

01 DOOR LIFTING

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01 DOOR LIFTING



DOOR LIFTING

GAS STRUTS - GENERAL INFORMATION

- Please use the below information and our 'Guide to Ordering' on the following pages to ensure you receive the correct gas strut, mounting points and opening angle for your installation. Our gas struts have a one way valve; once gassed we cannot remove force, nor accept them back for return.
- Most of our standard gas strut extended lengths can be increased by up to 20mm, in 5mm increments. It is important to remember increasing extended length also increases the minimum compressed length by the same, so you should check you have sufficient space between mounting points throughout door closing to accommodate this.
- Our standard gas struts are supplied with female ball socket ends & male ball stud mounting brackets with M8x12mm thread (M10x19mm for C14 gas struts) and a hex collar for tightening. However we also stock a wide range of alternative gas strut ends and mounting bracket options.
- Gas struts should be mounted cylinder up - shaft down where possible. This enables the best damping effect and also allows internal oil to lubricate the seal and shaft, prolonging gas strut life.
- Our gas struts have a 12 month warranty. Gas strut life varies hugely depending on installation environment and use. A gas strut that is compressed and extended regularly enables the internal oil to lubricate and protect the shaft. A gas strut used infrequently, or subject to a dusty or damp environment, or subject to corrosive elements (e.g. cleaners) will deteriorate more quickly. As the smooth surface of the shaft corrodes or pulls debris through the seal then the seal will become damaged and gas force will be lost.
- Our gas struts are rated for use in temperatures between -20°C to +80°C, however temperature changes will change gas strut force. As a rough guide, a 10°C reduction in temperature will reduce force by approximately 4%, and vice versa.
- Actual gas strut force may vary from nominal force; tolerance is approximately +/- 7% of the labelled force.

Some concepts often misunderstood:

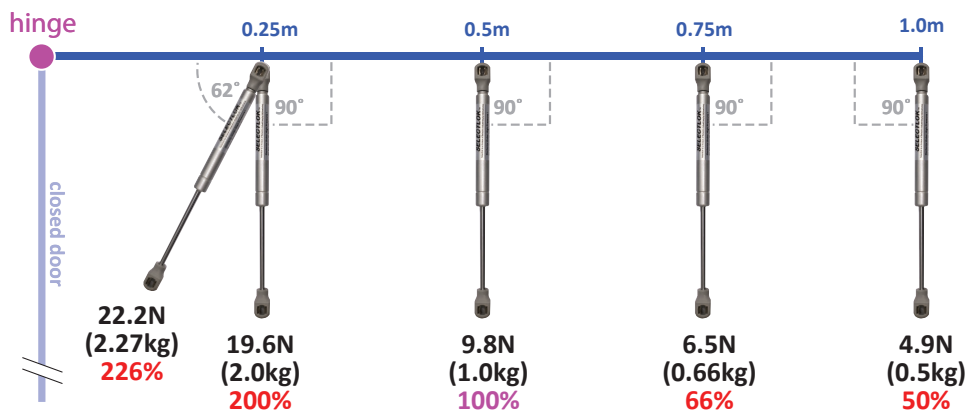
Gas struts are not rated in "newton metres". Newton metres (Nm) is a measurement of Torque which is a rotational force about a pivot. An example of Torque: A 1.0m high Vertical Door (hinged across the top) with a Centre of Gravity of 0.5m, with a total mass of 1kg lifted to horizontal (open) position has gravity acting upon it creating torque: $0.5m \times 1kg \times 9.8 = 4.9Nm$ of Torque.

By contrast, a gas strut has Force which is measured in newtons (N). The gas strut force required to hold this door at horizontal varies depending on the mounting distance from the centre of hinge and the angle the gas strut is on. A gas strut mounted vertically at the COG (0.5m from hinge) would require 9.8N of force to make the door weightless: $4.9Nm / 0.5m = 9.8N$ (more force would be required to securely hold it up against wind and vibrations). Additionally, for doors and hatches the gas strut cannot be mounted perpendicular to the door which reduces its efficiency and so we need to add even more force to hold the door up.

Below is a representation of the force required just to counteract gravity (make the door weightless) at different distances from the hinge.

Diagram showing a vertical door 1.0m High, 1kg total weight with 0.5m COG, open at horizontal position = 4.9Nm Torque

At centre of gravity the perpendicular force required equals total door weight (100%). Out at the opening edge only 50% is required because the hinge is holding half the weight. While the angled strut close to hinge requires 226% of door weight.



DOOR LIFTING

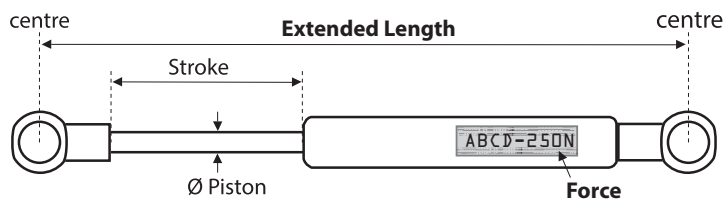
GAS STRUTS - GUIDE TO ORDERING

PLEASE READ BEFORE ORDERING

The following detailed information is provided to ensure new door designs and gas strut fit-outs go smoothly and without wasting unnecessary time and expense. We recommend you read the following pages and ask us any questions before ordering.

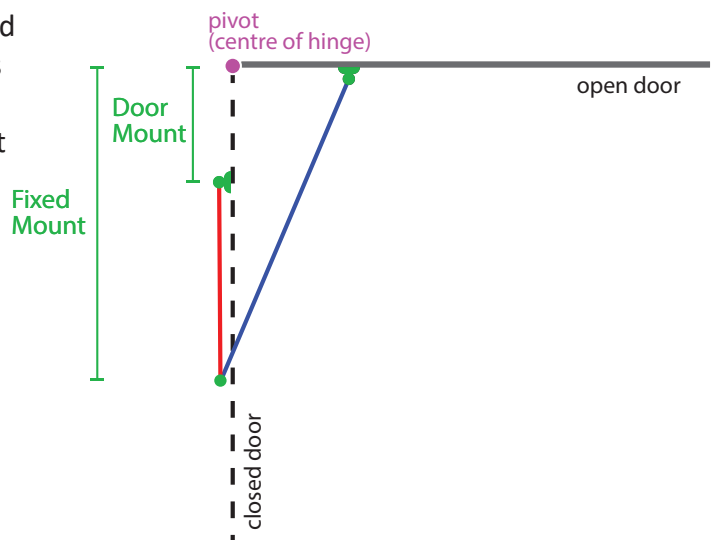
1. Situations:

1a. If you are replacing existing gas struts please check the label to see if a force is noted. This could be shown in Newtons, for example "250N", "1000N", or it could be shown in pounds "30lb". If you have this information then we only need this and the extended length of the gas strut (centre to centre of end connections) and a photo showing the type of end connection (socket, eyelet, clevis, etc).



1b. If your existing gas struts do not have the force noted on the label but they are almost holding the door then you can return **both** struts to us for force testing; we can then discuss your door performance and agree on a percentage increase to the force for the new struts.

1c. If your existing gas struts are not holding the door at all then you will need to read on and provide the following information as well as the distances from centre of hinge to the centre of each mounting point (Door Mount and Fixed Mount).



1d. If it is a new design then we need the following information and we will specify the gas strut and advise where to position the mounting brackets. If you have any restrictions or preferences for where the mounting points need to go, we need to know before doing the calculation and specifying the gas strut - please send us a detailed drawing / photos demonstrating your requirements.

DOOR LIFTING

GAS STRUTS - GUIDE TO ORDERING

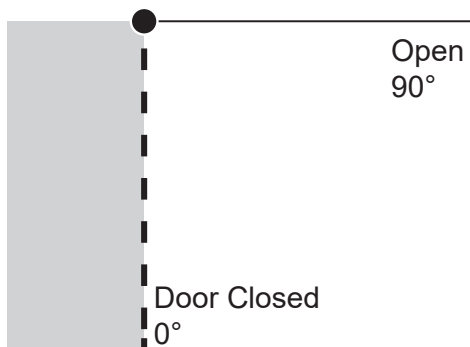
PLEASE READ BEFORE ORDERING

2. Type of Door:

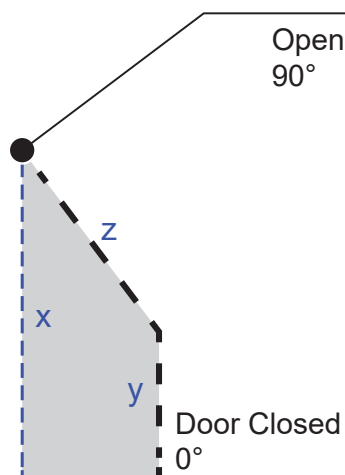
We need to know what type of door (or other) you are using the gas struts on. Different door designs have different COG (Centre of Gravity) throughout their rotation and this can completely change where the mounting points need to be and what gas strut force is required.

Below are the five most common setups. Please advise which you have and send us photos and/or a detailed drawing with all dimensions (and where applicable include **z, y, x, w, v, u, t, s** shown below):

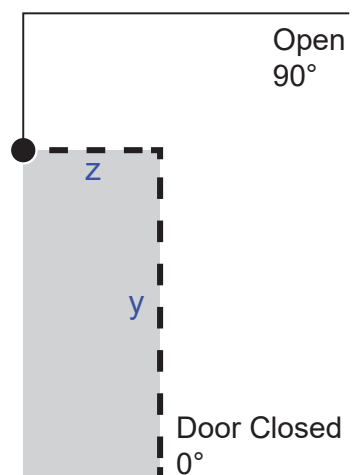
VERTICAL DOOR



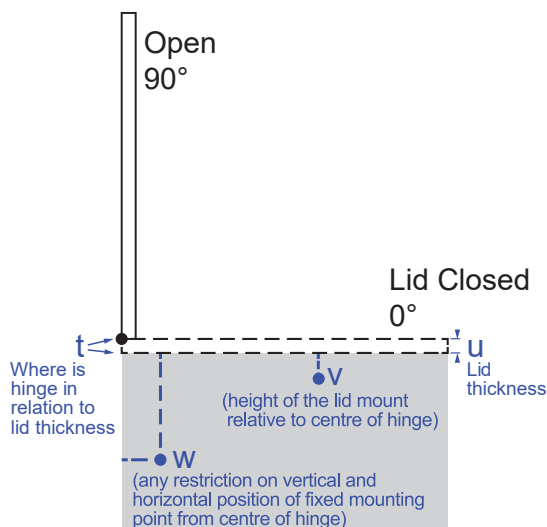
SLOPED DOOR



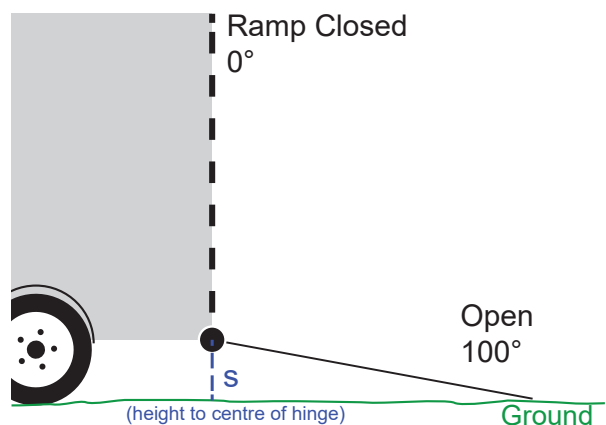
GULLWING DOOR / GULLWING LID



HATCH / LID



RAMP DOOR



DOOR LIFTING

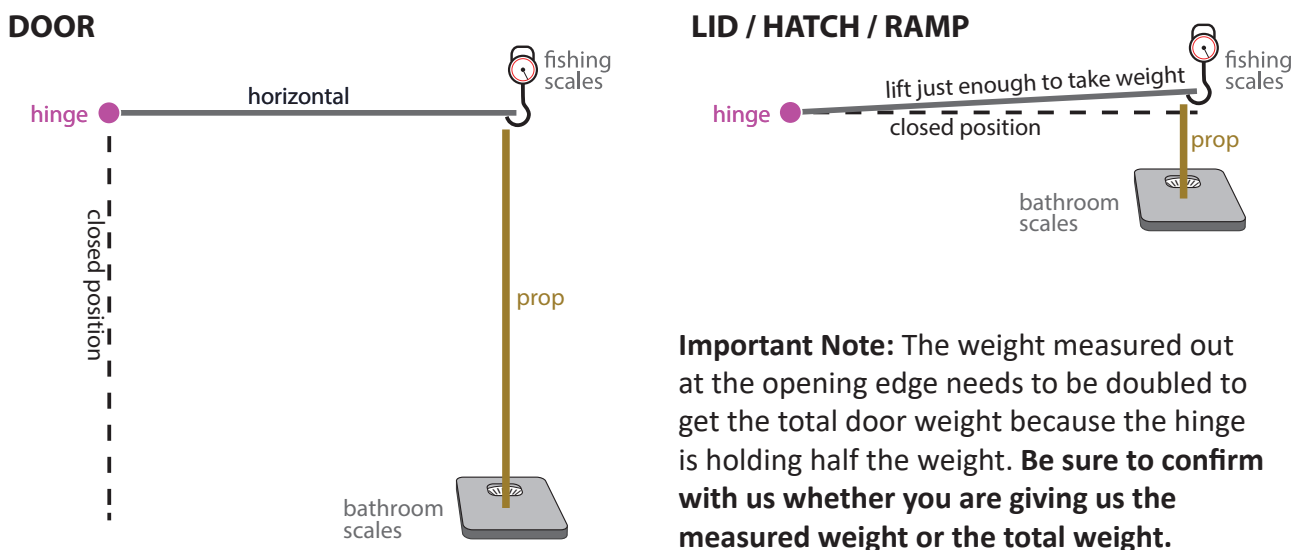
GAS STRUTS - GUIDE TO ORDERING

PLEASE READ BEFORE ORDERING

3. Door Weight and COG:

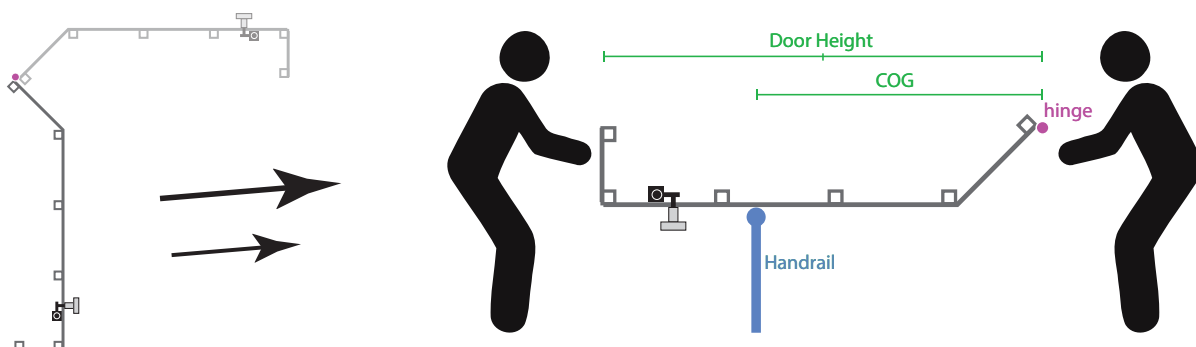
We must have accurate weight and measurements in order to give you the desired result. If you guess and under / over estimate any specifications, then you may end up with gas struts that do not function correctly. Our gas struts have a one-way valve; once we add gas to suit your specification we cannot remove it - so we cannot accept gas struts back for return. Note that while under-estimating may seem a safe gamble, a lower force specification may see you end up with a smaller diameter gas strut with a maximum force capability below what is required for your application.

- 3a. If the door is not yet installed weigh the whole finished door including hardware on some platform (or bathroom) scales.
- 3b. If the door / hatch is already installed on the hinge then (remove any existing gas struts and) hook the bottom / opening edge of the door / hatch using some hanging scales (fishing / luggage type) and lift to horizontal to get a weight. If the door is too heavy to hold with hanging scales you can use a pole to prop the door up on some platform scales - see diagram below:



- 3c. COG (Centre of Gravity): If the door / hatch is not evenly constructed from hinge to opening edge, or if there is door hardware installed this can shift the COG from the middle of the door. We need to know this so we can allow for it in the calculation.

