

Rittling Architechtural Enclosures

Submittal Data, English Language, IP Units

Submittal data

Project

Job number

Architect

Engineer

Contractor

Performance data: heating

| Mean water temperature | |
|-------------------------|-----------|
| | °F |
| Design room temperature | |
| | °F |
| Heating capacity | |
| | BTH/br ft |

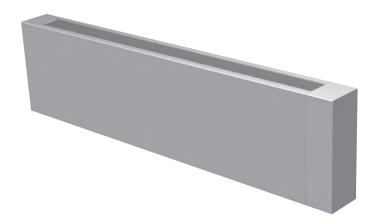


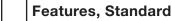
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*Page number

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Zehnder Rittling's Standard Bargrille Enclosure provide high output in an attractive architectural design with a depth of 5-3/8".

Enclosure

- 14, 16, 18-gauge cold rolled steel with painted finish
- 1'-8' lengths in 6" increments
- Powder coated finish in decorator colors available
- 14", 20" or 24" standard heights
- Custom heights of 6"-36" available on all models
- Available in 16-gauge or 18-gauge stainless steel

Copper/Aluminum Element

- Tube: 3/4", 1" or 1-1/4"
- Fin: 2-3/4" x 4", 3-1/4" x 3-1/4" or 4-1/4" x 4-1/4"
- 1' to 12' lengths in 6" increments

Steel Element

- Tube: 1", 1-1/4" or 2"
- Fin: 3-1/4" x 3-1/4" or 4-1/4" x 4-1/4"
- 1-1/2' to 10' length in 6" increments

Mounting

- Snap mounting channel
- Optional 20-gauge galvannealed steel full back panel (18-gauge available)
- Urethane gasket for air seal available
- 4' or 8' lengths

Hangers

- 16-gauge galvannealed steel
- Slide cradle will accommodate 1-3/4" linear expansion for quiet operation
- BG5/IBG5: Self-gauging, snap fit, expansion cradle with positive-locking, bottom-mounting clip provide easy installation as well as security
- Second row bracket, slip-in or wall mounted. Used for multiple tiers of element
- Slip-in pipe hanger or wall pipe hanger for use with bare tube supply and return pipes

BG5/IBG5, BGVL5/BGHL5, IBGVL5/IBGHL5

Joints

Internal joggle joiners provide hairline joints without any external fasteners

Damper (optional)

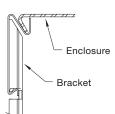
- Durable knob
- Security tamper proof
- Aluminum slide (IBG only)
- See charts on pages 69-71 for availability

Grille

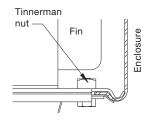
- BG: standard aluminum extrusion, etched finishes, pencilproof
- IBG: heavy-duty aluminum extrusion, R-204 clear anodized finish, 15° grille deflection, pencilproof.



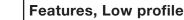
Cutaway view of IBG5 enclosure showing 4-1/4" x 4-1/4" fin configuration



Mounting channel detail



Positive locking bottom mounting clip detail



Zehnder Rittling's Low Profile Bargrille Enclosure provides an attractive architectural design with a slimline appearance and a depth of less than 4".

Enclosure

- 14, 16, 18-gauge cold rolled steel with painted finish
- 1'-8' lengths in 6" increments
- Standard heights
 - BG3/IBG3: 8", 11" or 14"
 - BGVL3/BGHL3: 11" or 14"
 - IBGVL3/IBGHL3: 11" or 14"
- Custom heights available
 - BG3/IBG3: 6"-36"
 - BGVL3/BGHL3: 10"-36"
 - IBGVL3/IBGHL3: 10"-36"
- Powder coated finish in decorator colors available
- Available in 16- and 18-gauge stainless steel

Copper/Aluminum Element

- Tube: 3/4", 1" or 1-1/4"
- Fin: 2-3/4" x 4", 3-1/4" x 3-1/4" or 4-1/4" x 4-1/4"
- 1' to 12' lengths in 6" increments

Steel Element

- Tube: 1", 1-1/4" or 2"
- Fin: 3-1/4" x 3-1/4" or 4-1/4" x 4-1/4"
- 1-1/2' to 10' length in 6" increments

Mounting

- Mounting channel
- Optional 20-gauge galvannealed steel full back panel (18-gauge available)
- Urethane gasket for air seal available
- 4' or 8' lengths

Hangers

- 16-gauge galvannealed steel
- Slide cradle will accommodate 1-3/4" linear expansion for quiet operation

BG3/IBG3, BGVL3/BGHL3, IBGVL3/IBGHL3

- BG3/IBG3: Self-gauging, snap fit, expansion cradle with positive-locking, bottom-mounting clip provide easy installation as well as security
- Second row bracket, slip-in or wall mounted. Used for multiple tiers of element
- Slip-in pipe hanger or wall pipe hanger for use with bare tube supply and return pipes

Joints

Internal joggle joiners provide hairline joints without any external fasteners

Damper (optional)

- Durable knob
- Security tamper proof
- Aluminum slide (IBG only)

Grille

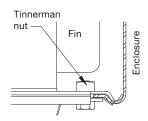
- BG: standard aluminum extrusion, etched finishes, pencilproof
- IBG: heavy-duty aluminum extrusion, R-204 clear anodized finish, 15° grille deflection, pencilproof



3-1/4" x 3-1/4" fin configuration

Bracket

Mounting channel detail



Positive locking bottom mounting clip detail

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Enclosure

English, IP Units

PBG5/PIBG5, PBG10/PIBG10

Features, Pedestal

Zehnder Rittling's Pedestal Bargrille Enclosure offers a slimline appearance in a strong floor mounted enclosure.

Enclosure

- 14, 16, 18-gauge cold rolled steel with painted finish
- 1'-8' lengths in 6" increments
- PBG5/PIBG5:
 - 1 row: 6" high
 - 1 row and return: 8" high
 - 2 row: 12" high
- PBG10/PIBG10:
 - 2 column: 6" high
- Powder coated finish in decorator colors available
- Available in 16-gauge or 18-gauge stainless steel
- 1-row or 2-row high (PBG5/PIBG5), 2-column wide (PBG10/ PIBG10) or many other custom configurations available

Copper/Aluminum Element

- Tube: 3/4", 1" or 1-1/4"
- Fin: 2-3/4" x 4", 3-1/4" x 3-1/4" or 4-1/4" x 4-1/4"
- 1' to 12' lengths in 6" increments

Steel Element

- Tube: 1", 1-1/4" or 2"
- Fin: 3-1/4" x 3-1/4" or 4-1/4" x 4-1/4"
- 1-1/2' to 10' length in 6" increments

Mounting

- Pedestal brackets 2 available style bases:
 - Adjustable U (standard) 4" +5/8" / -13/16"
 - Aluminum floor flange (optional), not available on 2 column
- Enclosure mounts to a cradle-type expansion bracket with positive locking bottom mounting clip to provide easy installation and security

Joints

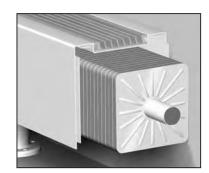
Internal joggle joiners provide hairline joints without any external fasteners

Damper (optional)

Aluminum slide (PIBG only)

Grille

- PBG: standard aluminum extrusion, etched finishes, pencilproof
- PIBG: heavy-duty aluminum extrusion, R-204 clear anodized finish, 15° grille deflection, pencilproof



Cutaway view of PIBG enclosure showing 4-1/4" x 4-1/4" fin configuration.

English, IP Units



Features, Sloped top

Zehnder Rittling's Sloped Top Bargrille Enclosure provide strong contemporary styling and high output with a depth of 5-3/8".

Enclosure

- 14, 16, 18-gauge cold rolled steel, phosphatized with painted finish
- 1'-8' lengths in 6" increments
- Powder coated finish in decorator colors available
- Available in 16-gauge and 18-gauge stainless steel
- 20" or 24" standard heights
- Custom heights:6"-36" available

Copper/Aluminum Element

- Tube: 3/4", 1" or 1-1/4"
- Fin: 2-3/4" x 4", 3-1/4" x 3-1/4" or 4-1/4" x 4-1/4"
- 1' to 12' lengths in 6" increments

Steel Element

- Tube: 1", 1-1/4" or 2"
- Fin: 3-1/4" X 3-1/4" or 4-1/4" X 4-1/4"
- 1-1/2' to 10' length in 6" increments

Mounting

- Snap mounting channel
- Optional 20-gauge galvannealed steel full back panel (18-gauge available).
- Urethane gasket for air seal available.
- 4' or 8' lengths

Hangers

- Self-gauging, snap-fit, expansion cradle with positivelocking, bottom-mounting clip provide easy installation as well as security
- 16-gauge galvannealed steel
- Slide cradle will accommodate 1-3/4" linear expansion for quiet operation.



- Second row bracket, slip-in or wall mounted. Used for multiple tiers of element
- Slip-in pipe hanger or wall pipe hanger for use with bare tube supply and return pipes

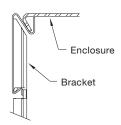
Joints

Internal joggle joiners provide hairline joints without any external fasteners

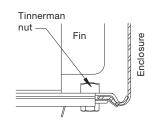
Grille

- SBG: standard aluminum extrusion, etched finishes, pencilproof
- SIBG: heavy-duty aluminum extrusion, R-204 clear anodized finish, 15° grille deflection, pencilproof





Mounting channel detail



Cutaway view of SIBG5 enclosure showing 4-1/4" x 4-1/4" fin configuration.

Positive locking bottom mounting clip detail

English, IP Units

SBG3/SIBG3, SBGVL3/SIBGVL3

Features, Sloped top

Zehnder Rittling's Sloped Top Bargrille Enclosure provide strong contemporary styling and high output with a depth of 3-15/16".

Enclosure

- 14, 16, 18-gauge cold rolled steel, phosphatized with painted finish
- 1'-8' lengths in 6" increments
- Powder coated finish in decorator colors available
- Available in 16-gauge and 18-gauge stainless steel
- 8", 11", 14" standard heights
- Custom heights: 6"-36" available

Copper/Aluminum Element

- Tube: 3/4", 1" or 1-1/4"
- Fin: 2-3/4" x 4", 3-1/4" x 3-1/4" or 4-1/4" x 4-1/4"
- 1 to 12-foot lengths in 6" increments

Steel Element

- Tube: 1", 1-1/4" or 2"
- Fin: 3-1/4" x 3-1/4" or 4-1/4" x 4-1/4"
- 1-1/2' to 10' length in 6" increments

Mounting

- Snap mounting channel
- Optional 20-gauge galvannealed steel full back panel (18-gauge available).
- Urethane gasket for air seal available.
- 4' or 8' lengths

Hangers

- Self-gauging, snap-fit, expansion cradle with positivelocking, bottom-mounting clip provide easy installation as well as security
- 16-gauge galvannealed steel

- Slide cradle will accommodate 1-3/4" linear expansion for quiet operation.
- Second row bracket, slip-in or wall mounted. Used for multiple tiers of element
- Slip-in pipe hanger or wall pipe hanger for use with bare tube supply and return pipes
- See charts on pages 69-71 for available combinations

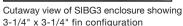
Joints

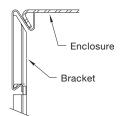
Internal joggle joiners provide hairline joints without any external fasteners

Grille

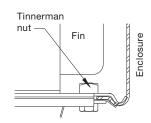
- SBG: standard aluminum extrusion, etched finishes, pencilproof
- SIBG: heavy-duty aluminum extrusion, R-204 clear anodized finish, 15° grille deflection, pencilproof







Mounting channel detail



Positive locking bottom mounting clip detail

General data

Performance ratings: model BG5/IBG5; standard enclosure

| | Element | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|----------------|-----------------|------------------------|-----------------------|---------------------------------|---------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft²/ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | | | Steel element | | | 1 | | |
| | | 1 | 14 | 18 | 4.00 | 960 | 750 | 660 | 580 | 510 |
| | | 1 | 20 | 24 | 4.10 | 980 | 760 | 680 | 600 | 520 |
| | | 2 | 20 | 24 | 6.20 | 1490 | 1160 | 1030 | 910 | 790 |
| | 1S-3¼ X 3¼-32 | 1 | 24 | 28 | 4.30 | 1030 | 800 | 710 | 630 | 540 |
| | | 2 | 24 | 28 | 6.60 | 1570 | 1220 | 1080 | 960 | 830 |
| | | 3 | 24 | 28 | 7.60 | 1820 | 1420 | 1250 | 1110 | 960 |
| | | 1 | 14 | 18 | 4.50 | 1080 | 840 | 740 | 660 | 570 |
| <u>e</u> | | 1 | 20 | 24 | 4.80 | 1150 | 900 | 790 | 700 | 610 |
| 1" Dia. steel | | 2 | 20 | 24 | 6.80 | 1640 | 1280 | 1130 | 1000 | 870 |
| Dia | 1S-3¼ X 3¼-40 | 1 | 24 | 28 | 5.00 | 1200 | 940 | 830 | 730 | 640 |
| - - | | 2 | 24 | 28 | 7.10 | 1710 | 1330 | 1180 | 1040 | 910 |
| | | 3 | 24 | 28 | 8.30 | 1980 | 1540 | 1370 | 1210 | 820 |
| | | 1 | 14 | 18 | 5.00 | 1200 | 940 | 830 | 730 | 840 |
| | | 1 | 20 | 24 | 5.60 | 1350 | 1050 | 930 | 820 | 710 |
| | 40 01/ X 01/ 40 | 2 | 20 | 24 | 7.80 | 1870 | 1460 | 1290 | 1140 | 990 |
| | 1S-3¼ X 3¼-48 | 1 | 24 | 28 | 5.80 | 1400 | 1090 | 970 | 850 | 740 |
| | | 2 | 24 | 28 | 7.80 | 1860 | 1450 | 1280 | 1130 | 980 |
| | | 3 | 24 | 28 | 8.90 | 2130 | 1660 | 1470 | 1300 | 1130 |
| | | 1 | 14 | 18 | 5.80 | 1400 | 1090 | 970 | 850 | 740 |
| | | 1 | 20 | 24 | 6.10 | 1450 | 1130 | 1000 | 890 | 770 |
| | 1S-4¼ X 4¼-32 | 2 | 20 | 24 | 9.00 | 2150 | 1630 | 1480 | 1310 | 1140 |
| | 13-4/4 A 4/4-32 | 1 | 24 | 28 | 6.10 | 1490 | 1160 | 1030 | 910 | 790 |
| | | 2 | 24 | 28 | 9.40 | 2250 | 1760 | 1550 | 1370 | 1190 |
| | | 3 | 24 | 28 | 10.10 | 2590 | 2020 | 1790 | 1580 | 1370 |
| | | 1 | 14 | 18 | 6.60 | 1570 | 1220 | 1080 | 960 | 830 |
| Bel | | 1 | 20 | 24 | 7.10 | 1690 | 1310 | 1170 | 1030 | 900 |
| . ste | 1S-4¼ X 4¼-40 | 2 | 20 | 24 | 9.90 | 2380 | 1860 | 1640 | 1450 | 1260 |
| 1" Dia. steel | 13-474 A 474-4U | 1 | 24 | 28 | 7.20 | 1730 | 1350 | 1200 | 1060 | 920 |
| - | | 2 | 24 | 28 | 10.30 | 2470 | 1930 | 1700 | 1510 | 1310 |
| | | 3 | 24 | 28 | 11.80 | 2840 | 2220 | 1960 | 1730 | 1510 |
| | | 1 | 14 | 18 | 7.30 | 1760 | 1370 | 1210 | 1070 | 930 |
| | | 1 | 20 | 24 | 8.20 | 1960 | 1530 | 1350 | 1200 | 1040 |
| | 1S-4¼ X 4¼-48 | 2 | 20 | 24 | 10.90 | 2620 | 2050 | 1810 | 1600 | 1390 |
| | 10-7/4 A 4/4-40 | 1 | 24 | 28 | 8.40 | 2010 | 1570 | 1390 | 1230 | 1070 |
| | | 2 | 24 | 28 | 11.30 | 2710 | 2110 | 1870 | 1650 | 1440 |
| | | 3 | 24 | 28 | 13.05 | 3130 | 2440 | 2160 | 1910 | 1660 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model BG5/IBG5; standard enclosure

| | Element | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|---------------|--------------------|------------------------|-----------------------|---------------------------------|---------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft²/ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | I | 1 | Steel element | I | 1 | 1 | | |
| | | 1 | 14 | 18 | 3.90 | 940 | 730 | 650 | 570 | 500 |
| | | 1 | 20 | 24 | 4.00 | 960 | 750 | 660 | 590 | 510 |
| | | 2 | 20 | 24 | 6.10 | 1460 | 1140 | 1010 | 890 | 770 |
| | 1¼S-3¼ X 3¼-32 | 1 | 24 | 28 | 4.20 | 1010 | 790 | 700 | 620 | 540 |
| | | 2 | 24 | 28 | 6.40 | 1540 | 1200 | 1060 | 940 | 820 |
| | | 3 | 24 | 28 | 7.40 | 1780 | 1390 | 1230 | 1090 | 940 |
| | | 1 | 14 | 18 | 4.40 | 1060 | 830 | 730 | 650 | 560 |
| fee | | 1 | 20 | 24 | 4.70 | 1130 | 880 | 780 | 690 | 600 |
| 1¼" Dia. stee | 41/ C 01/ X 01/ 40 | 2 | 20 | 24 | 6.70 | 1610 | 1260 | 1110 | 980 | 850 |
| ä | 1¼S-3¼ X 3¼-40 | 1 | 24 | 28 | 4.90 | 1180 | 920 | 810 | 720 | 630 |
| 11/4 | | 2 | 24 | 28 | 7.00 | 1680 | 1310 | 1160 | 1020 | 890 |
| | | 3 | 24 | 28 | 8.10 | 1940 | 1510 | 1340 | 1180 | 1030 |
| | | 1 | 14 | 18 | 4.90 | 1180 | 920 | 810 | 720 | 630 |
| | | 1 | 20 | 24 | 5.50 | 1320 | 1030 | 910 | 810 | 700 |
| | 1¼S-3¼ X 3¼-48 | 2 | 20 | 24 | 7.40 | 1780 | 1390 | 1230 | 1090 | 940 |
| | 1/43-3/4 A 3/4-40 | 1 | 24 | 28 | 5.70 | 1370 | 1070 | 950 | 840 | 730 |
| | | 2 | 24 | 28 | 7.60 | 1820 | 1420 | 1260 | 1110 | 960 |
| | | 3 | 24 | 28 | 8.70 | 2090 | 1630 | 1440 | 1270 | 1110 |
| | | 1 | 14 | 18 | 5.70 | 1370 | 1070 | 950 | 840 | 730 |
| | | 1 | 20 | 24 | 5.90 | 1420 | 1110 | 980 | 870 | 750 |
| | 1¼S-4¼ X 4¼-32 | 2 | 20 | 24 | 8.80 | 2110 | 1650 | 1460 | 1290 | 1120 |
| | 1/43-4/4 7 4/4-32 | 1 | 24 | 28 | 6.10 | 1460 | 1140 | 1010 | 890 | 770 |
| | | 2 | 24 | 28 | 9.20 | 2210 | 1720 | 1520 | 1350 | 1170 |
| | | 3 | 24 | 28 | 10.60 | 2540 | 1980 | 1750 | 1550 | 1350 |
| | | 1 | 14 | 18 | 6.40 | 1540 | 1200 | 1060 | 940 | 820 |
| teel | | 1 | 20 | 24 | 6.90 | 1660 | 1290 | 1150 | 1010 | 880 |
| Dia. stee | 1¼S-4¼ X 4¼-40 | 2 | 20 | 24 | 9.70 | 2330 | 1820 | 1610 | 1420 | 1230 |
| ō | 1/40-7/4 A 4/4-40 | 1 | 24 | 28 | 7.10 | 1700 | 1330 | 1170 | 1040 | 900 |
| 11/4" | | 2 | 24 | 28 | 10.10 | 2420 | 1890 | 1670 | 1480 | 1280 |
| | | 3 | 24 | 28 | 11.60 | 2780 | 2170 | 1920 | 1700 | 1470 |
| | | 1 | 14 | 18 | 7.20 | 1730 | 1350 | 1190 | 1060 | 920 |
| | | 1 | 20 | 24 | 8.00 | 1920 | 1500 | 1320 | 1170 | 1020 |
| | 1¼S-4¼ X 4¼-48 | 2 | 20 | 24 | 10.70 | 2570 | 2000 | 1770 | 1570 | 1360 |
| | 1,40 4/4 7 4/4 40 | 1 | 24 | 28 | 8.20 | 1970 | 1540 | 1360 | 1200 | 1040 |
| | | 2 | 24 | 28 | 11.10 | 2660 | 2070 | 1840 | 1620 | 1410 |
| | | 3 | 24 | 28 | 12.80 | 3070 | 2390 | 2120 | 1870 | 1630 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model BG5/IBG5; standard enclosure

| | | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|-------|--|------------------------|-----------------------|---------------------------------|---------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element 2S-4¼ X 4¼-32 2S-4¼ X 4¼-40 2S-4¼ X 4¼-48 | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft⅔ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | | | Steel element | | | | | |
| | | 1 | 14 | 18 | 5.70 | 1370 | 1070 | 950 | 840 | 730 |
| | | 1 | 20 | 24 | 6.00 | 1430 | 1120 | 990 | 870 | 760 |
| | 25-41/4 X 41/4-32 | 2 | 20 | 24 | 8.60 | 2070 | 1610 | 1430 | 1260 | 1100 |
| | 20-7/4 7 7/4-02 | 1 | 24 | 28 | 6.10 | 1470 | 1150 | 1010 | 900 | 780 |
| | | 2 | 24 | 28 | 8.90 | 2140 | 1670 | 1480 | 1310 | 1130 |
| | | 3 | 24 | 28 | 10.20 | 2450 | 1910 | 1690 | 1490 | 1300 |
| | | 1 | 14 | 18 | 6.50 | 1560 | 1220 | 1080 | 950 | 830 |
| steel | | 1 | 20 | 24 | 6.80 | 1630 | 1270 | 1120 | 990 | 860 |
| l. st | 06 41/ X 41/ 40 | 2 | 20 | 24 | 9.30 | 2230 | 1740 | 1540 | 1360 | 1180 |
| Dia | 23-4/4 A 4/4-40 | 1 | 24 | 28 | 7.20 | 1730 | 1350 | 1190 | 1060 | 920 |
| ~ | | 2 | 24 | 28 | 9.80 | 2350 | 1830 | 1620 | 1430 | 1250 |
| | | 3 | 24 | 28 | 11.30 | 2710 | 2110 | 1870 | 1650 | 1440 |
| | | 1 | 14 | 18 | 7.40 | 1780 | 1390 | 1230 | 1090 | 940 |
| | | 1 | 20 | 24 | 7.70 | 1850 | 1440 | 1280 | 1130 | 980 |
| | 00 41/ V 41/ 40 | 2 | 20 | 24 | 10.00 | 2400 | 1870 | 1660 | 1460 | 1270 |
| | 20-474 A 474-40 | 1 | 24 | 28 | 8.30 | 1990 | 1550 | 1370 | 1210 | 1050 |
| | | 2 | 24 | 28 | 10.60 | 2540 | 1980 | 1750 | 1550 | 1350 |
| | - Equivalant Direct Padi | 3 | 24 | 28 | 12.20 | 2930 | 2290 | 2020 | 1790 | 1550 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

 Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)

- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model BG5/IBG5; standard enclosure

| | Element | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|-----------------|--|------------------------|-----------------------|---------------------------------|--------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft²/ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | 1 | 1 | c | opper elemen | t | 1 | 1 | | |
| | | 1 | 14 | 18 | 5.30 | 1280 | 1000 | 890 | 780 | 680 |
| | | 1 | 20 | 24 | 5.90 | 1400 | 1090 | 970 | 860 | 740 |
| | 2/ O 02/ X 4 00 | 2 | 20 | 24 | 7.70 | 1860 | 1450 | 1280 | 1130 | 990 |
| | 34C-234 X 4-32 | 1 | 24 | 28 | 6.10 | 1470 | 1150 | 1010 | 900 | 780 |
| | | 2 | 24 | 28 | 8.50 | 2050 | 1600 | 1410 | 1250 | 1090 |
| | | 3 | 24 | 28 | 9.90 | 2360 | 1840 | 1630 | 1440 | 1260 |
| | | 1 | 14 | 18 | 5.90 | 1430 | 1120 | 990 | 880 | 760 |
| ber | | 1 | 20 | 24 | 6.60 | 1590 | 1240 | 1100 | 970 | 840 |
| 34" Dia. copper | | 2 | 20 | 24 | 8.00 | 1930 | 1510 | 1330 | 1180 | 1020 |
| Dia. | ³ / ₄ C-2 ³ / ₄ X 4-40 | 1 | 24 | 28 | 7.00 | 1690 | 1320 | 1170 | 1030 | 900 |
| 1 1 | | 2 | 24 | 28 | 9.00 | 2170 | 1690 | 1500 | 1330 | 1150 |
| | | 3 | 24 | 28 | 10.50 | 2510 | 1960 | 1730 | 1530 | 1330 |
| | | 1 | 14 | 18 | 6.50 | 1570 | 1220 | 1080 | 960 | 830 |
| | | 1 | 20 | 24 | 7.40 | 1790 | 1400 | 1240 | 1100 | 950 |
| | | 2 | 20 | 24 | 8.40 | 2030 | 1590 | 1400 | 1240 | 1080 |
| | 34C-234 X 4-48 | 1 | 24 | 28 | 7.80 | 1880 | 1470 | 1300 | 1150 | 1000 |
| | | 2 | 24 | 28 | 9.50 | 2270 | 1770 | 1570 | 1390 | 1210 |
| | | 3 | 24 | 28 | 10.90 | 2600 | 2030 | 1800 | 1590 | 1380 |
| | | 1 | 14 | 18 | 5.1 | 1224 | 955 | 845 | 747 | 649 |
| | | 1 | 20 | 24 | 5.4 | 1296 | 1011 | 894 | 791 | 687 |
| | ³ /4C-3 ¹ /4 X 3 ¹ /4-32 | 2 | 20 | 24 | 8.4 | 2010 | 1568 | 1387 | 1226 | 1065 |
| | %0-3% X 3%-32 | 1 | 24 | 28 | 5.6 | 1350 | 1053 | 932 | 824 | 716 |
| | | 2 | 24 | 28 | 9.2 | 2218 | 1730 | 1531 | 1353 | 1176 |
| | | 3 | 24 | 28 | 10.7 | 2573 | 2007 | 1775 | 1569 | 1364 |
| | | 1 | 14 | 18 | 5.9 | 1422 | 1109 | 981 | 867 | 754 |
| 34" Dia. copper | | 1 | 20 | 24 | 6.5 | 1548 | 1207 | 1068 | 944 | 820 |
| 5 C | ³ ⁄4C-3 ¹ ⁄4 X 3 ¹ ⁄4-40 | 2 | 20 | 24 | 9.3 | 2227 | 1737 | 1537 | 1359 | 1180 |
| Dia. | 74 C- 374 X 374-40 | 1 | 24 | 28 | 6.8 | 1620 | 1264 | 1118 | 988 | 859 |
| 34" | | 2 | 24 | 28 | 10.1 | 2419 | 1887 | 1669 | 1476 | 1282 |
| | | 3 | 24 | 28 | 11.9 | 2854 | 2226 | 1969 | 1741 | 1512 |
| | | 1 | 14 | 18 | 6.4 | 1530 | 1193 | 1056 | 933 | 811 |
| | | 1 | 20 | 24 | 7.4 | 1764 | 1376 | 1217 | 1076 | 935 |
| | ³ 4C-3¼ X 3¼-48 | 2 | 20 | 24 | 11.0 | 2644 | 2062 | 1824 | 1613 | 1401 |
| | /4 U-U /4 A U/4 -4 0 | 1 | 24 | 28 | 7.9 | 1890 | 1474 | 1304 | 1153 | 1002 |
| | | 2 | 24 | 28 | 11.9 | 2858 | 2229 | 1972 | 1743 | 1515 |
| | | 3 | 24 | 28 | 14.0 | 3367 | 2626 | 2323 | 2054 | 1784 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

- Important Rating Information Performance ratings based on:
- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)
- Revised November 2016. Zehnder periodically makes changes to the design and/or specifications of its products. As a result, the design and specifications of each product at the time of order may be different than as described herein. Please contact Zehnder's Sales Support staff at 844-934-6337 for specific information on current design and specifications. Designs, specifications and other information contained herein are not express warranties, which are only as expressly set forth by Zehnder in its terms and conditions of sale. The latest version of this document is available at www.zehnder-rittling.com.

General data

Performance ratings: model BG5/IBG5, standard enclosure

| | Element | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|-----------------|---|------------------------|-----------------------|---------------------------------|--------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft²/ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | 1 | 1 | C | opper elemen | t | 1 | 1 | | |
| | | 1 | 14 | 18 | 6.80 | 1620 | 1300 | 1120 | 990 | 860 |
| | | 1 | 20 | 24 | 7.20 | 1720 | 1340 | 1190 | 1050 | 910 |
| | | 2 | 20 | 24 | 10.60 | 2530 | 1970 | 1750 | 1540 | 1340 |
| | ³ / ₄ C-4 ¹ / ₄ X 4 ¹ / ₄ -32 | 1 | 24 | 28 | 7.50 | 1800 | 1400 | 1240 | 1100 | 950 |
| | | 2 | 24 | 28 | 11.70 | 2810 | 2190 | 1940 | 1710 | 1490 |
| | | 3 | 24 | 28 | 13.40 | 3210 | 2500 | 2210 | 1960 | 1700 |
| | | 1 | 14 | 18 | 7.90 | 1900 | 1482 | 1310 | 1160 | 1010 |
| ber | | 1 | 20 | 24 | 8.60 | 2070 | 1610 | 1430 | 1260 | 1100 |
| 34" Dia. copper | | 2 | 20 | 24 | 11.60 | 2770 | 2160 | 1910 | 1690 | 1470 |
| Dia. | 3∕4C-41⁄4 X 41⁄4-40 | 1 | 24 | 28 | 9.00 | 2160 | 1680 | 1490 | 1320 | 1150 |
| ∦ " [| | 2 | 24 | 28 | 12.60 | 3020 | 2360 | 2080 | 1840 | 1600 |
| | | 3 | 24 | 28 | 14.50 | 3470 | 2710 | 2390 | 2120 | 1840 |
| | | 1 | 14 | 18 | 8.50 | 2040 | 1590 | 1410 | 1240 | 1080 |
| | | 1 | 20 | 24 | 9.80 | 2340 | 1830 | 1610 | 1430 | 1240 |
| | | 2 | 20 | 24 | 13.60 | 3270 | 2550 | 2260 | 1990 | 1730 |
| | 3∕4C-41⁄4 X 41⁄4-48 | 1 | 24 | 28 | 10.50 | 2510 | 1960 | 1730 | 1530 | 1330 |
| | | 2 | 24 | 28 | 14.70 | 3520 | 2750 | 2430 | 2150 | 1870 |
| | | 3 | 24 | 28 | 16.70 | 3940 | 3070 | 2720 | 2400 | 2090 |
| | | 1 | 14 | 18 | 5.30 | 1270 | 990 | 880 | 770 | 670 |
| | | 1 | 20 | 24 | 5.80 | 1390 | 1080 | 960 | 850 | 740 |
| | 40.0% X 4.00 | 2 | 20 | 24 | 7.70 | 1850 | 1440 | 1280 | 1130 | 980 |
| | 1C-2¾ X 4-32 | 1 | 24 | 28 | 6.10 | 1460 | 1140 | 1010 | 890 | 770 |
| | | 2 | 24 | 28 | 8.50 | 2040 | 1590 | 1410 | 1240 | 1080 |
| | | 3 | 24 | 28 | 9.80 | 2350 | 1830 | 1620 | 1430 | 1250 |
| | | 1 | 14 | 18 | 5.90 | 1420 | 1110 | 980 | 870 | 750 |
| per | | 1 | 20 | 24 | 6.60 | 1580 | 1230 | 1090 | 960 | 840 |
| 1" Dia. copper | 1C-2¾ X 4-40 | 2 | 20 | 24 | 8.00 | 1920 | 1500 | 1320 | 1170 | 1020 |
| Dia. | IG-2% X 4-40 | 1 | 24 | 28 | 7.00 | 1680 | 1310 | 1160 | 1020 | 890 |
| 1 | | 2 | 24 | 28 | 9.00 | 2160 | 1680 | 1490 | 1320 | 1140 |
| | | 3 | 24 | 28 | 10.40 | 2500 | 1950 | 1730 | 1530 | 1330 |
| | | 1 | 14 | 18 | 6.50 | 1560 | 1190 | 1070 | 950 | 830 |
| | | 1 | 20 | 24 | 7.40 | 1780 | 1390 | 1230 | 1090 | 940 |
| | 10 03/ 1 4 40 | 2 | 20 | 24 | 8.40 | 2020 | 1580 | 1390 | 1230 | 1070 |
| | 1C-2¾ X 4-48 | 1 | 24 | 28 | 7.80 | 1870 | 1460 | 1290 | 1140 | 990 |
| | | 2 | 24 | 28 | 9.40 | 2260 | 1760 | 1560 | 1380 | 1200 |
| | | 3 | 24 | 28 | 10.80 | 2590 | 2020 | 1790 | 1580 | 1370 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)
- Revised November 2016. Zehnder periodically makes changes to the design and/or specifications of its products. As a result, the design and specifications of each product at the time of order may be different than as described herein. Please contact Zehnder's Sales Support staff at 844-934-6337 for specific information on current design and specifications. Designs, specifications and other information contained herein are not express warranties, which are only as expressly set forth by Zehnder in its terms and conditions of sale. The latest version of this document is available at www.zehnder-ritling.com.

