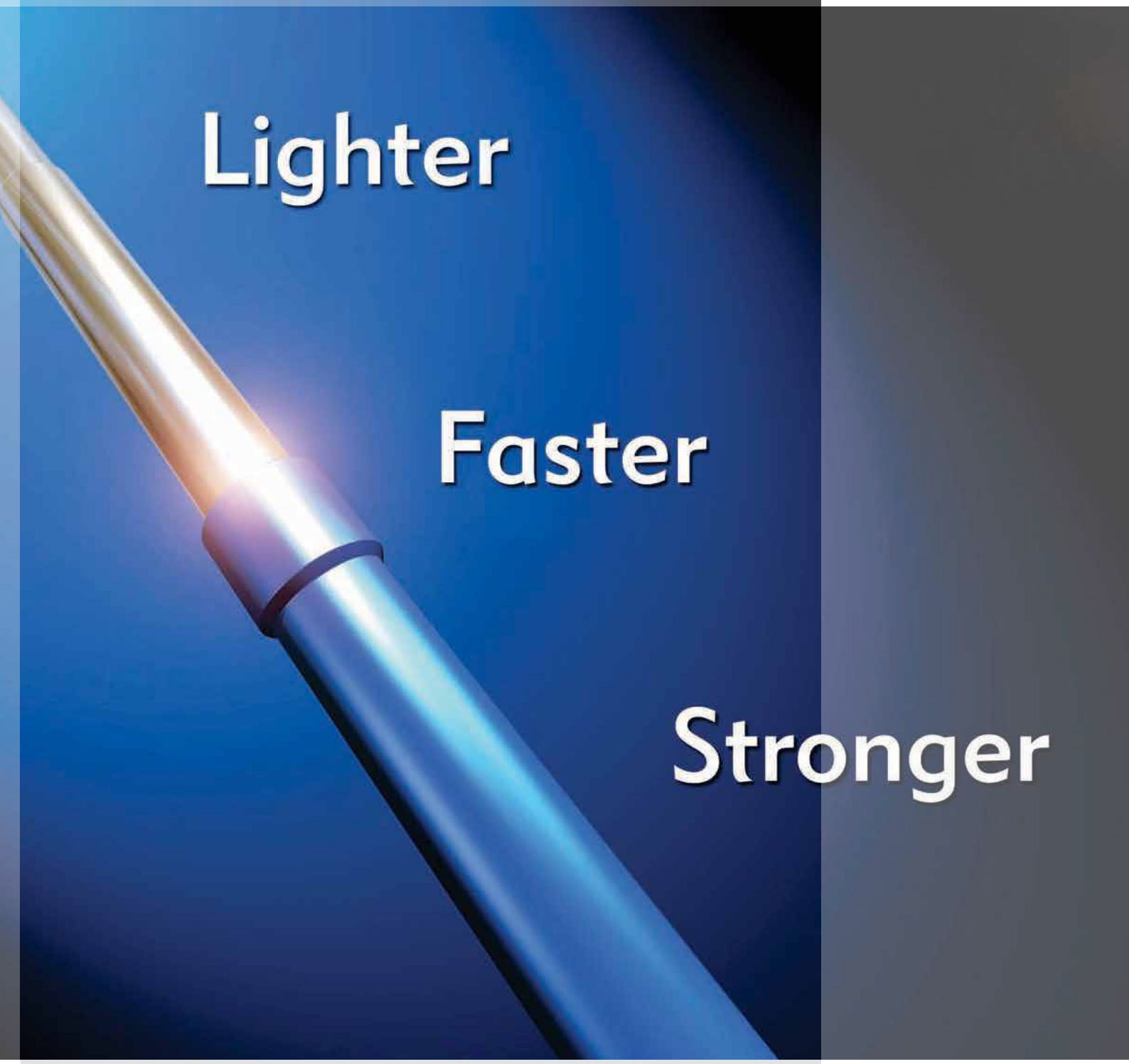
Product Catalogue

Edbro



Edbro Full Product Catalogue

www.jost-world.com

Member of JOST-World

Edbro
SETTING THE INDUSTRY STANDARD

Edbro Product Catalogue

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Ejector Rams.

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Introduction



CS Series

Tipping Hoists - A new generation of Edbro hydraulic tipping hoist equipment to suit rigid truck and trailer tippers worldwide.

The CS range of cylinders is the lightest and most durable range of telescopic cylinders in the world, providing a true "fit and forget" solution to tipping applications.



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

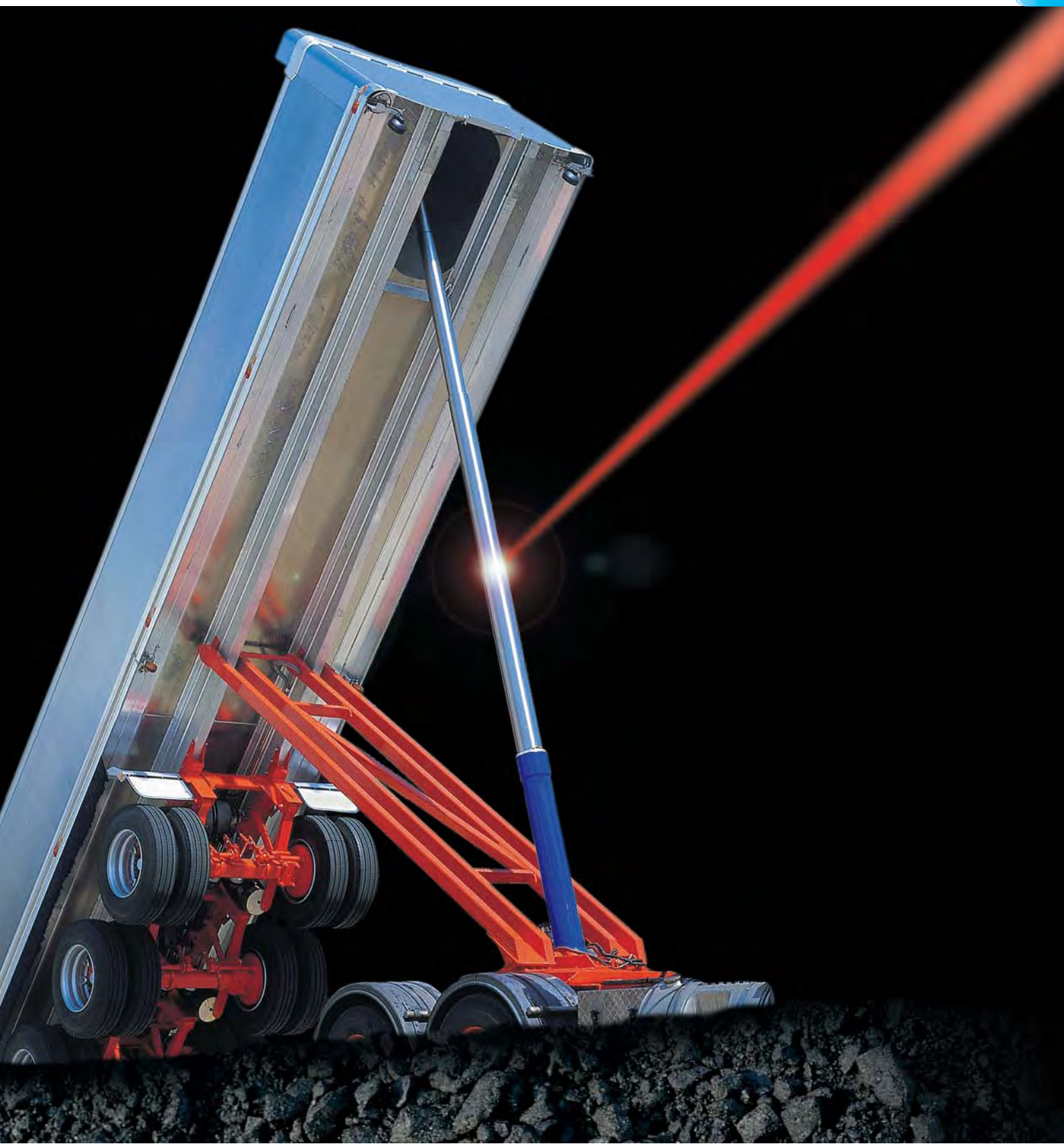
The Edbro RK Series of double acting telescopic cylinders are used for a wide range of applications. Typical operations are ejector trailers and refuse collection vehicles with cylinders designed to user requirements.

Edbro

SETTING THE INDUSTRY STANDARD

CS Series

Hydraulic Cylinders



Edbro C Series technology has set new industry standards with unique features and unrivalled benefits

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.***



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

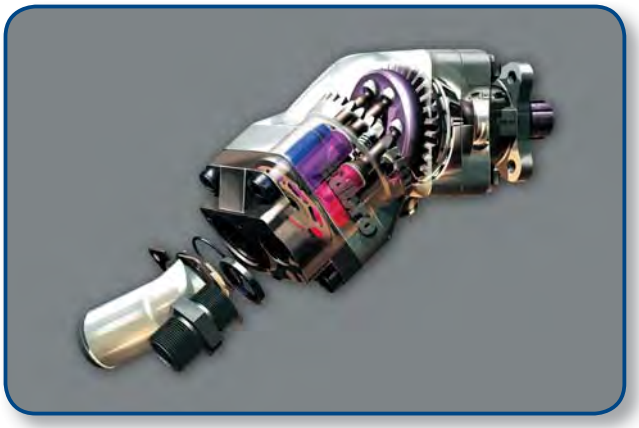
Our unrivalled product knowledge and experience ensures a safe but optimized cylinder selection for even the most demanding of applications. A comprehensive cylinder selection programme is available on line at ***www.edbro.com*** *which will present a range of suitable cylinders for your application.*

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.

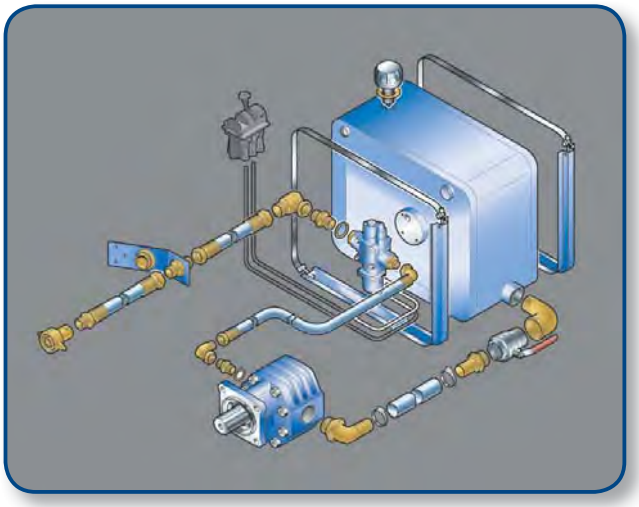


Engineering Expertise

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.





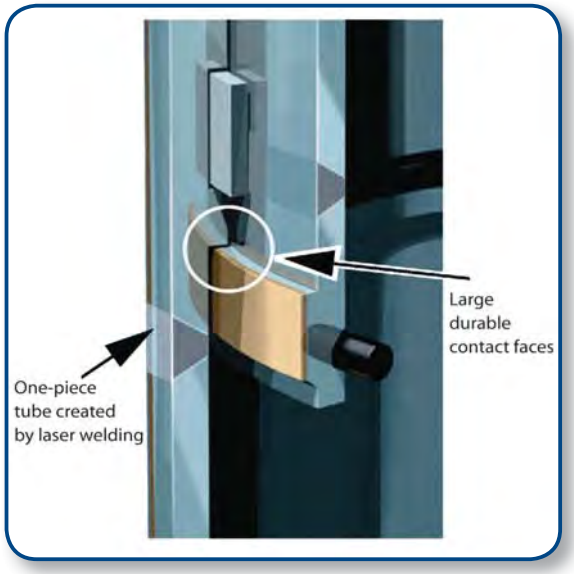
Benefits



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.

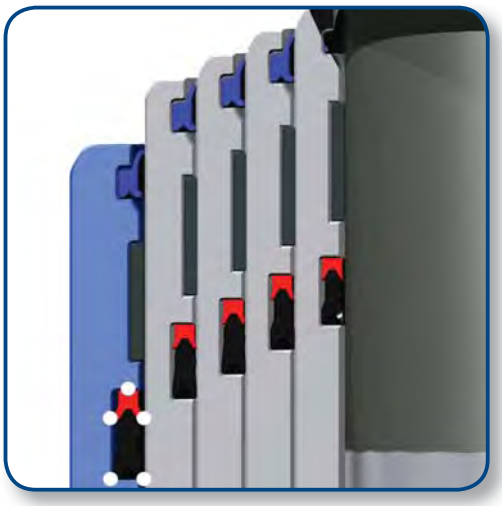


Stronger

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.

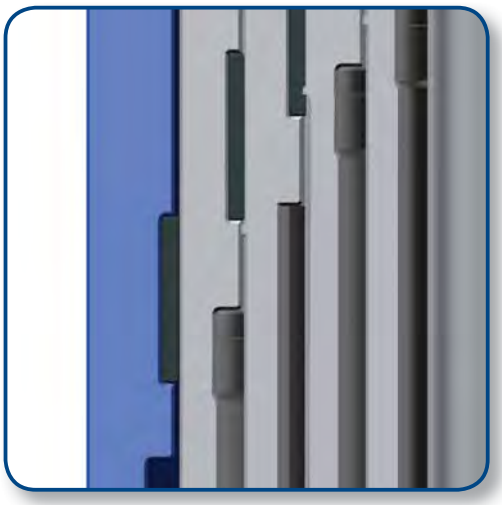
Features



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

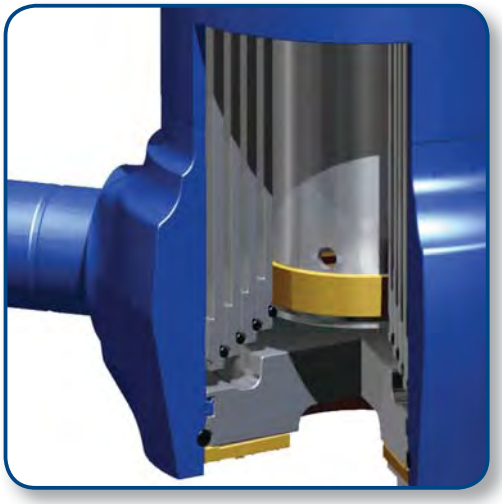
Unique 5 point sealing system reduces friction for years of smooth, trouble-free operation.





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 bodylength 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

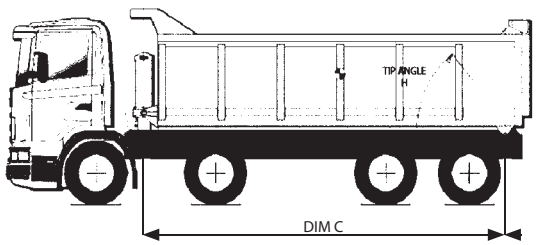


This variant of eye type will ensure that there is no bending stress imposed on the body and reduces cylinder side loading but it will allow more body movement under sideload conditions.

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*** *for a list of angles for specific materials (hyper link for web & memory stick versions).*

Estimate the cylinder stroke:



Approx stroke = Tip angle (H) x Pivot length (Dim C) / 59

Estimate the required body and payload:

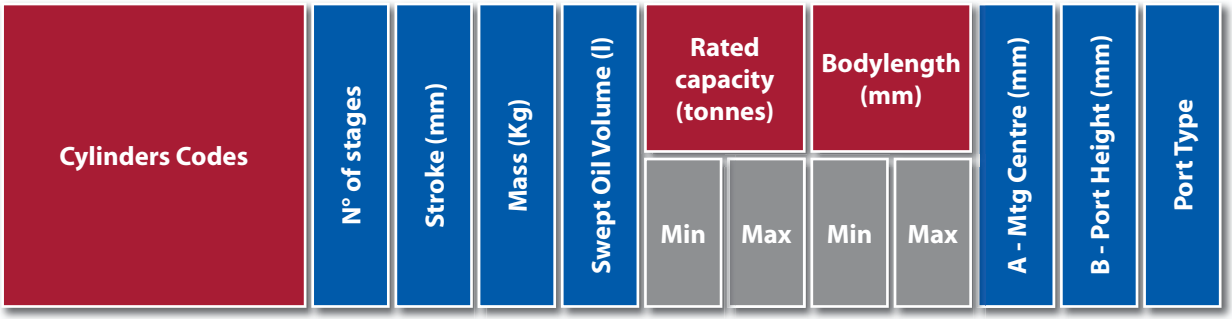
Payload is normally estimated from the design capacity of the chassis and legal road requirements.

Maximum payload = body capacity x 1.5t/m^3 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.*** *If a suitable cylinder is not listed e-mail your application details to Edbro.*

Understanding the catalogue pages



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 x Swept volume / (pump displacement (cc/rev) X 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***

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:

Temperature rating: *Range -25C to + 110C*

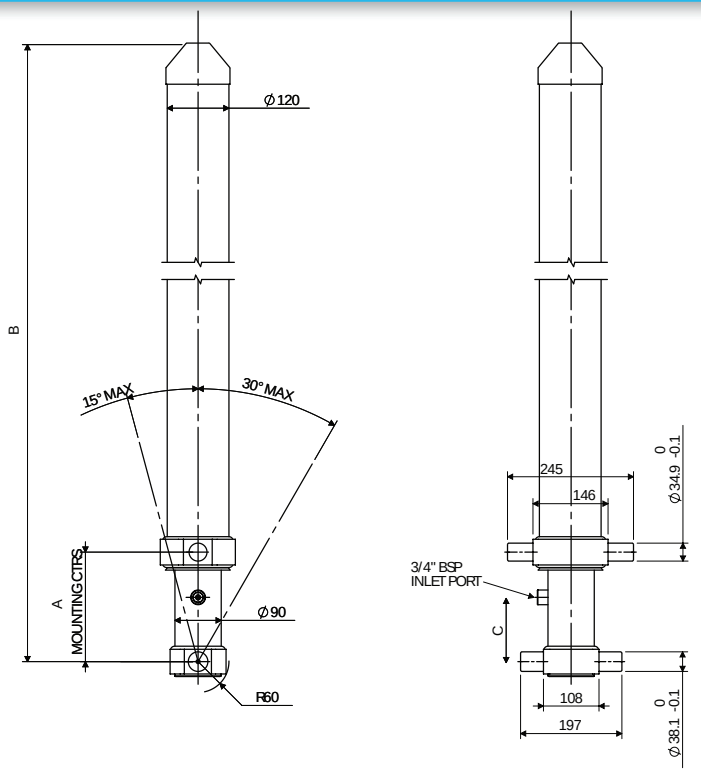
Chrome plating: *Edbro uses a high performance micro-crack chrome plating system. For cylinders with top eye mounting, the smallest stage is always chrome plated. For other cylinders chrome plating is an option. The minimum guaranteed corrosion resistance is 40hrs neutral salt exposure to rating 10 ISO4406. 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:*

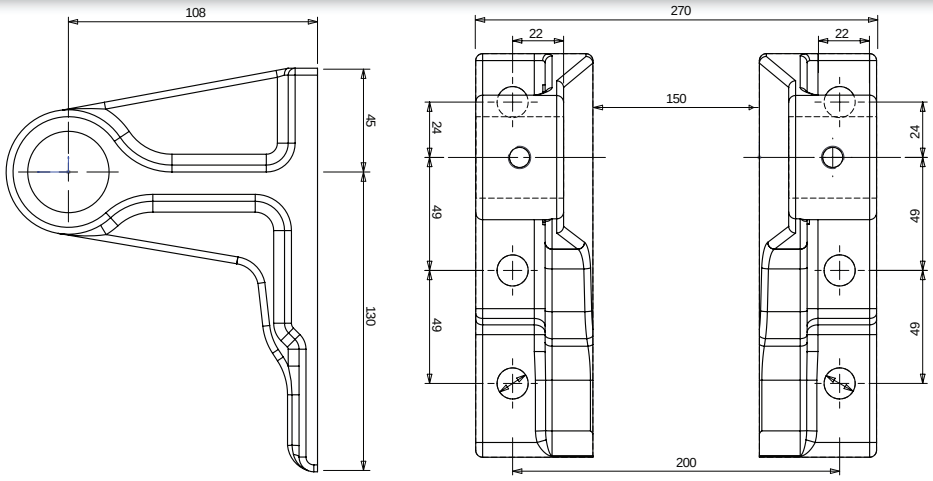
Model									small inner dia	max flow l/min
CS22	CS19	CS18	CS17	CS15	CS13	CS11	CS10	CS7	mm	
						4	3	3	63	60
			6	5	4	3			79	90
	6	5	5	4	3				98	135
	5	4	4	3					117	200
5	4								136	250

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

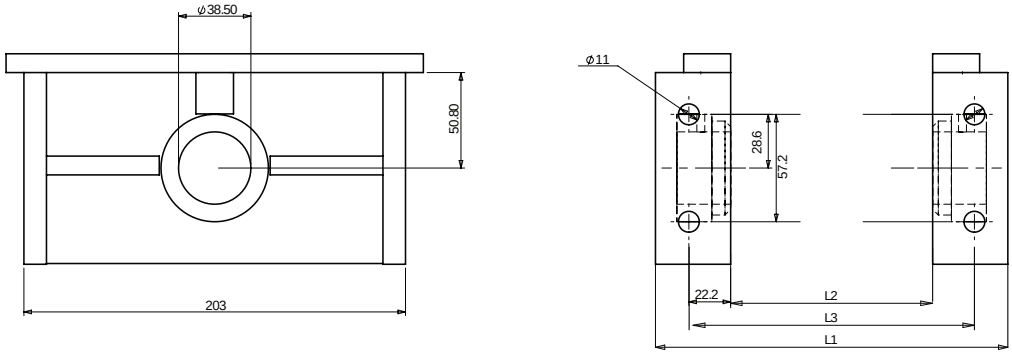
CS7 00



EB165/1 - EB166/1



RB14A/FAB



Mass: 3kg x 2 = 6 kg

CS7 00

CYLINDERS WITH OUTER COVER

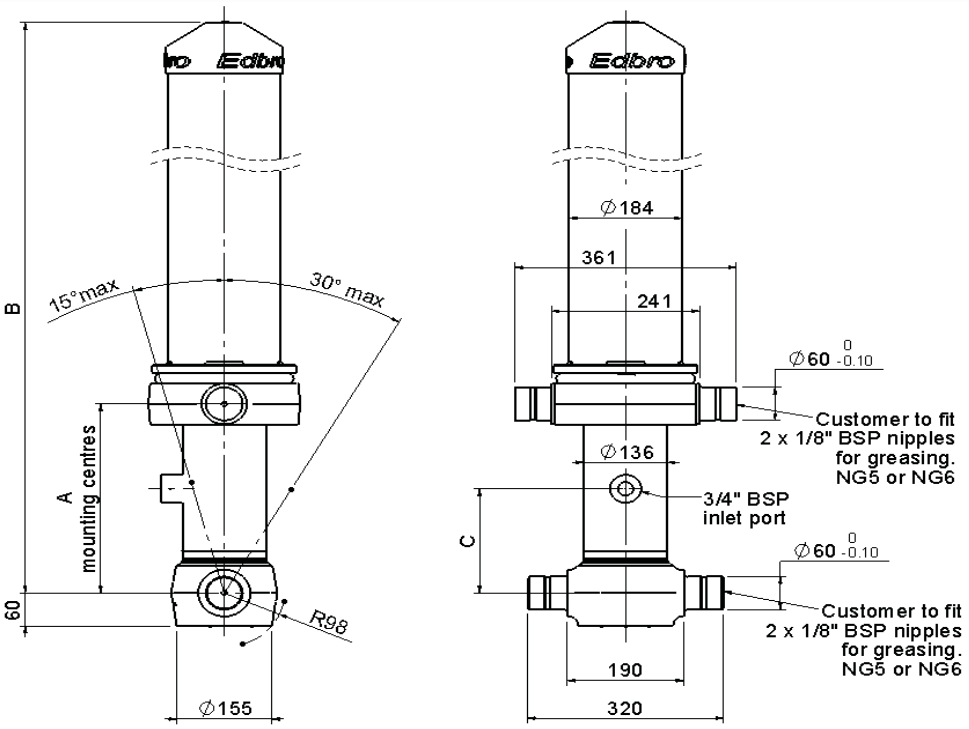
CS07

Cylinders Codes	N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)	capacity (tonnes)		Bodylength (mm)		A - Mounting Centre (mm)	B - Overall Height (mm)	C - Port Height (mm)	Port Type
					Min	Max	Min	Max				
CS07 00 3 2130 N12 A28	3	2130	49	7	7	10	3000	3200	213	1010	125	BSP
CS07 00 3 2355 N12 A28	3	2355	52	7	7	11	3250	3650	213	1085	125	BSP
CS07 00 3 2595 N12 A28	3	2595	56	9	7	10	3500	3900	213	1165	125	BSP
CS07 00 3 2895 N12 A28	3	2895	60	11	7	11	3750	4250	213	1265	125	BSP
CS07 00 3 3195 N12 A28	3	3195	64	12	7	10	4250	4750	213	1365	125	BSP

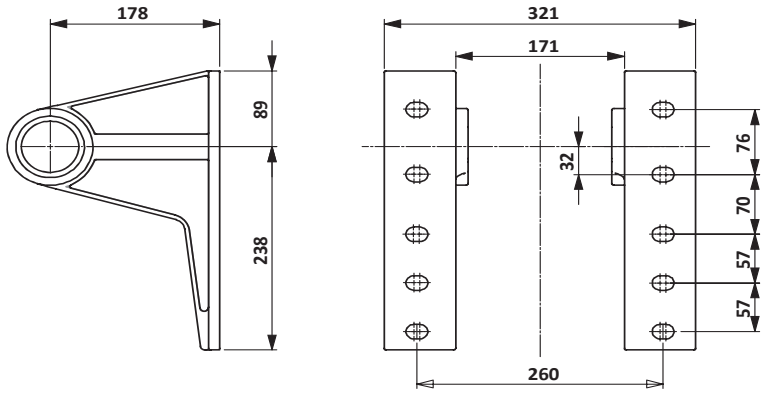
CYLINDERS WITH EYE MOUNTING

CS07 0E 3 2595 N12 A02	3	2595	44	9	7	11	3500	3900	1135	1135	125	BSP
CS07 0E 3 2595 B12 A02	3	2595	44	9	7	11	3500	3900	1135	1135	125	BSP

CS11 00

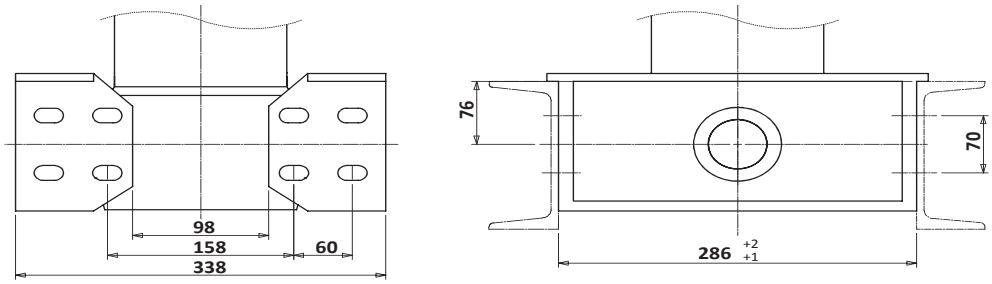


LB108-LB109



Mass: 7kg x 2 = 14 kg

BB103



Mass: 11kg x 2 = 22 kg

CS11 00

CYLINDERS WITH OUTER COVER

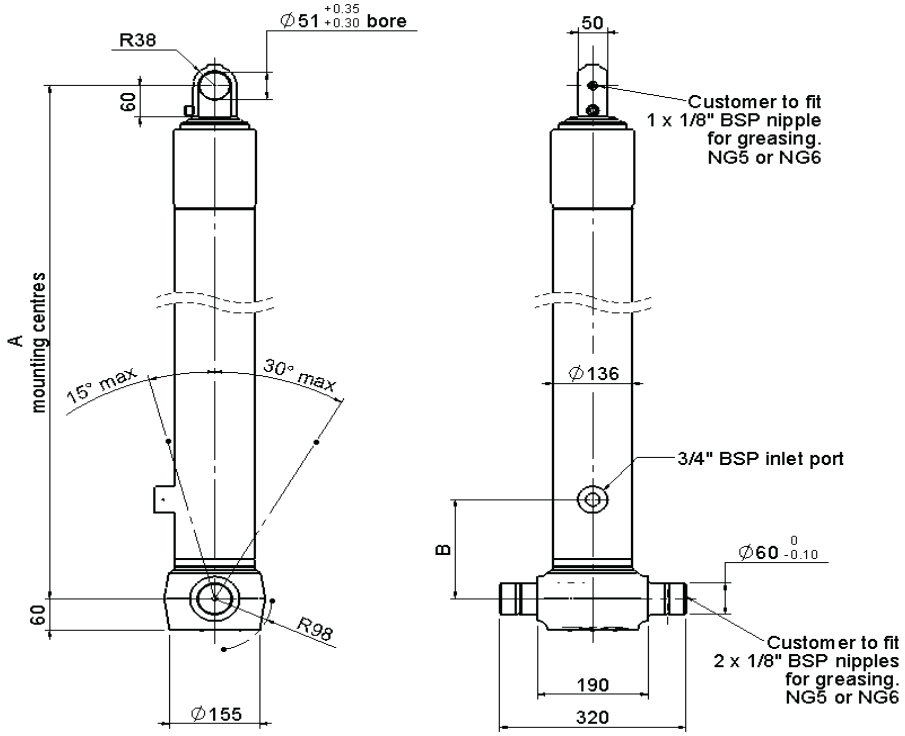
CS11

Cylinders Codes	N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)	Tipping capacity		Bodylength (mm)		A - Mounting Centre (mm) Tolerance - +40 / -0	B - Overall Height (mm)	C - Port Height (mm)	Port Type
					Min	Max	Min	Max				
CS11 00 3 3194 B19 A11	3	3194	111	24	22	35	4400	4650	345	1331	190	BSP
CS11 00 3 3344 B19 A11	3	3344	115	26	21	34	4550	4800	345	1381	190	BSP
CS11 00 3 3494 B19 A11	3	3494	119	27	21	33	4700	4950	345	1431	190	BSP
CS11 00 3 3644 B19 A11	3	3644	122	28	21	32	4850	5100	345	1481	190	BSP
CS11 00 3 3794 B19 A11	3	3794	125	29	21	32	5000	5250	345	1531	190	BSP
CS11 00 3 3944 B19 A11	3	3944	128	30	21	31	5150	5400	345	1581	190	BSP
CS11 00 3 4094 B19 A11	3	4094	132	32	21	30	5300	5500	345	1631	190	BSP
CS11 00 4 3271 B19 A11	4	3271	100	22	17	31	4400	4700	345	1086	190	BSP
CS11 00 4 3471 B19 A11	4	3471	104	23	17	31	4550	4850	345	1136	190	BSP
CS11 00 4 3671 B19 A11	4	3671	107	25	17	30	4700	5200	345	1186	190	BSP
CS11 00 4 3871 B19 A11	4	3871	111	25	17	30	4850	5350	345	1236	190	BSP
CS11 00 4 4071 B19 A11	4	4071	115	27	17	29	5000	5500	345	1286	190	BSP
CS11 00 4 4271 B19 A11	4	4271	118	27	17	27	5250	5750	345	1336	190	BSP
CS11 00 4 4471 B19 A11	4	4471	122	30	16	26	5500	6000	345	1386	190	BSP
CS11 00 4 4671 B19 A11	4	4671	125	31	16	24	5750	6250	345	1436	190	BSP
CS11 00 4 4871 B19 A11	4	4871	129	32	16	23	6000	6500	345	1486	190	BSP
CS11 00 4 5071 B19 A11	4	5071	133	33	16	23	6250	6750	345	1536	190	BSP
CS11 00 4 5271 B19 A11	4	5271	136	34	16	22	6500	7000	345	1586	190	BSP
CS11 00 4 5471 B19 A11	4	5471	140	36	16	21	6750	7250	345	1636	190	BSP

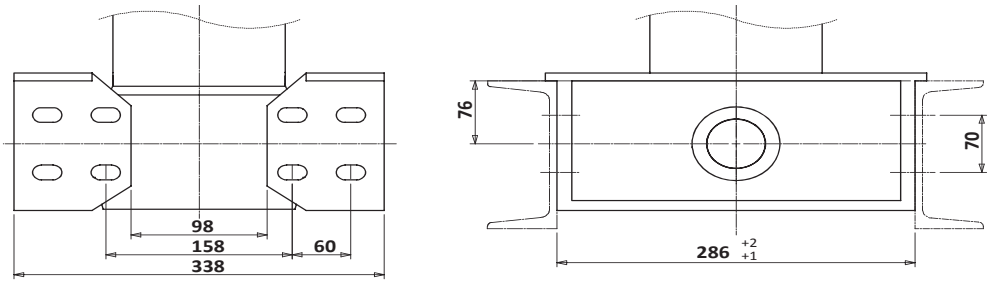
SPECIALS

CS11 00 4 4271 B19 A21	4	4271	115	27	17	27	5250	5750	345	1336	190	BSP

CS11 0E

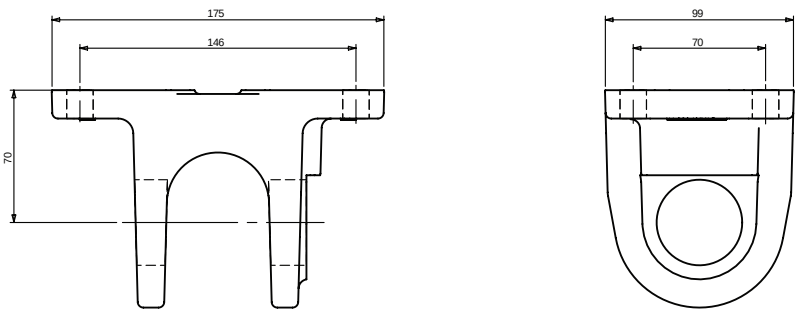


BB103



Mass: 11kg x 2 = 22 kg

OMK1C



OMK1C for 3-4 stages ; Mass : 5.5 kg

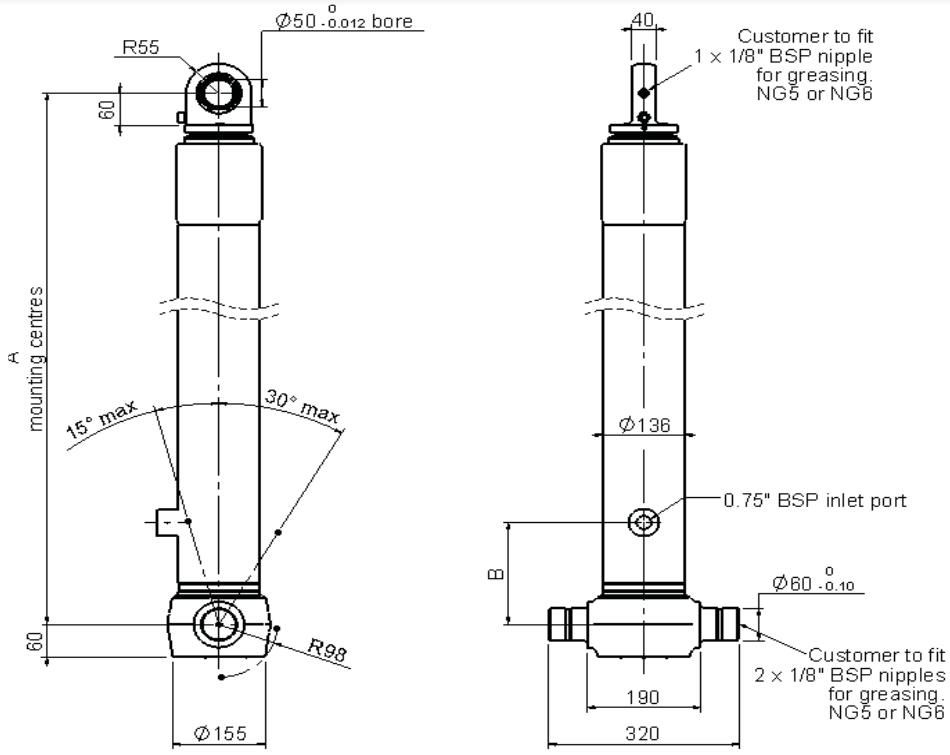
CS11 0E

CYLINDERS WITH EYE MOUNTING

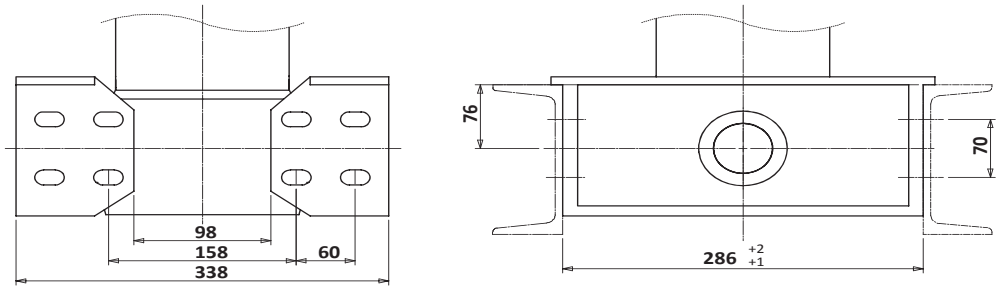
CS11 0E

Cylinders Codes	N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)	Tipping capacity		Bodylength (mm)		A - Mounting Centre (mm) Tolerance - +40 / -0	B - Port Height (mm)	Port Type
					Min	Max	Min	Max			
CS11 0E 3 2444 B19 A01	3	2444	61	19	23	33	3900	4100	1049	190	BSP
CS11 0E 3 2594 B19 A01	3	2594	66	20	22	32	4000	4200	1099	190	BSP
CS11 0E 3 2744 B19 A01	3	2744	68	22	19	32	4100	4300	1149	190	BSP
CS11 0E 3 2894 B19 A01	3	2894	71	22	19	32	4200	4400	1199	190	BSP
CS11 0E 3 3044 B19 A01	3	3044	73	24	19	32	4300	4500	1249	190	BSP
CS11 0E 3 3194 B19 A01	3	3194	85	24	19	31	4400	4650	1299	190	BSP
CS11 0E 3 3344 B19 A01	3	3344	79	26	19	30	4550	4800	1349	190	BSP
CS11 0E 3 3494 B19 A01	3	3494	81	27	19	29	4700	4950	1399	190	BSP
CS11 0E 3 3644 B19 A01	3	3644	84	28	19	29	4850	5100	1449	190	BSP
CS11 0E 3 3794 B19 A01	3	3794	86	29	18	28	5000	5250	1499	190	BSP
CS11 0E 3 3944 B19 A01	3	3944	89	30	18	27	5150	5400	1549	190	BSP
CS11 0E 3 4094 B19 A01	3	4094	92	32	18	27	5300	5550	1599	190	BSP

CS11 0S



BB103



Mass: 11kg x 2 = 22 kg

CS11 0S

CYLINDERS WITH SPHERICAL MOUNTING

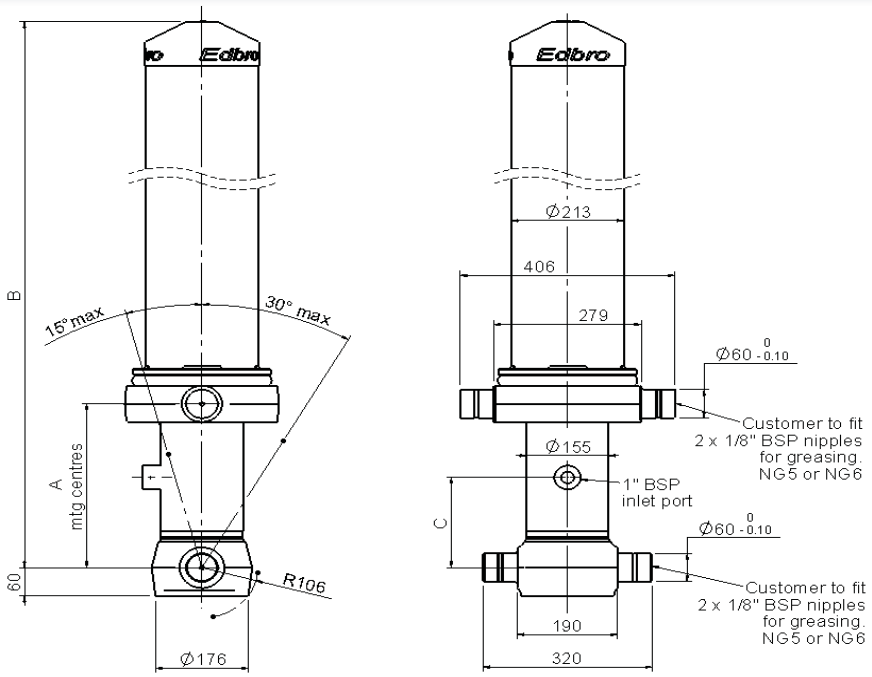
CS11 0S

Cylinders Codes			N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)	Tipping capacity		Bodylength (mm)		A - Mounting Centre (mm) Tolernace - +40 / -0	B - Port Height (mm)	Port Type
							Min	Max	Min	Max			
CS11 0S 3	2444	B19 A01	3	2444	66	19	23	33	3900	4100	1059	190	BSP
CS11 0S 3	2594	B19 A01	3	2594	68	20	22	32	4000	4200	1109	190	BSP
CS11 0S 3	2744	B19 A01	3	2744	71	22	19	32	4100	4300	1159	190	BSP
CS11 0S 3	2894	B19 A01	3	2894	74	22	19	32	4200	4400	1209	190	BSP
CS11 0S 3	3044	B19 A01	3	3044	76	24	19	32	4300	4500	1259	190	BSP
CS11 0S 3	3194	B19 A01	3	3194	79	24	19	31	4400	4650	1309	190	BSP
CS11 0S 3	3344	B19 A01	3	3344	80	26	19	31	4550	4800	1359	190	BSP
CS11 0S 3	3494	B19 A01	3	3494	84	27	19	29	4700	4950	1409	190	BSP
CS11 0S 3	3644	B19 A01	3	3644	87	28	19	29	4850	5100	1459	190	BSP
CS11 0S 3	3794	B19 A01	3	3794	89	29	18	28	5000	5250	1509	190	BSP
CS11 0S 3	3944	B19 A01	3	3944	92	30	18	27	5150	5400	1559	190	BSP
CS11 0S 3	4094	B19 A01	3	4094	94	32	18	27	5300	5550	1609	190	BSP

SPECIALS

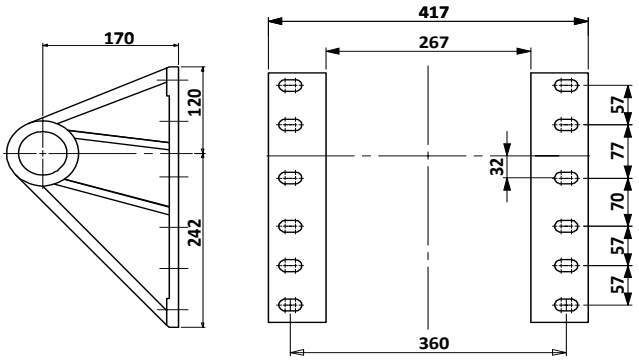
CS11 0S 3	3494	B19 A04	3	3494	85	27	20	32	4750	5000	1484	190	BSP

CS13 00



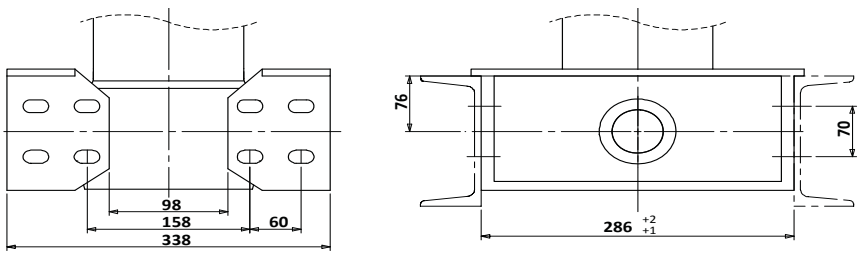
Typical Model shown CS13003

LB104-LB105



Mass: 8.5kg x 2 = 16 kg

BB103



Mass: 11kg x 2 = 22 kg

CS13 00

CYLINDERS WITH OUTER COVER

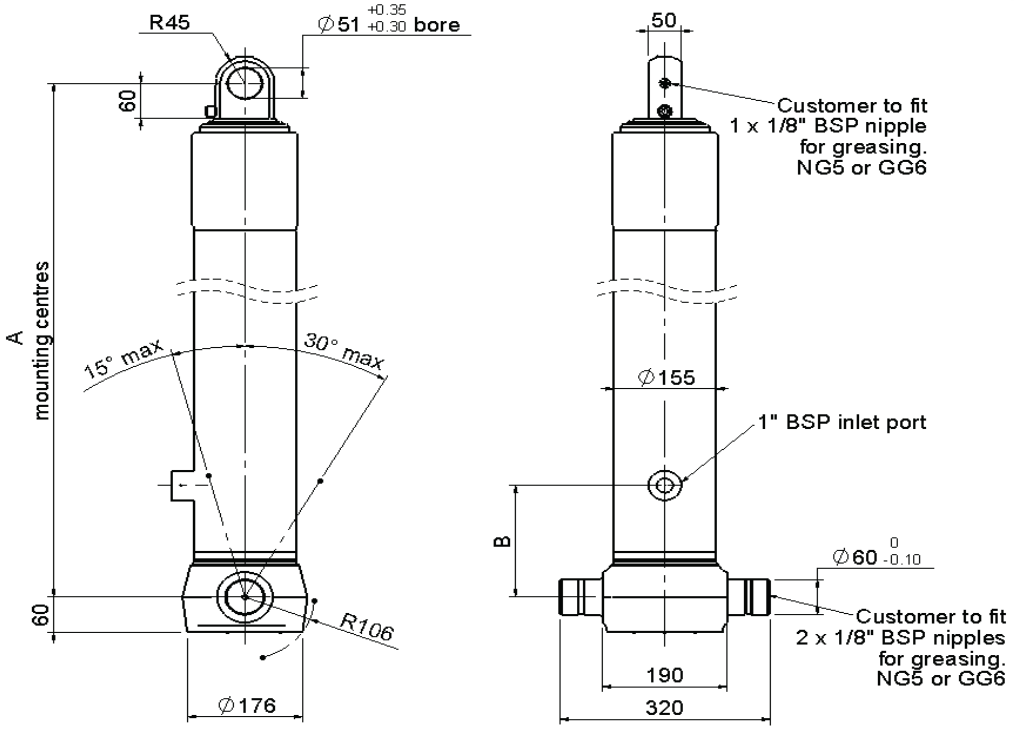
CS13 00

Cylinders Codes	N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)	Tipping capacity		Bodylength (mm)		A - Mounting Centre (mm) Tolernace - +40 / -0	B - Overall Height (mm)	C - Port Height (mm)	Port Type
					Min	Max	Min	Max				
CS13 00 3 3169 B19 A11	3	3169	153	34	27	49	4200	4450	345	1337	190	BSP
CS13 00 3 3319 B19 A11	3	3319	157	36	27	47	4350	4600	345	1387	190	BSP
CS13 00 3 3469 B19 A11	3	3469	162	37	27	45	4500	4750	345	1437	190	BSP
CS13 00 3 3619 B19 A11	3	3619	166	39	27	43	4650	4900	345	1487	190	BSP
CS13 00 3 3769 B19 A11	3	3769	170	42	27	42	4800	5050	345	1537	190	BSP
CS13 00 3 3919 B19 A11	3	3919	174	43	27	41	4950	5200	345	1587	190	BSP
CS13 00 4 3841 B19 A11	4	3841	153	36	27	42	4750	5250	345	1242	190	BSP
CS13 00 4 4041 B19 A11	4	4041	156	38	27	42	4900	5400	345	1292	190	BSP
CS13 00 4 4241 B19 A11	4	4241	160	39	26	42	5250	5750	345	1342	190	BSP
CS13 00 4 4441 B19 A11	4	4441	167	42	26	40	5500	6000	345	1392	190	BSP
CS13 00 4 4641 B19 A11	4	4641	172	43	25	38	5750	6250	345	1442	190	BSP
CS13 00 4 4841 B19 A11	4	4841	176	45	25	37	6000	6500	345	1492	190	BSP
CS13 00 4 5041 B19 A11	4	5041	181	48	25	35	6250	6750	345	1542	190	BSP
CS13 00 4 5241 B19 A11	4	5241	186	49	25	34	6500	7000	345	1592	190	BSP
CS13 00 4 5441 B19 A11	4	5441	190	51	23	33	6750	7750	345	1642	190	BSP
CS13 00 4 5641 B19 A11	4	5641	195	53	23	32	7000	8000	345	1692	190	BSP
CS13 00 4 5841 B19 A11	4	5841	200	55	23	32	7250	8250	345	1742	190	BSP

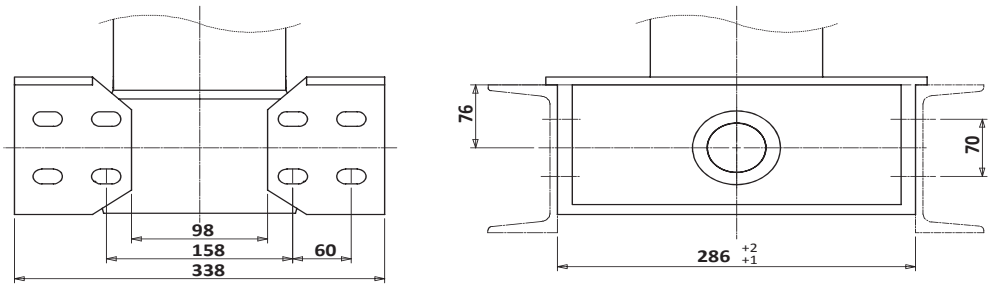
SPECIALS

CS13 00 4 3441 B19 J11	4	3441	153	34	24	45	4350	4550	345	1242	190	BSP
CS13 00 4 4441 B19 J11	4	4441	176	43	27	37	5500	6600	345	1492	190	BSP
CS13 00 4 4891 B19 H11	4	4891	186	50	26	40	6000	6500	345	1592	190	BSP
CS13 00 4 5441 B19 A21	4	5441	186	51	23	33	6750	7750	345	1634	190	BSP
CS13 00 5 4068 B19 A11	5	4068	146	33	17	28	5000	5500	345	1097	190	BSP
CS13 00 5 4568 B19 A11	5	4568	154	38	17	25	5600	6100	345	1197	190	BSP

CS13 0E

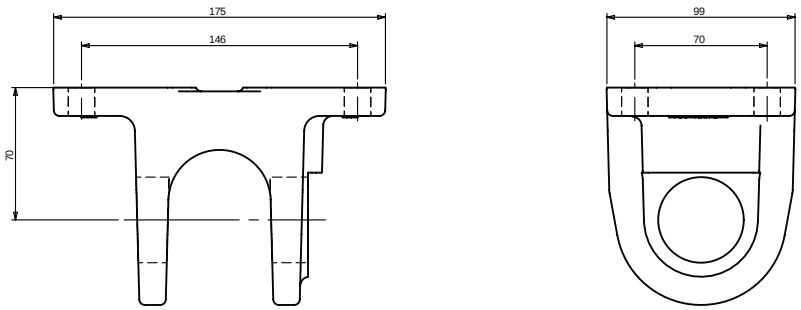


BB103



Mass: 11kg x 2 = 22 kg

OMK1C



OMK1C for 3-4 stages ; Mass : 5.5 kg

CS13 0E

CYLINDERS WITH EYE MOUNTING

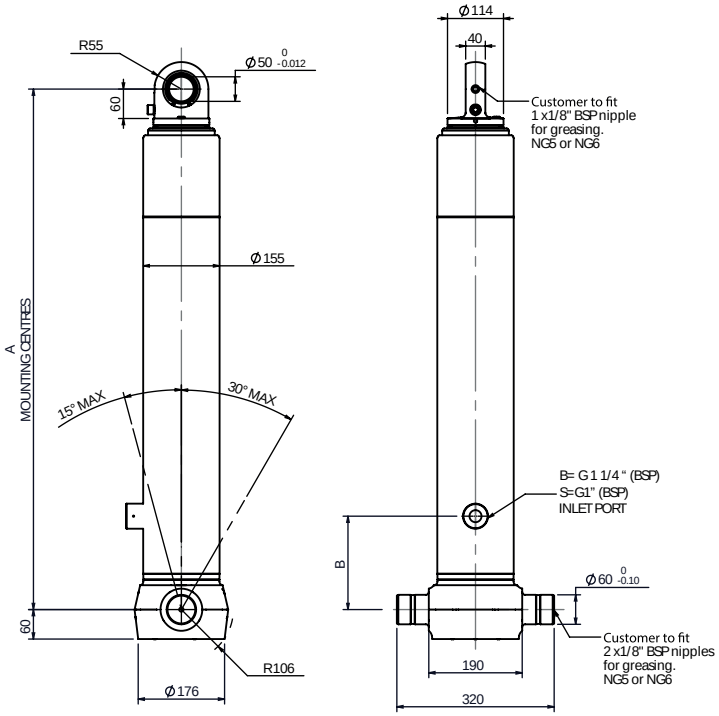
CS13 0E

Cylinders Codes	N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)	Tipping capacity Min	Tipping capacity Max	Bodylength (mm) Min	Bodylength (mm) Max	A - Mounting Centre (mm) Tolernace - +40 / -0	B - Port Height (mm)	Port Type
CS13 0E 3 2419 B19 A01	3	2419	88	26	35	54	3800	4000	1049	190	BSP
CS13 0E 3 2569 B19 A01	3	2569	92	28	30	53	3900	4100	1099	190	BSP
CS13 0E 3 2719 B19 A01	3	2719	95	30	30	53	4000	4200	1149	190	BSP
CS13 0E 3 2869 B19 A01	3	2869	98	31	29	52	4100	4350	1199	190	BSP
CS13 0E 3 3019 B19 A01	3	301	101	33	29	52	4200	4450	1249	190	BSP
CS13 0E 3 3169 B19 A01	3	3169	105	34	28	51	4300	4700	1299	190	BSP
CS13 0E 3 3319 B19 A01	3	3319	108	36	28	49	4450	4850	1349	190	BSP
CS13 0E 3 3469 B19 A01	3	3469	109	38	28	47	4600	5000	1399	190	BSP
CS13 0E 3 3619 B19 A01	3	3619	114	39	28	46	4750	5150	1449	190	BSP
CS13 0E 3 3769 B19 A01	3	3769	117	42	28	44	4900	5300	1499	190	BSP
CS13 0E 3 3919 B19 A01	3	3919	121	43	28	43	5050	5450	1549	190	BSP
CS13 0E 4 3441 B19 A01	4	3441	99	32	25	47	4600	5000	1104	190	BSP
CS13 0E 4 3641 B19 A01	4	3641	102	35	25	43	4850	5250	1154	190	BSP
CS13 0E 4 3841 B19 A01	4	3841	106	36	25	40	5100	5500	1204	190	BSP
CS13 0E 4 4041 B19 A01	4	4041	108	38	24	38	5350	5750	1254	190	BSP
CS13 0E 4 4241 B19 A01	4	4241	113	39	24	36	5600	6000	1304	190	BSP
CS13 0E 4 4441 B19 A01	4	4441	117	42	24	35	5850	6350	1354	190	BSP
CS13 0E 4 4641 B19 A01	4	4641	120	44	22	32	6100	6600	1404	190	BSP
CS13 0E 4 4841 B19 A01	4	4841	124	45	20	28	6350	6850	1454	190	BSP
CS13 0E 4 5041 B19 A01	4	5041	128	48	18	24	6600	7100	1504	190	BSP
CS13 0E 4 5241 B19 A01	4	5241	131	49	16	21	6850	7350	1554	190	BSP
CS13 0E 4 5441 B19 A01	4	5441	135	51	16	21	7100	7600	1604	190	BSP

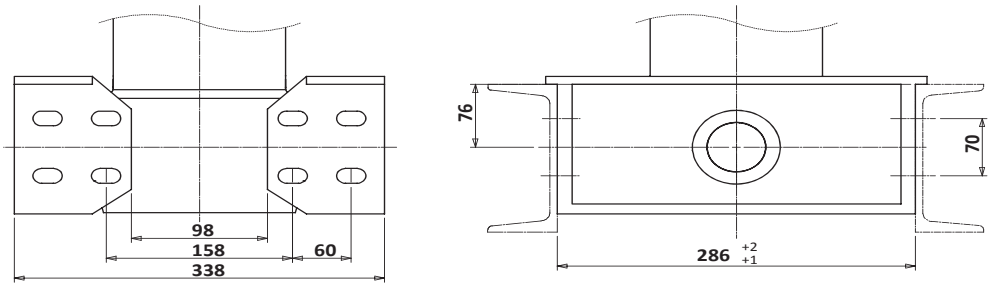
SPECIALS

CS13 0E 4 5241 B70 A01	4	5241	131	49	16	21	6850	7350	1554	700	BSP
CS13 0E 4 5241 B70 N01	4	5241	142	52	17	24	6800	7300	1704	700	BSP

CS13 0S



BB103



Mass: 11kg x 2 = 22 kg

CS13 0S

CYLINDERS WITH SPHERICAL MOUNTING

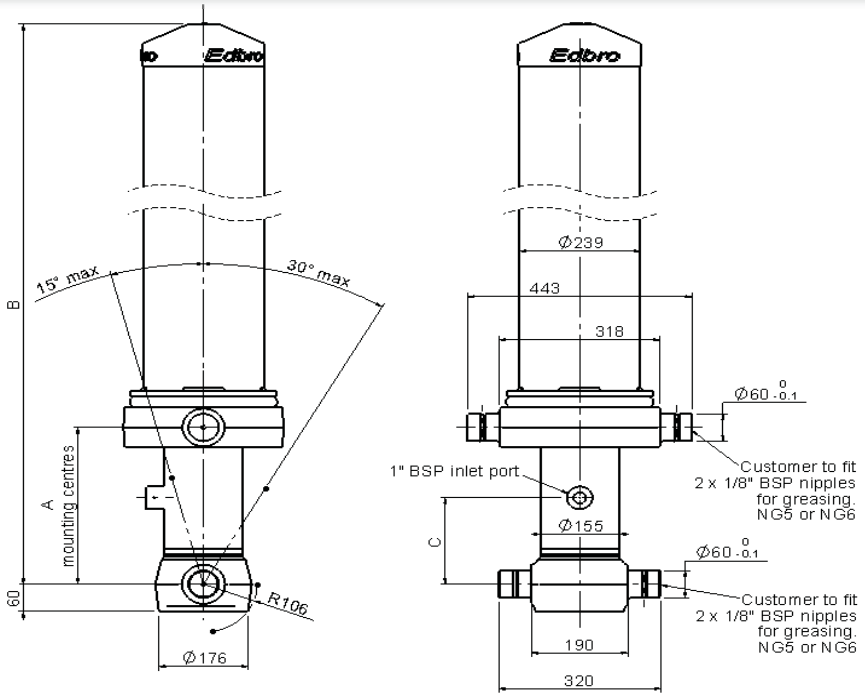
CS 13 0S

Cylinders Codes	N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)	Tipping capacity		Bodylength (mm)		A - Mounting Centre (mm) Tolernace - +40 / -0	B - Port Height (mm)	Port Type
					Min	Max	Min	Max			
CS13 0S 3 2419 B19 A01	3	2419	91	26	35	54	3800	4000	1059	190	BSP
CS13 0S 3 2569 B19 A01	3	2569	94	28	30	53	3900	4100	1109	190	BSP
CS13 0S 3 2719 B19 A01	3	2719	98	30	30	53	4000	4200	1159	190	BSP
CS13 0S 3 2869 B19 A01	3	2869	101	31	29	52	4100	4350	1209	190	BSP
CS13 0S 3 3019 B19 A01	3	3019	104	33	29	52	4200	4450	1259	190	BSP
CS13 0S 3 3169 B19 A01	3	3169	107	34	28	51	4300	4700	1309	190	BSP
CS13 0S 3 3319 B19 A01	3	3319	110	36	28	49	4450	4850	1359	190	BSP
CS13 0S 3 3469 B19 A01	3	3469	114	38	28	47	4600	5000	1409	190	BSP
CS13 0S 3 3619 B19 A01	3	3619	115	39	28	46	4750	5150	1459	190	BSP
CS13 0S 3 3769 B19 A01	3	3769	120	42	28	44	4900	5300	1509	190	BSP
CS13 0S 3 3919 B19 A01	3	3919	123	43	28	43	5050	5450	1559	190	BSP
CS13 0S 4 3441 B19 A01	4	3441	107	32	25	47	4600	5000	1114	190	BSP
CS13 0S 4 3641 B19 A01	4	3641	105	35	25	43	4850	5250	1164	190	BSP
CS13 0S 4 3841 B19 A01	4	3841	109	36	25	40	5100	5500	1214	190	BSP
CS13 0S 4 4041 B19 A01	4	4041	112	38	24	38	5350	5750	1264	190	BSP
CS13 0S 4 4241 B19 A01	4	4241	116	39	24	36	5600	6000	1314	190	BSP
CS13 0S 4 4441 B19 A01	4	4441	120	42	24	35	5850	6350	1364	190	BSP
CS13 0S 4 4641 B19 A01	4	4641	123	44	22	32	6100	6600	1414	190	BSP
CS13 0S 4 4841 B19 A01	4	4841	127	45	20	28	6350	6850	1464	190	BSP
CS13 0S 4 5041 B19 A01	4	5041	130	48	18	24	6600	7100	1514	190	BSP
CS13 0S 4 5241 B19 A01	4	5241	134	49	16	21	6850	7350	1564	190	BSP
CS13 0S 4 5441 B19 A01	4	5441	138	51	16	21	7100	7600	1614	190	BSP

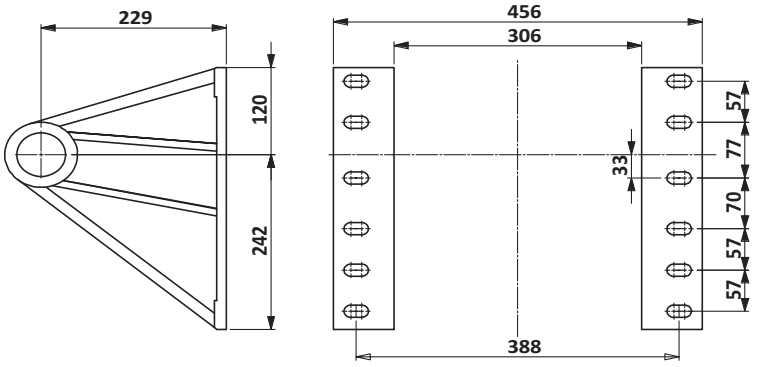
SPECIALS

CS13 0S 3 3469 S19 A01	3	3469	114	38	28	47	4600	5000	1409	190	SAE
CS13 0S 3 3469 S19 A02	3	3468	115	38	28	47	4600	5000	1434	190	SAE
CS13 0S 3 3919 B19 A03	3	3919	124	43	28	41	5150	5550	1609	190	BSP

CS14 00

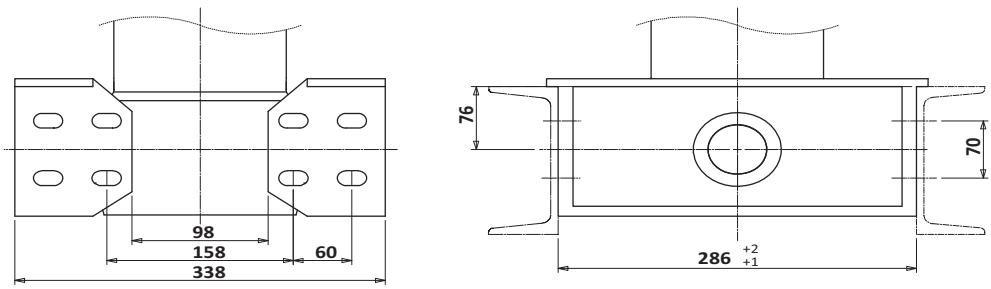


LB200-LB201



Mass: 8kg x 2 = 16 kg

BB103



Mass: 11kg x 2 = 22 kg

CS14 00

CYLINDERS WITH OUTER COVER

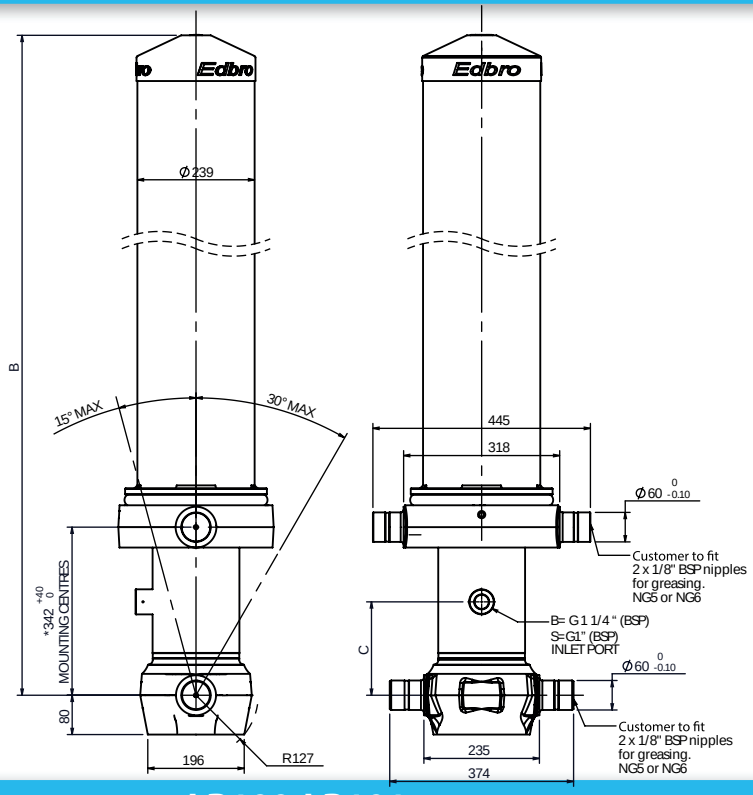
CS14 00

Cylinders Codes	N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)	Tipping capacity		Bodylength (mm)		A - Mounting Centre (mm) Tolernace - +40 / -0	B - Overall Height (mm)	C - Port Height (mm)	Port Type
					Min	Max	Min	Max				
CS14 00 4 4641 B19 A11	4	4641	201	43	25	38	5750	6250	345	1442	190	BSP
CS14 00 4 5041 B19 A11	4	5041	208	48	25	35	6250	6750	345	1542	190	BSP
CS14 00 4 5441 B19 A11	4	5441	216	51	24	36	6500	7500	345	1642	190	BSP
CS14 00 4 5841 B19 A11	4	5841	223	55	24	33	7000	8000	345	1742	190	BSP

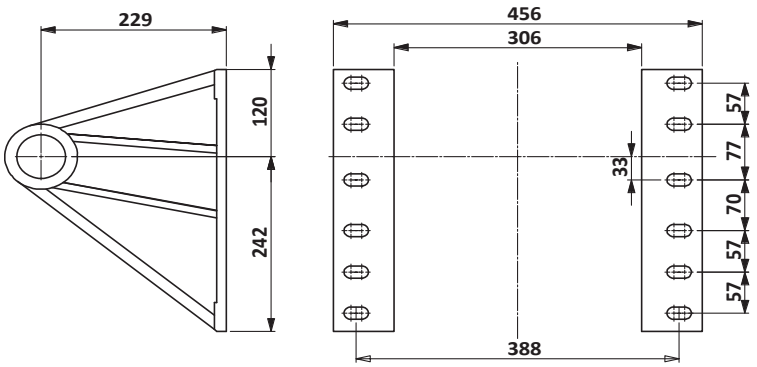
SHORT COVER

CS14 00 4 4641 B25 A15	4	4641	187	43	25	38	5750	6250	1035	1442	250	BSP
CS14 00 4 5041 B25 A15	4	5041	194	48	25	35	6250	6750	1035	1542	250	BSP
CS14 00 4 5441 B25 A15	4	5441	202	51	24	35	6550	7550	1035	1642	250	BSP
CS14 00 4 5841 B25 A15	4	5841	209	55	22	31	7000	8000	1035	1742	250	BSP

CS15 00

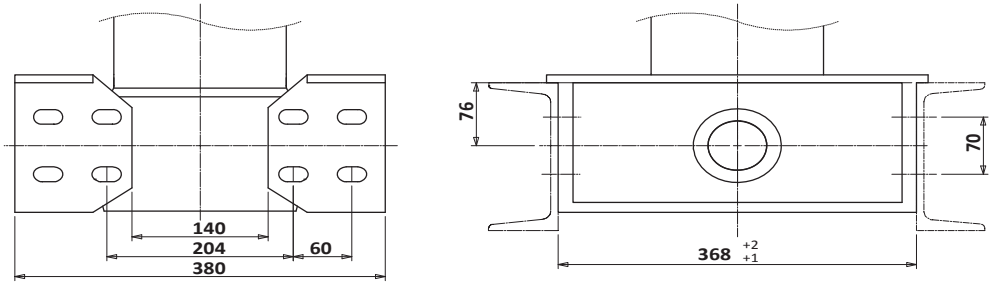


LB100-LB101



Mass: 10kg x 2 = 20 kg

BB200



Mass: 11 kg x 2 = 22 kg

CS15 00

CYLINDERS WITH OUTER COVER

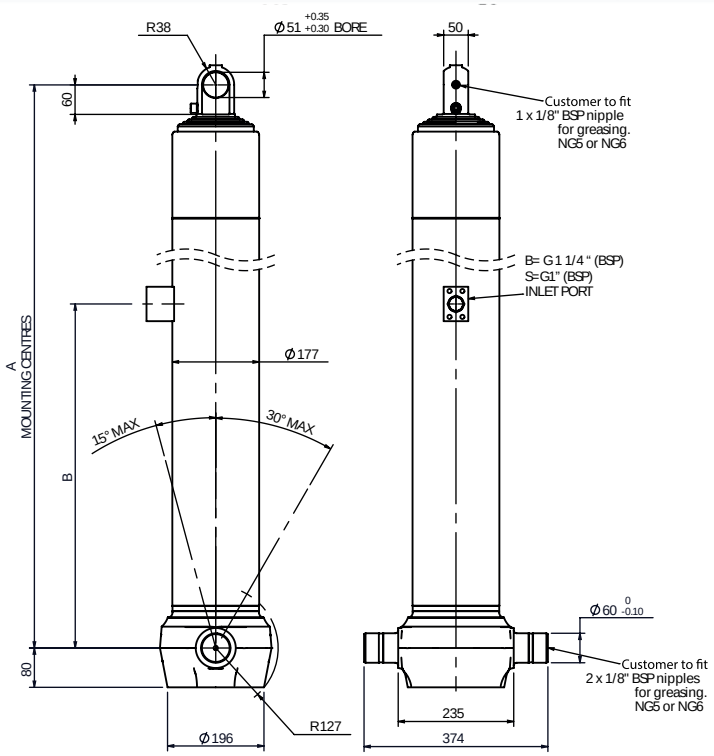
CS15 00

Cylinders Codes	N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)	Tipping capacity		Bodylength (mm)		A - Mounting Centre (mm) Tolernace - +40 / -0	B - Overall Height (mm)	C - Port Height (mm)	Port Type
					Min	Max	Min	Max				
CS15 00 4 4006 B19 A11	4	4006	200	51	37	57	5250	5750	345	1270	190	BSP
CS15 00 4 4206 B19 A11	4	4206	206	53	37	57	5400	5900	345	1320	190	BSP
CS15 00 4 4406 B19 A11	4	4406	212	56	37	56	5550	6050	345	1370	190	BSP
CS15 00 4 4606 B19 A11	4	4606	217	59	37	56	5700	6200	345	1420	190	BSP
CS15 00 4 4806 B19 A11	4	4806	223	61	37	55	5850	6350	345	1470	190	BSP
CS15 00 4 5006 B19 A11	4	5006	228	65	32	50	6000	7000	345	1520	190	BSP
CS15 00 4 5206 B19 A11	4	5206	232	67	35	53	6250	7250	345	1570	190	BSP
CS15 00 4 5406 B19 A11	4	5406	240	70	35	51	6500	7500	345	1620	190	BSP
CS15 00 4 5606 B19 A11	4	5606	246	72	37	53	6750	7750	345	1670	190	BSP
CS15 00 4 5806 B19 A11	4	5806	251	75	37	51	7000	8000	345	1720	190	BSP
CS15 00 4 6006 B19 A11	4	6006	257	77	36	50	7250	8250	345	1770	190	BSP
CS15 00 5 4277 B19 A11	5	4277	191	48	26	41	5500	6000	345	1125	190	BSP
CS15 00 5 4527 B19 A11	5	4527	197	52	26	40	5750	6250	345	1175	190	BSP
CS15 00 5 4777 B19 A11	5	4777	203	53	26	39	6000	6500	345	1225	190	BSP
CS15 00 5 5027 B19 A11	5	5027	209	56	26	38	6250	6750	345	1275	190	BSP
CS15 00 5 5277 B19 A11	5	5277	215	58	24	37	6500	7500	345	1325	190	BSP
CS15 00 5 5527 B19 A11	5	5527	221	62	24	36	6750	7750	345	1375	190	BSP
CS15 00 5 5777 B19 A11	5	5777	227	65	24	35	7000	8000	345	1425	190	BSP
CS15 00 5 6027 B19 A11	5	6027	234	67	24	35	7250	8250	345	1475	190	BSP
CS15 00 5 6277 B19 A11	5	6277	240	71	24	34	7500	8500	345	1525	190	BSP

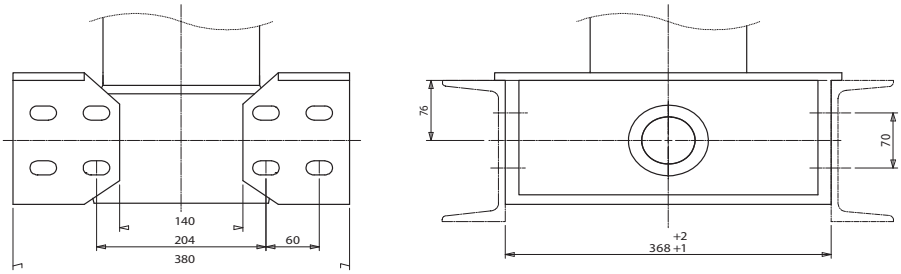
SPECIALS

CS15 00 4 4206 N19 A11	4	4206	206	53	37	57	5400	5900	345	1320	190	BSP
CS15 00 4 4206 S19 A11	4	4206	207	53	37	57	5400	5900	345	1320	190	SAE
CS15 00 4 4606 N19 A11	4	4606	217	59	37	56	5700	6200	345	1420	190	BSP
CS15 00 4 5006 B25 A15	4	5006	212	65	35	55	6000	7000	1035	1520	250	BSP
CS15 00 4 5206 N19 A11	4	5206	234	67	35	53	6250	7250	345	1570	190	BSP
CS15 00 4 5606 B25 A14	4	5606	233	72	36	52	6750	7750	900	1670	250	BSP
CS15 00 4 5806 B19 A12	4	5806	247	75	36	51	7000	8000	550	1720	190	BSP
CS15 00 5 4277 S19 A11	5	4277	192	48	26	41	5000	6000	345	1125	190	SAE
CS15 00 5 4527 S19 A11	5	4527	198	52	26	40	5750	6250	345	1175	190	SAE
CS15 00 5 5027 B19 A13	5	5027	199	56	26	38	6250	6750	775	1275	190	BSP
CS15 00 5 5027 B25 A13	5	5027	199	56	26	38	6250	6750	775	1275	250	BSP
CS15 00 5 5277 S19 A11	5	5277	216	58	24	37	6500	7500	345	1325	190	SAE
CS15 00 5 6527 B19 F21	5	6527	248	76	26	38	7500	8500	345	1625	190	BSP
CS15 00 5 6277 T19 A11	5	6277	240	71	24	34	7500	8500	345	1525	190	BSP
CS15 00 5 6527 B19 F11	5	6527	251	76	26	38	7500	8500	345	1625	190	BSP
CS15 00 5 6777 B19 A11	5	6777	252	77	24	33	8000	9000	345	1625	190	BSP

CS15 0E

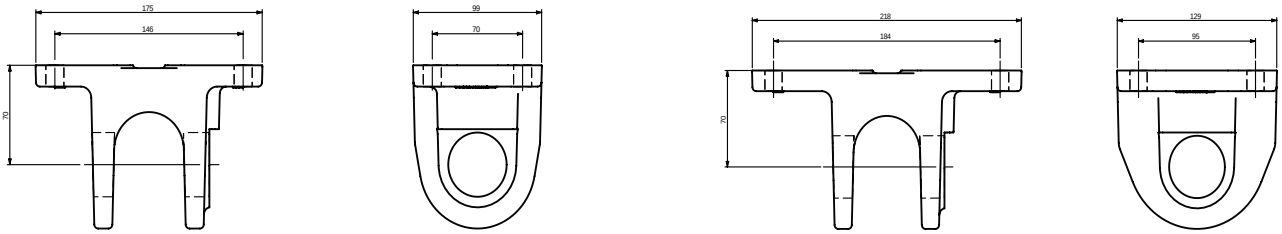


BB200



Mass: 11 kg x 2 = 22 kg

OMK1C & OMK2C



OMK1C for 4-5 stages ; Mass 5.5 kgs

OMK2C for 3 stages ; Mass 7 kgs

CS15 0E

CYLINDERS WITH EYE MOUNTING

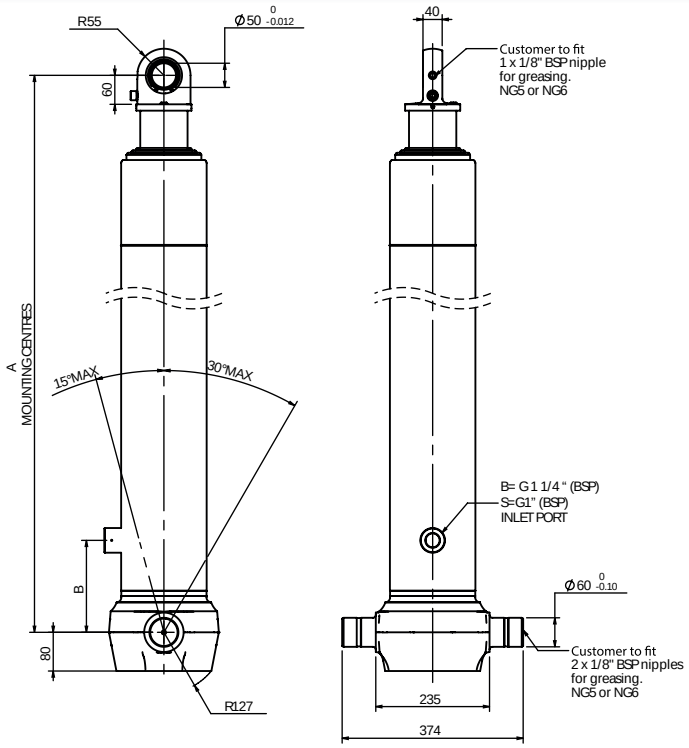
CS15 0E

Cylinders Codes	N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)	Tipping capacity		Bodylength (mm)		A - Mounting Centre (mm) Tolernace - +40 / -0	B - Port Height (mm)	Port Type
					Min	Max	Min	Max			
CS15 0E 3 3439 B19 A01	3	3436	143	50	35	56	4700	5200	1380	190	BSP
CS15 0E 3 3589 B19 A01	3	3589	147	52	35	55	4850	5350	1430	190	BSP
CS15 0E 3 3739 B19 A01	3	3739	151	55	35	53	5000	5500	1480	190	BSP
CS15 0E 3 3889 B19 A01	3	3889	155	57	34	49	5300	5800	1530	190	BSP
CS15 0E 3 4039 B19 A01	3	4039	159	60	35	52	5250	5750	1580	190	BSP
CS15 0E 3 4189 B19 A01	3	4189	163	61	38	54	5600	6100	1630	190	BSP
CS15 0E 3 4339 B19 A01	3	4339	167	64	38	53	5750	6250	1680	190	BSP
CS15 0E 3 4489 B19 A01	3	4489	171	66	38	52	5900	6400	1730	190	BSP
CS15 0E 3 4639 B19 A01	3	4639	175	68	38	51	6050	6550	1780	190	BSP
CS15 0E 3 4789 B19 A01	3	4789	178	70	38	51	6200	6700	1830	190	BSP
CS15 0E 4 4206 B19 A01	4	4206	149	53	35	54	5550	6000	1285	190	BSP
CS15 0E 4 4406 B19 A01	4	4406	154	56	36	52	5900	6400	1335	190	BSP
CS15 0E 4 4606 B19 A01	4	4606	158	59	36	52	6050	6550	1385	190	BSP
CS15 0E 4 4806 B19 A01	4	4808	163	61	37	52	6200	6700	1435	190	BSP
CS15 0E 4 5006 B19 A01	4	5006	167	65	35	49	6350	6850	1485	190	BSP
CS15 0E 4 5206 B19 A01	4	5206	172	67	30	44	6500	7500	1535	190	BSP
CS15 0E 4 5406 B19 A01	4	5406	176	70	27	38	6750	7750	1585	190	BSP
CS15 0E 4 5606 B19 A01	4	5606	181	72	27	37	7000	8000	1635	190	BSP
CS15 0E 4 5806 B19 A01	4	5806	185	75	24	32	7250	8250	1685	190	BSP
CS15 0E 4 6006 B19 A01	4	6006	190	77	24	32	7500	8500	1735	190	BSP

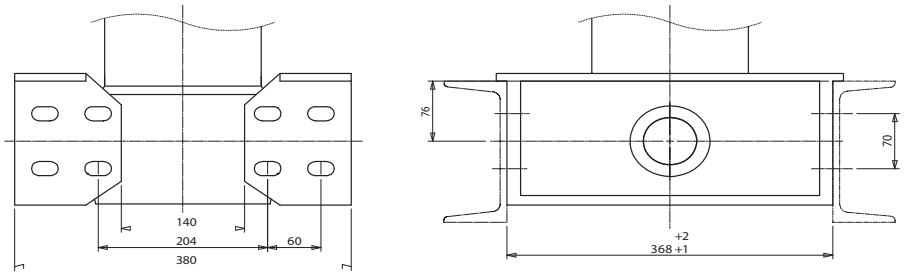
SPECIALS

CS15 0E 4 5206 T19 A01	4	5206	172	67	30	44	6500	7500	1535	190	BSP
CS15 0E 5 3778 B19 A01	5	3778	128	43	25	46	5000	5500	990	190	BSP
CS15 0E 5 4528 B19 A01	5	4528	143	52	25	39	5800	6300	1140	190	BSP
CS15 0E 5 4778 B19 A01	5	4778	148	53	25	38	6050	6550	1190	190	BSP
CS15 0E 5 5778 B19 A01	5	5778	167	65	18	26	7150	8150	1390	190	BSP
CS15 0E 5 6028 B19 A01	5	6028	172	67	16	22	7500	8500	1440	190	BSP

CS15 0S



BB200



Mass: 11 kg x 2 = 22 kg

CS15 0S

CYLINDERS WITH SPHERICAL MOUNTING

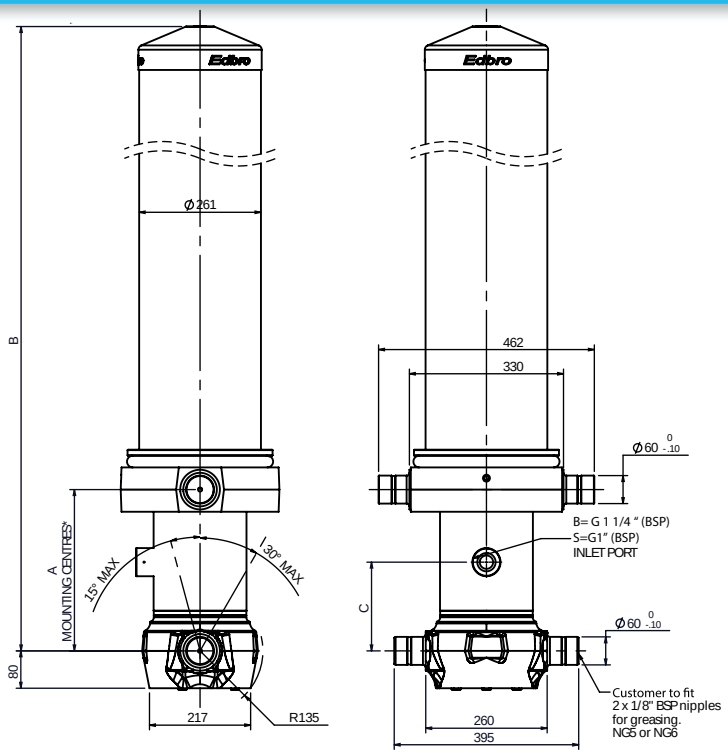
CS15 0S

Cylinders Codes	N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)	Tipping capacity		Bodylength (mm)		A - Mounting Centre (mm) Tolernace - +40 / -0	B - Port Height (mm)	Port Type
					Min	Max	Min	Max			
CS15 0S 4 4206 B19 A01	4	4206	152	53	35	54	5550	6000	1295	190	BSP
CS15 0S 4 4406 B19 A01	4	4406	156	56	36	52	5900	6400	1345	190	BSP
CS15 0S 4 4606 B19 A01	4	4606	159	59	36	52	6050	6550	1395	190	BSP
CS15 0S 4 4806 B19 A01	4	4806	165	61	37	52	6200	6700	1445	190	BSP
CS15 0S 4 5006 B19 A01	4	5006	170	65	35	49	6350	6850	1495	190	BSP
CS15 0S 4 5206 B19 A01	4	5203	174	67	30	44	6500	7500	1545	190	BSP
CS15 0S 4 5406 B19 A01	4	5405	179	70	27	38	6750	7750	1595	190	BSP
CS15 0S 4 5606 B19 A01	4	5603	184	72	27	37	7000	8000	1645	190	BSP
CS15 0S 4 5806 B19 A01	4	5806	188	75	24	32	7250	8250	1695	190	BSP
CS15 0S 4 6006 B19 A01	4	6006	193	77	24	32	7500	8500	1745	190	BSP

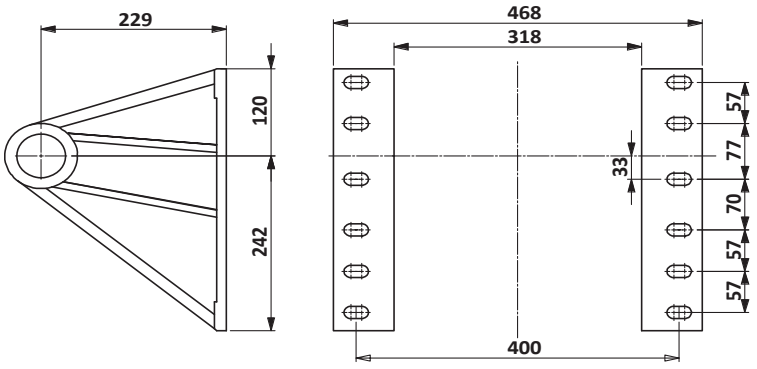
SPECIALS

CS15 0S 3 4639 B19 A01	3	4639	175	68	38	51	6050	6550	1780	190	BSP
CS15 0S 4 4606 B19 A04	4	4606	162	59	36	52	6050	6550	1470	190	BSP
CS15 0S 4 4606 B19 A05	4	4606	162	59	36	52	6050	6550	1495	190	BSP
CS15 0S 4 4606 S19 A01	4	4606	162	59	36	52	6050	6550	1395	190	SAE
CS15 0S 4 4606 S19 A04	4	4606	162	59	36	52	6050	6550	1470	190	SAE
CS15 0S 4 5206 B70 A01	4	5206	174	67	30	44	6500	7500	1545	700	BSP
CS15 0S 4 5806 B70 A01	4	5806	188	75	24	32	7250	8250	1695	700	BSP
CS15 0S 5 5778 B19 A03	5	5778	171	65	16	23	7150	8150	1450	190	BSP

CS17 00

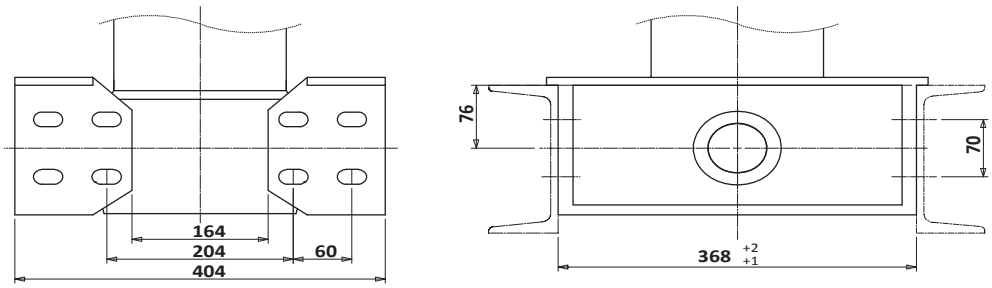


LB100-LB101



Mass: 10.4 kg x 2 = 20.8 kg

BB200



Mass: 11 kg x 2 = 22 kg

CS17 00

CYLINDERS WITH OUTER COVER

CS17 00

Cylinders Codes	N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)	Tipping capacity Min	Tipping capacity Max	Bodylength (mm) Min	Bodylength (mm) Max	A - Mounting Centre (mm) Tolernace - +40 / -0	B - Overall Height (mm)	C - Port Height (mm)	Port Type
CS17 00 5 5233 B19 A11	5	5233	263	79	39	61	6500	7500	345	1326	190	BSP
CS17 00 5 5483 B19 A11	5	5483	271	83	39	59	6750	7750	345	1376	190	BSP
CS17 00 5 5733 B19 A11	5	5733	279	86	39	58	7000	8000	345	1426	190	BSP
CS17 00 5 5983 B19 A11	5	5983	286	89	39	57	7250	8250	345	1476	190	BSP
CS17 00 5 6233 B19 A11	5	6233	294	95	38	55	7500	8500	345	1526	190	BSP
CS17 00 5 6483 B19 A11	5	6483	302	98	38	55	7750	8750	345	1576	190	BSP
CS17 00 5 6733 B19 A11	5	6733	309	102	38	54	8000	9000	345	1626	190	BSP
CS17 00 5 6983 B19 A11	5	6983	317	105	38	53	8250	9250	345	1676	190	BSP
CS17 00 5 7233 B19 A11	5	7233	326	109	38	52	8500	9500	345	1726	190	BSP
CS17 00 5 7483 B19 A11	5	7483	332	113	38	51	8750	9750	345	1776	190	BSP
CS17 00 5 7733 B19 A11	5	7733	336	117	38	51	9000	10000	345	1826	190	BSP
CS17 00 5 7983 B19 A11	5	7983	346	120	39	48	9500	10500	345	1876	190	BSP
CS17 00 5 8233 B19 A11	5	8233	355	125	36	47	9500	10500	345	1926	190	BSP
CS17 00 5 8483 B19 A11	5	8483	363	128	29	38	9750	10750	345	1976	190	BSP
CS17 00 5 8733 B19 A11	5	8733	371	132	26	34	10000	11000	345	2026	190	BSP
CS17 00 5 8983 B19 A11	5	8983	378	136	24	30	10250	11250	345	2076	190	BSP

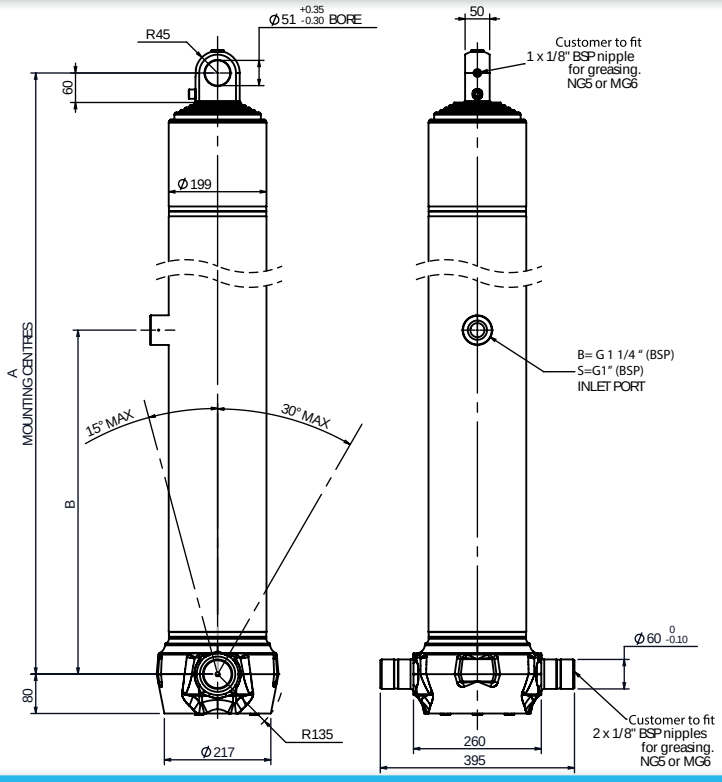
SHORT COVER

CS17 00 5 5733 B25 A15	5	5733	256	86	39	57	7000	8000	1035	1426	250	BSP
CS17 00 5 6233 B25 A15	5	6233	273	95	38	55	7500	8500	1035	1526	250	BSP
CS17 00 5 6733 B25 A15	5	6733	289	102	38	50	8000	9000	1035	1626	250	BSP
CS17 00 5 7233 B25 A15	5	7233	304	109	33	44	8500	9500	1035	1726	250	BSP
CS17 00 5 7733 B25 A15	5	7733	319	117	29	39	9000	10000	1035	1826	250	BSP
CS17 00 5 8233 B25 A15	5	8233	335	125	26	34	9500	10500	1035	1926	250	BSP

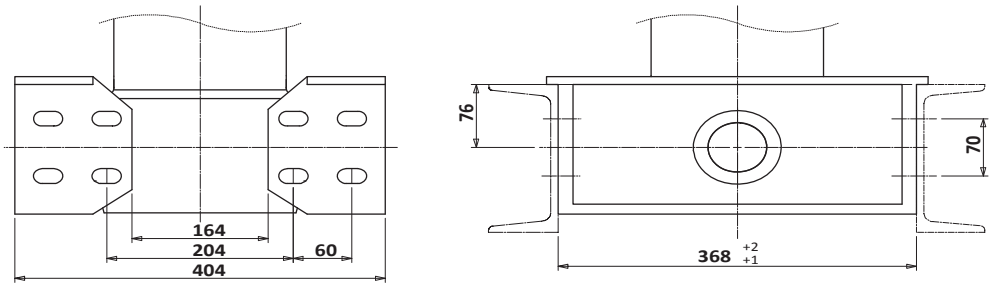
SPECIALS

CS17 00 5 5733 N14 A10	5	5733	280	86	39	58	7000	8000	300	1426	137	BSP
CS17 00 5 6233 N14 A10	5	6233	295	95	38	56	7500	8500	300	1526	137	BSP
CS17 00 5 6233 S19 A11	5	6233	295	95	38	55	7500	8500	345	1526	190	SAE
CS17 00 5 6233 S25 A14	5	6233	278	95	38	55	7500	8500	900	1526	250	SAE
CS17 00 5 6233 T19 A11	5	6233	294	95	38	55	7500	8500	345	1526	190	BSP
CS17 00 5 6483 B19 S11	5	6483	325	103	41	64	7550	8750	345	1726	190	BSP
CS17 00 5 6733 B19 L11	5	6733	328	105	40	59	8000	9000	345	1726	190	BSP
CS17 00 5 6733 N14 A10	5	6733	311	102	38	54	8000	9000	300	1626	137	BSP
CS17 00 5 7233 B25 A14	5	7233	304	109	33	44	8500	9500	900	1726	250	BSP
CS17 00 5 7233 S19 A11	5	7233	325	109	38	52	8500	9500	345	1726	190	SAE
CS17 00 5 7233 S19 A12	5	7233	319	109	38	52	8500	9500	550	1726	190	SAE
CS17 00 5 7233 S25 A14	5	7233	309	109	38	52	8500	9500	900	1726	250	SAE
CS17 00 5 7233 S25 A15	5	7233	305	109	33	44	8500	9500	1035	1726	250	SAE
CS17 00 5 7233 T19 A12	5	7233	319	109	38	52	8500	95000	550	1726	190	BSP
CS17 00 5 7233 N25 A16	5	7233	299	109	29	40	8500	9500	1200	1726	250	BSP
CS17 00 5 7733 S19 A12	5	7733	334	117	38	51	9000	10000	550	1826	190	SAE
CS17 00 5 8233 N25 S16	5	8233	353	130	33	42	9500	10500	1200	2076	250	BSP
CS17 00 5 8233 S19 A11	5	8233	356	125	38	47	9500	10500	345	1926	190	SAE
CS17 00 5 8233 S25 A14	5	8233	362	136	38	47	9500	10500	900	2076	190	SAE
CS17 00 5 8983 B19 L11	5	8983	394	141	24	30	10250	11250	345	2176	190	BSP
CS17 00 5 8983 S19 L12	5	8983	388	141	24	20	10250	11250	550	2176	190	SAE

CS17 0E

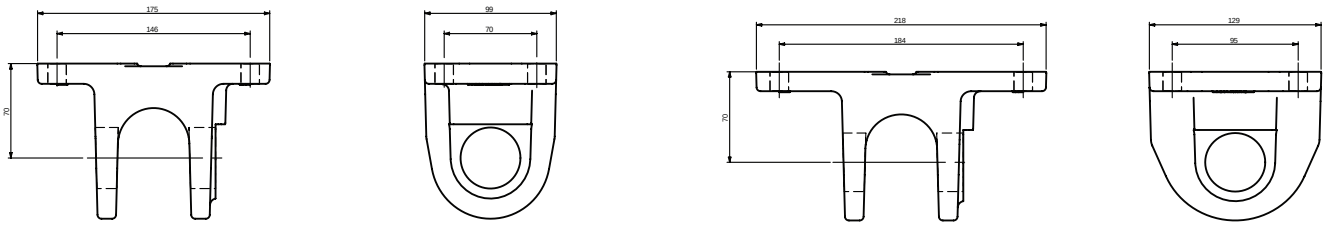


BB200



Mass: 11 kg x 2 = 22 kg

OMK1C & OMK2C



OMK1C for 5 stages ; Mass : 5.5 kg

OMK2C for 4 stages ; Mass : 7 kg

CS17 0E

CYLINDERS WITH EYE MOUNTING

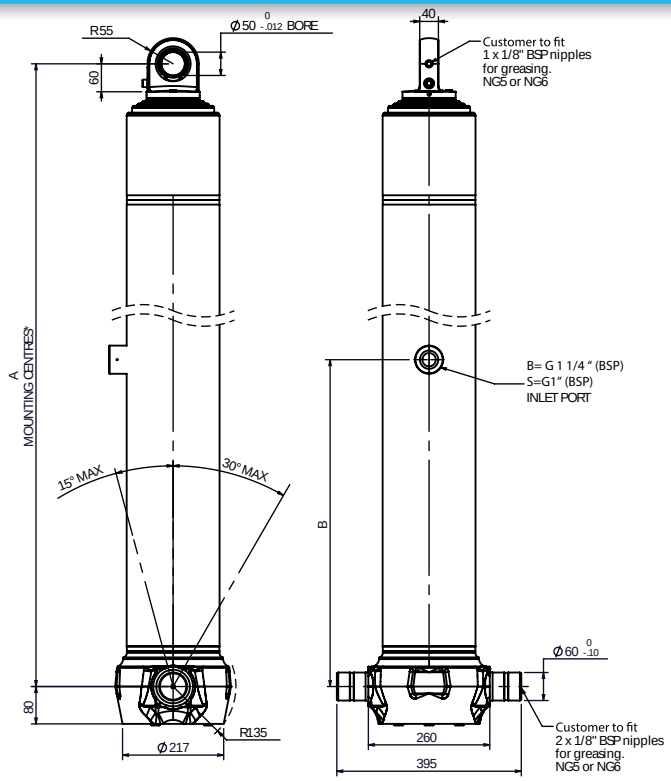
CS17 0E

Cylinders Codes	N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)	Tipping capacity		Bodylength (mm)		A - Mounting Centre (mm) Tolernace - +40 / -0	B - Port Height (mm)	Port Type
					Min	Max	Min	Max			
CS17 0E 4 4566 B19 A01	4	4566	192	77	36	61	5750	6750	1385	190	BSP
CS17 0E 4 4766 B19 A01	4	4766	197	80	37	61	6000	6000	1435	190	BSP
CS17 0E 4 4966 B19 A01	4	4966	203	85	38	60	6250	7250	1485	190	BSP
CS17 0E 4 5166 B19 A01	4	5166	209	88	40	60	6500	7500	1535	190	BSP
CS17 0E 4 5366 B19 A01	4	5366	214	92	39	58	6750	7750	1585	190	BSP
CS17 0E 4 5566 B19 A01	4	5566	220	94	39	56	7000	8000	1635	190	BSP
CS17 0E 4 5766 B19 A01	4	5766	225	98	39	55	7250	8250	1685	190	BSP
CS17 0E 4 5966 B19 A01	4	5966	231	102	39	53	7500	8500	1735	190	BSP
CS17 0E 4 6166 B19 A01	4	6166	237	105	39	53	7550	8550	1785	190	BSP
CS17 0E 4 6366 B19 A01	4	6366	242	108	34	46	8000	9000	1835	190	BSP
CS17 0E 5 5233 B70 A01	5	5233	195	79	37	56	6750	7750	1290	700	BSP
CS17 0E 5 5483 B70 A01	5	5483	201	83	37	54	7000	8000	1340	700	BSP
CS17 0E 5 5733 B70 A01	5	5733	207	86	36	50	7250	8250	1390	700	BSP
CS17 0E 5 5983 B70 A01	5	5983	213	89	31	45	7500	8500	1440	700	BSP
CS17 0E 5 6233 B70 A01	5	6233	219	95	28	40	7750	8750	1490	700	BSP
CS17 0E 5 6483 B70 A01	5	6483	223	98	25	35	8000	9000	1540	700	BSP
CS17 0E 5 6733 B70 A01	5	6733	232	102	25	34	8250	9250	1590	700	BSP
CS17 0E 5 6983 B70 A01	5	6983	238	105	23	31	8500	9500	1640	700	BSP
CS17 0E 5 7233 B70 A01	5	7233	244	109	24	31	8750	9750	1690	700	BSP

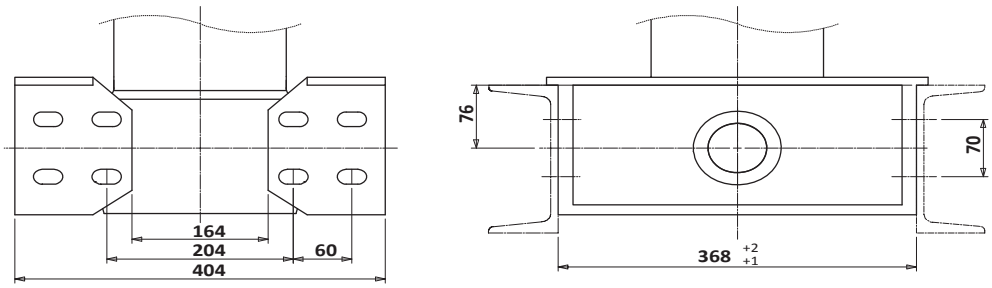
SPECIALS

CS17 0E 5 5733 B19 A01	5	5733	207	86	36	50	7250	8250	1390	190	BSP
CS17 0E 5 5733 S70 A01	5	5733	208	86	36	50	7250	8250	1390	700	SAE
CS17 0E 5 5733 S70 A06	5	5733	209	86	33	46	7250	8250	1515	700	SAE
CS17 0E 5 5733 S70 A08	5	5733	210	86	33	46	7250	8250	1565	700	SAE
CS17 0E 5 6233 B19 A03	5	6233	220	95	28	40	7750	8750	1540	190	BSP
CS17 0E 5 6233 B70 A02	5	6233	220	95	28	40	7750	8750	1515	700	BSP
CS17 0E 5 6233 B70 A03	5	6233	220	95	28	40	7750	8750	1540	700	BSP
CS17 0E 5 6233 S70 A01	5	6233	220	95	28	40	7750	8750	1490	700	SAE
CS17 0E 5 6233 S70 A02	5	6233	220	95	28	40	7750	8750	1515	700	SAE
CS17 0E 5 6483 S70 A01	5	6483	226	98	25	35	8000	9000	1540	700	SAE
CS17 0E 5 6483 T19 A01	5	6483	226	98	25	35	8000	9000	1540	190	BSP
CS17 0E 5 6733 B19 A01	5	6733	232	102	25	34	8250	9250	1590	190	BSP
CS17 0E 5 6983 B19 A01	5	6983	238	105	23	31	8500	9500	1640	190	BSP
CS17 0E 5 7033 B19 K02	5	7033	251	110	27	35	8750	9750	1765	190	BSP
CS17 0E 5 7033 S70 K02	5	7033	251	110	27	35	8750	9750	1765	700	SAE

CS17 0S



BB200



Mass: 11 kg x 2 = 22 kg

CS17 0S

CYLINDERS WITH SPHERICAL MOUNTING

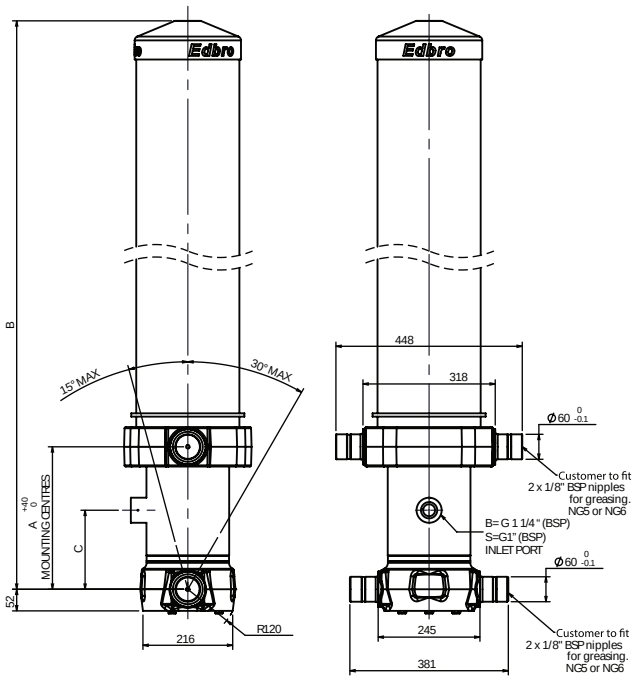
CS17 0S

Cylinders Codes	N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)	Tipping capacity		Bodylength (mm)		A - Mounting Centre (mm) Tolernace - +40 / -0	B - Port Height (mm)	Port Type
					Min	Max	Min	Max			
CS17 0S 4 4566 B19 A01	4	4566	192	77	36	61	5750	6750	1385	190	BSP
CS17 0S 4 4766 B19 A01	4	4766	198	80	37	61	6000	6000	1435	190	BSP
CS17 0S 4 4966 B19 A01	4	4966	203	85	38	60	6250	7250	1485	190	BSP
CS17 0S 4 5166 B19 A01	4	5166	209	88	40	60	6500	7500	1535	190	BSP
CS17 0S 4 5366 B19 A01	4	5366	215	92	39	58	6750	7750	1585	190	BSP
CS17 0S 4 5566 B19 A01	4	5566	220	94	39	56	7000	8000	1635	190	BSP
CS17 0S 4 5766 B19 A01	4	5766	226	98	39	55	7250	8250	1685	190	BSP
CS17 0S 4 5966 B19 A01	4	5966	231	102	39	53	7500	8500	1735	190	BSP
CS17 0S 4 6166 B19 A01	4	6166	237	105	40	52	7750	8750	1785	190	BSP
CS17 0S 4 6366 B19 A01	4	6366	243	108	34	46	8000	9000	1835	190	BSP
CS17 0S 5 5233 B70 A01	5	5233	197	79	37	56	6750	7750	1300	700	BSP
CS17 0S 5 5483 B70 A01	5	5483	204	83	37	54	7000	8000	1350	700	BSP
CS17 0S 5 5733 B70 A01	5	5733	210	86	36	50	7250	8250	1400	700	BSP
CS17 0S 5 5983 B70 A01	5	5983	216	89	31	45	7500	8500	1450	700	BSP
CS17 0S 5 6233 B70 A01	5	6233	222	95	28	40	7750	8750	1500	700	BSP
CS17 0S 5 6483 B70 A01	5	6483	228	98	25	35	8000	9000	1550	700	BSP
CS17 0S 5 6733 B70 A01	5	6733	234	102	25	34	8250	9250	1600	700	BSP
CS17 0S 5 6983 B70 A01	5	6983	241	105	23	31	8500	9500	1650	700	BSP
CS17 0S 5 7233 B70 A01	5	7233	247	109	24	31	8750	9750	1700	700	BSP

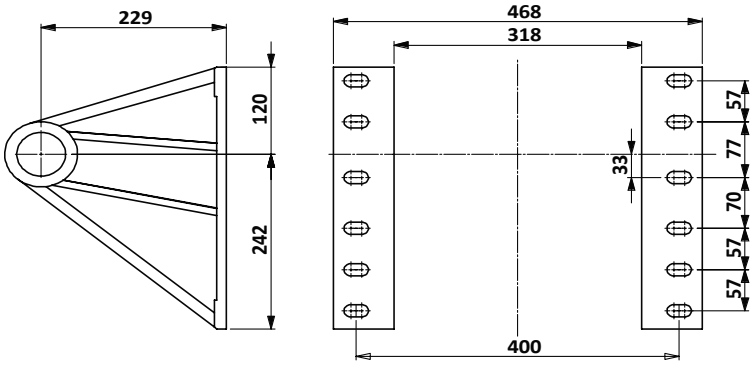
SPECIALS

CS17 0S 4 4566 B70 A05	4	4566	194	79	36	61	6000	7000	1485	700	BSP
CS17 0S 5 5183 B70 G01	5	5183	204	81	38	59	6750	7750	1350	700	BSP
CS17 0S 5 5233 B70 L08	5	5233	212	82	39	63	6750	7750	1575	700	BSP
CS17 0S 5 5483 B19 A02	5	5483	204	83	37	54	7000	8000	1375	190	BSP
CS17 0S 5 5483 B70 A07	5	5483	203	83	36	51	7000	8000	1500	700	BSP
CS17 0S 5 5733 B19 A01	5	5733	210	86	36	50	7250	8250	1400	190	BSP
CS17 0S 5 5733 B70 A08	5	5733	212	86	33	46	7250	8250	1575	700	BSP
CS17 0S 5 6233 B19 A02	5	6233	222	95	28	40	7750	8750	1525	190	BSP
CS17 0S 5 6233 B19 A03	5	6233	223	95	28	40	7750	8750	1550	190	BSP
CS17 0S 5 6233 B19 A05	5	6233	223	95	28	40	7750	8750	1600	190	BSP
CS17 0S 5 6233 B19 L01	5	6233	234	99	28	40	7750	8750	1600	190	BSP
CS17 0S 5 6283 B70 E02	5	6283	229	96	28	40	7750	8750	1575	700	BSP
CS17 0S 5 6283 S70 E02	5	6283	229	96	28	40	7750	8750	1575	700	SAE
CS17 0S 5 7033 B19 K01	5	7033	253	110	27	35	8500	9500	1745	190	BSP
CS17 0S 5 7033 B70 K01	5	7033	253	110	23	31	8500	9500	1745	700	BSP
CS17 0S 5 7033 B70 K02	5	7033	253	110	27	35	8750	9750	1775	700	BSP
CS17 0S 5 7033 S70 K02	5	7033	254	110	27	35	8750	9750	1775	700	SAE
CS17 0S 6 4805 B19 A01	6	4805	174	65	25	43	6150	7150	1055	190	BSP
CS17 0S 6 5705 B70 N01	6	5705	206	81	27	46	7100	8100	1305	700	BSP

CS17 LO



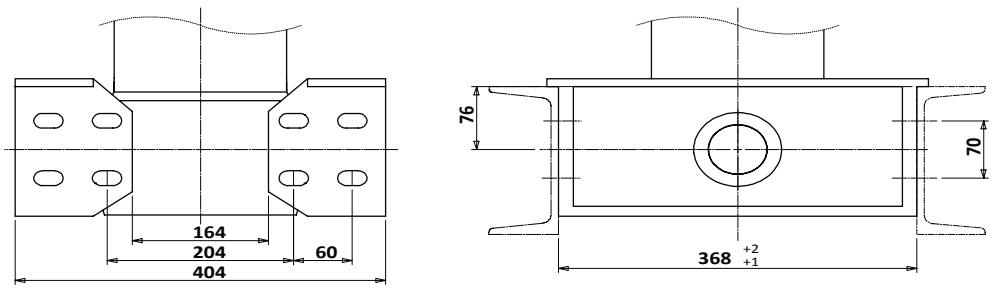
LB200-LB201



Mass: 8 kg x 2 = 16 kg

Only for use on controlled applications with a maximum body and payload of 36 tonnes.

