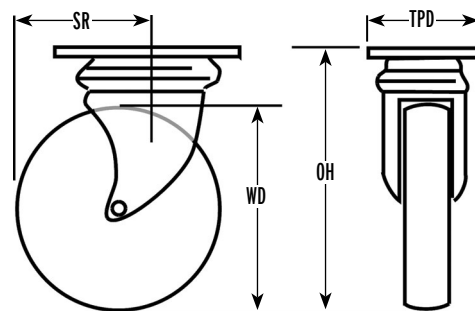


CASTORS

Castor Selection Always choose the largest wheel diameter that you can. Large wheels help reduce rolling resistance and can cope with rougher surfaces. The wheel types of the castors that Flints stocks are shown on the table below and overleaf.

Castor Loading On a platform fitted with four castors take the weight of the platform and the load it is carrying [evenly distributed] and divide by three to take into account uneven surfaces etc. If the platform is carrying actors then you will have to assume the worst case: that the actors will all be standing on one corner of the platform and so EACH castor will have to take the entire load with an added margin for safety.

WD = Wheel Diameter
OH = Overall Height
SR = Swivel Radius
TW = Tread Width
TPD=Top Plate Dims



All measurements are in millimetres

| Wheel Type | For | Against | Typical Use |
|--------------------|---|--------------------------------------|---|
| Polypropylene [PP] | Economical and non-marking | Too noisy for use during performance | Small items of furniture, small boxes, light trucks |
| Grey Rubber | Cheap, quiet, non-marking, floor protecting | Light duty use only | Light trucks and furniture used during performance |

LIGHT-DUTY CASTORS



50 mm Swivel



50 mm Swivel Braked



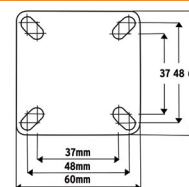
50 mm Fixed



50 mm Swivel Bolt-hole



50 mm Swivel Braked Bolt-hole



Top Plate 75 mm Swivel



75 mm Polypropylene Wheel



75 mm Rubber Wheel

Light-Duty Castors This range of industrial castors all have pressed steel top plates with plain bearings. Wheels are polypropylene, or a quiet non-marking rubber tyre on plastic with a steel core. The Swivel Bolt-hole and Swivel Braked Bolt-hole castors have either a 10 mm or 12 mm bolt-hole. Use the Expanders below to fit them to all types of trolley.

This page
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| Light-Duty Castors | type | WD load [kg] | | OH | SR | TW | | wt [kg] | | TPD | centres | | offset | code | price | code | price | |
|---------------------------|-------------------------|--------------|--------|----|-----|------|--------|---------|--------|------|---------|---------|--------|------|-----------|-------|--------------|--------|
| | | PP | rubber | | | PP | rubber | PP | rubber | | median | bolt Ø | | | | | | PP |
| 50 WHEEL DIAMETER | Swivel | 50 | 40 | 50 | 73 | 50 | 20 | 17 | 0.20 | 0.20 | 50 x 50 | 35 x 35 | 10 | 25 | CASLD50NS | £3.97 | CASLD50RS | £3.97 |
| | Swivel Braked | 50 | 40 | 50 | 73 | 73 | 20 | 17 | 0.22 | 0.22 | 50 x 50 | 35 x 35 | 10 | 25 | CASLD50NB | £4.83 | CASLD50RB | £4.83 |
| | Fixed | 50 | 40 | 50 | 73 | - | 20 | 17 | 0.19 | 0.19 | 50 x 50 | 35 x 35 | 10 | - | CASLD50NF | £3.84 | CASLD50RF | £3.84 |
| | Swivel Bolt-hole | 50 | - | 40 | 71 | 50 | - | 17 | - | 0.20 | - | - | 10 | 25 | - | - | CASLD50RSBT | £4.33 |
| | Swivel Braked Bolt-hole | 50 | - | 40 | 71 | 73 | - | 17 | - | 0.22 | - | - | 10 | 25 | - | - | CASLD50RBST | £6.18 |
| 75 WHEEL DIAMETER | Swivel | 75 | 50 | 50 | 100 | 69.5 | 21 | 21 | 0.23 | 0.33 | 60 x 60 | 43 x 43 | 10 | 32 | CASLD75NS | £5.14 | CASLD75RS | £5.15 |
| | Swivel Braked | 75 | 50 | 50 | 100 | 90 | 21 | 21 | 0.26 | 0.35 | 60 x 60 | 43 x 43 | 10 | 32 | CASLD75NB | £6.18 | CASLD75RB | £6.18 |
| | Fixed | 75 | 50 | 50 | 100 | - | 21 | 21 | 0.22 | 0.32 | 60 x 60 | 43 x 43 | 10 | - | CASLD75NF | £4.94 | CASLD75RF | £4.94 |
| | Swivel Bolt-hole | 75 | - | 50 | 95 | 69.5 | - | 21 | - | 0.30 | - | - | 10 | 32 | - | - | CASLD75RSBT | £6.66 |
| | Swivel Braked Bolt-hole | 75 | - | 50 | 95 | 90 | - | 21 | - | 0.32 | - | - | 10 | 32 | - | - | CASLD75RBST | £8.05 |
| 100 WHEEL DIAMETER | Swivel Bolt-hole | 100 | - | 80 | 128 | 88 | - | 27 | - | 0.60 | - | - | 12 | 38 | - | - | CASLD100RSBT | £10.06 |
| | Swivel Braked Bolt-hole | 100 | - | 80 | 128 | 105 | - | 27 | - | 0.70 | - | - | 12 | 38 | - | - | CASLD100RBST | £11.13 |

Expanders for 12 mm Bolt-Hole castors come with a reducer washer.



Round Bolt

Square Bolt

Inserts for Bolt-Hole Castors These expanders can be fitted to any single bolt-hole castor. Use for round or square tubing on all types of trolley. All the expanders have a 10 mm bolt. The 50 mm and 75 mm Ø bolt-hole castors above have a 10 mm threaded hole and will fit perfectly. Meanwhile, the 100 mm Ø bolt-hole castors above have a 12 mm threaded hole and the 12 mm extender will come as a kit with a reducer washer to ensure a snug fit.