General data

Performance ratings: model BG5/IBG5, standard enclosure

| | Element | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|----------------|-----------------|------------------------|-----------------------|---------------------------------|---------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft²/ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | | c | opper element | t | | | | |
| | | 1 | 14 | 18 | 4.9 | 1171 | 914 | 808 | 714 | 621 |
| | | 1 | 20 | 24 | 5.3 | 1282 | 1000 | 884 | 782 | 679 |
| | | 2 | 20 | 24 | 7.0 | 1688 | 1317 | 1165 | 1030 | 895 |
| | 1C-3¼ X 3¼-32 | 1 | 24 | 28 | 5.6 | 1348 | 1051 | 930 | 822 | 714 |
| | | 2 | 24 | 28 | 7.8 | 1864 | 1454 | 1286 | 1137 | 988 |
| | | 3 | 24 | 28 | 8.8 | 2118 | 1652 | 1461 | 1292 | 1122 |
| | | 1 | 14 | 18 | 5.2 | 1249 | 975 | 862 | 762 | 662 |
| per | | 1 | 20 | 24 | 5.8 | 1398 | 1090 | 964 | 853 | 741 |
| Dia. copper | | 2 | 20 | 24 | 7.2 | 1739 | 1357 | 1200 | 1061 | 922 |
| oia. | 1C-3¼ X 3¼-40 | 1 | 24 | 28 | 6.2 | 1477 | 1152 | 1019 | 901 | 783 |
| 1 | | 2 | 24 | 28 | 8.2 | 1957 | 1526 | 1350 | 1194 | 1037 |
| | | 3 | 24 | 28 | 9.1 | 2195 | 1712 | 1515 | 1339 | 1163 |
| | | 1 | 14 | 18 | 6.1 | 1452 | 1133 | 1002 | 886 | 770 |
| | | 1 | 20 | 24 | 6.9 | 1653 | 1289 | 1141 | 1008 | 876 |
| | | 2 | 20 | 24 | 7.4 | 1778 | 1387 | 1227 | 1084 | 942 |
| | 1C-3¼ X 3¼-48 | 1 | 24 | 28 | 7.3 | 1742 | 1359 | 1202 | 1063 | 923 |
| | | 2 | 24 | 28 | 8.3 | 1989 | 1552 | 1373 | 1214 | 1054 |
| | | 3 | 24 | 28 | 9.3 | 2232 | 1741 | 1540 | 1361 | 1183 |
| | | 1 | 14 | 18 | 6.60 | 1590 | 1240 | 1100 | 970 | 850 |
| | | 1 | 20 | 24 | 7.00 | 1690 | 1320 | 1200 | 1030 | 900 |
| | | 2 | 20 | 24 | 10.40 | 2480 | 1930 | 1710 | 1510 | 1310 |
| | 1C-4¼ X 4¼-32 | 1 | 24 | 28 | 7.30 | 1760 | 1370 | 1220 | 1070 | 930 |
| | | 2 | 24 | 28 | 11.50 | 2750 | 2150 | 1900 | 1680 | 1460 |
| | | 3 | 24 | 28 | 13.20 | 3150 | 2460 | 2170 | 1920 | 1670 |
| | | 1 | 14 | 18 | 7.70 | 1860 | 1450 | 1280 | 1130 | 990 |
| per | | 1 | 20 | 24 | 8.40 | 2030 | 1580 | 1400 | 1240 | 1080 |
| do | 10 41/ X 41/ 40 | 2 | 20 | 24 | 11.40 | 2720 | 2120 | 1880 | 1660 | 1440 |
| oia. | 1C-4¼ X 4¼-40 | 1 | 24 | 28 | 8.80 | 2120 | 1650 | 1460 | 1290 | 1120 |
| 1" Dia. copper | | 2 | 24 | 28 | 12.40 | 2960 | 2310 | 2040 | 1810 | 1570 |
| | | 3 | 24 | 28 | 14.20 | 3400 | 2650 | 2350 | 2070 | 1800 |
| | | 1 | 14 | 18 | 8.30 | 2000 | 1560 | 1380 | 1220 | 1060 |
| | | 1 | 20 | 24 | 9.60 | 2290 | 1790 | 1580 | 1400 | 1210 |
| | 1C-4¼ X 4¼-48 | 2 | 20 | 24 | 13.40 | 3210 | 2500 | 2210 | 1960 | 1700 |
| | IG-4/4 A 4/4-48 | 1 | 24 | 28 | 10.30 | 2460 | 1920 | 1700 | 1700 | 1300 |
| | | 2 | 24 | 28 | 14.40 | 3450 | 2690 | 2380 | 2100 | 1830 |
| | | 3 | 24 | 28 | 16.10 | 3860 | 3010 | 2670 | 2350 | 2050 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model BG5/IBG5; standard enclosure

| | Element | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|-----------------|-----------------------------|------------------------|-----------------------|---------------------------------|--------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft²/ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | 1 | C | opper elemen | t | | 1 | | |
| | | 1 | 14 | 18 | 5.10 | 1220 | 950 | 840 | 740 | 650 |
| | | 1 | 20 | 24 | 5.70 | 1370 | 1070 | 950 | 840 | 730 |
| | | 2 | 20 | 24 | 7.60 | 1820 | 1420 | 1260 | 1110 | 960 |
| | 1¼C-2¾ X 4-32 | 1 | 24 | 28 | 6.00 | 1440 | 1120 | 990 | 880 | 760 |
| | | 2 | 24 | 28 | 8.40 | 2020 | 1580 | 1390 | 1230 | 1070 |
| | | 3 | 24 | 28 | 9.70 | 2330 | 1820 | 1610 | 1420 | 1230 |
| L . | | 1 | 14 | 18 | 5.70 | 1370 | 1070 | 950 | 840 | 730 |
| bpe | | 1 | 20 | 24 | 6.40 | 1540 | 1200 | 1060 | 940 | 820 |
| 1¼" Dia. copper | | 2 | 20 | 24 | 7.90 | 1900 | 1480 | 1310 | 1160 | 1010 |
| Dia | 1¼C-2¾ X 4-40 | 1 | 24 | 28 | 6.90 | 1660 | 1290 | 1150 | 1010 | 880 |
| 1/4" | | 2 | 24 | 28 | 8.90 | 2140 | 1670 | 1480 | 1310 | 1130 |
| - | | 3 | 24 | 28 | 10.20 | 2450 | 1910 | 1690 | 1490 | 1300 |
| | | 1 | 14 | 18 | 6.40 | 1540 | 1200 | 1060 | 940 | 820 |
| | | 1 | 20 | 24 | 7.30 | 1750 | 1370 | 1210 | 1070 | 930 |
| | 41/ O 02/ X 4 40 | 2 | 20 | 24 | 8.30 | 1990 | 1550 | 1370 | 1210 | 1050 |
| | 1¼C-2¾ X 4-48 | 1 | 24 | 28 | 7.70 | 1850 | 1440 | 1280 | 1130 | 980 |
| | | 2 | 24 | 28 | 9.30 | 2230 | 1740 | 1540 | 1360 | 1180 |
| | | 3 | 24 | 28 | 10.70 | 2570 | 2000 | 1770 | 1510 | 1360 |
| | | 1 | 14 | 18 | 4.8 | 1140 | 890 | 787 | 696 | 604 |
| | | 1 | 20 | 24 | 5.0 | 1210 | 943 | 835 | 738 | 641 |
| | 1¼C-3¼ X 3¼-32 | 2 | 20 | 24 | 7.5 | 1805 | 1408 | 1245 | 1101 | 956 |
| | 1/40-3/4 A 3/4-32 | 1 | 24 | 28 | 5.3 | 1261 | 984 | 870 | 769 | 669 |
| | | 2 | 24 | 28 | 8.3 | 1997 | 1558 | 1378 | 1218 | 1059 |
| | | 3 | 24 | 28 | 9.8 | 2358 | 1839 | 1627 | 1438 | 1250 |
| <u> </u> | | 1 | 14 | 18 | 5.5 | 1331 | 1038 | 918 | 812 | 705 |
| bpe | | 1 | 20 | 24 | 6.0 | 1452 | 1132 | 1002 | 885 | 769 |
| 8 | 1¼C-3¼ X 3¼-40 | 2 | 20 | 24 | 8.5 | 2034 | 1587 | 1403 | 1241 | 1078 |
| Dia | 1740-374 × 374-40 | 1 | 24 | 28 | 6.3 | 1521 | 1186 | 1049 | 928 | 806 |
| 1¼" Dia. copper | | 2 | 24 | 28 | 9.2 | 2214 | 1727 | 1528 | 1351 | 1173 |
| | | 3 | 24 | 28 | 10.7 | 2572 | 2006 | 1775 | 1569 | 1363 |
| | | 1 | 14 | 18 | 6.2 | 1485 | 1158 | 1025 | 906 | 787 |
| | | 1 | 20 | 24 | 7.1 | 1710 | 1334 | 1180 | 1043 | 906 |
| | 1¼C-3¼ X 3¼-48 | 2 | 20 | 24 | 10.1 | 2417 | 1885 | 1668 | 1474 | 1281 |
| | 1 /4 U-U /4 A U/4-40 | 1 | 24 | 28 | 7.6 | 1818 | 1418 | 1254 | 1109 | 964 |
| | | 2 | 24 | 28 | 10.7 | 2572 | 2006 | 1775 | 1569 | 1363 |
| | | 3 | 24 | 28 | 12.3 | 2958 | 2307 | 2041 | 1804 | 1568 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model BG5/IBG5; standard enclosure

| | | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|----------|-------------------------|------------------------|-----------------------|---------------------------------|--------------|-------------------------|-------------------------|-------------------------|---|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft⅔ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | of 0.69 factor of 0.61 090 960 160 1020 700 1510 200 1070 890 1670 170 1920 280 1130 390 1230 870 1650 460 1290 040 1800 330 2060 370 1210 570 1390 190 1940 660 1470 332 2060 | 160°F factor of 0.53 |
| | | | | C | opper elemen | t | | | | |
| | | 1 | 14 | 18 | 6.60 | 1580 | 1230 | 1090 | 960 | 840 |
| | | 1 | 20 | 24 | 7.00 | 1680 | 1310 | 1160 | 1020 | 890 |
| | 1¼C-4¼ X 4¼-32 | 2 | 20 | 24 | 10.30 | 2470 | 1920 | 1700 | 1510 | 1310 |
| | 1740-474 X 474-32 | 1 | 24 | 28 | 7.30 | 1750 | 1360 | 1200 | 1070 | 930 |
| | | 2 | 24 | 28 | 11.40 | 2740 | 2140 | 1890 | 1670 | 1450 |
| | | 3 | 24 | 28 | 13.10 | 3140 | 2450 | 2170 | 1920 | 1660 |
| 5 | | 1 | 14 | 18 | 7.70 | 1850 | 1440 | 1280 | 1130 | 980 |
| copper | | 1 | 20 | 24 | 8.40 | 2020 | 1570 | 1390 | 1230 | 1070 |
| | 1¼C-4¼ X 4¼-40 | 2 | 20 | 24 | 11.30 | 2710 | 2110 | 1870 | 1650 | 1440 |
| 1¼" Dia. | 1740-474 7 474-40 | 1 | 24 | 28 | 8.80 | 2110 | 1640 | 1460 | 1290 | 1120 |
| 1/4" | | 2 | 24 | 28 | 12.30 | 2950 | 2300 | 2040 | 1800 | 1560 |
| | | 3 | 24 | 28 | 14.10 | 3380 | 2640 | 2330 | 2060 | 1790 |
| | | 1 | 14 | 18 | 8.25 | 1980 | 1540 | 1370 | 1210 | 1050 |
| | | 1 | 20 | 24 | 9.50 | 2280 | 1780 | 1570 | 1390 | 1210 |
| | 1¼C-4¼ X 4¼-48 | 2 | 20 | 24 | 13.25 | 3180 | 2480 | 2190 | 1940 | 1690 |
| | 1740-474 X 474-40 | 1 | 24 | 28 | 10.10 | 2410 | 1880 | 1660 | 1470 | 1280 |
| | | 2 | 24 | 28 | 14.10 | 3380 | 2640 | 2332 | 2060 | 1790 |
| | Equivalant Direct Padic | 3 | 24 | 28 | 15.80 | 3780 | 2950 | 2610 | 2310 | 2000 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

 Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)

- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model BGVL5/BGHL5/IBGVL5/IBGHL5; standard enclosure

| | Flement | Rows of | Enclosure | Recommended | EDR* | Steam heat | | Hot wa | ter heat | |
|------------|-----------------|-----------------------------------|-----------------------|--|------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | element (on 6-inch centers) | height (in inches) | minimum installed height (in inches) | EDR* (ft²⁄ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | 1 | 1 | | Steel element | 1 | I | 1 | 1 | 1 |
| | | 1 | 14 | 18 | 3.50 | 840 | 660 | 580 | 510 | 450 |
| | | 1 | 20 | 24 | 3.57 | 858 | 670 | 590 | 520 | 450 |
| | | 1 | 24 | 28 | 3.76 | 901 | 700 | 620 | 550 | 480 |
| | 1S-3¼ X 3¼-32 | 2 | 20 | 24 | 5.43 | 1304 | 1020 | 900 | 800 | 690 |
| | | 2 | 24 | 28 | 5.72 | 1374 | 1070 | 950 | 840 | 730 |
| | | 3 | 24 | 28 | 6.64 | 1593 | 1240 | 1100 | 970 | 840 |
| | | 1 | 14 | 18 | 3.94 | 945 | 740 | 650 | 580 | 500 |
| ē | | 1 | 20 | 24 | 4.19 | 1006 | 780 | 690 | 610 | 530 |
| Dia. steel | | 1 | 24 | 28 | 4.38 | 1050 | 820 | 720 | 640 | 560 |
| Dia | 1S-3¼ X 3¼-40 | 2 | 20 | 24 | 5.98 | 1435 | 1120 | 990 | 880 | 760 |
| ÷ | | 2 | 24 | 28 | 6.23 | 1496 | 1170 | 1030 | 910 | 790 |
| | | 3 | 24 | 28 | 7.22 | 1733 | 1350 | 1200 | 1060 | 920 |
| | | 1 | 14 | 18 | 4.38 | 1050 | 820 | 720 | 640 | 560 |
| | | 1 | 20 | 24 | 4.92 | 1181 | 920 | 820 | 720 | 630 |
| | | 1 | 24 | 28 | 5.10 | 1225 | 960 | 850 | 750 | 650 |
| | 1S-3¼ X 3¼-48 | 2 | 20 | 24 | 6.82 | 1636 | 1280 | 1130 | 1000 | 870 |
| | | 2 | 24 | 28 | 6.78 | 1628 | 1270 | 1120 | 990 | 860 |
| | | 3 | 24 | 28 | 7.77 | 1864 | 1450 | 1290 | 1140 | 990 |
| | | 1 | 14 | 18 | 5.10 | 1225 | 960 | 850 | 750 | 650 |
| | | 1 | 20 | 24 | 5.29 | 1269 | 990 | 880 | 770 | 670 |
| | | 1 | 24 | 28 | 5.43 | 1304 | 1020 | 900 | 800 | 690 |
| | 1S-4¼ X 4¼-32 | 2 | 20 | 24 | 7.84 | 1881 | 1470 | 1300 | 1150 | 1000 |
| | | 2 | 24 | 28 | 8.20 | 1969 | 1540 | 1360 | 1200 | 1040 |
| | | 3 | 24 | 28 | 9.44 | 2266 | 1770 | 1560 | 1380 | 1200 |
| | | 1 | 14 | 18 | 5.72 | 1374 | 1070 | 950 | 840 | 730 |
| <u>e</u> | | 1 | 20 | 24 | 6.16 | 1479 | 1150 | 1020 | 900 | 780 |
| . steel | 1S-4¼ X 4¼-40 | 1 | 24 | 28 | 6.31 | 1514 | 1180 | 1040 | 920 | 800 |
| Dia. | 13-4/4 A 4/4-4U | 2 | 20 | 24 | 8.68 | 2083 | 1620 | 1440 | 1270 | 1100 |
| ÷ | | 2 | 24 | 28 | 9.01 | 2161 | 1690 | 1490 | 1320 | 1150 |
| | | 3 | 24 | 28 | 10.35 | 2485 | 1940 | 1710 | 1520 | 1320 |
| | | 1 | 14 | 18 | 6.42 | 1540 | 1200 | 1060 | 940 | 820 |
| | | 1 | 20 | 24 | 7.15 | 1715 | 1340 | 1180 | 1050 | 910 |
| | 1S-4¼ X 4¼-48 | 1 | 24 | 28 | 7.33 | 1759 | 1370 | 1210 | 1070 | 930 |
| | 13-4/4 A 4/4-48 | 2 | 20 | 24 | 9.55 | 2293 | 1790 | 1580 | 1400 | 1220 |
| | | 2 | 24 | 28 | 9.88 | 2371 | 1850 | 1640 | 1450 | 1260 |
| | | 3 | 24 | 28 | 11.41 | 2739 | 2140 | 1890 | 1670 | 1450 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model BGVL5/BGHL5/IBGVL5/IBGHL5; standard enclosure

| | | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|----------------|--------------------|------------------------|-----------------------|---------------------------------|-----------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | EDn (ft⅔ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | 1 | | Steel element | 1 | I | 1 | 1 | |
| | | 1 | 14 | 18 | 3.43 | 823 | 640 | 570 | 500 | 440 |
| | | 1 | 20 | 24 | 3.50 | 840 | 660 | 580 | 510 | 450 |
| | | 1 | 24 | 28 | 3.68 | 884 | 690 | 610 | 540 | 470 |
| | 1¼S-3¼ X 3¼-32 | 2 | 20 | 24 | 5.32 | 1278 | 1000 | 880 | 780 | 680 |
| | | 2 | 24 | 28 | 5.61 | 1348 | 1050 | 930 | 820 | 710 |
| | | 3 | 24 | 28 | 6.49 | 1558 | 1210 | 1070 | 950 | 830 |
| | | 1 | 14 | 18 | 3.86 | 928 | 720 | 640 | 570 | 490 |
| ee | | 1 | 20 | 24 | 4.12 | 989 | 770 | 680 | 600 | 520 |
| 1¼" Dia. steel | | 1 | 24 | 28 | 4.30 | 1033 | 810 | 710 | 630 | 550 |
| ä | 1¼S-3¼ X 3¼-40 | 2 | 20 | 24 | 5.87 | 1409 | 1100 | 970 | 860 | 750 |
| 11/4 | | 2 | 24 | 28 | 6.13 | 1470 | 1150 | 1010 | 900 | 780 |
| | | 3 | 24 | 28 | 7.07 | 1698 | 1320 | 1170 | 1040 | 900 |
| | | 1 | 14 | 18 | 4.30 | 1033 | 810 | 710 | 630 | 550 |
| | | 1 | 20 | 24 | 4.81 | 1155 | 900 | 800 | 700 | 610 |
| | | 1 | 24 | 28 | 4.99 | 1199 | 940 | 830 | 730 | 640 |
| | 1¼S-3¼ X 3¼-48 | 2 | 20 | 24 | 6.49 | 1558 | 1210 | 1070 | 950 | 830 |
| | | 2 | 24 | 28 | 6.64 | 1593 | 1240 | 1100 | 970 | 840 |
| | | 3 | 24 | 28 | 7.62 | 1829 | 1430 | 1260 | 1120 | 970 |
| | | 1 | 14 | 18 | 4.99 | 1199 | 940 | 830 | 730 | 640 |
| | | 1 | 20 | 24 | 5.18 | 1243 | 970 | 860 | 760 | 660 |
| | 41/ C 41/ X 41/ 20 | 1 | 24 | 28 | 5.32 | 1278 | 1000 | 880 | 780 | 680 |
| | 1¼S-4¼ X 4¼-32 | 2 | 20 | 24 | 7.69 | 1846 | 1440 | 1270 | 1130 | 980 |
| | | 2 | 24 | 28 | 8.06 | 1934 | 1510 | 1330 | 1180 | 1020 |
| | | 3 | 24 | 28 | 9.26 | 2223 | 1730 | 1530 | 1360 | 1180 |
| | | 1 | 14 | 18 | 5.61 | 1348 | 1050 | 930 | 820 | 710 |
| steel | | 1 | 20 | 24 | 6.05 | 1453 | 1130 | 1000 | 890 | 770 |
| a.st | 1¼S-4¼ X 4¼-40 | 1 | 24 | 28 | 6.20 | 1488 | 1160 | 1030 | 910 | 790 |
| Dia. | 1743-474 A 474-40 | 2 | 20 | 24 | 8.49 | 2039 | 1590 | 1410 | 1240 | 1080 |
| 11/4" | | 2 | 24 | 28 | 8.82 | 2118 | 1650 | 1460 | 1290 | 1120 |
| | | 3 | 24 | 28 | 10.14 | 2433 | 1900 | 1680 | 1480 | 1290 |
| | | 1 | 14 | 18 | 6.31 | 1514 | 1180 | 1040 | 920 | 800 |
| | | 1 | 20 | 24 | 7.00 | 1680 | 1310 | 1160 | 1020 | 890 |
| | 1¼S-4¼ X 4¼-48 | 1 | 24 | 28 | 7.18 | 1724 | 1340 | 1190 | 1050 | 910 |
| | 1/4J-474 A 474-40 | 2 | 20 | 24 | 9.37 | 2249 | 1750 | 1550 | 1370 | 1190 |
| | | 2 | 24 | 28 | 9.70 | 2328 | 1820 | 1610 | 1420 | 1230 |
| | | 3 | 24 | 28 | 11.19 | 2686 | 2100 | 1850 | 1640 | 1420 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model BGVL5/BGHL5/IBGVL5/IBGHL5; standard enclosure

| | | Rows of element | Enclosure | Recommended | EDR* | Steam heat | | Hot wa | ter heat | |
|-----------|-----------------|------------------------|-----------------------|---------------------------------|---------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft⅔ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | | | Steel element | | | | | |
| | | 1 | 14 | 18 | 4.99 | 1199 | 940 | 830 | 730 | 640 |
| | | 1 | 20 | 24 | 5.21 | 1251 | 980 | 860 | 760 | 660 |
| | 2S-4¼ X 4¼-32 | 1 | 24 | 28 | 5.36 | 1286 | 1000 | 890 | 780 | 680 |
| | 23-474 7 474-32 | 2 | 20 | 24 | 7.55 | 1811 | 1410 | 1250 | 1100 | 960 |
| | | 2 | 24 | 28 | 7.80 | 1873 | 1460 | 1290 | 1140 | 990 |
| | | 3 | 24 | 28 | 8.93 | 2144 | 1670 | 1480 | 1310 | 1140 |
| | | 1 | 14 | 18 | 5.69 | 1365 | 1060 | 940 | 830 | 720 |
| steel | | 1 | 20 | 24 | 5.94 | 1426 | 1110 | 980 | 870 | 760 |
| . sto | 2S-4¼ X 4¼-40 | 1 | 24 | 28 | 6.31 | 1514 | 1180 | 1040 | 920 | 800 |
| 2" Dia. | 25-4% X 4%-40 | 2 | 20 | 24 | 8.13 | 1951 | 1520 | 1350 | 1190 | 1030 |
| م <u></u> | | 2 | 24 | 28 | 8.57 | 2056 | 1600 | 1420 | 1250 | 1090 |
| | | 3 | 24 | 28 | 9.88 | 2371 | 1850 | 1640 | 1450 | 1260 |
| | | 1 | 14 | 18 | 6.49 | 1558 | 1210 | 1070 | 950 | 830 |
| | | 1 | 20 | 24 | 6.74 | 1619 | 1260 | 1120 | 990 | 860 |
| | 2S-4¼ X 4¼-48 | 1 | 24 | 28 | 7.26 | 1741 | 1360 | 1200 | 1060 | 920 |
| | 20-474 A 474-40 | 2 | 20 | 24 | 8.75 | 2100 | 1640 | 1450 | 1280 | 1110 |
| | | 2 | 24 | 28 | 9.26 | 2223 | 1730 | 1530 | 1360 | 1180 |
| | | 3 | 24 | 28 | 10.68 | 2564 | 2000 | 1770 | 1560 | 1360 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

 Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)

- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model BGVL5/BGHL5/IBGVL5/IBGHL5; standard enclosure

| | | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|-----------------|---|------------------------|-----------------------|---------------------------------|--------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft⅔ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | | C | opper elemen | t | | | | |
| | | 1 | 14 | 18 | 4.67 | 1120 | 870 | 770 | 680 | 590 |
| | | 1 | 20 | 24 | 5.10 | 1225 | 960 | 850 | 750 | 650 |
| | 2/ O 02/ X 4 00 | 1 | 24 | 28 | 5.36 | 1287 | 1000 | 890 | 780 | 680 |
| | ³ ⁄4C-2 ³ ⁄4X 4-32 | 2 | 20 | 24 | 6.78 | 1628 | 1270 | 1120 | 990 | 860 |
| | | 2 | 24 | 28 | 7.47 | 1794 | 1400 | 1240 | 1090 | 950 |
| | | 3 | 24 | 28 | 8.60 | 2065 | 1610 | 1420 | 1260 | 1090 |
| | | 1 | 14 | 18 | 5.21 | 1251 | 980 | 860 | 760 | 660 |
| 34" Dia. copper | | 1 | 20 | 24 | 5.80 | 1391 | 1090 | 960 | 850 | 740 |
| cop | | 1 | 24 | 28 | 6.16 | 1479 | 1150 | 1020 | 900 | 780 |
| Dia. | 34C-234 X 4-40 | 2 | 20 | 24 | 7.04 | 1689 | 1320 | 1170 | 1030 | 900 |
| Ma" | | 2 | 24 | 28 | 7.91 | 1899 | 1480 | 1310 | 1160 | 1010 |
| | | 3 | 24 | 28 | 9.15 | 2196 | 1710 | 1520 | 1340 | 1160 |
| | | 1 | 14 | 18 | 5.72 | 1374 | 1070 | 950 | 840 | 730 |
| | | 1 | 20 | 24 | 6.53 | 1566 | 1220 | 1080 | 960 | 830 |
| | | 1 | 24 | 28 | 6.85 | 1645 | 1280 | 1140 | 1000 | 870 |
| | 34C-234 X 4-48 | 2 | 20 | 24 | 7.40 | 1776 | 1390 | 1230 | 1080 | 940 |
| | | 2 | 24 | 28 | 8.28 | 1986 | 1550 | 1370 | 1210 | 1050 |
| | | 3 | 24 | 28 | 9.48 | 2275 | 1770 | 1570 | 1390 | 1210 |
| | | 1 | 14 | 18 | 4.5 | 1071 | 835 | 739 | 653 | 568 |
| | | 1 | 20 | 24 | 4.7 | 1134 | 885 | 782 | 692 | 601 |
| | 2/ O 01/ X 01/ 00 | 1 | 24 | 28 | 7.3 | 1759 | 1372 | 1213 | 1073 | 932 |
| | ³ / ₄ C-3 ¹ / ₄ X 3 ¹ / ₄ -32 | 2 | 20 | 24 | 4.9 | 1181 | 921 | 815 | 721 | 626 |
| | | 2 | 24 | 28 | 8.1 | 1941 | 1514 | 1339 | 1184 | 1029 |
| | | 3 | 24 | 28 | 9.4 | 2251 | 1756 | 1553 | 1373 | 1193 |
| . | | 1 | 14 | 18 | 5.2 | 1244 | 971 | 859 | 759 | 659 |
| 34" Dia. copper | | 1 | 20 | 24 | 5.6 | 1355 | 1057 | 935 | 826 | 718 |
| cop | ³ ⁄4C-3 ¹ ⁄4 X 3 ¹ ⁄4-40 | 1 | 24 | 28 | 8.1 | 1949 | 1520 | 1345 | 1189 | 1033 |
| Dia. | -/4U-3/4 X 3/4-4U | 2 | 20 | 24 | 5.9 | 1418 | 1106 | 978 | 865 | 751 |
| 3/4" [| | 2 | 24 | 28 | 8.8 | 2117 | 1651 | 1461 | 1291 | 1122 |
| | | 3 | 24 | 28 | 10.4 | 2497 | 1948 | 1723 | 1523 | 1323 |
| | | 1 | 14 | 18 | 5.6 | 1339 | 1044 | 924 | 817 | 710 |
| | | 1 | 20 | 24 | 6.4 | 1544 | 1204 | 1065 | 942 | 818 |
| | 3/C-21/ V 21/- 49 | 1 | 24 | 28 | 9.6 | 2313 | 1804 | 1596 | 1411 | 1226 |
| | ³ ⁄ ₄ C-3 ¹ ⁄ ₄ X 3 ¹ ⁄ ₄ -48 | 2 | 20 | 24 | 6.9 | 1654 | 1290 | 1141 | 1009 | 876 |
| | | 2 | 24 | 28 | 10.4 | 2500 | 1950 | 1725 | 1525 | 1325 |
| | | 3 | 24 | 28 | 12.3 | 2946 | 2298 | 2033 | 1797 | 1561 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)

■ Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)

■ Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model BGVL5/BGHL5/IBGVL5/IBGHL5; standard enclosure

| | | Rows of | Enclosure | Recommended | Ŭ | Steam heat | | Hot wa | ter heat | |
|-----------------|---|-----------------------------------|-----------------------|--|-------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | element (on 6-inch centers) | height (in inches) | minimum installed height (in inches) | EDR* (ft²/ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | I | C | opper elemen | t | I | 1 | 1 | 1 |
| | | 1 | 14 | 18 | 5.91 | 1418 | 1110 | 980 | 860 | 750 |
| | | 1 | 20 | 24 | 6.27 | 1505 | 1170 | 1040 | 920 | 800 |
| | | 1 | 24 | 28 | 6.56 | 1575 | 1230 | 1090 | 960 | 830 |
| | 34C-4¼ X 4¼-32 | 2 | 20 | 24 | 9.22 | 2214 | 1730 | 1530 | 1350 | 1170 |
| | | 2 | 24 | 28 | 10.24 | 2459 | 1920 | 1700 | 1500 | 1300 |
| | | 3 | 24 | 28 | 11.70 | 2809 | 2190 | 1940 | 1710 | 1490 |
| | | 1 | 14 | 18 | 6.93 | 1663 | 1300 | 1150 | 1010 | 880 |
| 34" Dia. copper | | 1 | 20 | 24 | 7.55 | 1811 | 1410 | 1250 | 1100 | 960 |
| Cop | | 1 | 24 | 28 | 7.88 | 1890 | 1470 | 1300 | 1150 | 1000 |
| Dia. | ³ ⁄ ₄ C-4 ¹ ⁄ ₄ X 4 ¹ ⁄ ₄ -40 | 2 | 20 | 24 | 10.10 | 2424 | 1890 | 1670 | 1480 | 1280 |
| 4" | | 2 | 24 | 28 | 11.01 | 2643 | 2060 | 1820 | 1610 | 1400 |
| <i>м</i> . | | 3 | 24 | 28 | 12.65 | 3037 | 2370 | 2100 | 1850 | 1610 |
| | | 1 | 14 | 18 | 7.44 | 1785 | 1390 | 1230 | 1090 | 950 |
| | | 1 | 20 | 24 | 8.53 | 2048 | 1600 | 1410 | 1250 | 1090 |
| | | 1 | 24 | 28 | 9.15 | 2197 | 1710 | 1520 | 1340 | 1160 |
| | 3∕4C-4¼ X 4¼-48 | 2 | 20 | 24 | 11.92 | 2861 | 2230 | 1970 | 1750 | 1520 |
| | | 2 | 24 | 28 | 12.83 | 3080 | 2400 | 2130 | 1880 | 1630 |
| | | 3 | 24 | 28 | 14.36 | 3448 | 2690 | 2380 | 2100 | 1830 |
| | | 1 | 14 | 18 | 4.63 | 1111 | 870 | 770 | 680 | 590 |
| | | 1 | 20 | 24 | 5.07 | 1216 | 950 | 840 | 740 | 640 |
| | 40.0%/ X 4.00 | 1 | 24 | 28 | 5.32 | 1278 | 1000 | 880 | 780 | 680 |
| | 1C-2¾ X 4-32 | 2 | 20 | 24 | 6.74 | 1619 | 1260 | 1120 | 990 | 860 |
| | | 2 | 24 | 28 | 7.44 | 1785 | 1390 | 1230 | 1090 | 950 |
| | | 3 | 24 | 28 | 8.57 | 2056 | 1600 | 1420 | 1250 | 1090 |
| | | 1 | 14 | 18 | 5.18 | 1243 | 970 | 860 | 760 | 660 |
| per | | 1 | 20 | 24 | 5.76 | 1383 | 1080 | 950 | 840 | 730 |
| Dia. copper | 1C-2¾ X 4-40 | 1 | 24 | 28 | 6.13 | 1470 | 1150 | 1010 | 900 | 780 |
| Dia. | 10-2% A 4-40 | 2 | 20 | 24 | 7.00 | 1680 | 1310 | 1160 | 1020 | 890 |
| 1 | | 2 | 24 | 28 | 7.88 | 1890 | 1470 | 1300 | 1150 | 1000 |
| | | 3 | 24 | 28 | 9.11 | 2188 | 1710 | 1510 | 1330 | 1160 |
| | | 1 | 14 | 18 | 5.69 | 1365 | 1060 | 940 | 830 | 720 |
| | | 1 | 20 | 24 | 6.49 | 1558 | 1210 | 1070 | 950 | 830 |
| | 1C-2¾ X 4-48 | 1 | 24 | 28 | 6.82 | 1636 | 1280 | 1130 | 1000 | 870 |
| | 1 V-2 /4 A 4-40 | 2 | 20 | 24 | 7.36 | 1768 | 1380 | 1220 | 1080 | 940 |
| | | 2 | 24 | 28 | 8.24 | 1978 | 1540 | 1360 | 1210 | 1050 |
| | | 3 | 24 | 28 | 9.44 | 2266 | 1770 | 1560 | 1380 | 1200 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)
- Revised November 2016. Zehnder periodically makes changes to the design and/or specifications of its products. As a result, the design and specifications of each product at the time of order may be different than as described herein. Please contact Zehnder's Sales Support staff at 844-934-6337 for specific information on current design and specifications. Designs, specifications and other information contained herein are not express warranties, which are only as expressly set forth by Zehnder in its terms and conditions of sale. The latest version of this document is available at www.zehnder-rittling.com.

