

EXTERNAL LOUVERS

Rev.02
27-05-2015



GMC EXL-061 PRODUCT SPECIFICATIONS:

- Standard Material: Aluminum Profile.
- Usable for fresh air intakes, air exhausts, places where natural ventilation is needed and air volume control and direction are not.
- Has three models: Z-type Standard Bladed (EXL-161), Curvilinear type Standard Bladed (EXL-261), Z- Type Wide Bladed (EXL-361) and Circular External Louver (EXL-461).
- Standard Frame width is 32.5mm. On request, frame width can be reduced to 22mm.
- Mounted with 4 mm screws with appropriate quantity.
- On request, wire screen can be added on backside for keeping dust and insects out.
- Electrostatic powder coating(oven-drying) with the colour from RAL catalogue.



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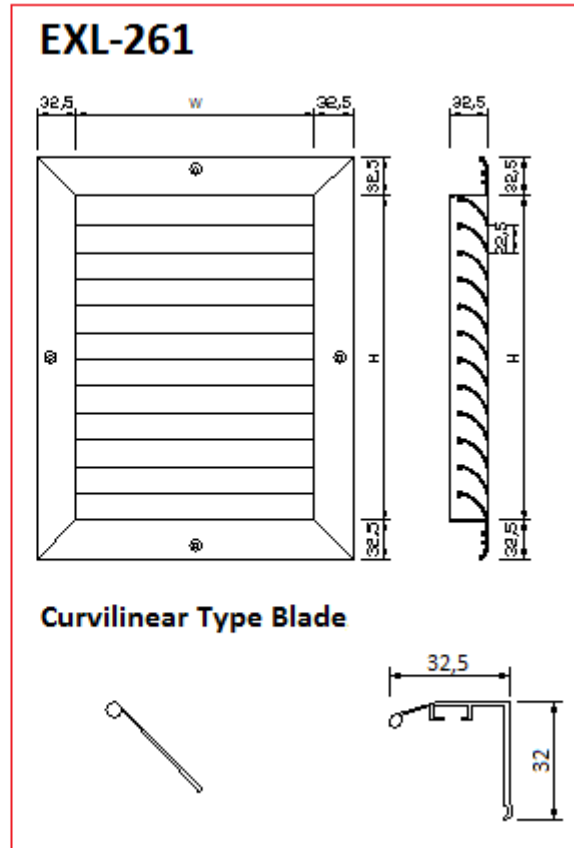
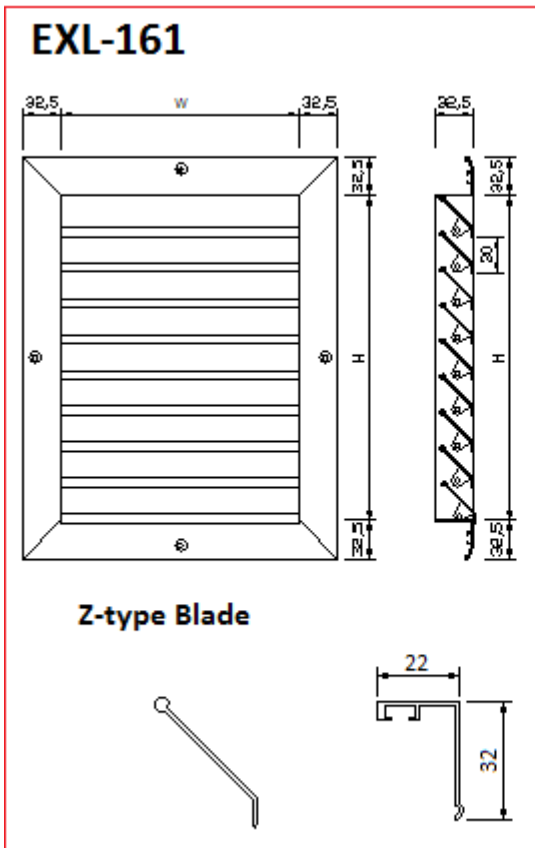
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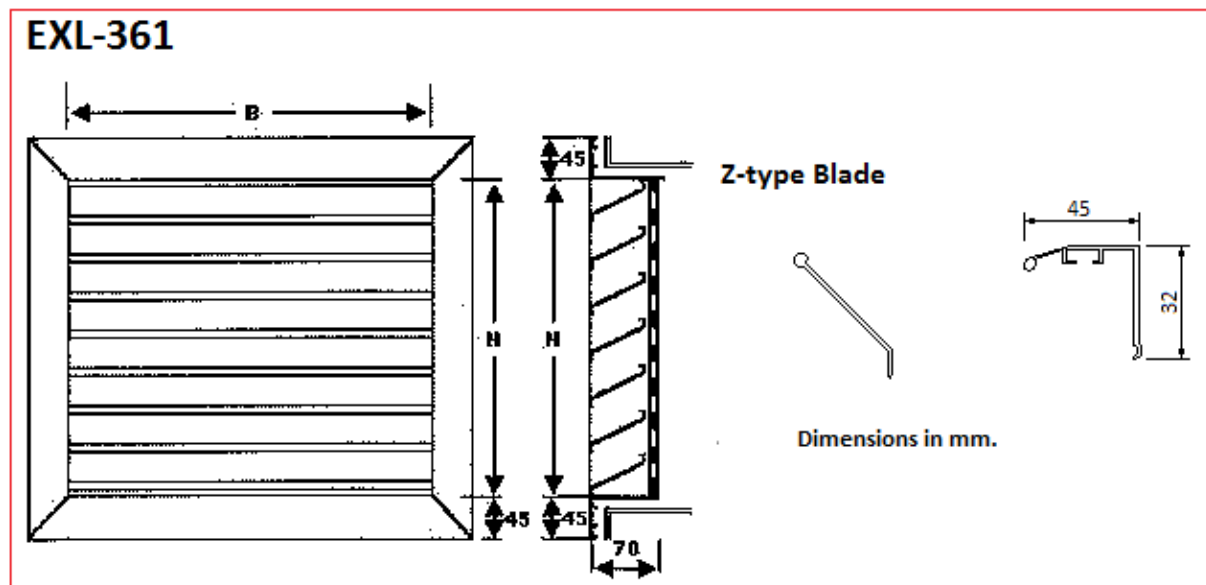
Rev.02
27-05-2015