To find the COG of an irregularly constructed door, with the door off the hinge, two people can position it on top of a round hand rail (or similar) and move it back and forth (hinge to opening edge) until it balances. The COG is the distance measured from the hinge to the balancing point. See diagram below showing a bent door with handle and hardware:



Note: Specifications can change from time to time without notice.
Cut-outs & construction should only be done with the products onsite.

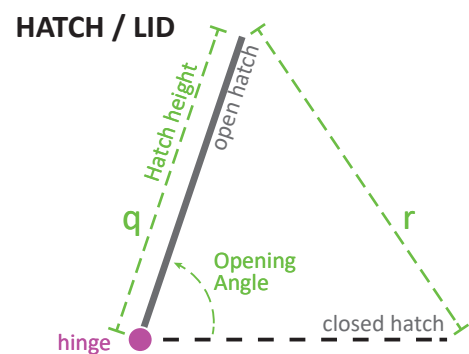
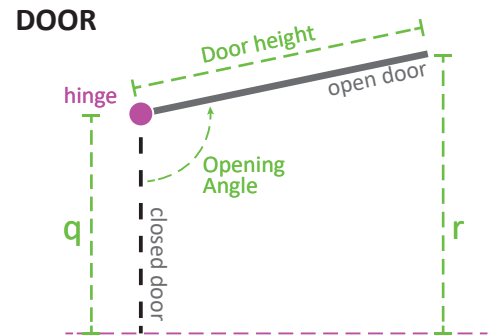
DOOR LIFTING

GAS STRUTS - GUIDE TO ORDERING PLEASE READ BEFORE ORDERING

4. Height: Measure the distance from the centre of hinge to the opening edge as shown in diagram beside.

Note: We do not ask for the length of the hinged side because it is not part of the calculation except whether to use one or two gas struts. You should only consider using one gas strut per door if you have a very lightweight door with a short hinge side, or a door with an extremely strong frame, body and hinge. Otherwise you should always have two to balance forces.

5. Opening angle: We need to know what opening angle you require for your door / hatch. Because this can be difficult to measure, if the angle is critical, it is better to give us a drawing showing the door in both closed and open position and the measurements for **r** and **q** in the diagram beside. If a door is not vertical when closed, or if a hatch is not horizontal when closed, you need to advise us.

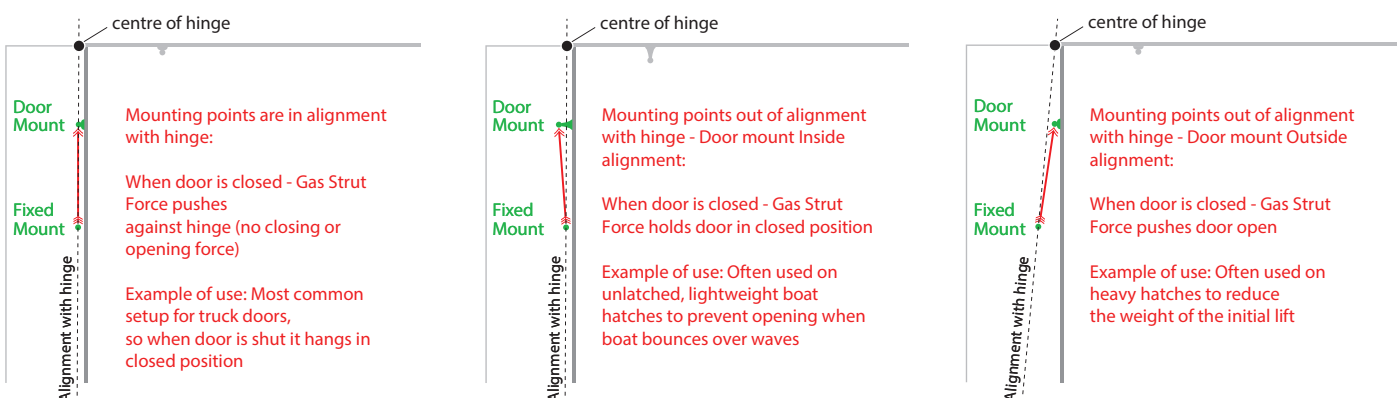


Note: When we input your desired opening angle into our standard calculator it will return mounting point positions which will ensure the door mounting point moves through your specified opening angle. If you have a thick door, or large brackets which offset your mounting point(s) then this will alter the angle the door opens to. To solve this for you we need a detailed drawing showing all measurements from the centre of hinge: door thickness, mounting bracket offsets, door closed and open positions. We will then specify the appropriate gas strut and mounting positions to achieve the desired door open angle.

If you already have gas struts and need to solve this issue onsite during installation:

- Open the door to the desired opening angle
- Mark the door mounting point position that we have specified on the door (allowing for bracket offsets)
- From this door mounting point, measure the extended length of the gas strut down to the body / frame and mark your desired fixed mounting point position (allowing for bracket offsets)
- Now check that throughout door closing rotation the distance between the two mounting points is always larger than the minimum compressed length of the gas strut. (**Minimum Compressed Length = Extended Length - Stroke**)

In addition to this, offset mounting points will effect how the door performs in closed position. The gas strut may push the door open, or, hold the door closed (see below diagram). This should be considered when designing mounting brackets.



DOOR LIFTING

GAS STRUTS - GUIDE TO ORDERING

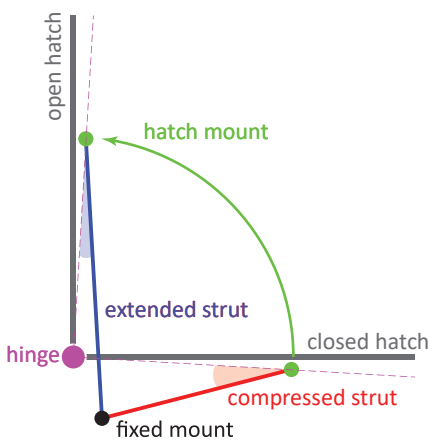
PLEASE READ BEFORE ORDERING

6. **Hatches / Lids** require more consideration of mounting positions to achieve the correct gas strut performance. However, as long as you provide us with accurate weight and measurements and install the mounting points exactly where we specify - we can make a hatch weightless to lift, or with a little weight remaining to keep it closed, or design it so the gas strut force can hold the hatch closed.

The appropriate gas strut setup for a hatch will depend on the hatch weight, opening angle and how it is to be used. See some common examples below:

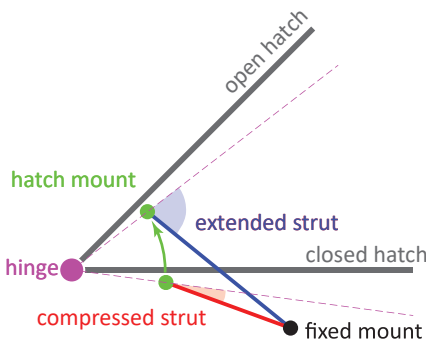
For heavy hatches opening up close to vertical

Hatch Closed: strut angled up to help initial lift
Hatch Open: strut close to hinge to reduce efficiency



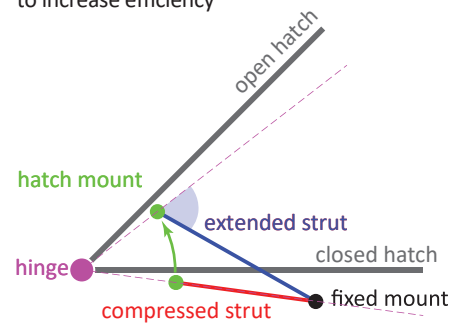
For heavy hatches with shallow opening angle

Hatch Closed: strut angled up to help initial lift
Hatch Open: strut almost perpendicular to lid to increase efficiency



For light hatches with shallow opening angle

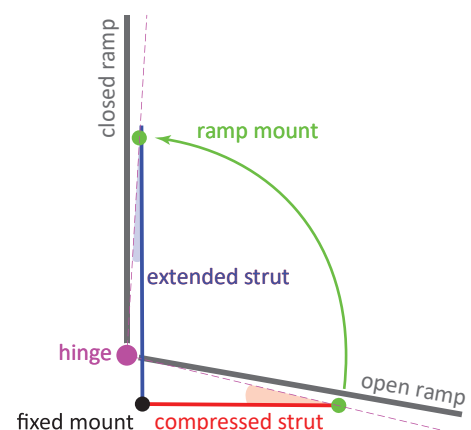
Hatch Closed: strut angled at hinge so no upward force
Hatch Open: strut almost perpendicular to lid to increase efficiency



Note: The pink dashed lines emanating from the centre of hinge and passing through the centre of the hatch mounting point. The angle which the gas strut makes with the pink dashed line dictates the efficiency of the gas strut force and contributes to the overall size of the lever arm creating the desired hatch rotation. The closer the angle is to 90°, the more efficient the gas strut is. The shallower the angle the less efficient the gas strut is.

So, while a hatch mounting point further from the hinge can contribute to a larger lever arm, if it results in a shallow gas strut angle it can undermine the gain. The tricky part is to get the right balance between the two for both open and closed hatch positions. We have the tools and skills to achieve this.

7. **Ramp Doors (e.g. horse float)** require a mounting point below the hinge such that the strut has some angle and efficiency when the ramp is down (at it's largest Torque value), but as close as possible to the vertical plane through the centre of hinge so that when the ramp door is in closed position (where the Torque value is close to zero) the angle is very shallow so the gas strut is as inefficient as possible so you are able to pull the ramp door down. If the strut has too much angle in closed position it will be too hard to pull open.



Note: Specifications can change from time to time without notice.
Cut-outs & construction should only be done with the products onsite.

DOOR LIFTING

GAS STRUTS - STANDARD

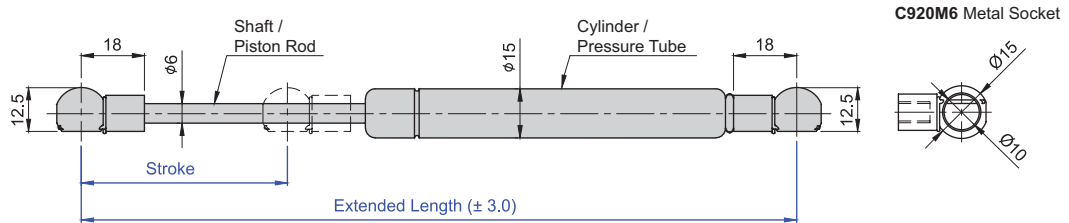
6mm PISTON 300N (MAX)

NI-SLIDE STEEL

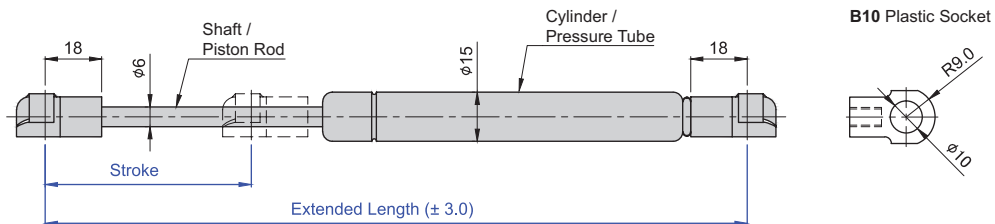
- High quality German specification & Japanese quality management
- All struts supplied with female ball socket ends & male 10mm ball studs with 13mm M8 thread
- Piston treated with Ni-slide nitrating process for corrosion resistance
- Cylinder rolled, not welded, for optimal seal
- Superior damping control with patented labyrinth piston



C6



B10-090253



Code	Force Range (N)	Stroke (mm)	Extended (mm)	Ø Piston (mm)	Ø Cylinder (mm)
C6-060195-XXXN	50 - 300	60	195	6	15
C6-080240-XXXN	50 - 300	80	240	6	15
B10-080240-XXXN	50 - 300	80	240	6	15
B10-090253-XXXN	60 - 300	90	253	6	15
C6-100280-XXXN	50 - 300	100	280	6	15

Lengths of most gas struts can be increased up to 20mm, in 5mm increments.

DOOR LIFTING

GAS STRUTS - OUTDOOR / MARINE

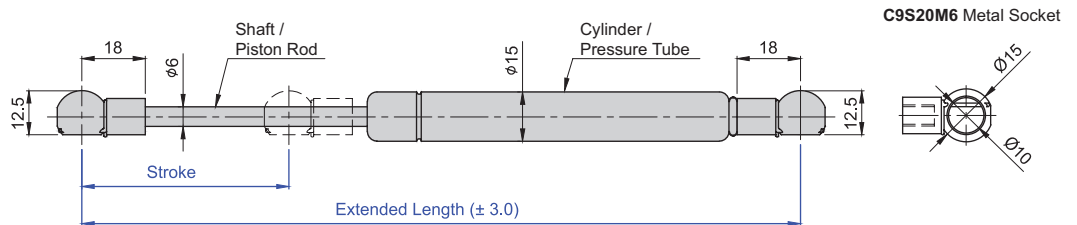
6mm PISTON 300N (MAX)

STAINLESS STEEL

- High quality German specification & Japanese quality management
- All struts supplied with female ball socket ends & male 10mm ball studs with 13mm M8 thread
- 316 stainless steel shaft & cylinder, 303 stainless steel socket ends and ball stud brackets
- High corrosion resistance, non-magnetic
- Rolled not welded for optimal seal
- Superior damping control with patented labyrinth piston



S6



Code	Force Range (N)	Stroke (mm)	Extended (mm)	Ø Piston (mm)	Ø Cylinder (mm)
S6-060195-XXXN	50 - 300	60	195	6	15
S6-080240-XXXN	50 - 300	80	240	6	15
S6-100280-XXXN	50 - 300	100	280	6	15

Lengths of most gas struts can be increased up to 20mm, in 5mm increments.

Note: Specifications can change from time to time without notice.
Cut-outs & construction should only be done with the products onsite.

DOOR LIFTING

GAS STRUTS - STANDARD

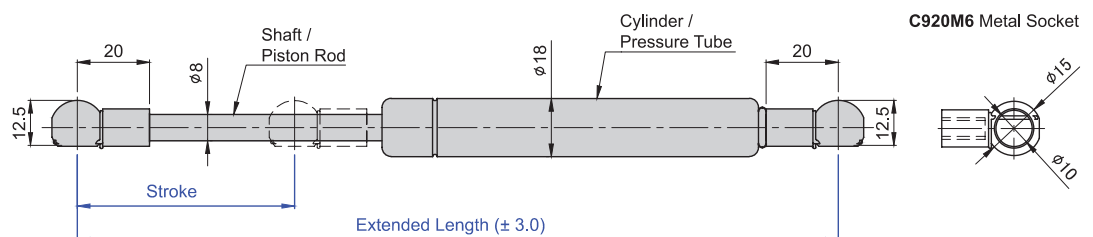
8mm PISTON 700N (MAX)

NI-SLIDE STEEL

- High quality German specification & Japanese quality management
- All struts supplied with female ball socket ends & male 10mm ball studs with 13mm M8 thread
- Piston treated with Ni-slide nitrating process for corrosion resistance
- Cylinder rolled, not welded, for optimal seal
- Superior damping control with patented labyrinth piston



C8



Code	Force Range (N)	Stroke (mm)	Extended (mm)	Ø Piston (mm)	Ø Cylinder (mm)
C8-075230-XXXN	100 - 700	75	230	8	18
C8-080245-XXXN	500 - 700	80	245	8	18
C8-090260-XXXN	50 - 700	90	260	8	18
C8-110290-XXXN	150 - 700	110	290	8	18
C8-100295-XXXN	100 - 700	100	295	8	18
C8-115310-XXXN	50 - 700	115	310	8	18
C8-125330-XXXN	50 - 700	125	330	8	18
C8-135350-XXXN	50 - 700	135	350	8	18
B10-140365-XXXN	150 - 700	140	365	8	18
C8-148375-XXXN	50 - 700	148	375	8	18
C8-165405-XXXN	50 - 700	165	405	8	18
C8-165410-XXXN*	100 - 700	165	410	8	18
C8-177430-XXXN	50 - 700	177	430	8	18
C8-185450-XXXN	100 - 700	185	450	8	18
C8-190460-XXXN	100 - 700	190	460	8	18
C8-200485-XXXN	100 - 700	200	485	8	18

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Lengths of most gas struts can be increased up to 20mm, in 5mm increments.