General data

Performance ratings: model BGVL5/BGHL5/IBGVL5/IBGHL5; standard enclosure

| | | Rows of | | Recommended | | Steam heat | | Hetwo | ter heat | |
|----------------|-----------------|------------------------|-----------------------|---------------------------------|--------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Flowent | element | Enclosure | minimum | EDR* | Steamneat | | | ter neat | |
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft²∕ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | | C | opper elemen | t | | | 1 | 1 |
| | | 1 | 14 | 18 | 4.3 | 1025 | 799 | 707 | 625 | 543 |
| | | 1 | 20 | 24 | 4.7 | 1122 | 875 | 774 | 684 | 594 |
| | | 1 | 24 | 28 | 6.2 | 1477 | 1152 | 1019 | 901 | 783 |
| | 1C-3¼ X 3¼-2 | 2 | 20 | 24 | 4.9 | 1180 | 920 | 814 | 720 | 625 |
| | | 2 | 24 | 28 | 6.8 | 1631 | 1272 | 1125 | 995 | 864 |
| | | 3 | 24 | 28 | 7.7 | 1853 | 1445 | 1279 | 1130 | 982 |
| | | 1 | 14 | 18 | 4.6 | 1093 | 853 | 754 | 667 | 579 |
| per | | 1 | 20 | 24 | 5.1 | 1223 | 954 | 844 | 746 | 648 |
| 1" Dia. copper | | 1 | 24 | 28 | 6.3 | 1522 | 1187 | 1050 | 928 | 807 |
| ja. | 1C-3¼ X 3¼-40 | 2 | 20 | 24 | 5.4 | 1293 | 1008 | 892 | 789 | 685 |
| Ē | | 2 | 24 | 28 | 7.1 | 1712 | 1336 | 1181 | 1044 | 907 |
| | | 3 | 24 | 28 | 8.0 | 1921 | 1498 | 1325 | 1172 | 1018 |
| | | 1 | 14 | 18 | 5.3 | 1271 | 991 | 877 | 775 | 673 |
| | | 1 | 20 | 24 | 6.0 | 1446 | 1128 | 998 | 882 | 767 |
| | | 1 | 24 | 28 | 6.5 | 1556 | 1213 | 1073 | 949 | 824 |
| | 1C-3¼ X 3¼-48 | 2 | 20 | 24 | 6.4 | 1525 | 1189 | 1052 | 930 | 808 |
| | | 2 | 24 | 28 | 7.3 | 1741 | 1358 | 1201 | 1062 | 923 |
| | | 3 | 24 | 28 | 8.1 | 1953 | 1523 | 1347 | 1191 | 1035 |
| | | 1 | 14 | 18 | 5.80 | 1391 | 1090 | 960 | 850 | 740 |
| | | 1 | 20 | 24 | 6.16 | 1479 | 1150 | 1020 | 900 | 780 |
| | | 1 | 24 | 28 | 6.42 | 1540 | 1200 | 1060 | 940 | 820 |
| | 1C-4¼ X 4¼-32 | 2 | 20 | 24 | 9.04 | 2170 | 1690 | 1500 | 1320 | 1150 |
| | | 2 | 24 | 28 | 10.03 | 2406 | 1880 | 1660 | 1470 | 1280 |
| | | 3 | 24 | 28 | 11.48 | 2756 | 2150 | 1900 | 1680 | 1460 |
| | | 1 | 14 | 18 | 6.78 | 1628 | 1270 | 1120 | 990 | 860 |
| per | | 1 | 20 | 24 | 7.40 | 1776 | 1390 | 1230 | 1080 | 940 |
| g | 10 11/ X 11/ 10 | 1 | 24 | 28 | 7.73 | 1855 | 1450 | 1280 | 1130 | 980 |
| Dia. copper | 1C-4¼ X 4¼-40 | 2 | 20 | 24 | 9.92 | 2380 | 1860 | 1640 | 1450 | 1260 |
| ÷ | | 2 | 24 | 28 | 10.79 | 2590 | 2020 | 1790 | 1580 | 1370 |
| | | 3 | 24 | 28 | 12.40 | 2975 | 2320 | 2050 | 1810 | 1580 |
| | | 1 | 14 | 18 | 7.29 | 1750 | 1370 | 1210 | 1070 | 930 |
| | | 1 | 20 | 24 | 8.35 | 2004 | 1560 | 1380 | 1220 | 1060 |
| | 1C-4¼ X 4¼-48 | 1 | 24 | 28 | 8.97 | 2153 | 1680 | 1490 | 1310 | 1140 |
| | 10-474 A 474-40 | 2 | 20 | 24 | 11.70 | 2809 | 2190 | 1940 | 1710 | 1490 |
| | | 2 | 24 | 28 | 12.58 | 3019 | 2350 | 2080 | 1840 | 1600 |
| | | 3 | 24 | 28 | 14.07 | 3378 | 2630 | 2330 | 2060 | 1790 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)
- Revised November 2016. Zehnder periodically makes changes to the design and/or specifications of its products. As a result, the design and specifications of each product at the time of order may be different than as described herein. Please contact Zehnder's Sales Support staff at 844-934-6337 for specific information on current design and specifications. Designs, specifications and other information contained herein are not express warranties, which are only as expressly set forth by Zehnder in its terms and conditions of sale. The latest version of this document is available at www.zehnder-rittling.com.

General data

Performance ratings: model BGVL5/BGHL5/IBGVL5/IBGHL5; standard enclosure

| | | Rows of | | | | | | Hatwa | tor boot | |
|-------------------|--------------------|------------------------|-----------------------|---------------------------------|--------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | - | element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft²⁄ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | | C | opper elemen | t | | | 1 | 1 |
| | | 1 | 14 | 18 | 4.45 | 1068 | 830 | 740 | 650 | 570 |
| | | 1 | 20 | 24 | 4.99 | 1199 | 940 | 830 | 730 | 640 |
| | | 1 | 24 | 28 | 5.25 | 1260 | 980 | 870 | 770 | 670 |
| | 1¼C-2¾ X 4-32 | 2 | 20 | 24 | 6.64 | 1593 | 1240 | 1100 | 970 | 840 |
| | | 2 | 24 | 28 | 7.36 | 1768 | 1380 | 1220 | 1080 | 940 |
| | | 3 | 24 | 28 | 8.49 | 2039 | 1590 | 1410 | 1240 | 1080 |
| | | 1 | 14 | 18 | 4.99 | 1199 | 940 | 830 | 730 | 640 |
| bpe | | 1 | 20 | 24 | 5.61 | 1348 | 1050 | 930 | 820 | 710 |
| 1¼" Dia. copper | | 1 | 24 | 28 | 6.05 | 1453 | 1130 | 1000 | 890 | 770 |
| Dia. | 1¼C-2¾ X 4-40 | 2 | 20 | 24 | 6.93 | 1663 | 1300 | 1150 | 1010 | 880 |
| 1/4 " | | 2 | 24 | 28 | 7.80 | 1873 | 1460 | 1290 | 1140 | 990 |
| - | | 3 | 24 | 28 | 8.93 | 2144 | 1670 | 1480 | 1310 | 1140 |
| | | 1 | 14 | 18 | 5.61 | 1348 | 1050 | 930 | 820 | 710 |
| | | 1 | 20 | 24 | 6.38 | 1531 | 1190 | 1060 | 930 | 810 |
| | | 1 | 24 | 28 | 6.74 | 1619 | 1260 | 1120 | 990 | 860 |
| | 1¼C-2¾ X 4-48 | 2 | 20 | 24 | 7.26 | 1741 | 1360 | 1200 | 1060 | 920 |
| | | 2 | 24 | 28 | 8.13 | 1951 | 1520 | 1350 | 1190 | 1030 |
| | | 3 | 24 | 28 | 9.37 | 2249 | 1750 | 1550 | 1370 | 1190 |
| | | 1 | 14 | 18 | 4.2 | 998 | 778 | 689 | 609 | 529 |
| | | 1 | 20 | 24 | 4.4 | 1058 | 826 | 730 | 646 | 561 |
| | 41/ O 01/ X 01/ 00 | 1 | 24 | 28 | 6.6 | 1579 | 1232 | 1090 | 963 | 837 |
| | 1¼C-3¼ X 3¼-32 | 2 | 20 | 24 | 4.6 | 1104 | 861 | 762 | 673 | 585 |
| | | 2 | 24 | 28 | 7.3 | 1748 | 1363 | 1206 | 1066 | 926 |
| | | 3 | 24 | 28 | 8.6 | 2063 | 1609 | 1424 | 1259 | 1094 |
| | | 1 | 14 | 18 | 4.9 | 1164 | 908 | 803 | 710 | 617 |
| bpe | | 1 | 20 | 24 | 5.3 | 1270 | 991 | 876 | 775 | 673 |
| 00 | 11/ O 01/ X 01/ 40 | 1 | 24 | 28 | 7.4 | 1780 | 1388 | 1228 | 1086 | 943 |
| Dia | 1¼C-3¼ X 3¼-40 | 2 | 20 | 24 | 5.5 | 1331 | 1038 | 918 | 812 | 705 |
| 11⁄4" Dia. copper | | 2 | 24 | 28 | 8.1 | 1937 | 1511 | 1337 | 1182 | 1027 |
| | | 3 | 24 | 28 | 9.4 | 2250 | 1755 | 1553 | 1373 | 1193 |
| | | 1 | 14 | 18 | 5.4 | 1299 | 1014 | 897 | 793 | 689 |
| | | 1 | 20 | 24 | 6.2 | 1496 | 1167 | 1032 | 913 | 793 |
| | 1¼C-3¼ X 3¼-48 | 1 | 24 | 28 | 8.8 | 2115 | 1649 | 1459 | 1290 | 1121 |
| | 1740-374 A 374-48 | 2 | 20 | 24 | 6.6 | 1591 | 1241 | 1098 | 970 | 843 |
| | | 2 | 24 | 28 | 9.4 | 2250 | 1755 | 1553 | 1373 | 1193 |
| | | 3 | 24 | 28 | 10.8 | 2588 | 2019 | 1786 | 1579 | 1372 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model BGVL5/BGHL5/IBGVL5/IBGHL5; standard enclosure

| | | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|--------------------|-----------------------------------|------------------------|-----------------------|---------------------------------|--------------|-------------------------|-------------------------|-------------------------|--|------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft⅔ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | actor of 0.69 factor of 0.61 950 840 1010 900 1060 930 1490 1320 1650 1460 1900 1680 1120 990 | |
| | | | | C | opper elemer | t | | | | |
| | | 1 | 14 | 18 | 5.76 | 1383 | 1080 | 950 | 840 | 730 |
| | | 1 | 20 | 24 | 6.13 | 1470 | 1150 | 1010 | 900 | 780 |
| | 1¼C-4¼ X 4¼-32 | 1 | 24 | 28 | 6.38 | 1531 | 1190 | 1060 | 930 | 810 |
| | 1740-474 7 474-32 | 2 | 20 | 24 | 9.01 | 2161 | 1690 | 1490 | 1320 | 1150 |
| | | 2 | 24 | 28 | 9.99 | 2398 | 1870 | 1650 | 1460 | 1270 |
| | | 3 | 24 | 28 | 11.45 | 2748 | 2140 | 1900 | 1680 | 1460 |
| | | 1 | 14 | 18 | 6.74 | 1619 | 1260 | 1120 | 990 | 860 |
| hh | | 1 | 20 | 24 | 7.36 | 1768 | 1380 | 1220 | 1080 | 940 |
| 8 | 1¼C-4¼ X 4¼-40 | 1 | 24 | 28 | 7.69 | 1847 | 1440 | 1270 | 1130 | 980 |
| | 1 /4 C-4 /4 X 4 /4-40 | 2 | 20 | 24 | 9.88 | 2371 | 1850 | 1640 | 1450 | 1260 |
| 1 1/4" UIA. Copper | | 2 | 24 | 28 | 10.76 | 2581 | 2010 | 1780 | 1570 | 1370 |
| - | | 3 | 24 | 28 | 12.32 | 2958 | 2310 | 2040 | 1800 | 1570 |
| ĺ | | 1 | 14 | 18 | 7.22 | 1733 | 1350 | 1200 | 1060 | 920 |
| | | 1 | 20 | 24 | 8.31 | 1995 | 1560 | 1380 | 1220 | 1060 |
| | 1¼C-4¼ X 4¼-48 | 1 | 24 | 28 | 8.79 | 2109 | 1640 | 1460 | 1290 | 1120 |
| | 174 0- 474 X 474-40 | 2 | 20 | 24 | 11.59 | 2783 | 2170 | 1920 | 1700 | 1470 |
| | | 2 | 24 | 28 | 12.32 | 2958 | 2310 | 2040 | 1800 | 1570 |
| | | 3 | 24 | 28 | 13.78 | 3308 | 2580 | 2280 | 2020 | 1750 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

Important Rating Information Performance ratings based on:

 Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)

- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model BG3/IBG3; low profile, bar grille enclosure

| | | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|----------------|-------------------|------------------------|-----------------------|---------------------------------|---------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft²∕ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | | : | Steel element | | | | | |
| | | 1 | 8 | 12 | 3.20 | 770 | 600 | 530 | 470 | 410 |
| | 1S-3¼ X 3¼-32 | 1 | 11 | 15 | 3.40 | 820 | 640 | 570 | 500 | 430 |
| | 13-374 A 374-32 | 1 | 14 | 18 | 3.50 | 840 | 660 | 580 | 510 | 450 |
| | | 2 | 14 | 18 | 4.80 | 1150 | 900 | 790 | 700 | 610 |
| <u>e</u> | | 1 | 8 | 12 | 3.50 | 840 | 660 | 580 | 510 | 450 |
| . ste | 40.01/ X.01/ 40 | 1 | 11 | 15 | 3.80 | 920 | 720 | 630 | 560 | 490 |
| 1" Dia. steel | 1S-3¼ X 3¼-40 | 1 | 14 | 18 | 4.00 | 960 | 750 | 660 | 590 | 510 |
| - - | | 2 | 14 | 18 | 5.40 | 1300 | 1010 | 900 | 790 | 690 |
| | | 1 | 8 | 12 | 4.00 | 960 | 748 | 660 | 590 | 510 |
| | 1S-3¼ X 3¼-48 | 1 | 11 | 15 | 4.30 | 1030 | 803 | 710 | 630 | 550 |
| | 13-3/4 8 3/4-40 | 1 | 14 | 18 | 4.50 | 1080 | 842 | 750 | 660 | 570 |
| | | 2 | 14 | 18 | 610 | 1470 | 1146 | 1010 | 900 | 780 |
| | | 1 | 8 | 12 | 3.10 | 750 | 590 | 520 | 460 | 400 |
| | 1¼S-3¼ X 3¼-32 | 1 | 11 | 15 | 3.30 | 800 | 620 | 550 | 490 | 420 |
| | 1743-374 x 374-32 | 1 | 14 | 18 | 3.40 | 820 | 640 | 570 | 500 | 530 |
| | | 2 | 14 | 18 | 4.70 | 1130 | 880 | 780 | 690 | 600 |
| lee | | 1 | 8 | 12 | 3.40 | 820 | 640 | 570 | 500 | 430 |
| a. st | 1¼S-3¼ X 3¼-40 | 1 | 11 | 15 | 3.80 | 900 | 700 | 620 | 550 | 480 |
| 1¼" Dia. steel | 1743-374 A 374-40 | 1 | 14 | 18 | 3.90 | 940 | 730 | 650 | 570 | 500 |
| 11/4 | | 2 | 14 | 18 | 5.30 | 1270 | 990 | 880 | 770 | 670 |
| | | 1 | 8 | 12 | 3.90 | 940 | 730 | 650 | 570 | 500 |
| | 1¼S-3¼ X 3¼-48 | 1 | 11 | 15 | 4.20 | 1010 | 790 | 700 | 620 | 540 |
| | 1743-374 X 374-40 | 1 | 14 | 18 | 4.40 | 1060 | 830 | 730 | 650 | 560 |
| | | 2 | 14 | 18 | 6.00 | 1440 | 1120 | 990 | 880 | 760 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

 Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)

- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)

Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model BG3/IBG3; low profile, bar grille enclosure

| | | Rows of element | Enclosure | Recommended | EDR* | Steam heat | | Hot wa | ter heat | |
|-----------------|---|------------------------|-----------------------|---------------------------------|--------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft⅔ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | 1 | 1 | C | opper elemen | t | l | 1 | | |
| | | 1 | 8 | 12 | 4.30 | 1030 | 800 | 710 | 630 | 540 |
| | | 1 | 11 | 15 | 4.60 | 1100 | 860 | 760 | 670 | 580 |
| | ³ /4C-2 ³ / ₄ X 4-32 | 1 | 14 | 18 | 4.90 | 1170 | 910 | 810 | 710 | 620 |
| | | 2 | 14 | 18 | 6.70 | 1600 | 1250 | 1110 | 980 | 850 |
| 34" Dia. copper | | 1 | 8 | 12 | 4.70 | 1130 | 880 | 780 | 690 | 600 |
| cop | | 1 | 11 | 15 | 5.10 | 1220 | 950 | 840 | 740 | 650 |
| Dia. | ³ 4C-2 ³ 4 X 4-40 | 1 | 14 | 18 | 5.40 | 1290 | 1010 | 890 | 790 | 680 |
| 4" [| | 2 | 14 | 18 | 9.30 | 2220 | 1230 | 1080 | 940 | 1176 |
| <i>с</i> . | | 1 | 8 | 12 | 5.10 | 1220 | 950 | 840 | 740 | 650 |
| | | 1 | 11 | 15 | 5.60 | 1340 | 1050 | 920 | 870 | 710 |
| | 34C-234 X 4-48 | 1 | 14 | 18 | 5.90 | 1410 | 1100 | 970 | 860 | 750 |
| | | 2 | 14 | 18 | 8.00 | 1930 | 1500 | 1330 | 1180 | 1020 |
| | | 1 | 8 | 12 | 4.10 | 980 | 760 | 680 | 600 | 520 |
| | | 1 | 11 | 15 | 4.40 | 1050 | 820 | 720 | 640 | 560 |
| | ³ / ₄ C-3 ¹ / ₄ X 3 ¹ / ₄ -32 | 1 | 14 | 18 | 4.70 | 1130 | 880 | 780 | 690 | 600 |
| | | 2 | 14 | 18 | 6.40 | 1540 | 1200 | 1060 | 940 | 820 |
| 34" Dia. copper | | 1 | 8 | 12 | 4.50 | 1080 | 840 | 750 | 660 | 570 |
| cop | 2/ O 01/ X 01/ 40 | 1 | 11 | 15 | 4.90 | 1170 | 910 | 810 | 710 | 620 |
| Dia. | ³ / ₄ C-3 ¹ / ₄ X 3 ¹ / ₄ -40 | 1 | 14 | 18 | 5.10 | 1240 | 970 | 860 | 760 | 660 |
| 34" [| | 2 | 14 | 18 | 7.10 | 1710 | 1330 | 1180 | 1040 | 910 |
| | | 1 | 8 | 12 | 5.00 | 1200 | 940 | 830 | 730 | 640 |
| | ³ ∕4C-3¼ X 3¼-48 | 1 | 11 | 15 | 5.40 | 1300 | 1010 | 900 | 790 | 690 |
| | %0-3% X 3%-40 | 1 | 14 | 18 | 5.40 | 1370 | 1070 | 950 | 840 | 730 |
| | | 2 | 14 | 18 | 7.90 | 1890 | 1480 | 1300 | 1150 | 1000 |
| | | 1 | 8 | 12 | 4.20 | 1010 | 790 | 700 | 620 | 540 |
| | 1C-2¾ X 4-32 | 1 | 11 | 15 | 4.50 | 1080 | 840 | 750 | 660 | 570 |
| | 10-274 X 4-32 | 1 | 14 | 18 | 4.80 | 1150 | 900 | 730 | 700 | 610 |
| | | 2 | 14 | 18 | 6.60 | 1580 | 1230 | 1090 | 960 | 840 |
| per | | 1 | 8 | 12 | 4.60 | 1110 | 870 | 770 | 680 | 590 |
| 8 | 1C-2¾ X 4-40 | 1 | 11 | 15 | 5.00 | 1200 | 940 | 830 | 730 | 640 |
| 1" Dia. copper | 10-274 A 4-40 | 1 | 14 | 18 | 5.30 | 1270 | 990 | 880 | 770 | 670 |
| ļ Ļ | | 2 | 14 | 18 | 7.30 | 1750 | 1370 | 1210 | 1070 | 930 |
| | | 1 | 8 | 12 | 5.00 | 1200 | 940 | 830 | 730 | 640 |
| | 1C-2¾ X 4-48 | 1 | 11 | 15 | 5.50 | 1320 | 1030 | 910 | 810 | 700 |
| | IV-2 /4 A T-TU | 1 | 14 | 18 | 5.80 | 1390 | 1080 | 960 | 850 | 740 |
| | | 2 | 14 | 18 | 7.90 | 1900 | 1480 | 1310 | 1160 | 1010 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)
- Revised November 2016. Zehnder periodically makes changes to the design and/or specifications of its products. As a result, the design and specifications of each product at the time of order may be different than as described herein. Please contact Zehnder's Sales Support staff at 844-934-6337 for specific information on current design and specifications. Designs, specifications and other information contained herein are not express warranties, which are only as expressly set forth by Zehnder in its terms and conditions of sale. The latest version of this document is available at www.zehnder-rittling.com.

General data

Performance ratings: model BG3/IBG3; low profile, bar grille enclosure

| | | Rows of element | Enclosure | Recommended | EDR* | Steam heat | | Hot wa | ter heat | |
|-------------------|--------------------------------|------------------------|-----------------------|---------------------------------|--------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft⅔/ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | 1 | 1 | C | opper elemen | t | I | 1 | 1 | |
| | | 1 | 8 | 12 | 4.00 | 960 | 750 | 660 | 590 | 510 |
| | | 1 | 11 | 15 | 4.30 | 1030 | 800 | 710 | 630 | 550 |
| | 1C-3¼ X 3¼-32 | 1 | 14 | 18 | 4.60 | 1110 | 870 | 770 | 680 | 590 |
| | | 2 | 14 | 18 | 6.30 | 1510 | 1180 | 1040 | 920 | 800 |
| per | | 1 | 8 | 12 | 4.40 | 1060 | 830 | 730 | 650 | 560 |
| Dia. copper | | 1 | 11 | 15 | 4.80 | 1150 | 900 | 790 | 700 | 610 |
| ia. | 1C-3¼ X 3¼-40 | 1 | 14 | 18 | 5.10 | 1220 | 950 | 840 | 740 | 650 |
| - - | | 2 | 14 | 18 | 7.00 | 1680 | 1310 | 1160 | 1020 | 890 |
| | | 1 | 8 | 12 | 4.90 | 1180 | 920 | 810 | 720 | 630 |
| | | 1 | 11 | 15 | 5.30 | 1270 | 990 | 880 | 770 | 670 |
| | 1C-3¼ X 3¼-48 | 1 | 14 | 18 | 5.60 | 1340 | 1050 | 920 | 820 | 710 |
| | | 2 | 14 | 18 | 7.70 | 1850 | 1440 | 1280 | 1130 | 980 |
| | | 1 | 8 | 12 | 4.00 | 960 | 750 | 660 | 590 | 510 |
| | | 1 | 11 | 15 | 4.30 | 1030 | 800 | 710 | 630 | 550 |
| | 1¼C-2¾ X 4-32 | 1 | 14 | 18 | 4.60 | 1110 | 870 | 770 | 680 | 590 |
| | | 2 | 14 | 18 | 6.30 | 1510 | 1180 | 1040 | 920 | 800 |
| 1¼" Dia. copper | | 1 | 8 | 12 | 4.50 | 1080 | 840 | 750 | 660 | 570 |
| co | | 1 | 11 | 15 | 4.80 | 1150 | 900 | 790 | 700 | 610 |
| Dia. | 1¼C-2¾ X 4-40 | 1 | 14 | 18 | 5.10 | 1220 | 950 | 840 | 740 | 650 |
| 1/4" | | 2 | 14 | 18 | 7.00 | 1680 | 1310 | 1160 | 1020 | 890 |
| - | | 1 | 8 | 12 | 5.00 | 1180 | 920 | 810 | 720 | 630 |
| | 1¼C-2¾ X 4-48 | 1 | 11 | 15 | 5.30 | 1270 | 990 | 880 | 770 | 670 |
| | 174 G-2 % X 4-40 | 1 | 14 | 18 | 5.60 | 1340 | 1050 | 920 | 820 | 710 |
| | | 2 | 14 | 18 | 7.70 | 1850 | 1440 | 1280 | 1130 | 980 |
| | | 1 | 8 | 12 | 3.50 | 850 | 660 | 590 | 520 | 450 |
| | 1¼C-3¼ X 3¼-32 | 1 | 11 | 15 | 3.80 | 920 | 720 | 630 | 560 | 490 |
| | 1/40-3/4 A 3/4-32 | 1 | 14 | 18 | 4.00 | 960 | 750 | 660 | 590 | 510 |
| 5 | | 2 | 14 | 18 | 5.50 | 1320 | 1030 | 910 | 810 | 700 |
| ppe | | 1 | 8 | 12 | 4.40 | 1060 | 830 | 730 | 650 | 560 |
| 8 | 1¼C-3¼ X 3¼-40 | 1 | 11 | 15 | 4.70 | 1130 | 880 | 780 | 690 | 600 |
| Dia | 1740-374 A 374-4U | 1 | 14 | 18 | 5.00 | 1200 | 940 | 830 | 730 | 640 |
| 11/4" Dia. copper | | 2 | 14 | 18 | 6.90 | 1660 | 1290 | 1150 | 1010 | 880 |
| | | 1 | 8 | 12 | 4.80 | 1150 | 900 | 790 | 700 | 610 |
| | 1¼C-3¼ X 3¼-48 | 1 | 11 | 15 | 5.20 | 1250 | 980 | 860 | 760 | 660 |
| | 1/-0-0/4 / 0/4-40 | 1 | 14 | 18 | 5.50 | 1320 | 1030 | 910 | 810 | 700 |
| | | 2 | 14 | 18 | 7.50 | 1800 | 1400 | 1240 | 1100 | 950 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)
- Revised November 2016. Zehnder periodically makes changes to the design and/or specifications of its products. As a result, the design and specifications of each product at the time of order may be different than as described herein. Please contact Zehnder's Sales Support staff at 844-934-6337 for specific information on current design and specifications. Designs, specifications and other information contained herein are not express warranties, which are only as expressly set forth by Zehnder in its terms and conditions of sale. The latest version of this document is available at www.zehnder-ritling.com.

General data

Performance ratings: model BGVL3/BGHL3/IBGVL3/IBGHL3; low profile, bar grille enclosure

| | | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|---------------|--------------------|------------------------|-----------------------|---------------------------------|---------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft²∕ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | | | Steel element | | | | | |
| | | 1 | 08 | 12 | 3.21 | 770 | 600 | 530 | 470 | 410 |
| | 40.01/ X.01/ 00 | 1 | 11 | 15 | 3.42 | 820 | 640 | 570 | 500 | 430 |
| | 1S-3¼ X 3¼-32 | 1 | 14 | 18 | 3.50 | 840 | 660 | 580 | 510 | 450 |
| | | 2 | 14 | 18 | 4.79 | 1150 | 900 | 790 | 700 | 610 |
| | | 1 | 08 | 12 | 3.50 | 840 | 660 | 580 | 510 | 450 |
| . ste | | 1 | 11 | 15 | 3.83 | 920 | 720 | 630 | 560 | 490 |
| 1" Dia. steel | 1S-3¼ X 3¼-40 | 1 | 14 | 18 | 4.00 | 960 | 750 | 660 | 590 | 510 |
| ÷ | | 2 | 14 | 18 | 5.42 | 1300 | 1010 | 900 | 790 | 690 |
| | | 1 | 08 | 12 | 4.00 | 960 | 750 | 660 | 590 | 510 |
| | 40.01/ X.01/ 40 | 1 | 11 | 15 | 4.29 | 1030 | 800 | 710 | 630 | 550 |
| | 1S-3¼ X 3¼-48 | 1 | 14 | 18 | 4.50 | 1080 | 840 | 750 | 660 | 570 |
| | | 2 | 14 | 18 | 6.13 | 1470 | 1150 | 1010 | 900 | 780 |
| | | 1 | 08 | 12 | 3.13 | 750 | 590 | 520 | 460 | 400 |
| | 41/ C 01/ X 01/ 00 | 1 | 11 | 15 | 3.33 | 800 | 620 | 550 | 490 | 420 |
| | 1¼S-3¼ X 3¼-32 | 1 | 14 | 18 | 3.42 | 820 | 640 | 570 | 500 | 430 |
| | | 2 | 14 | 18 | 4.71 | 1130 | 880 | 780 | 690 | 600 |
| steel | | 1 | 08 | 12 | 3.42 | 820 | 640 | 570 | 500 | 430 |
| a. st | 1¼S-3¼ X 3¼-40 | 1 | 11 | 15 | 3.75 | 900 | 700 | 620 | 550 | 480 |
| 1¼" Dia. | 1743-374 A 374-4U | 1 | 14 | 18 | 3.92 | 940 | 730 | 650 | 570 | 500 |
| 11/4 | | 2 | 14 | 18 | 5.29 | 1270 | 990 | 880 | 770 | 670 |
| | | 1 | 08 | 12 | 3.92 | 940 | 730 | 650 | 570 | 500 |
| | 1¼S-3¼ X 3¼-48 | 1 | 11 | 15 | 4.21 | 1010 | 790 | 700 | 620 | 540 |
| | 1743-374 A 374-48 | 1 | 14 | 18 | 4.42 | 1060 | 830 | 730 | 650 | 560 |
| | | 2 | 14 | 18 | 6.00 | 1440 | 1120 | 990 | 880 | 760 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

 Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)

 Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.) Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)

Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model BGVL3/BGHL3/IBGVL3/IBGHL3; low profile, bar grille enclosure

| | | Rows of element | Enclosure | Recommended | EDR* | Steam heat | | Hot wa | ter heat | |
|-----------------|---|------------------------|-----------------------|---------------------------------|--------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft⅔ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | | С | opper elemen | t | | | | |
| | | 1 | 08 | 12 | 3.76 | 901 | 700 | 620 | 550 | 480 |
| | | 1 | 11 | 15 | 4.01 | 963 | 750 | 660 | 590 | 510 |
| | 34C-234 X 4-32 | 1 | 14 | 18 | 4.27 | 1024 | 800 | 710 | 620 | 540 |
| | | 2 | 14 | 18 | 5.83 | 1400 | 1090 | 970 | 850 | 740 |
| 34" Dia. copper | | 1 | 08 | 12 | 4.12 | 989 | 770 | 680 | 600 | 520 |
| 5 Co | | 1 | 11 | 15 | 4.45 | 1068 | 830 | 740 | 650 | 570 |
| Dia. | 34C-234 X 4-40 | 1 | 14 | 18 | 4.70 | 1129 | 880 | 780 | 690 | 600 |
| %" I | | 2 | 14 | 18 | 8.09 | 1943 | 1520 | 1340 | 1180 | 1030 |
| | | 1 | 08 | 12 | 4.45 | 1068 | 830 | 740 | 650 | 570 |
| | | 1 | 11 | 15 | 4.89 | 1173 | 910 | 810 | 720 | 620 |
| | 34C-234 X 4-48 | 1 | 14 | 18 | 5.14 | 1234 | 960 | 850 | 750 | 650 |
| | | 2 | 14 | 18 | 7.04 | 1689 | 1320 | 1170 | 1030 | 900 |
| | | 1 | 08 | 12 | 3.57 | 858 | 670 | 590 | 520 | 450 |
| | | 1 | 11 | 15 | 3.83 | 919 | 720 | 630 | 560 | 490 |
| | ³ ⁄ ₄ C-3 ¹ ⁄ ₄ X 3 ¹ ⁄ ₄ -32 | 1 | 14 | 18 | 4.12 | 989 | 770 | 680 | 600 | 520 |
| | | 2 | 14 | 18 | 5.61 | 1348 | 1050 | 930 | 820 | 710 |
| 34" Dia. copper | | 1 | 08 | 12 | 3.94 | 945 | 740 | 650 | 580 | 500 |
| 5 Co | | 1 | 11 | 15 | 4.27 | 1024 | 800 | 710 | 620 | 540 |
| Dia. | ¾C-3¼ X 3¼-40 | 1 | 14 | 18 | 4.52 | 1085 | 850 | 750 | 660 | 580 |
| 4" | | 2 | 14 | 18 | 6.23 | 1496 | 1170 | 1030 | 910 | 790 |
| ° | | 1 | 08 | 12 | 4.38 | 1050 | 820 | 720 | 640 | 560 |
| | | 1 | 11 | 15 | 4.74 | 1138 | 890 | 780 | 690 | 600 |
| | 34C-31/4 X 31/4-48 | 1 | 14 | 18 | 4.99 | 1199 | 940 | 830 | 730 | 640 |
| | | 2 | 14 | 18 | 6.89 | 1654 | 1290 | 1140 | 1010 | 880 |
| | | 1 | 08 | 12 | 3.68 | 884 | 690 | 610 | 540 | 470 |
| | | 1 | 11 | 15 | 3.94 | 945 | 740 | 650 | 580 | 500 |
| | 1C-2¾ X 4-32 | 1 | 14 | 18 | 4.19 | 1007 | 780 | 690 | 610 | 530 |
| | | 2 | 14 | 18 | 5.76 | 1383 | 1080 | 950 | 840 | 730 |
| per | | 1 | 08 | 12 | 4.05 | 971 | 760 | 670 | 590 | 510 |
| 1" Dia. copper | 10 03/ 1 4 40 | 1 | 11 | 15 | 4.38 | 1050 | 820 | 720 | 640 | 560 |
| Dia. | 1C-2¾ X 4-40 | 1 | 14 | 18 | 4.63 | 1111 | 870 | 770 | 680 | 590 |
| - | | 2 | 14 | 18 | 6.38 | 1531 | 1190 | 1060 | 930 | 810 |
| | | 1 | 08 | 12 | 4.38 | 1050 | 820 | 720 | 640 | 560 |
| | 10 03/ V 4 40 | 1 | 11 | 15 | 4.81 | 1155 | 900 | 800 | 700 | 610 |
| | 1C-2¾ X 4-48 | 1 | 14 | 18 | 5.07 | 1216 | 950 | 840 | 740 | 640 |
| | | 2 | 14 | 18 | 6.93 | 1663 | 1300 | 1150 | 1010 | 880 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)
- Revised November 2016. Zehnder periodically makes changes to the design and/or specifications of its products. As a result, the design and specifications of each product at the time of order may be different than as described herein. Please contact Zehnder's Sales Support staff at 844-934-6337 for specific information on current design and specifications. Designs, specifications and other information contained herein are not express warranties, which are only as expressly set forth by Zehnder in its terms and conditions of sale. The latest version of this document is available at www.zehnder-rittling.com.

