



## CAPACITY TABLES for "NT" SERIES VALVES

### STEAM BTU/hour

| P.D.* with<br>10 PSI Inlet | 3.5 C <sub>v</sub><br>1-1/4" Valves | 2.74 C <sub>v</sub><br>1" Valves | 2.5 C <sub>v</sub><br>3/4" Valves | 1.8 C <sub>v</sub><br>1/2" Valves |
|----------------------------|-------------------------------------|----------------------------------|-----------------------------------|-----------------------------------|
| 1 psi                      | 48,000                              | 39,000                           | 36,000                            | 28,000                            |
| 3 psi                      | 87,000                              | 70,000                           | 65,000                            | 46,000                            |
| 5 psi                      | 113,000                             | 91,000                           | 84,000                            | 63,000                            |
| 7 psi                      | 130,000                             | 104,000                          | 96,000                            | 72,000                            |
| 10 psi                     | 162,000                             | 130,000                          | 120,000                           | 90,000                            |

\*P.D. = Pressure Drop

Capacity measured with 10 psi inlet pressure.

EDR = Equivalent Direct Radiation (in ft.<sup>2</sup>)

$$\text{EDR} = \frac{\text{BTU/hr}}{240} \quad \text{BTU/hr} = 240 \times \text{EDR}$$

BTU/hour = Lbs. steam/hour x 1000

### HOT WATER BTU/hour\*\*

| **Pressure Drop<br>Ft. | P.D.<br>PSI | 3.5 C <sub>v</sub><br>1-1/4" Valves | 2.74 C <sub>v</sub><br>1" Valves | 2.5 C <sub>v</sub><br>3/4" Valves | 1.8 C <sub>v</sub><br>1/2" Valves |
|------------------------|-------------|-------------------------------------|----------------------------------|-----------------------------------|-----------------------------------|
| 1                      | .43         | 21,000                              | 17,000                           | 16,500                            | 12,000                            |
| 2                      | .87         | 28,000                              | 23,000                           | 22,000                            | 15,500                            |
| 4                      | 1.7         | 44,000                              | 35,000                           | 32,500                            | 23,500                            |
| 6                      | 2.6         | 53,000                              | 43,000                           | 40,000                            | 29,000                            |
| 8                      | 3.5         | 64,000                              | 51,000                           | 47,000                            | 33,500                            |
| 10                     | 4.3         | 70,000                              | 56,000                           | 52,000                            | 37,500                            |
| 12                     | 5.2         | 77,000                              | 62,000                           | 57,000                            | 41,000                            |
| 14                     | 6.1         | 83,000                              | 67,000                           | 62,000                            | 44,500                            |
| 16                     | 7.0         | 88,000                              | 71,000                           | 66,000                            | 47,500                            |

\*\*Assumes 20° F drop in water temperature through radiation.

$$\text{GPM} = C_v \sqrt{\text{P.D.}} \quad 1 \text{ PSI} = 2.31 \text{ Ft. H}_2\text{O}$$

$$\text{BTU/hour} = \text{GPM} \times 10,000 \quad 1 \text{ Ft. H}_2\text{O} = .433 \text{ psi}$$

### EDR (Equivalent Direct Radiation in ft.<sup>2</sup>) for hot water

| Water Temperature | Cast Iron Radiator | Convactor |
|-------------------|--------------------|-----------|
| 200° F            | 209                | 205       |
| 190° F            | 187                | 183       |

BTU/hour = EDR in ft.<sup>2</sup> x (Appropriate number from above EDR Table)

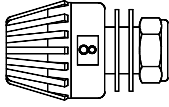
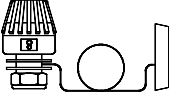



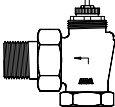
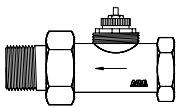
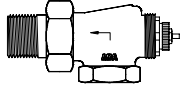
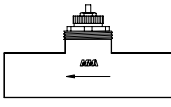
For example 205 for 200° F water in convactor.



