

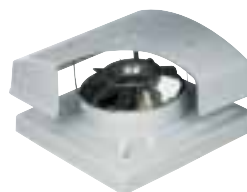
SKYFLOW
SSMF



Roof Mounted
Mixed Flow Fans

Skyflow SSMF

Features & Benefits



The Skyflow SSMF is a lightweight range of horizontal discharge mixed flow roof extract units which balance the need to satisfy architects modern day building needs against a low silhouette design. The Skyflow is UV stabilised for a durable, long lasting product, which delivers exceptional performance and noise characteristics.

- 7 standard sizes from 315mm to 630mm.
- Air volume flow rates of up to 3.9 m³/sec.
- Static pressures of up to 900 Pa.
- UV stabilised GRP cowl finished in goose wing grey.
- Supplied fully assembled with mixed flow fan.
- Low silhouette design, aesthetic appearance.
- Highly efficient, lightweight induction motors.
- Suitable for operating temperatures of 50° C with speed controllers and 70° C Fixed speed.
- Motors protected to IP55 with Class F insulation.
- Fully speed controllable.
- Thermal overload protection.
- Suitable for curb or purlin mounting.
- Bird Guards included.
- Extensive stock range available.
- Optional colours available.

Features & Benefits

Material Strength – A robust and durable unit with the top cowl and fan support housing in UV stabilised GRP to provide a longer life, whilst the inlet guards are zinc plated.

Aerodynamic appeal – The inherent aerodynamic benefits of good mixed flow impeller design provide marked advantages over conventional axial and centrifugal air performance characteristics.

Blade settings – Adjustable pitch mixed flow impellers have the blade angles factory set to meet the required duty.

Time saving - Drop in silencers can be supplied which reduces installation time by fitting the silencers into the roof space rather than the ductwork – Less labour, less time and cost.

Mounting – SSMF units are designed to be suitable for either curb or purlin mounting and can be mounted on flat or inclined roofs with a maximum pitch angle of 35°.

Quality impellers – Adjustable pitch mixed flow impellers are provided with blade angles set to meet the required duty. The impellers quality is reflected by natural aluminium finish spinings and pressings and zinc plated steel hub assemblies.

Easier maintenance - Lightweight and easily accessible at roof level, this simplifies cleaning and maintenance.

Design appeal – Roof units are supplied as standard in goose wing grey, with the option of any other RAL colour to comply with the overall design, profile and colour scheme for a building.

Reliability – Motors have sealed for life bearings.

Cost effective – The optional backdraught shutters enables reductions in heat loss from the building when the SSMF is not operating.

Motor protection – All SSMF units have integral thermal overload protection which prevents the motor from overheating.

Ease of wiring – The electrical connection to the motor is made by an IP55 terminal box fitted to a 550mm flying lead from the units inlet side.

Tested to the very latest standards – SSMF units are tested to ISO 5801:1997 (airside performance) and to BS 848 Pt 2:1985 (sound performance) meaning accurate, up to date information on performance and noise data that can be relied upon.

Quality assurance – All units are designed and manufactured with procedures as defined in BS EN ISO 9001: 2000.

Warranty – Each SSMF has a 12 month warranty.

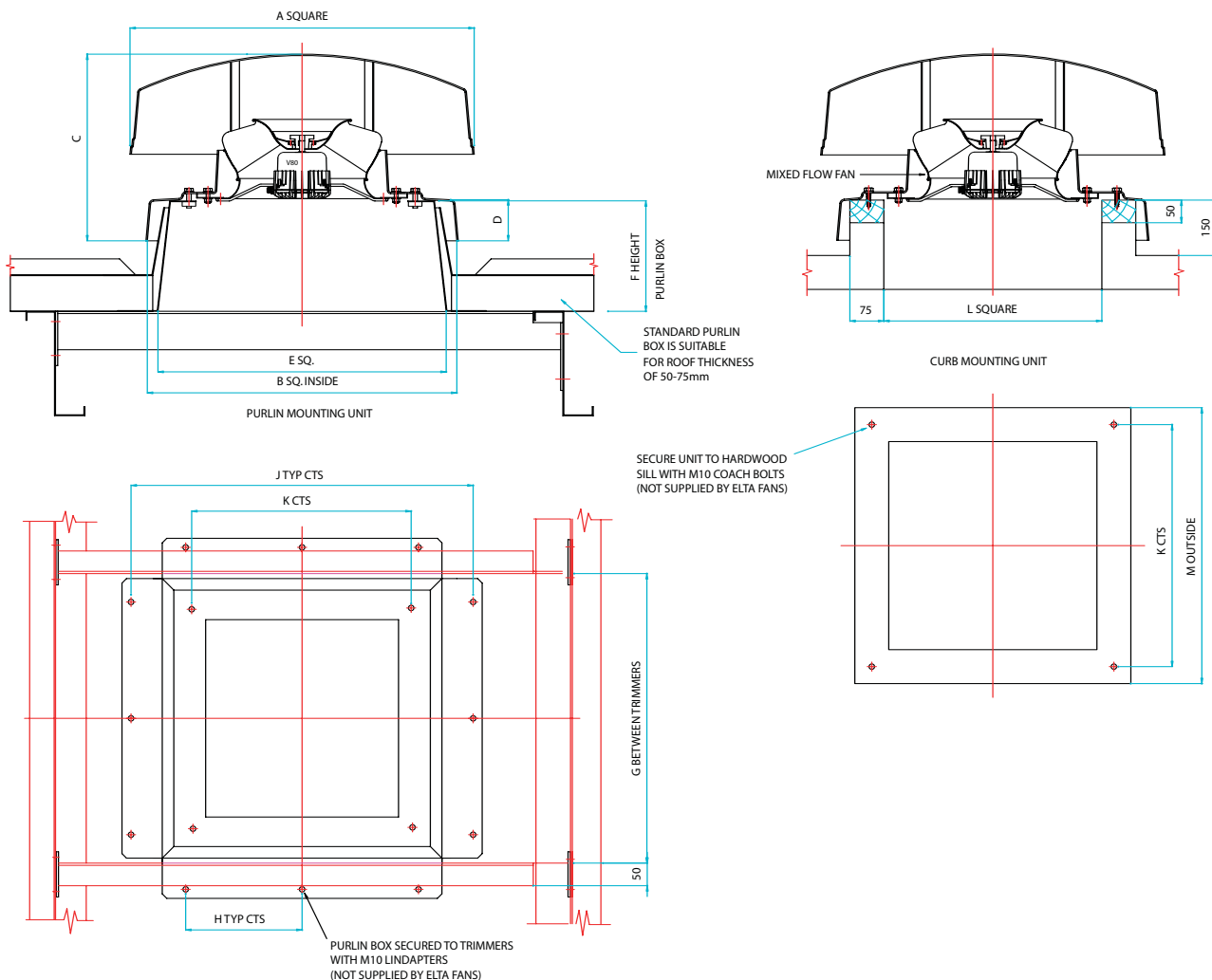
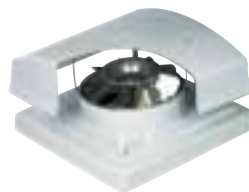
Full accessory range - Backdraught shutters, purlin boxes, drop in silencers, speed controllers, inverters and soaker sheets.