General data

Performance ratings: model BGVL3/BGHL3/IBGVL3/IBGHL3; low profile, bar grille enclosure

| | _ | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|-------------------|--------------------------|------------------------|-----------------------|---------------------------------|--------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft⅔ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | 1 | | С | opper elemer | nt | | | | |
| | | 1 | 08 | 12 | 3.50 | 840 | 660 | 580 | 510 | 450 |
| | 40.01/ X 01/ 00 | 1 | 11 | 15 | 3.76 | 901 | 700 | 620 | 550 | 480 |
| | 1C-3¼ X 3¼-32 | 1 | 14 | 18 | 4.05 | 971 | 760 | 670 | 590 | 510 |
| | | 2 | 14 | 18 | 5.51 | 1321 | 1030 | 910 | 810 | 700 |
| 1" Dia. copper | | 1 | 08 | 12 | 3.86 | 928 | 720 | 640 | 570 | 490 |
| cop | | 1 | 11 | 15 | 4.19 | 1006 | 780 | 690 | 610 | 530 |
| ja. | 1C-3¼ X 3¼-40 | 1 | 14 | 18 | 4.45 | 1068 | 830 | 740 | 650 | 570 |
| Ę | | 2 | 14 | 18 | 6.13 | 1470 | 1150 | 1010 | 900 | 780 |
| | | 1 | 08 | 12 | 4.30 | 1033 | 810 | 710 | 630 | 550 |
| | | 1 | 11 | 15 | 4.63 | 1111 | 870 | 770 | 680 | 590 |
| | 1C-3¼ X 3¼-48 | 1 | 14 | 18 | 4.89 | 1173 | 910 | 810 | 720 | 620 |
| | | 2 | 14 | 18 | 6.74 | 1619 | 1260 | 1120 | 990 | 860 |
| | | 1 | 08 | 12 | 3.50 | 840 | 660 | 580 | 510 | 450 |
| | | 1 | 11 | 15 | 3.76 | 901 | 700 | 620 | 550 | 480 |
| | 1¼C-2¾ X 4-32 | 1 | 14 | 18 | 4.05 | 971 | 760 | 670 | 590 | 510 |
| | 1 /4 U-2 % X 4-32 | 2 | 14 | 18 | 5.51 | 1321 | 1030 | 910 | 810 | 700 |
| 11/4" Dia. copper | | 1 | 08 | 12 | 3.94 | 945 | 740 | 650 | 580 | 500 |
| S | | 1 | 11 | 15 | 4.19 | 1006 | 780 | 690 | 610 | 530 |
| Dia. | 1¼C-2¾ X 4-40 | 1 | 14 | 18 | 4.45 | 1068 | 830 | 740 | 650 | 570 |
| /4" | | 2 | 14 | 18 | 6.13 | 1470 | 1150 | 1010 | 900 | 780 |
| ÷ | | 1 | 08 | 12 | 4.30 | 1033 | 810 | 710 | 630 | 550 |
| | | 1 | 11 | 15 | 4.63 | 1111 | 870 | 770 | 680 | 590 |
| | 1¼C-2¾ X 4-48 | 1 | 14 | 18 | 4.89 | 1173 | 910 | 810 | 720 | 620 |
| | | 2 | 14 | 18 | 6.74 | 1619 | 1260 | 1120 | 990 | 860 |
| | | 1 | 08 | 12 | 3.10 | 744 | 580 | 510 | 450 | 390 |
| | | 1 | 11 | 15 | 3.35 | 805 | 630 | 560 | 490 | 430 |
| | 1¼C-3¼ X 3¼-32 | 1 | 14 | 18 | 3.50 | 840 | 660 | 580 | 510 | 450 |
| | | 2 | 14 | 18 | 4.81 | 1155 | 900 | 800 | 700 | 610 |
| 11/4" Dia. copper | | 1 | 08 | 12 | 3.86 | 928 | 720 | 640 | 570 | 490 |
| ^c o | | 1 | 11 | 15 | 4.12 | 989 | 770 | 680 | 600 | 520 |
| Dia. | 1¼C-3¼ X 3¼-40 | 1 | 14 | 18 | 4.38 | 1050 | 820 | 720 | 640 | 560 |
| 1/4" | | 2 | 14 | 18 | 6.05 | 1453 | 1130 | 1000 | 890 | 770 |
| - | | 1 | 08 | 12 | 4.19 | 1007 | 780 | 690 | 610 | 530 |
| | 11/0 01/ 1/ 01/ 10 | 1 | 11 | 15 | 4.56 | 1094 | 850 | 750 | 670 | 580 |
| | 1¼C-3¼ X 3¼-48 | 1 | 14 | 18 | 4.81 | 1155 | 900 | 800 | 700 | 610 |
| | | 2 | 14 | 18 | 6.56 | 1575 | 1230 | 1090 | 960 | 830 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

■ Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)

■ Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)

■ Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

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Zehnder's Sales Support staff at 844-934-6337 for specific information on current design and specifications. Designs, specifications and other information contained herein are not express warranties, which are only as expressly set forth by Zehnder in its terms and conditions of sale. The latest version of this document is available at www.zehnder-rittling.com.

Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)

General data

Performance ratings: model PBG5/PIBG5; pedestal enclosure

| | | Enclosure | Enclosuro | Recommended | EDR* ht (ft²/ ft) | Steam heat | Hot water heat | | | | |
|---------------|---------------|-----------------------------------|-----------------------|--|----------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--|
| | Element | element (on 6-inch centers) | height (in inches) | minimum installed height (in inches) | | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 | |
| | | 1 | 1 | | Steel element | 1 | 1 | 1 | 1 | 1 | |
| | | 1 | 6 | 10 | 3.8 | 910 | 710 | 630 | 560 | 480 | |
| | 1S-3¼ X 3¼-32 | 1 | 8 | 12 | 3.9 | 924 | 721 | 638 | 564 | 490 | |
| _ | | 2 | 12 | 16 | 5.7 | 1360 | 1060 | 940 | 830 | 720 | |
| 1" Dia. steel | | 1 | 6 | 10 | 4.1 | 980 | 770 | 680 | 600 | 520 | |
| ia. s | 1S-3¼ X 3¼-40 | 1 | 8 | 12 | 4.2 | 1008 | 786 | 696 | 615 | 534 | |
| Ē | | 2 | 12 | 16 | 6.2 | 1480 | 1160 | 1020 | 900 | 790 | |
| - | 1S-3¼ X 3¼-48 | 1 | 6 | 10 | 4.4 | 1050 | 820 | 720 | 640 | 560 | |
| | | 1 | 8 | 12 | 4.5 | 1091 | 851 | 753 | 665 | 578 | |
| | | 2 | 12 | 16 | 6.6 | 1570 | 1230 | 1080 | 960 | 830 | |
| | | 1 | 6 | 10 | 5.3 | 1280 | 1000 | 880 | 780 | 680 | |
| | 1S-4¼ X 4¼-32 | 1 | 8 | 12 | 5.4 | 1289 | 1006 | 890 | 786 | 683 | |
| _ | | 2 | 12 | 16 | 7.5 | 1800 | 1400 | 1240 | 1100 | 950 | |
| steel | | 1 | 6 | 10 | 5.6 | 1330 | 1040 | 920 | 810 | 700 | |
| ia. s | 1S-4¼ X 4¼-40 | 1 | 8 | 12 | 5.7 | 1377 | 1074 | 950 | 840 | 730 | |
| 1" Dia. | | 2 | 12 | 16 | 8 | 1980 | 1540 | 1310 | 1210 | 1050 | |
| - | | 1 | 6 | 10 | 6.1 | 1470 | 1150 | 1010 | 900 | 780 | |
| | 1S-4¼ X 4¼-48 | 1 | 8 | 12 | 6.3 | 1512 | 1180 | 1044 | 923 | 802 | |
| | | 2 | 12 | 16 | 8.8 | 2120 | 1650 | 1460 | 1290 | 1120 | |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)
- Contact factory when ordering 1-1/4" copper, 1" steel and 1-1/4" steel elements to ensure proper fit up inside the enclosure.

General data

Performance ratings: model PBG5/PIBG5; pedestal enclosure

| | | Rows of | Enclosure | Recommended | | Steam heat | Hot water heat | | | | |
|----------------|----------------|-----------------------------------|-----------------------|--|------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--|
| | Element | element (on 6-inch centers) | height (in inches) | minimum installed height (in inches) | EDR* (ft⅔ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 | |
| | | | 1 | | Steel element | | | 1 | 1 | | |
| | | 1 | 6 | 10 | 3.7 | 890 | 700 | 610 | 540 | 470 | |
| | 1¼S-3¼ X 3¼-32 | 1 | 8 | 12 | 3.8 | 912 | 711 | 629 | 556 | 483 | |
| - | | 2 | 12 | 16 | 5.6 | 1330 | 1040 | 920 | 810 | 700 | |
| ste | | 1 | 6 | 10 | 4 | 960 | 750 | 660 | 590 | 510 | |
| 1¼" Dia. steel | 1¼S-3¼ X 3¼-40 | 1 | 8 | 12 | 4.1 | 983 | 767 | 679 | 600 | 521 | |
| 4" | | 2 | 12 | 16 | 6.1 | 1450 | 1130 | 1000 | 880 | 770 | |
| ÷ | | 1 | 6 | 10 | 4.3 | 1030 | 800 | 710 | 630 | 550 | |
| | 1¼S-3¼ X 3¼-48 | 1 | 8 | 12 | 4.4 | 1066 | 832 | 736 | 650 | 565 | |
| | | 2 | 12 | 16 | 6.4 | 1540 | 1200 | 1060 | 940 | 820 | |
| | 1¼S-4¼ X 4¼-32 | 1 | 6 | 10 | 5.2 | 1250 | 980 | 860 | 760 | 660 | |
| | | 1 | 8 | 12 | 5.3 | 1265 | 987 | 873 | 772 | 670 | |
| - | | 2 | 12 | 16 | 7.3 | 1760 | 1370 | 1210 | 1070 | 930 | |
| 1¼" Dia. steel | 1¼S-4¼ X 4¼-40 | 1 | 6 | 10 | 5.4 | 1300 | 1010 | 900 | 790 | 690 | |
| Dia. | | 1 | 8 | 12 | 5.5 | 1328 | 1036 | 916 | 810 | 704 | |
| 4" | | 2 | 12 | 16 | 8.1 | 1940 | 1510 | 1340 | 118 | 1030 | |
| 11 | | 1 | 6 | 10 | 6 | 1440 | 1120 | 990 | 880 | 760 | |
| | 1¼S-4¼ X 4¼-48 | 1 | 8 | 12 | 6.2 | 1488 | 1160 | 1027 | 907 | 788 | |
| | | 2 | 12 | 16 | 8.7 | 2080 | 1620 | 1440 | 1270 | 1100 | |
| | | 1 | 6 | 10 | 5 | 1198 | 935 | 827 | 731 | 635 | |
| | 2S-4¼ X 4¼-32 | 1 | 8 | 12 | 5.1 | 1216 | 949 | 839 | 742 | 645 | |
| | | 2 | 12 | 16 | 7.1 | 1699 | 1326 | 1173 | 1037 | 901 | |
| stee | | 1 | 6 | 10 | 5.2 | 1244 | 970 | 858 | 759 | 659 | |
| Dia. steel | 2S-4¼ X 4¼-40 | 1 | 8 | 12 | 5.3 | 1278 | 997 | 882 | 780 | 678 | |
| 2" Di | | 2 | 12 | 16 | 7.9 | 1886 | 1471 | 1301 | 1150 | 999 | |
| ~ | | 1 | 6 | 10 | 5.8 | 1382 | 1078 | 954 | 843 | 733 | |
| | 2S-4¼ X 4¼-48 | 1 | 8 | 12 | 6.0 | 1438 | 1122 | 992 | 877 | 762 | |
| | | 2 | 12 | 16 | 8.4 | 2025 | 1580 | 1397 | 1235 | 1073 | |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

 Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)

 Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)

- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)
- Contact factory when ordering 1-1/4" copper, 1" steel and 1-1/4" steel elements to ensure proper fit up inside the enclosure.

General data

Performance ratings: model PBG5/PIBG5; pedestal enclosure

| | | Rows of | Enclosure | Recommended | | Steam heat | Hot water heat | | | | |
|-----------------|---|-----------------------------------|-----------------------|--|------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--|
| | Element | element (on 6-inch centers) | height (in inches) | minimum installed height (in inches) | EDR* (ft⅔ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 | |
| | | | | C | opper elemer | t | | 1 | 1 | | |
| | | 1 | 6 | 10 | 3.7 | 900 | 700 | 620 | 550 | 480 | |
| | 34C-234 X 4-32 | 1 | 8 | 12 | 4.2 | 1005 | 784 | 694 | 613 | 533 | |
| er | | 2 | 12 | 16 | 6.7 | 1610 | 1260 | 1110 | 980 | 850 | |
| ddc | | 1 | 6 | 10 | 4 | 970 | 760 | 670 | 590 | 510 | |
| ¾" Dia. copper | 34C-234 X 4-40 | 1 | 8 | 12 | 4.6 | 1099 | 857 | 759 | 671 | 583 | |
| Ö | | 2 | 12 | 16 | 7.1 | 1710 | 1330 | 1180 | 1040 | 910 | |
| 3/41 | | 1 | 6 | 10 | 4.3 | 1040 | 810 | 720 | 630 | 550 | |
| | ³ 4C-2 ³ 4 X 4-48 | 1 | 8 | 12 | 5.0 | 1190 | 928 | 821 | 726 | 631 | |
| | | 2 | 12 | 16 | 7.5 | 1790 | 1400 | 1240 | 1090 | 950 | |
| | ¾C-3¼ X 3¼-32 | 1 | 6 | 10 | 3.8 | 918 | 716 | 633 | 560 | 487 | |
| | | 1 | 8 | 12 | 4.3 | 1032 | 805 | 712 | 630 | 547 | |
| Ŀ | | 2 | 12 | 16 | 7.4 | 1782 | 1390 | 1230 | 1087 | 945 | |
| ddo | ¾C-3¼ X 3¼-40 | 1 | 6 | 10 | 4.4 | 1044 | 814 | 720 | 637 | 553 | |
| ŭ. | | 1 | 8 | 12 | 5.0 | 1209 | 943 | 834 | 738 | 641 | |
| 34" Dia. copper | | 2 | 12 | 16 | 7.9 | 1905 | 1486 | 1315 | 1162 | 1010 | |
| 3,4 | | 1 | 6 | 10 | 5.2 | 1242 | 969 | 857 | 758 | 658 | |
| | ³ ⁄ ₄ C-3 ¹ ⁄ ₄ X 3 ¹ ⁄ ₄ -48 | 1 | 8 | 12 | 6.0 | 1439 | 1123 | 993 | 878 | 763 | |
| | | 2 | 12 | 16 | 8.1 | 1953 | 1523 | 1347 | 1191 | 1035 | |
| | | 1 | 6 | 10 | 5.1 | 1230 | 960 | 850 | 750 | 650 | |
| | ³ ⁄ ₄ C-4 ¹ ⁄ ₄ X 4 ¹ ⁄ ₄ -32 | 1 | 8 | 12 | 5.9 | 1423 | 1110 | 982 | 868 | 754 | |
| er | | 2 | 12 | 16 | 9.4 | 2260 | 1760 | 1560 | 1380 | 1200 | |
| ddo | | 1 | 6 | 10 | 5.8 | 1380 | 1080 | 950 | 840 | 730 | |
| ¾" Dia. copper | ³ ⁄ ₄ C-4 ¹ ⁄ ₄ X 4 ¹ ⁄ ₄ -40 | 1 | 8 | 12 | 7.3 | 1753 | 1368 | 1210 | 1070 | 929 | |
| Ö | | 2 | 12 | 16 | 10.05 | 2410 | 1880 | 1600 | 1470 | 1280 | |
| 34' | | 1 | 6 | 10 | 6.9 | 1650 | 1290 | 1140 | 1010 | 880 | |
| | ¾C-4¼ X 4¼-48 | 1 | 8 | 12 | 9.6 | 2310 | 1801 | 1594 | 1409 | 1224 | |
| | | 2 | 12 | 16 | 10.3 | 2470 | 1930 | 1700 | 1510 | 1310 | |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

 Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.) Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)

 Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.) Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model PBG5/PIBG5; pedestal enclosure

| | | Rows of | Enclosure | Recommended | | Steam heat | Hot water heat | | | | |
|----------------|---------------|-----------------------------------|-----------------------|--|------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--|
| | Element | element (on 6-inch centers) | height (in inches) | minimum installed height (in inches) | EDR* (ft⅔ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 | |
| | | | | C | opper elemer | ıt | | | | | |
| | | 1 | 6 | 10 | 3.7 | 890 | 690 | 610 | 540 | 470 | |
| | 1C-2¾ X 4-32 | 1 | 8 | 12 | 4.2 | 1005 | 784 | 694 | 613 | 533 | |
| La la | | 2 | 12 | 16 | 6.6 | 1570 | 1220 | 1080 | 960 | 830 | |
| ddo | | 1 | 6 | 10 | 4 | 960 | 750 | 660 | 590 | 510 | |
| 1" Dia. copper | 1C-2¾ X 4-40 | 1 | 8 | 12 | 4.6 | 1099 | 857 | 759 | 671 | 583 | |
| Dia | | 2 | 12 | 16 | 6.9 | 1660 | 1290 | 1150 | 1010 | 880 | |
| I | | 1 | 6 | 10 | 4.3 | 1030 | 800 | 710 | 630 | 550 | |
| | 1C-2¾ X 4-48 | 1 | 8 | 12 | 5.0 | 1190 | 928 | 821 | 726 | 631 | |
| | | 2 | 12 | 16 | 7.2 | 1730 | 1350 | 1190 | 1060 | 920 | |
| | 1C-3¼ X 3¼-32 | 1 | 6 | 10 | 3.4 | 818 | 638 | 564 | 499 | 433 | |
| | | 1 | 8 | 12 | 3.8 | 924 | 721 | 637 | 564 | 490 | |
| 2 | | 2 | 12 | 16 | 6 | 1447 | 1129 | 998 | 883 | 767 | |
| 1" Dia. copper | 1C-3¼ X 3¼-40 | 1 | 6 | 10 | 3.7 | 884 | 689 | 610 | 539 | 468 | |
| ŏ | | 1 | 8 | 12 | 4.2 | 1017 | 793 | 702 | 620 | 539 | |
| ö | | 2 | 12 | 16 | 6.3 | 1513 | 1180 | 1044 | 923 | 802 | |
| I | | 1 | 6 | 10 | 4 | 950 | 741 | 656 | 580 | 504 | |
| | 1C-3¼ X 3¼-48 | 1 | 8 | 12 | 4.6 | 1107 | 864 | 764 | 675 | 587 | |
| | | 2 | 12 | 16 | 6.6 | 1579 | 1231 | 1089 | 963 | 837 | |
| | | 1 | 6 | 10 | 5.1 | 1210 | 940 | 830 | 740 | 640 | |
| | 1C-4¼ X 4¼-32 | 1 | 8 | 12 | 5.9 | 1423 | 1110 | 982 | 868 | 754 | |
| 2 | | 2 | 12 | 16 | 9.3 | 2220 | 1730 | 1530 | 1360 | 1180 | |
| ddo | | 1 | 6 | 10 | 5.7 | 1350 | 1050 | 930 | 820 | 720 | |
| ŭ. | 1C-4¼ X 4¼-40 | 1 | 8 | 12 | 7.2 | 1723 | 1344 | 1189 | 1051 | 913 | |
| 1" Dia. copper | | 2 | 12 | 16 | 9.8 | 2360 | 1840 | 1630 | 1440 | 1250 | |
| | | 1 | 6 | 10 | 6.8 | 1620 | 1260 | 1120 | 990 | 860 | |
| | 1C-4¼ X 4¼-48 | 1 | 8 | 12 | 9.5 | 2276 | 1775 | 1571 | 1388 | 1206 | |
| | | 2 | 12 | 16 | 10.09 | 2420 | 1890 | 1670 | 1480 | 1280 | |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

 Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.) Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)

 Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.) Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)



Performance ratings: model PBG5/PIBG5; pedestal enclosure

| | | Rows of | Enclosure | Recommended | | Steam heat | Hot water heat | | | | |
|-----------------|----------------|-----------------------------------|-------------------------------------|--|------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--|
| | Element | element (on 6-inch centers) | element on 6-inch (in inches) | minimum installed height (in inches) | EDR* (ft⅔ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 | |
| | | | | C | opper elemen | t | 1 | 1 | | | |
| | | 1 | 6 | 10 | 3.7 | 890 | 690 | 610 | 540 | 470 | |
| | 1¼C-2¾ X 4-32 | 1 | 8 | 12 | 4.2 | 1005 | 784 | 694 | 613 | 533 | |
| e l | | 2 | 12 | 16 | 6.6 | 1590 | 1240 | 110 | 970 | 840 | |
| 1¼" Dia. copper | | 1 | 6 | 10 | 4 | 960 | 750 | 660 | 590 | 510 | |
| a.c | 1¼C-2¾ X 4-40 | 1 | 8 | 12 | 4.6 | 1099 | 857 | 759 | 671 | 583 | |
| Ē | | 2 | 12 | 16 | 7.1 | 1710 | 1330 | 1180 | 1040 | 910 | |
| 11/4 | | 1 | 6 | 10 | 4.2 | 1010 | 790 | 700 | 620 | 540 | |
| | 1¼C-2¾ X 4-48 | 1 | 8 | 12 | 4.8 | 1163 | 907 | 802 | 709 | 616 | |
| | | 2 | 12 | 16 | 7.2 | 1730 | 1350 | 1190 | 1060 | 920 | |
| | 1¼C-3¼ X 3¼-32 | 1 | 6 | 10 | 3.6 | 864 | 674 | 596 | 527 | 458 | |
| | | 1 | 8 | 12 | 4.1 | 978 | 763 | 675 | 597 | 518 | |
| er l | | 2 | 12 | 16 | 6.6 | 1594 | 1244 | 1100 | 973 | 845 | |
| 1¼" Dia. copper | 1¼C-3¼ X 3¼-40 | 1 | 6 | 10 | 4 | 968 | 755 | 668 | 590 | 513 | |
| a.c | | 1 | 8 | 12 | 4.6 | 1099 | 857 | 759 | 671 | 583 | |
| Ē | | 2 | 12 | 16 | 7.1 | 1699 | 1326 | 1173 | 1037 | 901 | |
| 11/4 | | 1 | 6 | 10 | 4.8 | 1158 | 903 | 799 | 706 | 614 | |
| | 1¼C-3¼ X 3¼-48 | 1 | 8 | 12 | 5.5 | 1329 | 1036 | 917 | 810 | 704 | |
| | | 2 | 12 | 16 | 7.2 | 1734 | 1353 | 1197 | 1058 | 919 | |
| | | 1 | 6 | 10 | 5 | 1200 | 940 | 830 | 730 | 640 | |
| | 1¼C-4¼ X 4¼-32 | 1 | 8 | 12 | 5.8 | 1395 | 1088 | 963 | 851 | 739 | |
| e l | | 2 | 12 | 16 | 9.1 | 2180 | 1700 | 1500 | 1330 | 1160 | |
| ddo | | 1 | 6 | 10 | 5.6 | 1340 | 1050 | 930 | 820 | 710 | |
| 1¼" Dia. copper | 1¼C-4¼ X 4¼-40 | 1 | 8 | 12 | 7.1 | 1693 | 1320 | 1168 | 1033 | 897 | |
| | | 2 | 12 | 16 | 9.7 | 2330 | 1820 | 1610 | 1420 | 1230 | |
| 11/4 | | 1 | 6 | 10 | 6.7 | 1610 | 1260 | 1110 | 980 | 850 | |
| | 1¼C-4¼ X 4¼-48 | 1 | 8 | 12 | 9.3 | 2243 | 1749 | 1547 | 1368 | 1189 | |
| | | 2 | 12 | 16 | 9.9 | 2380 | 1860 | 1640 | 1450 | 1260 | |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

 Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.) Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)

 Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.) Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model PBG10/PIBG10; pedestal enclosure

| | | Rows of | element | Recommended minimum | EDR* | Steam heat | Hot water heat | | | |
|---------------|----------------|------------------------|-----------------------|---------------------------------|-----------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | EDA (ft⅔ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | | | Steel element | | | | 1 | 1 |
| ee | 1S-3¼ X 3¼-32 | 2 | 6 | 10 | 6.9 | 1660 | 1290 | 1150 | 1010 | 880 |
| 1" Dia. steel | 1S-3¼ X 3¼-40 | 2 | 6 | 10 | 7.2 | 1730 | 1350 | 1190 | 1060 | 920 |
| ļ - | 1S-3¼ X 3¼-48 | 2 | 6 | 10 | 8 | 1910 | 1490 | 1320 | 1170 | 1010 |
| steel | 1S-4¼ X 4¼-32 | 2 | 6 | 10 | 9.8 | 2350 | 1830 | 1620 | 1430 | 1250 |
| Dia. st | 1S-4¼ X 4¼-40 | 2 | 6 | 10 | 10.4 | 2500 | 1950 | 1730 | 1530 | 1030 |
| ļ Ļ | 1S-4¼ X 4¼-48 | 2 | 6 | 10 | 11.2 | 2690 | 2100 | 1860 | 1640 | 1430 |
| steel | 1¼S-3¼ X 3¼-32 | 2 | 6 | 10 | 6.8 | 1630 | 1270 | 1120 | 990 | 860 |
| Dia. 9 | 1¼S-3¼ X 3¼-40 | 2 | 6 | 10 | 7.1 | 1700 | 1330 | 1170 | 1040 | 900 |
| 1¼" Dia. | 1¼S-3¼ X 3¼-48 | 2 | 6 | 10 | 7.8 | 1870 | 1460 | 1290 | 1140 | 990 |
| steel | 1¼S-4¼ X 4¼-32 | 2 | 6 | 10 | 9.6 | 2300 | 1790 | 1590 | 1400 | 1220 |
| Dia. 9 | 1¼S-4¼ X 4¼-40 | 2 | 6 | 10 | 10.2 | 2450 | 1910 | 1690 | 1490 | 1390 |
| 11/4" | 1¼S-4¼ X 4¼-48 | 2 | 6 | 10 | 11 | 2640 | 2060 | 1820 | 1610 | 1400 |
| steel | 2S-4¼ X 4¼-32 | 2 | 6 | 10 | 9.2 | 2208 | 1722 | 1524 | 1347 | 1170 |
| Dia. st | 2S-4¼ X 4¼-40 | 2 | 6 | 10 | 9.7 | 2328 | 1816 | 1606 | 1420 | 1234 |
| 5 | 2S-4¼ X 4¼-48 | 2 | 6 | 10 | 10.8 | 2592 | 2022 | 1788 | 1581 | 1374 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model PBG10/PIBG10; pedestal enclosure

| | | element | | Recommended minimum | | | Hot water heat | | | |
|-----------------|---|------------------------|-----------------------|---------------------------------|--------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft⅔ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | | C | opper elemen | t | | | | |
| pper | 34C-234 X 4-32 | 2 | 6 | 10 | 7.0 | 1680 | 1310 | 1150 | 1020 | 890 |
| 34" Dia. copper | ³ /4C-2 ³ / ₄ X 4-40 | 2 | 6 | 10 | 7.4 | 1770 | 1380 | 1220 | 1080 | 940 |
| 34" D | ¾C-2¾ X 4-48 | 2 | 6 | 10 | 7.9 | 1890 | 1470 | 1300 | 1150 | 1000 |
| pper | ³ ⁄ ₄ C-3 ¹ ⁄ ₄ X 3 ¹ ⁄ ₄ -32 | 2 | 6 | 10 | 7.2 | 1728 | 1348 | 1192 | 1054 | 916 |
| 34" Dia. copper | ³ ⁄ ₄ C-3 ¹ ⁄ ₄ X 3 ¹ ⁄ ₄ -40 | 2 | 6 | 10 | 8.0 | 1920 | 1498 | 1325 | 1171 | 1018 |
| 34" D | ³ / ₄ C-3 ¹ / ₄ X 3 ¹ / ₄ -48 | 2 | 6 | 10 | 9.5 | 2280 | 1778 | 1573 | 1391 | 1208 |
| pper | ³ ⁄ ₄ C-4 ¹ ⁄ ₄ X 4 ¹ ⁄ ₄ -32 | 2 | 6 | 10 | 9.6 | 2300 | 1790 | 1590 | 1400 | 1220 |
| 34" Dia. copper | ³ ⁄ ₄ C-4 ¹ ⁄ ₄ X 4 ¹ ⁄ ₄ -40 | 2 | 6 | 10 | 10.5 | 2520 | 1970 | 1740 | 1540 | 1340 |
| 34" D | 34C-41/4 X 41/4-48 | 2 | 6 | 10 | 12.7 | 3040 | 2370 | 2100 | 1850 | 1610 |
| per | 1C-2¾ X 4-32 | 2 | 6 | 10 | 6.9 | 1660 | 1290 | 1150 | 1010 | 880 |
| 1" Dia. copper | 1C-2¾ X 4-40 | 2 | 6 | 10 | 7.3 | 1750 | 1370 | 1210 | 1070 | 930 |
| - - | 1C-2¾ X 4-48 | 2 | 6 | 10 | 7.8 | 1870 | 1460 | 1290 | 1140 | 990 |
| per | 1C-3¼ X 3¼-32 | 2 | 6 | 10 | 6.4 | 1536 | 1198 | 1060 | 937 | 814 |
| 1" Dia. copper | 1C-3¼ X 3¼-40 | 2 | 6 | 10 | 6.7 | 1608 | 1254 | 1110 | 981 | 852 |
| 1" Di | 1C-3¼ X 3¼-48 | 2 | 6 | 10 | 7.2 | 1728 | 1348 | 1192 | 1054 | 916 |
| per | 1C-4¼ X 4¼-32 | 2 | 6 | 10 | 9.4 | 2250 | 1760 | 1550 | 1370 | 1190 |
| 1" Dia. copper | 1C-4¼ X 4¼-40 | 2 | 6 | 10 | 10.3 | 2470 | 1930 | 1700 | 1510 | 1310 |
| 1" Di | 1C-4¼ X 4¼-48 | 2 | 6 | 10 | 12.4 | 2980 | 2320 | 2060 | 1820 | 1580 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

 Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.) Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)

 Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.) Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model PBG10/PIBG10; pedestal enclosure

Rows of Recommended Steam heat Hot water heat Enclosure element minimum EDR* Element height (on 6-inch installed height (ft²/ ft) 215°F 190°F 180°F 170°F 160°F (in inches) centers) (in inches) factor of 1.00 factor of 0.78 factor of 0.69 factor of 0.61 factor of 0.53 Copper element 11/4" Dia. copper 11/4C-23/4 X 4-32 2 6 10 6.9 1660 1290 1150 1010 880 1¼C-2¾ X 4-40 2 6 10 7.3 1750 1370 1210 1070 930 1¼C-2¾ X 4-48 1440 2 6 10 7.7 1850 1280 1130 980 11/4" Dia. copper 11/4C-31/4 X 31/4-32 2 6 10 6.7 1608 1254 1110 981 852 11/4C-31/4 X 31/4-40 2 6 10 7.3 1752 1367 1209 1069 929 11/4C-31/4 X 31/4-48 2 6 10 8.9 2136 1666 1474 1303 1132 Dia. copper 11/4C-41/4 X 41/4-32 2 6 10 9.3 2230 1740 1540 1360 1180 2 11/4C-41/4 X 41/4-40 6 10 10.2 2450 1910 1690 1490 1300 1/4" 1¼C-4¼ X 4¼-48 2 2950 2300 2040 1800 1560 6 10 12.3

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model SBG5/SIBG5; sloped top enclosure

| | | Rows of element | Enclosure | Recommended | EDR* | Steam heat | | Hot wa | ter heat | |
|---------------|-----------------|------------------------|-----------------------|---------------------------------|---------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft²/ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | 1 | | | Steel element | | | | | |
| | | 1 | 14 | 18 | 4.08 | 980 | 760 | 680 | 600 | 520 |
| | | 1 | 20 | 24 | 4.21 | 1010 | 790 | 700 | 620 | 540 |
| | | 1 | 24 | 28 | 4.42 | 1060 | 830 | 730 | 650 | 560 |
| | 1S-3¼ X 3¼-32 | 2 | 20 | 24 | 6.29 | 1510 | 1180 | 1040 | 920 | 800 |
| | | 2 | 24 | 28 | 6.58 | 1580 | 1230 | 1090 | 960 | 840 |
| | | 3 | 24 | 28 | 7.71 | 1850 | 1440 | 1280 | 1130 | 980 |
| | | 1 | 14 | 18 | 4.58 | 1100 | 860 | 760 | 670 | 580 |
| ē | | 1 | 20 | 24 | 4.92 | 1180 | 920 | 810 | 720 | 630 |
| Dia. steel | | 1 | 24 | 28 | 5.08 | 1220 | 950 | 840 | 740 | 650 |
| Dia | 1S-3¼ X 3¼-40 | 2 | 20 | 24 | 6.92 | 1660 | 1290 | 1150 | 1010 | 880 |
| Ļ. | | 2 | 24 | 28 | 7.29 | 1750 | 1370 | 1210 | 1070 | 930 |
| | | 3 | 24 | 28 | 8.42 | 2020 | 1580 | 1390 | 1230 | 1070 |
| | | 1 | 14 | 18 | 5.08 | 1220 | 950 | 840 | 740 | 650 |
| | | 1 | 20 | 24 | 5.71 | 1370 | 1070 | 950 | 840 | 730 |
| | | 1 | 24 | 28 | 5.92 | 1420 | 1110 | 980 | 870 | 750 |
| | 1S-3¼ X 3¼-48 | 2 | 20 | 24 | 7.71 | 1850 | 1440 | 1280 | 1130 | 980 |
| | | 2 | 24 | 28 | 8.00 | 1920 | 1500 | 1320 | 1170 | 1020 |
| | | 3 | 24 | 28 | 9.21 | 2210 | 1720 | 1520 | 1350 | 1170 |
| | | 1 | 14 | 18 | 5.92 | 1420 | 1110 | 980 | 870 | 750 |
| | | 1 | 20 | 24 | 6.08 | 1460 | 1140 | 1010 | 890 | 770 |
| | 1S-4¼ X 4¼-32 | 1 | 24 | 28 | 6.29 | 1510 | 1180 | 1040 | 920 | 800 |
| | 15-4/4 X 4/4-32 | 2 | 20 | 24 | 9.21 | 2210 | 1720 | 1520 | 1350 | 1170 |
| | | 2 | 24 | 28 | 9.58 | 2300 | 1790 | 1590 | 1400 | 1220 |
| | | 3 | 24 | 28 | 11.00 | 2640 | 2060 | 1820 | 1610 | 1400 |
| | | 1 | 14 | 18 | 6.58 | 1580 | 1230 | 1090 | 960 | 840 |
| | | 1 | 20 | 24 | 7.08 | 1700 | 1330 | 1170 | 1040 | 900 |
| 1" Dia. steel | 1S-4¼ X 4¼-40 | 1 | 24 | 28 | 7.42 | 1780 | 1390 | 1230 | 1090 | 940 |
| Dia | 13-474 X 474-40 | 2 | 20 | 24 | 10.08 | 2420 | 1890 | 1670 | 1480 | 1280 |
| ÷. | | 2 | 24 | 28 | 10.50 | 2520 | 1970 | 1740 | 1540 | 1340 |
| | | 3 | 24 | 28 | 12.00 | 2880 | 2250 | 1990 | 1760 | 1530 |
| | | 1 | 14 | 18 | 7.50 | 1800 | 1400 | 1240 | 1100 | 950 |
| | | 1 | 20 | 24 | 8.42 | 2020 | 1580 | 1390 | 1230 | 1070 |
| | 1S-4¼ X 4¼-48 | 1 | 24 | 28 | 8.58 | 2060 | 1610 | 1420 | 1260 | 1090 |
| | 10-7/4 A 4/4-40 | 2 | 20 | 24 | 11.08 | 2660 | 2070 | 1840 | 1620 | 1410 |
| | | 2 | 24 | 28 | 11.50 | 2760 | 2150 | 1900 | 1680 | 1460 |
| | | 3 | 24 | 28 | 13.29 | 3190 | 2490 | 2200 | 1950 | 1690 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)
- Contact factory when ordering 1-1/4" copper, 1" steel and 1-1/4" steel elements to ensure proper fit up inside the enclosure.

