

# SO



**Caratteristiche:** silenziatori circolari.

**Costruzione:** cassa in acciaio zincato. Isolante in lana minerale da 60 kg/mc.

Spessore isolante:

- 50 mm per Ø uguale o inferiore a 315 mm.
- 100 mm per Ø uguale o superiore a 355 mm.

**Fissaggio:**

- Innesto (E).
- Flangia (F).
- Bordo collare (BC).

**Varianti:**

- Senza ogiva (N).
- Con ogiva (V).

**Characteristics:** circular sound attenuators.

**Finishing:** Casing in galvanized steel. Insulation in mineral wool 60 kg/mc.

Insulation thickness:

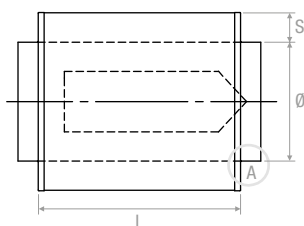
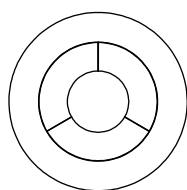
- 50 mm for Ø equal or less than 315 mm.
- 100 mm for Ø equal or greater than 355 mm.

**Fixing:**

- Coupling (E).
- Flange (F).
- Joint by collar (BC).

**Variant:**

- Without ogive (N).
- With ogive (V).



Dettaglio | Detail A



Connessione ad innesto (E) | Joint coupling (E)



Connessione a collare (BC) | Joint by collar (BC)



Connessione a flangia (F) | Joint by flange (F)

**S = 50 mm** per Ø uguale o inferiore a 315 mm | for Ø equal or less than 315 mm  
**S = 100 mm** per Ø uguale o inferiore a 355 mm | for Ø equal or less than 355 mm

## ESEMPIO SELEZIONE SILENZIATORE | SOUND ATTENUATOR SAMPLE SELECTION

## SON

|                                   |       |      |
|-----------------------------------|-------|------|
| Portata aria   Air flow           | mc/h  | 3450 |
| Diametro   Diameter               | mm    | 400  |
| Lunghezza   Length                | mm    | 800  |
| Area frontale   Frontal area      | mq    | 0,12 |
| Velocità frontale   Frontal speed | m/s   | 8    |
| Perdita di carico   Pressure drop | pa    | 3    |
| Attenuazione   Attenuation        | Hz    | 63   |
|                                   | dB(A) | 1    |

Solo perdita condotto | Only duct pressure drop

## SOV

|                                   |       |       |
|-----------------------------------|-------|-------|
| Portata aria   Air flow           | mc/h  | 11150 |
| Diametro   Diameter               | mm    | 630   |
| Lunghezza   Length                | mm    | 630   |
| Area frontale   Frontal area      | mq    | 0,31  |
| Velocità frontale   Frontal speed | m/s   | 10    |
| Perdita di carico   Pressure drop | pa    | 69    |
| Attenuazione   Attenuation        | Hz    | 63    |
|                                   | dB(A) | 1     |