Applications

Libraries, hospitals, offices, banks, shops, small industrial units and retail parks.

Skyflow SSMF

Dimensional Data



ROOF MOUNTED

| Product Code | A | B | C | D | E | F | G | H | J | K | L | M | Weight kg |
|--------------|------|------|-----|-----|------|-----|------|-----|------|-----|-----|-----|-----------|
| SSMF31 | 710 | 684 | 325 | 85 | 610 | 240 | 636 | 250 | 750 | 500 | 460 | 610 | 20 |
| SSMF35 | 800 | 784 | 445 | 90 | 730 | 250 | 756 | 300 | 870 | 600 | 550 | 700 | 25 |
| SSMF40 | 800 | 784 | 445 | 90 | 730 | 250 | 756 | 300 | 870 | 600 | 550 | 700 | 27 |
| SSMF45 | 960 | 934 | 510 | 100 | 860 | 250 | 886 | 350 | 1000 | 745 | 700 | 850 | 40 |
| SSMF50 | 960 | 934 | 510 | 100 | 860 | 250 | 886 | 350 | 1000 | 745 | 700 | 850 | 42 |
| SSMF56 | 1230 | 1054 | 590 | 105 | 1000 | 250 | 1026 | 435 | 1140 | 870 | 830 | 980 | 82 |
| SSMF63 | 1230 | 1054 | 590 | 105 | 1000 | 250 | 1026 | 435 | 1140 | 870 | 830 | 980 | 90 |

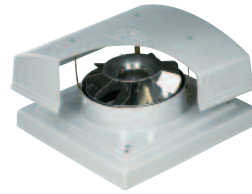
N.B. Weights only include skyflow roof unit, fan plate and impeller.

Accessories



Skyflow SSMF

Performance & Electrical Data



SINGLE Phase - 220V-240V / 50Hz

| Product Code | Speed r/min | Airflow m ³ /s @ Static Pressure Pa. | | | | | | | | | Motor Electrical Data | | | Speed Control | | Sound Level dBA @ 3m |
|---------------|-------------|---|------|------|------|------|------|------|------|------|-----------------------|---------|-----------|---------------|--------------|----------------------|
| | | 0 | 50 | 100 | 150 | 200 | 250 | 300 | 400 | 500 | FLC Amps | SC Amps | Output kW | Electron-ic | Trans-former | |
| SSMF315/6-5-2 | 935 | 0.37 | 0.28 | 0.05 | | | | | | | 1.05 | 2.00 | 0.12 | EL31TK | TC12 | 47 |
| SSMF315/4-5-2 | 1395 | 0.58 | 0.52 | 0.46 | 0.38 | 0.24 | | | | | 1.80 | 3.60 | 0.25 | EL31TK | TC14 | 58 |
| SSMF350/6-5-2 | 885 | 0.64 | 0.52 | 0.34 | | | | | | | 1.05 | 2.00 | 0.12 | EL31TK | TC12 | 50 |
| SSMF350/4-4-2 | 1300 | 0.94 | 0.86 | 0.77 | 0.66 | 0.53 | 0.22 | | | | 1.80 | 3.60 | 0.25 | EL31TK | TC14 | 60 |
| SSMF400/6-5-2 | 820 | 0.78 | 0.64 | 0.46 | 0.10 | | | | | | 1.05 | 2.00 | 0.12 | EL31TK | TC12 | 51 |
| SSMF400/4-5-2 | 1330 | 1.18 | 1.11 | 1.04 | 0.95 | 0.86 | 0.75 | 0.60 | 0.19 | | 3.60 | 10.8 | 0.55 | EL61TK | TC18 | 64 |
| SSMF450/6-5-2 | 935 | 1.28 | 1.13 | 0.97 | 0.78 | 0.53 | 0.18 | | | | 6.00 | 12.6 | 0.55 | EL61TK | TC18 | 55 |
| SSMF450/4-4-2 | 1290 | 1.65 | 1.54 | 1.43 | 1.31 | 1.18 | 1.04 | 0.87 | 0.42 | 0.05 | 4.90 | 15.0 | 0.75 | EL61TK | TC18 | 64 |
| SSMF500/6-5-2 | 890 | 1.60 | 1.43 | 1.25 | 1.03 | 0.78 | 0.45 | 0.08 | | | 6.00 | 12.6 | 0.55 | EL101 | TC18 | 58 |
| SSMF560/6-3-2 | 875 | 2.00 | 1.82 | 1.62 | 1.39 | 1.09 | 0.70 | 0.26 | | | 6.00 | 12.6 | 0.55 | EL101 | TC18 | 60 |

Sound levels are average spherical free field values at 50% peak pressure for comparative purposes only.

