

# Edbro CS Catalogue



Edbro CS Catalogue for  
Truck & Trailer Cylinders

CS7

CS11

CS13

CS14

CS15

CS17

CS18

CS19

CS22

## The Industry Standard

Since developing the first hydraulic tipping gear in 1916, Edbro has remained ahead of the competition producing technically superior cylinders which utilize the very latest technologies. A programme of continuous investment ensures that Edbro sets the industry standards, delivering developments in cylinder technology year on year. The CS range has been designed to operate in even the toughest of environments and deliver the reliability for which the brand is known and trusted.

Laser welding is central to our cylinder manufacturing and allows us to deliver numerous operator advantages which all result in increased profits for our customers. The Edbro CS series of cylinders is the lightest and most durable range of telescopic cylinders in the world and allows fast tipping when specified in combination with a Edbro hydraulic kit.



## Blue Technology

### Edbro Cylinders

Edbro has extensive experience in the design and manufacture of cylinders; the CS series of cylinders includes a wide range of sizes and options. Using the same basic cylinder technology Edbro also offers a range of combined cylinder and tanks: the CX range. The CX offers a neat and lightweight solution for rigid chassis. A full range of underbody cylinders and double acting telescopics are also available within the Edbro product range with information available at [www.edbro.com](http://www.edbro.com).

### Edbro Complete Kit Concept

In addition to the full range of cylinders Edbro offers a complete range of associated hydraulics and accessories such as pumps, valves, oil tanks etc., to provide you with the complete kit.

The Edbro complete kit concept offers you a number of advantages including:

- Guaranteed compatibility
- Safety and peace of mind with an Engineered solution from the industry experts
- Efficient & convenient way in which to source the complete solution
- Customized solutions to meet any hydraulic application





## **Flexible Manufacturing and Standard Components**

*Flexible production systems created by investment in new manufacturing technologies and automation combined with an extensive range of standard components allow Edbro to provide a fast and efficient design and manufacturing service. If you can't find the cylinder you need within this catalogue then contact Edbro and we can design a cylinder to meet your needs.*

## **Application Engineering**

*Our unrivalled product knowledge and experience ensures a safe but optimized cylinder selection for even the most demanding of applications. A comprehensive cylinder selection programme is available on line at [www.edbro.com](http://www.edbro.com) which will present a range of suitable cylinders for your application.*

## **Service and Spares**

*Edbro is supported by an extensive Global network of dedicated agents offering product support and spare parts whatever the age of your equipment.*

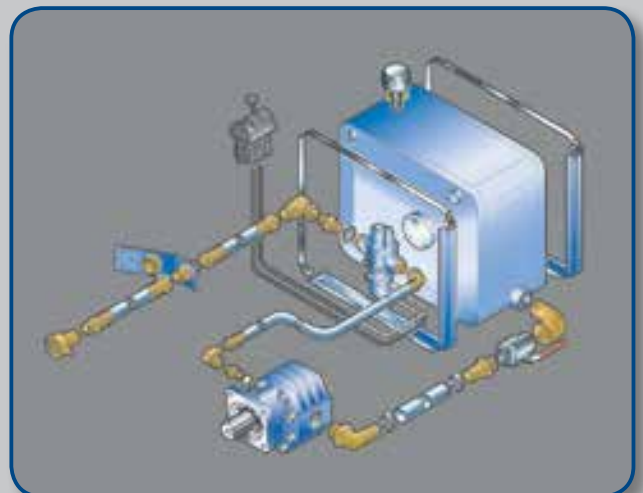
## **Quality**

*ISO 9001 certified and operating extensive on-line quality control systems, Edbro can guarantee that every cylinder built is to the highest standard and will deliver the "fit & forget" experience our customers have come to expect. With every cylinder being subjected to end of line testing to 150% of its maximum pressure you can trust in our quality.*

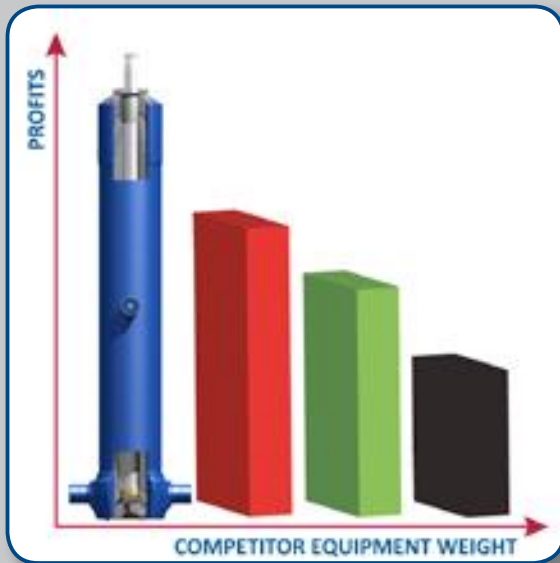
## **Engineering Expertise**

*With almost 100 years of industry experience you can be sure that Edbro have the expertise to produce world class designs with safety and reliability core to the design philosophy. Significant weight savings can also be achieved thanks to our state of the art manufacturing which allows us to put metal where it matters.*

*Our exhaustive pre-production testing program uses state of the art in-house test and development facilities, combined with international field testing programs working alongside some of our most demanding customers to produce cylinders of outstanding durability.*



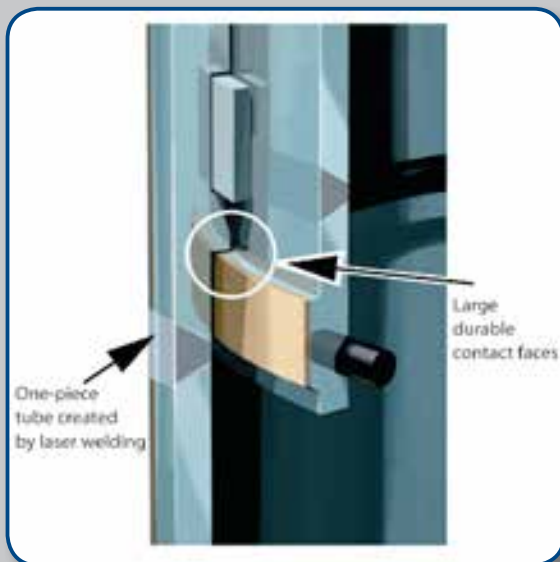
## Benefits



### *Lighter*

#### **Increased Payloads**

*The world's lightest tipping cylinders with savings of up to 100kg available, providing increased payload and so increased operating profits.*



### *Faster*

#### **Faster Tipping Speeds**

*One-piece tube construction and increased tube contact faces allow faster tipping speeds.*

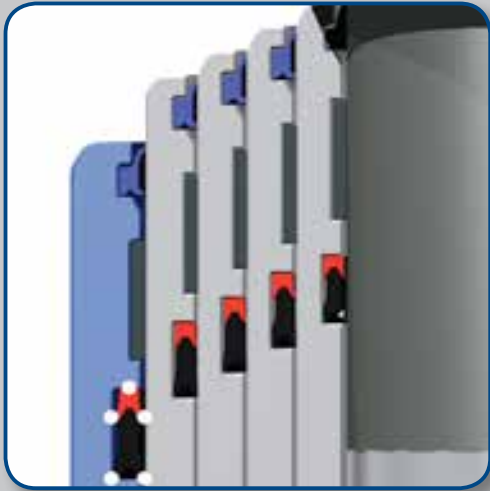


### *Stronger*

#### **Increased Lift & Side Load Capacity**

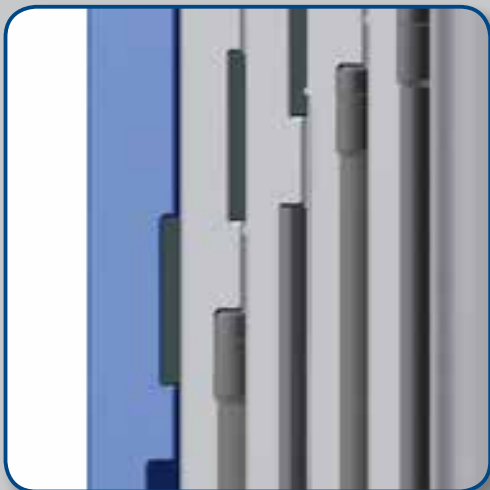
*Advanced design and production engineering techniques, allow material to be added where it matters, providing increased lift capacity and side load resistance.*

## Features



*Double lip wiper seal ensures efficient lubrication of each tube and prevents contamination of the cylinder.*

*Unique 5 point sealing system reduces friction for years of smooth, trouble-free operation.*



*Wear rings made from non-metallic, acetal material provide low friction and long service life.*

*One-piece tubes with large stop contact faces provide optimum durability for long life and reduced maintenance.*



*Thick one piece base design increases the strength and durability of the product.*

*Brass slider reduces risk of scoring and damage due to side load.*



## How to select your Edbro cylinder

### Make a decision about the style of mounting:

#### Outer cover type



The outer cover design is very strong and suits simple square fronted body designs. Stroke variants do not affect mounting centres but the cylinder reduces the available body length because a cab gap is required. The extra strength has a weight penalty but it may facilitate a simple and light body design.

#### Plain eye type



This is the lightest possible cylinder but is not as strong as the outer cover type. The plain eye is welded to the smallest tube so is very robust and so provides some form of sideload resistance. However, the body design is now more challenging and normally dedicated to a unique cylinder installation.

#### Spherical eye type

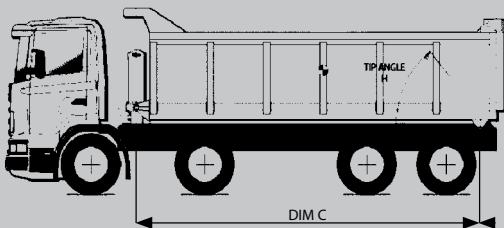


This variant of eye type will ensure that there is no bending stress imposed on the body and reduces cylinder side loading but it will allow more body movement under sideload conditions.

### Decide the required tipping angle:

Edbro recommend for general mixed material tipping operations 48-50° with 45° as a minimum. Refer to [www.edbro.com](http://www.edbro.com) for a list of angles for specific materials (hyper link for web & memory stick versions).

### Estimate the cylinder stroke:



$$\text{Approx stroke} = \text{Tip angle (H)} \times \text{Pivot length (Dim C)} / 59$$

### Estimate the required body and payload:

Payload is normally estimated from the design capacity of the chassis and legal road requirements.

Maximum payload = body capacity x 1.5t/m<sup>3</sup> x 1.5 (50% if overload is anticipated).

Add body mass for the total load to be lifted.

- Refer to the catalogue pages to select a cylinder of the chosen type with sufficient stroke and tipping capacity. For eye type, if the cylinder mounting centre A is too long for the body design, select a larger cylinder with more stages.
- When a suitable cylinder has been identified, a sales drawing can be requested from [sales@edbro.co.uk](mailto:sales@edbro.co.uk). If a suitable cylinder is not listed e-mail your application details to Edbro.