BB200



Mass: 11 kg x 2 = 22 kg

CS17 LO

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
					Min	Max	Min	Max				
CS17 LO 5 5233 B19 A11	5	5233	241	79	32	47	6500	7500	343	1348	190	BSP
CS17 LO 5 5483 B19 A11	5	5483	249	83	30	46	6750	7750	343	1398	190	BSP
CS17 LO 5 5733 B19 A11	5	5733	256	86	33	45	7000	8000	343	1448	190	BSP
CS17 LO 5 5983 B19 A11	5	5983	263	89	30	44	7250	8250	343	1498	190	BSP
CS17 LO 5 6233 B19 A11	5	6233	271	95	33	48	7500	8500	343	1548	190	BSP
CS17 LO 5 6483 B19 A11	5	6483	278	98	33	47	7750	8750	343	1600	190	BSP
CS17 LO 5 6733 B19 A11	5	6733	286	102	33	46	8000	9000	343	1648	190	BSP
CS17 LO 5 6983 B19 A11	5	6983	293	105	33	45	8250	9250	343	1700	190	BSP
CS17 LO 5 7233 B19 A11	5	7233	301	110	33	45	8500	9500	343	1748	190	BSP
CS17 LO 5 7483 B19 A11	5	7483	313	113	33	44	8750	9750	343	1800	190	BSP
CS17 LO 5 7733 B19 A11	5	7733	321	117	33	44	9000	10000	343	1848	190	BSP
CS17 LO 5 7983 B19 A11	5	7983	328	120	32	41	9500	10500	343	1900	190	BSP
CS17 LO 5 8233 B19 A11	5	8233	336	125	32	40	10000	11000	343	1948	190	BSP
CS17 LO 5 8483 B19 A11	5	8483	344	128	29	38	9750	10750	343	2000	190	BSP
CS17 LO 5 8733 B19 A11	5	8733	351	132	26	34	10000	11000	343	2048	190	BSP
CS17 LO 5 8983 B19 A11	5	8983	359	136	24	30	10250	11250	343	2100	190	BSP

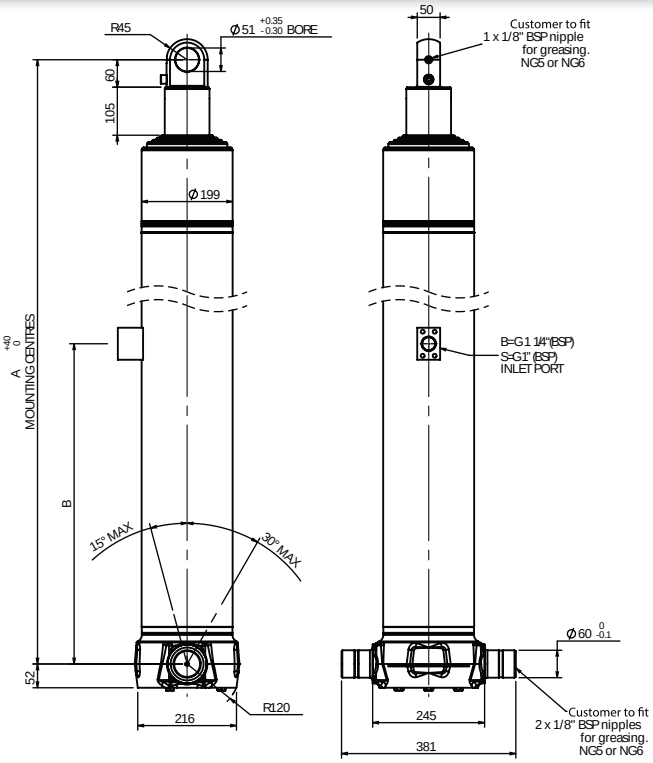
SHORT COVER

CS17 LO 5 5733 B25 A15	5	5733	240	86	33	49	7000	8000	1033	1448	250	BSP
CS17 LO 5 6233 B25 A15	5	6233	254	95	33	47	7500	8500	1033	1548	250	BSP
CS17 LO 5 6733 B25 A15	5	6733	269	102	33	46	8000	9000	1033	1648	250	BSP
CS17 LO 5 7233 B25 A15	5	7233	284	110	33	44	8500	9500	1033	1748	250	BSP
CS17 LO 5 7733 B25 A15	5	7733	299	117	29	39	9000	10000	1033	1848	250	BSP
CS17 LO 5 8233 B25 A15	5	8233	315	125	26	34	9500	10500	1033	1948	250	BSP

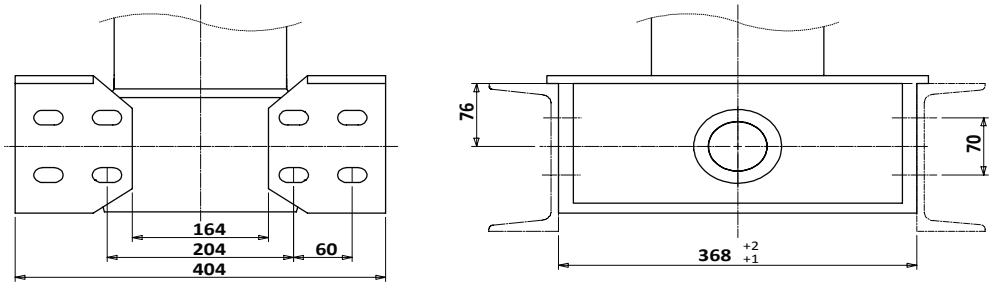
SPECIALS

CS17 LO 5 4766 B19 A12	5	4766	263	72	33	53	6000	7000	550	1257	190	BSP
CS17 LO 5 5033 B25 R15	5	5033	240	81	26	50	6250	7250	1033	1448	250	BSP
CS17 LO 5 5233 S19 A11	5	5233	242	79	32	47	6500	7500	343	1348	190	SAE
CS17 LO 5 5433 B25 G15	5	5433	240	84	30	48	6750	7750	1033	1448	250	BSP
CS17 LO 5 6233 N14 A10	5	6233	271	95	33	48	7500	8500	300	1550	137	BSP
CS17 LO 5 6233 S19 A11	5	6233	272	95	33	48	7500	8500	343	1548	190	SAE
CS17 LO 5 6233 S25 A14	5	6233	258	95	33	47	7500	8500	898	1548	250	SAE
CS17 LO 5 6233 T19 A11	5	6233	271	95	33	48	7500	8500	343	1548	190	BSP
CS17 LO 5 6733 N14 A10	5	6733	286	102	38	54	8000	9000	300	1650	137	BSP
CS17 LO 5 7233 B25 A14	5	7233	287	110	31	41	9000	10000	898	1748	250	BSP
CS17 LO 5 7233 S19 A11	5	7233	301	110	33	45	8500	9500	343	1748	190	SAE
CS17 LO 5 7233 T19 A11	5	7233	301	110	33	45	8500	9500	343	1748	190	BSP
CS17 LO 5 7233 S19 A12	5	7233	295	110	33	45	9000	10000	550	1750	190	SAE
CS17 LO 5 7233 S25 A14	5	7233	288	110	33	44	8500	9500	898	1748	250	SAE
CS17 LO 5 7233 S25 A15	5	7233	283	110	33	44	8500	9500	1033	1748	250	SAE
CS17 LO 5 7233 N25 A16	5	7233	280	110	29	40	8500	9500	1198	1748	250	BSP
CS17 LO 5 7733 S19 A12	5	7733	311	117	33	44	9000	10000	548	1848	190	SAE
CS17 LO 5 8233 N25 S16	5	8233	332	130	28	38	9500	10500	1198	2098	250	BSP
CS17 LO 5 8233 S19 A11	5	8233	336	125	33	43	10000	11000	343	1948	190	SAE
CS17 LO 5 8233 S25 S14	5	8233	340	130	26	34	10000	11000	900	2098	250	SAE
CS17 LO 5 8983 B19 L11	5	8983	374	142	24	29	11000	12000	343	2198	190	BSP
CS17 LO 5 8983 S19 L12	5	8983	369	142	23	29	11000	12000	548	2198	190	SAE

CS17 LE

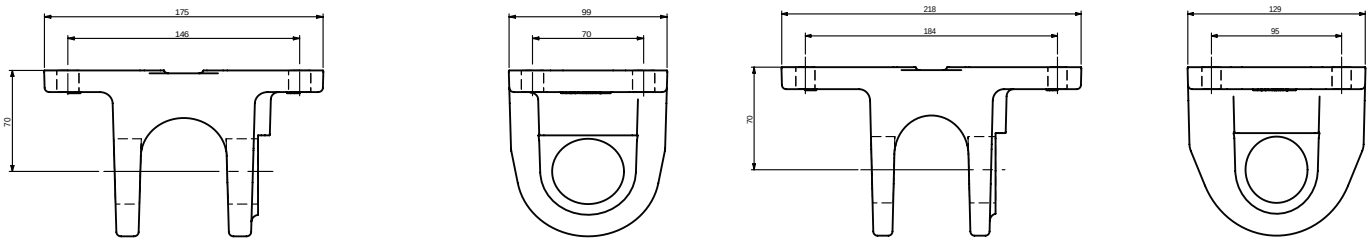


BB200



Mass: 11 kg x 2 = 22 kg

OMK1C & OMK2C



OMK1C for 5 stages ; Mass : 5.5 kg

OMK2C for 4 stages ; Mass : 7 kg

CS17 LE

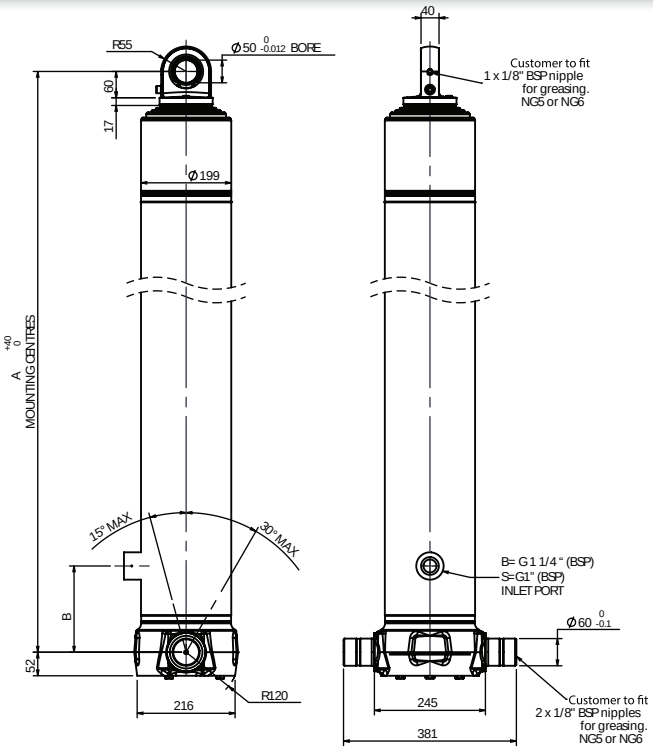
CYLINDERS WITH EYE MOUNTING

Cylinders Codes	N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)	Rated capacity		Bodylength (mm)		A - Mtg Centre (mm)	B - Port Height (mm)	Port Type
					Min	Max	Min	Max			
CS17 LE 5 5233 B70 A02	5	5233	182	79	28	43	6750	7750	1290	700	BSP
CS17 LE 5 5483 B70 A02	5	5483	188	83	31	47	7000	8000	1340	700	BSP
CS17 LE 5 5733 B70 A02	5	5733	195	86	31	46	7250	8250	1415	700	BSP
CS17 LE 5 5983 B70 A02	5	5983	201	89	21	27	8500	9500	1465	700	BSP
CS17 LE 5 6233 B70 A02	5	6233	208	95	28	40	7750	8750	1490	700	BSP
CS17 LE 5 6483 B70 A02	5	6483	213	98	25	35	8000	9000	1540	700	BSP
CS17 LE 5 6733 B70 A02	5	6733	219	102	23	34	8250	9250	1590	700	BSP
CS17 LE 5 6983 B70 A02	5	6983	226	105	23	31	8500	9500	1665	700	BSP
CS17 LE 5 7233 B70 A02	5	7233	232	110	24	31	8750	9750	1715	700	BSP

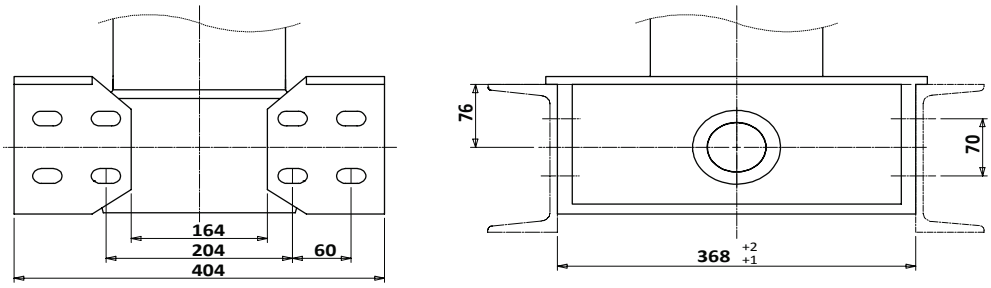
SPECIALS

CS17 LE 5 5566 B19 A02	5	5566	192	88	31	46	7000	8000	1382	190	BSP
CS17 LE 5 5733 B19 A02	5	5733	195	86	31	46	7250	8250	1415	190	BSP
CS17 LE 5 5733 B70 A08	5	5733	197	86	31	46	7250	8250	1565	700	BSP
CS17 LE 5 5733 S70 A06	5	5733	197	86	31	46	7250	8250	1515	700	SAE
CS17 LE 5 5733 S70 A08	5	5733	197	86	31	46	7250	8250	1565	700	SAE
CS17 LE 5 5733 S70 K02	5	5733	205	86	31	46	7250	8250	1505	700	SAE
CS17 LE 5 5966 S70 K02	5	5966	211	94	31	45	7500	8500	1552	700	SAE
CS17 LE 5 6233 B19 A03	5	6233	208	95	28	40	7750	8750	1540	190	BSP
CS17 LE 5 6233 B19 A02	5	6233	207	95	28	40	7750	8750	1515	190	BSP
CS17 LE 5 6233 B70 A03	5	6233	208	95	28	40	7750	8750	1540	700	BSP
CS17 LE 5 6233 S70 A02	5	6233	208	95	28	40	7750	8750	1515	700	SAE
CS17 LE 5 6366 B19 A02	5	6366	208	96	28	40	7800	8800	1542	190	BSP
CS17 LE 5 6483 S70 A02	5	6483	214	98	25	35	8000	9000	1565	700	SAE
CS17 LE 5 6483 T19 A02	5	6483	214	98	25	35	8000	9000	1565	190	BSP
CS17 LE 5 6733 B19 A02	5	6733	220	102	25	34	8250	9250	1615	190	BSP
CS17 LE 5 7033 B19 K02	5	7033	238	110	27	35	8750	9750	1765	190	BSP
CS17 LE 5 7033 S70 K02	5	7033	239	104	27	35	8750	9750	1765	700	SAE

CS17 LS



BB200



Mass: 11 kg x 2 = 22 kg

CS17 LS

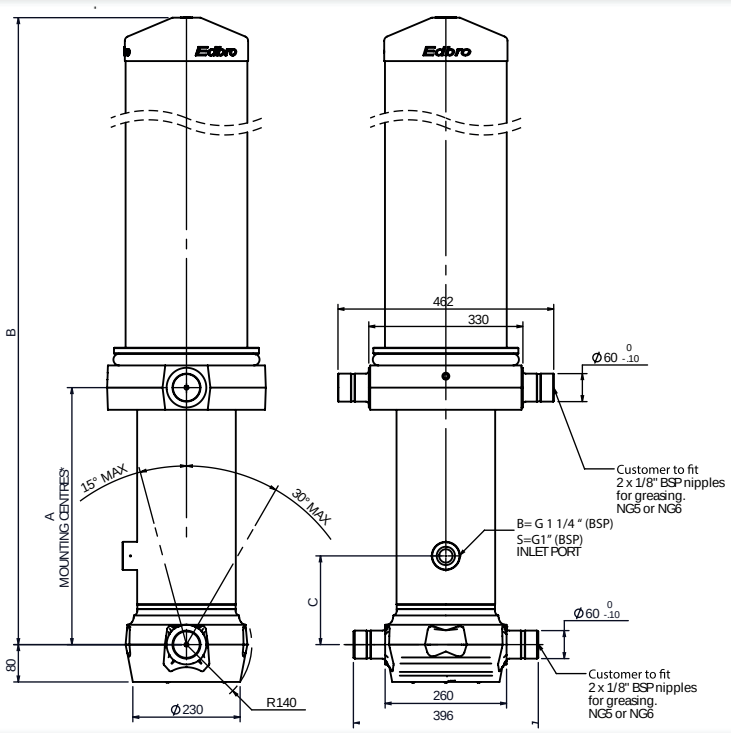
CYLINDERS WITH SPHERICAL MOUNTING

Cylinders Codes	N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)	Rated capacity		Bodylength (mm)		A - Mtg Centre (mm)	B - Port Height (mm)	Port Type
					Min	Max	Min	Max			
CS17 LS 5 5233 B70 A02	5	5233	186	79	31	48	6750	7750	1325	700	BSP
CS17 LS 5 5483 B70 A02	5	5483	192	83	31	47	7000	8000	1375	700	BSP
CS17 LS 5 5733 B70 A02	5	5733	198	86	31	46	7250	8250	1425	700	BSP
CS17 LS 5 5983 B70 A02	5	5983	204	89	31	45	7500	8500	1475	700	BSP
CS17 LS 5 6233 B70 A02	5	6233	210	95	28	40	7750	8750	1525	700	BSP
CS17 LS 5 6483 B70 A02	5	6483	217	98	25	35	8000	9000	1575	700	BSP
CS17 LS 5 6733 B70 A02	5	6733	223	102	23	34	8250	9250	1625	700	BSP
CS17 LS 5 6983 B70 A02	5	6983	229	105	23	31	8500	9500	1675	700	BSP
CS17 LS 5 7233 B70 A02	5	7233	235	109	24	31	8750	9750	1725	700	BSP

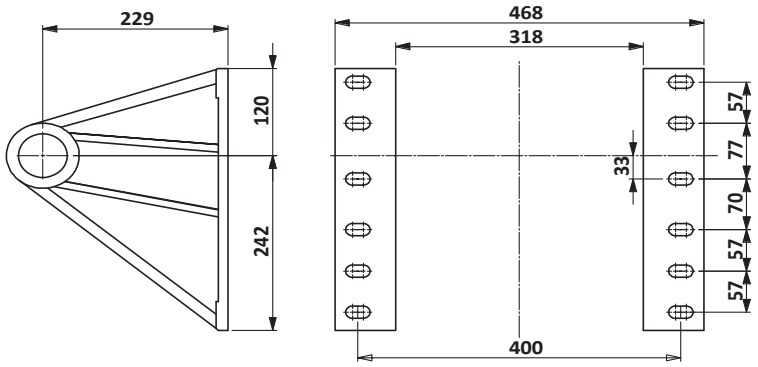
SPECIALS

CS17 LS 5	5233	B70 L08	5	5233	200	82	30	41	6750	7750	1575	700	BSP
CS17 LS 5	5483	B40 A02	5	5483	192	83	31	47	7000	8000	1375	400	BSP
CS17 LS 5	5483	B70 A07	5	5483	193	83	33	47	7000	8000	1500	700	BSP
CS17 LS 5	5733	B19 A02	5	5733	198	86	31	46	7250	8250	1425	190	BSP
CS17 LS 5	5733	R19 A06	5	5733	200	86	31	46	7250	8250	1525	190	SAE
CS17 LS 5	5733	B70 A08	5	5733	200	86	31	46	7250	8250	1575	700	BSP
CS17 LS 5	5883	S40 H03	5	5883	211	92	32	47	7500	8500	1550	400	SAE
CS17 LS 5	6233	B19 A02	5	6233	210	95	28	40	7750	8750	1525	190	BSP
CS17 LS 5	6233	B19 A03	5	6233	211	95	28	40	7750	8750	1550	190	BSP
CS17 LS 5	6233	S19 A03	5	6233	211	95	28	40	7750	8750	1550	190	SAE
CS17 LS 5	6233	R19 A02	5	6233	211	95	28	40	7750	8750	1525	190	SAE
CS17 LS 5	6283	B70 E02	5	6283	217	96	29	42	7750	8750	1575	700	BSP
CS17 LS 5	6733	B19 A02	5	6733	223	102	25	34	8250	9250	1625	190	BSP
CS17 LS 5	7033	B19 K02	5	7033	241	110	27	35	8750	9750	1775	190	BSP
CS17 LS 5	7033	B70 K02	5	7033	241	110	27	35	8750	9750	1775	700	BSP
CS17 LS 5	7033	S70 K02	5	7033	242	110	27	35	8750	9750	1775	700	SAE
CS17 LS 6	4805	B19 A02	6	4805	161	65	25	43	6150	7150	1080	190	BSP
CS17 LS 6	5705	B70 N02	6	5705	192	78	27	46	7100	8100	1330	700	BSP

CS18 00

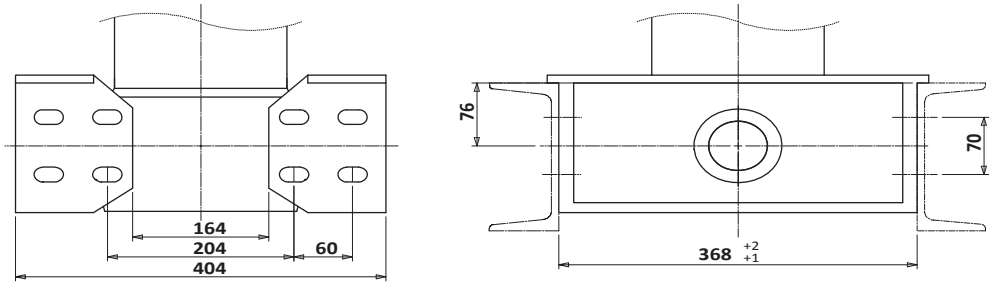


LB100-LB101



Mass: 10.4kg x 2 = 20.8 kg

BB200



Mass: 11 kg x 2 = 22 kg

CS18 00

CYLINDERS WITH OUTER COVER

CS18 00

Cylinders Codes	N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)	Tipping capacity		Bodylength (mm)		A - Mounting Centre (mm) Tolernace - +40 / -0	B - Overall Height (mm)	C - Port Height (mm)	Port Type
					Min	Max	Min	Max				
CS18 00 5 5733 B19 A11	5	5728	316	100	43	68	6750	7750	345	1426	190	BSP
CS18 00 5 5983 B19 A11	5	5978	322	104	43	66	7000	8000	345	1476	190	BSP
CS18 00 5 6233 B19 A11	5	6228	334	109	43	65	7250	8250	345	1526	190	BSP
CS18 00 5 6483 B19 A11	5	6483	344	113	43	63	7500	8500	345	1576	190	BSP
CS18 00 5 6733 B19 A11	5	6728	353	118	43	63	7500	8500	345	1626	190	BSP
CS18 00 5 6983 B19 A11	5	6978	362	122	44	61	8250	9250	345	1676	190	BSP
CS18 00 5 7233 B19 A11	5	7233	371	127	44	60	8500	9500	345	1726	190	BSP
CS18 00 5 7483 B19 A11	5	7483	380	131	44	59	8750	9750	345	1776	190	BSP
CS18 00 5 7733 B19 A11	5	7733	389	136	44	58	9000	10000	345	1826	190	BSP
CS18 00 5 7983 B19 A11	5	7983	398	139	44	58	9250	10250	345	1876	190	BSP
CS18 00 5 8233 B19 A11	5	8233	407	144	44	57	9500	10500	345	1926	190	BSP
CS18 00 5 8483 B19 A11	5	8483	411	149	44	57	9750	10750	345	1976	190	BSP
CS18 00 5 8733 B19 A11	5	8733	425	153	38	48	10000	11000	345	2026	190	BSP
CS18 00 5 8983 B19 A11	5	8983	434	158	33	41	10500	11500	345	2076	190	BSP
CS18 00 5 9233 B19 A11	5	9233	443	161	30	38	10500	11500	345	2126	190	BSP
CS18 00 5 9483 B19 A11	5	9483	452	166	29	36	11000	12000	345	2176	190	BSP

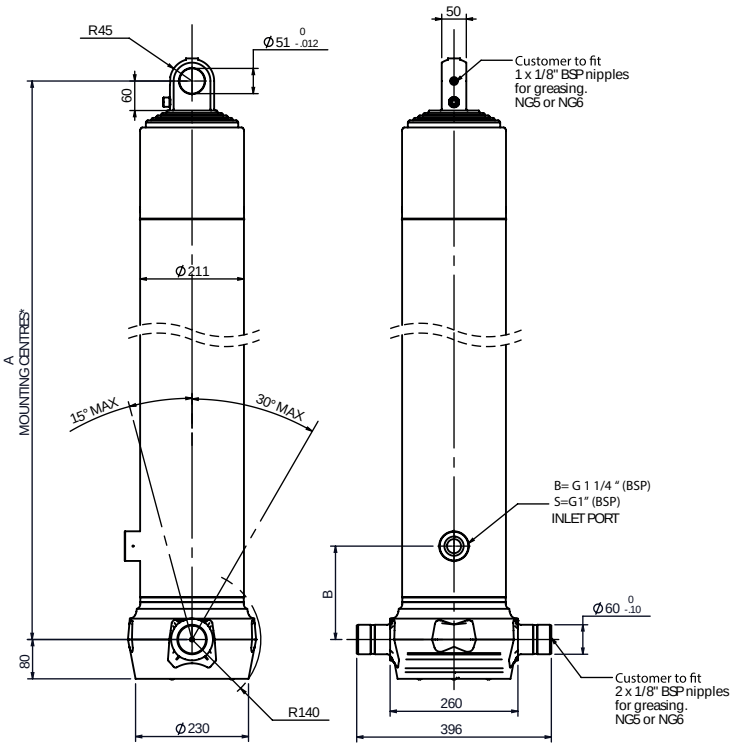
SHORT COVER

CS18 00 5 6233 B25 A15	5	6233	314	109	41	60	7500	8500	1035	1526	250	BSP
CS18 00 5 6733 B25 A15	5	6733	332	118	44	61	8000	9000	1035	1626	250	BSP
CS18 00 5 7233 B25 A15	5	7233	350	127	44	59	8500	9500	1035	1726	250	BSP
CS18 00 5 7733 B25 A15	5	7733	368	136	41	55	9000	10000	1035	1826	250	BSP
CS18 00 5 7733 S25 A15	5	7733	369	136	41	55	9000	10000	1035	1826	250	SAE
CS18 00 5 8233 B25 A15	5	8233	386	144	37	49	9500	10500	1035	1926	250	BSP

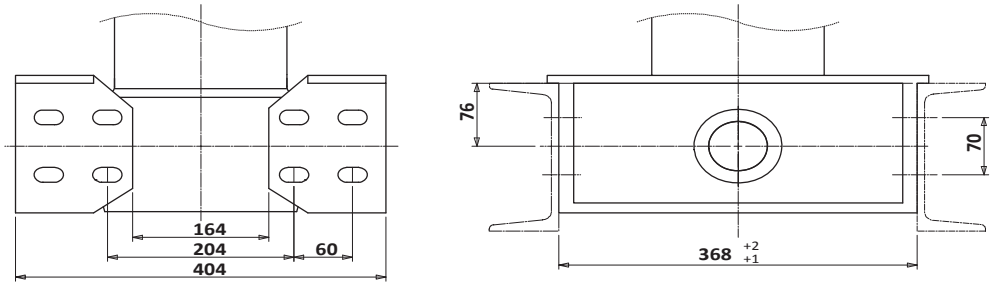
SPECIALS

CS18 00 5 6483 B25 A15	5	6483	323	113	41	59	7750	8750	1035	1576	250	BSP
CS18 00 5 6983 B25 A15	5	6983	341	122	44	60	8250	9250	1035	1676	250	BSP
CS18 00 5 7233 T19 A11	5	7233	371	127	44	60	8500	9500	345	1726	190	BSP
CS18 00 5 8233 B19 A12	5	8233	401	144	44	57	9500	10500	550	1926	190	BSP
CS18 00 5 8233 S19 A11	5	8233	407	144	44	57	9500	10500	345	1926	190	SAE
CS18 00 5 8983 B19 A12	5	8983	428	158	33	41	10500	11500	550	2076	190	BSP
CS18 00 5 8983 B19 AAA	5	8983	430	158	32	41	10500	11500	485	2076	190	BSP
CS18 00 5 8983 B25 A14	5	8978	417	158	33	41	10500	11500	900	2076	250	BSP
CS18 00 5 9233 B25 A16	5	9233	417	161	29	36	10750	11750	1200	2126	250	BSP
CS18 00 5 9233 N25 A16	5	9233	417	161	29	36	10750	11750	1200	2126	250	BSP
CS18 00 5 9233 S19 A11	5	9233	443	161	30	38	10500	11500	345	2126	190	SAE
CS18 00 5 9233 S25 A14	5	9233	427	161	29	36	10750	11750	900	2126	250	SAE
CS18 00 5 9483 B19 A12	5	9483	446	166	29	36	11000	12000	550	2176	190	BSP
CS18 00 5 9483 B19 AAB	5	9483	446	166	29	36	11000	12000	550	2176	190	BSP
CS18 00 5 9483 B25 A14	5	9483	436	166	29	36	11000	12000	900	2176	250	BSP

CS18 0E

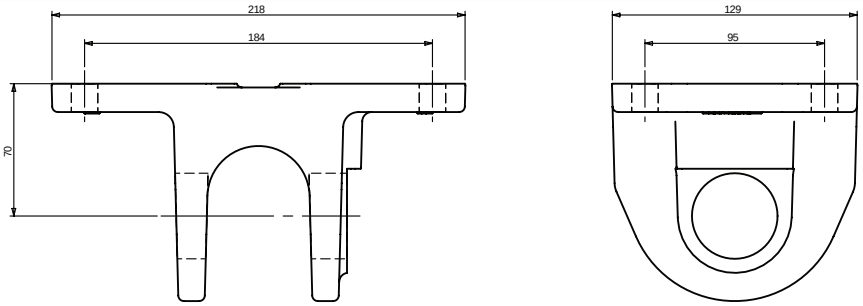


BB200



Mass: 11 kg x 2 = 22 kg

OMK2C



OMK2C for 4-5 stages ; Mass : 7 kg

CS18 0E

CYLINDERS WITH EYE MOUNTING

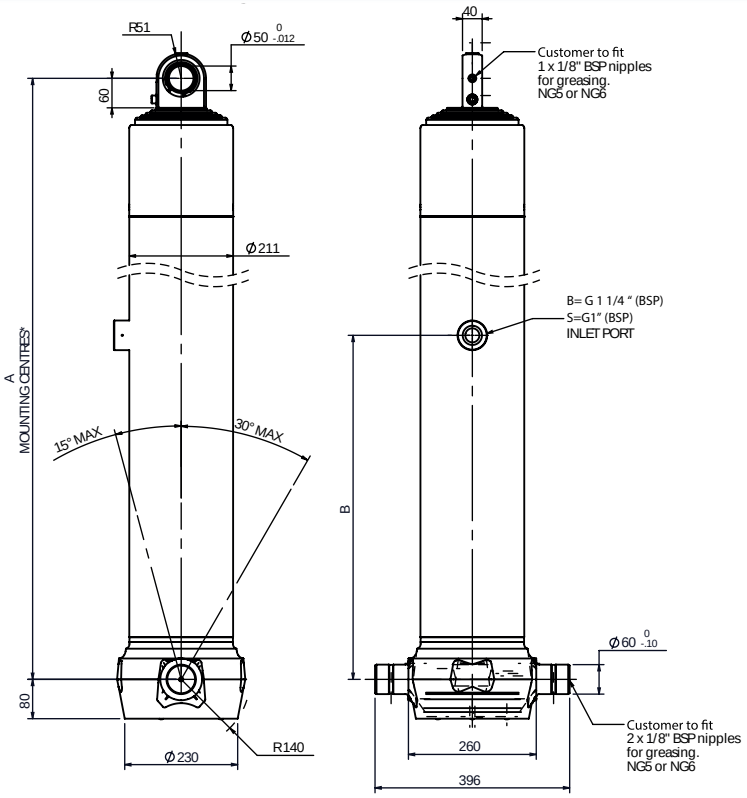
CS18 0E

Cylinders Codes	N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)	Tipping capacity		Bodylength (mm)		A - Mounting Centre (mm) Tolernace - +40 / -0	B - Port Height (mm)	Port Type
					Min	Max	Min	Max			
CS18 0E 4 5166 B19 A01	4	5166	241	102	44	62	6750	7750	1535	190	BSP
CS18 0E 4 5366 B19 A01	4	5366	248	106	44	60	7000	8000	1585	190	BSP
CS18 0E 4 5566 B19 A01	4	5566	242	110	44	59	7000	8000	1635	190	BSP
CS18 0E 4 5766 B19 A01	4	5766	261	114	44	58	7500	8500	1685	190	BSP
CS18 0E 4 5966 B19 A01	4	5966	268	118	44	57	7750	8750	1735	190	BSP
CS18 0E 4 6166 B19 A01	4	6166	275	122	44	56	8000	9000	1785	190	BSP
CS18 0E 4 6366 B19 A01	4	6366	281	126	44	55	8250	9250	1835	190	BSP
CS18 0E 4 6566 B19 A01	4	6566	288	130	44	55	8500	9500	1885	190	BSP
CS18 0E 4 6766 B19 A01	4	6766	294	134	39	48	8750	9750	1935	190	BSP
CS18 0E 4 6966 B19 A01	4	6966	301	138	39	47	9000	10000	1985	190	BSP
CS18 0E 4 7166 B19 A01	4	7166	308	142	35	43	9250	10250	2035	190	BSP
CS18 0E 4 7366 B19 A01	4	7366	314	145	35	43	9500	10500	2085	190	BSP
CS18 0E 4 7566 B19 A01	4	7566	321	149	29	35	9750	10750	2135	190	BSP
CS18 0E 4 7766 B19 A01	4	7766	328	153	29	34	10000	11000	2185	190	BSP
CS18 0E 4 7966 B19 A01	4	7966	334	158	29	34	10250	11250	2235	190	BSP
CS18 0E 4 8166 B19 A01	4	8166	341	162	29	34	10500	11500	2285	190	BSP
CS18 0E 5 6233 B70 A01	5	6233	260	109	40	51	8250	9250	1490	700	BSP
CS18 0E 5 6483 B70 A01	5	6483	267	113	37	48	8500	9500	1540	700	BSP
CS18 0E 5 6733 B70 A01	5	6733	275	118	34	43	8750	9750	1590	700	BSP
CS18 0E 5 6983 B70 A01	5	6983	282	122	31	38	9000	10000	1640	700	BSP
CS18 0E 5 7233 B70 A01	5	7233	290	127	31	38	9250	10250	1690	700	BSP
CS18 0E 5 7483 B70 A01	5	7483	297	131	27	34	9500	10500	1740	700	BSP
CS18 0E 5 7733 B70 A01	5	7733	305	136	25	31	9750	10750	1790	700	BSP
CS18 0E 5 7983 B70 A01	5	7983	312	140	25	31	10000	11000	1840	700	BSP

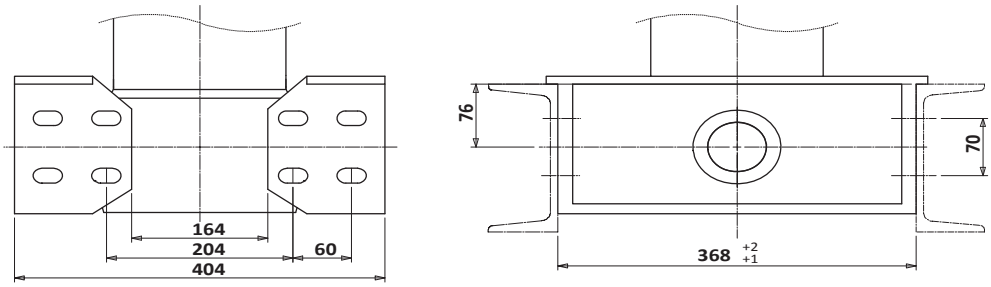
SPECIALS

CS18 0E 4 7616 S70 H01	4	7616	335	154	30	38	9250	10250	2235	700	SAE
CS18 0E 5 5483 B70 S02	5	5483	260	102	44	69	7000	8000	1515	700	BSP
CS18 0E 5 6233 B70 A02	5	6233	260	109	41	56	7750	8750	1515	700	BSP
CS18 0E 5 6983 B70 A02	5	6983	279	122	32	42	8500	9500	1665	700	BSP
CS18 0E 5 6983 S70 A06	5	6983	282	122	28	37	8500	9500	1765	700	SAE
CS18 0E 5 7483 B19 A01	5	7483	293	131	28	35	9500	10500	1740	190	BSP
CS18 0E 5 7633 S70 A01	5	7633	302	134	28	34	9500	10500	1772	700	SAE
CS18 0E 5 7983 B70 L01	5	7983	328	145	26	34	9750	10750	1940	700	BSP
CS18 0E 5 8233 B19 A01	5	8233	320	144	21	26	10000	11000	1892	190	BSP
CS18 0E 5 8233 S70 A01	5	8233	321	144	21	26	10000	11000	1892	700	SAE

CS18 0S



BB200



Mass: 11 kg x 2 = 22 kg

CS18 0S

CYLINDERS WITH SPHERICAL MOUNTING

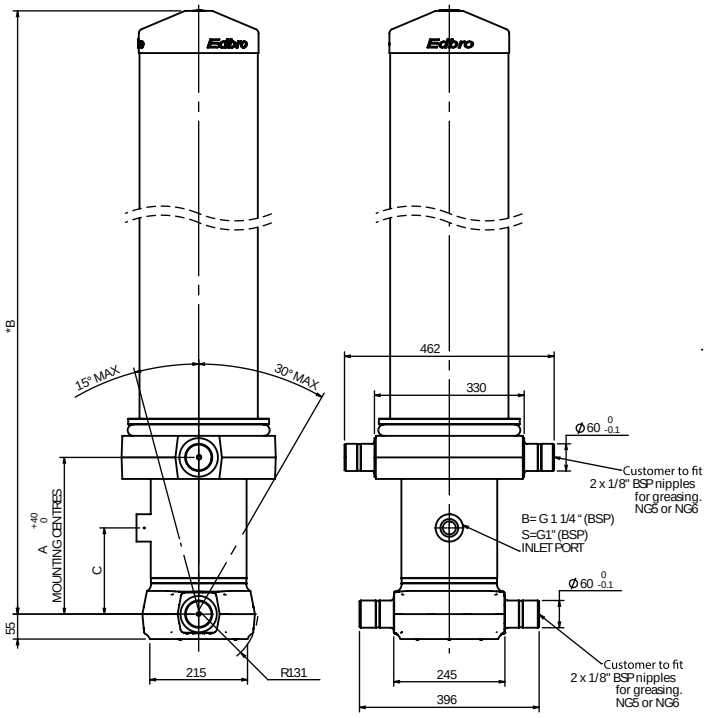
CS18 0S

Cylinders Codes	N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)	Tipping capacity		Bodylength (mm)		A - Mounting Centre (mm) Tolernace - +40 / -0	B - Port Height (mm)	Port Type
					Min	Max	Min	Max			
CS18 0S 4 5166 B19 A01	4	5166	242	102	44	62	6750	7750	1535	190	BSP
CS18 0S 4 5366 B19 A01	4	5366	248	106	44	60	7000	8000	1585	190	BSP
CS18 0S 4 5566 B19 A01	4	5566	248	110	44	60	7000	8000	1635	190	BSP
CS18 0S 4 5766 B19 A01	4	5766	262	114	44	58	7500	8500	1685	190	BSP
CS18 0S 4 5966 B19 A01	4	5966	268	118	44	57	7750	8750	1735	190	BSP
CS18 0S 4 6166 B19 A01	4	6166	275	122	44	56	8000	9000	1785	190	BSP
CS18 0S 4 6366 B19 A01	4	6366	282	126	44	55	8250	9250	1835	190	BSP
CS18 0S 4 6566 B19 A01	4	6566	288	130	44	55	8500	9500	1885	190	BSP
CS18 0S 4 6766 B19 A01	4	6766	295	134	39	48	8750	9750	1935	190	BSP
CS18 0S 4 6966 B19 A01	4	6966	301	138	39	47	9000	10000	1985	190	BSP
CS18 0S 4 7166 B19 A01	4	7166	308	142	39	47	9250	10250	2035	190	BSP
CS18 0S 4 7366 B19 A01	4	7366	315	145	35	43	9500	10500	2085	190	BSP
CS18 0S 4 7566 B19 A01	4	7566	321	149	29	35	9750	10750	2135	190	BSP
CS18 0S 4 7766 B19 A01	4	7766	328	153	29	34	10000	11000	2185	190	BSP
CS18 0S 4 7966 B19 A01	4	7966	335	158	29	34	10250	11250	2235	190	BSP
CS18 0S 4 8166 B19 A01	4	8166	341	162	29	34	10500	11500	2285	190	BSP
CS18 0S 5 6233 B70 A01	5	6233	262	109	40	51	8250	9250	1500	700	BSP
CS18 0S 5 6483 B70 A01	5	6483	270	113	37	48	8500	9500	1550	700	BSP
CS18 0S 5 6733 B70 A01	5	6733	277	118	34	43	8750	9750	1600	700	BSP
CS18 0S 5 6983 B70 A01	5	6983	285	122	31	38	9000	10000	1650	700	BSP
CS18 0S 5 7233 B70 A01	5	7233	293	127	31	38	9250	10250	1700	700	BSP
CS18 0S 5 7483 B70 A01	5	7483	300	131	27	34	9500	10500	1750	700	BSP
CS18 0S 5 7733 B70 A01	5	7733	308	136	25	31	9750	10750	1800	700	BSP
CS18 0S 5 7983 B70 A01	5	7983	315	140	25	31	10000	11000	1850	700	BSP

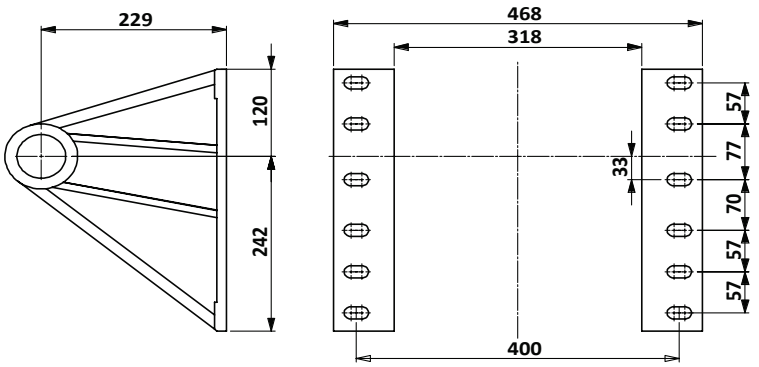
SPECIALS

CS18 0S 4 4416 B19 M01	4	4416	235	91	42	72	5650	6150	1485	190	BSP
CS18 0S 4 7616 S19 H01	4	7616	335	154	30	38	9250	10250	2235	190	SAE
CS18 0S 4 7616 S70 H01	4	7616	335	154	30	38	9250	10250	2235	700	SAE
CS18 0S 5 5983 B19 A05	5	5983	257	104	41	56	7500	8500	1550	190	BSP
CS18 0S 5 5983 B25 A05	5	5983	257	104	41	56	7500	8500	1550	250	BSP
CS18 0S 5 6233 B19 A05	5	6233	264	109	35	48	7500	8750	1600	190	BSP
CS18 0S 5 6983 B19 A04	5	6983	286	122	28	37	8500	9500	1725	190	BSP
CS18 0S 5 6983 S70 A06	5	6983	288	122	28	37	8500	9600	1775	700	SAE
CS18 0S 5 7233 B19 A02	5	7233	293	127	31	40	9250	10250	1725	190	BSP
CS18 0S 5 7633 B19 A01	5	7633	304	134	28	34	9500	10500	1780	190	BSP
CS18 0S 5 7633 B70 A01	5	7633	304	134	28	34	9500	10500	1780	700	BSP
CS18 0S 5 7633 S70 A01	5	7633	305	134	28	34	9500	10500	1780	700	SAE

CS18 LO



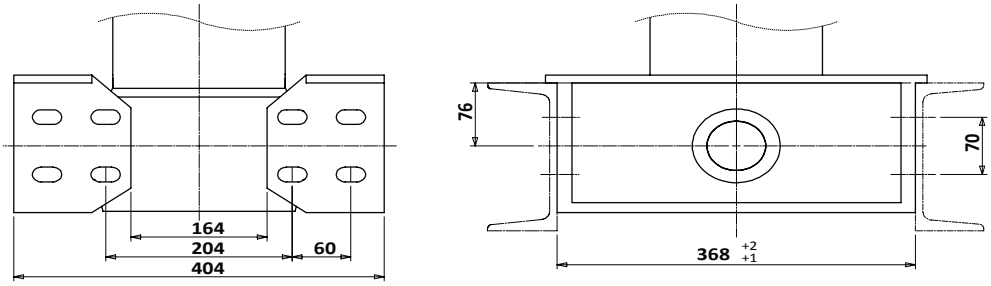
LB200 - LB201



Mass: 8 kg x 2 = 16 kg

Only for use in controlled applications with a maximum body and payload of 36 tonnes

BB200



Mass: 11 kg x 2 = 22 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
					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	422	162	30	38	10500	11500	345	2146	190	BSP
CS18 L0 5 9483 B19 A11	5	9483	425	166	29	34	11500	12500	345	2196	190	BSP

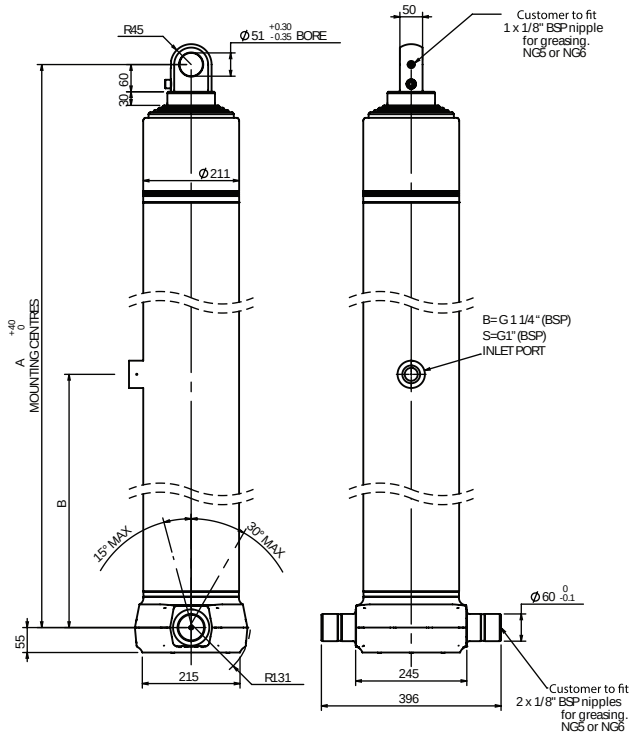
SHORT COVER

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	366	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

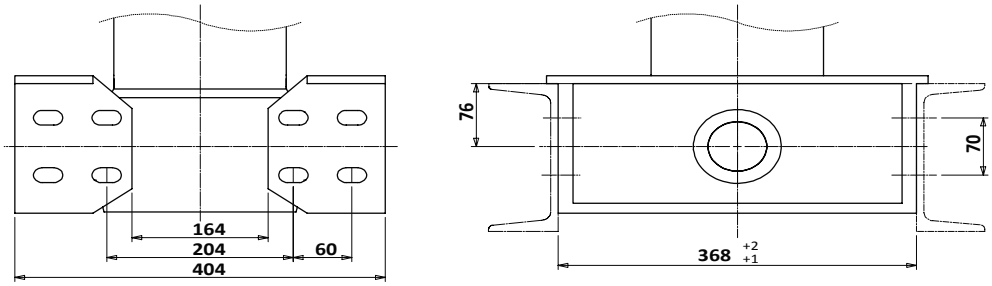
SPECIALS

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	352	127	34	46	8500	9500	345	1746	190	BSP
CS18 L0 5 8233 B19 A12	5	8233	380	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	10500	11500	900	2096	250	BSP
CS18 L0 5 9233 B25 A16	5	9233	397	162	26	31	11500	12500	1200	2146	250	BSP
CS18 L0 5 9233 N25 A16	5	9233	397	162	26	31	11500	12500	1200	2146	250	BSP
CS18 L0 5 9233 S19 A11	5	9233	422	162	30	38	10500	11500	345	2146	190	SAE
CS18 L0 5 9233 S25 A14	5	9233	406	162	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

CS18 LE

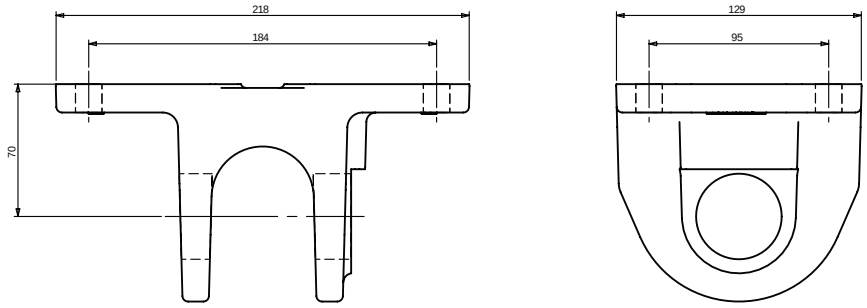


BB200



Mass: 11 kg x 2 = 22 kg

OMK2C



OMK2C for 4-5 stages ; Mass : 7 kg

C18 LE

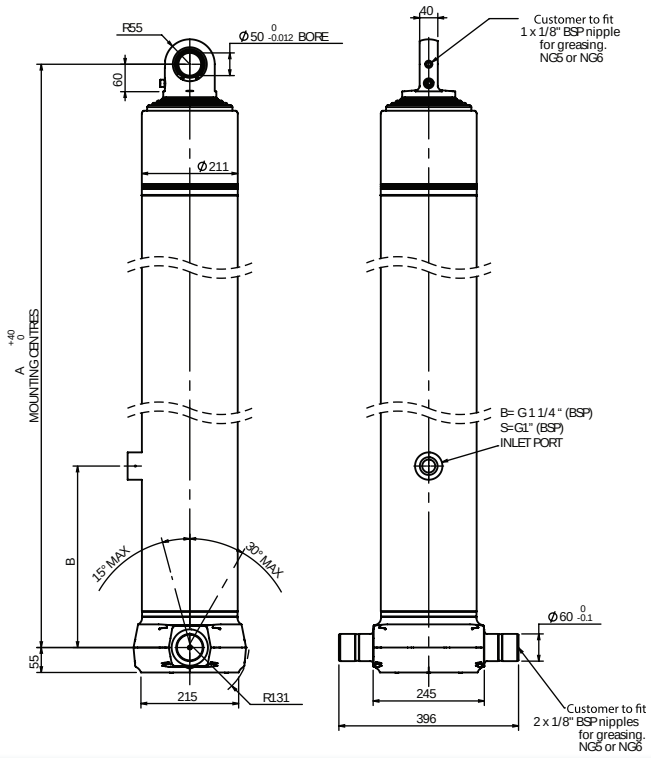
CYLINDERS WITH EYE MOUNTING

Cylinders Codes	N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)	Rated capacity		Bodylength (mm)		A - Mtg Centre (mm)	B - Port Height (mm)	Port Type
					Min	Max	Min	Max			
CS18 LE 5 6233 B70 A02	5	6233	241	109	32	43	8000	9000	1513	700	BSP
CS18 LE 5 6483 B70 A02	5	6483	249	113	35	45	8500	9500	1563	700	BSP
CS18 LE 5 6733 B70 A02	5	6733	255	118	31	40	8750	9750	1613	700	BSP
CS18 LE 5 7033 B70 A02	5	7033	264	123	32	42	8750	9750	1673	700	BSP
CS18 LE 5 7233 B70 A02	5	7233	277	127	31	40	9250	10250	1713	700	BSP
CS18 LE 5 7483 B70 A02	5	7483	285	131	28	37	9250	10250	1763	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	300	140	34	57	8000	9000	1863	700	BSP

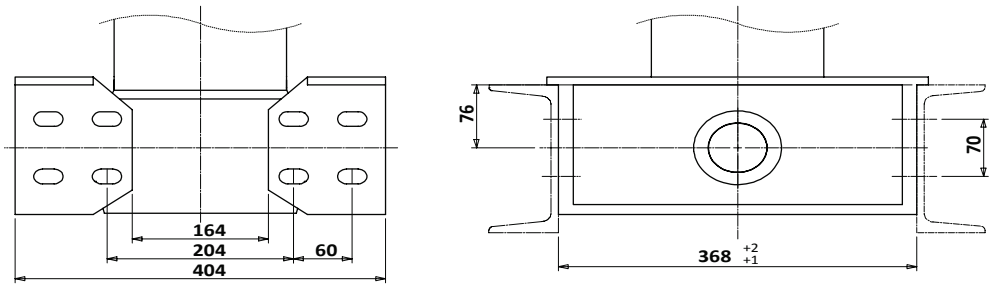
SPECIALS

CS18 LE 5 5483 B70 S02	5	5483	241	102	29	48	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 6883 B70 A03	5	6883	260	120	33	41	8750	9750	1668	700	BSP
CS18 LE 5 6983 S70 A06	5	6983	272	122	33	42	8750	9750	1763	700	SAE
CS18 LE 5 7233 B19 A03	5	7233	278	127	31	40	9250	10250	1738	190	BSP
CS18 LE 5 7233 B70 A03	5	7233	278	131	31	40	9000	10000	1738	700	BSP
CS18 LE 5 7483 S70 A02	5	7483	285	134	28	37	9250	10250	1763	700	SAE
CS18 LE 5 7633 S70 A02	5	7633	290	134	29	37	9250	10250	1793	700	BSP
CS18 LE 5 7983 B70 L02	5	7983	315	144	30	37	9750	10750	1863	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	26	33	10000	11000	1913	190	BSP
CS18 LE 5 8233 S70 A02	5	8233	308	144	26	33	10000	11000	1913	700	SAE

CS18 LS



BB200



Mass: 11 kg x 2 = 22 kg

CS18 LS

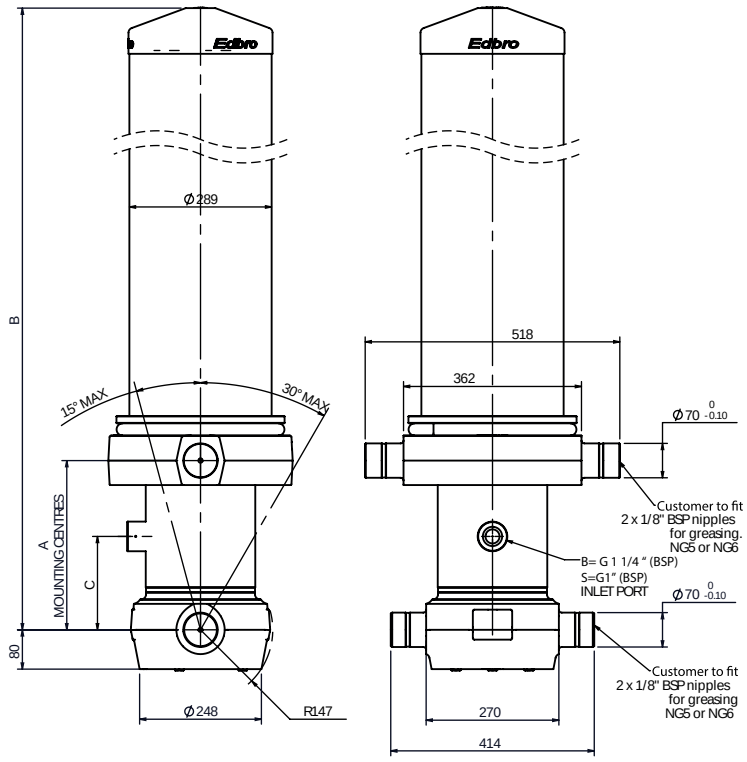
CYLINDERS WITH SPHERICAL MOUNTING

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

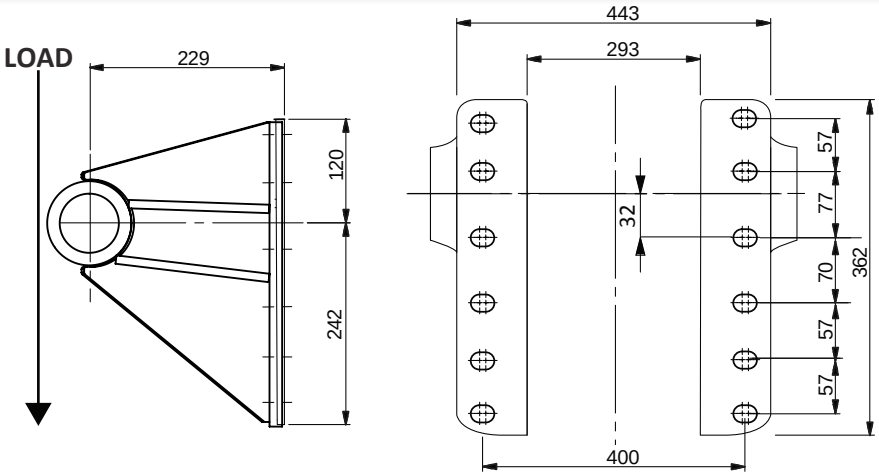
SPECIALS

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

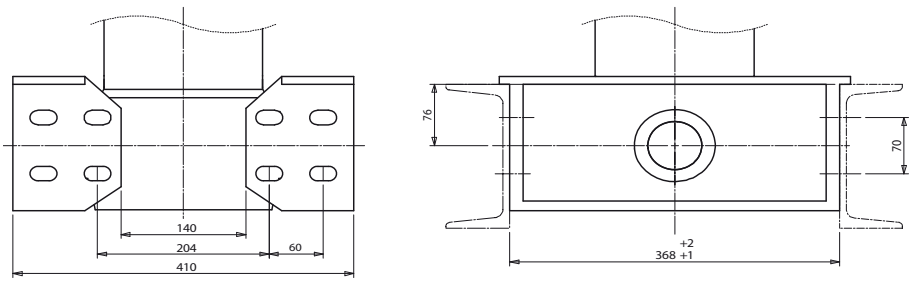
CS19 00



LB117-LB118



BB106



Mass: 18kg x 2 = 36 kg

CS19 00

CYLINDERS WITH OUTER COVER

CS19 00

Cylinders Codes			N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)	Tipping capacity		Bodylength (mm)		A - Mounting Centre (mm) Tolernace - +40 / -0	B - Overall Height (mm)	C - Port Height (mm)	Port Type
							Min	Max	Min	Max				
CS19 00 5	5678	B19 A11	5	5678	342	112	53	83	6750	7750	345	1443	190	BSP
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

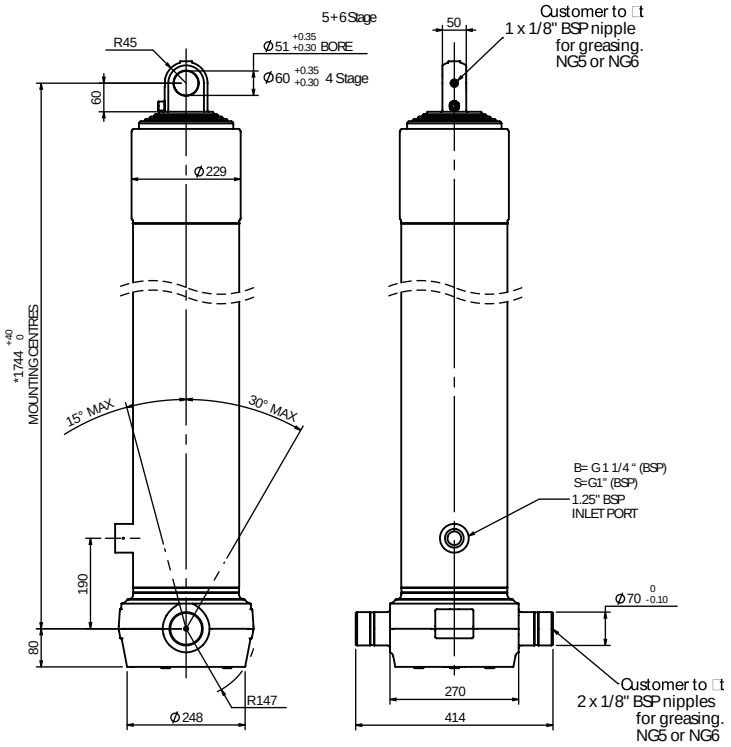
SHORT COVER

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

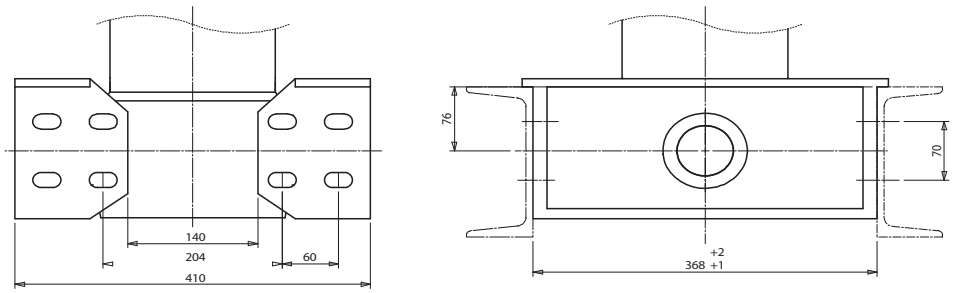
SPECIALS

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

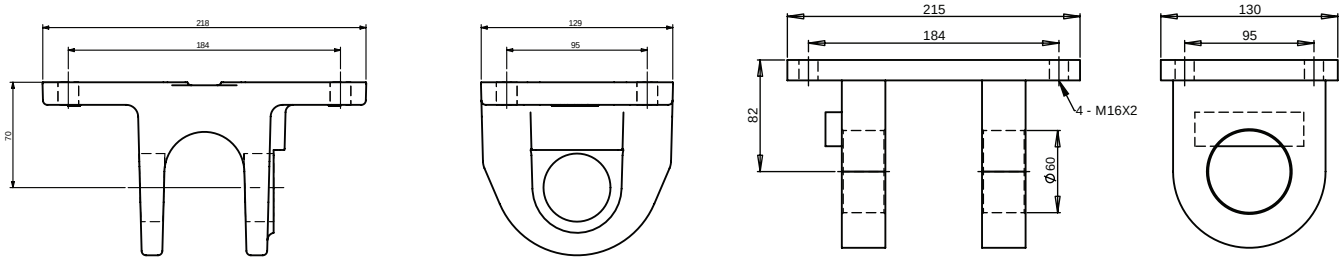


BB106



Mass: 18kg x 2 = 36 kg

OMK2C & OMK5



OMK2C for 5-6 stages; Mass: 7kg

OMK5 for 4 stages; Mass: 8kg

CS19 0E

CYLINDERS WITH EYE MOUNTING

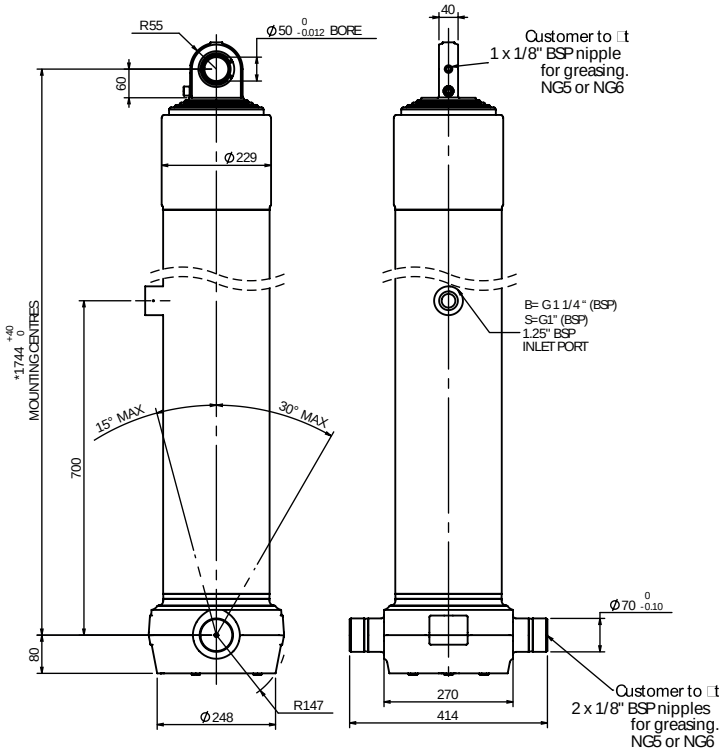
CS19 0E

Cylinders Codes			N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)	Tipping capacity		Bodylength (mm)		A - Mounting Centre (mm) Tolerance - +40 / -0	B -Port Height (mm)	Port Type
							Min	Max	Min	Max			
CS19 0E 4	5916	B19 A01	4	5916	281	131	58	80	7500	8500	1739	190	BSP
CS19 0E 4	6116	B19 A01	4	6116	295	134	53	74	7500	8500	1789	190	BSP
CS19 0E 4	6316	B19 A01	4	6316	297	139	53	72	7750	8750	1839	190	BSP
CS19 0E 4	6516	B19 A01	4	6516	309	144	53	71	8000	9000	1889	190	BSP
CS19 0E 4	6716	B19 A01	4	6716	316	149	46	62	8250	9250	1939	190	BSP
CS19 0E 4	6916	B19 A01	4	6916	318	153	46	61	8500	9500	1989	190	BSP
CS19 0E 5	5428	B19 A01	5	5428	251	107	50	78	6750	7750	1344	190	BSP
CS19 0E 5	5678	B19 A01	5	5678	258	111	50	76	7000	8000	1394	190	BSP
CS19 0E 5	5928	B19 A01	5	5928	262	117	50	75	7250	8250	1444	190	BSP
CS19 0E 5	6178	B19 A01	5	6178	274	122	45	62	7750	8750	1494	190	BSP
CS19 0E 5	6428	B19 A01	5	6428	278	127	45	61	8000	9000	1544	190	BSP
CS19 0E 5	6678	B19 A01	5	6678	289	132	40	55	8250	9250	1594	190	BSP
CS19 0E 5	6928	B19 A01	5	6928	293	137	36	48	8500	9500	1644	190	BSP
CS19 0E 5	7178	B19 A01	5	7178	304	142	36	47	8750	9750	1694	190	BSP
CS19 0E 5	7428	B19 A01	5	7428	308	147	33	43	9000	10000	1744	190	BSP
CS19 0E 5	7678	B19 A01	5	7678	319	151	27	35	9250	10250	1794	190	BSP

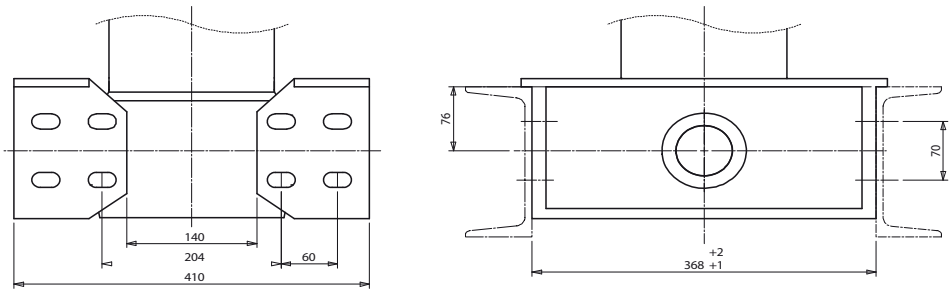
SPECIALS

CS19 0E 4	6316	T19 A01C	4	6316	297	139	53	72	7750	8750	1839	190	BSP
CS19 0E 5	7428	T19 A01C	5	7428	309	147	33	43	9000	10000	1744	190	BSP
CS19 0E 6	6995	B70 K02	6	6995	287	128	30	41	8750	9750	1524	700	BSP

CS19 0S

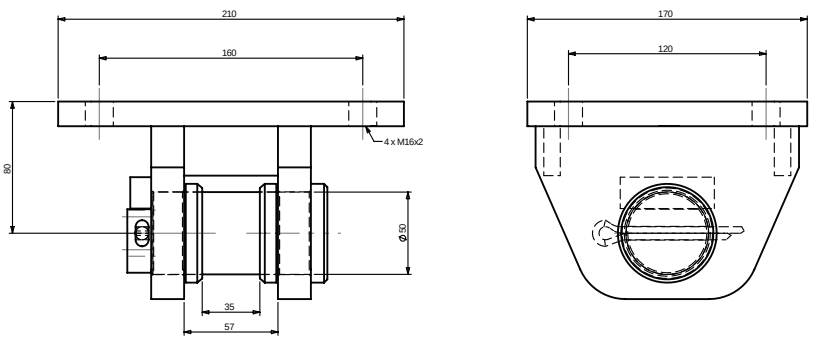


BB106



Mass: 18kg x 2 = 36 kg

OMK5



OMK5 for 5 stages; Mass: 8kg

CS19 0S

CYLINDERS WITH SPHERICAL MOUNTING

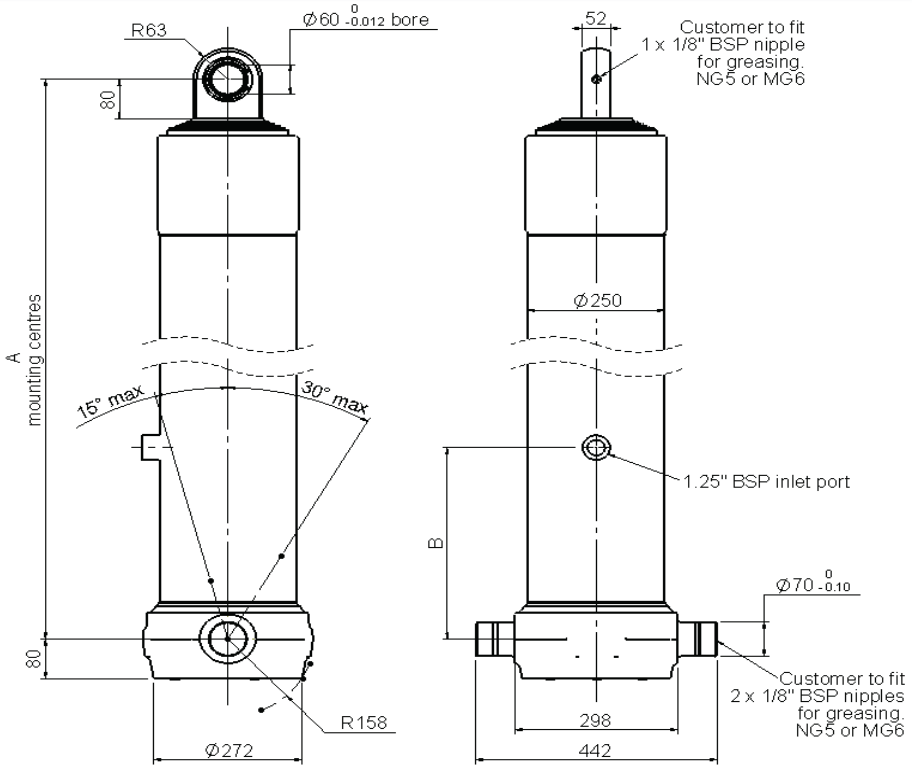
CS19 0S

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

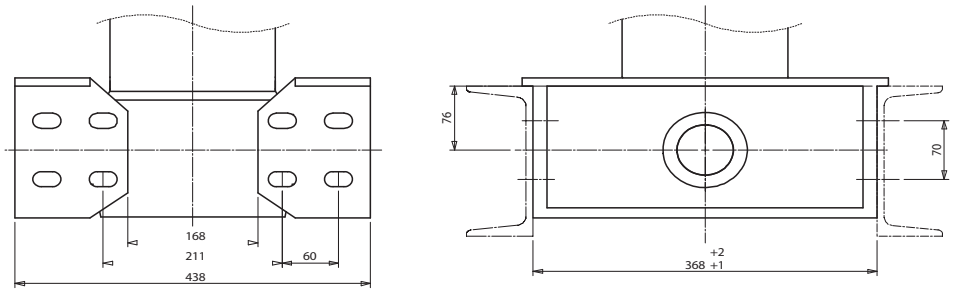
SPECIALS

CS19 0S 5	5678	B70 L04	5	5678	275	116	43	73	6500	7500	1569	700	BSP
CS19 0S 5	5928	B40 A05	5	5928	268	117	53	73	7500	8200	1544	400	BSP
CS19 0S 5	6178	S70 A01	5	6178	268	122	45	62	7750	8750	1494	700	SAE
CS19 0S 6	6245	B70 A01	6	6245	256	110	32	47	7750	8750	1309	700	BSP
CS19 0S 6	6995	B70 K01	6	6995	288	128	30	41	8750	9750	1549	700	BSP
CS19 0S 6	6995	B70 K01C	6	6995	288	128	30	41	8750	9750	1549	700	BSP
CS19 0S 6	7445	S70 A01	6	7445	288	132	23	30	9250	10250	1509	700	SAE

CS22 0S

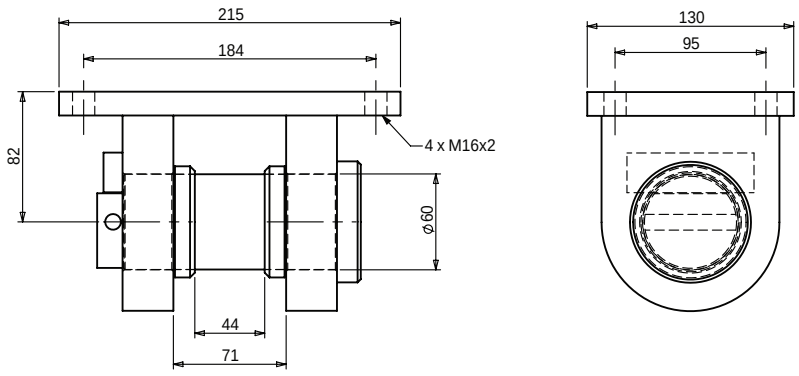


BB106



Mass: 18kg x 2 = 36 kg

OMK7



OMK7 for use with OS5 stage Mass: 12.2kg

CS22 0S

CYLINDERS WITH SPHERICAL MOUNTING

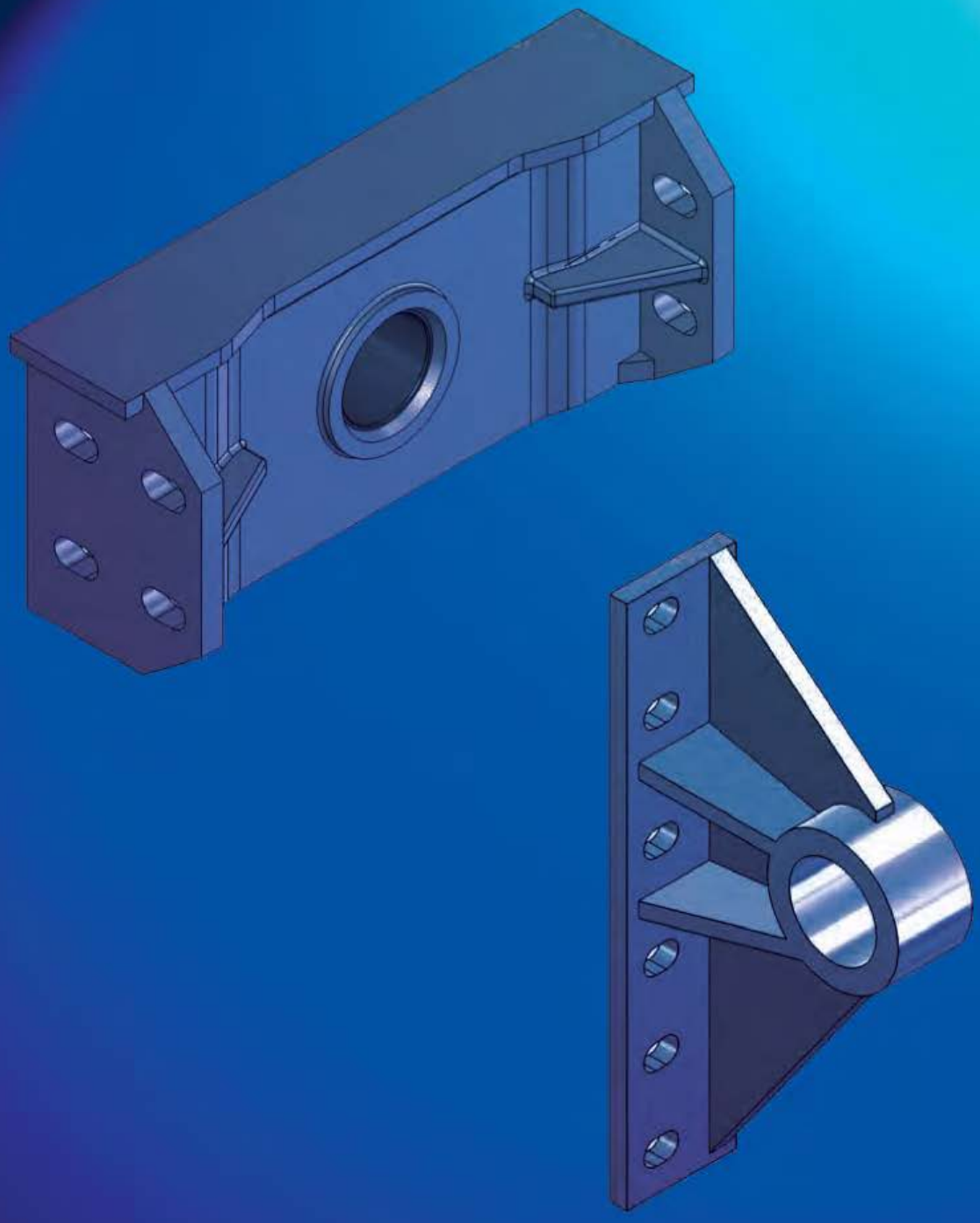
CS22 0S

Cylinders Codes			N° of stages	Stroke (mm)	Mass (Kg)	Swept Oil Volume (l)	Tipping capacity		Bodylength (mm)		A - Mounting Centre (mm) Tolerance - +40 / -0	B - Port Height (mm)	Port Type
							Min	Max	Min	Max			
CS22 0S 5	5530	B39 CAE	5	5530	346	140	67	94	7500	7900	1413	390	BSP
CS22 0S 5	5780	B39 CAE	5	5780	356	148	67	92	7750	8150	1463	390	BSP
CS22 0S 5	6030	B39 CAE	5	6030	387	154	74	95	8000	8400	1513	390	BSP
CS22 0S 5	6280	B39 CAE	5	6280	377	159	73	93	8250	8650	1563	390	BSP
CS22 0S 5	6530	B39 CAE	5	6530	387	166	73	92	8500	8900	1613	390	BSP
CS22 0S 5	6780	B39 CAE	5	6780	398	173	73	91	8750	9150	1663	390	BSP
CS22 0S 5	7030	B39 CAE	5	7030	404	180	79	102	9000	9400	1713	390	BSP
CS22 0S 5	7280	B39 CAE	5	7280	418	185	66	84	9250	9650	1763	390	BSP
CS22 0S 5	7530	B39 CAE	5	7530	429	192	59	75	9500	9900	1813	390	BSP
CS22 0S 5	8780	B39 CAE	5	8780	481	224	37	42	12500	12900	2063	390	BSP

Edbro

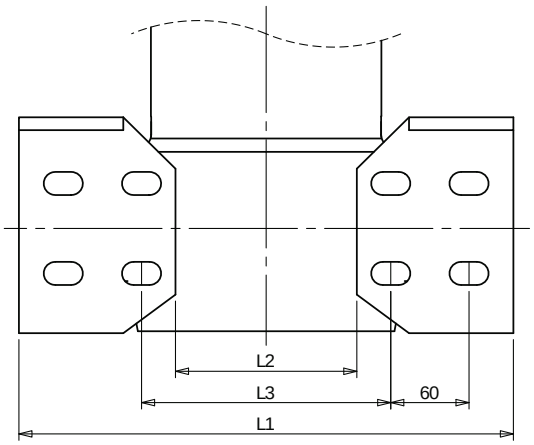
SETTING THE INDUSTRY STANDARD

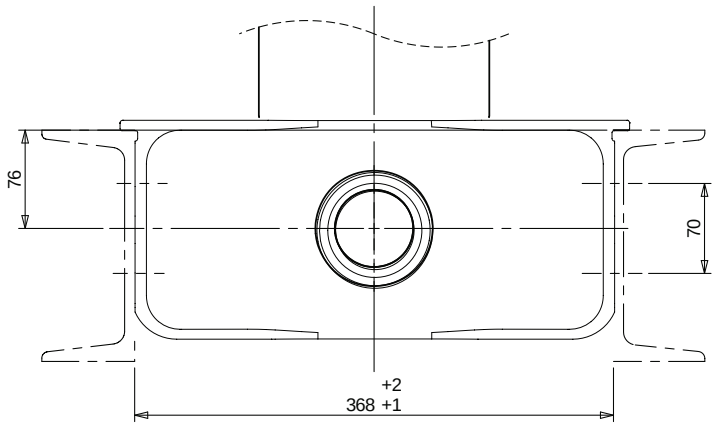
CS Brackets Standard and Options



Standard Bearing Brackets:

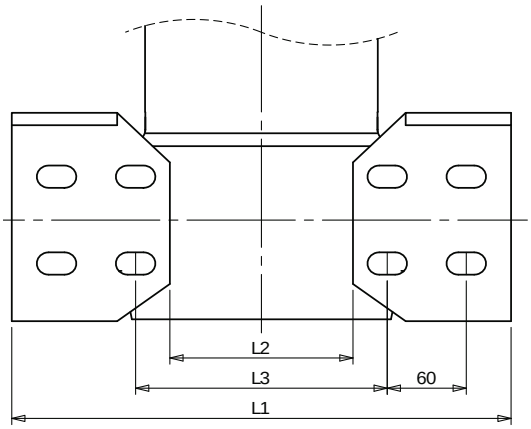
BB200 10.8 kg each

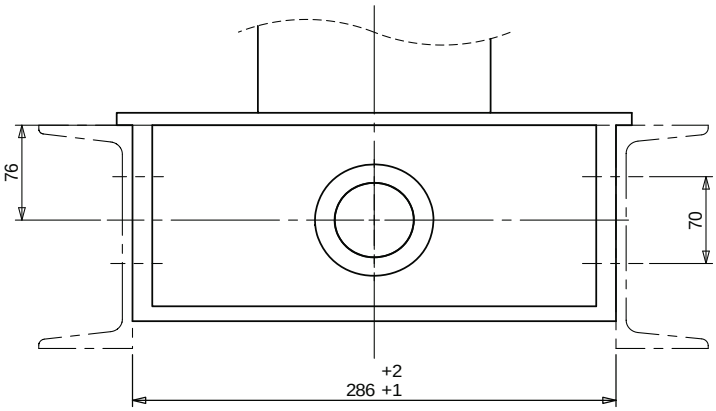




		CS17/18	CS15	CS17 Ultra / CS18 Ultra
		standard	*standard*	*standard*
L1		403	378	388
L2		163	138	148
L3	min	204	179	189
	std	206	181	191
	max	228	203	213

BB103 11kg each



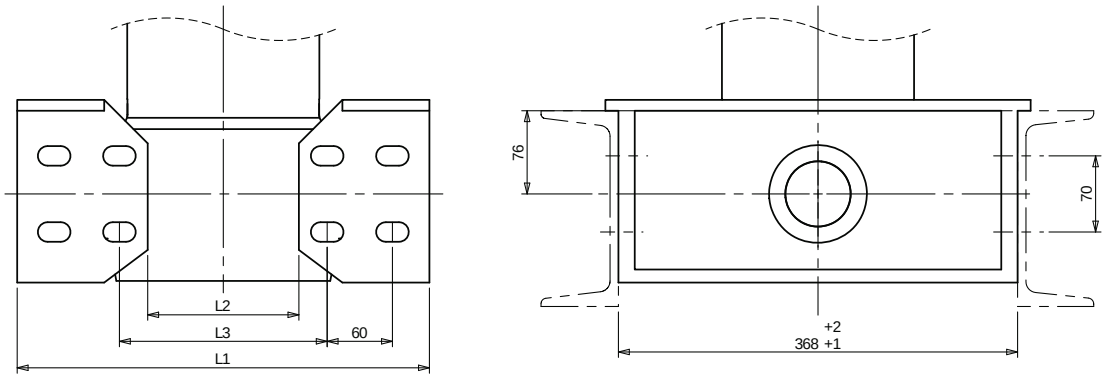


		CS13/11	CS15
		standard	*standard*
L1		338	383
L2		98	143
L3	min	138	183
	std	158	204
	max	162	207

All dimensions are given in mm unless otherwise stated.
Technical Specifications are subject to change without notice.

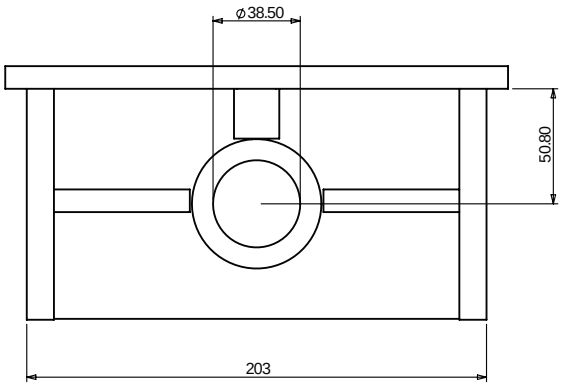
Standard Bearing Brackets:

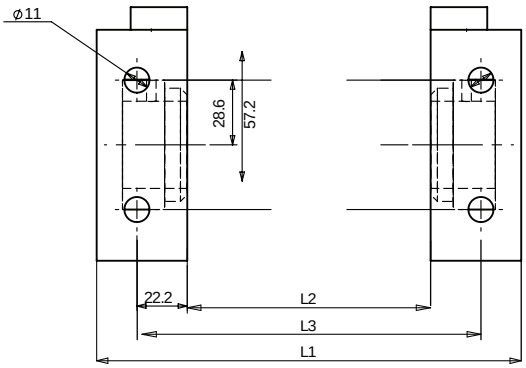
BB106 14.5 kg each



		CS19	CS22
		standard	*standard*
L1		410	438
L2		140	168
L3	min	180	207
	std	204	211
	max	213	241

RB14A/FAB 3 kg each



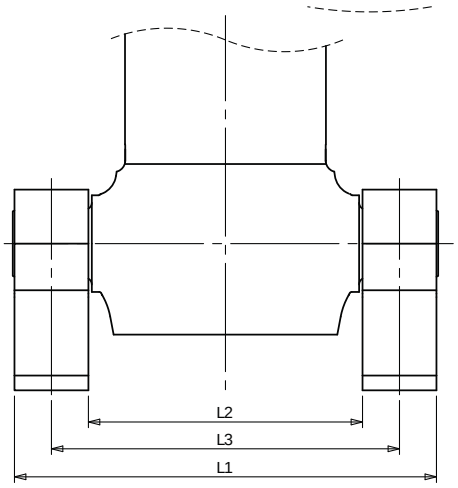


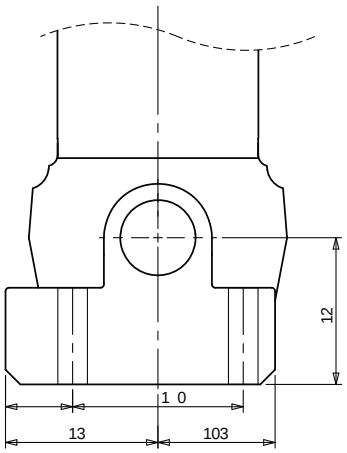
		CS07
		standard
L1		194
L2		114
L3		159

All dimensions are given in mm unless otherwise stated.
Technical Specifications are subject to change without notice.

Optional Bearing Brackets:

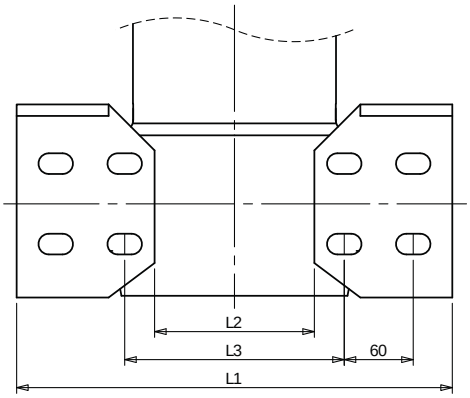
BB101 7 kg each

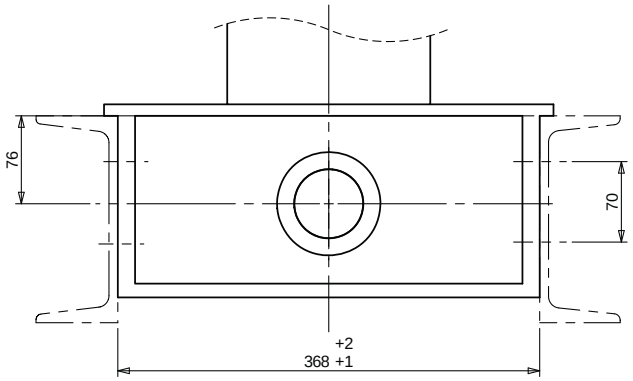




	CS17/18	CS15
	option	*option*
L1	396	371
L2	266	241
L3	331	306

BB100/B 13.5 kg each
Low Maintenance Bush



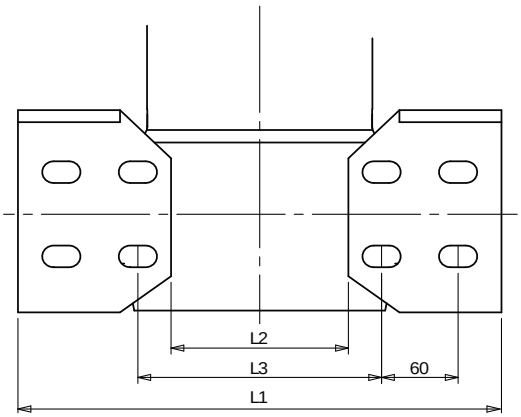


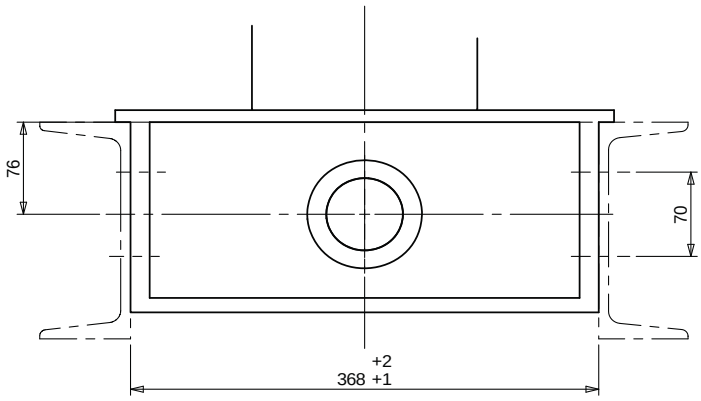
		CS17/18	CS15
		optional	*optional*
L1		404	380
L2		164	140
L3	min	204	180
	std	204	204
	max	228	204

All dimensions are given in mm unless otherwise stated.
Technical Specifications are subject to change without notice.

Optional Bearing Brackets:

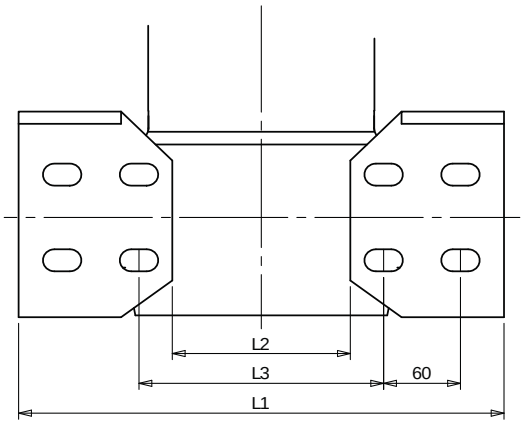
BB104 15 kg each

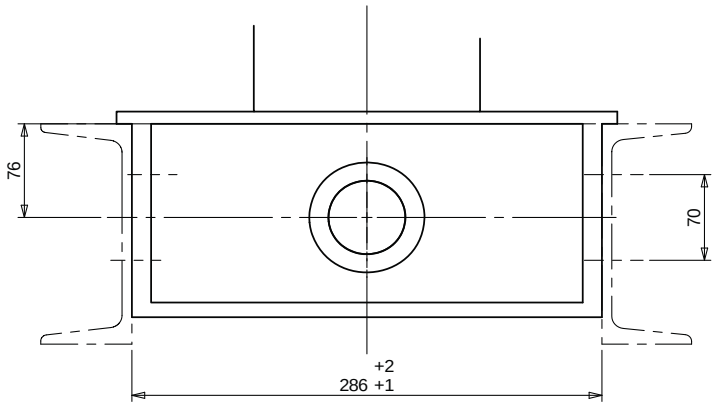




		CS15
		option
L1		375
L2		95
L3	min	134
	std	141
	max	146

BB105 12.5 kg each



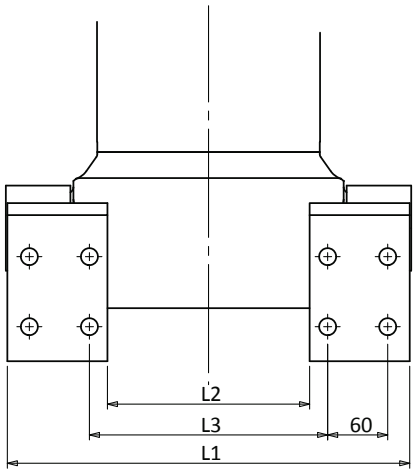


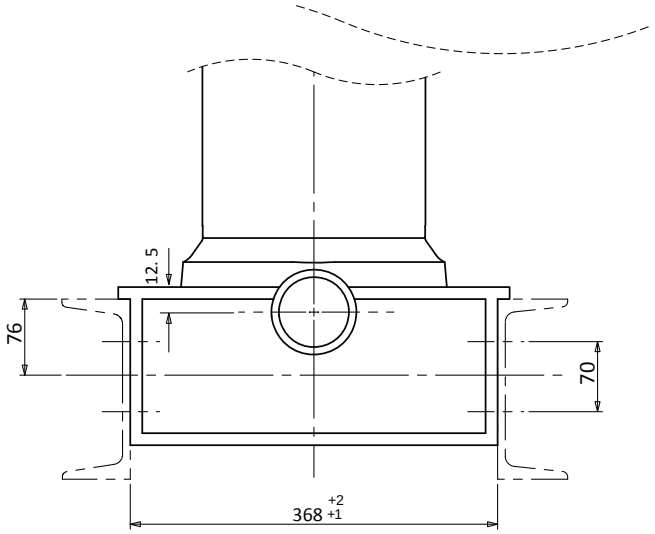
		CS15
		option
L1		375
L2		95
L3	min	134
	std	141
	max	146

All dimensions are given in mm unless otherwise stated.
Technical Specifications are subject to change without notice.

Optional Bearing Brackets:

BB108 12.5 kg each





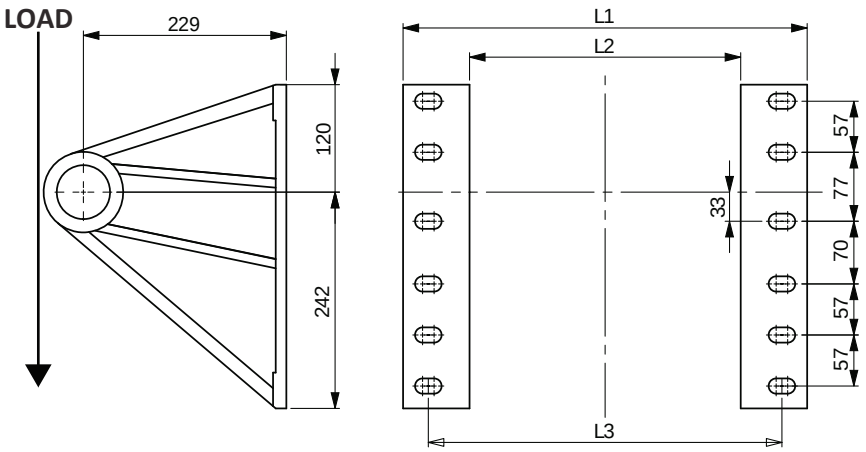
	CS17/18
	option
L1	390
L2	190
L3	228

All dimensions are given in mm unless otherwise stated.
Technical Specifications are subject to change without notice.

Standard Lifting Brackets:

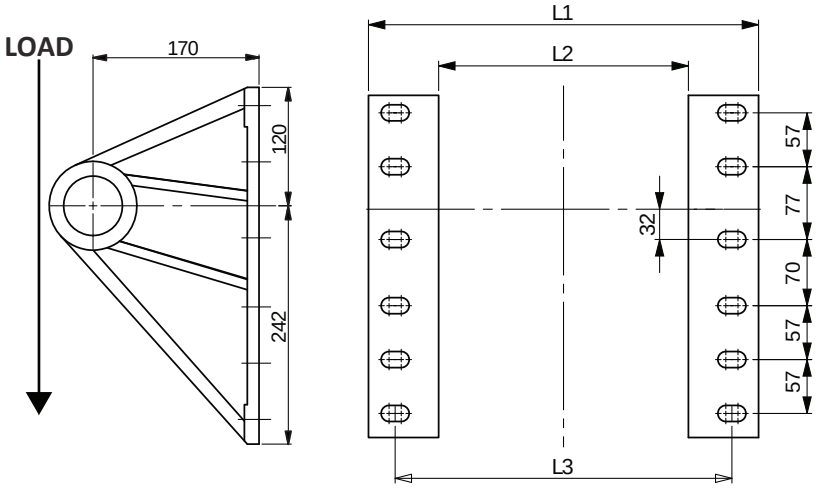
For use with outer cover cylinders (00 type)

LB100-LH & LB101-RH 10kg each



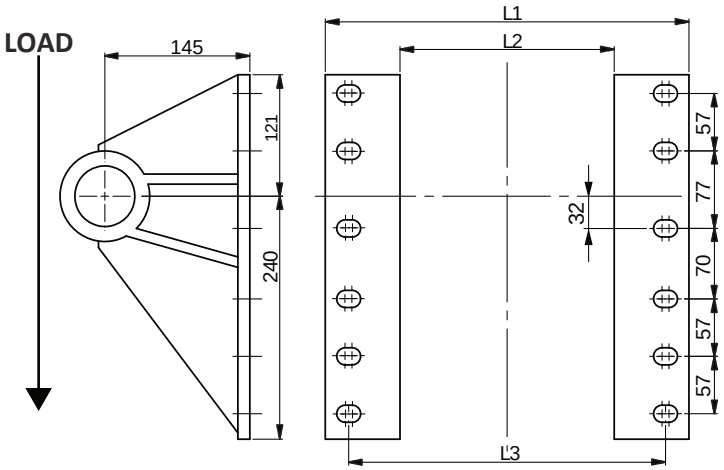
		CS17/18	CS15	CS13	CS11
		standard	*standard*	*option*	*option*
L1		468	456	417	379
L2		318	306	267	229
L3	min	398	386	347	309
	std	400	388	360	322
	max	424	412	373	335

LB104-LH & LB105-RH 8kg each



		CS13	CS17/18	CS15	CS11
		standard	*option*	*option*	*option*
L1		417	468	456	379
L2		267	318	306	229
L3	min	347	398	386	309
	std	360	400	388	322
	max	373	424	412	335

LB106-LH & LB107-RH 7kg each

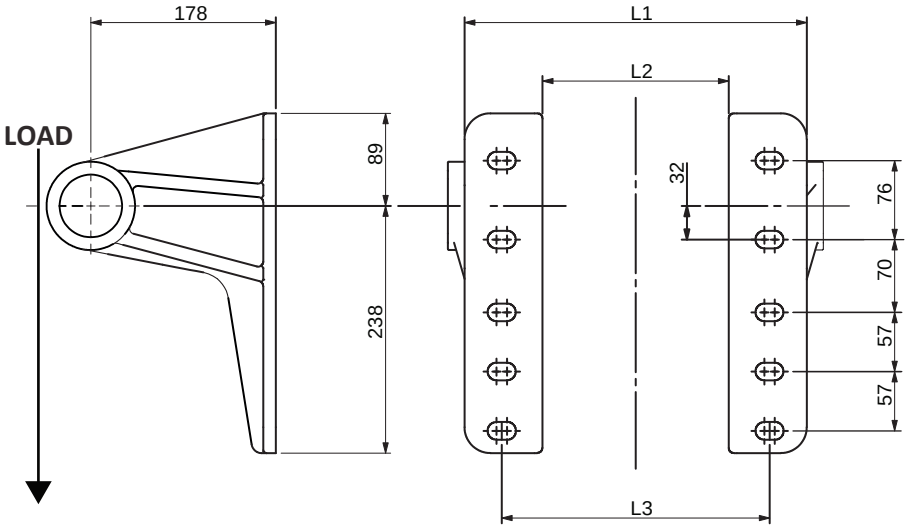


		CS17/18	CS15	CS13	CS11
		option	*option*	*option*	*option*
L1		454	442	403	365
L2		304	292	253	215
L3	min	400	388	349	311
	std	400	388	360	318
	max	414	402	363	325

All dimensions are given in mm unless otherwise stated.
Brackets to be mounted in the orientation position as shown in the diagrams above.
Technical Specifications are subject to change without notice.

