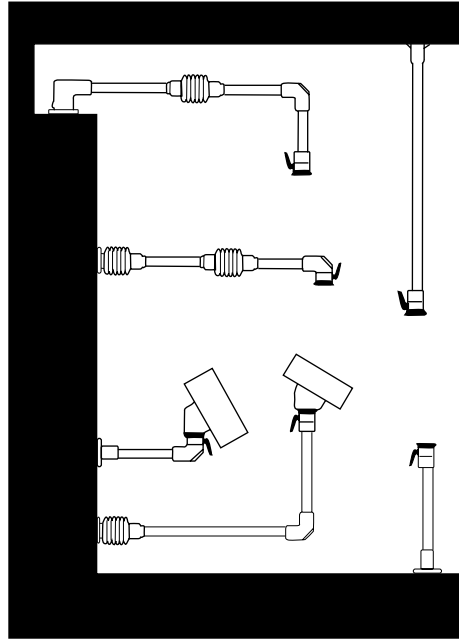


## Suspension Systems - NEMA 12, 13

Heavy Duty 50 mm or 80 mm

Operator Interface Enclosure



### Application

- Command 50mm and 80mm enclosure suspension systems are designed for medium and heavy loads.
- The strength of square tube and cast fittings provide a highly flexible, robust system.

### Standards

- **Complies with**
  - IEC 60529, IP 54

### Construction

- Enclosure coupling and elbow coupling fittings are die-cast from G Al Si 12 aluminum.
- All other fittings are die-cast 4G-s.g. iron.
- Suspension tubing is steel.

### Finish

- Fittings are finished in RAL 7040 window gray powder coating.
- Suspension tubing is RAL 7035 light gray powder coating.

Suspension System

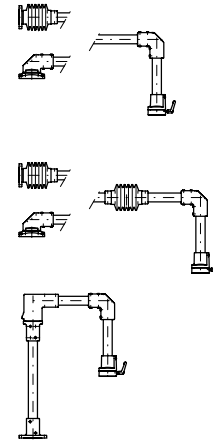
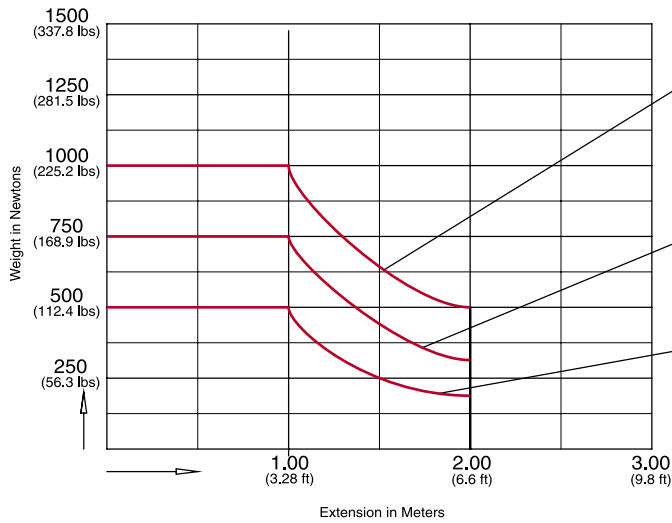
# Suspension Systems - NEMA 12, 13

Heavy Duty 50 mm or 80 mm

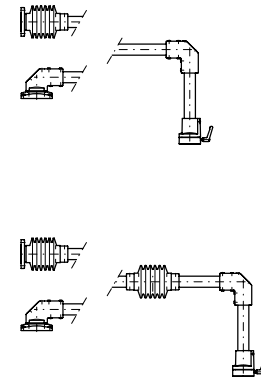
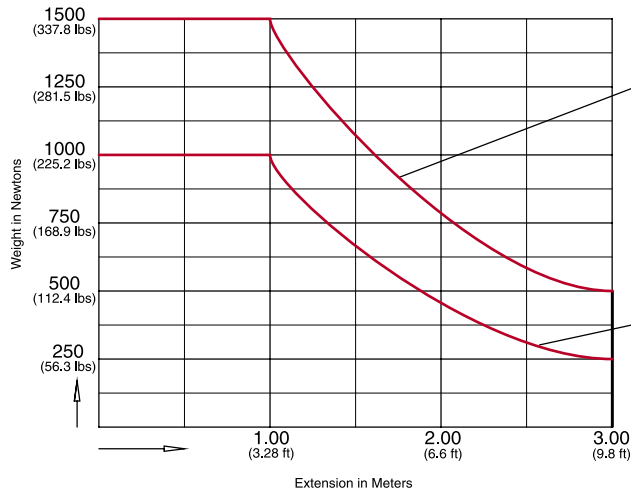
Operator Interface Enclosure