## Understanding the catalogue pages

Cylinders Codes	N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)	Rated capacity (tonnes)		Bodylength (mm)		A - Mtg Centre (mm)	B - Port Height (mm)	Port Type
					Min	Max	Min	Max			

**No of Stages:** The number of stages to extend when tipping.

**Stroke:** The total distance the cylinder extends when tipping.

**Mass:** This is the dry mass of the cylinder. Oil mass can be added at 0.87kg/litre.

**Swept oil volume:** This is the oil volume to extend the cylinder. Tipping time (s) =  $60000 \times \text{Swept volume} / (\text{pump displacement (cc/rev)} \times \text{rpm})$

**Maximum pressure:** All hydraulic systems must be fitted with a relief valve. Edbro cylinders can be used with systems up to 190bar maximum pressure.

**Tipping Capacity:** The tipping capacity is calculated using a Working Pressure limit. Normally this is 175bar but it may be reduced if the base mounting is likely to be overloaded (very short stroke cylinders) or if the buckling (bending) limit is likely to be exceeded (long stroke cylinders). For each cylinder the Working Pressure is stated on the sales drawing. The Tipping Capacity and Working Pressure are based on many assumptions about body and load geometry. A more favourable geometry may give higher results, a cylinder selection tool is available at [www.edbro.com](http://www.edbro.com)

**Bodylength:** The tipping capacity is calculated assuming square body and a vertical cylinder installation. The max/min bodylength is therefore for guidance only.

**Mounting centres:** Recommended design mounting centre (includes an initial pull out of 10mm).

**Port type:** BSP (parallel) ports are standard CS11 = ¾" CS13-15 = 1" CS17-22 = 1 ¼". Options are available for 4 bolt SAE(S) and twin port BSP (T).

### Cylinder specification notes:

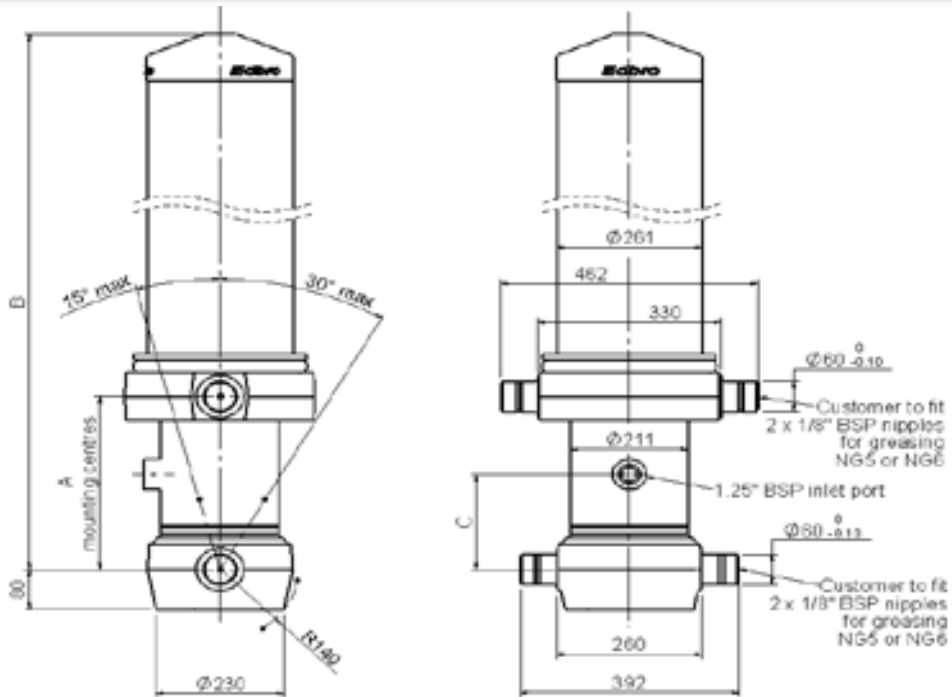
**Chrome plating:** Edbro uses a high performance micro-crack chrome plating system. For cylinders with top eye mounting, the smallest stage is always chrome plated. For other cylinders chrome plating is an option. The minimum guaranteed corrosion resistance is 40hrs neutral salt exposure to rating 10 ISO4406. Chrome plating is recommended where the cylinder is used in a corrosive or particularly dirty environment or where a very high tipping cycle count is envisaged.

**Maximum pump size:** The oil flow determines the speed of extension of the cylinder tubes. The maximum speed must be limited to 0.3m/s. Depending on cylinder size and number of stages, this can be converted into maximum flow rates as below:

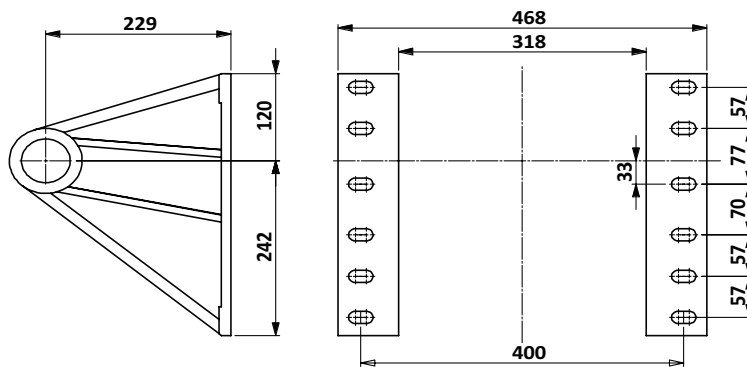
Model									small inner dia	max flow l/min
CS22	CS19	CS18	CS17	CS15	CS13	CS11	CS10	CS7	mm	
						4	3	3	63	60
			6	5	4	3			79	90
	6	5	5	4	3				98	135
	5	4	4	3					117	200
5	4								136	250

Note that the pump size = flow rate x 1000 / pump rpm

### CS18 00

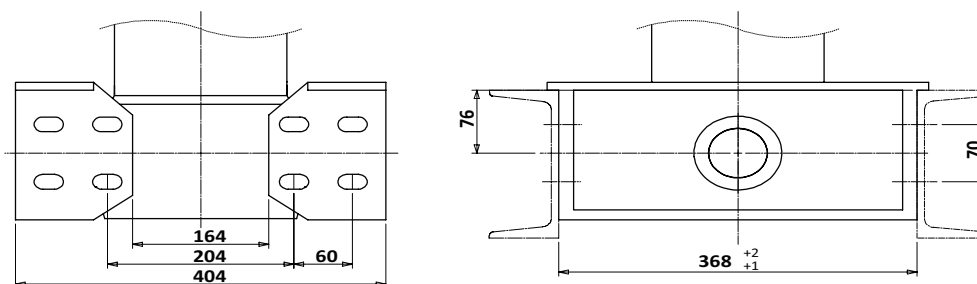


### LB100-LB101



Mass: 10kg x 2 = 20 kg

### BB200



Mass: 10.8kg x 2 = 21.6 kg



### CS18 00

#### CYLINDERS WITH OUTER COVER

CS18 00 Cylinders Codes	N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)					A - Mounting Centre (mm) Tolerance - +40 / -0	B - Overall Height (mm)	C - Port Height (mm)	Port Type
					Tipping capacity		Bodylength (mm)					
					Min	Max	Min	Max				
CS18 00 5 5733 B19 A11	5	5733	313	100	42	62	6750	7750	345	1426	190	BSP
CS18 00 5 5983 B19 A11	5	5983	322	104	42	61	7000	8000	345	1476	190	BSP
CS18 00 5 6233 B19 A11	5	6233	331	109	42	60	7250	8250	345	1526	190	BSP
CS18 00 5 6483 B19 A11	5	6483	340	113	42	59	7750	8750	345	1576	190	BSP
CS18 00 5 6733 B19 A11	5	6733	349	118	44	62	8000	9000	345	1626	190	BSP
CS18 00 5 6983 B19 A11	5	6983	358	122	44	61	8250	9250	345	1676	190	BSP
CS18 00 5 7233 B19 A11	5	7233	367	127	44	60	8500	9500	345	1726	190	BSP
CS18 00 5 7483 B19 A11	5	7483	376	131	44	59	8750	9750	345	1776	190	BSP
CS18 00 5 7733 B19 A11	5	7733	385	136	44	58	9000	10000	345	1826	190	BSP
CS18 00 5 7983 B19 A11	5	7983	394	139	44	58	9250	10250	345	1876	190	BSP
CS18 00 5 8233 B19 A11	5	8233	403	144	44	57	9500	10500	345	1926	190	BSP
CS18 00 5 8483 B19 A11	5	8483	412	149	44	57	9750	10750	345	1976	190	BSP
CS18 00 5 8733 B19 A11	5	8733	421	153	38	48	10000	11000	345	2026	190	BSP
CS18 00 5 8983 B19 A11	5	8983	430	158	34	43	10250	11250	345	2076	190	BSP
CS18 00 5 9233 B19 A11	5	9233	439	161	30	38	10500	11500	345	2126	190	BSP
CS18 00 5 9483 B19 A11	5	9483	448	165	29	36	11000	12000	345	2176	190	BSP

#### SHORT COVER

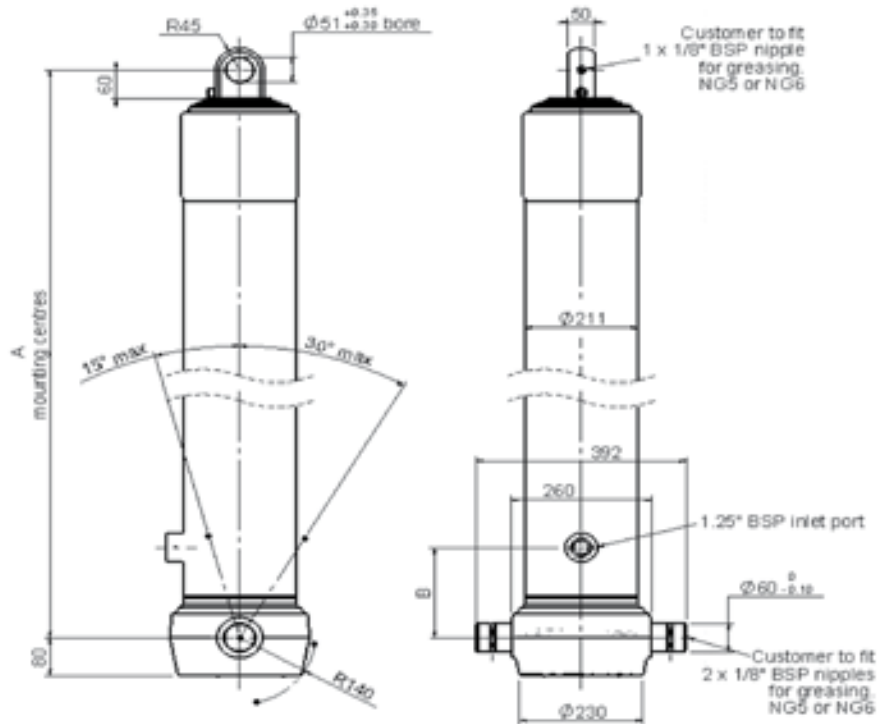
CS18 00 5 6233 B25 A15	5	6233	310	109	41	60	7500	8500	1035	1526	250	BSP
CS18 00 5 6733 B25 A15	5	6733	328	118	44	61	8000	9000	1035	1626	250	BSP
CS18 00 5 7233 B25 A15	5	7233	346	127	44	59	8500	9500	1035	1726	250	BSP
CS18 00 5 7733 B25 A15	5	7733	364	136	41	55	9000	10000	1035	1826	250	BSP
CS18 00 5 7733 S25 A15	5	7733	364	136	41	55	9000	10000	1035	1826	250	SAE
CS18 00 5 8233 B25 A15	5	8233	382	144	37	49	9500	10500	1035	1926	250	BSP