Standing Lifting Brackets:

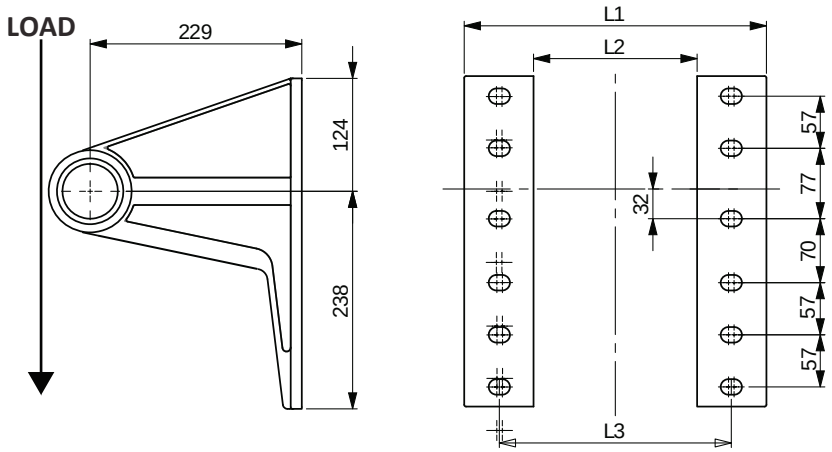
LB208-LH & LB209-RH 7.12 kg each



		CS11	CS13*
		standard	*option*
L1		329	367
L2		179	217
L3	min	248	286
	std	258	296
	max	268	306

**CS13 4 stage models only*

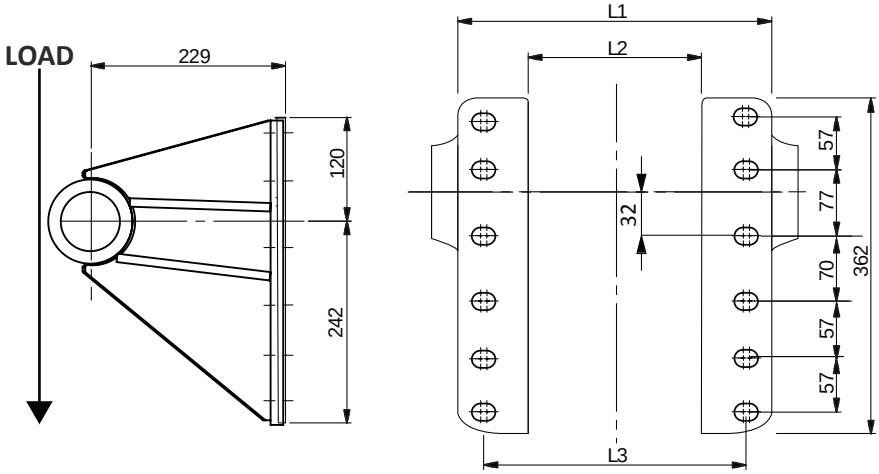
LB110-LH & LB111-RH 7.5kg each



		CS11	CS13*	CS15 /CS14
		option	*option*	*option*
L1		370	408	446
L2		220	258	296
L3	min	300	338	376
	std	303	340	378
	max	326	364	402

**CS13 4 stage models only*

LB117-LH & LB118-RH 12.7kg each



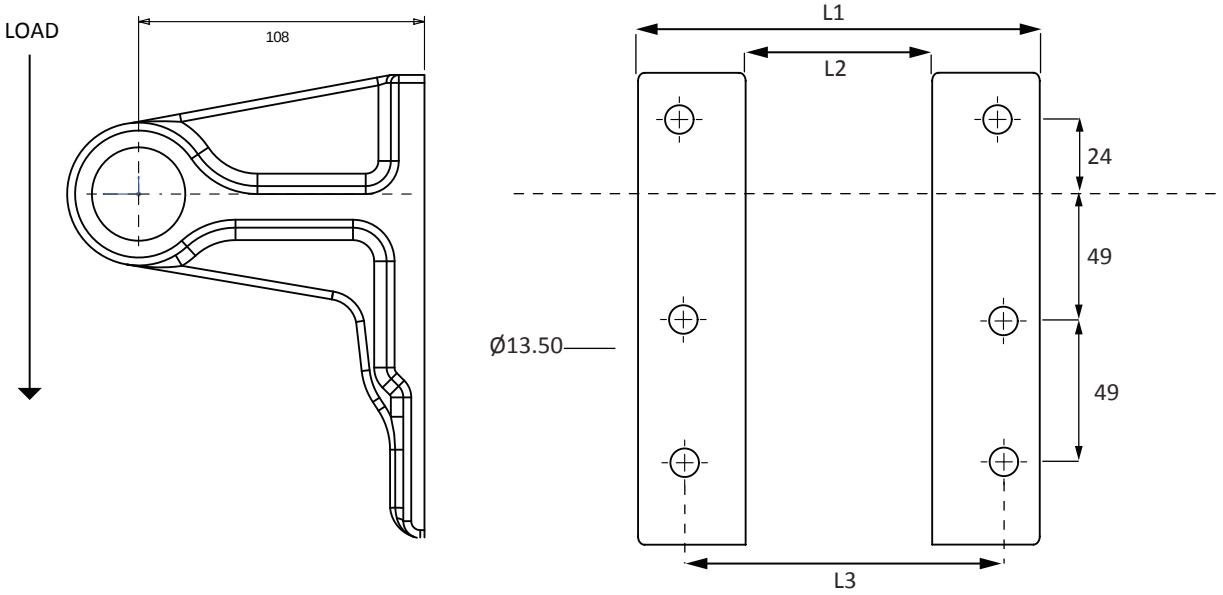
		CS19
		standard
L1		443
L2		293
L3	min	394
	std	400
	max	408

All dimensions are given in mm unless otherwise stated.
Brackets to be mounted in the orientation position as shown in the diagrams above.
Technical Specifications are subject to change without notice.

Standard Lifting Brackets:

EBF165/1 & EBF166/1 3.5kg each

For use with CS07



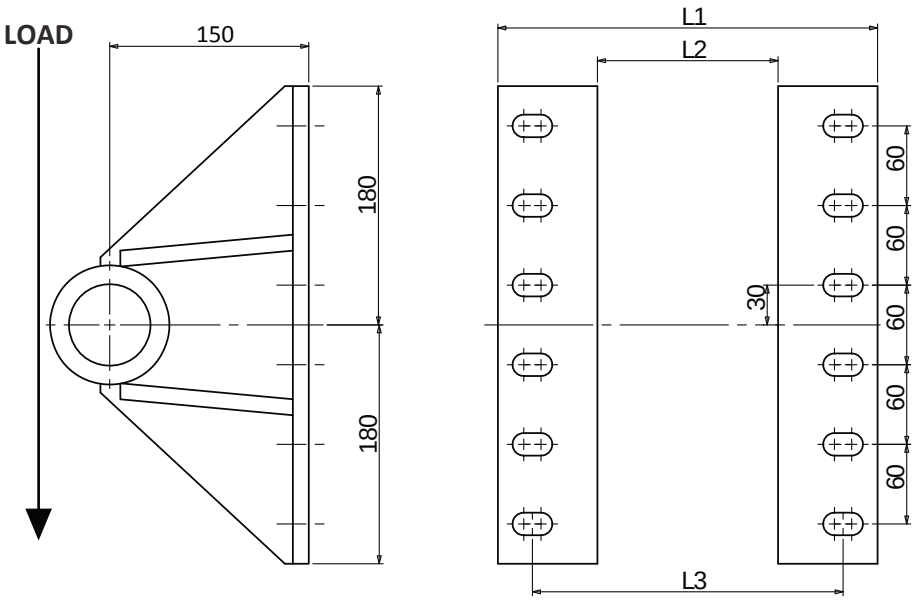
	CS07
	Standard
L1	228
L2	126
L3	196

All dimensions are given in mm unless otherwise stated.
Brackets to be mounted in the orientation position as shown in the diagrams above.
Technical Specifications are subject to change without notice.

Optional Lifting Brackets:

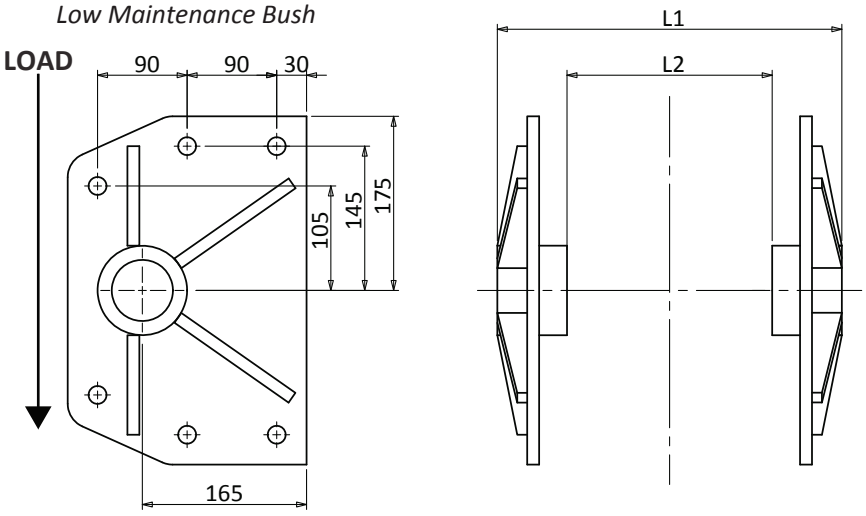
For use with outer cover cylinders (00 type)

LB102 *7.8kg each*
Low Maintenance Bush



		CS15	CS17/18
		option	*option*
L1		465	477
L2		315	327
L3	min	400	412
	std	400	412
	max	426	438

LB112 *(Silo special)* *9kg each*
Low Maintenance Bush

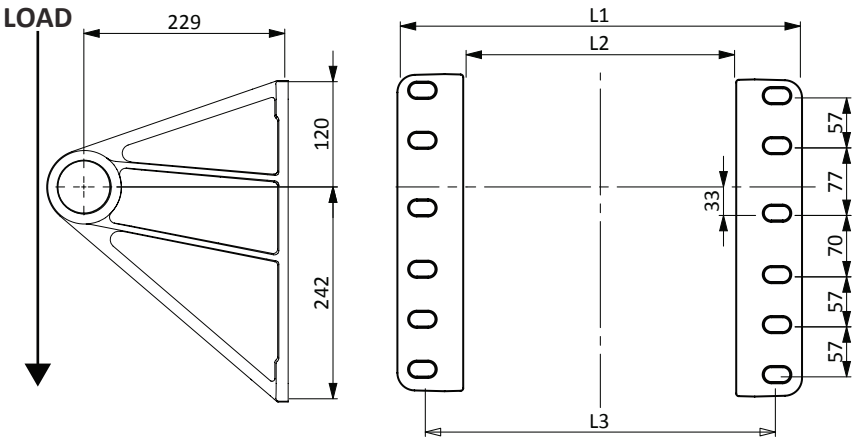


	CS17/18
	option
L1	476
L2	336

All dimensions are given in mm unless otherwise stated.
Brackets to be mounted in the orientation position as shown in the diagrams above.
Technical Specifications are subject to change without notice.

Optional Lifting Brackets:

LB200-LH & LB201-RH 8kg each



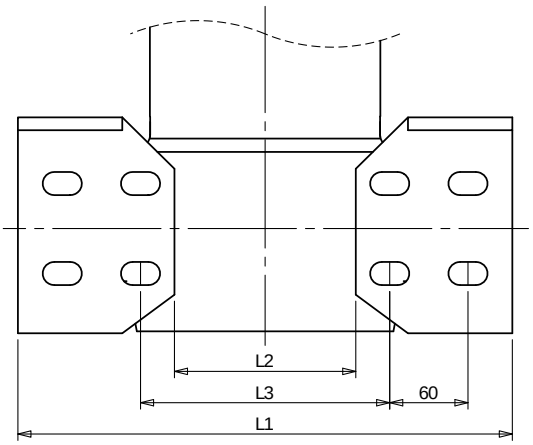
		CS17/18	CS15	CS13	CS11
		standard	*standard*	*option*	*option*
L1		468	456	417	379
L2		318	306	267	229
L3	min	398	386	347	309
	std	400	388	349	311
	max	424	412	373	335

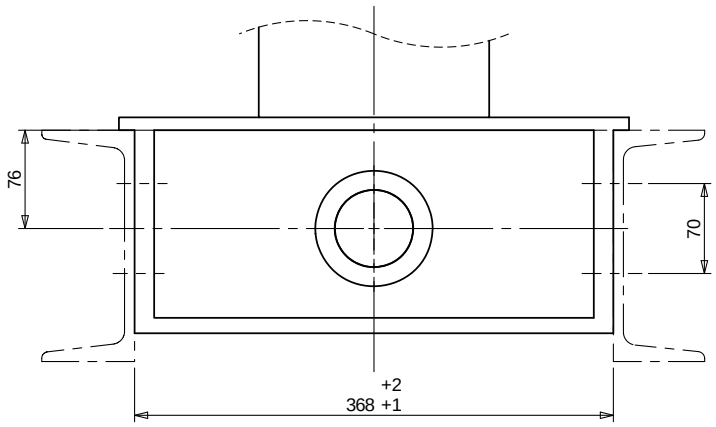
Only for use in controlled applications with a maximum body and payload of 36 tonnes.

All dimensions are given in mm unless otherwise stated.
Brackets to be mounted in the orientation position as shown in the diagrams above.
Technical Specifications are subject to change without notice.

Bearing Brackets:

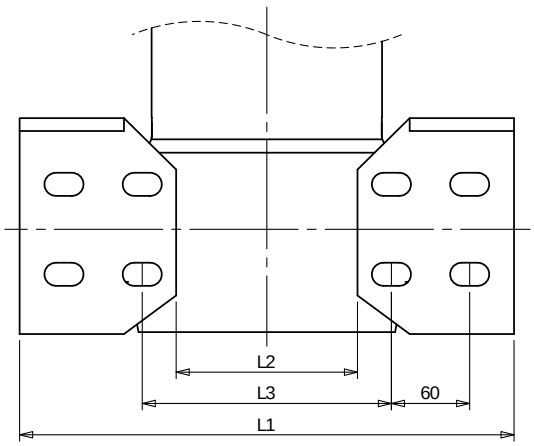
BB200 11 kg each

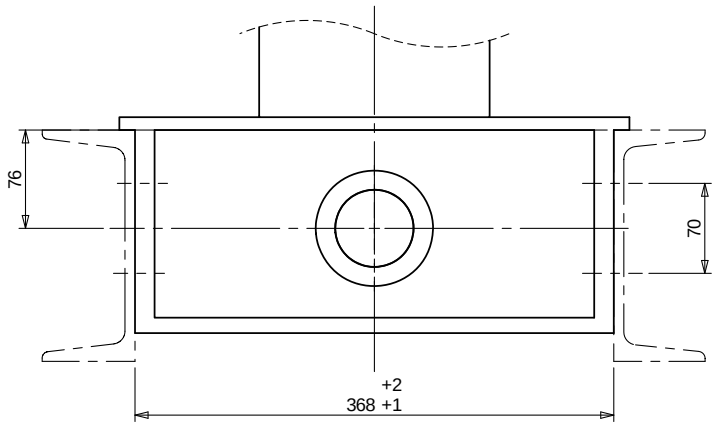




		CS17L/18L
		standard
L1		389
L2		149
L3	min	189
	std	204
	max	213

BB100CT 14.2 kg each





		CS17L/18L
		standard
L1		389
L2		149
L3	min	189
	std	204
	max	213

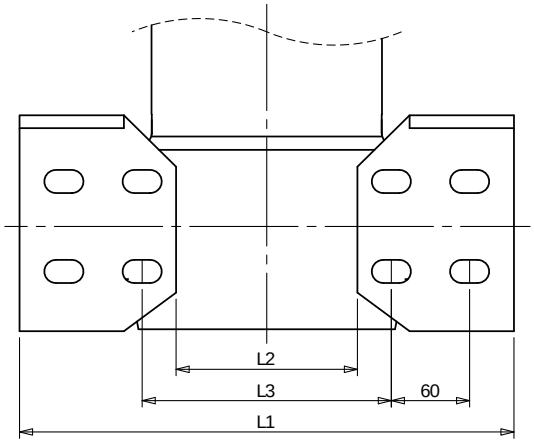
All dimensions are given in mm unless otherwise stated.
Technical Specifications are subject to change without notice.

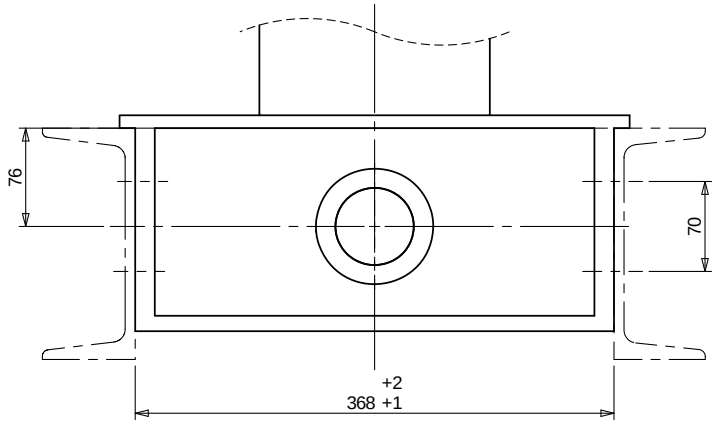
Edbro
SETTING THE INDUSTRY STANDARD

CS Ultra Brackets

Optional Brackets:

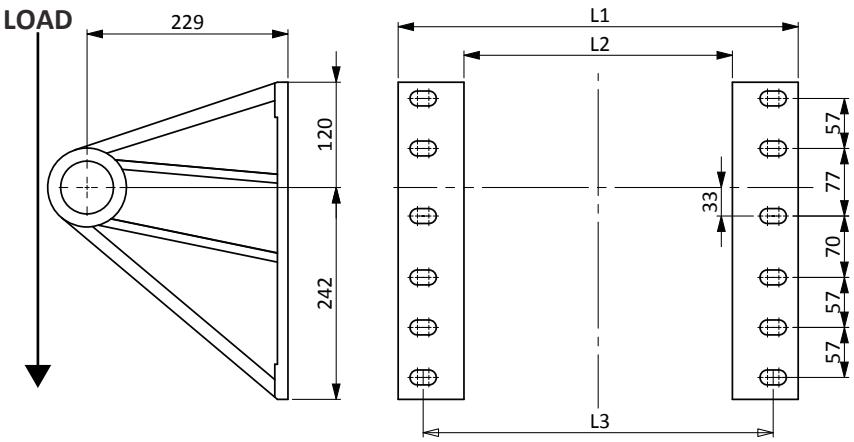
BB200/B 10.86 kg each





		CS17L/18L
		standard
L1		389
L2		149
L3	min	189
	std	204
	max	213

LB200-LH & LB201-RH 8kg each



		CS17L	CS18L
		standard	*standard*
L1		456	468
L2		306	318
L3	min	386	398
	std	400	400
	max	412	424

Only for use in controlled applications with a maximum body and payload of 36 tonnes.

All dimensions are given in mm unless otherwise stated.
Brackets to be mounted in the orientation position as shown in the diagrams above.
Technical Specifications are subject to change without notice.

Top Eye Brackets:

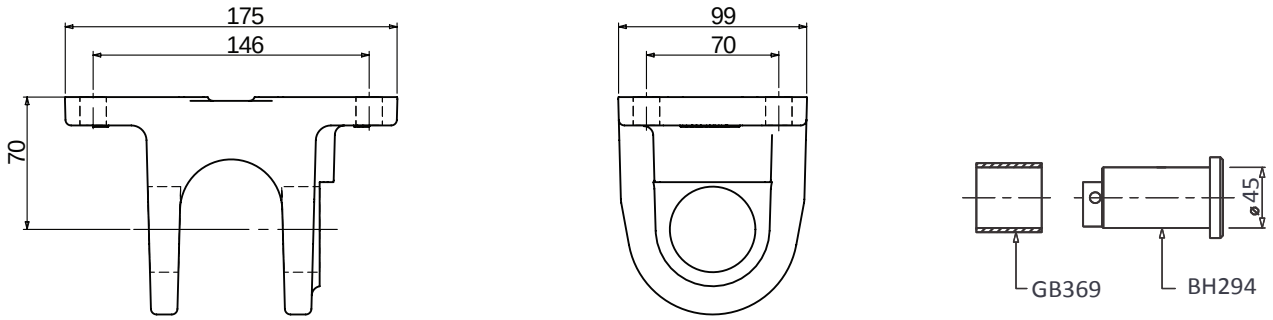
PLAIN EYE INC LOW MAINTENANCE BUSH

Plate assembly supplied with Pin, Bush, Washer & Retaining pin.

For use with OE types

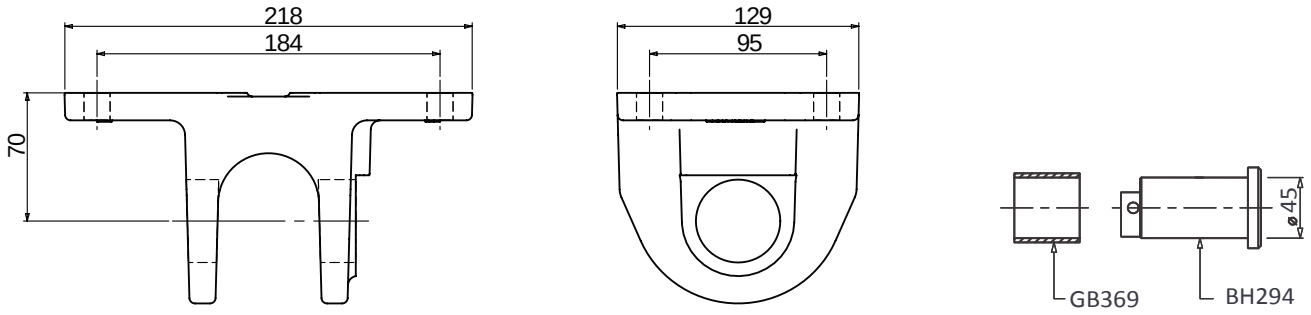
0MK1C (For use with CS11,CS13, CS15/4 & CS15/5 and CS17/5)

5.5 kg assy



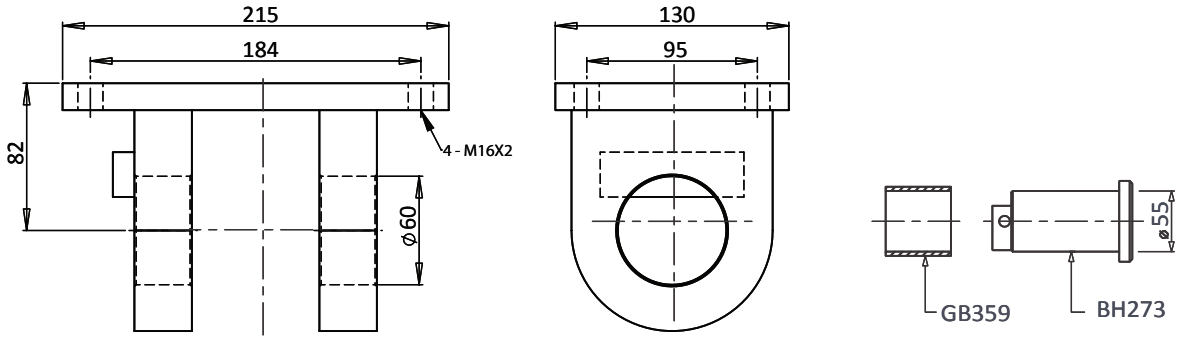
0MK2C (For use with CS15/3, CS17/4 and CS18)

6kg assy



0MK5 (For use with CS190E/4)

8kg assy



All dimensions are given in mm unless otherwise stated.
Technical Specifications are subject to change without notice.

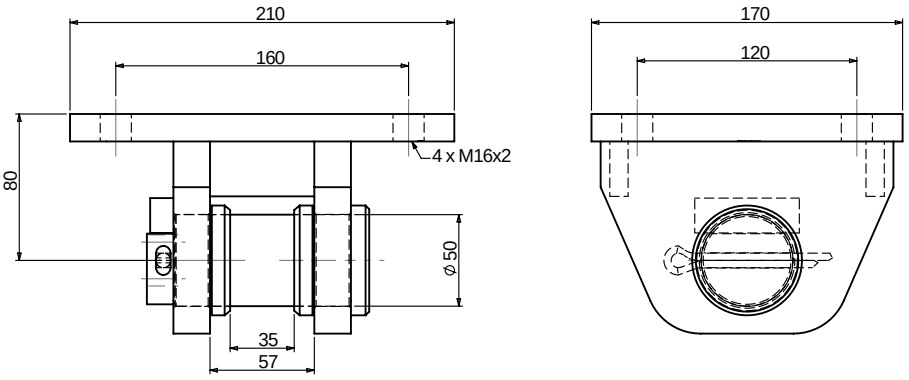
Top Eye Brackets:

PLAIN EYE INC LOW MAINTENANCE BUSH

Plate assembly supplied with Pin, Bush, Washer & Retaining pin.

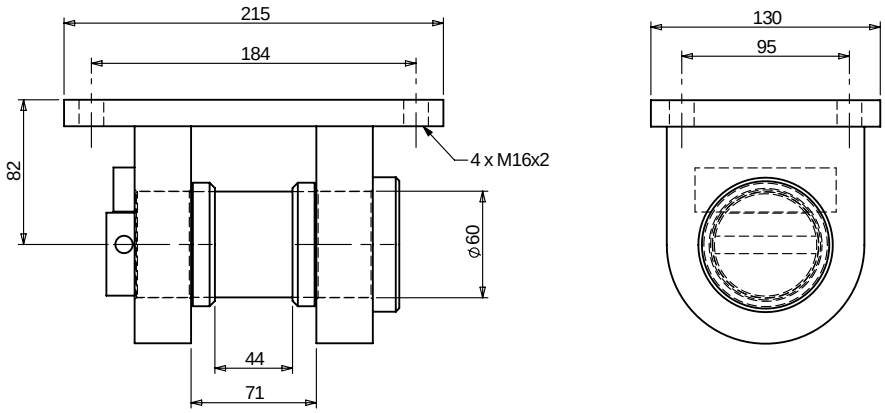
0MK6 (For use with CS19/OS)

10.2kg assy

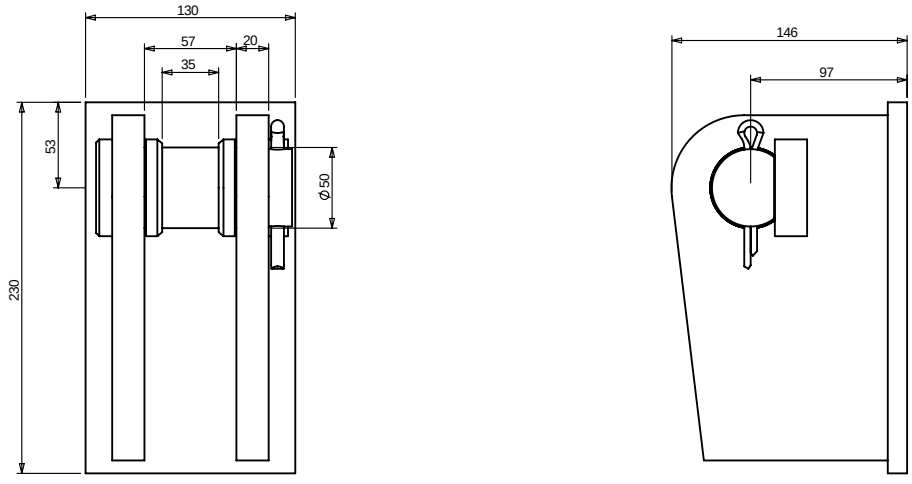


0MK7 (For use with CS22/0S)

12.2kg assy



0MK8

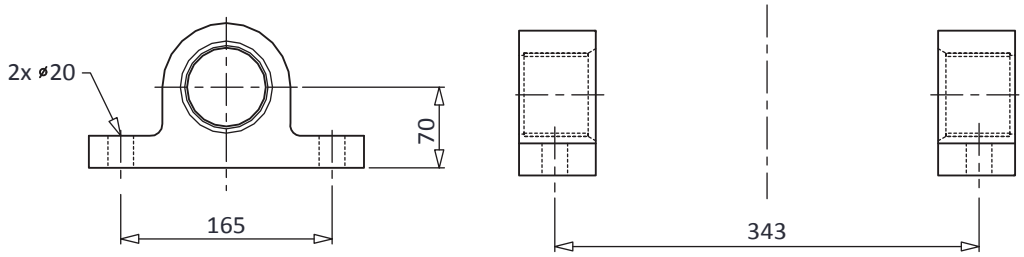


All dimensions are given in mm unless otherwise stated.
Technical Specifications are subject to change without notice.

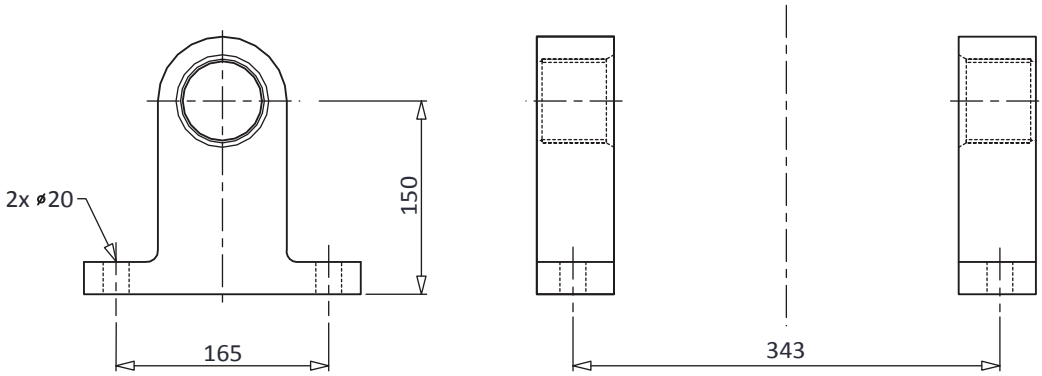
Foot Mounting Brackets:

CS17 & CS18 cylinders

18070B60Q 6kg each
Low Maintenance Bush (GB376)



18150B60F 9.8kg each
Low Maintenance Bush (GB376)

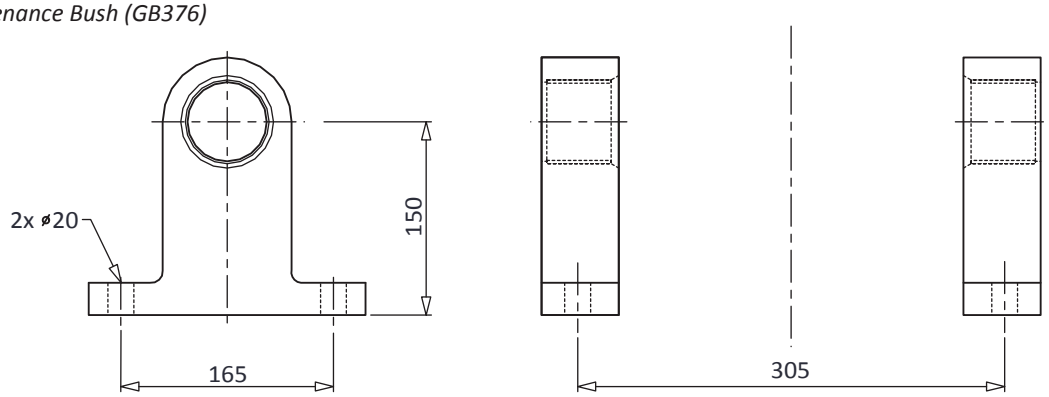


All dimensions are given in mm unless otherwise stated.
Technical Specifications are subject to change without notice.

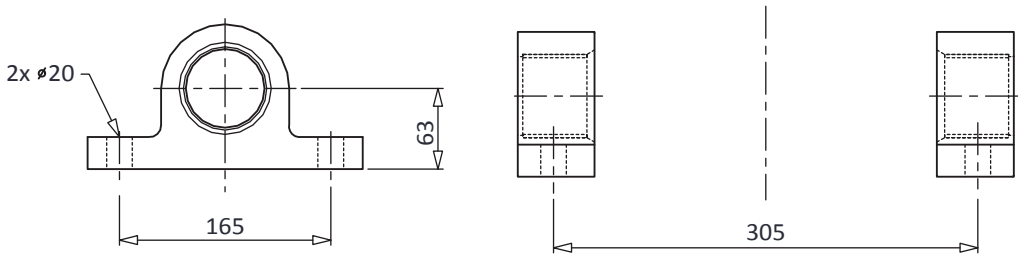
Foot Mounting Brackets:

CS15 cylinders

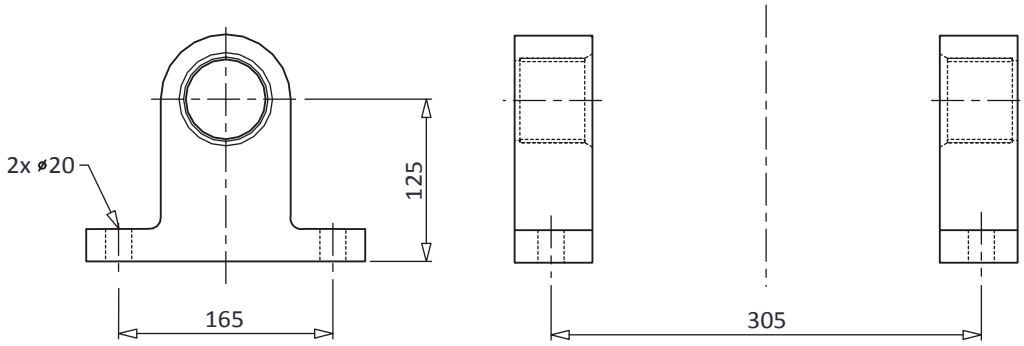
15150B60F 8.5kg each
Low Maintenance Bush (GB376)



15063B60Q 4.5kg each
Low Maintenance Bush (GB376)



15125B60F 7kg each
Low Maintenance Bush (GB376)

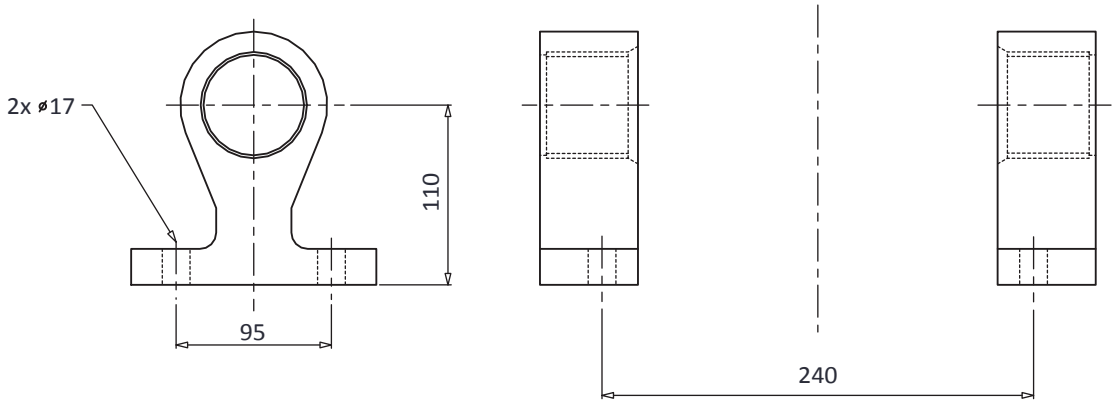


All dimensions are given in mm unless otherwise stated.
Technical Specifications are subject to change without notice.

Foot Mounting Brackets:

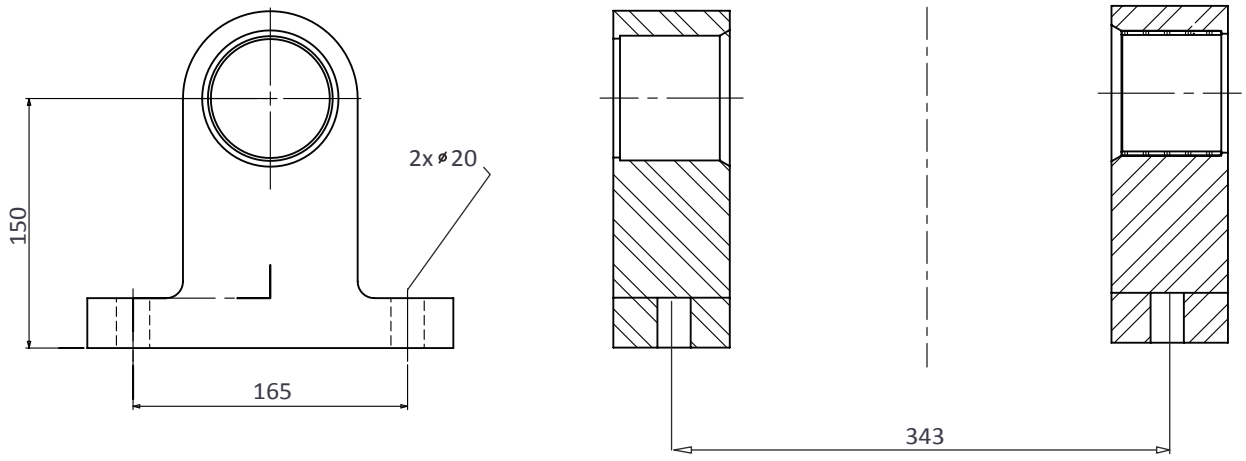
CS13 cylinders

13110B60F 7kg each
Low Maintenance Bush (GB376)



CS19 cylinders

19150B70Q 10.6kg each
Low Maintenance Bush (GB377)



All dimensions are given in mm unless otherwise stated.
Technical Specifications are subject to change without notice.

Mounting bolt advice for brackets:

	Imperial SAE J429			Metric ISO4014	
Thread		UNC	UNF	Coarse	
Bolt grade		8	8	8.8	
Nut grade		8	8	8	
Proof stress		120 ksi		827 Mpa	
Torque (Nm)	5/8"	287	325	M16	243
	3/4"	510	570	M20	490
Torque (lbft)	5/8"	212	240		
	3/4"	376	420		

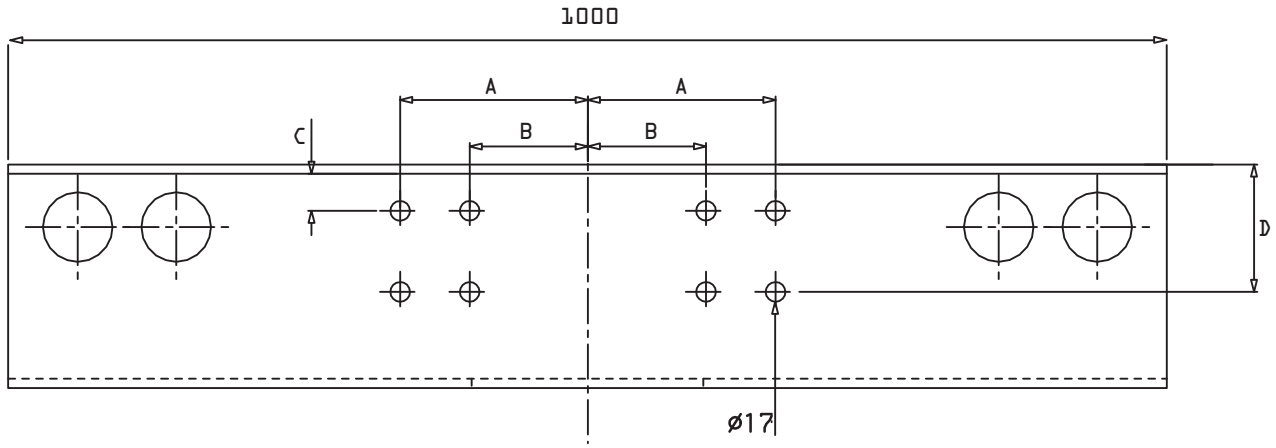
Note:

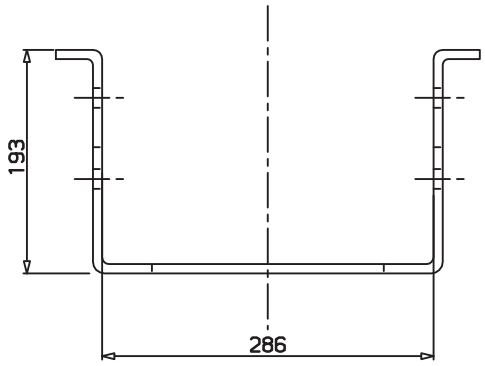
1. Torques are advisory only and will depend on plating and lubrication
2. The above figures are for plain (unplated) bolts in the as received condition, (μ=0.2) torqued to 75% of yield stress
3. For Zinc plated bolts, increase torques by 10% (μ=0.22)
4. For lubricated bolts (any finish), reduce torques by 25% (μ=0.15)
5. Compatible nut and washer grades must be used
6. Check final torque levels with your bolt supplier.

CS Cylinder Crossmember - PCA214/PCA216

* Suits PCA215 support bracket





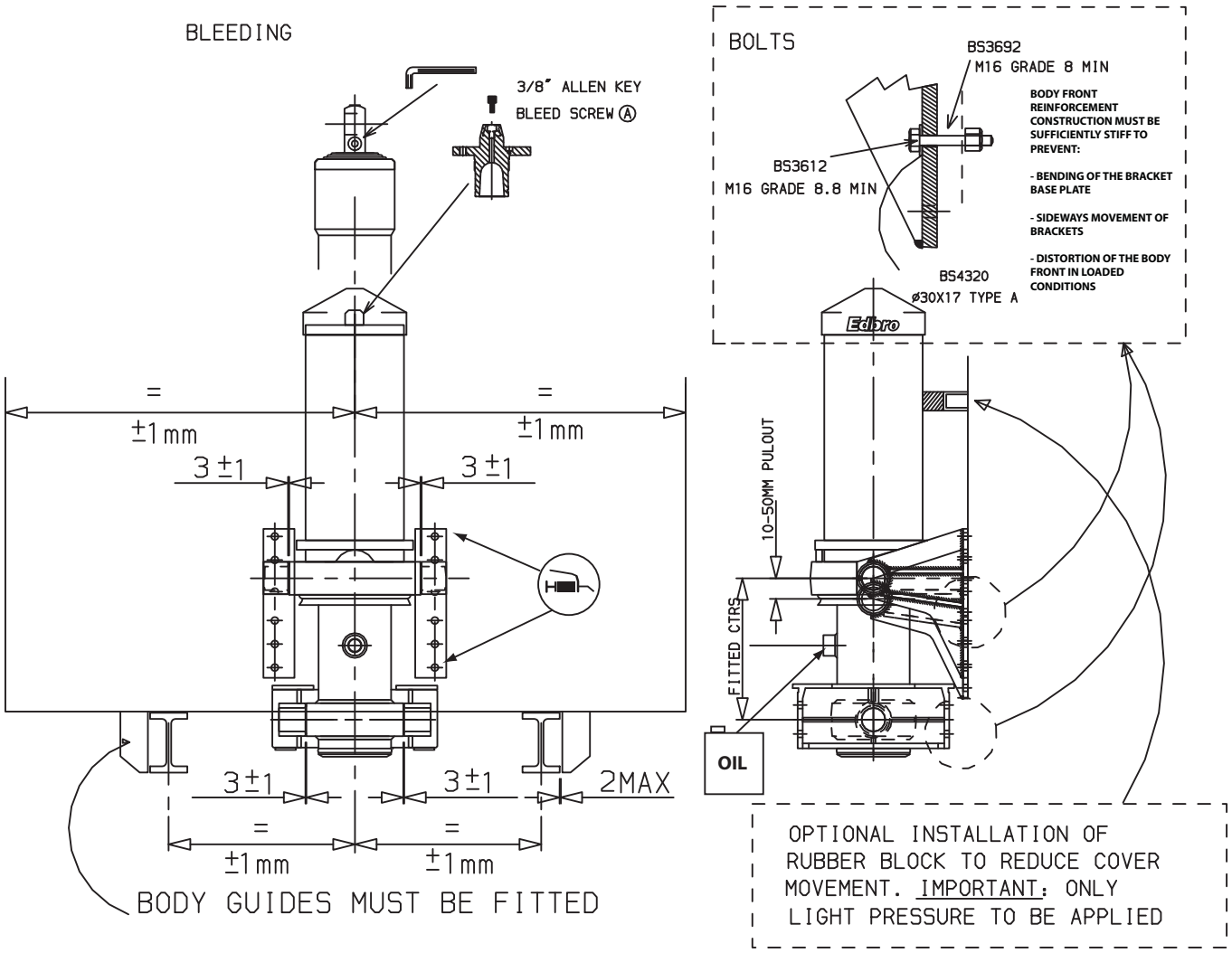


Dimensions & weight:

Part No.	A	B	C	D	Weight
PCA214	162	102	32	110	37 kg
PCA216	137	77	32	111	37kg

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

C Series Installation Guide - INSTALL01



Pressure (Refer to cylinder serial number plate)



Set pressure relief valve to working pressure (1).

Cylinder Bleeding Procedure

* Lift body approx 300 mm
* Loosen bleed screw (A)
* ⚠ **Take care!** Body will lower
* Allow air to escape
* Tighen when oil flows
* Lift body to full tip
* Lower & repeat

Recommended Torques

	Grade 8.8	Grade 10.9
M10	56Nm	77Nm
M12	98Nm	134Nm
M16	240Nm	332Nm

Retorque all bolts monthly

Oil/Grease

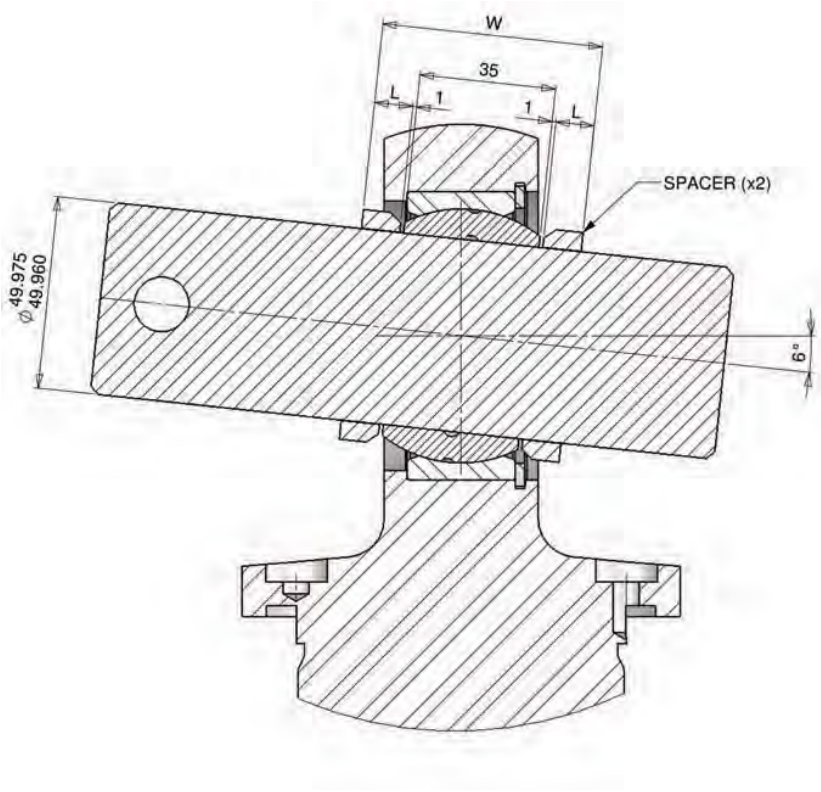
OIL **Oil Port**

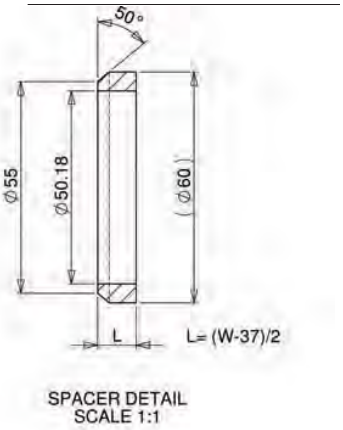
Grease (1/8" BSP)

See oil specification OIL01

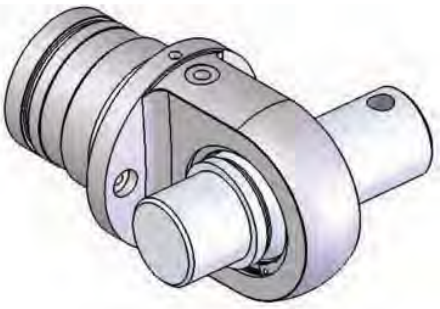
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

C Series Eye Type Installation Guide - INSTALL01

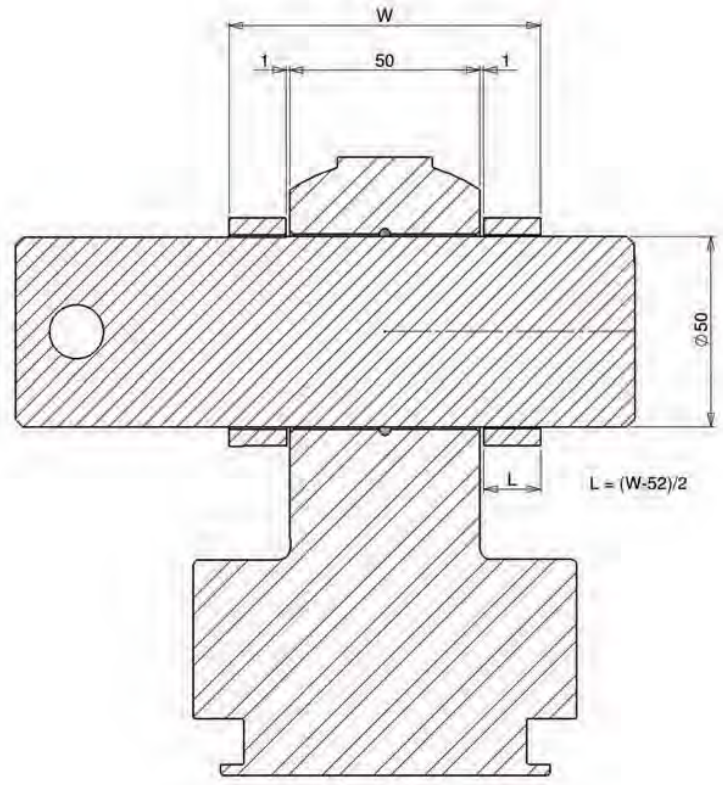


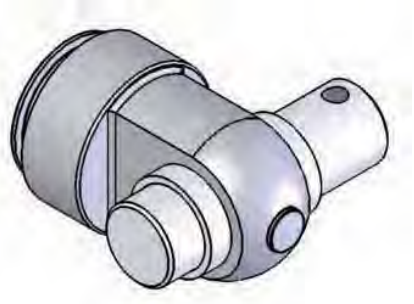


SPACER DETAIL
SCALE 1:1



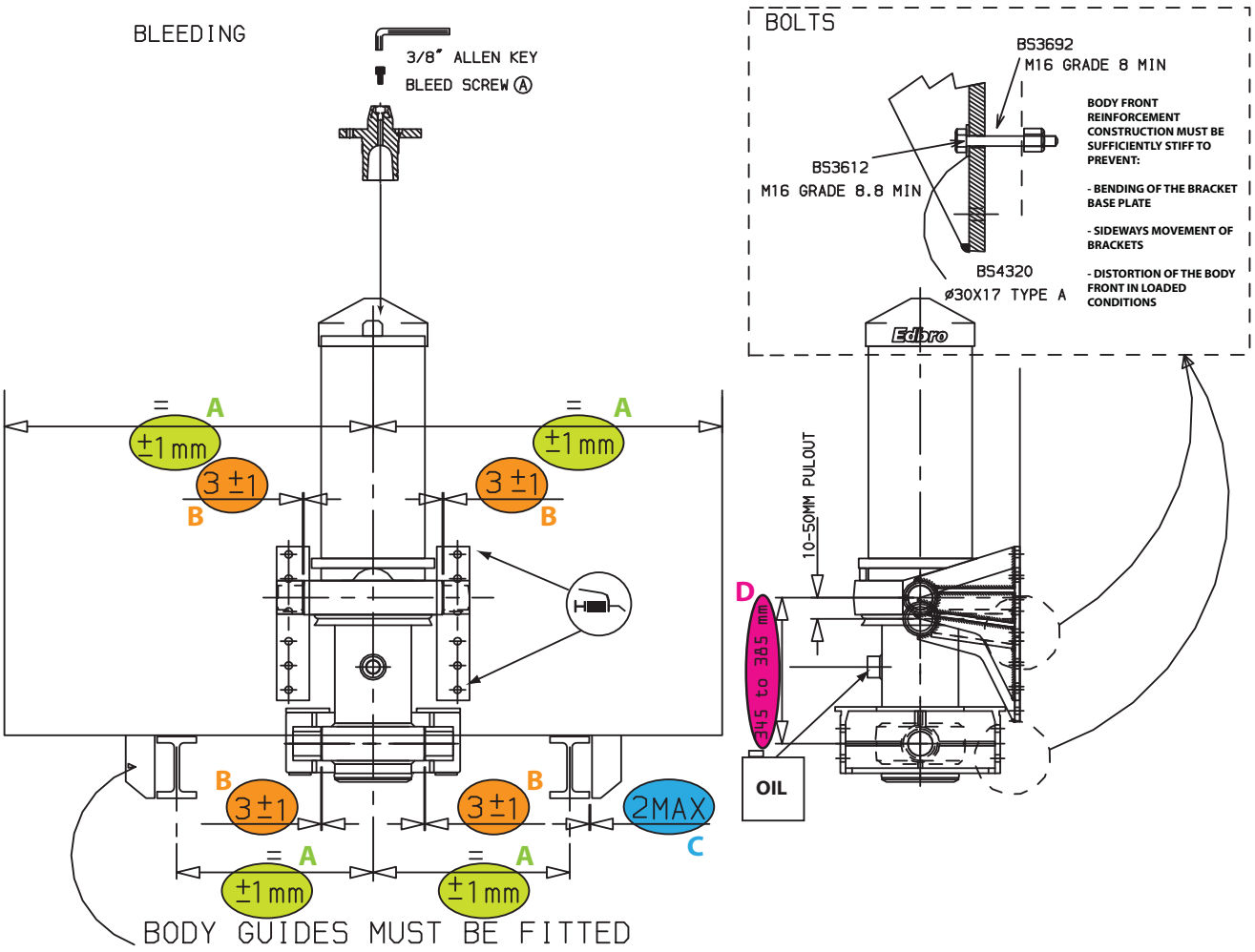
WHERE W = BRACKET WIDTH





All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

C Series Installation Check List - INSTALL02



INSTALLATION CHECK LIST

A. Check cylinder alignment		**E.** Check bolt torques	☐
B. Check bracket clearances		**F.** Confirm no oil leaks	☐
C. Check body guide clearances		**G.** Air bleeding done	☐
D. Check cylinder mounting pin centres			

Cylinder Bleeding Procedure

* Lift body approx 300 mm
* Loosen bleed screw (A)
* ⚠ **Take care!** Body will lower
* Allow air to escape
* Tighen when oil flows
* Lift body to full tip
* Lower & repeat

Recommended Torques

	Grade 8.8	Grade 10.9
M10	56Nm	77Nm
M12	98Nm	134Nm
M16	240Nm	332Nm

Retorque all bolts monthly

Oil/Grease

OIL **Oil Port**

Grease (1/8" BSP)

See oil specification OIL01

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Oil Specification Guide - OIL01

Oils specified to suit environmental temperature conditions. Use the colour coding below to identify the recommend manufacturer oil.

Environmental conditions	Extreme Cold	Cold	Winter to Summer	Hot	Very Hot
	To -40ºC	-5 to -25ºC	-5 to 30ºC	30 to 50ºC	Over 50ºC
ISO grade	N/A	15	32	46	68

MINERAL OIL

To be specified according to ISO 6743/4 HLP-HM or DIN 51524 (part 2) with ISO viscosity grade according to the chart above.

Mineral Oil							
		Oil Specification					**Grease Specification**
Manufacturer	**Mobil**	Aero HFA	DTE11M	DTE24	DTE25	DTE26	XHP222
	Shell	AeroShell 4	Tellus T15	Tellus 32	Tellus 46	Tellus 68	Retinax EP
	BP	*Not available*	Bartran HV15	Bartran HV32	Bartran HV46	Bartran HV68	Energrease LS EP2
	Gulf	*Not available*	Hydrasil 10	Hydrasil 32	Hydrasil 46	Hydrasil 68	Gulfcrown EP no2

ENVIRONMENTALLY FRIENDLY OIL

To be specificed according to ISO 15380 type HEES with equivalent specification to the mineral oils above.

Environmentally Friendly Oil							
		Oil Specification					**Grease Specification**
Manufacturer	**Mobil**	*Not available*	*Not available*	EAL 32	EAL 46	*Not available*	EAL 102
	Shell	*Not available*	HF – E 15	HF – E 32	HF – E 46	HF – E 68	Naturelle EP2
	BP	*Not available*	*Not available*	Biohyd SE-S 32	Biohyd SE-S-46	Biohyd SE-S 68	Biotac EP 2
	Gulf	*Not available*	*Not available*	Biosynth VG 32	Biosynth VG 46	*Not available*	Biocal 2

Notes:

1. Maximum running (under load) viscosity is 700 Cst
2. Minimum running (under load) viscosity is 10 Cst (efficiency may be reduced)
3. Oil cleanliness must to maintained to ISO 4406 class 19/16
4. It is recommended that oil should be replaced annually

Edbro

SETTING THE INDUSTRY STANDARD

CX Series

Hydraulic Cylinders



Lightweight, high performance combined ram and tank for rigid tipping applications






Benefits

The lightest cylinder on the market offering benefits of up to 258 kg per tip.

Increased productivity with up to 30% faster tipping speeds.

Zero downtime and minimal servicing with a fit and forget reputation you can count on.

Optimum bodybuilder turnaround time with combined ram & tank assembly, reduced piping and easy-fit brackets.

Features

Edbro's laser-welded one-piece tube construction maximises the weight advantage of the CX Series.

The unique, high performance sealing system increases seal and tube life for a true fit and forget cylinder.

Integrated hydraulic valve with built-in burst prevention feature for reduced risk of damage in fitting and the ultimate safety in operation.

Models in the CX Series are available with lift capacities from 10 to 32 tonnes and are designed for rigid trucks with 15 to 36 tonne G.V.W.

Actual kit weights may vary according to installation
* Includes option of EBA Piston Pump

Model code	Nominal truck GVW (tonnes)	Hoist stroke (mm)	Nominal lift capacity (tonnes)	Nominal body length (metres)	Average kit weight incl. oil (kg)
CX10	15	3059 3359	10 - 13	4.0 4.3	212
CX11	18	3271 3871 4271	12 - 15	4.25 5.0 5.5	289
CX11	22	3344 3644 3944	16	4.5 5.0 5.25	289
CX13	26	3841 4241 4641	19 - 24	5.0 5.5 6.5	442
CX14	32	5041	25	6.5	449
CX15	32 - 36	4606 5006 5606	29 - 32	5.75 6.5 7.0	535

Increase Your Profits

With a potential weight saving of up to 258 kg per load, the Edbro CX Series increases long-term profitability. See for yourself how much extra profit you could make with our simple weight saving calculation:

Weight saving of 0.258 tonnes x 5 loads per day = 1.29 tonnes extra payload per day

1.29 tonnes extra payload per day x 5 days worked per week = 6.45 tonnes extra payload per week

6.45 tonnes extra payload per week x 48 weeks worked per year = 309.6 tonnes extra payload per year

309.6 tonnes extra payload per year x £5 rate per tonne = £1,548 additional income per year

£1,548 additional income per year x 6 year life of chassis = £9,288 additional income during chassis life

Increase profits by £9,288 with the Edbro CX Series

Based on a saving of 258 kg on the CX14 model in the CX Series - actual savings vary according to application.

Edbro

SETTING THE INDUSTRY STANDARD

TS Series

Hydraulic Cylinders



The Edbro TS range of twin underbody cylinders for unquestionable reliability in tipper & tipper/grab operations






Benefits

100% fit and forget reliability with a proven track record in the most demanding of applications

Maximum safety in operation with 50% more stability

Increased productivity with 20% more lift capacity than the closest alternative product on the market

Optimum site turnaround with the fastest tipping speeds in the industry

Features

C Series cylinder technology provides the maximum power to weight ratio

Proven design technology ensures ultimate reliability in operation

Stabilising frame for optimum torsional stiffness while ensuring minimum weight construction

Flexibility in design for easy fitting to any chassis width

The Edbro TS range provides reliable solutions for 6-8 wheeler chassis from 26 - 32 tonnes GVW.

Model code	Chassis GVW (tonnes)	Lift capacity (tonnes)	Body length (metres)	Average kit weight incl. oil (kg)	Average tipping speed (seconds)	Total cycle time (seconds)
TS26	26	22 - 26	5.8 - 6.4	645	13	30
TS32	32	26 - 32	6.5 - 7.5	694	20	40
TS32L	32	26 - 32	7.6 - 9.5	710	20	40

Average kit weight relates to complete hoist kit including PTO/pump
Actual weights vary according to chassis installation



Ultimate Stability

The high tensile steel stabilising frame within the TS effectively absorbs side loads imposed by the chassis during tipping for increased stability while weight construction is kept to a minimum.

With 50% more torsional stiffness than comparable units, the TS provides ultimate stability for the safest tipping in even the most demanding operating conditions.

Edbro

SETTING THE INDUSTRY STANDARD

UB Series

Hydraulic Cylinders



High performance underbody telescopic hoists for tipper and crane applications







Benefits

Minimal downtime with a durable product which performs in even the toughest environments

The renowned Edbro fit and forget reliability promise for long-term peace of mind

Increased payload and maximum performance with lightweight and high strength materials

Edbro kit components and optimum specification provide the highest levels of performance

Features

Specially designed materials manufactured using unique Tuftride® process for increased tube strength and durability giving ultimate reliability over the life of the product

Edbro CT valve provides high flow rates and fast tipping

Long life seals decrease maintenance requirements

The Edbro underbody cylinders in the UB Series offer a range of solutions for applications from tipper to crane.

Model code	Chassis GVW (tonnes)	Nominal lift capacity (tonnes)	Body length (m)	Kit weight incl oil (kg)	Swept volume (litres)	Nominal pressure (bar)	Max pressure (bar)
UB10	7.5	5	3.4 - 4.4	135	7.5	160	175
UB12	10	7	3.4 - 4.8	156	11	160	175
UB14	11 - 15	10	3.6 - 5.4	176	15.6	160	175
UB16	18	12	4.0 - 5.4	201	21.5	160	175
UB18	26	20	4.8 - 6.0	268	38	160	175
UB24	32	25	4.8 - 6.0	323	52	160	175

Kit weight relates to full kit including PTO/pump
Weights are approximate & may vary according to chassis installation

Quality Components

Edbro cylinders are all supplied with a range of quality components specially designed and selected to further optimise the performance of the complete kit.

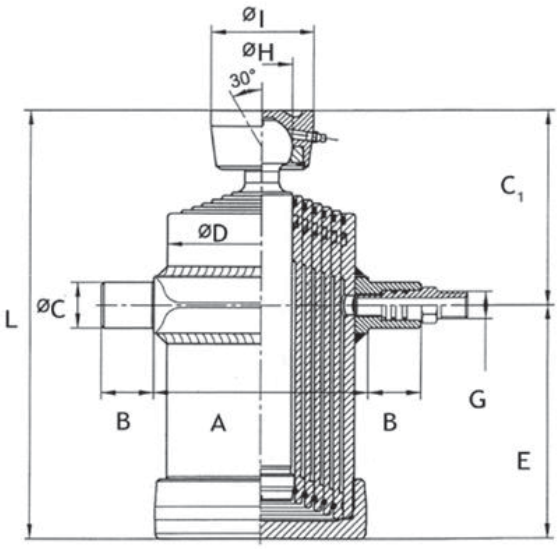
The extensive catalogue of components includes the CT range of hydraulic valves, single and dual air controls, gear pumps and bent axis piston pumps, and a wide range of PTOs available off the shelf for standard gearbox requirements, and to order for more unusual applications.







UB Series: Underbody Cylinders



Part Number	Stroke (mm)	Diameter of stages (mm)													Cylinder Dimensions (mm)										Mass (kg)	Volume (litre)	Thrust @ nominal pressure (tonne)
		30	46	61	68	76	88	91	107	126	145	165	187	210	236	265	A	B	C	C1	D	E	G ("BSP)	H	I	L			
UB080M300683	683																115	40	35	142	95	240	1/2	45	112	382	18	2.2	5
UB100M401050	1050																150	40	40	157	124	280	1/2	55	95	437	33.5	6.2	10
UB100M401290	1290																150	40	40	157	124	340	1/2	55	95	497	39	7.5	10
*UB100M401510	1510																150	40	40	157	124	395	1/2	55	95	552	43	8.8	10
UB100M501040	1040																150	40	40	150	124	225	1/2	45	112	375	29	5	8
*UB100M501490	1490																150	40	40	150	124	315	1/2	45	112	465	35	7.5	8
UB100M601245	1245																150	40	40	150	124	225	1/2	45	112	375	28.5	5.5	6
*UB110M401190	1190																150	40	40	157	124	315	1/2	55	95	472	36	7	10
UB120M301483	1483																175	45	45	165	152	515	1/2	65	107	680	63	13.8	16
UB120M401500	1500																175	45	45	165	152	395	1/2	55	95	557	63	12	14
UB120M401700	1700																175	45	45	162	152	445	1/2	55	95	607	69	13.5	14
UB120M501230	1230																175	45	45	165	152	265	1/2	55	95	430	46	9	11
*UB120M501480	1480																175	45	45	165	152	315	1/2	55	95	480	53	11	11
UB120M602257	2257																175	45	45	155	152	395	1/2	45	112	550	56	12	9
*UB140M401220	1220																175	45	45	162	152	325	1/2	55	95	487	55	9.7	14
UB140M501295	1295																210	45	50	245	170	205	3/4	65	107	450	65.5	12.7	16
UB140M501520	1520																210	45	50	245	170	250	3/4	65	107	495	72.5	14.8	16
UB140M501870	1870																210	45	50	245	170	320	3/4	65	107	565	81.5	18.2	16
UB140M502120	2120																210	45	50	245	170	370	3/4	65	107	615	88.5	20.6	16
*UB140M600987	987																210	45	50	240	170	110	3/4	55	95	350	50	10	13
UB140M601165	1165																210	45	50	240	170	140	3/4	55	95	380	54	10.5	13
UB140M601345	1345																210	45	50	240	170	170	3/4	55	95	410	59	12	13
UB140M601470	1470																210	45	50	240	170	190	3/4	55	95	430	61	13	13
*UB140M601765	1765																210	45	50	240	170	240	3/4	55	95	480	68	15.6	13
UB140M602245	2245																210	45	50	240	170	320	3/4	55	95	560	78	19.8	13
UB140M602965	2965																210	45	50	240	170	440	3/4	55	95	680	95	26	13

* Models available ex-stock (contact Edbro for availability information).
For all models in the UB Series maximum working pressure is 180 bar.
Spec sheets are also available with details of brackets and 3-way cradles.

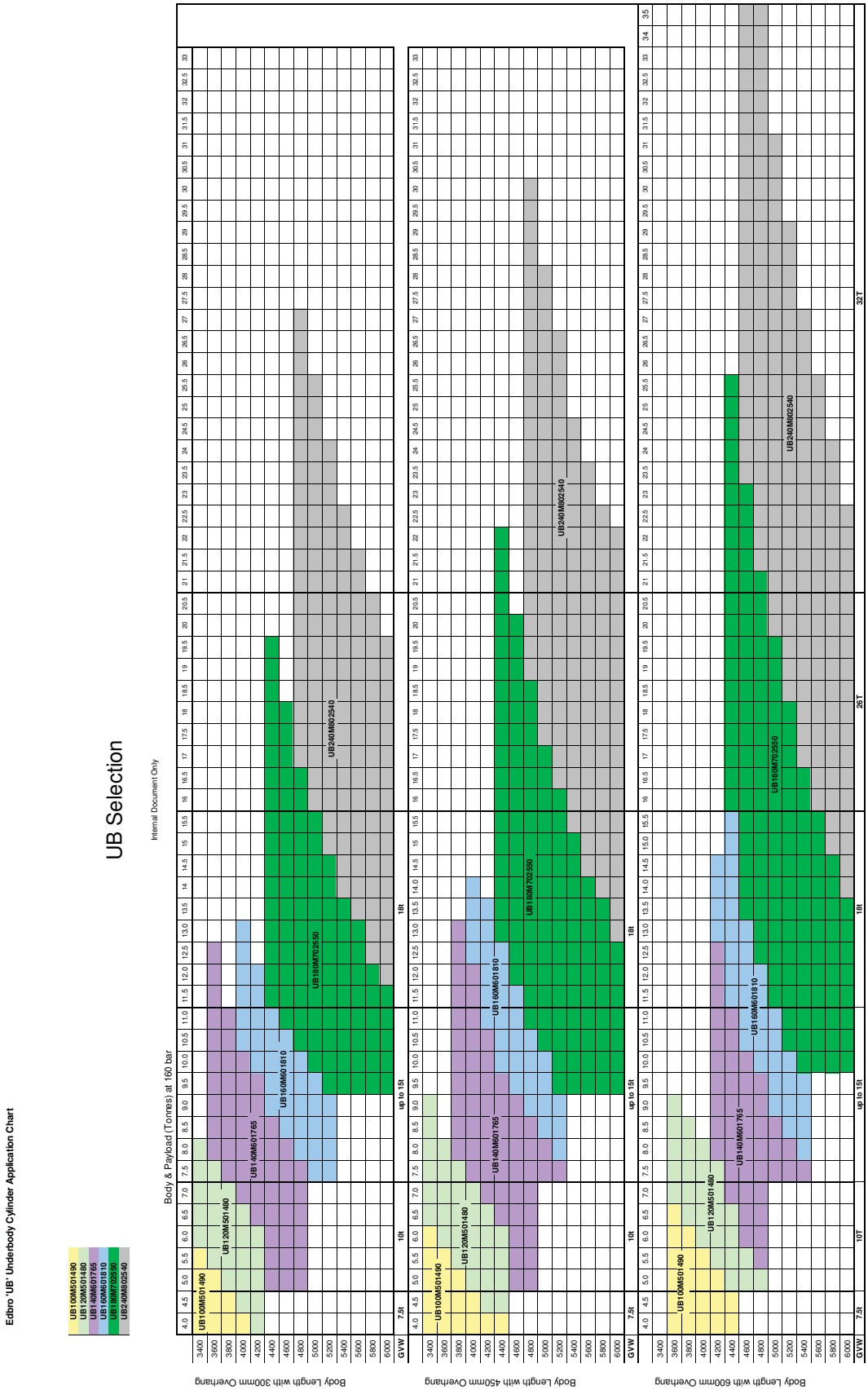
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

UB Series continued

Part Number	Stroke (mm)	Diameter of stages (mm)														Cylinder Dimensions (mm)										Mass (kg)	Volume (litre)	Thrust @ nominal pressure (tonne)
		30	46	61	68	76	88	91	107	126	145	165	187	210	236	265	A	B	C	C1	D	E	G ("BSP)	H	I	L			
UB160M401010	1010								■	■	■	■					230	45	50	253	190	210	3/4	73	150	463	74	15.8	25
*UB160M401490	1490						■		■	■	■						210	45	50	244	170	320	3/4	65	107	564	69	16.8	20
*UB160M401690	1690						■		■	■	■						210	45	50	244	170	370	3/4	65	107	614	76	19	20
UB160M402510	2510								■	■	■	■					230	45	50	253	190	605	3/4	73	150	858	128	40	25
*UB160M501275	1275						■		■	■	■	■					230	45	50	245	190	205	3/4	65	107	450	72.5	17.5	22
UB160M501500	1500						■		■	■	■	■					230	45	50	245	190	250	3/4	65	107	495	79.5	20.3	22
UB160M501850	1850						■		■	■	■	■					230	45	50	245	190	320	3/4	65	107	565	88.5	25	22
UB160M502450	2450						■		■	■	■	■					230	45	50	245	190	440	3/4	65	107	695	103.5	32.8	22
UB160M601540	1540				■		■		■	■	■	■					230	45	50	248	190	210	3/4	65	107	458	82	18.5	20
*UB160M601810	1810				■		■		■	■	■	■					230	45	50	248	190	255	3/4	65	107	503	89	21.5	20
UB160M602225	2225				■		■		■	■	■	■					230	45	50	248	190	325	3/4	65	107	573	102	25.9	20
UB160M602525	2525				■		■		■	■	■	■					230	45	50	248	190	375	3/4	65	107	623	110	29.4	20
UB160M602950	2950				■		■		■	■	■	■					230	45	50	248	190	445	3/4	65	107	693	125	34.6	20
UB160M701800	1800			■		■		■	■	■	■	■					230	45	50	243	190	210	3/4	55	95	453	76.5	20	14
UB180M502675	2675								■	■	■	■	■				250	50	50	258	215	525	3/4	73	150	783	161	47	29
UB180M502925	2925								■	■	■	■	■				250	50	50	258	215	575	3/4	73	150	833	171	51	29
UB180M602475	2475						■		■	■	■	■	■				250	50	50	260	215	375	3/4	73	150	635	134	38	25
UB180M701740	1740			■		■		■	■	■	■	■	■				250	50	50	260	215	175	3/4	65	107	435	97	22	18
UB180M701992	1992						■		■	■	■	■	■	■			275	50	55	253	240	265	1	73	150	518	136	35	25
UB180M702045	2045				■		■		■	■	■	■	■				250	50	50	250	215	255	3/4	65	107	505	116	29	22
*UB180M702550	2550				■		■		■	■	■	■	■				250	50	50	250	215	325	3/4	65	107	575	132	35	22
UB180M802310	2310			■		■		■	■	■	■	■	■				250	50	50	260	215	245	3/4	65	107	505	118	29	18
UB210M802295	2295				■		■		■	■	■	■	■	■			275	50	55	255	240	265	3/4	73	150	520	145	36	25
*UB240M802540	2540						■		■	■	■	■	■	■	■		310	55	70	255	270	309	1	73	150	564	180	52	30
UB240M803740	3740						■		■	■	■	■	■	■	■		310	55	70	255	270	459	1	73	150	714	264	78	30
UB240M901897B	1897				■		■		■	■	■	■	■	■	■		310	55	70	237	270	209	1	73	150	446	155	36	25
UB260M901842B	1842						■		■	■	■	■	■	■	■	■	340	55	70	237	300	212	1	73	150	448	188	45	32
UB260M902452	2452						■		■	■	■	■	■	■	■	■	340	55	70	257	300	272	1	73	150	529	222	59	32

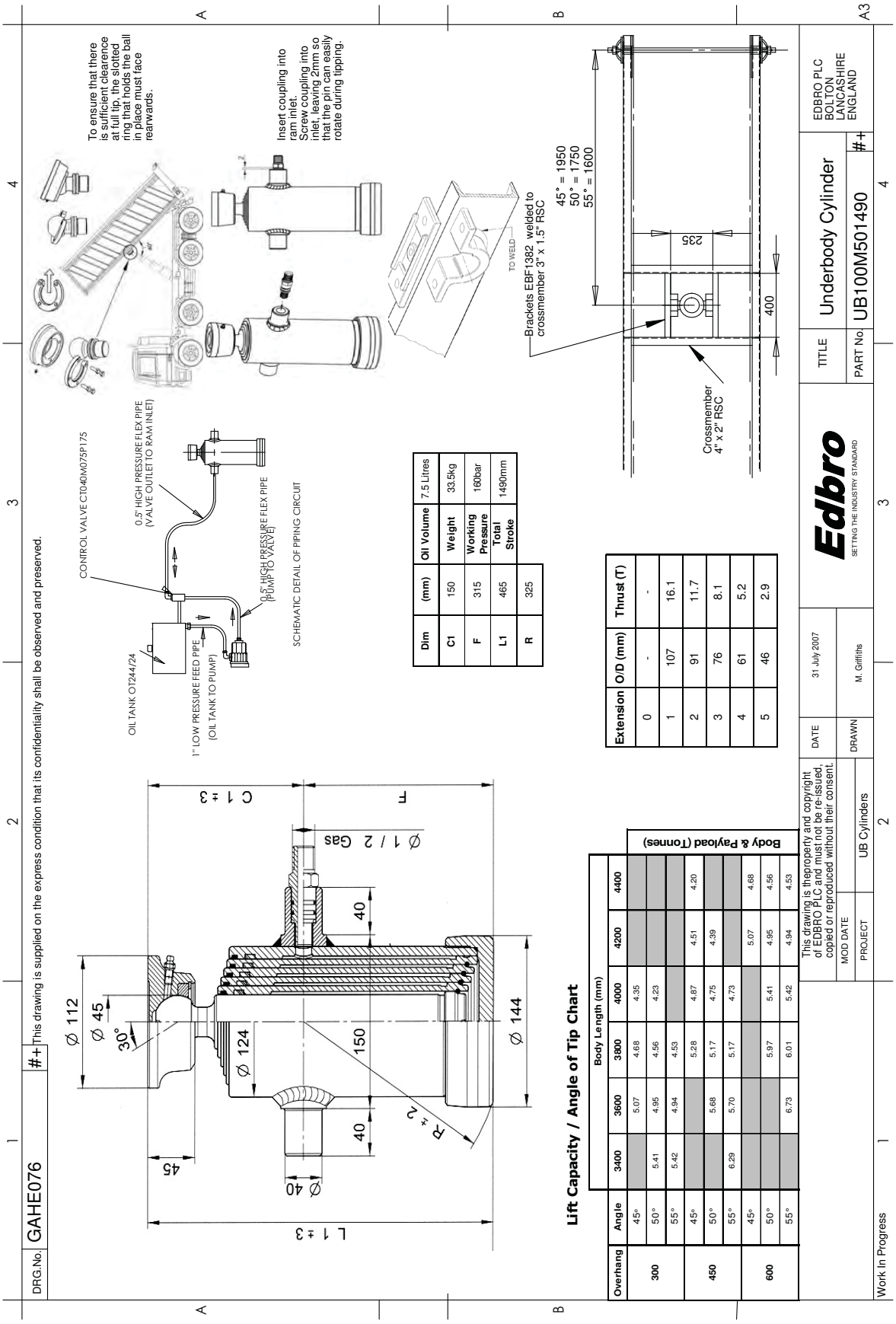
* Models available ex-stock (contact Edbro for availability information).
For all models in the UB Series maximum working pressure is 180 bar.
Spec sheets are also available with details of brackets and 3-way cradles.

UB Series continued



All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

UB Series continued - GAHE076



Dim	(mm)
C1	150
F	315
L1	465
R	325

Oil Volume	7.5 Litres
Weight	33.5kg
Working Pressure	160bar
Total Stroke	1490mm

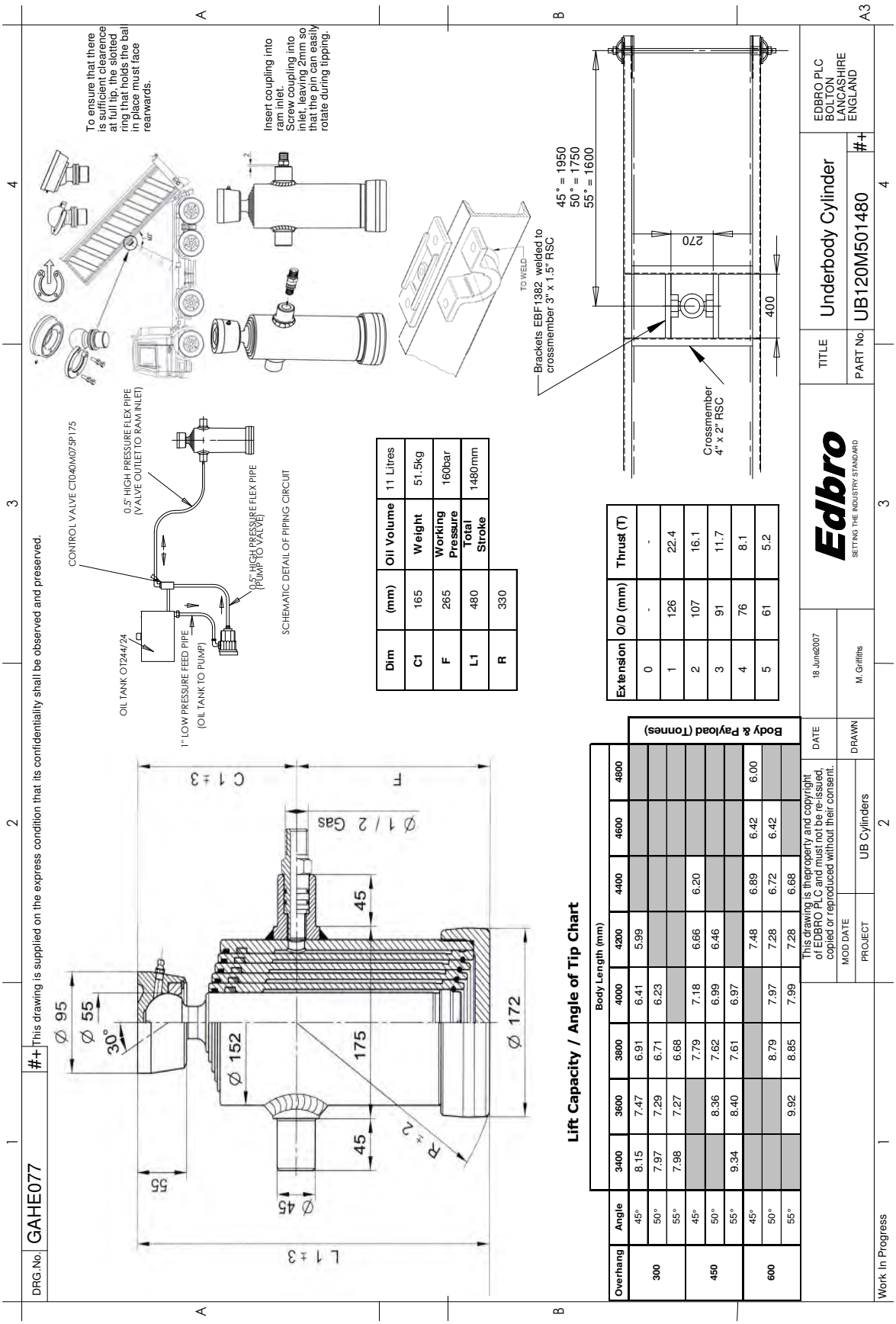
Extension	O/D (mm)	Thrust (T)
0	-	-
1	107	16.1
2	91	11.7
3	76	8.1
4	61	5.2
5	46	2.9

Lift Capacity / Angle of Tip Chart

Overhang	Angle	Body Length (mm) 3400	3600	3800	4000	4200	4400	Body & Payload (Tonnes)
300	45°		5.07	4.68	4.35			
	50°	5.41	4.95	4.56	4.23			
	55°	5.42	4.94	4.53				
450	45°			5.28	4.87	4.51	4.20	
	50°		5.68	5.17	4.75	4.39		
	55°	6.29	5.70	5.17	4.73			
600	45°					5.07	4.68	
	50°			5.97	5.41	4.95	4.56	
	55°		6.73	6.01	5.42	4.94	4.53	

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

UB Series continued - GAHE077



Dim	(mm)
C1	165
F	265
L1	480
R	330

Oil Volume	11 Litres
Weight	51.5kg
Working Pressure	160bar
Total Stroke	1480mm

Extension	O/D (mm)	Thrust (T)
0	-	-
1	126	22.4
2	107	16.1
3	91	11.7
4	76	8.1
5	61	5.2

Lift Capacity / Angle of Tip Chart

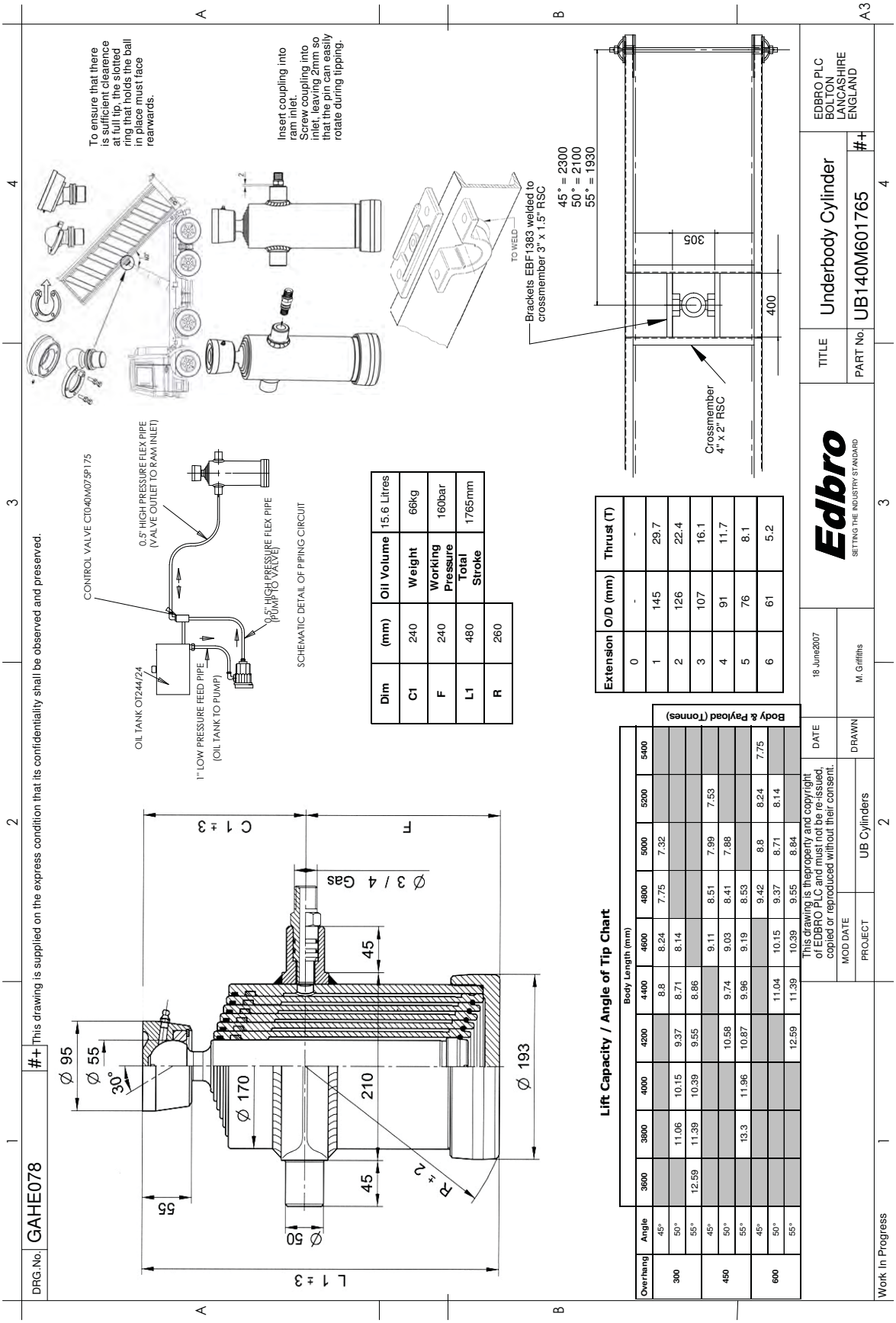
Overhang	Angle	Body Length (mm) 3400	3600	3800	4000	4200	4400	4600	4800
300	45°	8.15	7.47	6.91	6.41	5.99			
	50°	7.97	7.29	6.71	6.23				
	55°	7.98	7.27	6.68					
450	45°			7.79	7.18	6.66	6.20		
	50°		8.36	7.62	6.99	6.46			
	55°	9.34	8.40	7.61	6.97				
600	45°					7.48	6.89	6.42	6.00
	50°			8.79	7.97	7.28	6.72	6.42	
	55°		9.92	8.85	7.99	7.28	6.68		

Body & Payload (Tonnes)

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UB Series continued - GAHE078



Dim	(mm)
C1	240
F	240
L1	480
R	260

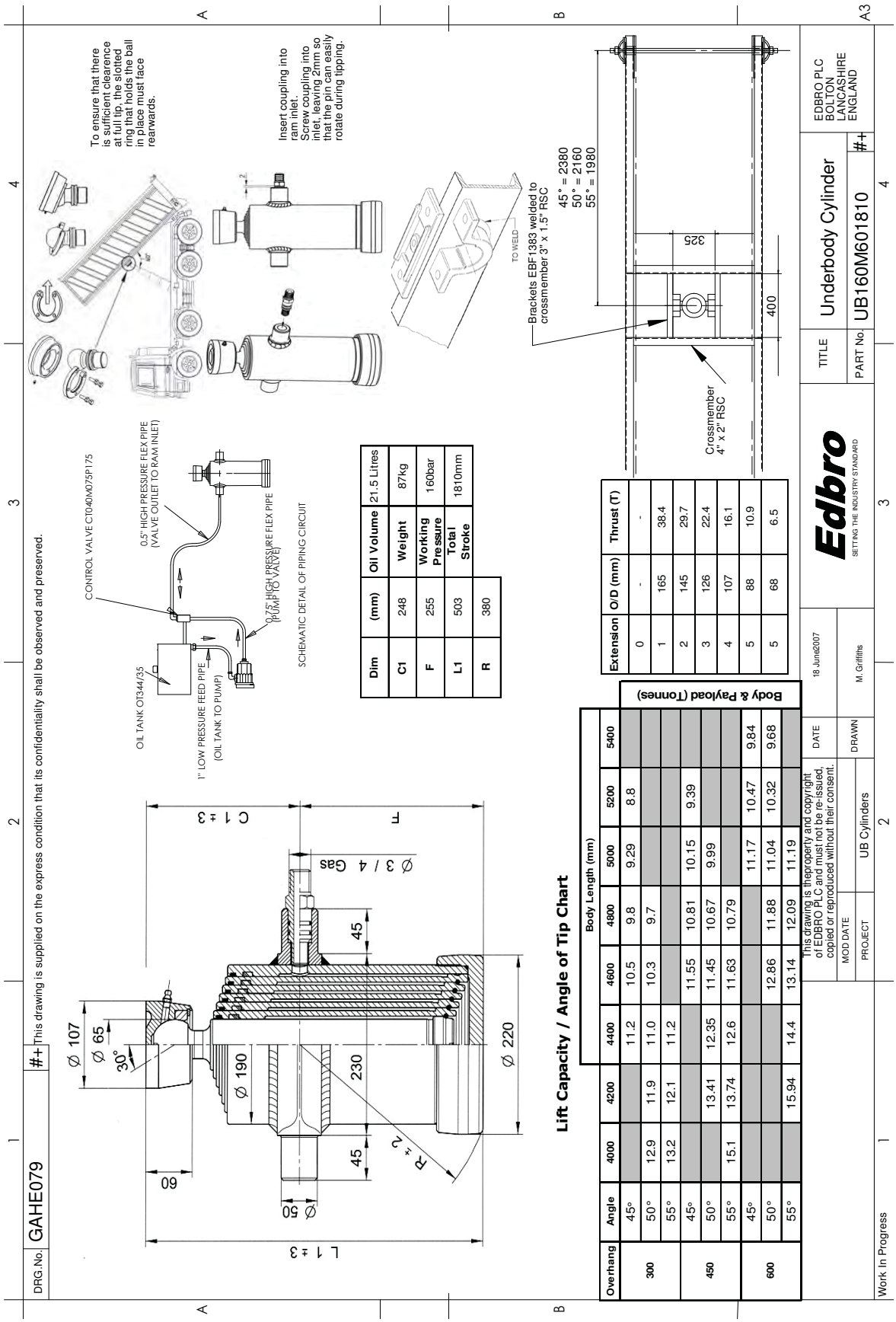
Oil Volume	15.6 Litres
Weight	66kg
Working Pressure	160bar
Total Stroke	1765mm

Extension	O/D (mm)	Thrust (T)
0	-	-
1	145	29.7
2	126	22.4
3	107	16.1
4	91	11.7
5	76	8.1
6	61	5.2

Lift Capacity / Angle of Tip Chart

Overhang	Angle	Body Length (mm) 3600	3800	4000	4200	4400	4600	4800	5000	5200	5400	Body & Payload (Tonnes)
300	45°					8.8	8.24	7.75	7.32			
	50°		11.06	10.15	9.37	8.71	8.14					
	55°	12.59	11.39	10.39	9.55	8.86						
450	45°						9.11	8.51	7.99	7.53		
	50°				10.58	9.74	9.03	8.41	7.88			
	55°		13.3	11.96	10.87	9.96	9.19	8.53				
600	45°							9.42	8.8	8.24	7.75	
	50°					11.04	10.15	9.37	8.71	8.14		
	55°				12.59	11.39	10.39	9.55	8.84			

UB Series continued - GAHE079



Dim	(mm)
C1	248
F	255
L1	503
R	380

Oil Volume	21.5 Litres
Weight	87kg
Working Pressure	160bar
Total Stroke	1810mm

Extension	O/D (mm)	Thrust (T)
0	-	-
1	165	38.4
2	145	29.7
3	126	22.4
4	107	16.1
5	88	10.9
5	68	6.5

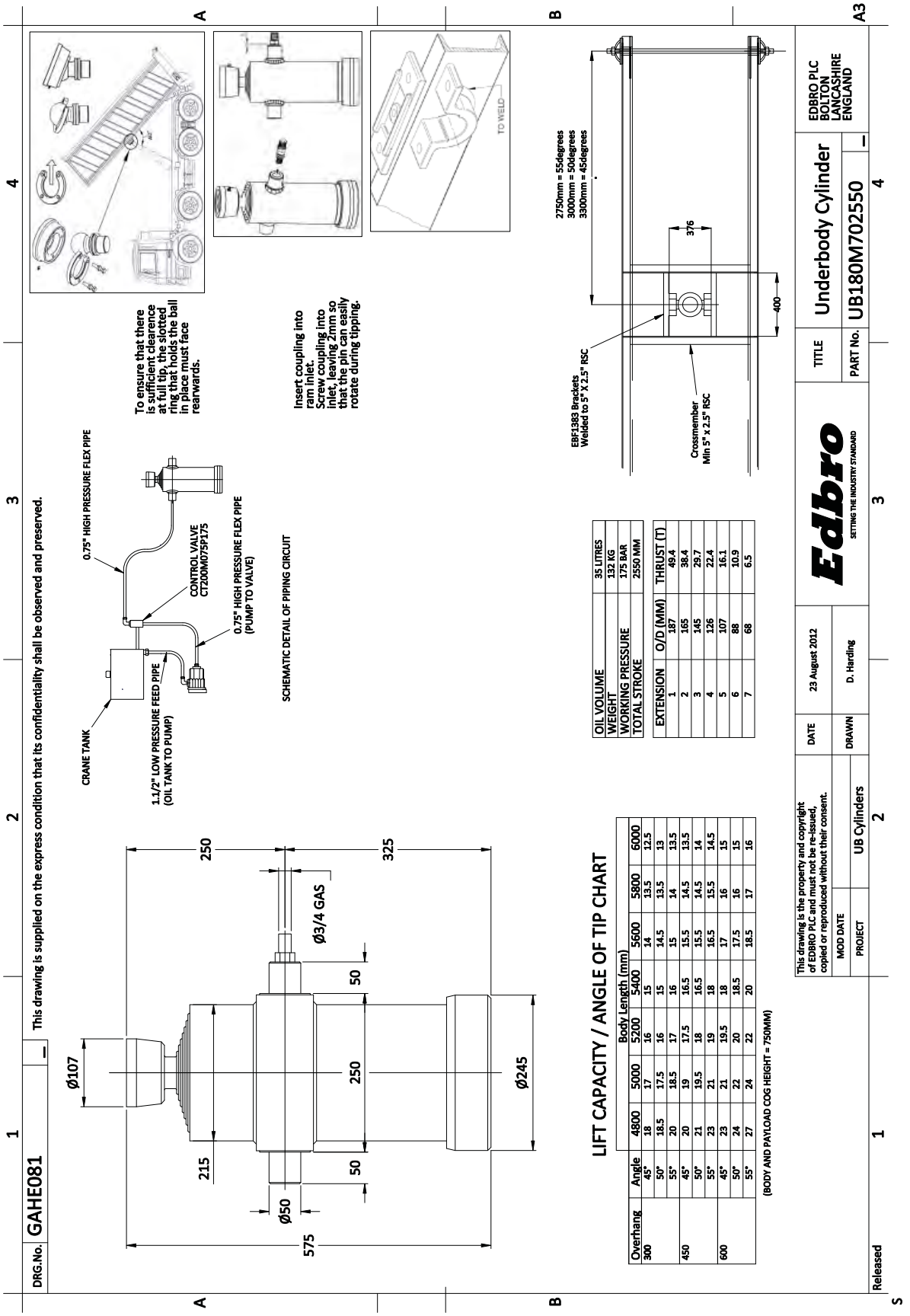
Lift Capacity / Angle of Tip Chart

Overhang	Angle	Body Length (mm) 4200	4000	4400	4600	4800	5000	5200	5400
300	45°			11.2	10.5	9.8	9.29	8.8	
	50°		12.9	11.9	11.0	10.3	9.7		
	55°		13.2	12.1	11.2				
450	45°				11.55	10.81	10.15	9.39	
	50°		13.41	12.35	11.45	10.67	9.99		
	55°		15.1	13.74	12.6	11.63	10.79		
600	45°						11.17	10.47	9.84
	50°				12.86	11.88	11.04	10.32	9.68
	55°		15.94	14.4	13.14	12.09	11.19		

Body & Payload (Tonnes)

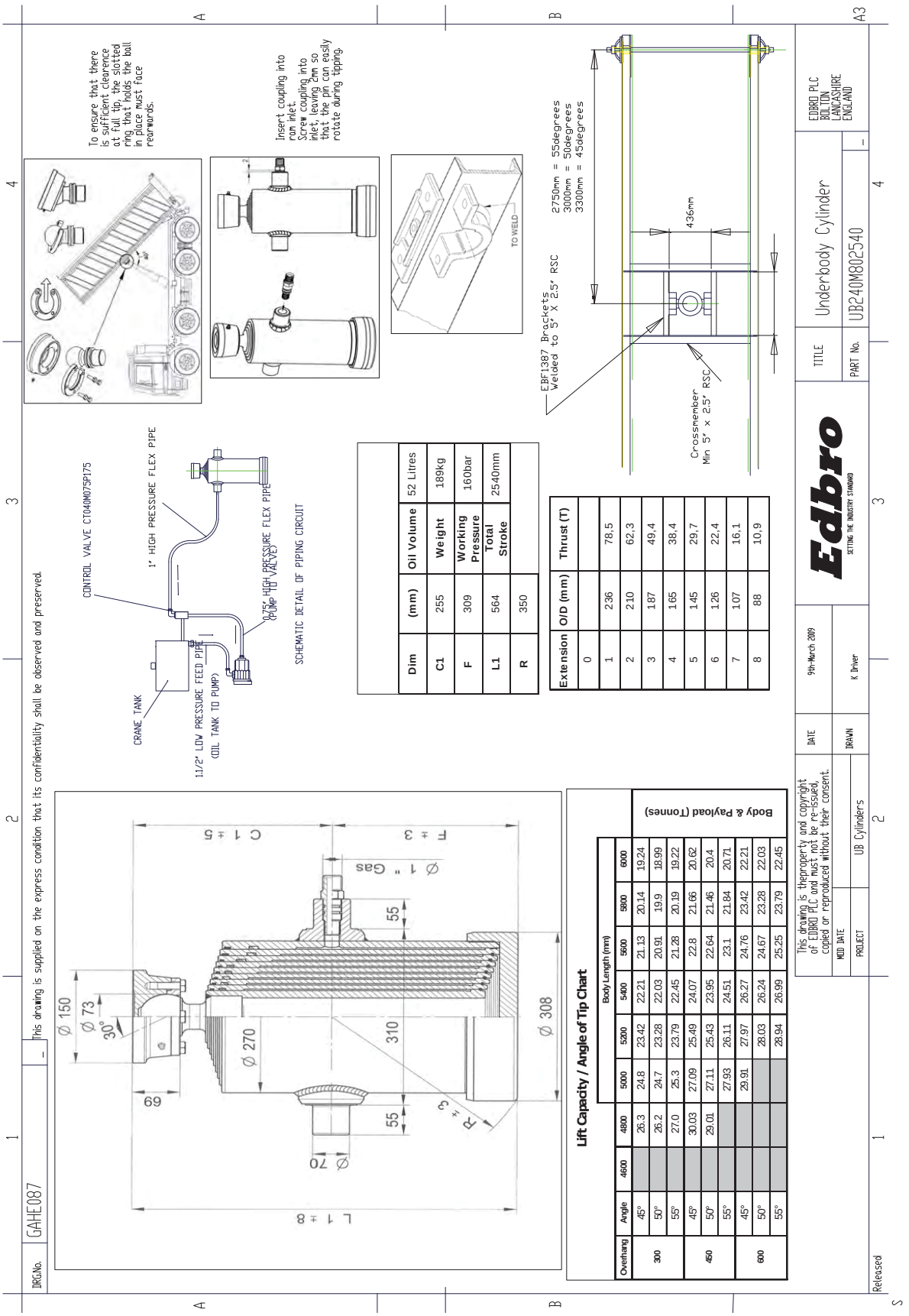
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

UB Series continued - GAHE081



All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

UB Series continued - GAHE087



Dim	(mm)
C1	255
F	309
L1	564
R	350

Oil Volume	52 Litres
Weight	189kg
Working Pressure	160bar
Total Stroke	2540mm

Extension	O/D (mm)	Thrust (T)
0		
1	236	78,5
2	210	62,3
3	187	49,4
4	165	38,4
5	145	29,7
6	126	22,4
7	107	16,1
8	88	10,9

Lift Capacity / Angle of Tip Chart

Overhang	Angle	Body Length (mm) 4600	4800	5000	5200	5400	5600	5800	6000	Body & Payload (Tonnes)
300	45°		26.3	24.8	23.42	22.21	21.13	20.14	19.24	
	50°		26.2	24.7	23.28	22.03	20.91	19.9	18.99	
	55°		27.0	25.3	23.79	22.45	21.28	20.19	19.22	
450	45°		30.03	27.09	25.49	24.07	22.8	21.66	20.62	
	50°		29.01	27.11	25.43	23.95	22.64	21.46	20.4	
	55°			27.93	26.11	24.51	23.1	21.84	20.71	
600	45°			29.91	27.97	26.27	24.76	23.42	22.21	
	50°				28.03	26.24	24.67	23.28	22.03	
	55°				28.94	26.99	25.25	23.79	22.45	

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

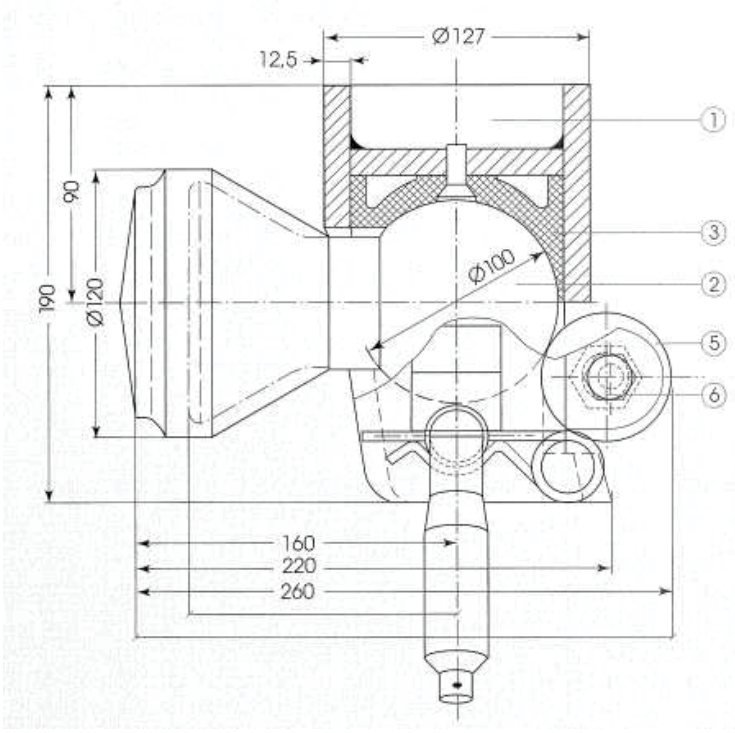
100 mm Pivot Ball: 3-way applications - BUB26

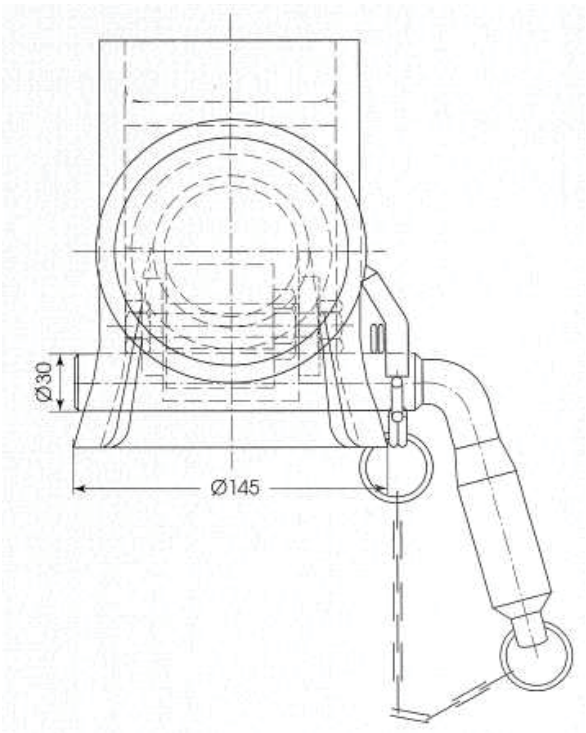
* Designed for heavy tipper 3-way applications up to 36 tonne GVW.

* 100 mm diameter ball

* Available as a kit including :
  - 4 x 100 mm diameter ball
  - 4 x body hinge brackets
  - 4 x 30 mm diameter locking pin







All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

80 mm Pivot Ball: 3-way applications - BUB16



* Designed for heavy tipper 3-way applications up to 18 tonne GVW.

* 80 mm diameter ball

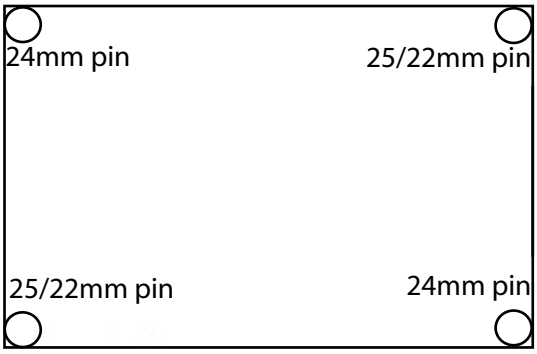
* Available as a kit including :

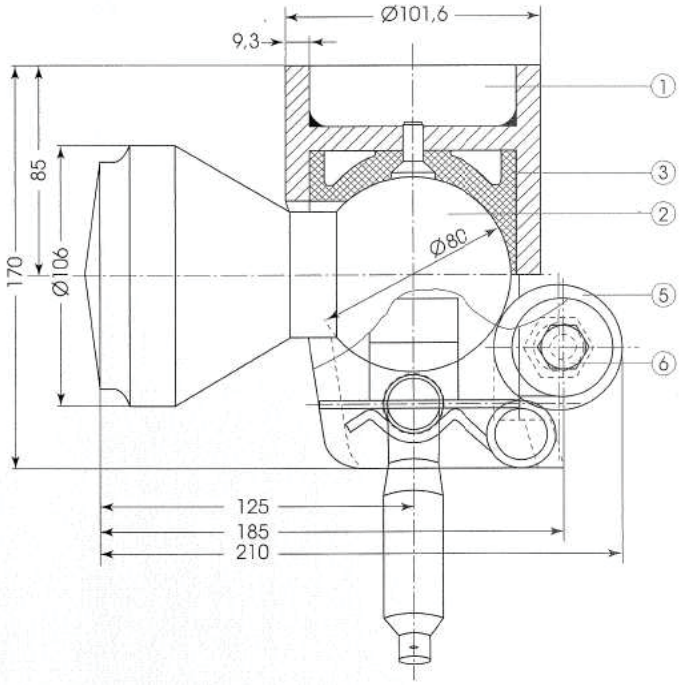
  4 x 80 mm diameter ball

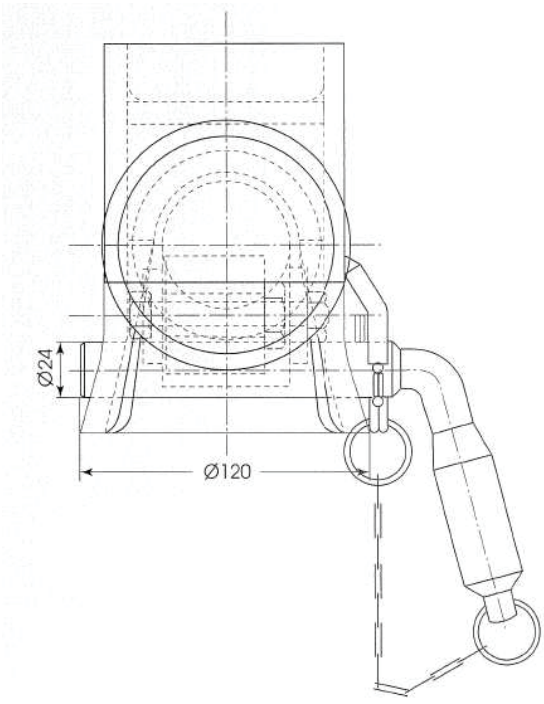
  2 x 24mm body hinge brackets
  2 x 25/22mm body hinge bracket

  2 x 25/22mm body hinge bracket
  1 x 25/22mm diameter locking pin

* To prevent damage to the body and cylinder, pins of the same diameter must be positioned diagonally opposite each other







All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

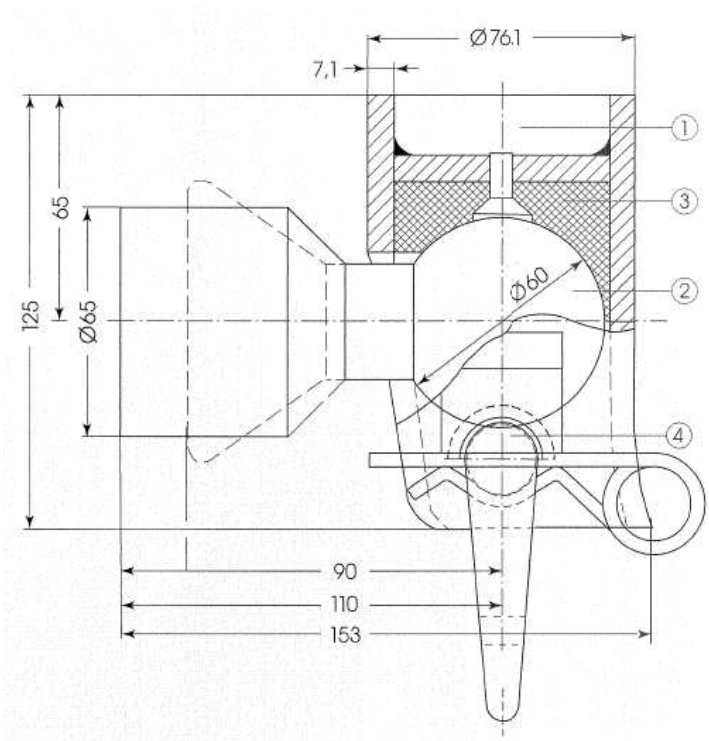
60 mm Pivot Ball: 3-way applications - BUB14

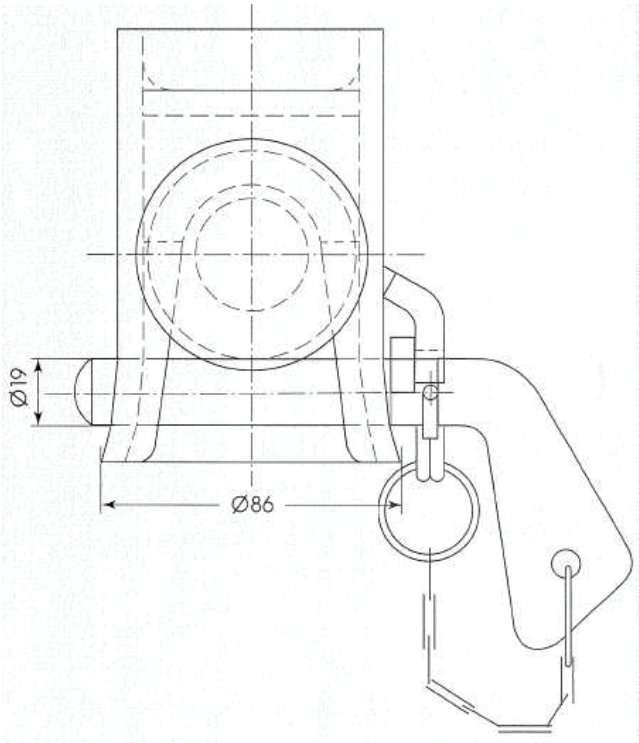
* Designed for medium tipper 3-way applications up to 12 tonne GVW.