Suspension System

## Load Capacity for 50mm



## Load Capacity for 80mm



### Measurement Conversions

**1 kg = 9.81 N**

**1 lb = 4.44 N**

e.g. 500 Newtons = 51 kg = 112.4 lbs

300 Newtons = 30.6 kg = 67.4 lbs

100 Newtons = 10.2 kg = 22.5 lbs

**1 foot = 0.305 m**



## Suspension Tube

| Part No.      | Outside mm | Inside mm | Tolerance | Length |      | Ship Wt. lbs |
|---------------|------------|-----------|-----------|--------|------|--------------|
|               |            |           |           | Metres | Feet |              |
| R144-021-000R | 50         | 40        | ±0.5      | 1      | 3.28 | 17           |
| R144-022-000R | Square     |           |           | 2      | 6.56 | 26           |
| R144-041-000R | 80         | 70        | ±0.6      | 1      | 3.28 | 21           |
| R144-042-000R | Square     |           |           | 2      | 6.56 | 33           |

# Suspension Systems - NEMA 12, 13

## Heavy Duty 50 mm or 80 mm Components

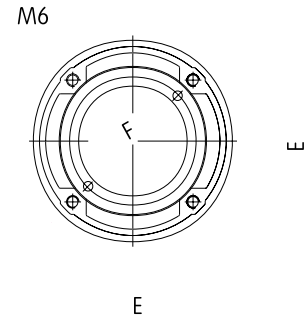
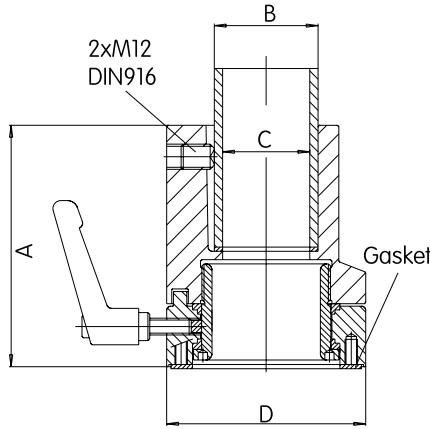
Operator Interface Enclosure



### Enclosure Coupling

- Cast aluminum.
- Large thrust flange.
- Fastens with 4 hex socket screws.
- Adjustable torque resistance.
- Features a rotation range of 300°.

| Part No.      | System | A  | B    | C    | D    | E    | F    | Ship Wt. lbs. |
|---------------|--------|----|------|------|------|------|------|---------------|
| R147-025-000R | in     | 50 | 4.53 | 1.97 | 1.65 | 3.78 | 2.28 | 2.06          |
|               | mm     |    | 115  | 50   | 42   | 96   | 58   | 52.3          |
| R147-025-200R | in     | 80 | 5.71 | 3.15 | 2.83 | 5.47 | 3.42 | 3.35          |
|               | mm     |    | 145  | 80   | 72   | 139  | 87   | 85            |



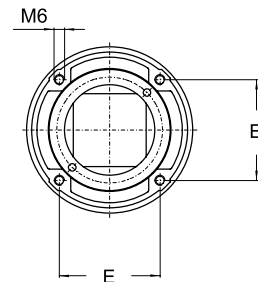
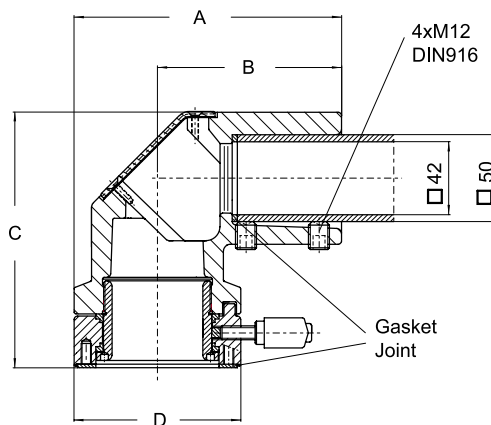
Suspension System