| Expanders for Bolt-Hole Castors | | | round code | price | square code | price | round code | price | square code | price |
|---------------------------------|--------|--------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|
| fits internal tubes | height | weight | fits 10 mm thread | | fits 10 mm thread | | fits 12 mm thread | | fits 12 mm thread | |
| 21.5 - 24 | 90 | 0.11 | CASER24 | £4.33 | CASES24 | £4.33 | CASER24K | £3.50 | CASES24K | £3.50 |
| 24 - 27 | 90 | 0.11 | CASER27 | £4.33 | CASES27 | £4.33 | CASER27K | £3.50 | CASES27K | £3.50 |
| 27 - 30 | 90 | 0.11 | CASER30 | £4.33 | CASES30 | £4.33 | CASER30K | £3.50 | CASES30K | £4.33 |

| Wheel Type | For | Against | Typical Use |
|--|--|---|--|
| Nylon | Cheap, very strong, clean, non-marking, light | Too noisy for use during performance. | Slave trucks, scaffolding castors, heavy-duty storage trolleys not used during performance |
| Polyurethane [Revvothane] on cast iron | Quiet, high tear strength, 10 times the working life and 3 times the load carrying of rubber, low rolling resistance, excellent recovery from static periods | Expensive | All uses but especially heavy scenery used during performance |
| Blue elastic rubber | Soft, very quiet, non-marking, floor protecting | Limited range from stock | Typically used as flight case castors |
| Black rubber on plastic | Cheap, quiet, floor protecting, medium-duty | May leave marks | Medium weight trucks where the budget is tight |
| Black polyurethane [PU] | Soft, very quiet, non-marking, floor protecting | The softer wheel adds a little rolling resistance | All performance stage use especially when the wheels may be seen and silence is required |

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MEDIUM TO HEAVY-DUTY CASTORS



100 mm Swivel



100 mm Swivel Braked



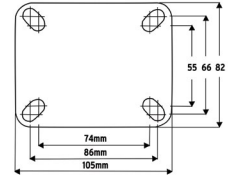
100 mm Fixed



80 mm Nylon Wheel



80 mm Polyurethane Wheel



Top Plate 80 mm, 100 mm Swivel

Medium to Heavy-Duty Castors This range of industrial castors all have pressed steel top plates. The wheels are either nylon with plain bearings, or a tough polyurethane [PU] tyre on cast iron with ball bearings. To decide which one to choose have a look at the table above.

| Medium to Heavy-Duty Castors | | WD load [kg] | | OH | SR | TW | | wt [kg] | | TPD | centres | | offset | code | price | code | price | |
|------------------------------|---------------|--------------|-----|-----|-----|----------|----|----------|------|------|----------|---------|--------|-------|------------|--------|------------|--------|
| type | | nylon PU | | | | nylon PU | | nylon PU | | | median | bolt Ø | | nylon | | PU | | |
| 80 WHEEL DIAMETER | Swivel | 80 | 200 | 200 | 106 | 77.5 | 35 | 30 | 0.56 | 0.90 | 105 x 85 | 80 x 60 | 10 | 37.5 | CASMD80NS | £9.75 | CASMD80PS | £27.82 |
| | Swivel Braked | 80 | 200 | 200 | 106 | 125 | 35 | 30 | 0.70 | 1 | 105 x 85 | 80 x 60 | 10 | 37.5 | CASMD80NB | £12.99 | CASMD80PB | £30.27 |
| | Fixed | 80 | 200 | 200 | 106 | - | 35 | 30 | 0.33 | 0.65 | 105 x 85 | 80 x 60 | 10 | - | CASMD80NF | £8.98 | CASMD80PF | £25.70 |
| 100 WHEEL DIAMETER | Swivel | 100 | 200 | 220 | 128 | 90 | 35 | 38 | 0.65 | 2.2 | 105 x 85 | 80 x 60 | 10 | 40 | CASMD100NS | £10.20 | CASMD100PS | £28.27 |
| | Swivel Braked | 100 | 200 | 220 | 128 | 125 | 35 | 38 | 0.75 | 2.4 | 105 x 85 | 80 x 60 | 10 | 40 | CASMD100NB | £13.46 | CASMD100PB | £31.16 |
| | Fixed | 100 | 200 | 220 | 128 | - | 35 | 38 | 0.55 | 1.7 | 105 x 85 | 80 x 60 | 10 | - | CASMD100NF | £9.59 | CASMD100PF | £26.48 |

REVVO SERIES 4 MEDIUM TO HEAVY-DUTY CASTORS



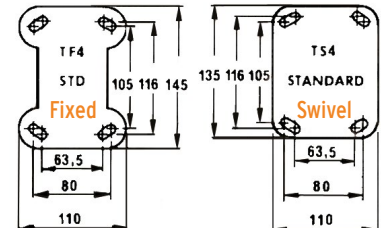
75 mm Swivel Revvothane



75 mm Fixed Revvothane



125 mm Swivel Braked Nylon



Revvo Series 4 Pressed steel top plate castors that reliably cope with all but the heaviest of stage loads. Swivel heads have a single ball bearing. Wheels have plain bearings and are either nylon, or a Revvothane tyre on cast iron. The brake locks both wheel and swivel with an easy-to-use foot lever which trails the direction of the travel. Fabricated castors for very heavy duties can be quickly supplied – please phone for a quotation. If you require the wheel and swivel lock to remain in a fixed position please see the Fixed Position Brake Castors [page 246] N.B. The revvothane versions come ungreased but have an oil hole for lubrication which is recommended to ensure the quietest performance.

| Revvo Series 4 | | WD load [kg] | | OH | SR | TW | | wt [kg] | | TPD | centres | | code | price | code | price | |
|------------------------------|---------------|------------------|-----|-----|-----|------------------|----|---------|------|------|-----------|----------|-------|---------|------------|---------|--------|
| type | | nylon Revvothane | | | | nylon Revvothane | | nylon | | | median | bolt Ø | nylon | | Revvothane | | |
| 75 WHEEL DIAMETER | Swivel | 75 | 160 | 175 | 114 | 73 | 35 | 25 | 0.95 | 1.39 | 135 x 110 | 105 x 80 | 10 | CAS132 | £15.12 | CAS131 | £30.22 |
| | Fixed | 75 | 160 | 175 | 114 | - | 35 | 25 | 0.53 | 0.95 | 145 x 110 | 105 x 80 | 10 | CAS032 | £10.08 | CAS031 | £24.78 |
| 100 WHEEL DIAMETER | Swivel | 100 | 225 | 250 | 139 | 91 | 35 | 29 | 1.02 | 1.69 | 135 x 110 | 105 x 80 | 10 | CAS140 | £16.76 | CAS141 | £35.41 |
| | Swivel Braked | 100 | 225 | 250 | 139 | 91 | 35 | 29 | 1.20 | 1.91 | 135 x 110 | 105 x 80 | 10 | CAS140L | £31.51 | CAS141L | £50.16 |
| | Fixed | 100 | 225 | 250 | 139 | - | 35 | 29 | 0.61 | 1.27 | 145 x 110 | 105 x 80 | 10 | CAS040 | £11.10 | CAS041 | £29.74 |
| 125 WHEEL DIAMETER | Swivel | 125 | 250 | 265 | 164 | 105 | 35 | 32 | 2.03 | 2.50 | 135 x 110 | 105 x 80 | 10 | CAS157 | £19.84 | CAS154 | £43.70 |
| | Swivel Braked | 125 | 250 | 265 | 164 | 105 | 35 | 32 | 2.30 | 2.78 | 135 x 110 | 105 x 80 | 10 | CAS157L | £34.59 | CAS154L | £58.34 |
| | Fixed | 125 | 250 | 265 | 164 | - | 35 | 32 | 1.34 | 1.89 | 135 x 110 | 105 x 80 | 10 | CAS057 | £14.14 | CAS054 | £38.01 |

BLACK THEATRE CASTORS

WHEEL DIAMETER
35



35 mm Swivel



35 mm Swivel Braked



35 mm Fixed

Low Level 35 mm Black Castors Neat, well-designed theatre castors, attractive enough for other uses like furniture making. Black sheet steel frames with a double ball race in the swivel head for smooth movement. Wheels are black polyurethane on a solid aluminium core with ball bearings. They are a hard-wearing 92A on the Shore scale.