THREE Phase - 380V-415V / 50Hz

| Product Code | Speed r/min | Airflow m ³ /s @ Static Pressure Pa. | | | | | | | | | | | Motor Electrical Data | | | Speed Control | Sound Level dBA @ 3m |
|---------------|-------------|---|------|------|------|------|------|------|------|------|------|------|-----------------------|---------|-----------|---------------|----------------------|
| | | 0 | 50 | 100 | 150 | 200 | 250 | 300 | 400 | 500 | 700 | 900 | FLC Amps | SC Amps | Output kW | Trans-former | |
| SSMF315/6-5-3 | 955 | 0.38 | 0.28 | | | | | | | | | | 0.68 | 1.70 | 0.18 | TC33 | 47 |
| SSMF315/4-5-3 | 1415 | 0.59 | 0.53 | 0.46 | 0.37 | 0.25 | | | | | | | 1.40 | 4.50 | 0.37 | TC33 | 59 |
| SSMF350/6-5-3 | 920 | 0.70 | 0.59 | 0.41 | | | | | | | | | 0.68 | 1.70 | 0.18 | TC33 | 50 |
| SSMF350/4-5-3 | 1330 | 0.93 | 0.86 | 0.77 | 0.67 | 0.54 | 0.34 | | | | | | 1.40 | 4.50 | 0.37 | TC33 | 60 |
| SSMF400/6-5-3 | 855 | 0.83 | 0.69 | 0.52 | 0.24 | | | | | | | | 0.68 | 1.70 | 0.18 | TC33 | 52 |
| SSMF400/4-5-3 | 1460 | 1.37 | 1.30 | 1.22 | 1.14 | 1.05 | 0.95 | 0.83 | 0.51 | 0.12 | | | 2.00 | 7.50 | 0.75 | TC33 | 66 |
| SSMF450/6-5-3 | 910 | 1.24 | 1.07 | 0.89 | 0.67 | 0.38 | 0.09 | | | | | | 0.94 | 2.40 | 0.25 | TC33 | 55 |
| SSMF450/4-4-3 | 1380 | 1.79 | 1.67 | 1.55 | 1.44 | 1.32 | 1.20 | 1.06 | 0.73 | 0.30 | | | 2.00 | 7.50 | 0.75 | TC33 | 64 |
| SSMF500/6-5-3 | 920 | 1.69 | 1.51 | 1.32 | 1.12 | 0.87 | 0.56 | 0.19 | | | | | 2.00 | 6.20 | 0.55 | TC33 | 59 |
| SSMF500/4-4-3 | 1390 | 2.40 | 2.30 | 2.19 | 2.07 | 1.95 | 1.82 | 1.68 | 1.37 | 1.01 | 0.16 | | 4.30 | 15.5 | 1.5 | TC310 | 68 |
| SSMF560/6-3-3 | 910 | 2.09 | 1.90 | 1.70 | 1.48 | 1.20 | 0.86 | 0.49 | | | | | 2.00 | 6.20 | 0.55 | TC33 | 61 |
| SSMF560/4-2-3 | 1390 | 2.77 | 2.67 | 2.57 | 2.45 | 2.34 | 2.22 | 2.08 | 1.78 | 1.39 | 0.30 | | 4.30 | 15.5 | 1.5 | TC310 | 70 |
| SSMF560/4-4-3 | 1435 | 3.87 | 3.74 | 3.61 | 3.47 | 3.34 | 3.20 | 3.05 | 2.74 | 2.38 | 1.38 | 0.31 | 6.78 | 47.5 | 3.0 | TC310 | 71 |
| SSMF630/6-3-3 | 965 | 3.52 | 3.31 | 3.09 | 2.85 | 2.60 | 2.33 | 2.03 | 1.30 | 0.43 | | | 5.36 | 30.5 | 2.2 | TC310 | 67 |

Sound levels are average spherical free field values at 50% peak pressure for comparative purposes only.

Silencer Data - SINGLE Phase

| Product Code | Silencer Attenuation & Pressure Drop Data | | | | | |
|---------------|---|-------|------|-------|-------|-------|
| | 600L | | 900L | | 1200L | |
| | dBA | ΔP Pa | dBA | ΔP Pa | dBA | ΔP Pa |
| SSMF315/6-5-2 | -8 | 5 | -10 | 6 | -12 | 7 |
| SSMF315/4-5-2 | -9 | 12 | -12 | 15 | -14 | 18 |
| SSMF350/6-5-2 | -8 | 9 | -10 | 12 | -12 | 14 |
| SSMF350/4-4-2 | -9 | 20 | -12 | 25 | -14 | 29 |
| SSMF400/6-5-2 | -8 | 7 | -11 | 8 | -12 | 10 |
| SSMF400/4-5-2 | -8 | 15 | -10 | 19 | -12 | 22 |
| SSMF450/6-5-2 | -9 | 10 | -12 | 13 | -13 | 15 |
| SSMF450/4-4-2 | -10 | 15 | -13 | 19 | -15 | 23 |
| SSMF500/6-5-2 | -8 | 10 | -11 | 12 | -13 | 14 |
| SSMF560/6-3-2 | -8 | 10 | -12 | 13 | -13 | 16 |

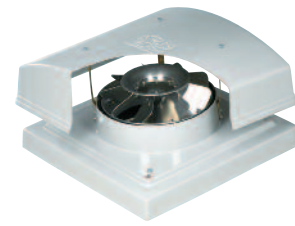
Silencer Data - THREE Phase

| Product Code | Silencer Attenuation & Pressure Drop Data | | | | | |
|---------------|---|-------|------|-------|-------|-------|
| | 600L | | 900L | | 1200L | |
| | dBA | ΔP Pa | dBA | ΔP Pa | dBA | ΔP Pa |
| SSMF315/6-5-3 | -8 | 5 | -10 | 7 | -12 | 8 |
| SSMF315/4-5-3 | -9 | 11 | -12 | 14 | -15 | 17 |
| SSMF350/6-5-3 | -8 | 12 | -10 | 15 | -12 | 18 |
| SSMF350/4-5-3 | -8 | 20 | -11 | 25 | -13 | 30 |
| SSMF400/6-5-3 | -8 | 7 | -11 | 9 | -12 | 10 |
| SSMF400/4-5-3 | -10 | 20 | -13 | 25 | -15 | 30 |
| SSMF450/6-5-3 | -9 | 8 | -12 | 11 | -14 | 13 |
| SSMF450/4-4-3 | -9 | 18 | -13 | 22 | -15 | 26 |
| SSMF500/6-5-3 | -9 | 11 | -12 | 13 | -13 | 16 |
| SSMF500/4-4-3 | -9 | 21 | -14 | 26 | -15 | 31 |
| SSMF560/6-3-3 | -9 | 10 | -13 | 12 | -14 | 14 |
| SSMF560/4-2-3 | -10 | 20 | -16 | 26 | -18 | 31 |
| SSMF560/4-4-3 | -10 | 36 | -16 | 45 | -18 | 53 |
| SSMF630/6-3-3 | -9 | 18 | -14 | 23 | -15 | 27 |

