	21 300-138 000	1	11
VLF-T 500/6/6P	8-36	0.37-0.37	1 167-7 867	10	11
VLF-T 560/6/6P	8-36	0.55-0.55	1 333-11 427	7	11
VLF-T 630/6/6P	8-38	0.75-1.1	2 333-16 800	10	11
VLF-T 710/3/6P	8-32	0.75-1.1	1 067-18 333	10	12
VLF-T 710/6/6P	8-32	0.75-1.5	1 200-20 800	10	12
VLF-T 800/6/6P	8-32	1.5-2.2	3 000-28 333	3	12
VLF-T 800/9/6P	8-30	2.2-3	5 000-28 667	10	12
VLF-T 900/6/6P	8-32	2.2-4	4 000-40 533	5	13
VLF-T 900/9/6P	8-32	2.2-5.5	7 333-42 200	10	13
VLF-T 1000/6/6P	8-32	2.2-7.5	9 333-55 067	10	13
VLF-T 1000/9/6P	8-32	2.2-11	10 000-57 333	10	13
VLF-T 1250/6/6P	8-32	5.5-15	16 667-103 333	10	14
VLF-T 1250/9/6P	8-24	7.5-15	14 200-92 000	10	14

Airflow envelope: minimum and maximum listed curve-domain endpoints across blade angles, rounded to whole m^3/h. This is not a duty point or a guaranteed continuous motor-supported operating range. Select the final angle and motor in FSP.

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All variants: Class F, IP55, IE2; motor working range -20 to +55 °C and maximum transported air +55 °C. Selected motor nameplate current and unit weight are not supplied.

02 / TECHNICAL DATA / 03

Compare the configurations.

400 V / 3 PHASE / 50 Hz

Configuration diameter/blades/poles	Angles deg.	Motor range / kW	Reference airflow envelope / m^3/h	Reserve %	Curve page
VLF-T 400/6/2-4P	8-34	0.75-3	1 330-9 950	10	14
VLF-T 450/6/2-4P	8-28	1.1-4	2 400-13 500	10	14
VLF-T 500/6/2-4P	8-28	2.2-5.5	3 500-18 300	0.5	15
VLF-T 560/6/2-4P	8-22	4-7.5	4 000-24 000	6	15
VLF-T 630/6/2-4P	8-20	4-7.5	7 000-31 320	0	15
VLF-T 710/3/4-8P	8-32	0.75-3	1 600-27 500	10	15
VLF-T 710/6/4-8P	8-32	1.1-4	1 800-31 200	1	16
VLF-T 800/6/4-8P	8-32	2.2-7.5	4 500-42 500	3	16
VLF-T 800/9/4-8P	8-30	2.2-11	7 500-43 000	10	16
VLF-T 900/6/4-8P	8-32	4-15	6 000-60 800	10	16
VLF-T 900/9/4-8P	8-32	4-18.5	11 000-63 300	10	17
VLF-T 1000/6/4-8P	8-32	5.5-22	14 000-82 600	3	17
VLF-T 1000/9/4-8P	8-32	7.5-30	15 000-86 000	10	17
VLF-T 1250/6/4-8P	8-32	15-45	25 000-155 000	1	17
VLF-T 1250/9/4-8P	8-24	18.5-45	21 300-138 000	1	18

Airflow envelope: minimum and maximum listed curve-domain endpoints across blade angles, rounded to whole m^3/h. This is not a duty point or a guaranteed continuous motor-supported operating range. Select the final angle and motor in FSP.

Motor range: product motor-power limits, not a fixed model rating. FSP chooses a listed motor using duty absorbed power and the model-specific reserve. For two-speed entries, the supplied curves describe the high-speed condition only; low-speed curves are not inferred.

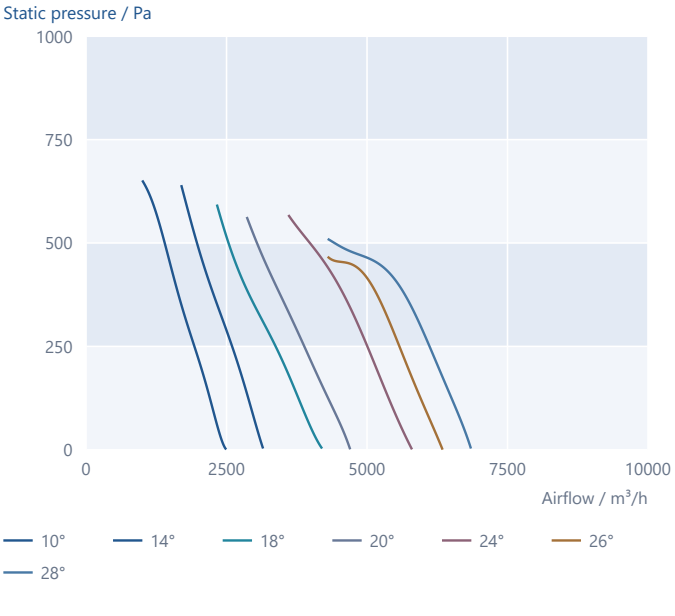
All variants: Class F, IP55, IE2; motor working range -20 to +55 °C and maximum transported air +55 °C. Selected motor nameplate current and unit weight are not supplied.

03 / AIR PERFORMANCE / 01

Fan Performance Curves

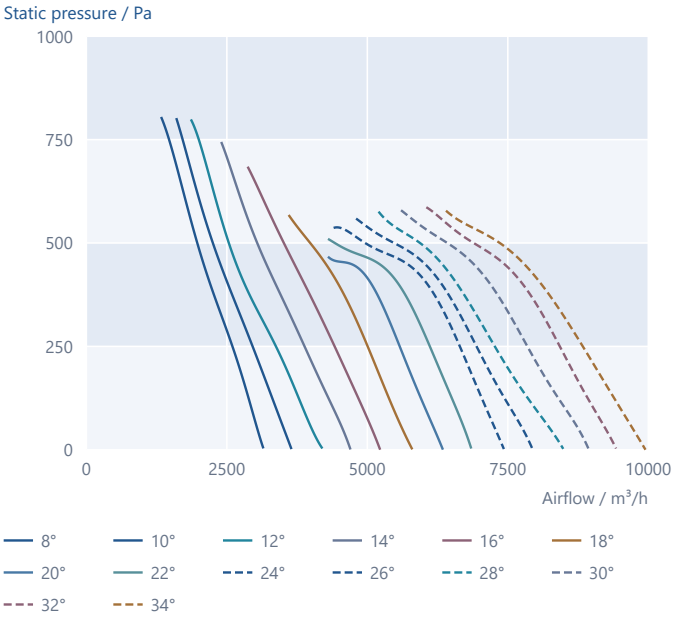
VLF-T 355/6/2P

7 blade angles / 400 V / 50 Hz



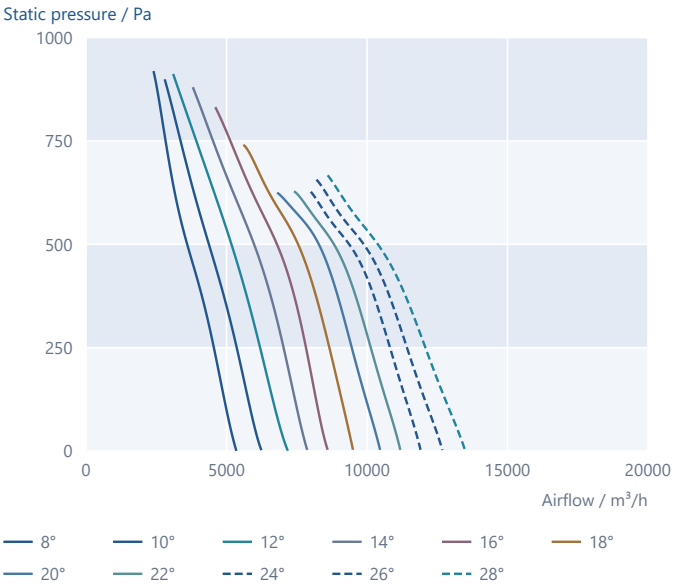
VLF-T 400/6/2P

14 blade angles / 400 V / 50 Hz



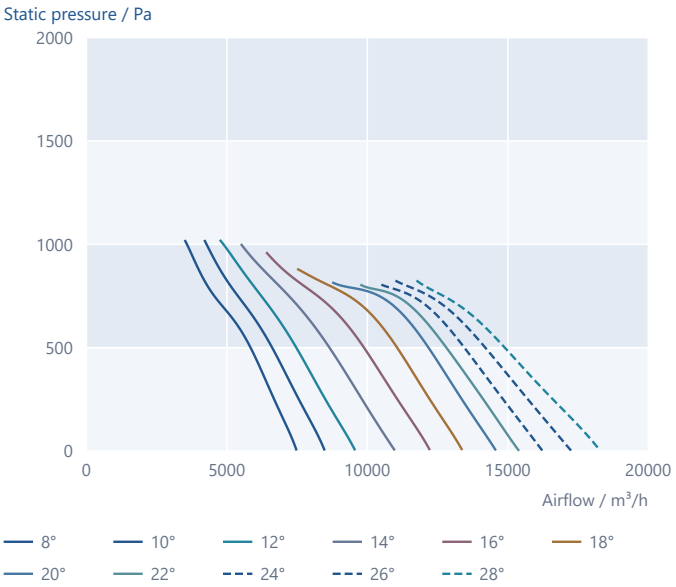
VLF-T 450/6/2P

11 blade angles / 400 V / 50 Hz



VLF-T 500/6/2P

11 blade angles / 400 V / 50 Hz



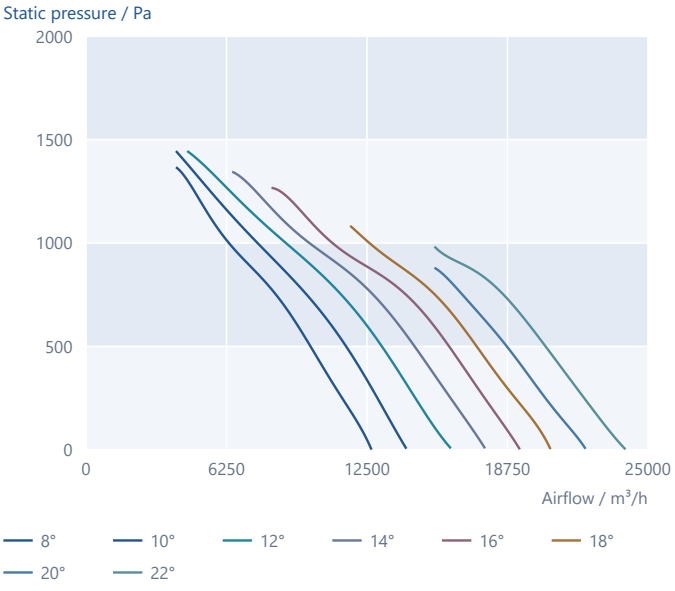
Each chart is one diameter/blade-count/pole configuration. Legend values are blade angles. Curves stay within domains; negative-pressure portions are omitted. Select duty angle and motor in FSP. Two-speed charts use supplied high-speed curves only.