Solo perdita condotto | Only duct pressure drop

ATTENUAZIONE PER INSERZIONE | INSERTION LOSS

SENZA OGIVA | WITHOUT OGIVE

| Ø    | L       | dB Frequenza Hz   Frequency Hz |     |     |     |      |      |      |      |
|------|---------|--------------------------------|-----|-----|-----|------|------|------|------|
|      |         | 63                             | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| 250  | mm      | mm                             |     |     |     |      |      |      |      |
|      | 1 x d   | 1                              | 1   | 2   | 6   | 13   | 6    | 2    | 3    |
|      | 1,5 x d | 1                              | 2   | 4   | 8   | 15   | 8    | 3    | 3    |
| 315  | 2 x d   | 1                              | 2   | 5   | 10  | 17   | 9    | 4    | 3    |
|      | 1 x d   | 1                              | 1   | 3   | 6   | 12   | 6    | 2    | 2    |
|      | 1,5 x d | 1                              | 2   | 4   | 9   | 14   | 7    | 2    | 2    |
| 355  | 2 x d   | 1                              | 2   | 5   | 12  | 16   | 8    | 3    | 3    |
|      | 1 x d   | 1                              | 1   | 3   | 7   | 12   | 5    | 1    | 2    |
|      | 1,5 x d | 1                              | 2   | 4   | 10  | 14   | 6    | 2    | 2    |
| 400  | 2 x d   | 1                              | 3   | 6   | 13  | 16   | 8    | 3    | 2    |
|      | 1 x d   | 1                              | 1   | 3   | 7   | 12   | 5    | 1    | 2    |
|      | 1,5 x d | 1                              | 2   | 4   | 11  | 14   | 6    | 2    | 2    |
| 450  | 2 x d   | 1                              | 3   | 6   | 14  | 16   | 7    | 2    | 2    |
|      | 1 x d   | 1                              | 1   | 3   | 8   | 12   | 5    | 1    | 2    |
|      | 1,5 x d | 1                              | 2   | 5   | 11  | 14   | 6    | 2    | 2    |
| 500  | 2 x d   | 1                              | 3   | 6   | 15  | 16   | 7    | 2    | 2    |
|      | 1 x d   | 1                              | 1   | 3   | 8   | 11   | 4    | 1    | 2    |
|      | 1,5 x d | 1                              | 2   | 5   | 12  | 14   | 6    | 2    | 2    |
| 560  | 2 x d   | 1                              | 3   | 7   | 16  | 16   | 7    | 2    | 2    |
|      | 1 x d   | 0                              | 1   | 3   | 9   | 11   | 4    | 1    | 1    |
|      | 1,5 x d | 1                              | 2   | 5   | 13  | 14   | 5    | 1    | 2    |
| 630  | 2 x d   | 1                              | 3   | 7   | 17  | 17   | 7    | 2    | 2    |
|      | 1 x d   | 0                              | 1   | 4   | 10  | 11   | 4    | 1    | 1    |
|      | 1,5 x d | 1                              | 2   | 6   | 14  | 14   | 5    | 1    | 2    |
| 710  | 2 x d   | 1                              | 3   | 8   | 19  | 17   | 7    | 2    | 2    |
|      | 1 x d   | 0                              | 1   | 4   | 10  | 11   | 4    | 1    | 1    |
|      | 1,5 x d | 1                              | 2   | 6   | 15  | 14   | 5    | 1    | 1    |
| 800  | 2 x d   | 1                              | 3   | 8   | 20  | 17   | 6    | 2    | 2    |
|      | 1 x d   | 0                              | 1   | 4   | 11  | 11   | 4    | 1    | 1    |
|      | 1,5 x d | 1                              | 2   | 6   | 16  | 14   | 5    | 1    | 1    |
| 900  | 2 x d   | 0                              | 1   | 4   | 12  | 11   | 3    | 1    | 1    |
|      | 1 x d   | 1                              | 2   | 7   | 18  | 15   | 5    | 1    | 1    |
|      | 1,5 x d | 1                              | 2   | 7   | 18  | 15   | 5    | 1    | 1    |
| 1000 | 2 x d   | 0                              | 1   | 5   | 13  | 11   | 3    | 0    | 1    |
|      | 1 x d   | 1                              | 2   | 7   | 19  | 15   | 5    | 1    | 1    |
|      | 1,5 x d | 1                              | 2   | 7   | 19  | 15   | 5    | 1    | 1    |