ROOF MOUNTED

Skyflow SSMF

Sound Data



SSMF - SINGLE Phase

| Product Code | 63Hz | 125Hz | 250Hz | 500Hz | 1kHz | 2kHz | 4kHz | 8kHz | dBA @ 3m |
|---------------|------|-------|-------|-------|------|------|------|------|----------|
| SSMF315/4-5-2 | 87 | 82 | 84 | 74 | 72 | 68 | 63 | 57 | 58 |
| SSMF350/4-4-2 | 91 | 85 | 85 | 76 | 73 | 69 | 65 | 58 | 60 |
| SSMF400/4-5-2 | 94 | 95 | 84 | 78 | 76 | 76 | 72 | 66 | 64 |
| SSMF450/4-4-2 | 93 | 90 | 86 | 78 | 78 | 77 | 72 | 65 | 64 |
| SSMF315/6-5-2 | 81 | 76 | 69 | 64 | 62 | 56 | 50 | 43 | 47 |
| SSMF350/6-5-2 | 82 | 79 | 73 | 66 | 64 | 59 | 53 | 46 | 50 |
| SSMF400/6-5-2 | 84 | 80 | 72 | 68 | 66 | 62 | 57 | 51 | 51 |
| SSMF450/6-5-2 | 86 | 83 | 77 | 72 | 70 | 66 | 60 | 53 | 55 |
| SSMF500/6-5-2 | 91 | 86 | 80 | 73 | 73 | 71 | 66 | 60 | 58 |
| SSMF560/6-3-2 | 90 | 88 | 81 | 78 | 76 | 71 | 65 | 59 | 60 |

SSMF - THREE Phase

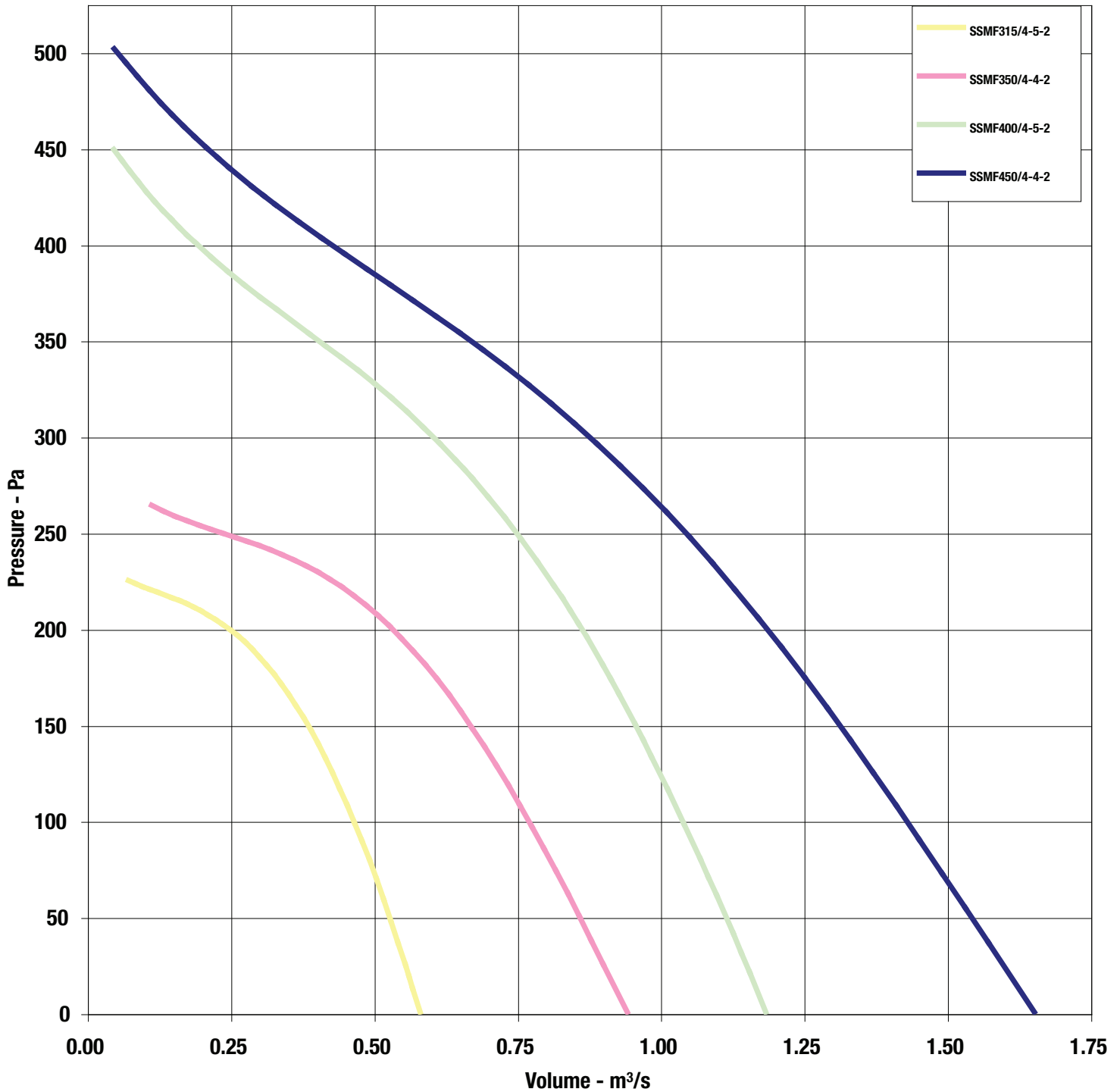
| Product Code | 63Hz | 125Hz | 250Hz | 500Hz | 1kHz | 2kHz | 4kHz | 8kHz | dBA @ 3m |
|---------------|------|-------|-------|-------|------|------|------|------|----------|
| SSMF315/4-5-3 | 87 | 82 | 85 | 75 | 73 | 68 | 63 | 57 | 59 |
| SSMF350/4-5-3 | 91 | 85 | 87 | 75 | 72 | 69 | 64 | 58 | 60 |
| SSMF400/4-5-3 | 94 | 91 | 90 | 81 | 79 | 78 | 74 | 68 | 66 |
| SSMF450/4-4-3 | 93 | 90 | 87 | 79 | 79 | 77 | 72 | 65 | 64 |
| SSMF500/4-4-3 | 96 | 93 | 89 | 84 | 81 | 82 | 79 | 73 | 68 |
| SSMF560/4-2-3 | 92 | 92 | 90 | 89 | 85 | 81 | 77 | 71 | 70 |
| SSMF560/4-4-3 | 93 | 93 | 91 | 90 | 86 | 82 | 78 | 72 | 71 |
| SSMF315/6-5-3 | 81 | 76 | 69 | 64 | 62 | 56 | 50 | 43 | 47 |
| SSMF350/6-5-3 | 82 | 79 | 74 | 66 | 64 | 59 | 53 | 46 | 50 |
| SSMF400/6-5-3 | 84 | 81 | 75 | 68 | 66 | 63 | 58 | 51 | 52 |
| SSMF450/6-5-3 | 86 | 83 | 76 | 71 | 70 | 66 | 60 | 53 | 55 |
| SSMF500/6-5-3 | 91 | 86 | 81 | 74 | 74 | 72 | 66 | 60 | 59 |
| SSMF560/6-3-3 | 90 | 88 | 81 | 79 | 77 | 71 | 65 | 59 | 61 |
| SSMF630/6-3-3 | 94 | 92 | 86 | 85 | 82 | 80 | 75 | 69 | 67 |

