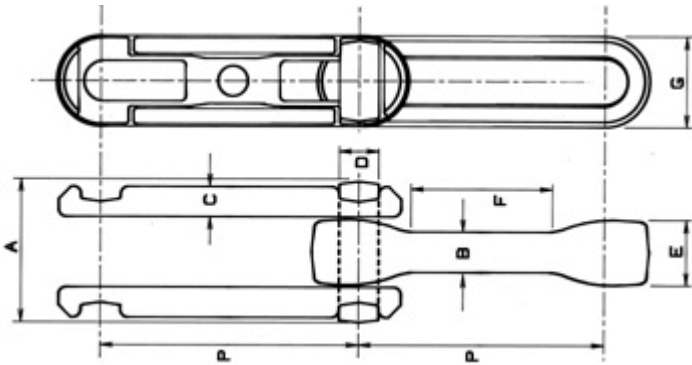
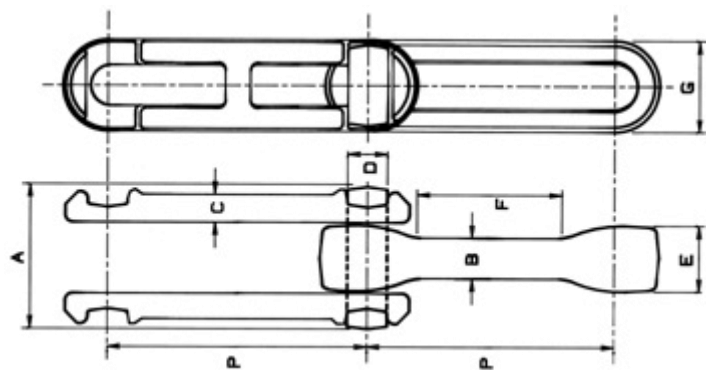


# Drop Forged Rivetless Chain

For Overhead Conveyors & Power & Free Systems



**X-Type**



**Regular Type**

| Chain    | Dimensions [mm] |      |      |      |      |      |     |    |
|----------|-----------------|------|------|------|------|------|-----|----|
|          | P               | A    | B    | C    | D    | E    | F   | G  |
| X348     | 76.6            | 44.0 | 13.0 | 10.4 | 12.7 | 18.8 | 41  | 28 |
| X458     | 102.4           | 57.0 | 16.0 | 12.0 | 15.8 | 25.0 | 58  | 36 |
| 4" Pitch | 101.6           | 57.0 | 16.0 | 12.0 | 15.8 | 25.0 | 58  | 36 |
| CC100    | 100.8           | 57.0 | 16.0 | 12.0 | 15.8 | 25.0 | 58  | 36 |
| 468      | 102.4           | 81.0 | 29.0 | 16.0 | 19.1 | 40.9 | 40  | 48 |
| X685     | 153.2           | 57.0 | 16.0 | 12.0 | 15.8 | 25.0 | 58  | 36 |
| X678     | 153.2           | 77.0 | 20.6 | 18.0 | 22.2 | 32.5 | 87  | 51 |
| 698      | 153.2           | 98.0 | 25.4 | 22.2 | 28.4 | 39.1 | 60  | 64 |
| 160      | 160.0           | 77.0 | 20.6 | 18.0 | 22.2 | 32.5 | 87  | 51 |
| 998      | 229.4           | 98.0 | 25.4 | 22.2 | 28.4 | 39.1 | 135 | 64 |

## Quality Control

Quality Control procedures include the following:

- Raw material analysis is received with steel suppliers certificate
- Regular dimensional checks take place
- Pitch tolerance is checked every 1000 meters
- Hardness checks are carried out on 1 part in 1000 components
- Samples of each batch are crack detected

If the customer requests it, 100% magnaflux crack detection can be carried out.

# Drop Forged Rivetless Chain

## Technical Properties

### Pitch tolerance

The pitch tolerance is normally measured over 3,28 m.