*Gas strut already has 5mm extension end(s).

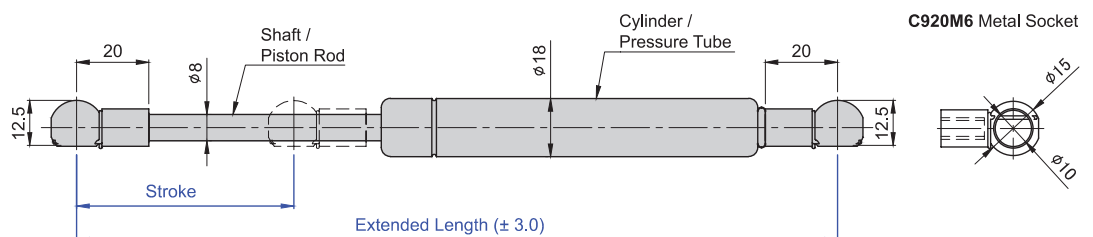
DOOR LIFTING

GAS STRUTS - STANDARD 8mm PISTON 700N (MAX) NI-SLIDE STEEL

- High quality German specification & Japanese quality management
- All struts supplied with female ball socket ends & male 10mm ball studs with 13mm M8 thread
- Piston treated with Ni-slide nitrating process for corrosion resistance
- Cylinder rolled, not welded, for optimal seal
- Superior damping control with patented labyrinth piston



C8



Code	Force Range (N)	Stroke (mm)	Extended (mm)	Ø Piston (mm)	Ø Cylinder (mm)
...Continued from previous page...					
C8-210500-XXXN	30 - 700	210	500	8	18
C8-210505-XXXN*	30 - 700	210	505	8	18
C8-220525-XXXN	100 - 700	220	525	8	18
C8-230540-XXXN	100 - 700	230	540	8	18
C8-240560-XXXN	100 - 700	240	560	8	18
C8-250575-XXXN	100 - 700	250	575	8	18
C8-250585-XXXN	100 - 700	250	585	8	18
C8-265610-XXXN	100 - 700	265	610	8	18
C8-275630-XXXN	100 - 700	275	630	8	18
C8-295670-XXXN	100 - 700	295	670	8	18
C8-310700-XXXN	100 - 700	310	700	8	18

Lengths of most gas struts can be increased up to 20mm, in 5mm increments.

*Gas strut already has 5mm extension end(s)

Note: Specifications can change from time to time without notice.
Cut-outs & construction should only be done with the products onsite.

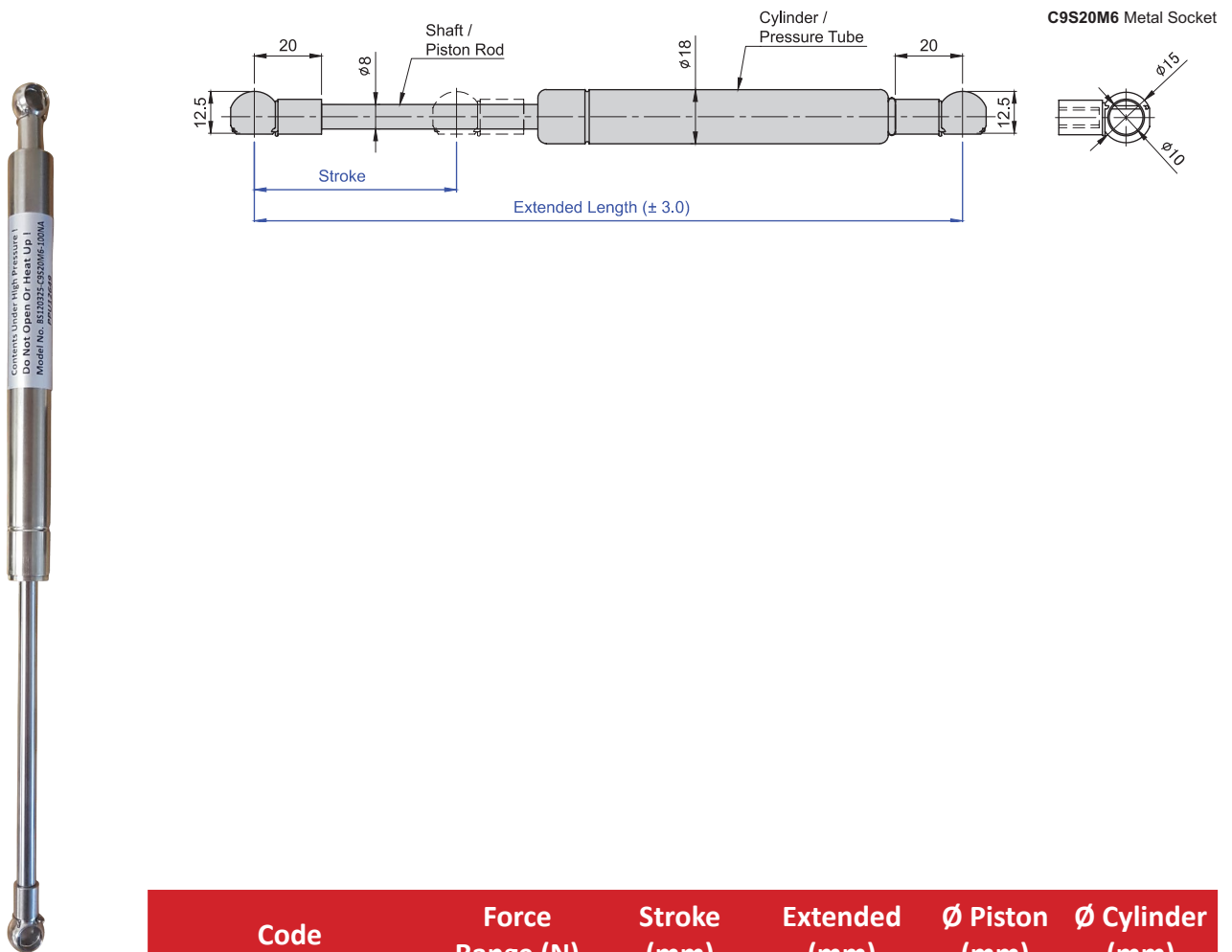
DOOR LIFTING

GAS STRUTS - OUTDOOR / MARINE

8mm PISTON 650N (MAX)

STAINLESS STEEL

- High quality German specification & Japanese quality management
- All struts supplied with female ball socket ends & male 10mm ball studs with 13mm M8 thread
- 316 stainless steel shaft & cylinder, 303 stainless steel socket ends and ball stud brackets
- High corrosion resistance, non-magnetic
- Rolled not welded for optimal seal
- Superior damping control with patented labyrinth piston



S8

Code	Force Range (N)	Stroke (mm)	Extended (mm)	Ø Piston (mm)	Ø Cylinder (mm)
S8-120325-XXXN	100 - 650	120	325	8	18
S8-165410-XXXN	100 - 650	165	410	8	18
S8-215510-XXXN	100 - 650	215	510	8	18
S8-265610-XXXN	100 - 650	265	610	8	18
S8-320710-XXXN	100 - 650	320	710	8	18
S8-365810-XXXN	100 - 650	365	810	8	18

Lengths of most gas struts can be increased up to 20mm, in 5mm increments.

DOOR LIFTING

GAS STRUTS - STANDARD

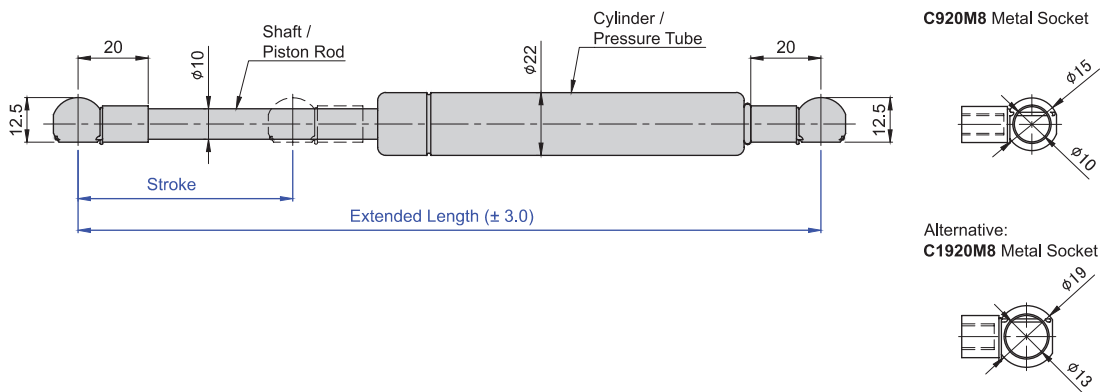
10mm PISTON 1100N (MAX)

NI-SLIDE STEEL

- High quality German specification & Japanese quality management
- All struts supplied with female ball socket ends & male 10mm ball studs with 13mm M8 thread
- Piston treated with Ni-slide nitrating process for corrosion resistance
- Cylinder rolled, not welded, for optimal seal
- Superior damping control with patented labyrinth piston



C10



Code	Force Range (N)	Stroke (mm)	Extended (mm)	Ø Piston (mm)	Ø Cylinder (mm)
C10-100300-XXXXN***	100 - 1100	100	300	10	22
C10-150385-XXXXN	100 - 1100	150	385	10	22
C10-160405-XXXXN	450 - 1100	160	405	10	22
C10-185450-XXXXN	100 - 1100	185	450	10	22
C10-210500-XXXXN	100 - 1100	210	500	10	22
C10-210520-XXXXN****	100 - 1100	210	520	10	22
C10-230540-XXXXN	100 - 1100	230	540	10	22
C10-250585-XXXXN	100 - 1100	250	585	10	22
C10-250600-XXXXN***	100 - 1100	250	600	10	22
C10-280650-XXXXN	100 - 1100	280	650	10	22
C10-280670-XXXXN	100 - 1100	280	670	10	22

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Lengths of most gas struts can be increased up to 20mm, in 5mm increments.

***Gas strut already has 15mm extension end(s).

****Gas strut already has 20mm extension end(s).

Note: Specifications can change from time to time without notice.
Cut-outs & construction should only be done with the products onsite.

SELECTLOK
NEW ZEALAND LTD

DOOR LIFTING

GAS STRUTS - STANDARD

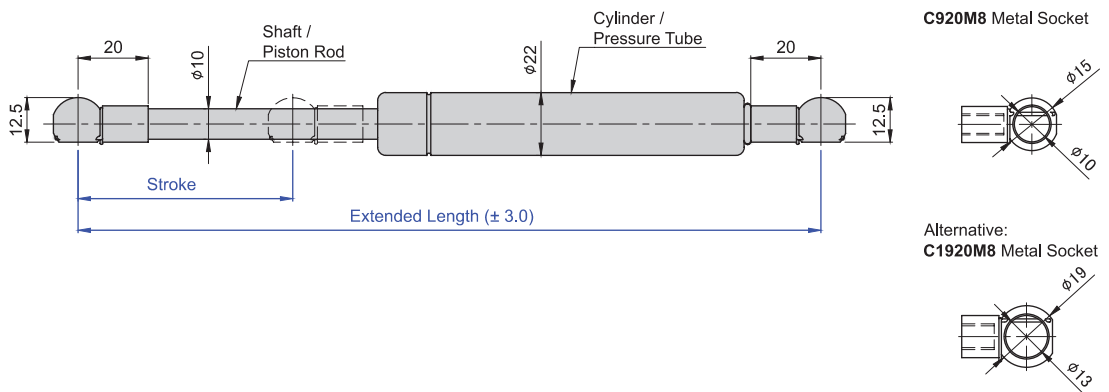
10mm PISTON 1100N (MAX)

NI-SLIDE STEEL

- High quality German specification & Japanese quality management
- All struts supplied with female ball socket ends & male 10mm ball studs with 13mm M8 thread
- Piston treated with Ni-slide nitrating process for corrosion resistance
- Cylinder rolled, not welded, for optimal seal
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C10



Code	Force Range (N)	Stroke (mm)	Extended (mm)	Ø Piston (mm)	Ø Cylinder (mm)
...Continued from previous page...					
C10-300700-XXXXN	100 - 1100	300	700	10	22
C10-325730-XXXXN	100 - 1100	325	730	10	22
C10-325735-XXXXN*	100 - 1100	325	735	10	22
C10-330750-XXXXN	100 - 1100	330	750	10	22
C10-350785-XXXXN	100 - 1100	350	785	10	22
B10-350795-XXXXN	300 - 1100	350	795	10	22
C10-350800-XXXXN***	100 - 1100	350	800	10	22
C10-370830-XXXXN	100 - 1100	370	830	10	22
C10-400885-XXXXN	100 - 1100	400	885	10	22
C10-400900-XXXXN***	100 - 1100	400	900	10	22

Lengths of most gas struts can be increased up to 20mm, in 5mm increments.

*Gas strut already has 5mm extension end(s).

***Gas strut already has 15mm extension end(s).

DOOR LIFTING

GAS STRUTS - OUTDOOR / MARINE

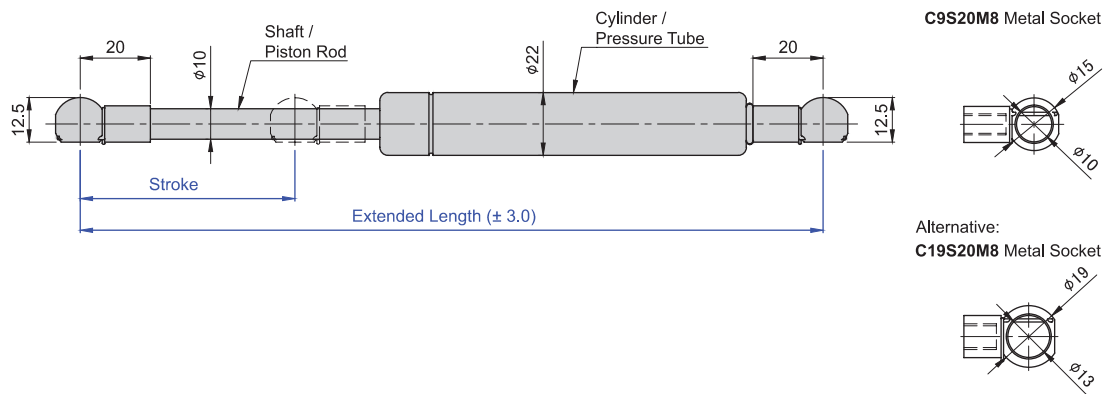
10mm PISTON 1000N (MAX)

STAINLESS STEEL

- High quality German specification & Japanese quality management
- All struts supplied with female ball socket ends & male 10mm ball studs with 13mm M8 thread
- 316 stainless steel shaft & cylinder, 303 stainless steel socket ends and ball stud brackets
- High corrosion resistance, non-magnetic
- Rolled not welded for optimal seal
- Superior damping control with patented labyrinth piston



S10



Code	Force Range (N)	Stroke (mm)	Extended (mm)	Ø Piston (mm)	Ø Cylinder (mm)
S10-165410-XXXN	100 - 1000	165	410	10	22
S10-250605-XXXN	100 - 1000	250	605	10	22
S10-350785-XXXN	100 - 1000	350	785	10	22
S10-350805-XXXN****	100 - 1000	350	805	10	22
S10-410910-XXXN	100 - 1000	410	910	10	22

Lengths of most gas struts can be increased up to 20mm, in 5mm increments.

****Gas strut already has 20mm extension end(s).

Note: Specifications can change from time to time without notice.
Cut-outs & construction should only be done with the products onsite.