TECHNICAL DETAILS



Dimensions in mm.



EXTERNAL LOUVERS

Rev.02
27-05-2015



SELECTION TABLES

EXL-161/261 STANDARD SELECTION TABLE

| | | H (mm) | | | | | | | | | | | | |
|----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Effective area (m ²) | | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 |
| W (mm) | 100 | 0,0049 | 0,0092 | 0,0128 | 0,0171 | 0,0207 | 0,0236 | 0,0279 | 0,0315 | 0,0351 | 0,0430 | 0,0509 | 0,0581 | 0,0660 |
| | 150 | 0,0074 | 0,0138 | 0,0192 | 0,0257 | 0,0311 | 0,0354 | 0,0419 | 0,0473 | 0,0527 | 0,0645 | 0,0764 | 0,0872 | 0,0990 |
| | 200 | 0,0098 | 0,0184 | 0,0256 | 0,0342 | 0,0414 | 0,0472 | 0,0558 | 0,0630 | 0,0702 | 0,0860 | 0,1018 | 0,1162 | 0,1320 |
| | 250 | 0,0123 | 0,0230 | 0,0320 | 0,0428 | 0,0518 | 0,0590 | 0,0698 | 0,0788 | 0,0878 | 0,1075 | 0,1273 | 0,1453 | 0,1650 |
| | 300 | 0,0147 | 0,0276 | 0,0384 | 0,0513 | 0,0621 | 0,0708 | 0,0837 | 0,0945 | 0,1053 | 0,1290 | 0,1527 | 0,1743 | 0,1980 |
| | 400 | 0,0172 | 0,0322 | 0,0448 | 0,0599 | 0,0725 | 0,0826 | 0,0977 | 0,1103 | 0,1229 | 0,1505 | 0,1782 | 0,2034 | 0,2310 |
| | 450 | 0,0196 | 0,0368 | 0,0512 | 0,0684 | 0,0828 | 0,0944 | 0,1116 | 0,1260 | 0,1404 | 0,1720 | 0,2036 | 0,2324 | 1,2640 |
| | 500 | 0,0221 | 0,0414 | 0,0576 | 0,0770 | 0,0932 | 0,1062 | 0,1256 | 0,1418 | 0,1580 | 0,1935 | 0,2291 | 0,2615 | 0,2970 |
| | 600 | 0,0245 | 0,0460 | 0,0640 | 0,0855 | 0,1035 | 0,1180 | 0,1395 | 0,1575 | 0,1755 | 0,2150 | 0,2545 | 0,2905 | 0,3300 |
| | 700 | 0,0294 | 0,0552 | 0,0768 | 0,1026 | 0,1242 | 0,1416 | 0,1674 | 0,1890 | 0,2106 | 0,2580 | 0,3054 | 0,3486 | 0,3960 |
| | 800 | 0,0343 | 0,0644 | 0,0896 | 0,1197 | 0,1449 | 0,1652 | 0,1953 | 0,2205 | 0,2457 | 0,3010 | 0,3563 | 0,4067 | 0,4620 |
| | 900 | 0,0392 | 0,0736 | 0,1024 | 0,1368 | 0,1656 | 0,1888 | 0,2232 | 0,2520 | 0,2808 | 0,3440 | 0,4072 | 0,4648 | 0,5280 |
| | 1000 | 0,0441 | 0,0828 | 0,1152 | 0,1539 | 0,1863 | 0,2124 | 0,2511 | 0,2835 | 0,3159 | 0,3870 | 0,4581 | 0,5229 | 0,5940 |
| 1100 | 0,0490 | 0,0920 | 0,1280 | 0,1710 | 0,2070 | 0,2360 | 0,2790 | 0,3150 | 0,3510 | 0,4300 | 0,5090 | 0,5810 | 0,6600 | |
| 1200 | 0,0539 | 0,1012 | 0,1408 | 0,1881 | 0,2277 | 0,2596 | 0,3039 | 0,3465 | 0,3861 | 0,4730 | 0,5599 | 0,6391 | 0,7260 | |
| | | 0,0588 | 0,1104 | 0,1536 | 0,2052 | 0,2484 | 0,2832 | 0,3348 | 0,3780 | 0,4212 | 0,5160 | 0,6108 | 0,6972 | 0,7920 |