CON OGIVA | WITH OGIVE

| Ø    | L       | dB Frequenza Hz   Frequency Hz |     |     |     |      |      |      |      |
|------|---------|--------------------------------|-----|-----|-----|------|------|------|------|
|      |         | 63                             | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| 250  | mm      | mm                             |     |     |     |      |      |      |      |
|      | 1 x d   | 0                              | 2   | 5   | 9   | 5    | 6    | 11   | 13   |
|      | 1,5 x d | 0                              | 3   | 6   | 11  | 10   | 11   | 15   | 15   |
| 315  | 2 x d   | 1                              | 3   | 7   | 13  | 15   | 16   | 18   | 17   |
|      | 1 x d   | 0                              | 2   | 5   | 9   | 7    | 7    | 10   | 11   |
|      | 1,5 x d | 1                              | 3   | 6   | 12  | 13   | 13   | 14   | 13   |
| 355  | 2 x d   | 1                              | 4   | 8   | 14  | 19   | 19   | 18   | 15   |
|      | 1 x d   | 1                              | 2   | 5   | 9   | 8    | 8    | 10   | 11   |
|      | 1,5 x d | 2                              | 3   | 6   | 12  | 15   | 14   | 14   | 12   |
| 400  | 2 x d   | 2                              | 4   | 8   | 15  | 21   | 20   | 17   | 14   |
|      | 1 x d   | 1                              | 2   | 5   | 10  | 9    | 9    | 10   | 10   |
|      | 1,5 x d | 2                              | 3   | 6   | 13  | 16   | 15   | 13   | 12   |
| 450  | 2 x d   | 2                              | 4   | 8   | 16  | 24   | 22   | 17   | 13   |
|      | 1 x d   | 1                              | 2   | 5   | 10  | 10   | 10   | 9    | 9    |
|      | 1,5 x d | 2                              | 3   | 7   | 13  | 18   | 16   | 13   | 11   |
| 500  | 2 x d   | 2                              | 4   | 8   | 16  | 26   | 23   | 17   | 13   |
|      | 1 x d   | 1                              | 2   | 5   | 10  | 12   | 11   | 9    | 8    |
|      | 1,5 x d | 2                              | 3   | 7   | 14  | 20   | 18   | 13   | 10   |
| 560  | 2 x d   | 2                              | 4   | 9   | 17  | 28   | 25   | 17   | 12   |
|      | 1 x d   | 1                              | 2   | 5   | 11  | 13   | 12   | 9    | 8    |
|      | 1,5 x d | 2                              | 3   | 7   | 14  | 22   | 19   | 13   | 10   |
| 630  | 2 x d   | 3                              | 4   | 9   | 18  | 31   | 26   | 17   | 12   |
|      | 1 x d   | 1                              | 2   | 5   | 11  | 15   | 12   | 9    | 7    |
|      | 1,5 x d | 2                              | 3   | 7   | 15  | 24   | 20   | 13   | 9    |
| 710  | 2 x d   | 3                              | 5   | 9   | 19  | 34   | 28   | 17   | 11   |
|      | 1 x d   | 1                              | 2   | 5   | 12  | 16   | 13   | 9    | 7    |
|      | 1,5 x d | 2                              | 4   | 8   | 16  | 27   | 22   | 13   | 9    |
| 800  | 2 x d   | 3                              | 5   | 10  | 20  | 37   | 30   | 17   | 11   |
|      | 1 x d   | 1                              | 2   | 6   | 12  | 18   | 14   | 9    | 7    |
|      | 1,5 x d | 2                              | 4   | 8   | 17  | 29   | 23   | 13   | 8    |
| 900  | 2 x d   | 1                              | 2   | 6   | 13  | 20   | 15   | 9    | 6    |
|      | 1 x d   | 1                              | 2   | 6   | 13  | 20   | 15   | 9    | 6    |
|      | 1,5 x d | 2                              | 4   | 8   | 18  | 32   | 24   | 13   | 8    |
| 1000 | 2 x d   | 2                              | 3   | 6   | 13  | 22   | 16   | 9    | 6    |
|      | 1 x d   | 2                              | 3   | 6   | 13  | 22   | 16   | 9    | 6    |
|      | 1,5 x d | 2                              | 4   | 9   | 19  | 35   | 26   | 13   | 8    |