| Chain    | Min U.T.S. | Measuring load | Chain weight | N° of pitches | Dimensions |          |
|----------|------------|----------------|--------------|---------------|------------|----------|
|          | [kN]       | [kN]           | [kg/m]       |               | MAX [mm]   | MIN [mm] |
| X348     | 110        | 0.45           | 3.3          | 40            | 3095.2     | 3050.5   |
| X458     | 220        | 0.90           | 4.8          | 30            | 3096.5     | 3062.2   |
| 4" Pitch | 220        | 0.90           | 4.8          | 30            | 3072.5     | 3038.2   |
| CC100    | 220        | 0.90           | 4.8          | 30            | 3037.5     | 3012.0   |
| 468      | 320        | 1.35           | 11.2         | 30            | 3096.5     | 3062.2   |
| X685     | 220        | 0.90           | 3.9          | 20            | 3082.8     | 3054.9   |
| X678     | 380        | 1.35           | 10.0         | 20            | 3082.8     | 3054.9   |
| 698      | 605        | 1.35           | 17.0         | 20            | 3227.9     | 3172.1   |
| 160      | 380        | 1.35           | 10.0         | 20            | 3082.8     | 3054.9   |
| 998      | 605        | 1.35           | 13.4         | 13            | 3001.2     | 2973.3   |

### Materials

The chain is manufactured from high carbon steels the two most popular being SAE1552 and SAE4140 with the compositions as shown in table

|            | SAE1552       | SAE4140       |
|------------|---------------|---------------|
| Carbon     | 0.47 – 0.55 % | 0.36 – 0.44 % |
| Manganese  | 1.20 – 1.50 % | 0.70 – 1.00 % |
| Phosphorus | 0.04 % max    | 0.04 % max    |
| Sulphur    | 0.05 % max    | 0.05 % max    |
| Chromium   | 0             | 0.90 – 1.20 % |

### Finishes

Chain can be supplied in a variety of conditions including:

- Zinc plated and de-embrittled. Plating thickness 10-13 µm.
- Hot dipped galvanized to a thickness of 60-80 µm
- Pins can be supplied coated with oil. The most popular greases are Structovid BHD and Optifluid 100W

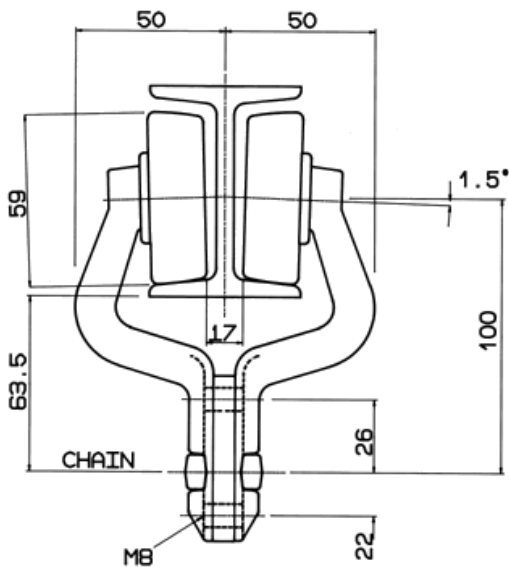
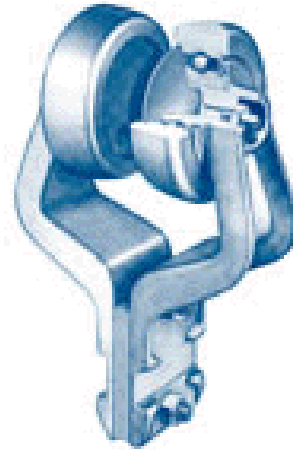
# Drop Forged Rivetless Chain

## Trolleys

### Trolleys for drop forged chain

Trolleys can be supplied to meet most design requirements. There are two main types;

1. Ribbon cage wheels: - semi-precision bearings, recommended for clean environments, operating in temperatures between  $-20^{\circ}\text{C}$  and  $150^{\circ}\text{C}$ .
2. Full ball complement: - semi-precision bearings, recommended for wash plant and oven applications, maximum operating temperature  $250^{\circ}\text{C}$  subject to grease used.



### 348 TROLLEY — 63.5mm DROP

Standard trolley has a riveted 59mm diameter wheel.

It can be supplied with caged or full ball wheels, with or without triple labyrinth seals and dust cover.

|                                      |          |
|--------------------------------------|----------|
| Weight of two wheel trolley          | 1.1kg    |
| Maximum payload of two wheel trolley | 100kg    |
| Torque for locknut M8                | 20-30Nm. |

