

## KNIGHT XL PUMP RECOMMENDATION TABLE

|          | Temperature Rise<br>20°F Δ T |       |          | Temperature Rise<br>25°F Δ T |       |          | Temperature Rise<br>30°F Δ T |       |           | Temperature Rise<br>35°F Δ T |       |          |
|----------|------------------------------|-------|----------|------------------------------|-------|----------|------------------------------|-------|-----------|------------------------------|-------|----------|
| Boiler   | Flow                         | Head  | Pump     | Flow                         | Head  | Pump     | Flow                         | Head  | Pump      | Flow                         | Head  | Pump     |
|          | Rate                         | Loss  |          | Rate                         | Loss  |          | Rate                         | Loss  | -         | Rate                         | Loss  |          |
| KBN400   | GPM                          | Ft/Hd | PUM30001 | GPM                          | Ft/Hd | PUM30001 | GPM                          | Ft/Hd | PUM30001  | GPM                          | Ft/Hd | PUM30001 |
|          | 37.0                         | 21.0  | 1        | 30.0                         | 14.0  |          | 26.0                         | 11.0  | ]         | 21.0                         | 8.0   | 1        |
| <b>_</b> |                              |       |          |                              |       |          |                              |       |           |                              |       |          |
| Boiler   | Flow                         | Head  | Pump     | Flow                         | Head  | Pump     | Flow                         | Head  | Pump      | Flow                         | Head  | Pump     |
|          | Rate                         | Loss  |          | Rate                         | Loss  |          | Rate                         | Loss  |           | Rate                         | Loss  |          |
| KBN501   | GPM                          | Ft/Hd | PUM30001 | GPM                          | Ft/Hd | PUM30001 | GPM                          | Ft/Hd | PUM30001  | GPM                          | Ft/Hd | PUM30001 |
|          | 46.0                         | 23.0  |          | 37.0                         | 16.0  |          | 32.0                         | 13.0  |           | 26.0                         | 10.0  |          |
|          |                              |       |          |                              |       |          | ·                            |       | · · · · · | ·                            |       |          |
| Boiler   | Flow                         | Head  | Pump     | Flow                         | Head  | Pump     | Flow                         | Head  | Pump      | Flow                         | Head  | Pump     |
|          | Rate                         | Loss  |          | Rate                         | Loss  |          | Rate                         | Loss  |           | Rate                         | Loss  |          |
| KBN601   | GPM                          | Ft/Hd | N/A      | GPM                          | Ft/Hd | PUM30001 | GPM                          | Ft/Hd | PUM30001  | GPM                          | Ft/Hd | PUM30001 |
|          | 55.0                         | 31.0  |          | 44.0                         | 22.0  |          | 38.0                         | 18.0  |           | 32.0                         | 13.0  |          |
| <u> </u> |                              |       |          |                              |       |          |                              |       |           |                              |       |          |
| Boiler   | Flow                         | Head  | Pump     | Flow                         | Head  | Pump     | Flow                         | Head  | Pump      | Flow                         | Head  | Pump     |
|          | Rate                         | Loss  |          | Rate                         | Loss  |          | Rate                         | Loss  |           | Rate                         | Loss  | _        |
| KBN701   | GPM                          | Ft/Hd | N/A      | GPM                          | Ft/Hd | PUM30001 | GPM                          | Ft/Hd | PUM30001  | GPM                          | Ft/Hd | PUM30001 |
|          | 65.0                         | 30.0  |          | 52.0                         | 20.0  |          | 45.0                         | 16.0  |           | 37.0                         | 11.0  |          |
| Doilor   | Flow                         | Head  | Dump     | Flow                         | Head  | Dumn     | Flow                         | Head  | Dump      | Flow                         | Head  | Dump     |
| Boiler   | Flow                         | Head  | Pump     | Flow                         | Head  | Pump     | Flow                         | Head  | Pump      | Flow                         | Head  | Pump     |
|          | Rate                         | Loss  |          | Rate                         | Loss  |          | Rate                         | Loss  |           | Rate                         |       |          |
| KBN801   | GPM                          | Ft/Hd | N/A      | GPM                          | Ft/Hd | PUM30001 | GPM                          | Ft/Hd | PUM30001  | GPM 40.0                     | Ft/Hd | PUM30001 |
|          | 74.0                         | 33.0  |          | 60.0                         | 23.0  |          | 51.0                         | 18.0  |           | 42.0                         | 12.0  |          |

This chart provides Pump recommendations for Knight XL boilers for the Boiler Loop / Space Heating piping.

Based on specific Temperature Rises, this chart includes calculated Gallon Per Minute flow rate, calculated Foot Head Loss and recommended Pump. The GPM, Ft/Hd and Pump selection is based on Primary / Secondary Boiler Loop piping of maximum 20 feet of straight pipe, 4 - 90° elbows and 2 - full port ball valves. See the Installation and Operation manual for more details including pipe diameters and piping diagrams.