DOOR LIFTING

GAS STRUTS - STANDARD

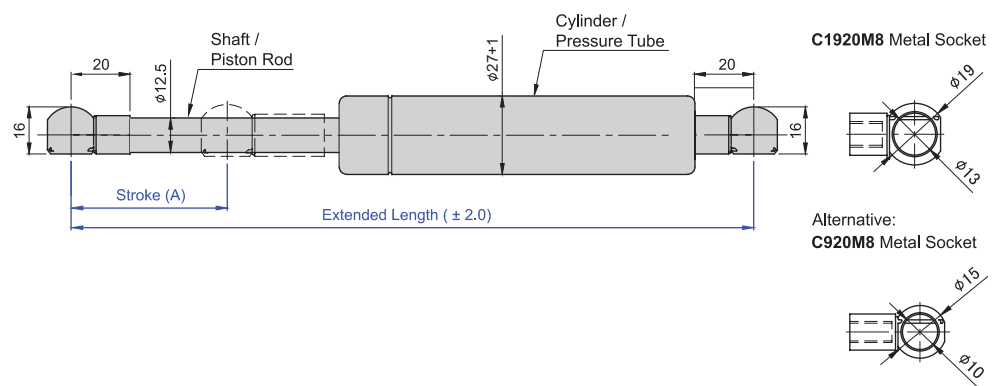
12mm PISTON 2000N (MAX)

NI-SLIDE STEEL

- High quality German specification & Japanese quality management
- All struts supplied with female ball socket ends & male 13mm ball studs with 13mm M8 thread
- Piston treated with Ni-slide nitrating process for corrosion resistance
- Cylinder rolled, not welded, for optimal seal
- Superior damping control with patented labyrinth piston



C12



Code	Force Range (N)	Stroke (mm)	Extended (mm)	Ø Piston (mm)	Ø Cylinder (mm)
C12-150385-XXXXN	100-2000	150	385	12.5	27
C12-150395-XXXXN**	100 - 2000	150	395	12.5	27
C12-220530-XXXXN	100 - 2000	220	530	12.5	27
C12-260620-XXXXN	100 - 2000	260	620	12.5	27
C12-280670-XXXXN	100 - 2000	280	670	12.5	27
C12-300700-XXXXN	100 - 2000	300	700	12.5	27
C12-325730-XXXXN	100 - 2000	325	730	12.5	27
C12-325750-XXXXN****	100 - 2000	325	750	12.5	27
C12-350785-XXXXN	100 - 2000	350	785	12.5	27
C12-375830-XXXXN	100 - 2000	375	830	12.5	27
C12-375850-XXXXN****	100 - 2000	375	850	12.5	27
C12-400900-XXXXN	100 - 2000	400	900	12.5	27

Lengths of most gas struts can be increased up to 20mm, in 5mm increments.

**Gas strut already has 10mm extension ends.

****Gas strut already has 20mm extension end(s).

DOOR LIFTING

GAS STRUTS - OUTDOOR / MARINE

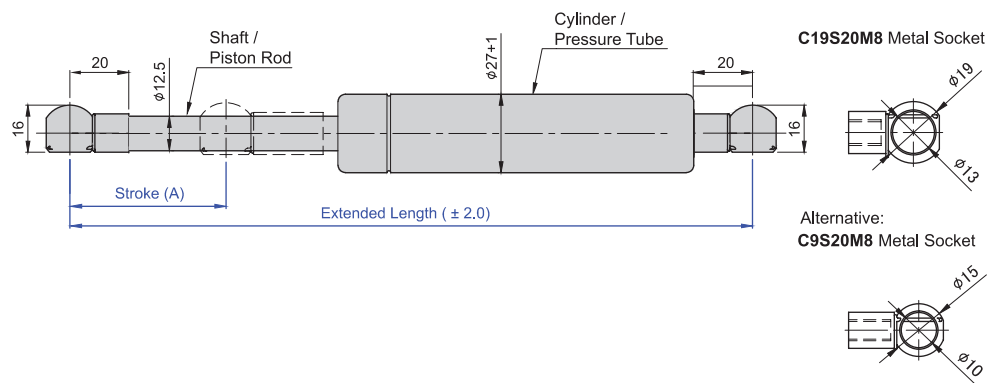
12mm PISTON 1800N (MAX)

STAINLESS STEEL

- High quality German specification & Japanese quality management
- All struts supplied with female ball socket ends & male 13mm ball studs with 13mm M8 thread
- 316 stainless steel shaft & cylinder, 303 stainless steel socket ends and ball stud brackets
- High corrosion resistance, non-magnetic
- Rolled not welded for optimal seal
- Superior damping control with patented labyrinth piston



S12



Code	Force Range (N)	Stroke (mm)	Extended (mm)	Ø Piston (mm)	Ø Cylinder (mm)
S12-220530-XXXXN	100 - 1800	220	530	12.5	27
S12-300700-XXXXN	100 - 1800	300	700	12.5	27
S12-400900-XXXXN	100 - 1800	400	900	12.5	27

Lengths of most gas struts can be increased up to 20mm, in 5mm increments.

Note: Specifications can change from time to time without notice.
Cut-outs & construction should only be done with the products onsite.

DOOR LIFTING

GAS STRUTS - STANDARD

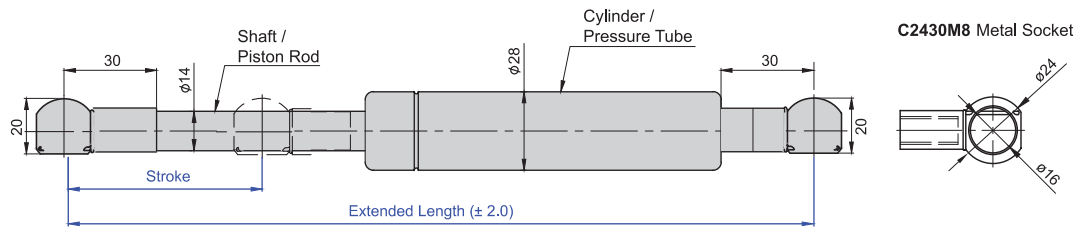
14mm PISTON 2500N (MAX)

NI-SLIDE STEEL

- High quality German specification & Japanese quality management
- All struts supplied with female ball socket ends & male 16mm ball studs with 20mm M8 thread
- Piston treated with Ni-slide nitrating process for corrosion resistance
- Cylinder rolled, not welded, for optimal seal
- Superior damping control with patented labyrinth piston



C14



Code	Force Range (N)	Stroke (mm)	Extended (mm)	Ø Piston (mm)	Ø Cylinder (mm)
C14-100320-XXXXN	100 - 2500	100	320	14	28
C14-190500-XXXXN	100 - 2500	190	500	14	28
C14-250605-XXXXN	100 - 2500	250	605	14	28
C14-350815-XXXXN	100 - 2500	350	815	14	28
C14-400920-XXXXN ⁺	100 - 2500	400	920	14	28
C14-4501030-XXXXN	100 - 2500	450	1030	14	28
C14-5001135-XXXXN	100 - 2500	500	1135	14	28
C14-5501300-XXXXN	100 - 2500	550	1300	14	28

Lengths of most gas struts can be increased up to 20mm, in 5mm increments.

⁺Gas strut has shorter C2425M8 end

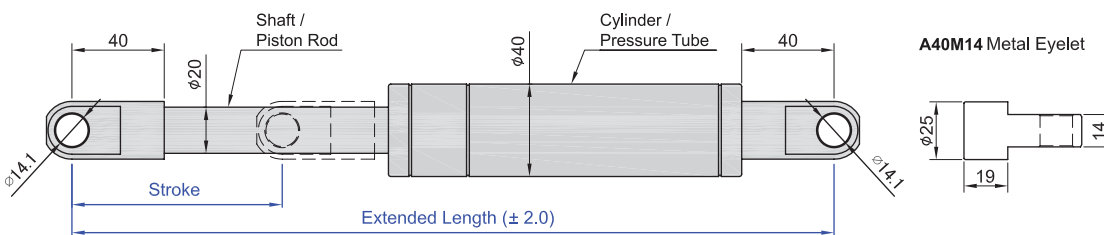
DOOR LIFTING

GAS STRUTS - STANDARD

20mm PISTON 5000N (MAX)

NI-SLIDE STEEL

- High quality German specification & Japanese quality management
- C20 gas struts supplied with aluminium eyelet ends with 14mm hole
- Piston treated with Ni-slide nitrating process for corrosion resistance
- Cylinder rolled, not welded, for optimal seal
- Superior damping control with patented labyrinth piston



C20

Code	Force Range (N)	Stroke (mm)	Extended (mm)	Ø Piston (mm)	Ø Cylinder (mm)
C20-100500-XXXXN	600 - 5000	150	500	20	40
C20-350900-XXXXN	600 - 5000	350	900	20	40
C20-5001200-XXXN	600 - 5000	500	1200	20	40

These are new products still under development. Please check with us to confirm specifications.

Note: Specifications can change from time to time without notice. Cut-outs & construction should only be done with the products onsite.

DOOR LIFTING

GAS STRUTS - SAFETY LOCKING

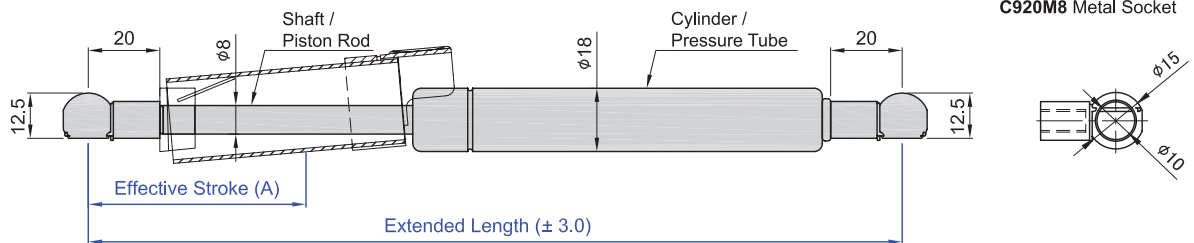
8mm & 10mm PISTON

NI-SLIDE STEEL

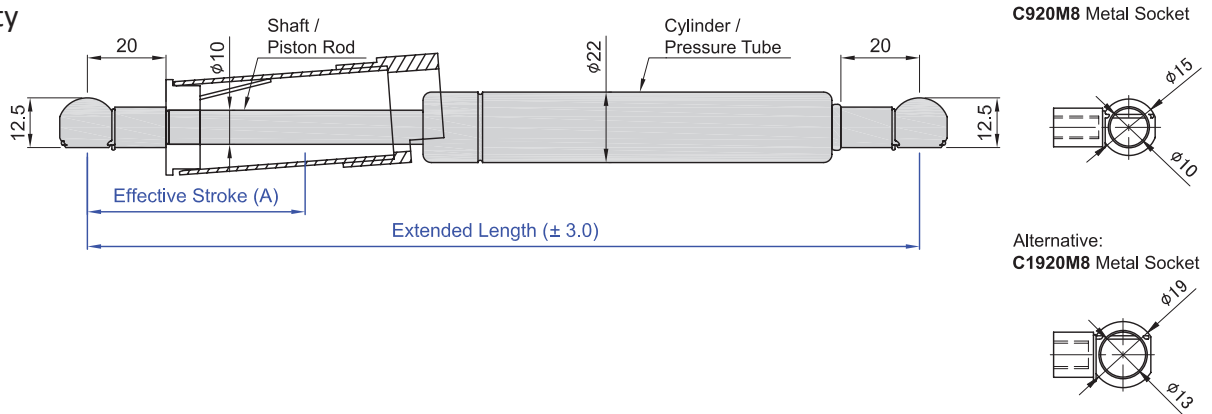
- Safety locking mechanism at full extension. Red collar must be depressed to close door / lid.
- High quality German specification & Japanese quality management
- All struts supplied with female ball socket ends & male 10mm ball studs with 15mm M8 thread
- Piston treated with Ni-slide nitrating process for corrosion resistance
- Cylinder rolled, not welded, for optimal seal
- Superior damping control with patented labyrinth piston



C8 Safety



C10 Safety



Code	Force Range (N)	Stroke (mm)	Extended (mm)	Ø Piston (mm)	Ø Cylinder (mm)	Ø Red Collar (mm)
C8-080245-XXXNPK	200 - 800	045	245	8	18	29
C10-210510-XXXXNPK	500 - 1100	175	510	10	22	36

Lengths of most gas struts can be increased up to 20mm, in 5mm increments.

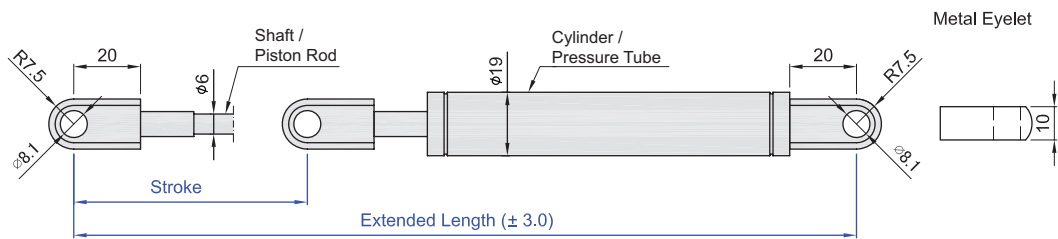
DOOR LIFTING

GAS STRUTS - REVERSE ACTION TENSION (PULL) GAS SPRINGS NI-SLIDE STEEL

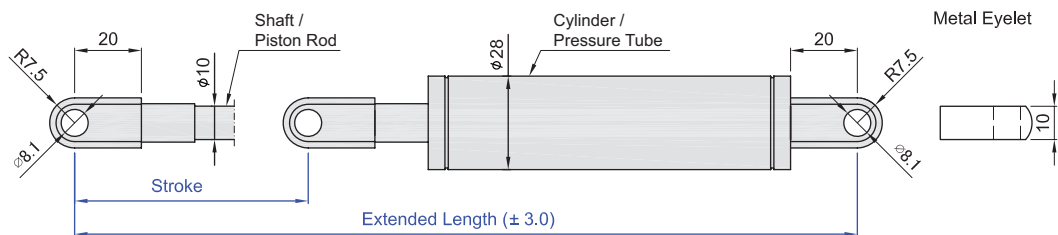
- Tension gas springs function opposite to standard gas struts: Instead of pushing the two ends apart the force pulls the two ends together.
- High quality German specification & Japanese quality management
- Supplied with eyelet ends
- Piston treated with Ni-slide nitrating process for corrosion resistance
- Cylinder rolled, not welded, for optimal seal
- Superior damping control with patented labyrinth piston



RC6



RC10



Code	Force Range (N)	Stroke (mm)	Extended (mm)	Ø Piston (mm)	Ø Cylinder (mm)
RC6-100340-50N	50 - 350	100	340	6	19
RC10-200540-150N	150 - 1200	200	540	10	28
RC10-300740-150N	150 - 1200	300	740	10	28
RC10-5501350-150N	150 - 2000	550	1350	10	40

These are new products still under development. Please check with us to confirm specifications.

Note: Specifications can change from time to time without notice. Cut-outs & construction should only be done with the products onsite.