- ✓ Discreet – only 52 mm high
- ✓ Non-marking
- ✓ Hard-wearing
- ✓ German quality

| Low Level Black Castors | WD | max load | OH | TW | weight | TDP | hole centres | offset | code | price |
|-------------------------|----|----------|----|----|---------|---------|-------------------|--------|------------|--------|
| Swivel | 35 | 100 kg | 52 | 27 | 0.27 kg | 60 x 60 | 38 x 38 / 47 x 47 | 15 | CAS35KUPL | £22.95 |
| Swivel Braked | 35 | 100 kg | 52 | 27 | 0.28 kg | 60 x 60 | 38 x 38 / 47 x 47 | 15 | CAS35KUPLB | £32.20 |
| Fixed | 35 | 100 kg | 52 | 27 | 0.23 kg | 60 x 60 | 38 x 38 / 47 x 47 | 15 | CAS35KUPLF | £21.56 |

WHEEL DIAMETER
50



50 mm Unbraked



50 mm Braked



50 mm Fixed

50 mm Black Castors We've had so many requests for this size of castors in an all black finish, we thought it was about time we added them into the Catalogue to complete our Black Theatre Castors range. Wheels are black polyurethane on a solid aluminium core with ball bearings. They are a hard-wearing 92A on the Shore scale. The housing is made of black sheet steel.

- ✓ Discreet
- ✓ Non-marking
- ✓ Hard-wearing
- ✓ German quality

| 50 mm Black Castors | WD | max load | OH | TW | weight | TDP | hole centres | offset | code | price |
|---------------------|----|----------|----|----|---------|---------|-------------------|--------|------------|--------|
| Unbraked | 50 | 150 kg | 72 | 40 | 0.4 kg | 60 x 60 | 38 x 38 / 47 x 47 | 31 | CAS50KUPL | £27.50 |
| Braked | 50 | 150 kg | 72 | 40 | 0.46 kg | 60 x 60 | 38 x 38 / 47 x 47 | 31 | CAS50KUPLB | £32.20 |
| Fixed | 50 | 150 kg | 72 | 40 | 0.39 kg | 60 x 60 | 38 x 38 / 47 x 47 | 31 | CAS50KUPLF | £26.45 |

WHEEL DIAMETER
75



75 mm Single Wheel Swivel



75 mm Single Wheel Swivel Braked



75 mm Single Wheel Fixed



75 mm Double Wheel Swivel Braked

Super Quiet Light-Duty Black Castors The frames are black sheet steel with double ball races in the swivel head. They are fitted with polyurethane tyres on a tough nylon hub with ball bearings giving super smooth running. The wheels are exceptionally quiet and non-marking, even on dance floors. Soft 80A on the Shore scale. The braked version locks both the wheel and the swivel. Available in a single or double wheel version.

- ✓ Non-marking – even on dance floors
- ✓ Great choice for all light loads
- ✓ German manufacturing quality

| Super Quiet Black Castors | WD | max load | OH | TW | weight | TDP | hole centres | offset | code | price |
|----------------------------|----|----------|-----|----|---------|---------|-------------------|--------|------------|--------|
| Single Wheel Swivel | 75 | 60 kg | 100 | 23 | 0.38 kg | 60 x 60 | 38 x 38 / 46 x 46 | 28 | CAS7523N | £17.05 |
| Single Wheel Swivel Braked | 75 | 60 kg | 100 | 23 | 0.43 kg | 60 x 60 | 38 x 38 / 46 x 46 | 28 | CAS7523NB | £17.50 |
| Double Wheel Swivel | 75 | 80 kg | 100 | 23 | 0.62 kg | 60 x 60 | 38 x 38 / 46 x 46 | 28 | CAS7523ND | £29.98 |
| Double Wheel Swivel Braked | 75 | 80 kg | 100 | 23 | 0.66 kg | 60 x 60 | 38 x 38 / 46 x 46 | 28 | CAS7523NDB | £32.05 |
| Single Wheel Fixed | 75 | 60 kg | 100 | 23 | 0.30 kg | 60 x 60 | 38 x 38 / 46 x 46 | 28 | CAS7523NF | £18.10 |

£
✓

WHEEL DIAMETER
100



100 mm Swivel



100 mm Swivel Braked

Heavy-Duty Black Euro Castors These tough castors represent fantastic value and would be the perfect choice for the majority of stage uses. The extra tough steel frame is finished in black. The swivel head has double ball races. The wide wheel has black polyurethane tyres on a black cast iron hub with twin ball races. The castor has been developed to be a main workhorse of European theatre stages. Available as a swivel castor or a swivel castor with wheel and swivel brake. They are a hard-wearing 92A on the Shore scale.

- ✓ Real value for a very tough castor – 350 kg loading for well under half the price of lower rated castors
- ✓ All-black frame, wheel and tyre
- ✓ Definitive choice for most theatre trucks
- ✓ Assembled in Germany

| Heavy-Duty Black Euro Castors | WD | max load | OH | TW | SR | weight | TPD | hole centres | offset | code | price | 20+ |
|-------------------------------|-----|----------|-----|----|-----|---------|----------|--------------|--------|-----------|--------|--------|
| Swivel | 100 | 350 kg | 125 | 40 | 95 | 1.60 kg | 140x 110 | 105 x 80 | 48 | CAS80BEC | £24.30 | £19.89 |
| Swivel Braked | 100 | 350 kg | 125 | 40 | 145 | 2.20 kg | 140x 110 | 105 x 80 | 48 | CAS80BECB | £28.68 | £24.29 |

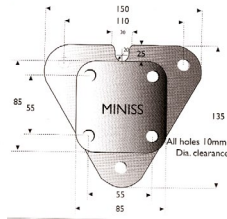
Best value
tough theatre
castor

SCENE SHIFTERS [TURTLES]

Scene Shifters [Turtles]

These castors solve the various problems that can be encountered when using traditional swivel castors. They permit heavy trucks to change rolling direction, even from stationary, without having to exert the extra effort normally needed to change wheel direction. They allow trucks to enter from the wings, stop centre stage, and leave upstage. The triple wheels also spread the load over a larger stage area reducing the problems caused by high point loads on soft floors. They can really help when trying to align trucks ready for bolting-up when the height inaccuracies, caused by high point loading on spongy stages, often cause delays to scene changes as staff are required to fetch crow bars to level up the trucks. Finally, they make good track jumpers. Flints stocks many types of turtles and sell them at prices well below list. We also stock the pneumatic Hebewunder lifting castors [see next page] which allow the scenery trucks to sit firmly on the stage and lift to move.

