P/PS/JET

Polypropylene plastic fans for use in corrosive environments

FUMEX
PURE ADVANTAGE

Polypropylene plastic fans for use in corrosive environments, such as laboratories and the pharmaceutical and chemical industries.

FUMEX's series of plastic fans come in a wide range of designs. The P and PS series for indoor or outdoor installation, and the JET series for mounting outdoor on roofs. All series are also available in ATEX versions with various motor sizes.

FUMEX P/PS/JET
All of our plastic fan models are available in ATEX versions.

The fans are made entirely of recyclable polypropylene with stainless steel screws, which makes them highly resistant to corrosive chemicals, but also means our plastic fans are very suitable for use in damp environments.

The fan series cover a wide span of manageable airflows – from 50 m^3/h to 17 000 m^3/h.

A suite of accessories is available for the P/PS/JET series, including flexible ducts and exhaust grilles. The entire range of accessories can be found at the end of this product sheet.

The rotational speed of the fans can be adjusted by means of a frequency converter or potentiometer, for example.

ATEX

ATEX certified fans for classified zones

P/PS/JET for use in ATEX zones are available in a wide range of sizes. The fans are certified for Zone II Gas Ex c IIC T4 and are made of corrosion resistant, conductive polypropylene. The same accessories as for our standard plastic fans are also avaliable in an ATEX version.

The ATEX Directive 2014/34/EU applies to equipment and protective systems intended for use in potentially explosive atmospheres.

A potentially explosive atmosphere exists when a mixture of gases, vapours, mists or dust combines in a way that has the potential to ignite under certain operating conditions.

To prevent the risk of explosion in facilities with explosive environments, equipment with the right type of certification must be used.

The user of the product is responsible for ensuring that the work environment receives ATEX classification if necessary and for determining which type of classification is required in the actual environment.

P

FUMEX P is designed to extract gas from corrosive environments such as laboratory fume hoods, battery compartments, chemical plants, etc.

The fan housing and fan wheel in injection-moulded polypropylene ensure maximum corrosion protection. Airflow from 50 to 17000 m^3/h.

Standard	ATEX	Speed (rpm)	Rated power (kW)		Rated current (A)					Voltage (V)	Weight (kg)	
					1-phase 230V	3-phase 230V		3-phase 400V				
P 15/2-3	P 15/2-3EX	2800	0,37	0,37	-	1,75	2,1	1,03	1,2	230/400	8,5	12
P 15/4-3	P 15/4-3EX	1400	0,25	0,18	-	1,5	1,13	0,85	0,65	230/400	8,5	10
P 15/6-3	P 15/6-3EX	900	0,18	0,18	-	1,3	1,06	0,75	0,61	230/400	8,5	10,5
P 15/2-1	-	2800	0,37		3,0	-		-		230	10	-
P 15/4-1	-	1400	0,25		2,3	-		-		230	10	-
P 20/2-3	P 20/2-3EX	2800	0,75	0,75	-	3,3	3,46	1,9	2	230/400	13	15
P 20/4-3	P 20/4-3EX	1400	0,25	0,18	-	1,5	1,13	0,85	0,65	230/400	9	11
P 20/6-3	P20/6-3EX	900	0,18	0,18	-	1,3	1,06	0,75	0,61	230/400	9	11
P 20/2-1	-	2800	0,75		4,97	-		-		230	14	-
P 20/4-1	-	1400	0,25		2,3	-		-		230	9,5	-
P 25/2-3	P 25/2-3EX	2800	2,2	2,2	-	8	8,7	4,6	5	230/400	26,5	23
P 25/4-3	P 25/4-3EX	1400	0,37	0,37	-	2	1,94	1,2	1,12	230/400	13	14
P 25/6-3	P 25/6-3EX	900	0,18	0,18	-	1,3	1,06	0,75	0,61	230/400	12	13
P 25/4-1	-	1400	0,37		3	-		-		230	13,5	-
P 30/4-3	P 30/4-3EX	1400	1,5	1,1	-	5,8	5,7	3,3	3,3	230/400	32,5	25
P 30/6-3	-	900	0,75		-	3,4		2		230/400	30	-
P 35/4-3	P 35/4-3EX	1400	5,5	5,5	-	-		11,1	11,5	400/690	67	85
P 35/6-3	P 35/6-3EX	900	2,2	2,2	-	10,4	9,7	6	5,6	230/400	67	60
P 50/4-3	P 50/4-3EX	1460	5,5	5,5	-	-		10,5	11,7	400/690	215	-
P 50/6-3	-	960	4		-	-		9,5		400/690	215	-

PS

FUMEX PS is designed to extract gas from corrosive environments where a higher pressure set point is needed.

The fan housing and fan wheel in injection-moulded polypropylene ensure maximum corrosion protection. Airflow from 50 to 6000 m³/h.