03 / AIR PERFORMANCE / 02

Fan Performance Curves

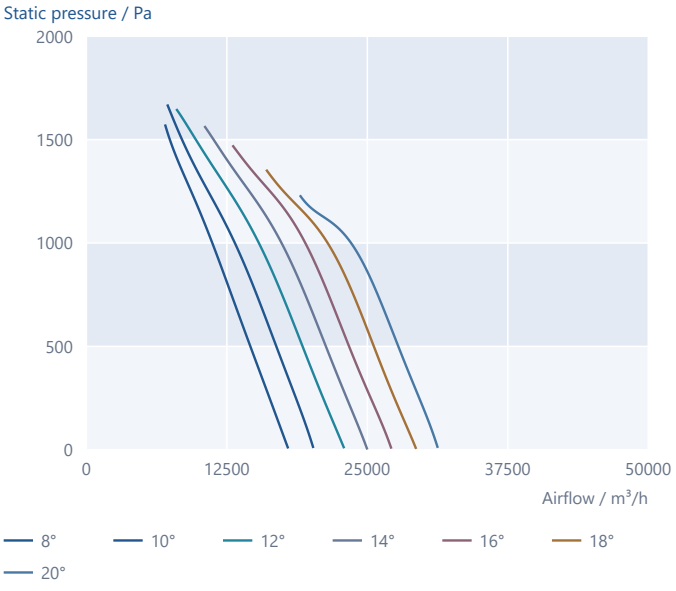
VLF-T 560/6/2P

8 blade angles / 400 V / 50 Hz



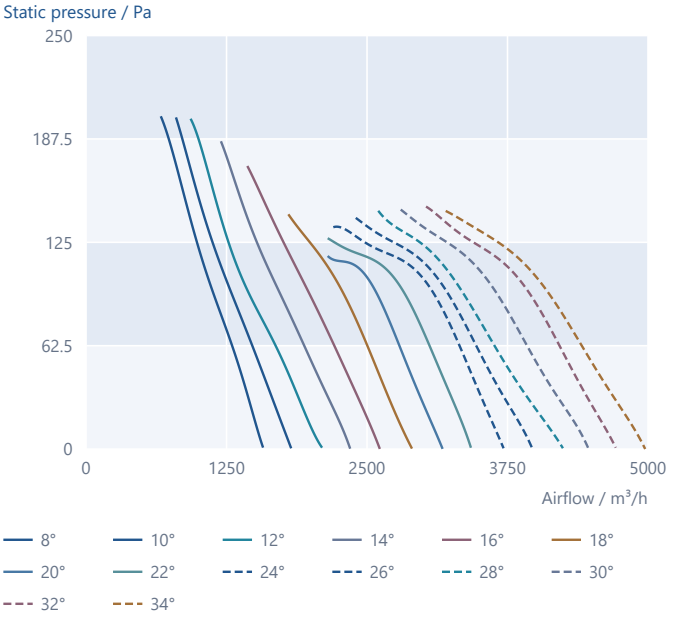
VLF-T 630/6/2P

7 blade angles / 400 V / 50 Hz



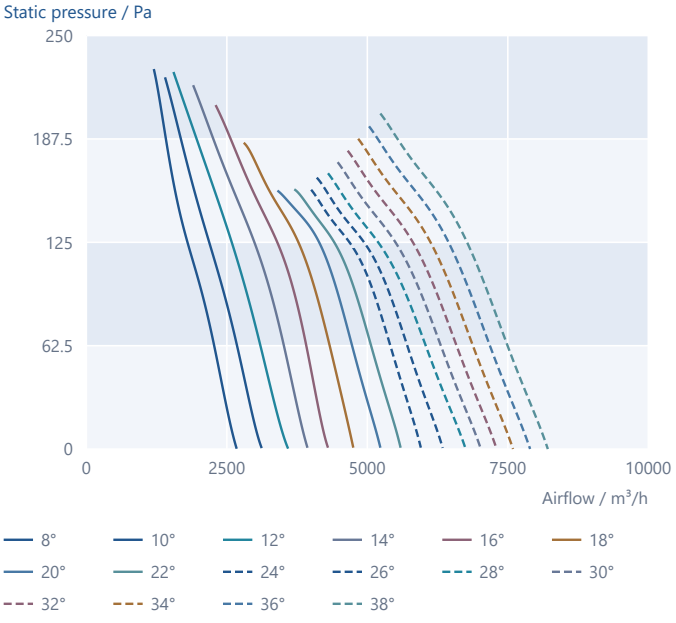
VLF-T 400/6/4P

14 blade angles / 400 V / 50 Hz



VLF-T 450/6/4P

16 blade angles / 400 V / 50 Hz



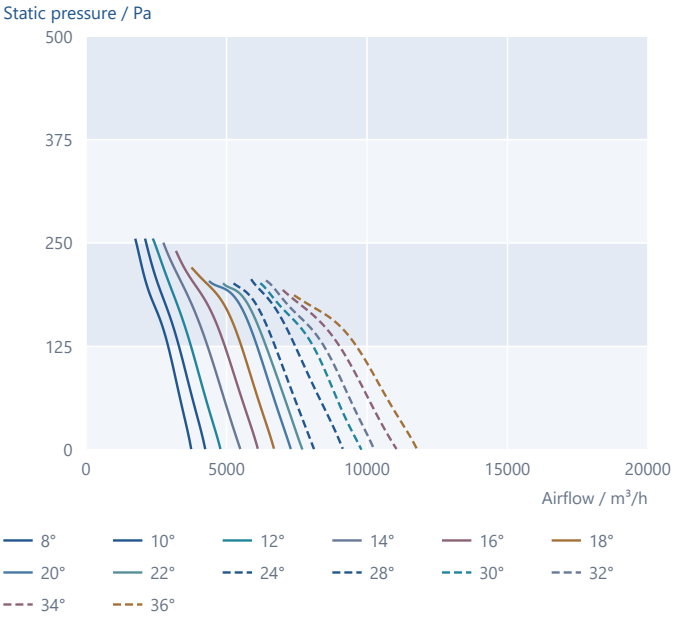
Each chart is one diameter/blade-count/pole configuration. Legend values are blade angles. Curves stay within domains; negative-pressure portions are omitted. Select duty angle and motor in FSP. Two-speed charts use supplied high-speed curves only.