MINI SCENE SHIFTER [LIGHT-DUTY TO 300 KG]

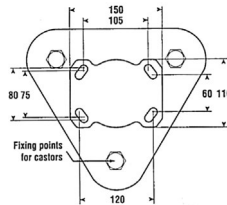


Mini Scene Shifter [up to 300 kg] Very popular units which are ideal for smaller sized trucks. The smaller swivel radius helps to keep the wheels nearer to the edge of the truck and thus improve the stability. Although reduced in size, these Scene Shifters will take very high loads. Mini 35 mm wheels with polyurethane tyres on plastic hub with ball bearings.

- ✓ Help to improve stability
- ✓ Very low overall height
- ✓ Lightweight

| Mini | WD | max load | OH | SR | TW | weight | code | list | Tradeline |
|------|----|----------|----|----|----|---------|-----------|--------|-----------|
| | 35 | 300 kg | 85 | 95 | 28 | 1.80 kg | CASMINISS | £86.59 | £86.59 |

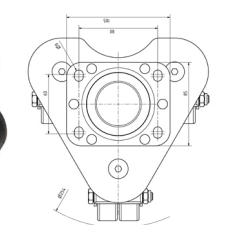
LOW LEVEL SCENE SHIFTER [TO 360 KG]



Low Level Scene Shifter [up to 360 kg] Choose this for heavy trucks which require a low overall height for sightline and access purposes. Top plate with twin wheels with polyurethane tyres on a cast iron hub with plain bearings. This is the same basic unit as the Heavy Duty Standard Scene Shifter below but fitted with low level twin wheeled castors.

| Low Level | WD | max load | OH | SR | TW | weight | code | list | Tradeline |
|-----------|----|----------|----|-----|--------|---------|--------|---------|-----------|
| | 50 | 360 kg | 96 | 154 | 2 x 14 | 8.20 kg | CAS601 | £199.26 | £149.08 |

SUPER QUIET ALL BLACK SCENE SHIFTER [TO 360 KG]

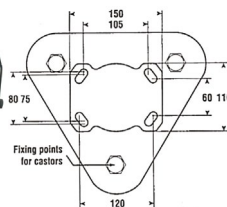


All Black Scene Shifter [up to 360 kg] A similar version to the popular 75 mm Super Quiet Scene shifters below, and only slightly taller than the low-level scene shifter above, with the added advantage of an all-black wheel construction. Frame of black sheet steel with double black polyurethane wheels, with a polyamide hub with ball bearings to give super smooth running. The softer Shore rating of 80A helps to also keep the noise down, and prevent marking on dance floors. A really great choice!

- ✓ Super quiet
- ✓ Non-marking
- ✓ Low friction
- ✓ German quality
- ✓ lower profile

| All Black | WD | max load | OH | TW | weight | TPD | hole centre | code | Tradeline |
|-----------|----|----------|-----|--------|--------|----------|-------------|---------|-----------|
| | 50 | 360 kg | 101 | 2 x 20 | 2.5 kg | 105 x 80 | 80 x 60 | CAS7524 | £114.85 |

SUPER QUIET BLACK SCENE SHIFTER [UP TO 240 KG]

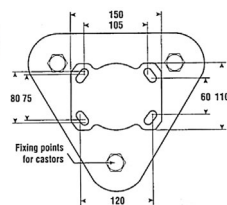


Super Quiet Black Scene Shifter [up to 240 kg] Choose these units for very quiet and easy moving trucks which will glide silently across the stage. Frame of black sheet steel with double ball races at the swivel head. They are fitted with three sets of twin wheels with polyurethane tyres on a tough nylon hub with ball bearings giving super smooth running. The black wheels have a slightly softer Shore rating than most castors at 80A which not only keeps the noise right down but helps to prevent any marking on dance floors.

- ✓ Super quiet
- ✓ Non-marking
- ✓ Low friction
- ✓ German quality

| Super Quiet | WD | max load | OH | TW | SR | weight | TPD | hole centre | code | price |
|-------------|----|----------|-----|--------|-----|---------|----------|-------------|----------|---------|
| | 75 | 240 kg | 125 | 2 x 23 | 381 | 4.40 kg | 105 x 85 | 80 x 60 | CAS7523T | £123.59 |

STANDARD SCENE SHIFTER [HEAVY-DUTY TO 460 KG]



Standard Scene Shifter [up to 460 kg] This is the main workhorse of the Scene Shifter series. Fitted with tough but quiet 100 mm wheels with polyurethane tyres on a cast iron hub with plain bearings. Choose this for all general and heavy-duty uses.

| Standard | WD | max load | OH | SR | TW | weight | code | list | Tradeline |
|----------|-----|----------|-----|-----|----|----------|--------|---------|-----------|
| | 100 | 460 kg | 168 | 218 | 29 | 11.80 kg | CAS602 | £191.27 | £143.08 |

LIFTING CASTORS

WHEEL DIAMETER
50



This gizmo uses compressed air to lift scenery over 40 mm.

Hebewunder [up to 400 kg] The Hebewunder is the perfect choice of castor to move heavy scenic trucks around the stage. Probably the biggest advantage of using the Hebewunder over braking castors is the fact that the truck will sit firmly on the floor when it is lowered into place. This ensures a well spread load and therefore great stability with no chance of accidental movement. Leaving built scenic pieces on braked castors during performance can result in the floor flexing due to the high point loading. This could translate into "wobbly scenery" from the audience's point of view or delayed scene changes because of the difficulty to marry up bolt holes or fixings. Each Hebewunder can lift 400 kg by means of compressed air. The triple swivel castors have the advantages of ensuring a minimal offset for easy initial rolling, good load spreading and excellent track jumping capabilities. The 50 mm castors employed on these units have solid aluminium wheels fitted with bearings and 92° Shore Vulkollan tyres. This allows great load bearing while maintaining a useful low overall height. Flints can supply all the accessories necessary to connect the units, a few are listed below, the rest and more info can be found in the Castors Appendix in the Our Catalogue section of our website.

| Hebewunder | WD | load [kg] | OH | SR | TW | wt [kg] | TPD | holes | code | list | price |
|------------|-----|-----------|-----|-----|-----|---------|-------|---------------------------------|-----------|-----------|-----------|
| | | | min | max | | | width | length [inc air supply] centres | | | |
| 50 | 400 | 400 | 147 | 188 | 250 | 40 | 9 | 220 330 | 180 x 150 | 11.5 | |
| | | | | | | | | | CASHW50 | | Tradeline |
| | | | | | | | | | CASHW50K | £1,741.30 | £354.65 |
| | | | | | | | | | CASHW50K2 | £2,461.88 | £1,676.77 |
| | | | | | | | | | | | £2,392.45 |