EXL-361 STANDARD SELECTION TABLE

| | | H (mm) | | | | | | | | | | | | |
|----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Effective area (m ²) | | 250 | 300 | 350 | 400 | 500 | 600 | 800 | 1000 | 1200 | 1400 | 1600 | 1800 | 2000 |
| W (mm) | 300 | 0,0420 | 0,0540 | 0,660 | 0,0780 | 0,1050 | 0,1290 | 0,1800 | 0,2310 | 0,2820 | 0,3300 | 0,3810 | 0,4320 | 0,4830 |
| | 350 | 0,0490 | 0,0630 | 0,0770 | 0,0910 | 0,1225 | 0,1505 | 0,2100 | 0,2965 | 0,3290 | 0,3850 | 0,4445 | 0,5040 | 0,5635 |
| | 400 | 0,0560 | 0,0720 | 0,0880 | 0,1040 | 0,1400 | 0,1720 | 0,2400 | 0,3080 | 0,3760 | 0,4400 | 0,5080 | 0,5760 | 0,6440 |
| | 450 | 0,0630 | 0,0810 | 0,0990 | 0,1170 | 0,1575 | 0,1935 | 0,2700 | 0,3465 | 0,4230 | 0,4950 | 0,5715 | 0,6480 | 0,7245 |
| | 500 | 0,0700 | 0,0900 | 0,1100 | 0,1300 | 0,1750 | 0,2150 | 0,3000 | 0,3850 | 0,4700 | 0,5500 | 0,6350 | 0,7200 | 0,8050 |
| | 600 | 0,0840 | 0,1080 | 0,1320 | 0,1560 | 0,2100 | 0,2580 | 0,3600 | 0,4620 | 0,5640 | 0,6600 | 0,7620 | 0,8640 | 0,9660 |
| | 700 | 0,0980 | 0,1260 | 0,1540 | 0,1820 | 0,2450 | 0,3010 | 0,4200 | 0,5390 | 0,6580 | 0,7700 | 0,8890 | 1,0080 | 1,1270 |
| | 800 | 0,1120 | 0,1440 | 0,1760 | 0,2080 | 0,2800 | 0,3440 | 0,4800 | 0,6160 | 0,7520 | 0,8800 | 1,0160 | 1,1520 | 1,2880 |
| | 900 | 0,1260 | 0,1620 | 0,1980 | 0,2340 | 0,3150 | 0,3870 | 0,5400 | 0,6930 | 0,8460 | 0,9900 | 1,1430 | 1,2960 | 1,4490 |
| | 1000 | 0,1400 | 0,1800 | 0,2200 | 0,2600 | 0,3500 | 0,4300 | 0,6000 | 0,7700 | 0,9400 | 1,1000 | 1,2700 | 1,4400 | 1,6100 |
| | 1200 | 0,1680 | 0,2160 | 0,2640 | 0,3120 | 0,4200 | 0,5160 | 0,7200 | 0,9240 | 1,1280 | 1,3200 | 1,5240 | 1,7280 | 1,9320 |
| | 1400 | 0,1960 | 0,2520 | 0,3080 | 0,3640 | 0,4900 | 0,6020 | 0,8400 | 1,0780 | 1,3160 | 1,5400 | 1,7780 | 2,0160 | 2,2540 |
| | 1600 | 0,2240 | 0,2880 | 0,3520 | 0,4160 | 0,5600 | 0,6880 | 0,9600 | 1,2320 | 1,5040 | 1,7600 | 2,0320 | 2,3040 | 2,5760 |
| 1800 | 0,2520 | 0,3240 | 0,3960 | 0,4680 | 0,6300 | 0,7740 | 1,0800 | 1,3860 | 1,6920 | 1,9800 | 2,2860 | 2,5920 | 2,8980 | |
| 2000 | 0,2800 | 0,3600 | 0,4400 | 0,5200 | 0,7000 | 0,8600 | 1,2000 | 1,5400 | 1,8800 | 2,2000 | 2,5400 | 2,8800 | 3,2200 | |
| 2200 | 0,3080 | 0,3960 | 0,4840 | 0,5720 | 0,7700 | 0,9460 | 1,3200 | 1,6940 | 2,0680 | 2,4200 | 2,7940 | 3,1680 | 3,5420 | |

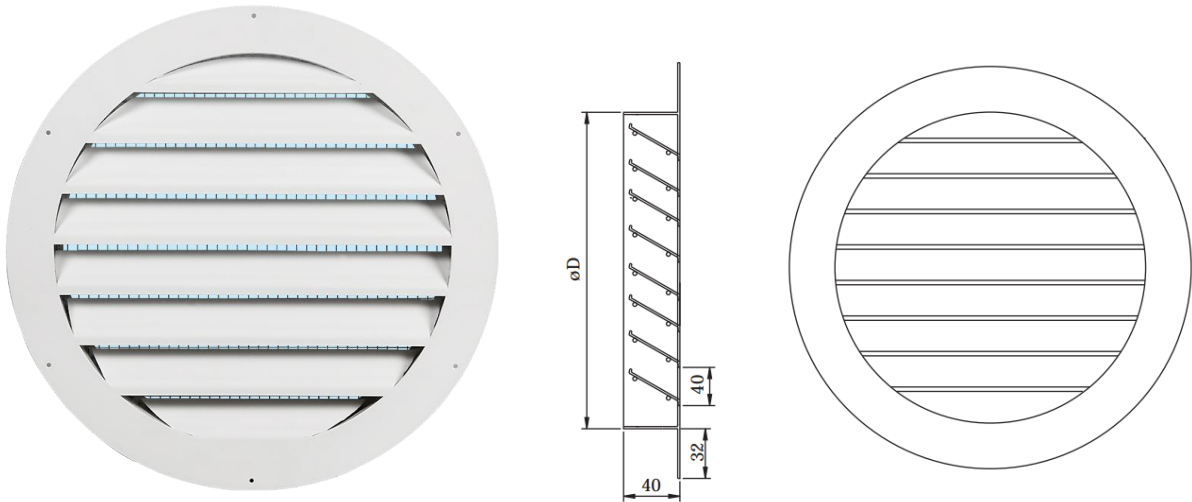


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EXL-461, CIRCULAR EXTERNAL LOUVER