# Drop Forged Rivetless Chain

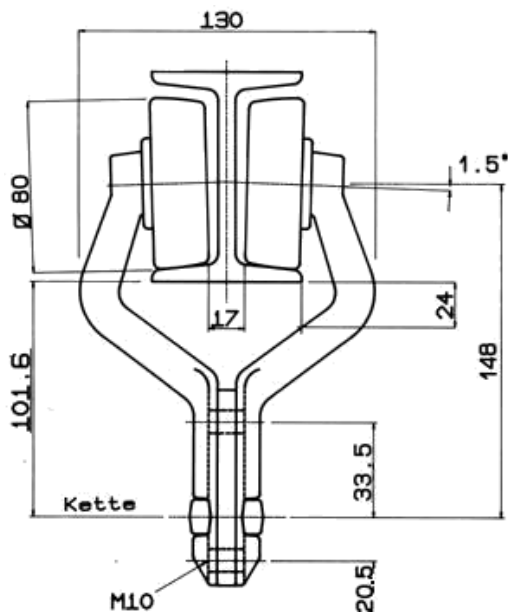
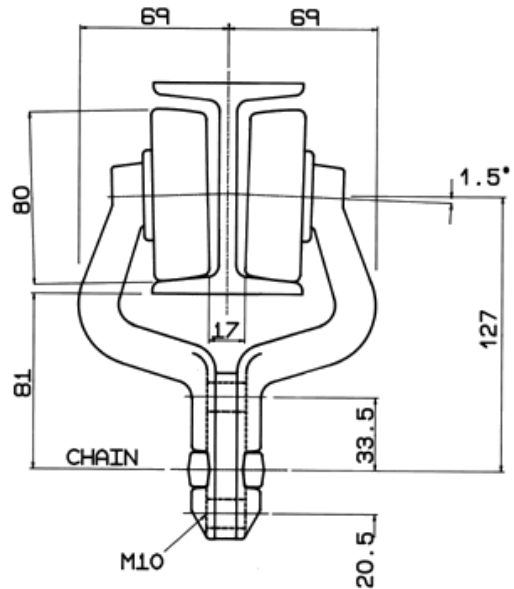
## Trolleys

### 458 TROLLEY - 81 mm DROP

Standard trolley has riveted 80mm diameter wheel.

It can be supplied with caged or full ball wheels, with or without triple labyrinth seals and dust cover. Alternatively a plastic wheel can be fitted.

|                                      |         |
|--------------------------------------|---------|
| Weight of two wheel trolley          | 2.5kg   |
| Maximum payload of two wheel trolley | 200kg   |
| Torque for locknut M10               | 40-50Nm |



### 458 TROLLEY - 4" DROP

Standard trolley has riveted 80mm diameter wheel.

It can be supplied with caged or full ball wheels, with or without triple labyrinth seals and dust cover. Alternatively a plastic wheel can be fitted.

|                                      |         |
|--------------------------------------|---------|
| Weight of two wheel trolley          | 2.6kg   |
| Maximum payload of two wheel trolley | 200kg   |
| Torque for locknut M10               | 40-50Nm |

# Drop Forged Rivetless Chain

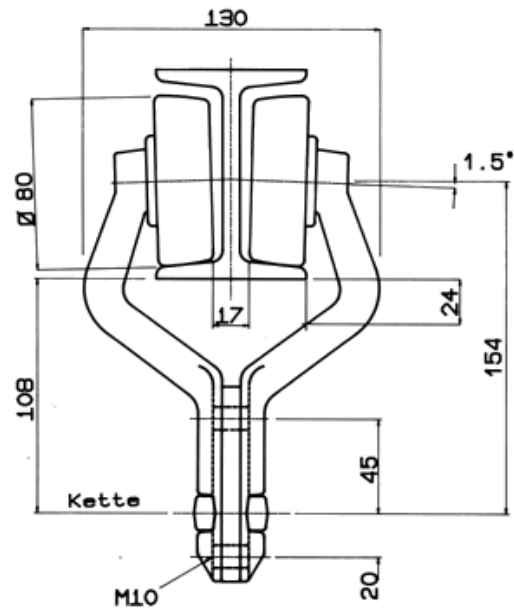
## Trolleys

### 458 TROLLEY - 108 mm DROP

Standard trolley has riveted 80mm diameter wheel.

It can be supplied with caged or full ball wheels, with or without triple labyrinth seals and dust cover. Alternatively a plastic wheel can be fitted.

|                                      |          |
|--------------------------------------|----------|
| Weight of two wheel trolley          | 2.6kg    |
| Maximum payload of two wheel trolley | 200kg    |
| Torque for locknut M10               | 40-50Nm. |