Skyflow SSMF

Performance Curves



4 Pole 1Ph Range

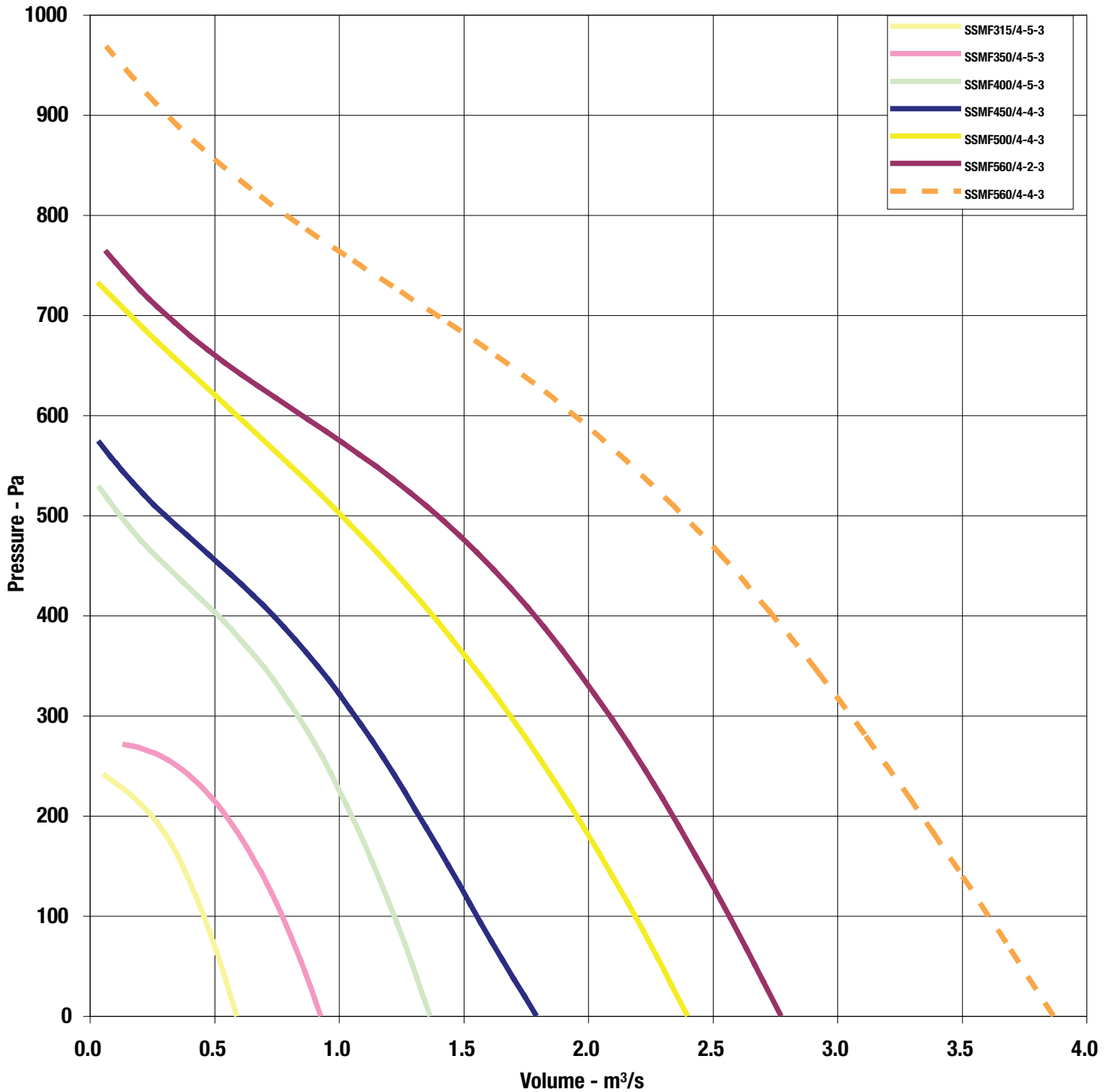


Skyflow SSMF

Performance Curves



4 Pole 3Ph Range

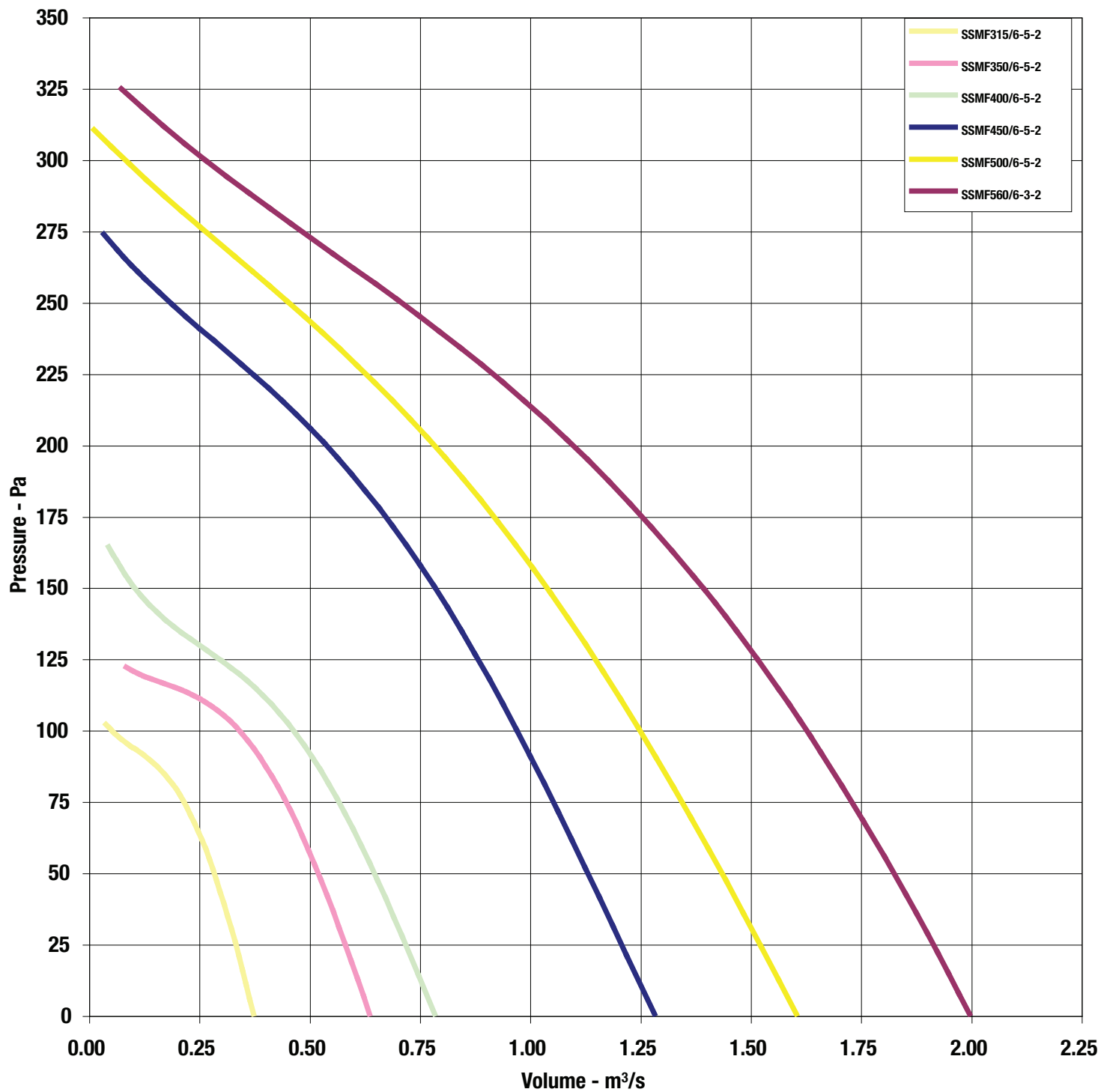


Skyflow SSMF

Performance Curves



6 Pole 1Ph Range

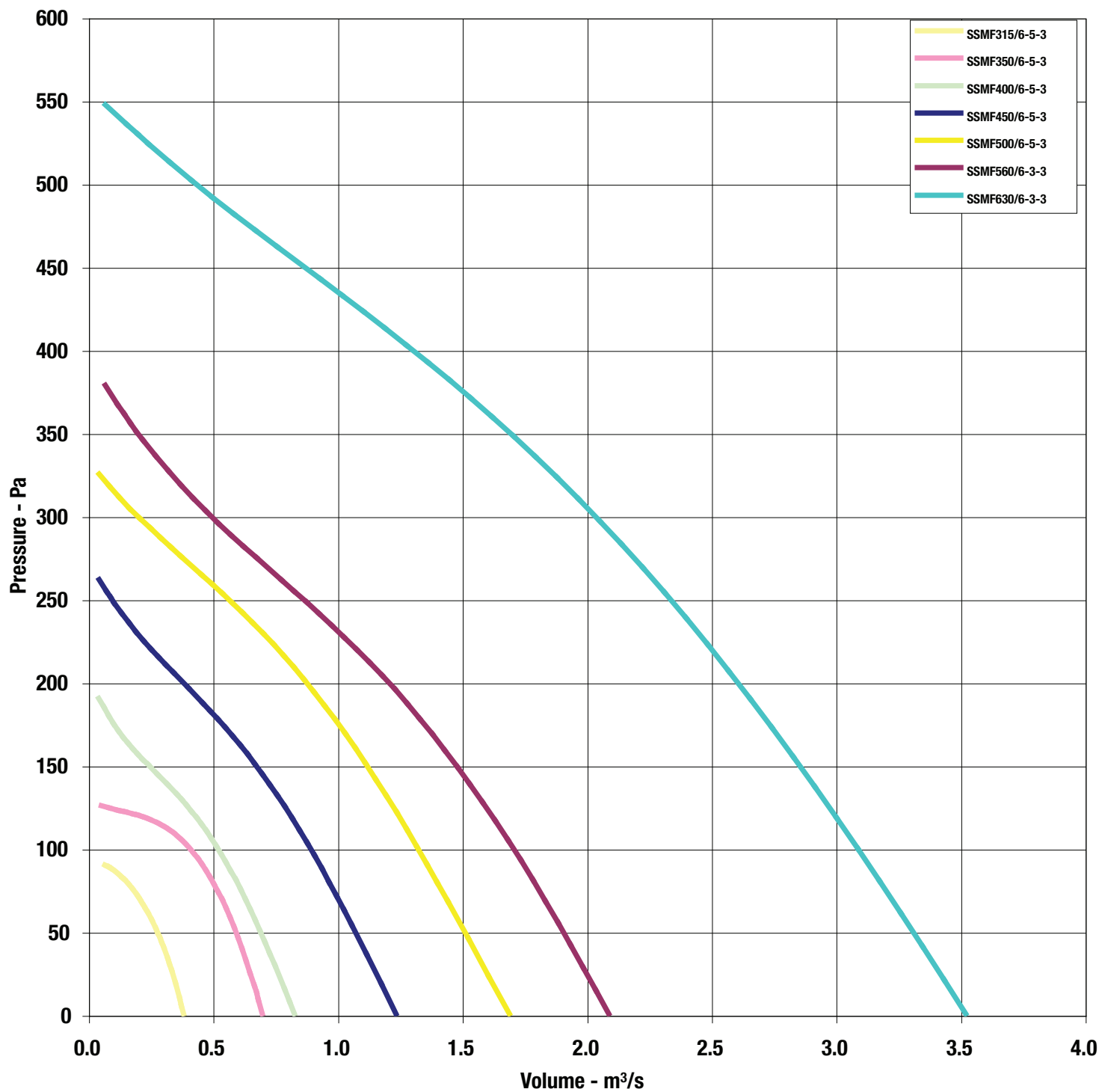


Skyflow SSMF

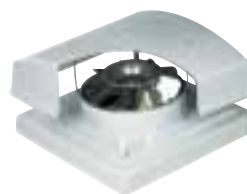
Performance Curves



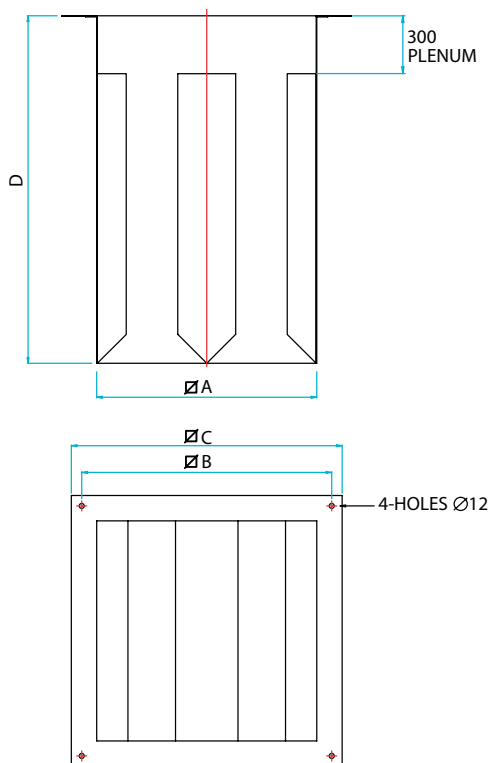
6 Pole 3Ph Range



Skyflow SSMF Accessories



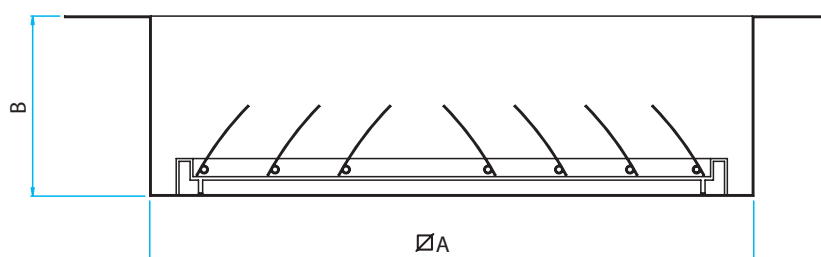