03 / AIR PERFORMANCE / 03

Fan Performance Curves

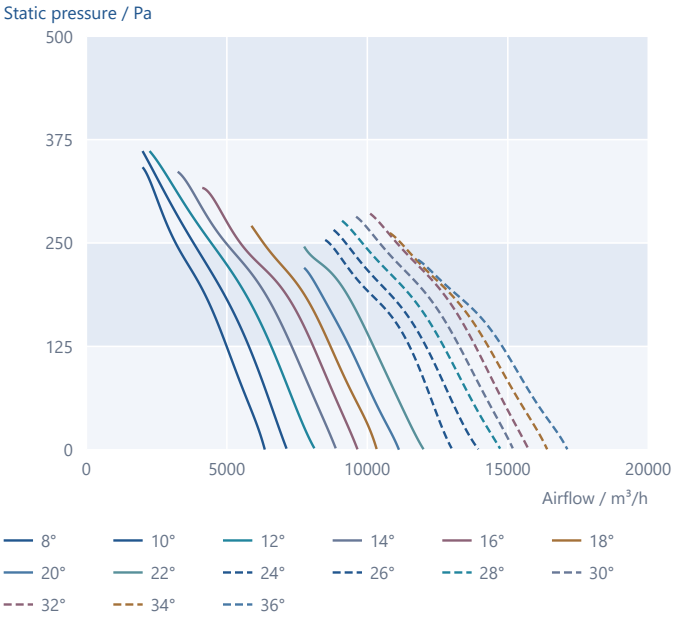
VLF-T 500/6/4P

14 blade angles / 400 V / 50 Hz



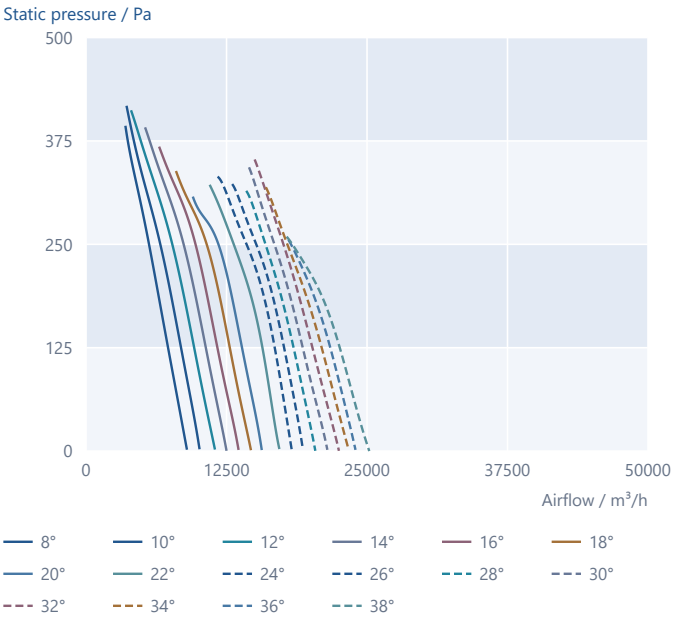
VLF-T 560/6/4P

15 blade angles / 400 V / 50 Hz



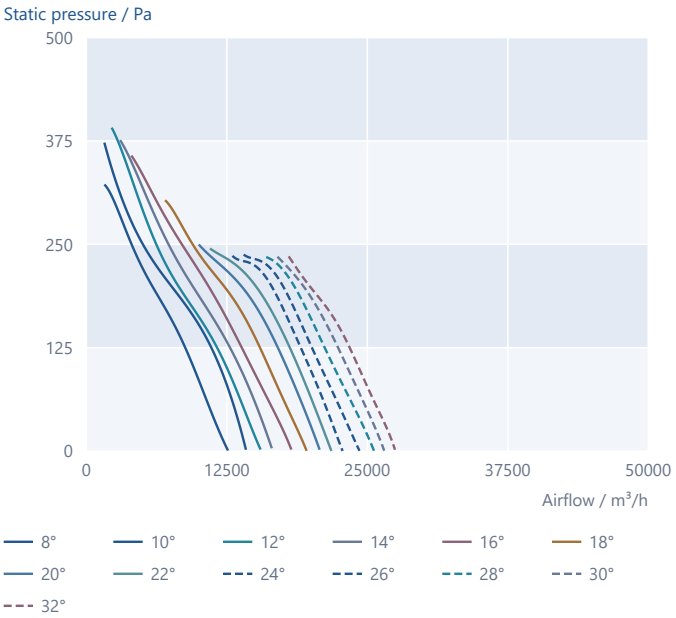
VLF-T 630/6/4P

16 blade angles / 400 V / 50 Hz



VLF-T 710/3/4P

13 blade angles / 400 V / 50 Hz



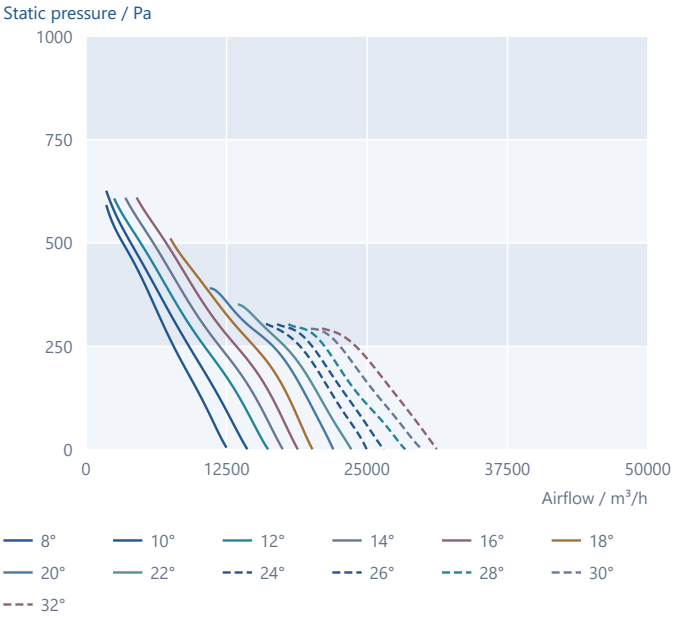
Each chart is one diameter/blade-count/pole configuration. Legend values are blade angles. Curves stay within domains; negative-pressure portions are omitted. Select duty angle and motor in FSP. Two-speed charts use supplied high-speed curves only.

03 / AIR PERFORMANCE / 04

Fan Performance Curves

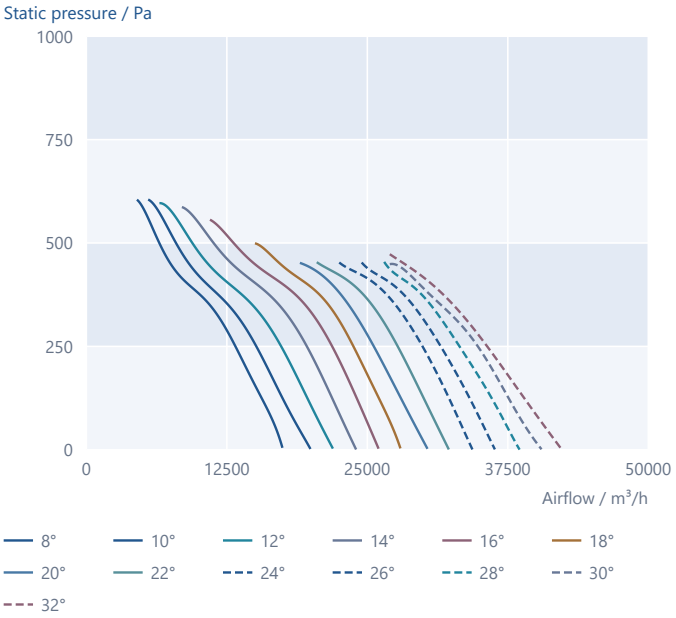
VLF-T 710/6/4P

13 blade angles / 400 V / 50 Hz



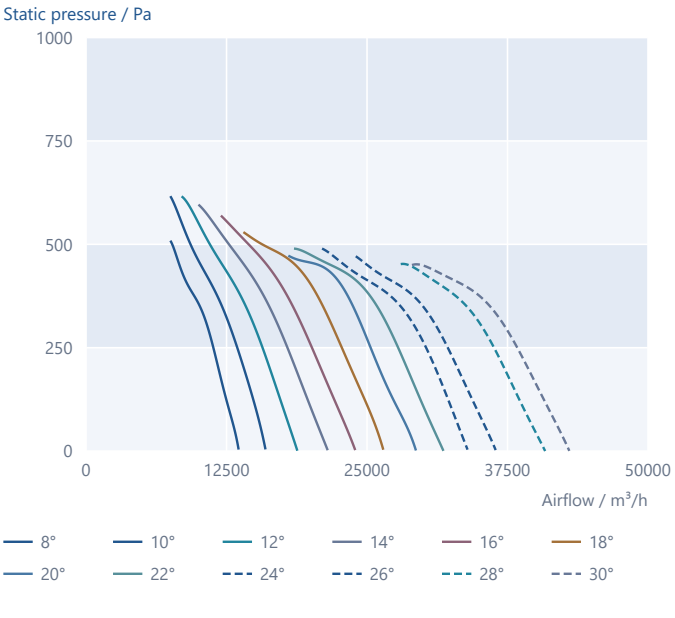
VLF-T 800/6/4P

13 blade angles / 400 V / 50 Hz



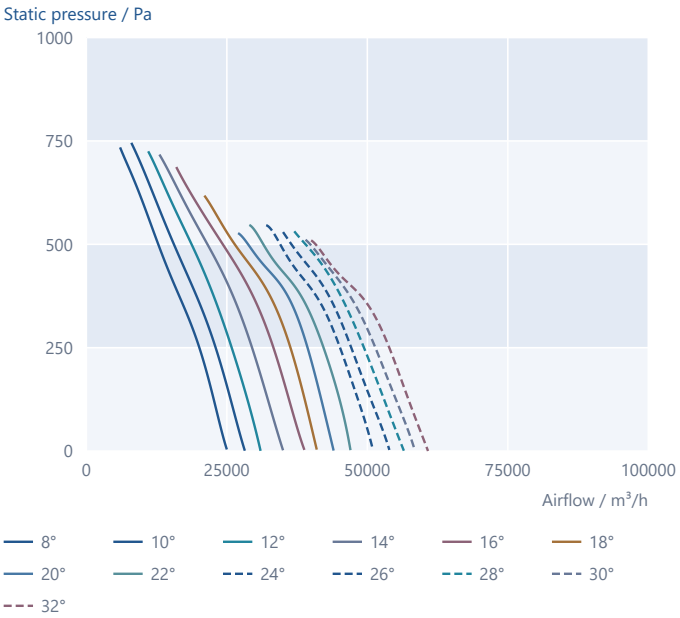
VLF-T 800/9/4P

12 blade angles / 400 V / 50 Hz



VLF-T 900/6/4P

13 blade angles / 400 V / 50 Hz



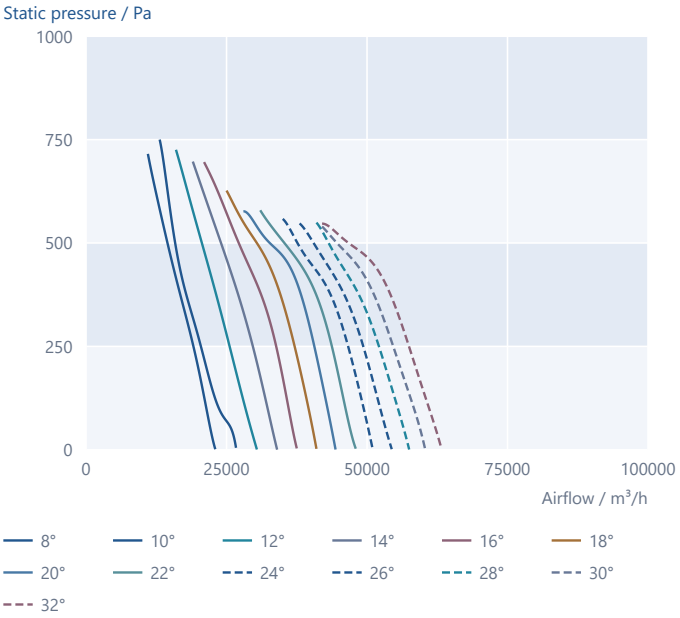
Each chart is one diameter/blade-count/pole configuration. Legend values are blade angles. Curves stay within domains; negative-pressure portions are omitted. Select duty angle and motor in FSP. Two-speed charts use supplied high-speed curves only.