#### SPECIALS

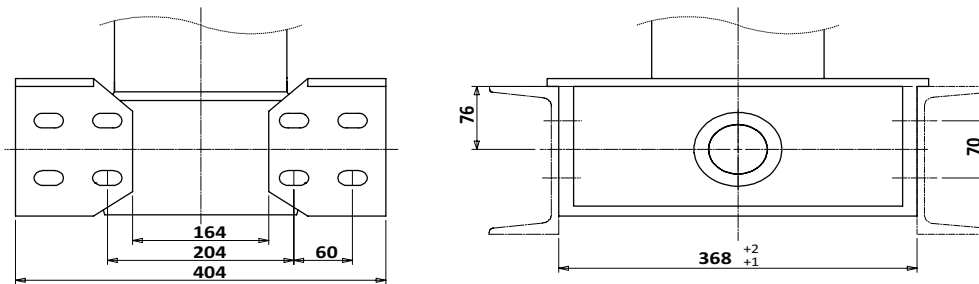
CS18 00 5 6483 B25 A15	5	6483	309	113	43	59	8000	9000	1035	1576	250	BSP
CS18 00 5 6983 B25 A15	5	6983	328	122	43	57	8500	9500	1035	1676	250	BSP
CS18 00 5 7233 T19 A11	5	7233	367	127	44	60	8500	9500	345	1726	190	BSP
CS18 00 5 8233 B19 A12	5	8233	388	144	41	54	9000	10000	550	1926	190	BSP
CS18 00 5 8233 S19 A11	5	8233	403	144	44	57	9500	10500	345	1926	190	SAE
CS18 00 5 8983 B19 A12	5	8983	430	158	30	38	11000	12000	550	2076	190	BSP
CS18 00 5 8983 B19 AAA	5	8983	431	158	30	38	11000	12000	485	2076	190	BSP
CS18 00 5 8983 B25 A14	5	8983	431	158	30	38	11000	12000	900	2076	250	BSP
CS18 00 5 9233 B25 A16	5	9233	426	161	27	31	11500	12500	1200	2126	250	BSP
CS18 00 5 9233 N25 A16	5	9233	426	161	27	31	11500	12500	1200	2126	250	BSP
CS18 00 5 9233 S19 A11	5	9233	439	161	37	47	10500	11500	345	2126	190	SAE
CS18 00 5 9233 S25 A14	5	9233	424	161	27	35	11500	12500	900	2126	250	SAE
CS18 00 5 9483 B19 A12	5	9483	441	166	27	33	11500	12500	550	2176	190	BSP
CS18 00 5 9483 B19 AAB	5	9483	438	166	27	33	11500	12500	550	2176	190	BSP
CS18 00 5 9483 B25 A14	5	9483	426	166	27	31	11750	12750	900	2176	250	BSP

# CS18 Cylinder Range

## CS18 0E

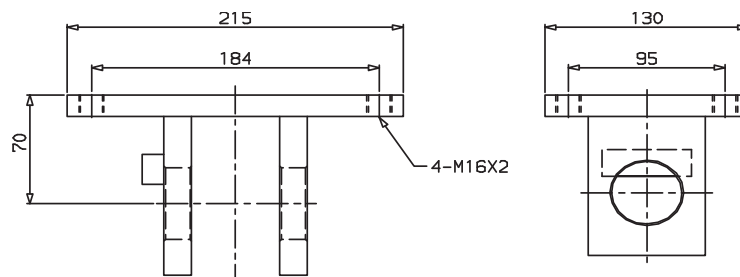


## BB200



Mass: 10.8kg x 2 = 21.6 kg

## OMK2



OMK2 for 4-5 stages ; Mass : 6 kg

### CS18 0E

#### CYLINDERS WITH EYE MOUNTING

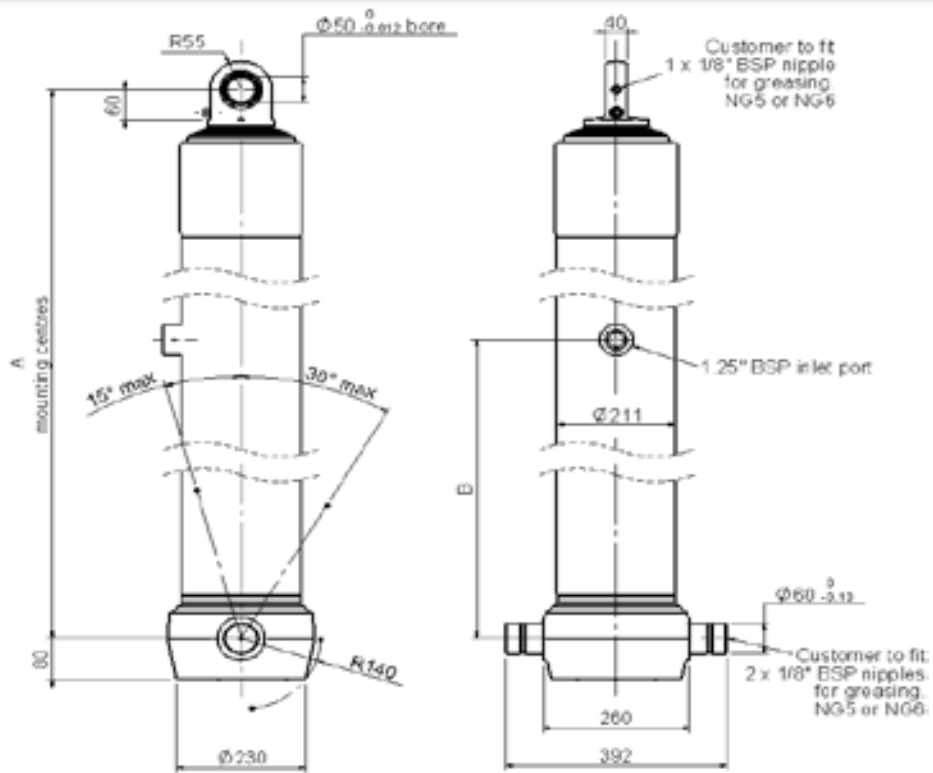
Cylinders Codes	N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)					A - Mounting Centre (mm) Tolerance - +40 / -0	B - Port Height (mm)	Port Type
					Tipping capacity		Bodylength (mm)				
					Min	Max	Min	Max			
CS18 0E 4 5166 B19 A01	4	5166	237	102	44	62	6750	7750	1535	190	BSP
CS18 0E 4 5366 B19 A01	4	5366	243	106	44	60	7000	8000	1585	190	BSP
CS18 0E 4 5566 B19 A01	4	5566	250	110	44	59	7250	8250	1635	190	BSP
CS18 0E 4 5766 B19 A01	4	5766	257	114	44	58	7500	8500	1685	190	BSP
CS18 0E 4 5966 B19 A01	4	5966	263	118	44	57	7750	8750	1735	190	BSP
CS18 0E 4 6166 B19 A01	4	6166	270	122	44	56	8000	9000	1785	190	BSP
CS18 0E 4 6366 B19 A01	4	6366	277	126	44	55	8250	9250	1835	190	BSP
CS18 0E 4 6566 B19 A01	4	6566	283	130	44	55	8500	9500	1885	190	BSP
CS18 0E 4 6766 B19 A01	4	6766	290	134	39	48	8750	9750	1935	190	BSP
CS18 0E 4 6966 B19 A01	4	6966	296	138	39	47	9000	10000	1985	190	BSP
CS18 0E 4 7166 B19 A01	4	7166	303	142	35	43	9250	10250	2035	190	BSP
CS18 0E 4 7366 B19 A01	4	7366	310	145	35	43	9500	10500	2085	190	BSP
CS18 0E 4 7566 B19 A01	4	7566	316	149	29	35	9750	10750	2135	190	BSP
CS18 0E 4 7766 B19 A01	4	7766	323	153	29	34	10000	11000	2185	190	BSP
CS18 0E 4 7966 B19 A01	4	7966	330	158	29	34	10250	11250	2235	190	BSP
CS18 0E 4 8166 B19 A01	4	8166	336	162	29	34	10500	11500	2285	190	BSP

CS18 0E 5 6233 B70 A01	5	6233	256	109	40	51	8250	9250	1490	700	BSP
CS18 0E 5 6483 B70 A01	5	6483	263	113	37	48	8500	9500	1540	700	BSP
CS18 0E 5 6733 B70 A01	5	6733	271	118	34	43	8750	9750	1590	700	BSP
CS18 0E 5 6983 B70 A01	5	6983	278	122	31	38	9000	10000	1640	700	BSP
CS18 0E 5 7233 B70 A01	5	7233	286	127	31	38	9250	10250	1690	700	BSP
CS18 0E 5 7483 B70 A01	5	7483	293	131	27	34	9500	10500	1740	700	BSP
CS18 0E 5 7733 B70 A01	5	7733	301	136	25	31	9750	10750	1790	700	BSP
CS18 0E 5 7983 B70 A01	5	7983	308	140	25	31	10000	11000	1840	700	BSP