### Elbow Coupling

- Cast Aluminum
- Large thrust flange.
- Fastens with 4 hex socket screws.
- Adjustable torque resistance.
- Features a rotation range of 300°.

| Part No.      | System | A  | B     | C    | D    | E    | Ship Wt. lbs. |
|---------------|--------|----|-------|------|------|------|---------------|
| R147-035-000R | in     | 50 | 6.06  | 4.17 | 5.79 | 3.78 | 2.28          |
|               | mm     |    | 154   | 106  | 147  | 96   | 58            |
| R147-035-200R | in     | 80 | 8.21  | 5.47 | 7.48 | 5.47 | 3.43          |
|               | mm     |    | 208.5 | 139  | 190  | 139  | 87            |



## Suspension Systems - NEMA 12, 13

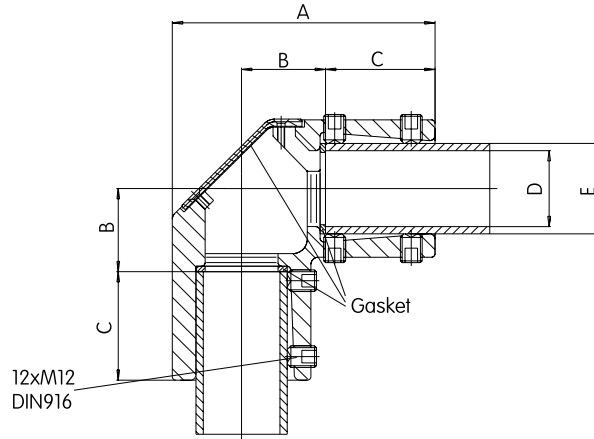
Heavy Duty 50 mm or 80 mm Components



### Elbow

- Cast Aluminum
- Large cover opening for easier cable pull through.

| Part No.             | System | A  | B    | C    | D    | E    | Ship Wt. lbs. |
|----------------------|--------|----|------|------|------|------|---------------|
| <b>R147-020-000R</b> | in     | 50 | 5.67 | 1.81 | 2.36 | 1.65 | 1.97          |
|                      | mm     |    | 144  | 46   | 60   | 42   | 50            |
| <b>R147-020-200R</b> | in     | 80 | 7.60 | 2.20 | 3.27 | 2.76 | 3.15          |
|                      | mm     |    | 193  | 56   | 83   | 70   | 80            |



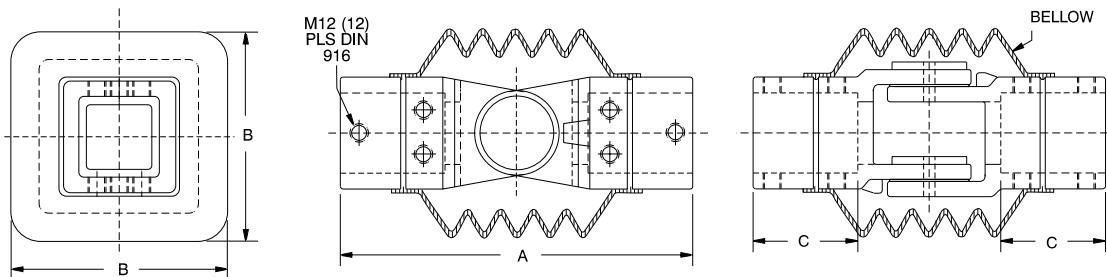
Operator Interface Enclosure



### Intermediate Joint

- 4G-s.g. cast iron.
- Integrated movement stop.
- One piece bellow.
- Two sleeves.
- Features a rotation range of 170°.