* 60 mm diameter ball

* Available as a kit including :
  - 4 x 60 mm diameter ball
  - 4 x body hinge brackets
  - 4 x 19 mm diameter locking pin







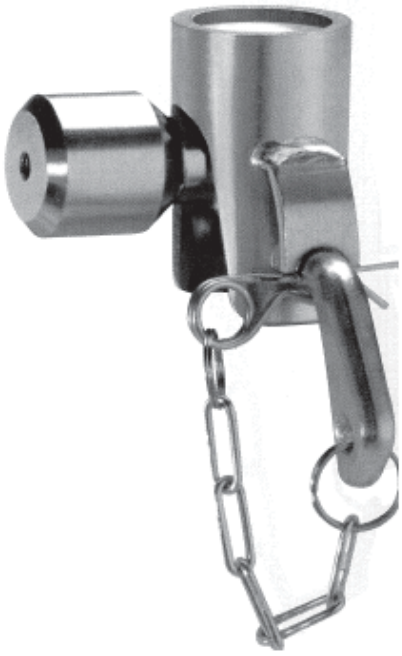
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

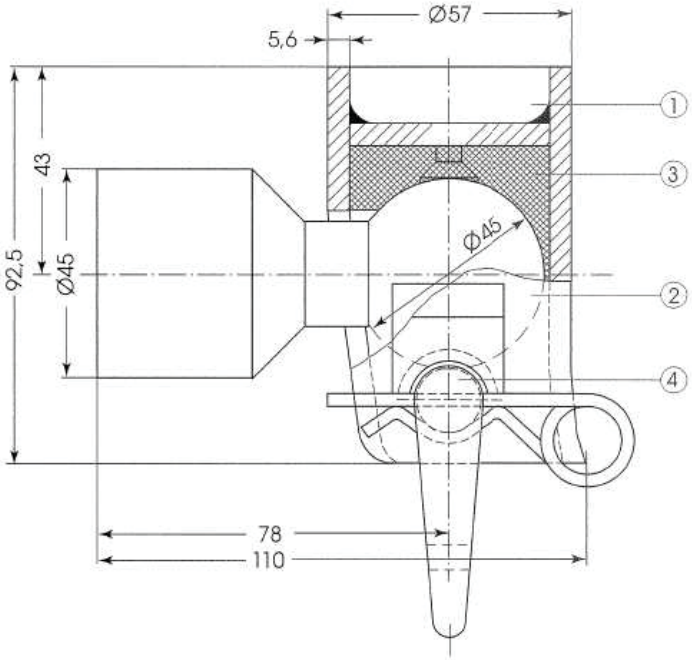
45 mm Pivot Ball: 3-way applications - BUB11

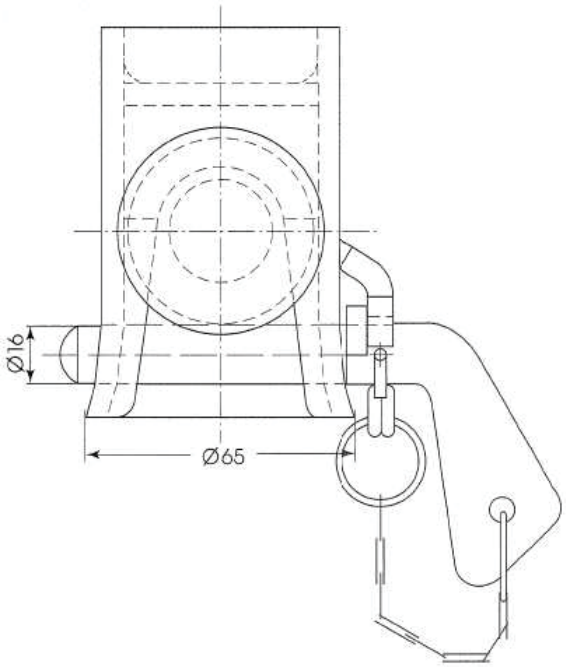
* Designed for agricultural and light tipper 3-way applications up to 8 tonne GVW.

* 45 mm diameter ball

* Available as a kit including :
  - 4 x 45 mm diameter ball
  - 4 x body hinge brackets
  - 4 x 16 mm diameter locking pin





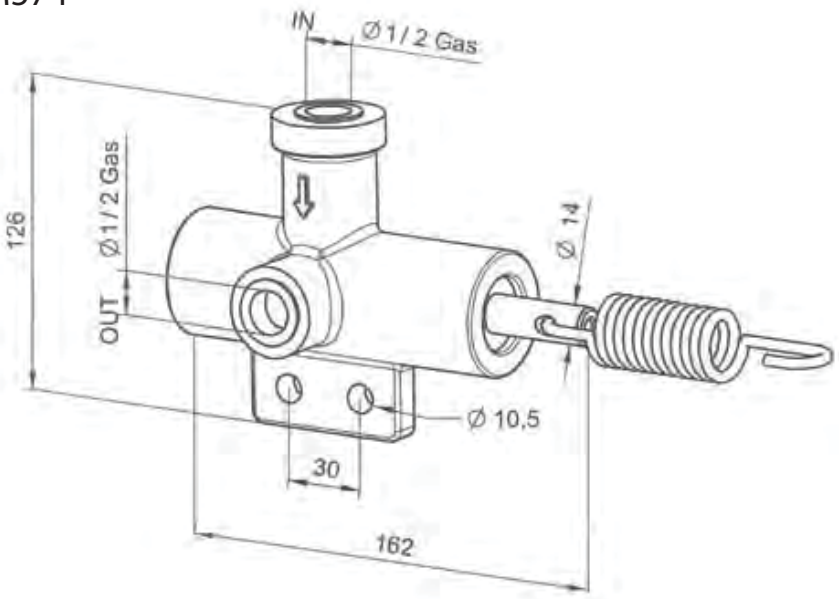


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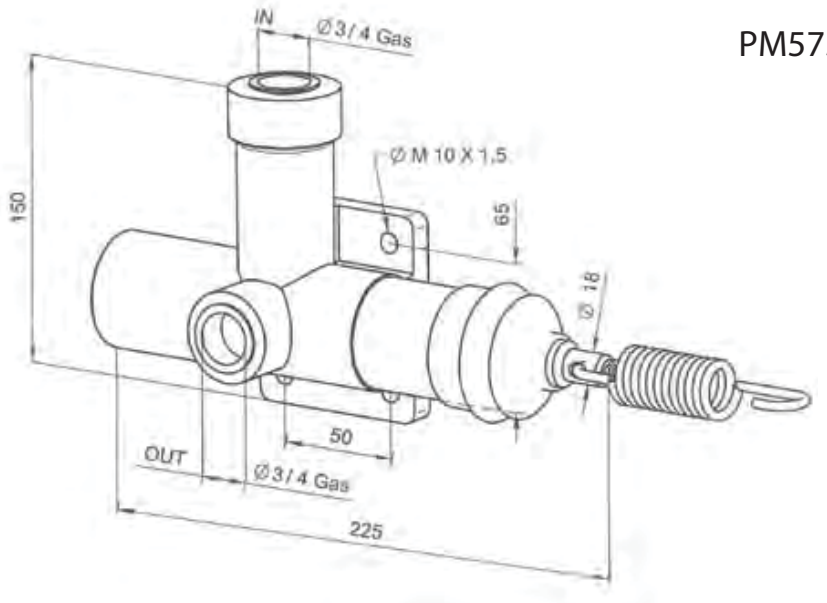
Knock-Off Valve - PM574 & PM575

Part number	Max flow (l/min)	Max pressure (bar)	Weight (kg)
PM574	100	400	1.8
PM575	200	350	4.2

PM574



PM575

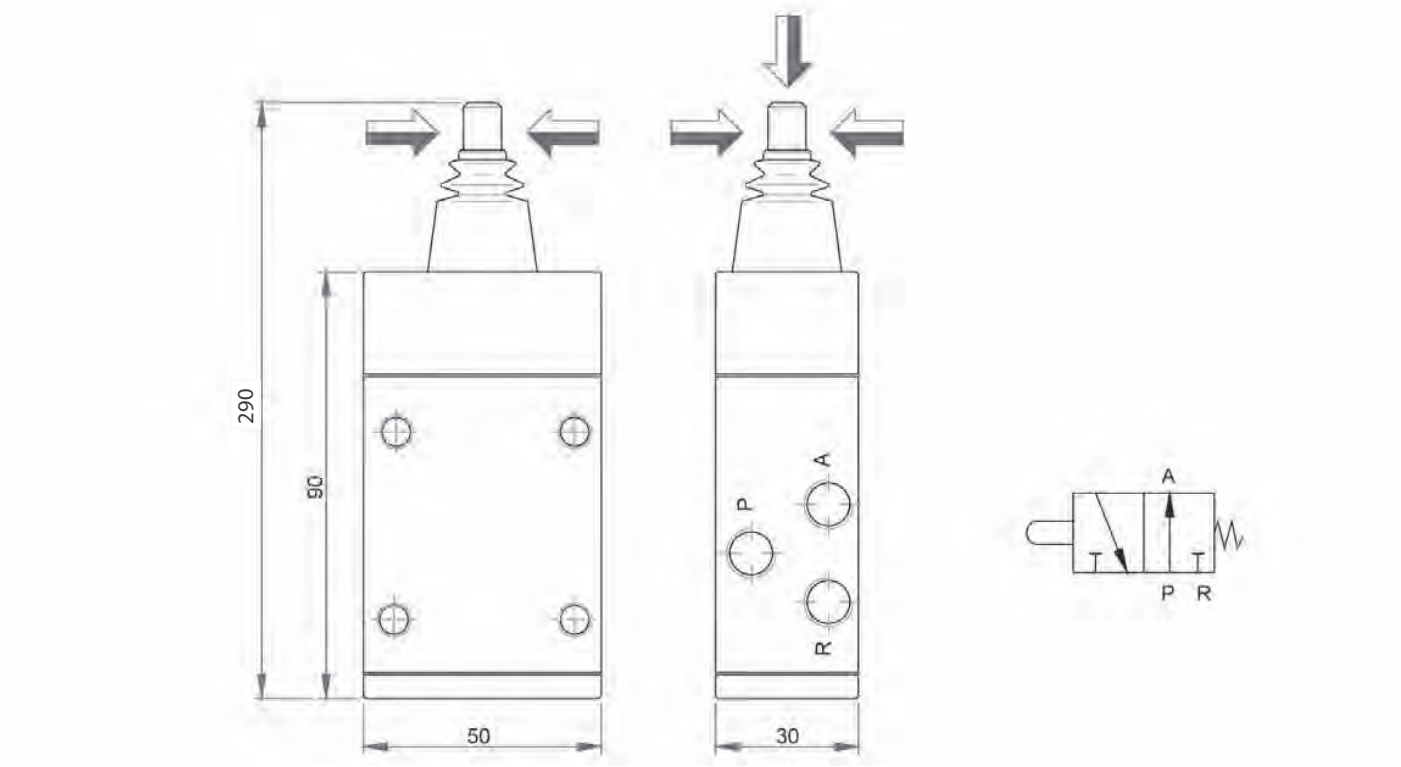


All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Pneumatic Knock-Off Valve – PM604



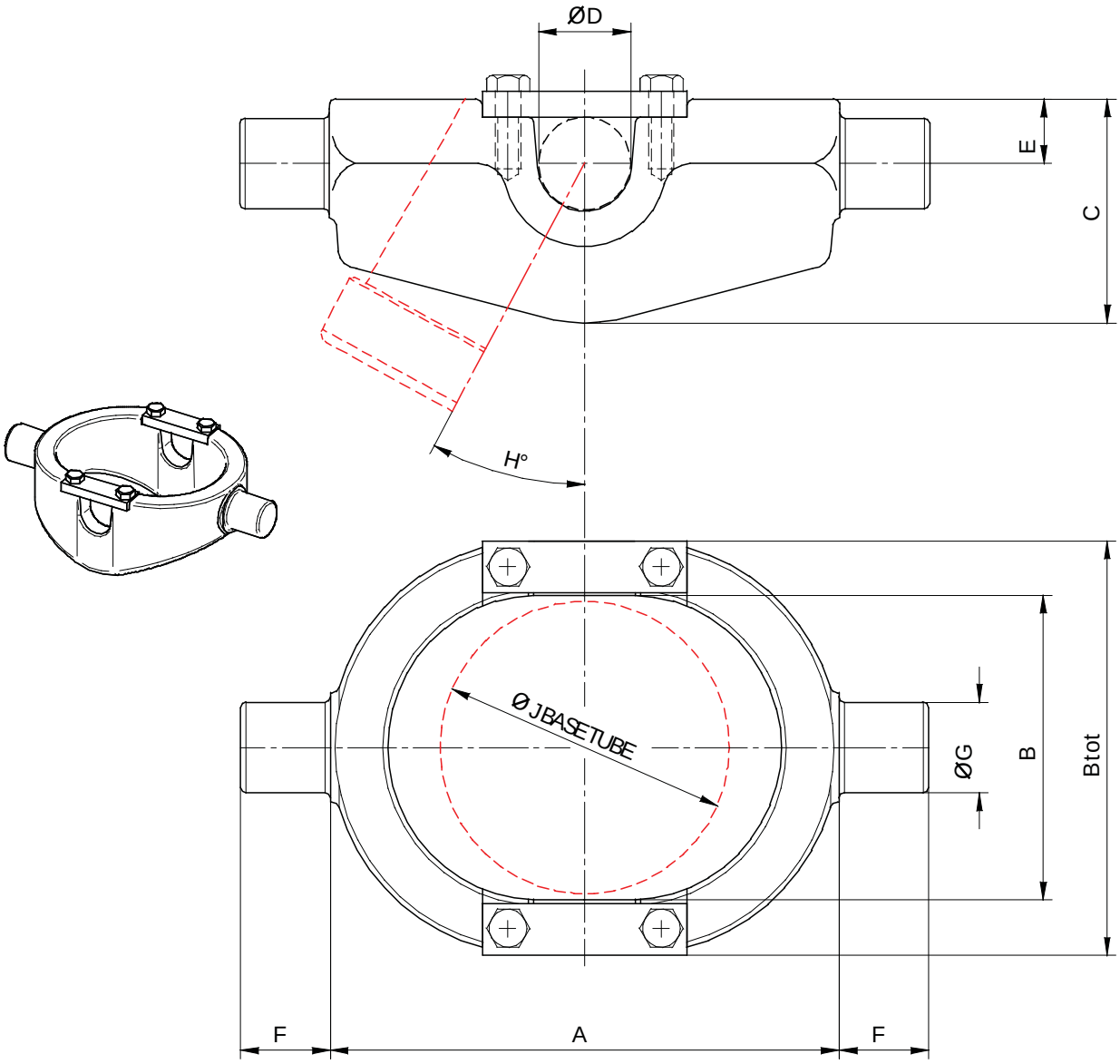
Pneumatic end of stroke valve to control any moveable components positioning.



Main Data	
Shifting	Side & rear
Threads	1/8"BSP
Max. Pressure	12 bar
Weight	0.65 kg

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

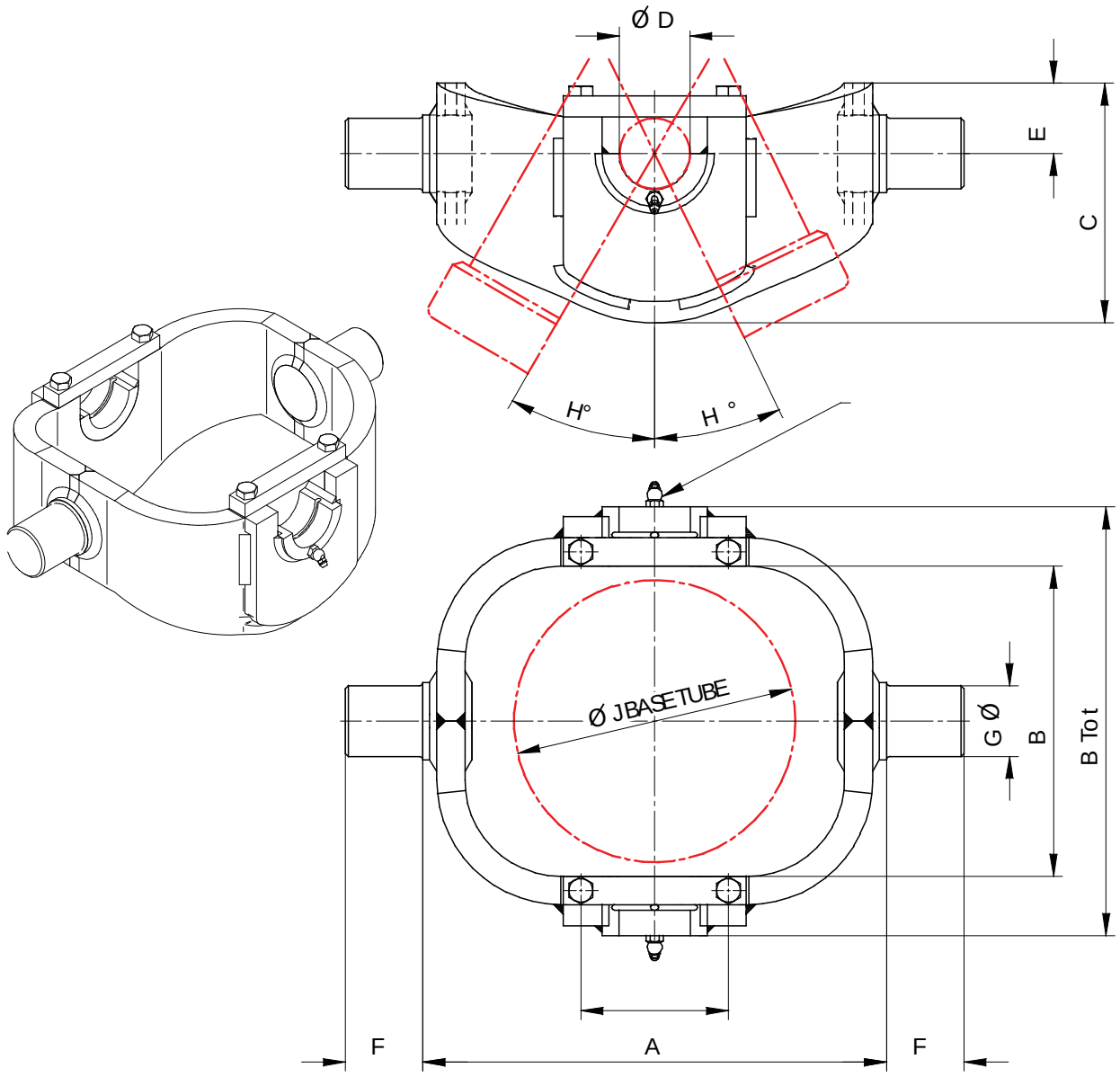
UB Series: UBC Cradles for Cylinders



Type	Dimensions (mm)										Capacity (ton)	Weight (kg)
	A	B	B tot.	C	ø D	E	F	ø G	H	ø J		
UBC1	200	120	160	77	35	25	35	35	32˚	80/95	7	5
UBC2	230	135	195	97	35	28	40	40	37˚	112	10	9
UBC3	230	155	215	107	40	31	40	40	30˚	124	16	10.5
UBC4	280	185	240	125	45	40	45	50	30˚	150	20	15

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

UB Series: UBC Cradles for Cylinders

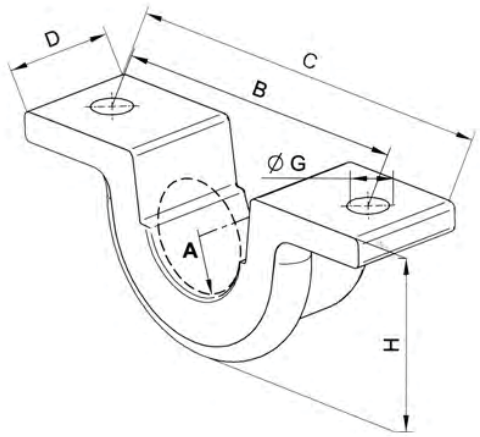


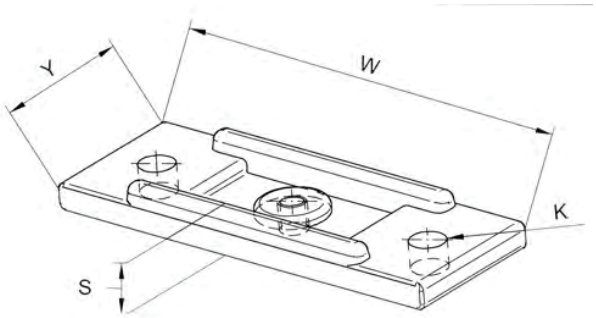
Type	Dimensions (mm)											Capacity (ton)	Weight (kg)
	A	B	B tot.	C	ø D	E	F	ø G	H °	Hg °	ø J		
UBC5	330	215	290	165	50	45	55	50	30°	26°	170	22	22
UBC6	390	235	310	205	50	65	55	50	30°	23°	190	23	29
UBC7	400	255	350	205	50	65	55	50	30°	25°	215	25	32
UBC8	460	277	370	235	55	68	55	55	34°	27°	240	25	52
UBC8A	540	277	380	300	70	85	55	70	40°	35°	240	35	74
UBC9	540	312	395	300	70	85	55	70	36°	30°	270	38	77
UBC10	540	342	425	300	70	85	55	70	32°	26°	300	38	77

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

UB Series: Fittings

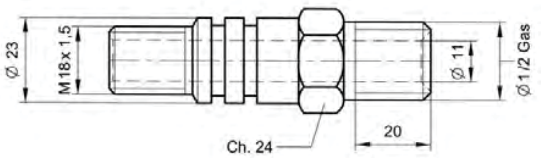
BRACKETS:



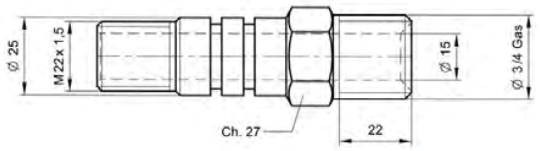


Part number	UB model	Dimensions										Weight (kg)
		ØA	B	C	D	ØG	H	W	Y	ØK	S	
UBS40	UB8/10	40.5	112	140	40	13	62	140	40	13	8	1
UBS45	UB12	45.5	112	140	40	13	62	140	40	13	8	1.2
UBS50	UB14/16/18	50.5	115	185	60	13	82	150	56	13	17	2.5
UBS55	UB21	56	115	185	60	13	86	150	56	13	17	2.6
UBS70	UB24/26	71	148	210	60	13	100	170	60	13	17	3.6

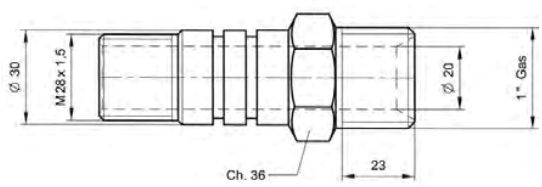
INLET PINS:



Part number: BU98
Required with: UB 8/10/12



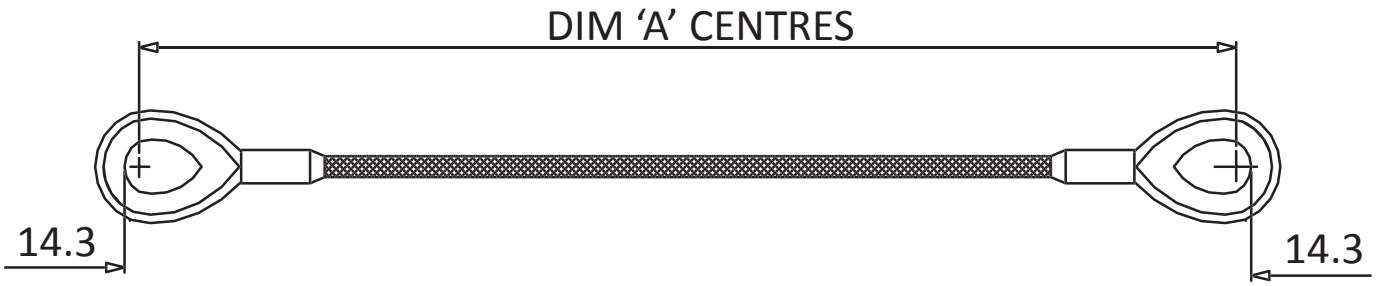
Part number: BU99
Required with: UB14/16/18/21



Part number: BU100
Required with: UB24/26

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Wire Rope Assembly - WQ5



Part No.	Dim. 'A' (mm)
WQ5/970	970

Wire Rope Specification:-

Ø19.05mm (3/4") Round Strand 6x12/6 + 6/1 Fibre Core

Part No. WQ5/ followed by length 'A' in mm

Edbro

SETTING THE INDUSTRY STANDARD

RK Series

Hydraulic Cylinders



Double acting telescopic ejector cylinders for waste handling applications worldwide

Edbro
SETTING THE INDUSTRY STANDARD

RK Series






Benefits

Maximised payloads with Edbro's lightweight cylinder technology

Minimal servicing downtime

Proven reliability and unrivalled durability with a "fit & forget" product you can trust, manufactured from high performance materials

Features

High performance Edbro sealing system and double lip wiper seals minimise service requirements

Zinc alloy ram nuts and inserts provide smooth operation and maximum durability

Hard chromed tubes protect the cylinder even when exposed to the elements

RK Series ejector cylinders are available from Edbro with a range of mounting options for both the base and piston ends. Selections available include trunnion, plain eye and spherical bearings.

A wide range of strokes are available on request. Please consult Edbro for individual specification details.

Tube diameter (mm)		240	213	186	160	133	111	89	70	50
Piston diameter (mm)		254	222	197	171	146	121	98	76	57
extend	**Thrust area (cm²)**	507	387	305	230	167	115	75	45	26
	Thrust @ 175 bar (tonnes)			54	41	30	21	13	8	5
	Thrust @ 150 bar	77	59	47	35	26	18	12	7	4
retract	**Thrust area (cm²)**	54	31	33	29	28	18	13	7	6
	Thrust @ 175 bar (tonnes)			6	5	5	3	2	1	1
	Thrust @ 150 bar	8	5	5	4	4	3	2	1	1

Model code	MWP (bar)	
RK098	175	2 stage
		3 stage
RK121	175	2 stage
		3 stage
		4 stage
RK146	175	2 stage
		3 stage
		4 stage
		5 stage
RK171	175	2 stage
		3 stage
		4 stage
		5 stage
		6 stage
RK197	150	3 stage
		4 stage
		5 stage
		6 stage
		7 stage
RK222	150	3 stage
		4 stage
		5 stage
		6 stage
		7 stage
		8 stage
RK254	150	6 stage
		7 stage
		8 stage
		9 stage

Ejector Technology

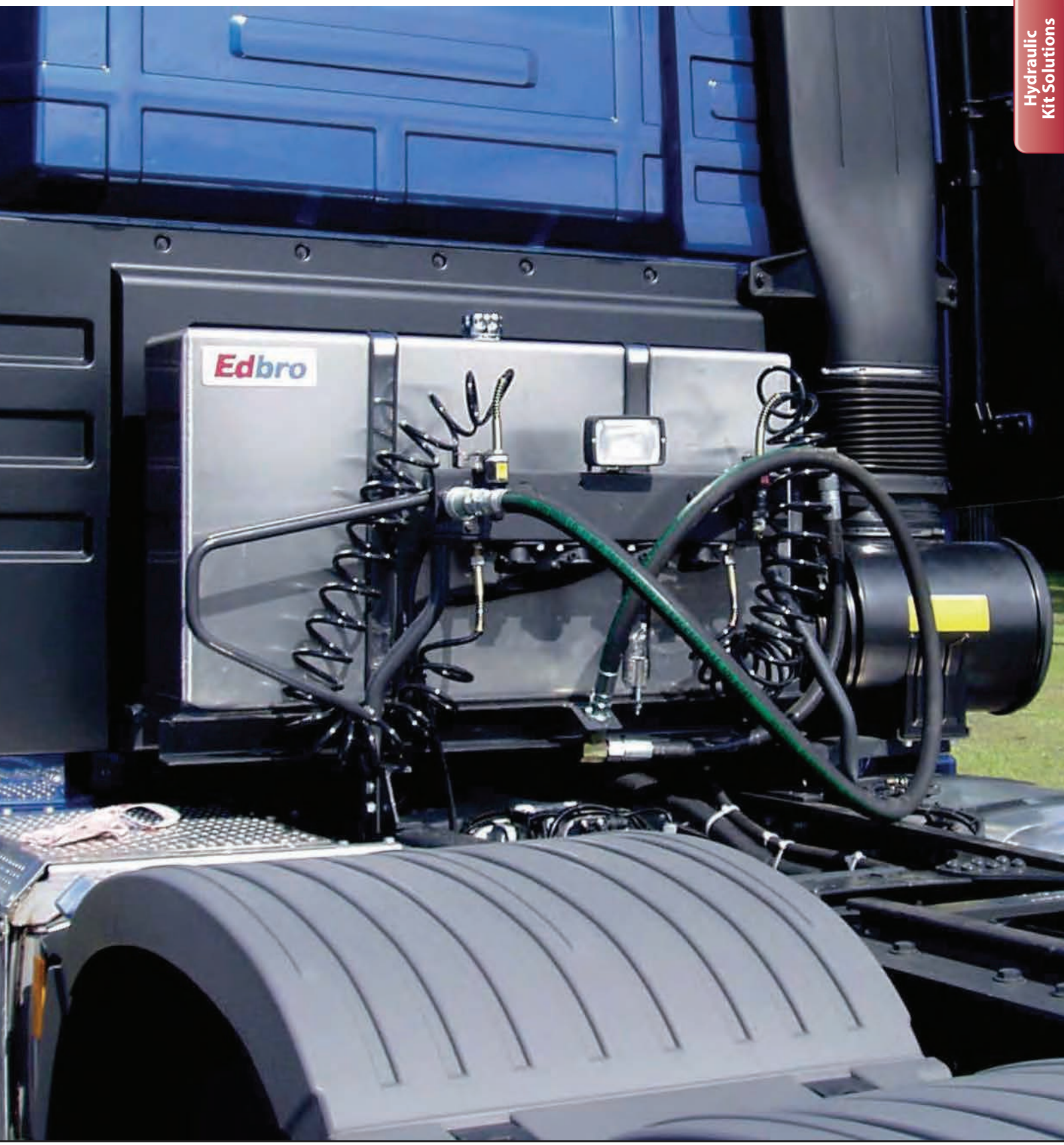
The Edbro RK Series of multi-telescopic, double acting cylinders are used for a wide range of applications. Typical operations are ejector trailers and refuse collection vehicles.

These hydraulic cylinders are designed and manufactured exclusively by Edbro using the latest manufacturing technology and the highest performance materials to ensure optimum product quality. Every cylinder is individually tested prior to despatch.

Edbro

SETTING THE INDUSTRY STANDARD

Hydraulic Kit Solutions



Combining decades of industry expertise with a reputation for high performance, cutting-edge technology, Edbro introduces Hydraulic Kit Solutions, designed to offer the optimum equipment whatever the application: from tippers to walking floors and beyond.

Edbro
SETTING THE INDUSTRY STANDARD

Hydraulic Kit Solutions






Benefits

Customised kits to suit specific requirements for the most efficient solution whatever your hydraulic needs

Increased payload capacity and productivity with optional lightweight and fast performance kits

Reliability and the trustworthy fit and forget Edbro reputation for quality, high performance products

Peace of mind with expert application and service engineering back-up from the Edbro team

Features

Specially selected, top quality components combine to produce high performance hydraulic kit solutions

Kit solutions to suit a wide range of applications, from tipper and ejector trailer to walking floor and car transporter

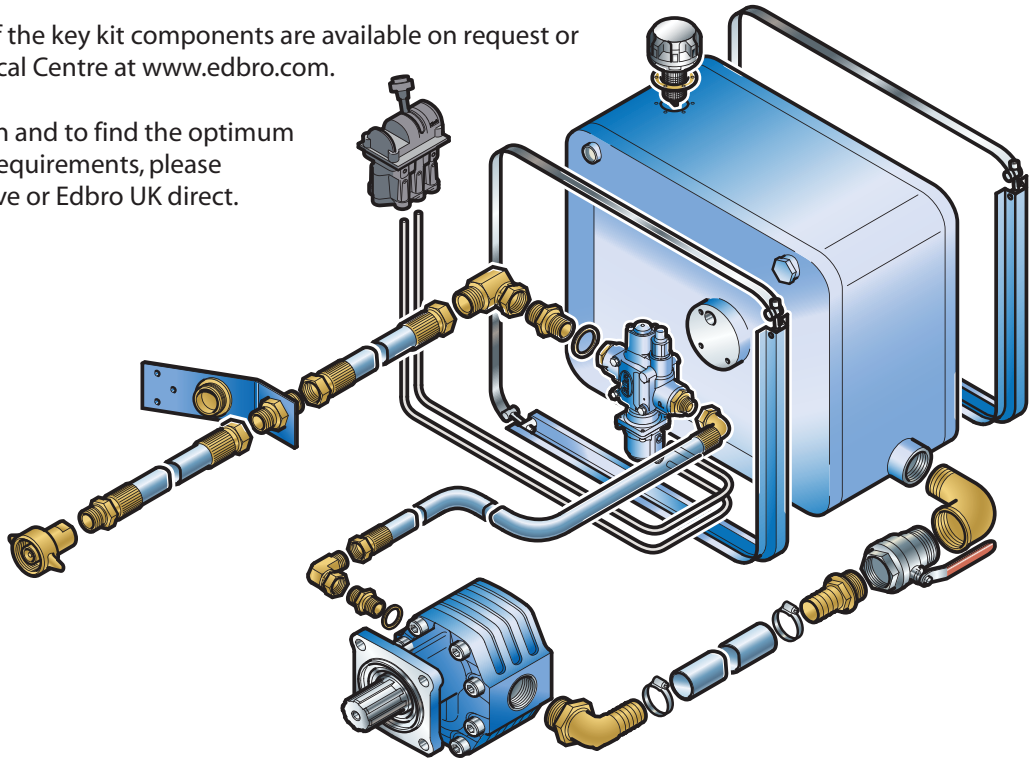
An extensive catalogue of kit components is available on request, from oil tanks, pumps and hydraulic valves to hoses and adaptors

Edbro Hydraulic Kit Solutions

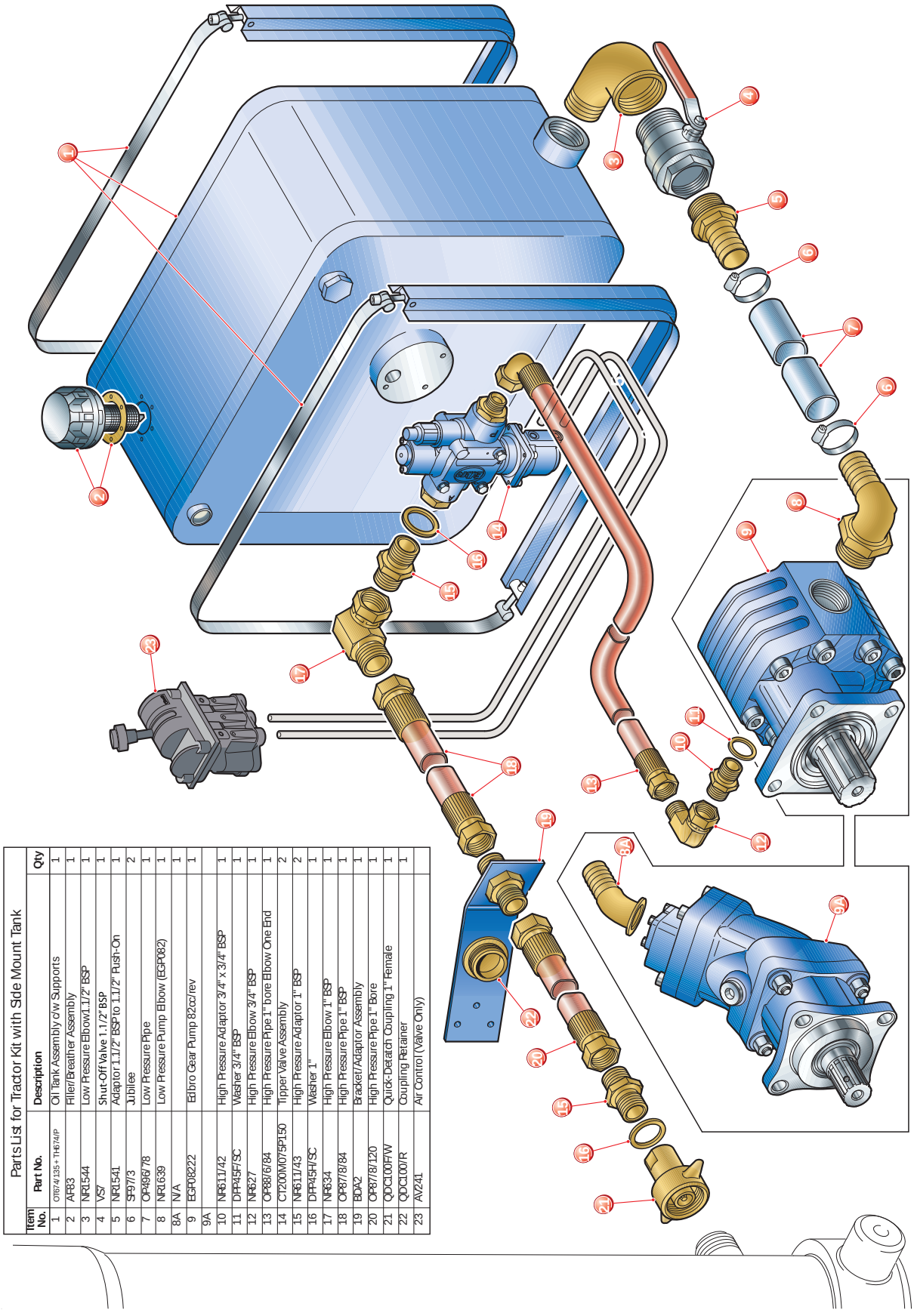
A full catalogue of hydraulic kit solutions is available from Edbro for a range of different applications. Chassis specific tank kits are now available to further customise your application.

Detailed specification sheets of the key kit components are available on request or to download within our Technical Centre at www.edbro.com.

For further detailed information and to find the optimum solution for your hydraulic kit requirements, please contact your local representative or Edbro UK direct.



Standard Side Mount Tipper Kit

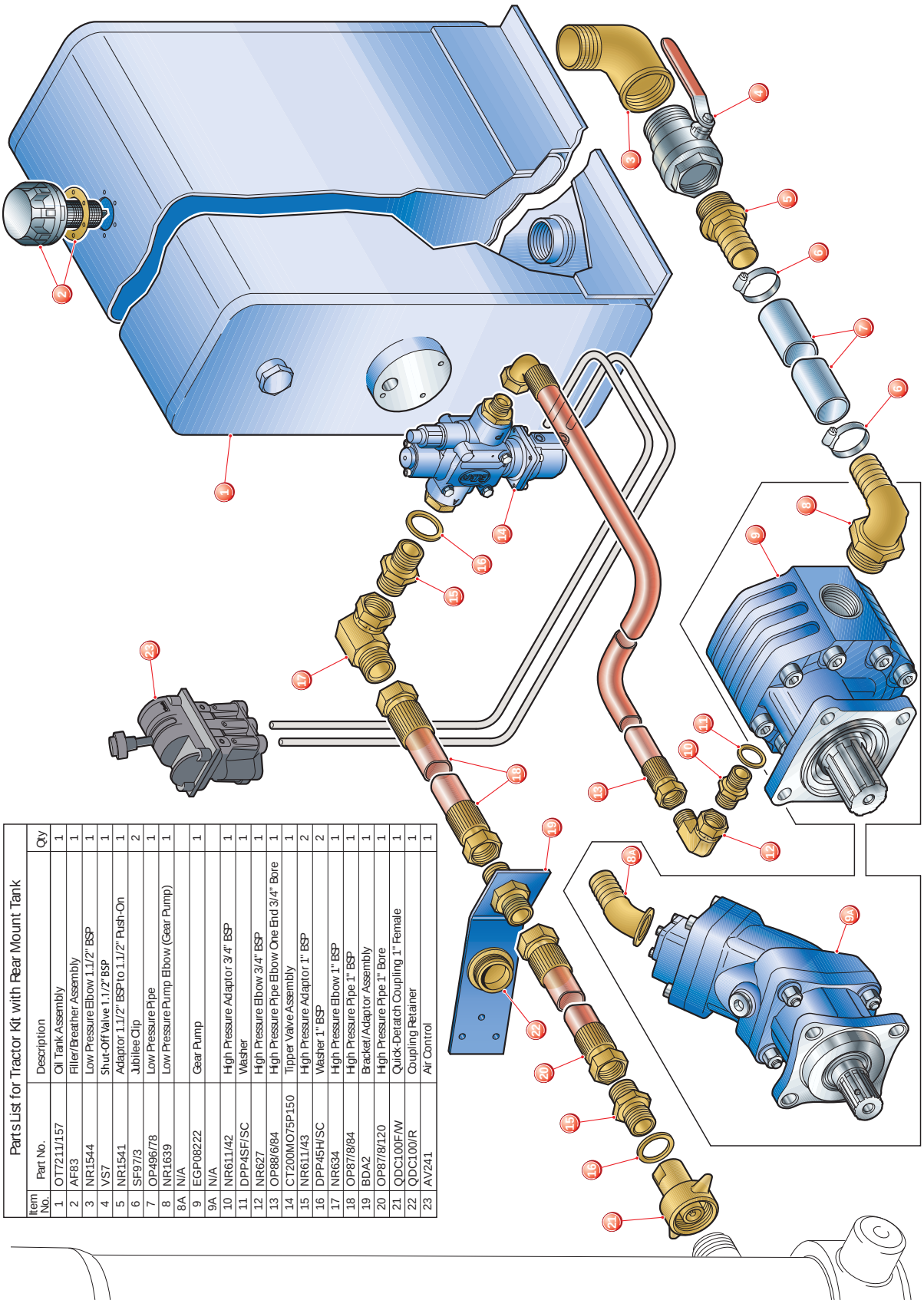


Parts List for Tractor Kit with Side Mount Tank

Item No.	Part No.	Description	Qty
1	OT674/135+THS74/P	Oil Tank Assembly c/w Supports	1
2	AF83	Filler/Breather Assembly	1
3	NR1544	Low Pressure Elbow1.1/2" BSP	1
4	VS7	Shut-Off Valve 1.1/2" BSP	1
5	NR1541	Adaptor 1.1/2" BSP to 1.1/2" Push-On	1
6	SP97/3	Jubilee	2
7	OP496/78	Low Pressure Pipe	1
8	NR1639	Low Pressure Pump Elbow (EGP082)	1
8A	N/A		1
9	EGP08222	Edbro Gear Pump 82cc/rev	1
9A			
10	NR611/42	High Pressure Adaptor 3/4" x 3/4" BSP	1
11	DPP45F/SC	Washer 3/4" BSP	1
12	NR627	High Pressure Elbow 3/4" BSP	1
13	OP88/6/84	High Pressure Pipe 1" bore Elbow One End	1
14	CT200M075P150	Tipper Valve Assembly	2
15	NR611/43	High Pressure Adaptor 1" BSP	2
16	DPP45H/SC	Washer 1"	1
17	NR634	High Pressure Elbow 1" BSP	1
18	OP87/8/84	High Pressure Pipe 1" BSP	1
19	BDA2	Bracket/Adaptor Assembly	1
20	OP87/8/120	High Pressure Pipe 1" Bore	1
21	QDC100F/W	Quick-Detatch Coupling 1" Female	1
22	QDC100/R	Coupling Retainer	1
23	AV241	Air Control (Valve Only)	

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Standard Rear Mount Tipper Kit

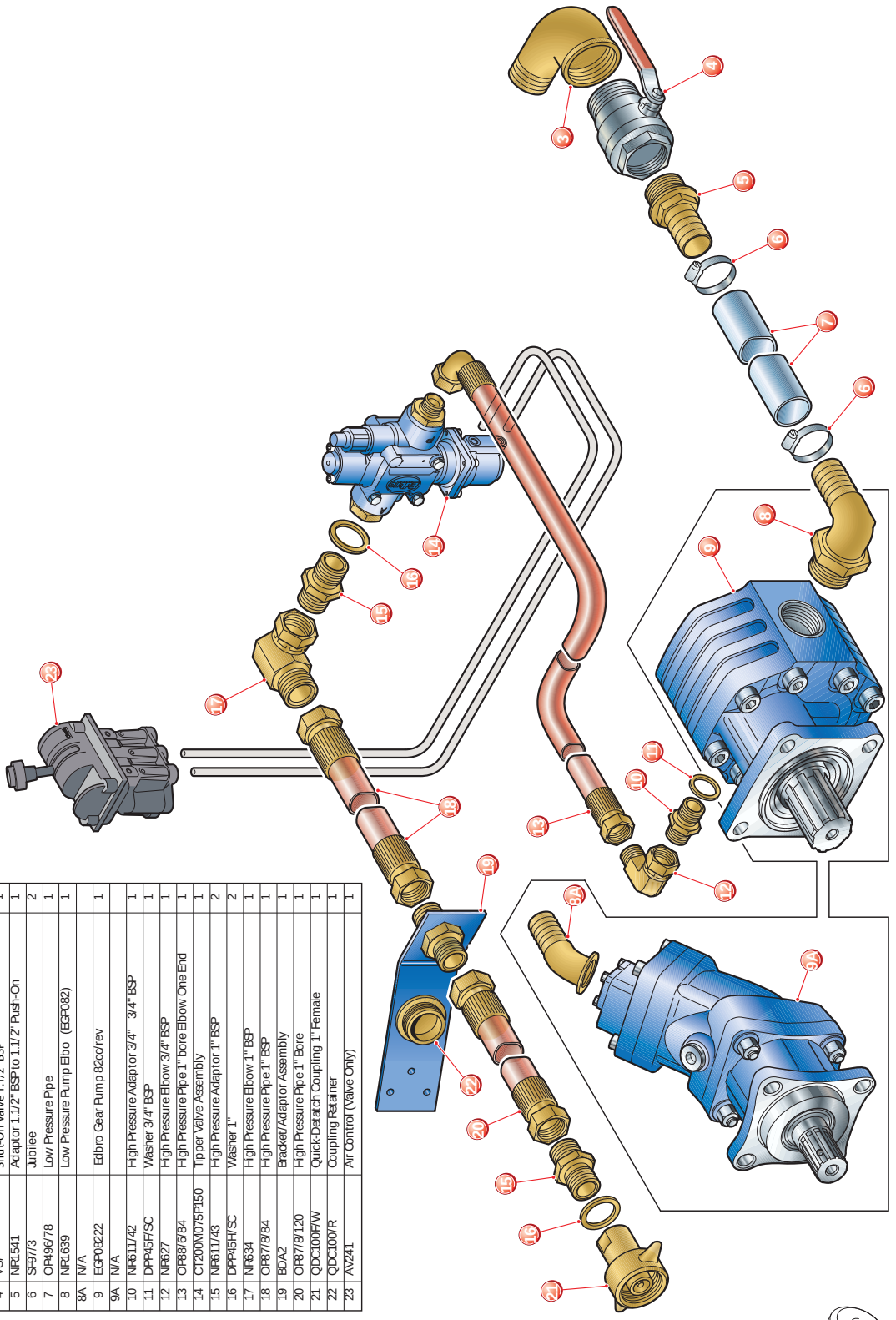


Parts List for Tractor Kit with Rear Mount Tank

Item No.	Part No.	Description	Qty
1	OT7211/157	Oil Tank Assembly	1
2	AF83	Filler/Breather Assembly	1
3	NR1544	Low Pressure Elbow 1.1/2" BSP	1
4	VS7	Shut-Off Valve 1.1/2" BSP	1
5	NR1541	Adaptor 1.1/2" BSP to 1.1/2" Push-On	1
6	SF97/3	Jubilee Clip	2
7	OP496/78	Low Pressure Pipe	1
8	NR1639	Low Pressure Pump Elbow (Gear Pump)	1
8A	N/A		
9	EGP08222	Gear Pump	1
9A	N/A		
10	NR611/42	High Pressure Adaptor 3/4" BSP	1
11	DPP4SF/SC	Washer	1
12	NR627	High Pressure Elbow 3/4" BSP	1
13	OP88/6/84	High Pressure Pipe Elbow One End 3/4" Bore	1
14	CT200MO75P150	Tipper Valve Assembly	1
15	NR611/43	High Pressure Adaptor 1" BSP	2
16	DPP45H/SC	Washer 1" BSP	2
17	NR634	High Pressure Elbow 1" BSP	1
18	OP87/8/84	High Pressure Pipe 1" BSP	1
19	BDA2	Bracket/Adaptor Assembly	1
20	OP87/8/120	High Pressure Pipe 1" Bore	1
21	QDC100F/W	Quick-Detatch Coupling 1" Female	1
22	QDC100/R	Coupling Retainer	1
23	AV241	Air Control	1

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Standard No Tank Tipper Kit

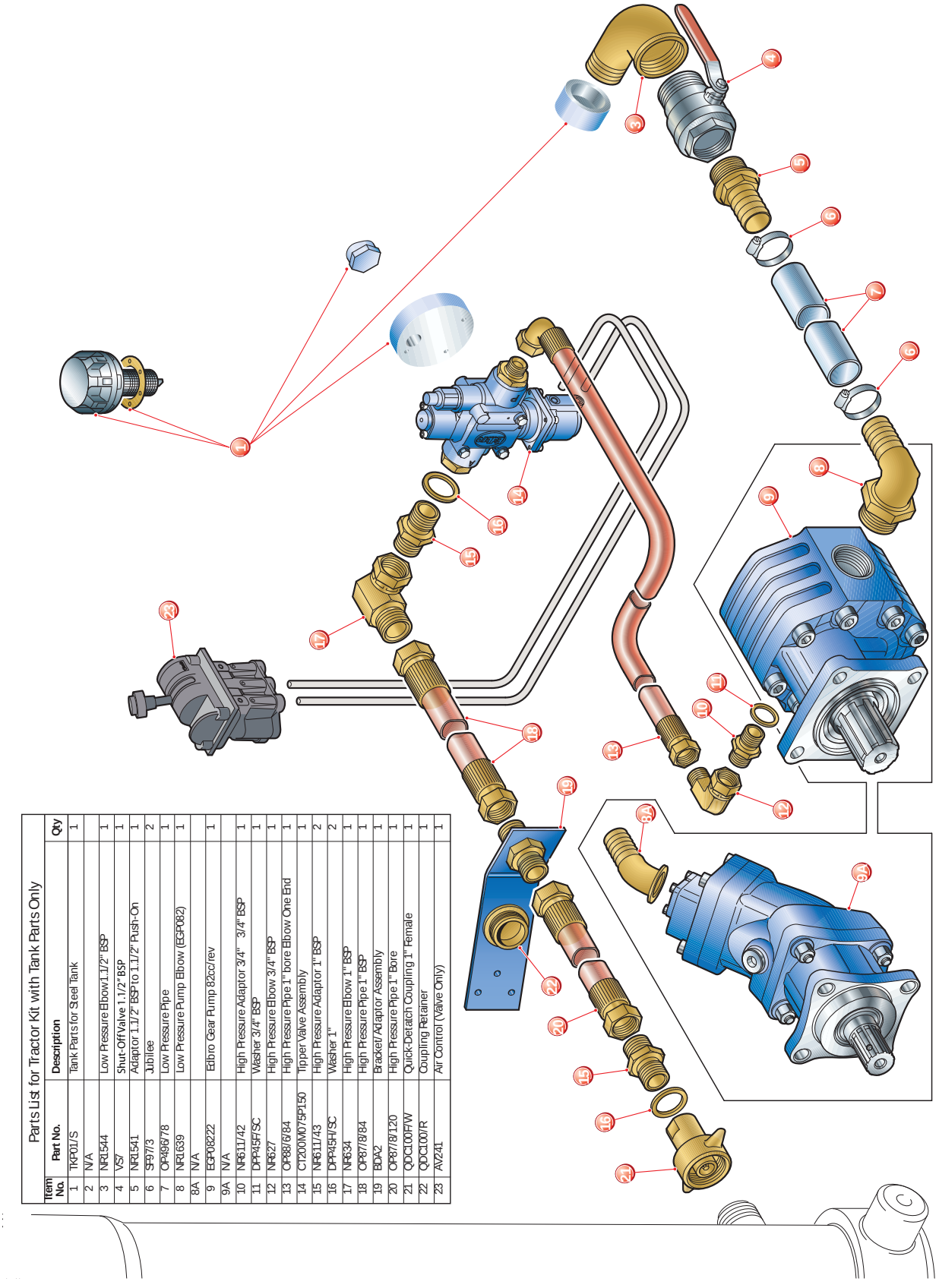


Parts List for Tractor Kit without Tank

Item No.	Part No.	Description	Qty
1	N/A		
2	N/A		
3	NRL544	Low Pressure Elbow1.1/2" BSP	1
4	VS7	Shut-Off Valve 1.1/2" BSP	1
5	NRL541	Adaptor 1.1/2" BSP to 1.1/2" Push-On	1
6	SP97/3	Jubilee	2
7	OP496/78	Low Pressure Pipe	1
8	NRL639	Low Pressure Pump Elbo (EGP082)	1
8A	N/A		
9	EGP08222	Edbro Gear Pump 82cc/rev	1
9A	N/A		
10	NR611/42	High Pressure Adaptor 3/4" 3/4" BSP	1
11	DPP45F/SC	Washer 3/4" BSP	1
12	NR627	High Pressure Elbow 3/4" BSP	1
13	OP88/6/84	High Pressure Pipe 1" bore Elbow One End	1
14	CT200M075P150	Tipper Valve Assembly	1
15	NR611/43	High Pressure Adaptor 1" BSP	2
16	DPP45H/SC	Washer 1"	2
17	NR634	High Pressure Elbow 1" BSP	1
18	OP87/8/84	High Pressure Pipe 1" BSP	1
19	BDA2	Bracket/Adaptor Assembly	1
20	OP87/8/120	High Pressure Pipe 1" Bore	1
21	QDC100FW	Quick-Detatch Coupling 1" Female	1
22	QDC100/R	Coupling Retainer	1
23	AV241	Air Control (Valve Only)	1

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Standard Tank Parts Only Tipper Kit

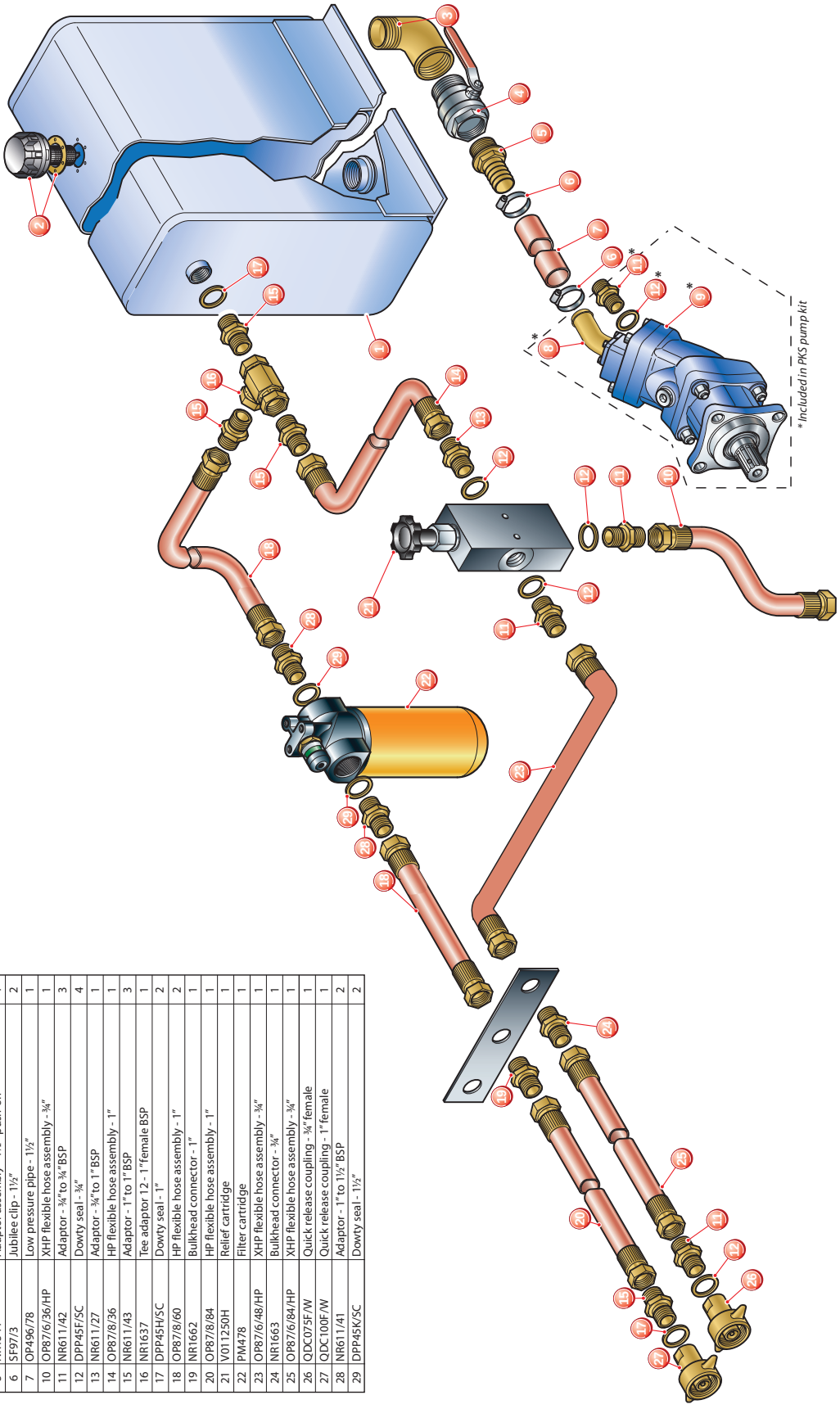


Parts List for Tractor Kit with Tank Parts Only

Item No.	Part No.	Description	Qty
1	TKP01/S	Tank Parts for Steel Tank	1
2	N/A		
3	NR1544	Low Pressure Elbow1.1/2" BSP	1
4	VS7	Shut-Off Valve 1.1/2" BSP	1
5	NR1541	Adaptor 1.1/2" BSP to 1.1/2" Push-On	1
6	SP97/3	Jubilee	2
7	OP498/78	Low Pressure Pipe	1
8	NR1639	Low Pressure Pump Elbow (EGP082)	1
8A	N/A		
9	EGP08222	Edbro Gear Pump 82cc/rev	1
9A	N/A		
10	NR611/42	High Pressure Adaptor 3/4" - 3/4" BSP	1
11	DPP45F/SC	Washer 3/4" BSP	1
12	NR627	High Pressure Elbow 3/4" BSP	1
13	OP887/84	High Pressure Pipe 1" bore Elbow One End	1
14	CT200M075P150	Tipper Valve Assembly	1
15	NR611/43	High Pressure Adaptor 1" BSP	2
16	DPP45H/SC	Washer 1"	2
17	NR634	High Pressure Elbow 1" BSP	1
18	OP877/84	High Pressure Pipe 1" BSP	1
19	BDA2	Bracket/Adaptor Assembly	1
20	OP877/8120	High Pressure Pipe 1" Bore	1
21	QDC100F/W	Quick-Detatch Coupling 1" Female	1
22	QDC100/R	Coupling Retainer	1
23	AV241	Air Control (Valve Only)	1

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Standard Walking Floor Kit Hydraulic Layout (1½" SUCTION LINE)



V.1 (02/09)

Parts List for Walking Floor Kit

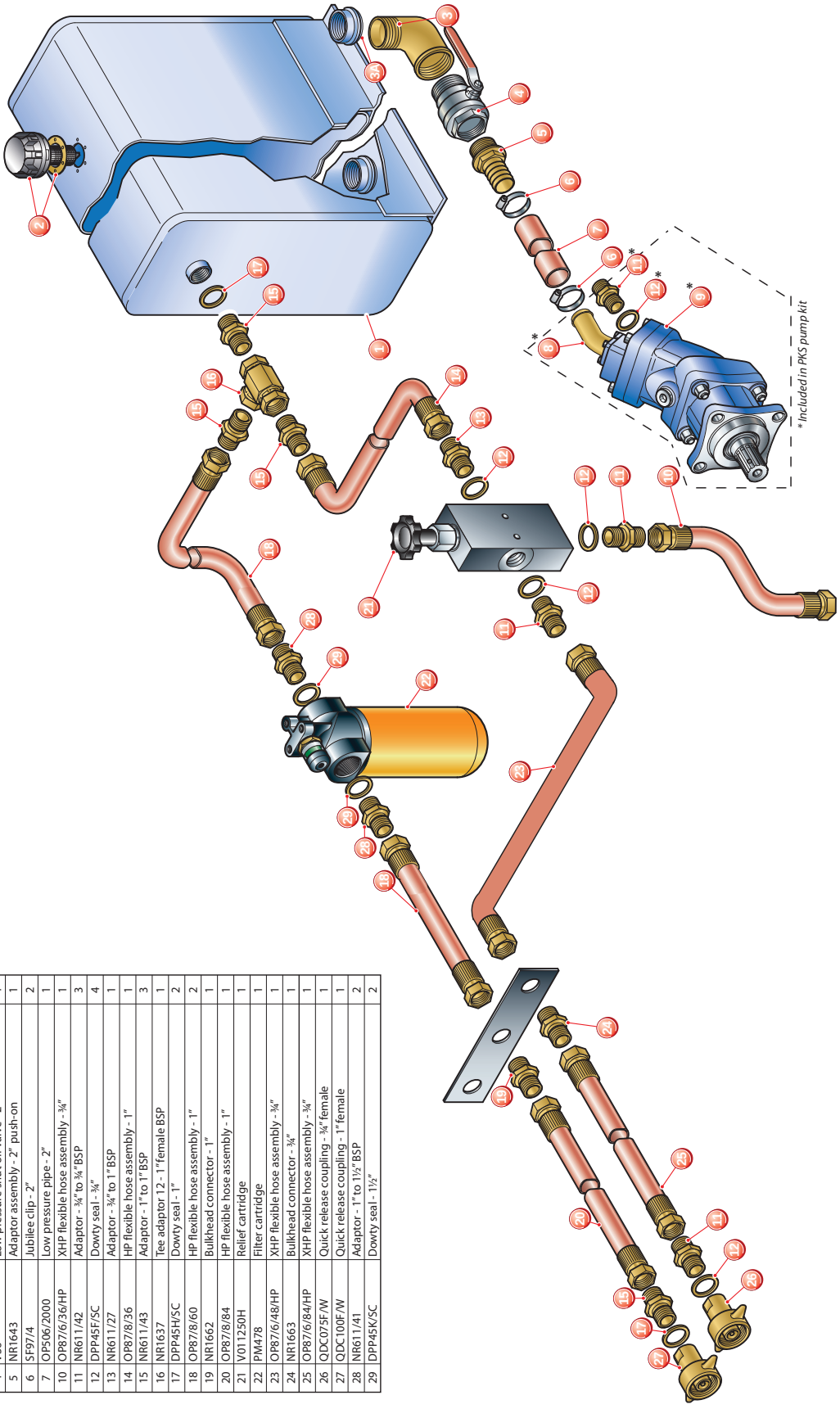
Item No.	Part No.	Description	Qty
1	OT******	Oil tank (subject to kit specification)	1
2	AF83	Filler breather assembly	1
3	NR1544	Low pressure elbow - 1½"	1
4	VS7	Low pressure shut off valve - 1½"	1
5	NR1541	Adaptor assembly - 1½" push-on	1
6	SF97/3	Jubilee clip - 1½"	2
7	OP496/78	Low pressure pipe - 1½"	1
10	OP87/6/36/HP	XHP flexible hose assembly - ¾"	1
11	NR611/42	Adaptor - ⅜"to ¾"BSP	3
12	DPP45F/SC	Dowty seal - ¾"	4
13	NR611/27	Adaptor - ¾"to 1" BSP	1
14	OP87/8/36	HP flexible hose assembly - 1"	1
15	NR611/43	Adaptor - 1"to 1"BSP	3
16	NR1637	Tee adaptor 12 - 1"female BSP	1
17	DPP45H/SC	Dowty seal - 1"	2
18	OP87/8/60	HP flexible hose assembly - 1"	2
19	NR1662	Bulkhead connector - 1"	1
20	OP87/8/84	HP flexible hose assembly - 1"	1
21	V0112501H	Relief cartridge	1
22	PM478	Filter cartridge	1
23	OP87/6/48/HP	XHP flexible hose assembly - ¾"	1
24	NR1663	Bulkhead connector - ¾"	1
25	OP87/6/84/HP	XHP flexible hose assembly - ¾"	1
26	QDC075F/W	Quick release coupling - ¾" female	1
27	QDC100F/W	Quick release coupling - 1" female	1
28	NR611/41	Adaptor - 1"to 1½"BSP	2
29	DPP45K/SC	Dowty seal - 1½"	2

PKS Pump Kit *

Item No.	Part No.	Description	Qty
8	NR1588	1½" push-on adapton - 45 degree	1
9	EBA09022	Bent axis piston pump	1
11	NR611/42	Adaptor ¾" - ¾" BSP	1
12	DPP45F/SC	Dowty seal - ¾"	1

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Standard Walking Floor Kit Hydraulic Layout (2" SUCTION LINE)



V.1 (02/09)

Parts List for Walking Floor Kit

Item No.	Part No.	Description	Qty
1	OT******	Oil tank (subject to kit specification)	1
2	AF83	Filler breather assembly	1
3	NR1642	Low pressure elbow - 2"	1
3A	NR1657	Adaptor 1½" to 2" BSP	1
4	V56	Low pressure shut off valve - 2"	1
5	NR1643	Adaptor assembly - 2" push-on	1
6	SF97/4	Jubilee clip - 2"	2
7	OP506/2000	Low pressure pipe - 2"	1
10	OP87/6/36/HP	XHP flexible hose assembly - ¾"	1
11	NR611/42	Adaptor - ¾" to ¾" BSP	3
12	DPP45F/SC	Dowty seal - ¾"	4
13	NR611/27	Adaptor - ¾" to 1" BSP	1
14	OP87/8/36	HP flexible hose assembly - 1"	1
15	NR611/43	Adaptor - 1" to 1" BSP	3
16	NR1637	Tee adaptor 12 - 1" female BSP	1
17	DPP45H/SC	Dowty seal - 1"	2
18	OP87/8/60	HP flexible hose assembly - 1"	2
19	NR1662	Bulkhead connector - 1"	1
20	OP87/8/84	HP flexible hose assembly - 1"	1
21	V011250H	Relief cartridge	1
22	PM478	Filter cartridge	1
23	OP87/6/48/HP	XHP flexible hose assembly - ¾"	1
24	NR1663	Bulkhead connector - ¾"	1
25	OP87/6/84/HP	XHP flexible hose assembly - ¾"	1
26	QDC075F/W	Quick release coupling - ¾" female	1
27	QDC100F/W	Quick release coupling - 1" female	1
28	NR611/41	Adaptor - 1" to 1½" BSP	2
29	DPP45K/SC	Dowty seal - 1½"	2

PKS Pump Kit *

Item No.	Part No.	Description	Qty
8	NR1590	2" push-on adapton - 45 degree	1
9	EBA09022	Bent axis piston pump	1
11	NR611/42	Adaptor ¾" - ¾" BSP	1
12	DPP45F/SC	Dowty seal - ¾"	1

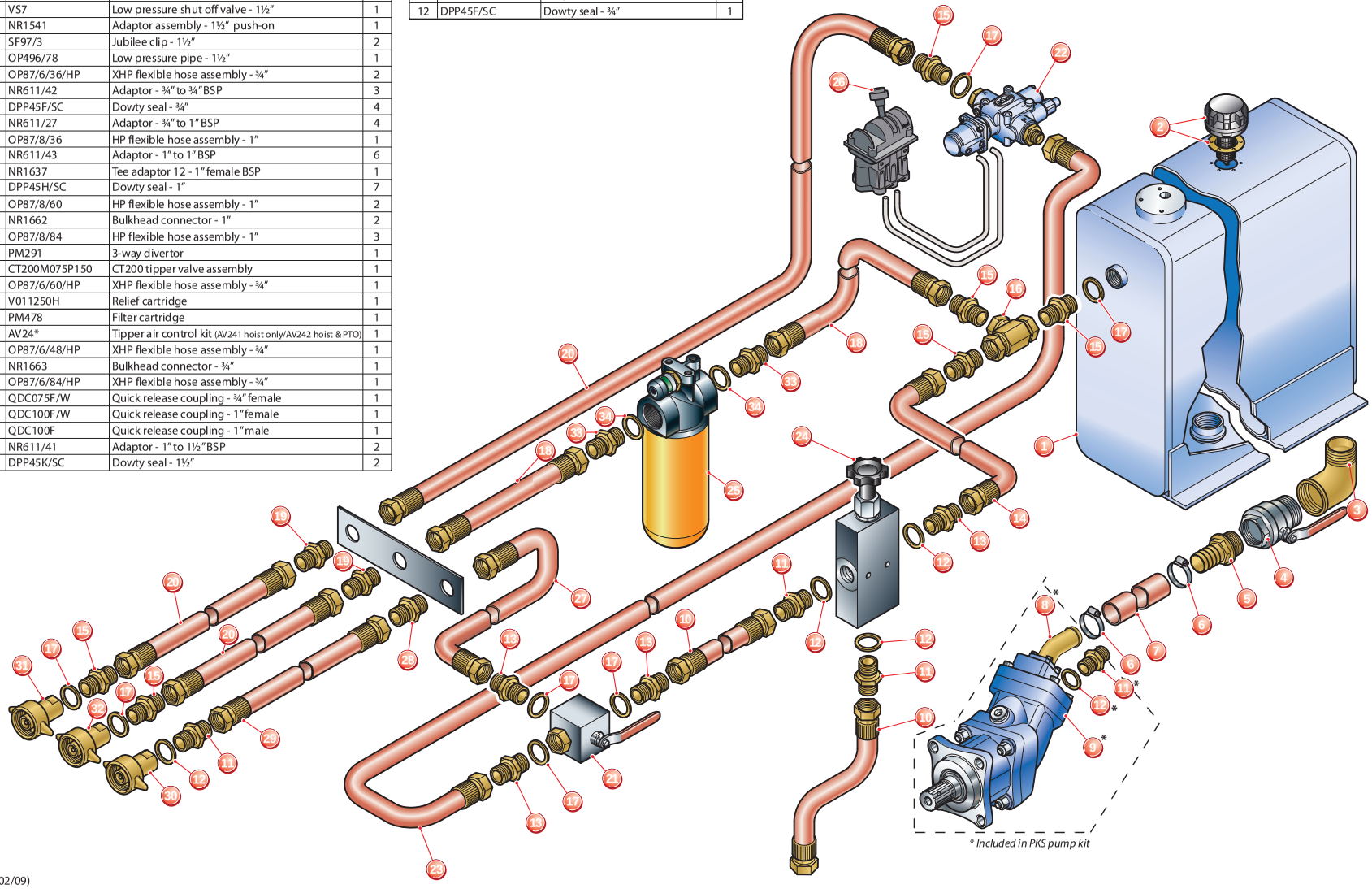
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Hydraulic Kit Solutions

Standard Walking Floor/Tipper Kit Hydraulic Layout (1½" SUCTION LINE)

Parts List for Walking Floor/Tipper Kit			
Item No.	Part No.	Description	Qty
1	OT******	Oil tank (subject to kit specification)	1
2	AF83	Filler breather assembly	1
3	NR1544	Low pressure elbow - 1½"	1
4	VS7	Low pressure shut off valve - 1½"	1
5	NR1541	Adaptor assembly - 1½" push-on	1
6	SF97/3	Jubilee clip - 1½"	2
7	OP496/78	Low pressure pipe - 1½"	1
10	OP87/6/36/HP	XHP flexible hose assembly - ¾"	2
11	NR611/42	Adaptor - ¾" to ¾"BSP	3
12	DPP45F/SC	Dowty seal - ¾"	4
13	NR611/27	Adaptor - ¾" to 1" BSP	4
14	OP87/8/36	HP flexible hose assembly - 1"	1
15	NR611/43	Adaptor - 1" to 1" BSP	6
16	NR1637	Tee adaptor 12 - 1" female BSP	1
17	DPP45H/SC	Dowty seal - 1"	7
18	OP87/8/60	HP flexible hose assembly - 1"	2
19	NR1662	Bulkhead connector - 1"	2
20	OP87/8/84	HP flexible hose assembly - 1"	3
21	PM291	3-way divertor	1
22	CT200M075P150	CT200 tipper valve assembly	1
23	OP87/6/60/HP	XHP flexible hose assembly - ¾"	1
24	V011250H	Relief cartridge	1
25	PM478	Filter cartridge	1
26	AV24*	Tipper air control kit (AV241 hoist only/AV242 hoist & PTO)	1
27	OP87/6/48/HP	XHP flexible hose assembly - ¾"	1
28	NR1663	Bulkhead connector - ¾"	1
29	OP87/6/84/HP	XHP flexible hose assembly - ¾"	1
30	QDC075F/W	Quick release coupling - ¾" female	1
31	QDC100F/W	Quick release coupling - 1" female	1
32	QDC100F	Quick release coupling - 1" male	1
33	NR611/41	Adaptor - 1" to 1½" BSP	2
34	DPP45K/SC	Dowty seal - 1½"	2

PKS Pump Kit *			
Item No.	Part No.	Description	Qty
8	NR1588	1½" push-on adapton - 45 degree	1
9	EBA09022	Bent axis piston pump	1
11	NR611/42	Adaptor ¾" - ¾" BSP	1
12	DPP45F/SC	Dowty seal - ¾"	1



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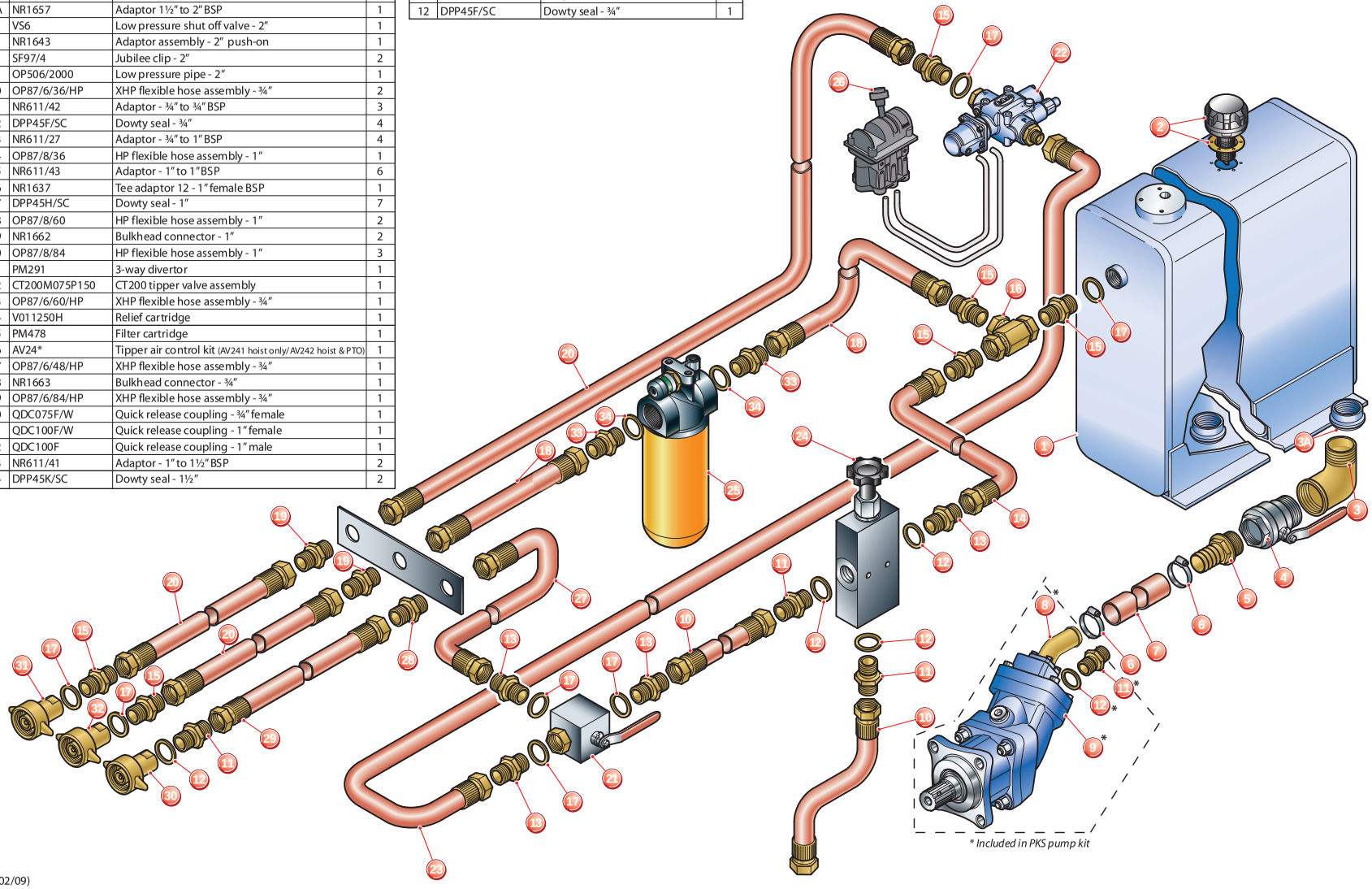
Hydraulic Kit Solutions

Hydraulic Kit Solutions

Standard Walking Floor/Tipper Kit Hydraulic Layout (2" SUCTION LINE)

Parts List for Walking Floor/Tipper Kit			
Item No.	Part No.	Description	Qty
1	OT******	Oil tank (subject to kit specification)	1
2	AF83	Filler breather assembly	1
3	NR1642	Low pressure elbow - 2"	1
3A	NR1657	Adaptor 1½" to 2" BSP	1
4	VS6	Low pressure shut off valve - 2"	1
5	NR1643	Adaptor assembly - 2" push-on	1
6	SF97/4	Jubilee clip - 2"	2
7	OP506/2000	Low pressure pipe - 2"	1
10	OP87/6/36/HP	XHP flexible hose assembly - ¾"	2
11	NR611/42	Adaptor - ¾" to ¾" BSP	3
12	DPP45F/SC	Dowty seal - ¾"	4
13	NR611/27	Adaptor - ¾" to 1" BSP	4
14	OP87/8/36	HP flexible hose assembly - 1"	1
15	NR611/43	Adaptor - 1" to 1" BSP	6
16	NR1637	Tee adaptor 12 - 1" female BSP	1
17	DPP45H/SC	Dowty seal - 1"	7
18	OP87/8/60	HP flexible hose assembly - 1"	2
19	NR1662	Bulkhead connector - 1"	2
20	OP87/8/84	HP flexible hose assembly - 1"	3
21	PM291	3-way divertor	1
22	CT200M075P150	CT200 tipper valve assembly	1
23	OP87/6/60/HP	XHP flexible hose assembly - ¾"	1
24	V011250H	Relief cartridge	1
25	PM478	Filter cartridge	1
26	AV24*	Tipper air control kit (AV241 hoist only/ AV242 hoist & PTO)	1
27	OP87/6/48/HP	XHP flexible hose assembly - ¾"	1
28	NR1663	Bulkhead connector - ¾"	1
29	OP87/6/84/HP	XHP flexible hose assembly - ¾"	1
30	QDC075F/W	Quick release coupling - ¾" female	1
31	QDC100F/W	Quick release coupling - 1" female	1
32	QDC100F	Quick release coupling - 1" male	1
33	NR611/41	Adaptor - 1" to 1½" BSP	2
34	DPP45K/SC	Dowty seal - 1½"	2

PKS Pump Kit *			
Item No.	Part No.	Description	Qty
8	NR1590	2" push-on adapton - 45 degree	1
9	EBA09022	Bent axis piston pump	1
11	NR611/42	Adaptor ¾" - ¾" BSP	1
12	DPP45F/SC	Dowty seal - ¾"	1



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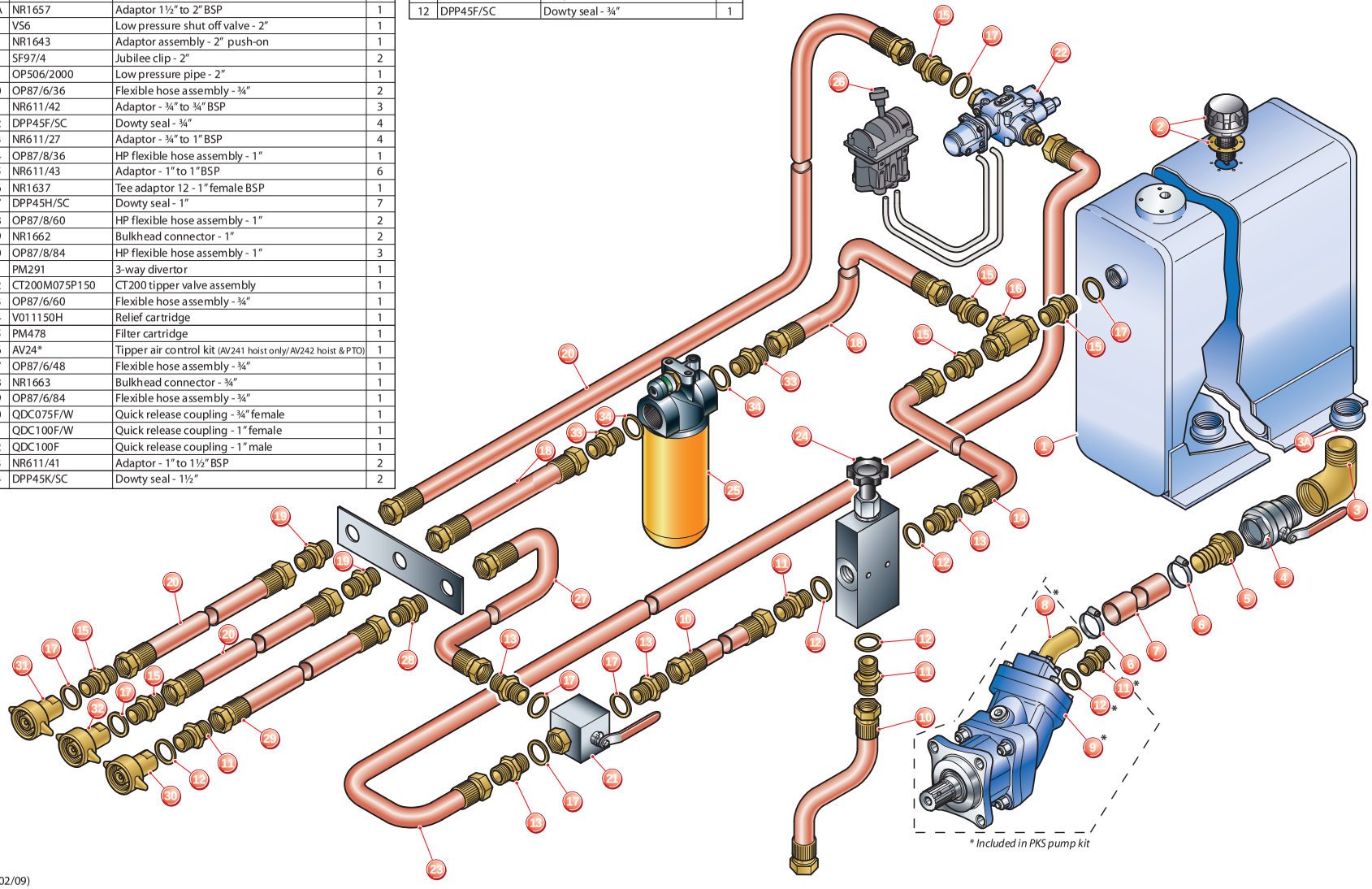
Hydraulic Kit Solutions

Hydraulic Kit Solutions

Standard Ejector/Tipper Kit Hydraulic Layout (2" SUCTION LINE)

Parts List for Ejector/Tipper Kit			
Item No.	Part No.	Description	Qty
1	OT******	Oil tank (subject to kit specification)	1
2	AF83	Filler breather assembly	1
3	NR1642	Low pressure elbow - 2"	1
3A	NR1657	Adaptor 1½" to 2" BSP	1
4	VS6	Low pressure shut off valve - 2"	1
5	NR1643	Adaptor assembly - 2" push-on	1
6	SF97/4	Jubilee clip - 2"	2
7	OP506/2000	Low pressure pipe - 2"	1
10	OP87/6/36	Flexible hose assembly - ¾"	2
11	NR611/42	Adaptor - ¾" to ¾" BSP	3
12	DPP45F/SC	Dowty seal - ¾"	4
13	NR611/27	Adaptor - ¾" to 1" BSP	4
14	OP87/8/36	HP flexible hose assembly - 1"	1
15	NR611/43	Adaptor - 1" to 1" BSP	6
16	NR1637	Tee adaptor 12 - 1" female BSP	1
17	DPP45H/SC	Dowty seal - 1"	7
18	OP87/8/60	HP flexible hose assembly - 1"	2
19	NR1662	Bulkhead connector - 1"	2
20	OP87/8/84	HP flexible hose assembly - 1"	3
21	PM291	3-way divertor	1
22	CT200M075P150	CT200 tipper valve assembly	1
23	OP87/6/60	Flexible hose assembly - ¾"	1
24	V011150H	Relief cartridge	1
25	PM478	Filter cartridge	1
26	AV24*	Tipper air control kit (AV241 hoist only/ AV242 hoist & PTO)	1
27	OP87/6/48	Flexible hose assembly - ¾"	1
28	NR1663	Bulkhead connector - ¾"	1
29	OP87/6/84	Flexible hose assembly - ¾"	1
30	QDC075F/W	Quick release coupling - ¾" female	1
31	QDC100F/W	Quick release coupling - 1" female	1
32	QDC100F	Quick release coupling - 1" male	1
33	NR611/41	Adaptor - 1" to 1½" BSP	2
34	DPP45K/SC	Dowty seal - 1½"	2

PKS Pump Kit *			
Item No.	Part No.	Description	Qty
8	NR1590	2" push-on adapton - 45 degree	1
9	EBA09022	Bent axis piston pump	1
11	NR611/42	Adaptor ¾" - ¾" BSP	1
12	DPP45F/SC	Dowty seal - ¾"	1



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Edbro
SETTING THE INDUSTRY STANDARD

Air Controls



Edbro offers a wide range of air control units with options to suit all markets.

A multi-function truck and trailer control is also available for operators wishing to control all operations with a single unit.

Hoist/PTO air controls: 6mm air fittings

Applies to the following air controls: SA2895/V2, SA2896/V2, SA2897/V2 & SA2898/V2

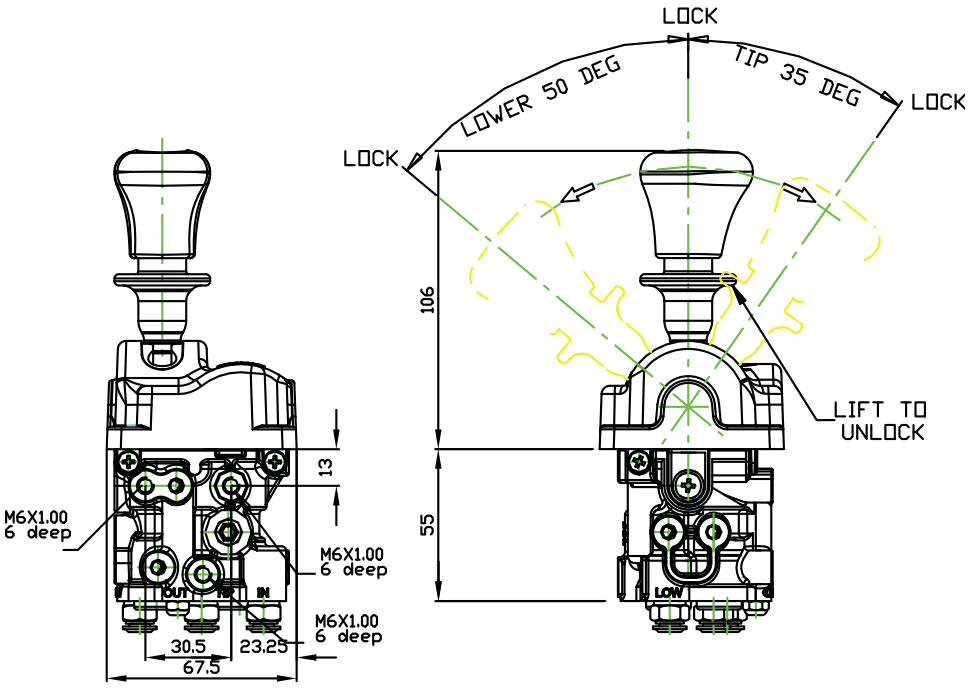
* Proportional lower control
* Compact and lightweight for easy installation
* Multiple mounting options
* Secure and easy to use push-in fittings
* Wide range of control options
* Available as valve only, or as a complete kit

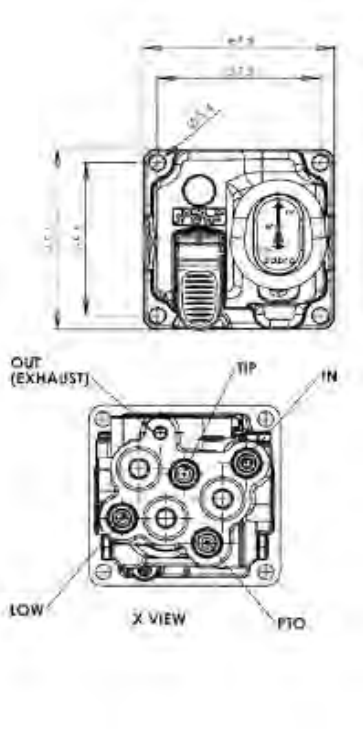
Valve part number	Hold in Tip	Hold in Low	Auto PTO	CE approved	Kit part number
SA2895/V2	Y	Y	Y	N	AV242/V2
SA2896/V2	N	Y	Y	Y	AV243/V2
SA2897/V2	Y	Y	N	N	AV244/V2
SA2898/V2	N	Y	N	Y	AV245/V2

AV kits also contain 6mm air pipe, ties, bolt kit & pipe diagram.

Specification of all hoist/PTO operating air controls:

Typical weight:	450 grams
Operating temperature range:	-45˚ to +80˚
Air condition:	Dry filtered air
Max working pressure:	12 bar
Air pipe material:	Nylon
Air pipe diameter:	6 mm
Recommended vehicle voltage:	24 volts





Note: Mounting brackets are available to mount the air control in the cab. A detailed spec sheet is available containing mounting dimensions.

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Hoist only air controls: 6mm air fittings

Applies to the following air controls: SA2894/V2 & SA2901/V2

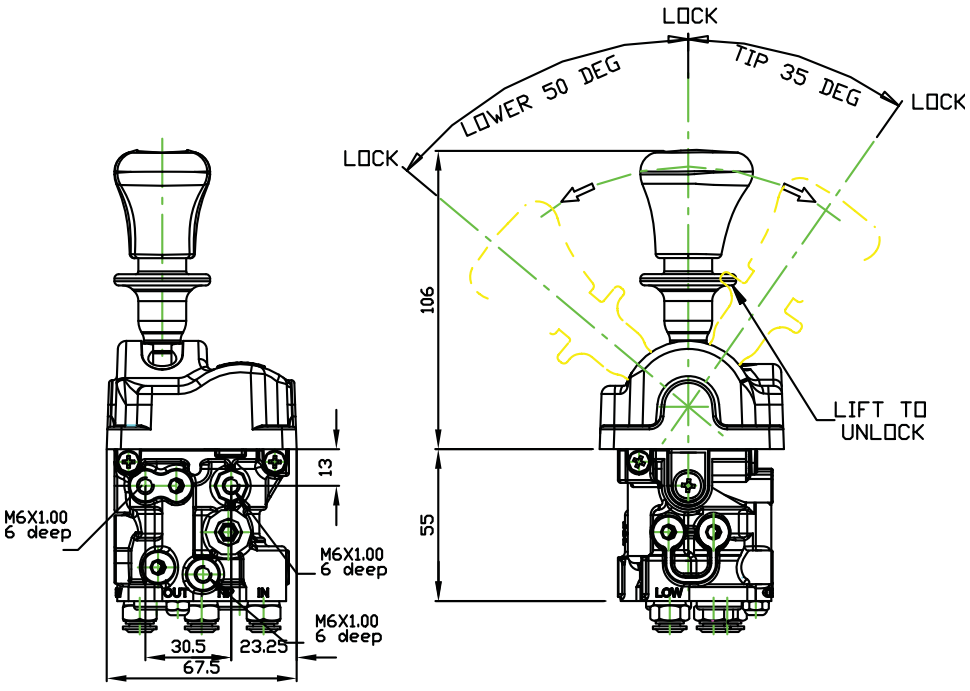
* Proportional lower control
* Compact and lightweight for easy installation
* Multiple mounting options
* Secure and easy to use push-in fittings
* Wide range of control options
* Available as valve only, or as a complete kit

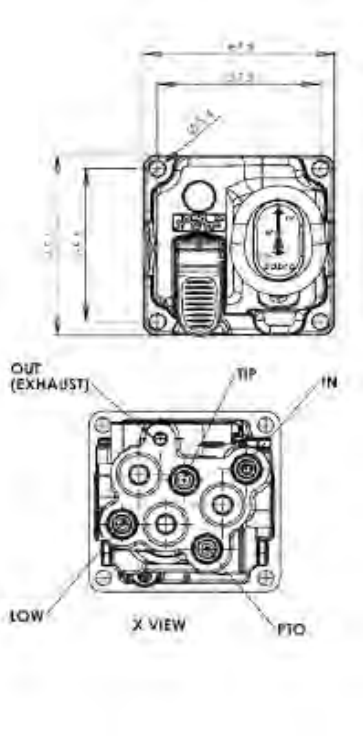
Valve part number	Hold in Tip	Hold in Low	CE approved	Kit part number
SA2894/V2	N	Y	Y	AV241/V2
SA2901/V2	Y	Y	N	AV246/V2

AV kits also contain 6mm air pipe, ties, bolt kit & pipe diagram.

Specification of all hoist/PTO operating air controls:

Typical weight:	450 grams
Operating temperature range:	-45˚ to +80˚
Air condition:	Dry filtered air
Max working pressure:	12 bar
Air pipe material:	Nylon
Air pipe diameter:	6 mm
Recommended vehicle voltage:	24 volts





Note: Mounting brackets are available to mount the air control in the cab. A detailed spec sheet is available containing mounting dimensions.

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Hoist/PTO air controls: ¼" air fittings

Applies to the following air controls: SA2902/V2, SA2941/V2, SA2942/V2 & SA2943/V2

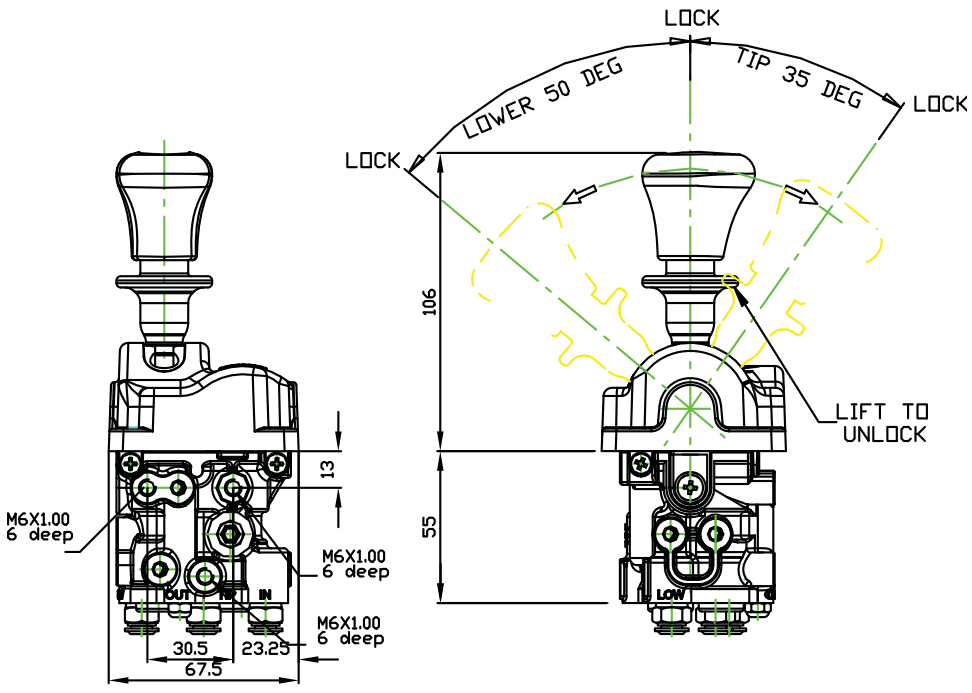
* Proportional lower control
* Compact and lightweight for easy installation
* Multiple mounting options
* Secure and easy to use push-in fittings
* Wide range of control options
* Available as valve only, or as a complete kit

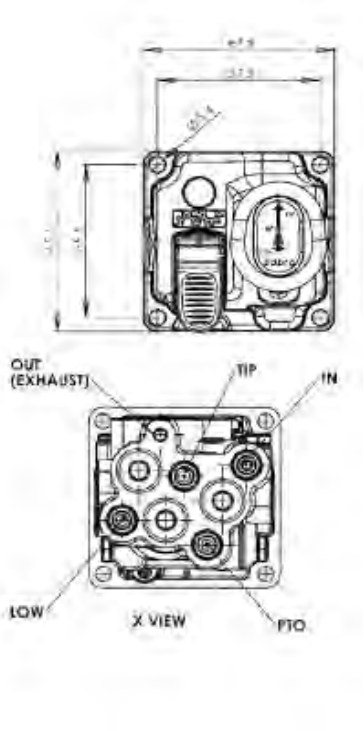
Valve part number	Hold in Tip	Hold in Low	Auto PTO	CE approved	Kit part number
SA2902/V2	Y	Y	Y	N	AV247/V2
SA2941V2	Y	Y	N	N	AV251/V2
SA2942/V2	N	Y	Y	Y	AV252/V2
SA2943/V2	N	Y	N	Y	AV253/V2

AV kits also contain ¼" air pipe (20m), ties, bolt kit & pipe diagram.

Specification of all hoist/PTO operating air controls:

Typical weight:	450 grams
Operating temperature range:	-45˚ to +80˚
Air condition:	Dry filtered air
Max working pressure:	12 bar
Air pipe material:	Nylon
Air pipe diameter:	¼"
Recommended vehicle voltage:	24 volts





Note: Mounting brackets are available to mount the air control in the cab. A detailed spec sheet is available containing mounting dimensions.

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Hoist only air controls: ¼" air fittings

Applies to the following air controls: SA2893A/V2 & SA2940/V2

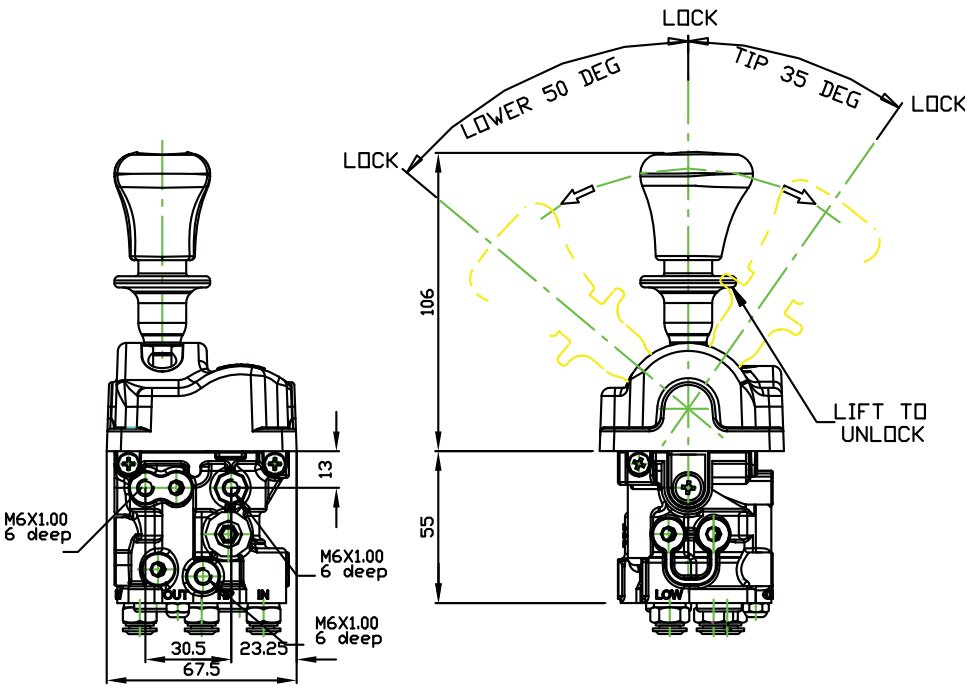
* Proportional lower control
* Compact and lightweight for easy installation
* Multiple mounting options
* Secure and easy to use push-in fittings
* Wide range of control options
* Available as valve only, or as a complete kit

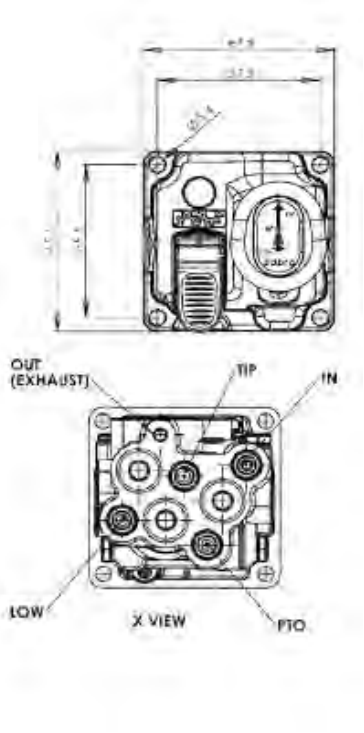
Valve part number	Hold in Tip	Hold in Low	CE approved	Kit part number
SA2893A/V2	Y	Y	N	AV240/V2
SA2940/V2	N	Y	Y	AV254/V2

AV kits also contain ¼" air pipe (20m), ties, bolt kit & pipe diagram.

Specification of all hoist/PTO operating air controls:

Typical weight:	450 grams
Operating temperature range:	-45˚ to +80˚
Air condition:	Dry filtered air
Max working pressure:	12 bar
Air pipe material:	Nylon
Air pipe diameter:	¼"
Recommended vehicle voltage:	24 volts





Note: Mounting brackets are available to mount the air control in the cab. A detailed spec sheet is available containing mounting dimensions.