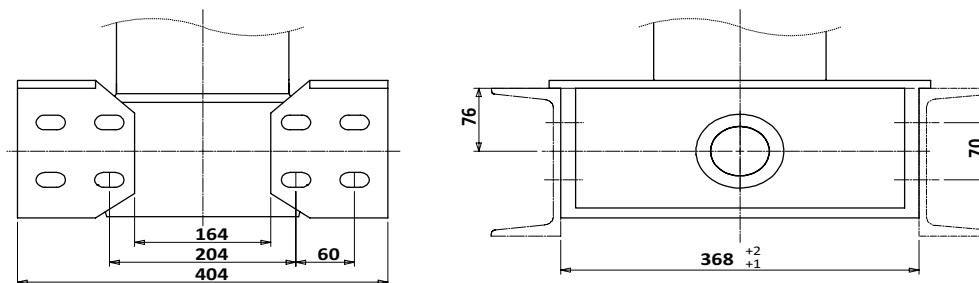
#### SPECIALS

CS18 0E 4 7616 S70 H01	4	7616	325	154	29	34	10000	11000	2235	700	SAE
CS18 0E 5 5483 B70 S02	5	5483	256	102	39	54	7000	8000	1515	700	BSP
CS18 0E 5 6233 B70 A02	5	6233	256	109	39	50	8000	9000	1515	700	BSP
CS18 0E 5 6983 B70 A02	5	6983	279	122	30	38	8750	9750	1665	700	BSP
CS18 0E 5 6983 S70 A06	5	6983	281	122	30	38	8720	9750	1765	700	SAE
CS18 0E 5 7483 B19 A01	5	7483	293	131	27	34	9000	10000	1740	190	BSP
CS18 0E 5 7633 S70 A01	5	7633	299	134	25	33	9250	10250	1772	700	SAE
CS18 0E 5 7983 B70 L01	5	7983	324	144	25	31	10000	11000	1940	700	BSP
CS18 0E 5 8233 B19 A01	5	8233	316	144	25	31	10500	11500	1892	190	BSP
CS18 0E 5 8233 S70 A01	5	8233	316	144	25	31	10500	11500	1892	700	SAE

### CS18 0S



### BB200



Mass: 10.8kg x 2 = 21.6 kg



### CS18 0S

#### CYLINDERS WITH SPHERICAL MOUNTING

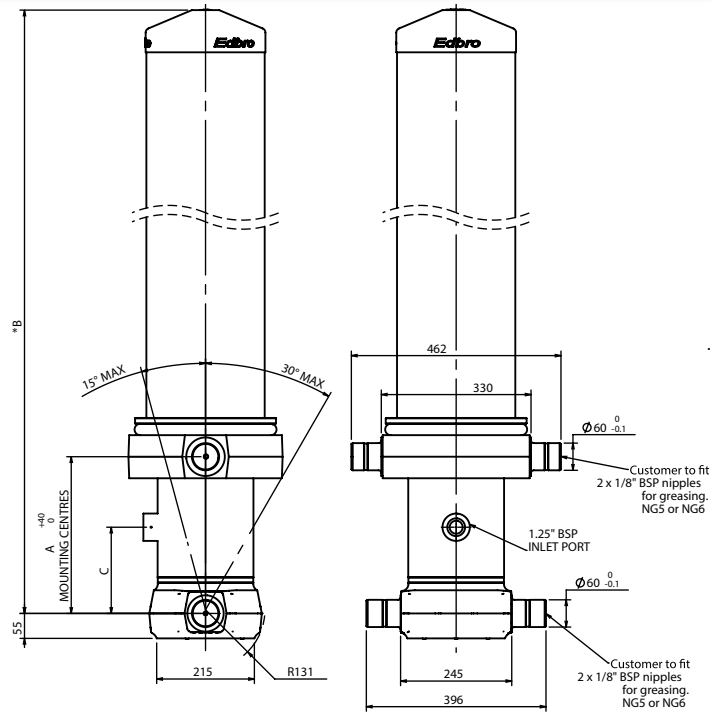
CS18 0S Cylinders Codes	N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)					A - Mounting Centre (mm) Tolerance - +40 / -0	B - Port Height (mm)	Port Type
					Tipping capacity		Bodylength (mm)				
					Min	Max	Min	Max			
CS18 0S 4 5166 B19 A01	4	5166	237	102	44	62	6750	7750	1535	190	BSP
CS18 0S 4 5366 B19 A01	4	5366	244	106	44	60	7000	8000	1585	190	BSP
CS18 0S 4 5566 B19 A01	4	5566	250	110	44	59	7250	8250	1635	190	BSP
CS18 0S 4 5766 B19 A01	4	5766	257	114	44	58	7500	8500	1685	190	BSP
CS18 0S 4 5966 B19 A01	4	5966	264	118	44	57	7750	8750	1735	190	BSP
CS18 0S 4 6166 B19 A01	4	6166	270	122	44	56	8000	9000	1785	190	BSP
CS18 0S 4 6366 B19 A01	4	6366	281	126	44	55	8250	9250	1835	190	BSP
CS18 0S 4 6566 B19 A01	4	6566	283	130	44	55	8500	9500	1885	190	BSP
CS18 0S 4 6766 B19 A01	4	6766	290	134	39	48	8750	9750	1935	190	BSP
CS18 0S 4 6966 B19 A01	4	6966	297	138	39	47	9000	10000	1985	190	BSP
CS18 0S 4 7166 B19 A01	4	7166	303	142	35	43	9250	10250	2035	190	BSP
CS18 0S 4 7366 B19 A01	4	7366	310	145	35	43	9500	10500	2085	190	BSP
CS18 0S 4 7566 B19 A01	4	7566	317	149	29	35	9750	10750	2135	190	BSP
CS18 0S 4 7766 B19 A01	4	7766	323	153	29	34	10000	11000	2185	190	BSP
CS18 0S 4 7966 B19 A01	4	7966	330	158	29	34	10250	11250	2235	190	BSP
CS18 0S 4 8166 B19 A01	4	8166	336	162	29	34	10500	11500	2285	190	BSP

CS18 0S 5 6233 B70 A01	5	6233	259	109	40	51	8250	9250	1500	700	BSP
CS18 0S 5 6483 B70 A01	5	6483	267	113	37	48	8500	9500	1550	700	BSP
CS18 0S 5 6733 B70 A01	5	6733	275	118	34	43	8750	9750	1600	700	BSP
CS18 0S 5 6983 B70 A01	5	6983	282	122	31	38	9000	10000	1650	700	BSP
CS18 0S 5 7233 B70 A01	5	7233	290	127	31	38	9250	10250	1700	700	BSP
CS18 0S 5 7483 B70 A01	5	7483	297	131	27	34	9500	10500	1750	700	BSP
CS18 0S 5 7733 B70 A01	5	7733	305	136	25	31	9750	10750	1800	700	BSP
CS18 0S 5 7983 B70 A01	5	7983	312	140	25	31	10000	11000	1850	700	BSP

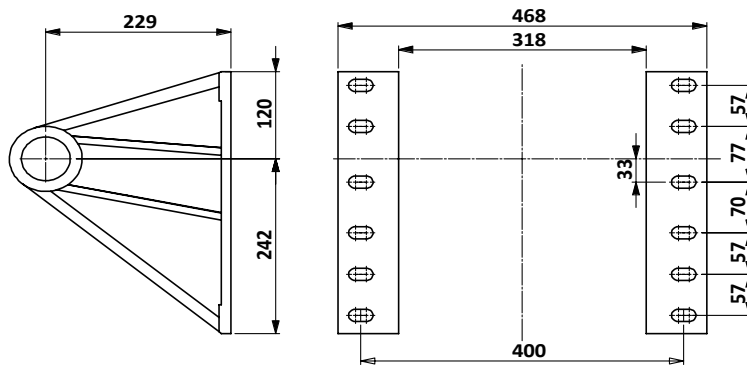
#### SPECIALS

CS18 0S 4 4416 B19 M01	4	4416	231	91	48	64	6000	7000	1485	190	BSP
CS18 0S 4 7616 S19 H01	4	7616	331	154	29	34	9500	10500	2235	190	SAE
CS18 0S 4 7616 S70 H01	4	7616	331	154	29	34	9500	10500	2235	700	SAE
CS18 0S 5 5983 B19 A05	5	5983	254	104	42	60	7500	8500	1550	190	BSP
CS18 0S 5 5983 B25 A05	5	5983	254	104	42	60	7500	8500	1550	250	BSP
CS18 0S 5 6233 B19 A05	5	6233	262	109	38	50	8000	9000	1600	190	BSP
CS18 0S 5 6983 B19 A04	5	6983	284	122	31	38	8750	9750	1725	190	BSP
CS18 0S 5 6983 S70 A06	5	6983	285	122	31	38	8750	9750	1775	700	SAE
CS18 0S 5 7233 B19 A02	5	7233	290	127	31	38	9250	10250	1725	190	BSP
CS18 0S 5 7633 B19 A01	5	7633	303	134	30	35	9250	10250	1780	190	BSP
CS18 0S 5 7633 B70 A01	5	7633	303	134	30	35	9250	10250	1780	700	BSP
CS18 0S 5 7633 S70 A01	5	7633	303	134	30	35	9250	10250	1780	700	SAE

### CS18 LO

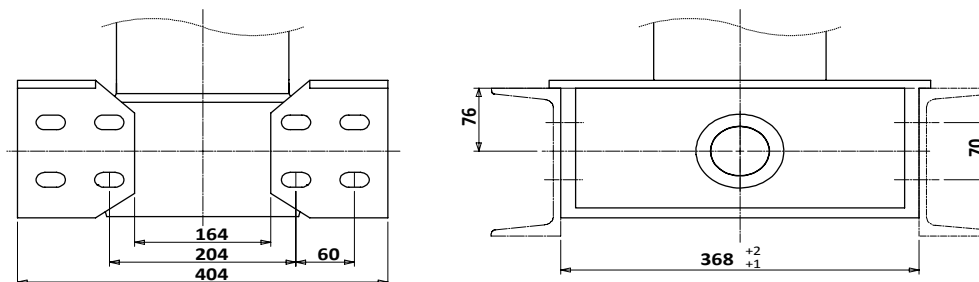


### LB200-LB201



Mass: 10kg x 2 = 20 kg

### BB200



Mass: 10.8kg x 2 = 21.6 kg

### CS18 LO

#### FULL COVER

Cylinders Codes	N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)	Rated capacity (tonnes)				Bodylength (mm)		A - Mtg Centre (mm)	B - Overall Height (mm)	C - Port Height (mm)	Port Type
					Rated capacity (tonnes)		Bodylength (mm)							
					Min	Max	Min	Max						
CS18 L0 5 5483 B19 A11	5	5483	290	97	31	51	6500	7500	345	1396	190	BSP		
CS18 L0 5 5733 B19 A11	5	5733	299	100	31	49	6750	7750	345	1446	190	BSP		
CS18 L0 5 5983 B19 A11	5	5983	308	104	31	48	7000	8000	345	1496	190	BSP		
CS18 L0 5 6233 B19 A11	5	6233	316	109	31	47	7250	8250	345	1546	190	BSP		
CS18 L0 5 6483 B19 A11	5	6483	325	113	34	48	7750	8750	345	1596	190	BSP		
CS18 L0 5 6733 B19 A11	5	6733	334	118	34	48	8000	9000	345	1646	190	BSP		
CS18 L0 5 6983 B19 A11	5	6983	343	122	34	47	8250	9250	345	1696	190	BSP		
CS18 L0 5 7233 B19 A11	5	7233	351	127	34	46	8500	9500	345	1746	190	BSP		
CS18 L0 5 7483 B19 A11	5	7483	360	131	34	46	8750	9750	345	1796	190	BSP		
CS18 L0 5 7733 B19 A11	5	7733	369	136	34	45	9000	10000	345	1846	190	BSP		
CS18 L0 5 7983 B19 A11	5	7983	378	139	36	46	9250	10250	345	1896	190	BSP		
CS18 L0 5 8233 B19 A11	5	8233	386	144	34	44	9500	10500	345	1946	190	BSP		
CS18 L0 5 8483 B19 A11	5	8483	395	149	34	44	9750	10750	345	1996	190	BSP		
CS18 L0 5 8733 B19 A11	5	8733	404	153	34	43	10000	11000	345	2046	190	BSP		
CS18 L0 5 8983 B19 A11	5	8983	413	158	34	43	10250	11250	345	2096	190	BSP		
CS18 L0 5 9233 B19 A11	5	9233	421	161	30	38	10500	11500	345	2146	190	BSP		
CS18 L0 5 9483 B19 A11	5	9483	430	165	29	36	11000	12000	345	2196	190	BSP		