EXL-461, STANDARD SELECTION TABLE

| øD mm | Efective area m ² | Pressure Pa | Air volume m ³ /h |
|----------|---------------------------------|----------------|---------------------------------|
| 300 | 0,037 | 31 | 400 |
| 400 | 0,061 | 31 | 650 |
| 450 | 0,079 | 31 | 850 |
| 500 | 0,099 | 31 | 1150 |
| 600 | 0,142 | 31 | 1600 |
| 700 | 0,201 | 31 | 2400 |
| 800 | 0,27 | 11 | 3000 |
| 1000 | 0,433 | 11 | 4800 |
| 1250 | 0,7 | 11 | 7800 |

*Air volume for 3m/s air velocity.



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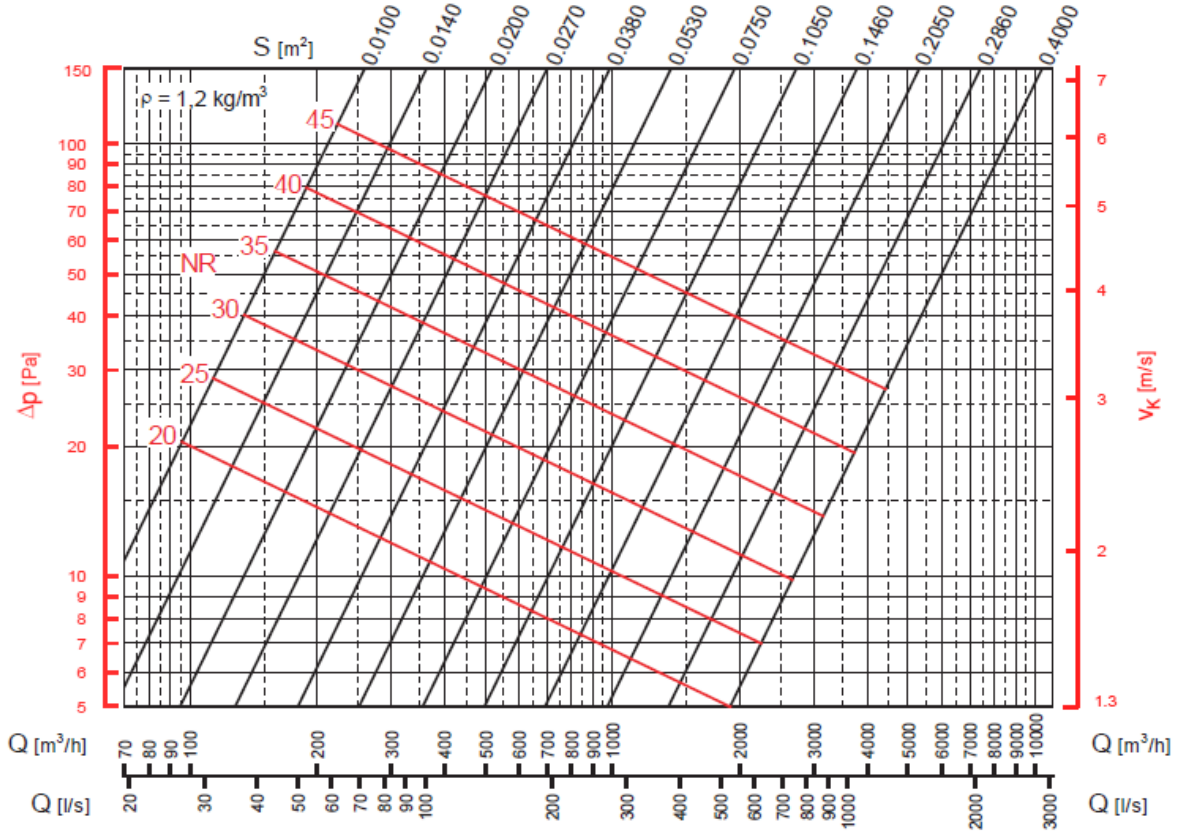
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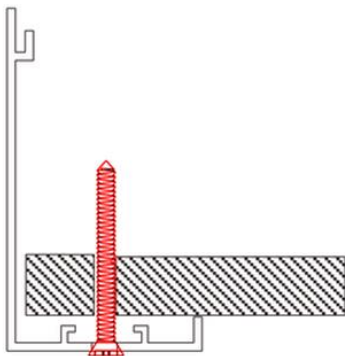
DATA DIAGRAM