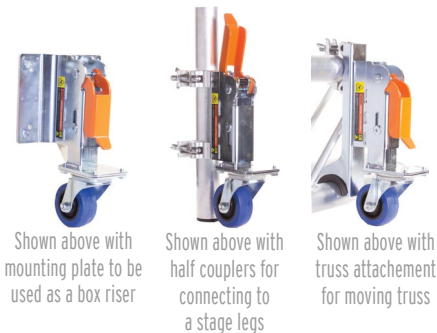


Take a look at the Castors Appendix: Hebewunder Castor in the 'Our Catalogue' section of our website for full details & accessories

Check out our YouTube channel (@flintstheatre) for product demonstrations and tutorials, such as this one all about the Hebewunder castor!



| Hebewunder Accessories | | price |
|------------------------|---------|--------|
| 3-way Valve 1/8" | CASHW3W | £59.20 |
| Air Hose 6x4 - 25 m | CASHWHO | £19.30 |
| Connector 1/8" | CASHWCO | £2.80 |
| Silencer | CASHWSI | £2.55 |
| T-Connector | CASHWTC | £5.64 |



Shown above with mounting plate to be used as a box riser

Shown above with half couplers for connecting to a stage legs

Shown above with truss attachment for moving truss

Lifting Wheel with 80 mm swivel castor [up to 130 kg] These lifting wheels are so useful, you'll be amazed you ever got by without them. The wheel can be levered down to engage with the floor, or up to remove the rolling effect. When the wheel is lowered it will raise up the attached structure by 27 mm. Made from sturdy zinc plated metal, with a 65° shore elastic rubber wheel on a polyamide core and single ball bearing. There are 3 proposed applications:
As a truss mover: by using the truss attachment, truss frames can be lifted and rolled from the stage
As a stage leg riser: instead of using a traditional scaffold castor inserted into the bottom of the stage leg, this system allows the user to lower the stage legs to the ground providing greater stability. NB 2-4 half couplers will be required for round stage legs.
As a box riser: the mounting plate allows the user to fix the lifting wheel to the side of any wooden box, and easily raise it up to roll into the desired position.

| Lifting Wheel | WD | load [kg] | min OH | max OH | SR | TW | wt [kg] | TPD | hole centres | hole Ø | code | price |
|-------------------|----|-----------|--------|--------|-----|----|---------|------------|--------------|--------|--------|---------|
| Main unit: | 80 | 130 | 303 | 380 | 250 | 36 | 2.95 | 80 x 60 mm | 128.5 mm | 11 mm | CAS658 | £181.36 |
| Truss Attachment: | | | | | | | 0.7 | | | | CAS633 | £17.65 |
| Mounting Plate: | | | | | | | 0.9 | | | | CAS645 | £24.10 |
| Half coupler | | | | | | | | | | | CAS590 | £18.37 |

SCAFFOLD CASTORS

HIRE

the 125 mm braked castor

WHEEL DIAMETER
125



the 150 mm braked castor

WHEEL DIAMETER
150



Scaffold Castors Flints stocks the versatile plug type scaffold castors which are suitable for converting steel rostra into slave trucks [with the addition of a short scaffold sleeve if going directly into the rostra corner post]. Fitted with strong nylon wheels [N.B. These may be supplied red]. Has a safe working load (SWL) of 535 kg.
 NB: Due to manufacturing tolerances on the plug and the tube, the castor can sometimes be a slack fit.

Conversion Sleeve A 127 mm length of scaffold tube to convert the plug to fit the corner posts of Steeldeck/Megadek rostra systems. Not needed when the castors are mounted on scaffolding legs.

| Conversion Sleeve | code | price |
|-------------------|--------|-------|
| | SCF092 | £1.10 |

| Scaffold Castors | max load | WD | OH [ex plug] | plug sizes | SR | TW | wt | code | price |
|------------------|----------|-----|--------------|------------|-----|----|---------|--------|--------|
| 125 mm braked | 600 kg | 125 | 157 | 38.35 x 58 | 100 | 38 | 2.27 kg | CAS316 | £44.74 |
| 150 mm braked | 400 kg | 150 | 180 | 38.35 x 58 | 110 | 40 | 2.57 kg | CAS317 | £56.36 |

FLIGHT CASE CASTORS

WHEEL DIAMETER
100



Set of great flight case castors for £33.98

Flight Case Castors These rugged top quality castors have blue elastic rubber tyres which are quiet and non-marking. Ideal for flight cases but also useful whenever noise is a concern. Fitted with roller bearings.

*NB: The fixed version has a 3 mm height difference.

Top plate: 105 x 80 mm. Bolt centres: 80 x 60 mm. Fixings: 4 off M8.

| Flight Case Castors | max load | WD | OH | SR | wt | code | price |
|---------------------|----------|-----|------|----|-------|---------|--------|
| Swivel | 150 kg | 100 | 125 | 85 | 460 g | CAS3470 | £10.45 |
| Swivel braked | 150 kg | 100 | 125 | 85 | 460 g | CAS3477 | £12.05 |
| Fixed | 150 kg | 100 | 128* | 85 | 460 g | CAS3478 | £9.65 |

TRADELIN

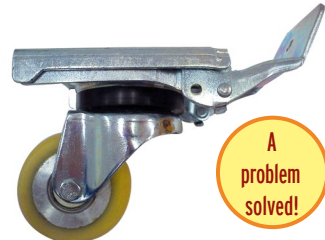
Buy set of four - two swivel & two braked
CAS347K £33.98

FIXED POSITION BRAKES

WHEEL DIAMETER
80

NEW TYPE

WHEEL DIAMETER
75



A problem solved!



Fixed Position Brake Castor - Now available in an ALL BLACK version Generally, the foot-operated brakes on swivel castors swivel with the wheel so they trail the direction of travel. If the wheels are easily accessible this is not generally too much of a problem, especially if only two brakes are needed. However, stage trucks are generally designed to hide the castors from the

audience making access to the brakes very difficult. If the truck needs positioning in view of the audience it can get messy!

These castors are designed to avoid this familiar problem. The foot-operated lever brake will lock off both the wheel and swivel but it remains fixed to the top plate. Your carpenters or metal fabricators will be able to position the castor so the lever neatly protrudes from the rear of the truck. A little bit of luminous tape on the lever and your trucks can be swiftly locked off even in a quick blackout. **Top quality german manufacture.** SPECIFICATION: Original: Top plate size: 135 x 105 mm. Bolt centres: 105 x 80 mm. 88° Shore. 40 mm Vulkollen wheel.