DOOR LIFTING

GAS STRUTS - ANTI-DUST BOOTS STEEL & STAINLESS STEEL

- Rubber dust boot
- Helps protect seal from foreign particles stuck to shaft
- Helps protect seal seat from corrosion
- Prolongs gas strut life
- To fit - remove socket end of gas strut, slide boot up shaft and cover cylinder end



Code	Compatible Gas Strut Models
RB-0818-30	C8, S8
RB-1022-30	C10, S10
RB-1222-30	C12 (a few models)
RB-1228-35	C12, S12
RB-1428-35	C14

GAS STRUTS - FEMALE SOCKET ENDS QUICK RELEASE ENDS STEEL & STAINLESS STEEL

- Spring loaded quick release female socket for 10mm diameter balls
- Ideal for lids that need to be removed (ute lids, boat hatches)
- Knurled for easy grip



Showing **QRE10M8** connected to **SW12** male ball stud bracket (available separately)



QRE10M#
Steel

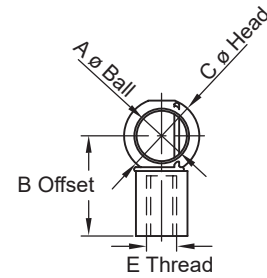


QRE10M#-SS
304 S/Steel

Code	Ball A (mm)	Thread E (mm)	Offset B (mm)	Overall Dia C (mm)	Max Force (N)	Material / Finish
QRE10M6	10	M6	24.6	14.3	1100	Steel / Black
QRE10M8	10	M8	28.6	15.9	1100	Steel / Black
QRE10M6-SS	10	M6	24.6	14.3	1100	304 S/Steel
QRE10M8-SS	10	M8	28.6	15.9	1100	304 S/Steel

DOOR LIFTING

GAS STRUTS - FEMALE SOCKET ENDS STEEL & STAINLESS STEEL



- Female socket ends for gas struts to fit male ball bracket



B10M#



C9##M#



C9S##M#



C19##M8



C19S##M8



C24##M8

Code	Ball A (mm)	Thread E (mm)	Offset B (mm)	Head C (mm)	Max Force (N)	Material / Finish
B10M6	10	M6	20	18x18	650	Plastic / Black
B10M8	10	M8	20	18x18	1000	Plastic / Black
C918M6	10	M6	18	15	1100	Steel / Black
C920M6-20DEG	10	M6	20	15	1100	Steel / Black
C920M6	10	M6	20	15	1100	Steel / Black
C925M6	10	M6	25	15	1100	Steel / Black
C930M6	10	M6	30	15	1100	Steel / Black
C918M8	10	M8	18	15	1100	Steel / Black
C920M8	10	M8	20	15	1100	Steel / Black
C925M8	10	M8	25	15	1100	Steel / Black
C930M8	10	M8	30	15	1100	Steel / Black
C9S20M6	10	M6	20	15	1000	303 S/Steel
C9S25M6	10	M6	25	15	1000	303 S/Steel
C9S30M6	10	M6	30	15	1000	303 S/Steel
C9S20M8	10	M8	20	15	1000	303 S/Steel
C9S25M8	10	M8	25	15	1000	303 S/Steel
C9S30M8	10	M8	30	15	1000	303 S/Steel
C1920M8	13	M8	20	19	2000	Steel / Black
C1925M8	13	M8	25	19	2000	Steel / Black
C1930M8	13	M8	30	19	2000	Steel / Black
C19S20M8	13	M8	20	19	1800	303 S/Steel
C19S25M8	13	M8	25	19	1800	303 S/Steel
C19S30M8	13	M8	30	19	1800	303 S/Steel
C2425M8	16	M8	25	24	2500	Steel / Y/Zinc
C2430M8	16	M8	30	24	2500	Steel / Y/Zinc
C2435M8	16	M8	35	24	2500	Steel / Y/Zinc

Codes in **bold** are the socket ends supplied with standard length gas struts

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SELECTLOK
NEW ZEALAND LTD

DOOR LIFTING

GAS STRUTS - MOUNTING BRACKETS

MALE BALL STUDS

STEEL & STAINLESS STEEL



SW11

SW13-SHORT

SW12

BS-002S2

SWS13

SWS12

SWS12-18L

SW14

SW4611

SW8272

SW14-L

SW-LS016

SWS14

SW18

TN-M8x17-ZP

Code	Ball A (mm)	Thread E (mm)	Offset B (mm)	C (mm)	D (mm)	F (mm)	Max Force (N)	Material / Finish	Matching Socket End
SW11	10	M6	14.2	4.9	12.5	12	400	Steel / Black	C9##M#
SW13-SHORT	10	M8	15	4.7	8	13	1200	Steel / Zinc	C9##M#
SW12	10	M8	14.5	4.5	13.5	12	1200	Steel / Black	C9##M#
BS-002S2	10	Rivet	12.5	3	4	11*	1000**	303 S/Steel	C9S##M#
SWS-13	10	M8	12.5	3	12	13	1200	303 S/Steel	C9S##M#
SWS-12	10	M8	14.5	4.5	12	12	1200	303 S/Steel	C9S##M#
SWS-12-18L	10	M8	14.5	4.5	18	12	1200	303 S/Steel	C9S##M#
SW14	13	M8	15	4.5	12.5	13	1800	Steel / Black	C19##M8
SW4611	13	M8	14	3	15	13	1800	Steel / Zinc	C19##M8
SW8272	13	M10	14	3	20	17	2000	Steel / Zinc	C19##M8
SW14-L	13	M8	22	10	20	13	2000	Steel / Y/Zinc	C19##M8
SW-LS016	13	M10	31	20	45	14	2000	Steel / Zinc	C19##M8
SWS-14	13	M8	15	4.5	12.5	13	1800	303 S/Steel	C19S##M8
SW18	16	M10	17	3	19	13*	2500	Steel / Y/Zinc	C243#M8

*Not Hex Shape **Depends on plate and riveting quality

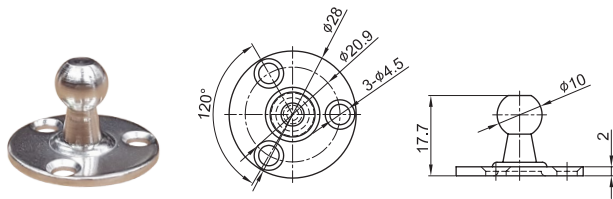
Code	Description	Material / Finish
TN-M8X17-ZP	Pronged T-Nut to create M8x17mm thread in timber	Steel / Zinc

DOOR LIFTING

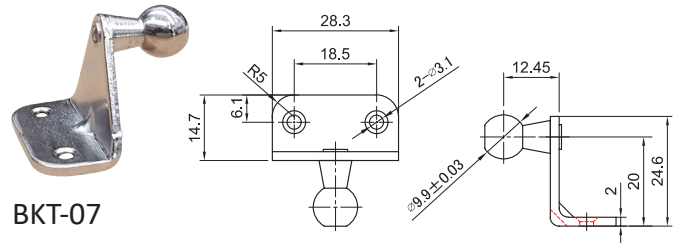
GAS STRUTS - MOUNTING BRACKETS

PLATE BRACKETS

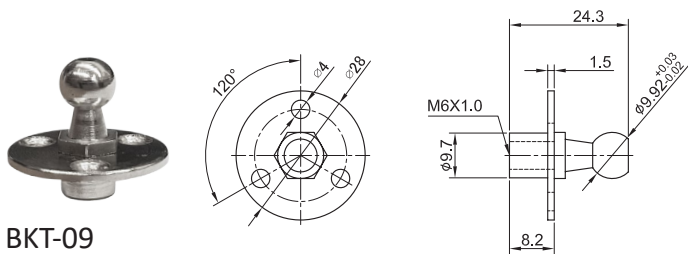
STEEL & STAINLESS STEEL



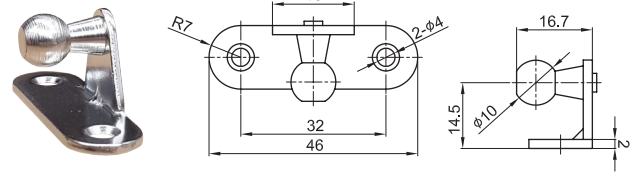
BKT-09A



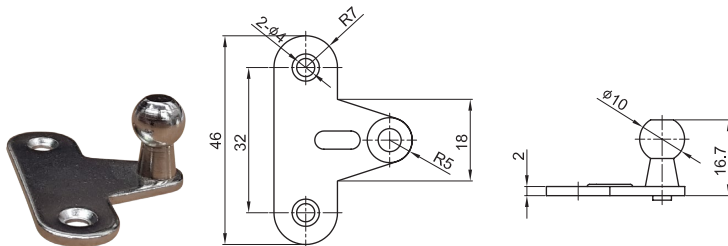
BKT-07



BKT-09



BKT-06
BKT-06SS



BKT-08
BKT-08SS

Code	Ball A (mm)	Ball Stud Angle to Mounting Surface	Ball Stud Offset to Mounting Surface (mm)	Max Force (N)	Material / Finish	Matching Socket End
BKT-09A	10	Perpendicular	13.5	300	Steel / Zinc	C9##M#
BKT-09	10	Perpendicular	13.5	400	Steel / Zinc	C9##M#
BKT-08	10	Perpendicular	12.5	300	Steel / Zinc	C9##M#
BKT-07	10	Parallel	18.5	200	Steel / Zinc	C9##M#
BKT-06	10	Parallel	14.5	300	Steel / Zinc	C9##M#
BKT-08SS	10	Perpendicular	12.5	300	303 S/Steel	C9S##M#
BKT-06SS	10	Parallel	14.5	300	303 S/Steel	C9S##M#

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DOOR LIFTING

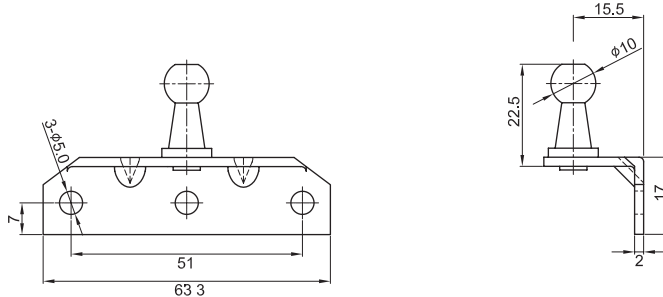
GAS STRUTS - MOUNTING BRACKETS

PLATE BRACKETS

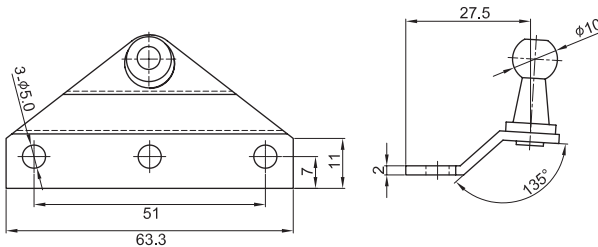
STEEL



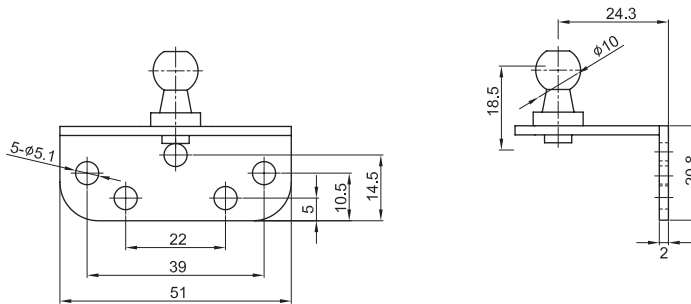
BKT-01



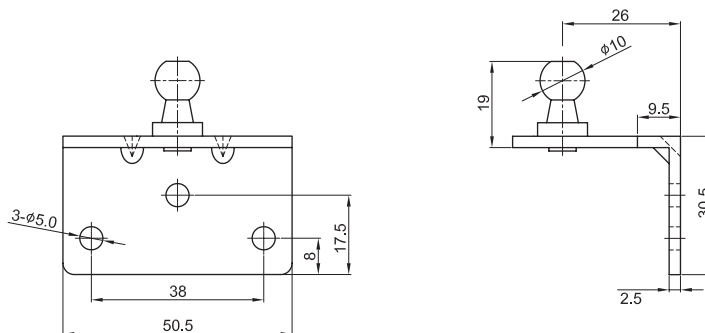
BKT-02



BKT-03



BKT-04



Code	Ball A (mm)	Ball Stud Angle to Mounting Surface	Ball Stud Offset to Mounting Surface (mm)	Max Force (N)	Material / Finish	Matching Socket End
BKT-01	10	Parallel	15.5	600	Steel / Zinc	C9##M#
BKT-02	10	94°	25.5	600	Steel / Zinc	C9##M#
BKT-03	10	Parallel	24.3	600	Steel / Zinc	C9##M#
BKT-04	10	Parallel	26	700	Steel / Zinc	C9##M#

DOOR LIFTING

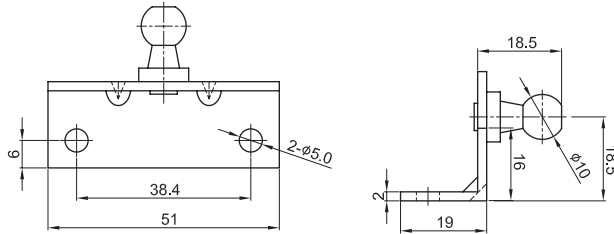
GAS STRUTS - MOUNTING BRACKETS

PLATE BRACKETS

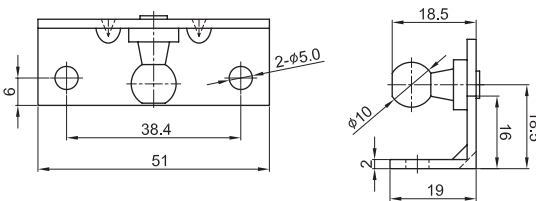
STEEL & STAINLESS STEEL



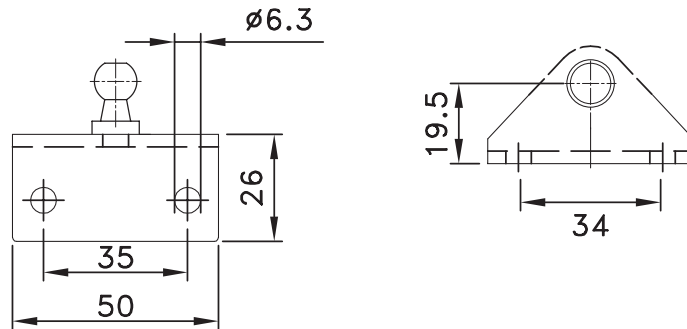
BKT-10-O
BKT-10-OSS



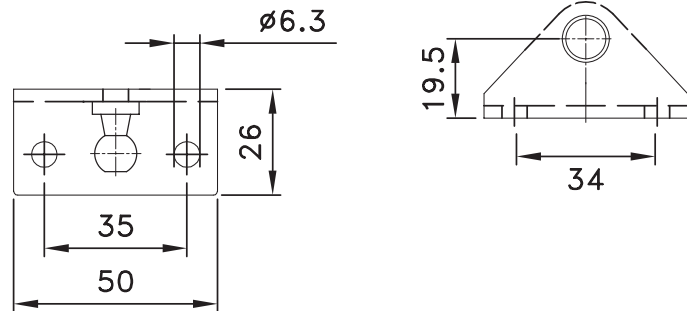
BKT-10-I
BKT-10-ISS



BKT-10-OHDSS



BKT-10-IHDSS



Code	Ball A (mm)	Ball Stud Angle to Mounting Surface	Ball Stud Offset to Mounting Surface (mm)	Max Force (N)	Material / Finish	Matching Socket End
BKT-10-O	10	Parallel	18.5	600	Steel / Zinc	C9##M#
BKT-10-I	10	Parallel	18.5	600	Steel / Zinc	C9##M#
BKT-10-OSS	10	Parallel	18.5	600	304/303 S/Steel	C9S##M#
BKT-10-ISS	10	Parallel	18.5	600	304/303 S/Steel	C9S##M#
BKT-10-OHDSS	10	Parallel	19.5	700	304/303 S/Steel	C9S##M#
BKT-10-IHDSS	10	Parallel	19.5	700	304/303 S/Steel	C9S##M#