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

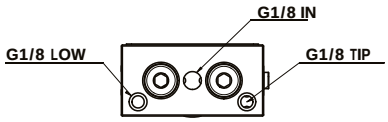
Pneumatic Proportional Control Switch - OB-A3



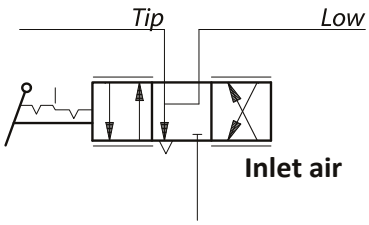
OB-A3

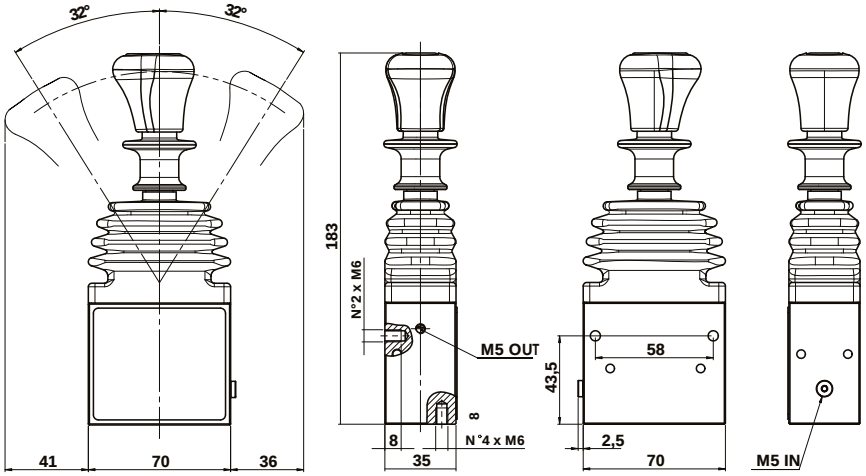
- Compact Size
- Fully proportional
- Auxillary switch available - Part No: OB-A3-NA
- G1/8" x 6mm Push-in Air fitting supplied separately order AF38/V2 x3

Lever Return	Pressure values Min. Bar	Pressure values Max. Bar	Temperature Min.	Temperature Max.
Manual (lockable in tip and lower - Non CE approved version)	5	12	-30	+80



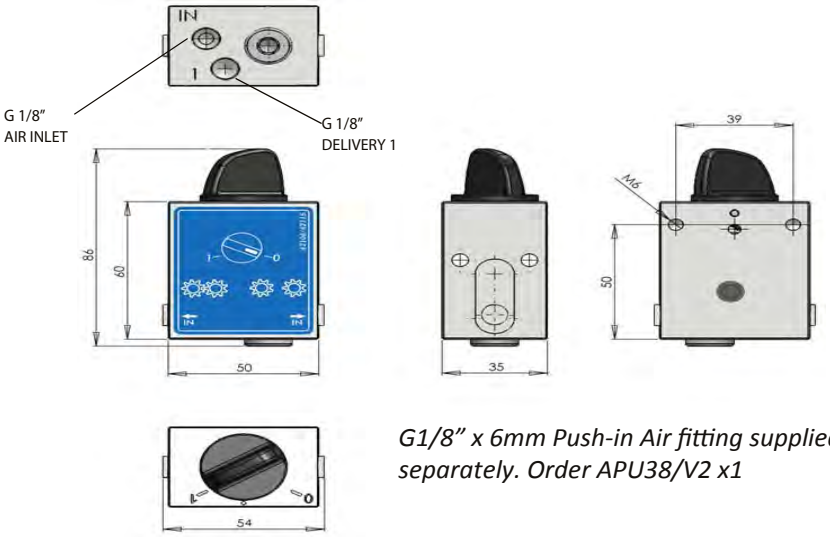
Functional diagram





OB-A3-NA (3 way & 2 position pneumatic controls with rear ports)





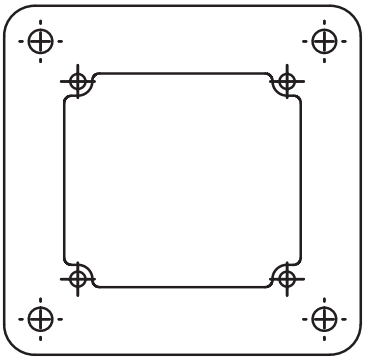
G1/8" x 6mm Push-in Air fitting supplied separately. Order APU38/V2 x1

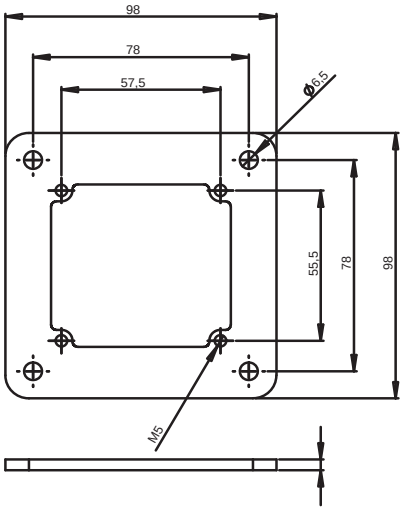
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Air control mounting brackets - SA2903/V2 - 2905/V2

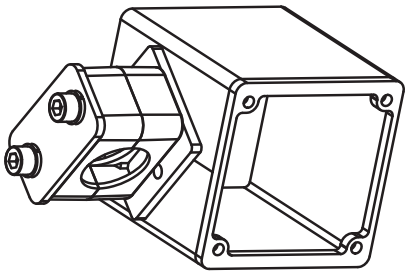
Mounting brackets for: SA2894/V2, SA2895V2, SA2896/V2, SA2897/V2, SA2898/V2 & SA2901/V2

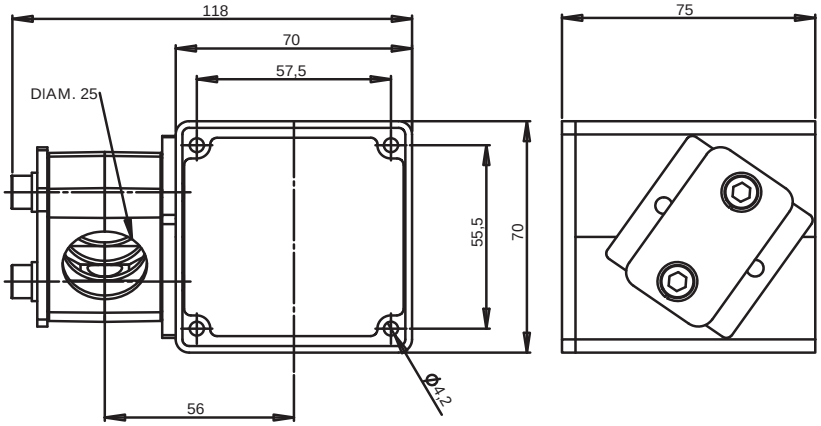
SA2903/V2 Dash Mount



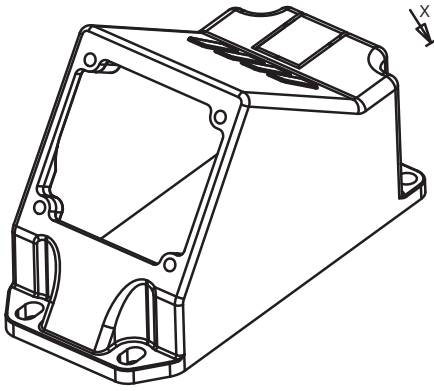


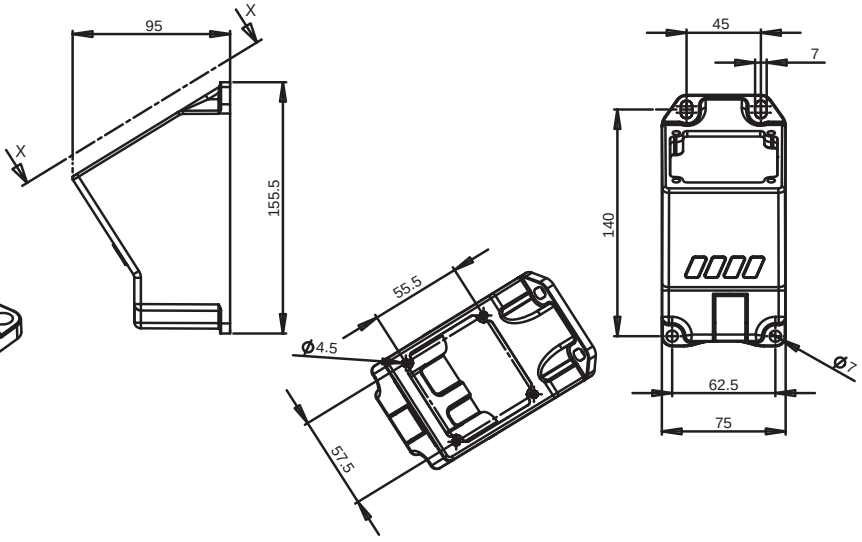
SA2904/V2 Grab handle Mount





SA2905/V2 Floor/Seat Mount





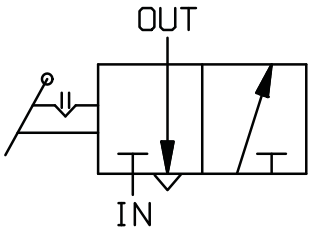
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

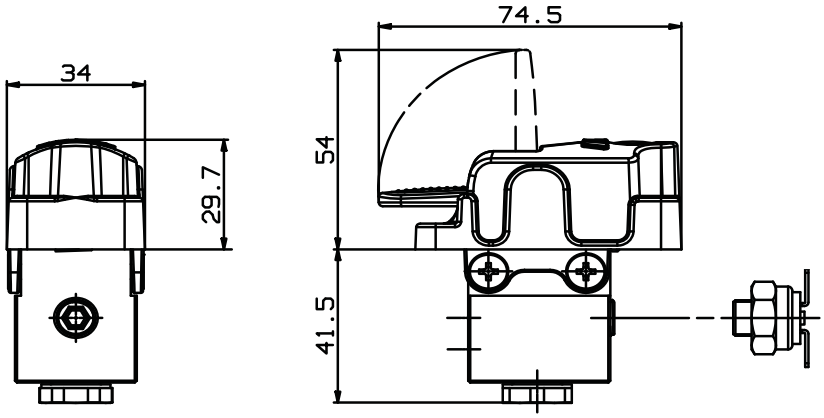
PTO Switch: - SA3061/SA3062

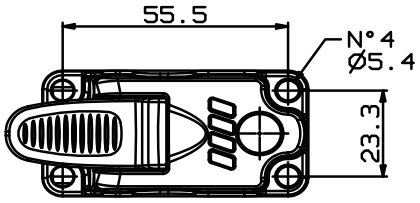


Technical features:

- Pneumatic switch 3/2
- Maximum pressure 12 bar
- Pressure switch option for auxiliary signal
- Optional LED PTO engaged signal







Product Codes:

- SA3062 With Light
- SA3061 Without Light

Bracket kit options available on request

AIR COMPRESSOR FOR PTO's 24V - PM499



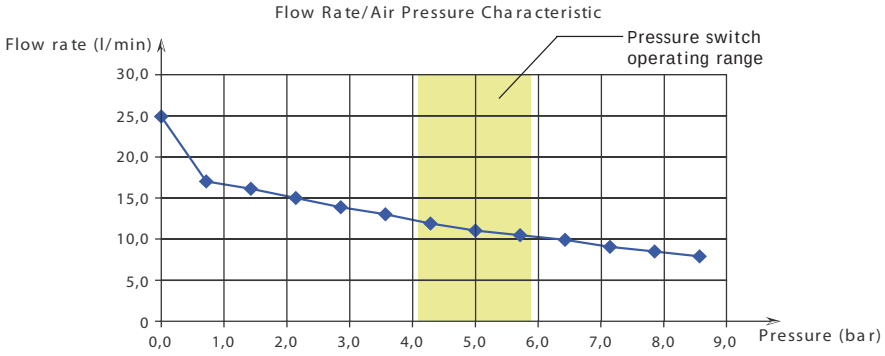
- Generates compressed air needed to pneumatically engage PTO's

- Enables the installation of pneumatic PTO's on any vehicle, leading to improved reliability of the system

- 4 mm air pipe supplied with unit

- Optional 6mm to 4mm air adaptor available (APU30)

Dimensions
260 x 240 x 75mm



OPERATING SPECIFICATION

P_{min} = 4.2 bar
P_{max} = 5.8 bar

Flow Rate = 10 l/min

150W DC electric motor
Direct coupling between motor and compressor piston

- Monobloc pneumatic circuit - no fittings reduces the likelihood of leaks

Specification	U.M.	Min	Typ	Max
Flow rate with air pressure of 5 bar	dm^3/min	10	11	12
Displacement	cm^3/rev		5,5	
Motor speed at 5.8 bar	rpm		2300	
Maximum running pressure	bar		9	
Maximum continuous working time	s		60	
Pressure switch trip pressure	bar	4,2	-	5,8
Noise level (at a distance of 1 meter)		65	68	70
Supply voltage	V		24	
Absorbed current	A	8	9	10
Average time to reach 5.8 bar	s	0,4	0,55	0,7
Mean engage time	s	0,3	0,4	0,5
Overall dimensions	mm		260x75x240	
Weight	kg		2,65	

Bodybuilder must inform user to verify pneumatic seals annually or after every 500 hours of PTO operation

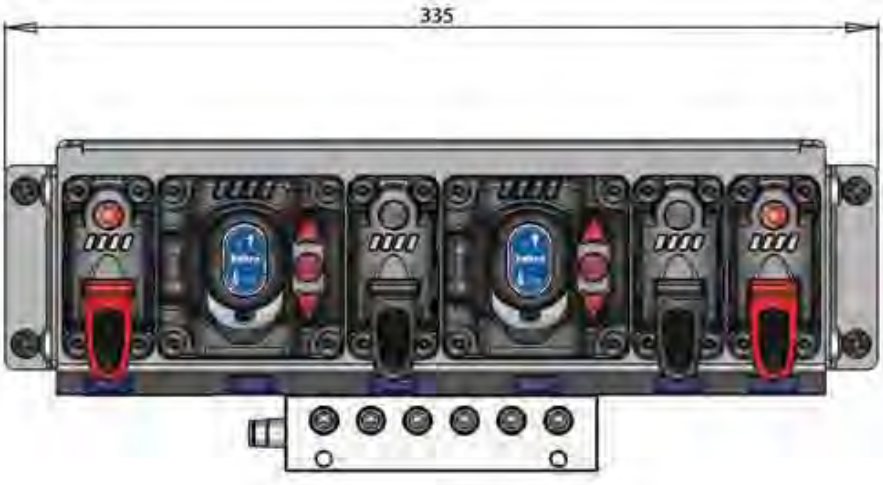
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

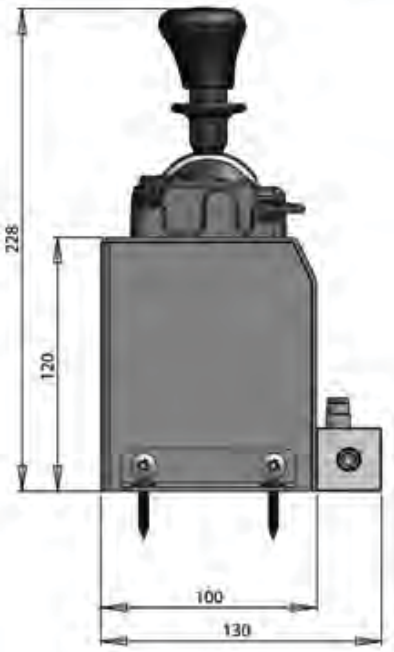
Truck & Dog Air Control Unit - PM605

* Air control unit for truck & dog dual application
* Ready to fit unit including air pipe, brackets and manifold
* Weight - 3.4KG



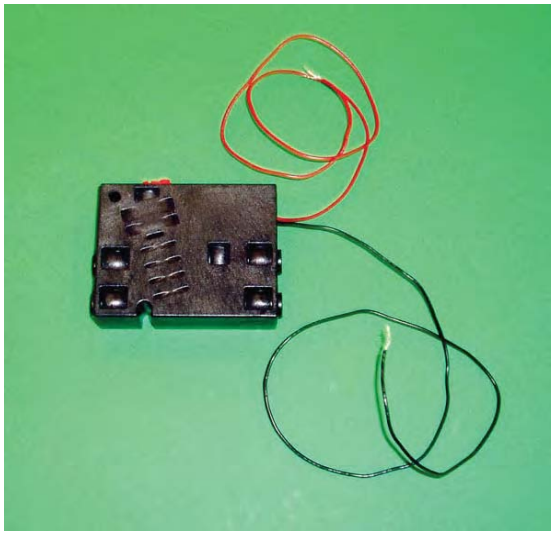
Dimensions: *all dimensions given in mm*



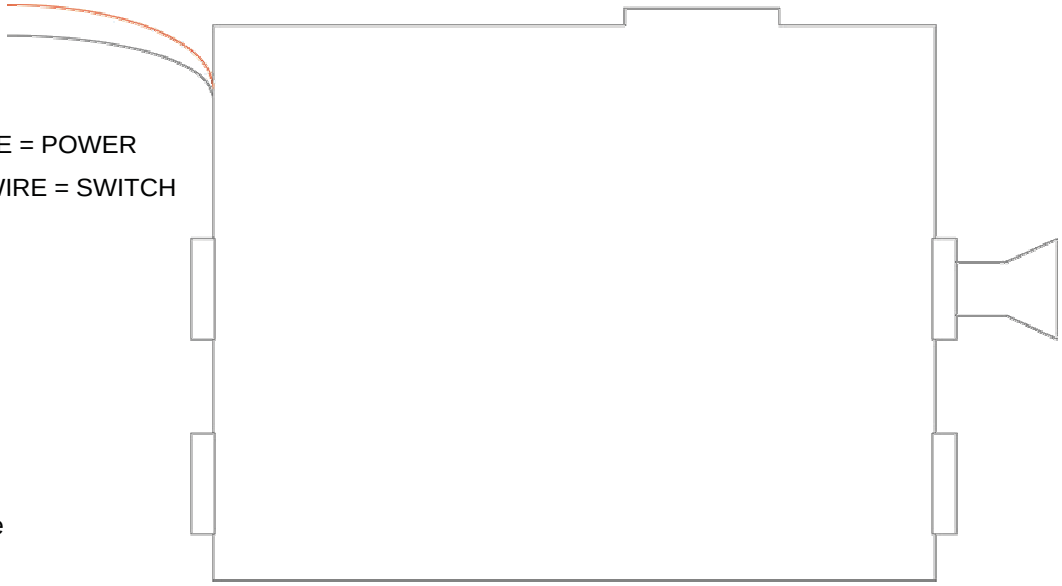


All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Handbrake Interlock Kit - ELA257



- Directional air solenoid valve
- Voltage: 24v DC
- Weight: 95g
- 4 x 6 mm pilot ports
- Optional 6mm to 4mm adaptor is available (APU30)
- Min pressure: 2 bar
- Max pressure: 8.3 bar
- Conforms to DIN 40 050 and DIN 43650 specifications



RED WIRE = POWER

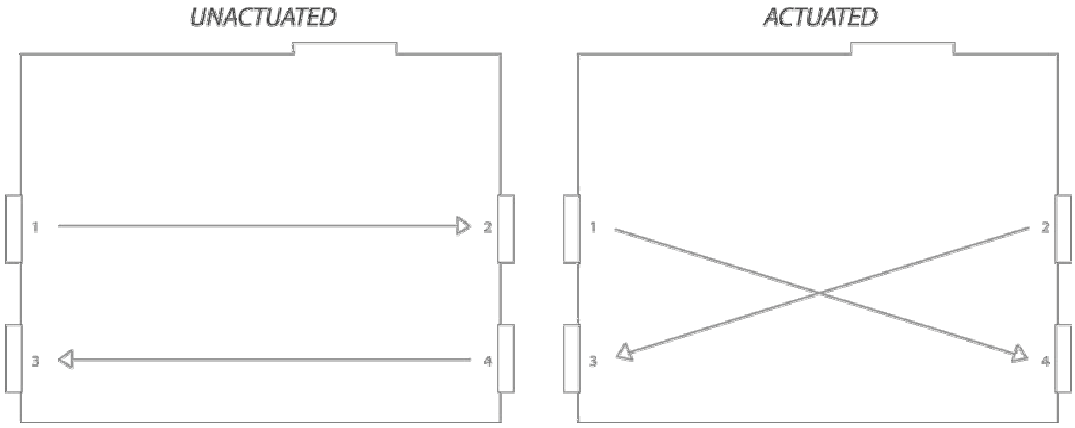
BLACK WIRE = SWITCH

Kit contents:

1 x EL854 solenoid valve

1 x APP3 6mm plug

Optional APU30 6mm to 4mm adaptor available

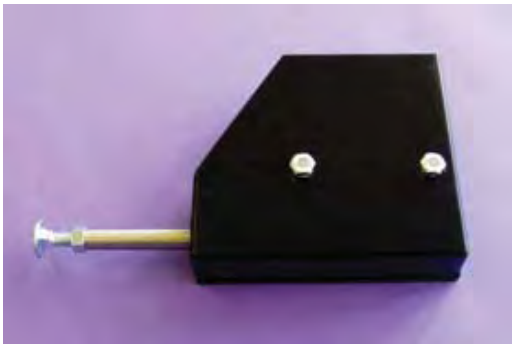


All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Knock-Off Valve - OV340H

Pneumatic knock-off valve designed to restrict end of stroke tipping and control angle of tip.

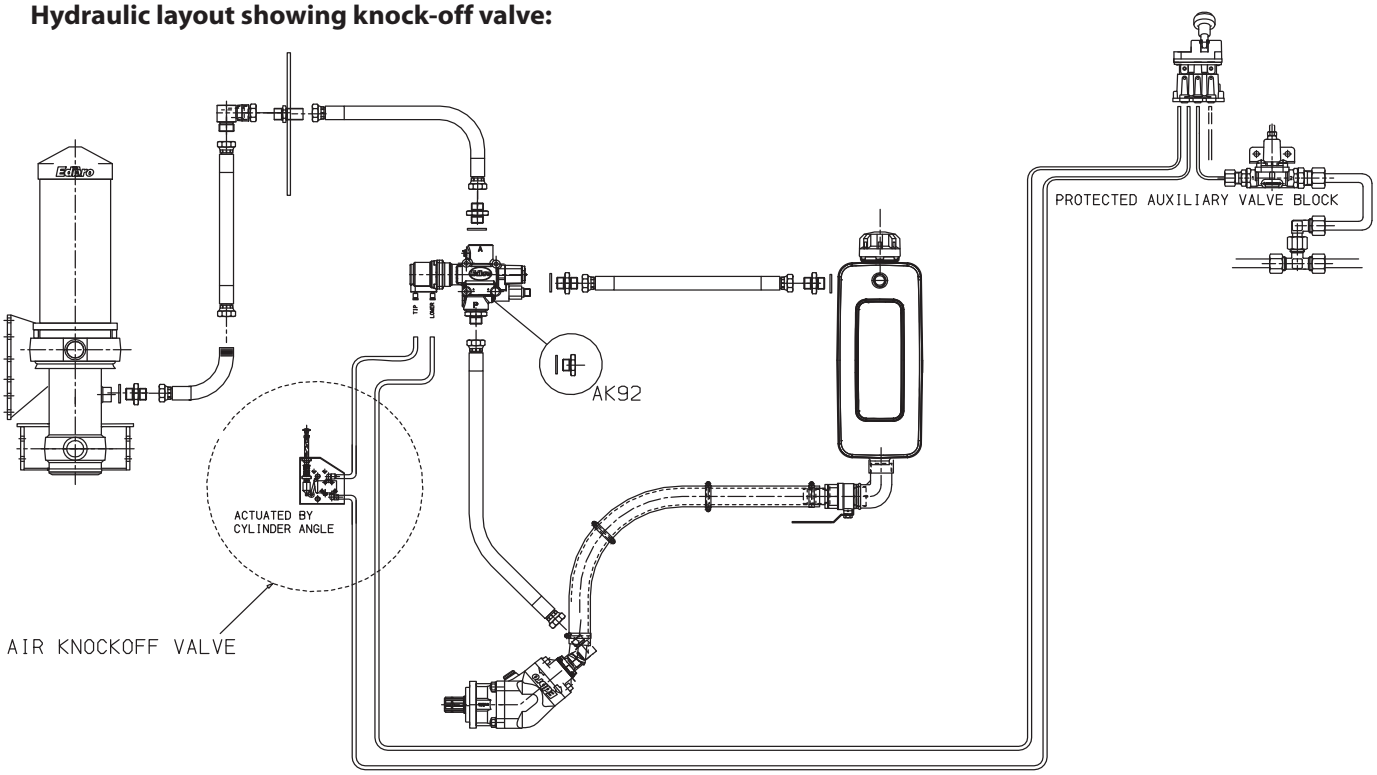




Part numbers:

OV340HA	¼" push-in air fitting
OV340HM	6mm push-in air fitting

Hydraulic layout showing knock-off valve:



All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

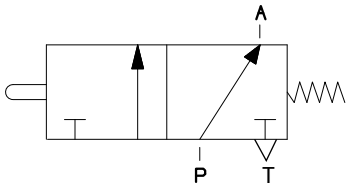
Knock Off Valve: PM629

The valve is designed to cut off the air flow to the tipping valve and therefore stop movement of the cylinder at the desired position.

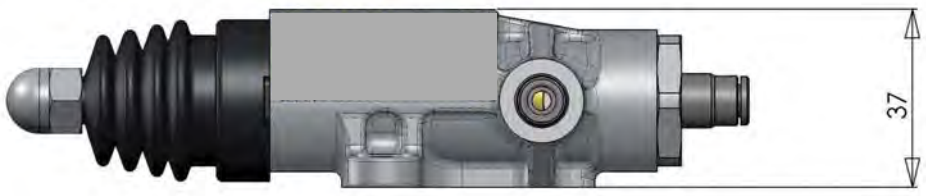
This system can be used as alternative to the end of stroke cable connected to the spool of the tipping valve.

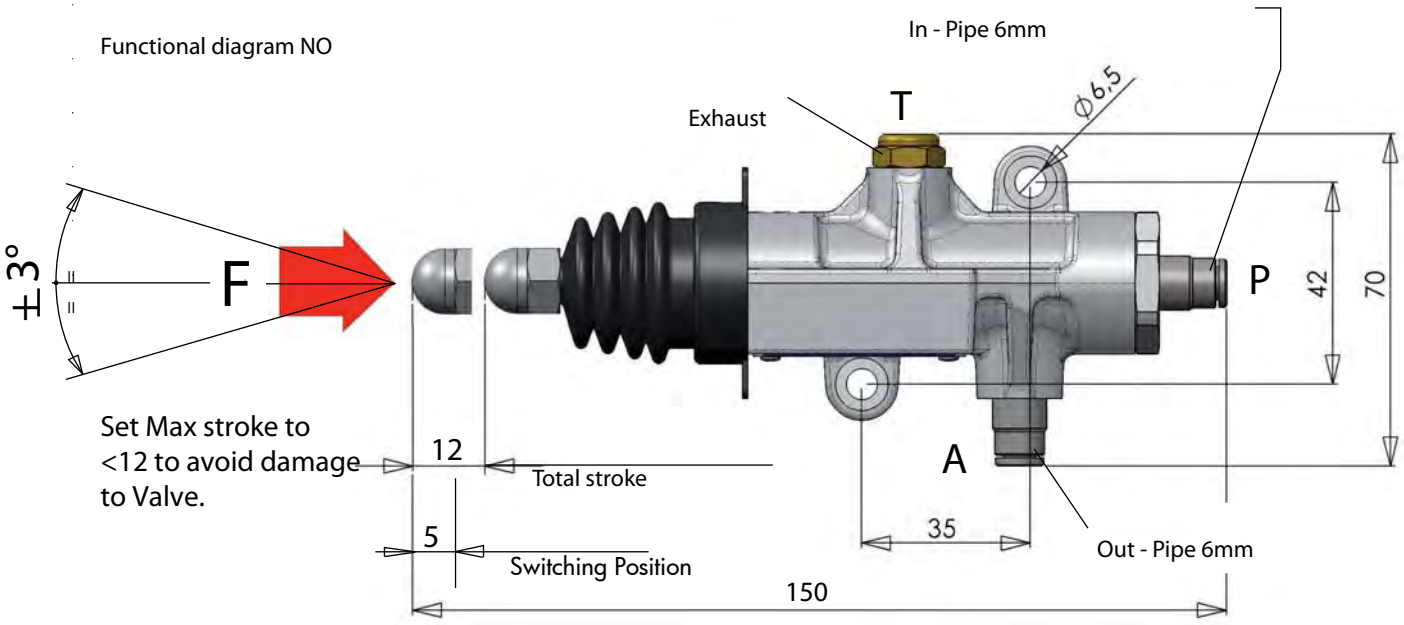
Max. pressure: 12 bar

Service temperature: -40° +140°C

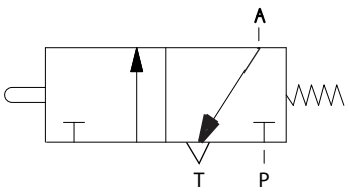


Functional diagram NO

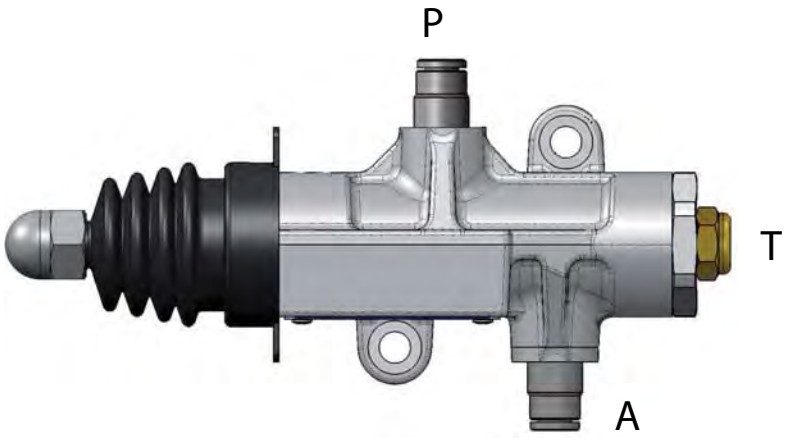




ALTERNATIVE USE: if the air ports are inverted the switch will work as NC (Normally Closed).



Functional diagram NC



All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Edbro
SETTING THE INDUSTRY STANDARD

Hydraulic Valves

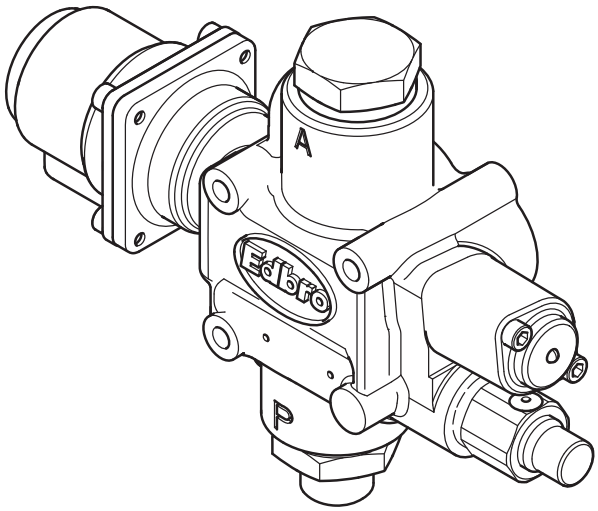


Edbro provides an extensive range of highly engineered hydraulic control valves. Built to last even in the most severe operating conditions, Edbro products offer increased flow capacities to help operators reduce tipping cycle times across their fleet.

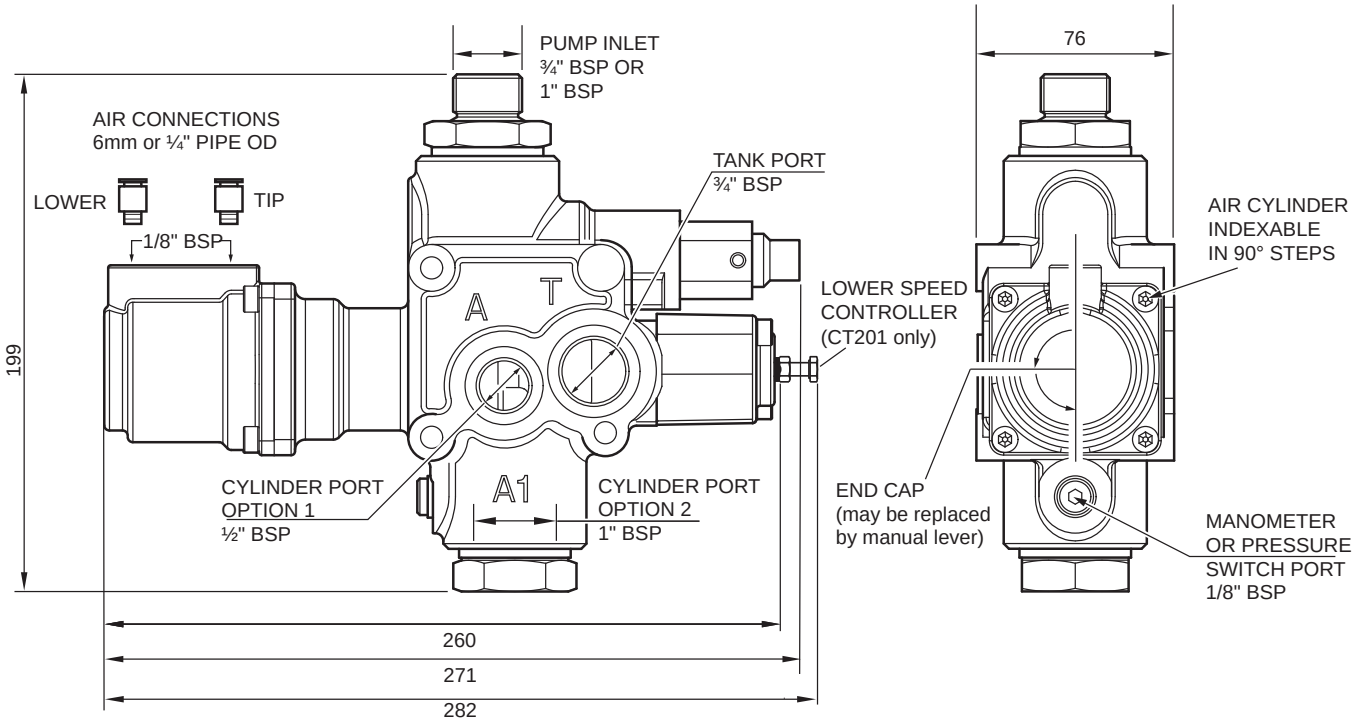
The latest CT201 valve from Edbro is lightweight and compact whilst still providing excellent control, high flow rates and still bearing the famous Edbro 'fit and forget' functionality.

Edbro also offers various types of directional control valves, overload valves, diversion valves and knock off valves to suit any tipper setup.

Hydraulic Control Valve for Tipper Applications - CT200/CT201



- **Fully proportional - excellent lowering control when loaded**
- **No system filtration required**
- **High flow capacity for reduced cycle times**
- **Compact and lightweight**
- **Interchangeable with previous VT valve range**
- **Multiple mounting options**
- **Pressure switch point provided**
- **Single pressure or two pressure relief valve cartridges available**
- **CT201 with adjustable lowering speed is available**



Part Number		Pump Inlet	Pressure (Bar)
CT200			P
CT201 (with adjustable lower speed)			
	M = 6mm air E = ¼" mm air	075 = ¾" BSP 100 = 1" BSP	90, 120, 135, 150, 165, 175, 200, 220, 250 000 No cartridge fitted

(Mounting bolts and face O-rings supplied with each valve)

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

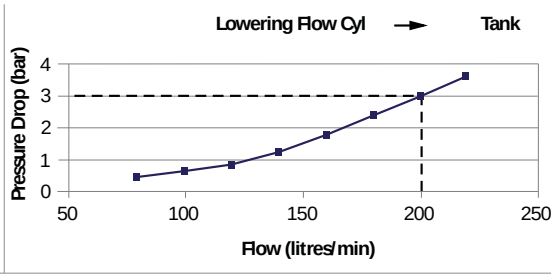
Hydraulic Control Valve for Tipper Applications - CT200/CT201

OPTIONS

Relief Valves (Single Pressure)	VC110 ☐☐H 090, 120, 135, 150, 165, 175, 200 bar		VC112 ☐☐H 220 - 250 bar
Relief Valves (Two Pressure)	VC115 H 150 - 220 bar adjustable VC116 H 150 - 250 bar adjustable		
Manual Lever (Replaces End Cap)	Spring return to neutral Available in vertical (RLA72) or horizontal (RLA73) versions.		
Remote Mounting Kit (Kits Include Plug for Port A)	Port A1 Pipe Connection	Port T Pipe Connection	Kit Part Number
	3/4" BSP	3/4" BSP	AK91
	1" BSP	1" BSP	AK92
Pressure Switch	1/8" BSP Body Raised Warning Kit (switch + washer + cover + light + buzzer + wiring)		SA2924
Port P Pump Inlet Elbow Adaptor	3/4" BSP		NR627
	1" BSP		NR634
Port A1 Outlet Adaptors for Tank Mounting	Pipe Connection	Straight	+ Elbow
	3/4" BSP	NR611/27	NR627
	1" BSP	NR611/43	NR634

PERFORMANCE

Max. flow from pump	180l/min
Rated return flow to tank (see graph)	200l/min
Maximum relief valve pressure	250 bar
Maximum peak pressure	350 bar
Minimum air pressure	6 bar
Mass	6 kg

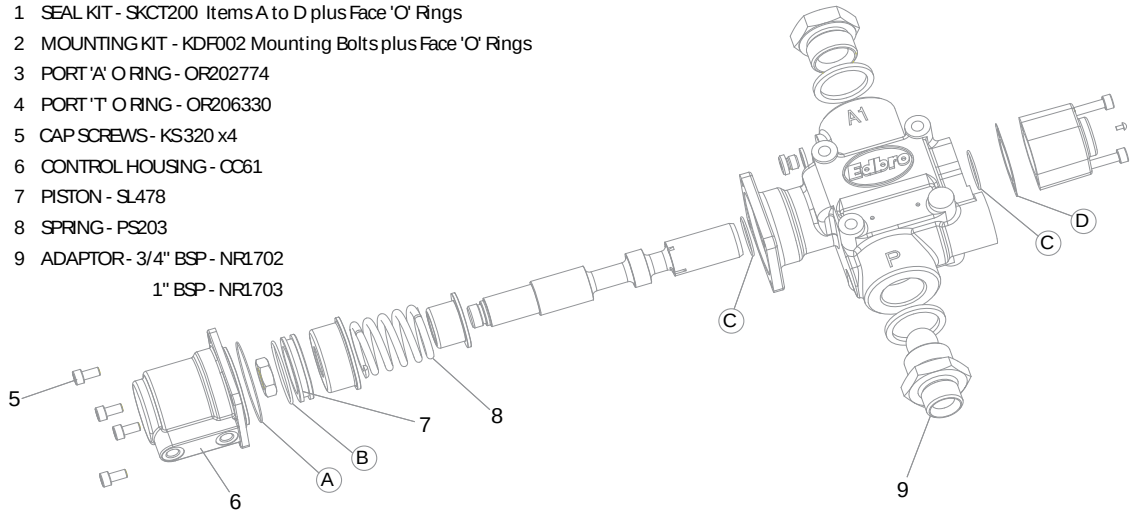


OIL & FILTRATION

- This valve is designed for tipper systems without filtration.
- The oil should be a good quality hydraulic oil to ISO 6743/4 HM32 for -15 to +27 C working temperature.
- For extended life or for higher duty applications, 25µm absolute return line filtration is recommended.
- Oil cleanliness to be maintained to ISO 4406 class 19/16.
- Oil should be replaced annually.

SPARES

1 SEAL KIT - SKCT200 Items A to D plus Face 'O' Rings
2 MOUNTING KIT - KDF002 Mounting Bolts plus Face 'O' Rings
3 PORT 'A' O RING - OR202774
4 PORT 'T' O RING - OR206330
5 CAP SCREWS - KS320 x4
6 CONTROL HOUSING - CC61
7 PISTON - SL478
8 SPRING - PS203
9 ADAPTOR - 3/4" BSP - NR1702
1" BSP - NR1703



All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

CT200 VALVE: Options & Accessories

Single Pressure Relief Valves
VC110xxxH & VC112xxxH

Replacement cartridges for the standard CT200 single pressure relief valve.

When ordering, use the following part numbers:

C110 H
090, 120, 135, 150, 165, 175, 200 bar

C112 H
220, 250 bar

Dual Pressure Relief Valves
VC115H & VC116H

An adjustable pressure relief valve, designed for tractor unit installations. This relief valve allows the tractor unit to be attached to a range of trailers with cylinders operating at different pressures.

The dual pressure relief valve replaces the single pressure relief valve, and is installed in the same valve fitting.

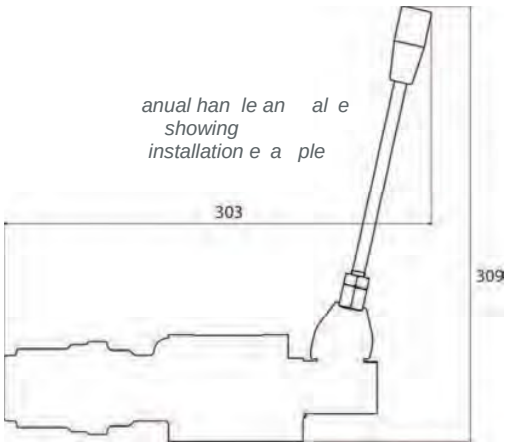
Two models are available:

C115H: 150/220 bar
C116H: 150/250 bar

Manual Handle
RLA72 90° to valve face
RLA73 In-line with valve

For applications where an air control is not possible, Edbro offer the manual handle as an additional it.

The end cap is removed and replaced by the manual handle it.

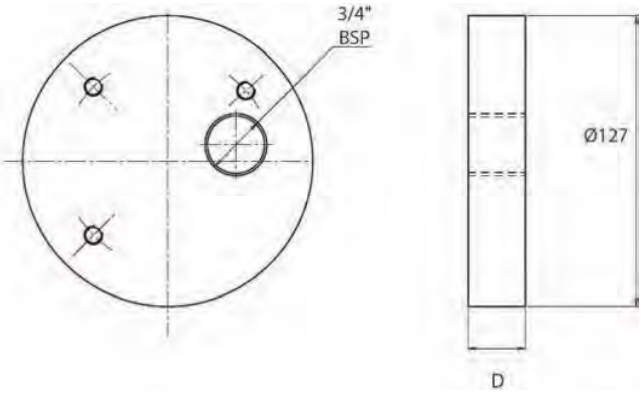


anual han le an al e showing installation e a ple

Valve Mounting Blocks
BP227 & BP227/AL

This bloc is designed for direct mounting of an Edbro CT200 valve. The bloc is available in steel or aluminium, and is to be welded directly to the oil tan .

Dimension D: Steel - 25mm
Aluminium - 30mm



Pump Inlet Adaptors
NR1969 & NR1697

Two inlet adaptors, allowing different si e pipe fittings from the pump to be used:

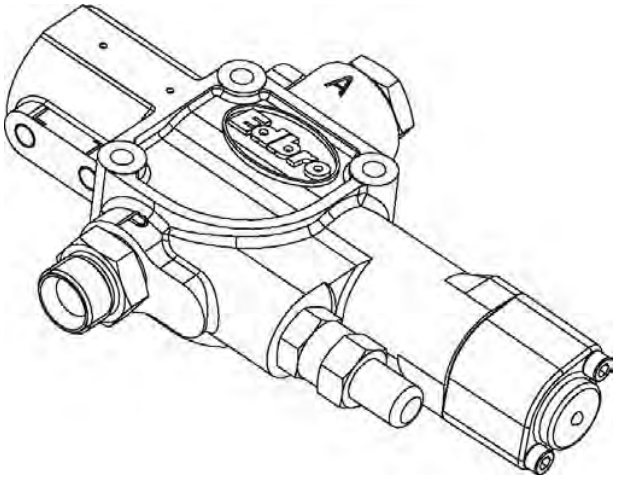
3/4 BSP Adaptor NR1702
1 BSP Adaptor NR1703

Speed Control Kit
SA2879

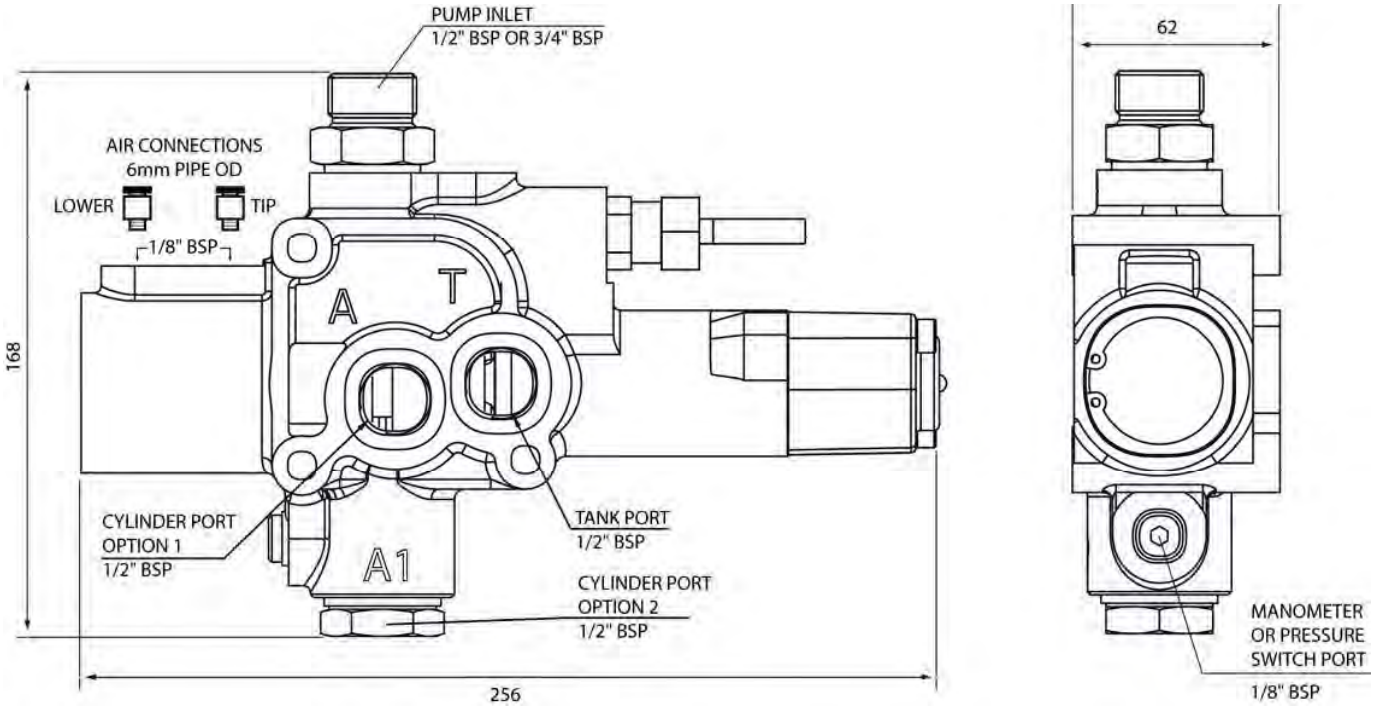
When using the valve in pneumatic configuration, this is a replacement end cap which allows the spool stro e to be adjusted using a screw.

By limiting the stro e in this way, return flow through the valve can be limited, thus increasing control over the speed of operation.

Hydraulic Control Valve for Tipper Applications - CT040/CT070



- Fully proportional—excellent lowering control when loaded
- No system filtration required
- Compact and lightweight
- Interchangeable with previous VT valve range
- Multiple mounting options
- Pressure switch point provided
- Single pressure relief cartridges available in a variety of pressure ratings



Part Number

CT040 or CT070 | M | | | | P | | | |

M = 6mm air fitting

Pump Inlet

050 = 1/2" BSP
075 = 3/4" BSP

Pressure (Bar)

120, 135, 150, 175, 200

Mounting bolts and face O-rings supplied with each valve

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

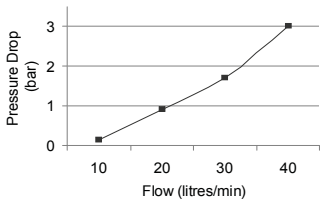
Hydraulic Control Valve for Tipper Applications - CT040/CT070

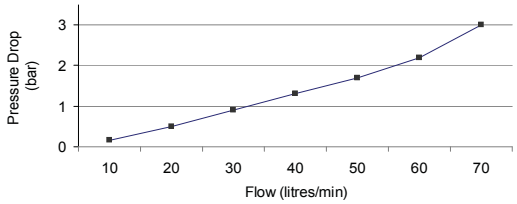
OPTIONS

Relief Valves	VC117 □□□ H 120, 135, 150, 175, 200		
Independent Mounting Kit	Port A1 Pipe Connection	Port T Pipe Connection	Kit Part Number
	3/4" BSP	3/4" BSP	AK94
	1/2" BSP	1/2" BSP	AK95
Pressure Switch	1/8" BSP Body Raised Warning Kit (switch + washer + cover + light + buzzer + wiring)	SA2924	
Port P Pump Inlet Elbow Adaptor	1/2" BSP 3/4" BSP	NR633 NR627	
Port A1 Outlet Adaptors for Tank Mounting	Pipe Connection	Straight	Elbow
	1/2" BSP	NR1700	NR633
	3/4" BSP	NR1675	NR627

PERFORMANCE

	CT070	CT040
Max. flow from pump	90l/min	90l/min
Rated return flow to tank (see graphs)	70 l/min	40 l/min
Maximum relief valve pressure	200 bar	200 bar
Maximum peak pressure	200 bar	200 bar
Minimum air pressure	6 bar	6 bar
Mass (including relief valve)	4.2kg	4.2kg



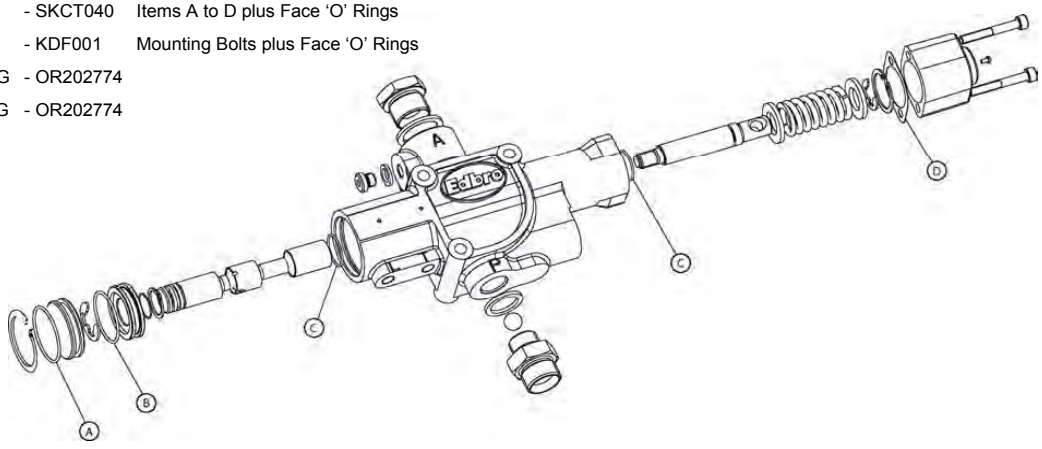


OIL & FILTRATION

- This valve is designed for tipper systems without filtration.
- The oil should be a good quality hydraulic oil to ISO 6743/4 HM2 for –15ºC to +27ºC working temperature.
- For extended life or for higher duty applications, 25μm absolute return line filtration is recommended.
- Oil Cleanliness to be maintained to ISO 4406 class 19/16.
- Oil should be replaced annually.

SPARES

1 SEAL KIT - SKCT040 Items A to D plus Face 'O' Rings
2 MOUNTING KIT - KDF001 Mounting Bolts plus Face 'O' Rings
3 PORT 'A' O RING - OR202774
4 PORT 'T' O RING - OR202774



All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Hydraulic Control Valve - Mechanically operated CT041M050P175M

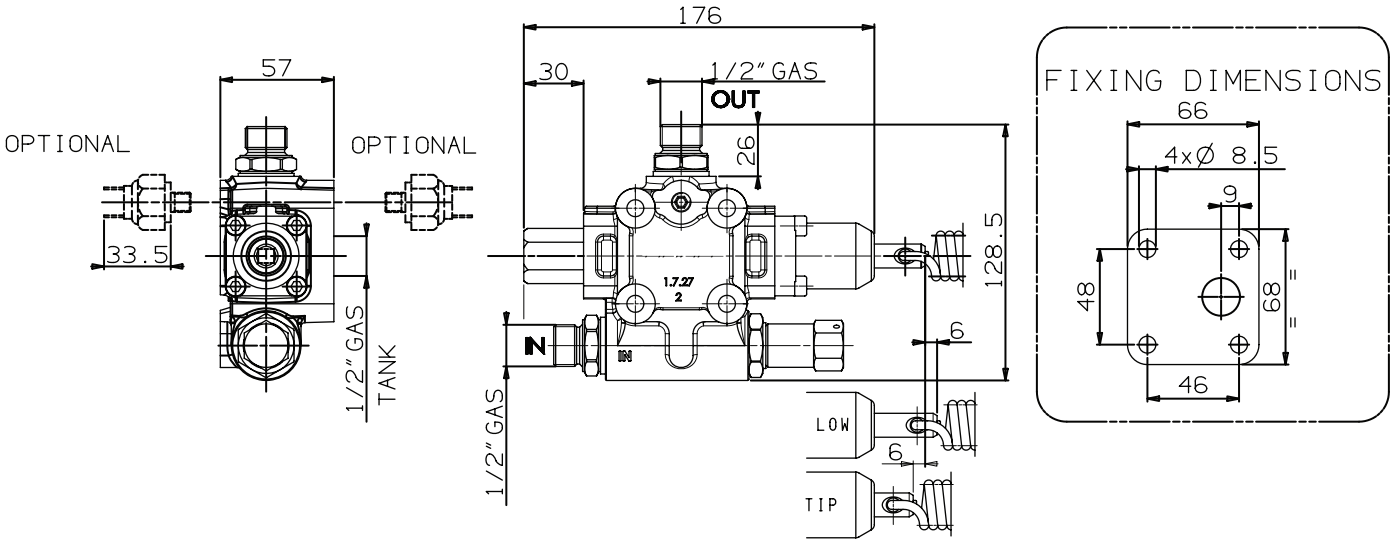
Mechanically operated proportional tipping valve to suit light duty tipper trucks.
Open center hydraulic scheme according to CE standards.



* Built-in check and adjustable relief valves
* Mechanical Direct End-of-stroke with anti-shock spring
* Ready for pressure signal switch mounting
* Galvanized body and nickel spool
* Compact size
* Guaranteed for oil temperature range -15+110 °C, viscosity range 12-100 cSt and oil filtering 25 µm.
* Rated return flow 45L/Min
* Mounting kit included

SPECIFICATION

Part Number	IN	TANK	OUT
CT041M050P175M	**G 1/2**	**G 1/2**	**G 1/2**



Rev1, March 2015

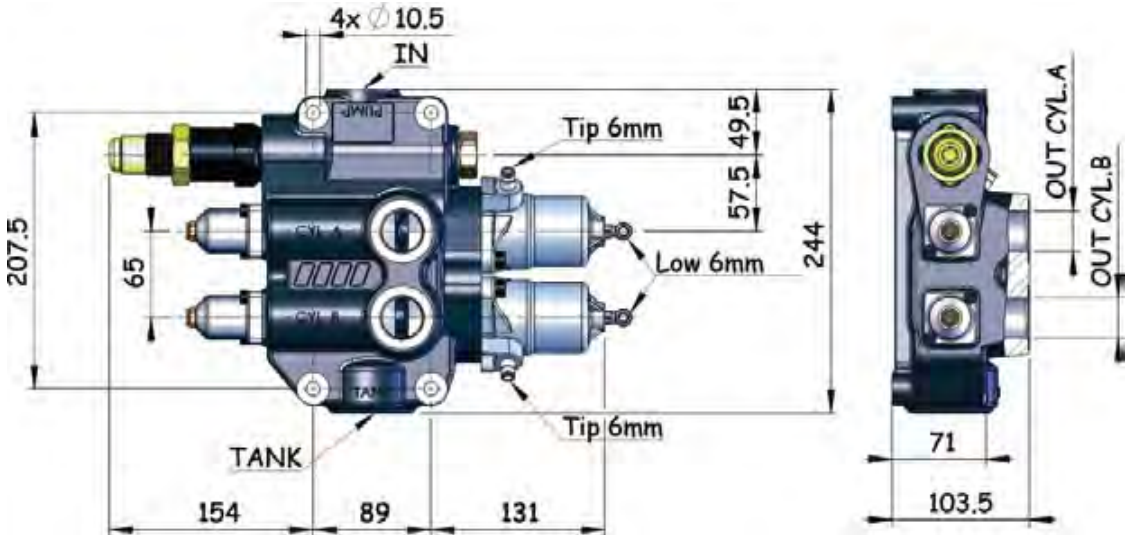
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

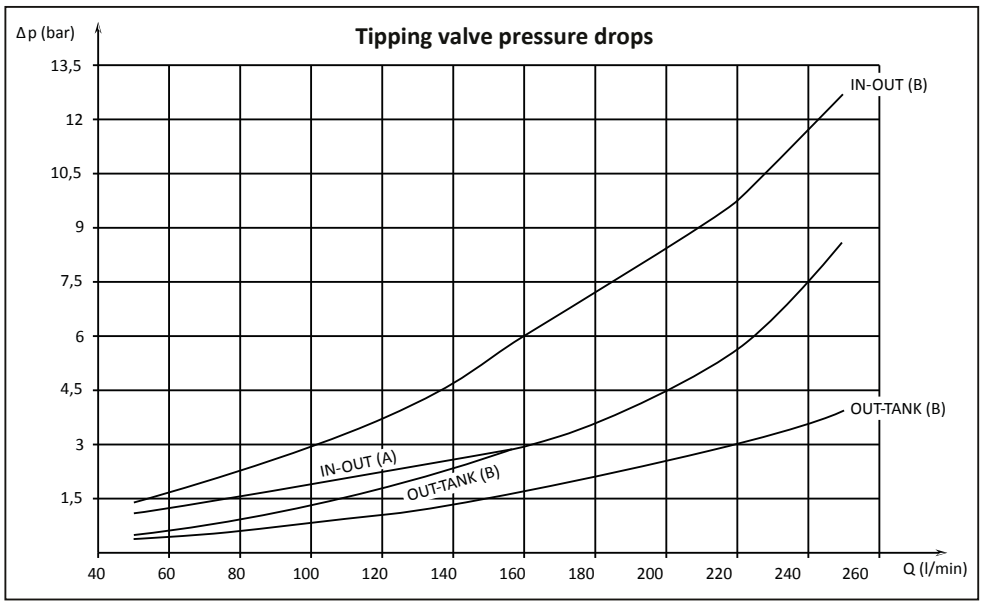
Directional Control Valve: Dual Tipper Operation - CTD250M100P140-300

* Two-spool control valve
* For applications including cranes, tippers & refuse trucks



CTD250M100P140-300 Technical Specification	
Inlet port	1" BSP
Tank port	1¼" BSP
Outlet ports (A & B)	1" BSP
Weight	25kg
Standard pressure setting	140 bar
Maximum pressure setting	300 bar
Flow rate	250 l/min





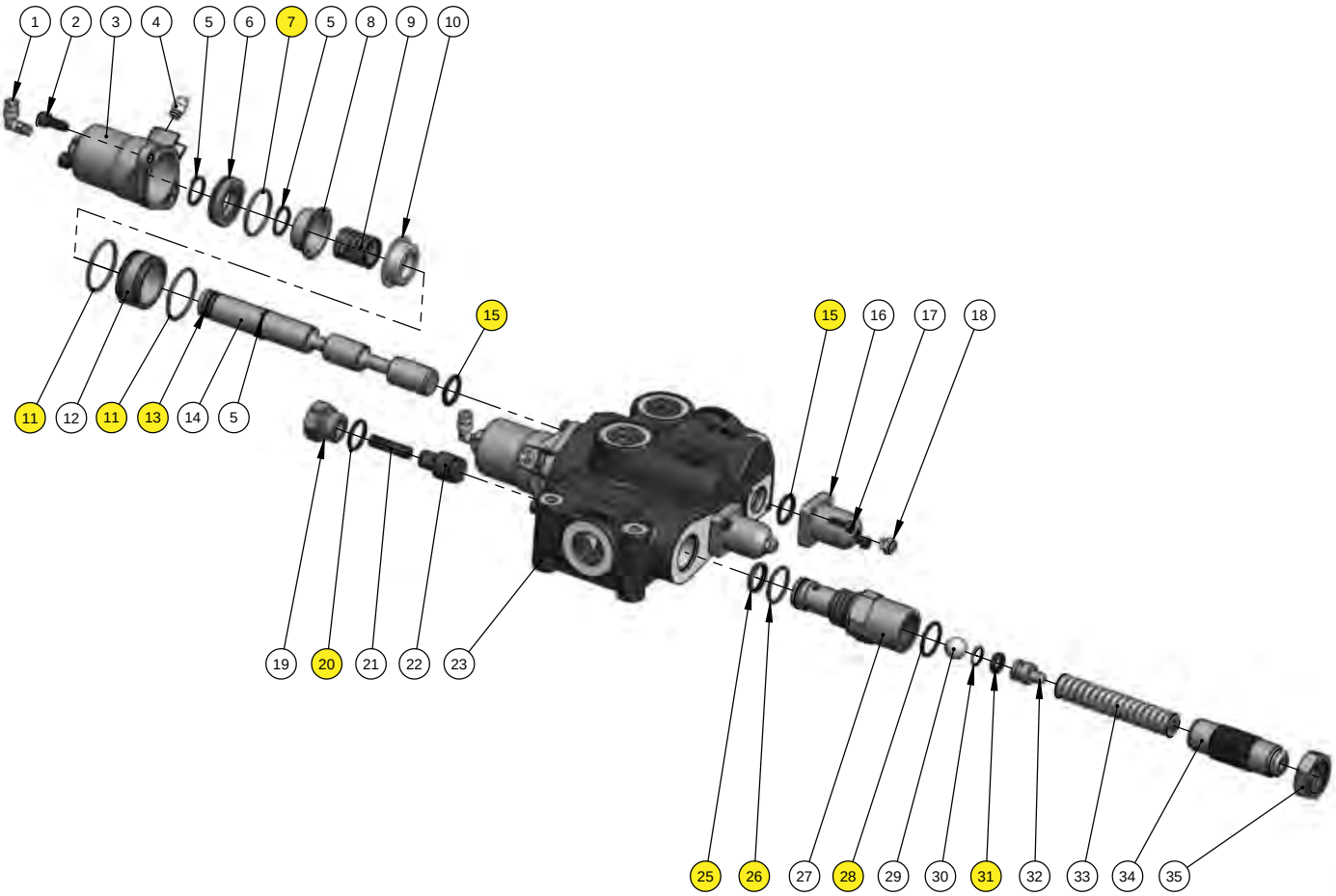
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Directional Control Valve: Dual Tipper Operation - CTD250M100P140-300

Spare Parts:

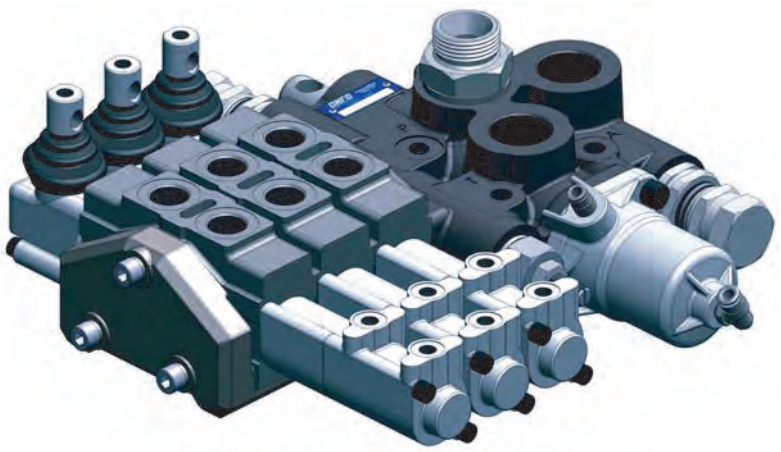
The following spare parts are available from Edbro for the CTD250M100P140-300 control valve.

* Seal kit **SKCTD250** *(contains items 7, 11, 13, 15, 20, 25, 26, 28 & 31 as shown ●)*



Valve: Multifunctional Hydraulic Valve - CTD250/60P160

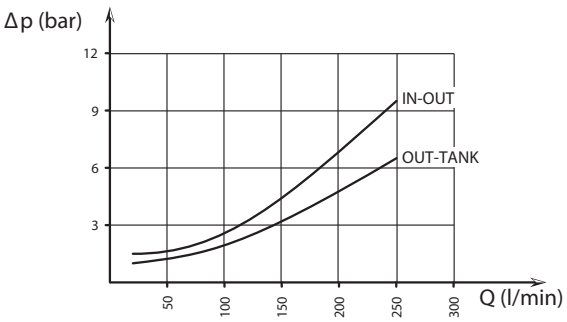
* Multifunctioanl hydraulic valve with auxillary valves with 1 double acting section
* Part no: CTD250/60P160
* Main valve flow rate = 250l/min
* Max working pressure = 320bar
* Auxiliary valve flow rate = 60l/min
* Max working pressure = 320bar



TECHNICAL FEATURES OF MAIN VALVE		
Flow rate	l/min.	250
Max. working pressure	bar	320
Working temperature		-15+110°C
Oil viscosity		12 - 100 cSt
Oil filtering		< 25 µm
Standard pressure setting	bar	160
Max. pneumatic pressure	bar	12

TECHNICAL FEATURES OF AUXILIARY VALVES		
Flow rate	l/min.	60
Max. working pressure	bar	320
Working temperature		-15+110°C
Oil viscosity		12 - 100 cSt
Oil filtering		< 25 µm
Max. pneumatic pressure	bar	12

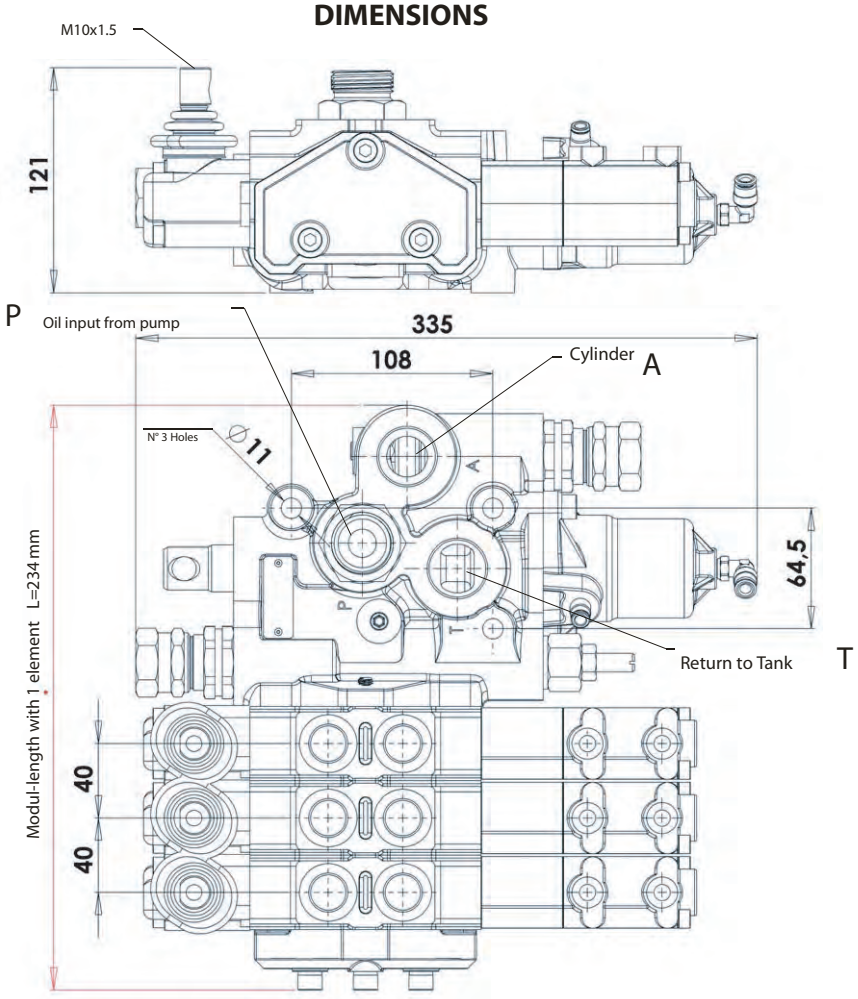
Tipping valve pressure drops

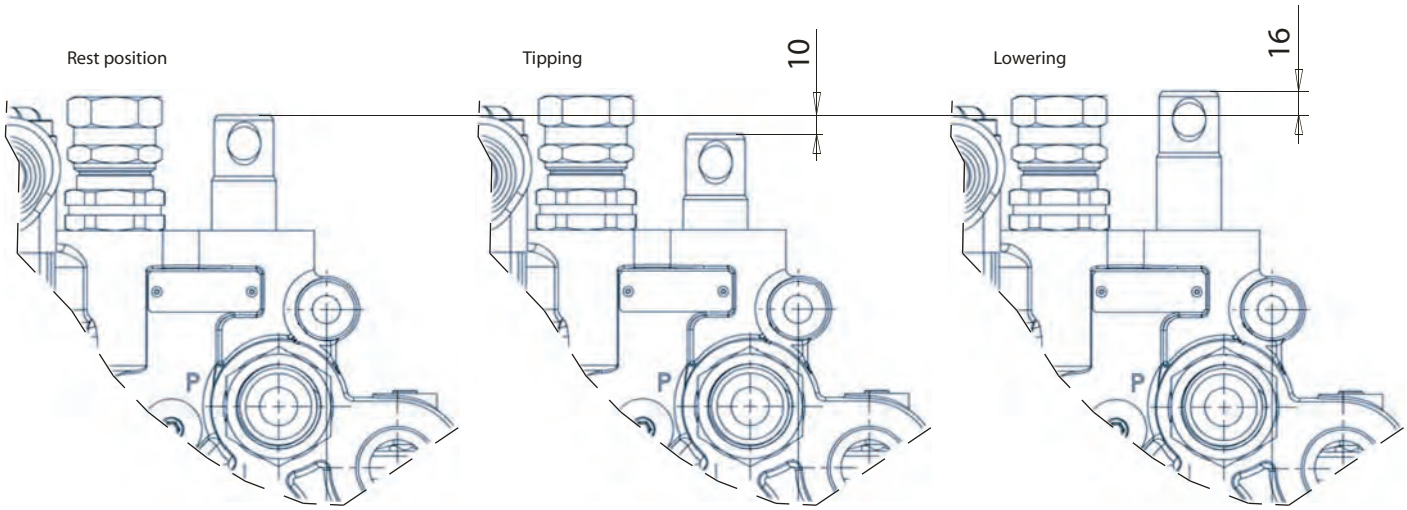


All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Valve: Multifunctional Hydraulic Valve

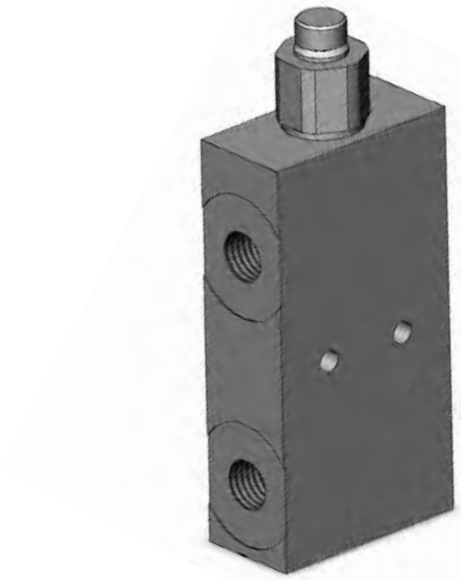
DIMENSIONS

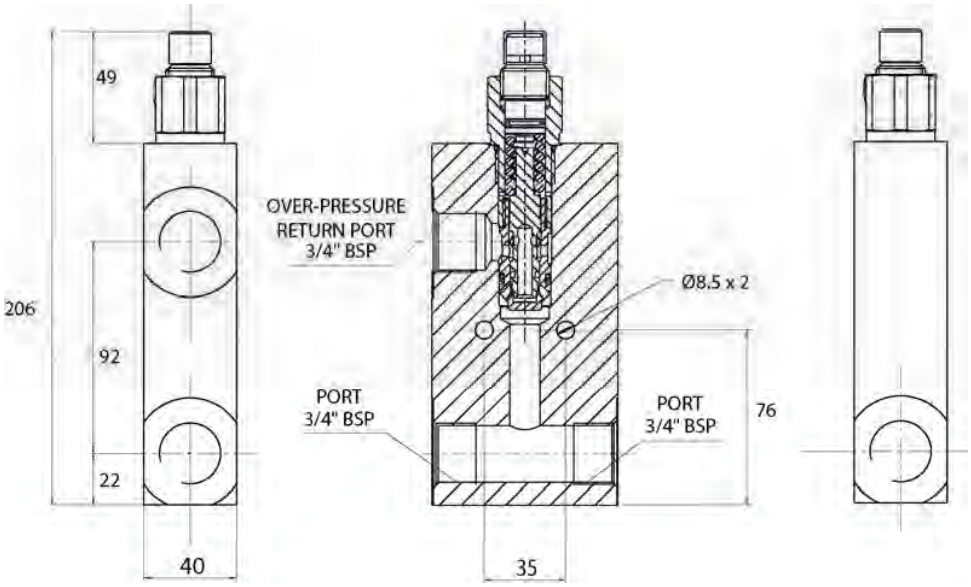




All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Valve: Hydraulic Overload Valve - VO11***





SPECIFICATION

Weight: 3.6kg including cartridge

Overload Pressure: Available in 90, 120, 135, 150, 165, 175, 200, 220, 250, 330 bar

Cartridge: Interchangeable with CT200 valve

Material: Zinc plated steel body

Replacement cartridges:

- VC110xxxH where xxx is the pressure up to 200 bar.
- VC112xxxH where xxx is 220 or 330 bar.

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

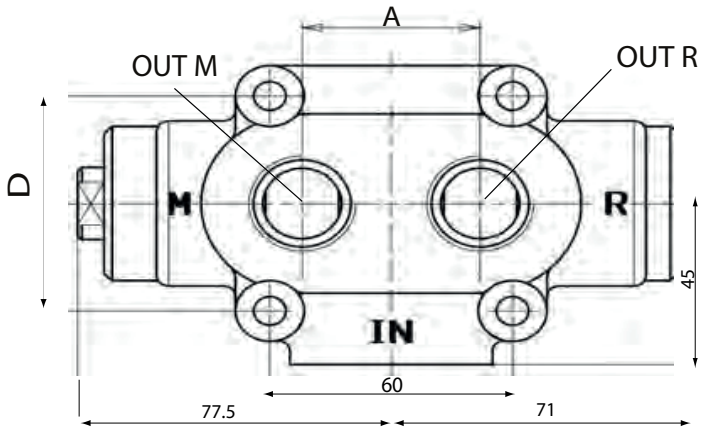
Valve: Hydraulic Divertor Valve

* Two position pneumatically controlled hydraulic flow divertor
* Part numbers VD075 & VD100 depending on port size (see table below)
* Weight = 2.5kg
* Max working pressure: 350 bar
* Max pneumatic pressure: 12 bar
* High quality paint finish



SPECIFICATION

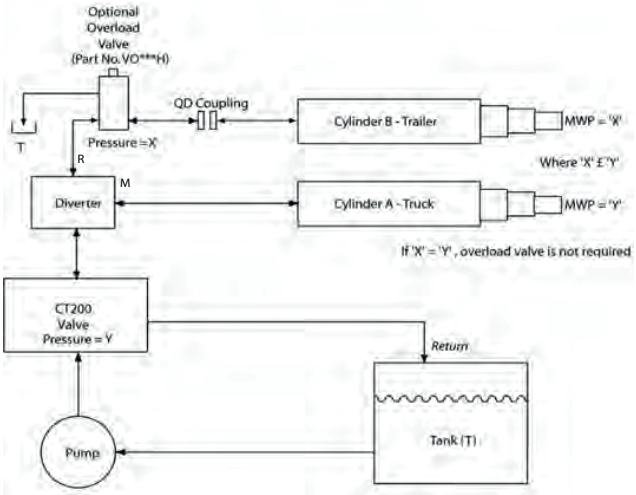
Part No	IN	M&R	Dim A	Dim D	Flow Rate (L/min)
VD075	1" BSP	¾" BSP	44	60	200
VD100	1" BSP	1" BSP	55	65	250



OPTIONS:

VDK075 kit also available for direct mounting to CT200 valve, including:

1 x VD075 divertor valve
1 x NR1694 positional union
2 x DPP45H/SC 1" self centering washer
1 x APU38/v2 (6mm Push in Air Fitting)



GUIDELINES

* If both cylinders require the same maximum operating pressure, the overload valve is not required.
* Divertor rest position is port M;applying air pressure selects port R.
* Divertor can be installed directly onto the CT200 valve using adaptor NR1694.
* When using a CX Series cylinder, the tank base pad should have a closure plate fitted, and the valve and divertor assembly should be installed remotely from the cylinder.
* When using a seperate oil tank, the CT200 valve and divertor valve can be installed directly to the valve mounting plate on the tank.
* The overload cartridge in the CT200 valve MUST be set higher than the cartridge in the overload valve (i.e. service line from overload valve must go to lower pressure cylinder).

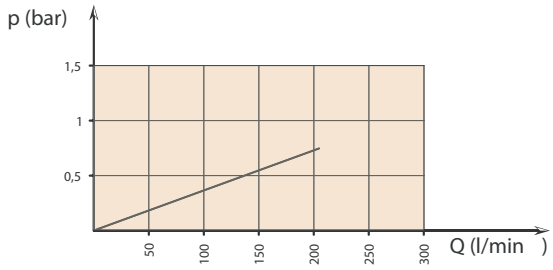
NOTE: Divertor must be set BEFORE control valve CT200 is operated.

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

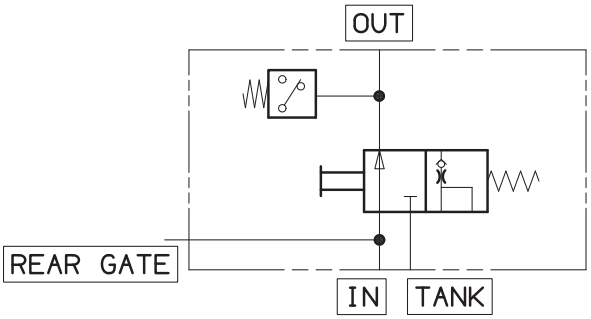
Hydraulic Knock Off Valve: PM630



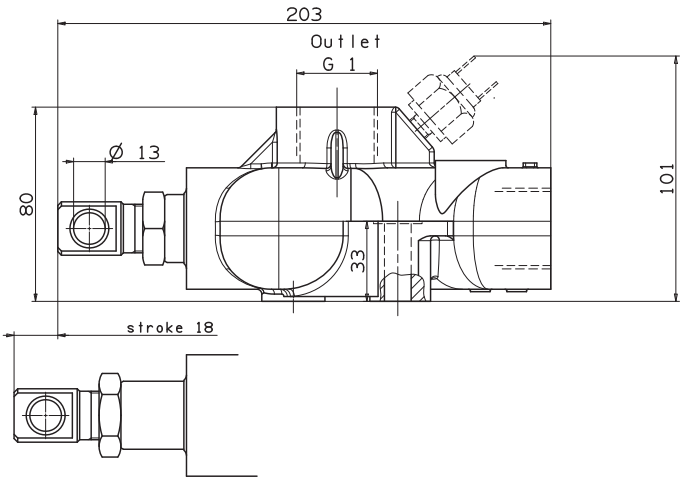
Pressure drops

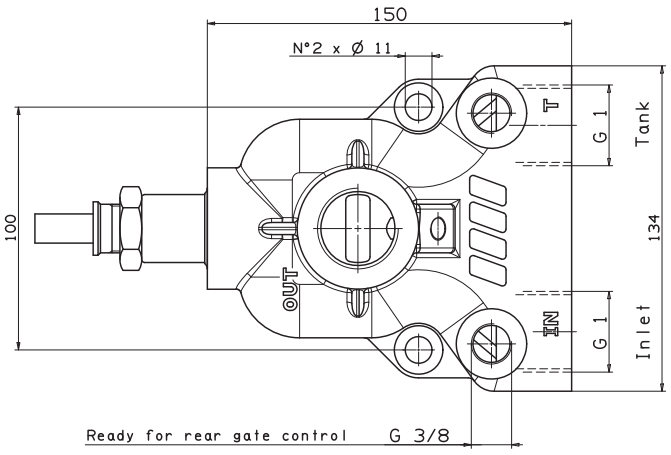


Hydraulic Knock off valve
- Flow: 200l/min
- Max pressure: 350 bar
- Weight: 4.8 kg
- Pressure switch option
- Anti-shock spring



Functional diagram





Pressure switch options:

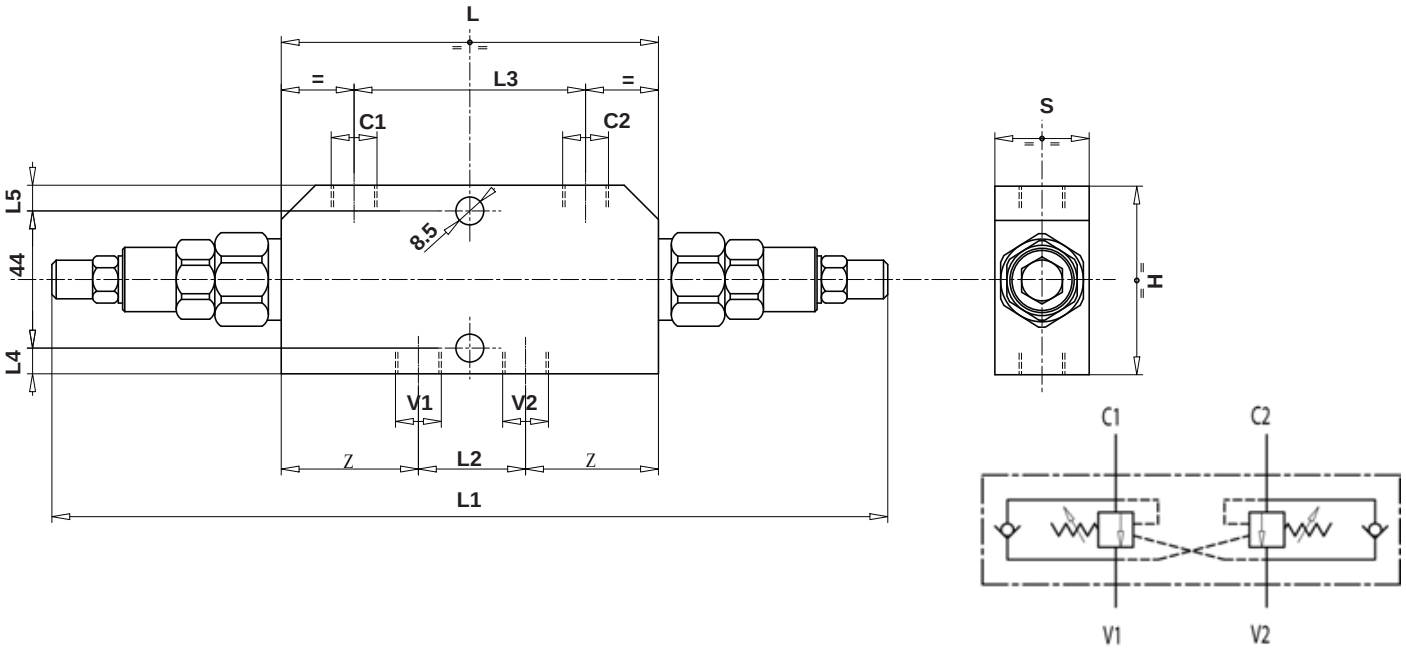
- PM481 - includes switch, rubber boot and sealing washer

- SA2924 Body raised warning kit - includes buzzer, wiring, light etc..

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Double Overcentre Valve





DOUBLE OVERCENTRE VALVE				DIMENSIONS									WEIGHT
TYPE GAS	CODE	MAX. FLOW l/min.	MAX. PRESSURE	V1 V2 C1 C2	L mm	L1 mm	L2 mm	L3 mm	L4 mm	L5 mm	H mm	S mm	Kg
3/8″	PM650	35	350 bar	3/8″	120	264	34	73	8	8	60	30	1.724
1/2″	PM649	50		1/2″	120	264	36	73	8	8	60	30	1.688
3/4″	PM651	105		3/4″	152	296	58	106	15	21	80	35	3.000

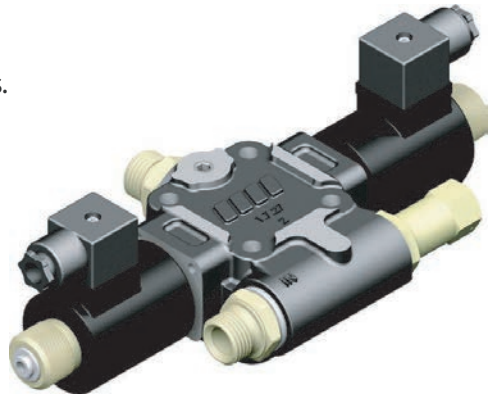
USE AND OPERATION:

These valves are used to control actuator's movement and block in both directions in order to enable the following functions:

- under control descent of a load: load's weight doesn't carry it away, as the valve prevents any cavitations of the actuator;
- limited maximum pressure in case of shocks created by loads, overloads or sudden manoeuvrings (load control with opened centre distributor).

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

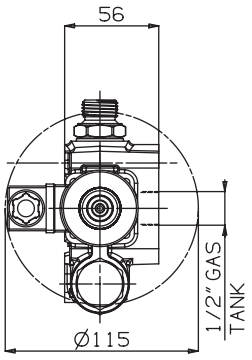
Valve: Electric Control Valve

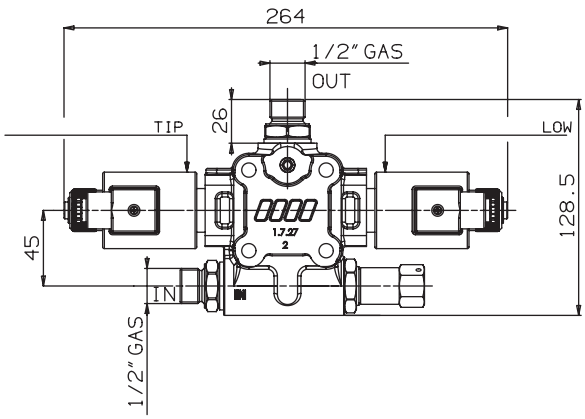


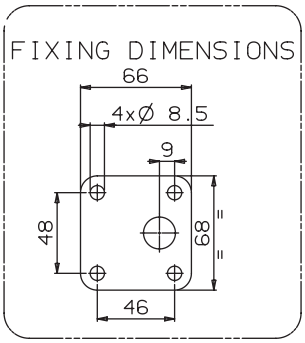
* Switch operated electric tipping valve to suit light duty tipper trucks. Open-centre hydraulic scheme according to CE standards
* Part numbers PM552, PM457 & PM453 (see table below)
* Built-in check and adjustable safety valves
* Cataphoresis coated body and nickel spool
* Compact size
* Guaranteed for oil temperature range -25-80C, viscosity range 12-100 cSt and oil filtering 25um.

SPECIFICATION

Tipping Valve Type	Order Code	IN	TANK	OUT	Wiring kit
12V, 140 bar	**PM552**	**G 1/2**	**G 1/2**	**G 1/2**	**PM553**
24V, 140 bar	**PM457**				**PM470**
24V, 175 bar	**PM453**				







All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Edbro
SETTING THE INDUSTRY STANDARD

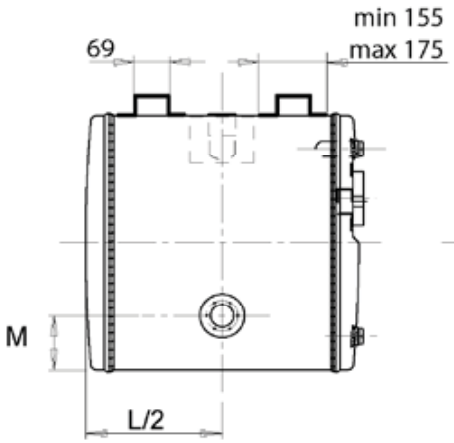
Oil Tanks



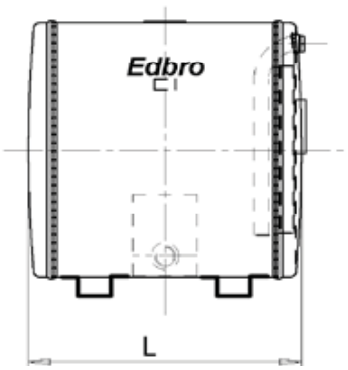
Edbro Oil Tanks are available in both aluminium and steel with a range of sizes and designs to suit all applications.

Special tanks are available upon request with custom tanks built to order.

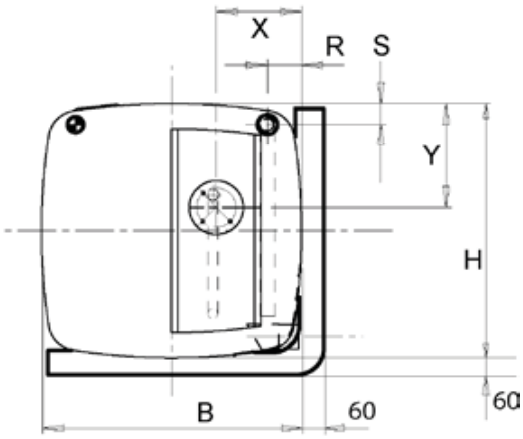
Oil Tanks: Side Mount



Top View



End View



Side View

features

- Side mounted to chassis
- High quality steel or aluminium options
- 1.5” BSP Feed port to rear of tank
- 1” BSP Auxiliary return Port (except OT543/53, OT545/78)
- Integral oil level sight glass
- Finished in chassis grey superior primer
- Pressure tested
- Compatible with Edbro valve CT200

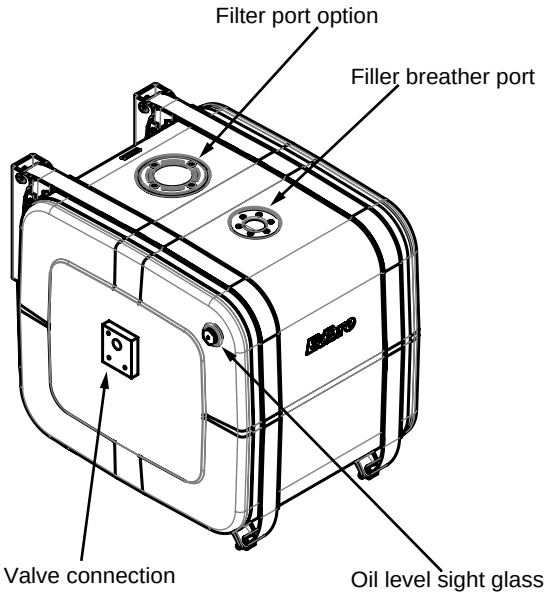
Part Number	Dimensions (mm)								Total Capacity (litres)	Useable Capacity (litres)	Material	Mass (kg)	Bracket Kit	Mass (inc kit) (kg)
	H*	B	L**	X	Y	R	S	M						
TANKS AVAILABLE EX-STOCK														
OT543/53	530	430	370	215	265	‡	‡	215	74	53	Steel	20	TH54	34
OT664/130 ***	630	690	400	N/A	N/A	N/A	N/A	50	157	130	Steel	36	TH664/P	58
OT674/135	610	720	430	360	200	80	50	130	170	135	Steel	36	TH674/P	58
OT676/200	610	720	640	360	200	80	50	130	272	200	Steel	47	TH675/P	69
OT724A	720	720	385	N/A	N/A	N/A	N/A	55	185	135	Steel	40	N/A(Included)	67
TANKS AVAILABLE TO ORDER														
OT545/78	530	430	540	215	265	‡	‡	215	108	78	Steel	27	TH54	39
OT665/135	610	610	530	200	250	80	50	130	177	135	Steel	30	TH66/P	52
OT666/165	610	610	640	200	250	80	50	130	214	165	Steel	42	TH66/P	64
OT675/165	610	720	520	360	200	80	50	130	205	165	Steel	43	TH675/P	65

NOTES:
All tanks are optionally supplied with separate oil filler/air breather AF97
* Add 65mm for filler cap
When remotely mounting the valve from the tank, the following parts are required:
DPP45F washer, NR994 plug
All tanks standard brackets: steel supports finished with painted steel straps
** Add maximum 20mm/25mm for valve plate on steel and aluminium tanks respectively, plus 80mm for valve and bolts
‡ Not a feature of these tanks
*** No valve mounting block fitted

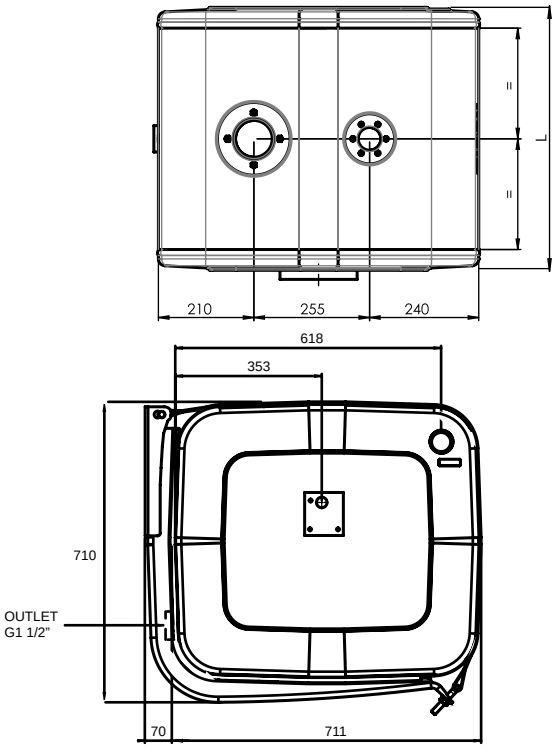
TANK CAPACITY:
Total capacity is the amount of oil to fill the tank and leave 50mm air gap above the oil.
Useable capacity is calculated assuming:
a minimum of 100mm oil depth left at the bottom of the tank when empty.
the air gap of 50mm above the oil when the tank is full.

TANK SELECTION:
Select a tank that has a useable capacity greater than the swept volume of the cylinder.

Oil Tanks: Side Mount Aluminium



(Left hand "FAL" version shown above)



features

- Highly polished aluminium finish
- 1.5" BSP Female Feed port
- Port for optional filter
- Universal bracket hole pattern
- Pressure tested
- Integral valve plate for Edbro CT200 valve
- Steel brackets with SS straps

Part Number TANKS AVAILABLE EX-STOCK		Dimensions (mm)	Total Capacity (litres)	Useable Capacity (litres)	Mass (inc kit) (kg)
RIGHT HAND	LEFT HAND	L			
OT674FAR/130	OT674FAL/130	400	150	130	42
OT675FAR/160	OT675FAL/160	500	200	160	44
OT676FAR/195	OT676FAL/195	600	250	195	46

NOTES:
All tanks are optionally supplied with separate oil filler/air breather AF97
Add 65mm for filler cap
When remotely mounting the valve from the tank, the following parts are required:
DPP45F washer, NR994 plug

Add 105mm for valve assembly

Valve connection:
CT200 valve

OPTIONAL FILTERS			
Part Ref.	Max. Flow (l/min.)	Filtration (µm)	Connection
PM643	200	60	G1"
PM642	160	25	G1"
PM476	200	25	G1"
PM627	200	25	G1 1/4"

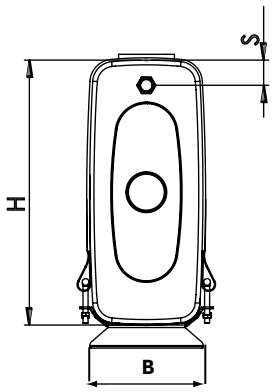
TANK CAPACITY:
Total capacity is the amount of oil to fill the tank and leave 90mm air gap above the oil.
Useable capacity is calculated assuming:
a minimum of 100mm oil depth left at the bottom of the tank when empty and an air gap of 90mm above the oil when the tank is full.

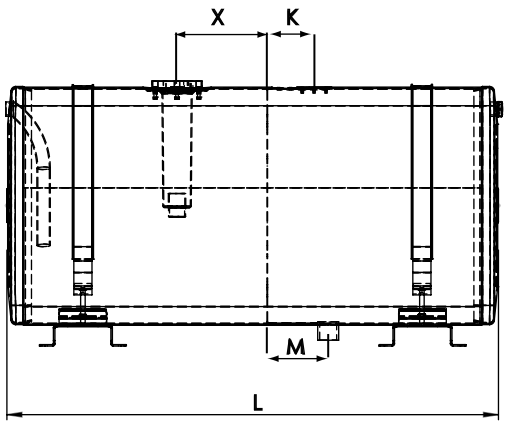
TANK SELECTION:
Select a tank that has a useable capacity greater than the swept volume of the cylinder.

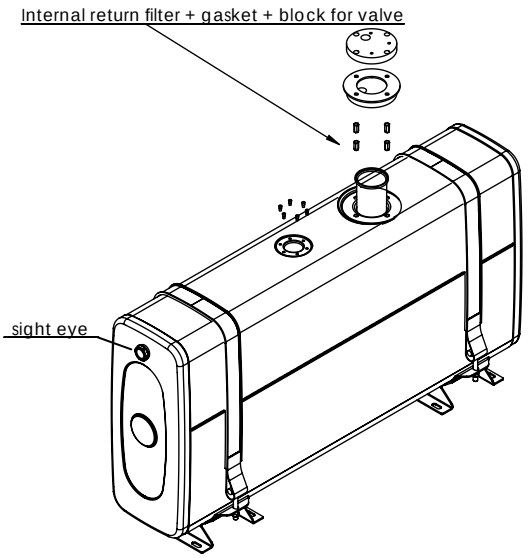
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Rev 2, Dec 2014

Oil Tanks: Rear Mount Tractor Chassis







Features

- Top mounted valve plate for easy maintenance
- Compatible with Edbro valve CT200
- Integral oil level sight glass
- Steel tanks finished in chassis grey superior primer
- Integral stainless steel return filter 60 micron
- Aluminium tanks have a high quality polished finish
- 1.5" BSP feed ports
- Auxiliary 1" BSP return port with plug fitted
- Pressure tested
- Internally cleaned

Part Number	Dimensions (mm)							Total capacity (litres)	Useable capacity (litres)	Material	Mass (kg)
	H *	B	L	X	S	M	K				
TANKS AVAILABLE EX-STOCK											
OT6211F/135	630	270	1150	200	60	200	100	165	135	Steel	44
OT6213F/155/01	630	270	1300	200	60	200	100	185	155	Steel	50
OT6216F/193	630	270	1650	200	60	200	100	235	193	Steel	58
OT6213AF/155/01	630	270	1300	200	60	200	100	185	155	Aluminum	29

Additonal required parts: (not supplied with oil tank)
AF97 oil filler breather *(*add 65mm to H dimension for filler cap)*
2x 6959999004 tank washer kit required

Remount Valve Mounting:
When remotely mounting the valve from the tank, the following parts are required:
DPP45F washer
NR994 plug
**Add to dimension H max 20mm for valve plate, plus 80mm for valve and bolts*

Filter:
Replacement Filer Element PM647, Full Filter Assembly PM646

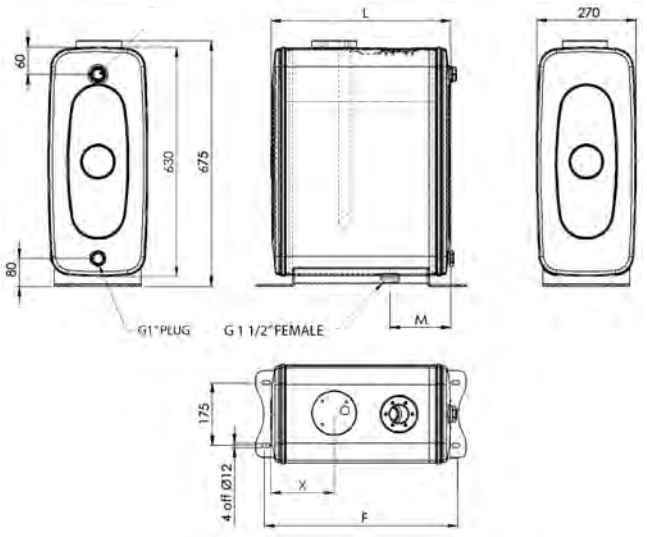
Tank selection:
Select a tank that has a useable capacity greater than the swept volume of the cylinder/working volume of the application.

Tank Capacity:
Total capacity is the amount of oil to fill the tank and leave 50mm air gap above the oil. Useable capacity is calculated assuming:
A minimum of 100mm oil depth left at the bottom of the tank when empty.
The air gap of 50mm above the oil when the tank is full.

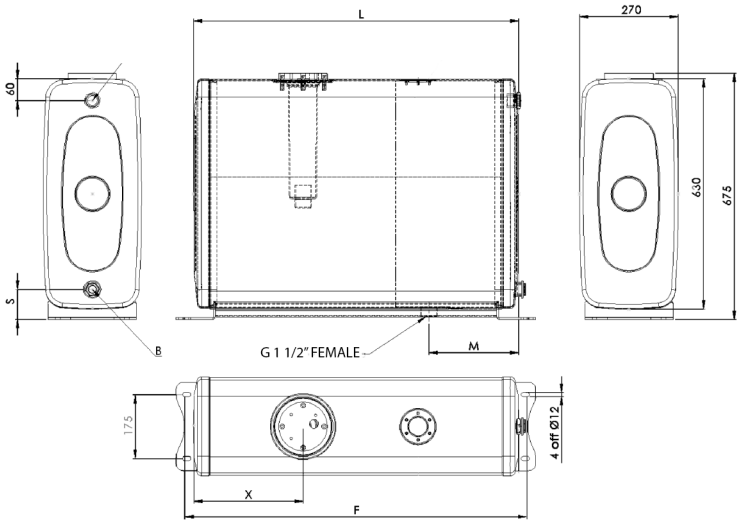
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice. Aug 2015

Oil Tanks: Rear Mount Rigid Chassis

Non Filter



Filter



Features

- 1.5" BSP Feed port to bottom of tank
- 1" BSP Auxiliary return Port
- Compatible with Edbro valve CT200
- Optional integral stainless steel return filter 60 micron
- Finished in chassis grey superior primer
- Pressure tested
- Integral oil level sight glass
- Internally cleaned

Part Number **	Dimensions (mm)						Total capacity (litres)	Useable capacity (litres)	Material	Integral Filter	Mass (kg)
	H *	F	L	X	S	M					
TANKS AVAILABLE EX-STOCK											
OT635/60/01	630	538	500	165	N/A	170	70	60	Steel	No	25
OT635F/60/01	630	538	500	165	N/A	170	70	60	Steel	Yes	25
OT637/84/01	630	738	700	175	80	250	100	84	Steel	No	30
OT637F/84/01	630	738	700	175	80	250	100	84	Steel	Yes	30
OT639/105/01	630	938	900	250	80	350	130	105	Steel	No	35
OT639F/105/01	630	938	900	250	80	350	130	105	Steel	Yes	35

Additonal required parts: (not supplied with oil tank)
AF97 oil filler breather *(*add 65mm to H dimension for filler cap)*
TMK1 tank washer kit

Remote Valve Mounting:
When remotely mounting the valve from the tank, the following parts are required:
DPP45F washer
NR994 plug
**Add to dimension H max 20mm for valve plate, plus 80mm for valve and bolts*

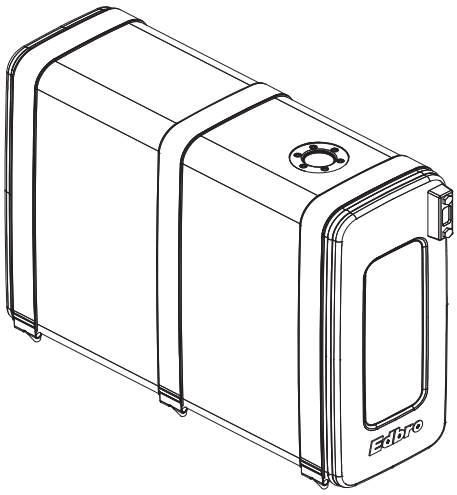
Support Brackets:
****Optional support brackets are not supplied with oil tank but are available*

Tank selection:
Select a tank that has a useable capacity greater than the swept volume of the cylinder/working volume ofthe application.

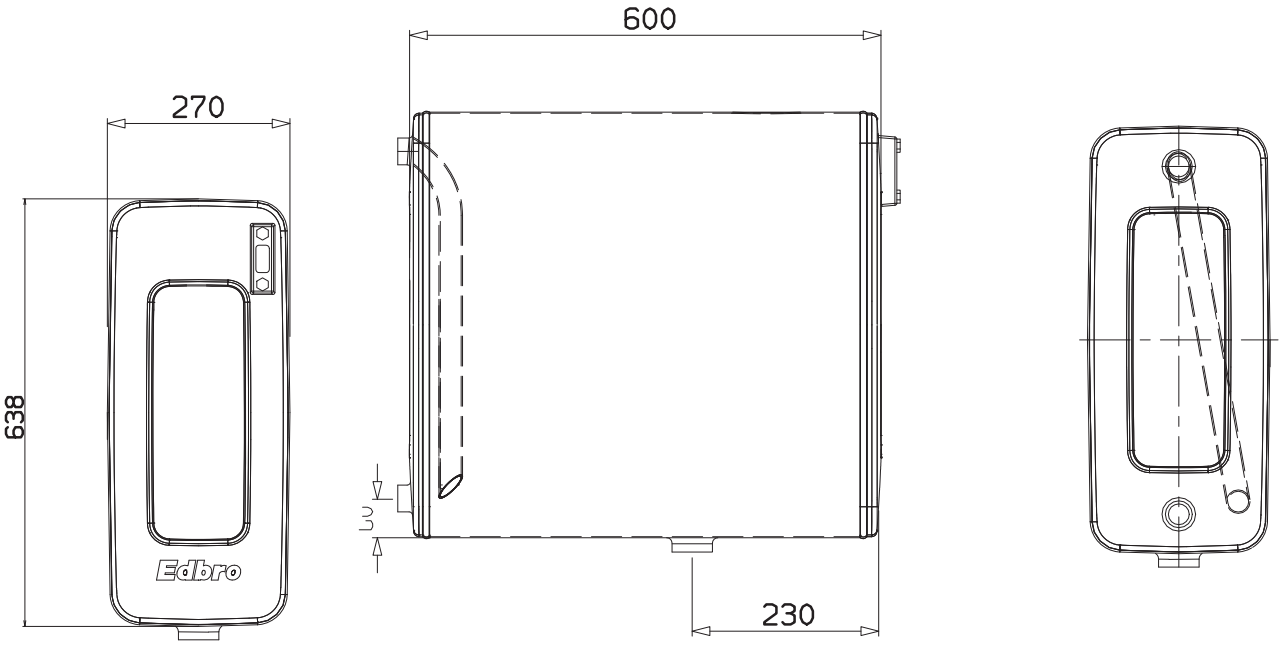
Tank Capacity:
Total capacity is the amount of oil to fill the tank and leave 50mm air gap above the oil. Useable capacity is calculated assuming:
A minimum of 100mm oil depth left at the bottom of the tank when empty.
The air gap of 50mm above the oil when the tank is full.