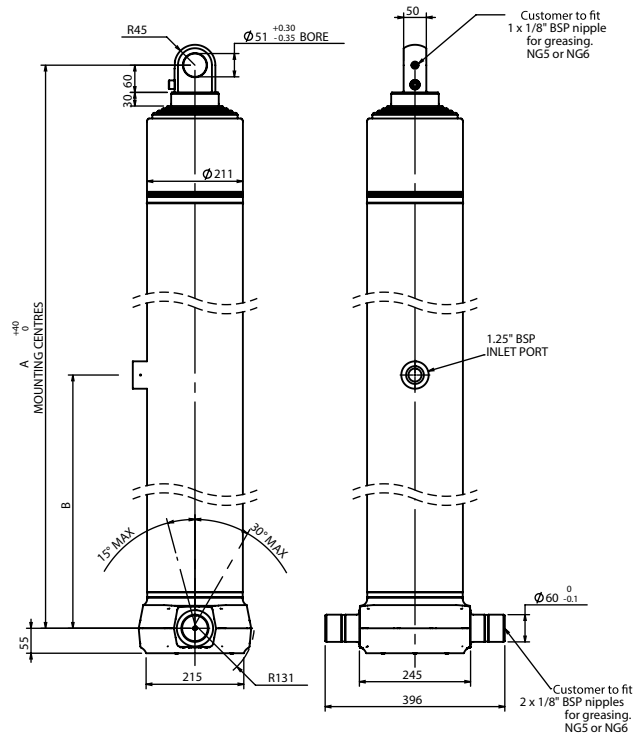
#### SHORT COVER

CS18 L0 5 6233 B25 A15	5	6233	296	109	34	49	7500	8500	1035	1546	250	BSP
CS18 L0 5 6733 B25 A15	5	6733	314	118	34	47	8000	9000	1035	1646	250	BSP
CS18 L0 5 7233 B25 A15	5	7233	331	127	34	46	8500	9500	1035	1746	250	BSP
CS18 L0 5 7733 B25 A15	5	7733	349	136	34	45	9000	10000	1035	1846	250	BSP
CS18 L0 5 7733 S25 A15	5	7733	350	136	34	45	9000	10000	1035	1846	250	SAE
CS18 L0 5 8233 B25 A15	5	8233	368	144	34	44	9500	10500	1035	1946	250	BSP
CS18 L0 5 8983 B25 A15	5	8983	393	158	30	38	10250	11250	1035	2096	250	BSP

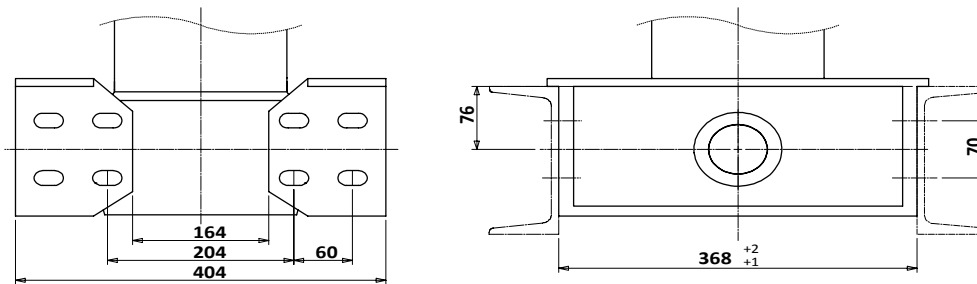
#### SPECIALS

CS18 L0 5 6483 B25 A15	5	6483	305	113	34	48	7750	8750	1035	1596	250	BSP
CS18 L0 5 6983 B25 A15	5	6983	323	122	34	46	8250	9250	1035	1696	250	BSP
CS18 L0 5 7233 T19 A11	5	7233	351	127	34	46	8500	9500	345	1746	190	BSP
CS18 L0 5 8233 B19 A12	5	8233	381	144	31	43	9000	10000	550	1946	190	BSP
CS18 L0 5 8233 S19 A11	5	8233	386	144	34	44	9500	10500	345	1946	190	SAE
CS18 L0 5 8483 S19 A11	5	8483	396	149	34	44	9750	10750	345	1996	190	SAE
CS18 L0 5 8983 B19 A12	5	8983	407	158	34	43	10250	11250	550	2096	190	BSP
CS18 L0 5 8983 S19 A11	5	8983	413	158	34	43	10250	11250	345	2096	190	SAE
CS18 L0 5 8983 B19 AAA	5	8983	409	158	34	43	10250	11250	485	2096	190	BSP
CS18 L0 5 8983 B25 A14	5	8983	397	158	33	41	11000	12000	900	2096	250	BSP
CS18 L0 5 9233 B25 A16	5	9233	397	161	26	31	11500	12500	1200	2146	250	BSP
CS18 L0 5 9233 N25 A16	5	9233	397	161	26	31	11500	12500	1200	2146	250	BSP
CS18 L0 5 9233 S19 A11	5	9233	422	161	30	38	10500	11500	345	2146	190	SAE
CS18 L0 5 9233 S25 A14	5	9233	406	161	28	33	11500	12500	900	2146	250	SAE
CS18 L0 5 9483 B19 A12	5	9483	425	166	29	34	11500	12500	550	2196	190	BSP
CS18 L0 5 9483 B19 AAB	5	9483	425	166	29	34	11500	12500	550	2196	190	BSP
CS18 L0 5 9483 B25 A14	5	9483	414	166	28	33	11750	12750	900	2196	250	BSP

### CS18LE

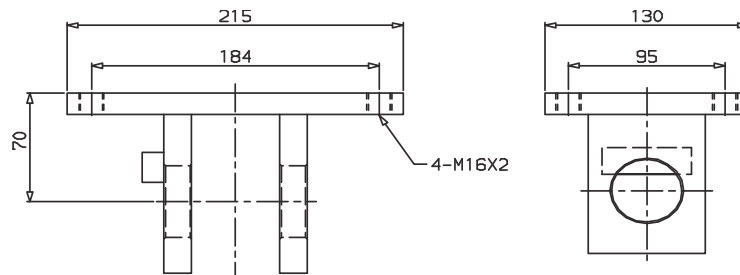


### BB200



Mass: 10.8kg x 2 = 21.6 kg

### OMK2



OMK2 for 4-5 stages ; Mass : 6 kg



### CS18 LE

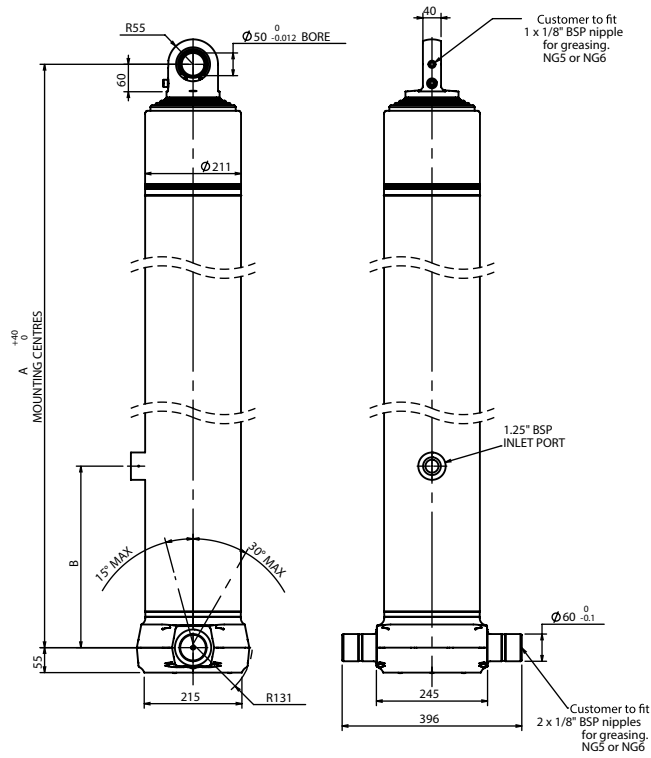
#### CYLINDERS WITH EYE MOUNTING

Cylinders Codes	N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)	Rated capacity				A - Mtg Centre (mm)	B - Port Height (mm)	Port Type
					Rated capacity		Bodylength (mm)				
					Min	Max	Min	Max			
CS18 LE 5 6233 B70 A02	5	6233	241	109	32	43	8250	9250	1513	700	BSP
CS18 LE 5 6483 B70 A02	5	6483	248	113	34	43	8500	9500	1563	700	BSP
CS18 LE 5 6733 B70 A02	5	6733	256	118	31	39	8750	9750	1613	700	BSP
CS18 LE 5 6883 B70 A03	5	6883	259	120	31	39	8750	9750	1660	700	BSP
CS18 LE 5 7033 B70 A02	5	7033	264	123	31	40	8750	9750	1673	700	BSP
CS18 LE 5 7233 B70 A02	5	7233	276	127	31	38	9250	10250	1713	700	BSP
CS18 LE 5 7733 B70 A02	5	7733	291	136	25	31	9750	10750	1813	700	BSP
CS18 LE 5 7983 B70 A02	5	7983	298	140	25	31	10000	11000	1863	700	BSP