EXL-061, PRESSURE DROP AND NOISE LEVELS



- Q [m³/h] supply air flow rate
- S [m²] effective outlet area
- v_k [m/s] velocity relating to the effective outlet area S
- Δp [Pa] total pressure loss
- NR noise rating (ISO standard, in relation to 10-12 W)

MOUNTING DETAIL



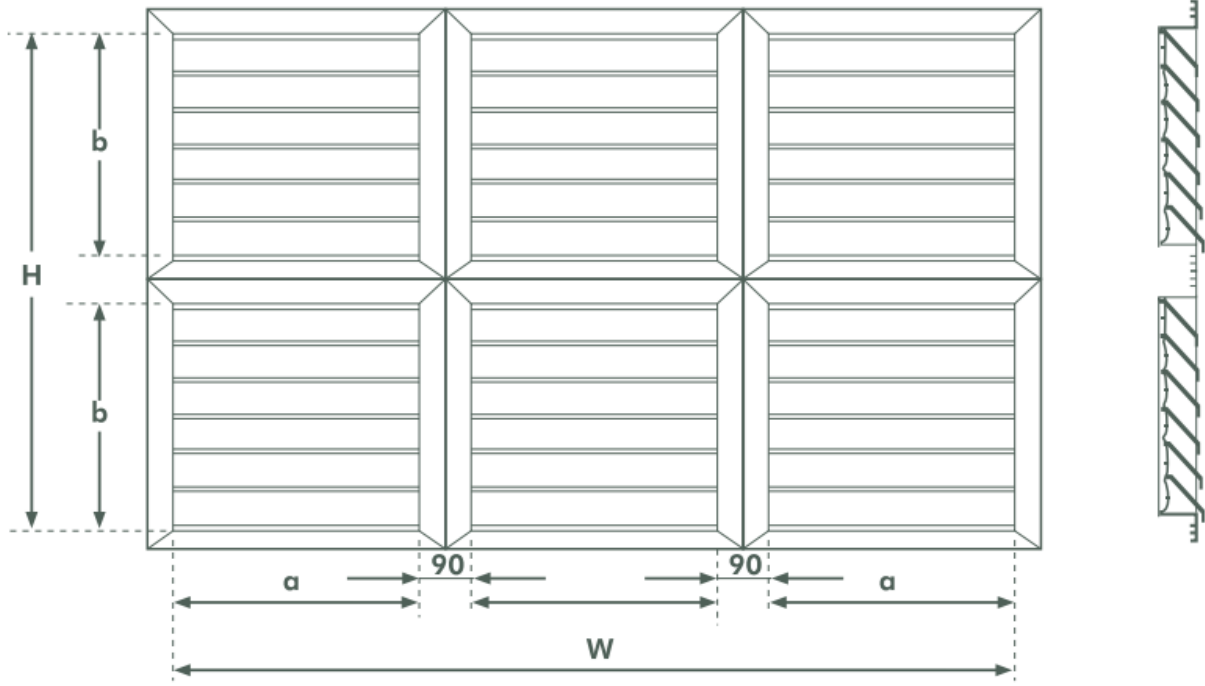
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Rev.02
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MOUNTING OF GREAT EXTERNAL LOUVERS

EXL-361 External Louvers bigger than 2200 x 2000 are manufactured as multi-pieces and installed side-by-side as shown below.



ORDER PARAMETERS

| | | | | | |
|--|------|----|--------|----|---|
| EXL-061 | F220 | 00 | OD9010 | SM | N 400X300 |
| EXL-161: Z-Bladed EXL-261: Curv.-Bladed EXL-361: Wide Bladed EXL-461: Circular Louver F220: Frame=22 mm F325: Frame=32,5 mm | | | | | N: Neck Size 00: No Mounting SM: Screw Mounting |
| 00: No Wire Screen 01: Wire Screen Added | | | | | 00: No coating EX: Eloxal Paint Coating OD----: Oven Drying Paint Coating |