Standard	ATEX	Speed (rpm)	Rated power (kW)		Rated current (A)					Voltage (V)	Weight (kg)	
					1-phase 230V	3-phase 230V		3-phase 400V				
PS 10/2-3	PS 10/2-3EX	2800	0,37	0,09	-	1,75	0,69	1,0	0,4	230/400	7	7
PS 10/4-3	PS 10/4-3EX	1400	0,25	0,06	-	1,5	0,59	0,85	0,34	230/400	7	7
PS 10/2-1	-	2800	0,37		3	-		-		230	8,5	-
PS 10/4-1	-	1400	0,25		2,3	-		-		230	8,5	-
PS 12/2-3	PS 12/2-3EX	2800	0,37	0,37	-	1,75	2,1	1	1,2	230/400	8	12
PS 12/4-3	PS 12/4-3EX	1400	0,25	0,18	-	1,5	1,13	0,85	0,65	230/400	8	10
PS 12/2-1	-	2800	0,37		3	-		-		230	9,5	-
PS 12/4-1	-	1400	0,25		2,3	-		-		230	9,5	-
PS 14/2-3	PS 14/2-3EX	2800	1,1	1,1	-	4,3	4,5	2,5	2,6	230/400	13	16
PS 14/2-1	-	2800	1,1		7,2	-		-		230	14	-
PS 16/2-3	PS 16/2-3EX	2800	2,2	2,2	-	8	8,7	4,6	5	230/400	26	23
PS 18/2-3	PS 18/2-3EX	2920	7,5	7,5	-	-		13,1	13,3	400/690	70,5	77

JET

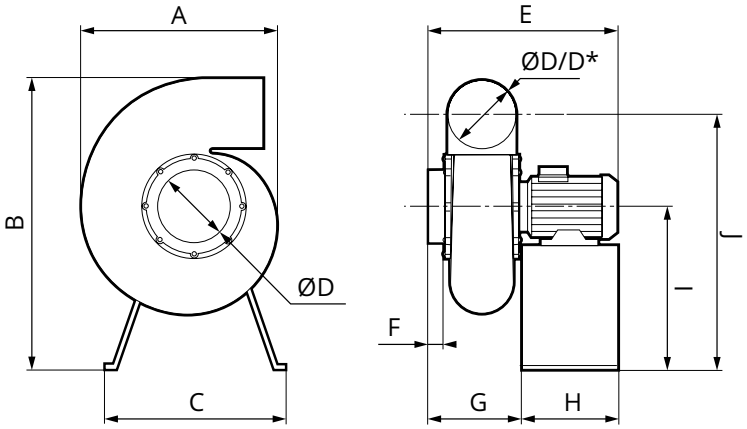
FUMEX JET JET is a roof mounted centrifugal fan. The motor is protected from corrosive gases and other elements in the surroundings.

The JET design enables maximum dilution of the gases ventilated into the surroundings. Airflow from 300 to 3 500 m^3/h.

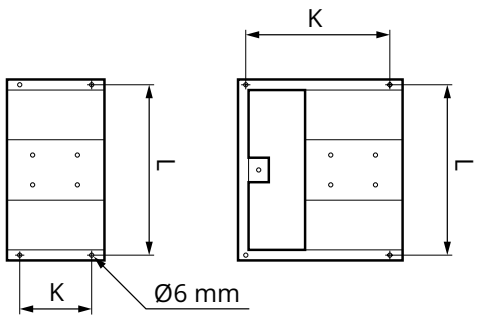
Standard	ATEX	Speed (rpm)	Rated Power (kW)		Rated current (A)					Voltage (V)	Weight (kg)	
					1-phase 230V	3-phase 230V		3-phase 400V				
JET 20/2-3	JET 20/2-3EX	2800	0,75	0,75	-	3,3	3,46	1,9	2	230/400	23	23
JET 20/4-3	JET 20/4-3EX	1400	0,25	0,18	-	1,5	1,13	0,85	0,65	230/400	19	19
JET 20/6-3	JET 20/6-3EX	900	0,18	0,18	-	1,3	1,06	0,75	0,61	230/400	19	20
JET 20/2-1	-	2800	0,75		4,97	-		-		230	24	-
JET 20/4-1	-	1400	0,25		2,3	-		-		230	20,5	-
JET 25/2-3	JET 25/2-3EX	2800	2,2	2,2	-	8	8,7	4,6	5	230/400	35	24
JET 25/4-3	JET 25/4-3EX	1400	0,37	0,37	-	2	1,94	1,2	1,12	230/400	21,5	25
JET 25/6-3	JET 25/6-3EX	900	0,18	0,18	-	1,3	1,06	0,75	0,61	230/400	21,5	24
JET 25/4-1	-	1400	0,37		3	-		-		230	23	-
JET 30/4-3	JET 30/4-3EX	1400	1,5	1,1	-	5,8	5,7	3,3	3,3	230/400	37	35
JET 30/6-3	-	900	0,75		-	3,4		2,0		230/400	34,5	-

Dimension diagrams (mm)

P

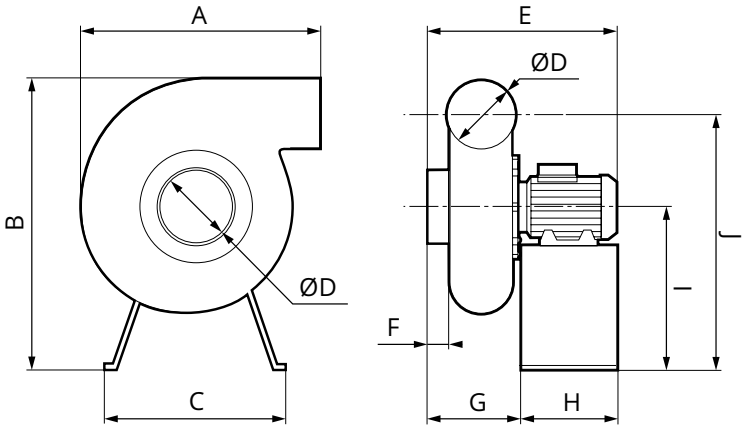


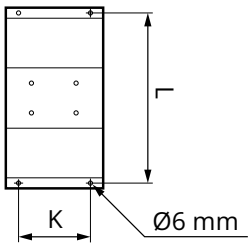
P 15/20/25/30/35 P 50



Article	A	B	C	D	D*	E	F	G	H	I	J	K	L
P 15	335	551	340	125	-	360	30	180	180	311	489	160	330
P 20	397	614	340	160	-	390	32	220	180	311	534	160	330
P 25-2	505	755	420	200	-	515	35	235	180	390	655	160	390
P 25-4/6	505	736	420	200	-	430	35	235	180	371	636	160	420
P 30	602	900	460	250	-	560	35	265	240	440	750	220	440
P 35	750	1150	600	315	-	730	60	320	350	580	993	314	600
P 50	1270	1505	600	600	500	1020	120	780	400	740	1255	720	495