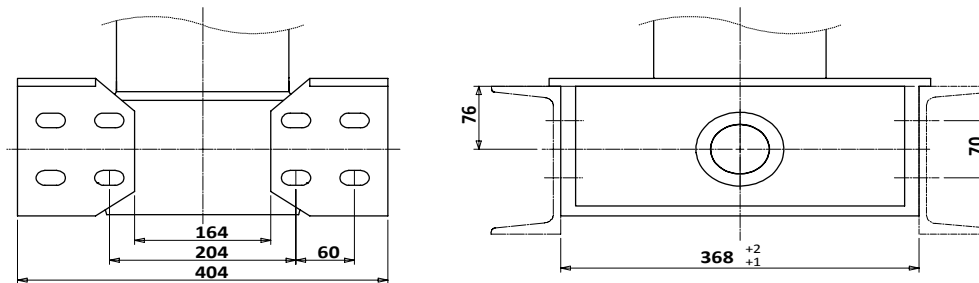
#### SPECIALS

CS18 LE 5 5483 B70 S02	5	5483	241	102	30	47	7000	8000	1513	700	BSP
CS18 LE 5 6583 B70 J02	5	6583	263	119	32	42	8500	9500	1663	700	BSP
CS18 LE 5 6983 S70 A06	5	6983	272	122	33	42	8750	9750	1673	700	SAE
CS18 LE 5 7233 B19 A03	5	7233	278	127	32	40	9000	10000	1738	190	BSP
CS18 LE 5 7233 B70 A03	5	7233	278	131	28	35	9000	10000	1738	700	BSP
CS18 LE 5 7483 B70 A02	5	7483	285	131	28	34	9500	10500	1763	700	BSP
CS18 LE 5 7483 S70 A02	5	7483	286	134	28	34	9250	10250	1763	700	SAE
CS18 LE 5 7633 S70 A02	5	7633	287	134	28	36	9250	10250	1793	700	BSP
CS18 LE 5 7983 B70 L02	5	7983	315	144	30	37	9750	10750	1963	700	BSP
CS18 LE 5 8183 S70 G02	5	8183	316	146	26	32	10000	11000	1963	700	SAE
CS18 LE 5 8233 B19 A02	5	8233	307	144	21	26	10000	11000	1913	190	BSP
CS18 LE 5 8233 S70 A02	5	8233	307	144	21	26	10000	11000	1913	700	SAE

### CS18 LS



### BB200



Mass: 10.8kg x 2 = 21.6 kg

### CS18 LS

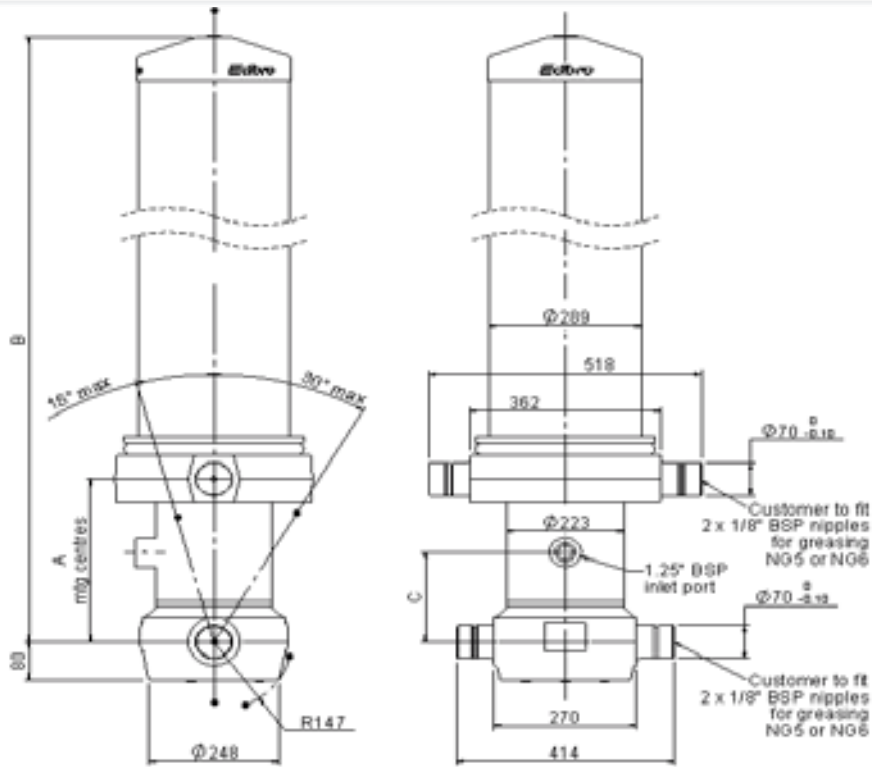
#### CYLINDERS WITH SPHERICAL MOUNTING

Cylinders Codes	N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)					A - Mtg Centre (mm)	B - Port Height (mm)	Port Type
					Rated capacity		Bodylength (mm)				
					Min	Max	Min	Max			
CS18 LS 5 6233 B70 A02	5	6233	243	109	32	43	8250	9250	1513	700	BSP
CS18 LS 5 6483 B70 A02	5	6483	250	113	34	43	8500	9500	1563	700	BSP
CS18 LS 5 6733 B70 A02	5	6733	258	118	31	39	8750	9750	1613	700	BSP
CS18 LS 5 6983 B70 A02	5	6983	262	122	31	39	9000	10000	1663	700	BSP
CS18 LS 5 7233 B70 A02	5	7233	278	127	31	38	9250	10250	1713	700	BSP
CS18 LS 5 7483 B70 A02	5	7483	289	131	28	34	9500	10500	1763	700	BSP
CS18 LS 5 7733 B70 A02	5	7733	293	136	25	31	9750	10750	1813	700	BSP
CS18 LS 5 7983 B70 A02	5	7983	300	140	25	31	10000	11000	1863	700	BSP

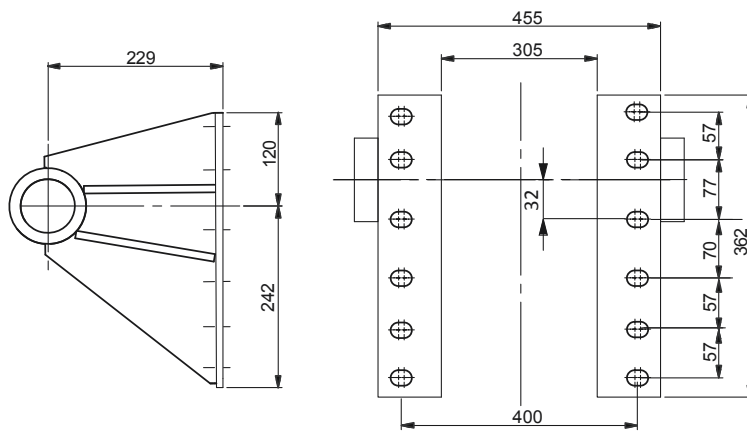
#### SPECIALS

CS18 LS 5 5983 B19 A05	5	5983	238	104	32	44	7500	8500	1538	190	BSP
CS18 LS 5 5983 B25 A05	5	5983	238	104	32	44	7500	8500	1538	250	BSP
CS18 LS 5 6233 B19 A05	5	6233	246	109	34	45	8000	9000	1588	190	BSP
CS18 LS 5 6233 B40 A02	5	6233	245	109	32	43	7750	8750	1513	400	BSP
CS18 LS 5 6983 B19 A04	5	6983	265	122	31	40	8750	9750	1713	190	BSP
CS18 LS 5 6983 S70 A06	5	6983	276	122	33	42	8750	9750	1763	700	SAE
CS18 LS 5 7233 B19 A02	5	7233	282	127	31	38	9250	10250	1713	190	BSP
CS18 LS 5 7483 B19 A02	5	7483	290	134	28	34	9250	10250	1763	190	BSP
CS18 LS 5 7483 B70 A02	5	7483	290	134	28	34	9250	10250	1763	700	BSP
CS18 LS 5 7483 S70 A02	5	7483	290	134	28	34	9250	10250	1763	700	SAE
CS18 LS 5 7483 B70 A09	5	7483	284	136	28	34	9500	10500	1938	700	BSP
CS18 LS 5 7633 B19 A02	5	7633	291	134	28	36	9250	10250	1793	190	BSP
CS18 LS 5 7633 B70 A02	5	7633	291	134	28	36	9250	10250	1793	700	BSP
CS18 LS 5 7633 S70 A02	5	7633	291	134	28	36	9250	10250	1793	700	SAE

### CS19 00

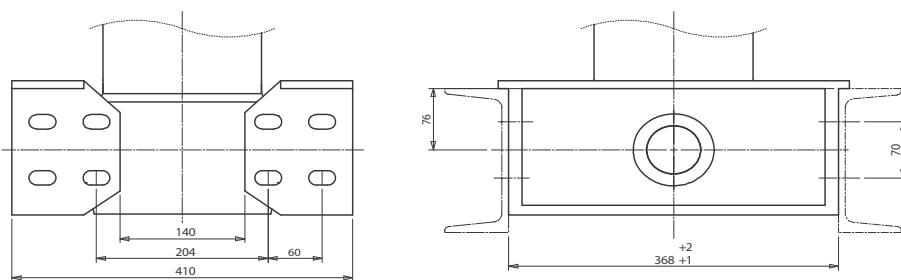


### LB113-LB114



Mass: 10.5kg x 2 = 21 kg

### BB106



Mass: 18kg x 2 = 36 kg



### CS19 00

#### CYLINDERS WITH OUTER COVER

CS19 00			N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)					A - Mounting Centre (mm) Tolerance - +40 / -0	B - Overall Height (mm)	C - Port Height (mm)	Port Type
Cylinders Codes							Tipping capacity		Bodylength (mm)					
							Min	Max	Min	Max				
CS19 00 5	5678	B19 A11					5	5678	342	112				
CS19 00 5	5928	B19 A11	5	5928	351	117	53	81	7000	8000	345	1493	190	BSP
CS19 00 5	6178	B19 A11	5	6178	361	122	53	79	7250	8250	345	1543	190	BSP
CS19 00 5	6428	B19 A11	5	6428	371	127	53	77	7500	8500	345	1593	190	BSP
CS19 00 5	6678	B19 A11	5	6678	380	132	54	76	8000	9000	345	1643	190	BSP
CS19 00 5	6928	B19 A11	5	6928	389	137	54	75	8000	9000	345	1693	190	BSP
CS19 00 5	7178	B19 A11	5	7178	399	142	54	74	8500	9500	345	1743	190	BSP
CS19 00 5	7428	B19 A11	5	7428	408	147	53	69	9000	10000	345	1793	190	BSP
CS19 00 5	7678	B19 A11	5	7678	418	152	53	69	9250	10250	345	1843	190	BSP
CS19 00 5	7928	B19 A11	5	7928	427	157	53	68	9500	10500	345	1893	190	BSP
CS19 00 5	8178	B19 A11	5	8178	436	162	53	68	9750	10750	345	1943	190	BSP
CS19 00 5	8428	B19 A11	5	8428	446	167	46	60	9750	10750	345	1993	190	BSP
CS19 00 5	8678	B19 A11	5	8678	455	172	42	53	10000	11000	345	2043	190	BSP
CS19 00 5	8928	B19 A11	5	8928	465	177	37	47	10250	11250	345	2093	190	BSP
CS19 00 5	9178	B19 A11	5	9178	474	182	34	43	10500	11500	345	2143	190	BSP
CS19 00 5	9428	B19 A11	5	9428	483	186	34	42	10750	11750	345	2193	190	BSP
CS19 00 5	9678	B19 A11	5	9678	493	191	34	42	11000	12000	345	2243	190	BSP