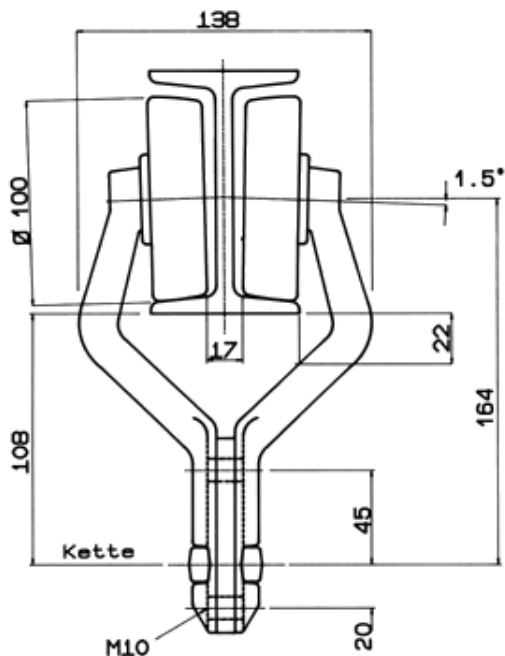


### 458 TROLLEY - 108mm DROP

Standard trolley has riveted 100mm diameter wheel.

It can be supplied with caged or full ball wheels, with or without triple labyrinth seals and dust cover. Alternatively a plastic wheel can be fitted.

|                                      |         |
|--------------------------------------|---------|
| Weight of two wheel trolley          | 3.3kg   |
| Maximum payload of two wheel trolley | 360kg   |
| Torque for locknut M10               | 40-50Nm |



# Drop Forged Rivetless Chain

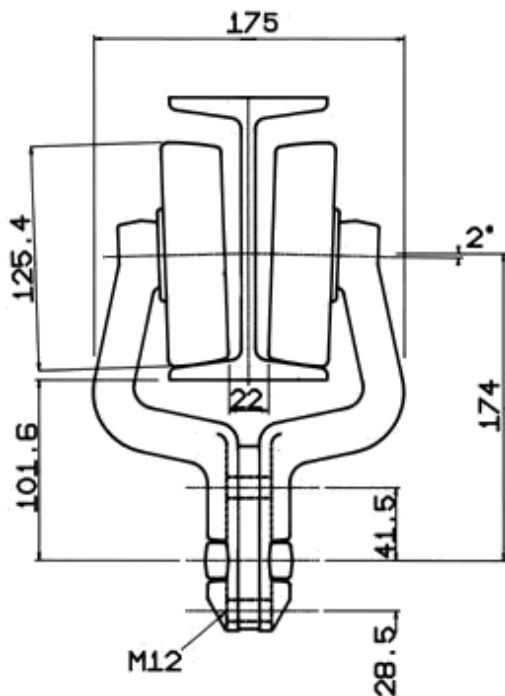
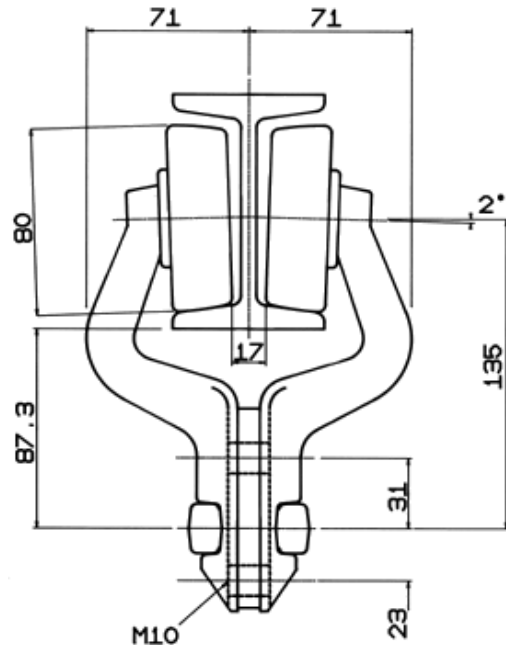
## Trolleys

### 678 TROLLEY (4"over 6") 87.3mm DROP

Standard trolley has riveted 80mm diameter wheel.

It can be supplied with caged or full ball wheels, with or without triple labyrinth seals and dust cover. Alternatively a plastic wheel can be fitted.

|                                      |         |
|--------------------------------------|---------|
| Weight of two wheel trolley          | 3.2kg   |
| Maximum payload of two wheel trolley | 200kg   |
| Torque for locknut M10               | 40-50Nm |



### 678 TROLLEY 101.6mm DROP

Standard trolley has riveted 125,4mm diameter wheel.

It can be supplied with caged or full ball wheels, with or without triple labyrinth seals and dust cover. Alternatively a plastic wheel can be fitted.

|                                      |        |
|--------------------------------------|--------|
| Weight of two wheel trolley          | 7.7kg  |
| Maximum payload of two wheel trolley | 550kg  |
| Torque for locknut M10               | 40-50N |