# SILENZIATORI CIRCOLARI CON OGIVA - PERDITE DI CARICO

## CIRCULAR SOUND ATTENUATOR WITH OGIVE - PRESSURE DROP

| Ø    | L       | PA                                                                          |   |    |    |    |    |    |    |    |
|------|---------|-----------------------------------------------------------------------------|---|----|----|----|----|----|----|----|
|      |         | Velocità frontale V <sub>f</sub> [m/s]   Frontal Speed V <sub>f</sub> [m/s] |   |    |    |    |    |    |    |    |
| mm   | mm      | 2                                                                           | 3 | 4  | 5  | 6  | 7  | 8  | 9  | 10 |
| 250  | 1 x d   | 3                                                                           | 6 | 11 | 18 | 25 | 34 | 45 | 57 | 70 |
|      | 1,5 x d | 3                                                                           | 7 | 13 | 20 | 28 | 38 | 50 | 63 | 78 |
|      | 2 x d   | 3                                                                           | 8 | 14 | 21 | 31 | 42 | 55 | 69 | 86 |
| 315  | 1 x d   | 3                                                                           | 6 | 11 | 17 | 25 | 34 | 45 | 56 | 69 |
|      | 1,5 x d | 3                                                                           | 7 | 12 | 19 | 28 | 38 | 49 | 63 | 77 |
|      | 2 x d   | 3                                                                           | 8 | 14 | 21 | 31 | 42 | 54 | 69 | 85 |
| 355  | 1 x d   | 3                                                                           | 6 | 11 | 17 | 25 | 34 | 44 | 56 | 69 |
|      | 1,5 x d | 3                                                                           | 7 | 12 | 19 | 28 | 38 | 49 | 62 | 77 |
|      | 2 x d   | 3                                                                           | 8 | 14 | 21 | 31 | 42 | 54 | 69 | 85 |
| 400  | 1 x d   | 3                                                                           | 6 | 11 | 17 | 25 | 34 | 44 | 56 | 69 |
|      | 1,5 x d | 3                                                                           | 7 | 12 | 19 | 28 | 38 | 49 | 62 | 77 |
|      | 2 x d   | 3                                                                           | 8 | 14 | 21 | 30 | 41 | 54 | 68 | 84 |
| 450  | 1 x d   | 3                                                                           | 6 | 11 | 17 | 25 | 34 | 44 | 56 | 69 |
|      | 1,5 x d | 3                                                                           | 7 | 12 | 19 | 28 | 38 | 49 | 62 | 77 |
|      | 2 x d   | 3                                                                           | 8 | 14 | 21 | 30 | 41 | 54 | 68 | 84 |
| 500  | 1 x d   | 3                                                                           | 6 | 11 | 17 | 25 | 34 | 44 | 56 | 69 |
|      | 1,5 x d | 3                                                                           | 7 | 12 | 19 | 28 | 38 | 49 | 62 | 76 |
|      | 2 x d   | 3                                                                           | 8 | 14 | 21 | 30 | 41 | 54 | 68 | 84 |
| 560  | 1 x d   | 3                                                                           | 6 | 11 | 17 | 25 | 34 | 44 | 56 | 69 |
|      | 1,5 x d | 3                                                                           | 7 | 12 | 19 | 28 | 37 | 49 | 62 | 76 |
|      | 2 x d   | 3                                                                           | 8 | 13 | 21 | 30 | 41 | 54 | 68 | 84 |
| 630  | 1 x d   | 3                                                                           | 6 | 11 | 17 | 25 | 34 | 44 | 56 | 69 |
|      | 1,5 x d | 3                                                                           | 7 | 12 | 19 | 27 | 37 | 49 | 62 | 76 |
|      | 2 x d   | 3                                                                           | 8 | 13 | 21 | 30 | 41 | 53 | 67 | 83 |
| 710  | 1 x d   | 3                                                                           | 6 | 11 | 17 | 25 | 34 | 44 | 55 | 68 |
|      | 1,5 x d | 3                                                                           | 7 | 12 | 19 | 27 | 37 | 49 | 61 | 76 |
|      | 2 x d   | 3                                                                           | 8 | 13 | 21 | 30 | 41 | 53 | 67 | 83 |
| 800  | 1 x d   | 3                                                                           | 6 | 11 | 17 | 25 | 34 | 44 | 55 | 68 |
|      | 1,5 x d | 3                                                                           | 7 | 12 | 19 | 27 | 37 | 48 | 61 | 76 |
| 900  | 1 x d   | 3                                                                           | 6 | 11 | 17 | 25 | 33 | 44 | 55 | 68 |
|      | 1,5 x d | 3                                                                           | 7 | 12 | 19 | 27 | 37 | 48 | 61 | 75 |
| 1000 | 1 x d   | 3                                                                           | 6 | 11 | 17 | 25 | 33 | 44 | 55 | 68 |
|      | 1,5 x d | 3                                                                           | 7 | 12 | 19 | 27 | 37 | 48 | 61 | 75 |