CS19 00 6	7145	B19 A11	6	7145	368	126	45	57	8250	9250	345	1498	190	BSP
CS19 00 6	7445	B19 A11	6	7445	378	132	38	51	9000	10000	345	1548	190	BSP
CS19 00 6	7745	B19 A11	6	7745	388	137	38	51	9250	10250	345	1598	190	BSP

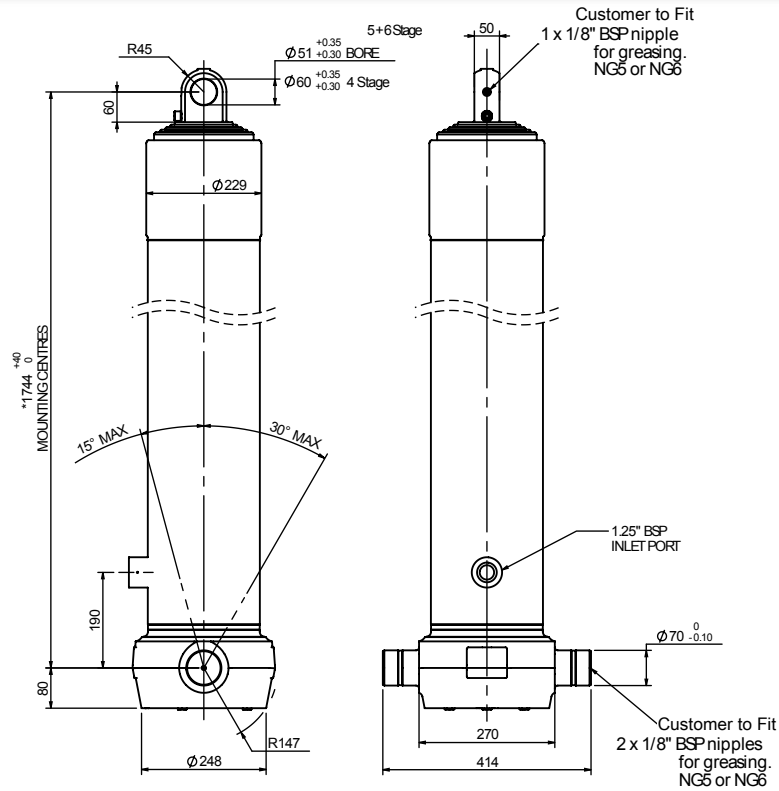
#### SHORT COVER

CS19 00 5	7178	B25 A15	5	7178	374	142	47	65	8350	9350	1035	1743	250	BSP
CS19 00 5	7428	B25 A15	5	7428	384	147	46	62	8750	9750	1035	1793	250	BSP
CS19 00 5	7678	B25 A15	5	7678	394	152	42	55	9000	10000	1035	1843	250	BSP

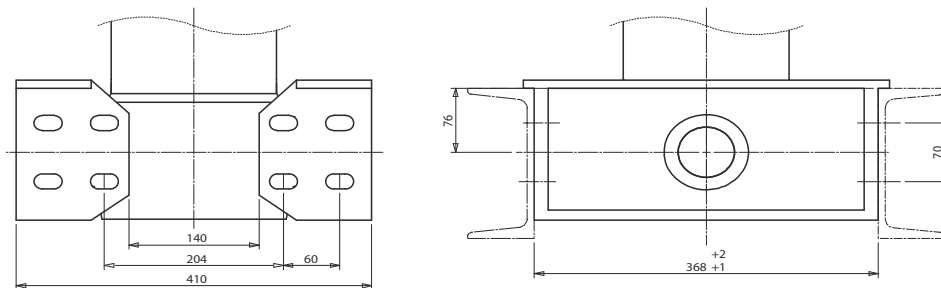
#### SPECIALS

CS19 00 5	6678	N19 A11C	5	6678	380	132	54	76	8000	9000	345	1643	190	BSP
CS19 00 5	8428	N25 A16C	5	8428	416	167	34	44	9750	10750	1200	1993	250	BSP
CS19 00 5	9428	B19 A12C	5	9428	476	186	28	35	10750	11750	550	2193	190	BSP
CS19 00 6	7145	B25 A15	6	7145	344	126	32	43	8750	9750	1035	1498	250	BSP

### CS19 0E

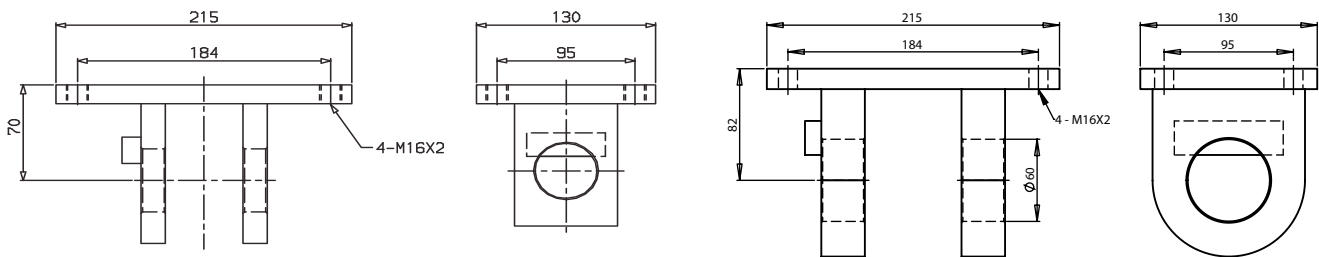


### BB106



Mass: 18kg x 2 = 36 kg

### OMK2 & OMK5



OMK2 for 5-6 stages ; Mass : 6 kg

OMK5 for 4 stages; Mass: 8kg

### CS19 0E

#### CYLINDERS WITH EYE MOUNTING

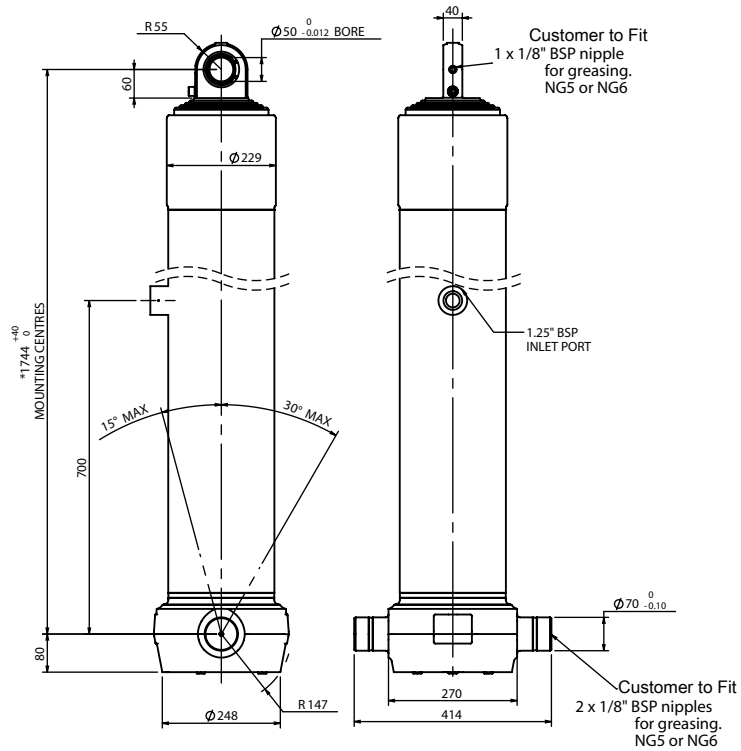
CS19 0E			N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)					A - Mounting Centre (mm) Tolerance - +40 / -0	B - Port Height (mm)	Port Type
Cylinders Codes							Tipping capacity		Bodylength (mm)				
							Min	Max	Min	Max			
CS19 0E 4	5916	B19 A01	4	5916	282	131	58	80	7500	8500	1739	190	BSP
CS19 0E 4	6116	B19 A01	4	6116	289	135	53	74	7500	8500	1789	190	BSP
CS19 0E 4	6316	B19 A01	4	6316	296	139	53	72	7750	8750	1839	190	BSP
CS19 0E 4	6516	B19 A01	4	6516	303	144	53	71	8000	9000	1889	190	BSP
CS19 0E 4	6716	B19 A01	4	6716	310	148	47	62	8250	9250	1939	190	BSP
CS19 0E 4	6916	B19 A01	4	6916	317	153	46	61	8500	9500	1989	190	BSP

CS19 0E 5	5428	B19 A01	5	5428	245	107	50	78	6750	7750	1344	190	BSP
CS19 0E 5	5678	B19 A01	5	5678	252	112	50	76	7000	8000	1394	190	BSP
CS19 0E 5	5928	B19 A01	5	5928	260	117	50	75	7250	8250	1444	190	BSP
CS19 0E 5	6178	B19 A01	5	6178	268	122	45	62	7750	8750	1494	190	BSP
CS19 0E 5	6428	B19 A01	5	6428	275	127	44	60	8000	9000	1544	190	BSP
CS19 0E 5	6678	B19 A01	5	6678	283	132	40	73	8250	9250	1594	190	BSP
CS19 0E 5	6928	B19 A01	5	6928	290	137	36	48	8500	9500	1644	190	BSP
CS19 0E 5	7178	B19 A01	5	7178	298	142	36	47	8750	9750	1694	190	BSP
CS19 0E 5	7428	B19 A01	5	7428	306	147	33	43	9000	10000	1744	190	BSP
CS19 0E 5	7678	B19 A01	5	7678	313	152	27	35	9250	10250	1794	190	BSP

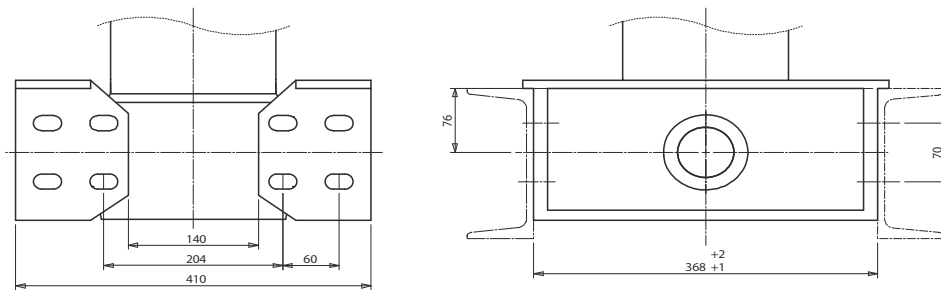
#### SPECIALS

CS19 0E 4	6316	T19 A01C	4	6316	296	139	53	72	7750	8750	1839	190	BSP
CS19 0E 5	7428	T19 A01C	5	7428	306	147	33	43	9000	10000	1744	190	BSP
CS19 0E 6	6995	B70 K02	6	6995	285	127	30	41	8750	9750	1524	700	BSP