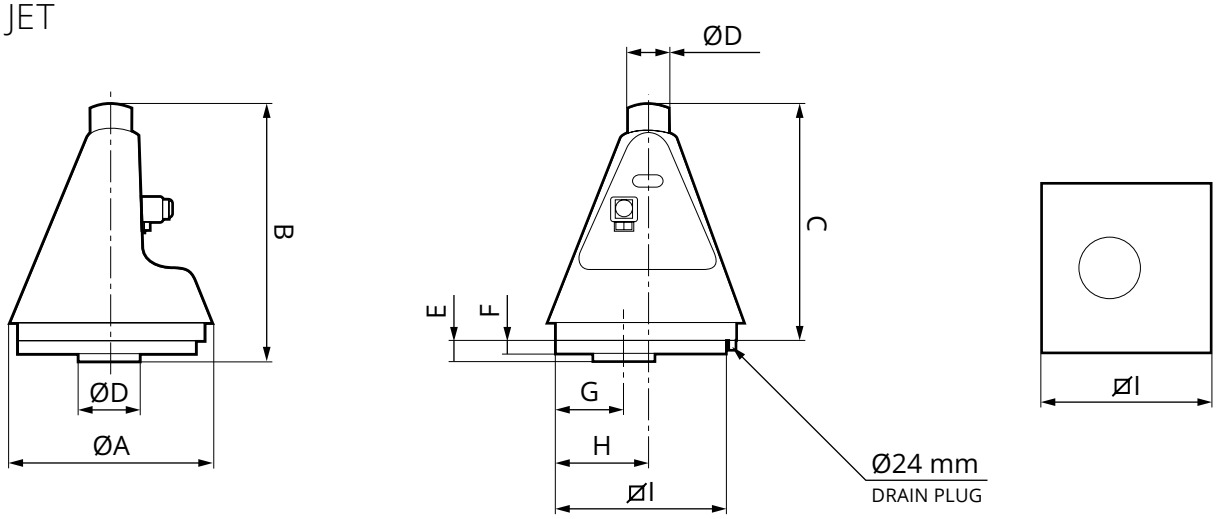
PS





Article	A	B	C	D	E	F	G	H	I	J	K	L
PS 10	285	270	240	75	173	32	150	180	310	460	160	330
PS 12	375	486	340	90	350	45	162	180	311	441	160	330
PS 14	450	552	340	125	433	55	203	180	320	490	160	330
PS 16	540	678	420	160	477	40	207	240	390	595	160	330
PS 18	618	952	590	200	680	40	220	350	602	852	310	570

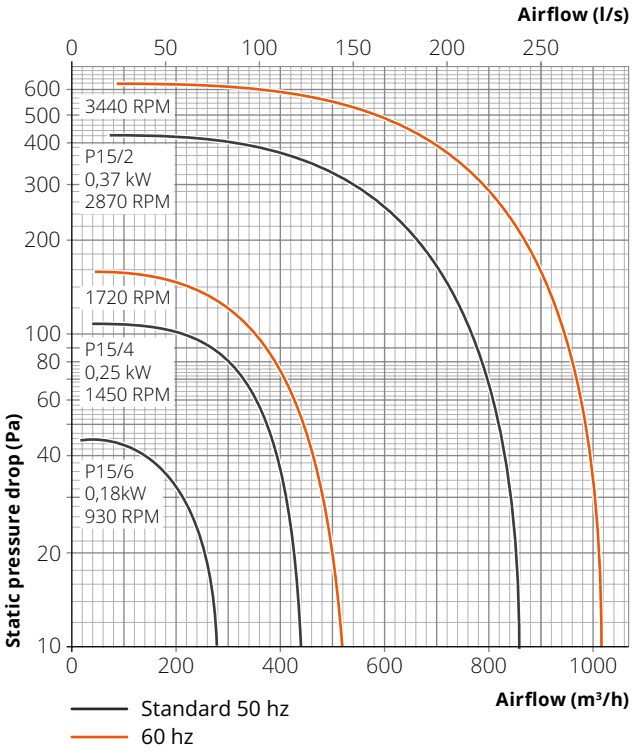
JET



Article	A	B	C	D	E	F	G	H	I
JET 20	600	920	870	160	70	25	250	300	540
JET 25	735	1140	1090	200	70	25	240	300	540
JET 30	880	1140	1030	250	70	25	200	320	570