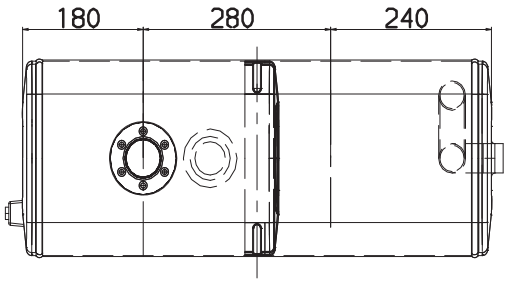
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Aluminium Oil Tank: Rear Mount for Rigid Trucks **- OTA604**



* Aluminium rear mount oil tank
* Suitable for rigid truck chassis
* Useable capacity - 75 litres
* Weight - 20.4kg



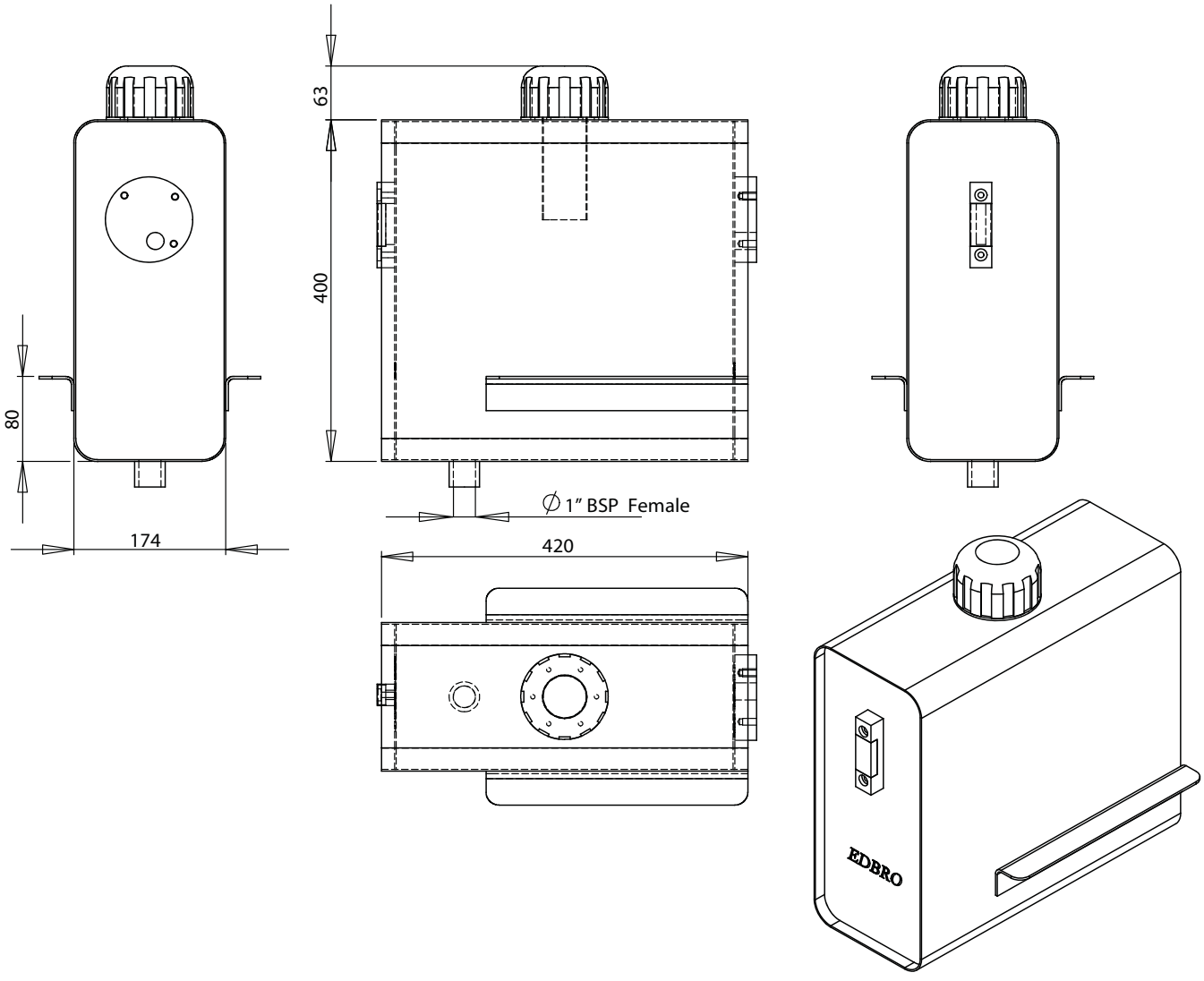


All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Steel Oil Tank: Rear Mount for Rigid Trucks - **OTA723**

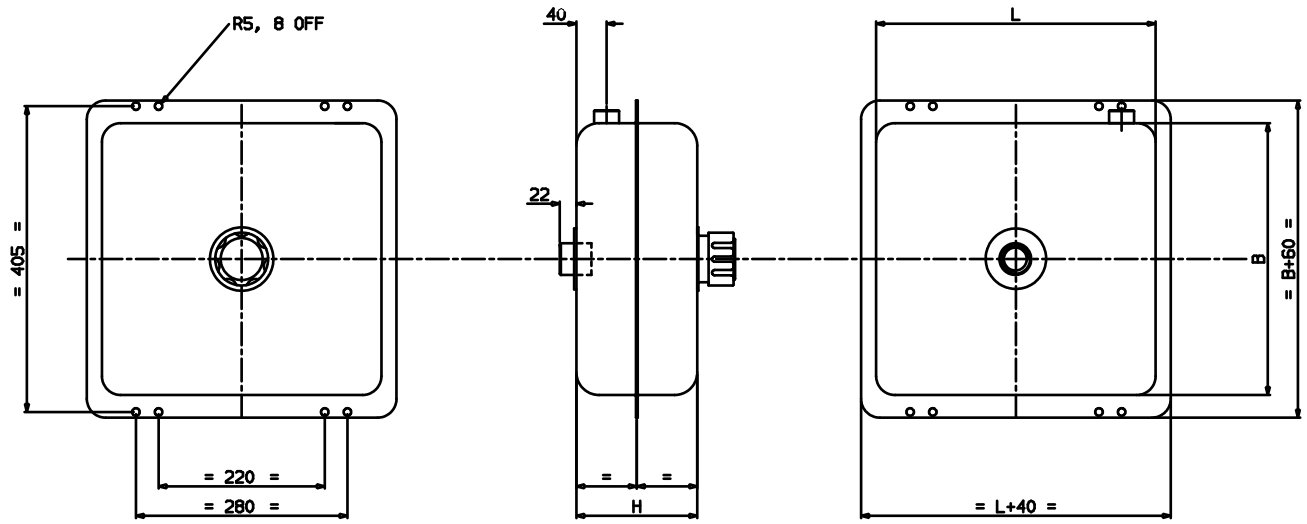


* Steel rear mount oil tank
* Suitable for rigid truck chassis
* Useable capacity - 18 litres
* Weight - 14kg
* Includes filler breather cap



All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Oil Tanks: Under Body



features

- To suit small under body cylinders
- High quality steel
- Integral oil level sight glass
- Steel tanks finished in chassis grey superior primer
- 1" BSP feed ports with integral sludge trap
- Auxiliary 3/4" BSP return port with sealed caps fitted
- Pressure tested
- Internally cleaned

Part Number	Dimensions (mm)			Useable Capacity (litres)	Total Capacity (litres)	Material	Mass (kg)
	H*	B	L				
OT144/10	160	360	370	10	21	Steel	5.5
OT344/29	300	360	370	29	40	Steel	7.0

*All tanks optionally supplied with separate oil filler / air breather AF83. * Add 65mm for filler cap.*

Tank capacity

Total capacity is the amount of oil to fill the tank and leave 40mm air gap above the oil. Useable capacity is calculated assuming:

A minimum of 50mm oil depth left at the bottom of the tank.

The air gap of 40mm above the oil when the tank is full.

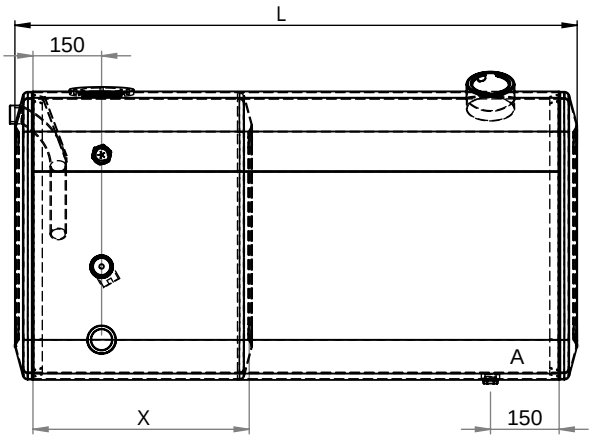
Tank selection

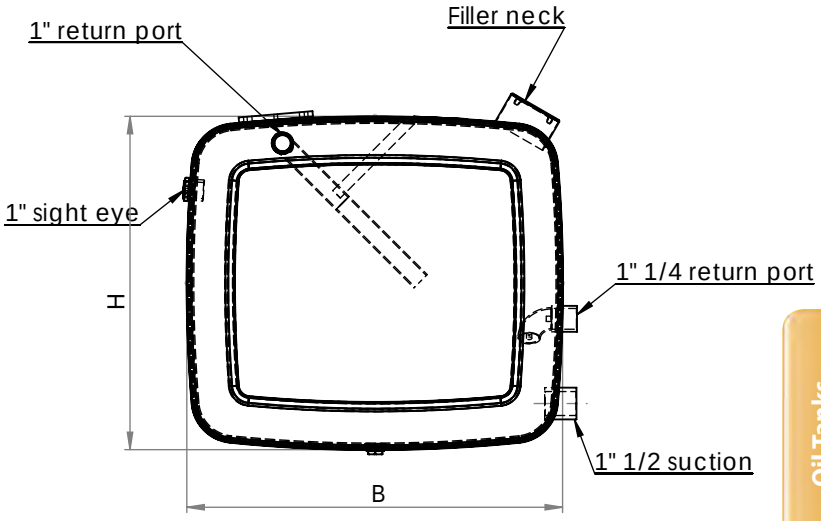
Select a tank that has a useable capacity greater than the swept volume of the cylinder.

Combination Oil Tank: Side Mount for Tractor Unit - OTKT/***/***



* Fuel cap with key included
* Aluminium side mount tank for tractor unit
* Suitable for rigid truck chassis
* Combined tank for Oil and Diesel
* AF97 - Air Filler breather sold separately
* Fuel gauge not supplied





Part Number	Dimensions (mm)			Oil capacity (litres)	Diesel capacity (litres)	Material	Mass (kg)
	H	B	L				
OTKT/200/300*	630	700	1250	200	300	Aluminium	30
OTKT/200/330	630	700	1325	200	330	Aluminium	34
OTKT/200/350	630	700	1375	200	350	Aluminium	38
OTKT/200/400*	630	700	1400	200	400	Aluminium	42
OTKT/200/500	630	700	1590	200	500	Aluminium	48

* Tanks available ex-stock
All other tanks available to order.

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Tank Parts Kit - TPK01

- **Sufficient parts to build your own tank**
- **Steel or aluminium options**
- **Valve plate compatible with CT200 valve range**
- **For 1½" suction lines, 1" BSP auxiliary return**
- **Oil filler/breather with combined dipstick**

TPK01/S for steel tanks comprises:

1 x AF97 filler breather
1 x BP227 valve plate
1 x NR1552 L.P. feed adaptor
1 x BU3 extra return boss
1 x NR994/4 plug 1" BSP
1 x DPP45H washer 1" BSP



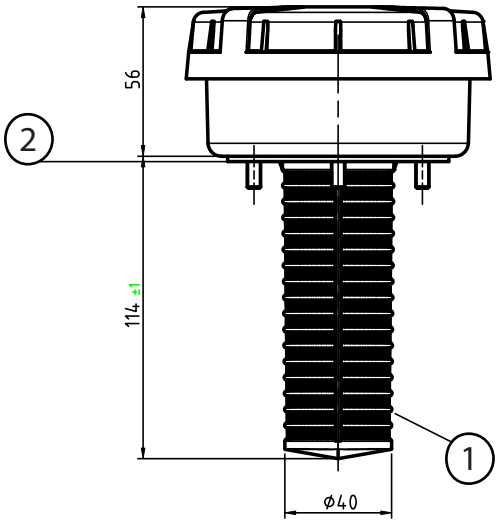


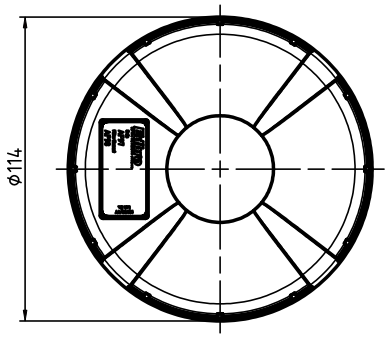
TPK01/AL for aluminium tanks comprises:

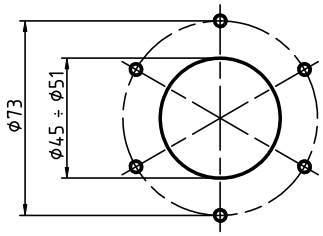
1 x AF97 filler breather
1 x BP227/AL valve plate (alloy)
1 x NR1684 L.P. feed adaptor (alloy)
1 x NR1685 extra return boss (alloy)
1 x NR994/4 plug 1" BSP
1 x DPP45H washer 1" BSP

For oil tank design guidance, refer to Information Bulletin 00 X 06.

Combined Filler Breather - AF97







* Replaces AF83 tank cap
* Flow rate: 1600l/min (dp=0.02 BAR)
* Working Temperature: -25C - 110C
* AF98 filter media: resin impregnated paper 10uM
* Compatible with fluids: Mineral Oil ISO 2943
* Supplied with 6x DIN965 M5x16 Screws and 6x DIN7982C 4.8x19 Screws

Replacement parts:
1. AF98 - Filter media

2. PM597 - Rubber gasket

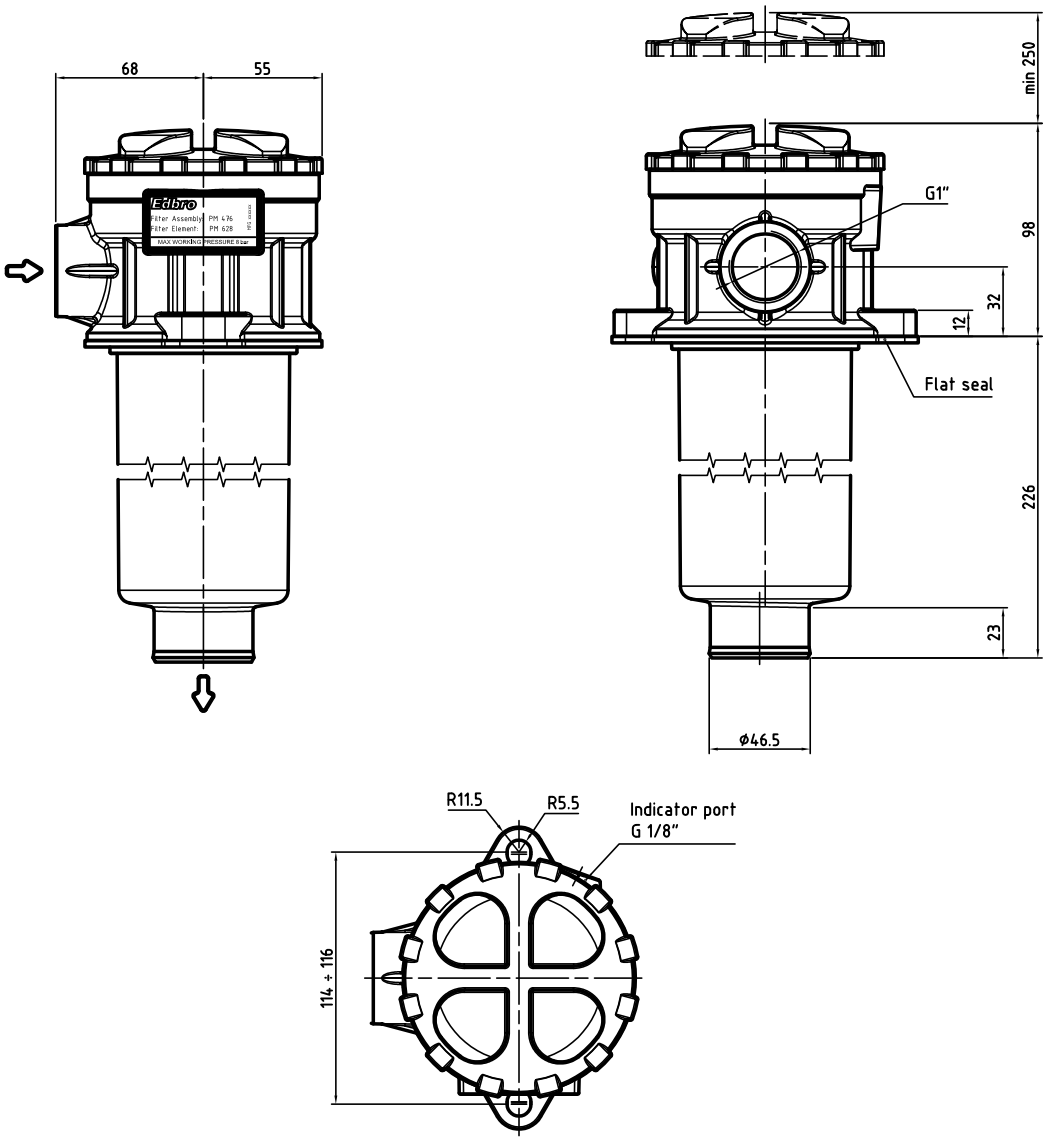
Combined Filler Breather - AF86



- Used on CX range of combined Ram & Tank Cylinders
- Metal tube allows tank to breath from centre of the tank
- Anti-splash design reduces chance of oil spillage through breather
- Water proof Cap design

External Return Filter - PM476

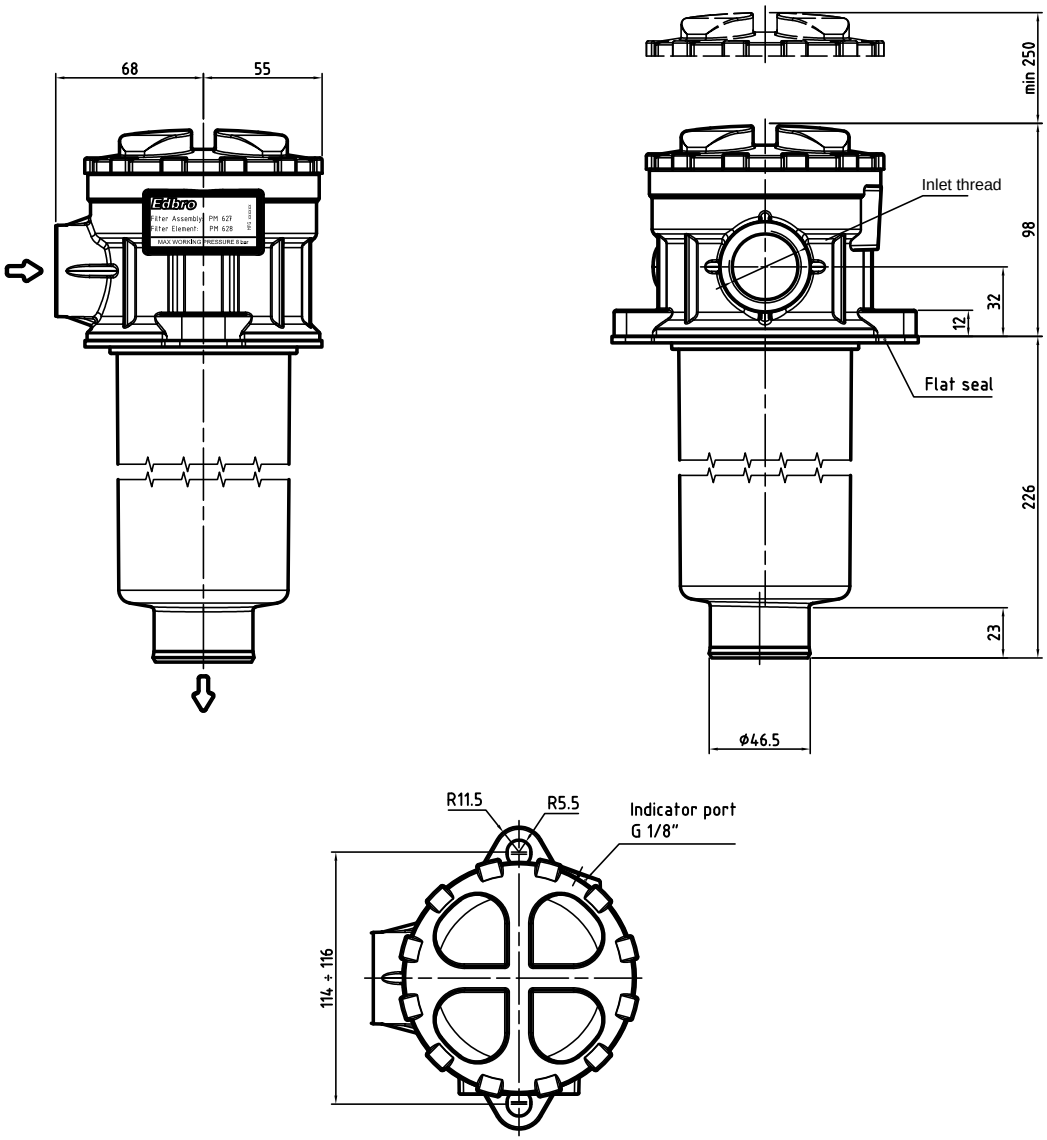
* Max working pressure: 8 bar
* Max flow rate: 300l/min
* Working Temperature: -25C - +110C
* Filter media: resin impregnated paper 25uM
* Inlet thread: G 1”
* Max pressure drop: 10 bar
* Weight: 1.19kg



All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

External Return Filter - PM627- G1.1/4"

* Filter body Max working pressure: 7 bar
* Max flow rate: 200 l/min
* Working Temperature: -25C - +110C
* Filter Grade: 25um
* Inlet thread: G 1.1/4"
* Max pressure : 3 bar (using 25um filter PM628)
* Weight: 1.2kg



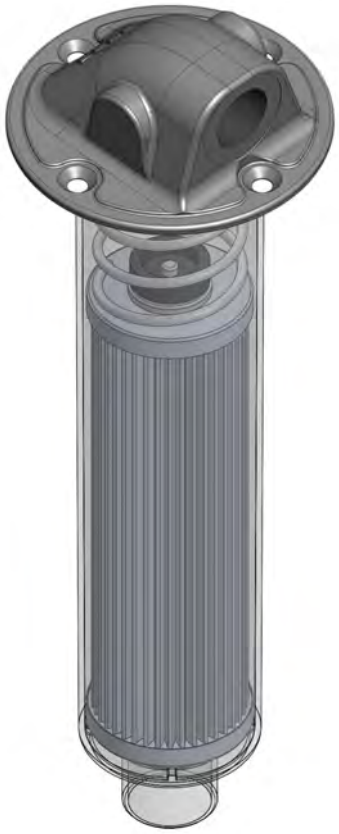
Replacement Filter PM628

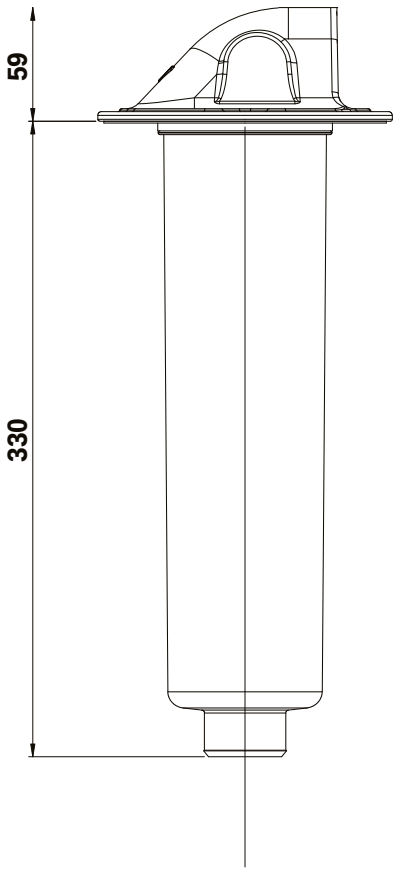
Data based on 30mm2/s (cSt)

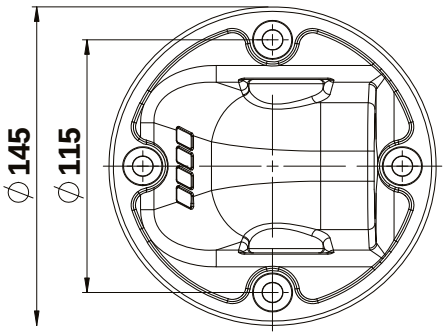
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

External Return Filter - PM642 G1”

* Filter body Max working pressure: 7 bar
* Max flow rate: 160l/min
* Working Temperature: -25C - +110C
* Filter Grade : 25um
* Inlet thread: G 1”
* Max pressure : 3 bar (using 25um filter PM628)
* Weight: 1.2kg







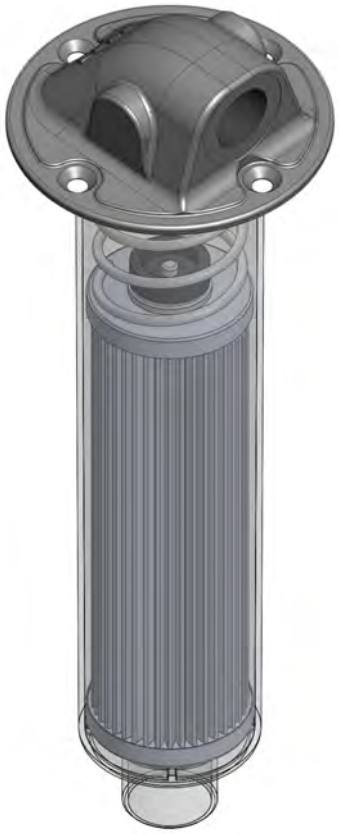
Replacement Filter PM628

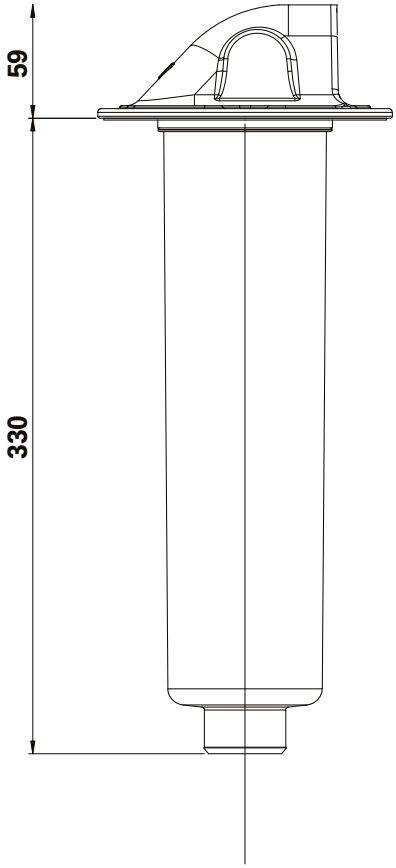
Data based on 30mm2/s (cSt)

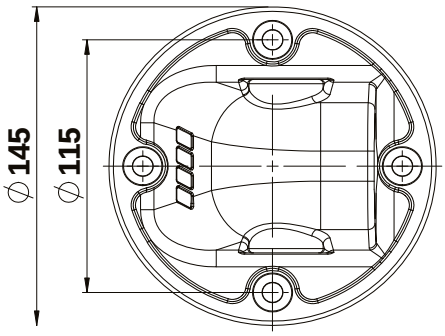
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

External Return Filter - PM643 G1”

* Filter body Max working pressure: 7 bar
* Max flow rate: 200l/min
* Working Temperature: -25C - +110C
* Filter Grade : 60um
* Inlet thread: G 1”
* Max pressure : 3 bar (using 25um filter PM628)
* Weight: 1.2kg







Replacement Filter PM628

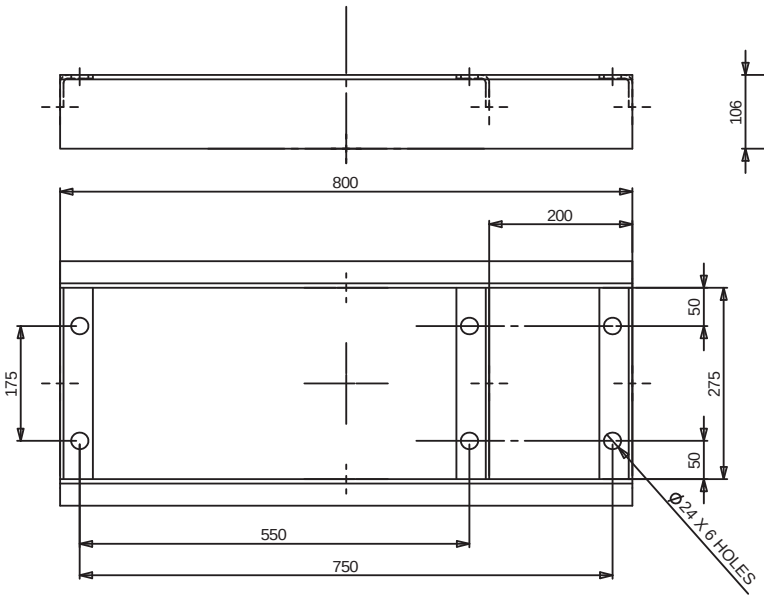
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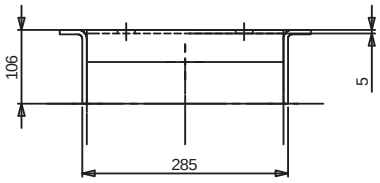
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

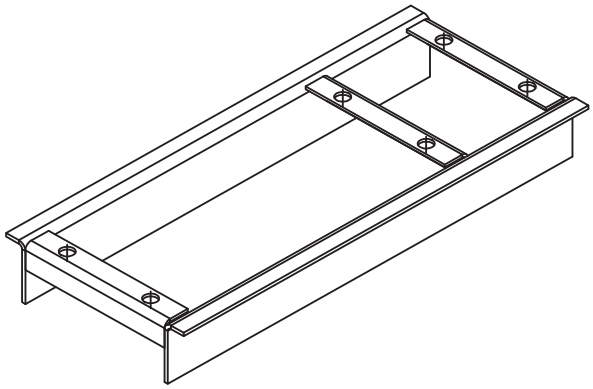
Oil Tank Support Bracket - PCA215

* PCA215 support bracket suits PCA214 & PCA216 cross members
* Weight: 28 kg
* Designed to suit the following oil tanks:
  OTA635F/65
  OT635/65
  OT637F/84
  OT637/84









All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Oil Tank Bracket : OTB279

* Steel rear mounted bracket for Steel and Aluminum tanks

* Fitted to chassis

* Parts supplied together as kit

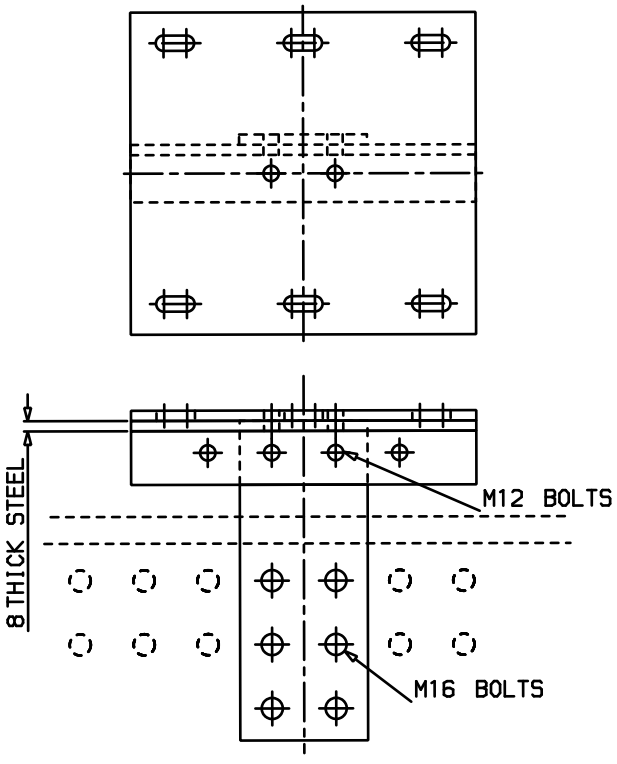
* Painted grey to match chassis colour

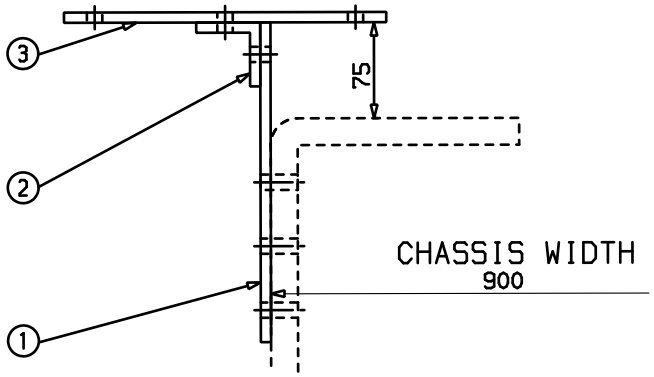
* Bolts not supplied in kit

* Weight - 10kg

OTB279 Kit List

	Part No.	Description	Quantity
1	SP4235	BASE STEEL PLATE	2
2	BSP779	STEEL ANGLE	2
3	SP4236	TOP STEEL PLATE	2





Edbro
SETTING THE INDUSTRY STANDARD

Gear and Piston Pumps



Edbro have a wealth of experience in the field of pumps and our engineering team are on hand to help you select the right pump for your application.

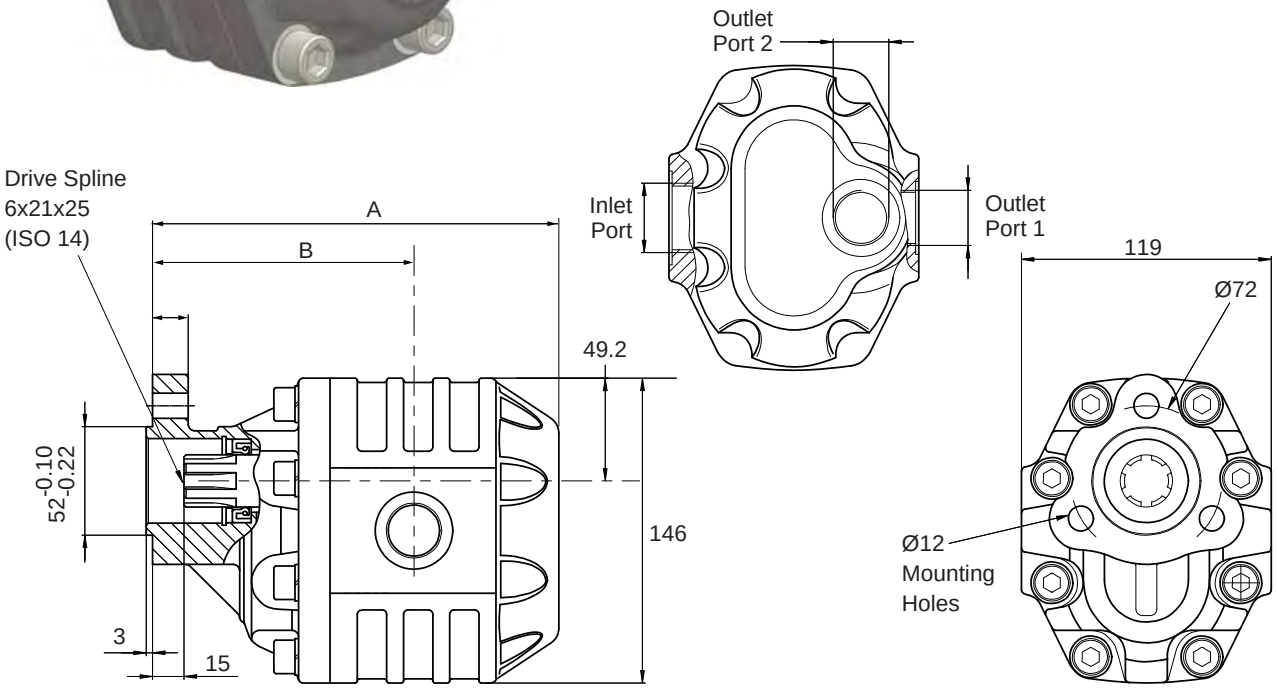
The current product range present operators with a wide selection of choices with solutions available for most on vehicle hydraulic requirements.

The product range includes gear pumps and piston pumps in both low and high pressure variants, dual flow pumps and variable flow units for specialist applications.

Gear Pump: Tipper Applications



- A range of flows from 17 to 125 cm ^{3}/rev
- Compact size for easy installation
- Ideal for close coupled PTO mounting
- 3 - Hole UNI Mounting flange
- Bronze thrust plates for maximum durability
- Available anti-clockwise (left) or clockwise (right) rotation
- Optional output port



Part Number		IN	OUT 1	OUT 2	A	B	Weight
Rotation Left	Rotation Right	ISO 228	ISO 228	ISO 228	mm	mm	Kg
EGP017315 3H	EGP017315C 3H	1/2 inch BSP	1/2 inch BSP		152.5	103.5	8.5
EGP027315 3H	EGP027315C 3H	3/4 inch BSP			158.5	108	9.5
EGP034300 3H	EGP034300C 3H		3/4 inch BSP		163.5	109	10.5
EGP043290 3H	EGP043290C 3H				169.5	114	11
EGP061240 3H	EGP061240C 3H	1 inch BSP			180.5	120.5	12
EGP082210 3H	EGP082210C 3H	$1^1/_4$ inch BSP			193.5	124.5	13
EGP100200 3H	EGP100200C 3H		1 inch BSP	3/4 inch BSP	210.5	138.5	14
EGP125180 3H	EGP125180C 3H				226.5	142.5	16

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Gear Pump: Tipper Applications

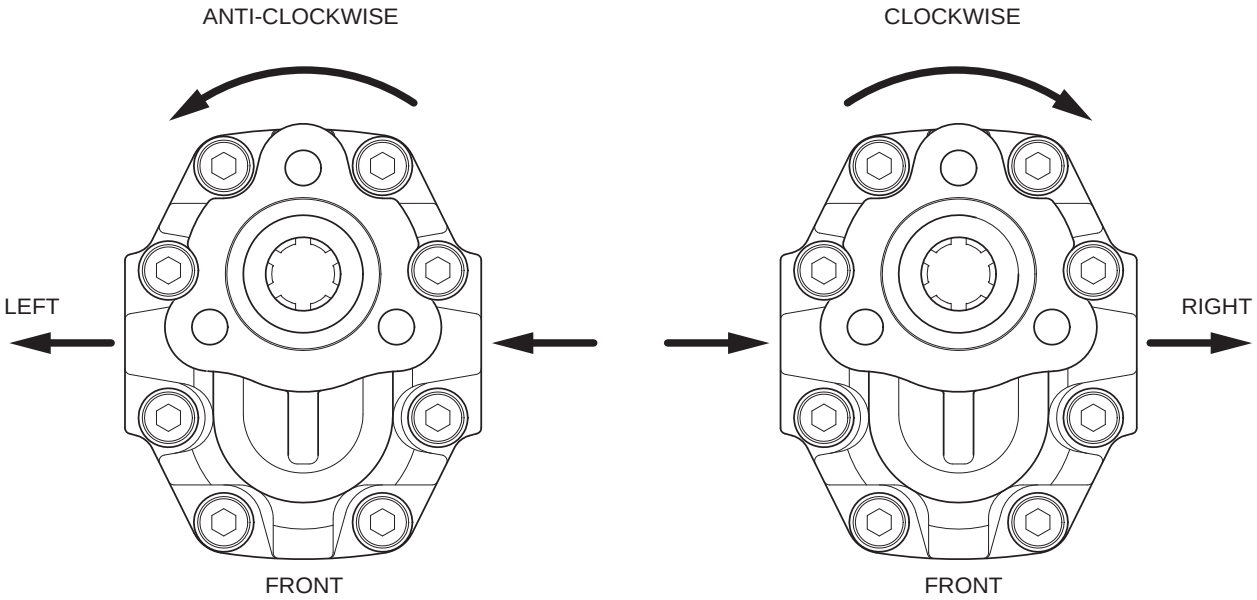
TECHNICAL FEATURES						
Part Number	Displacement	Pressure		Max. continuous speed	Max. intermittent speed	Min. speed
		P1	P2			
	^{3}/rev cm	bar	bar	rpm	rpm	rpm
EGP017315/C 3H	17	315	325	2500	3000	300
EGP027315/C 3H	26					
EGP034300/C 3H	34	300	310	2200	2800	
EGP043290/C 3H	43	290	300	2000	2500	
EGP061240/C 3H	60	240	250	1800	2000	
EGP082210/C 3H	81	210	220	1500	1800	
EGP100200/C 3H	98	200	220			
EGP125180/C 3H	123	180	200			

P1= Max. Intermittent pressure (20 sec. max.)
P2= Max. peak pressure (6 sec. max.)

OIL & FILTRATION

- The EGP range is designed primarily for use on tipper applications without filtration.
- The oil should be a good quality hydraulic oil to ISO 6743/4 HM32 for -15° to +27°C working temperature.
- For extended life or for higher duty applications, 25µm absolute return line filtration is recommended.
- Oil cleanliness to be maintained to ISO 4406 class 19/16.
- Oil should be replaced annually.

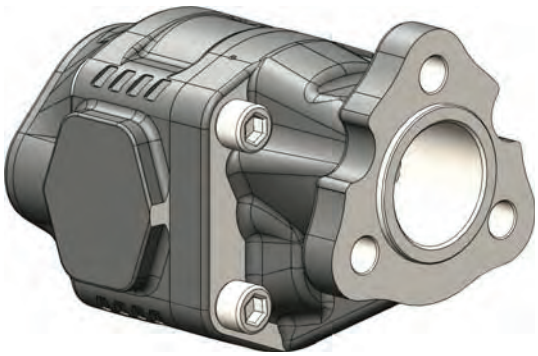
PUMP ROTATION



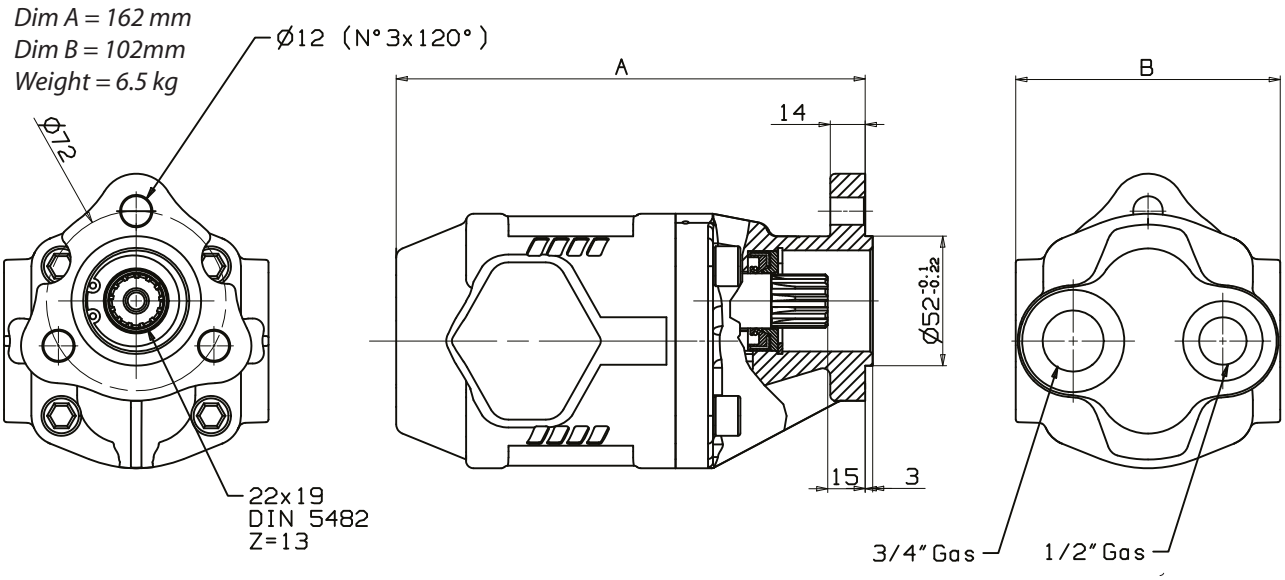
- Pumps can be supplied to suit the rotation required
- If rotation is to be reversed, refer to instructions supplied with the kit

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Medium Duty Gear Pump: For tipper application - EGP0025170



* 3-hole gear pump for medium duty applications
* EGP025170 - anti-clockwise (left) rotation
* EGP025170C - clockwise (right) rotation
* 25cm^3/rev output flow
* Medium pressure (220 bar MWP)
* Compact size for easy installation
* Ideal for close coupled PTO mounting
* Bronze trust plates for maximum durability



PERFORMANCE

Displacement	cm^3/rev	25
Working pressure	bar	220
Max pressure	bar	240
Max. working speed	rpm	2200 @ 200 bar
		3000 @ 220 bar
		3500 @ no pressure

PIPES

Size: Suction 3/4 inch
Pressure 1/2 inch

Pipe runs should be direct and short, with no kinks.

OIL & FILTRATION

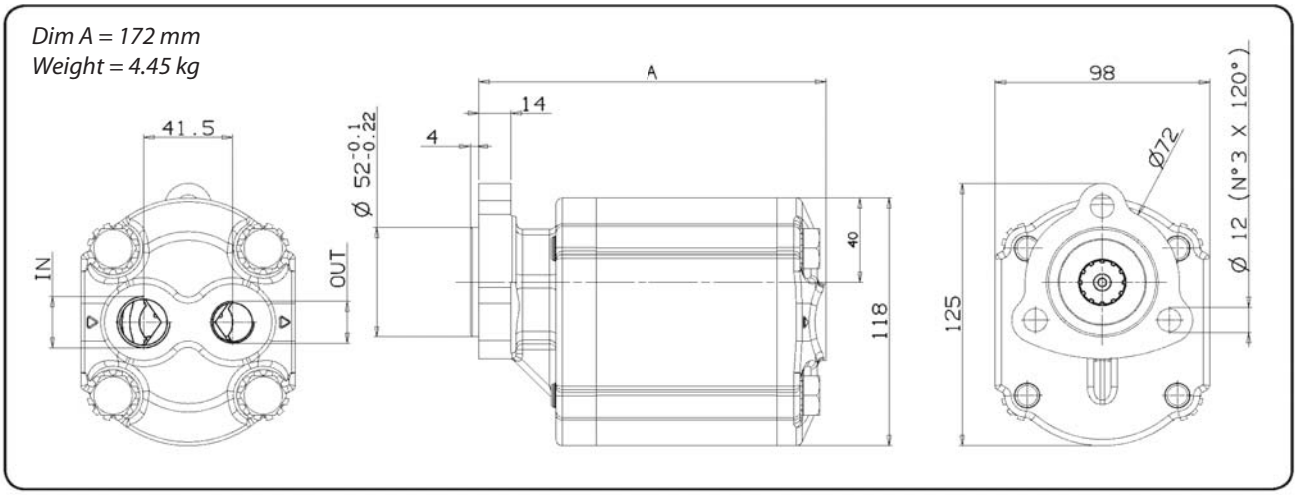
* This pump is designed for medium pressure, intermittent use tipping systems without filtration.
* The oil should be a good quality hydraulic oil to ISO 6743/4 HM32 for -15°to +27°C working temperature.
* For extended life 25 um absolute return line filtration is recommended.
* Oil cleanliness is maintained to ISO 4406 class 19/16.
* Oil should be replaced annually.

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Light Duty Gear Pump: Tipper Applications - EGP032180



* 3-hole gear pump for light duty applications
* EGP0321803H - anti-clockwise (left) rotation
* EGP032180C3H - clockwise (right) rotation
* 32cm^3/rev output flow
* Medium pressure (200 bar MWP)
* Compact size for easy installation
* Ideal for close coupled PTO mounting
* Bronze trust plates for maximum durability



PIPE ADAPTOR KIT OPTIONS

Low pressure inlet: AK26 (NR110/3, DS18, LNSC - 1" elbow)

High pressure outlet: AK78 (NR611/44, DPP45D/SC - 1/2" to 1/2" adaptor)

PERFORMANCE

Displacement	cm^3/rev	32
Max. working pressure	bar	200
Peak pressure	bar	220
Max. working speed	rpm	1500 @ 180 bar
		2800 @ 200 bar
		3500 @ no pressure

PIPES

Size: Suction 3/4 inch maximum

Pressure 1/2 inch maximum

Pipe runs should be direct and short, with no kinks.

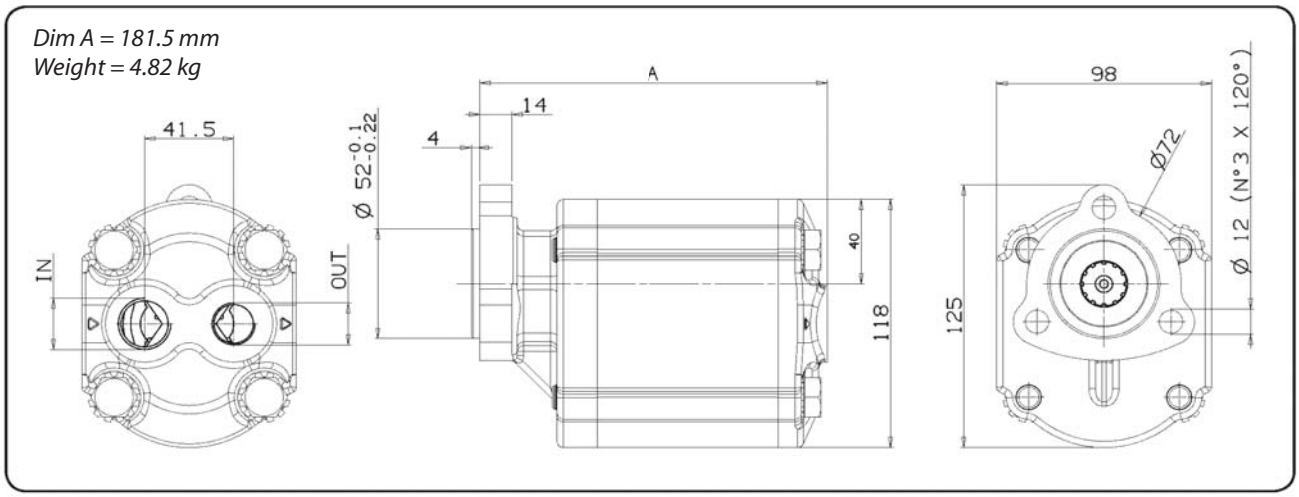
OIL & FILTRATION

* This pump is designed for low pressure, intermittent use tipping systems without filtration.
* The oil should be a good quality hydraulic oil to ISO 6743/4 HM32 for -15°to +27°C working temperature.
* For extended life 25 um absolute return line filtration is recommended.
* Oil cleanliness is maintained to ISO 4406 class 19/16.
* Oil should be replaced annually.

Light Duty Gear Pump: Tipper Applications - EGP040150



* 3-hole gear pump for light duty applications
* EGP0401503H - anti-clockwise (left) rotation
* EGP040150C3H - clockwise (right) rotation
* 40cm^3/rev output flow
* Medium pressure (170 bar MWP)
* Compact size for easy installation
* Ideal for close coupled PTO mounting
* Bronze trust plates for maximum durability



PIPE ADAPTOR KIT OPTIONS

Low pressure inlet: AK26 (NR110/3, DS18, LNSC - 1" elbow)

High pressure outlet: AK78 (NR611/44, DPP45D/SC - 1/2" to 1/2" adaptor)

PERFORMANCE

Displacement	cm^3/rev	40
Max. working pressure	bar	170
Peak pressure	bar	190
Max. working speed	rpm	1500 @ 150 bar
		2400 @ 170 bar
		3500 @ no pressure

PIPES

Size: Suction 3/4 inch maximum

Pressure 1/2 inch maximum

Pipe runs should be direct and short, with no kinks.

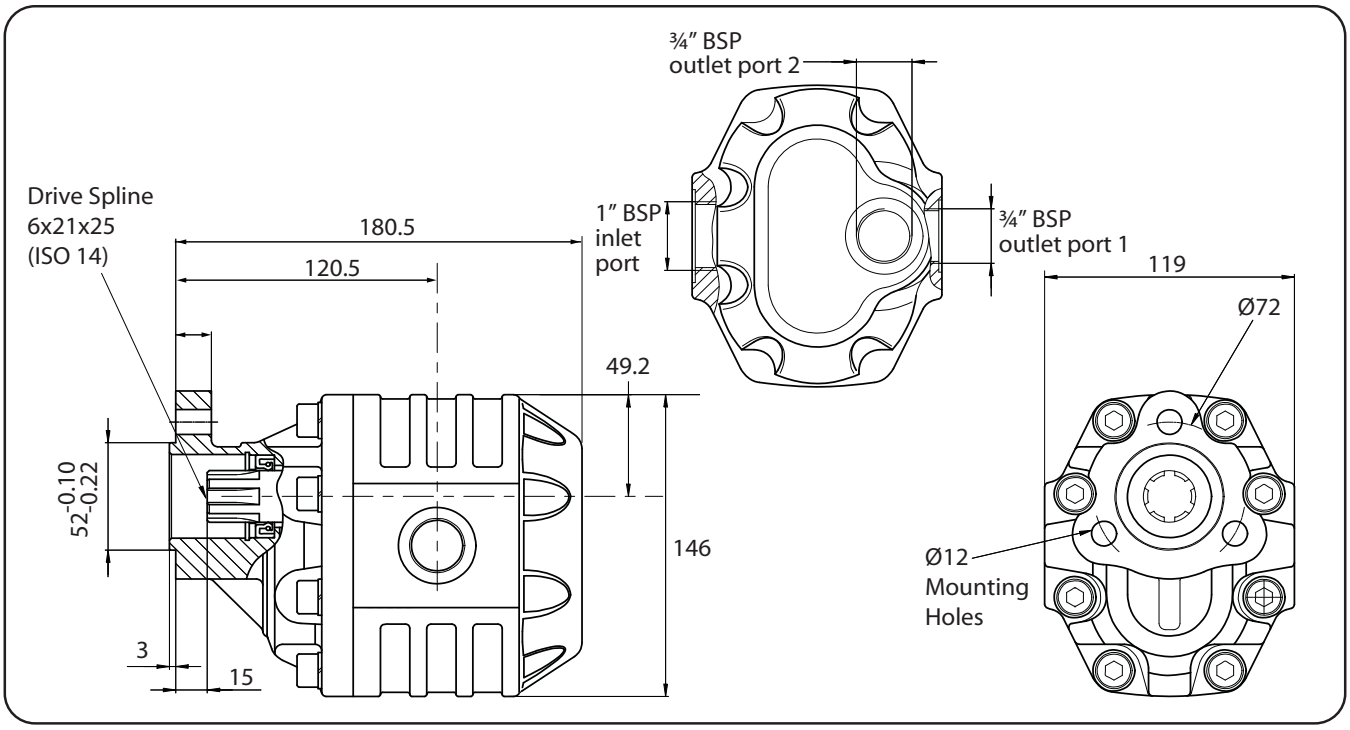
OIL & FILTRATION

* This pump is designed for low pressure, intermittent use tipping systems without filtration.
* The oil should be a good quality hydraulic oil to ISO 6743/4 HM32 for -15°to +27°C working temperature.
* For extended life 25 um absolute return line filtration is recommended.
* Oil cleanliness is maintained to ISO 4406 class 19/16.
* Oil should be replaced annually.

3 Hole Gear Pump: Tipper Applications - EGP0612403H



* 60 cm³/rev output flow
* Medium pressure (240 bar MWP)
* Compact size for easy installation
* Ideal for close coupled PTO mounting
* 3 hole UNI mounting flange
* Bronze trust plates for maximum durability
* Available anti-clockwise (left) rotation as EGP0612403H or clockwise (right) rotation as EGP061240C3H
* Optional output port



NB. This pump is supplied as complete kit PKS9620/04.

PKS9620/04 pump kit includes:

EGP0612403H	Gear pump
NR1664	Low pressure adaptor (1" BSP push-on 90° elbow)
NR611/42	High pressure adaptor (¾" BSP)
NR627	High pressure elbow (¾" BSP 90°)
DPP45F/SC	Washer (¾" BSP)

** Other adaptor options are available. Please contact Edbro for more information.*

3 Hole Gear Pump: Tipper Applications - EGP0612403H

PERFORMANCE

Displacement	60 cm³/rev
Max. working pressure	240 bar
Peak pressure	250 bar
Max working speed	1800 rpm @ 220 bar

PIPES

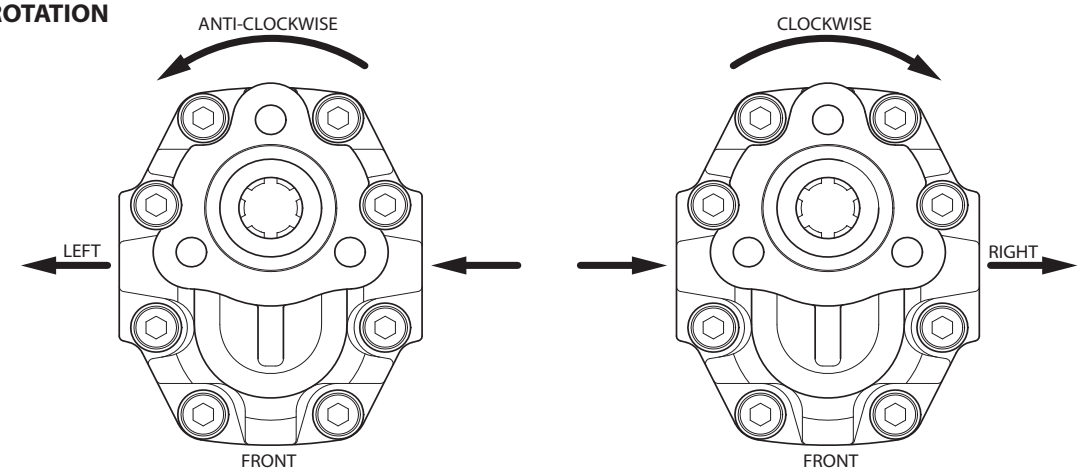
Size: Suction 1¼" minimum
Pressure ¾" minimum

Pipe runs should be direct and short, with no kinks

OIL & FILTRATION

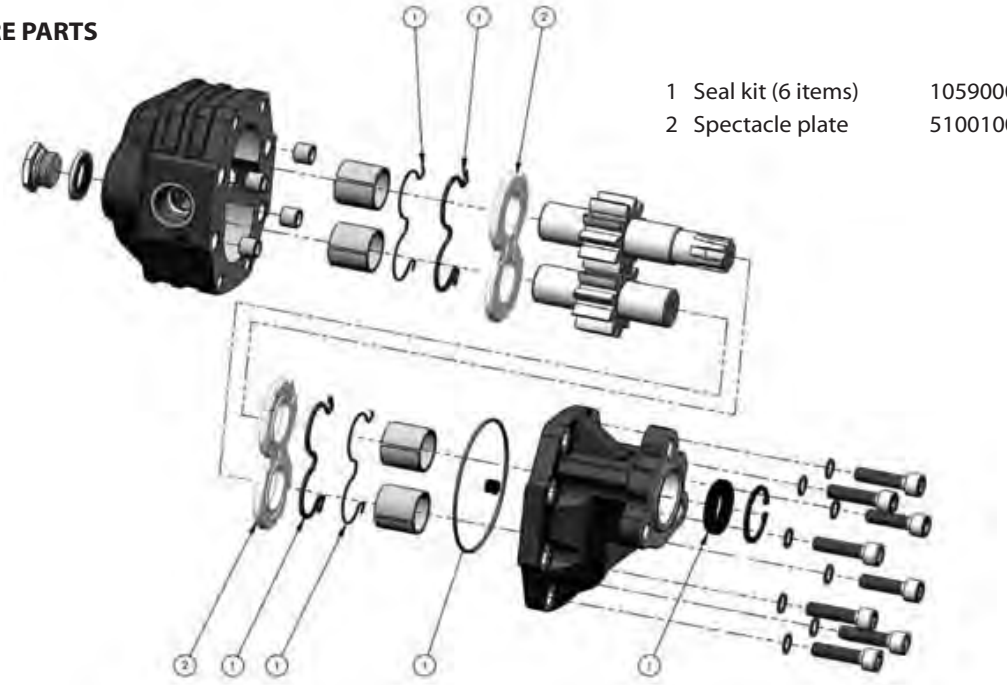
* This pump is designed for low pressure, intermittent use tipping systems without filtration.
* The oil should be a good quality hydraulic oil to ISO 6743/4 HM32 for -15 to +27 C working temperature.
* For extended life 25 µm absolute return line filtration is recommended.
* Oil cleanliness is maintained to ISO 4406 class 19/16.
* Oil should be replaced annually.

PUMP ROTATION



* *Pumps can be supplied to suit the rotation required*
* *If rotation is to be reversed, refer to instructions supplied with the kit*

SPARE PARTS



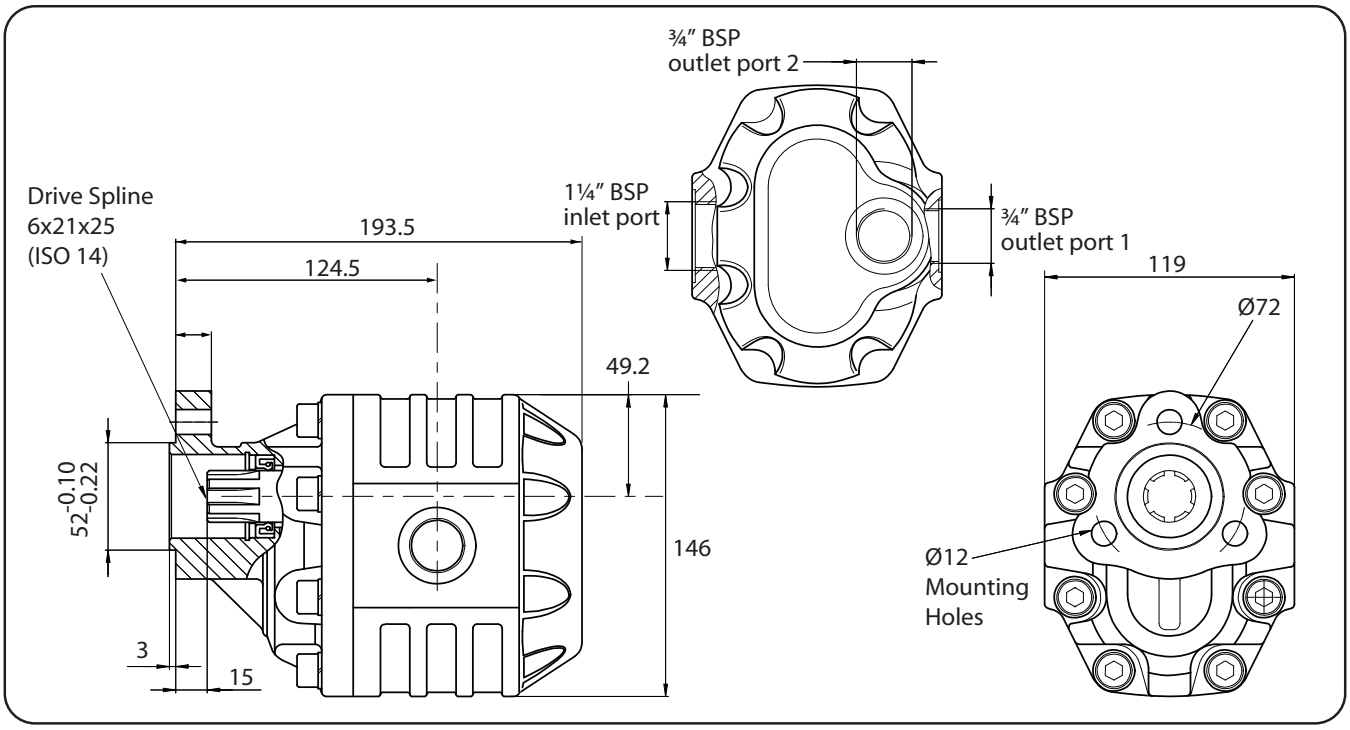
1	Seal kit (6 items)	10590000188	(1 per pump)
2	Spectacle plate	51001000106	(2 per pump)

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

3 Hole Gear Pump: Tipper Applications - EGP0822103H



* 81 cm³/rev output flow
* Medium pressure (240 bar MWP)
* Compact size for easy installation
* Ideal for close coupled PTO mounting
* 3 hole UNI mounting flange
* Bronze trust plates for maximum durability
* Available anti-clockwise (left) rotation as EGP0822103H or clockwise (right) rotation as EGP082210C3H
* Optional output port



NB. This pump is supplied as complete kit PKS9609/03.

PKS9609/03 pump kit includes:

EGP0822103H	Gear pump
NR1639	Low pressure adaptor (1½" BSP push-on 90° elbow)
NR611/42	High pressure adaptor (¾" BSP)
NR627	High pressure elbow (¾" BSP 90°)
DPP45F/SC	Washer (¾" BSP)

** Other adaptor options are available. Please contact Edbro for more information.*

3 Hole Gear Pump: Tipper Applications - EGP0822103H

PERFORMANCE

Displacement	81 cm³/rev
Max. working pressure	210 bar
Peak pressure	220 bar
Max working speed	1800 rpm @ 220 bar

PIPES

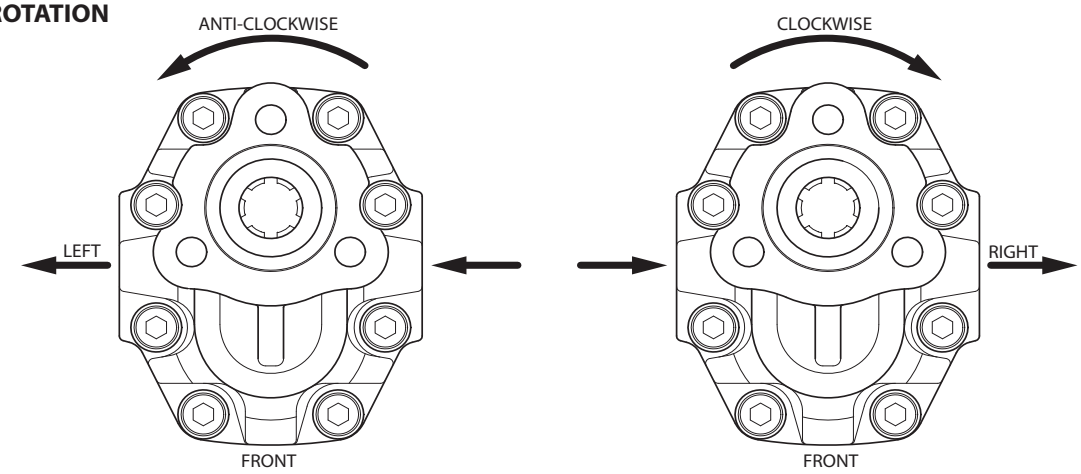
Size: Suction 1½" minimum
Pressure ¾" minimum

Pipe runs should be direct and short, with no kinks

OIL & FILTRATION

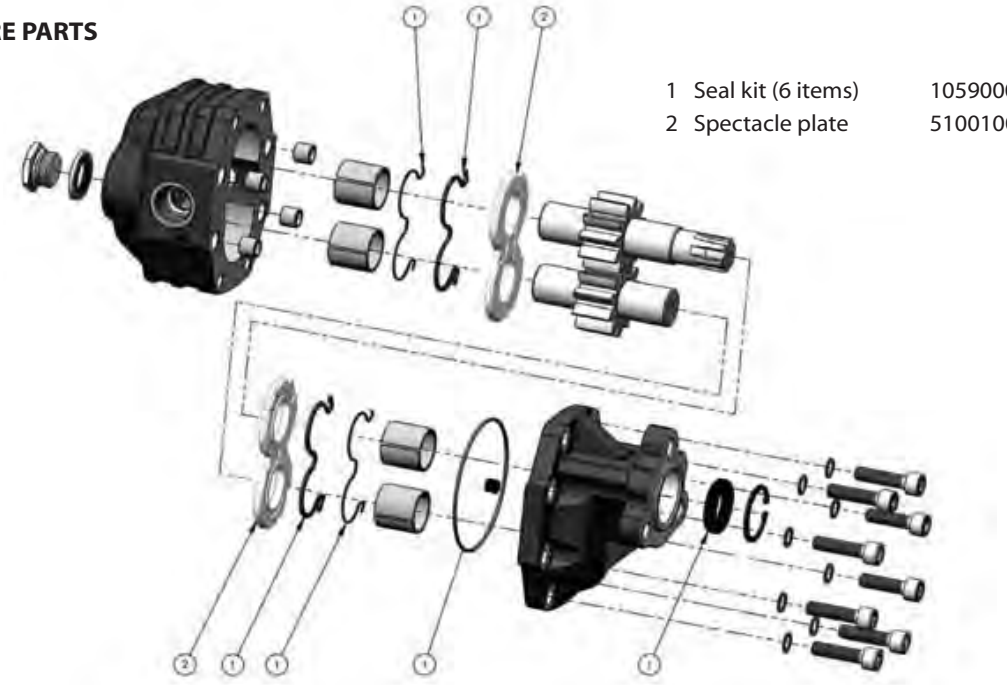
* This pump is designed for low pressure, intermittent use tipping systems without filtration.
* The oil should be a good quality hydraulic oil to ISO 6743/4 HM32 for -15 to +27 C working temperature.
* For extended life 25 µm absolute return line filtration is recommended.
* Oil cleanliness is maintained to ISO 4406 class 19/16.
* Oil should be replaced annually.

PUMP ROTATION



* *Pumps can be supplied to suit the rotation required*
* *If rotation is to be reversed, refer to instructions supplied with the kit*

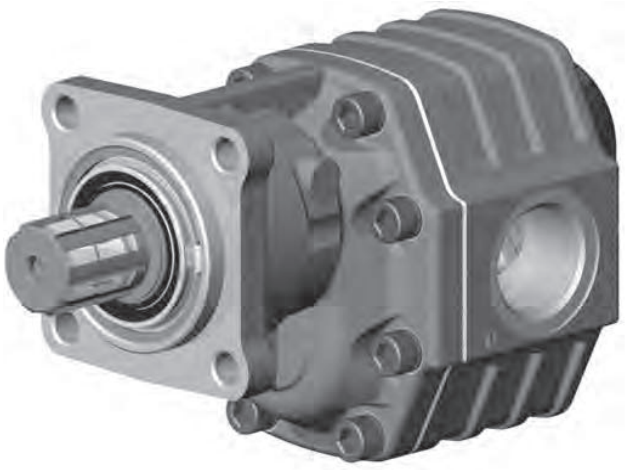
SPARE PARTS



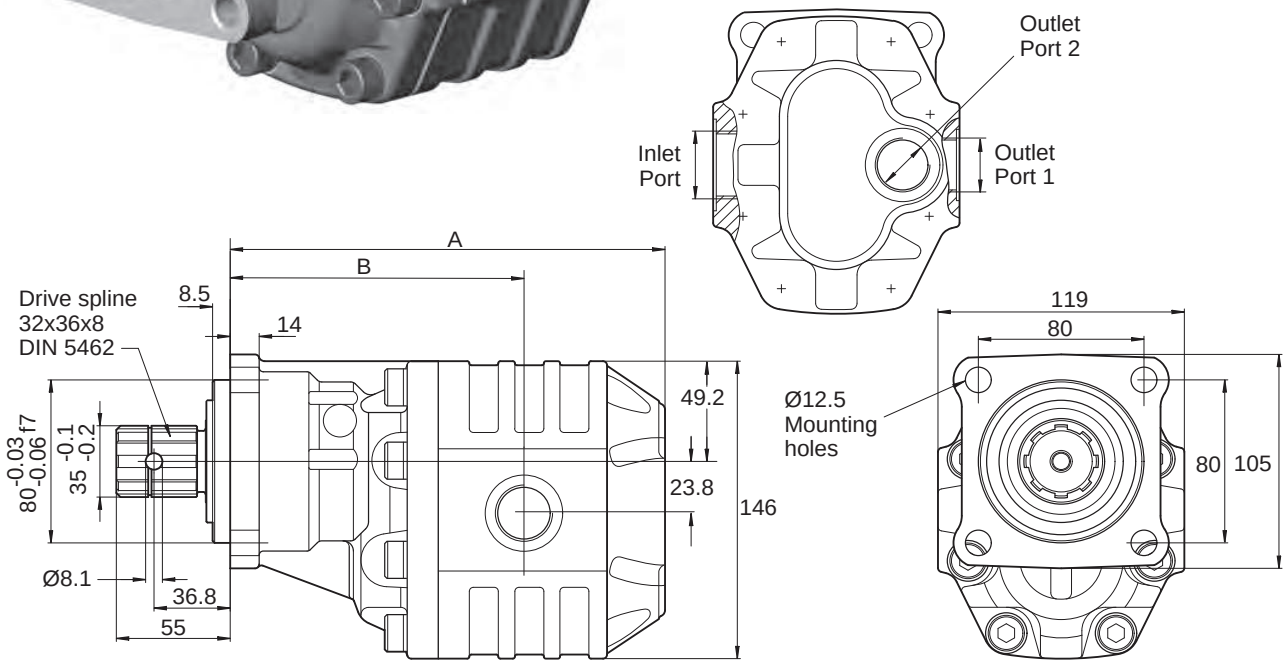
1	Seal kit (6 items)	10590000188	(1 per pump)
2	Spectacle plate	51001000106	(2 per pump)

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Gear Pumps: Tipper Application



- A range of flows from 17 to 125 cm ^{3}/rev
- Compact size for easy installation
- Ideal for close coupled PTO mounting
- 4 - Hole ISO7653 Mounting flange
- Bronze thrust plates for maximum durability
- Bi-Directional Pumps from 43-112 cm ^{3}/rev
- Optional output port



Part Number	IN	OUT 1	OUT 2	A	B	Weight
	ISO 228	ISO 228	ISO 228	mm	mm	Kg
EGP017315	1/2 inch BSP	1/2 inch BSP		168.5	119.5	11
EGP027315	3/4 inch BSP			174.5	124	12
EGP034300		3/4 inch BSP		179.5	125	13
EGP043250R				185.5	130	14.3
EGP061240R	1 inch BSP	1 inch BSP		196.5	136.5	15.3
EGP082220R				209.5	140.5	16.3
EGP090225R	$1^1/_4$ inch BSP	$1^1/_4$ inch BSP		228.5	151.5	19.5
EGP100220R				232.5	155.5	18.7
EGP112125R				238.5	161.5	20
EGP125150	$1^1/_4$ inch BSP	1 inch BSP	3/4 inch BSP	242.5	158.5	17

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Gear Pumps: Tipper Application

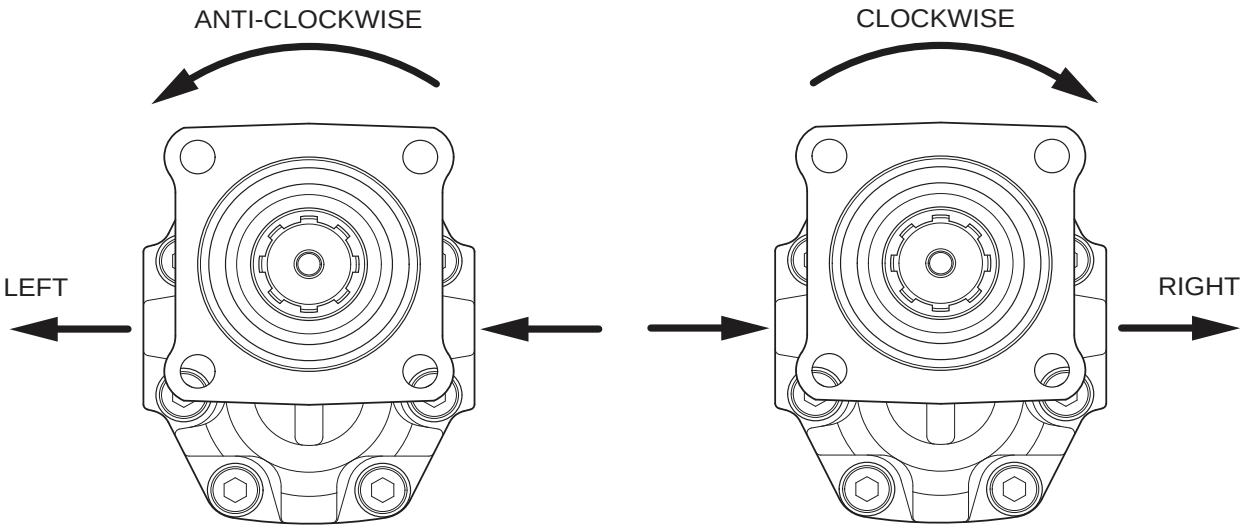
TECHNICAL FEATURES						
Part Number	Displacement	Pressure		Max. continuous speed	Max. intermittent speed	Min. speed
		P1	P2			
	cm^3/rev	bar	bar	rpm	rpm	rpm
EGP017315	17	315	325	2500	3000	300
EGP027315	26					
EGP034300	34	300	310	2200	2800	
EGP043250R	43	240	250	1700	2250	
EGP061240R	60	200	210	1500	1800	
EGP082220R	81	180	190	1400	1700	
EGP090250R	91	250	265	1800	2700	
EGP100220R	99	240	255			
EGP112225R	112	225	240			
EGP125150	125	180	200	1500	1800	

P1= Max. Intermittent pressure (20 sec. max.)
P2= Max. peak pressure (6 sec. max.)

OIL & FILTRATION

- The EGP range is designed primarily for use on tipper applications without filtration.
- The oil should be a good quality hydraulic oil to ISO 6743/4 HM32 for -15° to +27°C working temperature.
- For extended life or for higher duty applications, 25µm absolute return line filtration is recommended.
- Oil cleanliness to be maintained to ISO 4406 class 19/16.
- Oil should be replaced annually.

PUMP ROTATION



- If rotation is to be reversed, refer to instructions supplied with the kit

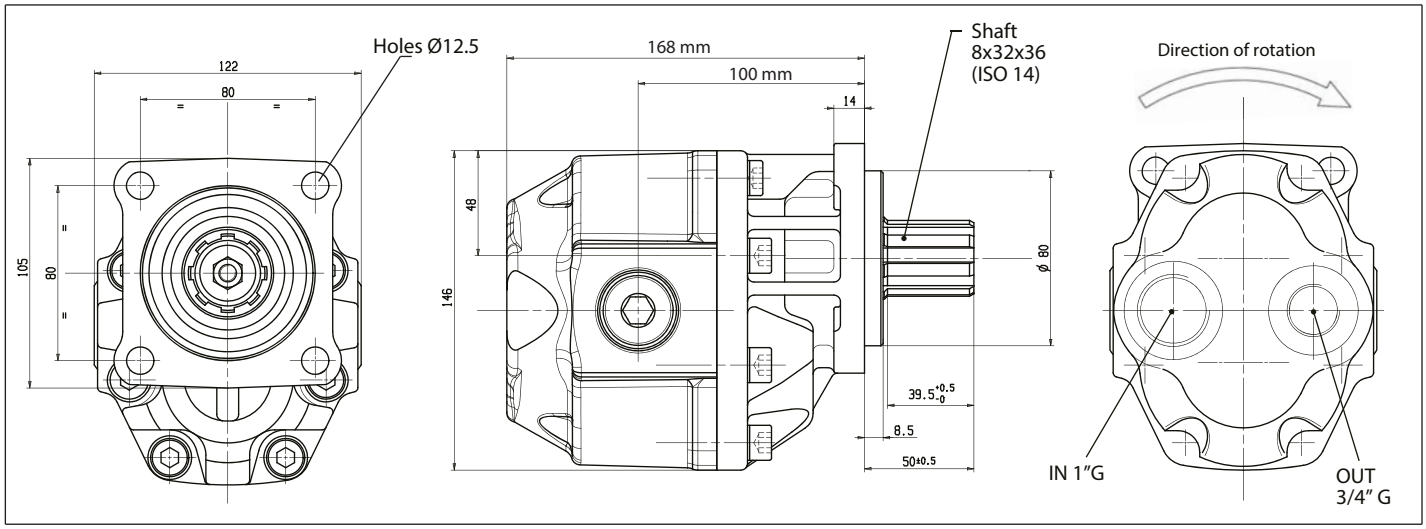
Short Gear Pumps : Tipper Application - EGP082220A



- 4-hole slim line gear pump
- Available as part of pump kit PKS9609/07
- 82cm³/rev output flow
- Maximum working pressure 190 bar
- Slim-line design for compact installation
- Optional inlet and outlets

KIT CONTENTS (PKS9609/07)

1 x EGP082220A short design gear pump	
1 x NR1664	1” - 1.5” suction fitting (elbow)
1 x DPP45F/SC	3/4” Dowty Seal
1 x NR611/42	3/4” - 3/4” adaptor
1 x NR627	3/4” - 3/4” female elbow



PERFORMANCE

Displacement		cm³	82
Max. working pressure	bar	190	
Peak pressure	bar	220	
Max continuous speed	rpm	1500 @ 190 bar	
Max intermittent speed	rpm	1800 @ 220 bar	

PIPES

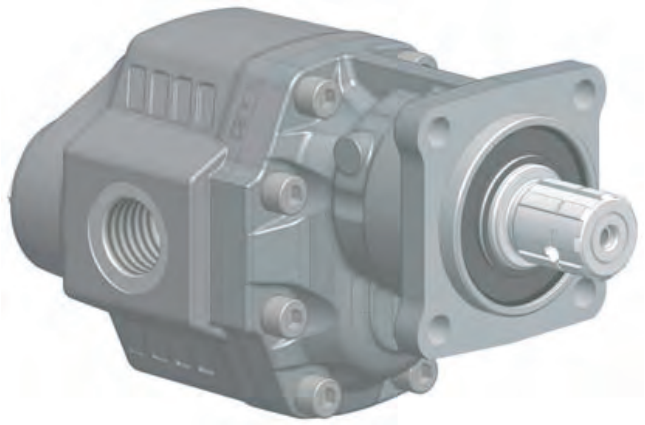
Size: Suction 1.25” minimum
Pressure 3/4” minimum
Pipe runs should be direct and short, with no kinks

OIL & FILTRATION

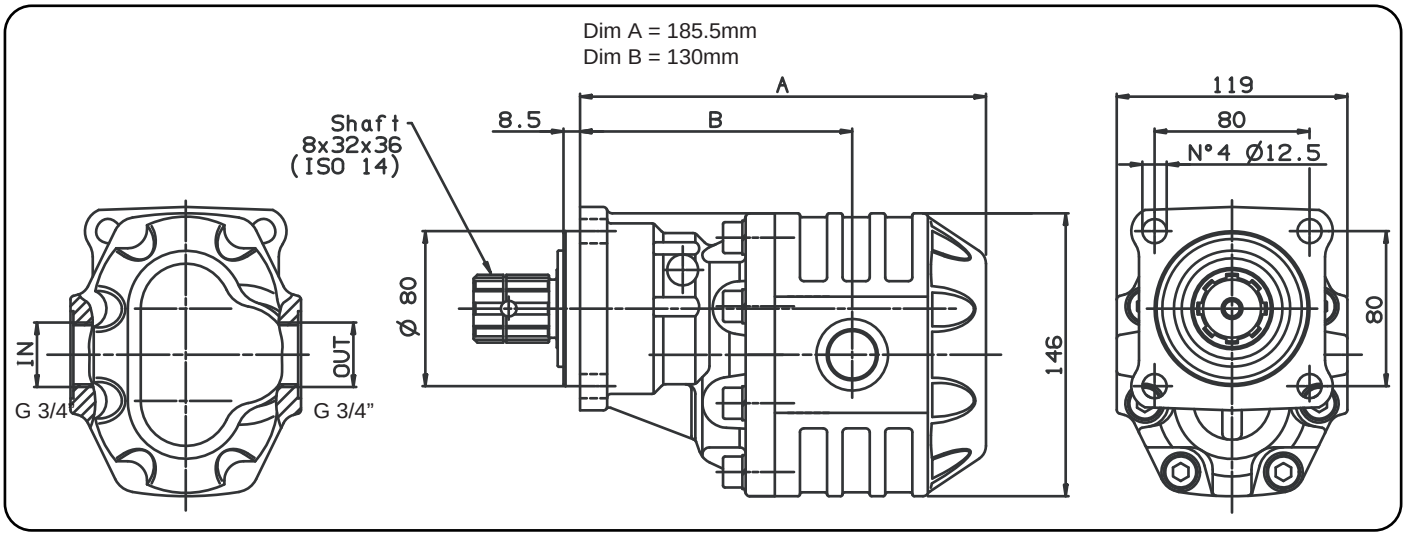
- This pumpis designed for low pressure, intermittent use tipping systems without filtration
- The oil should be a good quality hydraulic oil to ISO 6743/4 HM32 for -15 to +27°c working temperature
- For extended life 25 um absolute return line filtration is recommended
- Oil clenliness is maintained to ISO 4406 class 19/16
- Oil should be replaced annually

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Gear Pump : For tipper application - **EGP043250R**



- 43 cm^3/rev output flow
- Medium pressure (250 bar mwp)
- Compact size for easy installation
- Weight - 14.3kg
- Ideal for close coupled PTO mounting
- 4 - Hole ISO7653 Mounting flange
- Bronze thrust plates for maximum durability
- Bi-directional Pump



Refer to HP to LP Fittings sheet for different size options available.

PERFORMANCE

Displacement	cm^3/rev	43
Max. Working Pressure	bar	250
Max. Intermitent Pressure	bar	230
Max. Working Speed	rpm	2000
Min. Speed	rpm	300

PIPES

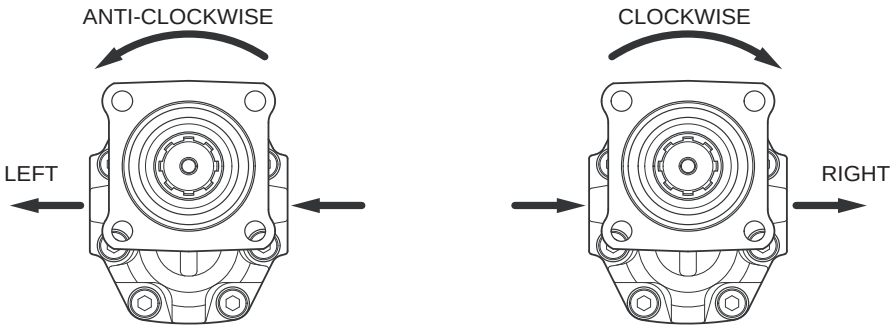
- Size: Suction 1 inch minimum
  Pressure $^1/_2$ inch minimum
- Pipe runs should be direct and short, with no kinks.

Gear Pump : For tipper application - EGP043250R

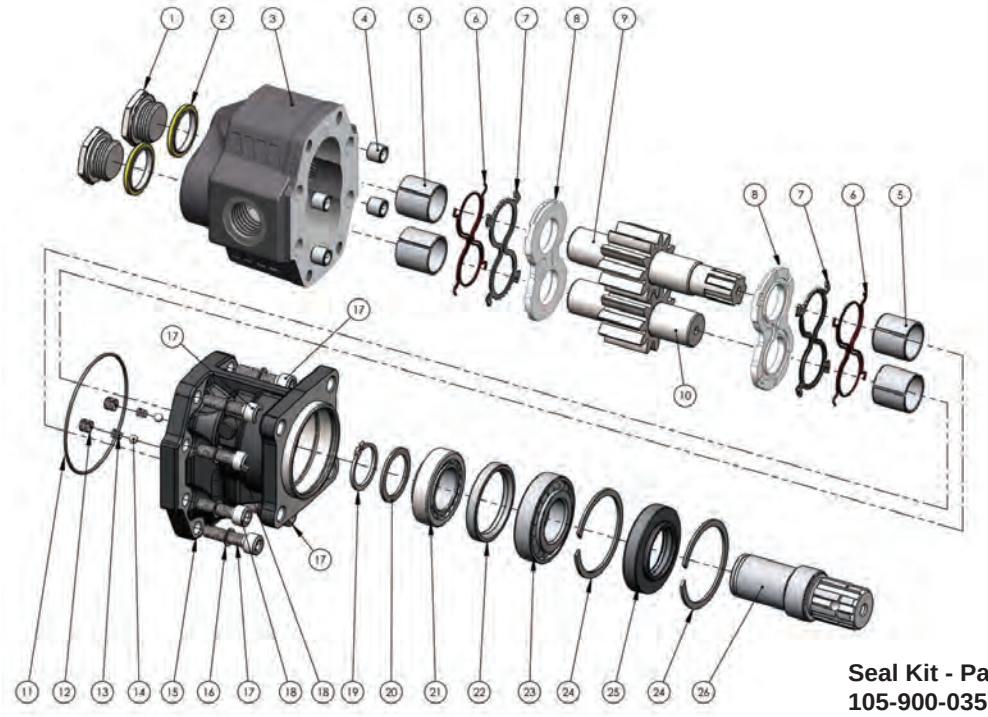
OIL & FILTRATION

- This pump is designed for low pressure, intermittent use, tipper systems without filtration.
- The oil should be a good quality hydraulic oil to ISO 6743/4 HM32 for -15° to +27°C working temperature.
- For extended life or for higher duty applications, 25µm absolute return line filtration is recommended.
- Oil cleanliness to be maintained to ISO 4406 class 19/16.
- Oil should be replaced annually.

PUMP ROTATION
(view from PTO end)

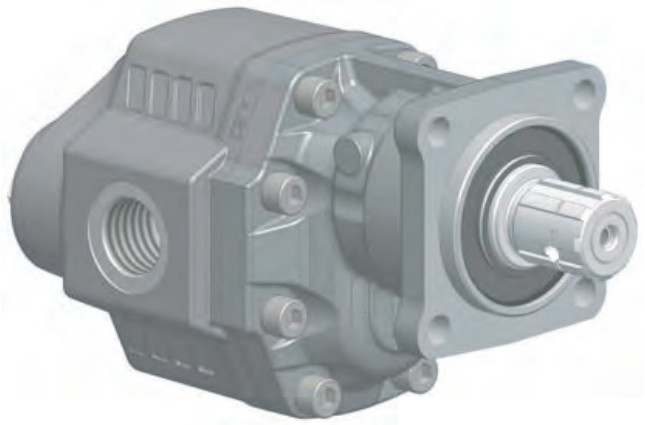


SPARE PARTS

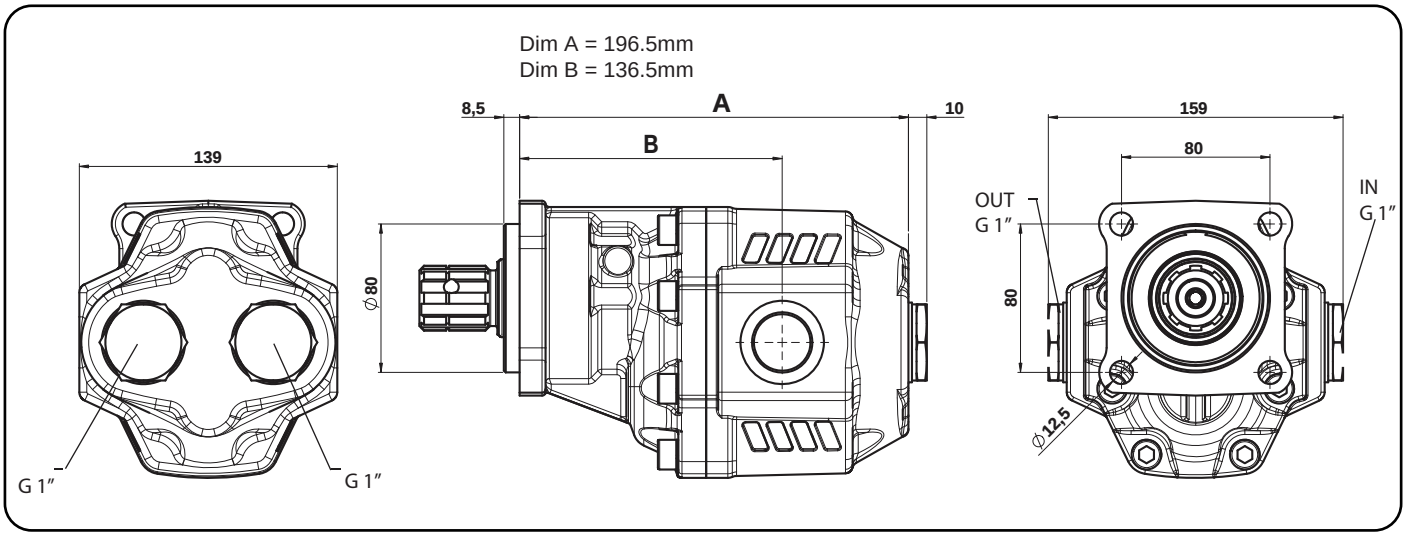


Seal Kit - Part no:
105-900-0357

Gear Pump : For tipper application - EGP061240R



- 61 cm^3/rev output flow
- Medium pressure (240 bar mwp)
- Compact size for easy installation
- Weight - 15.3kg
- Ideal for close coupled PTO mounting
- 4 - Hole ISO7653 Mounting flange
- Bronze thrust plates for maximum durability
- Bi-directional Pump



Refer to HP to LP Fittings sheet for different size options available.

PERFORMANCE

Displacement	cm^3/rev	61
Max. Working Pressure	bar	240
Max. Intermitent Pressure	bar	220
Max. Working Speed	rpm	1800
Min. Speed	rpm	300

PIPES

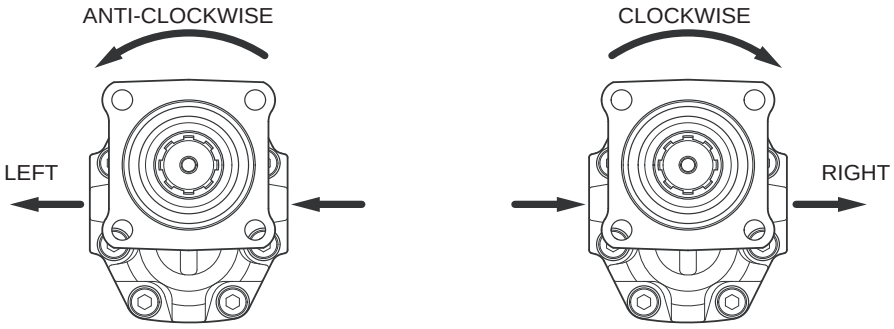
- Size: Suction 1 1/2" inch minimum
  Pressure 3/4 inch minimum
- Pipe runs should be direct and short, with no kinks.

Gear Pump : For tipper application - EGP061240R

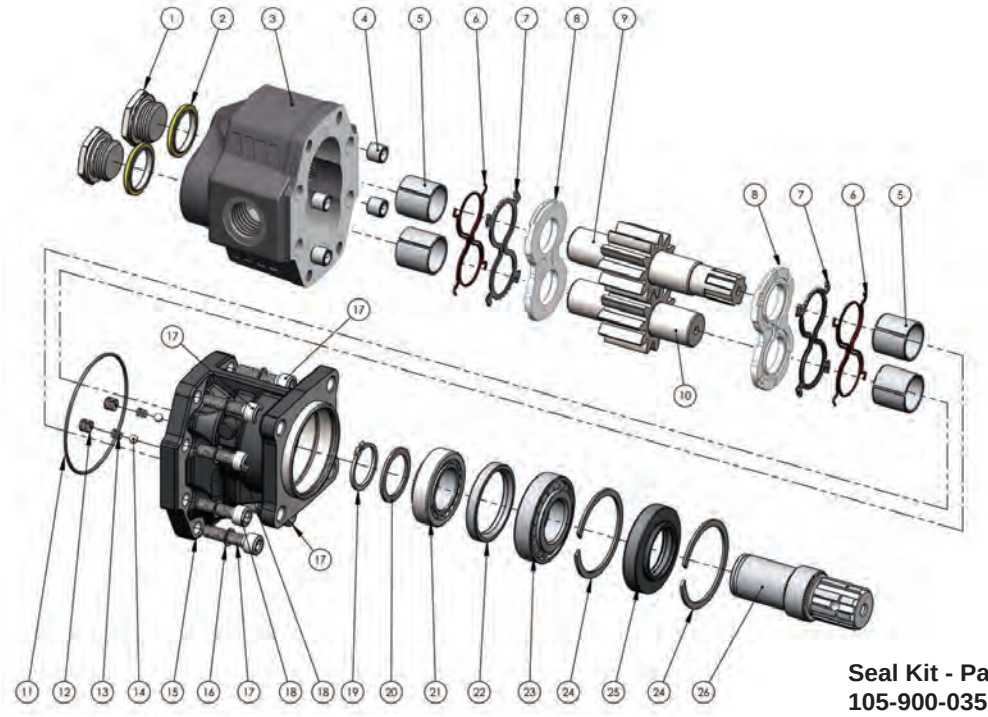
OIL & FILTRATION

- This pump is designed for low pressure, intermittent use, tipper systems without filtration.
- The oil should be a good quality hydraulic oil to ISO 6743/4 HM32 for -15° to +27°C working temperature.
- For extended life or for higher duty applications, 25µm absolute return line filtration is recommended.
- Oil cleanliness to be maintained to ISO 4406 class 19/16.
- Oil should be replaced annually.

PUMP ROTATION
(view from PTO end)

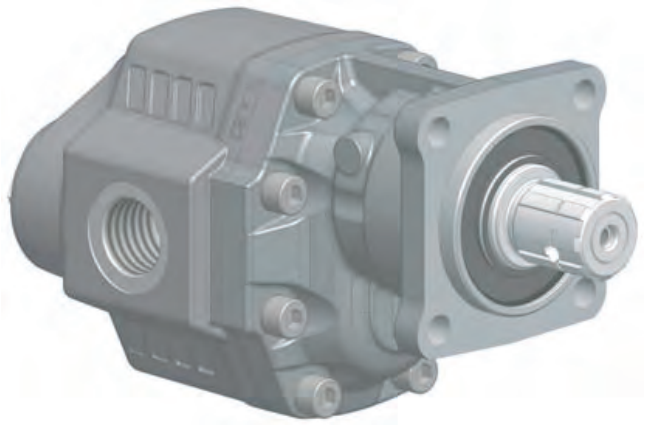


SPARE PARTS

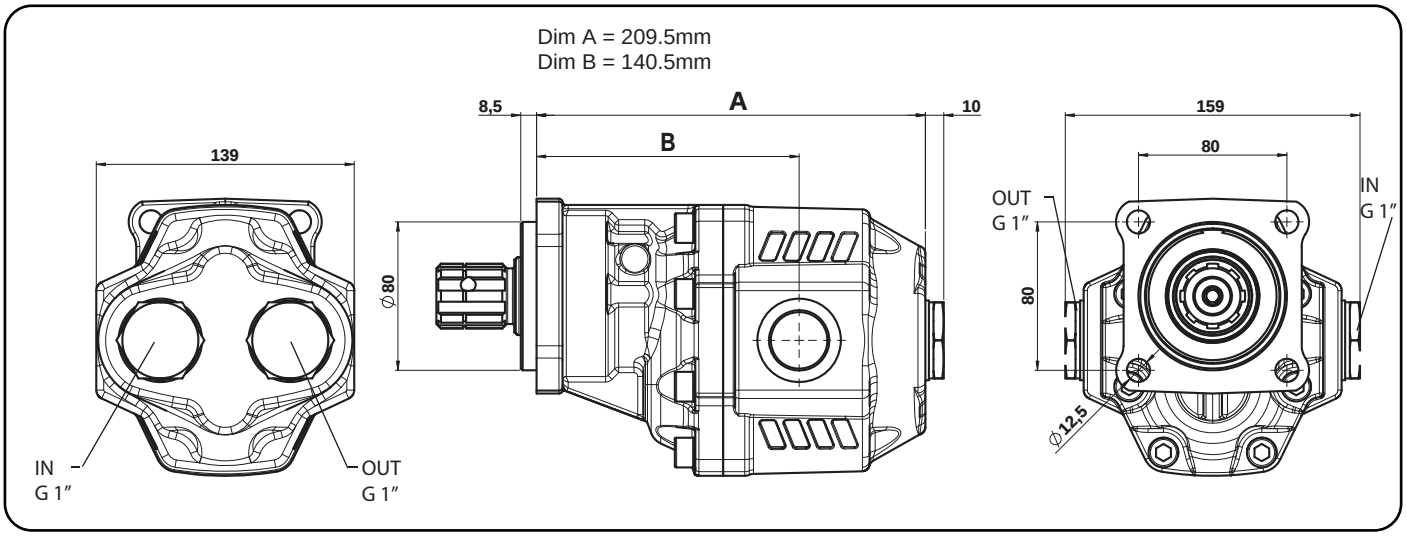


Seal Kit - Part no:
105-900-0357

Gear Pump : For tipper application - EGP082220R



- 82 cm^3/rev output flow
- Medium pressure (220 bar mwp)
- Compact size for easy installation
- Weight - 16.3kg
- Ideal for close coupled PTO mounting
- 4 - Hole ISO7653 Mounting flange
- Bronze thrust plates for maximum durability
- Bi-directional Pump



Refer to HP to LP Fittings sheet for different size options available.

PERFORMANCE

Displacement	cm^3/rev	82
Max. Working Pressure	bar	220
Max. Intermitent Pressure	bar	200
Max. Working Speed	rpm	1500
Min. Speed	rpm	300

PIPES

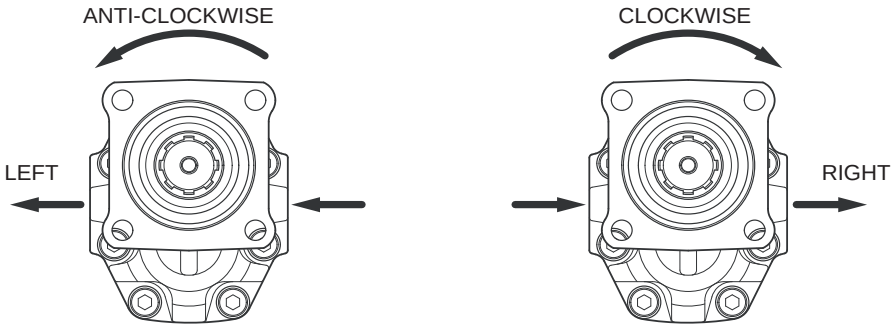
- Size: Suction 1 1/2" inch minimum
  Pressure 3/4" inch minimum
- Pipe runs should be direct and short, with no kinks.

Gear Pump : For tipper application - EGP0082220R

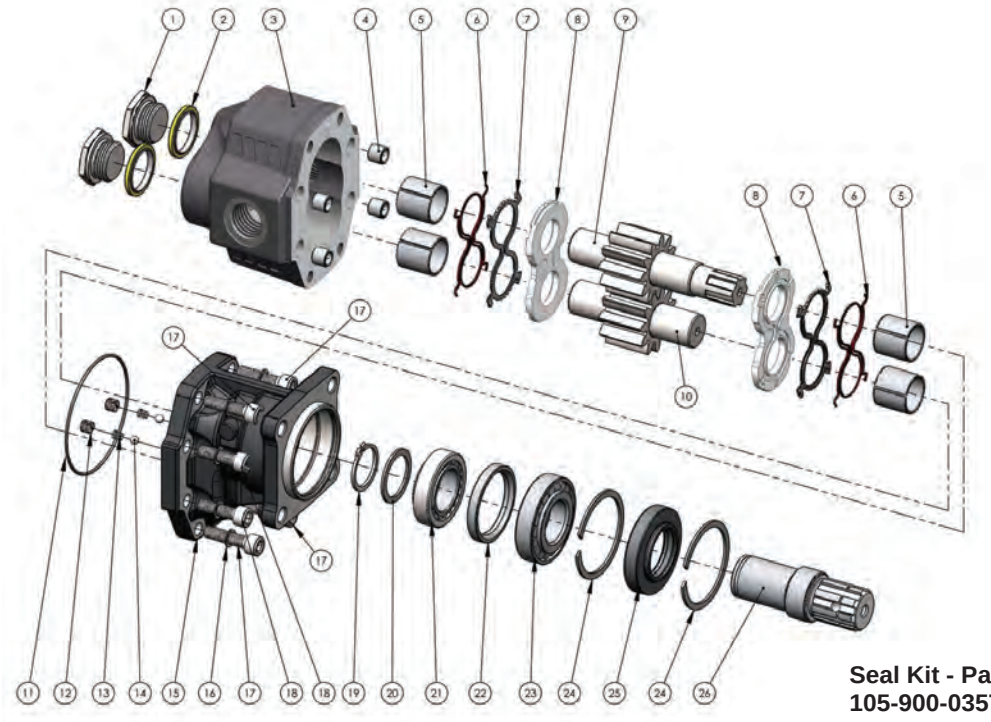
OIL & FILTRATION

- This pump is designed for low pressure, intermittent use, tipper systems without filtration.
- The oil should be a good quality hydraulic oil to ISO 6743/4 HM32 for -15° to +27°C working temperature.
- For extended life or for higher duty applications, 25µm absolute return line filtration is recommended.
- Oil cleanliness to be maintained to ISO 4406 class 19/16.
- Oil should be replaced annually.

PUMP ROTATION
(view from PTO end)



SPARE PARTS

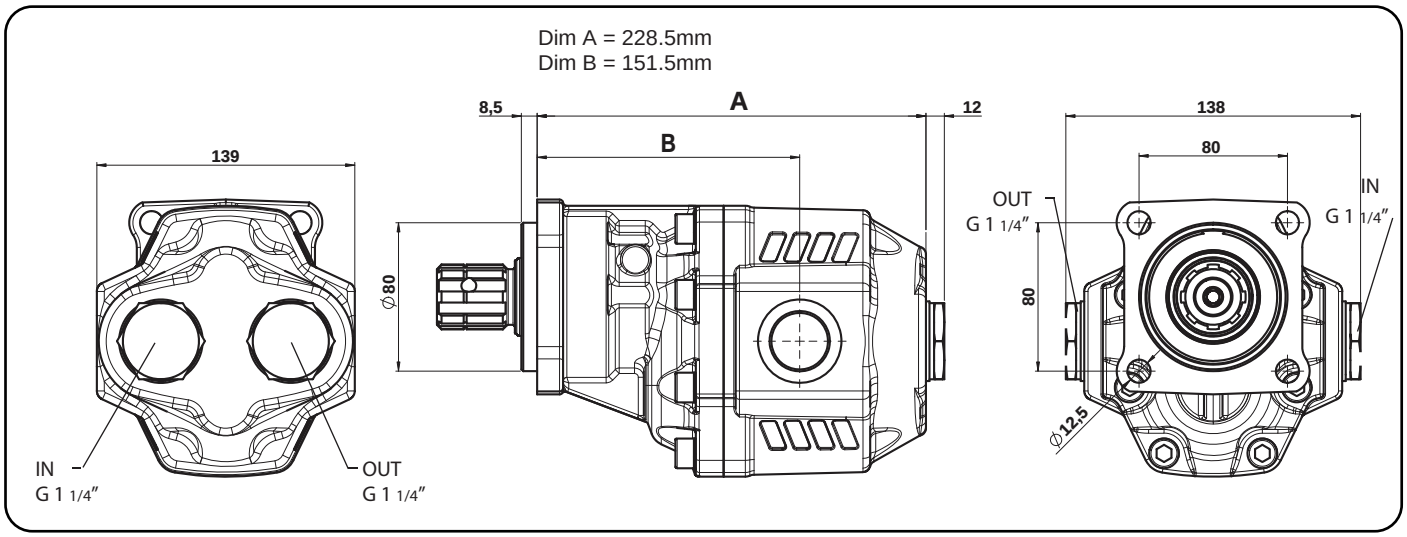


Seal Kit - Part no:
105-900-0357

Gear Pump for Tipper Applications - EGP090250R



- 90cm³/rev output flow
- Medium pressure (250 bar mwp)
- Compact size for easy installation
- Weight - 19.5kg
- Ideal for close coupled PTO mounting
- 4 - Hole ISO7653 mounting flange
- Bronze thrust plates for maximum durability
- Bi-directional



Refer to HP to LP Fittings sheet for different size options available.

PERFORMANCE

Displacement	cm³/rev	90
Max. Working Pressure	bar	250
Max. Intermitent Pressure	bar	230
Max. Working Speed	rpm	1800
Min. Speed	rpm	300

PIPES

- Size: Suction 1 1/2" inch minimum
  Pressure 3/4" inch minimum
- Pipe runs should be direct and short, with no kinks.

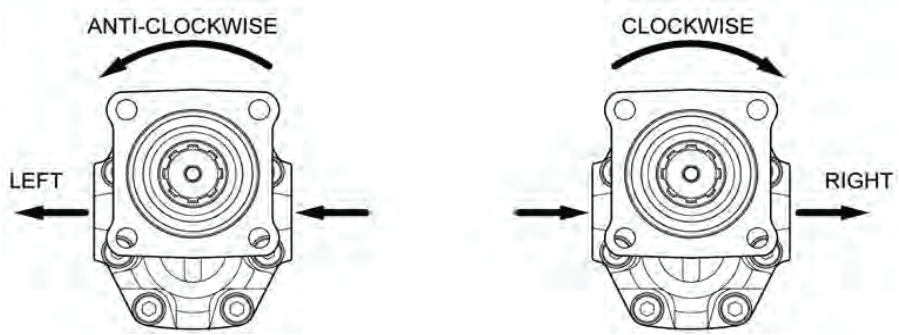
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Gear Pump for Tipper Applications - EGP090250R

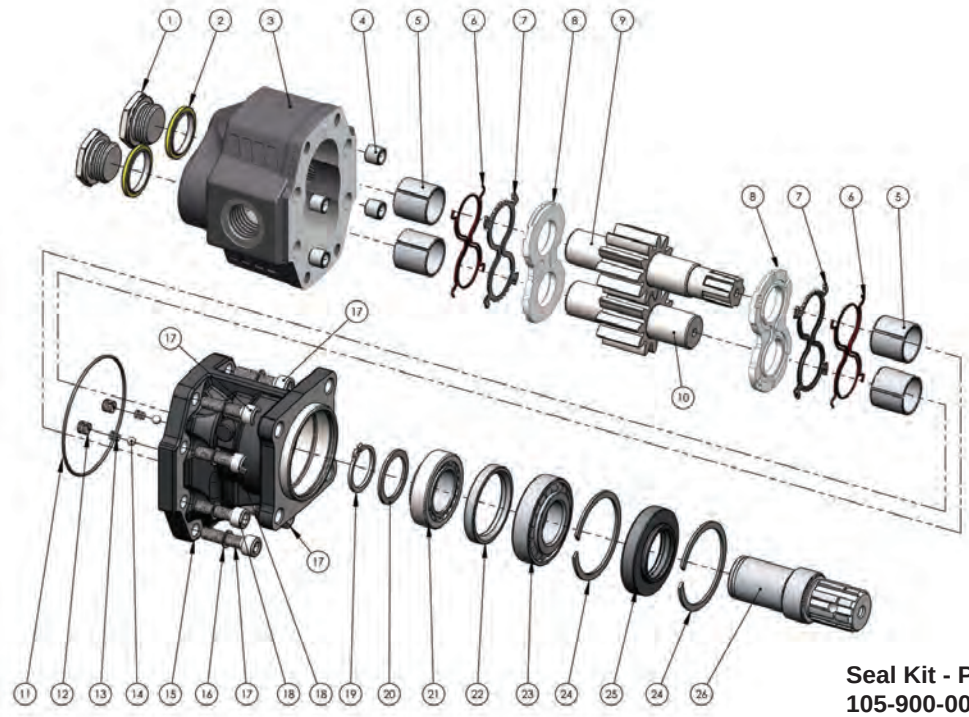
OIL & FILTRATION

- This pump is designed for low pressure, intermittent use tipping systems without filtration.
- The oil should be a good quality hydraulic oil to ISO 6743/4 HM32 for –15º to +27ºC working temperature.
- For extended life or for higher duty applications, 25 µm absolute return line filtration is recommended.
- Oil cleanliness is maintained to ISO 4406 class 19/16.
- Oil should be replaced annually.