03 / AIR PERFORMANCE / 05

Fan Performance Curves

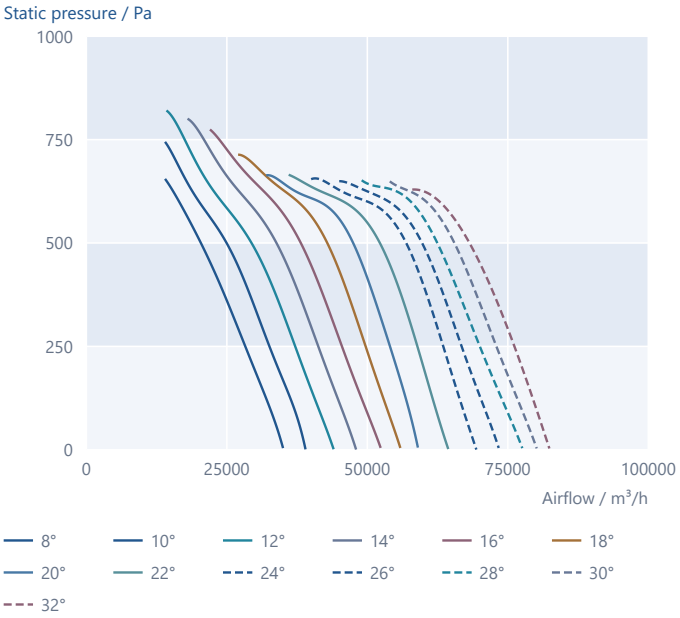
VLF-T 900/9/4P

13 blade angles / 400 V / 50 Hz



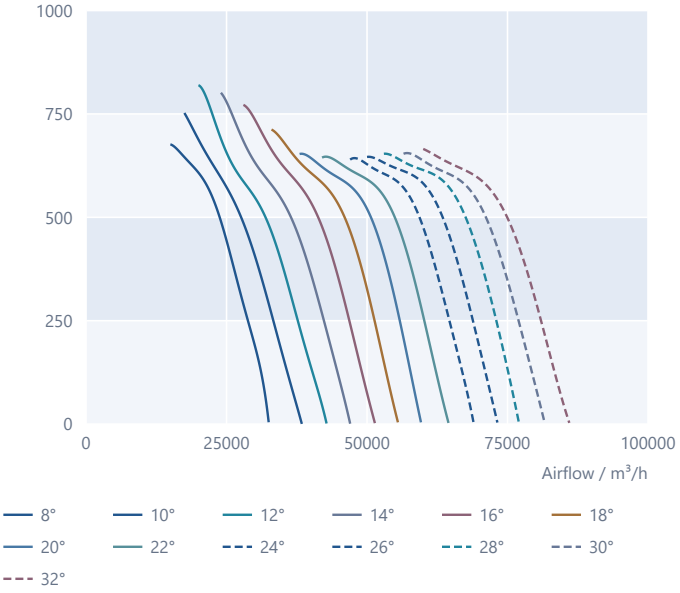
VLF-T 1000/6/4P

13 blade angles / 400 V / 50 Hz



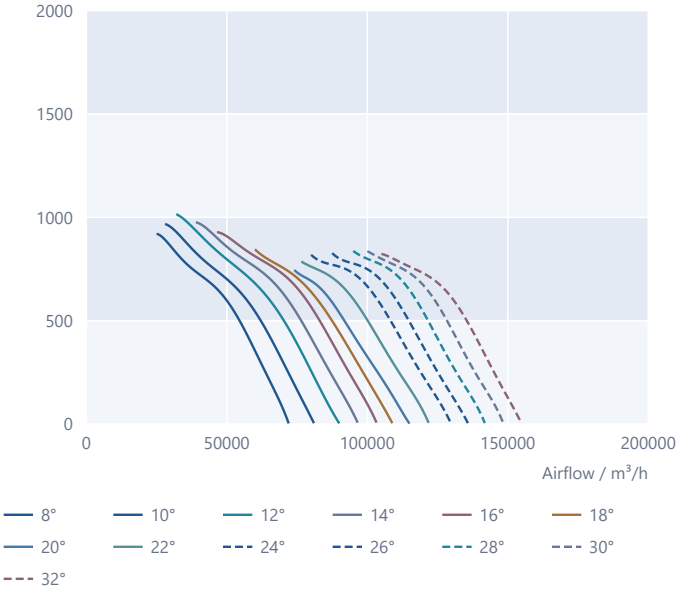
VLF-T 1000/9/4P

13 blade angles / 400 V / 50 Hz



VLF-T 1250/6/4P

13 blade angles / 400 V / 50 Hz



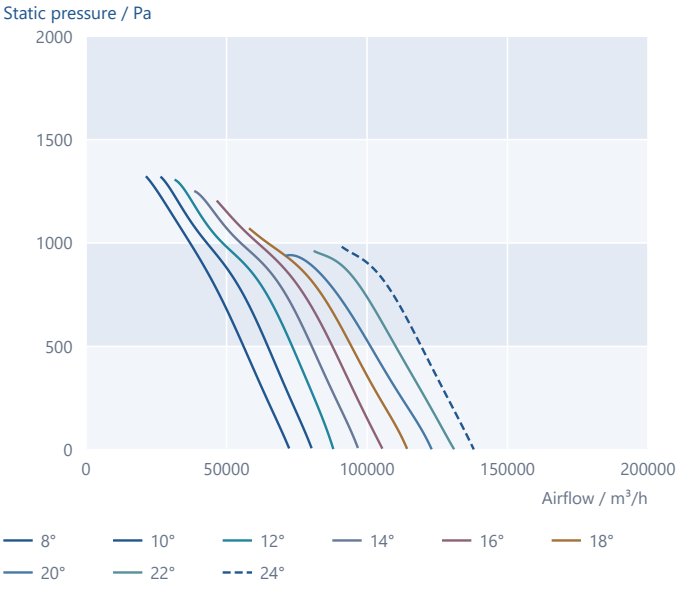
Each chart is one diameter/blade-count/pole configuration. Legend values are blade angles. Curves stay within domains; negative-pressure portions are omitted. Select duty angle and motor in FSP. Two-speed charts use supplied high-speed curves only.

03 / AIR PERFORMANCE / 06

Fan Performance Curves

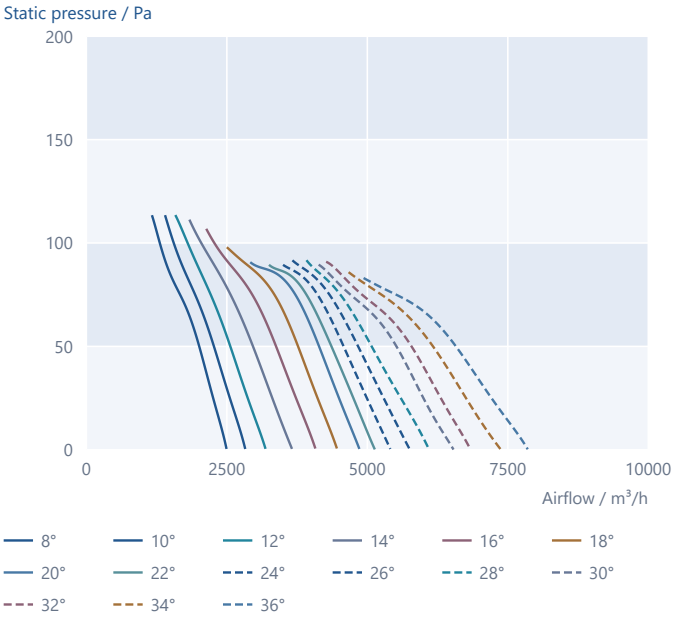
VLF-T 1250/9/4P

9 blade angles / 400 V / 50 Hz



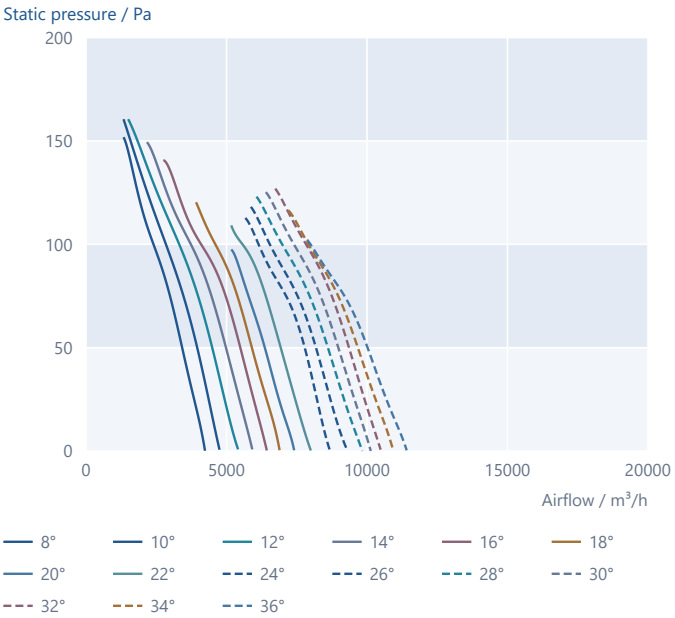
VLF-T 500/6/6P

15 blade angles / 400 V / 50 Hz



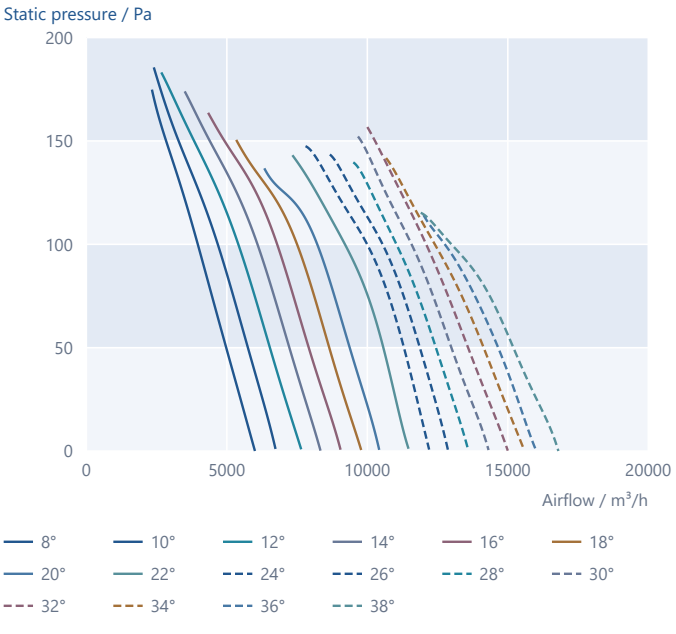
VLF-T 560/6/6P

15 blade angles / 400 V / 50 Hz



VLF-T 630/6/6P

16 blade angles / 400 V / 50 Hz



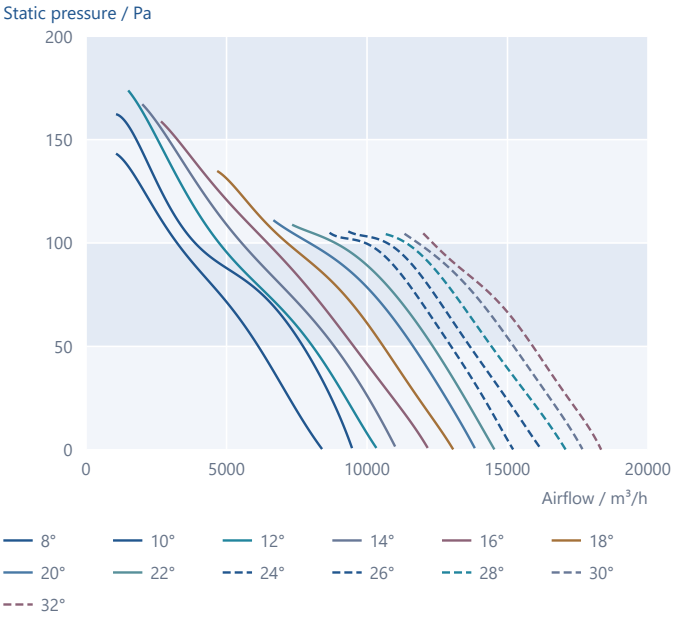
Each chart is one diameter/blade-count/pole configuration. Legend values are blade angles. Curves stay within domains; negative-pressure portions are omitted. Select duty angle and motor in FSP. Two-speed charts use supplied high-speed curves only.