Fan performance P

P 15



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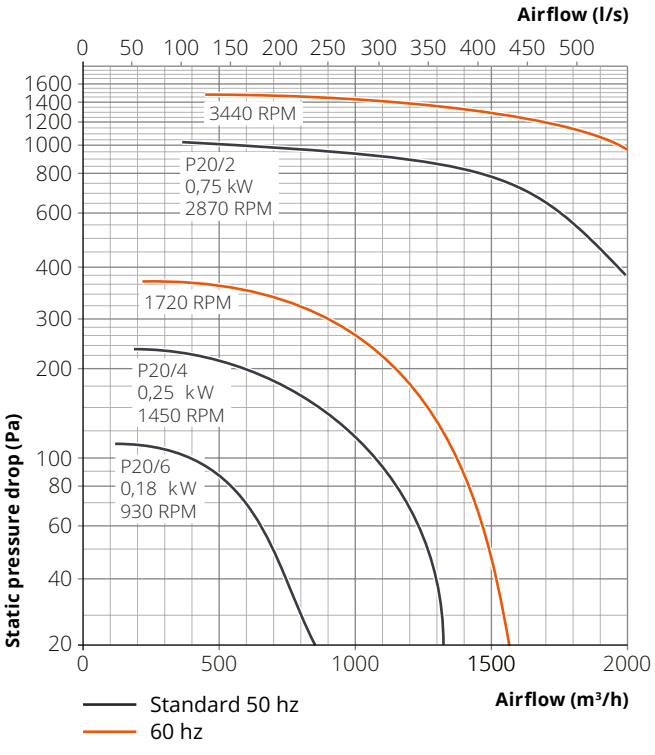

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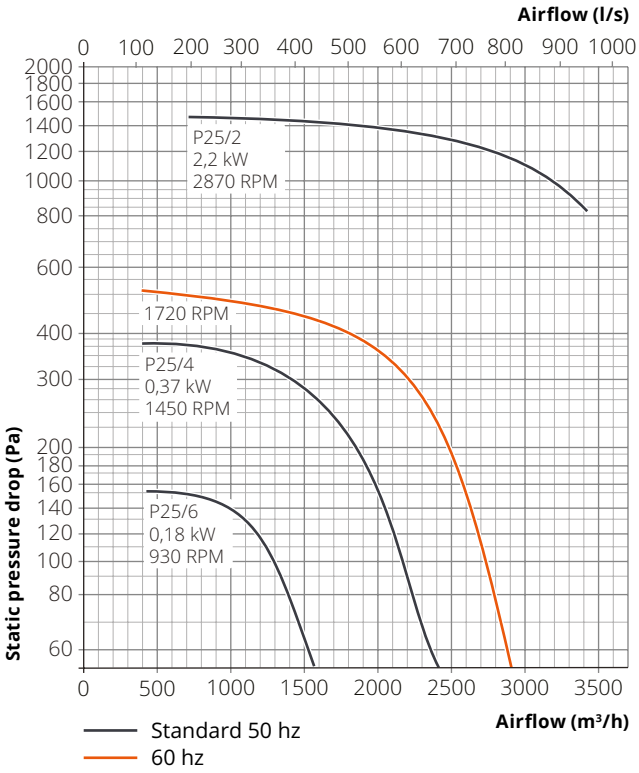

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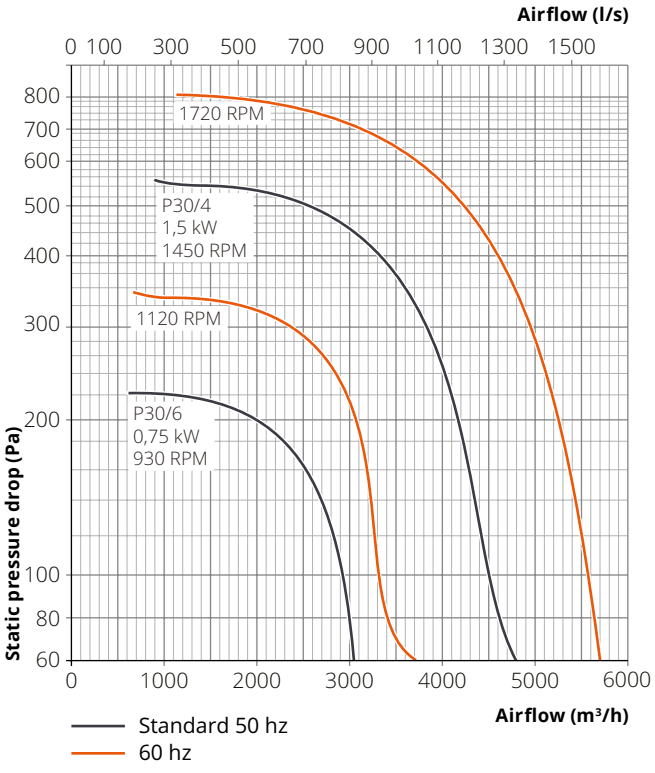