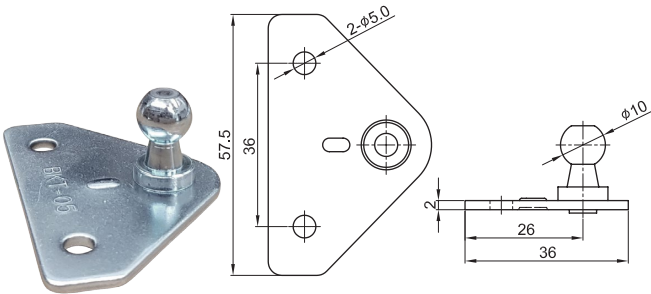
DOOR LIFTING

DOOR LIFTING

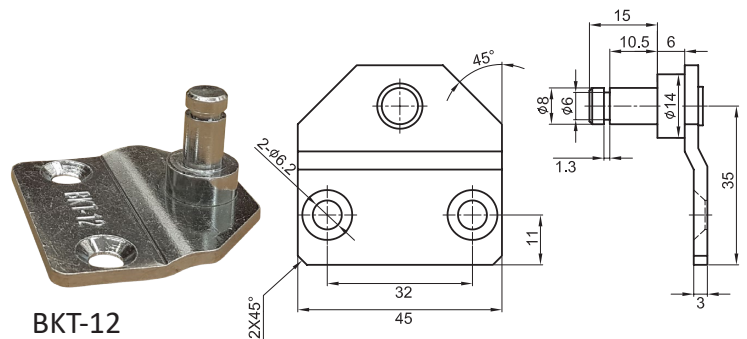
GAS STRUTS - MOUNTING BRACKETS

PLATE BRACKETS

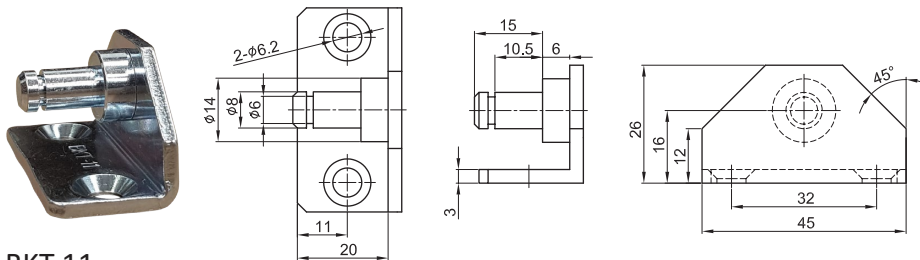
STEEL & STAINLESS STEEL



BKT-05
BKT-05SS



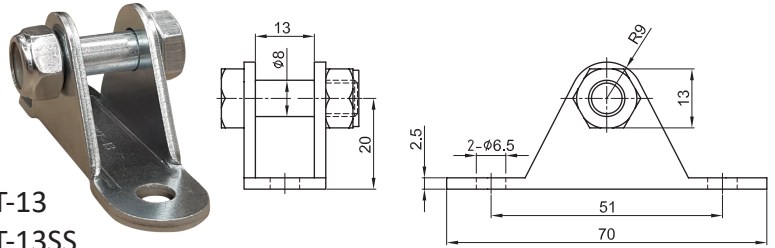
BKT-12
BKT-12SS



BKT-11
BKT-11SS



BKT-15SS



BKT-13
BKT-13SS

Code	Ball A (mm)	Ball Stud Angle to Mounting Surface	Ball Stud Offset to Mounting Surface (mm)	Max Force (N)	Material / Finish	Matching Socket End
BKT-05	10	Perpendicular	14	600	Steel / Zinc	C9##M#
BKT-12	Axle	Perpendicular	16.5	1100	Steel / Zinc	Eyelet
BKT-11	Axle	Parallel	16	1100	Steel / Zinc	Eyelet
BKT-13	Axle	Parallel	20	2500	Steel / Zinc	Eyelet
BKT-05SS	10	Perpendicular	14	600	304/303 S/Steel	C9S##M#
BKT-12SS	Axle	Perpendicular	16.5	1100	304/303 S/Steel	Eyelet
BKT-11SS	Axle	Parallel	16	1100	304/303 S/Steel	Eyelet
BKT-13SS	Axle	Parallel	20	2500	304/303 S/Steel	Eyelet
BKT-15SS	10	Perpendicular	22	500	304/303 S/Steel	C9S##M#

DOOR LIFTING

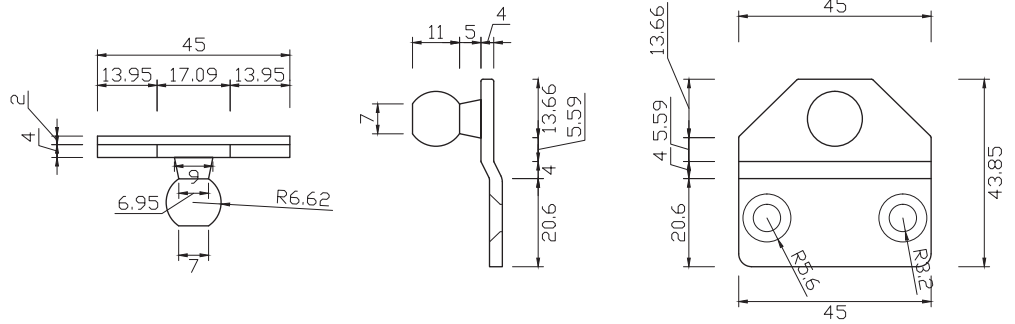
GAS STRUTS - MOUNTING BRACKETS

HEAVY DUTY PLATE BRACKETS

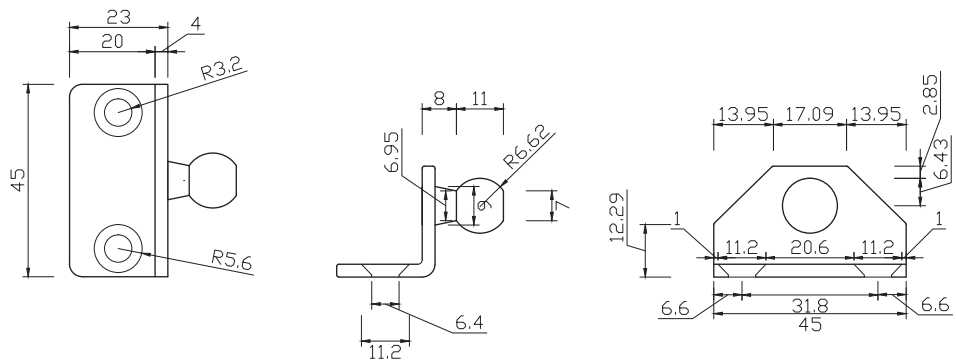
STEEL



BKT12-13



BKT11-13-0



Code	Ball A (mm)	Ball Stud Angle to Mounting Surface	Ball Stud Offset to Mounting Surface (mm)	Max Force (N)	Material / Finish	Matching Socket End
BKT-12-13	13	Perpendicular	16.5	2000	Steel / Zinc	C19##M8
BKT-11-13-O	13	Parallel	17	2000	Steel / Zinc	C19##M8

DOOR LIFTING

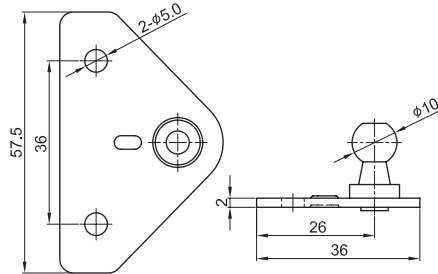
GAS STRUTS - MOUNTING BRACKETS

PLATE BRACKETS

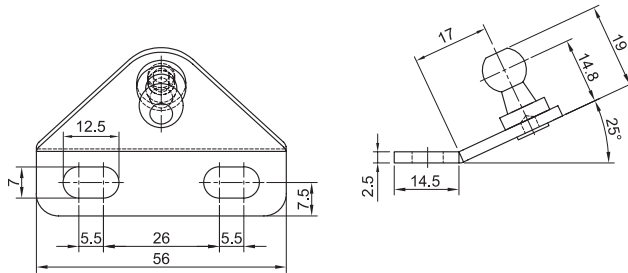
STEEL BLACK & STAINLESS STEEL



BKT-05BLK

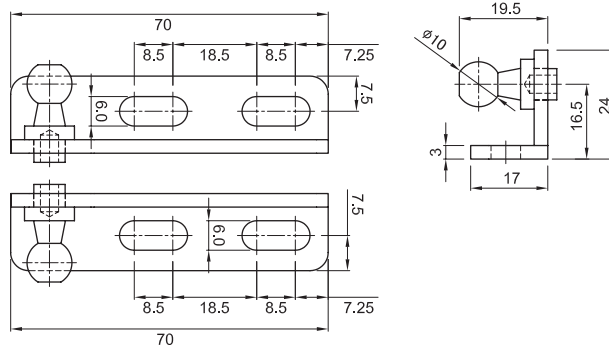


BKT-52
BKT-52SS



BKT-26-R

BKT-26-L



Code	Ball A (mm)	Ball Stud Angle to Mounting Surface	Ball Stud Offset to Mounting Surface (mm)	Max Force (N)	Material / Finish	Matching Socket End
BKT-05BLK	10	Perpendicular	14	600	Steel / Black	C9##M#
BKT-52	10	65°	22.5	700	Steel / Black	C9##M#
BKT-26-R	10	Parallel	16.5	1100	Steel / Black	C9##M#
BKT-26-L	10	Parallel	16.5	1100	Steel / Black	C9##M#
BKT-52SS	10	65°	16.5	700	304/303 S/Steel	C9S##M#

DOOR LIFTING

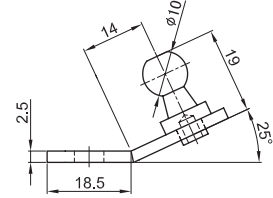
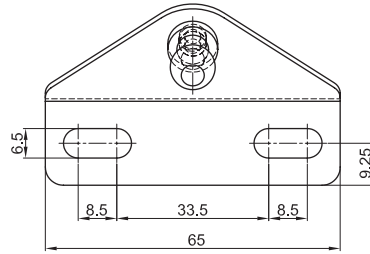
GAS STRUTS - MOUNTING BRACKETS

PLATE BRACKETS

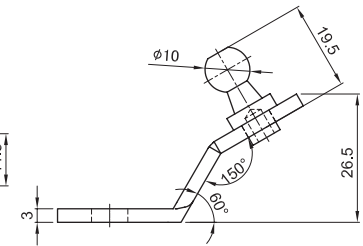
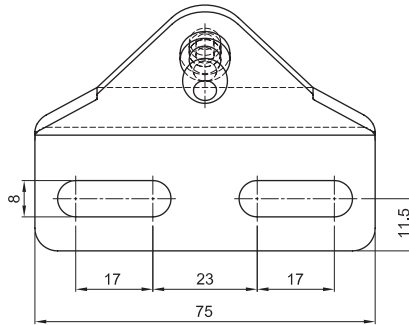
STEEL BLACK



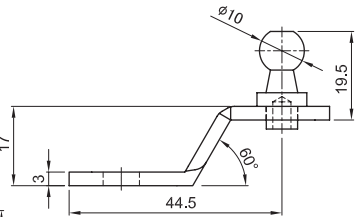
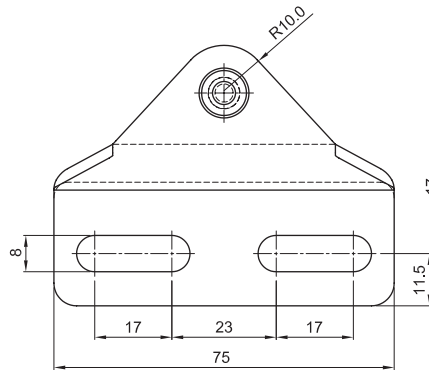
BKT-51



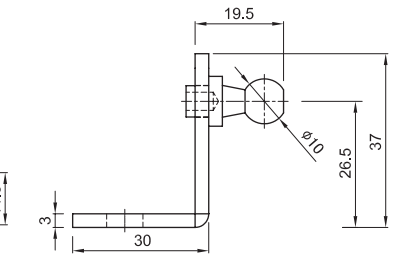
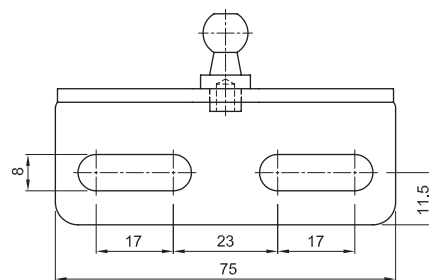
BKT-25-B



BKT-25-C



BKT-25-O



Code	Ball A (mm)	Ball Stud Angle to Mounting Surface	Ball Stud Offset to Mounting Surface (mm)	Max Force (N)	Material / Finish	Matching Socket End
BKT-51	10	65°	20	700	Steel / Black	C9##M#
BKT-25-B	10	60°	32	1100	Steel / Black	C9##M#
BKT-25-C	10	Perpendicular	30	1100	Steel / Black	C9##M#
BKT-25-O	10	Parallel	26.5	1100	Steel / Black	C9##M#

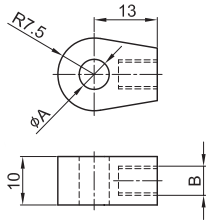
Note: Specifications can change from time to time without notice. Cut-outs & construction should only be done with the products onsite.

DOOR LIFTING

GAS STRUTS - MOUNTING BRACKETS

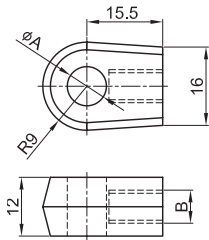
EYELET ENDS

ZINC ALLOY



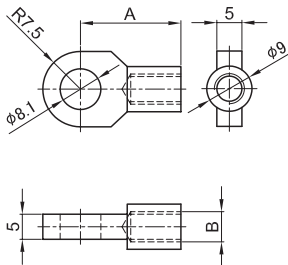
D7A

Code	Eye Dia (mm)	Thread (mm)	Offset (mm)	Thick (mm)	Max Force (N)	Material / Finish
D7A	8.1	M6	13	12	600	Zinc / Zinc



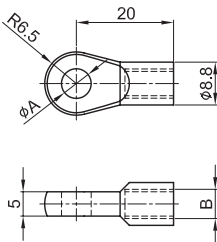
D8
D10
D13

Code	Eye Dia (mm)	Thread (mm)	Offset (mm)	Thick (mm)	Max Force (N)	Material / Finish
D8	8.1	M8	15.5	12	2000	Zinc / Zinc
D10	10.1	M8	15.5	12	2000	Zinc / Zinc
D13	13	M8	15.5	12	1500	Zinc / Zinc



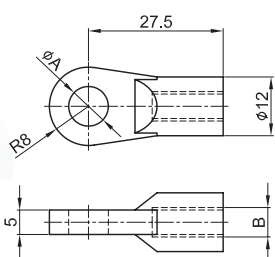
A7
BLACK

Code	Eye Dia (mm)	Thread (mm)	Offset (mm)	Thick (mm)	Max Force (N)	Material / Finish
A7 BLACK	8.1	M6	20	5	700	Zinc / Black



D6

Code	Eye Dia (mm)	Thread (mm)	Offset (mm)	Thick (mm)	Max Force (N)	Material / Finish
D6	6.1	M6	20	5	300	Zinc / Zinc



D8A
D8A2
D8A5
D8A6

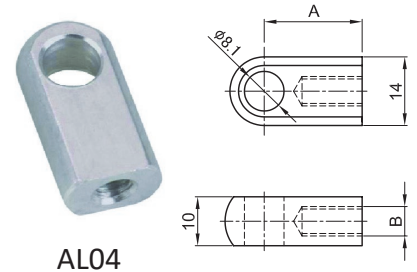
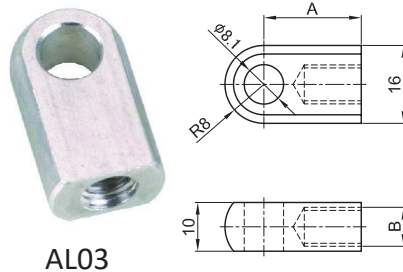
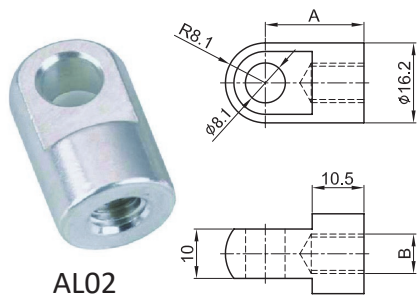
Code	Eye Dia (mm)	Thread (mm)	Offset (mm)	Thick (mm)	Max Force (N)	Material / Finish
D8A	8.1	M8	27.5	5	700	Zinc / Zinc
D8A2	8.1	M6	27.5	5	700	Zinc / Zinc
D8A5	10.1	M8	27.5	5	700	Zinc / Zinc
D8A6	10.1	M6	27.5	5	700	Zinc / Zinc