| Part No.             | System | A  | B     | C    | Ship Wt. lbs. |
|----------------------|--------|----|-------|------|---------------|
| <b>R147-015-000R</b> | in     | 50 | 9.29  | 5.51 | 2.76          |
|                      | mm     |    | 236   | 140  | 70            |
| <b>R147-015-200R</b> | in     | 80 | 12.60 | 7.09 | 3.82          |
|                      | mm     |    | 320   | 180  | 97            |

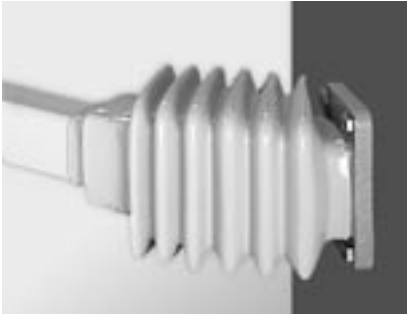


Suspension System

# Suspension Systems - NEMA 12, 13

## Heavy Duty 50 mm or 80 mm Components

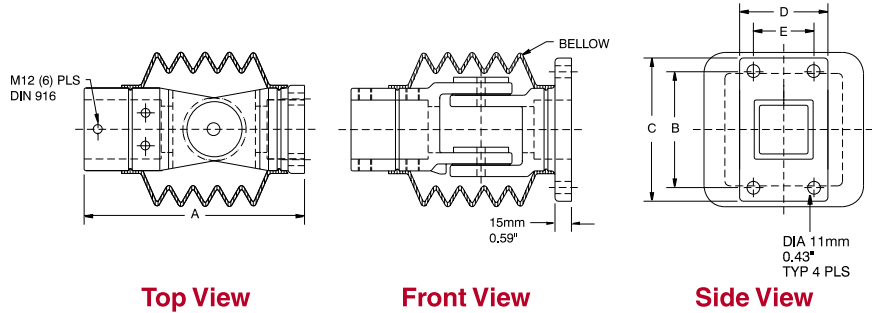
Operator Interface Enclosure



### Wall Joint

- 4G-s.g. cast iron.
- Integrated movement stop.
- One piece bellow.
- Two sleeves.
- Features a rotation range of 170°.

| Part No.      | System | A   | B     | C    | D    | E    | Ship Wt. lbs. |
|---------------|--------|-----|-------|------|------|------|---------------|
| R147-010-000R | in     | 50  | 7.87  | 4.13 | 5.12 | 3.15 | 2.17          |
|               | mm     | 200 | 105   | 130  | 80   | 55   | 9             |
| R147-010-200R | in     | 80  | 10.83 | 5.91 | 6.89 | 4.53 | 3.54          |
|               | mm     | 275 | 150   | 175  | 115  | 90   | 20            |

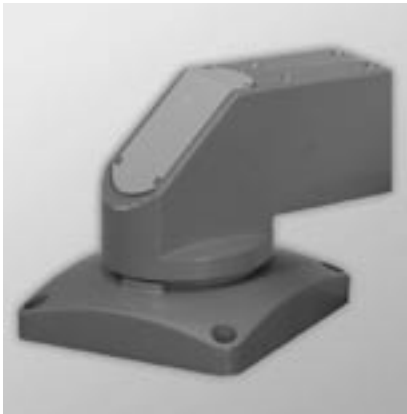


Top View

Front View

Side View

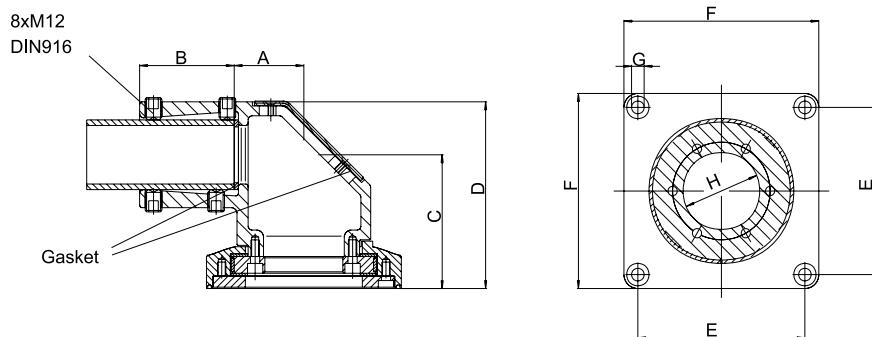
Suspension System



### Socket Joint

- Cast Aluminum.
- Integrated movement stop.
- Service free bearings.
- Features a rotation range of 300°.
- Can mount on top of machine or inverted.