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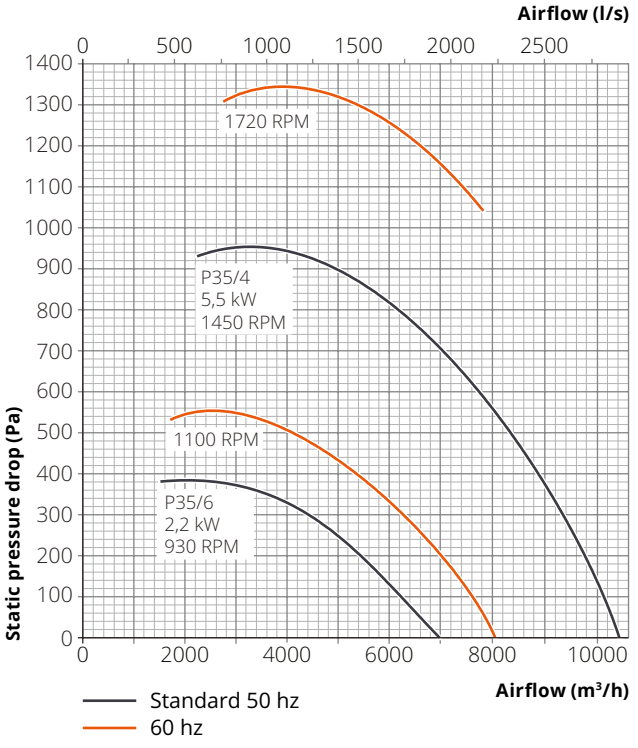
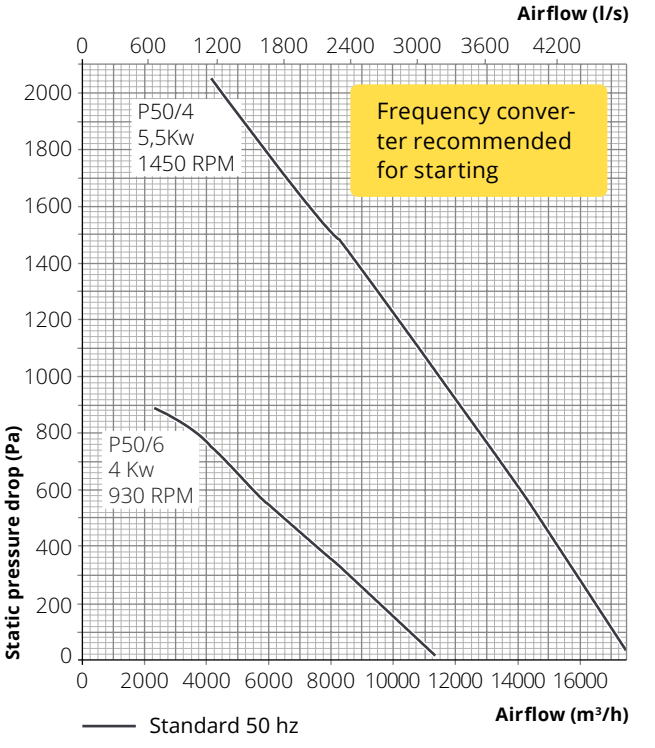
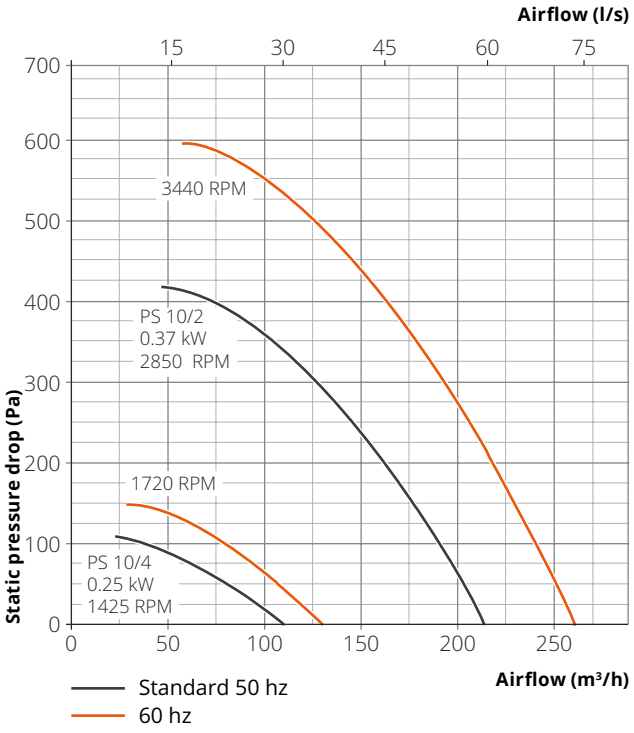


