

## ELLIPSES FLEXIBLE WAVEGUIDE



transportation, but also has the perfect tensile strength and softness. Operating temperature range:-40°C ~+75°C , storage Temperature:-55°C ~+85°C.

### Jacket:

The waveguide using environmentally friendly halogen-free black polyethylene jacket, with excellent corrosion resistance and radiation resistance, the jacket can provide protection during installation to the waveguide.

### Application :

Microwave and satellite communication transmission.

### Features:

Elliptical flexible waveguide not only has advantage of low attenuation, large length production, easy installation and

### Technical Specification

| TYPE                   | BT-24(R)           | BT-26       | BT-38                          | BT-48                           | BT-54                      | BT-85                      | BT-90                        |
|------------------------|--------------------|-------------|--------------------------------|---------------------------------|----------------------------|----------------------------|------------------------------|
| Outer sheath           | Black polyethylene |             |                                |                                 |                            |                            |                              |
| Outer sheath size (mm) | 100.5×63.5         | 108.4×61.3  | 82.6×47.4                      | 72.0×42.0                       | 58.5×38.0                  | 40.5×25.0                  | 34.0×24.0                    |
| Weight (kg/m)          | 2.6                | 2.5         | 1.70                           | 1.40                            | 1.00                       | 0.71                       | 0.6                          |
| Min bend radius (mm) E | 800                | 600         | 340                            | 300                             | 240                        | 200                        | 160                          |
| Min bend radius (mm) H | 2000               | 1500        | 840                            | 750                             | 580                        | 520                        | 350                          |
| Freq(GHz)              | 2.200–3.100        | 2.500–2.700 | 3.400 – 4.200                  | 4.400 – 5.000                   | 5.000 – 7.000              | 8.200 – 8.800              | 8.600–10.000                 |
| Attenuation (dB/100m)  | 2.0                | 2.0         | 3.6dB(3.4GHz)<br>2.6dB(4.2GHz) | 4.7dB(4.4GHz)<br>3.8 dB(5.0GHz) | 5.3dB(5GHz)<br>4.3dB(6GHz) | 6.5(8.2GHz)<br>5.9(8.8GHz) | 11.2(8.6GHz)<br>9.5(10.0GHz) |
| Peak power (Kw)        | 550                | 460         | 310                            | 190                             | 150                        | 55                         | 40                           |
| VSWR                   | 1.20               | 1.30        | 1.15                           | 1.15                            | 1.15                       | 1.10                       | 1.15                         |

|                             |                            |               |             |             |                            |                                    |                              |
|-----------------------------|----------------------------|---------------|-------------|-------------|----------------------------|------------------------------------|------------------------------|
| Operating temperature range | -40°C ~+75°C               |               |             |             |                            |                                    |                              |
| Storage Temperature         | -55°C ~+85°C               |               |             |             |                            |                                    |                              |
| Flange                      | PDR22 UDR22<br>PDR32 UDR32 | N-K50<br>IF45 | PDR40 UDR40 | PDR48 UDR48 | PDR48 UDR48<br>PDR58 UDR58 | PDR100<br>UDR100<br>PDR84<br>UDR84 | PDR100 UDR100<br>PDR84 UDR84 |

| TYPE                        | BT-110                                | BT-120           | BT-148                                | BT-188                                 | BTX-62-6G      | BTX-62-7G      | BTX-80-7G                        | BTX-80-8G                        |
|-----------------------------|---------------------------------------|------------------|---------------------------------------|--|----------------|----------------|----------------------------------|----------------------------------|
| Outer sheath                | Black polyethylene                    |                  |                                       |  |                |                |                                  |                                  |
| Outer sheath size (mm)      | 33.0×21.0                             | 29.0×15.0        | 25.3×16.0                             | 23.6×16.1                              | 52.0×30.0      | 52.0×30.0      | 44.8×27.6                        | 44.8×27.6                        |
| Weight (kg/m)               | 0.50                                  | 0.40             | 0.34                                  | 0.22                                   | 0.85           | 0.85           | 0.72                             | 0.72                             |
| Min bend radius (mm) E      | 150                                   | 150              | 150                                   | 150                                    | 220            | 220            | 200                              | 200                              |
| Min bend radius (mm) H      | 300                                   | 300              | 350                                   | 380                                    | 550            | 550            | 520                              | 520                              |
| Freq(GHz)                   | 10.200–11.70                          | 10.70–13.00      | 14.00–15.35                           | 17.70–19.70                            | 5.925–6.425    | 6.425–7.125    | 7.125–7.725                      | 7.725–8.500                      |
| Attenuation (dB/100m)       | 10.7<br>(10.2GHz)<br>9.9<br>(11.7GHz) | 10               | 16.5<br>(14GHz)<br>15.5<br>(15.35GHz) | 20.5<br>(17.7GHz)<br>19.0<br>(19.7GHz) | 5.2            | 4.5            | 5.4                              | 5.4                              |
| Peak power (Kw)             | 35                                    | 35               | 20                                    | 7                                      | 102            | 102            | 60                               | 60                               |
| VSWR                        | 1.15                                  | 1.20             | 1.20                                  | 1.25                                   | 1.1            | 1.1            | 1.1                              | 1.1                              |
| Operating temperature range | -40°C ~ +75°C                         |                  |                                       |  |                |                |                                  |                                  |
| Storage Temperature         | -55°C ~ +85°C                         |                  |                                       |  |                |                |                                  |                                  |
| Flange                      | PDR100<br>UDR100<br>PBR100<br>UBR100  | PBR120<br>UBR120 | PBR120<br>UBR120<br>PBR140<br>UBR140  | PBR140<br>UBR140<br>PBR220<br>UBR220   | PDR70<br>UDR70 | PDR70<br>UDR70 | PDR70<br>UDR70<br>PDR84<br>UDR84 | PDR70<br>UDR70<br>PDR84<br>UDR84 |