DOOR LIFTING

GAS STRUTS - MOUNTING BRACKETS

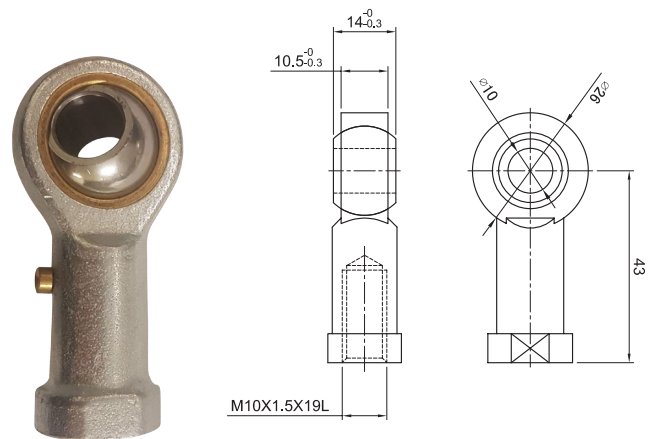
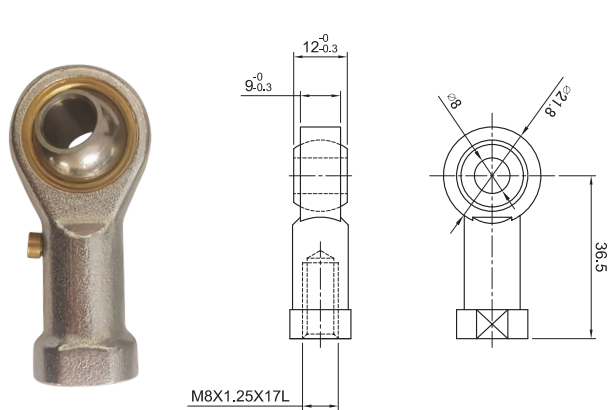
EYELET ENDS

ZINC ALLOY & ALUMINIUM



Code	Eye Dia (mm)	Thread (mm)	Offset (mm)	Thick (mm)	Max Force (N)	Material / Finish
AL02	8.1	M8	20	10	1100	Aluminium
AL03	8.1	M8	20	10	1100	Aluminium
AL04	8.1	M6	20	10	700	Aluminium

- Swivel eyelet (pillow ball)



Code	Eye Dia (mm)	Thread (mm)	Offset (mm)	Thick (mm)	Max Force (N)	Material / Finish
PHS8	8	M8	36.5	9	2000	Zinc / Zinc
PHS10	10	M10	43	10	2500	Zinc / Zinc

DOOR LIFTING

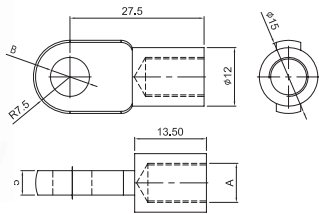
GAS STRUTS - MOUNTING BRACKETS

EYELET ENDS

STAINLESS STEEL



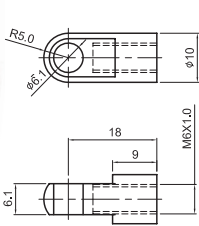
A15S08



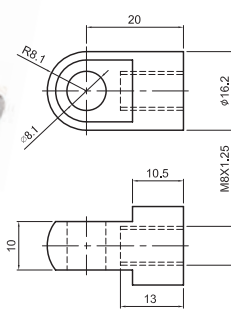
Code	Eye Dia (mm)	Thread (mm)	Offset (mm)	Thick (mm)	Max Force (N)	Material / Finish
A15S08M6	8.1	M6	27.5	5	700	303 S/Steel
A15S08M8	8.1	M8	27.5	5	1000	303 S/Steel



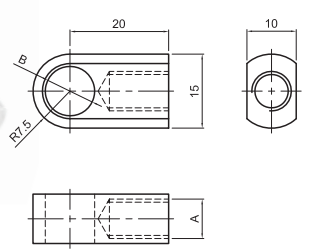
L1S



L2S



L5S



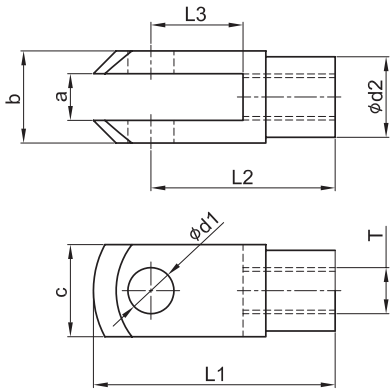
Code	Eye Dia (mm)	Thread (mm)	Offset (mm)	Thick (mm)	Max Force (N)	Material / Finish
L1S	6.1	M6	18	6.1	700	303 S/Steel
L2S	8.1	M8	20	10	2500	303 S/Steel
L5SM608	8.1	M6	20	10	700	303 S/Steel
L5SM808	8.1	M8	20	10	1100	303 S/Steel

DOOR LIFTING

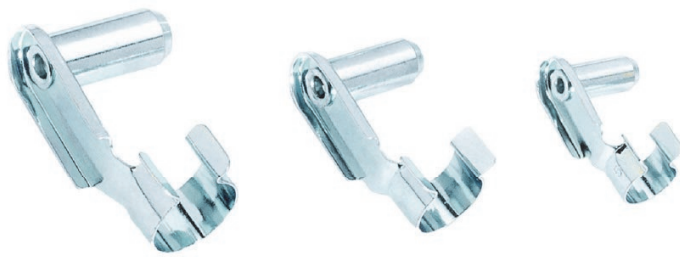
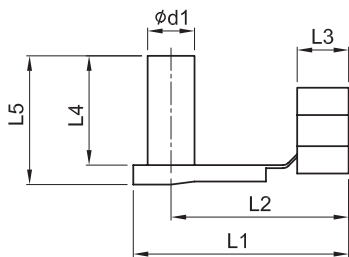
GAS STRUTS - MOUNTING BRACKETS

CLEVIS ENDS

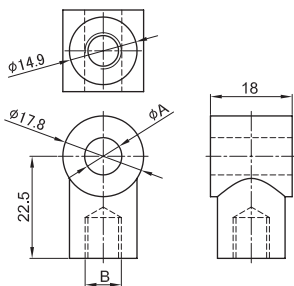
STEEL



Code	Eye Dia (mm)	Thread T (mm)	Offset L2 (mm)	Gap L3 (mm)	b & c (mm)	Max Force (N)	Material / Finish
U7	10.1	M8	40	23	19	2500	Steel / Zinc
U6	8.1	M8	32	16	16	2500	Steel / Zinc
U5	6.1	M6	25	12	12	700	Steel / Zinc



Code	Pin Dia (mm)	L2 (mm)	L4 (mm)	Material / Finish
U7-PIN	10	38	23	Steel / Zinc
U6-PIN	8	29.5	19	Steel / Zinc
U5-PIN	6	22	14	Steel / Zinc



Code	Eye Dia (mm)	Thread (mm)	Offset (mm)	Thick (mm)	Max Force (N)	Material / Finish
T10	10.1	M8	22.5	18	2500	Steel / Zinc
T8	8.1	M8	22.5	18	2500	Steel / Zinc

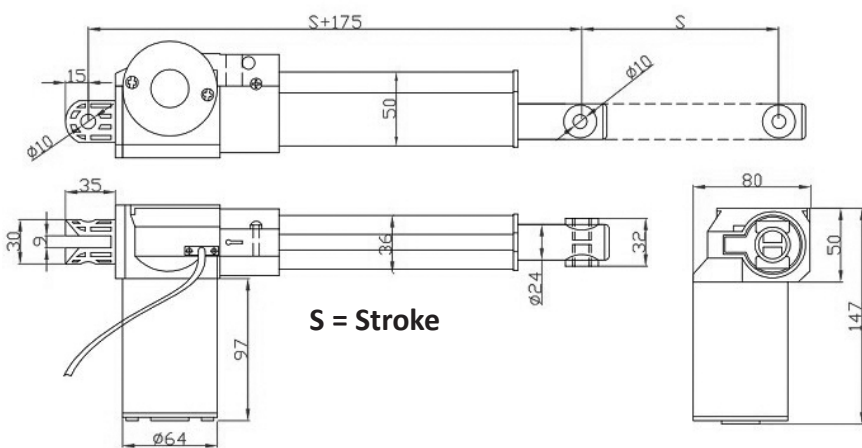
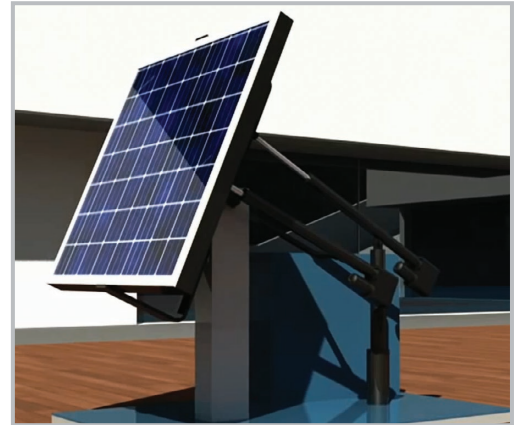
DOOR LIFTING

DOOR LIFTING

LINEAR ACTUATORS

UP TO 6,000N

- Tail gate raising / lowering
- Vehicle door opening / closing
- High or heavy windows
- Lifting / reclining chair, sofa, bed, desk, table
- Solar panel - sun tracking
- Satellite dish alignment



Code	Stroke Options (mm)	Duty Force (N)	Speed (mm/s)	Contracted Length (mm)	Extended Length (mm)
LA21-###-12V-2000N	100 / 200 / 300 / 400 / 500	1,500	15	Stroke + 175	2x Stroke + 175
LA21-###-12V-6000N	100 / 200 / 300 / 400 / 500	4,500	5	Stroke + 175	2x Stroke + 175

Other models and voltages available on request.

DOOR LIFTING

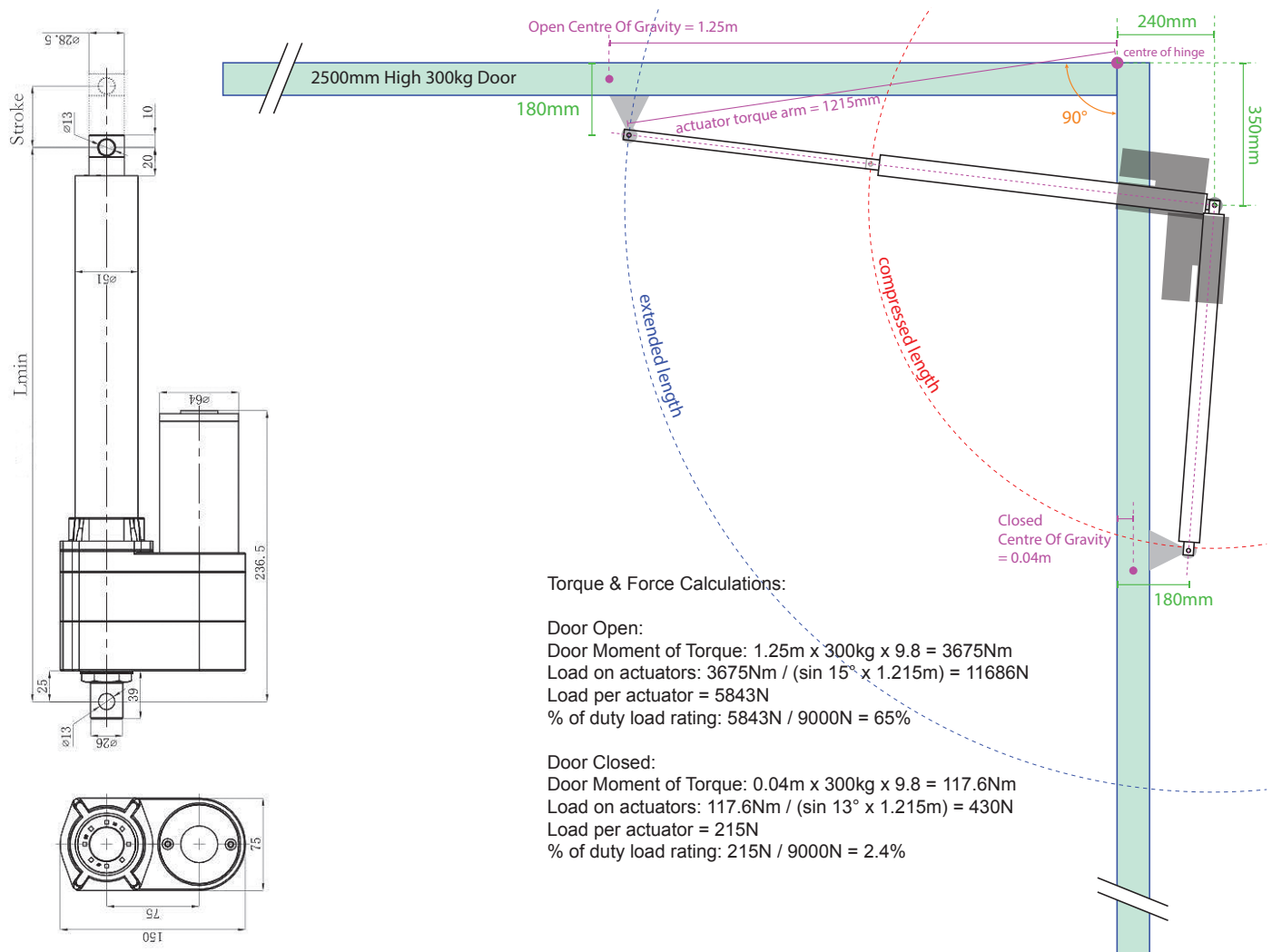
LINEAR ACTUATORS

HEAVY DUTY UP TO 15,000N

- Heavy container side doors
- Pop up shops
- Tail gate raising / lowering
- Vehicle door opening / closing
- IP65
- Ball screw
- 12V 12A Max



Example of LA50 actuator setup to lift 300kg 2.5m high container door:



Code	Stroke (mm)	Duty Force (N)	Load Speed	Unload Speed	Contracted Length (mm)	Extended Length (mm)
LA50-600MM-12V-7000N	600	5,000	11mm/sec	17mm/sec	850	1450
LA50-600MM-12V-12000N	600	9,000	6mm/sec	8mm/sec	850	1450

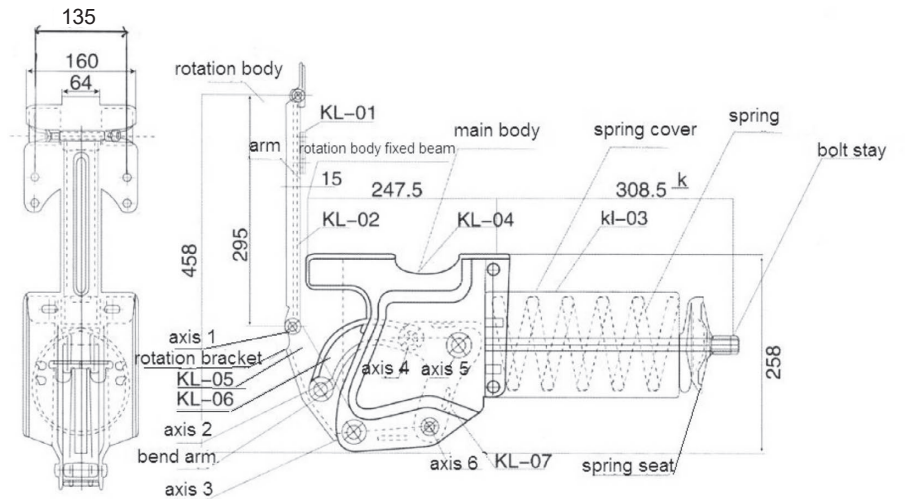
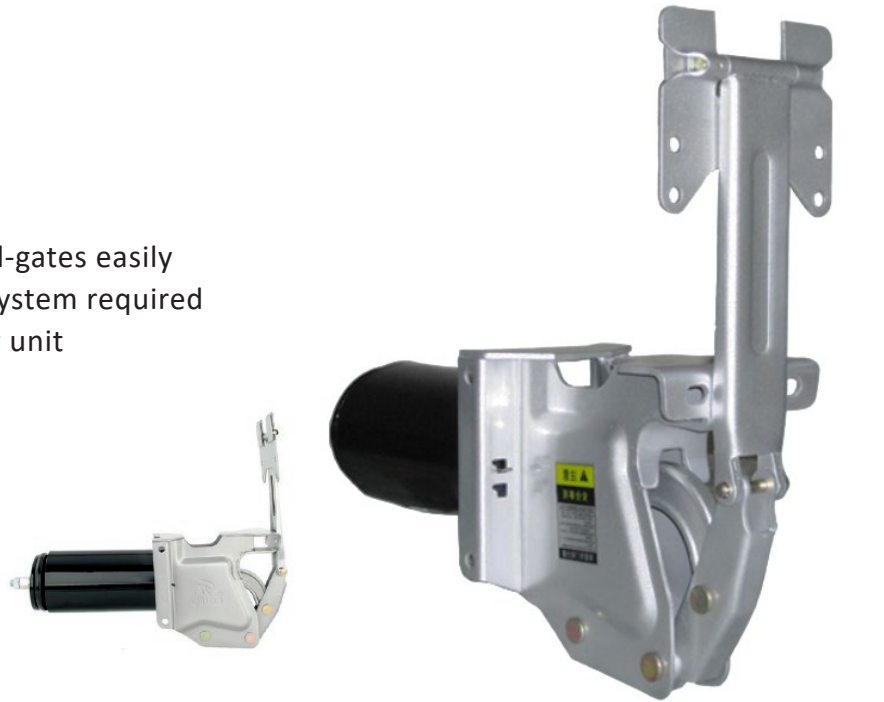
Other models and voltages available on request.