03 / AIR PERFORMANCE / 07

Fan Performance Curves

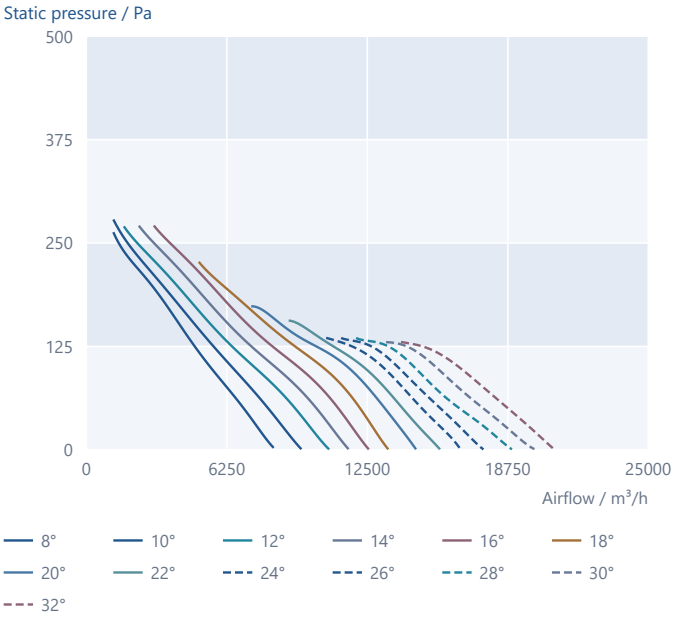
VLF-T 710/3/6P

13 blade angles / 400 V / 50 Hz



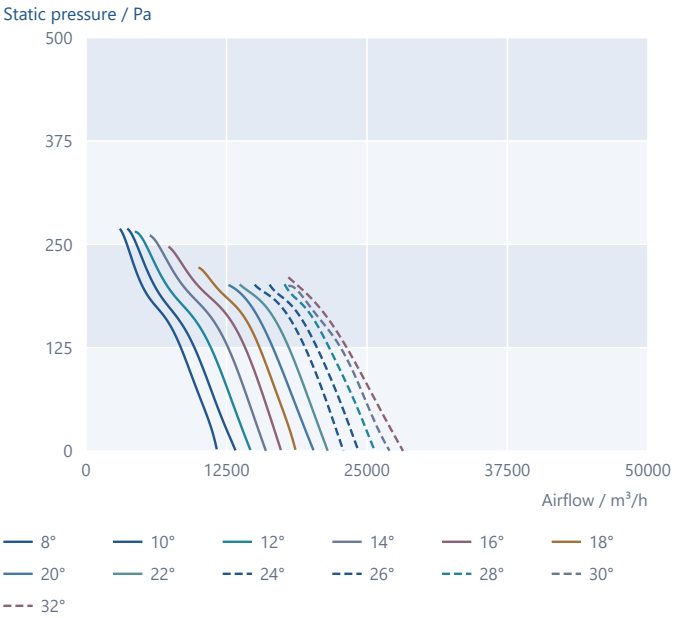
VLF-T 710/6/6P

13 blade angles / 400 V / 50 Hz



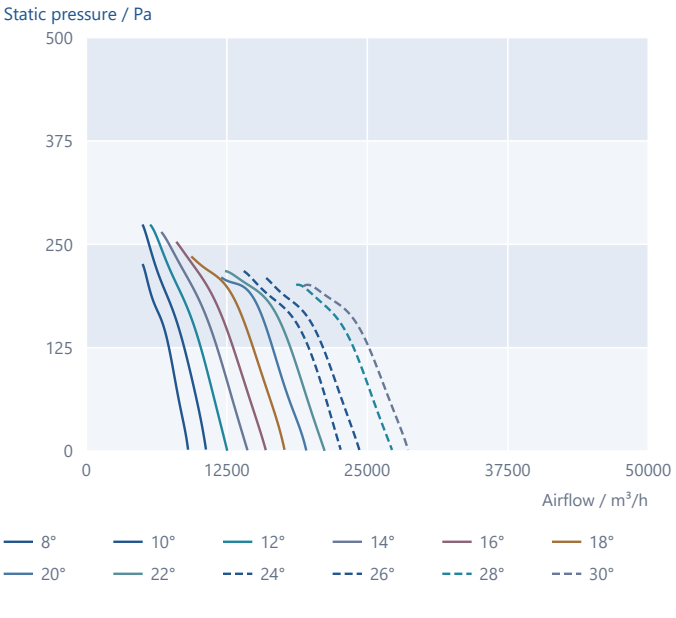
VLF-T 800/6/6P

13 blade angles / 400 V / 50 Hz



VLF-T 800/9/6P

12 blade angles / 400 V / 50 Hz



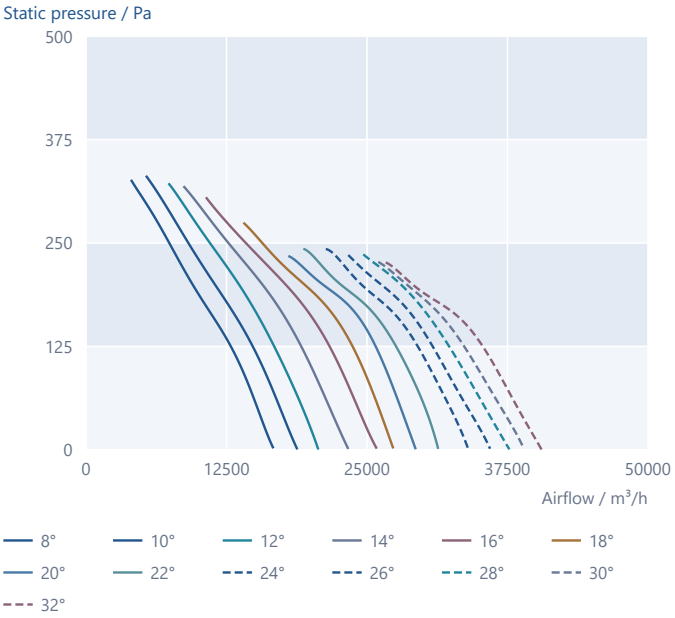
Each chart is one diameter/blade-count/pole configuration. Legend values are blade angles. Curves stay within domains; negative-pressure portions are omitted. Select duty angle and motor in FSP. Two-speed charts use supplied high-speed curves only.

03 / AIR PERFORMANCE / 08

Fan Performance Curves

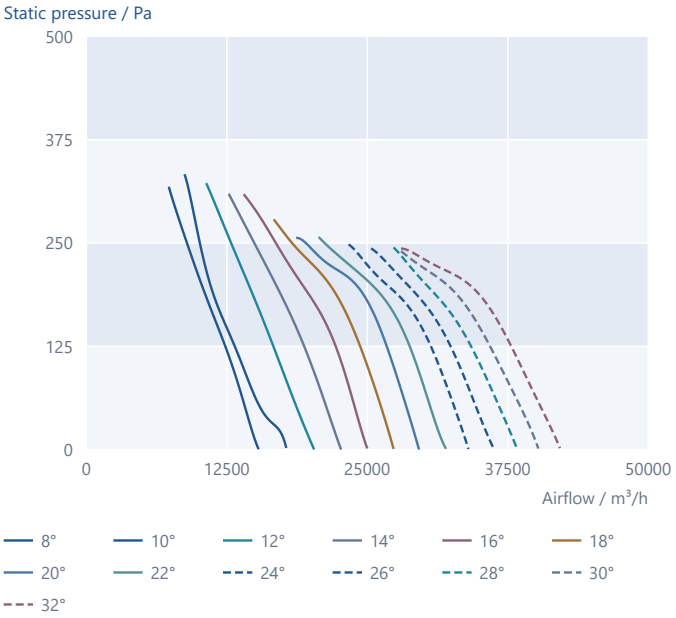
VLF-T 900/6/6P

13 blade angles / 400 V / 50 Hz



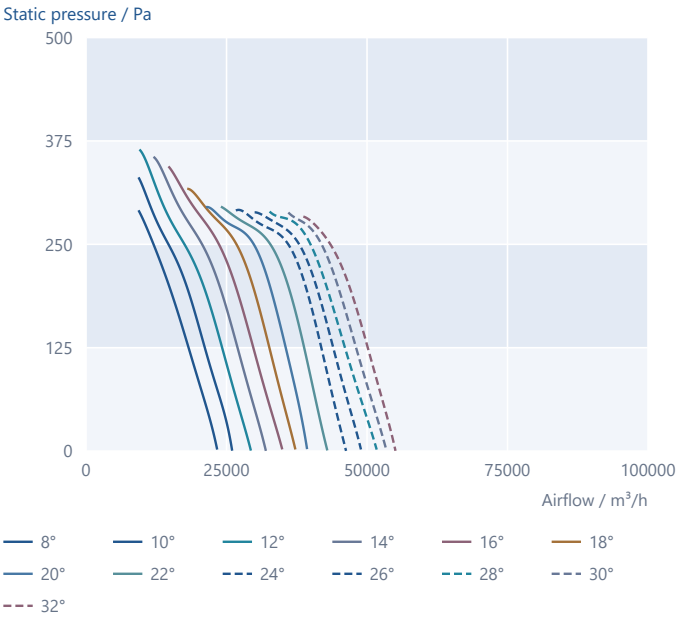
VLF-T 900/9/6P

13 blade angles / 400 V / 50 Hz



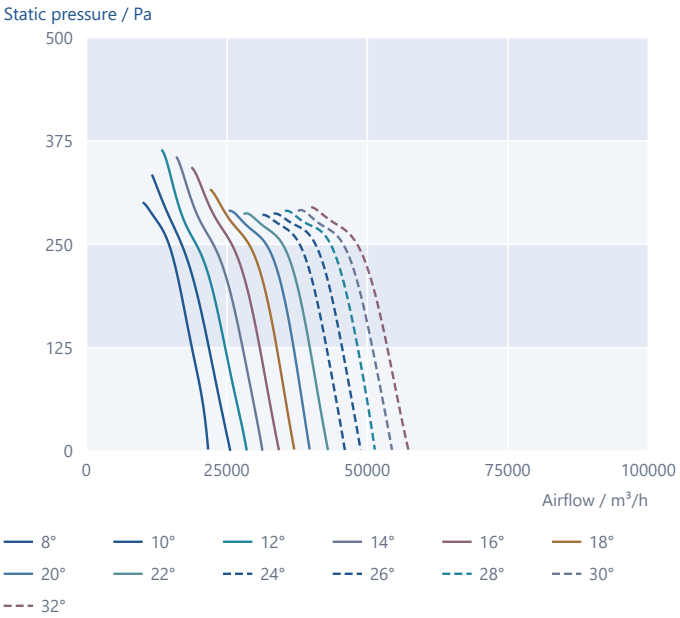
VLF-T 1000/6/6P

13 blade angles / 400 V / 50 Hz



VLF-T 1000/9/6P

13 blade angles / 400 V / 50 Hz



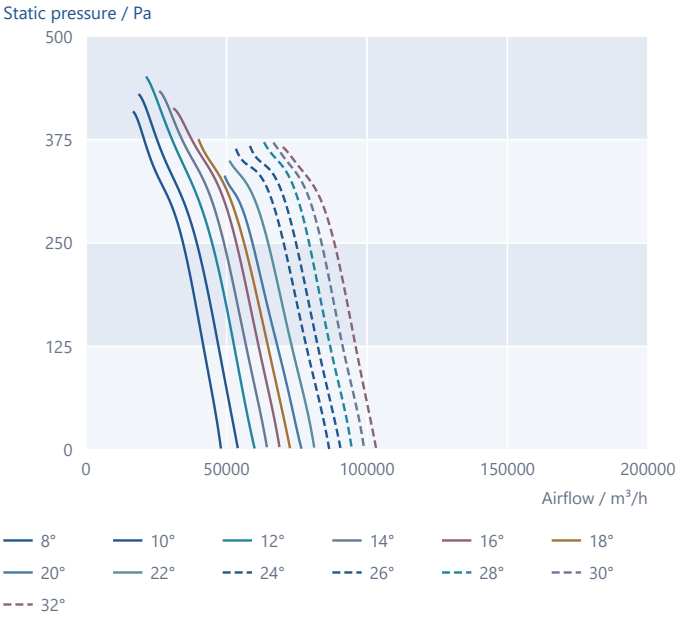
Each chart is one diameter/blade-count/pole configuration. Legend values are blade angles. Curves stay within domains; negative-pressure portions are omitted. Select duty angle and motor in FSP. Two-speed charts use supplied high-speed curves only.