P 50

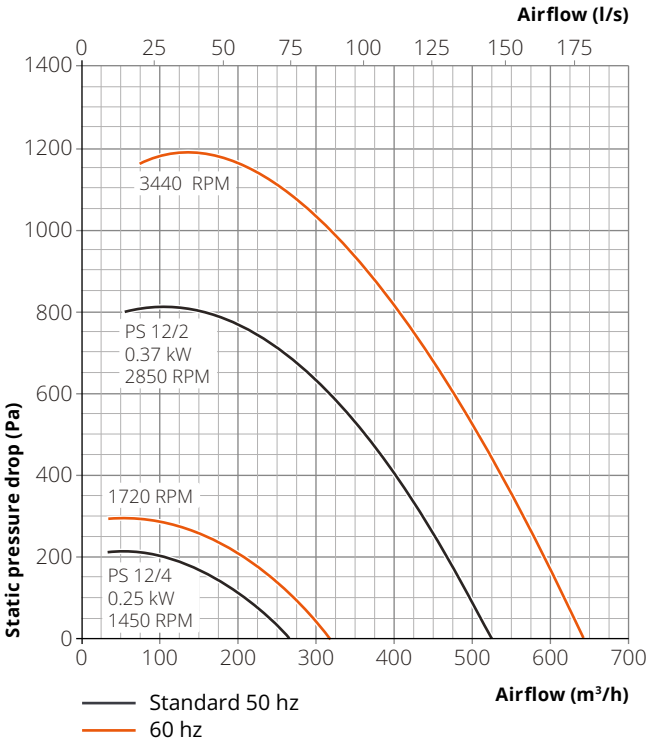


Fan performance PS

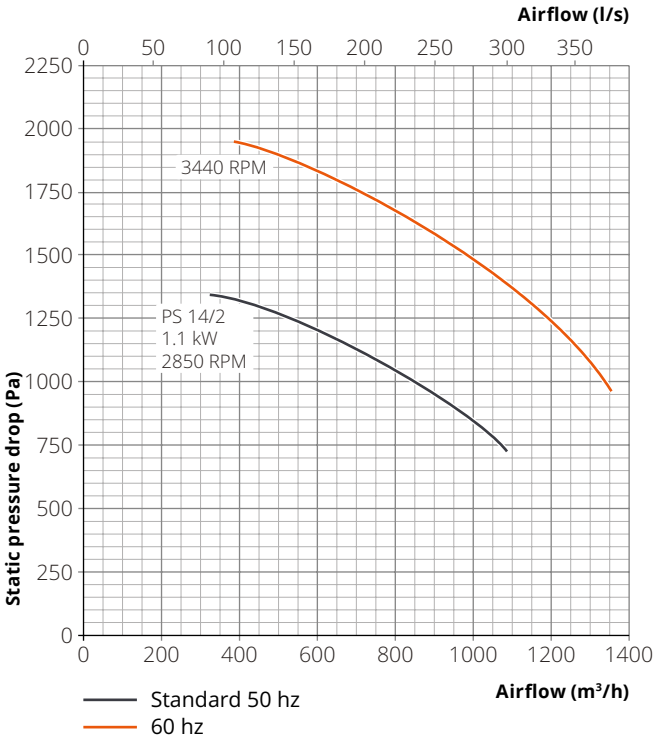
PS 10



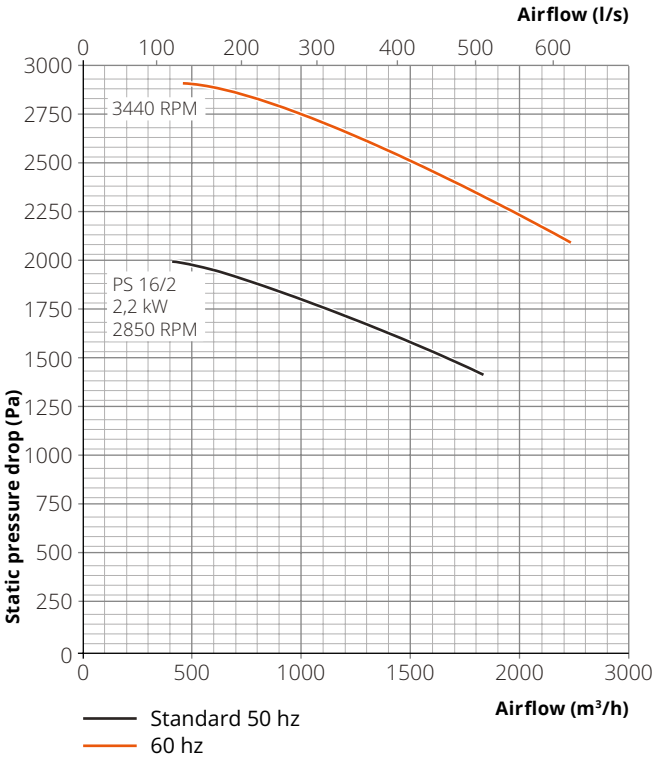
PS 12



PS 14

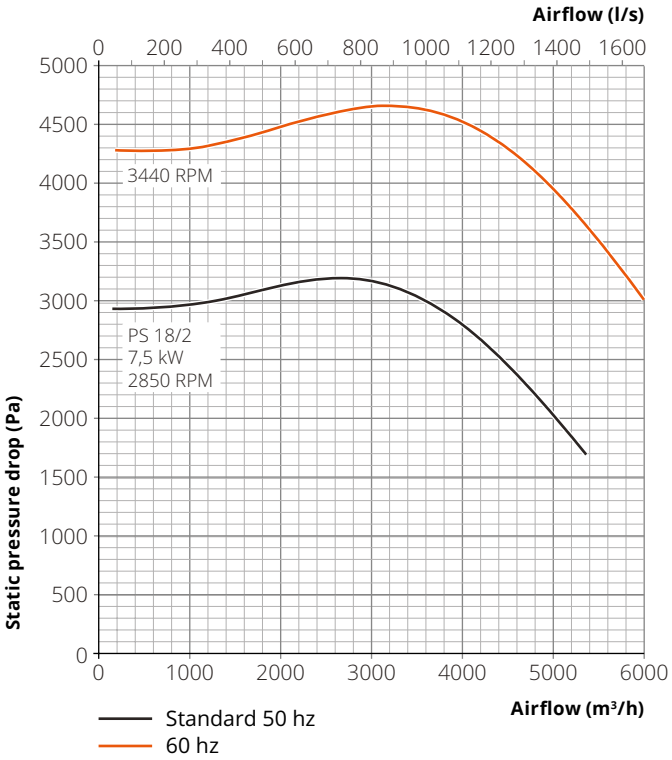


PS 16

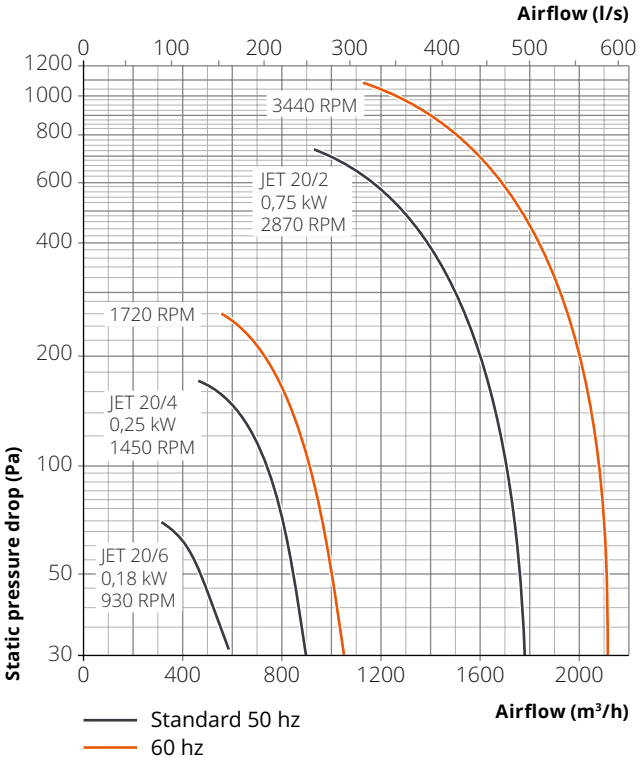


Fan performance JET

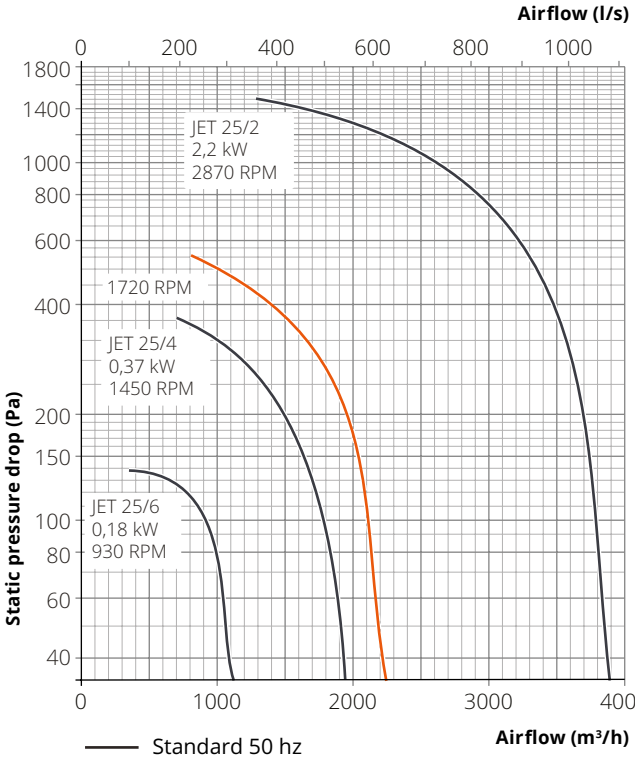
PS 18



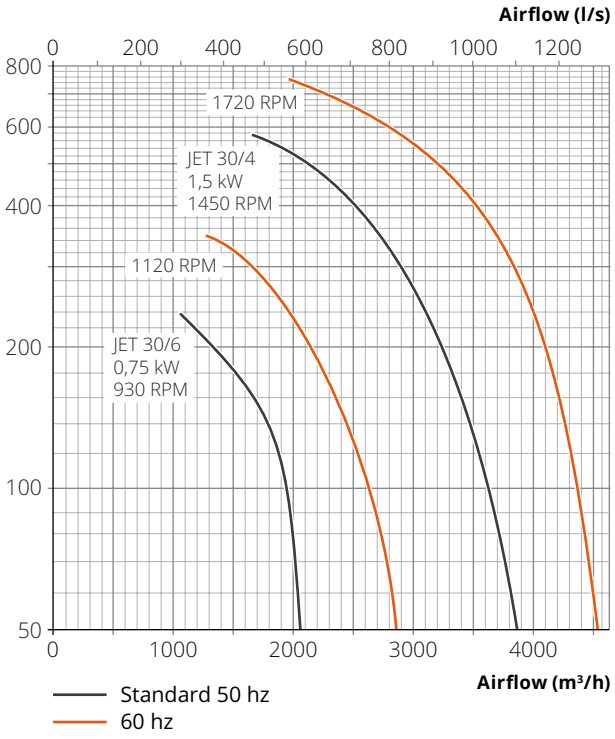
JET 20



JET 25



JET 30



Sound data

P

Measured according to ISO 5801

		P 15		P 20		P 25		P 30		P 35		P 50	
rpm		1450	2870	1450	2870	1450	2870	930	1450	930	1450	930	1450
Airflow (m³/h)		245	414	760	1500	1330	2630	1590	2476	3770	5880	5100	7950
Static pressure (Pa)		106	485	188	735	322	1261	206	500	290	704	533	1300
Frequency (Hz)	**63**	82	97	93	100	100	115	86	96	86	96	93	103
	125	76	91	76	91	81	96	82	91	88	98	83	93
	250	71	86	80	95	81	96	72	81	79	89	80	90
	500	64	79	73	88	75	90	68	78	76	85	74	83
	1000	59	74	66	81	69	84	66	76	73	82	74	84
	2000	48	63	55	70	61	76	62	72	71	81	64	74
	4000	42	57	53	67	58	73	57	67	68	77	57	67
	8000	24	49	46	61	53	68	52	61	62	71	52	62
LwA (dB A)		67	81	76	91	78	93	72	82	79	89	78	88
LpA* (dB A)		46	61	56	70	57	72	51	61	59	69	58	67

*Acoustic pressure Lp at 3 meters from fan.