PUMP ROTATION

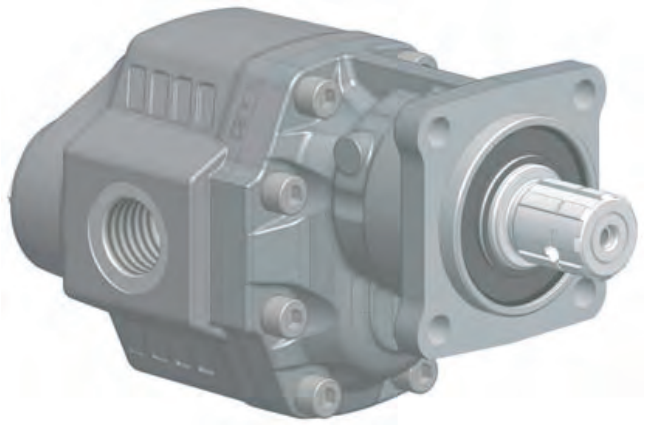


SPARE PARTS

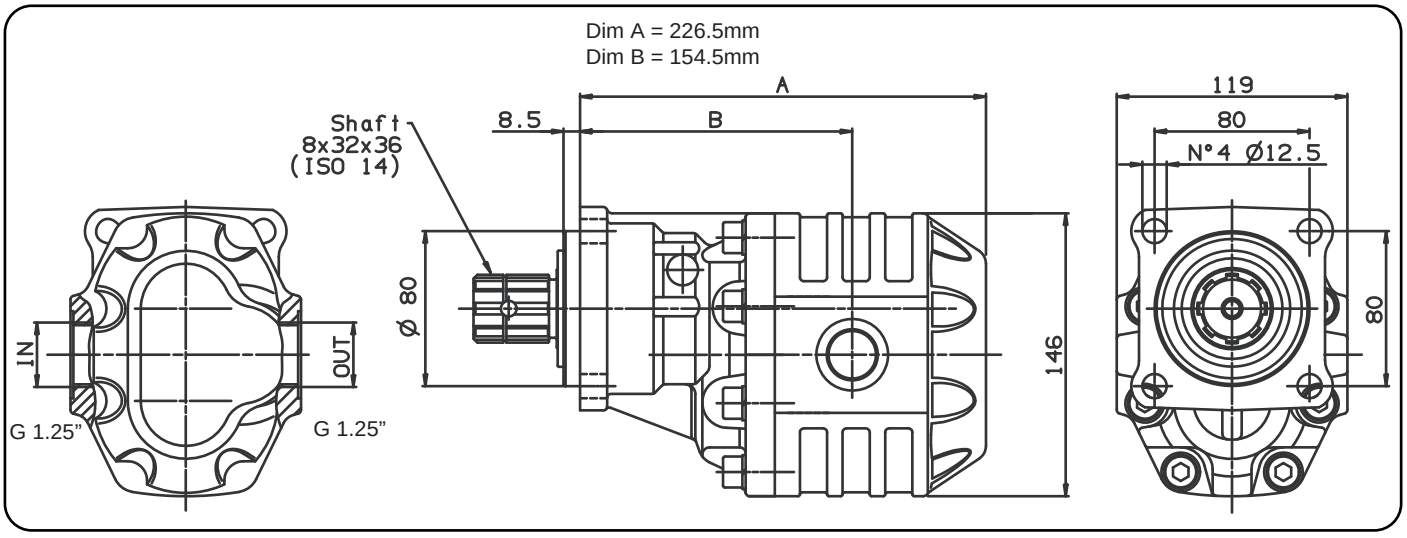


Seal Kit - Part no:
105-900-00464

Gear Pump : For tipper application - EGP100220R



- 100cm^3/rev output flow
- Medium pressure (220 bar mwp)
- Compact size for easy installation
- Weight - 15.8kg
- Ideal for close coupled PTO mounting
- 4 - Hole ISO7653 Mounting flange
- Bronze thrust plates for maximum durability
- Bi-directional Pump



Refer to HP to LP Fittings sheet for different size options available.

PERFORMANCE

Displacement	cm^3/rev	100
Max. Working Pressure	bar	220
Max. Intermitent Pressure	bar	200
Max. Working Speed	rpm	1500
Min. Speed	rpm	300

PIPES

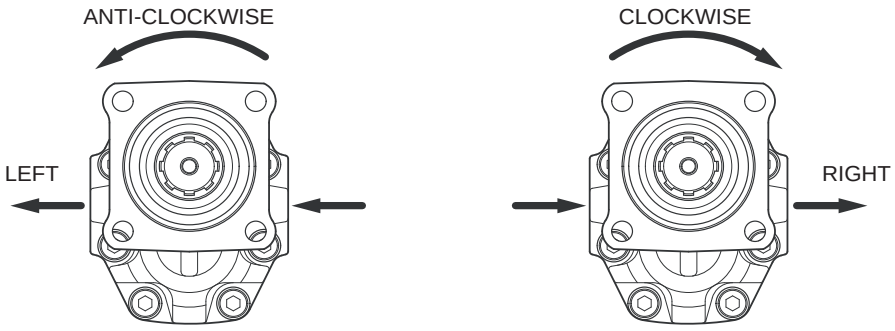
- Size: Suction 1 1/2" inch minimum
  Pressure 3/4" inch minimum
- Pipe runs should be direct and short, with no kinks.

Gear Pump : For tipper application - EGP0100220R

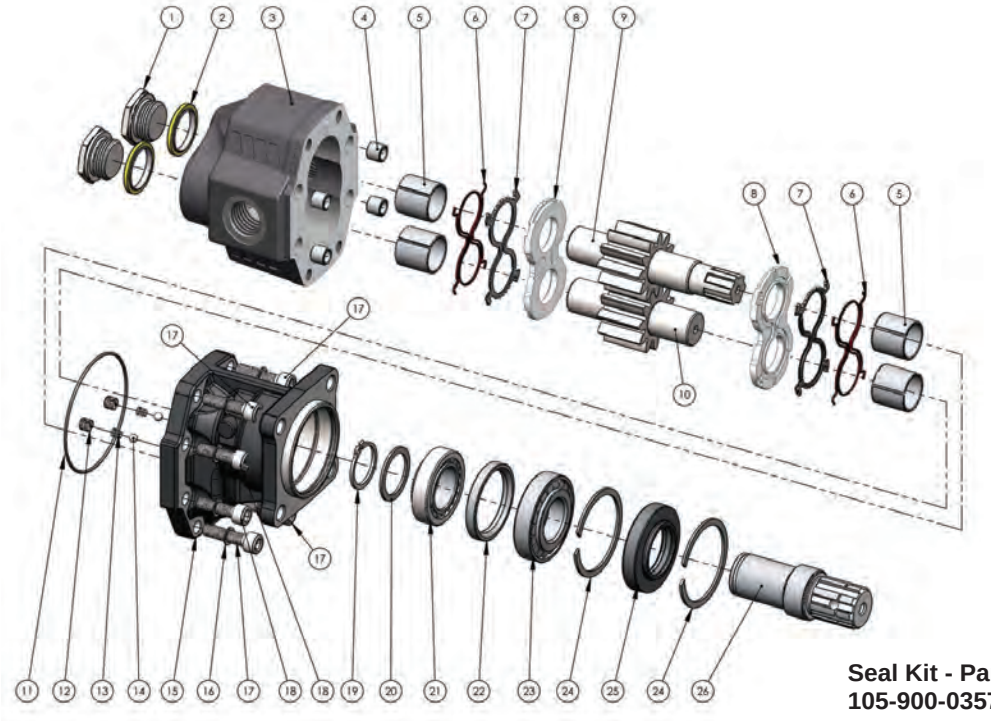
OIL & FILTRATION

- This pump is designed for low pressure, intermittent use, tipper systems without filtration.
- The oil should be a good quality hydraulic oil to ISO 6743/4 HM32 for -15° to +27°C working temperature.
- For extended life or for higher duty applications, 25µm absolute return line filtration is recommended.
- Oil cleanliness to be maintained to ISO 4406 class 19/16.
- Oil should be replaced annually.

PUMP ROTATION
(view from PTO end)



SPARE PARTS

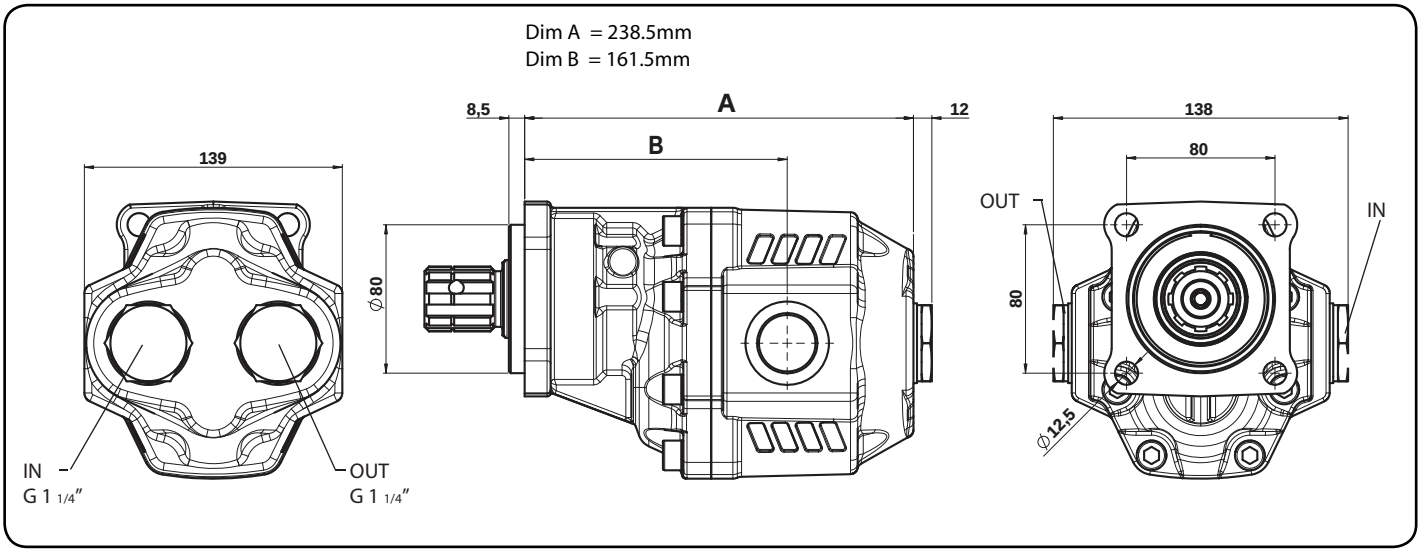


Seal Kit - Part no:
105-900-0357

Gear Pump for Tipper Applications - EGP112225R



- 112 cm³/rev output flow
- Medium pressure (240 bar mwp)
- Compact size for easy installation
- Weight - 20kg
- Ideal for close coupled PTO mounting
- 4 - Hole ISO7653 mounting flange
- Bronze thrust plates for maximum durability
- Bi-directional



Refer to HP to LP Fitting sheet for different size options available.

PERFORMANCE

Displacement	cm³/rev	112
Max. Working Pressure	bar	240
Max. Intermitent Pressure	bar	225
Max. Working Speed	rpm	1800
Min. Speed	rpm	300

PIPES

- Size: Suction 2" inch minimum
  Pressure 1" inch minimum
- Pipe runs should be direct and short, with no kinks.

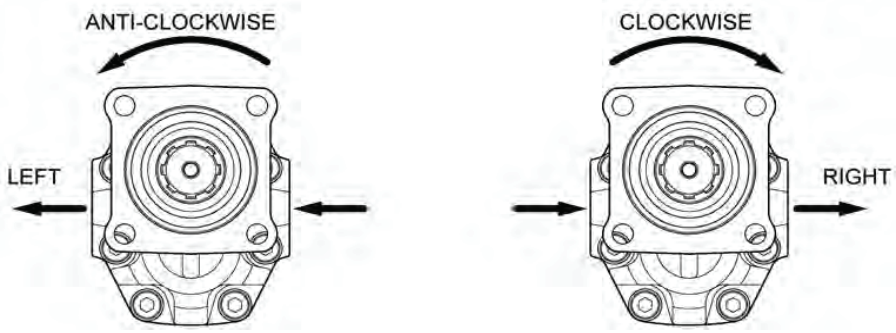
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Gear Pump for Tipper Applications - EGP112225R

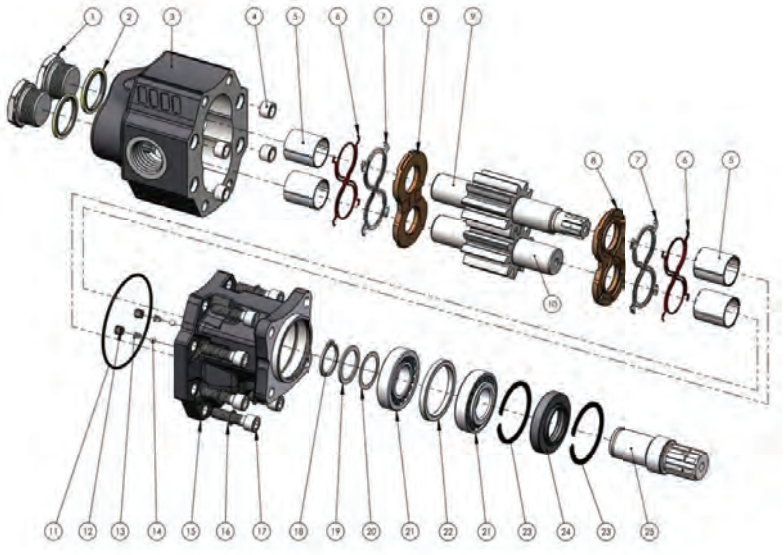
OIL & FILTRATION

- This pump is designed for low pressure, intermittent use tipping systems without filtration.
- The oil should be a good quality hydraulic oil to ISO 6743/4 HM32 for –15º to +27ºC working temperature.
- For extended life or for higher duty applications, 25 µm absolute return line filtration is recommended.
- Oil cleanliness is maintained to ISO 4406 class 19/16.
- Oil should be replaced annually.

PUMP ROTATION

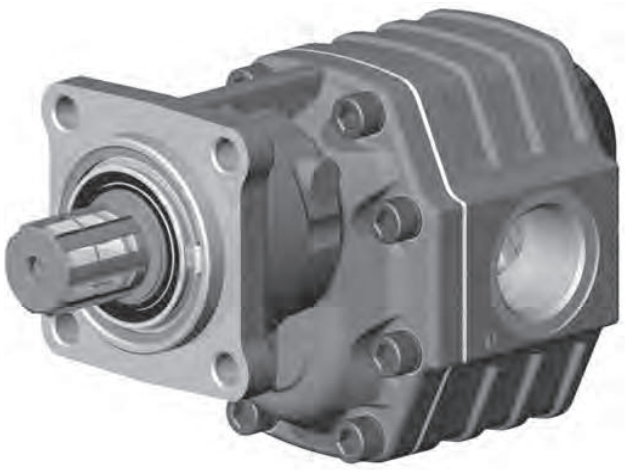


SPARE PARTS

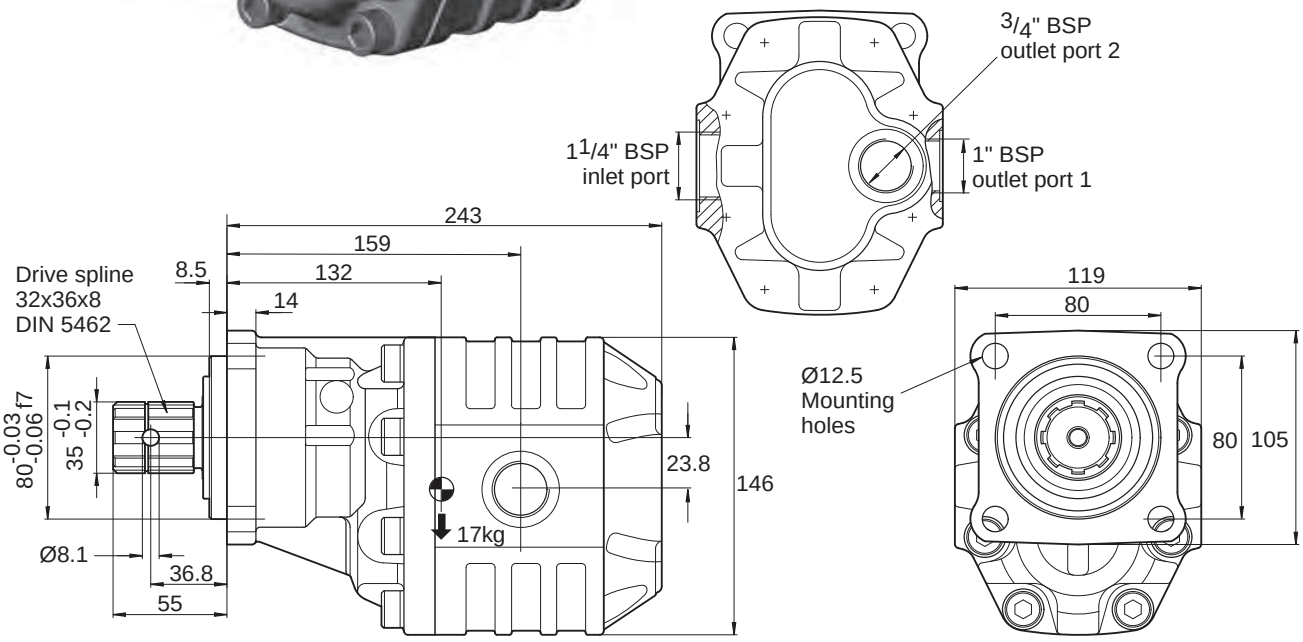


Seal Kit - Part no:
105-900-00464

Gear Pump: Tipper applications - **EGP125150R**



- 125 cm³/rev output flow
- Medium pressure (150 bar mwp)
- Compact size for easy installation
- Ideal for close coupled PTO mounting
- 4 - Hole ISO7653 Mounting flange
- Bronze thrust plates for maximum durability
- Bi-Directional Pump
- Optional output port



All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Gear Pump: Tipper applications - EGP125150

PERFORMANCE

Displacement	cm^3/rev	125
Max. Working Pressure	bar	150
Peak Pressure	bar	180
Max. Working Speed	rpm	1800 @ 160bar 3500 @ no pressure

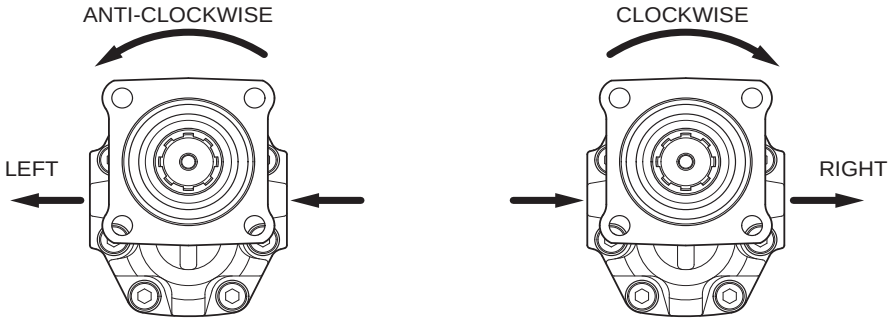
PIPES

- Size: Suction $1^1/_2$ inch minimum
  Pressure $3\ ^/_4$ inch minimum
- Pipe runs should be direct and short, with no kinks.

OIL & FILTRATION

- This pump is designed for low pressure, intermittent use, tipper systems without filtration.
- The oil should be a good quality hydraulic oil to ISO 6743/4 HM32 for -15° to +27°C working temperature.
- For extended life or for higher duty applications, 25µm absolute return line filtration is recommended.
- Oil cleanliness to be maintained to ISO 4406 class 19/16.
- Oil should be replaced annually.

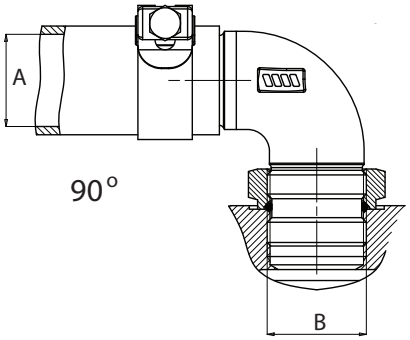
PUMP ROTATION



- Pumps can be supplied to suit the rotation required
- If rotation is to be reversed, refer to instructions supplied with the kit

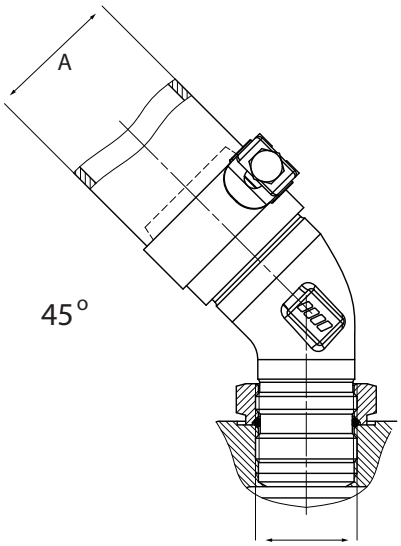
Gear Pumps: Low Pressure Adaptors





Part	A	B
NR1677	1/2"	1.25"
NR1678	3/4"	1"
NR1679	3/4"	1.25"
NR1644	3/4"	1.5"
NR1664	1"	1.5"
NR1639	1.25"	1.5"
NR1682	1.25	2"

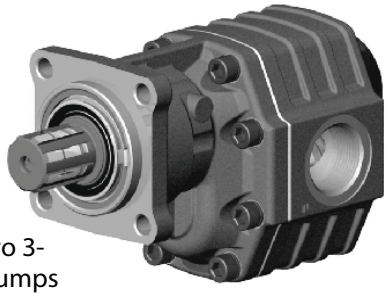




Part	A	B
NR1742	1.25"	1.5"
NR1683	1.25"	2"

e l a m



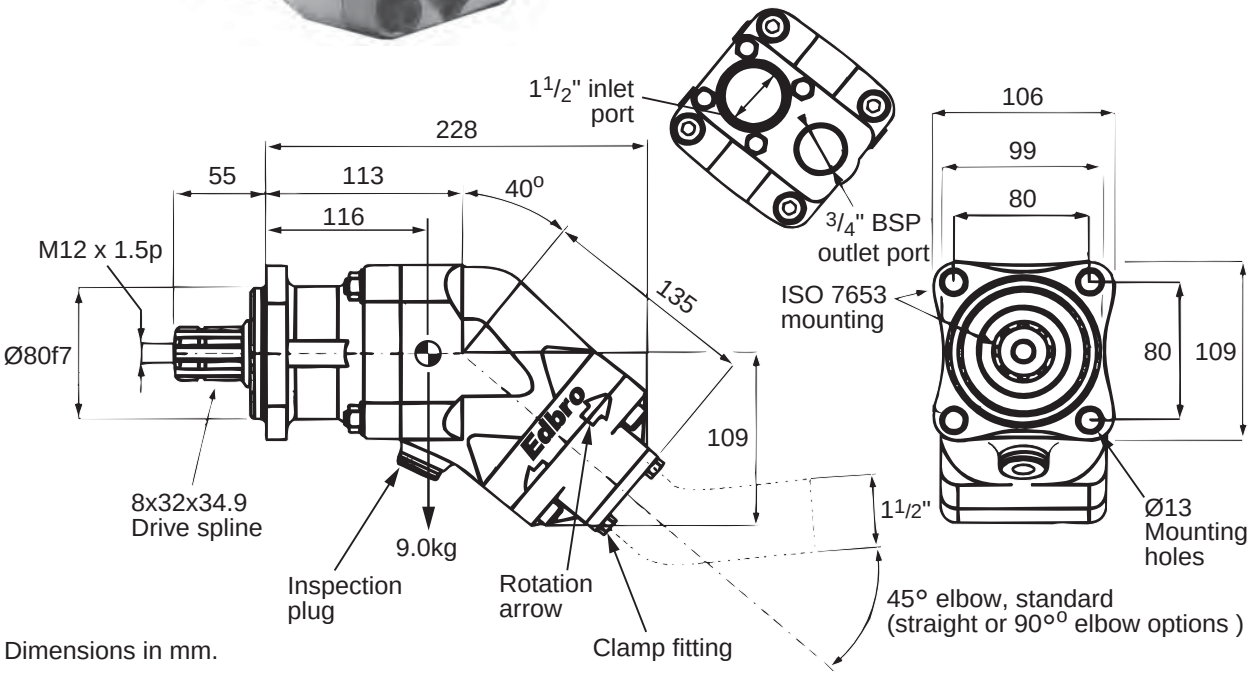


For use with Edbro 3- and 4-bolt Gear pumps

Bent Axis Piston Pump: Tipper Applications - EBA04722



- 47 cm³/rev output flow
- Medium pressure (220 bar mwp)
- Compact size for easy installation
- Ideal for close coupled PTO mounting
- Lightweight aluminium casings
- Reversible rotation whilst installed
- 4 - Hole ISO7653 Mounting flange



Dimensions in mm.

PIPE ADAPTOR KIT OPTIONS

Low pressure inlet adaptors	High pressure outlet adaptor options	
	3/4 inch BSP straight (NR611/42, DPP45F)	3/4 inch BSP 90° elbow (NR611/42, NR627, DPP45F)
1 1/2 inch push-on 45° elbow (NR1588)	AK53 (standard)	AK66
1 1/2 inch push-on 90° elbow (NR1589)	AK54	AK67
1 1/2 inch push-on straight (NR1612)	AK52	AK65

Bent Axis Piston Pump: Tipper Applications - EBA04722

PERFORMANCE

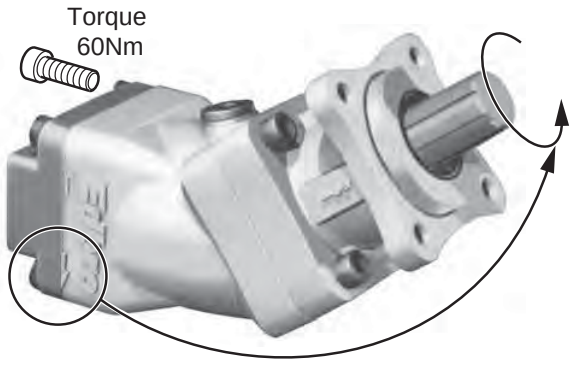
Displacement	cm^3/rev	47
Max. Working Pressure	bar	220
Max. Working Speed	rpm	1900
Max.Speed Off-Load	rpm	2500
Power	Kw	55
Weight	kg	9.0
Moment at PTO face	Nm	10.1

OIL & FILTRATION

This pump is designed for low pressure, intermittent use, tipper systems without filtration.
The oil should be a good quality hydraulic oil to ISO 6743/4 HM32 for -15° to +27° C working temperature.
For extended life or for higher duty applications, 25mm absolute return line filtration is recommended.
Oil cleanliness to be maintained to ISO 4406 class 19/16.
Oil should be replaced annually.

PIPES

Size: Suction $1\frac{1}{2}$ inch minimum
Pressure $\frac{3}{4}$ inch minimum
The suction pipe must be able to withstand -12psi (-0.8bar) pressure.
Pipe runs should be direct and short, with no kinks.



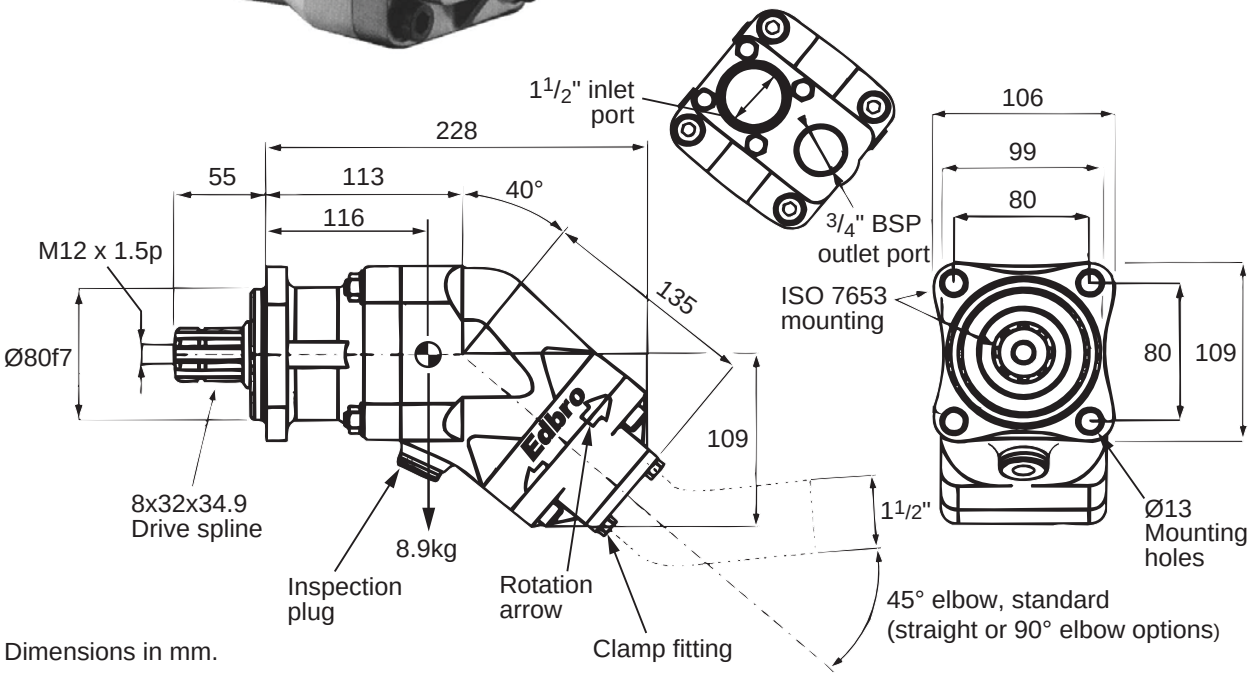
ROTATION DIRECTION
The rotation direction is shown by the complete arrows on the pump casing, and is specified as clockwise (right hand rotation) or anti-clockwise (left hand rotation), when viewed looking toward the pump along the splined shaft.
To change the rotation direction, remove the 4 setscrews and lift the end cover by a few mm.

Rotate through 180° push back into place and replace the setscrews.
Unless specially requested, ANTI-CLOCKWISE configuration will be supplied.

Bent Axis Piston Pump: Tipper Applications - EBA06422



- 64 cm³/rev output flow
- Medium pressure (250 bar mwp)
- Compact size for easy installation
- Ideal for close coupled PTO mounting
- Lightweight aluminium casings
- Reversible rotation whilst installed
- 4 - Hole ISO7653 Mounting flange



Dimensions in mm.

PIPE ADAPTOR KIT OPTIONS

Low pressure inlet adaptors	High pressure outlet adaptor options	
	3/4 inch BSP straight (NR611/42, DPP45F)	3/4 inch BSP 90° elbow (NR611/42, NR627, DPP45F)
1 1/2 inch push-on 45° elbow (NR1588)	AK53 (standard)	AK66
1 1/2 inch push-on 90° elbow (NR1589)	AK54	AK67
1 1/2 inch push-on straight (NR1612)	AK52	AK65

Bent Axis Piston Pump: Tipper Applications - EBA06422

PERFORMANCE

Displacement	cm^3/rev	64
Max. Working Pressure	bar	250
Max. Working Speed	rpm	1900
Max.Speed Off-Load	rpm	2500
Power	Kw	55
Weight	kg	9.0
Moment at PTO face	Nm	10.1

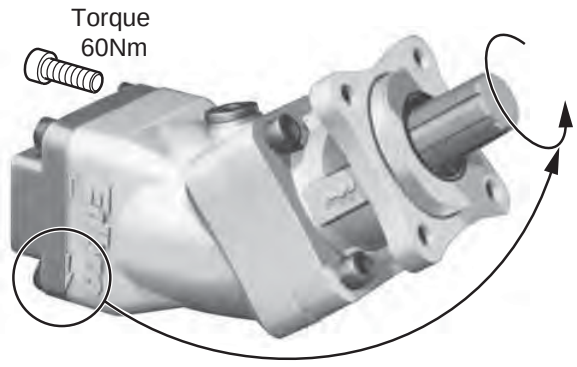
OIL & FILTRATION

This pump is designed for low pressure, intermittent use, tipper systems without filtration.
The oil should be a good quality hydraulic oil

to ISO 6743/4 HM32 for -15° to +27°C working temperature.
For extended life or for higher duty applications, 25mm absolute return line filtration is recommended.
Oil cleanliness to be maintained to ISO 4406 class 19/16.
Oil should be replaced annually.

PIPES

Size: Suction $1^1/_2$ inch minimum
Pressure $^3/_4$ inch minimum
The suction pipe must be able to withstand -12psi (-0.8bar) pressure.
Pipe runs should be direct and short, with no kinks.



ROTATION DIRECTION

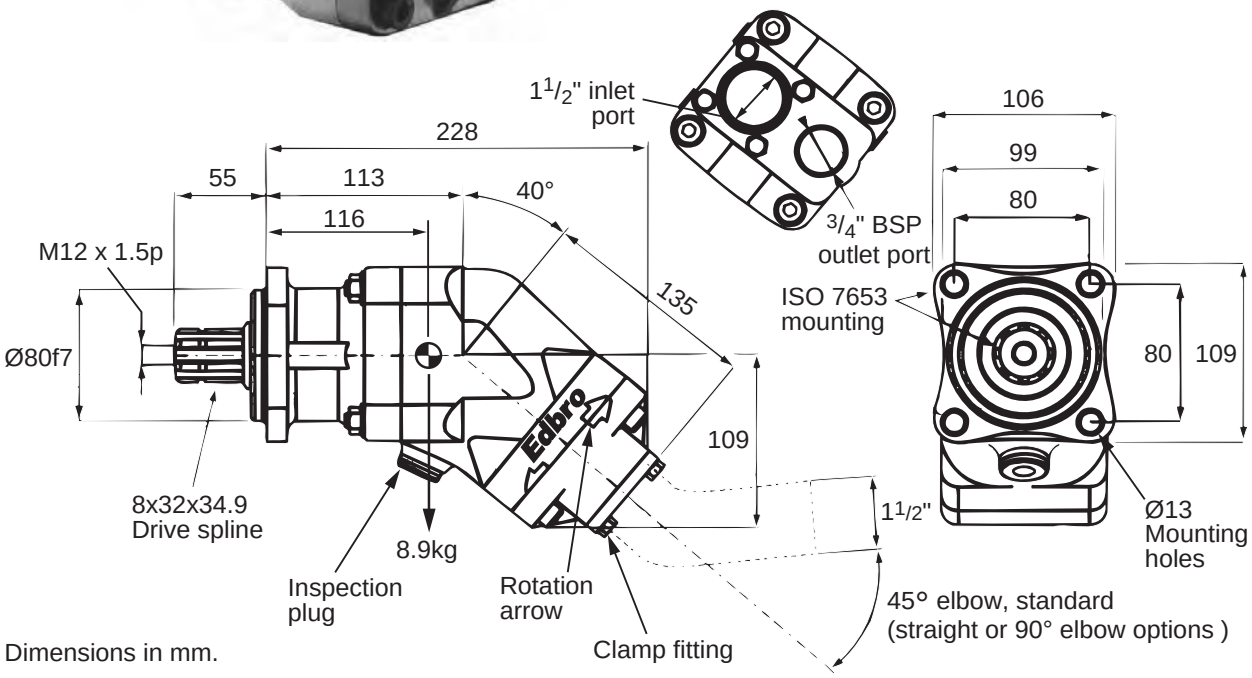
The rotation direction is shown by the complete arrows on the pump casing, and is specified as clockwise (right hand rotation) or anti-clockwise (left hand rotation), when viewed looking toward the pump along the splined shaft.
To change the rotation direction, remove the 4 setscrews and lift the end cover by a few mm.

Rotate through 180° push back into place and replace the setscrews.
Unless specially requested, ANTI-CLOCKWISE configuration will be supplied.

Bent Axis Piston Pump: Tipper Applications - EBA09022



- 90 cm³/rev output flow
- Medium pressure (250 bar mwp)
- Compact size for easy installation
- Ideal for close coupled PTO mounting
- Lightweight aluminium casings
- Reversible rotation whilst installed
- 4 - Hole ISO7653 Mounting flange



Dimensions in mm.

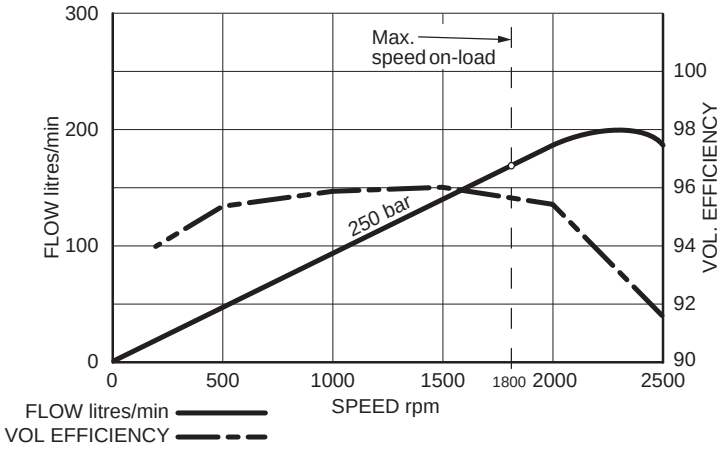
PIPE ADAPTOR KIT OPTIONS

Low pressure inlet adaptors	High pressure outlet adaptor options	
	3/4 inch BSP straight (NR611/1, DPP45F)	3/4 inch BSP 90° elbow (NR611/1, NR627, DPP45F)
1 1/2 inch push-on 45° elbow (NR1588)	AK53 (standard)	AK66
1 1/2 inch push-on 90° elbow (NR1589)	AK54	AK67
1 1/2 inch push-on straight (NR1612)	AK52	AK65
2 inch push-on	Details available on request	

Bent Axis Piston Pump: Tipper Applications - EBA09022

PERFORMANCE

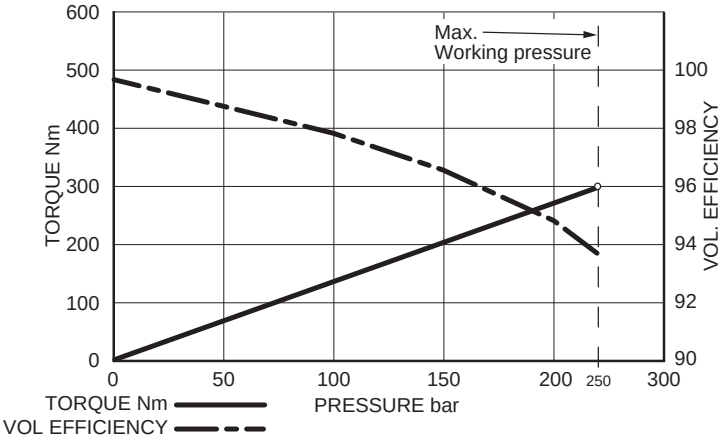
Displacement	cm^3/rev	90
Max. Working Pressure	bar	250
Max. Working Speed	rpm	1800
Max.Speed Off-Load	rpm	2500
Power	Kw	70
Weight	kg	8.9
Moment at PTO face	Nm	10.1



PIPES

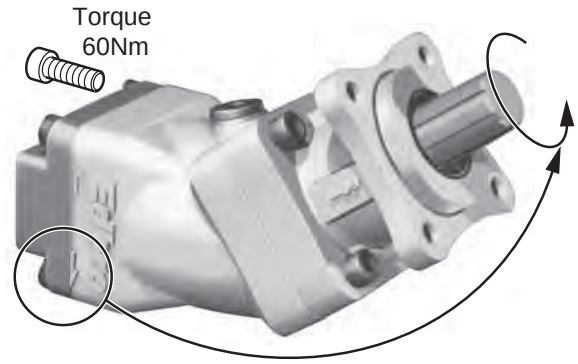
Size: Suction $1^1/_2$ inch minimum
Pressure $^3/_4$ inch minimum

For improved high speed efficiency and to avoid cavitation, a 2 inch suction pipe must be used.
The suction pipe must be able to withstand -12psi (-0.8bar) pressure.
Pipe runs should be direct and short, with no kinks.



OIL & FILTRATION

This pump is designed for low pressure, intermittent use, tipper systems without filtration.
The oil should be a good quality hydraulic oil to ISO 6743/4 HM32 for -15° to +27°C working temperature.
For extended life or for higher duty applications, 25µm absolute return line filtration is recommended.
Oil cleanliness to be maintained to ISO 4406 class 19/16.
Oil should be replaced annually.



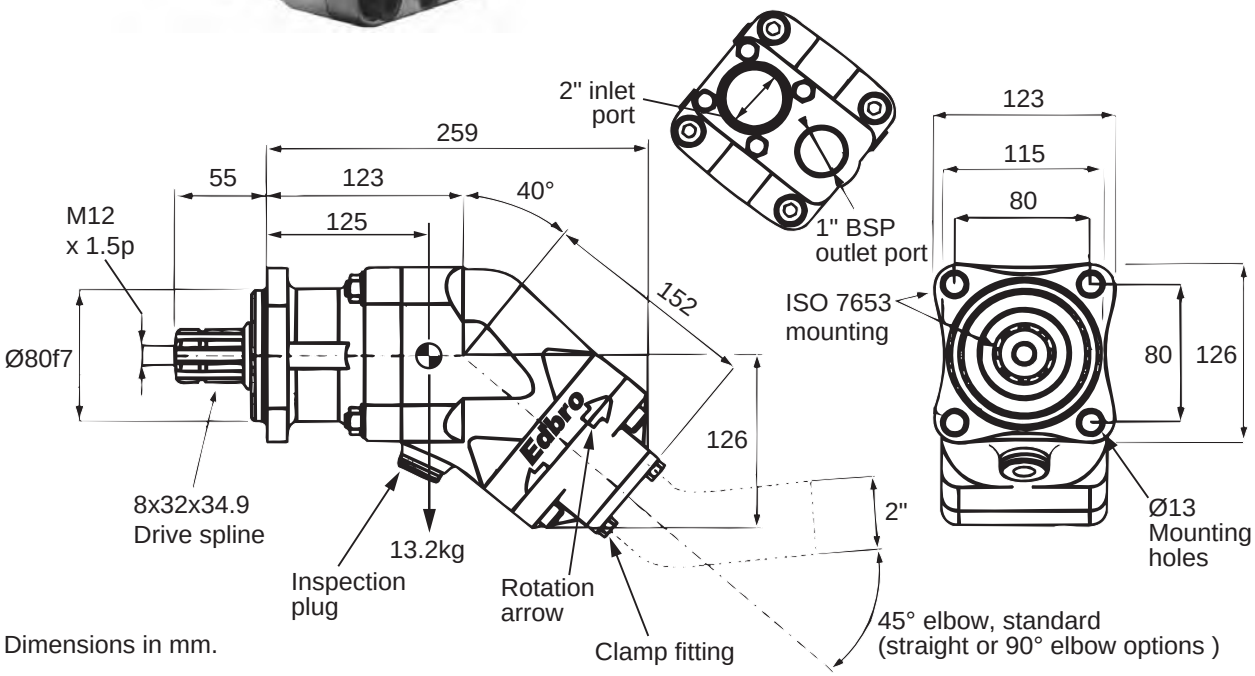
ROTATION DIRECTION

The rotation direction is shown by the complete arrows on the pump casing, and is specified as clockwise (right hand rotation) or anti-clockwise (left hand rotation), when viewed looking toward the pump along the splined shaft.
To change the rotation direction, remove the 4 setscrews and lift the end cover by a few mm.
Rotate through 180° push back into place and replace the setscrews.
Unless specially requested, ANTI-CLOCKWISE configuration will be supplied.

Bent Axis Piston Pump: Tipper Applications - EBA13022



- 130 cm^3/rev output flow
- Medium pressure (220 bar mwp)
- Compact size for easy installation
- Ideal for close coupled PTO mounting
- Lightweight aluminium casings
- Reversible rotation whilst installed
- 4 - Hole ISO7653 Mounting flange



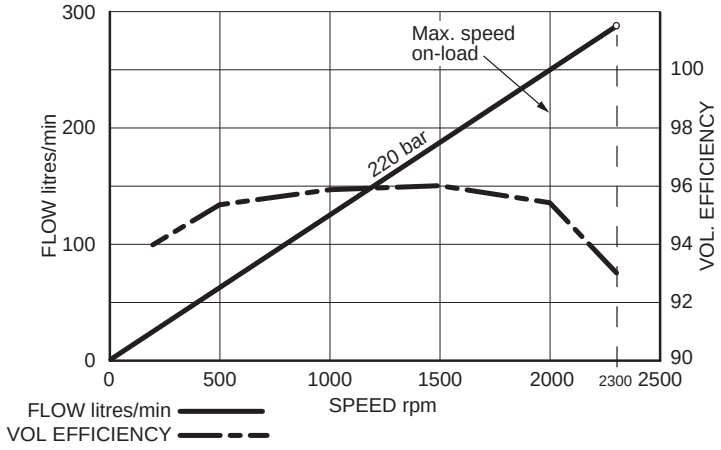
Dimensions in mm.

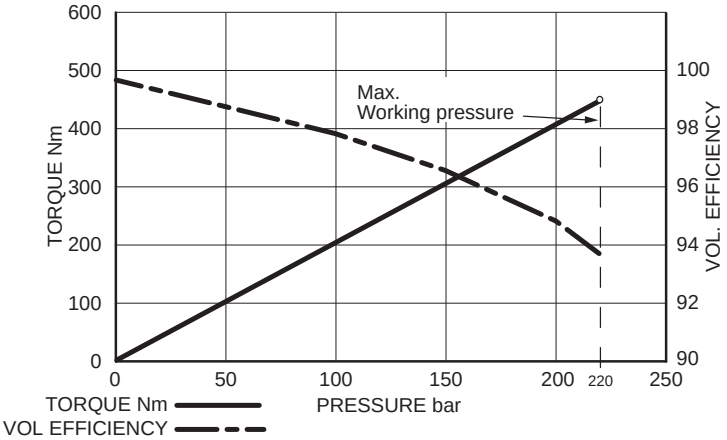
PIPE ADAPTOR KIT OPTIONS

Low pressure inlet adaptors	High pressure outlet adaptor options	
	1 inch BSP straight (NR611/24, DPP45H)	1 inch BSP 90° Elbow (NR611/24, NR634, DPP45H)
2 inch push-on 45° elbow (NR1608)	AK59 (standard)	AK72
2 inch push-on 90° elbow (NR1605)	AK60	AK73
2 inch push-on straight (NR1615)	AK58	AK71
$2^1/_2$ inch push-on	Details available on request	

Bent Axis Piston Pump: Tipper Applications - EBA13022

PERFORMANCE		
Displacement	cm^3/rev	130
Max. Working Pressure	bar	220
Max. Working Speed	rpm	2000
Max.Speed Off-Load	rpm	2300
Power	Kw	95
Weight	kg	13.2
Moment at PTO face	Nm	16.2





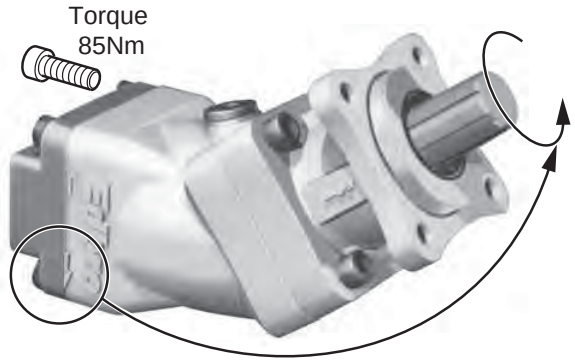
PIPES

Size: Suction 2 inch minimum
Pressure 1 inch minimum

For improved high speed efficiency and to avoid cavitation, a $2^1/_2$ inch suction pipe must be used.
The suction pipe must be able to withstand -12psi (-0.8bar) pressure.
Pipe runs should be direct and short, with no kinks.

OIL & FILTRATION

This pump is designed for low pressure, intermittent use, tipper systems without filtration.
The oil should be a good quality hydraulic oil to ISO 6743/4 HM32 for -15° to +27°C working temperature.
For extended life or for higher duty applications, 25µm absolute return line filtration is recommended.
Oil cleanliness to be maintained to ISO 4406 class 19/16.
Oil should be replaced annually.

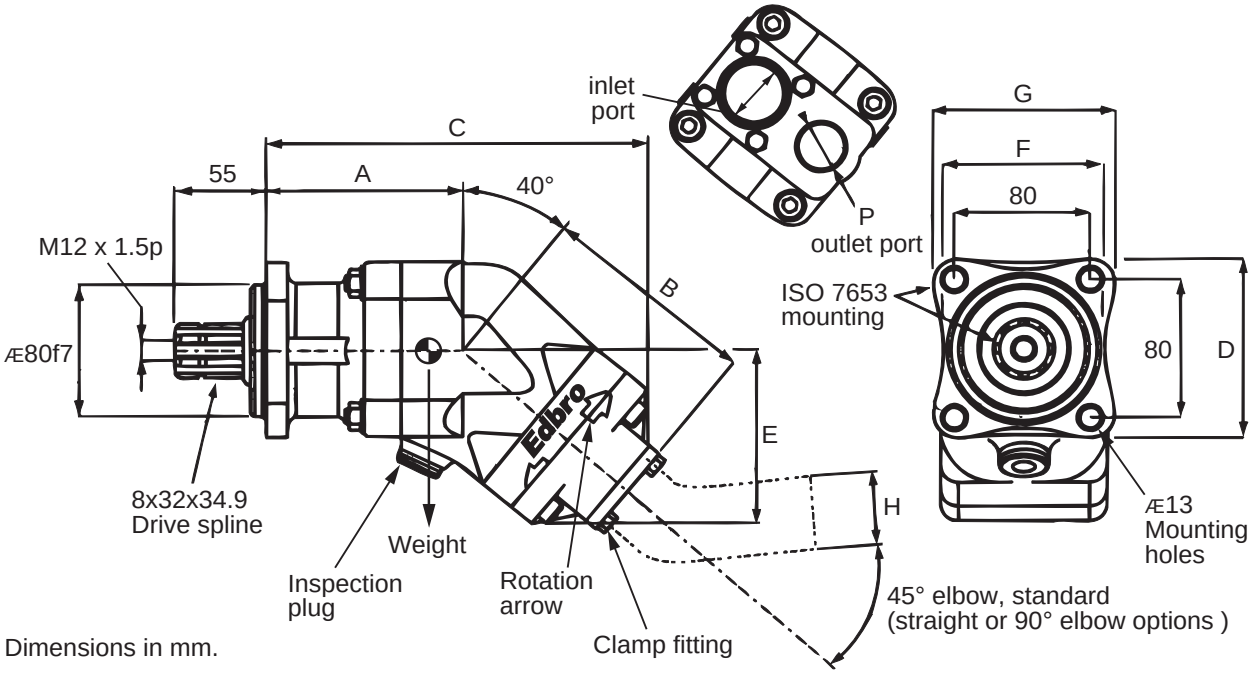


ROTATION DIRECTION

The rotation direction is shown by the complete arrows on the pump casing, and is specified as clockwise (right hand rotation) or anti-clockwise (left hand rotation), when viewed looking toward the pump along the splined shaft.
To change the rotation direction, remove the 4 setscrews and lift the end cover by a few mm.
Rotate through 180° push back into place and replace the setscrews.
Unless specially requested, ANTI-CLOCKWISE configuration will be supplied.

Bent Axis Piston Pump: Crane Applications

- 12 to 108 cm³/rev displacement
- High pressure (400 bar mwp)
- Compact size for easy installation
- Ideal for close coupled PTO mounting
- Reversible rotation whilst installed
- 4 - Hole ISO7653 Mounting flange



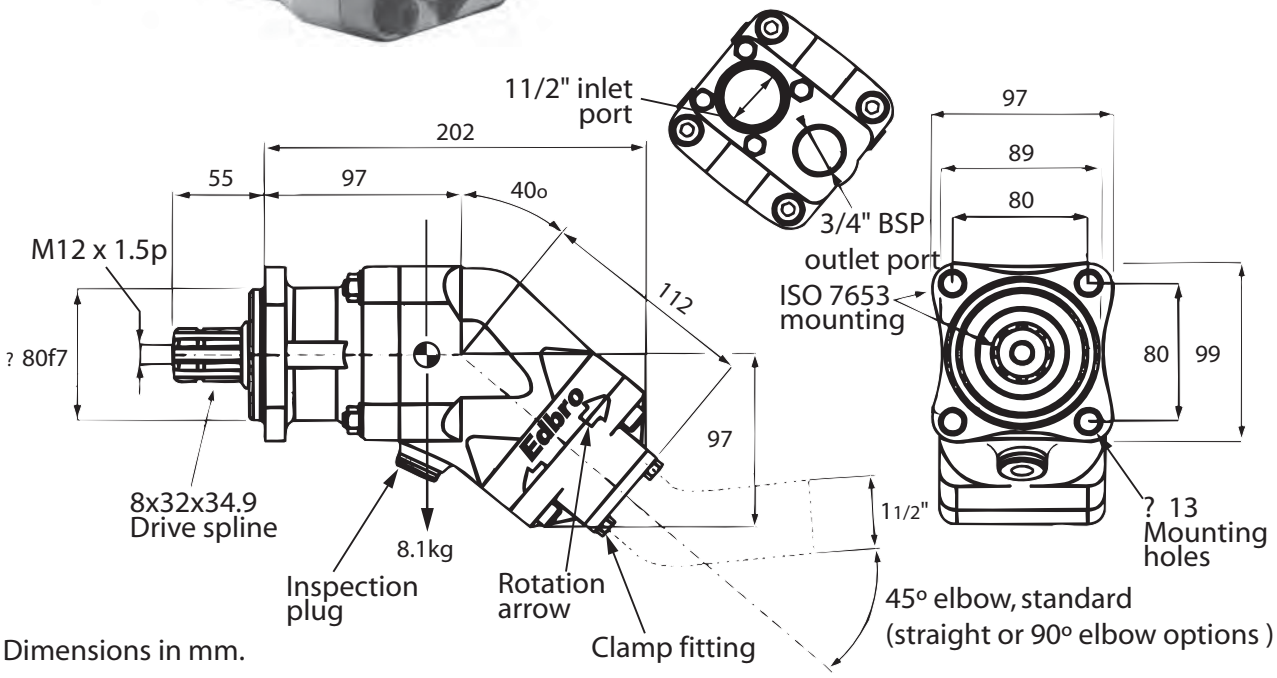
Dimensions in mm.

Nomenclature		Units	EBA01240	EBA01740	EBA02540	EBA03440	EBA04740	EBA06440	EBA08440	EBA10840
Displacement		cm³/rev	12.6	17.0	25.4	34.2	47.1	63.6	83.6	108.0
Nominal Flow at 1000 rpm		l/min	12.0	16.2	25.0	34.0	47.0	63.5	83.5	108.0
Max. Pump Speed										
Continuous		RPM	2300	2300	2300	2300	1900	1900	1500	1500
Intermittant		RPM	3000	3000	3000	3000	2500	2500	2000	2000
Max. Working Pressure		bar	400	400	400	400	400	400	400	400
Weight		kgs	8.1	8.1	8.1	8.1	11.7	11.7	17	17
Dimensions	A	mm	97	97	97	97	113	113	123	123
	B		112	112	112	112	130	130	147	147
	C		202	202	202	202	228	228	259	259
	D		99	99	99	99	109	109	126	126
	E		97	97	97	97	109	109	126	126
	F		89	89	89	89	99	99	115	115
	G		97	97	97	97	106	106	123	123
	H		38	38	38	38	38	38	50	50
	P	BSP	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	1"	1"

Bent Axis Piston Pump: Crane Applications - **EBA01240**



- 12 cm3/rev output flow
- High pressure (400 bar mwp)
- Compact size for easy installation
- Ideal for close coupled PTO mounting
- 4 - Hole ISO7653 Mounting flange
- Reversible rotation whilst installed



Dimensions in mm.

PIPE ADAPTOR KIT OPTIONS

Low pressure inlet adaptors	High pressure outlet adaptor options	
	3/4 inch BSP straight (NR611/42, DPP45F)	3/4 inch BSP 90o elbow (NR611/42, NR627, DPP45F)
11/2 inch push-on 45o elbow (NR1588)	AK53 (standard)	AK66
11/2 inch push-on 90o elbow (NR1589)	AK54	AK67
11/2 inch push-on straight (NR1612)	AK52	AK65

Bent Axis Piston Pump: Crane Applications - EBA01240

PERFORMANCE

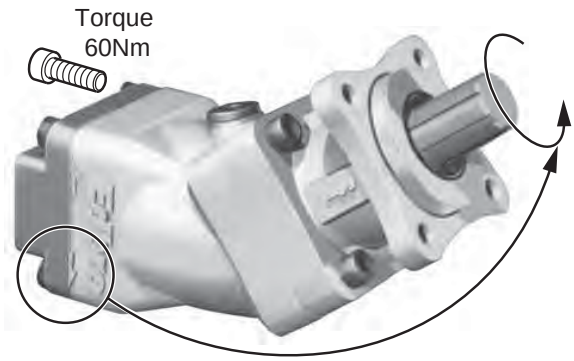
Displacement	cm^3/rev	12
Max. Working Pressure	bar	400
Max. Working Speed	rpm	2300
Max.Speed Off-Load	rpm	3000
Power	Kw	55
Weight	kg	8.1

OIL & FILTRATION

This pump is designed for low pressure, intermittent use, tipper systems without filtration.
The oil should be a good quality hydraulic oil to ISO 6743/4 HM32 for -15^{o} to +27^{o}C working temperature.
For extended life or for higher duty applications, 25μm absolute return line filtration is recommended.
Oil cleanliness to be maintained to ISO 4406 class 19/16.
Oil should be replaced annually.

PIPES

Size: Suction $1^{1}/_{2}$ inch minimum
Pressure $^{3}/_{4}$ inch minimum
The suction pipe must be able to withstand -12psi (-0.8bar) pressure.
Pipe runs should be direct and short, with no kinks.



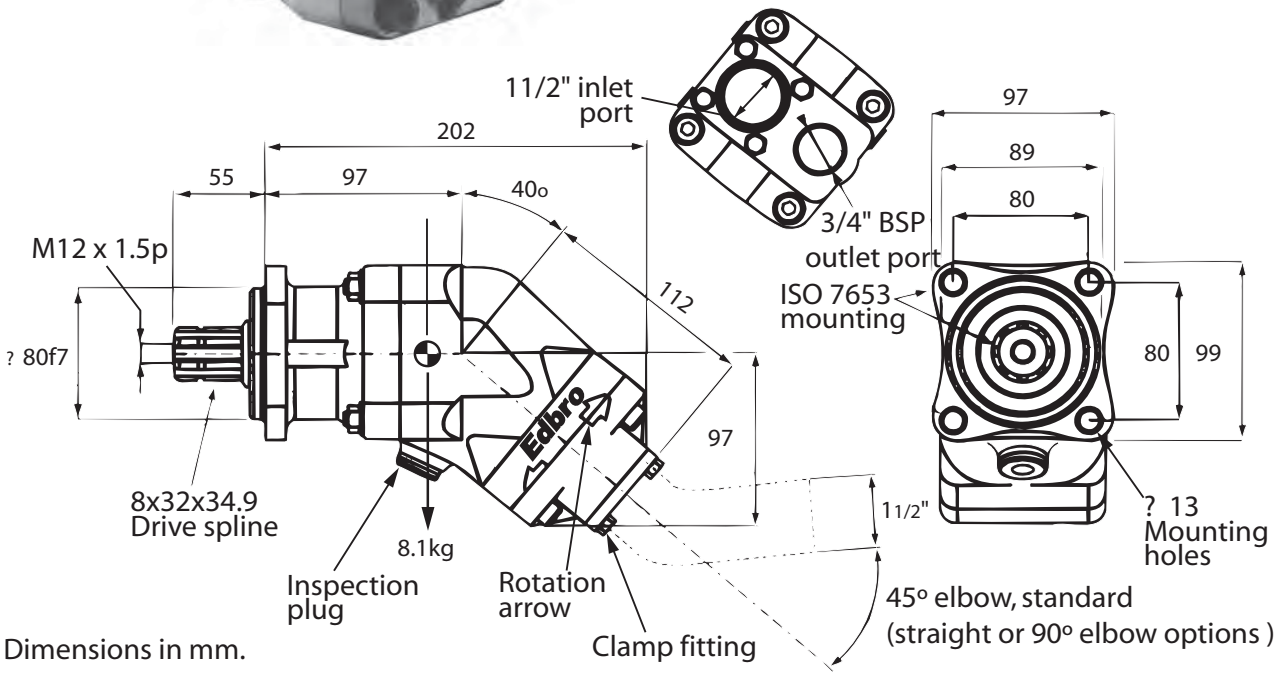
ROTATION DIRECTION

The rotation direction is shown by the complete arrows on the pump casing, and is specified as clockwise (right hand rotation) or anti-clockwise (left hand rotation), when viewed looking toward the pump along the splined shaft.
To change the rotation direction, remove the 4 setscrews and lift the end cover by a few mm.
Rotate through 180^{o} push back into place and replace the setscrews.
Unless specially requested, ANTI-CLOCKWISE configuration will be supplied.

Bent Axis Piston Pump: Crane Applications - **EBA01740**



- 17 cm3/rev output flow
- High pressure (400 bar mwp)
- Compact size for easy installation
- Ideal for close coupled PTO mounting
- 4 - Hole ISO7653 Mounting flange
- Reversible rotation whilst installed



Dimensions in mm.

PIPE ADAPTOR KIT OPTIONS

Low pressure inlet adaptors	High pressure outlet adaptor options	
	3/4 inch BSP straight (NR611/42, DPP45F)	3/4 inch BSP 90o elbow (NR611/42, NR627, DPP45F)
11/2 inch push-on 45o elbow (NR1588)	AK53 (standard)	AK66
11/2 inch push-on 90o elbow (NR1589)	AK54	AK67
11/2 inch push-on straight (NR1612)	AK52	AK65

Bent Axis Piston Pump: Crane Applications - EBA01740

PERFORMANCE

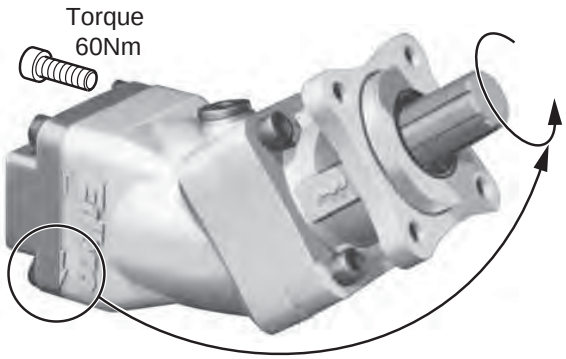
Displacement	cm^3/rev	17
Max. Working Pressure	bar	400
Max. Working Speed	rpm	2300
Max.Speed Off-Load	rpm	3000
Power	Kw	55
Weight	kg	8.1

OIL & FILTRATION

This pump is designed for low pressure, intermittent use, tipper systems without filtration.
The oil should be a good quality hydraulic oil to ISO 6743/4 HM32 for -15^{o} to +27^{o}C working temperature.
For extended life or for higher duty applications, 25μm absolute return line filtration is recommended.
Oil cleanliness to be maintained to ISO 4406 class 19/16.
Oil should be replaced annually.

PIPES

Size: Suction $1^{1}/_{2}$ inch minimum
Pressure $^{3}/_{4}$ inch minimum
The suction pipe must be able to withstand -12psi (-0.8bar) pressure.
Pipe runs should be direct and short, with no kinks.



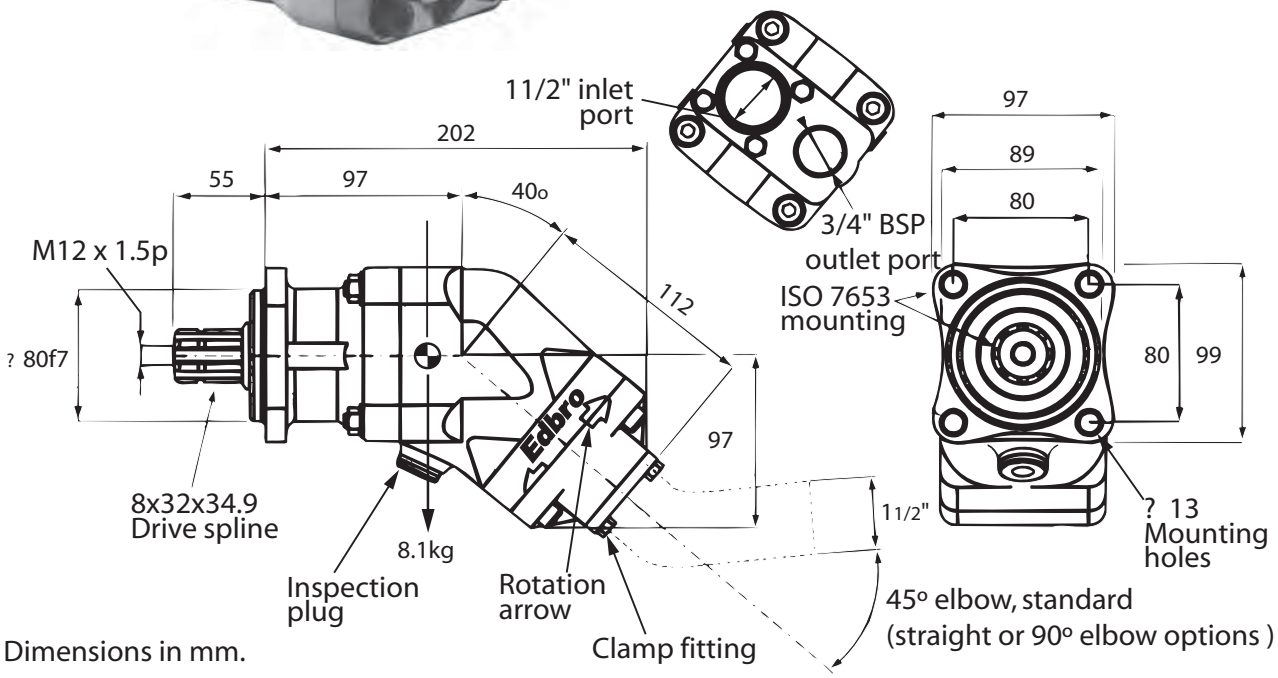
ROTATION DIRECTION

The rotation direction is shown by the complete arrows on the pump casing, and is specified as clockwise (right hand rotation) or anti-clockwise (left hand rotation), when viewed looking toward the pump along the splined shaft.
To change the rotation direction, remove the 4 setscrews and lift the end cover by a few mm.
Rotate through 180^{o} push back into place and replace the setscrews.
Unless specially requested, ANTI-CLOCKWISE configuration will be supplied.

Bent Axis Piston Pump: Crane Applications - **EBA02540**



- 25 cm3/rev output flow
- High pressure (400 bar mwp)
- Compact size for easy installation
- Ideal for close coupled PTO mounting
- 4 - Hole ISO7653 Mounting flange
- Reversible rotation whilst installed



Dimensions in mm.

PIPE ADAPTOR KIT OPTIONS

Low pressure inlet adaptors	High pressure outlet adaptor options	
	3/4 inch BSP straight (NR611/42, DPP45F)	3/4 inch BSP 90o elbow (NR611/42, NR627, DPP45F)
11/2 inch push-on 45o elbow (NR1588)	AK53 (standard)	AK66
11/2 inch push-on 90o elbow (NR1589)	AK54	AK67
11/2 inch push-on straight (NR1612)	AK52	AK65

Bent Axis Piston Pump: Crane Applications - EBA02540

PERFORMANCE

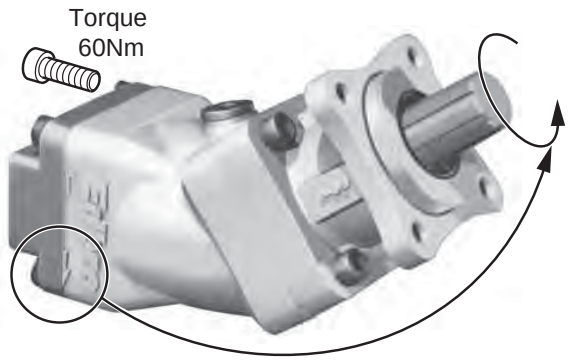
Displacement	cm^3/rev	25
Max. Working Pressure	bar	400
Max. Working Speed	rpm	2300
Max.Speed Off-Load	rpm	3000
Power	Kw	55
Weight	kg	8.1

OIL & FILTRATION

This pump is designed for low pressure, intermittent use, tipper systems without filtration.
The oil should be a good quality hydraulic oil to ISO 6743/4 HM32 for -15^o to +27^{o}C working temperature.
For extended life or for higher duty applications, 25μm absolute return line filtration is recommended.
Oil cleanliness to be maintained to ISO 4406 class 19/16.
Oil should be replaced annually.

PIPES

Size: Suction $1^1/_2$ inch minimum
Pressure $^3/_4$ inch minimum
The suction pipe must be able to withstand -12psi (-0.8bar) pressure.
Pipe runs should be direct and short, with no kinks.



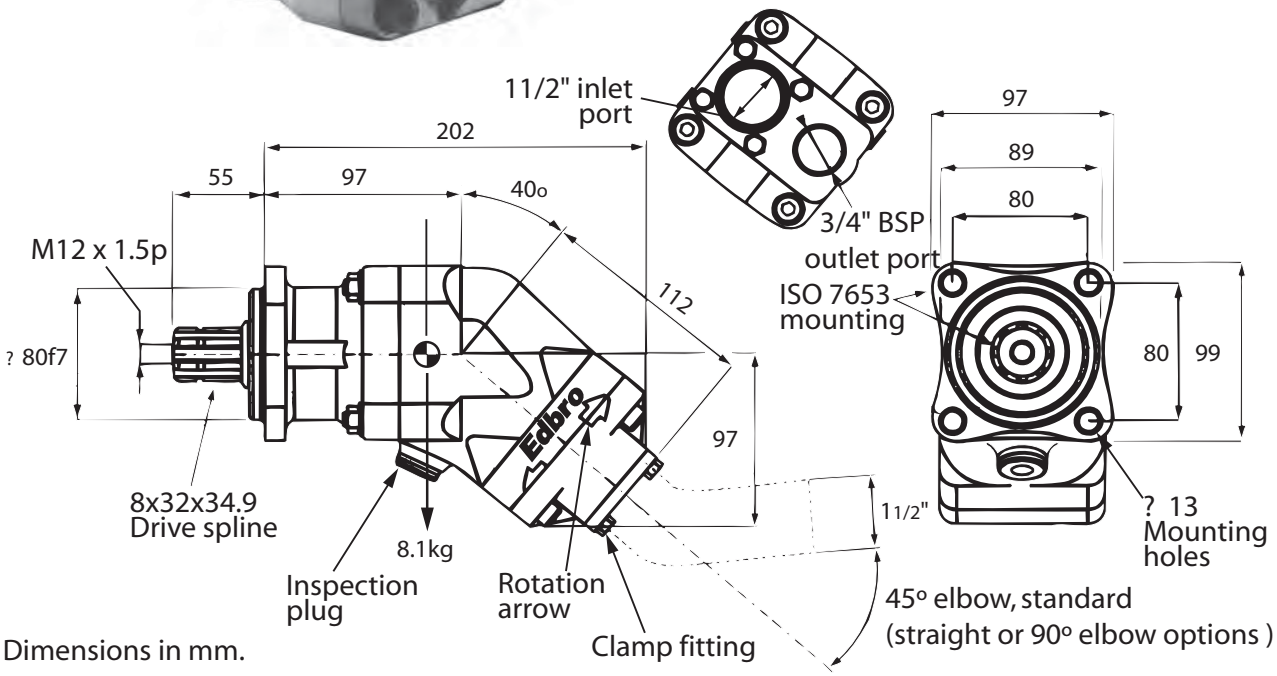
ROTATION DIRECTION

The rotation direction is shown by the complete arrows on the pump casing, and is specified as clockwise (right hand rotation) or anti-clockwise (left hand rotation), when viewed looking toward the pump along the splined shaft.
To change the rotation direction, remove the 4 setscrews and lift the end cover by a few mm.
Rotate through 180^o push back into place and replace the setscrews.
Unless specially requested, ANTI-CLOCKWISE configuration will be supplied.

Bent Axis Piston Pump: Crane Applications - EBA03440



- 34 cm3/rev output flow
- High pressure (400 bar mwp)
- Compact size for easy installation
- Ideal for close coupled PTO mounting
- 4 - Hole ISO7653 Mounting flange
- Reversible rotation whilst installed



Dimensions in mm.

PIPE ADAPTOR KIT OPTIONS

Low pressure inlet adaptors	High pressure outlet adaptor options	
	3/4 inch BSP straight (NR611/42, DPP45F)	3/4 inch BSP 90o elbow (NR611/42, NR627, DPP45F)
11/2 inch push-on 45o elbow (NR1588)	AK53 (standard)	AK66
11/2 inch push-on 90o elbow (NR1589)	AK54	AK67
11/2 inch push-on straight (NR1612)	AK52	AK65

Bent Axis Piston Pump: Crane Applications - EBA03440

PERFORMANCE

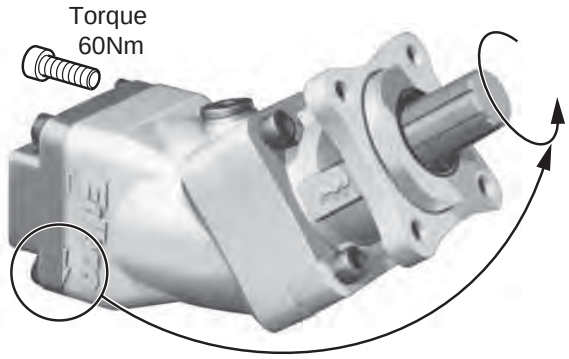
Displacement	cm^3/rev	34
Max. Working Pressure	bar	400
Max. Working Speed	rpm	2300
Max.Speed Off-Load	rpm	3000
Power	Kw	55
Weight	kg	8.1

OIL & FILTRATION

This pump is designed for low pressure, intermittent use, tipper systems without filtration.
The oil should be a good quality hydraulic oil to ISO 6743/4 HM32 for -15^o to +27^{o}C working temperature.
For extended life or for higher duty applications, 25μm absolute return line filtration is recommended.
Oil cleanliness to be maintained to ISO 4406 class 19/16.
Oil should be replaced annually.

PIPES

Size: Suction $1^1/_2$ inch minimum
Pressure $^3/_4$ inch minimum
The suction pipe must be able to withstand -12psi (-0.8bar) pressure.
Pipe runs should be direct and short, with no kinks.



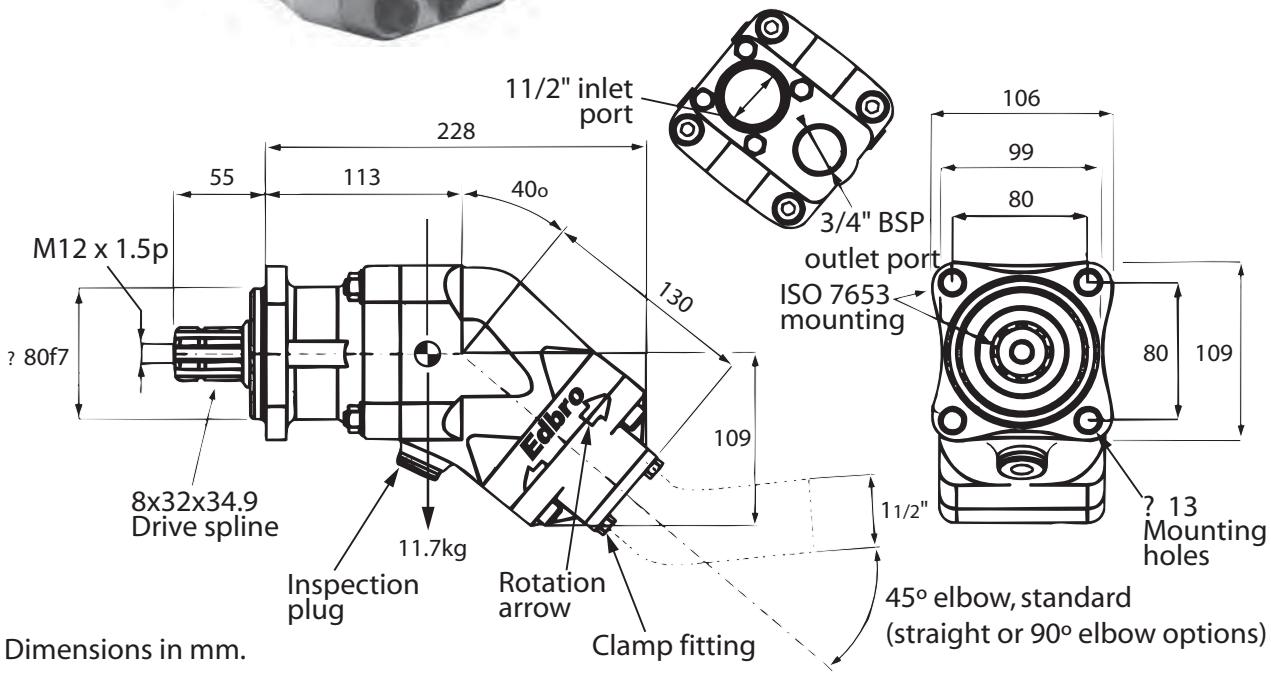
ROTATION DIRECTION

The rotation direction is shown by the complete arrows on the pump casing, and is specified as clockwise (right hand rotation) or anti-clockwise (left hand rotation), when viewed looking toward the pump along the splined shaft.
To change the rotation direction, remove the 4 setscrews and lift the end cover by a few mm.
Rotate through 180^o push back into place and replace the setscrews.
Unless specially requested, ANTI-CLOCKWISE configuration will be supplied.

Bent Axis Piston Pump: Crane Applications - **EBA04740**



- 47 cm3/rev output flow
- High pressure (400 bar mwp)
- Compact size for easy installation
- Ideal for close coupled PTO mounting
- 4 - Hole ISO7653 Mounting flange
- Reversible rotation whilst installed



Dimensions in mm.

PIPE ADAPTOR KIT OPTIONS

Low pressure inlet adaptors	High pressure outlet adaptor options	
	3/4 inch BSP straight (NR611/42, DPP45F)	3/4 inch BSP 90o elbow (NR611/42, NR627, DPP45F)
11/2 inch push-on 45o elbow (NR1588)	AK53 (standard)	AK66
11/2 inch push-on 90o elbow (NR1589)	AK54	AK67
11/2 inch push-on straight (NR1612)	AK52	AK65

Bent Axis Piston Pump: Crane Applications - EBA04740

PERFORMANCE

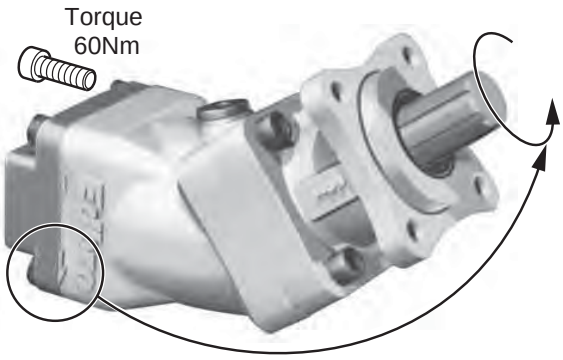
Displacement	cm^3/rev	47
Max. Working Pressure	bar	400
Max. Working Speed	rpm	1900
Max.Speed Off-Load	rpm	2500
Power	Kw	55
Weight	kg	11.7

OIL & FILTRATION

This pump is designed for low pressure, intermittent use, tipper systems without filtration.
The oil should be a good quality hydraulic oil to ISO 6743/4 HM32 for -15^{o} to +27^{o}C working temperature.
For extended life or for higher duty applications, 25μm absolute return line filtration is recommended.
Oil cleanliness to be maintained to ISO 4406 class 19/16.
Oil should be replaced annually.

PIPES

Size: Suction $1^{1}/_{2}$ inch minimum
Pressure $^{3}/_{4}$ inch minimum
The suction pipe must be able to withstand -12psi (-0.8bar) pressure.
Pipe runs should be direct and short, with no kinks.



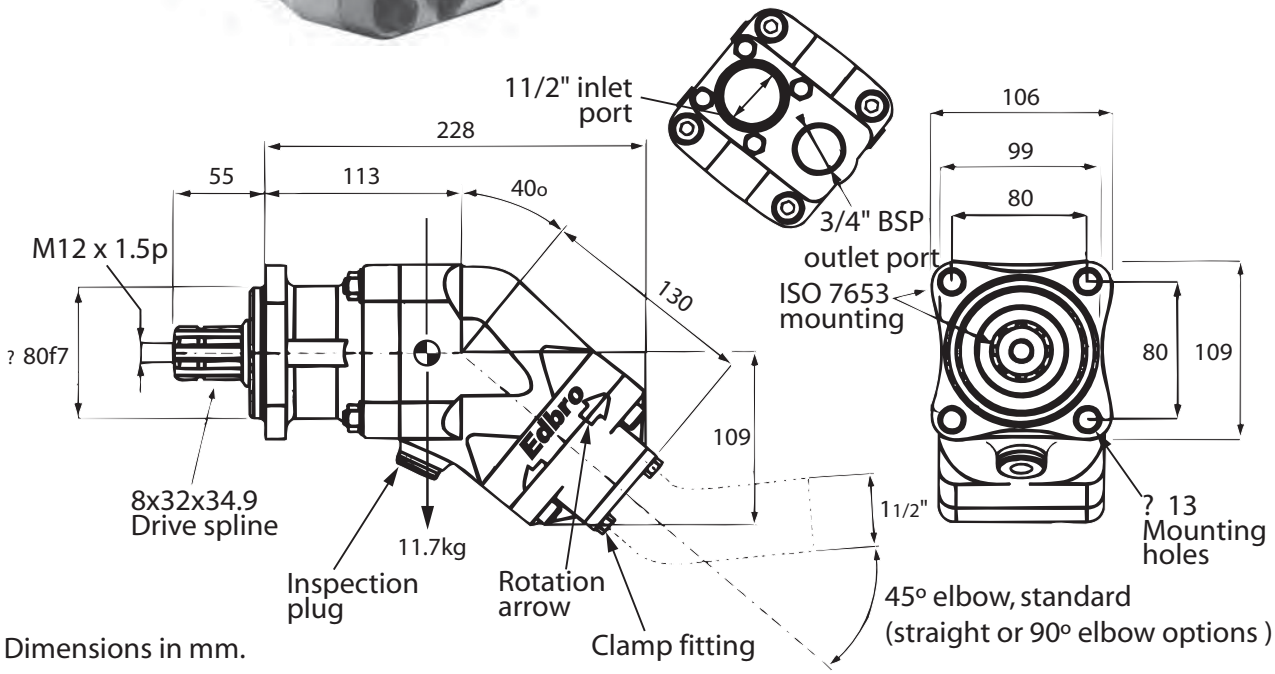
ROTATION DIRECTION

The rotation direction is shown by the complete arrows on the pump casing, and is specified as clockwise (right hand rotation) or anti-clockwise (left hand rotation), when viewed looking toward the pump along the splined shaft.
To change the rotation direction, remove the 4 setscrews and lift the end cover by a few mm.
Rotate through 180^{o} push back into place and replace the setscrews.
Unless specially requested, ANTI-CLOCKWISE configuration will be supplied.

Bent Axis Piston Pump: Crane Applications - **EBA06440**



- 64 cm3/rev output flow
- High pressure (400 bar mwp)
- Compact size for easy installation
- Ideal for close coupled PTO mounting
- 4 - Hole ISO7653 Mounting flange
- Reversible rotation whilst installed



Dimensions in mm.

PIPE ADAPTOR KIT OPTIONS

Low pressure inlet adaptors	High pressure outlet adaptor options	
	3/4 inch BSP straight (NR611/42, DPP45F)	3/4 inch BSP 90o elbow (NR611/42, NR627, DPP45F)
11/2 inch push-on 45o elbow (NR1588)	AK53 (standard)	AK66
11/2 inch push-on 90o elbow (NR1589)	AK54	AK67
11/2 inch push-on straight (NR1612)	AK52	AK65

Bent Axis Piston Pump: Crane Applications - EBA06440

PERFORMANCE

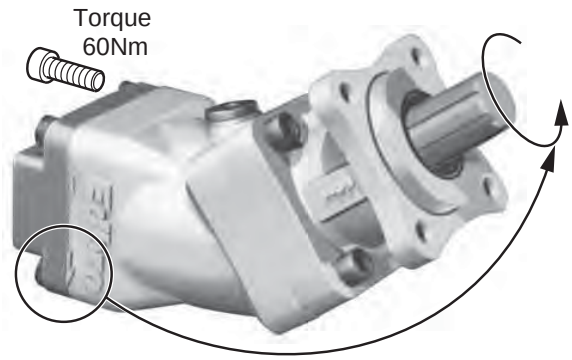
Displacement	cm^3/rev	64
Max. Working Pressure	bar	400
Max. Working Speed	rpm	1900
Max.Speed Off-Load	rpm	2500
Power	Kw	55
Weight	kg	11.7

OIL & FILTRATION

This pump is designed for low pressure, intermittent use, tipper systems without filtration.
The oil should be a good quality hydraulic oil to ISO 6743/4 HM32 for -15^o to +27^{o}C working temperature.
For extended life or for higher duty applications, 25μm absolute return line filtration is recommended.
Oil cleanliness to be maintained to ISO 4406 class 19/16.
Oil should be replaced annually.

PIPES

Size: Suction $1^1/_2$ inch minimum
Pressure $^3/_4$ inch minimum
The suction pipe must be able to withstand -12psi (-0.8bar) pressure.
Pipe runs should be direct and short, with no kinks.



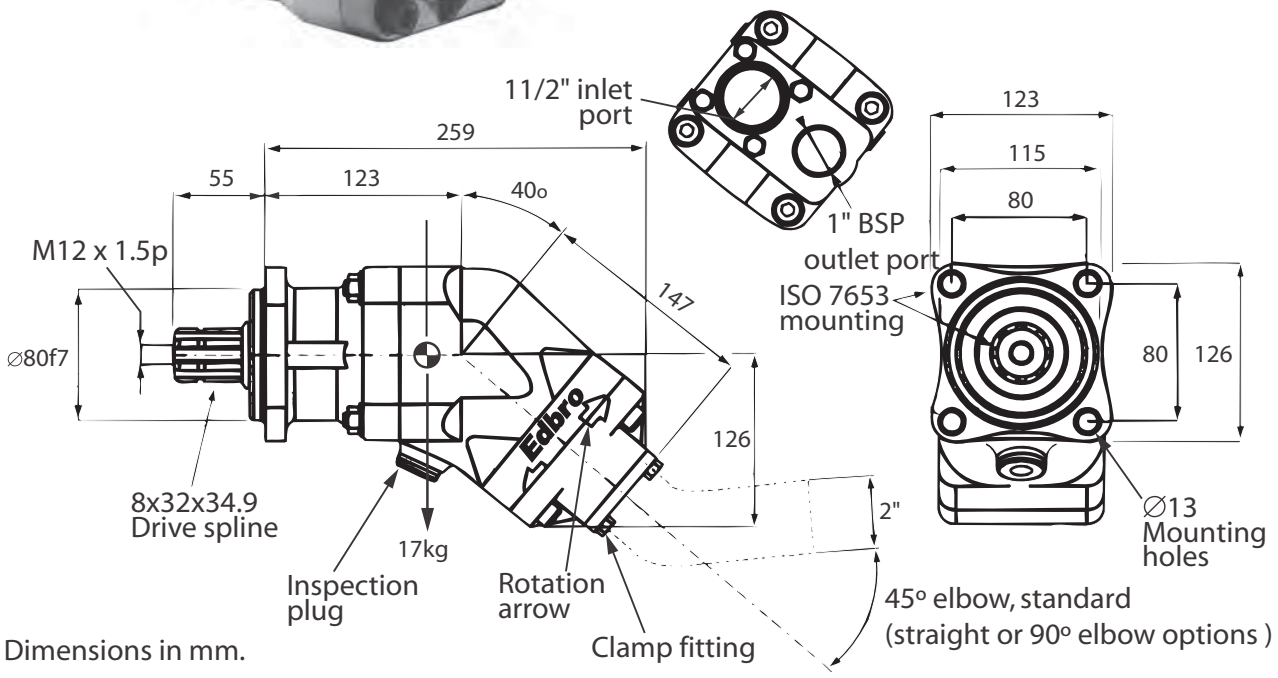
ROTATION DIRECTION

The rotation direction is shown by the complete arrows on the pump casing, and is specified as clockwise (right hand rotation) or anti-clockwise (left hand rotation), when viewed looking toward the pump along the splined shaft.
To change the rotation direction, remove the 4 setscrews and lift the end cover by a few mm.
Rotate through 180^o push back into place and replace the setscrews.
Unless specially requested, ANTI-CLOCKWISE configuration will be supplied.

Bent Axis Piston Pump: Crane Applications - **EBA08440**



- 84 cm3/rev output flow
- High pressure (400 bar mwp)
- Compact size for easy installation
- Ideal for close coupled PTO mounting
- 4 - Hole ISO7653 Mounting flange
- Reversible rotation whilst installed



Dimensions in mm.

PIPE ADAPTOR KIT OPTIONS

Low pressure inlet adaptors	High pressure outlet adaptor options	
	1 inch BSP straight (NR611/22, DPP45H)	1 inch BSP 90o elbow (NR611/24, NR634, DPP45H)
2 inch push-on 45o elbow (NR1608)	AK59 (standard)	AK72
2 inch push-on 90o elbow (NR1605)	AK60	AK73
2 inch push-on straight (NR1615)	AK58	AK71

Bent Axis Piston Pump: Crane Applications - EBA08440

PERFORMANCE

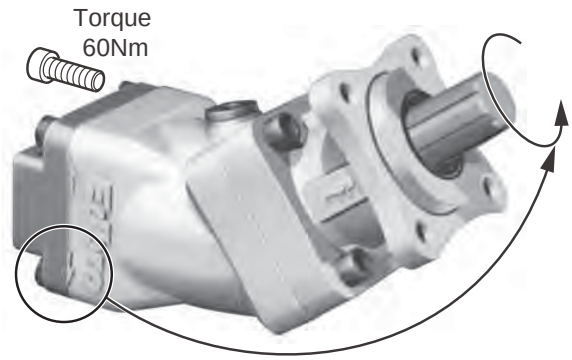
Displacement	cm^3/rev	84
Max. Working Pressure	bar	400
Max. Working Speed	rpm	1500
Max.Speed Off-Load	rpm	2000
Power	Kw	55
Weight	kg	17

OIL & FILTRATION

This pump is designed for low pressure, intermittent use, tipper systems without filtration.
The oil should be a good quality hydraulic oil to ISO 6743/4 HM32 for -15^{o} to +27^{o}C working temperature.
For extended life or for higher duty applications, 25µm absolute return line filtration is recommended.
Oil cleanliness to be maintained to ISO 4406 class 19/16.
Oil should be replaced annually.

PIPES

Size: Suction $1^{1}/_{2}$ inch minimum
Pressure $^{3}/_{4}$ inch minimum
The suction pipe must be able to withstand -12psi (-0.8bar) pressure.
Pipe runs should be direct and short, with no kinks.



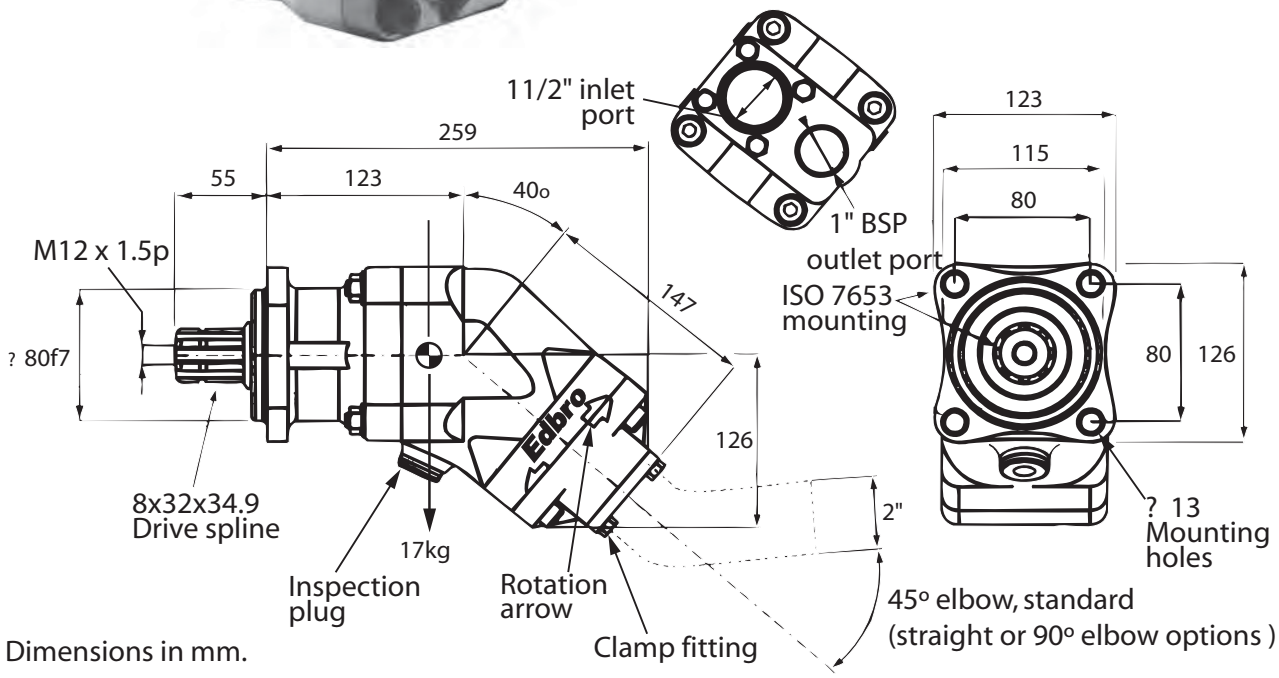
ROTATION DIRECTION

The rotation direction is shown by the complete arrows on the pump casing, and is specified as clockwise (right hand rotation) or anti-clockwise (left hand rotation), when viewed looking toward the pump along the splined shaft.
To change the rotation direction, remove the 4 setscrews and lift the end cover by a few mm.
Rotate through 180^{o} push back into place and replace the setscrews.
Unless specially requested, ANTI-CLOCKWISE configuration will be supplied.

Bent Axis Piston Pump: Crane Applications - **EBA10840**



- 108 cm3/rev output flow
- High pressure (400 bar mwp)
- Compact size for easy installation
- Ideal for close coupled PTO mounting
- 4 - Hole ISO7653 Mounting flange
- Reversible rotation whilst installed



Dimensions in mm.

PIPE ADAPTOR KIT OPTIONS

Low pressure inlet adaptors	High pressure outlet adaptor options	
	1 inch BSP straight (NR611/22, DPP45H)	1 inch BSP 90o elbow (NR611/24, NR634, DPP45H)
2 inch push-on 45o elbow (NR1608)	AK59 (standard)	AK72
2 inch push-on 90o elbow (NR1605)	AK60	AK73
2 inch push-on straight (NR1615)	AK58	AK71

Bent Axis Piston Pump: Crane Applications - EBA10840

PERFORMANCE

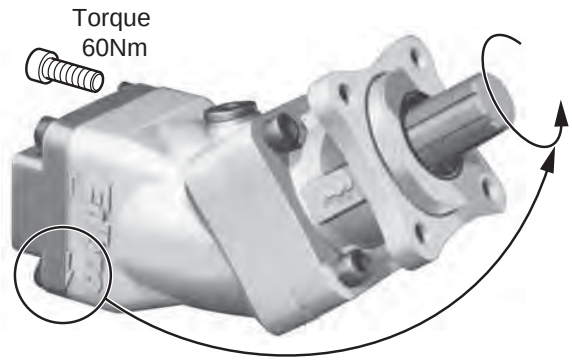
Displacement	cm^3/rev	108
Max. Working Pressure	bar	400
Max. Working Speed	rpm	1500
Max.Speed Off-Load	rpm	2000
Power	Kw	55
Weight	kg	17

OIL & FILTRATION

This pump is designed for low pressure, intermittent use, tipper systems without filtration.
The oil should be a good quality hydraulic oil to ISO 6743/4 HM32 for -15^o to +27^{o}C working temperature.
For extended life or for higher duty applications, 25μm absolute return line filtration is recommended.
Oil cleanliness to be maintained to ISO 4406 class 19/16.
Oil should be replaced annually.

PIPES

Size: Suction $1^1/_2$ inch minimum
Pressure $^3/_4$ inch minimum
The suction pipe must be able to withstand -12psi (-0.8bar) pressure.
Pipe runs should be direct and short, with no kinks.



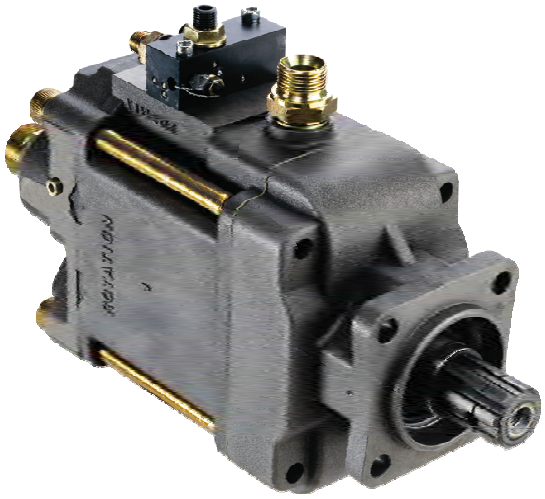
ROTATION DIRECTION

The rotation direction is shown by the complete arrows on the pump casing, and is specified as clockwise (right hand rotation) or anti-clockwise (left hand rotation), when viewed looking toward the pump along the splined shaft.
To change the rotation direction, remove the 4 setscrews and lift the end cover by a few mm.
Rotate through 180^o push back into place and replace the setscrews.
Unless specially requested, ANTI-CLOCKWISE configuration will be supplied.

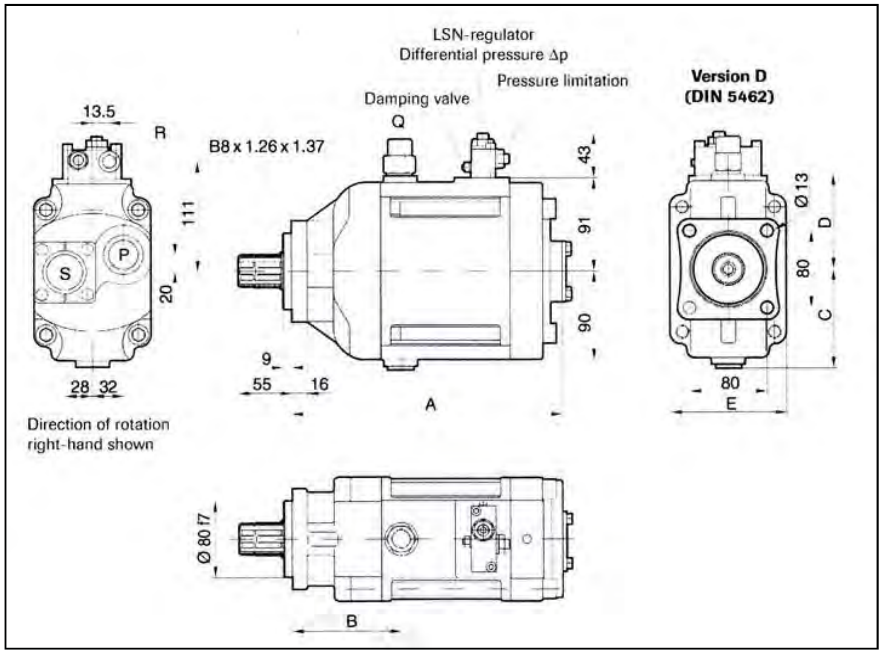
Variable Flow Pumps

EBA *** 40V C
092 or 112
C = clockwise
= anticlockwise

- Variable axial piston pumps
- Designed for direct installation onto a PTO
- Compact installation dimensions
- Externally drained for effective cooling
- Clockwise and anti-clockwise rotation models available



			092	112
Nominal oil flow at max. setting angle and pump speed rpm			l/min	
		500	46	56
		1000	92	112
		1500	138	168
Displacement		cm³/rev	92	112
Max. pump speed		rpm	2400	2200
Max. working pressure				
continuous		MPa	35	35
intermittent		MPa	40	40
Differential pressure	Δp	MPa	2.1-3.8	2.1-3.8
Weight		kg	25.8	28.1
Tare-weight torque		Nm	35.3	40.0
Dimensions	mm DIN	A	277	279
	DIN	B	110	115
		C	105	107
		D	100	102
		E	120	125
Suction connection		S	50-75	50-75
Pressure connection	ISO G	P	1	1
Pump housing drainage	ISO G	Q	3/4	3/4
Signal connection	ISO G	R	1/4	1/4
Max. torque		Nm	530	600



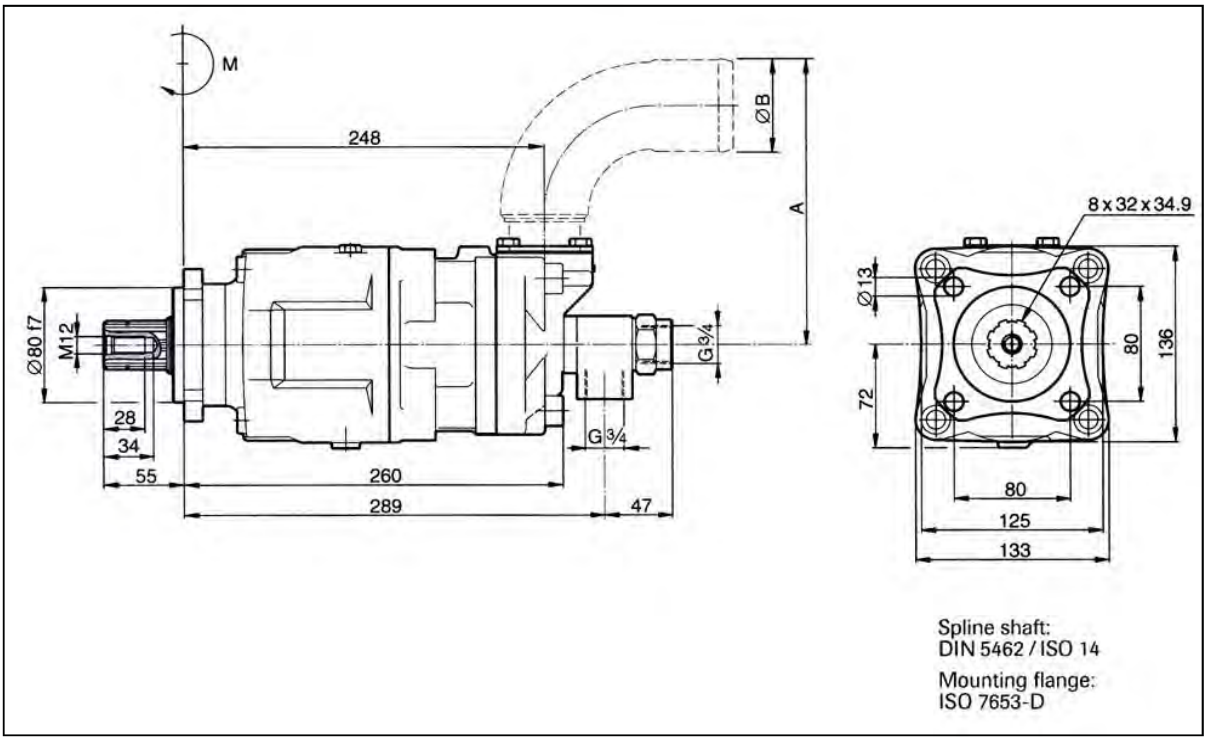
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Dual Flow Pumps

- Dual flow pumps
- Range of 8 models
- Large displacement for lower speeds and low noise levels
- Smooth operation
- Durability in tough operation
- Slim housing for mounting in confined areas



			20/20	28/28	40/20	35/35	56/28	46/46	53/53	64/32
Nominal oil flow at pump speed rpm						l/min				
		500	10+10	14+14	20+10	17.5+17.5	28+14	23+23	26.5+26.5	32+16
		1000	20+20	28+28	40+20	35+35	56+28	46+46	53+53	64+32
		1500	30+30	42+42	60+30	52.5+52.5	84+42	69+69	79.5+79.5	96+48
Deplacement	cm^3/rev.		20.3+20.3	27.5+27.5	40.7+20.3	33.9+33.9	54.9+27.5	45.8+45.8	52.5+52.5	63.0+31.5
Max pump speed	rpm		2200	1800	2200	2200	1800	1800	1600	1600
Max working pressure	MPa		35	35	35	33	35	33	33	35
Weight	kg		22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0
Dimensions	mm	A	133	133	133	133	166	166	166	166
		B	50	50	50	50	64	64	64	64
Tare-weight torque	Nm	M	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5
Direction of rotation	independent									



All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Low Pressure Adaptors: Piston Pumps



PUMP	1 1/2" Straight	1 1/2" 45 Degree	1 1/2" 90 Degree	2" Straight	2" 45 Degree	2" 90 Degree	2 1/2" 45 Degree	3" 45 Degree
EBA012	NR1612	NR1588	NR1589	NR1613	NR1590	NR1591	-	-
EBA017	NR1612	NR1588	NR1589	NR1613	NR1590	NR1591	-	-
EBA025	NR1612	NR1588	NR1589	NR1613	NR1590	NR1591	-	-
EBA034	NR1612	NR1588	NR1589	NR1613	NR1590	NR1591	-	-
EBA047	NR1612	NR1588	NR1589	NR1613	NR1590	NR1591	-	-
EBA064/ EBA090	NR1612	NR1588	NR1589	NR1613	NR1590	NR1591	NR1634	-
EBA084	-	-	-	NR1615	NR1608	NR1605	NR1740	-
EBA108	-	-	-	NR1615	NR1608	NR1605	NR1740	NR1749



All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Piston Pump: High Pressure Adaptors

Fig A

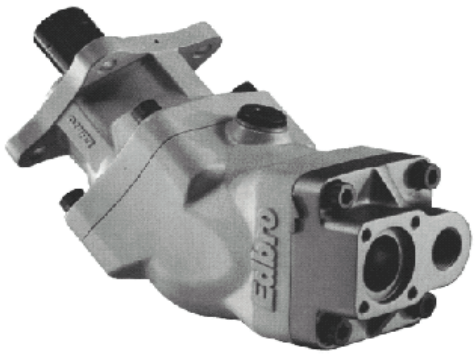


Fig B



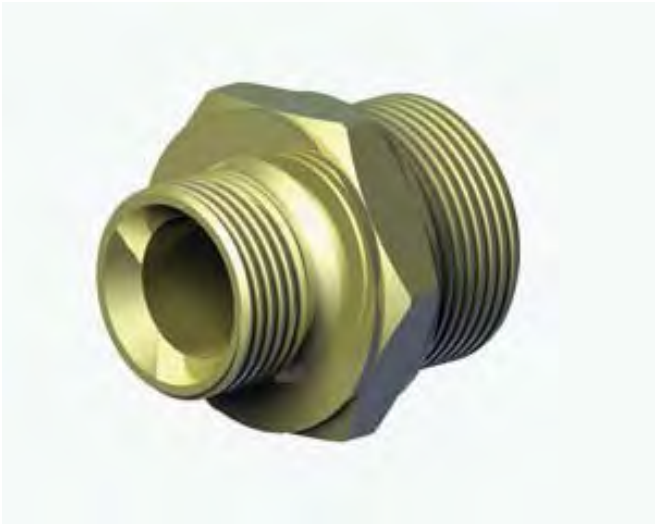
	Fig A			Fig B
PUMP SIZE	**3/4" – 3/4 "**	**3/4 " – 1"**		**3/4 " – 1 1/16"jic**
EBA 012	NR1651	50297		50298
EBA 017	NR1651	50297		50298
EBA 025	NR1651	50297		50298
EBA 034	NR1651	50297		50298
EBA 047	NR1651	50297		50298
EBA 064	NR1651	50297		50298

PUMP SIZE	**1" – 1"**	**1" – 3/4"**		**1" – 1 1/16"jic**
EBA 084	NR1652	50302		50300
EBA 108	NR1562	50302		50300



All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

High Pressure Adaptor BSP G" Thread - N R611



	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	1.1/4"
1/8"									
1/4"									
3/8"		NR611/19	NR611/30						
1/2"		NR611/50	NR611/25	NR611/44					
5/8"				NR611/16					
3/4"				NR611/45	NR611/6	NR611/42			
7/8"						NR611/11			
1"				NR611/46		NR611/27	NR611/12	NR611/43	
1.1/4"						NR611/40		NR611/47	
1.1/2"								NR611/41	NR611/48
2"									
2.1/2"									

For appropriate sealing washer refer to DPP45** specification sheet

Sealing Washer to suit BSP (G" Thread)



	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	1.1/4"	1.1/2"	2"
Part No	DPP45A	DPP45B/SC	DPP45C	DPP45D/SC	DPP45E	DPP45F/SC	DPP45G	DPP45H/SC	DPP45J/SC	DPP45K/SC	DPP45M

Part number is followed by /SC for self centering version ie DPP45H/SC
Not all versions are available in self centering style

Piston Pumps: By-Pass Valve - PM504/PM505



The Edbro By-Pass valve is ideal for use in situations where it is inconvenient to disengage the PTO during operation. It is ideal for applications such as road maintenance vehicles, concrete mixers, refuse trucks etc…

Features of the By-Pass valve include:-

- Operated from the cab
- Can also be operated manually
- Compact design, direct mounting to pump
- Can be regulated at 0-40 Mpa working pressure
- Symmetrical designs, allows flexible mounting, and use on clockwise and anti clockwise pumps

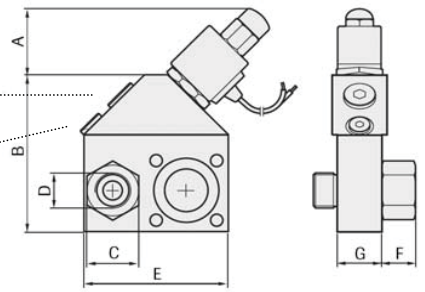
KIT CONTENTS

- By Pass Valve
- 2m Cable
- Installation hardware

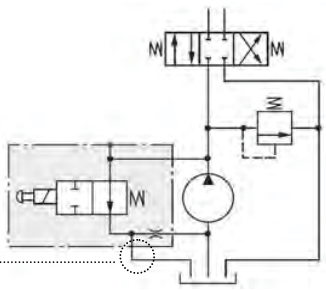
BY-PASS VALVE		PM504	PM505
Weight	kg	2.4	3.0
Max working pressure	MPa	40	40
Max pump speed	rpm	012-034 047-064 3000 2500	084-108 2000
Magnet voltage	V	12 / 24	12 / 24
Current	A	1 / 0.5	1 / 0.5
Power	W	12	12
Protection class contact		IP 66 - / ADR	IP 66 - / ADR
Function		Normally open	Normally open
Dimensions	mm A B C D E F G	45 110 36 3/4” BSP 100 25 31	41 127 42 1” BSP 116 28 31

Connection 3/4” BSP
or possible cooling line

Connection 1/8” BSP
or system pressure
management



When the hydraulic system is equipped with a closed-centre valve or another type of valve, which has a circulation pressure of 0.15 MPa or more, a separate cooling line must be connected to create oil circulation and cooling of the pump. The connection to the oil tank should be below the oil level.