03 / AIR PERFORMANCE / 09

Fan Performance Curves

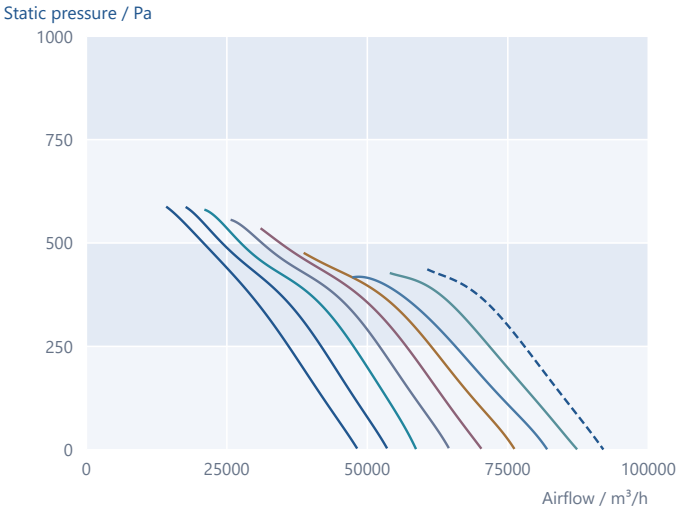
VLF-T 1250/6/6P

13 blade angles / 400 V / 50 Hz



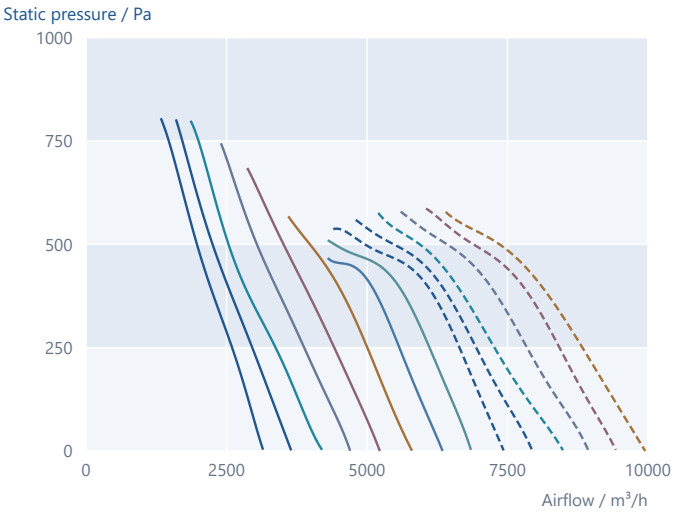
VLF-T 1250/9/6P

9 blade angles / 400 V / 50 Hz



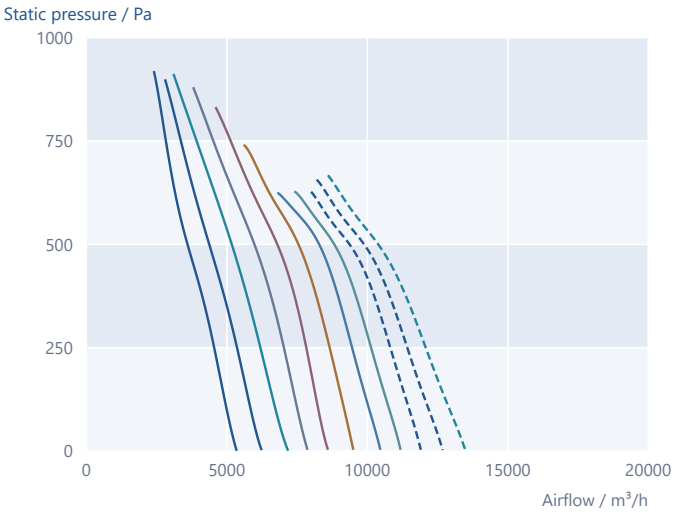
VLF-T 400/6/2-4P

14 blade angles / 400 V / 50 Hz



VLF-T 450/6/2-4P

11 blade angles / 400 V / 50 Hz



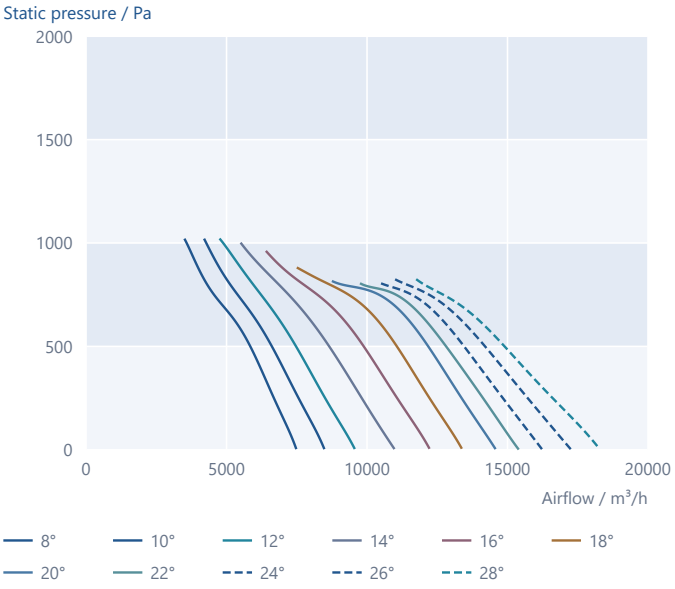
Each chart is one diameter/blade-count/pole configuration. Legend values are blade angles. Curves stay within domains; negative-pressure portions are omitted. Select duty angle and motor in FSP. Two-speed charts use supplied high-speed curves only.