PS

Measured according to ISO 5801

		PS 10		PS 12		PS 14		PS 16		PS 18	
rpm		1540	2870	1450	2870	1725	2870	1725	2870	2000	2870
Airflow (m³/h)		80	157	175	346	468	780	514	855	2141	3073
Static pressure (Pa)		79	308	167	652	418	1150	711	1970	1567	3227
Frequency (Hz)	**63**	82	97	86	101	93	104	95	106	104	112
	125	79	94	80	95	84	95	86	97	92	100
	250	72	86	69	84	83	94	83	94	89	97
	500	61	76	69	83	76	87	78	89	87	95
	1000	59	74	68	83	73	84	76	87	83	90
	2000	47	62	57	72	66	77	73	84	82	90
	4000	40	55	50	65	68	79	69	80	77	85
	8000	34	49	43	58	56	67	66	77	71	78
LwA (dB A)		67	81	71	86	79	90	83	93	89	97
LpA* (dB A)		46	61	51	65	59	70	62	73	69	77

*Acoustic pressure Lp at 3 meters from fan.

JET

Measured according to ISO 5801

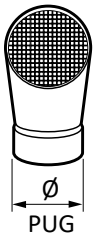
		JET 20		JET 25		JET 30	
rpm		1450	2870	1450	2870	930	1450
Airflow (m³/h)		470	925	647	1280	1006	1570
Static pressure (Pa)		190	740	325	1273	185	450
Frequency (Hz)	**63**	61	76	71	86	67	77
	125	67	81	75	90	69	78
	250	66	80	71	86	64	74
	500	63	78	69	84	65	74
	1000	61	75	67	82	65	74
	2000	55	69	63	77	61	71
	4000	52	67	59	73	57	66
	8000	45	60	55	70	53	63
LwA (dB A)		66	80	72	87	69	78
LpA* (dB A)		45	60	51	66	48	58

*Acoustic pressure Lp at 3 meters from fan.

P & PS accessories

Exhaust Grille PUG

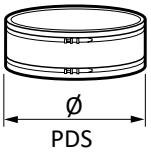
Made of PVC.



Standard	ATEX	Ø mm
PUG-090	-	90
PUG-125	PUG-125EX	125
PUG-160	PUG-160EX	160
PUG-200	PUG-200EX	200
PUG-250	PUG-250EX	250
PUG-315	PUG-315EX	315

Flexible Duct PDS

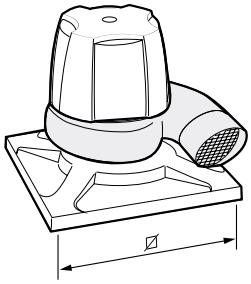
Made of flexible PVC.
Comes with two clamps.



Standard	ATEX	Ø mm
PDS-090	-	90
PDS-125	PDS-125EX	125
PDS-160	PDS-160EX	160
PDS-200	PDS-200EX	200
PDS-250	PDS-250EX	250
PDS-315	PDS-315EX	315

Roof Mounting Kit PRF

For P series. For mounting on roof.
Made of polypropylene.

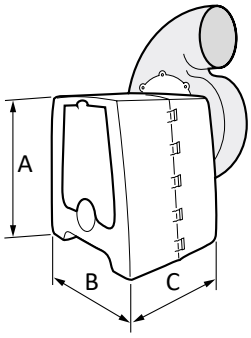


Standard	ATEX	Ø mm
PRF 15	PRF 15EX	547
PRF 20	PRF 20EX	547
PRF 25	PRF 25EX	547
PRF 30	PRF 30EX	547
PRF 35	PRF 35EX	700

Motor Stand PRS

Motor stand with motor weather cover. Made of polypropylene.

- PRS 450 suitable for PS12, PS14, P15, P20 & P25/4-6.
- PRS 550 suitable for PS16, P25/2 & P30.
- PRS 750 suitable for P35.



Standard	ATEX	A Ø mm	B Ø mm	C Ø mm
PRS 450	PRS 450EX	450	425	90
PRS 550	PRS 550EX	550	425	125
PRS 750	PRS 750EX	715	585	160

Accessories

Safety Switch SSB/ SSB EMC
With lockable toggle. Two M25 bushings included. SSB EMC is copper-sheathed.

Safety Switch SSB 550EX
With lockable knob. Two M20 bushings, 1 x auxiliary contact 1 NO. Max rated current: 10 A.

EX-classified according to Directive 2014/34/EU, class:
- II 2G Ex eb db IIC T6 Gb
- II 2D Ex tb IIIC T80 °C Db

Contactor SKO
3-pin contactor with over-current relay for manual reset. The over-current relay has phase loss protection. Used together with external switches or control.

Motor Protection Switch SMB
3-pin motor protection switch with thermal magnetic release equipped with phase fault protection. Designed for operating and protecting fan motors.

Specifications

Form of delivery
Plastic fan supplied as standard LG version including motor stand for easy installation. Series P 15/20/25/30/35 can be delivered in reverse design (RD).

Surface finishing
Plastic parts: ..... PP, recyclable
Steel parts: ..... Stainless steel or powder-coated

Motor
3-phase or 1-phase asynchronous motor.
Protection class IP 55. Insulation class F.
Motors for other voltages available upon request (two-speed, explosion-proof, etc.).

Temperature range
Ambient: ..... -15 °C to 55 °C
Airflow: ..... 0 °C to 60 °C

Version (view from inlet side)
The fan is available as standard in the following versions:

P*

LG 0 | **LG 90** | LG 180 | LG 270

PS

LG 0 | **LG 90** | LG 180 | LG 270

■ Standardised delivery version

* Series P 15/20/25/30/35 can be delivered in reverse design (RD).

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G:a Burträskvägen 48, 931 92 Skellefteå, Sweden • Tel.: +46 910-361 80 • Fax: +46 910-130 22 • E-mail: info@fumex.se
www.fumex.com