**SILENZIATORI CIRCOLARI SENZA OGIVA - PERDITE DI CARICO**  
 CIRCULAR SOUND ATTENUATOR WITHOUT OGIVE - PRESSURE DROP

| Ø    | L       | PA                                                                          |   |   |   |   |   |   |   |    |
|------|---------|-----------------------------------------------------------------------------|---|---|---|---|---|---|---|----|
|      |         | Velocità frontale V <sub>f</sub> [m/s]   Frontal Speed V <sub>f</sub> [m/s] |   |   |   |   |   |   |   |    |
| mm   | mm      | 2                                                                           | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 250  | 1 x d   | 0                                                                           | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 4  |
|      | 1,5 x d | 0                                                                           | 1 | 1 | 1 | 2 | 3 | 4 | 5 | 6  |
|      | 2 x d   | 0                                                                           | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 8  |
| 315  | 1 x d   | 0                                                                           | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 3  |
|      | 1,5 x d | 0                                                                           | 0 | 1 | 1 | 2 | 2 | 3 | 4 | 5  |
|      | 2 x d   | 0                                                                           | 1 | 1 | 2 | 2 | 3 | 4 | 5 | 6  |
| 355  | 1 x d   | 0                                                                           | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 3  |
|      | 1,5 x d | 0                                                                           | 0 | 1 | 1 | 1 | 2 | 3 | 3 | 4  |
|      | 2 x d   | 0                                                                           | 0 | 1 | 1 | 2 | 3 | 3 | 4 | 5  |
| 400  | 1 x d   | 0                                                                           | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 2  |
|      | 1,5 x d | 0                                                                           | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 4  |
|      | 2 x d   | 0                                                                           | 0 | 1 | 1 | 2 | 2 | 3 | 4 | 5  |
| 450  | 1 x d   | 0                                                                           | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2  |
|      | 1,5 x d | 0                                                                           | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 3  |
|      | 2 x d   | 0                                                                           | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 4  |
| 500  | 1 x d   | 0                                                                           | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2  |
|      | 1,5 x d | 0                                                                           | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 3  |
|      | 2 x d   | 0                                                                           | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 4  |
| 560  | 1 x d   | 0                                                                           | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2  |
|      | 1,5 x d | 0                                                                           | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 3  |
|      | 2 x d   | 0                                                                           | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 3  |
| 630  | 1 x d   | 0                                                                           | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2  |
|      | 1,5 x d | 0                                                                           | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2  |
|      | 2 x d   | 0                                                                           | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 3  |
| 710  | 1 x d   | 0                                                                           | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1  |
|      | 1,5 x d | 0                                                                           | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2  |
|      | 2 x d   | 0                                                                           | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 3  |
| 800  | 1 x d   | 0                                                                           | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1  |
|      | 1,5 x d | 0                                                                           | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2  |
| 900  | 1 x d   | 0                                                                           | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1  |
|      | 1,5 x d | 0                                                                           | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2  |
| 1000 | 1 x d   | 0                                                                           | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1  |
|      | 1,5 x d | 0                                                                           | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1  |