Note: Specifications can change from time to time without notice.
 Cut-outs & construction should only be done with the products onsite.

DOOR LIFTING

TRUCK GATE / TAIL GATE LIFT ASSIST

- Lower / Lift heavy side-boards and tail-gates easily
- Mechanical - no expensive hydraulic system required
- Adjust to suit weights up to 150kg per unit
- Opening angle 90° or 180°



Code	Description
TGL-Q1	Tail gate lift, <150kg, 90° / 180°

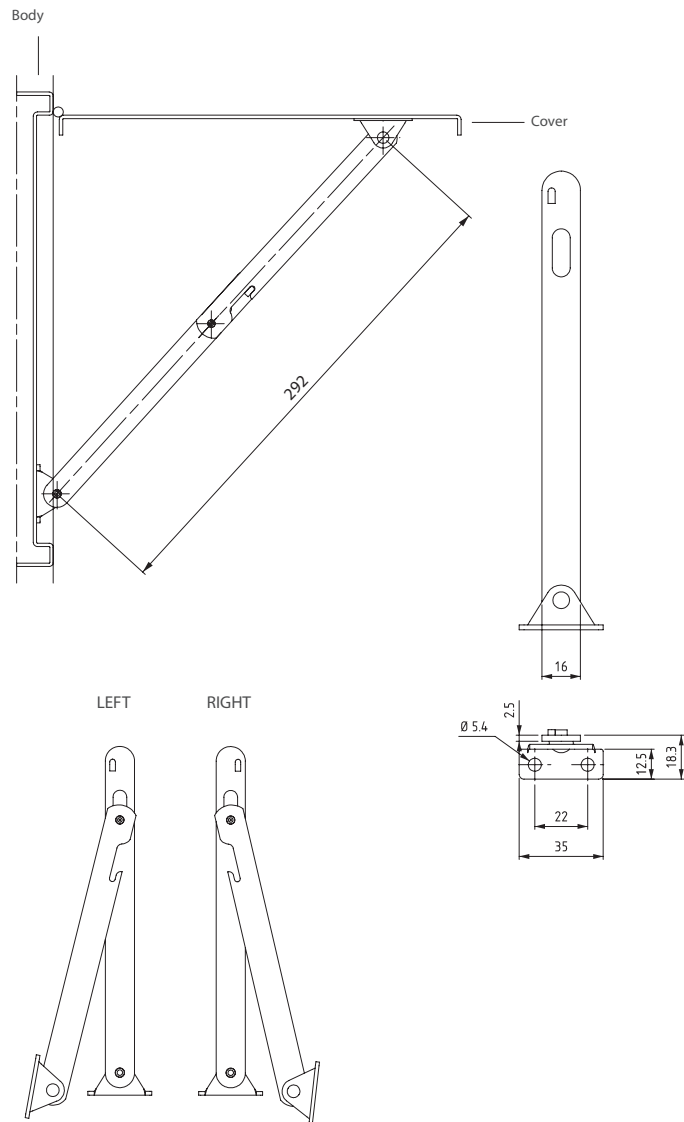
DOOR LIFTING

COVER STAY

MILD DUTY

STEEL & STAINLESS STEEL

- For light to medium duty applications
- Available to suit left or right hand applications



Code	<input type="checkbox"/> Left <input type="checkbox"/> Right	Material / Finish	Open Length (mm)
M-079-6-3-292-001	Left	Steel / Zinc	292
M-079-6-3-292-002	Right	Steel / Zinc	292
M-079-4-0-292-001	Left	304 S/Steel	292
M-079-4-0-292-002	Right	304 S/Steel	292

Note: Specifications can change from time to time without notice.
Cut-outs & construction should only be done with the products onsite.

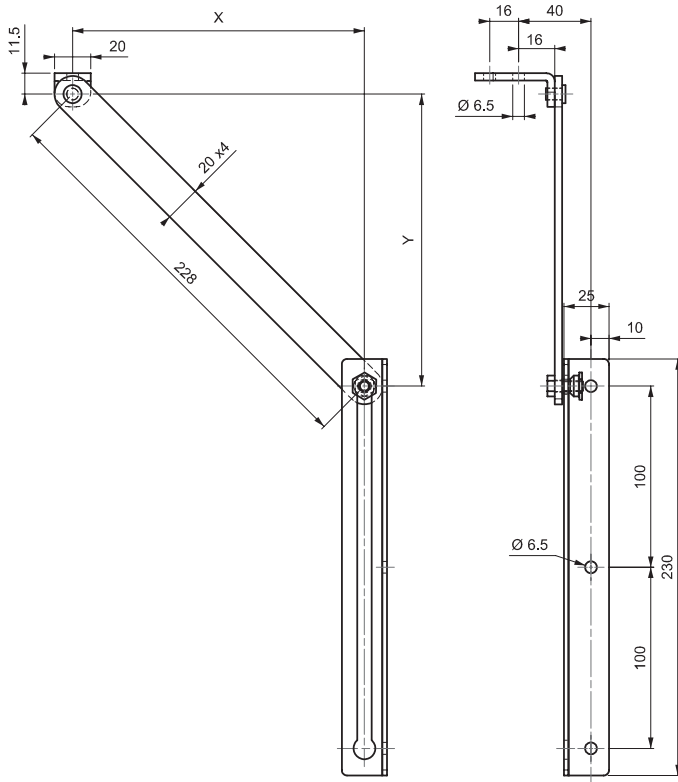
DOOR LIFTING

COVER STAY

HEAVY DUTY

STEEL & STAINLESS STEEL

- For medium to heavy duty applications
- Automatic lock to keep door open



Installation Dimensions:

Opening Angle (°)	Dimensions (mm)		Minimum Door Width Required
	X	Y	
140	140	180	403
120	120	166	389
110	110	150	373
100	100	146	369

For other opening angles use formula: $Y = X + \text{min.}40$

Code	Material / Finish	Open Length (mm)
M-179-6-3	Steel / Zinc	228
M-179-4-0	304 S/Steel	228

DOOR LIFTING

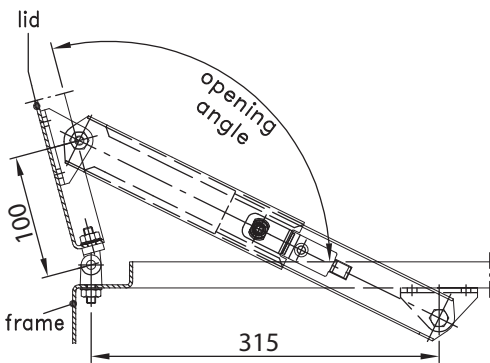
COVER STAY

HEAVY DUTY

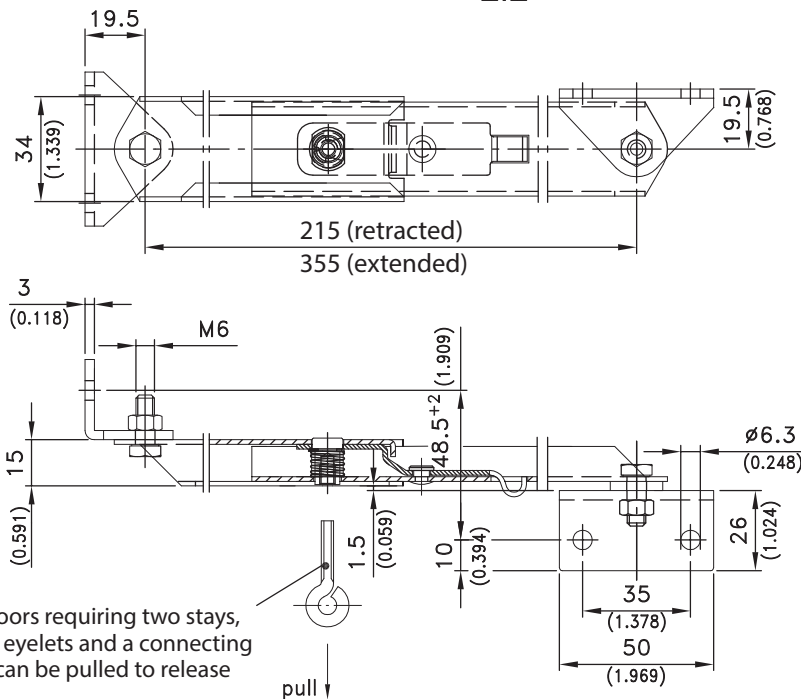
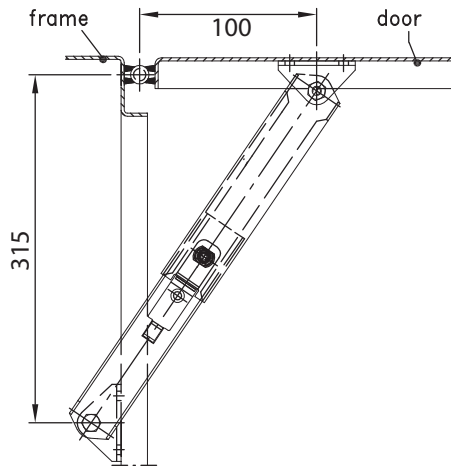
STAINLESS STEEL

- For heavy duty applications
- Telescopic push button release

Hatch / Lid:



Vertical Door:



For heavy doors requiring two stays, connect M4 eyelets and a connecting wire which can be pulled to release



Code	Material / Finish	Open Length (mm)
230-9502-MOD	304 S/Steel	355

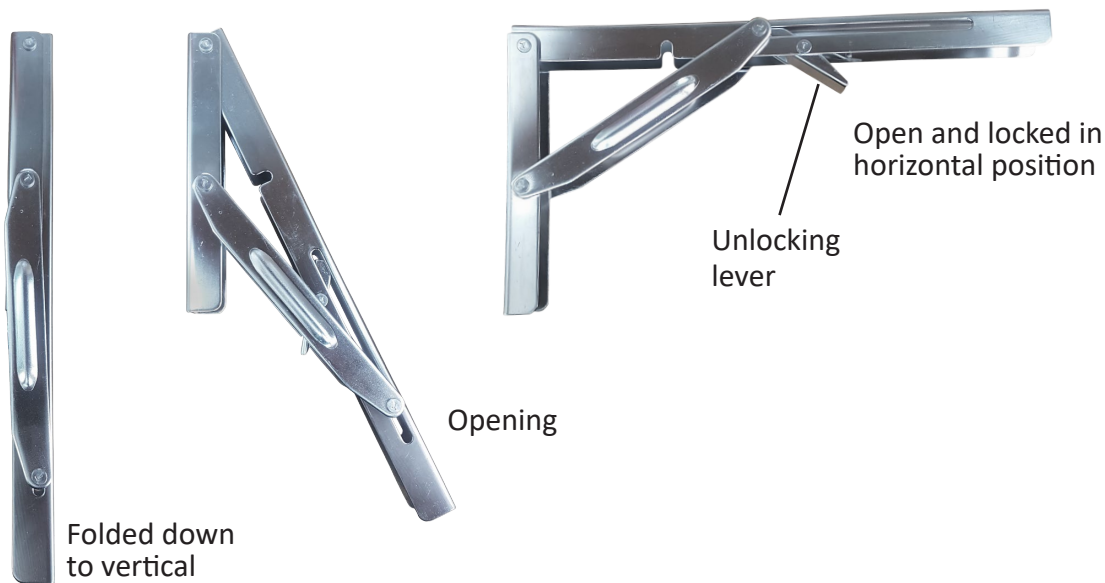
DOOR LIFTING

FOLDING TABLE / SEAT BRACKET

250kg MAX LOAD

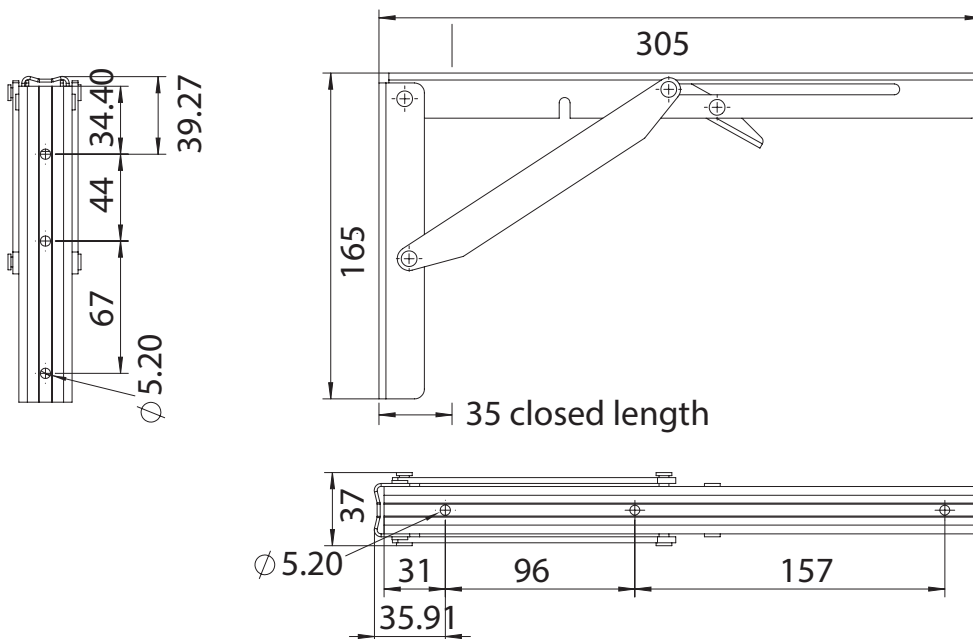
316 STAINLESS STEEL

- Folding table / chair bracket
- 250kg Max load
- 90° Rotation, locks in up position only
- 316 Stainless steel



Showing inside

Code	Wall plate (mm)	Table Plate (mm)	Mounting Type
DX316-TB	160H x 24W	300 L x 24W	6x 12G / M5 Screws

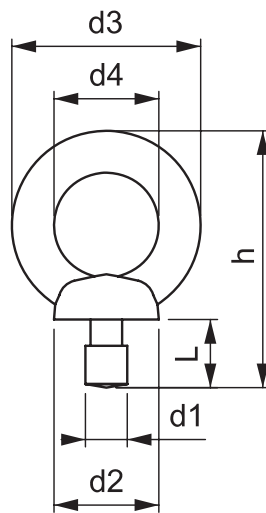


DOOR LIFTING

LIFTING EYE BOLTS

STEEL

- Creates easy lifting / moving of enclosures, machines and trailer bodies, cages and covers



Code	Thread (mm)	Safe Load at 90° (kg)	d2 (mm)	d3 (mm)	d4 (mm)	h (mm)	L (mm)	Material / Finish
M-2451	M8	140	20	36	20	49	13.0	Steel / Zinc
M-2452	M10	230	25	45	25	63	17.0	Steel / Zinc
M-2453	M12	340	30	54	30	73.5	20.5	Steel / Zinc
M-2455	M16	700	35	63	35	89	27.0	Steel / Zinc

Note: Specifications can change from time to time without notice. Cut-outs & construction should only be done with the products onsite.