General data

Performance ratings: model SBG5/SIBG5; sloped top enclosure

| | | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|----------------|--------------------|------------------------|-----------------------|---------------------------------|---------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft²/ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | | 1 | Steel element | | | | | |
| | | 1 | 14 | 18 | 4.00 | 960 | 750 | 660 | 590 | 510 |
| | | 1 | 20 | 24 | 4.08 | 980 | 760 | 680 | 600 | 520 |
| | 41/ C 01/ X 01/ 00 | 1 | 24 | 28 | 4.29 | 1030 | 800 | 710 | 630 | 550 |
| | 1¼S-3¼ X 3¼-32 | 2 | 20 | 24 | 6.21 | 1490 | 1160 | 1030 | 910 | 790 |
| | | 2 | 24 | 28 | 6.50 | 1560 | 1220 | 1080 | 950 | 830 |
| | | 3 | 24 | 28 | 7.50 | 1800 | 1400 | 1240 | 1100 | 950 |
| | | 1 | 14 | 18 | 4.50 | 1080 | 840 | 750 | 660 | 570 |
| tee | | 1 | 20 | 24 | 4.79 | 1150 | 900 | 790 | 700 | 610 |
| 1¼" Dia. steel | 41/ C 01/ X 01/ 40 | 1 | 24 | 28 | 5.00 | 1200 | 940 | 830 | 730 | 640 |
| ā | 1¼S-3¼ X 3¼-40 | 2 | 20 | 24 | 6.79 | 1630 | 1270 | 1120 | 990 | 860 |
| 11/4 | | 2 | 24 | 28 | 7.08 | 1700 | 1330 | 1170 | 1040 | 900 |
| | | 3 | 24 | 28 | 8.21 | 1970 | 1540 | 1360 | 1200 | 1040 |
| | | 1 | 14 | 18 | 5.00 | 1200 | 940 | 830 | 730 | 640 |
| | | 1 | 20 | 24 | 5.58 | 1340 | 1050 | 920 | 820 | 710 |
| | 1¼S-3¼ X 3¼-48 | 1 | 24 | 28 | 5.79 | 1390 | 1080 | 960 | 850 | 740 |
| | 1/43-3/4 X 3/4-40 | 2 | 20 | 24 | 7.50 | 1800 | 1400 | 1240 | 1100 | 950 |
| | | 2 | 24 | 28 | 7.79 | 1870 | 1460 | 1290 | 1140 | 990 |
| | | 3 | 24 | 28 | 9.00 | 2160 | 1680 | 1490 | 1320 | 1140 |
| | | 1 | 14 | 18 | 5.79 | 1390 | 1080 | 960 | 850 | 740 |
| | | 1 | 20 | 24 | 6.00 | 1440 | 1120 | 990 | 880 | 760 |
| | 1¼S-4¼ X 4¼-32 | 1 | 24 | 28 | 6.21 | 1490 | 1160 | 1030 | 910 | 790 |
| | 1743-474 × 474-32 | 2 | 20 | 24 | 9.00 | 2160 | 1680 | 1490 | 1320 | 1140 |
| | | 2 | 24 | 28 | 9.42 | 2260 | 1760 | 1560 | 1380 | 1200 |
| | | 3 | 24 | 28 | 10.79 | 2590 | 2020 | 1790 | 1580 | 1370 |
| | | 1 | 14 | 18 | 6.50 | 1560 | 1220 | 1080 | 950 | 830 |
| teel | | 1 | 20 | 24 | 7.00 | 1680 | 1310 | 1160 | 1020 | 890 |
| 1¼" Dia. stee | 1¼S-4¼ X 4¼-40 | 1 | 24 | 28 | 7.21 | 1730 | 1350 | 1190 | 1060 | 920 |
| ā | 1/40-4/4 X 4/4-40 | 2 | 20 | 24 | 9.92 | 2380 | 1860 | 1640 | 1450 | 1260 |
| 11/4 | | 2 | 24 | 28 | 10.29 | 2470 | 1930 | 1700 | 1510 | 1310 |
| | | 3 | 24 | 28 | 11.79 | 2830 | 2210 | 1950 | 1730 | 1500 |
| | | 1 | 14 | 18 | 7.29 | 1750 | 1370 | 1210 | 1070 | 930 |
| | | 1 | 20 | 24 | 8.21 | 1970 | 1540 | 1360 | 1200 | 1040 |
| | 1¼S-4¼ X 4¼-48 | 1 | 24 | 28 | 8.42 | 2020 | 1580 | 1390 | 1230 | 1070 |
| | ·/40-7/4 A 4/4-40 | 2 | 20 | 24 | 10.92 | 2620 | 2040 | 1810 | 1600 | 1390 |
| | | 2 | 24 | 28 | 11.29 | 2710 | 2110 | 1870 | 1650 | 1440 |
| | | 3 | 24 | 28 | 13.00 | 3120 | 2430 | 2150 | 1900 | 1650 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model SBG5/SIBG5; sloped top enclosure

| | | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|---------------|-----------------|------------------------|-----------------------|---------------------------------|---------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft⅔ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | | | Steel element | | | | | |
| | | 1 | 14 | 18 | 5.79 | 1390 | 1080 | 960 | 850 | 740 |
| | | 1 | 20 | 24 | 5.83 | 1400 | 1090 | 970 | 850 | 740 |
| | 2S-4¼ X 4¼-32 | 1 | 24 | 28 | 6.21 | 1490 | 1160 | 1030 | 910 | 790 |
| | 23-4/4 A 4/4-32 | 2 | 20 | 24 | 8.79 | 2110 | 1650 | 1460 | 1290 | 1120 |
| | | 2 | 24 | 28 | 9.08 | 2180 | 1700 | 1500 | 1330 | 1160 |
| | | 3 | 24 | 28 | 10.50 | 2520 | 1970 | 1740 | 1540 | 1340 |
| | | 1 | 14 | 18 | 6.50 | 1560 | 1220 | 1080 | 950 | 830 |
| ee | | 1 | 20 | 24 | 6.92 | 1660 | 1290 | 1150 | 1010 | 880 |
| 2" Dia. steel | 2S-4¼ X 4¼-40 | 1 | 24 | 28 | 7.21 | 1730 | 1350 | 1190 | 1060 | 920 |
| Dia | 23-4% X 4%-40 | 2 | 20 | 24 | 9.50 | 2280 | 1780 | 1570 | 1390 | 1210 |
| N | | 2 | 24 | 28 | 10.00 | 2400 | 1870 | 1660 | 1460 | 1270 |
| | | 3 | 24 | 28 | 11.50 | 2760 | 2150 | 1900 | 1680 | 1460 |
| | | 1 | 14 | 18 | 7.29 | 1750 | 1370 | 1210 | 1070 | 930 |
| | | 1 | 20 | 24 | 7.92 | 1900 | 1480 | 1310 | 1160 | 1010 |
| | 2S-4¼ X 4¼-48 | 1 | 24 | 28 | 8.42 | 2020 | 1580 | 1390 | 1230 | 1070 |
| | 20-4/4 A 4/4-48 | 2 | 20 | 24 | 10.21 | 2450 | 1910 | 1690 | 1490 | 1300 |
| | | 2 | 24 | 28 | 10.79 | 2590 | 2020 | 1790 | 1580 | 1370 |
| | | 3 | 24 | 28 | 12.42 | 2980 | 2320 | 2060 | 1820 | 1580 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

 Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)

- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model SBG5/SIBG5; sloped top enclosure

| | | Rows of element | Enclosure | Recommended | EDR* | Steam heat | | Hot wa | ter heat | |
|-----------------|--|------------------------|-----------------------|---------------------------------|---------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft²/ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | 1 | | C | opper element | t | | | | |
| | | 1 | 14 | 18 | 4.57 | 1096 | 850 | 760 | 670 | 580 |
| | | 1 | 20 | 24 | 4.81 | 1155 | 900 | 800 | 700 | 610 |
| | 2/ O 02/ X 4 00 | 1 | 24 | 28 | 5.09 | 1221 | 950 | 840 | 740 | 650 |
| | ³ / ₄ C-2 ³ / ₄ X 4-32 | 2 | 20 | 24 | 7.20 | 1729 | 1350 | 1190 | 1050 | 920 |
| | | 2 | 24 | 28 | 7.92 | 1901 | 1480 | 1310 | 1160 | 1010 |
| | | 3 | 24 | 28 | 9.10 | 2185 | 1700 | 1510 | 1330 | 1160 |
| | | 1 | 14 | 18 | 5.42 | 1300 | 1010 | 900 | 790 | 690 |
| ber | | 1 | 20 | 24 | 5.88 | 1412 | 1100 | 970 | 860 | 750 |
| 34" Dia. copper | 2/ O 02/ X 4 40 | 1 | 24 | 28 | 6.13 | 1472 | 1150 | 1020 | 900 | 780 |
| Dia. | ³ / ₄ C-2 ³ / ₄ X 4-40 | 2 | 20 | 24 | 7.65 | 1835 | 1430 | 1270 | 1120 | 970 |
| 34" | | 2 | 24 | 28 | 8.30 | 1993 | 1550 | 1380 | 1220 | 1060 |
| | | 3 | 24 | 28 | 9.52 | 2284 | 1780 | 1580 | 1390 | 1210 |
| | | 2 | 20 | 24 | 7.87 | 1888 | 1470 | 1300 | 1150 | 1000 |
| | | 2 | 24 | 28 | 8.58 | 2059 | 1610 | 1420 | 1260 | 1090 |
| | 3/ 0 03/ X 4 40 | 3 | 24 | 28 | 9.85 | 2363 | 1840 | 1630 | 1440 | 1250 |
| | ³ ⁄4C-2 ³ ⁄4 X 4-48 | 1 | 14 | 18 | 5.80 | 1393 | 1090 | 960 | 850 | 740 |
| | | 1 | 20 | 24 | 6.60 | 1584 | 1240 | 1090 | 970 | 840 |
| | | 1 | 24 | 28 | 7.12 | 1709 | 1330 | 1180 | 1040 | 910 |
| | | 1 | 14 | 18 | 6.42 | 1540 | 1200 | 1060 | 940 | 820 |
| | | 1 | 20 | 24 | 7.42 | 1780 | 1390 | 1230 | 1090 | 940 |
| | ³ ⁄4C-3 ¹ ⁄4 X 3 ¹ ⁄4-32 | 1 | 24 | 28 | 7.92 | 1900 | 1480 | 1310 | 1160 | 1010 |
| | 74 0- 374 X 374-32 | 2 | 20 | 24 | 9.71 | 2330 | 1820 | 1610 | 1420 | 1230 |
| | | 2 | 24 | 28 | 10.00 | 2400 | 1870 | 1660 | 1460 | 1270 |
| | | 3 | 24 | 28 | 11.00 | 2640 | 2060 | 1820 | 1610 | 1400 |
| | | 1 | 14 | 18 | 5.29 | 1270 | 990 | 880 | 770 | 670 |
| bei | | 1 | 20 | 24 | 5.79 | 1390 | 1080 | 960 | 850 | 740 |
| Ö | ³ ⁄4C-3 ¹ ⁄4 X 3 ¹ ⁄4-40 | 1 | 24 | 28 | 6.08 | 1460 | 1140 | 1010 | 890 | 770 |
| Dia. | 74 0- 374 X 374-40 | 2 | 20 | 24 | 8.08 | 1940 | 1510 | 1340 | 1180 | 1030 |
| 3₄" Dia. copper | | 2 | 24 | 28 | 9.00 | 2160 | 1680 | 1490 | 1320 | 1140 |
| | | 3 | 24 | 28 | 10.29 | 2470 | 1930 | 1700 | 1510 | 1310 |
| | | 1 | 14 | 18 | 5.92 | 1420 | 1110 | 980 | 870 | 750 |
| | | 1 | 20 | 24 | 6.50 | 1560 | 1220 | 1080 | 950 | 830 |
| | ³ 4C-3¼ X 3¼-48 | 1 | 24 | 28 | 6.92 | 1660 | 1290 | 1150 | 1010 | 880 |
| | /4U-U/4 A U/4-70 | 2 | 20 | 24 | 9.42 | 2260 | 1760 | 1560 | 1380 | 1200 |
| | | 2 | 24 | 28 | 9.71 | 2330 | 1820 | 1610 | 1420 | 1230 |
| | | 3 | 24 | 28 | 10.71 | 2570 | 2000 | 1770 | 1570 | 1360 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Revised November 2016. Zehnder periodically makes changes to the design and/or specifications of its products. As a result, the design and specifications of each product at the time of order may be different than as described herein. Please contact Zehnder's Sales Support staff at 844-934-6337 for specific information on current design and specifications. Designs, specifications and other information contained herein are not express warranties, which are only as expressly set forth by Zehnder in its

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)

■ Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)

■ Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model SBG5/SIBG5; sloped top enclosure

| | | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|-----------------|---------------------|------------------------|-----------------------|---------------------------------|--------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft⅔/ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | | C | opper elemen | t | 1 | | | |
| | | 1 | 14 | 18 | 8.79 | 2110 | 1650 | 1460 | 1290 | 1120 |
| | | 1 | 20 | 24 | 10.00 | 2400 | 1870 | 1660 | 1460 | 1270 |
| | | 1 | 24 | 28 | 10.79 | 2590 | 2020 | 1790 | 1580 | 1370 |
| | ¾C-4¼ X 4¼-32 | 2 | 20 | 24 | 11.92 | 2860 | 2230 | 1970 | 1740 | 1520 |
| | | 2 | 24 | 28 | 13.00 | 3120 | 2430 | 2150 | 1900 | 1650 |
| | | 3 | 24 | 28 | 14.92 | 3580 | 2790 | 2470 | 2180 | 1900 |
| | | 1 | 14 | 18 | 6.92 | 1660 | 1290 | 1150 | 1010 | 880 |
| 34" Dia. copper | | 1 | 20 | 24 | 7.29 | 1750 | 1370 | 1210 | 1070 | 930 |
| ő | 3/ C 41/ X 41/ 40 | 1 | 24 | 28 | 7.71 | 1850 | 1440 | 1280 | 1130 | 980 |
| Dia. | 3⁄4C-41⁄4 X 41⁄4-40 | 2 | 20 | 24 | 10.92 | 2620 | 2040 | 1810 | 1600 | 1390 |
| 3/4" | | 2 | 24 | 28 | 12.00 | 2880 | 2250 | 1990 | 1760 | 1530 |
| | | 3 | 24 | 28 | 13.79 | 3310 | 2580 | 2280 | 2020 | 1750 |
| | | 1 | 14 | 18 | 8.21 | 1970 | 1540 | 1360 | 1200 | 1040 |
| | | 1 | 20 | 24 | 8.92 | 2140 | 1670 | 1480 | 1310 | 1130 |
| | 3/ C A1/ X A1/ A0 | 1 | 24 | 28 | 9.29 | 2230 | 1740 | 1540 | 1360 | 1180 |
| | 3⁄4C-41∕4 X 41⁄4-48 | 2 | 20 | 24 | 11.58 | 2780 | 2170 | 1920 | 1700 | 1470 |
| | | 2 | 24 | 28 | 12.58 | 3020 | 2360 | 2080 | 1840 | 1600 |
| | | 3 | 24 | 28 | 14.42 | 3460 | 2700 | 2390 | 2110 | 1830 |
| | | 1 | 14 | 18 | 4.48 | 1076 | 840 | 740 | 660 | 570 |
| | | 1 | 20 | 24 | 4.76 | 1142 | 890 | 790 | 700 | 610 |
| | 1C-2¾ X 4-32 | 1 | 24 | 28 | 4.95 | 1188 | 930 | 820 | 720 | 630 |
| | 10-2% X 4-32 | 2 | 20 | 24 | 7.07 | 1696 | 1320 | 1170 | 1030 | 900 |
| | | 2 | 24 | 28 | 7.78 | 1868 | 1460 | 1290 | 1140 | 990 |
| | | 3 | 24 | 28 | 8.91 | 2138 | 1670 | 1480 | 1300 | 1130 |
| | | 1 | 14 | 18 | 5.28 | 1267 | 990 | 870 | 770 | 670 |
| Dia. copper | | 1 | 20 | 24 | 5.75 | 1379 | 1080 | 950 | 840 | 730 |
| d o | 1C-2¾ X 4-40 | 1 | 24 | 28 | 6.00 | 1439 | 1120 | 990 | 880 | 760 |
| Dia. | 10-274 X 4-40 | 2 | 20 | 24 | 7.53 | 1808 | 1410 | 1250 | 1100 | 960 |
| ļ | | 2 | 24 | 28 | 8.20 | 1967 | 1530 | 1360 | 1200 | 1040 |
| | | 3 | 24 | 28 | 9.30 | 2231 | 1740 | 1540 | 1360 | 1180 |
| | | 1 | 14 | 18 | 5.67 | 1360 | 1060 | 940 | 830 | 720 |
| | | 1 | 20 | 24 | 6.46 | 1551 | 1210 | 1070 | 950 | 820 |
| | 1C-2¾ X 4-48 | 1 | 24 | 28 | 6.98 | 1676 | 1310 | 1160 | 1020 | 890 |
| | IV-2 /4 A 4-40 | 2 | 20 | 24 | 7.73 | 1855 | 1450 | 1280 | 1130 | 980 |
| | | 2 | 24 | 28 | 8.39 | 2013 | 1570 | 1390 | 1230 | 1070 |
| | | 3 | 24 | 28 | 9.63 | 2310 | 1800 | 1590 | 1410 | 1220 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model SBG5/SIBG5; sloped top enclosure

| | | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|----------------|--------------------|------------------------|-----------------------|---------------------------------|---------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft²/ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | 1 | | C | opper element | t | | | | |
| | | 1 | 14 | 18 | 5.21 | 1250 | 980 | 860 | 760 | 660 |
| | | 1 | 20 | 24 | 5.71 | 1370 | 1070 | 950 | 840 | 730 |
| | 10 01/ X 01/ 00 | 1 | 24 | 28 | 6.00 | 1440 | 1120 | 990 | 880 | 760 |
| | 1C-3¼ X 3¼-32 | 2 | 20 | 24 | 7.92 | 1900 | 1480 | 1310 | 1160 | 1010 |
| | | 2 | 24 | 28 | 8.79 | 2110 | 1650 | 1460 | 1290 | 1120 |
| | | 3 | 24 | 28 | 10.08 | 2420 | 1890 | 1670 | 1480 | 1280 |
| | | 1 | 14 | 18 | 5.79 | 1390 | 1080 | 960 | 850 | 740 |
| per | | 1 | 20 | 24 | 6.42 | 1540 | 1200 | 1060 | 940 | 820 |
| cob | | 1 | 24 | 28 | 6.79 | 1630 | 1270 | 1120 | 990 | 860 |
| 1" Dia. copper | 1C-3¼ X 3¼-40 | 2 | 20 | 24 | 9.21 | 2210 | 1720 | 1520 | 1350 | 1170 |
| 1 I | | 2 | 24 | 28 | 9.50 | 2280 | 1780 | 1570 | 1390 | 1210 |
| | | 3 | 24 | 28 | 10.58 | 2540 | 1980 | 1750 | 1550 | 1350 |
| | | 1 | 14 | 18 | 6.29 | 1510 | 1180 | 1040 | 920 | 800 |
| | | 1 | 20 | 24 | 7.21 | 1730 | 1350 | 1190 | 1060 | 920 |
| | 40 01/ X 01/ 40 | 1 | 24 | 28 | 7.71 | 1850 | 1440 | 1280 | 1130 | 980 |
| | 1C-3¼ X 3¼-48 | 2 | 20 | 24 | 9.50 | 2280 | 1780 | 1570 | 1390 | 1210 |
| | | 2 | 24 | 28 | 9.79 | 2350 | 1830 | 1620 | 1430 | 1250 |
| | | 3 | 24 | 28 | 10.79 | 2590 | 2020 | 1790 | 1580 | 1370 |
| | | 1 | 14 | 18 | 6.79 | 1630 | 1270 | 1120 | 990 | 860 |
| | | 1 | 20 | 24 | 7.21 | 1730 | 1350 | 1190 | 1060 | 920 |
| | 1C-4¼ X 4¼-32 | 1 | 24 | 28 | 7.50 | 1800 | 1400 | 1240 | 1100 | 950 |
| | 10-474 X 474-32 | 2 | 20 | 24 | 10.71 | 2570 | 2000 | 1770 | 1570 | 1360 |
| | | 2 | 24 | 28 | 11.79 | 2830 | 2210 | 1950 | 1730 | 1500 |
| | | 3 | 24 | 28 | 13.50 | 3240 | 2530 | 2240 | 1980 | 1720 |
| | | 1 | 14 | 18 | 8.00 | 1920 | 1500 | 1320 | 1170 | 1020 |
| ber | | 1 | 20 | 24 | 8.71 | 2090 | 1630 | 1440 | 1270 | 1110 |
| 8 | 1C-4¼ X 4¼-40 | 1 | 24 | 28 | 9.08 | 2180 | 1700 | 1500 | 1330 | 1160 |
| 1" Dia. copper | 10-474 X 474-40 | 2 | 20 | 24 | 11.42 | 2740 | 2140 | 1890 | 1670 | 1450 |
| ļ Ļ | | 2 | 24 | 28 | 12.42 | 2980 | 2320 | 2060 | 1820 | 1580 |
| | | 3 | 24 | 28 | 14.08 | 3380 | 2640 | 2330 | 2060 | 1790 |
| | | 1 | 14 | 18 | 8.58 | 2060 | 1610 | 1420 | 1260 | 1090 |
| | | 1 | 20 | 24 | 9.79 | 2350 | 1830 | 1620 | 1430 | 1250 |
| | 1C-4¼ X 4¼-48 | 1 | 24 | 28 | 10.58 | 2540 | 1980 | 1750 | 1550 | 1350 |
| | 1 V T /4 A T /4-TU | 2 | 20 | 24 | 11.71 | 2810 | 2190 | 1940 | 1710 | 1490 |
| | | 2 | 24 | 28 | 12.71 | 3050 | 2380 | 2100 | 1860 | 1620 |
| | | 3 | 24 | 28 | 14.58 | 3500 | 2730 | 2420 | 2140 | 1860 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model SBG5/SIBG5; sloped top enclosure

| | | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|-----------------|------------------------------------|------------------------|-----------------------|---------------------------------|--------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft⅔ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | 1 | | C | opper elemen | t | 1 | | | |
| | | 1 | 14 | 18 | 5.61 | 1346 | 1050 | 930 | 820 | 710 |
| | | 1 | 20 | 24 | 6.41 | 1538 | 1200 | 1060 | 940 | 820 |
| | 1¼C-2¾ X 4-32 | 1 | 24 | 28 | 6.88 | 1650 | 1290 | 1140 | 1010 | 870 |
| | 174 G-2% X 4-32 | 2 | 20 | 24 | 7.59 | 1822 | 1420 | 1260 | 1110 | 970 |
| | | 2 | 24 | 28 | 8.25 | 1980 | 1540 | 1370 | 1210 | 1050 |
| | | 1 | 14 | 18 | 4.43 | 1063 | 830 | 730 | 650 | 560 |
| 5 | | 1 | 20 | 24 | 4.68 | 1122 | 880 | 770 | 680 | 590 |
| bbe | | 1 | 24 | 28 | 4.90 | 1175 | 920 | 810 | 720 | 620 |
| 1¼" Dia. copper | 41/ O 02/ X A 40 | 2 | 20 | 24 | 6.93 | 1663 | 1300 | 1150 | 1010 | 880 |
| Dia | 1¼C-2¾ X 4-40 | 2 | 24 | 28 | 7.65 | 1835 | 1430 | 1270 | 1120 | 970 |
| 1/4" | | 3 | 24 | 28 | 8.77 | 2105 | 1640 | 1450 | 1280 | 1120 |
| - | | 1 | 14 | 18 | 5.23 | 1254 | 980 | 870 | 760 | 660 |
| | | 1 | 20 | 24 | 5.67 | 1360 | 1060 | 940 | 830 | 720 |
| | | 1 | 24 | 28 | 5.94 | 1426 | 1110 | 980 | 870 | 760 |
| | 41/ O 02/ X A 40 | 2 | 20 | 24 | 7.40 | 1775 | 1380 | 1220 | 1080 | 940 |
| | 1¼C-2¾ X 4-48 | 2 | 24 | 28 | 8.06 | 1934 | 1510 | 1330 | 1180 | 1030 |
| | | 3 | 24 | 28 | 9.18 | 2204 | 1720 | 1520 | 1340 | 1170 |
| | | 3 | 24 | 28 | 9.52 | 2284 | 1780 | 1580 | 1390 | 1210 |
| | | 1 | 14 | 18 | 4.79 | 1150 | 900 | 790 | 700 | 610 |
| | | 1 | 20 | 24 | 5.50 | 1320 | 1030 | 910 | 810 | 700 |
| | 1¼C-3¼ X 3¼-32 | 1 | 24 | 28 | 5.79 | 1390 | 1080 | 960 | 850 | 740 |
| | 1/4C-3/4 X 3/4-32 | 2 | 20 | 24 | 7.71 | 1850 | 1440 | 1280 | 1130 | 980 |
| | | 2 | 24 | 28 | 8.58 | 2060 | 1610 | 1420 | 1260 | 1090 |
| | | 3 | 24 | 28 | 9.92 | 2380 | 1860 | 1640 | 1450 | 1260 |
| L . | | 2 | 20 | 24 | 9.00 | 2160 | 1680 | 1490 | 1320 | 1140 |
| 1¼" Dia. copper | | 2 | 24 | 28 | 9.29 | 2230 | 1740 | 1540 | 1360 | 1180 |
| 00 | 1¼C-3¼ X 3¼-40 | 3 | 24 | 28 | 10.42 | 2500 | 1950 | 1730 | 1530 | 1330 |
| Dia | 174 C-3 74 A 3 74-40 | 1 | 14 | 18 | 5.71 | 1370 | 1070 | 950 | 840 | 730 |
| 1/4" | | 1 | 20 | 24 | 6.21 | 1490 | 1160 | 1030 | 910 | 790 |
| - I | | 1 | 24 | 28 | 6.50 | 1560 | 1220 | 1080 | 950 | 830 |
| | | 1 | 14 | 18 | 6.08 | 1460 | 1140 | 1010 | 890 | 770 |
| | | 1 | 20 | 24 | 7.08 | 1700 | 1330 | 1170 | 1040 | 900 |
| | 1¼C-3¼ X 3¼-48 | 1 | 24 | 28 | 7.58 | 1820 | 1420 | 1260 | 1110 | 960 |
| | 1740-374 A 374-40 | 2 | 20 | 24 | 9.29 | 2230 | 1740 | 1540 | 1360 | 1180 |
| | | 2 | 24 | 28 | 9.58 | 2300 | 1790 | 1590 | 1400 | 1220 |
| | | 3 | 24 | 28 | 10.71 | 2570 | 2000 | 1770 | 1570 | 1360 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect
 Water average temperature velocities, refer to EZselect
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)

General data

Performance ratings: model SBG5/SIBG5; sloped top enclosure

| | | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|----------|-----------------------------------|------------------------|-----------------------|---------------------------------|--------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft²∕ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | | C | opper elemen | t | | | | |
| | | 1 | 14 | 18 | 6.71 | 1610 | 1260 | 1110 | 980 | 850 |
| | | 1 | 20 | 24 | 7.08 | 1700 | 1330 | 1170 | 1040 | 900 |
| | 1¼C-4¼ X 4¼-32 | 1 | 24 | 28 | 7.42 | 1780 | 1390 | 1230 | 1090 | 940 |
| | 1740-474 × 474-32 | 2 | 20 | 24 | 10.50 | 2520 | 1970 | 1740 | 1540 | 1340 |
| | | 2 | 24 | 28 | 11.58 | 2780 | 2170 | 1920 | 1700 | 1470 |
| | | 3 | 24 | 28 | 13.29 | 3190 | 2490 | 2200 | 1950 | 1690 |
| 5 | | 1 | 14 | 18 | 7.92 | 1900 | 1480 | 1310 | 1160 | 1010 |
| copper | | 1 | 20 | 24 | 8.58 | 2060 | 1610 | 1420 | 1260 | 1090 |
| S. | 1¼C-4¼ X 4¼-40 | 1 | 24 | 28 | 9.00 | 2160 | 1680 | 1490 | 1320 | 1140 |
| Dia | 1740-474 7 474-40 | 2 | 20 | 24 | 11.21 | 2690 | 2100 | 1860 | 1640 | 1430 |
| 1¼" Dia. | | 2 | 24 | 28 | 12.21 | 2930 | 2290 | 2020 | 1790 | 1550 |
| | | 3 | 24 | 28 | 13.92 | 3340 | 2610 | 2300 | 2040 | 1770 |
| | | 1 | 14 | 18 | 8.50 | 2040 | 1590 | 1410 | 1240 | 1080 |
| | | 1 | 20 | 24 | 9.71 | 2330 | 1820 | 1610 | 1420 | 1230 |
| | 1¼C-4¼ X 4¼-48 | 1 | 24 | 28 | 10.42 | 2500 | 1950 | 1730 | 1530 | 1330 |
| | 174 0- 474 A 474-40 | 2 | 20 | 24 | 11.50 | 2760 | 2150 | 1900 | 1680 | 1460 |
| | | 2 | 24 | 28 | 12.50 | 3000 | 2340 | 2070 | 1830 | 1590 |
| | | 3 | 24 | 28 | 14.42 | 3460 | 2700 | 2390 | 2110 | 1830 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

 Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)

- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model SBG3/SIBG3; low profile, sloped top enclosure

| | | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|----------------|--------------------|------------------------|-----------------------|---------------------------------|---------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft²/ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | | | Steel element | | | | | |
| | | 1 | 08 | 12 | 3.29 | 790 | 620 | 550 | 480 | 420 |
| | 1S-3¼ X 3¼-32 | 1 | 11 | 15 | 3.50 | 840 | 660 | 580 | 510 | 450 |
| | 13-3/4 8 3/4-32 | 1 | 14 | 18 | 3.71 | 890 | 690 | 610 | 540 | 470 |
| | | 2 | 14 | 18 | 5.00 | 1200 | 940 | 830 | 730 | 640 |
| <u>e</u> | | 1 | 08 | 12 | 3.58 | 860 | 670 | 590 | 520 | 460 |
| . ste | 40.01/ X.01/ 40 | 1 | 11 | 15 | 3.92 | 940 | 730 | 650 | 570 | 500 |
| 1" Dia. steel | 1S-3¼ X 3¼-40 | 1 | 14 | 18 | 4.08 | 980 | 760 | 680 | 600 | 520 |
| - - | | 2 | 14 | 18 | 5.58 | 1340 | 1050 | 920 | 820 | 710 |
| | | 1 | 08 | 12 | 4.08 | 980 | 760 | 680 | 600 | 520 |
| | 40.01/ X.01/ 40 | 1 | 11 | 15 | 4.42 | 1060 | 830 | 730 | 650 | 560 |
| | 1S-3¼ X 3¼-48 | 1 | 14 | 18 | 4.58 | 1100 | 860 | 760 | 670 | 580 |
| | | 2 | 14 | 18 | 6.29 | 1510 | 1180 | 1040 | 920 | 800 |
| | | 1 | 08 | 12 | 3.21 | 770 | 600 | 530 | 470 | 410 |
| | 41/ C 01/ X 01/ 00 | 1 | 11 | 15 | 3.42 | 820 | 640 | 570 | 500 | 430 |
| | 1¼S-3¼ X 3¼-32 | 1 | 14 | 18 | 3.58 | 860 | 670 | 590 | 520 | 460 |
| | | 2 | 14 | 18 | 4.92 | 1180 | 920 | 810 | 720 | 630 |
| ee | | 1 | 08 | 12 | 3.50 | 840 | 660 | 580 | 510 | 450 |
| a. st | 1¼S-3¼ X 3¼-40 | 1 | 11 | 15 | 3.79 | 910 | 710 | 630 | 560 | 480 |
| 1¼" Dia. steel | 1743-374 X 374-40 | 1 | 14 | 18 | 4.00 | 960 | 750 | 660 | 590 | 510 |
| 11/4 | | 2 | 14 | 18 | 5.50 | 1320 | 1030 | 910 | 810 | 700 |
| | | 1 | 08 | 12 | 4.00 | 960 | 750 | 660 | 590 | 510 |
| | 1¼S-3¼ X 3¼-48 | 1 | 11 | 15 | 4.29 | 1030 | 800 | 710 | 630 | 550 |
| | 1743-374 A 374-48 | 1 | 14 | 18 | 4.50 | 1080 | 840 | 750 | 660 | 570 |
| | | 2 | 14 | 18 | 6.21 | 1490 | 1160 | 1030 | 910 | 790 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)
- Contact factory when ordering 1-1/4" copper, 1" steel and 1-1/4" steel elements to ensure proper fit up inside the enclosure.