Drop In Silencers



- For information on silencers and an explanation of the data, see p107
- Baffle type silencers
- Galvanised steel casing with perforated steel lining and baffles
- Infill is glass tissue faced high density mineral wool

| Unit Size | Product Code | A | B | C | D | Airways | Weight kg |
|-----------|-----------------|-----|-----|-----|------|---------|-----------|
| SSMF31 | 068-SFDS-0600-A | 440 | 500 | 600 | 600 | 2 | 15 |
| | 068-SFDS-0900-A | | | | 900 | | 20 |
| | 068-SFDS-1200-A | | | | 1200 | | 25 |
| SSF35 | 068-SFDS-0600-B | 530 | 600 | 650 | 600 | 2 | 17 |
| | 068-SFDS-0900-B | | | | 900 | | 24 |
| | 068-SFDS-1200-B | | | | 1200 | | 32 |
| SSMF45/50 | 068-SFDS-0600-C | 670 | 745 | 800 | 600 | 2 | 23 |
| | 068-SFDS-0900-C | | | | 900 | | 34 |
| | 068-SFDS-1200-C | | | | 1200 | | 43 |
| SSMF56/63 | 068-SFDS-0600-D | 810 | 870 | 940 | 600 | 3 | 27 |
| | 068-SFDS-0900-D | | | | 900 | | 41 |
| | 068-SFDS-1200-D | | | | 1200 | | 50 |