03 / AIR PERFORMANCE / 10

Fan Performance Curves

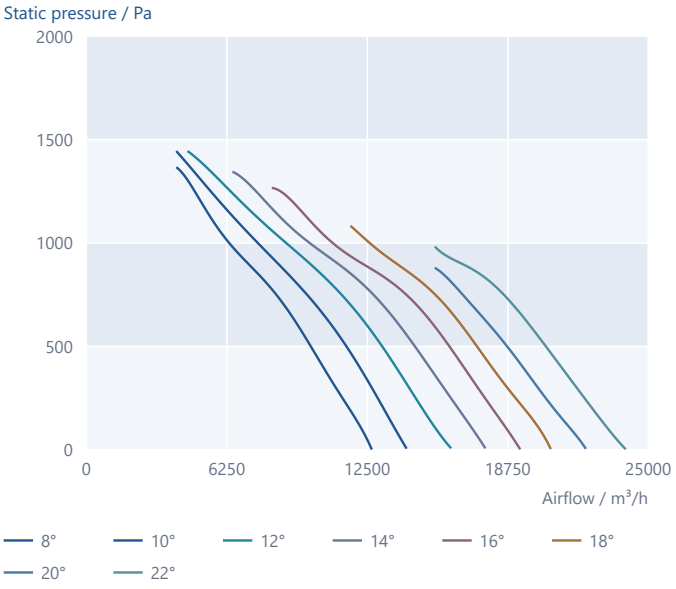
VLF-T 500/6/2-4P

11 blade angles / 400 V / 50 Hz



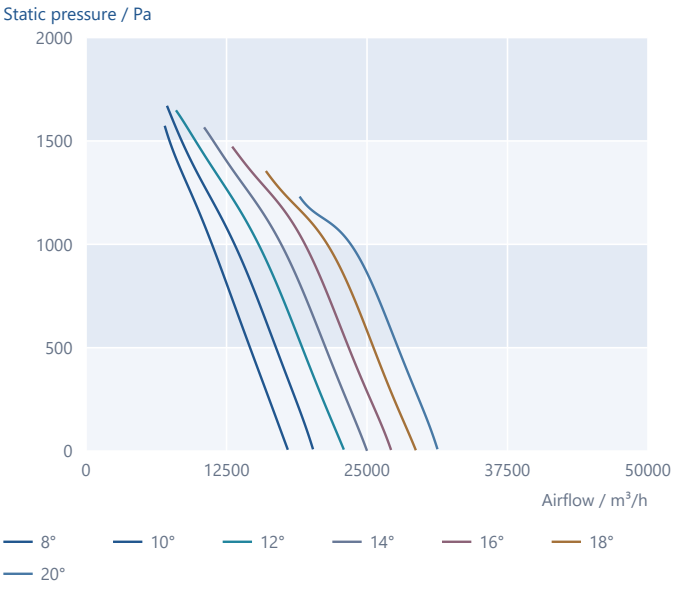
VLF-T 560/6/2-4P

8 blade angles / 400 V / 50 Hz



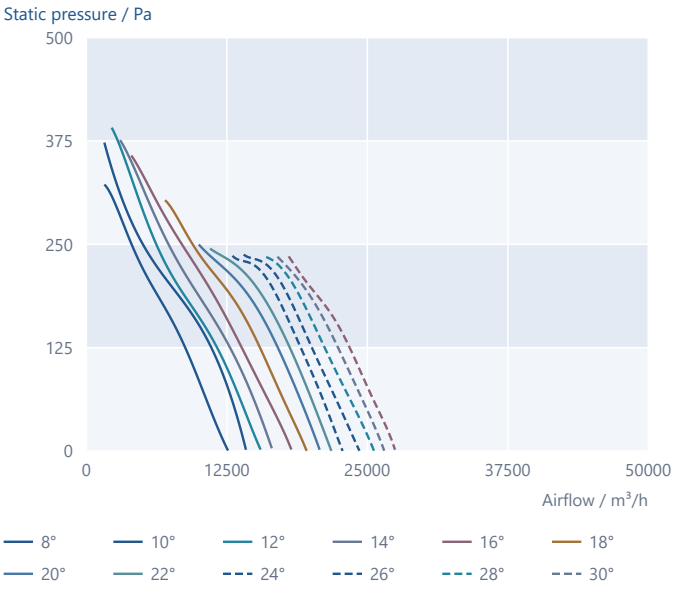
VLF-T 630/6/2-4P

7 blade angles / 400 V / 50 Hz



VLF-T 710/3/4-8P

13 blade angles / 400 V / 50 Hz



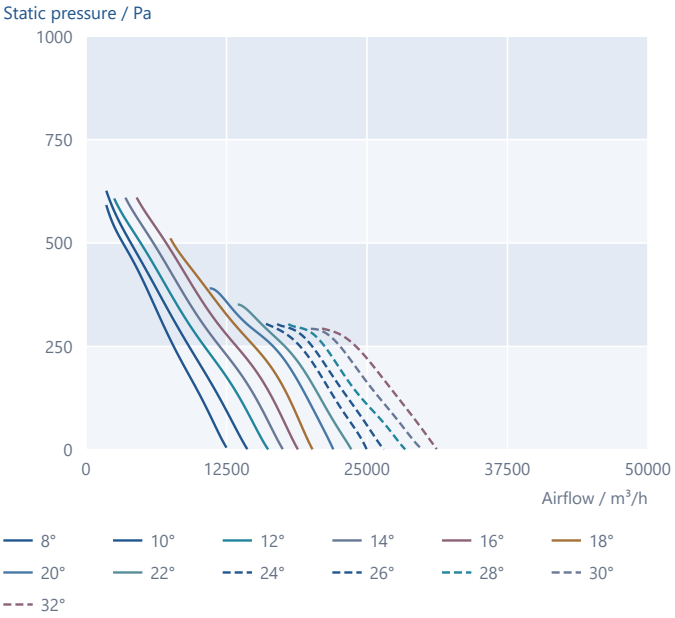
Each chart is one diameter/blade-count/pole configuration. Legend values are blade angles. Curves stay within domains; negative-pressure portions are omitted. Select duty angle and motor in FSP. Two-speed charts use supplied high-speed curves only.

03 / AIR PERFORMANCE / 11

Fan Performance Curves

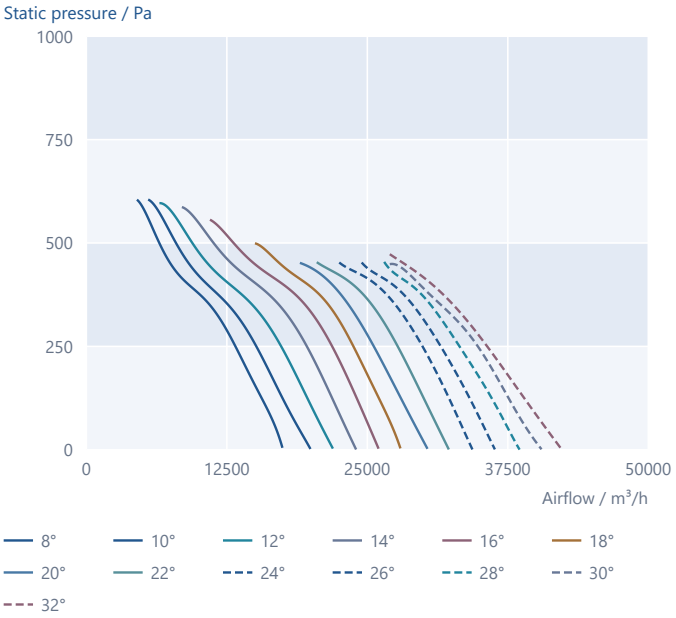
VLF-T 710/6/4-8P

13 blade angles / 400 V / 50 Hz



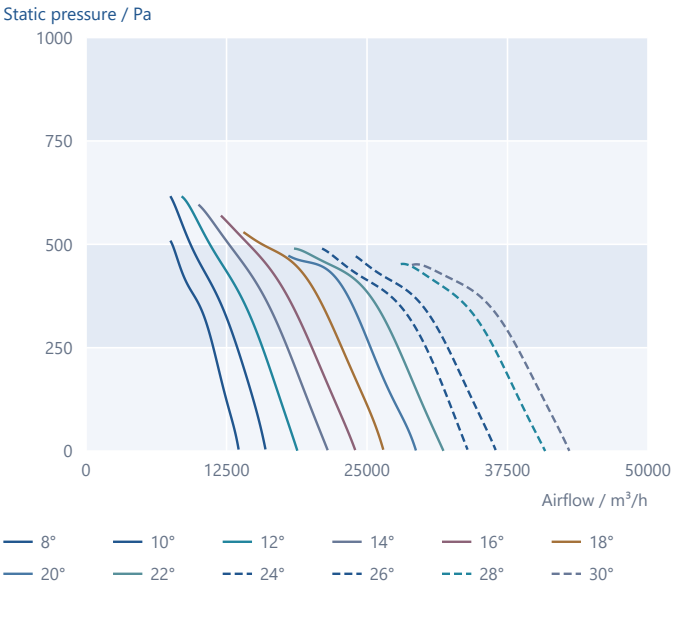
VLF-T 800/6/4-8P

13 blade angles / 400 V / 50 Hz



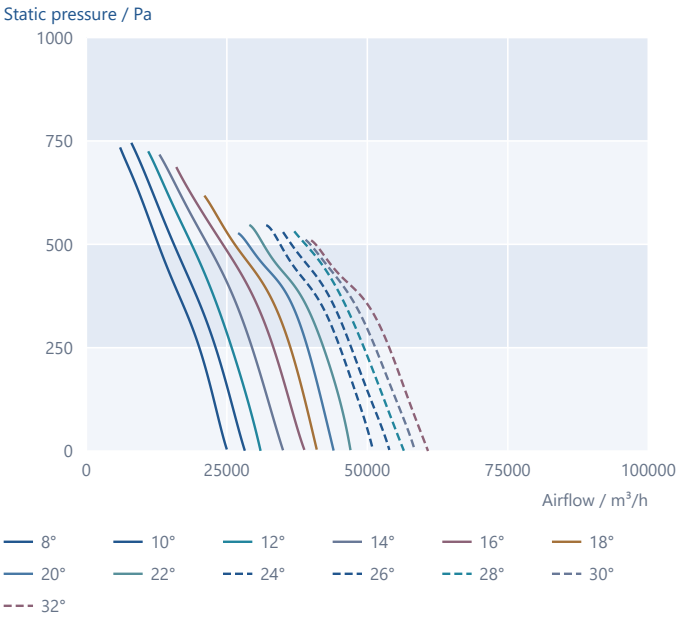
VLF-T 800/9/4-8P

12 blade angles / 400 V / 50 Hz



VLF-T 900/6/4-8P

13 blade angles / 400 V / 50 Hz



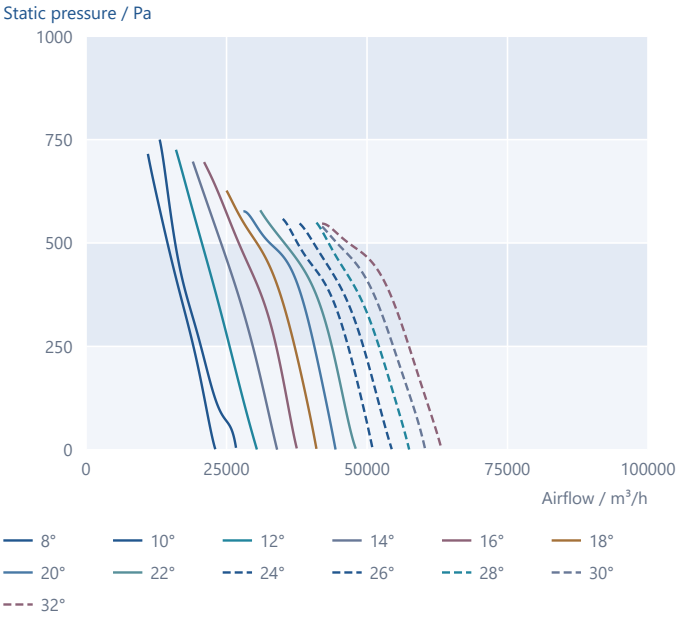
Each chart is one diameter/blade-count/pole configuration. Legend values are blade angles. Curves stay within domains; negative-pressure portions are omitted. Select duty angle and motor in FSP. Two-speed charts use supplied high-speed curves only.