| Part No.      | System | A  | B    | C     | D     | E    | F    | G    | H   | Ship Wt. lbs. |
|---------------|--------|----|------|-------|-------|------|------|------|-----|---------------|
| R147-005-000R | in     | 50 | 1.97 | 2.68  | 3.78  | 5.28 | 4.72 | 5.51 | .35 | 2.17          |
|               | mm     | 50 | 68   | 96    | 134   | 120  | 140  | 9    | 55  | 12            |
| R147-005-200R | in     | 80 | 2.91 | 3.86  | 5.57  | 7.70 | 7.09 | 8.27 | .51 | 3.30          |
|               | mm     | 74 | 98   | 141.5 | 195.5 | 180  | 210  | 13   | 84  | 35            |



## Suspension Systems - NEMA 12, 13

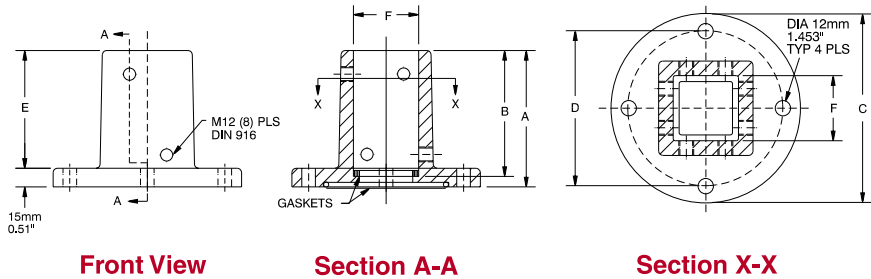
### Heavy Duty 50 mm or 80 mm Components



### Cast Iron Base

- 4G-s.g. cast iron.
- Gasket included.
- Does not rotate.

| Part No.             | System | A  | B    | C    | D    | E    | F    | Ship Wt. lbs. |
|----------------------|--------|----|------|------|------|------|------|---------------|
| <b>R147-030-000R</b> | in     | 50 | 4.33 | 3.94 | 5.98 | 4.92 | 3.74 | 1.97          |
|                      | mm     |    | 110  | 100  | 152  | 125  | 95   | 50            |
| <b>R147-030-200R</b> | in     | 80 | 5.51 | 5.12 | 7.87 | 6.81 | 4.92 | 3.15          |
|                      | mm     |    | 140  | 130  | 200  | 173  | 125  | 80            |



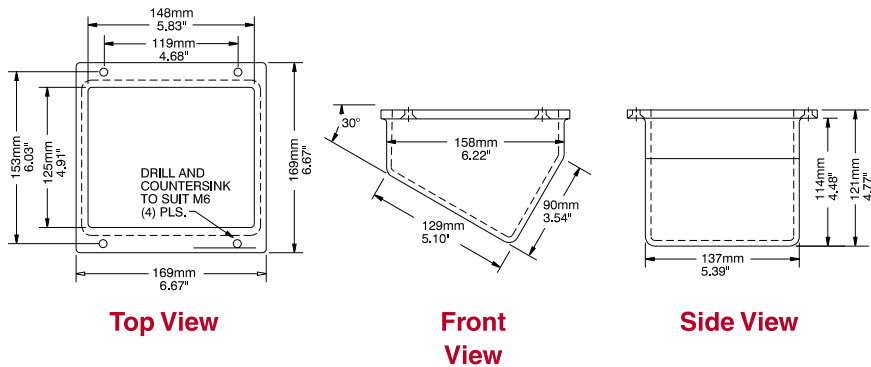
Operator Interface Enclosure



### Slope Adaptor

- Provides 30° or 60° incline by mounting to rear of enclosure.
- Cast aluminum.

| Part No.             | Ship Wt. lbs. |
|----------------------|---------------|
| <b>R140-045-000R</b> | 8             |



Suspension System