General data

Performance ratings: model SBG3/SIBG3; low profile, sloped top enclosure

| | | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|-----------------|---|------------------------|-----------------------|---------------------------------|--------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft²/ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | 1 | | C | opper elemen | t | | | 1 | |
| | | 1 | 08 | 12 | 4.42 | 1060 | 830 | 730 | 650 | 560 |
| | | 1 | 11 | 15 | 4.71 | 1130 | 880 | 780 | 690 | 600 |
| | 34C-234 X 4-32 | 1 | 14 | 18 | 5.00 | 1200 | 940 | 830 | 730 | 640 |
| | | 2 | 14 | 18 | 6.79 | 1630 | 1270 | 1120 | 990 | 860 |
| ¾" Dia. copper | | 1 | 08 | 12 | 4.79 | 1150 | 900 | 790 | 700 | 610 |
| cop | | 1 | 11 | 15 | 5.17 | 1240 | 970 | 860 | 760 | 660 |
| Dia. | 34C-234 X 4-40 | 1 | 14 | 18 | 5.50 | 1320 | 1030 | 910 | 810 | 700 |
| ∦" [| | 2 | 14 | 18 | 7.50 | 1800 | 1400 | 1240 | 1100 | 950 |
| ю. | | 1 | 08 | 12 | 5.17 | 1240 | 970 | 860 | 760 | 660 |
| | | 1 | 11 | 15 | 5.67 | 1360 | 1060 | 940 | 830 | 720 |
| | 34C-234 X 4-48 | 1 | 14 | 18 | 6.00 | 1440 | 1120 | 990 | 880 | 760 |
| | | 2 | 14 | 18 | 8.21 | 1970 | 1540 | 1360 | 1200 | 1040 |
| | | 1 | 08 | 12 | 4.21 | 1010 | 790 | 700 | 620 | 540 |
| | | 1 | 11 | 15 | 4.50 | 1080 | 840 | 750 | 660 | 570 |
| | ³ / ₄ C-3 ¹ / ₄ X 3 ¹ / ₄ -32 | 1 | 14 | 18 | 4.71 | 1130 | 880 | 780 | 690 | 600 |
| | | 2 | 14 | 18 | 6.42 | 1540 | 1200 | 1060 | 940 | 820 |
| ber | | 1 | 08 | 12 | 4.50 | 1080 | 840 | 750 | 660 | 570 |
| 34" Dia. copper | 3/ C 01/ X 01/ 40 | 1 | 11 | 15 | 4.92 | 1180 | 920 | 810 | 720 | 630 |
| Dia. | 3∕4C-31⁄4 X 31⁄4-40 | 1 | 14 | 18 | 5.21 | 1250 | 980 | 860 | 760 | 660 |
| 34" [| | 2 | 14 | 18 | 7.08 | 1700 | 1330 | 1170 | 1040 | 900 |
| | | 1 | 08 | 12 | 5.00 | 1200 | 940 | 830 | 730 | 640 |
| | ³ ⁄4C-3 ¹ ⁄4 X 3 ¹ ⁄4-48 | 1 | 11 | 15 | 5.42 | 1300 | 1010 | 900 | 790 | 690 |
| | %0-3% X 3%-40 | 1 | 14 | 18 | 5.71 | 1370 | 1070 | 950 | 840 | 730 |
| | | 2 | 14 | 18 | 7.92 | 1900 | 1480 | 1310 | 1160 | 1010 |
| | | 1 | 08 | 12 | 4.29 | 1030 | 800 | 710 | 630 | 550 |
| | 1C-2¾ X 4-32 | 1 | 11 | 15 | 4.58 | 1100 | 860 | 760 | 670 | 580 |
| | 10-274 X 4-32 | 1 | 14 | 18 | 4.92 | 1180 | 920 | 810 | 720 | 630 |
| | | 2 | 14 | 18 | 6.71 | 1610 | 1260 | 1110 | 980 | 850 |
| 1" Dia. copper | | 1 | 08 | 12 | 4.71 | 1130 | 880 | 780 | 690 | 600 |
| 00 | 1C-2¾ X 4-40 | 1 | 11 | 15 | 5.08 | 1220 | 950 | 840 | 740 | 650 |
| Dia. | IV-2 /4 A 4-4V | 1 | 14 | 18 | 5.42 | 1300 | 1010 | 900 | 790 | 690 |
| ļ. | | 2 | 14 | 18 | 7.42 | 1780 | 1390 | 1230 | 1090 | 940 |
| | | 1 | 08 | 12 | 5.08 | 1220 | 950 | 840 | 740 | 650 |
| | 1C-2¾ X 4-48 | 1 | 11 | 15 | 5.58 | 1340 | 1050 | 920 | 820 | 710 |
| | 10 2 /4 X 7 70 | 1 | 14 | 18 | 5.92 | 1420 | 1110 | 980 | 870 | 750 |
| | | 2 | 14 | 18 | 8.08 | 1940 | 1510 | 1340 | 1180 | 1030 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)
- Revised November 2016. Zehnder periodically makes changes to the design and/or specifications of its products. As a result, the design and specifications of each product at the time of order may be different than as described herein. Please contact Zehnder's Sales Support staff at 844-934-6337 for specific information on current design and specifications. Designs, specifications and other information contained herein are not express warranties, which are only as expressly set forth by Zehnder in its terms and conditions of sale. The latest version of this document is available at www.zehnder-ritling.com.

General data

Performance ratings: model SBG3/SIBG3; low profile, sloped top enclosure

| | | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|-----------------|-------------------------------------|------------------------|-----------------------|---------------------------------|--------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft⅔ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | 1 | C | opper elemen | t | | | 1 | 1 |
| | | 1 | 08 | 12 | 4.08 | 980 | 760 | 680 | 600 | 520 |
| | | 1 | 11 | 15 | 4.42 | 1060 | 830 | 730 | 650 | 560 |
| | 1C-3¼ X 3¼-32 | 1 | 14 | 18 | 4.71 | 1130 | 880 | 780 | 690 | 600 |
| | | 2 | 14 | 18 | 6.42 | 1540 | 1200 | 1060 | 940 | 820 |
| per | | 1 | 08 | 12 | 4.50 | 1080 | 840 | 750 | 660 | 570 |
| Dia. copper | | 1 | 11 | 15 | 4.92 | 1180 | 920 | 810 | 720 | 630 |
| la. | 1C-3¼ X 3¼-40 | 1 | 14 | 18 | 5.21 | 1250 | 980 | 860 | 760 | 660 |
| 1= | | 2 | 14 | 18 | 7.08 | 1700 | 1330 | 1170 | 1040 | 900 |
| | | 1 | 08 | 12 | 5.00 | 1200 | 940 | 830 | 730 | 640 |
| | | 1 | 11 | 15 | 5.42 | 1300 | 1010 | 900 | 790 | 690 |
| | 1C-3¼ X 3¼-48 | 1 | 14 | 18 | 5.71 | 1370 | 1070 | 950 | 840 | 730 |
| | | 2 | 14 | 18 | 7.79 | 1870 | 1460 | 1290 | 1140 | 990 |
| | | 1 | 08 | 12 | 4.08 | 980 | 760 | 680 | 600 | 520 |
| | | 1 | 11 | 15 | 4.42 | 1060 | 830 | 730 | 650 | 560 |
| | 1¼C-2¾ X 4-32 | 1 | 14 | 18 | 4.71 | 1130 | 880 | 780 | 690 | 600 |
| ~ | | 2 | 14 | 18 | 6.42 | 1540 | 1200 | 1060 | 940 | 820 |
| ppe | | 1 | 08 | 12 | 4.58 | 1100 | 860 | 760 | 670 | 580 |
| 1¼" Dia. copper | 1¼C-2¾ X 4-40 | 1 | 11 | 15 | 4.92 | 1180 | 920 | 810 | 720 | 630 |
| Dia. | T74G-2%4 X 4-40 | 1 | 14 | 18 | 5.21 | 1250 | 980 | 860 | 760 | 660 |
| 1/4" | | 2 | 14 | 18 | 7.08 | 1700 | 1330 | 1170 | 1040 | 900 |
| - | | 1 | 08 | 12 | 5.00 | 1200 | 940 | 830 | 730 | 640 |
| | 1¼C-2¾ X 4-48 | 1 | 11 | 15 | 5.42 | 1300 | 1010 | 900 | 790 | 690 |
| | 174 G-2% X 4-4 0 | 1 | 14 | 18 | 5.71 | 1370 | 1070 | 950 | 840 | 730 |
| | | 2 | 14 | 18 | 7.79 | 1870 | 1460 | 1290 | 1140 | 990 |
| | | 1 | 08 | 12 | 3.58 | 860 | 670 | 590 | 520 | 460 |
| | 1¼C-3¼ X 3¼-32 | 1 | 11 | 15 | 3.92 | 940 | 730 | 650 | 570 | 500 |
| | 1/40-3/4 X 3/4-32 | 1 | 14 | 18 | 4.08 | 980 | 760 | 680 | 600 | 520 |
| - | | 2 | 14 | 18 | 5.58 | 1340 | 1050 | 920 | 820 | 710 |
| 1¼" Dia. copper | | 1 | 08 | 12 | 4.50 | 1080 | 840 | 750 | 660 | 570 |
| 0.0 | 1¼C-3¼ X 3¼-40 | 1 | 11 | 15 | 4.79 | 1150 | 900 | 790 | 700 | 610 |
| Dia | 1740-374 A 374-40 | 1 | 14 | 18 | 5.08 | 1220 | 950 | 840 | 740 | 650 |
| 1/4" | | 2 | 14 | 18 | 7.00 | 1680 | 1310 | 1160 | 1020 | 890 |
| - | | 1 | 08 | 12 | 4.92 | 1180 | 920 | 810 | 720 | 630 |
| | 1¼C-3¼ X 3¼-48 | 1 | 11 | 15 | 5.29 | 1270 | 990 | 880 | 770 | 670 |
| | 1/4 0- 0/4 X 0/4 -4 0 | 1 | 14 | 18 | 5.58 | 1340 | 1050 | 920 | 820 | 710 |
| | | 2 | 14 | 18 | 7.71 | 1850 | 1440 | 1280 | 1130 | 980 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)
- Revised November 2016. Zehnder periodically makes changes to the design and/or specifications of its products. As a result, the design and specifications of each product at the time of order may be different than as described herein. Please contact Zehnder's Sales Support staff at 844-934-6337 for specific information on current design and specifications. Designs, specifications and other information contained herein are not express warranties, which are only as expressly set forth by Zehnder in its terms and conditions of sale. The latest version of this document is available at www.zehnder-ritling.com.

General data

Performance ratings: model SBGVL5/SIBGVL5; sloped top enclosure

| | | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|---------------|-----------------|------------------------|-----------------------|---------------------------------|---------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft²/ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | 1 | | | Steel element | | 1 | | 1 | 1 |
| | | 1 | 14 | 18 | 3.57 | 858 | 670 | 590 | 520 | 450 |
| | | 1 | 20 | 24 | 3.68 | 884 | 690 | 610 | 540 | 470 |
| | 40.01/ X 01/ 00 | 1 | 24 | 28 | 3.86 | 928 | 720 | 640 | 570 | 490 |
| | 1S-3¼ X 3¼-32 | 2 | 20 | 24 | 5.51 | 1321 | 1030 | 910 | 810 | 700 |
| | | 2 | 24 | 28 | 5.76 | 1383 | 1080 | 950 | 840 | 730 |
| | | 3 | 24 | 28 | 6.74 | 1619 | 1260 | 1120 | 990 | 860 |
| | | 1 | 14 | 18 | 4.01 | 963 | 750 | 660 | 590 | 510 |
| <u>e</u> | | 1 | 20 | 24 | 4.30 | 1034 | 810 | 710 | 630 | 550 |
| 1" Dia. steel | | 1 | 24 | 28 | 4.45 | 1068 | 830 | 740 | 650 | 570 |
| Dia | 1S-3¼ X 3¼-40 | 2 | 20 | 24 | 6.05 | 1453 | 1130 | 1000 | 890 | 770 |
| Ļ. | | 2 | 24 | 28 | 6.38 | 1531 | 1190 | 1060 | 930 | 810 |
| | | 3 | 24 | 28 | 7.36 | 1768 | 1380 | 1220 | 1080 | 940 |
| | | 1 | 14 | 18 | 4.45 | 1068 | 830 | 740 | 650 | 570 |
| | | 1 | 20 | 24 | 4.99 | 1199 | 940 | 830 | 730 | 640 |
| | | 1 | 24 | 28 | 5.18 | 1243 | 970 | 860 | 760 | 660 |
| | 1S-3¼ X 3¼-48 | 2 | 20 | 24 | 6.74 | 1619 | 1260 | 1120 | 990 | 860 |
| | | 2 | 24 | 28 | 7.00 | 1680 | 1310 | 1160 | 1020 | 890 |
| | | 3 | 24 | 28 | 8.06 | 1934 | 1510 | 1330 | 1180 | 1020 |
| | | 1 | 14 | 18 | 5.18 | 1243 | 970 | 860 | 760 | 660 |
| | | 1 | 20 | 24 | 5.32 | 1278 | 1000 | 880 | 780 | 680 |
| | 40 41/ X 41/ 00 | 1 | 24 | 28 | 5.51 | 1321 | 1030 | 910 | 810 | 700 |
| | 1S-4¼ X 4¼-32 | 2 | 20 | 24 | 8.06 | 1934 | 1510 | 1330 | 1180 | 1020 |
| | | 2 | 24 | 28 | 8.39 | 2013 | 1570 | 1390 | 1230 | 1070 |
| | | 3 | 24 | 28 | 9.63 | 2310 | 1800 | 1590 | 1410 | 1220 |
| | | 1 | 14 | 18 | 5.76 | 1383 | 1080 | 950 | 840 | 730 |
| <u>e</u> | | 1 | 20 | 24 | 6.20 | 1488 | 1160 | 1030 | 910 | 790 |
| 1" Dia. steel | 10 A1/ X A1/ A0 | 1 | 24 | 28 | 6.49 | 1558 | 1210 | 1070 | 950 | 830 |
| Dia | 1S-4¼ X 4¼-40 | 2 | 20 | 24 | 8.82 | 2118 | 1650 | 1460 | 1290 | 1120 |
| ÷. | | 2 | 24 | 28 | 9.19 | 2205 | 1720 | 1520 | 1350 | 1170 |
| | | 3 | 24 | 28 | 10.50 | 2520 | 1970 | 1740 | 1540 | 1340 |
| | | 1 | 14 | 18 | 6.56 | 1575 | 1230 | 1090 | 960 | 830 |
| | | 1 | 20 | 24 | 7.36 | 1768 | 1380 | 1220 | 1080 | 940 |
| | 1S-4¼ X 4¼-48 | 1 | 24 | 28 | 7.51 | 1803 | 1410 | 1240 | 1100 | 960 |
| | 13-4/4 A 4/4-48 | 2 | 20 | 24 | 9.70 | 2328 | 1820 | 1610 | 1420 | 1230 |
| | | 2 | 24 | 28 | 10.06 | 2415 | 1880 | 1670 | 1470 | 1280 |
| | | 3 | 24 | 28 | 11.63 | 2791 | 2180 | 1930 | 1700 | 1480 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)

Relights, refer to EZselect selection software.)
 Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

Contact factory when ordering 1-1/4" copper, 1" steel and 1-1/4" steel elements to ensure proper fit up inside the enclosure.

Revised November 2016. Zehnder periodically makes changes to the design and/or specifications of its products. As a result, the design and specifications of each product at the time of order may be different than as described herein. Please contact Zehnder's Sales Support staff at 844-934-6337 for specific information on current design and specifications. Designs, specifications and other information contained herein are not express warranties, which are only as expressly set forth by Zehnder in its terms and conditions of sale. The latest version of this document is available at www.zehnder-rittling.com.

selection software.)

General data

Performance ratings: model SBGVL5/SIBGVL5; sloped top enclosure

| | | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|----------------|---------------------|------------------------|-----------------------|---------------------------------|---------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft²⁄ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | 1 | | Steel element | | 1 | 1 | 1 | |
| | | 1 | 14 | 18 | 3.50 | 840 | 660 | 580 | 510 | 450 |
| | | 1 | 20 | 24 | 3.57 | 858 | 670 | 590 | 520 | 450 |
| | 41/ C 01/ X 01/ 00 | 1 | 24 | 28 | 3.76 | 901 | 700 | 620 | 550 | 480 |
| | 1¼S-3¼ X 3¼-32 | 2 | 20 | 24 | 5.43 | 1304 | 1020 | 900 | 800 | 690 |
| | | 2 | 24 | 28 | 5.69 | 1365 | 1060 | 940 | 830 | 720 |
| | | 3 | 24 | 28 | 6.56 | 1575 | 1230 | 1090 | 960 | 830 |
| | | 1 | 14 | 18 | 3.94 | 945 | 740 | 650 | 580 | 500 |
| tee | | 1 | 20 | 24 | 4.19 | 1006 | 780 | 690 | 610 | 530 |
| 1¼" Dia. steel | 41/ C 01/ X 01/ 40 | 1 | 24 | 28 | 4.38 | 1050 | 820 | 720 | 640 | 560 |
| | 1¼S-3¼ X 3¼-40 | 2 | 20 | 24 | 5.94 | 1426 | 1110 | 980 | 870 | 760 |
| 11/4 | | 2 | 24 | 28 | 6.20 | 1488 | 1160 | 1030 | 910 | 790 |
| | | 3 | 24 | 28 | 7.18 | 1724 | 1340 | 1190 | 1050 | 910 |
| | | 1 | 14 | 18 | 4.38 | 1050 | 820 | 720 | 640 | 560 |
| | | 1 | 20 | 24 | 4.89 | 1173 | 910 | 810 | 720 | 620 |
| | 41/ C 01/ X 01/ 40 | 1 | 24 | 28 | 5.07 | 1216 | 950 | 840 | 740 | 640 |
| | 1¼S-3¼ X 3¼-48 | 2 | 20 | 24 | 6.56 | 1575 | 1230 | 1090 | 960 | 830 |
| | | 2 | 24 | 28 | 6.82 | 1636 | 1280 | 1130 | 1000 | 870 |
| | | 3 | 24 | 28 | 7.88 | 1890 | 1470 | 1300 | 1150 | 1000 |
| | | 1 | 14 | 18 | 5.07 | 1216 | 950 | 840 | 740 | 640 |
| | | 1 | 20 | 24 | 5.25 | 1260 | 980 | 870 | 770 | 670 |
| | 1¼S-4¼ X 4¼-32 | 1 | 24 | 28 | 5.43 | 1304 | 1020 | 900 | 800 | 690 |
| | 1/43-4/4 7 4/4-32 | 2 | 20 | 24 | 7.88 | 1890 | 1470 | 1300 | 1150 | 1000 |
| | | 2 | 24 | 28 | 8.24 | 1978 | 1540 | 1360 | 1210 | 1050 |
| | | 3 | 24 | 28 | 9.44 | 2266 | 1770 | 1560 | 1380 | 1200 |
| | | 1 | 14 | 18 | 5.69 | 1365 | 1060 | 940 | 830 | 720 |
| tee | | 1 | 20 | 24 | 6.13 | 1470 | 1150 | 1010 | 900 | 780 |
| 1¼" Dia. steel | 1¼S-4¼ X 4¼-40 | 1 | 24 | 28 | 6.31 | 1514 | 1180 | 1040 | 920 | 800 |
| ā | ·/••••••/• A •/4-+0 | 2 | 20 | 24 | 8.68 | 2083 | 1620 | 1440 | 1270 | 1100 |
| 11/4 | | 2 | 24 | 28 | 9.01 | 2161 | 1690 | 1490 | 1320 | 1150 |
| | | 3 | 24 | 28 | 10.32 | 2476 | 1930 | 1710 | 1510 | 1310 |
| | | 1 | 14 | 18 | 6.38 | 1531 | 1190 | 1060 | 930 | 810 |
| | | 1 | 20 | 24 | 7.18 | 1724 | 1340 | 1190 | 1050 | 910 |
| | 1¼S-4¼ X 4¼-48 | 1 | 24 | 28 | 7.36 | 1768 | 1380 | 1220 | 1080 | 940 |
| | 1,40 4/4 7 4/4 40 | 2 | 20 | 24 | 9.55 | 2293 | 1790 | 1580 | 1400 | 1220 |
| | | 2 | 24 | 28 | 9.88 | 2371 | 1850 | 1640 | 1450 | 1260 |
| | | 3 | 24 | 28 | 11.38 | 2730 | 2130 | 1880 | 1670 | 1450 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model SBGVL5/SIBGVL5; sloped top enclosure

| | | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|---------------|-----------------|------------------------|-----------------------|---------------------------------|---------------|-------------------------|-------------------------|--|----------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft⅔ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 190°F 180°F ctor of 0.78 factor of 0.69 | | 160°F factor of 0.53 |
| | | 1 | | | Steel element | | | 1 | | 1 |
| | | 1 | 14 | 18 | 5.07 | 1216 | 950 | 840 | 740 | 640 |
| | | 1 | 20 | 24 | 5.10 | 1225 | 960 | 850 | 750 | 650 |
| | 2S-4¼ X 4¼-32 | 1 | 24 | 28 | 5.43 | 1304 | 1020 | 900 | 800 | 690 |
| | 23-4/4 x 4/4-32 | 2 | 20 | 24 | 7.69 | 1846 | 1440 | 1270 | 1130 | 980 |
| | | 2 | 24 | 28 | 7.95 | 1908 | 1490 | 1320 | 1160 | 1010 |
| | | 3 | 24 | 28 | 9.19 | 2205 | 1720 | 1520 | 1350 | 1170 |
| | | 1 | 14 | 18 | 5.69 | 1365 | 1060 | 940 | 830 | 720 |
| <u>ee</u> | | 1 | 20 | 24 | 6.05 | 1453 | 1130 | 1000 | 890 | 770 |
| . St | 2S-4¼ X 4¼-40 | 1 | 24 | 28 | 6.31 | 1513 | 1180 | 1040 | 920 | 800 |
| 2" Dia. steel | 25-4% X 4%-40 | 2 | 20 | 24 | 8.31 | 1995 | 1560 | 1380 | 1220 | 1060 |
| N | | 2 | 24 | 28 | 8.75 | 2100 | 1640 | 1450 | 1280 | 1110 |
| | | 3 | 24 | 28 | 10.06 | 2415 | 1880 | 1670 | 1470 | 1280 |
| | | 1 | 14 | 18 | 6.38 | 1531 | 1190 | 1060 | 930 | 810 |
| | | 1 | 20 | 24 | 6.93 | 1663 | 1300 | 1150 | 1010 | 880 |
| | 2S-4¼ X 4¼-48 | 1 | 24 | 28 | 7.36 | 1768 | 1380 | 1220 | 1080 | 940 |
| | 20-4/4 A 4/4-48 | 2 | 20 | 24 | 8.93 | 2144 | 1670 | 1480 | 1310 | 1140 |
| | | 2 | 24 | 28 | 9.44 | 2266 | 1770 | 1560 | 1380 | 1200 |
| | | 3 | 24 | 28 | 10.86 | 2608 | 2030 | 1800 | 1590 | 1380 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

Important Rating Information Performance ratings based on:

 Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)

- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model SBGVL5/SIBGVL5; sloped top enclosure

| | | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|-----------------|--|------------------------|-----------------------|---------------------------------|--------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft²/ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | | c | opper elemen | t | 1 | | 1 | |
| | | 1 | 14 | 18 | 4.00 | 959 | 750 | 660 | 580 | 510 |
| | | 1 | 20 | 24 | 4.21 | 1010 | 790 | 700 | 620 | 540 |
| | 2/ O 02/ X 4 00 | 1 | 24 | 28 | 4.45 | 1068 | 830 | 740 | 650 | 570 |
| | ³ / ₄ C-2 ³ / ₄ X 4-32 | 2 | 20 | 24 | 6.30 | 1513 | 1180 | 1040 | 920 | 800 |
| | | 2 | 24 | 28 | 6.93 | 1663 | 1300 | 1150 | 1010 | 880 |
| | | 3 | 24 | 28 | 7.97 | 1912 | 1490 | 1320 | 1170 | 1010 |
| | | 1 | 14 | 18 | 4.74 | 1138 | 890 | 780 | 690 | 600 |
| ber | | 1 | 20 | 24 | 5.15 | 1236 | 960 | 850 | 750 | 650 |
| Dia. copper | | 1 | 24 | 28 | 5.37 | 1288 | 1000 | 890 | 790 | 680 |
| Dia. | ³ / ₄ C-2 ³ / ₄ X 4-40 | 2 | 20 | 24 | 6.69 | 1606 | 1250 | 1110 | 980 | 850 |
| 34" | | 2 | 24 | 28 | 7.27 | 1744 | 1360 | 1200 | 1060 | 920 |
| | | 3 | 24 | 28 | 8.33 | 1999 | 1560 | 1380 | 1220 | 1060 |
| | | 1 | 14 | 18 | 5.08 | 1219 | 950 | 840 | 740 | 650 |
| | | 1 | 20 | 24 | 5.78 | 1386 | 1080 | 960 | 850 | 730 |
| | 2/ O O2/ X A AO | 1 | 24 | 28 | 6.23 | 1495 | 1170 | 1030 | 910 | 790 |
| | 34C-234 X 4-48 | 2 | 20 | 24 | 6.88 | 1652 | 1290 | 1140 | 1010 | 880 |
| | | 2 | 24 | 28 | 7.51 | 1802 | 1410 | 1240 | 1100 | 950 |
| | | 3 | 24 | 28 | 8.62 | 2068 | 1610 | 1430 | 1260 | 1100 |
| | | 1 | 14 | 18 | 4.63 | 1111 | 870 | 770 | 680 | 590 |
| | | 1 | 20 | 24 | 5.07 | 1216 | 950 | 840 | 740 | 640 |
| | ³ /4C-3 ¹ /4 X 3 ¹ /4-32 | 1 | 24 | 28 | 5.32 | 1278 | 1000 | 880 | 780 | 680 |
| | %4 C- 3/4 A 3/4-32 | 2 | 20 | 24 | 7.07 | 1698 | 1320 | 1170 | 1040 | 900 |
| | | 2 | 24 | 28 | 7.88 | 1890 | 1470 | 1300 | 1150 | 1000 |
| | | 3 | 24 | 28 | 9.01 | 2161 | 1690 | 1490 | 1320 | 1150 |
| | | 1 | 14 | 18 | 5.18 | 1243 | 970 | 860 | 760 | 660 |
| 34" Dia. copper | | 1 | 20 | 24 | 5.69 | 1365 | 1060 | 940 | 830 | 720 |
| Š | ³ ⁄4C-3 ¹ ⁄4 X 3 ¹ ⁄4-40 | 1 | 24 | 28 | 6.05 | 1453 | 1130 | 1000 | 890 | 770 |
| Dia. | /+U-U/4 A U/4-4U | 2 | 20 | 24 | 8.24 | 1978 | 1540 | 1360 | 1210 | 1050 |
| 34" | | 2 | 24 | 28 | 8.49 | 2039 | 1590 | 1410 | 1240 | 1080 |
| | | 3 | 24 | 28 | 9.37 | 2249 | 1750 | 1550 | 1370 | 1190 |
| | | 1 | 14 | 18 | 5.61 | 1348 | 1050 | 930 | 820 | 710 |
| | | 1 | 20 | 24 | 6.49 | 1558 | 1210 | 1070 | 950 | 830 |
| | ³ ⁄4C-3 ¹ ⁄4 X 3 ¹ ⁄4-48 | 1 | 24 | 28 | 6.93 | 1663 | 1300 | 1150 | 1010 | 880 |
| | /4 0-0 /4 A 0/4-40 | 2 | 20 | 24 | 8.49 | 2039 | 1590 | 1410 | 1240 | 1080 |
| | | 2 | 24 | 28 | 8.75 | 2100 | 1640 | 1450 | 1280 | 1110 |
| | | 3 | 24 | 28 | 9.63 | 2310 | 1800 | 1590 | 1410 | 1220 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)

■ Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)

■ Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model SBGVL5/SIBGVL5; sloped top enclosure

| | | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|------------------|-----------------------------|------------------------|-----------------------|---------------------------------|--------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft²/ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | 1 | 1 | C | opper elemen | t | l | l | 1 | |
| | | 1 | 14 | 18 | 6.05 | 1453 | 1130 | 1000 | 890 | 770 |
| | | 1 | 20 | 24 | 6.38 | 1531 | 1190 | 1060 | 930 | 810 |
| | | 1 | 24 | 28 | 6.74 | 1619 | 1260 | 1120 | 990 | 860 |
| | ¾C-4¼ X 4¼-32 | 2 | 20 | 24 | 9.55 | 2293 | 1790 | 1580 | 1400 | 1220 |
| | | 2 | 24 | 28 | 10.50 | 2520 | 1970 | 1740 | 1540 | 1340 |
| | | 3 | 24 | 28 | 12.07 | 2896 | 2260 | 2000 | 1770 | 1540 |
| | | 1 | 14 | 18 | 7.18 | 1724 | 1340 | 1190 | 1050 | 910 |
| ber | | 1 | 20 | 24 | 7.80 | 1873 | 1460 | 1290 | 1140 | 990 |
| 3∕4" Dia. copper | | 1 | 24 | 28 | 8.13 | 1951 | 1520 | 1350 | 1190 | 1030 |
| Dia. | 3∕4C-41⁄4 X 41⁄4-40 | 2 | 20 | 24 | 10.14 | 2433 | 1900 | 1680 | 1480 | 1290 |
| 34" | | 2 | 24 | 28 | 11.01 | 2643 | 2060 | 1820 | 1610 | 1400 |
| | | 3 | 24 | 28 | 12.61 | 3028 | 2360 | 2090 | 1850 | 1600 |
| | | 1 | 14 | 18 | 7.69 | 1847 | 1440 | 1270 | 1130 | 980 |
| | | 1 | 20 | 24 | 8.75 | 2100 | 1640 | 1450 | 1280 | 1110 |
| | ³ ⁄4C-4¼ X 4¼-48 | 1 | 24 | 28 | 9.44 | 2266 | 1770 | 1560 | 1380 | 1200 |
| | % U- 4% X 4%-40 | 2 | 20 | 24 | 10.43 | 2503 | 1950 | 1730 | 1530 | 1330 |
| | | 2 | 24 | 28 | 11.38 | 2730 | 2130 | 1880 | 1670 | 1450 |
| | | 3 | 24 | 28 | 13.05 | 3133 | 2440 | 2160 | 1910 | 1660 |
| | | 1 | 14 | 18 | 3.92 | 942 | 730 | 650 | 570 | 500 |
| | | 1 | 20 | 24 | 4.16 | 999 | 780 | 690 | 610 | 530 |
| | 1C-2¾ X 4-32 | 1 | 24 | 28 | 4.33 | 1040 | 810 | 720 | 630 | 550 |
| | 10-274 X 4-32 | 2 | 20 | 24 | 6.18 | 1484 | 1160 | 1020 | 910 | 790 |
| | | 2 | 24 | 28 | 6.81 | 1635 | 1270 | 1130 | 1000 | 870 |
| | | 3 | 24 | 28 | 7.79 | 1871 | 1460 | 1290 | 1140 | 990 |
| | | 1 | 14 | 18 | 4.62 | 1109 | 860 | 760 | 680 | 590 |
| Dia. copper | | 1 | 20 | 24 | 5.03 | 1207 | 940 | 830 | 740 | 640 |
| ğ | 1C-2¾ X 4-40 | 1 | 24 | 28 | 5.25 | 1259 | 980 | 870 | 770 | 670 |
| Dia. | 10-2 /4 X 4-40 | 2 | 20 | 24 | 6.59 | 1582 | 1230 | 1090 | 970 | 840 |
| ļ Ļ | | 2 | 24 | 28 | 7.17 | 1721 | 1340 | 1190 | 1050 | 910 |
| | | 3 | 24 | 28 | 8.13 | 1952 | 1520 | 1350 | 1190 | 1030 |
| | | 1 | 14 | 18 | 4.96 | 1190 | 930 | 820 | 730 | 630 |
| | | 1 | 20 | 24 | 5.65 | 1357 | 1060 | 940 | 830 | 720 |
| | 1C-2¾ X 4-48 | 1 | 24 | 28 | 6.11 | 1467 | 1140 | 1010 | 890 | 780 |
| | 10 2/47 7 70 | 2 | 20 | 24 | 6.76 | 1623 | 1270 | 1120 | 990 | 860 |
| | | 2 | 24 | 28 | 7.34 | 1761 | 1370 | 1220 | 1070 | 930 |
| | | 3 | 24 | 28 | 8.42 | 2021 | 1580 | 1390 | 1230 | 1070 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)
- Revised November 2016. Zehnder periodically makes changes to the design and/or specifications of its products. As a result, the design and specifications of each product at the time of order may be different than as described herein. Please contact Zehnder's Sales Support staff at 844-934-6337 for specific information on current design and specifications. Designs, specifications and other information contained herein are not express warranties, which are only as expressly set forth by Zehnder in its terms and conditions of sale. The latest version of this document is available at www.zehnder-rittling.com.