All Black Version: Top plate size: 135 x 110 mm. Bolt centres: 105 x 80 mm. 92° Shore. 50 mm wide polyurethane wheel.

| Fixed Brake Castor | max load | WD | OH | TW | wt | code | price |
|--------------------|----------|----|-----|----|---------|---------|---------|
| | 250 kg | 80 | 125 | 40 | 2.25 kg | CASFPB | £119.55 |
| All Black | 350 kg | 75 | 125 | 50 | 2.3 kg | CASFPBN | £125.00 |

PLATE SKATES



WHEEL DIAMETER
150



Plate Skates These useful devices will grip panels up to 56 mm thick and take loads of 250 kg on their strong 150 mm Ø wheels. Ideal for moving heavy flottage or sheets of ply from lorries or around stage. Just use one in the centre of the panel and the crew can manoeuvre heavy items with ease. Dimensions can be found on page 359.

| Plate Skates | max load | WD | OH | TW | wt | code | price |
|--------------|----------|-----|-----|----|---------|------------|--------|
| | 250 kg | 150 | 225 | 40 | 4.20 kg | CASPS15056 | £60.90 |

LOW LEVEL CASTORS

Front view of the swivel version.



Sheer genius, creative ingenuity

Lo-Line®

Very Low Level Heavy-Duty Castor

Every now and again you come across some products of such brilliance that you wonder how you ever managed without them. These castors designed by the legendary Mike Barnett solve the age-old problem of theatre trucks having to be 150 mm high just to accommodate decent castors. Now, with a bit of ingenuity, you can build a truck just 40 mm high with a weight loading on each swivel Lo-Line® unit of up to 350 kg! These ingenious units use 130 mm diameter steel wheels canted over so that the overall height is just 34 mm. Fitted with special deep grooved ball bearings which are sealed for life. The 16 mm thick top plate can be welded or drilled and tapped to secure the units to your trucks. Available in four types. Copyright: M.Barnett.

- ✓ Solves sightline problems from front row seats
- ✓ Just 34 mm overall height!
- ✓ Great track jumpers
- ✓ Use the fixed version along revolve rims
- ✓ Useful for low level slave pallets
- ✓ Takes up to 350 kg [175 kg for fixed units]
- ✓ Both wheels together provide a tread width of 70 mm



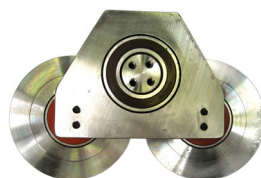
Top view of the fixed version.

Fixed Version

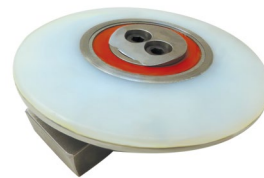
These units can be used on any truck running in a straight line or on pivot trucks with the units aligned in line with the pivot point. In particular they are perfect for use around the rims of revolves, allowing heavy-duty revolves, and their surrounds, to be very low profile sometimes

enabling the front row to actually see the floor! Also available in a quieter version with replaceable nylon inserts.

| Lo-Line® Fixed | code | Tradelin | | | | | |
|----------------------|--------|----------|----|---------|-----------|------------|---------|
| max load | WD | OH | TW | wt | | | |
| 175 kg | 130 | 34 | 35 | 1.25 kg | CASMBLLCF | £63.35 | |
| Nylon insert version | 175 kg | 130 | 34 | 35 | 1.25 kg | CASMBLLCNF | £114.50 |



Top view of the swivel version



Upside down view of nylon version.

Swivel Version For all stage use. Also available in a quieter version with replaceable nylon inserts in the wheels.

| Lo-Line® Swivel | code | Tradelin | | | | | | |
|----------------------|--------|----------|-----|-----|---------|----------|-----------|---------|
| max load | WD | OH | SR | TW | wt | | | |
| 350 kg | 130x2 | 34 | 140 | 70 | 4.25 kg | CASMBLLC | £210.00 | |
| Nylon insert version | 350 kg | 130x2 | 34 | 140 | 70 | 4.25 kg | CASMBLLCN | £277.65 |

See also Flying Saucers, and Lazy Susans on the next page.

For Dollies and Material Handling Products see our special section, pages 359 – 360

LOW LEVEL CASTORS



Low Level Single Wheel Swivel Castor A popular and very useful single bolt-fixing castor with a quiet polyurethane tyre and an overall height of just 59 mm. These are the same wheels used on the Mini Scene Shifter. They are supplied complete with an M10 Allen bolt leaving 20 mm of protruding thread.

| Low Level Single Swivel Castors | WD | load | OH | SR | TW | code |
|---------------------------------|----|--------|----|----|----|---------|
| | 35 | 100 kg | 59 | 33 | 28 | CAS295S |

TRADELINE

| | |
|------------------------|-----------------|
| Low Level Single Wheel | CAS295S |
| List £12.00 | our price £9.99 |



Low Level Twin Wheel Swivel Castors If you need to move heavy weights but have restricted height these tough units with polyurethane tyres on cast iron wheels are ideal. We have now introduced a more economical version with nylon wheels for use when noise is not an issue.

| Low Level Swivel Castors | WD | load | OH | SR | TW | code |
|--------------------------------|----|--------|----|----|--------|---------|
| Polyurethane tyre on cast iron | 50 | 160 kg | 64 | 50 | 2 x 14 | CAS295 |
| Nylon | 50 | 160 kg | 64 | 50 | 2 x 14 | CAS295N |

TRADELINE

| | |
|---------------------------|------------------|
| Polyurethane on cast iron | CAS295 |
| List £35.14 | our price £29.00 |
| Nylon wheels | CAS295N |
| List £19.69 | our price £15.89 |

ROLLERS



Nylon Rollers A useful range of small but heavy-duty nylon rollers. For convenience each size has the same hub width and diameter bore. The rollers are fitted with two ball races with side shields making them

very free-running and quiet. The special feature is that they can be ordered with either a plain face, a V groove, or a round groove. Ideal for constructing heavy-duty travellers, small lifts, under-stage tracking, etc. The V-grooved rollers will run smoothly on inverted angle iron tracks. Trucks will self-centre if there is any width discrepancy between the tracks whereas flanged wheels running on square tracks may bind and screech.

| Nylon Rollers | WD | bore | hub width | wt | code | price |
|---------------|----|------|-----------|------|----------|--------|
| Plain | 50 | 10 | 25 | 80 g | FHSN050P | £12.95 |
| Round groove | 50 | 10 | 25 | 60 g | FHSN050R | £12.95 |
| V groove | 50 | 10 | 25 | 60 g | FHSN050V | £12.95 |

See also Black Nylon Bow Rollers on page 221.

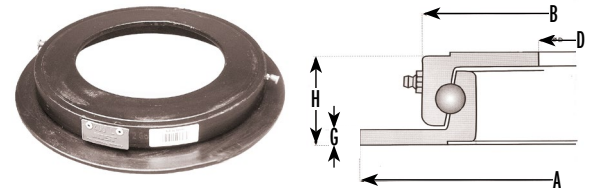
FLYING SAUCERS



Flying Saucer [Ball transfer unit] If you can't even fit in a low level swivel then these may help, but be careful on soft floors as they exert a very high point pressure which can cause damage. The units are really designed to be mounted facing upwards as transfer units for crates and boxes.

