



# 70190

## T12 BALLAST

ELECTRONIC BALLAST

### FEATURES

- Optimum performance while maintaining a high level of efficiency
- Ballasts comply with the OEM requirements of the top light fixture manufacturers
- Multi voltage technology and class A sound rating
- Automatic restart capability and end of life lamp protection

### APPLICATION

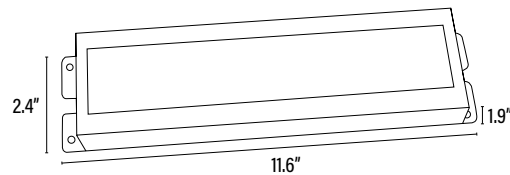
Used in offices, board rooms, retail lighting, or wherever a ballast is required.

### PRODUCT DETAILS

| ELECTRICAL                   |             |
|------------------------------|-------------|
| Watts                        | 110W        |
| Input Voltage                | 120-277V    |
| Input Frequency              | 50/60Hz     |
| Current 120V/277V            | 1.8A/0.8A   |
| Starting Method              | Rapid Start |
| ENVIRONMENT                  |             |
| Minimum Starting Temperature | -10°C       |
| Suitable Location            | <b>DAMP</b> |
| LIFESPAN                     |             |
| Warranty (Years)             | <b>5</b>    |
| CERTIFICATIONS               |             |



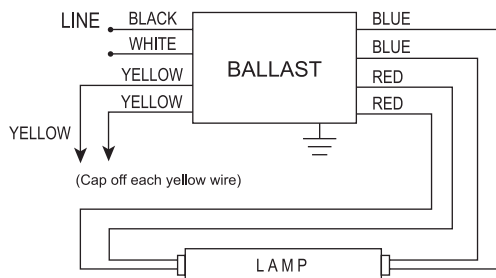
| CONSTRUCTION        |                              |
|---------------------|------------------------------|
| Housing             | Steel                        |
| Finish              | Silver                       |
| PACKAGING           |                              |
| Master Carton       | 10pc / 10811768023586        |
| Individual Box      | 811768023589                 |
| Country of Origin   | China                        |
| HS Tariff           | 8504.10.0000                 |
| DIMENSIONS          |                              |
| Dimensions (Inches) | 11.6"(L) x 2.4"(W) x 1.9"(H) |



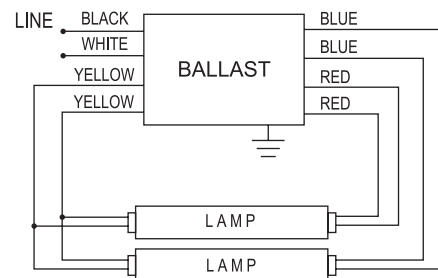
### ORDERING

| ITEM# | DESCRIPTION   | CASE |
|-------|---|------|
| 70190 | BALLAST 1 OR 2 F96 OR 2 F48 F60 F72T12/HO 120-277V - SUPERIOR LIFE® | 10   |

### WIRING DIAGRAM



**ONE LAMP**



**TWO LAMP**

Electrical specifications on next page.