VERSIONI DISPONIBILI | VERSIONS AVAILABLE

| Ø    | L   | SENZA OGIVA<br>WITHOUT OGIVE | CON OGIVA<br>WITH OGIVE |
|------|-----|------------------------------|-------------------------|
| mm   | mm  |                              |                         |
| 200  | 250 |                              |                         |
| 225  | 250 |                              |                         |
| 250  | 250 |                              |                         |
| 280  | 250 |                              |                         |
| 315  | 250 |                              |                         |
| 355  | 250 |                              |                         |
| 400  | 250 |                              |                         |
| 450  | 250 |                              |                         |
| 500  | 250 |                              |                         |
| 560  | 250 |                              |                         |
| 630  | 250 |                              |                         |
| 710  | 250 |                              |                         |
| 800  | 250 |                              |                         |
| 900  | 250 |                              |                         |
| 1000 | 250 |                              |                         |
| 200  | 500 |                              |                         |
| 225  | 500 |                              |                         |
| 250  | 500 |                              |                         |
| 280  | 500 |                              |                         |
| 315  | 500 |                              |                         |
| 355  | 500 |                              |                         |
| 400  | 500 |                              |                         |
| 450  | 500 |                              |                         |
| 500  | 500 |                              |                         |
| 560  | 500 |                              |                         |
| 630  | 500 |                              |                         |
| 710  | 500 |                              |                         |
| 800  | 500 |                              |                         |
| 900  | 500 |                              |                         |
| 1000 | 500 |                              |                         |
| 200  | 750 |                              |                         |
| 225  | 750 |                              |                         |
| 250  | 750 |                              |                         |
| 280  | 750 |                              |                         |
| 315  | 750 |                              |                         |
| 355  | 750 |                              |                         |
| 400  | 750 |                              |                         |
| 450  | 750 |                              |                         |
| 500  | 750 |                              |                         |
| 560  | 750 |                              |                         |
| 630  | 750 |                              |                         |
| 710  | 750 |                              |                         |
| 800  | 750 |                              |                         |
| 900  | 750 |                              |                         |
| 1000 | 750 |                              |                         |

| Ø    | L    | SENZA OGIVA<br>WITHOUT OGIVE | CON OGIVA<br>WITH OGIVE |
|------|------|------------------------------|-------------------------|
| mm   | mm   |                              |                         |
| 200  | 1000 |                              |                         |
| 225  | 1000 |                              |                         |
| 250  | 1000 |                              |                         |
| 280  | 1000 |                              |                         |
| 315  | 1000 |                              |                         |
| 355  | 1000 |                              |                         |
| 400  | 1000 |                              |                         |
| 450  | 1000 |                              |                         |
| 500  | 1000 |                              |                         |
| 560  | 1000 |                              |                         |
| 630  | 1000 |                              |                         |
| 710  | 1000 |                              |                         |
| 800  | 1000 |                              |                         |
| 900  | 1000 |                              |                         |
| 1000 | 1000 |                              |                         |
| 200  | 1250 |                              |                         |
| 225  | 1250 |                              |                         |
| 250  | 1250 |                              |                         |
| 280  | 1250 |                              |                         |
| 315  | 1250 |                              |                         |
| 355  | 1250 |                              |                         |
| 400  | 1250 |                              |                         |
| 450  | 1250 |                              |                         |
| 500  | 1250 |                              |                         |
| 560  | 1250 |                              |                         |
| 630  | 1250 |                              |                         |
| 710  | 1250 |                              |                         |
| 800  | 1250 |                              |                         |
| 900  | 1250 |                              |                         |
| 1000 | 1250 |                              |                         |
| 200  | 1500 |                              |                         |
| 225  | 1500 |                              |                         |
| 250  | 1500 |                              |                         |
| 280  | 1500 |                              |                         |
| 315  | 1500 |                              |                         |
| 355  | 1500 |                              |                         |
| 400  | 1500 |                              |                         |
| 450  | 1500 |                              |                         |
| 500  | 1500 |                              |                         |
| 560  | 1500 |                              |                         |
| 630  | 1500 |                              |                         |
| 710  | 1500 |                              |                         |
| 800  | 1500 |                              |                         |
| 900  | 1500 |                              |                         |
| 1000 | 1500 |                              |                         |

FIL-SIL