General data

Performance ratings: model SBGVL5/SIBGVL5; sloped top enclosure

| | | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|----------------|---|------------------------|-----------------------|---------------------------------|--------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft⅔/ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | | c | opper elemen | t | 1 | | 1 | |
| | | 1 | 14 | 18 | 4.56 | 1094 | 850 | 750 | 670 | 580 |
| | | 1 | 20 | 24 | 4.99 | 1199 | 940 | 830 | 730 | 640 |
| | 40.01/ X 01/ 00 | 1 | 24 | 28 | 5.25 | 1260 | 980 | 870 | 770 | 670 |
| | 1C-3¼ X 3¼-32 | 2 | 20 | 24 | 6.93 | 1663 | 1300 | 1150 | 1010 | 880 |
| | | 2 | 24 | 28 | 7.69 | 1846 | 1440 | 1270 | 1130 | 980 |
| | | 3 | 24 | 28 | 8.82 | 2118 | 1650 | 1460 | 1290 | 1120 |
| | | 1 | 14 | 18 | 5.07 | 1216 | 950 | 840 | 740 | 640 |
| per | | 1 | 20 | 24 | 5.61 | 1348 | 1050 | 930 | 820 | 710 |
| 1" Dia. copper | | 1 | 24 | 28 | 5.94 | 1426 | 1110 | 980 | 870 | 760 |
| Dia. | 1C-3¼ X 3¼-40 | 2 | 20 | 24 | 8.06 | 1934 | 1510 | 1330 | 1180 | 1020 |
| 1 I | | 2 | 24 | 28 | 8.31 | 1995 | 1560 | 1380 | 1220 | 1060 |
| | | 3 | 24 | 28 | 9.26 | 2223 | 1730 | 1530 | 1360 | 1180 |
| | | 1 | 14 | 18 | 5.51 | 1321 | 1030 | 910 | 810 | 700 |
| | | 1 | 20 | 24 | 6.31 | 1514 | 1180 | 1040 | 920 | 800 |
| | | 1 | 24 | 28 | 6.74 | 1619 | 1260 | 1120 | 990 | 860 |
| | 1C-3¼ X 3¼-48 | 2 | 20 | 24 | 8.31 | 1995 | 1560 | 1380 | 1220 | 1060 |
| | | 2 | 24 | 28 | 8.57 | 2056 | 1600 | 1420 | 1250 | 1090 |
| | | 3 | 24 | 28 | 9.44 | 2266 | 1770 | 1560 | 1380 | 1200 |
| | | 1 | 14 | 18 | 5.94 | 1426 | 1110 | 980 | 870 | 760 |
| | | 1 | 20 | 24 | 6.31 | 1514 | 1180 | 1040 | 920 | 800 |
| | 1C-4¼ X 4¼-32 | 1 | 24 | 28 | 6.56 | 1575 | 1230 | 1090 | 960 | 830 |
| | 1 C-4 ¹ / ₄ X 4 ¹ / ₄ -32 | 2 | 20 | 24 | 9.37 | 2249 | 1750 | 1550 | 1370 | 1190 |
| | | 2 | 24 | 28 | 10.32 | 2476 | 1930 | 1710 | 1510 | 1310 |
| | | 3 | 24 | 28 | 11.81 | 2835 | 2210 | 1960 | 1730 | 1500 |
| | | 1 | 14 | 18 | 7.00 | 1680 | 1310 | 1160 | 1020 | 890 |
| per | | 1 | 20 | 24 | 7.62 | 1829 | 1430 | 1260 | 1120 | 970 |
| 1" Dia. copper | 1C-4¼ X 4¼-40 | 1 | 24 | 28 | 7.95 | 1908 | 1490 | 1320 | 1160 | 1010 |
| Dia. | IG-4% X 4%-4U | 2 | 20 | 24 | 9.99 | 2398 | 1870 | 1650 | 1460 | 1270 |
| 1 | | 2 | 24 | 28 | 10.86 | 2608 | 2030 | 1800 | 1590 | 1380 |
| | | 3 | 24 | 28 | 12.32 | 2958 | 2310 | 2040 | 1800 | 1570 |
| | | 1 | 14 | 18 | 7.51 | 1803 | 1410 | 1240 | 1100 | 960 |
| | | 1 | 20 | 24 | 8.57 | 2056 | 1600 | 1420 | 1250 | 1090 |
| | 10 41/ V 41/ 40 | 1 | 24 | 28 | 9.26 | 2223 | 1730 | 1530 | 1360 | 1180 |
| | 1C-4¼ X 4¼-48 | 2 | 20 | 24 | 10.24 | 2459 | 1920 | 1700 | 1500 | 1300 |
| | | 2 | 24 | 28 | 11.12 | 2669 | 2080 | 1840 | 1630 | 1410 |
| | | 3 | 24 | 28 | 12.76 | 3063 | 2390 | 2110 | 1870 | 1620 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)

■ Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)

■ Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model SBGVL5/SIBGVL5; sloped top enclosure

| | | Rows of | Enclosure | Recommended | 50.0± | Steam heat | | | | |
|-------------------|----------------------------------|-----------------------------------|-----------------------|--|------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| | Element | element (on 6-inch centers) | height (in inches) | minimum installed height (in inches) | EDR* (ft²⁄ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | | Co | pper element | | | | | |
| | | 1 | 14 | 18 | 3.88 | 930 | 730 | 640 | 570 | 490 |
| | | 1 | 20 | 24 | 4.09 | 982 | 770 | 680 | 600 | 520 |
| | 11/ C 03/ X 4 00 | 1 | 24 | 28 | 4.28 | 1028 | 800 | 710 | 630 | 540 |
| | 1¼C-2¾ X 4-32 | 2 | 20 | 24 | 6.06 | 1455 | 1130 | 1000 | 890 | 770 |
| | | 2 | 24 | 28 | 6.69 | 1606 | 1250 | 1110 | 980 | 850 |
| | | 3 | 24 | 28 | 7.67 | 1843 | 1440 | 1270 | 1120 | 980 |
| L | | 1 | 14 | 18 | 4.57 | 1097 | 860 | 760 | 670 | 580 |
| bpe | | 1 | 20 | 24 | 4.96 | 1190 | 930 | 820 | 730 | 630 |
| 1¼" Dia. copper | | 1 | 24 | 28 | 5.20 | 1248 | 970 | 860 | 760 | 660 |
| Dia | 1¼C-2¾ X 4-40 | 2 | 20 | 24 | 6.47 | 1553 | 1210 | 1070 | 950 | 820 |
| 1/4" | | 2 | 24 | 28 | 7.05 | 1692 | 1320 | 1170 | 1030 | 900 |
| - | | 3 | 24 | 28 | 8.04 | 1929 | 1500 | 1330 | 1180 | 1020 |
| | | 1 | 14 | 18 | 4.91 | 1178 | 920 | 810 | 720 | 620 |
| | | 1 | 20 | 24 | 5.61 | 1346 | 1050 | 930 | 820 | 710 |
| | 1¼C-2¾ X 4-48 | 1 | 24 | 28 | 6.02 | 1444 | 1130 | 1000 | 880 | 770 |
| | 1 /4 U- 2 % X 4-40 | 2 | 20 | 24 | 6.64 | 1594 | 1240 | 1100 | 970 | 840 |
| | | 2 | 24 | 28 | 7.22 | 1733 | 1350 | 1200 | 1060 | 920 |
| | | 3 | 24 | 28 | 8.33 | 1999 | 1560 | 1380 | 1220 | 1060 |
| | | 1 | 14 | 18 | 4.19 | 1006 | 780 | 690 | 610 | 530 |
| | | 1 | 20 | 24 | 4.81 | 1155 | 900 | 800 | 700 | 610 |
| | 1¼C-3¼ X 3¼-32 | 1 | 24 | 28 | 5.07 | 1216 | 950 | 840 | 740 | 640 |
| | 1/4C-3/4 A 3/4-32 | 2 | 20 | 24 | 6.74 | 1619 | 1260 | 1120 | 990 | 860 |
| | | 2 | 24 | 28 | 7.51 | 1803 | 1410 | 1240 | 1100 | 960 |
| | | 3 | 24 | 28 | 8.68 | 2083 | 1620 | 1440 | 1270 | 1100 |
| L_ | | 1 | 14 | 18 | 4.99 | 1199 | 940 | 830 | 730 | 640 |
| 11/4" Dia. copper | | 1 | 20 | 24 | 5.43 | 1304 | 1020 | 900 | 800 | 690 |
| 8 | 1¼C-3¼ X 3¼-40 | 1 | 24 | 28 | 5.69 | 1365 | 1060 | 940 | 830 | 720 |
| Dia | 1740-374 A 374-4U | 2 | 20 | 24 | 7.88 | 1890 | 1470 | 1300 | 1150 | 1000 |
| 1/4" | | 2 | 24 | 28 | 8.13 | 1951 | 1520 | 1350 | 1190 | 1030 |
| - I | | 3 | 24 | 28 | 9.11 | 2188 | 1710 | 1510 | 1330 | 1160 |
| | | 1 | 14 | 18 | 5.32 | 1278 | 1000 | 880 | 780 | 680 |
| | | 1 | 20 | 24 | 6.20 | 1488 | 1160 | 1030 | 910 | 790 |
| | 1¼C-3¼ X 3¼-48 | 1 | 24 | 28 | 6.64 | 1593 | 1240 | 1100 | 970 | 840 |
| | 1/4U-U/4 A U/4-40 | 2 | 20 | 24 | 8.13 | 1951 | 1520 | 1350 | 1190 | 1030 |
| | | 2 | 24 | 28 | 8.39 | 2013 | 1570 | 1390 | 1230 | 1070 |
| | | 3 | 24 | 28 | 9.37 | 2249 | 1750 | 1550 | 1370 | 1190 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model SBGVL5/SIBGVL5; sloped top enclosure

| | | Rows of element | Enclosure | minimum EDR* | Steam heat | Hot water heat | | | | |
|----------|----------------------------|------------------------|-----------------------|---------------------------------|--------------|-------------------------|-------------------------|---|------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft⅔ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 190°F 180°F tor of 0.78 factor of 0.69 | | 160°F factor of 0.53 |
| | | | | C | opper elemen | t | | | | |
| | | 1 | 14 | 18 | 5.87 | 1409 | 1100 | 970 | 860 | 750 |
| | | 1 | 20 | 24 | 6.20 | 1488 | 1160 | 1030 | 910 | 790 |
| | 1¼C-4¼ X 4¼-32 | 1 | 24 | 28 | 6.49 | 1558 | 1210 | 1070 | 950 | 830 |
| | 1740-474 7 474-32 | 2 | 20 | 24 | 9.19 | 2205 | 1720 | 1520 | 1350 | 1170 |
| | | 2 | 24 | 28 | 10.14 | 2433 | 1900 | 1680 | 1480 | 1290 |
| | | 3 | 24 | 28 | 11.63 | 2791 | 2180 | 1930 | 1700 | 1480 |
| 5 | | 1 | 14 | 18 | 6.93 | 1663 | 1300 | 1150 | 1010 | 880 |
| copper | | 1 | 20 | 24 | 7.51 | 1803 | 1410 | 1240 | 1100 | 960 |
| | 1¼C-4¼ X 4¼-40 | 1 | 24 | 28 | 7.88 | 1890 | 1470 | 1300 | 1150 | 1000 |
| 1¼" Dia. | 1/40-4/4 X 4/4-40 | 2 | 20 | 24 | 9.81 | 2354 | 1840 | 1620 | 1440 | 1250 |
| 1/4" | | 2 | 24 | 28 | 10.68 | 2564 | 2000 | 1770 | 1560 | 1360 |
| - | | 3 | 24 | 28 | 12.18 | 2923 | 2280 | 2020 | 1780 | 1550 |
| | | 1 | 14 | 18 | 7.44 | 1785 | 1390 | 1230 | 1090 | 950 |
| | | 1 | 20 | 24 | 8.49 | 2039 | 1590 | 1410 | 1240 | 1080 |
| | 1¼C-4¼ X 4¼-48 | 1 | 24 | 28 | 9.11 | 2188 | 1710 | 1510 | 1330 | 1160 |
| | 174 0- 474 A 474-40 | 2 | 20 | 24 | 10.06 | 2415 | 1880 | 1670 | 1470 | 1280 |
| | | 2 | 24 | 28 | 10.94 | 2625 | 2050 | 1810 | 1600 | 1390 |
| | | 3 | 24 | 28 | 12.61 | 3028 | 2360 | 2090 | 1850 | 1600 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

 Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)

- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model SBGVL3/SIBGVL3; low profile, sloped top enclosure

| | | Rows of element | Enclosure | Recommended | EDR* | Steam heat | | Hot wa | ter heat | |
|----------------|-------------------|------------------------|-----------------------|---------------------------------|---------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft²/ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | | | Steel element | | | | | |
| | | 1 | 08 | 12 | 2.88 | 691 | 540 | 480 | 420 | 370 |
| | | 1 | 11 | 15 | 3.06 | 735 | 570 | 510 | 450 | 390 |
| | 1S-3¼ X 3¼-32 | 1 | 14 | 18 | 3.24 | 779 | 610 | 540 | 480 | 410 |
| | | 2 | 14 | 18 | 4.38 | 1050 | 820 | 720 | 640 | 560 |
| | | 1 | 08 | 12 | 3.14 | 753 | 590 | 520 | 460 | 400 |
| 1" Dia. steel | | 1 | 11 | 15 | 3.43 | 823 | 640 | 570 | 500 | 440 |
| Dia | 1S-3¼ X 3¼-40 | 1 | 14 | 18 | 3.57 | 858 | 670 | 590 | 520 | 450 |
| ÷ | | 2 | 14 | 18 | 4.89 | 1173 | 910 | 810 | 720 | 620 |
| | | 1 | 08 | 12 | 3.57 | 858 | 670 | 590 | 520 | 450 |
| | 1S-3¼ X 3¼-48 | 1 | 11 | 15 | 3.86 | 928 | 720 | 640 | 570 | 490 |
| | 15-3/4 X 3/4-48 | 1 | 14 | 18 | 4.01 | 963 | 750 | 660 | 590 | 510 |
| | | 2 | 14 | 18 | 5.51 | 1321 | 1030 | 910 | 810 | 700 |
| | | 1 | 08 | 12 | 2.81 | 674 | 530 | 460 | 410 | 360 |
| | 1¼S-3¼ X 3¼-32 | 1 | 11 | 15 | 2.99 | 718 | 560 | 500 | 440 | 380 |
| | 1/43-3/4 X 3/4-32 | 1 | 14 | 18 | 3.14 | 753 | 590 | 520 | 460 | 400 |
| | | 2 | 14 | 18 | 4.30 | 1033 | 810 | 710 | 630 | 550 |
| ee | | 1 | 08 | 12 | 3.06 | 735 | 570 | 510 | 450 | 390 |
| a. st | 1¼S-3¼ X 3¼-40 | 1 | 11 | 15 | 3.32 | 797 | 620 | 550 | 490 | 420 |
| 1¼" Dia. steel | 1743-374 A 374-40 | 1 | 14 | 18 | 3.50 | 840 | 660 | 580 | 510 | 450 |
| 11/4 | | 2 | 14 | 18 | 4.81 | 1155 | 900 | 800 | 700 | 610 |
| | | 1 | 08 | 12 | 3.50 | 840 | 660 | 580 | 510 | 450 |
| | 1¼S-3¼ X 3¼-48 | 1 | 11 | 15 | 3.76 | 901 | 700 | 620 | 550 | 480 |
| | 1743-374 A 374-40 | 1 | 14 | 18 | 3.94 | 945 | 740 | 650 | 580 | 500 |
| | | 2 | 14 | 18 | 5.43 | 1304 | 1020 | 900 | 800 | 690 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)
- Contact factory when ordering 1-1/4" copper, 1" steel and 1-1/4" steel elements to ensure proper fit up inside the enclosure.

General data

Performance ratings: model SBGVL3/SIBGVL3; low profile, sloped top enclosure

| | | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|-----------------|---|------------------------|-----------------------|---------------------------------|--------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft²/ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | 1 | | C | opper elemen | t | | | | |
| | | 1 | 08 | 12 | 3.86 | 928 | 720 | 640 | 570 | 490 |
| | | 1 | 11 | 15 | 4.12 | 989 | 770 | 680 | 600 | 520 |
| | 34C-234 X 4-32 | 1 | 14 | 18 | 4.38 | 1050 | 820 | 720 | 640 | 560 |
| | | 2 | 14 | 18 | 5.94 | 1426 | 1110 | 980 | 870 | 760 |
| 34" Dia. copper | | 1 | 08 | 12 | 4.19 | 1006 | 780 | 690 | 610 | 530 |
| cop | | 1 | 11 | 15 | 4.52 | 1085 | 850 | 750 | 660 | 580 |
| Dia. | 34C-234 X 4-40 | 1 | 14 | 18 | 4.81 | 1155 | 900 | 800 | 700 | 610 |
| 4" | | 2 | 14 | 18 | 6.56 | 1575 | 1230 | 1090 | 960 | 830 |
| | | 1 | 08 | 12 | 4.52 | 1085 | 850 | 750 | 660 | 580 |
| | | 1 | 11 | 15 | 4.96 | 1190 | 930 | 820 | 730 | 630 |
| | 34C-234 X 4-48 | 1 | 14 | 18 | 5.25 | 1260 | 980 | 870 | 770 | 670 |
| | | 2 | 14 | 18 | 7.18 | 1724 | 1340 | 1190 | 1050 | 910 |
| | | 1 | 08 | 12 | 3.68 | 884 | 690 | 610 | 540 | 470 |
| | | 1 | 11 | 15 | 3.94 | 945 | 740 | 650 | 580 | 500 |
| | ³ / ₄ C-3 ¹ / ₄ X 3 ¹ / ₄ -32 | 1 | 14 | 18 | 4.12 | 989 | 770 | 680 | 600 | 520 |
| | | 2 | 14 | 18 | 5.61 | 1348 | 1050 | 930 | 820 | 710 |
| ber | | 1 | 08 | 12 | 3.94 | 945 | 740 | 650 | 580 | 500 |
| 34" Dia. copper | 3/ C 01/ X 01/ 40 | 1 | 11 | 15 | 4.30 | 1033 | 810 | 710 | 630 | 550 |
| Dia. | ³ / ₄ C-3 ¹ / ₄ X 3 ¹ / ₄ -40 | 1 | 14 | 18 | 4.56 | 1094 | 850 | 750 | 670 | 580 |
| ∦∎ [| | 2 | 14 | 18 | 6.20 | 1488 | 1160 | 1030 | 910 | 790 |
| | | 1 | 08 | 12 | 4.38 | 1050 | 820 | 720 | 640 | 560 |
| | 3/ C 01/ X 01/ 40 | 1 | 11 | 15 | 4.74 | 1138 | 890 | 780 | 690 | 600 |
| | 3⁄4C-31⁄4 X 31⁄4-48 | 1 | 14 | 18 | 4.99 | 1199 | 940 | 830 | 730 | 640 |
| | | 2 | 14 | 18 | 6.93 | 1663 | 1300 | 1150 | 1010 | 880 |
| | | 1 | 08 | 12 | 3.76 | 901 | 700 | 620 | 550 | 480 |
| | 1C-2¾ X 4-32 | 1 | 11 | 15 | 4.01 | 963 | 750 | 660 | 590 | 510 |
| | 10-2% × 4-32 | 1 | 14 | 18 | 4.30 | 1033 | 810 | 710 | 630 | 550 |
| | | 2 | 14 | 18 | 5.87 | 1409 | 1100 | 970 | 860 | 750 |
| per | | 1 | 08 | 12 | 4.12 | 989 | 770 | 680 | 600 | 520 |
| Dia. copper | 1C-2¾ X 4-40 | 1 | 11 | 15 | 4.45 | 1068 | 830 | 740 | 650 | 570 |
| Dia. | 10-274 A 4-40 | 1 | 14 | 18 | 4.74 | 1138 | 890 | 780 | 690 | 600 |
| ļ Ļ | | 2 | 14 | 18 | 6.49 | 1558 | 1210 | 1070 | 950 | 830 |
| | | 1 | 08 | 12 | 4.45 | 1068 | 830 | 740 | 650 | 570 |
| | 1C-2¾ X 4-48 | 1 | 11 | 15 | 4.89 | 1173 | 910 | 810 | 720 | 620 |
| | IV-2 /4 A 4-40 | 1 | 14 | 18 | 5.18 | 1243 | 970 | 860 | 760 | 660 |
| | | 2 | 14 | 18 | 7.07 | 1698 | 1320 | 1170 | 1040 | 900 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

General data

Performance ratings: model SBGVL3/SIBGVL3; low profile, sloped top enclosure

| | | Rows of element | Enclosure | Recommended minimum | EDR* | Steam heat | | Hot wa | ter heat | |
|-------------------|--------------------|------------------------|-----------------------|---------------------------------|--------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Element | (on 6-inch centers) | height (in inches) | installed height (in inches) | (ft²/ ft) | 215°F factor of 1.00 | 190°F factor of 0.78 | 180°F factor of 0.69 | 170°F factor of 0.61 | 160°F factor of 0.53 |
| | | | | C | opper elemen | t | | | 1 | |
| | | 1 | 08 | 12 | 3.57 | 858 | 670 | 590 | 520 | 450 |
| | | 1 | 11 | 15 | 3.86 | 928 | 720 | 640 | 570 | 490 |
| | 1C-3¼ X 3¼-32 | 1 | 14 | 18 | 4.12 | 989 | 770 | 680 | 600 | 520 |
| | | 2 | 14 | 18 | 5.61 | 1348 | 1050 | 930 | 820 | 710 |
| per | | 1 | 08 | 12 | 3.94 | 945 | 740 | 650 | 580 | 500 |
| do | | 1 | 11 | 15 | 4.30 | 1033 | 810 | 710 | 630 | 550 |
| 1" Dia. copper | 1C-3¼ X 3¼-40 | 1 | 14 | 18 | 4.56 | 1094 | 850 | 750 | 670 | 580 |
| <u> </u> | | 2 | 14 | 18 | 6.20 | 1488 | 1160 | 1030 | 910 | 790 |
| | | 1 | 08 | 12 | 4.38 | 1050 | 820 | 720 | 640 | 560 |
| | | 1 | 11 | 15 | 4.74 | 1138 | 890 | 780 | 690 | 600 |
| | 1C-3¼ X 3¼-48 | 1 | 14 | 18 | 4.99 | 1199 | 940 | 830 | 730 | 640 |
| | | 2 | 14 | 18 | 6.82 | 1636 | 1280 | 1130 | 1000 | 870 |
| | | 1 | 08 | 12 | 3.57 | 858 | 670 | 590 | 520 | 450 |
| | | 1 | 11 | 15 | 3.86 | 928 | 720 | 640 | 570 | 490 |
| | 1¼C-2¾ X 4-32 | 1 | 14 | 18 | 4.12 | 989 | 770 | 680 | 600 | 520 |
| | | 2 | 14 | 18 | 5.61 | 1348 | 1050 | 930 | 820 | 710 |
| Iado | | 1 | 08 | 12 | 4.01 | 963 | 750 | 660 | 590 | 510 |
| 1¼" Dia. copper | 41/ O 02/ X 4 40 | 1 | 11 | 15 | 4.30 | 1033 | 810 | 710 | 630 | 550 |
| Dia. | 1¼C-2¾ X 4-40 | 1 | 14 | 18 | 4.56 | 1094 | 850 | 750 | 670 | 580 |
| 1/4" | | 2 | 14 | 18 | 6.20 | 1488 | 1160 | 1030 | 910 | 790 |
| - | | 1 | 08 | 12 | 4.38 | 1050 | 820 | 720 | 640 | 560 |
| | 11/ C 03/ X 4 40 | 1 | 11 | 15 | 4.74 | 1138 | 890 | 780 | 690 | 600 |
| | 1¼C-2¾ X 4-48 | 1 | 14 | 18 | 4.99 | 1199 | 940 | 830 | 730 | 640 |
| | | 2 | 14 | 18 | 6.82 | 1636 | 1280 | 1130 | 1000 | 870 |
| | | 1 | 08 | 12 | 3.14 | 753 | 590 | 520 | 460 | 400 |
| | 1¼C-3¼ X 3¼-32 | 1 | 11 | 15 | 3.43 | 823 | 640 | 570 | 500 | 440 |
| | 1740-374 A 374-32 | 1 | 14 | 18 | 3.57 | 858 | 670 | 590 | 520 | 450 |
| <u> </u> | | 2 | 14 | 18 | 4.89 | 1173 | 910 | 810 | 720 | 620 |
| ppe | | 1 | 08 | 12 | 3.94 | 945 | 740 | 650 | 580 | 500 |
| 8 | 1¼C-3¼ X 3¼-40 | 1 | 11 | 15 | 4.19 | 1006 | 780 | 690 | 610 | 530 |
| 11⁄4" Dia. copper | 1 /40-374 A 374-4U | 1 | 14 | 18 | 4.45 | 1068 | 830 | 740 | 650 | 570 |
| 1/4" | | 2 | 14 | 18 | 6.13 | 1470 | 1150 | 1010 | 900 | 780 |
| - | | 1 | 08 | 12 | 4.30 | 1033 | 810 | 710 | 630 | 550 |
| | 1¼C-3¼ X 3¼-48 | 1 | 11 | 15 | 4.63 | 1111 | 870 | 770 | 680 | 590 |
| | : /4U-U/4 A U/4-40 | 1 | 14 | 18 | 4.89 | 1173 | 910 | 810 | 720 | 620 |
| | | 2 | 14 | 18 | 6.74 | 1619 | 1260 | 1120 | 990 | 860 |

In BTU/hr per active (finned) lineal foot of tube at entering air temperature of 65°F

*EDR - Equivalent Direct Radiation area (for steam heat) per active (finned) lineal foot of tube.

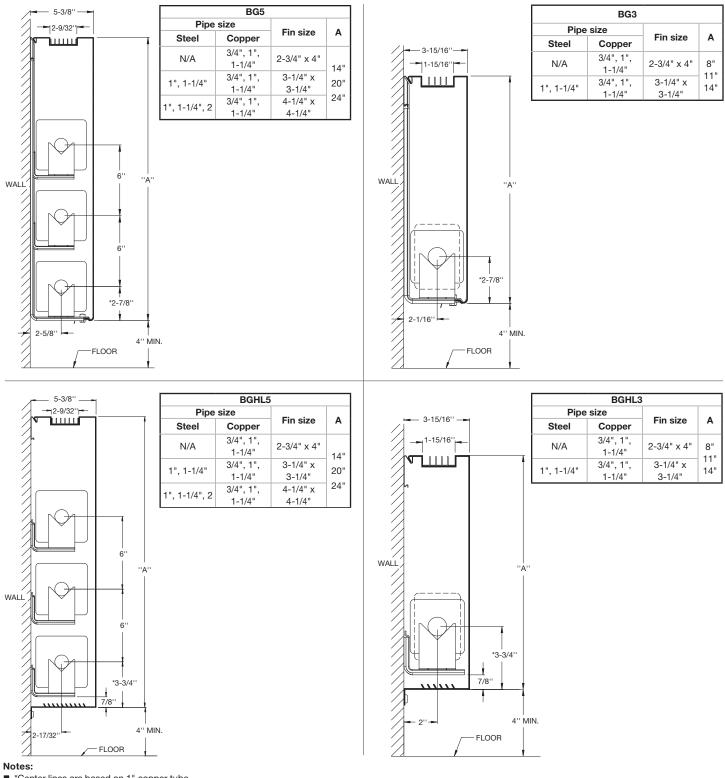
Important Rating Information Performance ratings based on:

- Installation at height shown. (Lower heights are not recommended. For greater heights, refer to EZselect selection software.)
- Steam at nominal 1 (actual 0.9) psig and 215°F. (For other conditions, refer to EZselect selection software.)
- Entering air temperature of 65°F. (For other temperatures, refer to EZselect selection software.)
- Water average temperature (°F) shown and velocity of 3 fps or more. (For lower velocities, refer to EZselect selection software.)

English, IP Units

Dimensional data

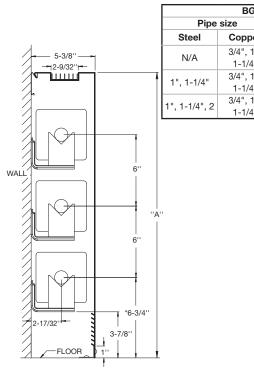
Bargrille enclosures



*Center lines are based on 1" copper tube.

English, IP Units

Dimensional data



*Centerlines are based on 1" copper tube

Note:

| ŀ | Pipe | BGVL | , | |
|---|---------------|---------------------|--------------------|-----|
| ŀ | Steel | Copper | Fin size | A |
| Ì | N/A | 3/4", 1", 1-1/4" | 2-3/4" x 4" | 14" |
| | 1", 1-1/4" | 3/4", 1", 1-1/4" | 3-1/4" x 3-1/4" | 20" |
| | 1", 1-1/4", 2 | 3/4", 1", 1-1/4" | 4-1/4" x 4-1/4" | 24" |

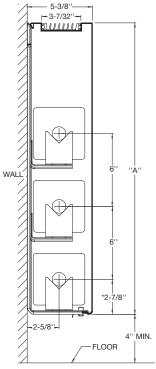
3-15/16" 1-15/16 α ''A' *6-3/4''

Bargrille enclosures

| | BGVL3 | } | |
|------------|---------------------|--------------------|-----------|
| Pipe | size | | |
| Steel | Copper | Fin size | A |
| N/A | 3/4", 1", 1-1/4" | 2-3/4" x 4" | 8" 11" |
| 1", 1-1/4" | 3/4", 1", 1-1/4" | 3-1/4" x 3-1/4" | 14" |

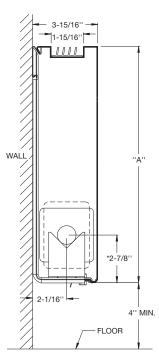
WALL 3-7/8'' FLOOR 1

Dimensional data



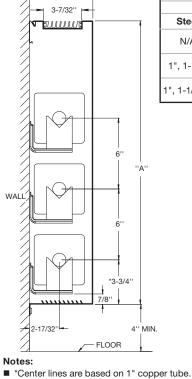
5-3/8''

| Steel Copper N/A 3/4", 1", 1-1/4" 2-3/4" x 4" 1", 1-1/4" 3/4", 1", 3-1/4" 3-1/4" x | | IBG5 | | |
|--|---------------|---------------------|--------------------|-----|
| Steel Copper N/A 3/4", 1", 1-1/4" 2-3/4" x 4" 1", 1-1/4" 3/4", 1", 3-1/4" 3-1/4" x | Pipe | size | _ | |
| N/A 1-1/4" 2-3/4" x 4" 1. 1", 1-1/4" 3/4", 1", 3-1/4" x 1. 2. 1", 1-1/4" 3/4", 1", 3-1/4" x 3. 1. | Steel | Copper | Fin size | A |
| 1", 1-1/4" 3/4", 1", 3-1/4" x 1-1/4" 3-1/4" 20 | N/A | | 2-3/4" x 4" | 14" |
| 2 | 1", 1-1/4" | | | 20" |
| 1", 1-1/4", 2 3/4", 1", 4-1/4" x 2' 1-1/4" 4-1/4" | 1", 1-1/4", 2 | 3/4", 1", 1-1/4" | 4-1/4" x 4-1/4" | 24" |



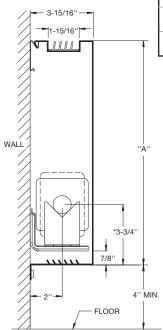
| Imnerial | hararille | enclosures |
|----------|-----------|------------|
| imperiar | bargrille | enciosures |

| IBG3 | | | |
|------------|---------------------|--------------------|-----------|
| Pipe size | | Ein sins | |
| Steel | Copper | Fin size | A |
| N/A | 3/4", 1", 1-1/4" | 2-3/4" x 4" | 8" 11" |
| 1", 1-1/4" | 3/4", 1", 1-1/4" | 3-1/4" x 3-1/4" | 14" |



Pipe size Fin size Α Steel Copper 3/4", 1", 2-3/4" x 4" N/A 1-1/4" 14" 3/4", 1", 3-1/4" x 1", 1-1/4" 20" 1-1/4" 3-1/4" 24" 3/4", 1", 4-1/4" x 1", 1-1/4", 2 1-1/4" 4-1/4"

IBGHL5



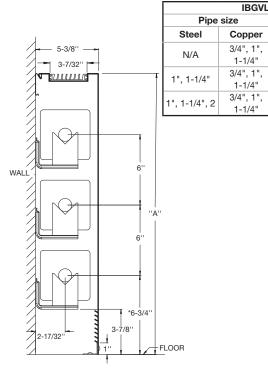
Revised November 2016. Zehnder periodically makes changes to the design and/or specifications of its products. As a result, the design and specifications of each product at the time of order may be different than as described herein. Please contact Zehnder's Sales Support staff at 844-934-6337 for specific information on current design and specifications. Designs, specifications and other information contained herein are not express warranties, which are only as expressly set forth by Zehnder in its

| IBGHL3 | | | |
|------------|---------------------|--------------------|-----------|
| Pipe size | | _ | |
| Steel | Copper | Fin size | A |
| N/A | 3/4", 1", 1-1/4" | 2-3/4" x 4" | 8" 11" |
| 1", 1-1/4" | 3/4", 1", 1-1/4" | 3-1/4" x 3-1/4" | 14" |

terms and conditions of sale. The latest version of this document is available at www.zehnder-rittling.com.