### ELECTRICAL SPECIFICATIONS/120V

| LAMP TYPE   | NO. OF LAMPS | RATED LAMP WATTS | MIN. START TEMP (°F/C) | INPUT CURRENT (AMPS) | INPUT POWER (ANSI WATTS) | BALLAST FACTOR | MAX THD % | POWER FACTOR | MAX LAMP CURRENT CREST FACTOR | BEF  |
|-------------|--------------|------------------|------------------------|----------------------|--------------------------|----------------|-----------|--------------|-------------------------------|------|
| F96T12HO    | 2            | 110              | -22/-30                | 1.6                  | 193                      | 0.85           | 10        | 0.99         | 1.7                           | 0.44 |
| F96T12HO    | 1            | 110              | -22/-30                | 0.91                 | 110                      | 0.88           | 15        | 0.98         | 1.7                           | 0.80 |
| F96T12HO/ES | 2            | 95               | 60/16                  | 1.3                  | 154                      | 0.89           | 10        | 0.99         | 1.7                           | 0.58 |
| F96T12HO/ES | 1            | 95               | 60/16                  | 0.67                 | 78                       | 0.91           | 15        | 0.97         | 1.7                           | 1.17 |
| F84T12HO    | 2            | 100              | -22/-30                | 1.3                  | 160                      | 0.90           | 10        | 0.99         | 1.7                           | 0.56 |
| F84T12HO    | 1            | 100              | -22/-30                | 0.88                 | 105                      | 0.95           | 15        | 0.98         | 1.7                           | 0.90 |
| F72T12HO    | 2            | 85               | -22/-30                | 1.26                 | 150                      | 0.93           | 15        | 0.98         | 1.7                           | 0.62 |
| F72T12HO    | 1            | 85               | -22/-30                | 0.84                 | 100                      | 0.96           | 15        | 0.98         | 1.7                           | 0.96 |
| F60T12HO    | 2            | 75               | -22/-30                | 1.2                  | 140                      | 1              | 15        | 0.98         | 1.7                           | 0.71 |
| F60T12HO    | 1            | 75               | -22/-30                | 0.71                 | 85                       | 1.05           | 15        | 0.97         | 1.7                           | 1.24 |
| F70T8       | 2            | 70               | -22/-30                | 1.18                 | 119                      | 0.9            | 15        | 0.98         | 1.7                           | 0.76 |
| F48T12HO    | 2            | 60               | -22/-30                | 1                    | 120                      | 1.10           | 15        | 0.98         | 1.7                           | 0.92 |
| F48T12HO    | 1            | 60               | -22/-30                | 0.59                 | 70                       | 1.15           | 15        | 0.97         | 1.7                           | 1.64 |
| F36T12HO    | 2            | 50               | -22/-30                | 0.88                 | 105                      | 1.18           | 15        | 0.98         | 1.7                           | 1.12 |
| F24T12HO    | 2            | 35               | -22/-30                | 0.63                 | 75                       | 1.2            | 15        | 0.97         | 1.7                           | 1.60 |

### ELECTRICAL SPECIFICATIONS/230V

| LAMP TYPE   | NO. OF LAMPS | RATED LAMP WATTS | MIN. START TEMP (°F/C) | INPUT CURRENT (AMPS) | INPUT POWER (ANSI WATTS) | BALLAST FACTOR | MAX THD % | POWER FACTOR | MAX LAMP CURRENT CREST FACTOR | BEF  |
|-------------|--------------|------------------|------------------------|----------------------|--------------------------|----------------|-----------|--------------|-------------------------------|------|
| F96T12HO    | 2            | 110              | -22/-30                | 0.87                 | 193                      | 0.85           | 10        | 0.99         | 1.7                           | 0.44 |
| F96T12HO    | 1            | 110              | -22/-30                | 0.49                 | 110                      | 0.88           | 15        | 0.98         | 1.7                           | 0.80 |
| F96T12HO/ES | 2            | 95               | 60/16                  | 0.69                 | 154                      | 0.89           | 15        | 0.99         | 1.7                           | 0.58 |
| F96T12HO/ES | 1            | 95               | 60/16                  | 0.35                 | 78                       | 0.91           | 15        | 0.97         | 1.7                           | 1.17 |
| F84T12HO    | 2            | 100              | -22/-30                | 0.71                 | 160                      | 0.90           | 10        | 0.99         | 1.7                           | 0.56 |
| F84T12HO    | 1            | 100              | -22/-30                | 0.47                 | 105                      | 0.95           | 15        | 0.98         | 1.7                           | 0.90 |
| F72T12HO    | 2            | 85               | -22/-30                | 0.67                 | 150                      | 0.93           | 15        | 0.98         | 1.7                           | 0.62 |
| F72T12HO    | 1            | 85               | -22/-30                | 0.44                 | 100                      | 0.96           | 15        | 0.98         | 1.7                           | 0.96 |
| F60T12HO    | 2            | 75               | -22/-30                | 0.62                 | 140                      | 1              | 15        | 0.98         | 1.7                           | 0.71 |
| F60T12HO    | 1            | 75               | -22/-30                | 0.38                 | 85                       | 1.05           | 15        | 0.97         | 1.7                           | 1.24 |
| F70T8       | 2            | 70               | -22/-30                | 0.53                 | 119                      | 0.9            | 15        | 0.98         | 1.7                           | 0.76 |
| F48T12HO    | 2            | 60               | -22/-30                | 0.53                 | 120                      | 1.10           | 15        | 0.98         | 1.7                           | 0.92 |
| F48T12HO    | 1            | 60               | -22/-30                | 0.31                 | 70                       | 1.15           | 20        | 0.97         | 1.7                           | 1.64 |
| F36T12HO    | 2            | 50               | -22/-30                | 0.47                 | 105                      | 1.18           | 15        | 0.98         | 1.7                           | 1.12 |
| F24T12HO    | 2            | 35               | -22/-30                | 0.33                 | 75                       | 1.2            | 20        | 0.97         | 1.7                           | 1.60 |