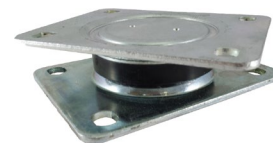
| Flying Saucer | max load | OH | code | price |
|---------------|----------|----|--------|-------|
| | 25 kg | 30 | CAS710 | £4.34 |

TURNTABLES



Turntables A range of ball-bearing turntables ideally suited for securing revolve centres to the stage but also handy for constructing stage trucks and for revolving platforms for heavy sculptures. The flanges are undrilled. Measurements in mm.

| Turntables | max load | ØA | ØB | ØD | H | G | wt | code | Tradeline |
|------------|----------|-----|-----|-----|----|---|-------|---------|-----------|
| | 750 kg | 400 | 342 | 230 | 45 | 8 | 11 kg | CAS400L | £296.45 |
| | 900 kg | 500 | 442 | 330 | 45 | 8 | 15 kg | CAS500L | £329.35 |



CAS135105HD - with 2 plates

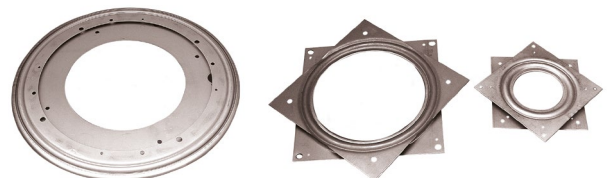


CAS38109S - with 1 plate

Turntables with fixing plates These discrete ball-bearing turntables are well suited for smaller revolving set pieces, furniture and sculptures. It's worth considering the intended order of assembly or you might find yourself on a sticky wicket! Specifications: Bolt hole Ø: 11 mm, Material: Steel, Hole centres: A- 105 x 75 mm, B - 105 x 75 / 80 mm.

| Turntables | max load | OH | plate dims | wt | code | price |
|------------|----------|---------|--------------|----|-------------|--------|
| A | 1000 kg | 34.5 mm | 135 x 105 mm | | CAS135105HD | £48.95 |
| B | 1000 kg | 28.5 mm | 138 x 109 mm | | CAS138109S | £28.35 |

Other sizes are available to order.



Lazy Susans These lightweight ball race rings are designed for maximum stability and smooth running. They are suitable for props and special effects. Zinc-plate finish. For heavy scenery applications choose the turntables listed above. No one really knows why they are called Lazy Susans but the first written reference was in an advert in Vanity Fair in December 1917.

| Lazy Susans | max load | Ø/width | OH | code | price |
|-------------|----------|---------|-------|----------|--------|
| Round | 450 kg | 300 mm | 10 mm | CAS300LS | £10.80 |
| Square | 225 kg | 150 mm | 10 mm | CAS150LS | £5.27 |
| Square | 130 kg | 100 mm | 10 mm | CAS100LS | £3.85 |

Triple E Unijack™™

The Unijack™™ system was the major building block in the Triple E range when the company started. Now several thousand Unijack™™ later it is still doing the work it was designed for on stages throughout the world. The system comprises the basic lifting unit with a range of accessories that allow easy handling of heavy scenery. Designed originally for scenic trucks on theatre stages, they can also be used for all types of industrial equipment, machinery, workbenches, display cabinets and counters. All can be moved or braked with confidence. This range was updated recently to unify the body across all the Unijack™™s and brakes.

Registered Design No. 1032215 Registered Trademark No. 1302\376.

NEW TYPE

WHEEL DIAMETER
50



50 mm Twin-Wheeled Castor

Unijack™™ fitted with 2" (50mm) twin wheel castor

It is recommended that this Unijack™™ be installed with a 10mm clearance between the floor and castor to ensure that the foot pedal is at its most efficient travel and lift position. This also creates a ground clearance of 24mm for the moving item. If lightweight pieces are to be moved, then clearance may be reduced to give more lift. This unit may be fitted with the UJA5 stud set and locking catch to create a lift off UJA1/5. All Unijack™™s can be fitted with a keyplate for quick removal. Please note all Unijack™™s have been updated in 2022.

NEW TYPE



Unijack™™ Rubber Foot Brake

Unijack™™ fitted with Brake Foot is designed to hold a stage truck in position by lifting a fixed castor from the floor. The unit should be fitted so that it only lifts the fixed castor with a minimum clearance. The design recommendation is that the rubber brake foot should be installed with 3 mm more clearance than that of the truck to the floor. All Unijack™™s can be fitted with a keyplate for quick removal. Please note Unijack™™ has been updated in 2022. Working Load Limit: 275kg

| Triple E Unijack™™ | SWL | code | price |
|--------------------|--------|------------|---------|
| Rubber Foot Brake | 275 kg | UJA4301 | £156.42 |
| Spare Rubber Foot | | UJA4301P01 | £11.64 |

| Triple E Unijack™™ | SWL | code | price |
|---------------------------|--------|---------|---------|
| 50 mm twin-wheeled castor | 160 kg | UJA4101 | £173.83 |

NEW TYPE

WHEEL DIAMETER
80



80 mm Single Wheel Castor

Unijack™™ fitted with 80mm wheel castor

It is recommended that this Unijack™™ be installed with a 10mm clearance between the floor and castor to ensure that the foot pedal is at its most efficient travel and lift position. This also creates a ground clearance of 24mm for the moving item. If lightweight pieces are to be moved, then clearance may be reduced to give more lift. This unit may be fitted with the UJA5 stud set and locking catch to create a lift off UJA1/5. All Unijack™™s can be fitted with a keyplate for quick removal. Please note all Unijack™™s have been updated in 2022.

NEW TYPE



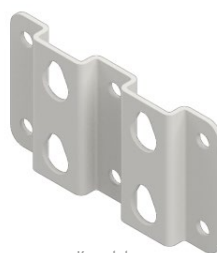
Stud set and key plate

Stud Set for Unijack™™ Keyplate

All the Unijack™™s can simply be bolted to your scenery but the big advantage of fitting this UJA4501 Stud Set to your Unijack™™s is that one set of Unijack™™s can be used on many pieces of scenery. The scenery will need to be fitted with a UJA4601 receiving keyplate.

The steel studs are stepped from 19 mm x 6 mm to 12 mm x 4 mm to a further 10 mm x 5mm allowing them to be conveniently located into the UJA4601 keyplate. The face of the stud is also drilled and countersunk to accept an M8 countersunk cap bolt. A simple safety catch is also supplied and fastened to the top corner of the Unijack™™ backplate. Once in a down position the catch will lock the Unijack™™ to the UJA4601 keyplate.