English, IP Units

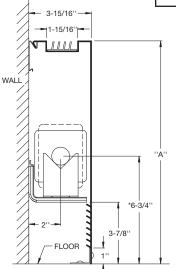
Dimensional data



| | Pipe | IBGVL: | 5 | |
|---|---------------|---------------------|--------------------|----|
| | Steel | Copper | Fin size | A |
| İ | N/A | 3/4", 1", 1-1/4" | 2-3/4" x 4" | 14 |
| İ | 1", 1-1/4" | 3/4", 1", 1-1/4" | 3-1/4" x 3-1/4" | 20 |
| | 1", 1-1/4", 2 | 3/4", 1", 1-1/4" | 4-1/4" x 4-1/4" | 24 |

Imperial bargrille enclosures

| IBGVL3 | | | |
|------------|---------------------|--------------------|-----------|
| Pipe | size | . | |
| Steel | Copper | Fin size | A |
| N/A | 3/4", 1", 1-1/4" | 2-3/4" x 4" | 8" 11" |
| 1", 1-1/4" | 3/4", 1", 1-1/4" | 3-1/4" x 3-1/4" | 14" |

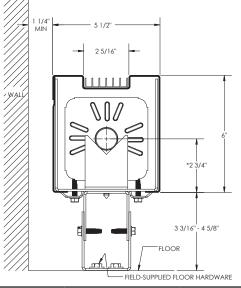


Note:

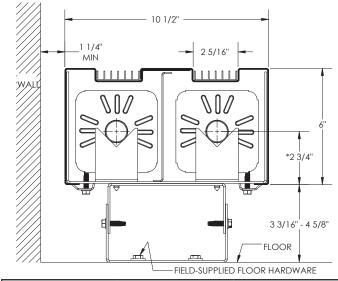
*Centerlines are based on 1" copper tube

English, IP Units

Dimensional data



| PBG506 | | |
|------------|------------------|-----------------|
| Pipe | size | . |
| Steel | Copper | Fin size |
| N/A | 3/4", 1", 1-1/4" | 2-3/4" x 4" |
| 1", 1-1/4" | 3/4", 1", 1-1/4" | 3-1/4" x 3-1/4" |
| 1", 1-1/4" | 3/4", 1", 1-1/4" | 4-1/4" x 4-1/4" |

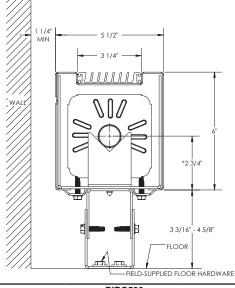


| PBG1006 | | |
|------------|------------------|-----------------|
| Pipe | e size | _ |
| Steel | Copper | Fin size |
| N/A | 3/4", 1", 1-1/4" | 2-3/4" x 4" |
| 1", 1-1/4" | 3/4", 1", 1-1/4" | 3-1/4" x 3-1/4" |
| 1", 1-1/4" | 3/4", 1", 1-1/4" | 4-1/4" x 4-1/4" |

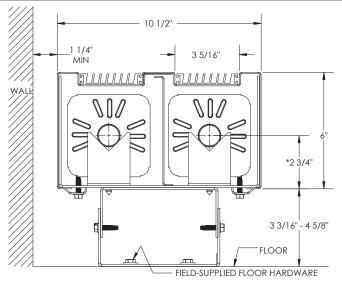
Notes:

*Center lines are based on 1" copper tube.

Pedestal enclosures



| PIBG506 | | |
|------------|------------------|-----------------|
| Pipe | e size | _ |
| Steel | Copper | Fin size |
| N/A | 3/4", 1", 1-1/4" | 2-3/4" x 4" |
| 1", 1-1/4" | 3/4", 1", 1-1/4" | 3-1/4" x 3-1/4" |
| 1", 1-1/4" | 3/4", 1", 1-1/4" | 4-1/4" x 4-1/4" |

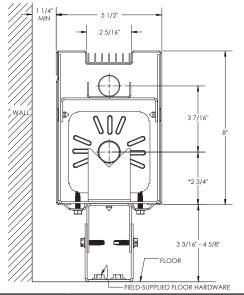


| PIBG1006 | | |
|------------|------------------|-----------------|
| Pip | Pipe size | |
| Steel | Copper | Fin size |
| N/A | 3/4", 1", 1-1/4" | 2-3/4" x 4" |
| 1", 1-1/4" | 3/4", 1", 1-1/4" | 3-1/4" x 3-1/4" |
| 1", 1-1/4" | 3/4", 1", 1-1/4" | 4-1/4" x 4-1/4" |

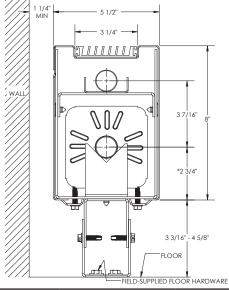
English, IP Units

Pedestal enclosures

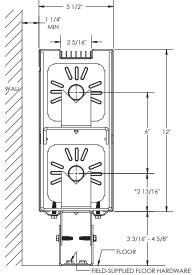
Dimensional data



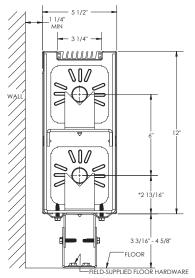
| PBG508 | | |
|------------|------------------|------------------|
| Pipe | size | . |
| Steel | Copper | Fin size |
| N/A | 3/4", 1", 1-1/4" | 2-3/4" x 4" |
| 1", 1-1/4" | 3/4", 1", 1-1/4" | 3-1/4" x 3-1/4" |
| 1", 1-1/4" | 3/4", 1", 1-1/4" | 4-1/4" x 4-1/4"* |



| PIBG508 | | |
|------------|------------------|------------------|
| Pipe | e size | . |
| Steel | Copper | Fin size |
| N/A | 3/4", 1", 1-1/4" | 2-3/4" x 4" |
| 1", 1-1/4" | 3/4", 1", 1-1/4" | 3-1/4" x 3-1/4" |
| 1", 1-1/4" | 3/4", 1", 1-1/4" | 4-1/4" x 4-1/4"* |



| PBG512 | | | |
|------------|------------------|------------------|--|
| Pipe size | | <u> </u> | |
| Steel | Copper | Fin size | |
| N/A | 3/4", 1", 1-1/4" | 2-3/4" x 4" | |
| 1", 1-1/4" | 3/4", 1", 1-1/4" | 3-1/4" x 3-1/4" | |
| 1", 1-1/4" | 3/4", 1", 1-1/4" | 4-1/4" x 4-1/4"* | |



| PIBG512 | | | |
|------------|------------------|------------------|--|
| Pipe size | | | |
| Steel | Copper | Fin size | |
| N/A | 3/4", 1", 1-1/4" | 2-3/4" x 4" | |
| 1", 1-1/4" | 3/4", 1", 1-1/4" | 3-1/4" x 3-1/4" | |
| 1", 1-1/4" | 3/4", 1", 1-1/4" | 4-1/4" x 4-1/4"* | |

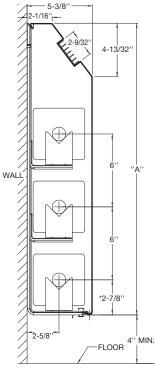
Notes:

*Center lines are based on 1" copper tube.

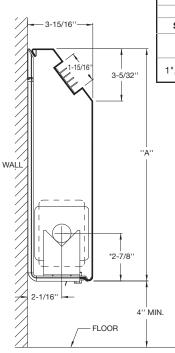
English, IP Units

Dimensional data

Sloped top enclosures

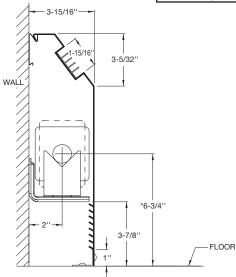


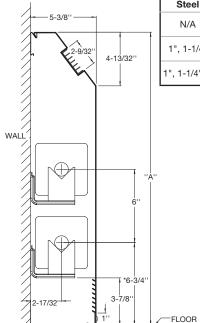
| SBG5 | | | |
|---------------|---------------------|--------------------|-----|
| Pipe size | | | |
| Steel | Copper | Fin size | A |
| N/A | 3/4", 1", 1-1/4" | 2-3/4" x 4" | 14" |
| 1", 1-1/4" | 3/4", 1", 1-1/4" | 3-1/4" x 3-1/4" | 20" |
| 1", 1-1/4", 2 | 3/4", 1", 1-1/4" | 4-1/4" x 4-1/4" | 24" |



| SBG3 | | | |
|------------|---------------------|--------------------|-----------|
| Pipe | size | . | |
| Steel | Copper | Fin size | A |
| N/A | 3/4", 1", 1-1/4" | 2-3/4" x 4" | 8" 11" |
| 1", 1-1/4" | 3/4", 1", 1-1/4" | 3-1/4" x 3-1/4" | 14" |

| | SBGVL | 3 | |
|------------|---------------------|--------------------|-------|
| Pipe | size | | |
| Steel | Copper | Fin size | A |
| N/A | 3/4", 1", 1-1/4" | 2-3/4" x 4" | - 4 - |
| 1", 1-1/4" | 3/4", 1", 1-1/4" | 3-1/4" x 3-1/4" | 14" |





Pipe size Fin size Α Steel Copper 3/4", 1", 2-3/4" x 4" 1-1/4" 14" 3/4", 1", 3-1/4" x 20" 1", 1-1/4" 1-1/4" 3-1/4" 24" 3/4", 1", 4-1/4" x 1", 1-1/4", 2 1-1/4" 4-1/4"

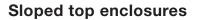
SBGVL5

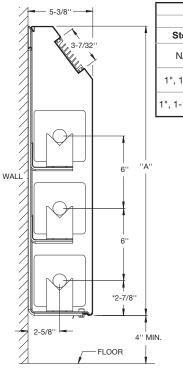
Notes:

*Center lines are based on 1" copper tube.

English, IP Units

Dimensional data





5-3/8

| SIBG5 | | | |
|---------------|---------------------|--------------------|-----|
| Pipe size | | . | |
| Steel | Copper | Fin size | Α |
| N/A | 3/4", 1", 1-1/4" | 2-3/4" x 4" | 14" |
| 1", 1-1/4" | 3/4", 1", 1-1/4" | 3-1/4" x 3-1/4" | 20" |
| 1", 1-1/4", 2 | 3/4", 1", 1-1/4" | 4-1/4" x 4-1/4" | 24" |

SIBGVL5

Copper

3/4", 1",

Fin size

2-3/4" x 4"

3-1/4" x

3-1/4"

4-1/4" x

4-1/4"

Α

14"

20"

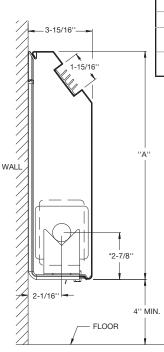
24"

WAL

Pipe size

Steel

N/A



3-15/16

2'

1-15/16'

3-5/32''

*6-3/4''

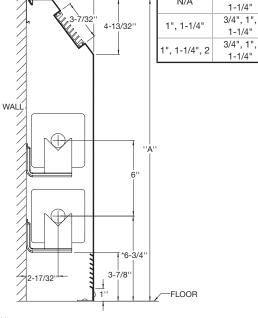
FLOOR

3-7/8'

1'

| | SIBG3 | | |
|------------|---------------------|--------------------|-----------|
| Pipe | size | | |
| Steel | Copper | Fin size | A |
| N/A | 3/4", 1", 1-1/4" | 2-3/4" x 4" | 8" 11" |
| 1", 1-1/4" | 3/4", 1", 1-1/4" | 3-1/4" x 3-1/4" | 14" |

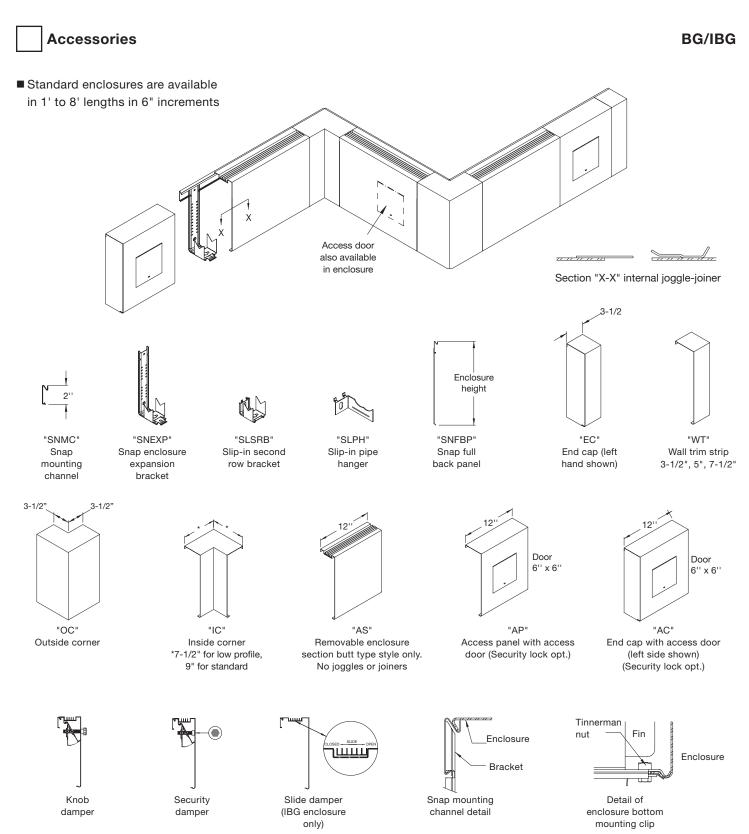
| | SIBGVL | 3 | |
|------------|---------------------|--------------------|-------|
| Pipe | size | | |
| Steel | Copper | Fin size | A |
| N/A | 3/4", 1", 1-1/4" | 2-3/4" x 4" | - 4 - |
| 1", 1-1/4" | 3/4", 1", 1-1/4" | 3-1/4" x 3-1/4" | 14" |



Notes:

*Center lines are based on 1" copper tube.

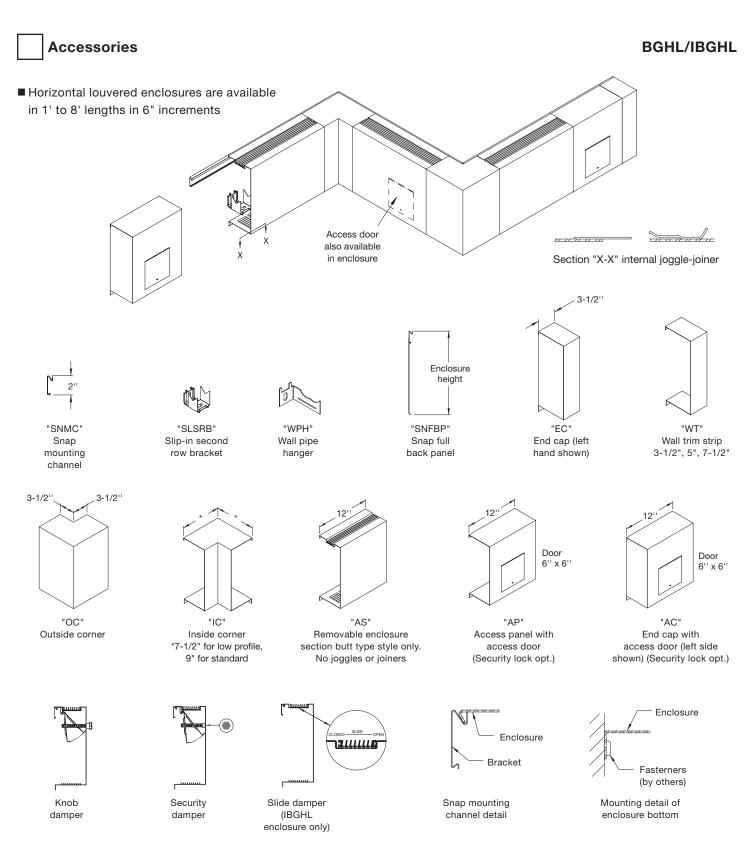
English, IP Units



Notes:

All accessories are overlap type, butt type optional (except as noted)

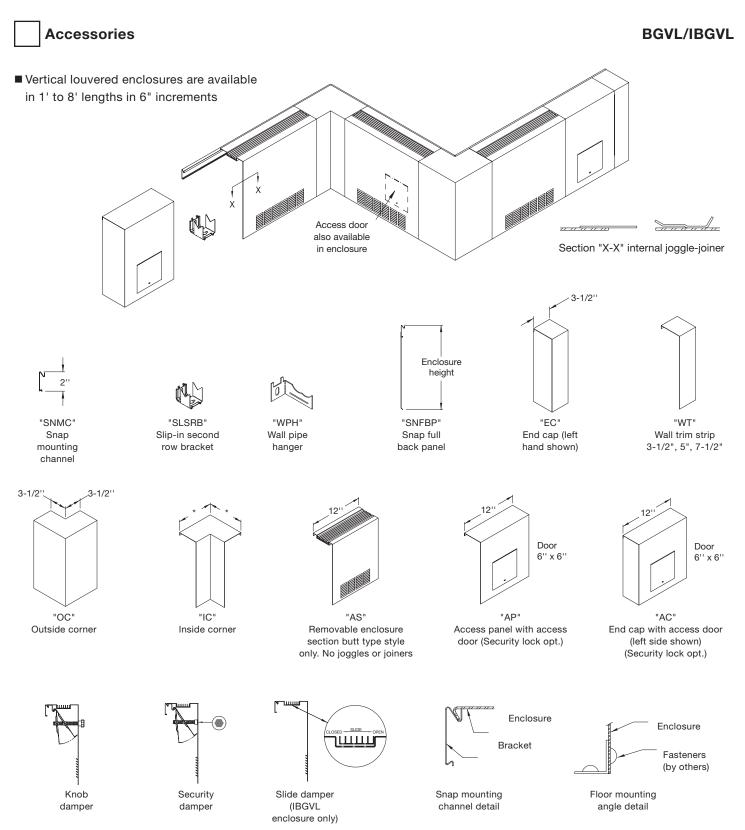
English, IP Units



Notes:

All accessories are overlap type, butt type optional (except as noted)

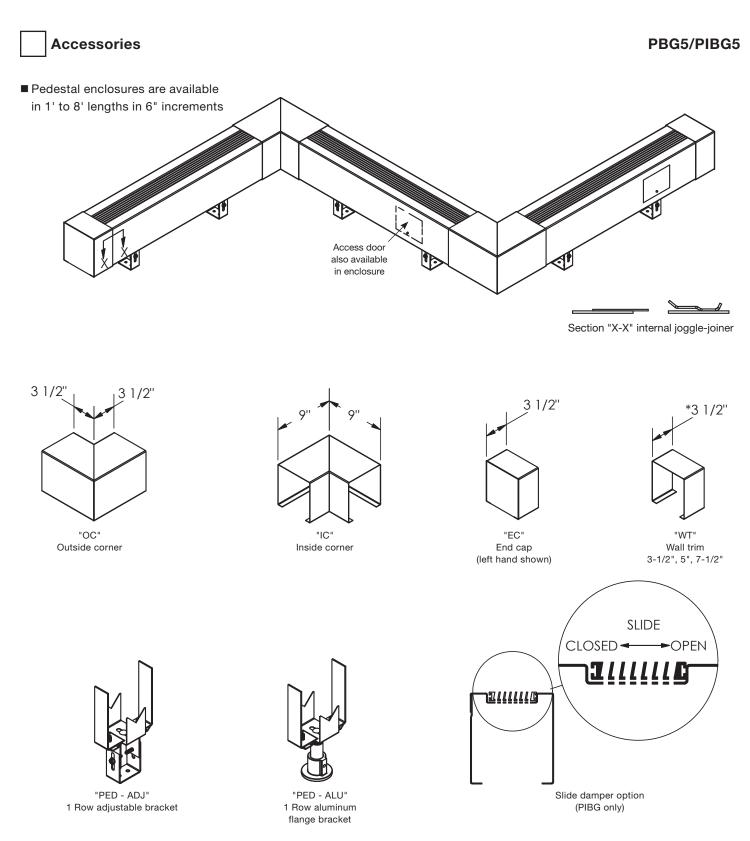
English, IP Units



Notes:

All accessories are overlap type, butt type optional (except as noted)

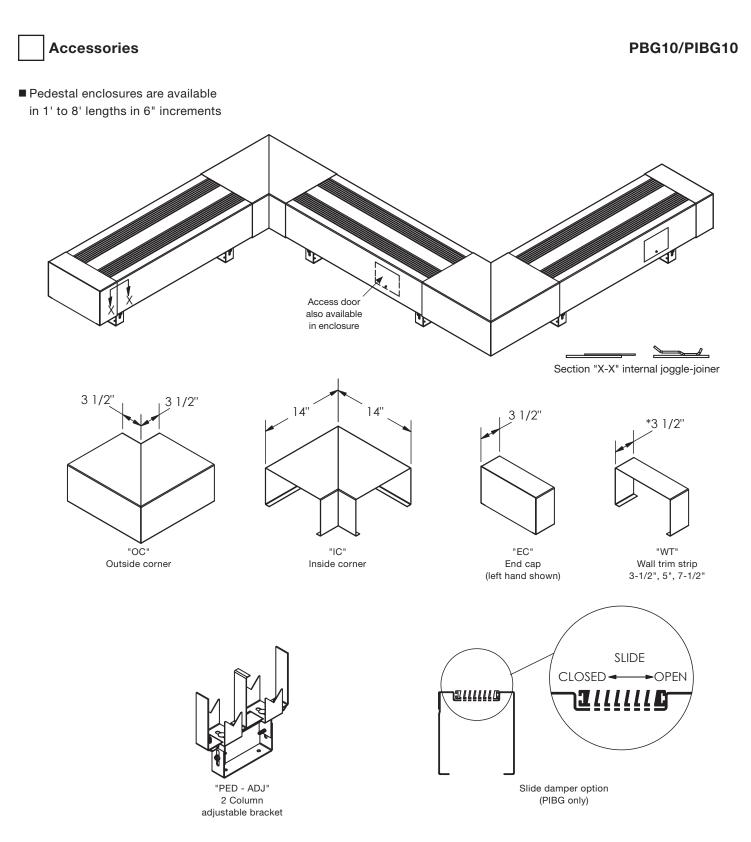
English, IP Units



Notes:

■ All accessories are overlap type, butt type optional (except as noted)

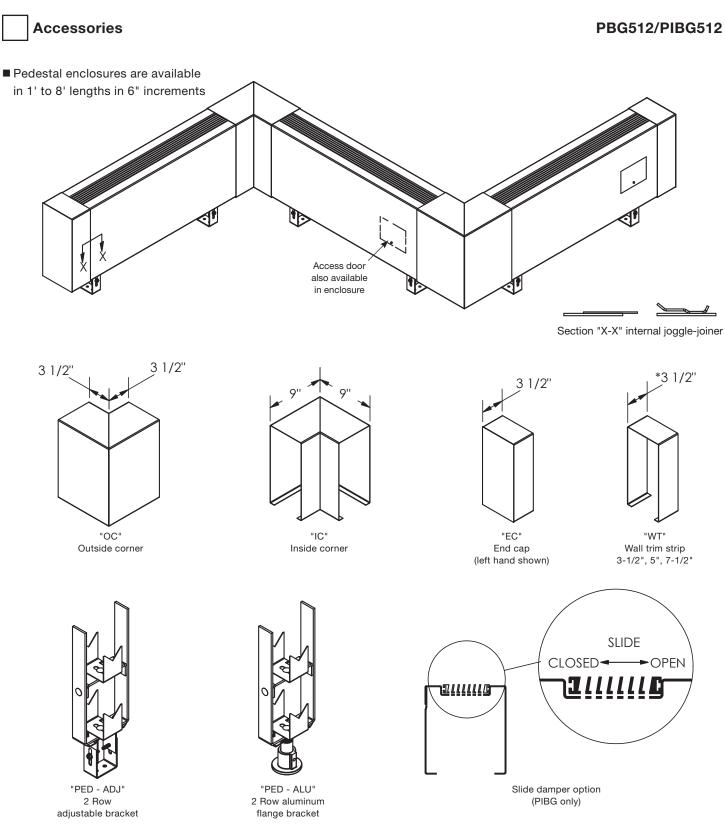
English, IP Units



Notes:

All accessories are overlap type, butt type optional (except as noted)

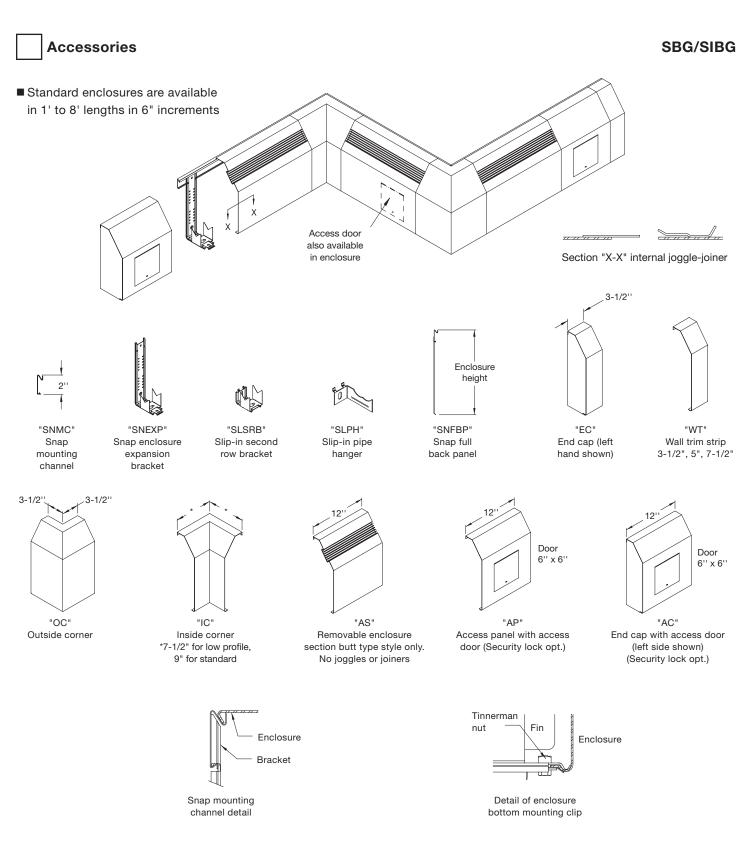
English, IP Units



Notes:

All accessories are overlap type, butt type optional (except as noted)

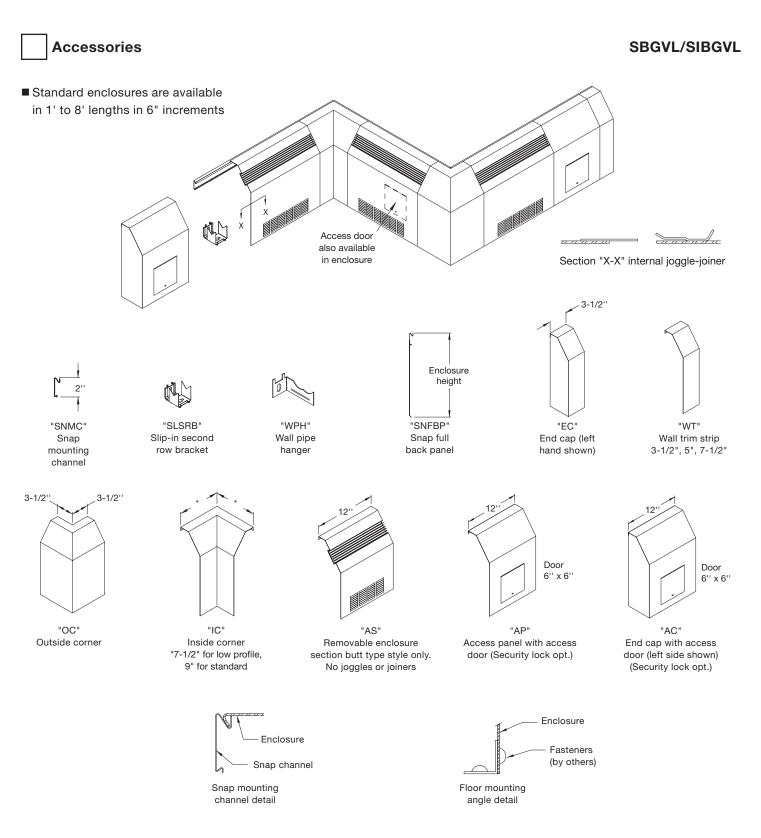
English, IP Units



Notes:

All accessories are overlap type, butt type optional (except as noted)

English, IP Units



Notes:

All accessories are overlap type, butt type optional (except as noted)

Mechanical specifications

General

Furnish and install finned tube heating elements and enclosures as indicated on plans, with required mounting components and accessories. Material shall be manufactured in accordance with Zehnder Rittling's High Quality Standards and in conformance to ISO 9001:2008 standards established and maintained by Zehnder Rittling of Buffalo, New York.

Steel heating elements

Steel heating elements shall consist of 0.027" thick galvanized fins permanently bonded to high pressure A106 seamless schedule 40B steel tubing by mechanically expanding the steel tubing to the steel fins. Steel tube wall thickness; 1" dia. - 0.0133", 1-1/4" dia. - 0.140", 2" dia -0.154", prior to tube expansion.

Guaranteed working pressures:

1" IPS - 780 psig at temperature up to 650°F. 1-1/4" IPS -660 psig at temperatures up to 650°F. 2" IPS - 405 psig at temperatures up to 650°F.

Copper-aluminum heating elements

Copper-Aluminum heating elements shall consist of 0.016" thick, 1100 grade aluminum fins permanently bonded to lightly annealed copper alloy 122 seamless drawn tubing by mechanically expanding the copper tubing to the aluminum fins. Copper tube wall thickness; 3/4" dia - 0.020", 1" dia. -0.025", 1-1/4" dia. - 0.028", prior to tube expansion. Copper tube meets the following ASTM standard designations: ASTM B42, ASTM B68, ASTM B75, ASTM B88, ASTM B111, ASTM B152, ASTM B280.

Guaranteed working pressures:

1-1/4" CU - 194 psig at temperatures up to 300°F. 1" CU - 204 psig at temperature up to 300°F. 3/4" CU - 218 psig at temperatures up to 300°F.

Snap mounting channel or full back panel

Mounting channel shall be die formed from 23-gauge galvannealed steel and the full back panel from 20-gauge galvannealed steel. For rigidity, the top projection of the mounting channel or full back panel shall position the enclosure away from the wall so as to allow for installation or removal of enclosure without damage to wall. A urethane gasket is available to form air seal at wall (optional).

Hanger Brackets

All hanger brackets shall be die formed for rigidity. Brackets used for first row or one row of finned tube shall incorporate a positive-lock mounting clip for the enclosure. Brackets will be self-gauging, allowing for a single measurement installation.

All hangers must provide for lengthwise movement of elements during expansion and contraction as well as aligning elements to prevent contact with brackets, walls, or enclosure.

Enclosures & accessories

Enclosures shall be of the type as shown on the drawings. Enclosures shall be manufactured from 14-16-18-gauge cold rolled steel; 12-gauge not available. All wall mounted enclosures shall be reinforced with welded gussets. The joining of enclosure shall be accomplished by use of internal joggle joiners to provide for hairline joints and added rigidity. No sheet metal screws or other fastening devices shall be visible.

Securing the top portion of the enclosure to the wall will be accomplished by use of a full length mounting channel or full back panel.

The lower portion of open inlet enclosures will be secured by use of a positive-locking, bottom-mounting clip using fasteners, thus preventing removal without tools.

VL enclosures will be secured to the floor using floor mounting angle or channel (fasteners by others).

HL enclosures will be secured to the wall by the flange of the enclosure (with fasteners by others).

Pedestal enclosures will attach to the brackets which will be mounted directly to the floor, no wall supports or brackets are needed.

Mechanical specifications

Dampers

Enclosure dampers shall be provided where indicated. Damper blades shall be fabricated from 18-gauge material painted to match enclosure color. Threaded damper screw and trunion shall provide positive operation of blade to provide variable heat output.

Damper shall be operated by solid plastic damper knobs attached to damper screw. Recessed security allen head operators shall be used in secure areas as indicated. Consult factory on enclosure heights of 8" or below.

Access door

Access doors shall be provided where noted on plans. Doors shall be 6"x6". Knob, security, slide damper also available. (Security damper must be operated by use of a hex key. Slide damper has limited availability.)

BG/PBG/SBG

Aluminum discharge grille shall run the continuous length of the enclosure. The grille shall have a standard mill finish with straight vanes with 0° deflection. The grille shall be pencilproof.

IBG/PIBG/SIBG

Aluminum discharge grille shall run the continuous length of the enclosure. The grille shall have a clear (204-R1) anodized finish. The grille will have a 15° deflection and be pencilproof.

Paint

All enclosures and accessories shall be degreased and chemically phosphatized before application of a durable, attractive, electrostatic epoxy powder coating. Decorator colors are available from Zehnder Rittling color selector chart

In the interest of product improvement, we reserve the right to make product and specification changes without notice.

Warranty

Zehnder Rittling guarantees its products to be free from defects in material and workmanship for a period of one year from date of shipment from our Buffalo, New York factory.

Should there be any defects in the good(s), the purchaser should promptly notify Zehnder Rittling and upon receipt of written consent from Zehnder Rittling, the purchaser shall return the defective good(s) to the factory for inspection with freight prepaid. If inspection shows the goods to be defective, Zehnder Rittling will at its discretion repair or replace the said item(s).

Defects arising from damage due to shipment, improper installation, negligence or misuse by others are not covered by this warranty.

This warranty is extended only to the original purchaser from Zehnder Rittling.

Zehnder · 100 Rittling Boulevard · Buffalo, NY USA 14220 T 844-934-6337 (844-ZEHNDER) · F 716-827-6523 sales@zehnder-rittling.com · www.zehnder-rittling.com