03 / AIR PERFORMANCE / 12

Fan Performance Curves

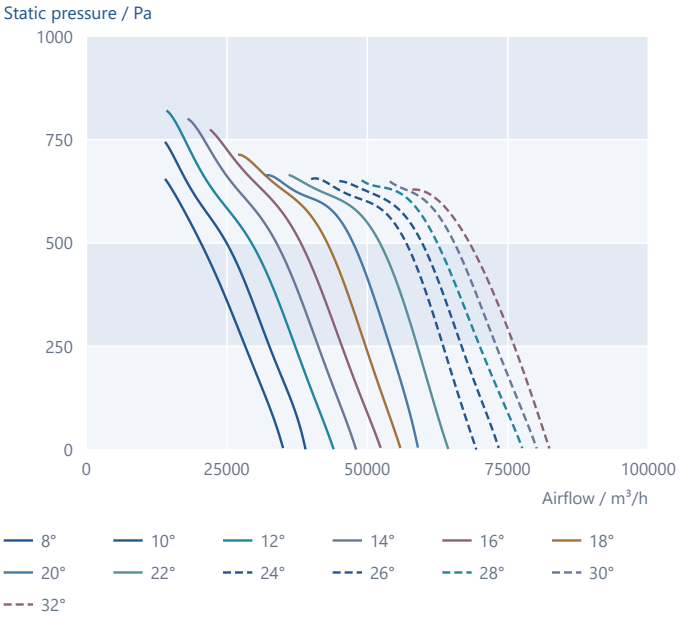
VLF-T 900/9/4-8P

13 blade angles / 400 V / 50 Hz



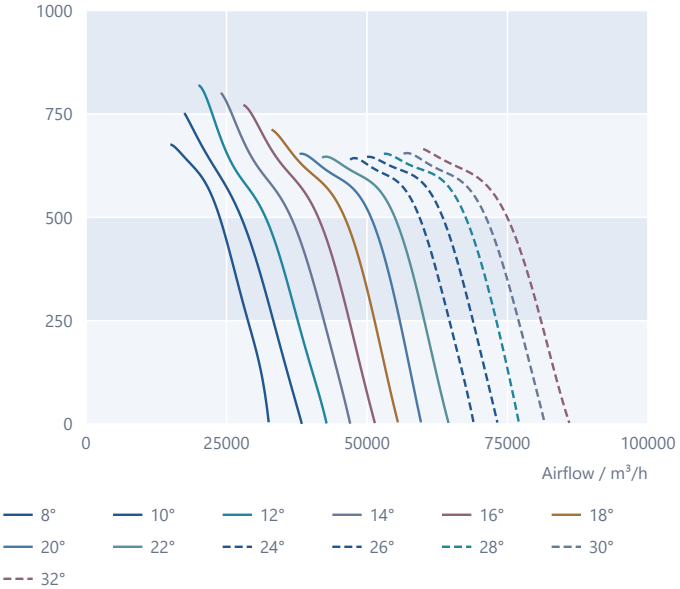
VLF-T 1000/6/4-8P

13 blade angles / 400 V / 50 Hz



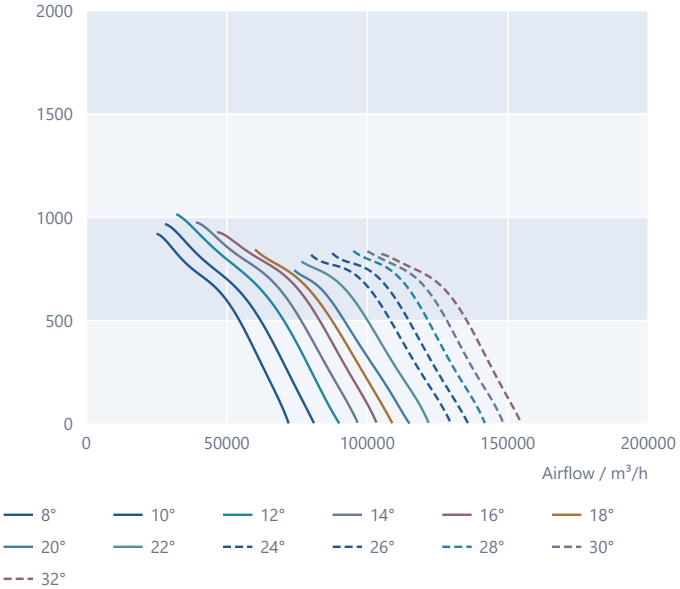
VLF-T 1000/9/4-8P

13 blade angles / 400 V / 50 Hz



VLF-T 1250/6/4-8P

13 blade angles / 400 V / 50 Hz



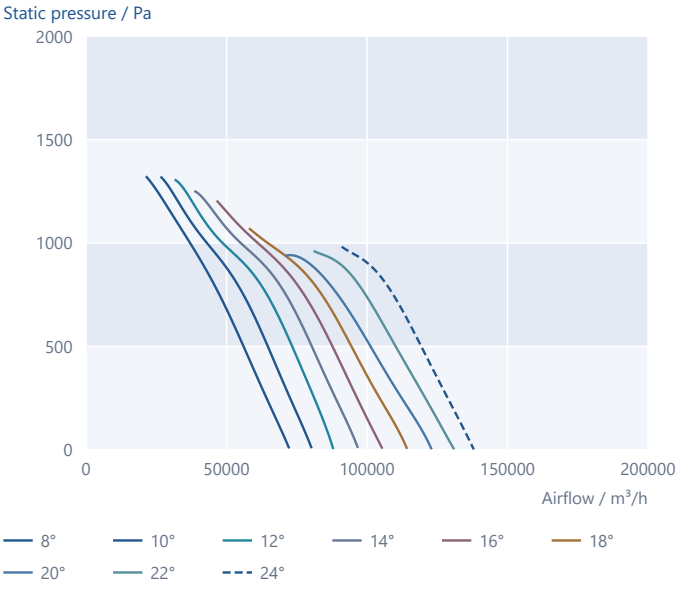
Each chart is one diameter/blade-count/pole configuration. Legend values are blade angles. Curves stay within domains; negative-pressure portions are omitted. Select duty angle and motor in FSP. Two-speed charts use supplied high-speed curves only.

03 / AIR PERFORMANCE / 13

Fan Performance Curves

VLF-T 1250/9/4-8P

9 blade angles / 400 V / 50 Hz



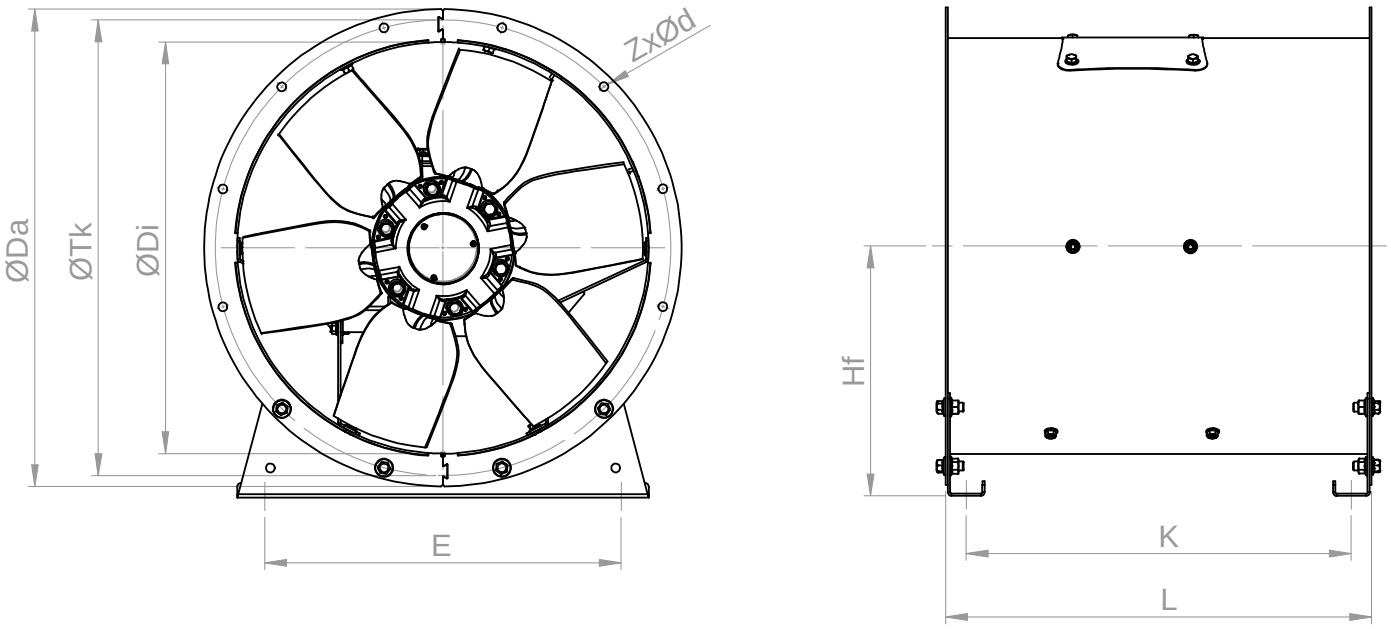
Each chart is one diameter/blade-count/pole configuration. Legend values are blade angles. Curves stay within domains; negative-pressure portions are omitted. Select duty angle and motor in FSP. Two-speed charts use supplied high-speed curves only.

04 / DIMENSIONAL DATA

Plan the duct connections.

SERIES DRAWING / 355-1250

All lengths in mm / Z: hole count



Size	Da	Tk	Di	E	Z	d	Hf	K	L
355	430	400	355	310	8	12	232	380	434
400	480	450	400	335	8	12	255	420	474
450	530	500	450	385	8	12	280	420	474
500	590	560	500	425	12	12	310	524	580
560	650	620	560	485	12	12	340	524	580
630	720	690	630	555	12	12	375	544	600
710	800	770	710	595	16	12	420	544	600
800	890	860	800	625	16	12	470	634	700
900	1005	970	900	675	16	15	527	697	775
1000	1105	1070	1000	775	16	15	577	772	850
1250	1390	1320	1250	950	20	15	720	861	949

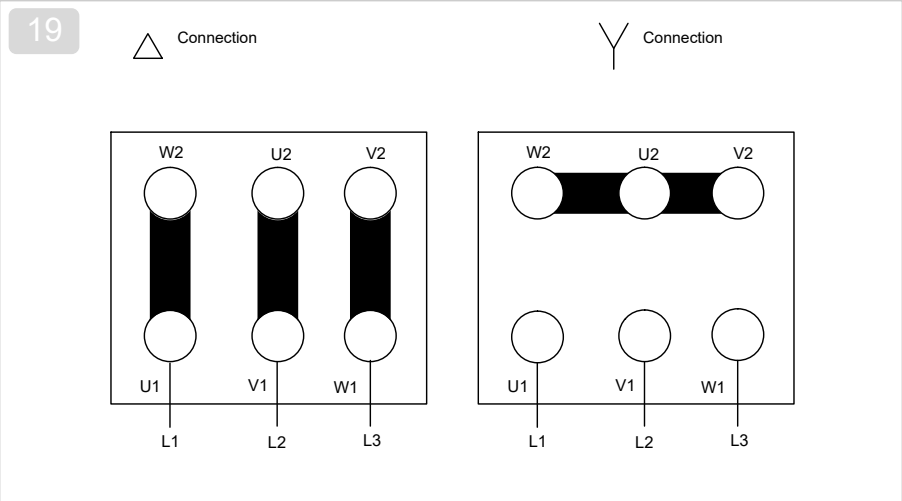
Product vector drawing. Z is the number of flange holes. Other labels retain their definitions and geometry. Dimensions are common to the supplied configurations at each diameter. Confirm mounting orientation and supports for the supplied unit.

05 / ELECTRICAL & INSTALLATION

Connect the selected motor.

Single-speed connection diagram 19. Star or delta connection must match the actual motor nameplate and supplied documentation; 400 V supply alone does not determine the correct connection. This generic diagram does not describe a two-speed motor.

THREE PHASE / SINGLE-SPEED DIAGRAM 19



DUTY-BASED SELECTION

Enter the required airflow and pressure in FSP. The programme selects a suitable blade angle and a listed motor using the listed absorbed-power curve and product-specific motor reserve. Final motor power, current and wiring must follow the selected and supplied configuration.

TWO-SPEED CONFIGURATIONS

Listed 2-4P and 4-8P entries include separate motor-speed designations. Only the listed high-speed performance curves are supplied here. Low-speed curves and a verified two-speed connection diagram are unavailable; use the supplied motor documentation.

Provide suitable supports and clear inlet/discharge paths. Isolate supply before maintenance. Keep the impeller, access cover and flange connections accessible. Smoke duty requires verification of the supplied unit certification.

VLF-T

Tube axial flow fans

VOLTVENT®
VENTILATION SYSTEMS

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