NEW TYPE



Key plate

Keyplate for Unijack™™

These need to be fitted to your scenery to accept Unijack™™s fitted with the UJA4501 Stud Sets. Six 10 mm diameter holes in the plate provide sufficient fixing points and two vertical corrugations ensure there is enough clearance for the stud set.

| Triple E Unijack™™ | code | price |
|----------------------------------|---------|--------|
| Stud set for use with Unijack™™s | UJA4501 | £40.58 |
| Keyplates | UJA4601 | £28.94 |

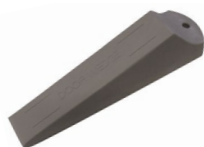
| Triple E Unijack™™ | SWL | code | price |
|--------------------|--------|---------|---------|
| 80 mm Castor | 200 kg | UJA4201 | £197.00 |

BRAKES

Choice of Brakes

When braked castors are not feasible due to poor access we have a selection of separate brake units. For light trucks, a door stop with a rubber foot or even a rubber door wedge will often suffice. If positioning is crucial [and you can drill into the stage floor] then drop bolts work well. Sometimes it is worth considering not using castors and brakes but gluing carpet to the base of the truck with the pile facing downwards. This will slide easily across painted stage floors but will not need brakes. It is ideal for quietly moving furniture on carpeted ply panels. The problem is that we don't sell plywood or carpet so we wouldn't really recommend this method at all. Heavier trucks can be quickly braked by using one of the lever brakes that we stock. The action of the lever will raise the truck slightly which can cause some visible movement. Using "Wind Down" brakes will be less jerky with the added advantage that they can gently raise heavy trucks so that bolt holes align. A more positive braking action can be achieved by raising all the castors using Unijacks [page 248]. The truck frame will then sit firmly on the stage thus spreading the load. In the scene dock, heavy chain placed around castors will effectively stop any movement. Onstage the quieter Sausage Weight Bags [page 154] can be used.

SIMPLE DOOR STOPS

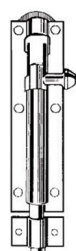


Rubber Door Wedge Cheap quiet low budget solution. Drilled for lanyard. If you buy half a dozen you will be able to retrieve all those stage weights currently being used to hold open the backstage doors.

| Rubber Door Wedge | code | price |
|-------------------|--------|-------|
| | DOR050 | £2.30 |

1 m Lengths of Black Chain A length of chain wrapped around the wheel will effectively prevent even heavy trucks from moving. Only suitable when access to wheels is good and the noise of chains is acceptable. These chains are black japanned. See also Sausage Weight Bags [page 154].

| 1 m Lengths of Black Chain | MRL | code | price | 15 m+ |
|----------------------------|--------|--------|-------|-------|
| link size: 6 x 33 mm | 140 kg | WIR833 | £5.77 | £5.20 |



Straight Drop Bolts - Tower Bolts Useful for locating lightweight trucks in preset positions.

| Straight Drop Bolts | code | price |
|---------------------|--------|-------|
| 4" | DOR110 | £1.76 |
| 6" | DOR111 | £2.18 |
| 8" | DOR112 | £3.14 |



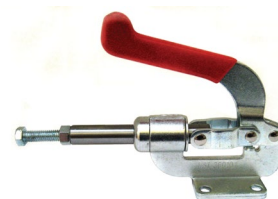
Door Stops Good quality units ideal for lightweight trucks. Fitted with a rubber foot. Screws included.

Small type SPECIFICATION: Backing plate: 119 x 25 mm. Raised foot remains 11 mm below plate, lowered 39 mm below max. Fixings: 3 off No.8 [4 mm] csk screws included.

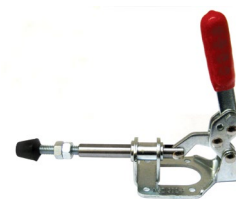
Large type SPECIFICATION: Backing plate: 179 x 38 mm. Foot raised remains 6 mm below backing plate, lowered 40 mm below max. Fixings: 3 off No.8 [4 mm] csk screws included.

| Door Stop Type | code | price |
|----------------|--------|--------|
| Small type | DOR030 | £9.75 |
| Large type | DOR031 | £14.85 |

LEVER-TYPE TRUCK BRAKES



Heavy-duty Lever [3/8" thread]



Light-duty Lever [5/16" thread]



Medium-duty Lever [5/16" thread]



Medium/Light-duty Foot [5/16" thread]

Heavy-duty Foot [3/8" thread]



Lever Truck Brakes These popular brakes have a powerful smooth action to push down the plunger and raise the truck. The threaded foot fitting allows the final height to be adjusted and then locked off. You can buy the lever action without the extension feet so that you can have the option of fitting your own plate, disc, or castor. They also make excellent levers for production assembly jigs.



| Lever Truck Brakes | movement | max load | code | price | 10+ |
|------------------------------------|----------|----------|-----------|--------|--------|
| Heavy-duty lever | 40 mm | 362 kg | CAS74550 | £29.95 | £22.95 |
| Heavy-duty foot | | 362 kg | CAS74555 | £4.40 | £3.90 |
| Medium-duty lever | 30 mm | 135 kg | CAS74510 | £21.89 | £14.85 |
| Medium-duty foot [also fits light] | | 135 kg | CAS74515 | £3.79 | £3.30 |
| Light-duty lever includes foot | 45 kg | | CAS745302 | £15.25 | £13.65 |



Floor Lock Excellent smooth powerful action. The unit bolts under the truck with its lever protruding through the back. The foot will cant to take up uneven floor surfaces.

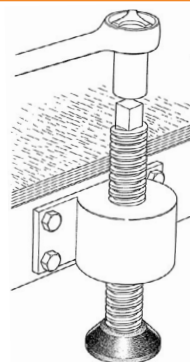
SPECIFICATION: Mounting height: 150 mm. Retracted height: 125 mm.

| Floor Lock | load capacity | code | price |
|------------|---------------|--------|--------|
| | 2,000 kg | CAS701 | £52.58 |

TRIPLE E UNIJACKS

See page 248 for the popular Triple E Unijack Brakes.

WIND DOWN BRAKES



Wind Down Brake A superb industrial-quality brake for heavy trucks. Rapid descent with just four turns to drop 25 mm. These brake units will not jerk the scenery when it is positioned in view of the audience. They can be used to anti-rake touring scenery to fit a variety of stages. Useful to level-up large trucks on uneven stage floors and to raise heavy units from the floor to access pallet handling equipment. Fitted with a square head to fit a 19 mm socket and a black nylon foot with

a bronze bush. All parts replaceable. Design right applies.

SPECIFICATION: Overall height: 240 mm. Movement range: 135 mm. Fixing Plate: 60 x 150 x 8 mm thick. Drilled for 4 off M10 bolts.

| Wind Down Brake | code | Tradeline |
|-----------------|---------|-----------|
| | FHS080 | £185.00 |
| Spare foot | FHS080F | £33.37 |