# COMPARISON CHART

| Description          | MACON        | Ammark   |     | Bell & Gossett (ITT) | Honeywell Braukmann | Honeywell Sparco/Braukmann | Danfoss RA 2000 | Flair®                                 | Taco | Notes |
|----------------------|--------------|----------|-----|----------------------|---------------------|----------------------------|-----------------|--|------|-------|
|                      |              | Old(SYR) | New |                      |                     |                            |                 |  |      |       |
| ½" Vertical Angle    | N10637       | 70       | 60  | TM12-50              | V110E1004           | V100E1055/5030             | 013G8014        | 524 504                                | 5223 |       |
| ½" Horizontal Angle  | N10837       | 77       | 67  | TM42-50              | V110F1002           | V100F1054                  | 013G8013        | 424 404                                | 5222 |       |
| ½" Straight          | N10737       | 71       | 61  | TM21-50              | V110D1000           | V100D1056/5057             | 013G8015        | 324 504                                | 5221 |       |
| ½" Sweat             | N10930       | -        | -   |                      | -                   | V100G5054                  | 013G8042        | 114 504                                |      |       |
| ¾" Vertical Angle    | N10657       | 70       | 60  | TM12-75              | V110E1012           | V100E1063                  | 013G8019        | 524 506                                | 5233 |       |
| ¾" Horizontal Angle  | N10857       | 77       | 67  | TM42-75              | V110F1010           | V100F1062                  | 013G8018        | 424 506                                | 5232 |       |
| ¾" Straight          | N10757       | 71       | 61  | TM12-75              | V110D1008           | V100D1064/5065             | 013G8020        | 324 506                                | 5231 |       |
| ¾" Sweat             | N10950       | -        | -   |                      | -                   | V100G5062                  | 013G8044        | 114 506                                |      |       |
| 1" Vertical Angle    | N10677       | 70       | 60  | TM12-100             | V110E1020           | V100E1071                  | 013G8024        | 524 508                                | 5243 |       |
| 1" Horizontal Angle  | N10877       | 77       | 67  | TM42-100             | V110F1018           | V100F1070                  | 013G8023        | 424 508                                | 5242 |       |
| 1" Straight          | N10777       | 71       | 61  | TM21-100             | V110D1016           | V100D1072                  | 013G8025        | 324 508                                | 5241 |       |
| 1" Sweat             | N10970       | -        | -   |                      | -                   | -                          | -               | 114 408                                |      |       |
| 1¼" Vertical Angle   | N10697       | 70       | 60  | -                    | V110E1028           | -                          | 013G8031        | 524 610                                | -    |       |
| 1¼" Horizontal Angle | N10897       | 77       | 67  | -                    | V110F1026           | -                          | 013G8030        | -                                      | -    |       |
| 1¼" Straight         | N10797       | 71       | 61  | -                    | V110D1024           | -                          | 013G8032        | 324 610                                | -    |       |
| Direct Mount T'Stat  | ENT B26000   | 72       | 62  | TM5                  | T104A1018/1040      | T100A1028/1018             | 013G8200        | VW, VN, VX, RP510, RP518, RP610, RP612 | 5202 |       |
| Direct Mount T'Stat  | MTW / MTL    | 72       | 62  | TM5                  | T104A1018/1040      | T100A1028/1018             | 013G8200        | VW, VN, VX, RP510, RP518, RP610, RP612 | 5202 |       |
| Remote Sensor T'Stat | ENTZ B36000  | 73       | 63  | TM6                  | T104F1021/1512      | T100F1395/1021             | 013G8202        | VY, VQ, RP512, RP266                   | 5203 |       |
| Remote Dial T'Stat   | ENTL B46000  | 76       | 66  | TM9                  | T104B1019/1038      | T100B1035/1387             | 013G8262        | VZ, VV, RP524                          | 5206 |       |
| Remote Sensor & Dial | ENTLZ B56000 | 74       | -   | -                    | T104C1015/1036      | T100C1026/1015             | 013G8222        | Not Available                          | 5211 |       |
| One Pipe Steam Valve | OPSK         | -        | -   | TM1PS                | Y108P               | Y100P                      | 013G0140        | 624-501                                | 5213 |       |

## SUGGESTED APPLICATIONS

|   | <br>ENT B26000 | <br>ENTZ B36000 | <br>ENTL B46000 | <br>ENTLZ B56000 | <br>VM - 24 Volt |
|---|---|--|---|---|---|
| <br>Vertical Angle   | Not recommended<br>(may shut off prematurely due to poor air circulation)                         | Yes  | Yes   | Yes   | Yes   |
| <br>Straight         | Yes, if thermostat is mounted inverted or horizontal  | Yes  | Yes   | Yes   | Yes   |
| <br>Horizontal Angle | Yes   | Yes  | Yes   | Yes   | Yes   |
| <br>Sweat            | Yes, if thermostat is mounted inverted or horizontal  | Yes  | Yes   | Yes   | Yes   |