Backdraught Shutters

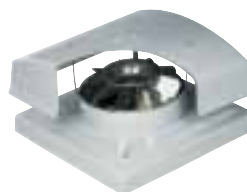


| Unit Size | Product Code | A | B | Weight kg |
|-----------|-----------------|-----|-----|-----------|
| SSMF315 | SSMF-SHUT-31 | 434 | 130 | 3.5 |
| SSMF350 | SSMF-SHUT-35-40 | 534 | 130 | 5.0 |
| SSMF450 | SSMF-SHUT-45/50 | 677 | 230 | 8.0 |
| SSMF500 | | | | |
| SSMF560 | SSMF-SHUT-56/63 | 780 | 300 | 11.5 |
| SSMF630 | | | | |

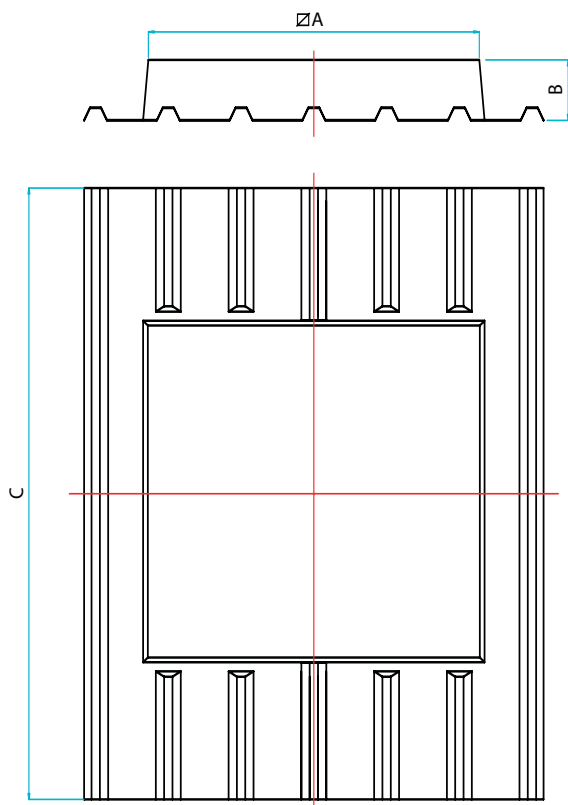
- Prevents backdraught and reduces heat loss from building
- Polypropylene shutter in pre-galvanised steel frame

ROOF MOUNTED

Skyflow SSMF Accessories



Soaker Sheets

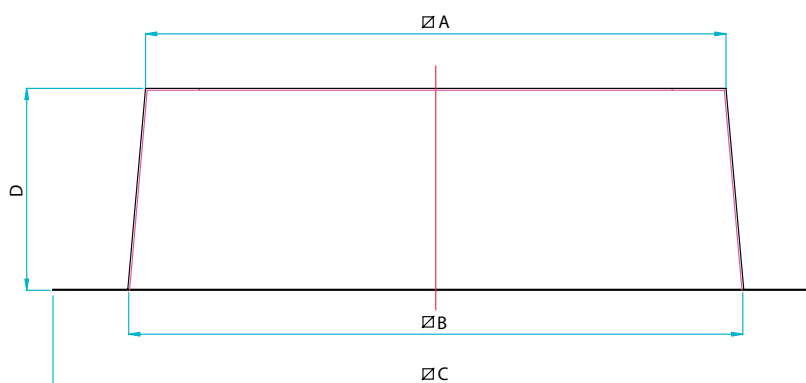


- Fire retardant glass reinforced plastic (GRP)
- UV stabilised

| Unit Size | Product Code | A | B | C |
|-----------|------------------|------|-----|------|
| SSMF31 | 039S-SP-31/35*** | 600 | 152 | 1830 |
| SSMF35/40 | 039S-SP-40/45*** | 730 | 165 | 1830 |
| SSMF45/50 | 039S-SP-50/56*** | 890 | 165 | 1830 |
| SSMF56/63 | 039S-SP-63/71*** | 1010 | 165 | 1830 |

*** Add soaker panel profile to part code
Weights dependant on profile.

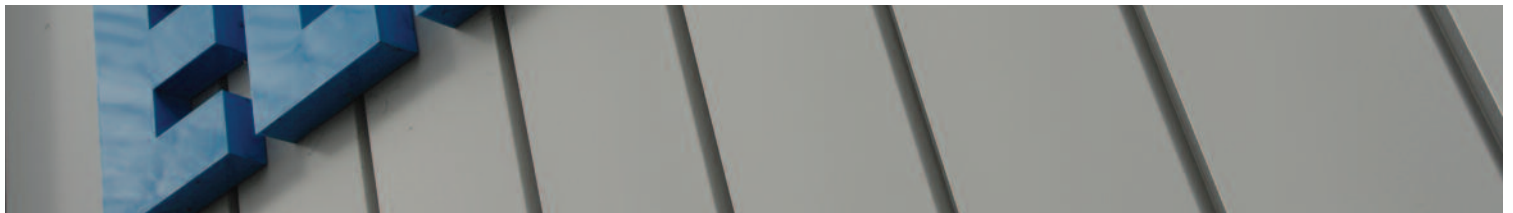
Purlin Boxes



| Unit Size | Product Code | A | B | C | D | Weight kg |
|-----------|--------------|-----|------|------|-----|-----------|
| SSMF31 | 039B-PB31/35 | 570 | 610 | 790 | 240 | 9 |
| SSMF35/40 | 039B-PB40/45 | 690 | 730 | 970 | 250 | 11 |
| SSMF45/50 | 039B-PB50/56 | 820 | 860 | 1040 | 250 | 13 |
| SSMF56/63 | 039B-PB63/71 | 960 | 1000 | 1180 | 250 | 15 |

- Pre-galvanised mild steel

ROOF MOUNTED



Elta Fans Ltd - Applied Technology

17 Barnes Wallis Road,
Segensworth East Industrial Estate,
Fareham, Hampshire, P015 5ST, United Kingdom.

Visit: eltafans.com

e-mail: mailbox@eltafans.co.uk

Applied Technology:

Tel: +44 (0) 1489 566500

Fax: +44 (0) 1489 566555

Building Services:

Tel: +44 (0) 1384 275800

Fax: +44 (0) 1384 275810

Export:

Tel: +44 (0) 1489 566500

Fax: +44 (0) 1489 566555