### CS19 0S

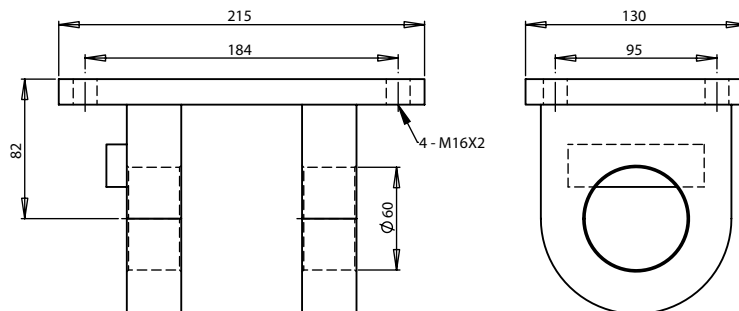


### BB106



Mass: 18kg x 2 = 36 kg

### OMK6



OMK6 for 5 stages; Mass: 8kg



### CS19 OS

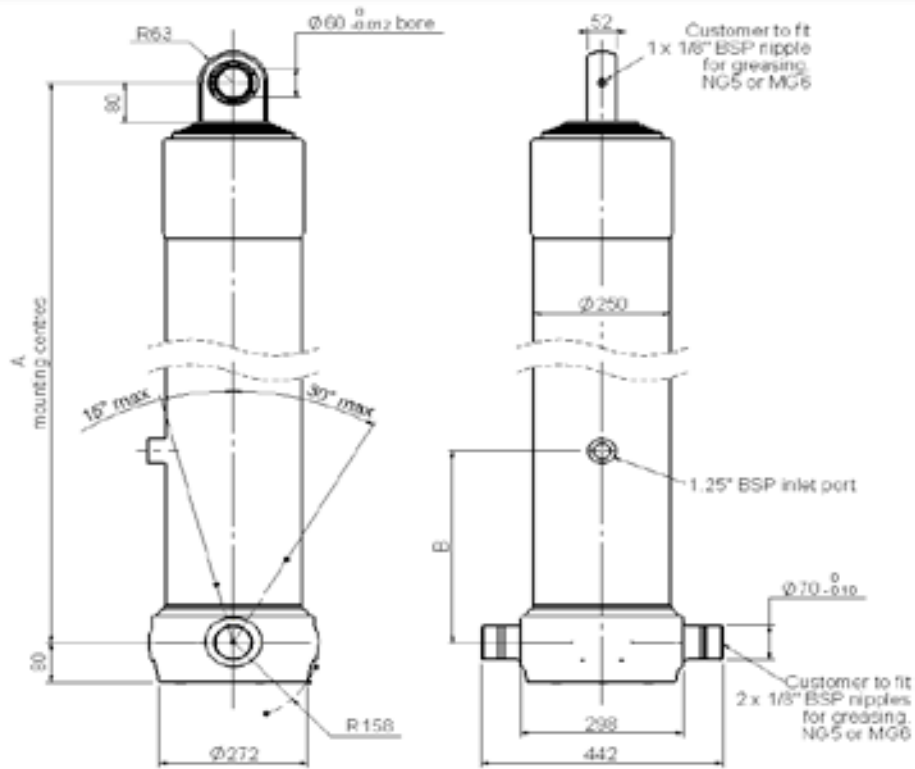
#### CYLINDERS WITH SPHERICAL MOUNTING

CS19 OS			N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)					A - Mounting Centre (mm) Tolerance - +40 / -0	B - Port Height (mm)	Port Type
Cylinders Codes							Tipping capacity		Bodylength (mm)				
							Min	Max	Min	Max			
CS19 OS 5	5428	B70 A01	5	5428	245	107	50	78	6750	7750	1344	700	BSP
CS19 OS 5	5678	B70 A01	5	5678	252	112	50	76	7000	8000	1394	700	BSP
CS19 OS 5	5928	B70 A01	5	5928	260	117	50	75	7250	8250	1444	700	BSP
CS19 OS 5	6178	B70 A01	5	6178	268	122	45	62	7750	8750	1494	700	BSP
CS19 OS 5	6428	B70 A01	5	6428	275	127	44	60	8000	9000	1544	700	BSP
CS19 OS 5	6678	B70 A01	5	6678	283	132	41	58	8000	9000	1594	700	BSP
CS19 OS 5	6928	B70 A01	5	6928	291	137	36	48	8500	9500	1644	700	BSP
CS19 OS 5	7178	B70 A01	5	7178	298	142	36	47	8750	9750	1694	700	BSP
CS19 OS 5	7428	B70 A01	5	7428	306	147	33	43	9000	10000	1744	700	BSP
CS19 OS 5	7678	B70 A01	5	7678	313	152	27	35	9250	10250	1794	700	BSP

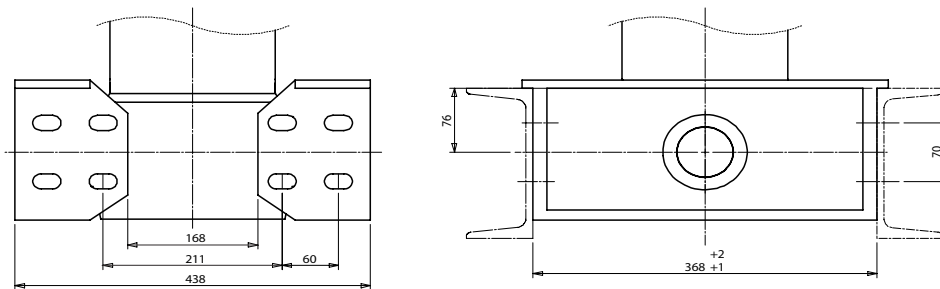
#### SPECIALS

CS19 OS 5	5678	B70 L04	5	5678	253	107	43	73	6500	7500	1469	700	BSP
CS19 OS 5	5928	B40 A05	5	5928	268	117	53	73	7500	8200	1544	400	BSP
CS19 OS 5	6178	S70 A01	5	6178	268	122	45	62	7750	8750	1494	700	SAE
CS19 OS 6	6245	B70 A01	6	6245	256	110	32	47	7750	8750	1309	700	BSP
CS19 OS 6	6995	B70 K01	6	6995	288	128	30	41	8750	9750	1549	700	BSP
CS19 OS 6	6995	B70 K01C	6	6995	288	128	30	41	8750	9750	1549	700	BSP
CS19 OS 6	7445	S70 A01	6	7445	288	132	23	30	9250	10250	1509	700	SAE

### CS22 OS

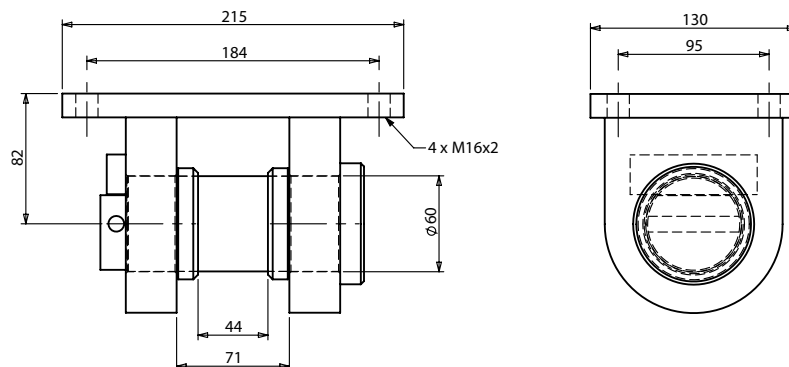


### BB106



Mass: 18kg x 2 = 36 kg

### OMK7



OMK7 for use with OS5 stage Mass: 12.2kg

### CS22 0S

#### CYLINDERS WITH SPHERICAL MOUNTING

CS22 0S			N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)					A - Mounting Centre (mm) Tolerance - +40 / -0	B - Port Height (mm)	Port Type
Cylinders Codes							Tipping capacity		Bodylength (mm)				
							Min	Max	Min	Max			
CS22 0S 5	5530	B39 CAE	5	5530	361	140	67	94	7500	7900	1413	390	BSP
CS22 0S 5	5780	B39 CAE	5	5780	369	147	67	92	7750	8150	1463	390	BSP
CS22 0S 5	6030	B39 CAE	5	6030	377	153	74	95	8000	8400	1513	390	BSP
CS22 0S 5	6280	B39 CAE	5	6280	384	160	73	93	8250	8650	1563	390	BSP
CS22 0S 5	6530	B39 CAE	5	6530	392	166	73	92	8500	8900	1613	390	BSP
CS22 0S 5	6780	B39 CAE	5	6780	399	172	73	91	8750	9150	1663	390	BSP
CS22 0S 5	7030	B39 CAE	5	7030	407	179	73	90	9000	9400	1713	390	BSP
CS22 0S 5	7280	B39 CAE	5	7280	415	185	66	84	9250	9650	1763	390	BSP
CS22 0S 5	7530	B39 CAE	5	7530	422	192	59	75	9500	9900	1813	390	BSP

## Full Product Range

**CS Series is one of a wide range of Edbro cylinders designed to optimise tipping applications, for further product information on any of our range please visit [www.edbro.com](http://www.edbro.com)**



### CX Series

*The Fully integrated ram and tank design of the CX range is ideally suited to rigid truck installations. The integration of the oil tank allows the size to be optimised to the cylinder and provides advantages in ease of installation. The CX allows the direct mounting of the hydraulic valve to the base of the cylinder which reduces the number of components and protects the valve from the elements whilst providing the added safety feature of hose burst protection.*



### TS Series

*The TS range uses the C series cylinder technology in combination with a high strength stabilizing frame and is designed especially for 6 and 8 wheel Trucks. The design allows for maximum safety with 50% more stability and increases productivity with greater lift capacity and 30% faster tipping speeds than the closest competitor's product.*



### UB Series

*High performance underbody telescopic hoists for tipper and crane applications including 3-way tipping solutions. Edbro kit components and optimum specification provide the highest levels of performance. Increased payload and maximum performance with lightweight and high strength materials.*



### RK Series

*The Edbro RK Series of double acting telescopic cylinders are used for a wide range of applications. Typical operations are ejector trailers and refuse collection vehicles with cylinders designed to user requirements.*



## Global Distribution and Global Service



For a full list of Edbro Service Agents and Distributors,  
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