Electrical 277V specifications on next page.

# 70190

## ELECTRICAL SPECIFICATIONS



## TECHNICAL DATA SHEET

### ELECTRICAL SPECIFICATIONS/277V

| LAMP TYPE   | NO. OF LAMPS | RATED LAMP WATTS | MIN. START TEMP (°F/C) | INPUT CURRENT (AMPS) | INPUT POWER (ANSI WATTS) | BALLAST FACTOR | MAX THD % | POWER FACTOR | MAX LAMP CURRENT CREST FACTOR | BEF  |
|-------------|--------------|------------------|------------------------|----------------------|--------------------------|----------------|-----------|--------------|-------------------------------|------|
| F96T12HO    | 2            | 110              | -22/-30                | 0.72                 | 193                      | 0.85           | 10        | 0.99         | 1.7                           | 0.44 |
| F96T12HO    | 1            | 110              | -22/-30                | 0.41                 | 110                      | 0.88           | 15        | 0.97         | 1.7                           | 0.80 |
| F96T12HO/ES | 2            | 95               | 60/16                  | 0.57                 | 154                      | 0.89           | 15        | 0.98         | 1.7                           | 0.58 |
| F96T12HO/ES | 1            | 95               | 60/16                  | 0.29                 | 78                       | 0.91           | 20        | 0.96         | 1.7                           | 1.17 |
| F84T12HO    | 2            | 100              | -22/-30                | 0.59                 | 160                      | 0.90           | 15        | 0.98         | 1.7                           | 0.56 |
| F84T12HO    | 1            | 100              | -22/-30                | 0.39                 | 105                      | 0.95           | 15        | 0.97         | 1.7                           | 0.90 |
| F72T12HO    | 2            | 85               | -22/-30                | 0.55                 | 150                      | 0.93           | 15        | 0.98         | 1.7                           | 0.62 |
| F72T12HO    | 1            | 85               | -22/-30                | 0.39                 | 100                      | 0.96           | 15        | 0.97         | 1.7                           | 0.96 |
| F60T12HO    | 2            | 75               | -22/-30                | 0.52                 | 140                      | 1              | 15        | 0.98         | 1.7                           | 0.71 |
| F60T12HO    | 1            | 75               | -22/-30                | 0.31                 | 85                       | 1.05           | 15        | 0.96         | 1.7                           | 1.24 |
| F70T8       | 2            | 70               | -22/-30                | 0.44                 | 119                      | 0.9            | 15        | 0.97         | 1.7                           | 0.76 |
| F48T12HO    | 2            | 60               | -22/-30                | 0.44                 | 120                      | 1.10           | 15        | 0.97         | 1.7                           | 0.92 |
| F48T12HO    | 1            | 60               | -22/-30                | 0.26                 | 70                       | 1.15           | 20        | 0.96         | 1.7                           | 1.64 |
| F36T12HO    | 2            | 50               | -22/-30                | 0.39                 | 105                      | 1.18           | 15        | 0.97         | 1.7                           | 1.12 |
| F24T12HO    | 2            | 35               | -22/-30                | 0.28                 | 75                       | 1.2            | 20        | 0.96         | 1.7                           | 1.60 |