All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Edbro

SETTING THE INDUSTRY STANDARD

Power Take Off Range





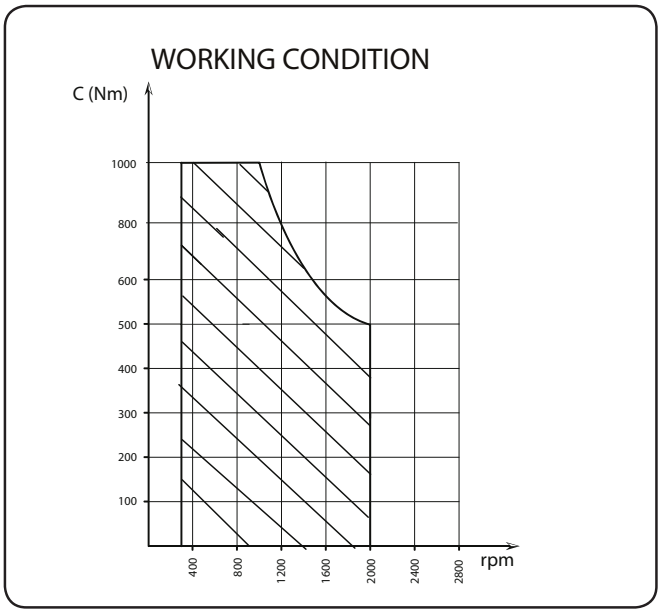
Edbro offers an extensive range of high performance PTO units to suit varying applications the world over.

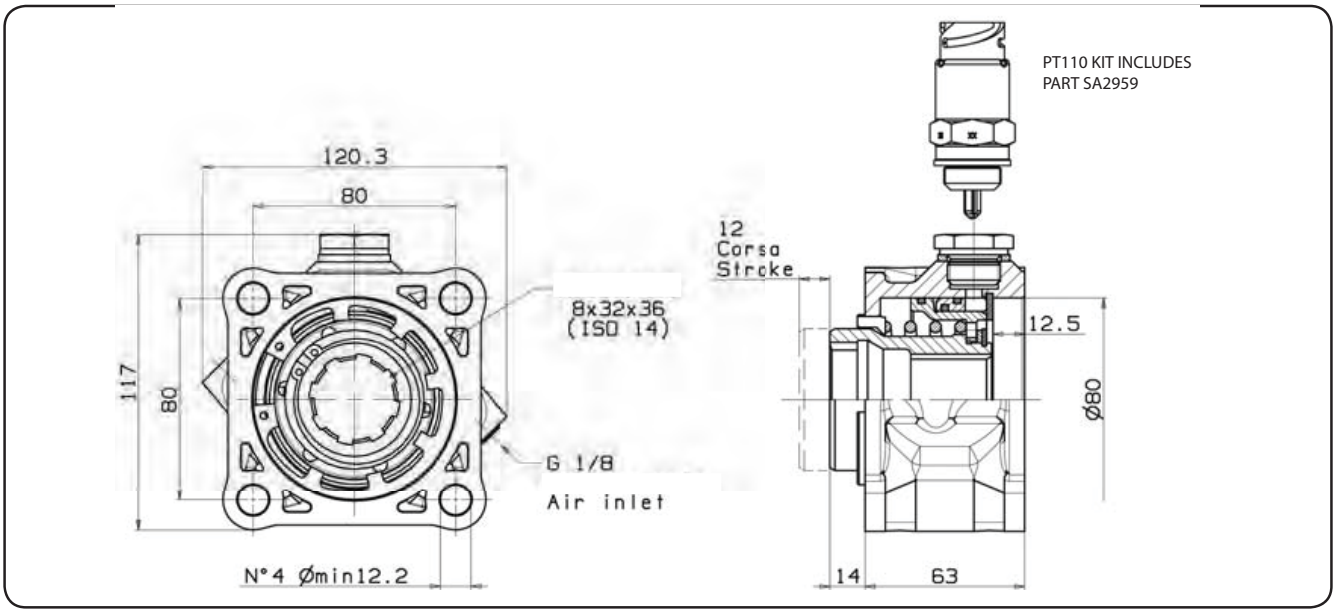
From standard block PTOs to high speed dual output units, Edbro have the range and expertise to provide the solutions.

PTO - Block PTO - PT110-111



PT111







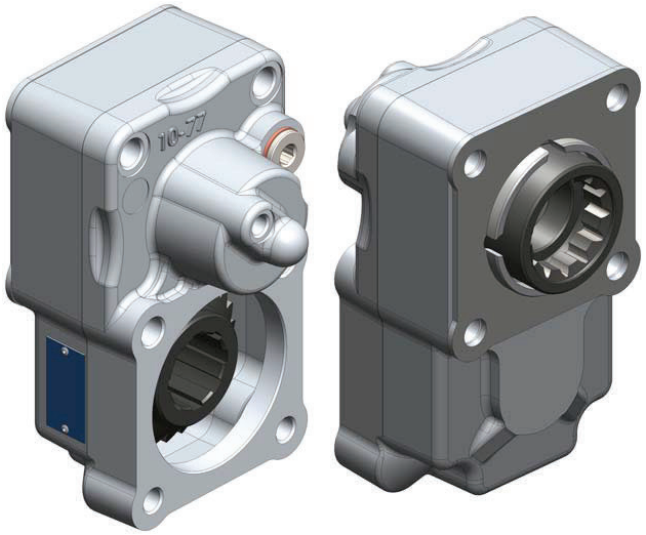
INCLUDES AIR FITTING

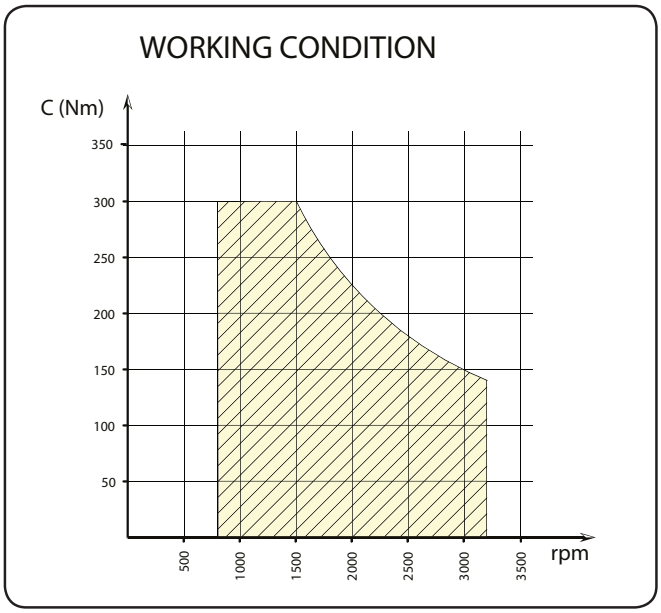
TECHNICAL SPECIFICATION:

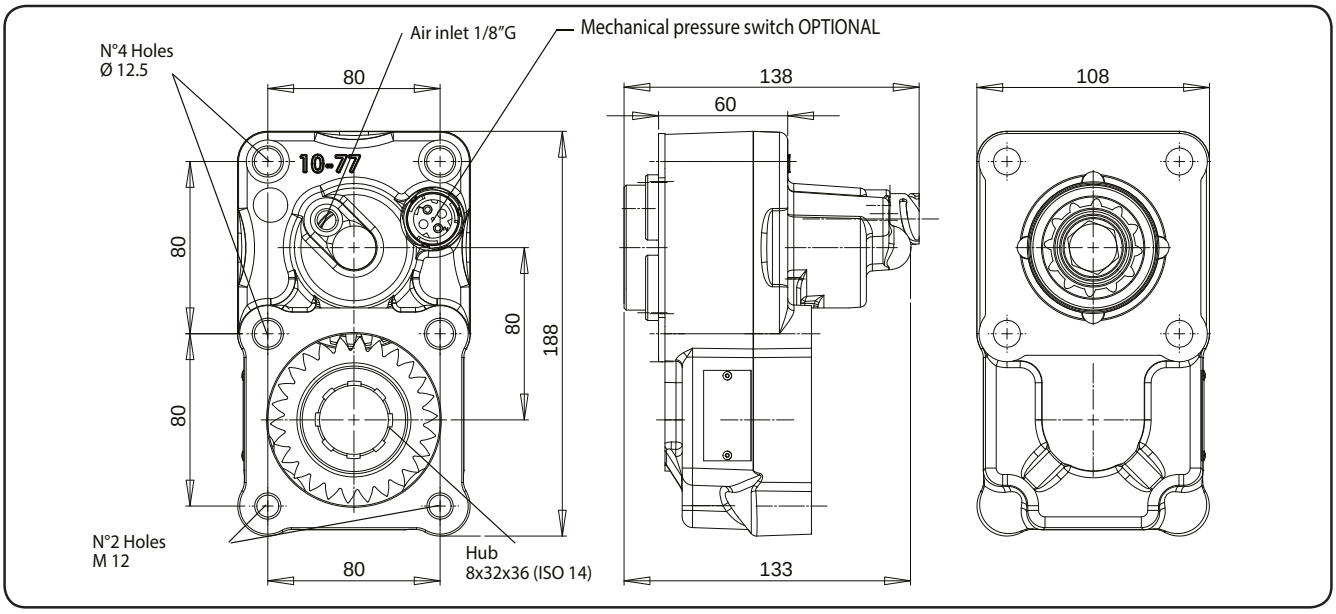
Gearbox:	Volvo, Eaton, Mercedes, ZF, Scania
Max torque:	1000 Nm
Mounting side:	Rear
Output:	Rear
Rotation:	Clockwise
PT110 Conversion:	Merit Bayonnet required Part No. SA2959

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

PTO - Pneumatic Clutch- PT184





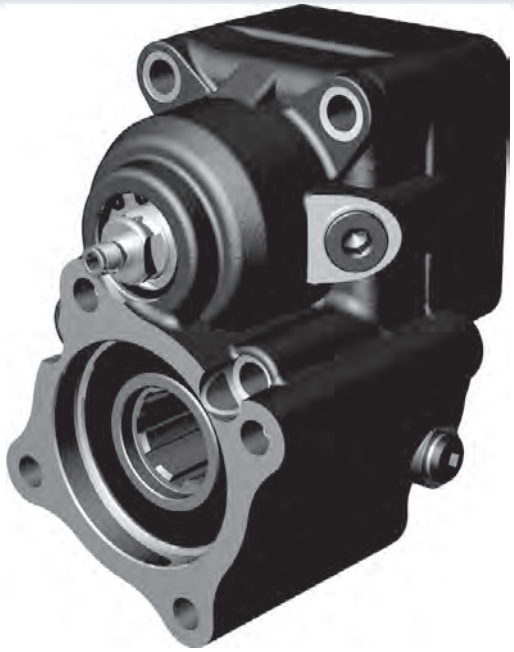


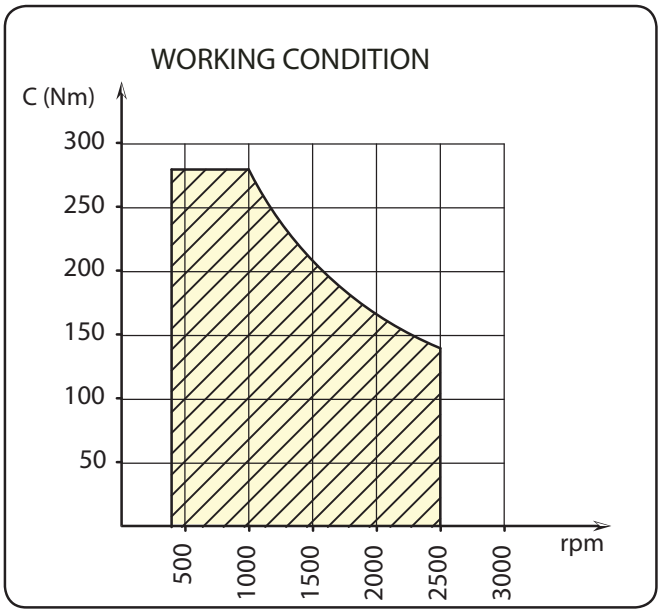
TECHNICAL SPECIFICATION:

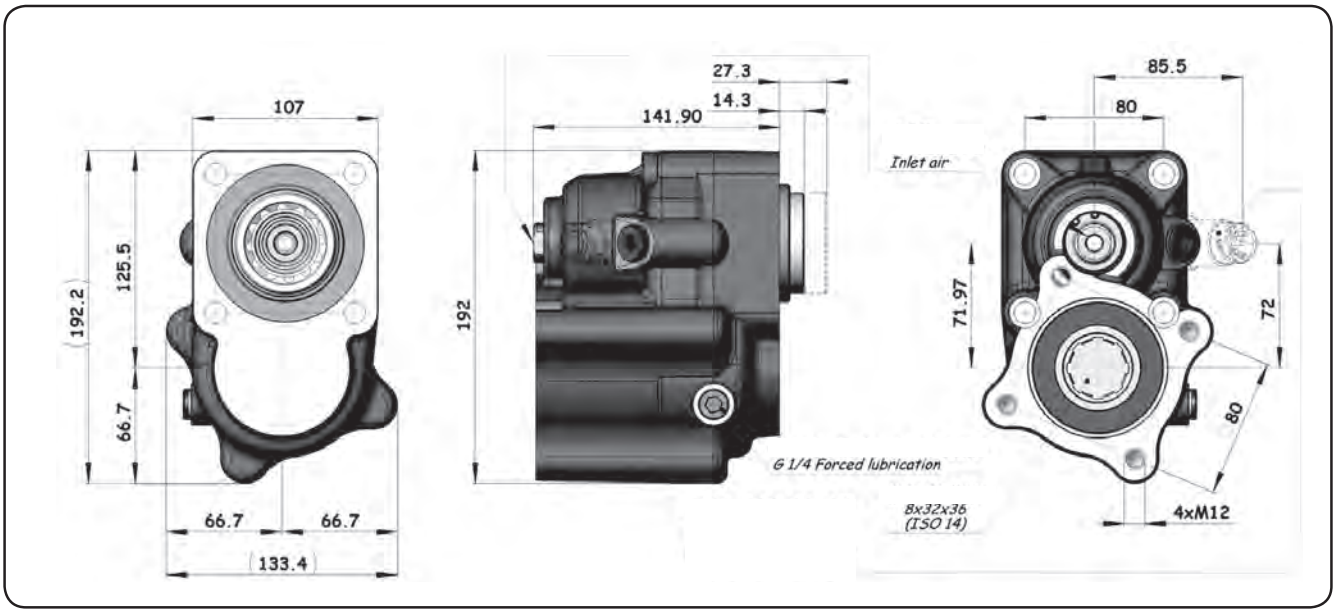
Gearbox :	Volvo and ZF
Max torque :	300 Nm
Mounting side :	Rear
Output :	Rear
Rotation :	Anti-Clockwise
Weight:	11kg
Internal ratio:	= 1:1.35

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

PTO - Twin Wheel PTO- PT211







TECHNICAL SPECIFICATION:

Gearbox: Eaton-E, Mercedes, Volvo and ZF

Max torque: 280 Nm

Mounting side: Rear

Output: Rear

Rotation: Anti-Clockwise

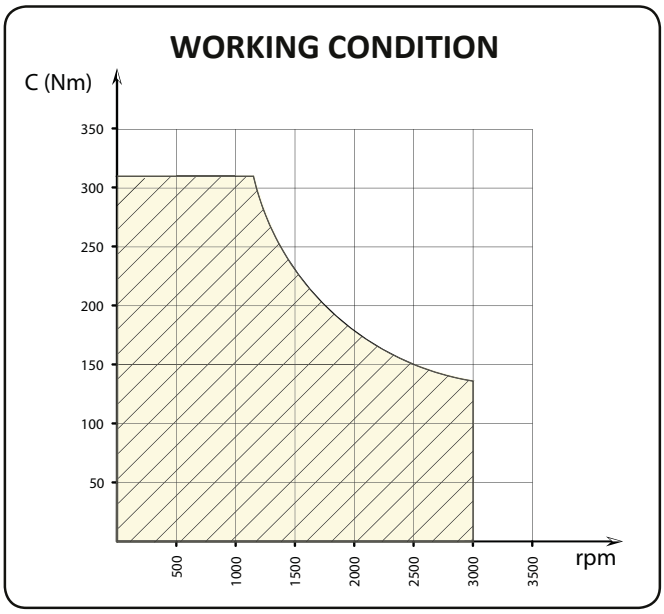
Weight: 11kg

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

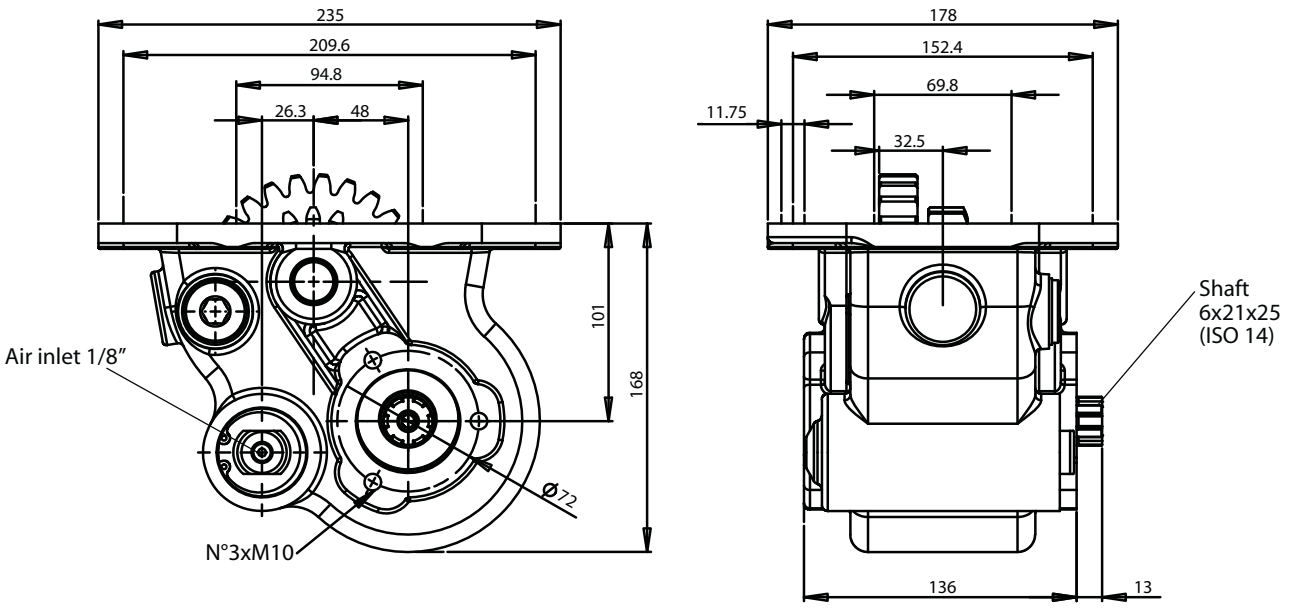
Fuller Roadranger: High Speed Range - PT346

Available as kit PKS2315/05 containing:
PT346 PTO
SA3052 mounting kit





Weight 12.8 kg



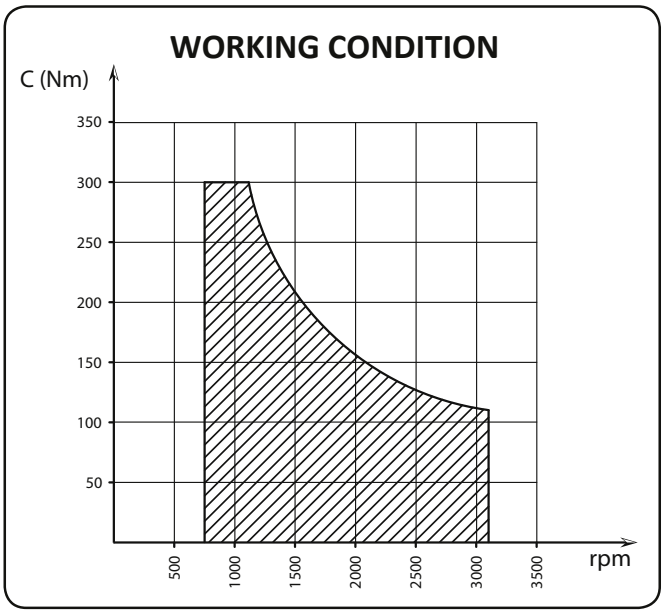
PTO Kit	PTO	Max Torque (Nm)	Mounting Side	Output	Rotation	Mounting Kit
PKS2315/05	PT346	320	Left	Rear	Clockwise	SA3052

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

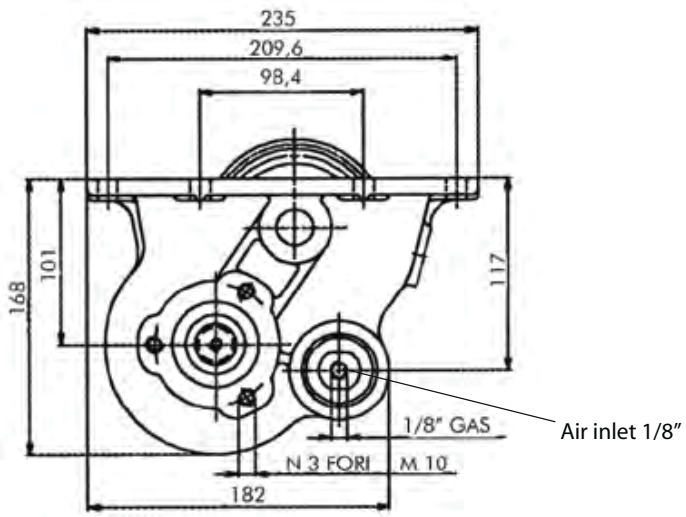
Fuller 14613 Roadranger: Low Speed Range 3 Bolt - PT347

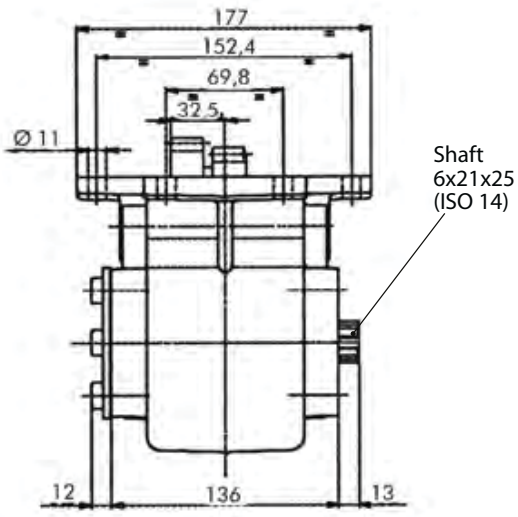
Available as kit PKS2315/06 containing:
PT347 PTO
SA3052 mounting kit





Weight 12.8 kg



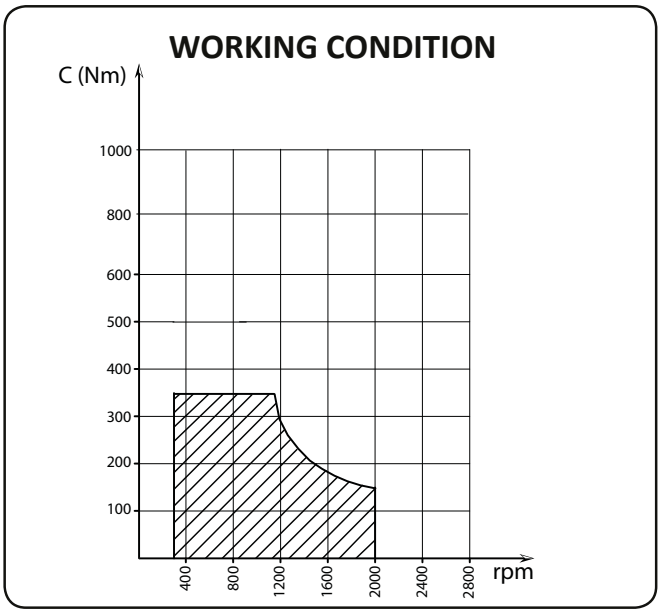


PTO Kit	PTO	Max Torque (Nm)	Mounting Side	Output	Rotation	Mounting Kit
PKS2315/06	PT347	300	Left	Rear	Clockwise	SA3052

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

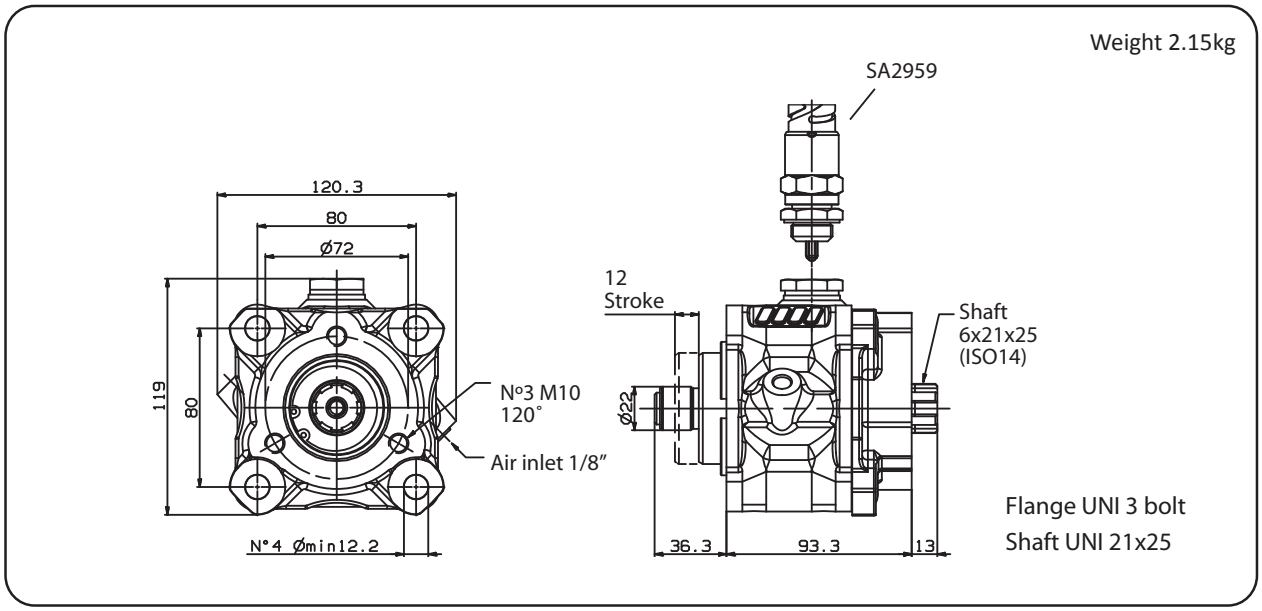
PTO - PT348





PKS9101/24 "ZF Ecosplit" containing:
PT348 PTO
SA3013 mounting kit
SA3003 quill shaft

PKS9103/23 "ZF 12AS Tronic" containing:
PT348 PTO
SA3013 mounting kit
SA3025 quill shaft



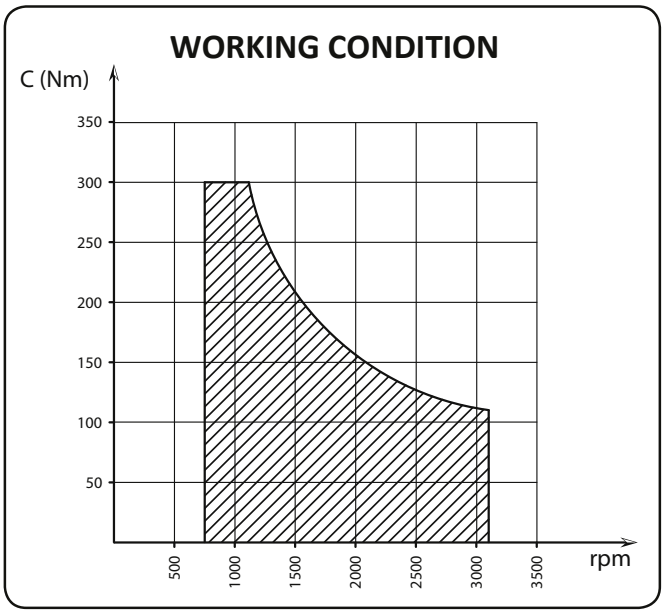
PTO Kit	PTO	Max Torque (Nm)	Mounting Side	Output	Rotation	Mounting Kit
PKS9101/24 PKS9103/23	PT348	350	Rear	Rear	Clockwise	SA3013

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

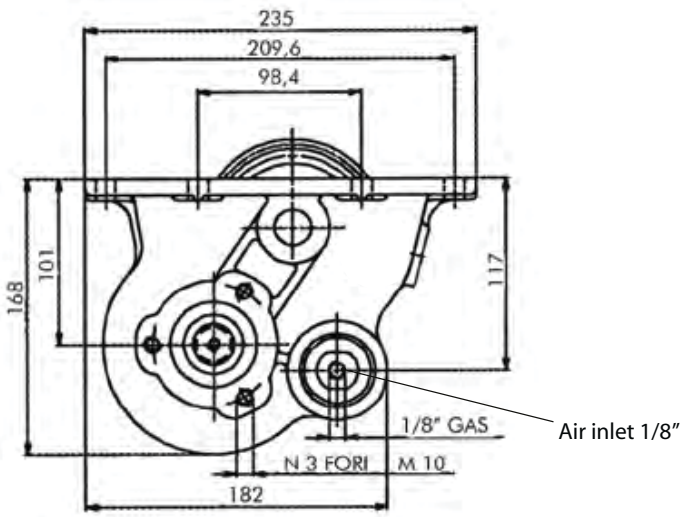
Fuller 14613 Roadranger: Low Speed Range 4 Bolt - PT357

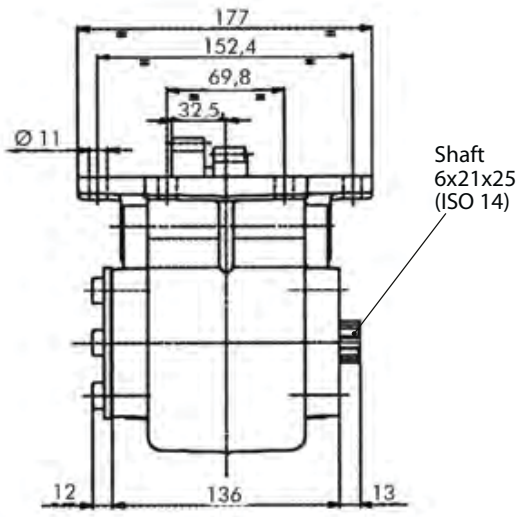
PT357 PTO





Weight 12.8 kg





PTO	Max Torque (Nm)	Mounting Side	Output	Rotation	Mounting Kit
PT357	300	Lower	Rear	Clockwise	SA3052

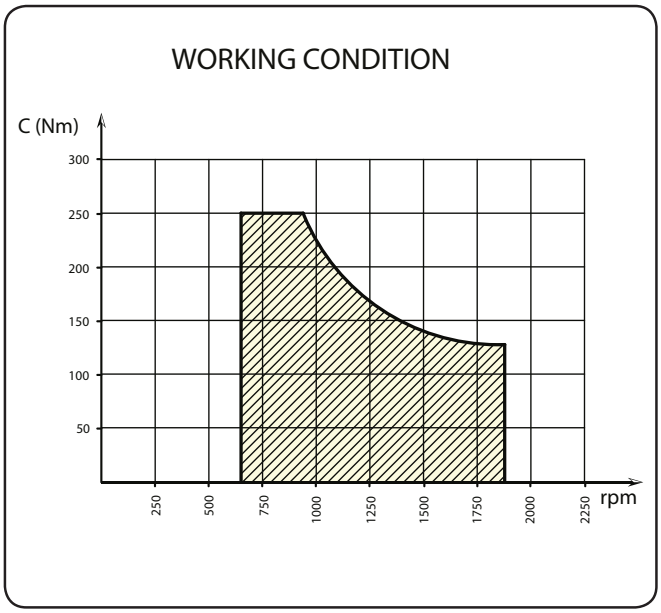
Order mounting kit seperatley

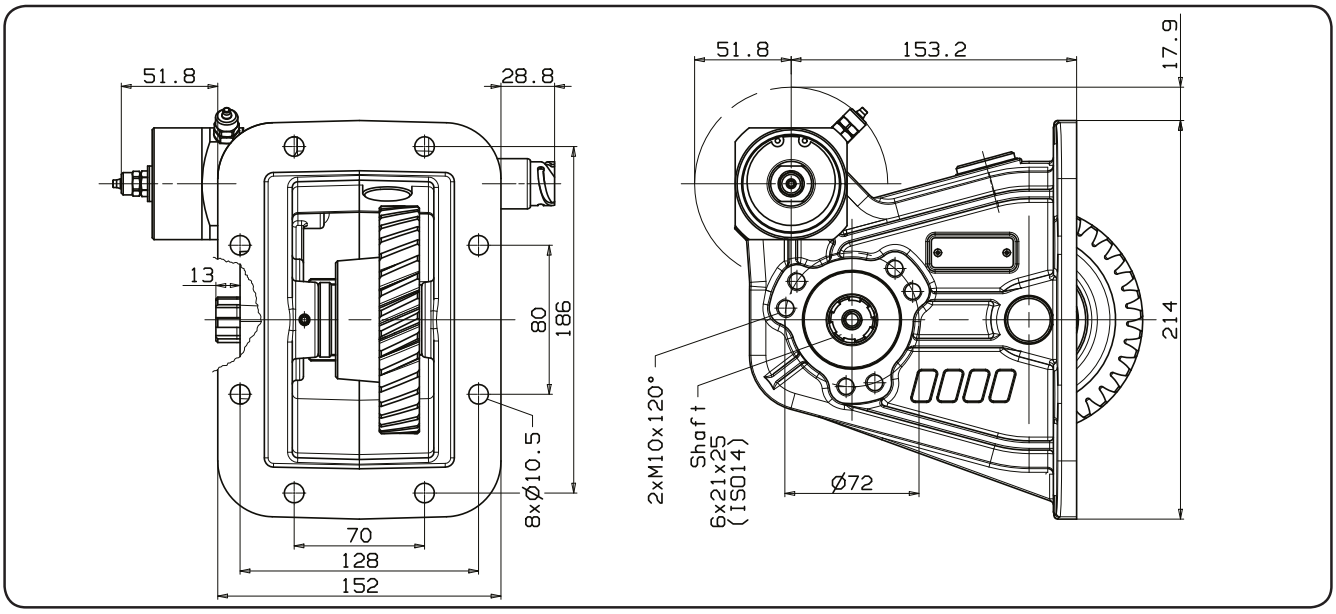
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

PTO - Vacuum Clutch- PT369



PT369





TECHNICAL SPECIFICATION:

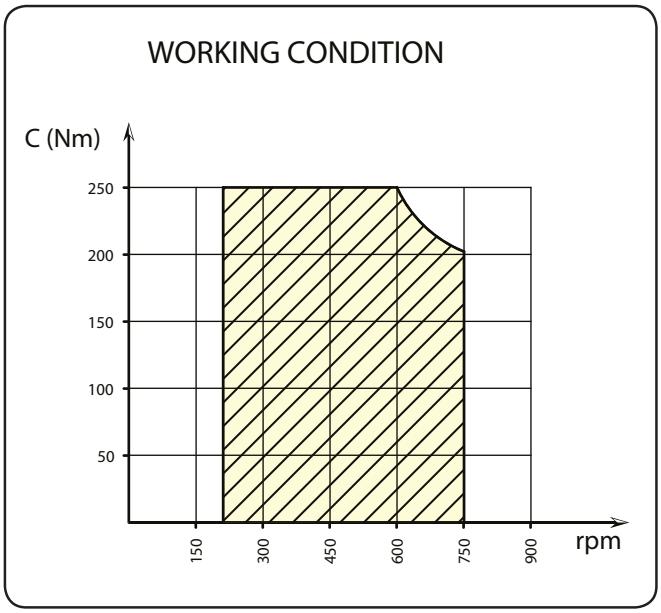
Gearbox:	Isuzu
Max torque:	250 Nm
Mounting side:	Side
Output:	Rear
Rotation:	Clockwise
Weight:	4kg

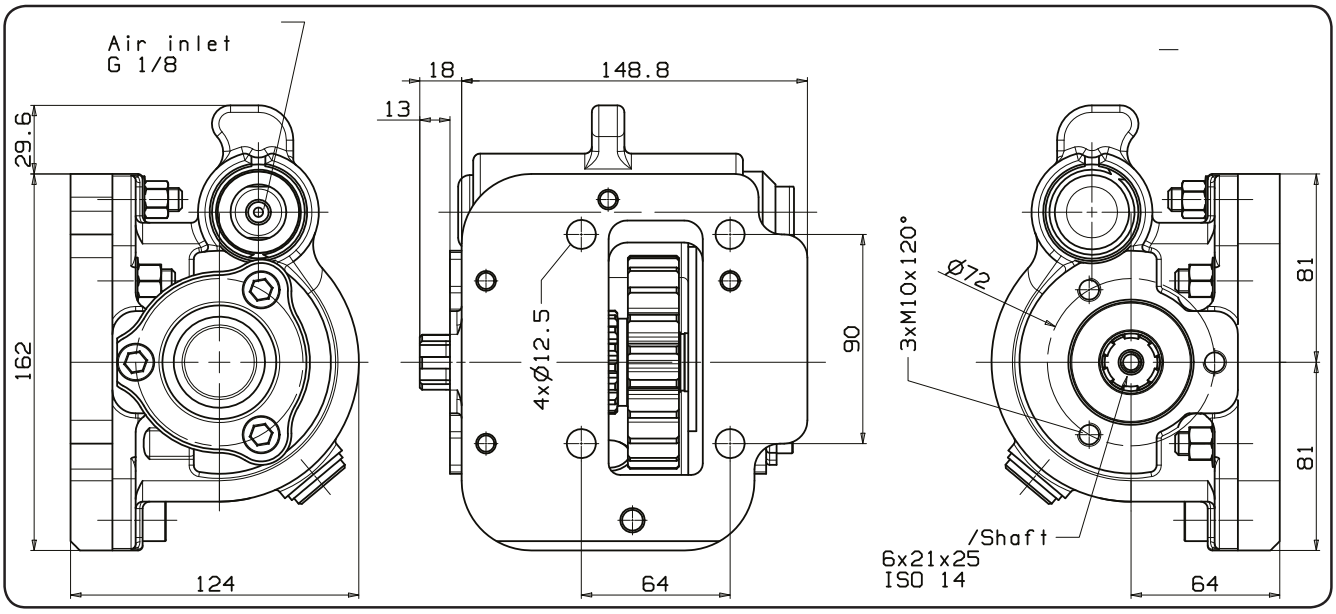
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

PTO - Clutch PTO - PT370



PT370





TECHNICAL SPECIFICATION:

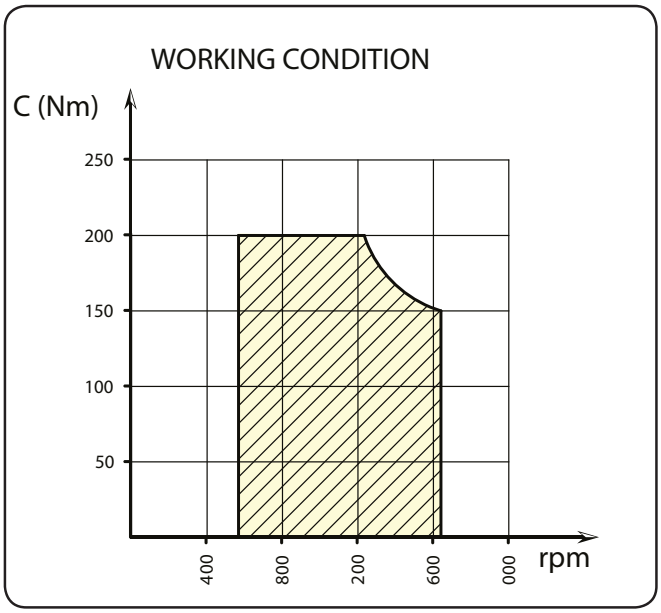
Gearbox:	Nissan
Max torque:	250 Nm
Mounting side:	Side
Output:	Rear
Rotation:	Clockwise
Weight:	10.3kg

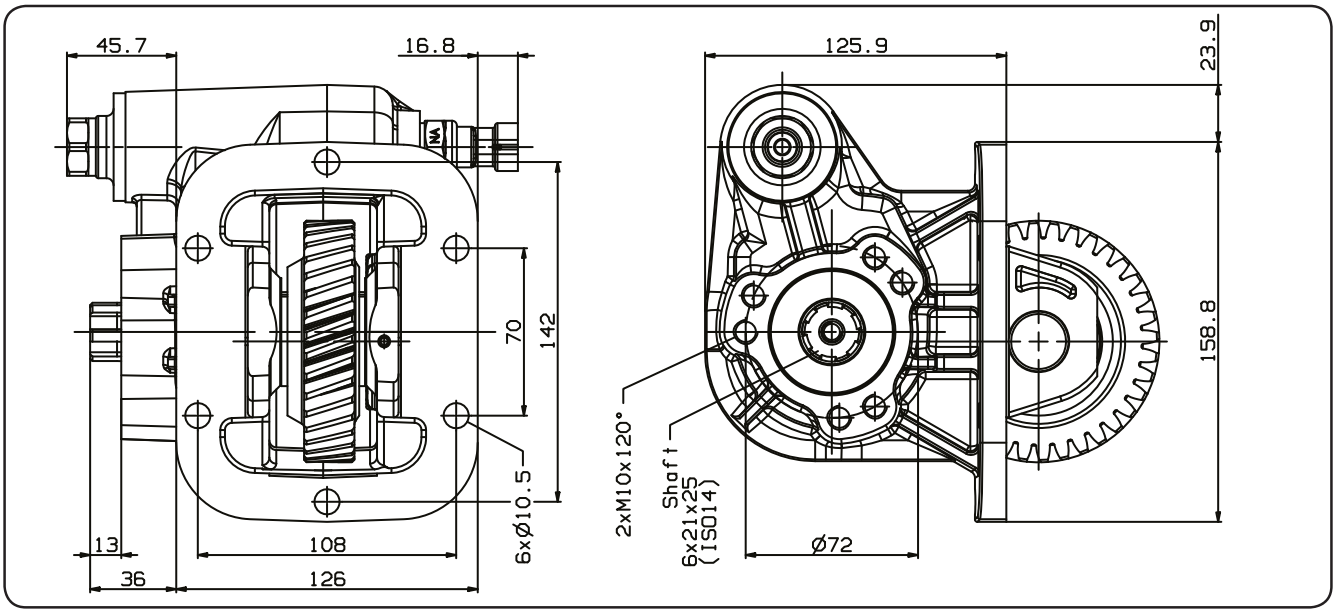
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

PTO - Clutch PTO - PT371



PT371



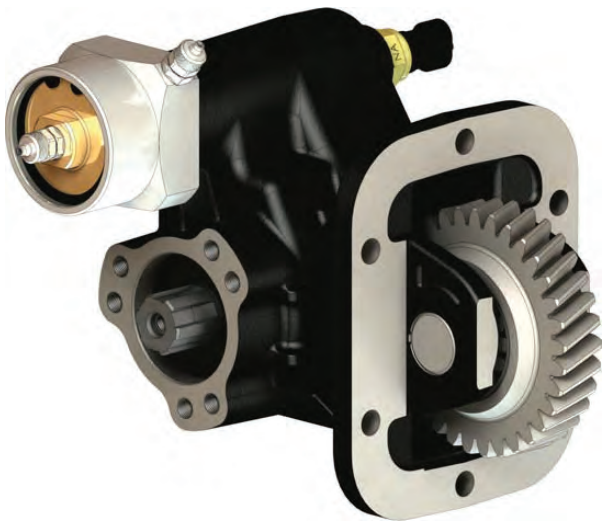


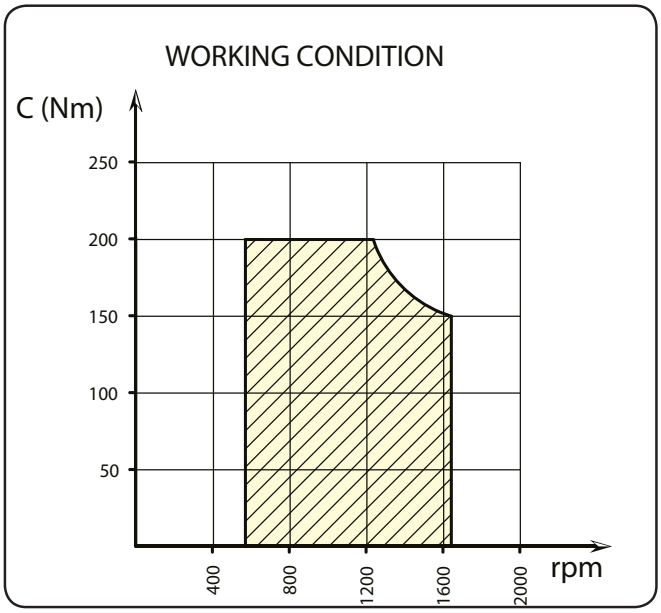
TECHNICAL SPECIFICATION:

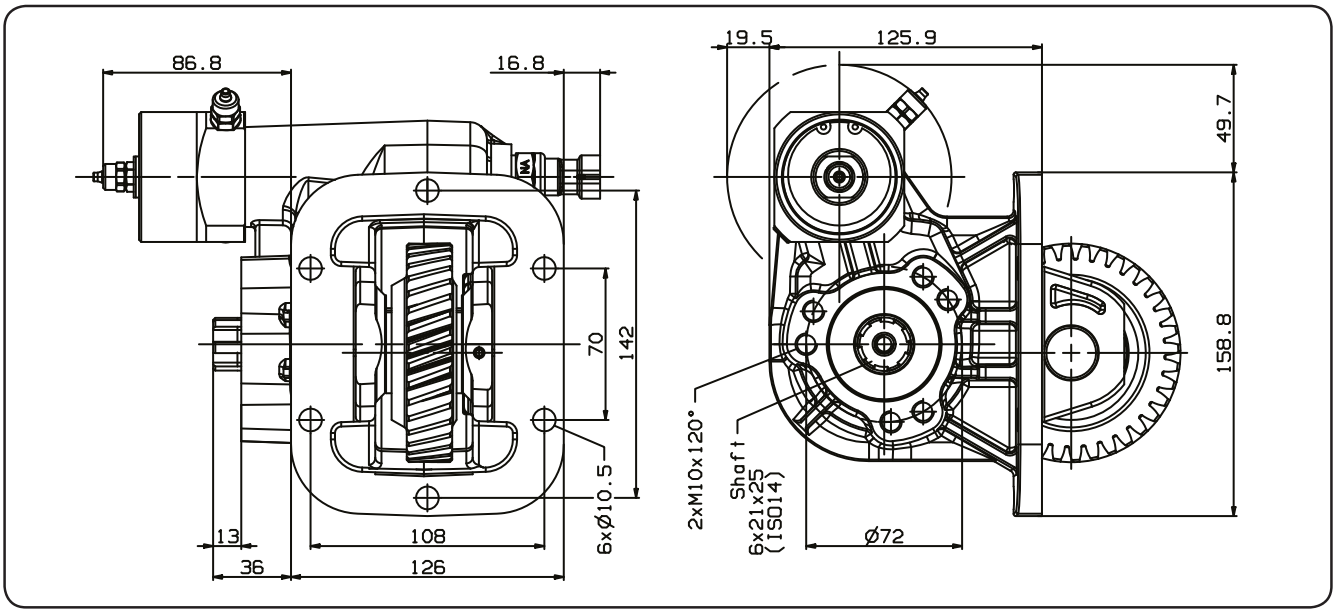
Gearbox:	Isuzu
Max torque:	200 Nm
Mounting side:	Side
Output:	Rear
Rotation:	Clockwise
Weight:	8kg

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

PTO - Vacuum Clutch PTO - PT373





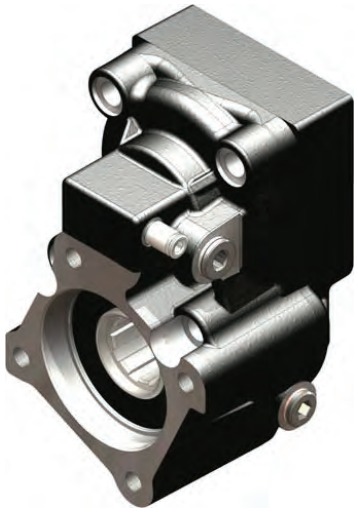


TECHNICAL SPECIFICATION:

Gearbox:	Isuzu - MYY/5T, 6P & 6S
Max torque:	200 Nm
Mounting side:	Side
Output:	Rear
Rotation:	Clockwise
Weight:	7.7kg

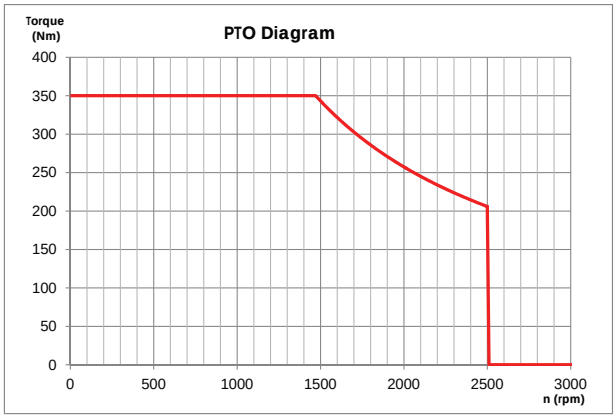
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

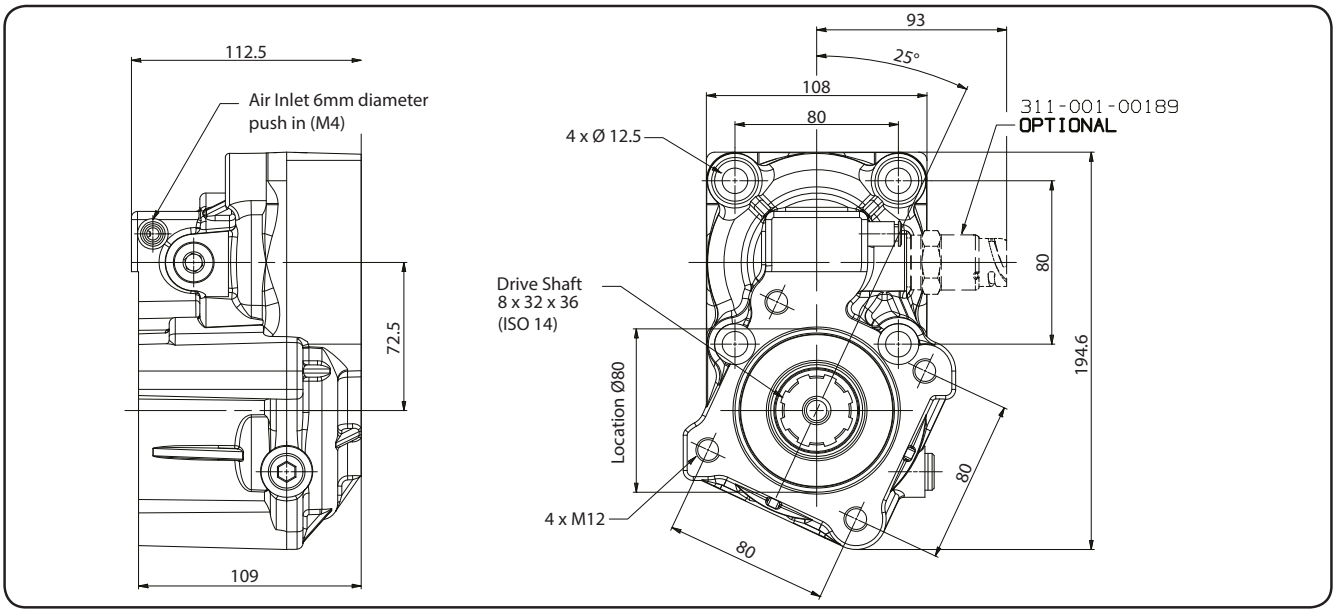
PTO - Pneumatic PTO - PT377



PT377

WORKING CONDITION



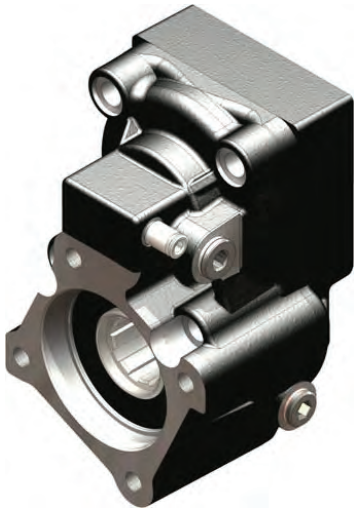


TECHNICAL SPECIFICATION:

Gearbox:	Merc / Iveco / Eaton / ZF / Volvo
Max torque:	350 Nm
Mounting side:	Side
Output:	Rear
Rotation:	Anti Clockwise
Ratio:	1:1.8

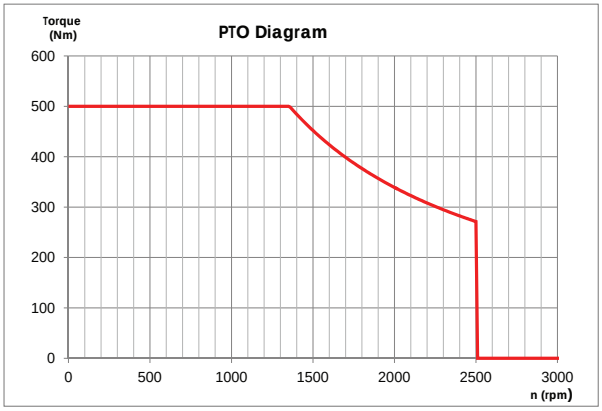
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

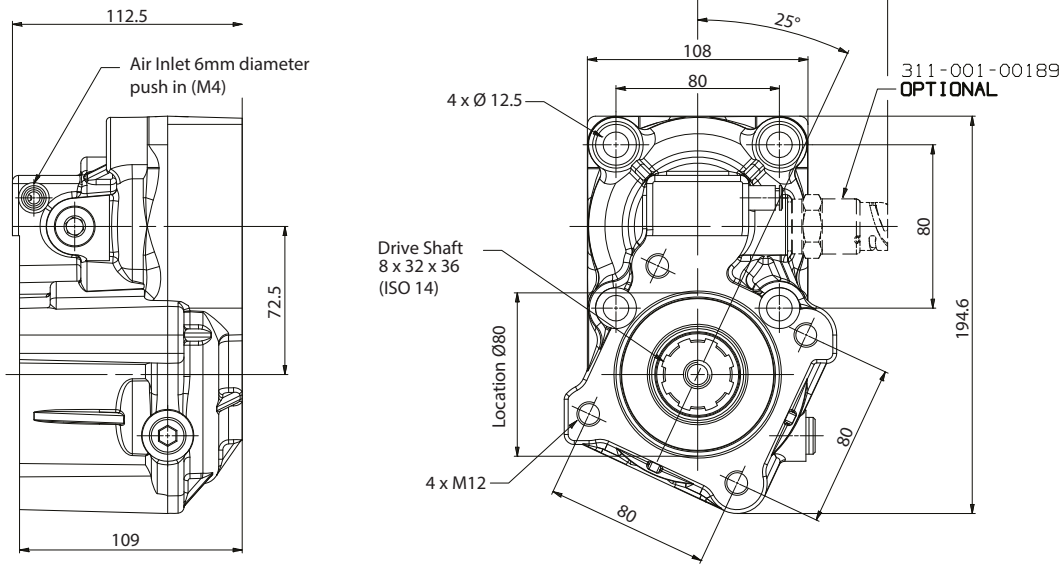
PTO - Pneumatic PTO - PT378



PT378

WORKING CONDITION



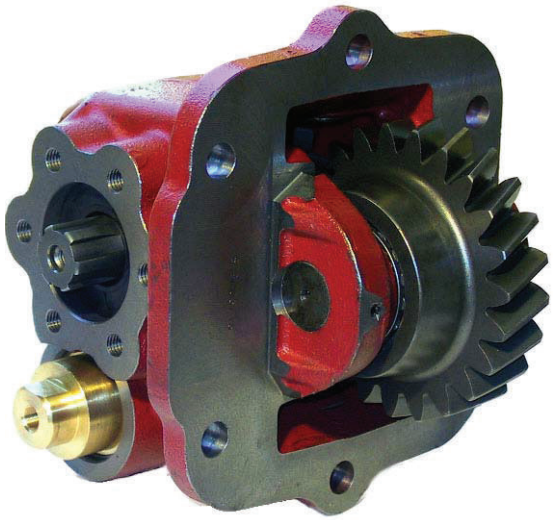


TECHNICAL SPECIFICATION:

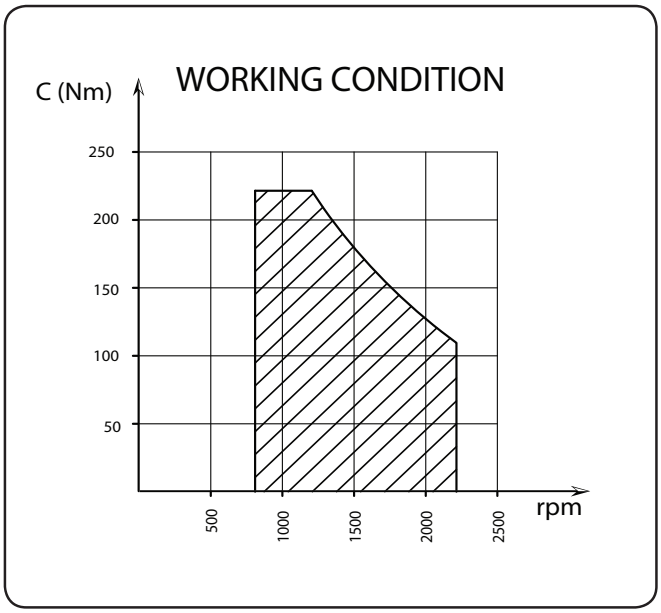
Gearbox:	Merc / Iveco / Eaton / ZF / Volvo
Max torque:	500 Nm
Mounting side:	Side
Output:	Rear
Rotation:	Anti Clockwise
Ratio:	1:1

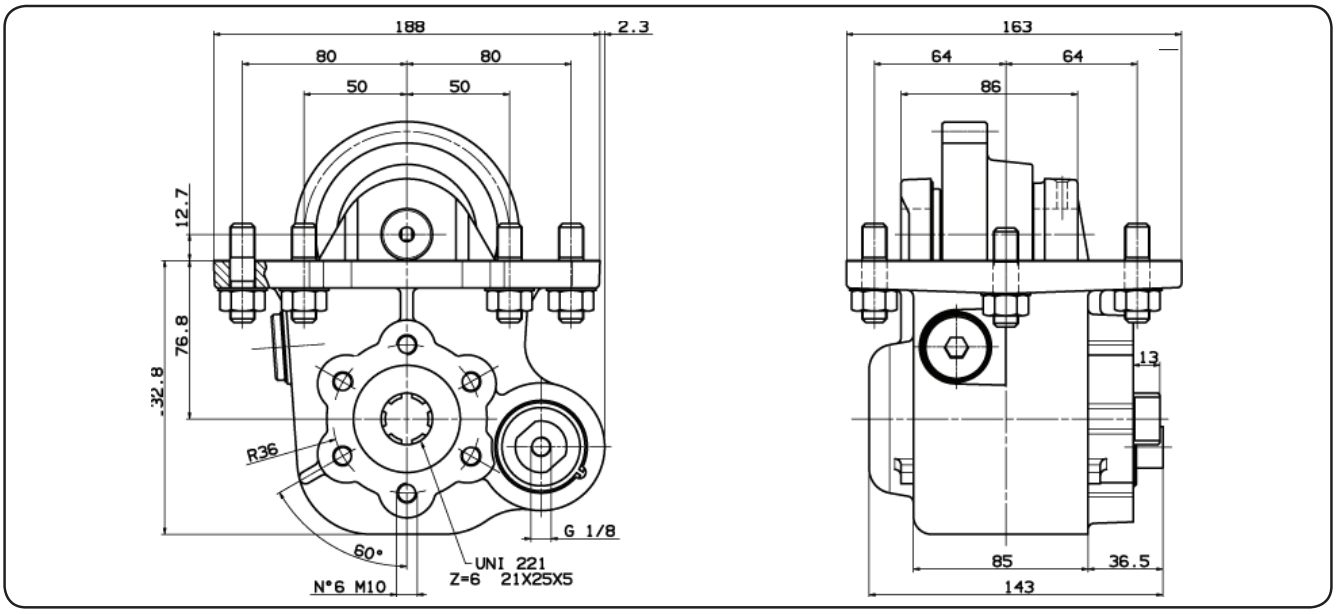
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

PTO - Clutch PTO - PT379



PT379





TECHNICAL SPECIFICATION:

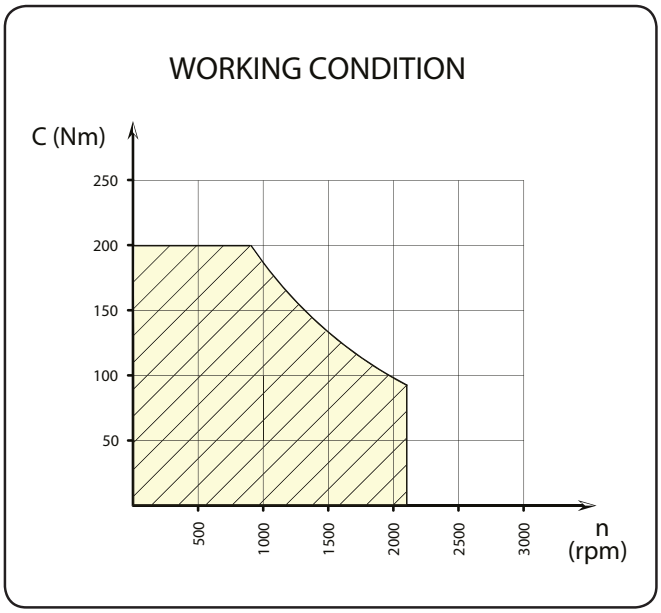
Gearbox:	Nissan
Max torque:	200 Nm
Mounting side:	Side
Output:	Rear
Rotation:	Clockwise
Weight:	10.3kg

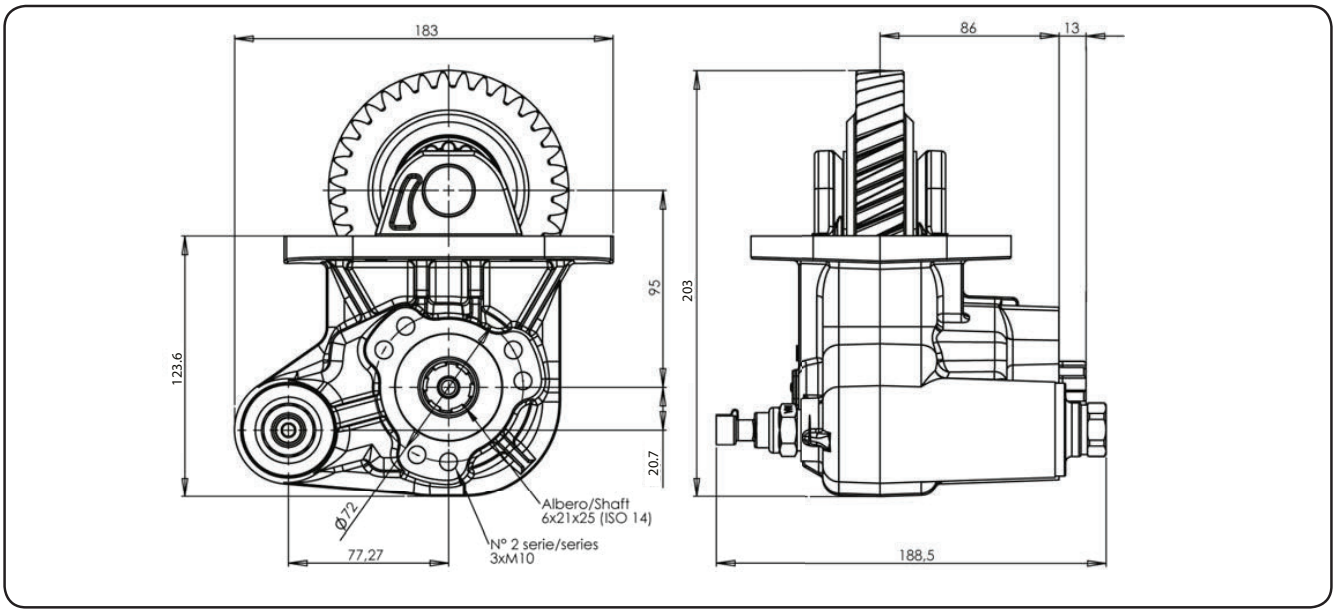
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

PTO - Mechaincal Clutch PTO - PT380



PT380





TECHNICAL SPECIFICATION:

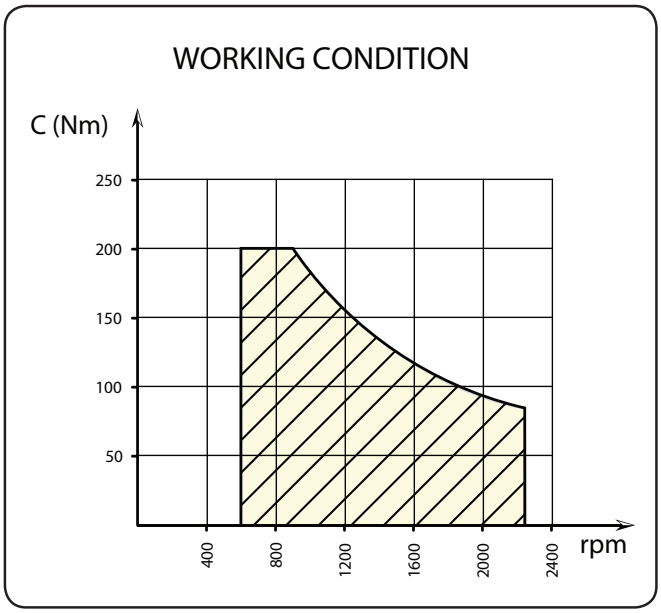
Gearbox:	Nissan
Max torque:	200 Nm
Mounting side:	Side
Output:	Rear
Rotation:	Clockwise
Weight:	9.3kg

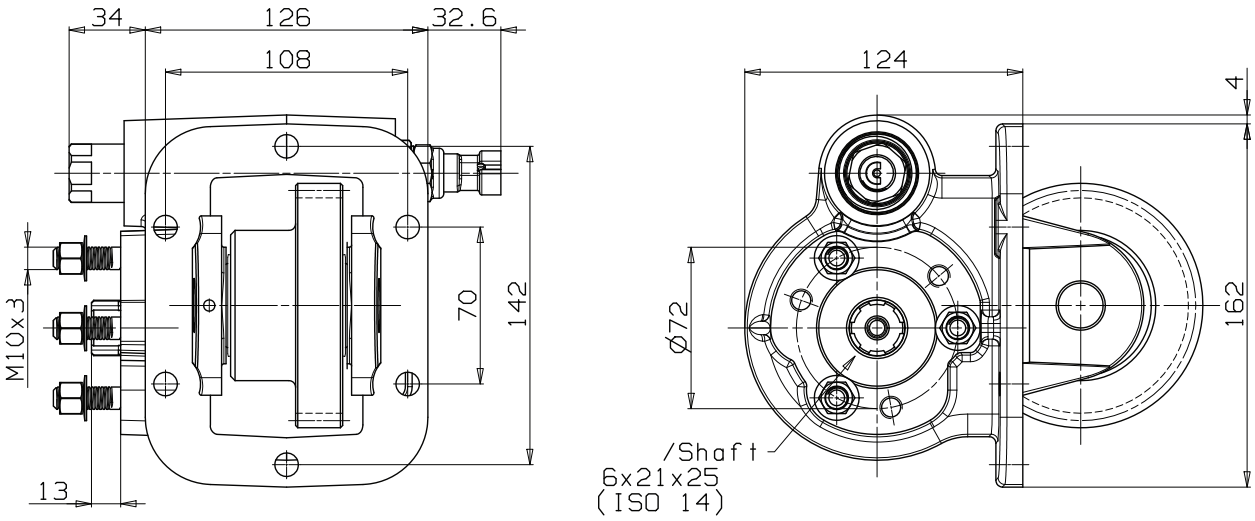
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

PTO - Mechaincal Clutch PTO - PT381



PT381





TECHNICAL SPECIFICATION:

Gearbox:	Toyota
Max torque:	200 Nm
Mounting side:	Side
Output:	Rear
Rotation:	Clockwise
Weight:	11kg

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Adaptor Guide: 3-bolt pump to 4-bolt PTO





To use a 3-bolt pump with a 4-bolt PTO supply together one option from both A & B as follows:

A - adaptor for 3-bolt pump to 4-bolt PTO:

Supply **SA2851** to suit supported fixed-wheel PTOs

Supply **SA2885** to suit loose wheel light duty PTOs (e.g. PBA160, PBA184, PBA186, etc)

B - coupling adaptor for 3-bolt pump to 4-bolt PTO:

Supply **SA2767** to suit EGP025230 or EGP025170

Supply **SA2768** to suit EGP025150

Adaptor: 4-Bolt Pump to 3 Bolt Cast Iron PTO **- SA2822/SA2823**



Features:

- Only for use with Edbro Cast Iron PTO's (not for use with aluminium PTO's)
- Maximum torque:- 250 Nm
- SA2822 - coupling assembly
- SA2823 - mounting kit

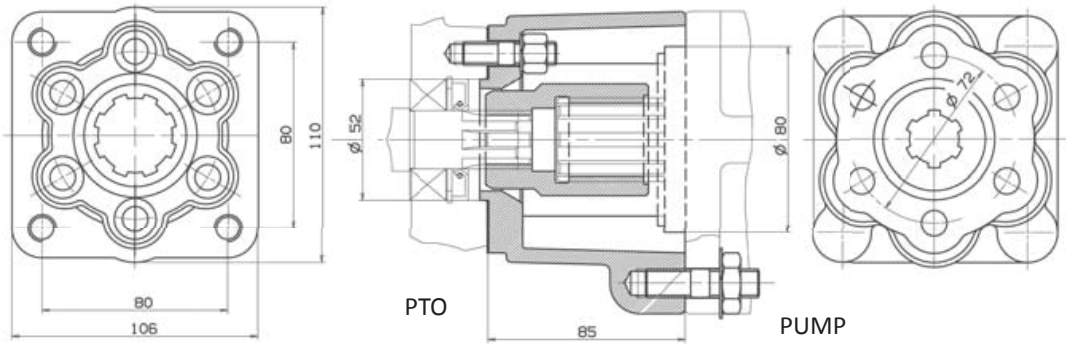
Kit Contents:

SA2822-
Adaptor, PTO Mounting Kit, Coupling
SA2823-
Pump Mounting Kit

Adaptor: 3 bolt PTO to 4 bolt Pump - SA3009



Adaptor UNI PTO (3 HOLES) / ISO (4 HOLES) PUMP



Features:

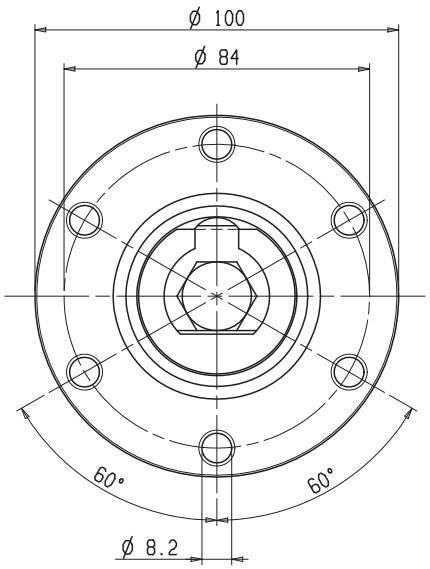
- Only for use with Edbro aluminium PTO's
- Maximum torque:- 250 Nm

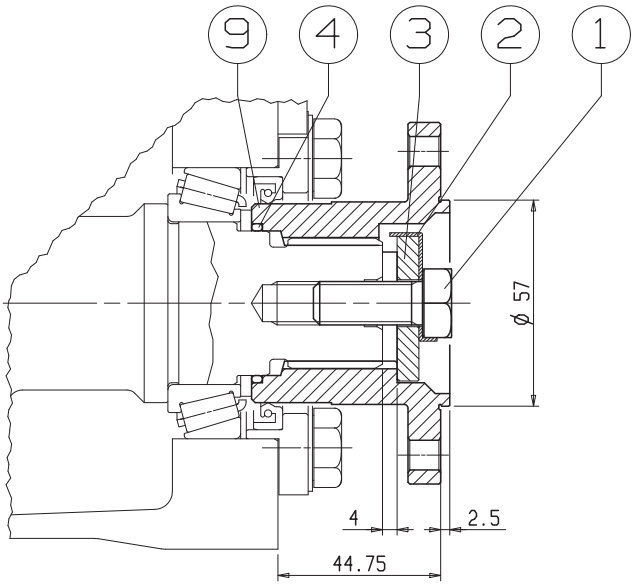
Kit Contents:

- Adaptor
- Coupling
- PTO/Pump mounting kit

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Flange Kit - SA2958

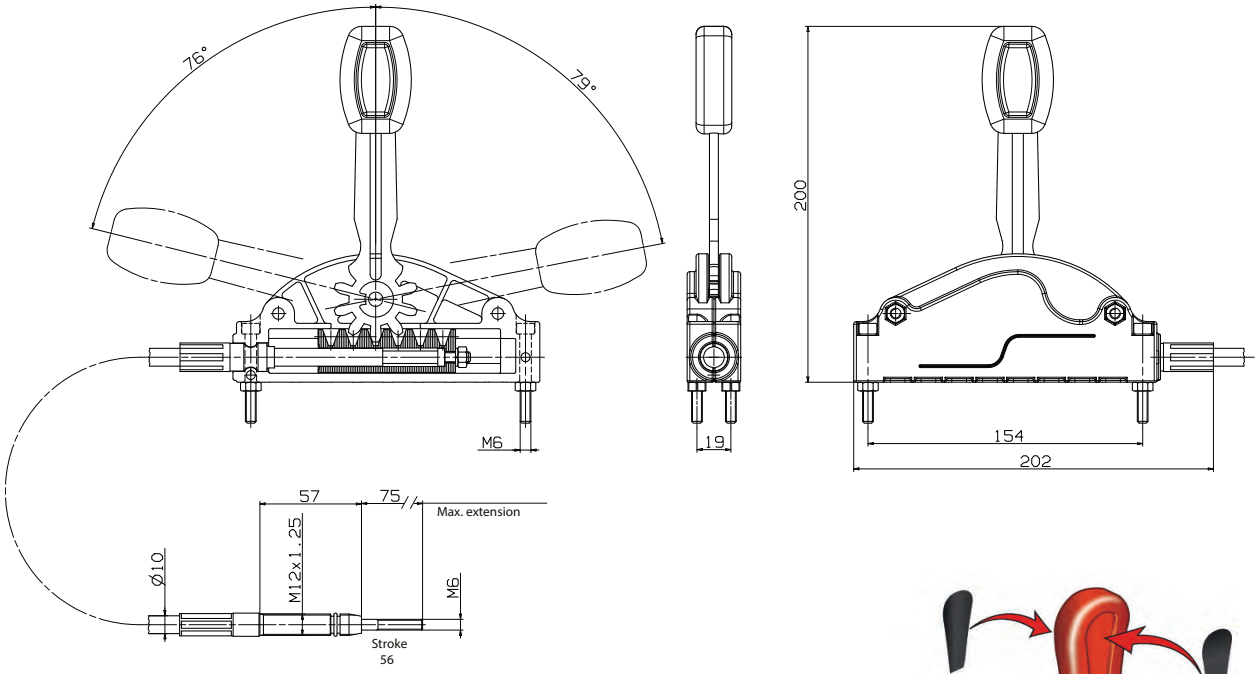


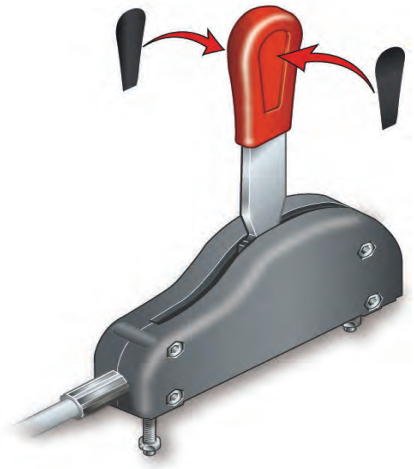


Pos.	Pieces	Denomination
1	1	Screw TE M 12x30 UNI 5739
2	1	Back-up washer M12
3	1	Flange locking washer
4	1	Gasket O-R 3156 FKM/FPM
9	1	Female flange 32x36 DIN 10

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Manual Control Lever - PCL20xxxx





TECHNICAL FEATURES
- Stroke 56 mm
- Transmitted force: Pull 600 N/Push 350 N
- Minimum sheath bending radius: 250 mm
- Lenghts 0.7 - 9m available on application

PHISICAL FEATURES
- Body in glass-filled nylon.
- Pressed steel lever with corrosion protection.

This Remote control is suitable for moving mechanisms with relatively high loads.

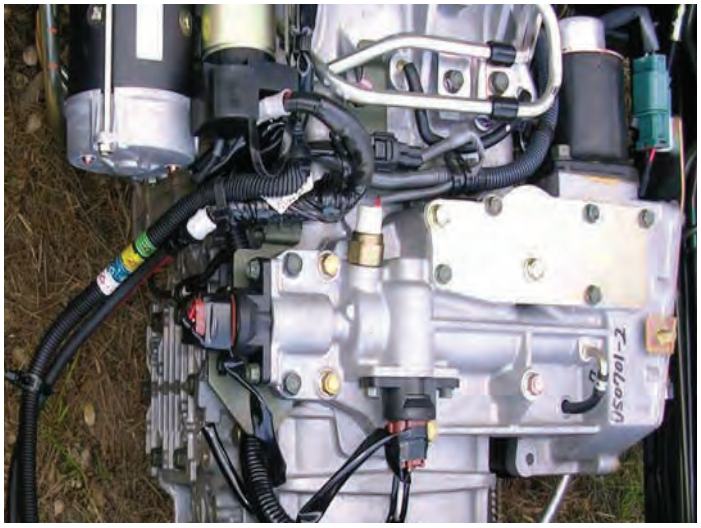
Part No	Cable Length
PCL20/2500	2.5 m
PCL20/3000	3 m
PCL20/3500	3.5 m

Suitable for control of manual valves and PTO's

PTO Wiring Kit - SA3050

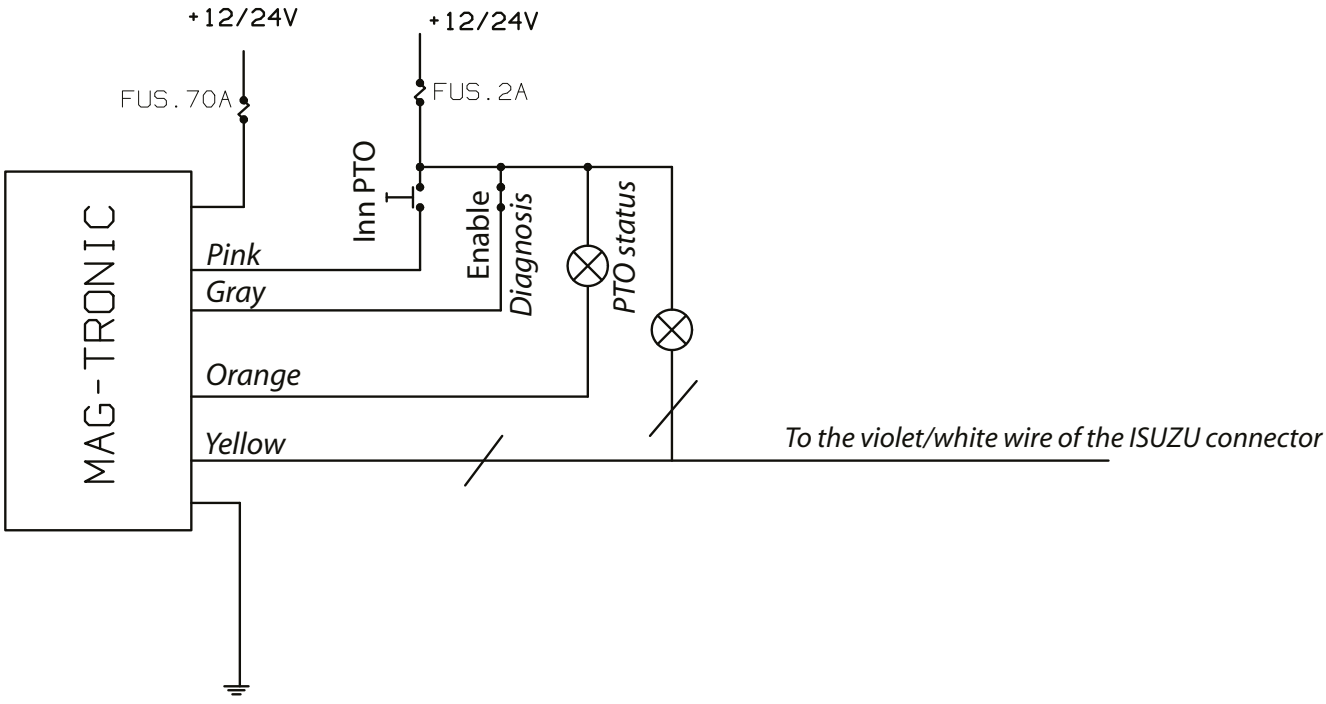
SA3050 - Isuzu Wiring Kit Smoother Mag-Tronic PTO

GEARBOX ASSEMBLY



CAB INTERIOR





Edbro
SETTING THE INDUSTRY STANDARD

Safety Equipment



Edbro constantly strive to improve the safety of tipping and in order to help fleets tip more safely have developed a range of devices to aid operators.

The high voltage alert and inclinometer range provide operators with a warning system which alerts the driver to dangers during the tipping cycle.

Edbro
SETTING THE INDUSTRY STANDARD

Inclinometer



Safety Equipment

Tip with safety not with guesswork using the Edbro Inclinometer for trailer applications






Benefits

Continual monitoring of tipping angle during operation to reduce risk of accident

Increased assistance in preventing potential tipper overturns

Optimised driver safety to reduce risk of injury and potential liability claims

Components

Easy to read in-cab display unit

Pneumatic tipping cut off valve

IP rated suzi connectors/suzi cable

Protective ABS cover

IP68 sensor complete with state of the art 3D sensor to indicate sideways chassis movement with accuracy of 0.1˚ to 360˚

Specifications

General	
Operating voltage	24 vDC
Nominal operating current	400 mA
Measurement range *(dependent on model)*	±8 ° (standard) ±10 ° (modified) ±15 ° (off road)
Sensor operating temperature	-30 to +55 °C
Resolution	± 0.1 °
Valve operating voltage	24 vDC
Valve operating current	170 mA
Valve operating pressure	0 to 125 PSI
Valve operating temperature	0 to +50 °C
Voice Warning Sounder	
Operating voltage	12 - 24 vDC
Nominal operating current	500 mA
Sound level	85 db
Frequency	Speech
MIRA tested for on & off highway (sounder only)	
Protection Ratings	
External electronic connections	IP68
Sensor casing	Aluminium IP68
Sensor shield	ABS IP68



Engineering Excellence

At Edbro we offer unrivalled application engineering support and in-depth product knowledge that only comes from decades of industry experience.

Our highly skilled engineers can offer the optimum product for your application to maximise operating payload and ensure ultimate safety in operation.

Extensive research combined with testing in the most arduous environments ensures the best on the market for reliability and performance in any situation.

Edbro
SETTING THE INDUSTRY STANDARD

Inclinometer



Safety Equipment

Tip with safety not with guesswork using the Edbro Inclinometer for rigid truck applications






Benefits

Continual monitoring of tipping angle during operation to reduce risk of accident

Increased assistance in preventing potential tipper overturns

Optimised driver safety to reduce risk of injury and potential liability claims

Components

Easy to read in-cab display unit

Pneumatic tipping cut off valve

IP rated suzi connectors/suzi cable

Protective ABS cover

IP68 sensor complete with state of the art 3D sensor to indicate sideways chassis movement with accuracy of 0.1˚ to 360˚



Specifications

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Valve operating voltage	24 vDC
Valve operating current	170 mA
Valve operating pressure	0 to 125 PSI
Valve operating temperature	0 to +50 °C
Voice Warning Sounder	
Operating voltage	12 - 24 vDC
Nominal operating current	500 mA
Sound level	85 db
Frequency	Speech
MIRA tested for on & off highway (sounder only)	
Protection Ratings	
External electronic connections	IP68
Sensor casing	Aluminium IP68
Sensor shield	ABS IP68

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Edbro
SETTING THE INDUSTRY STANDARD

High Voltage Alert



Safety Equipment

Increase operator safety when tipping under power lines with the Edbro HVA unit






Benefits

Clear warning to operator of potential danger in tipping

Reduces the risk of power line contact, improving the safety of tipping

Components

Compact detection antenna mounted within chassis cab

In-cab warning unit with clear audio and visual warnings

12-24 volt unit easily fitted to a range of vehicles including tippers and cranes

Specifications

General	
Operating voltage	12 - 24 vDC
Nominal operating current	< 150 mA
Size	130 mm (W) x 35 mm (H) x 25 mm (D)
Weight	155 g
Nominal operating temperature	-5 to +55 °C
HV detenction range	Up to 100 metres
Warning tone	Approx 85 db (high pitched pulsed buzzer)
Visual warning	High intensity red flashing LED
Power indicator	High intensity green LED
Mute facility	30 seconds *
**Mute can be activated for 30 seconds then alarm sounds until muted again*	
Detection Antenna	
Length	235 mm
Weight	60 g



Engineering Excellence

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Body Raised Warning System - SA2924



This simple to install kit provides an audible and visual warning that the tipper body is raised. Everything is provided to ensure a neat installation.

The hydraulic pressure switch is used to provide a signal from the hydraulic valve. When the body is raised above the chassis, high pressure is present within the cylinder, and this signal is fed to the buzzer and red warning light in the cab. Detailed fitting instructions are included in the kit.

Specification:-

Voltage:	*24v dc*
Fuse rating:	*5A*
Warning Light Dimensions (Max) (w x h x d):	*24mm x 13mm x 27mm*

Kit Contents

Cable
Buzzer
Warning Light
Fuse & Holder
Cable Ends & Connectors
Cable Ties

Pressure Switch
Rubber Boot
1/8” BSP Dowty Washer
Fitting Instructions
Warning Sticker

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

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SETTING THE INDUSTRY STANDARD

Accessories



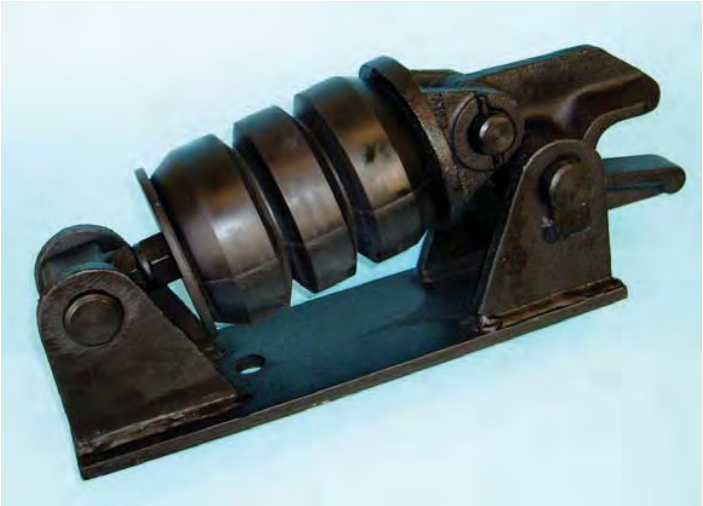
Edbro offers a wide range of accessories to compliment it's cylinder and hydraulic kit range providing customers with a one stop shop approach to truck hydraulics.

If you can't find what you're looking for within the catalogue feel free to contact your local representative who is sure to be able to help.

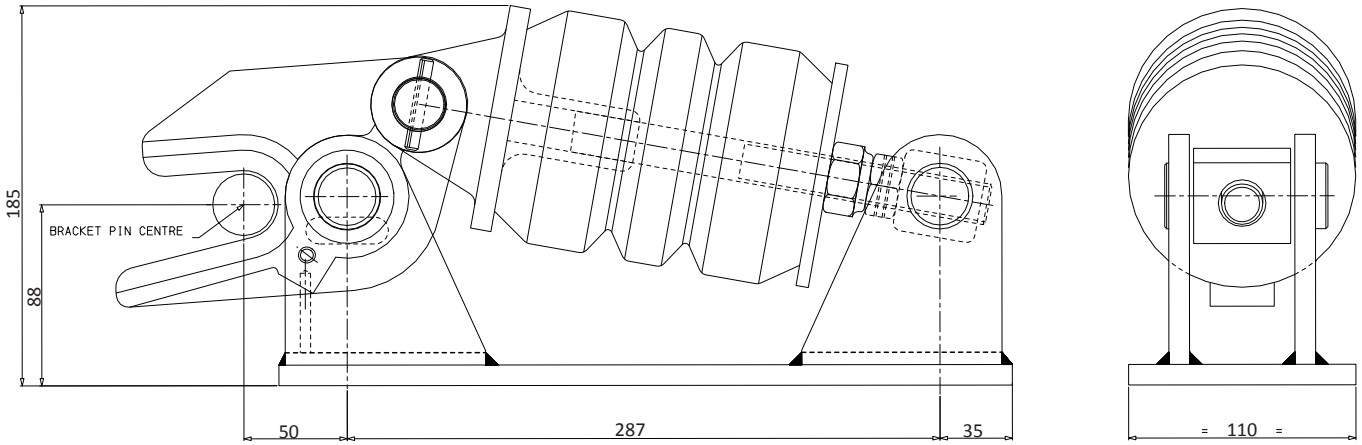
Body Clamp - BCA01

Key features:

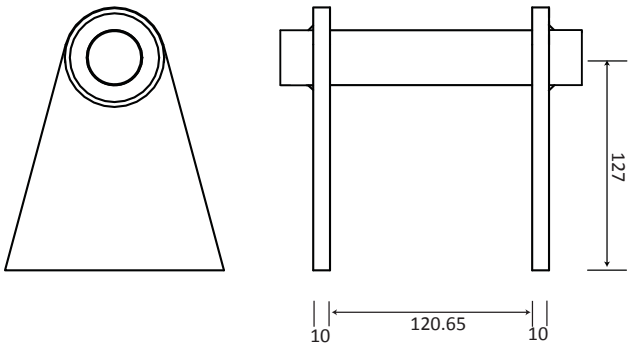
- Designed to stop an empty body from rattling in transit.
- Prevents damage to the chassis and the tipper for longer overall life.
- Reduces noise pollution for the benefit of the operator and the environment.
- Steel and aluminium bracket options are available.



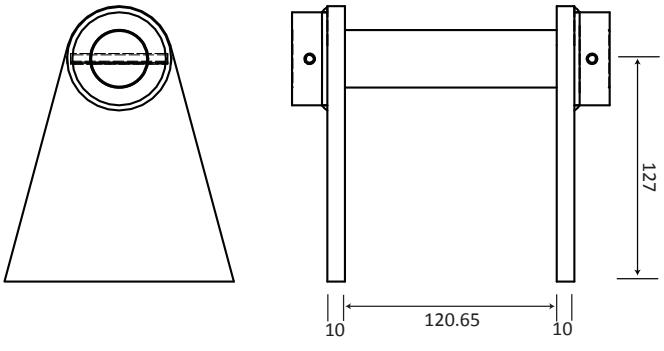
BCA01 BODY CLAMP



BCA02 - Steel Top Bracket



BCA02A - Aluminium Top Bracket

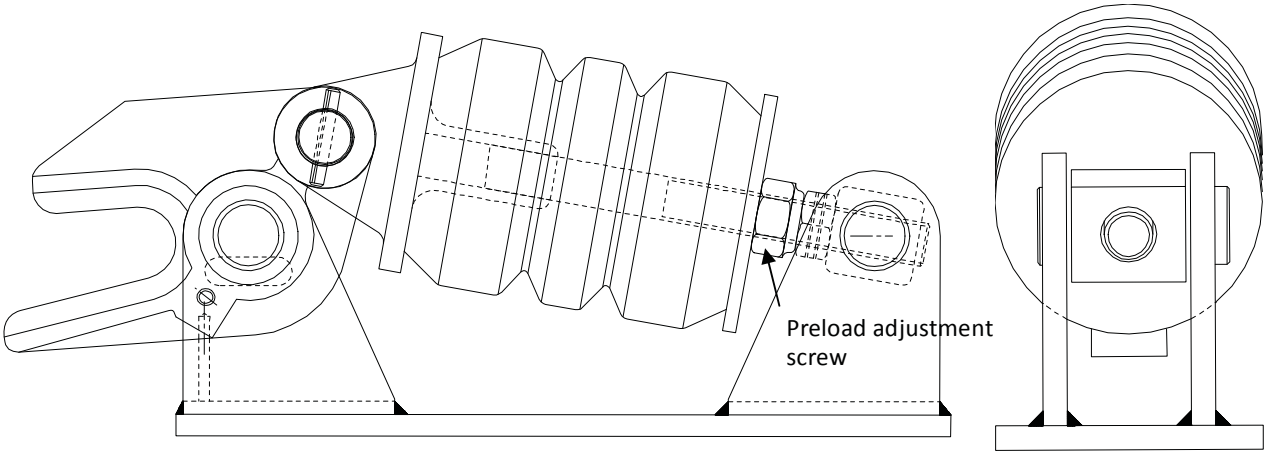


All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Body Clamp - BCA01

Installation:

* The body clamp must be positioned as close as possible to the front of the body. When the tipper body is resting on the chassis, the horizontal difference between the body bracket and clamp centre must be 50 mm and the vertical distance 0 mm.
* It is essential to ensure greasing of the body clamp before installation and regularly during use.
* Ensure that body clamp and bracket are both fully welded to the body and chassis before compression adjustment.



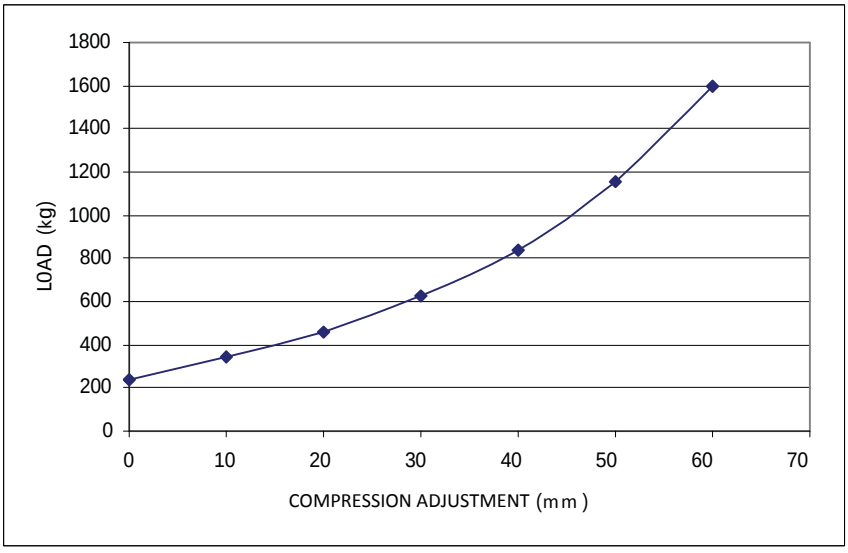
Adjust compression load to suit tipper body as follows:

Recommended compression load C: $= M \times \frac{K}{L}$

M = 1400 kg (tipper body with own weight)
K = 2100 mm (distance between the centre of gravity and the rear hinge)
L = 3400 mm (distance between the locking bar and the rear hinge)

Example Calculation = $1400 \times \frac{2100}{3400} = 865$ kg

According to the diagram below, compression adjustment is 40mm.
Therefore adjust preload screw, compressing the spring by 40 mm.



This graph shows the relation between the power block adjustment and resulting force (kgs)

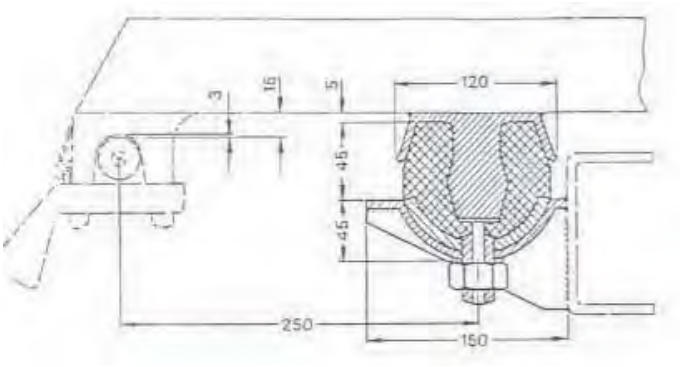
All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

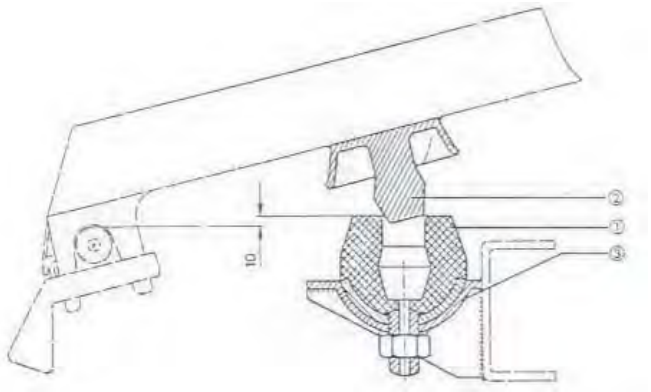
Body Locking System: POLYP Body Lock - PM58/PM58AL



- Suitable For Aluminum and Steel Bodies
- Prolongs Equipment Life
- Automatic Locking Action
- Eliminates Body Vibration And Bounce
- Low Maintenance

The **POLYP** body-locking device has been introduced to dampen noise and vibration between tipper body/bin and chassis when running empty.
The oil resistant rubber body, which has an open conical hollow space, is fastened to sub-frame or chassis. The steel or aluminum thorn is fastened to the underside if the body/bin. As both sections come together they lock into place holding the body/bin firmly to the chassis.





The locking action is automatic; therefoe manual operation is not required. Because of its elastic properties, the **POLYP** gripping device adapts itself to any twists of the vehicle frame and at the same time takes up any road shock.
The fitment of one or two **POLYPS** (depending on body size) will almost entirely eliminate vibration and bounce, and at the same time prolong the useful life of your equipment.
Other than greasing once a week, no other maintenance is required. When tipping, the force of the hydraulic ram will separate the **POLYP**

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Electric Power Pack - HPU24V/12V



- Electric power packs for vehicles without an air supply
- 24V & 12V variants available
- Integral oil tank
- Complete with wiring kit & simple installation instructions
- 10L and 15L Tank capacity available

- Installation dimensions:

  Height 10L = 570
  Width 10L = 220
  Depth 10L = 225

  Height 15L = 720
  Width 15L = 220
  Depth 15L = 225

- Maximum pressure = 120bar



Edbro part numbers:

- HPU24V/10L/3.1CC - 10 Litre
- HPU24V/15L/3.1CC - 15 Litre
- HPU12V/10L/3.1CC - 10 Litre
- HPU12V/15L/3.1CC - 15 Litre

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

High Pressure Hoses - OP83/OP87/OP88

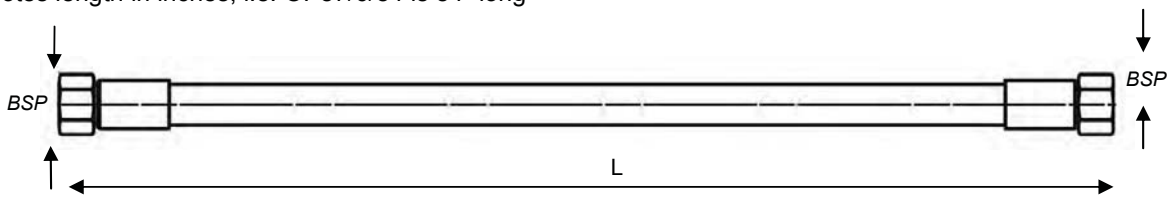
- **Twin high tensile steel braided**
- **Highly flexible with compact dimensions**
- **Meets EN853/DIN 20022-2SN and SAE100R2AT**
- **All fittings to BSP standard, 60° cone, unless otherwise stated**



STRAIGHT FITTINGS BOTH ENDS: OP87/*/**

/* denotes bore in ⅛", i.e. OP87/6 is ¾" bore

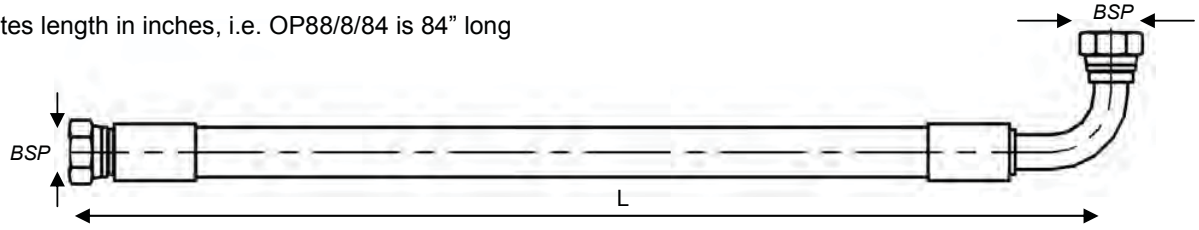
/** denotes length in inches, i.e. OP87/6/84 is 84" long



90° ELBOW ONE END: OP88/*/**

/* denotes bore in ⅛", i.e. OP88/8 is 1" bore

/** denotes length in inches, i.e. OP88/8/84 is 84" long



NOM SIZE		TYPE	PART NO.	L LENGTH OPTION (inches)							
BSP	MWP										
½"	275	STRAIGHT	OP83/	39	48	54	60	66	72	84	
		ELBOW	OP88/4	42	48						
¾"	215	STRAIGHT	OP87/6	36	48	60	72	84	96	120	156
		ELBOW	OP88/6	30	48	60	72	84			
1"	165	STRAIGHT	OP87/8	36	48	60	84	96	108	120	
		ELBOW	OP88/8	54	84						

Other sizes and specifications are available, please enquire further if necessary.

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

High Pressure Hoses - OP90

* Twin high tensile steel braided
* Highly flexible with compact dimensions
* Meets EN853/DIN 20022-2SN & SAE100R2AT
* All fittings to BSP standard, 60° cone, unless otherwise stated



BOTH ENDS 90° SWEPT ELBOW - SAME DIRECTION

/* denotes bore in ⅛", i.e. OP90/8 is 1" bore

/** denotes length in inches, i.e. OP90/8/84 is 84" long



Nominal size		Type	Part No	Length options (inches)				
BSP	MWP							
½"	275	Elbow	OP90/4	42	48			
¾"	215	Elbow	OP90/6	30	48	60	72	84
1"	165	Elbow	OP90/8	54	84			

Other sizes & specifications are available, please enquiry further if necessary.

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

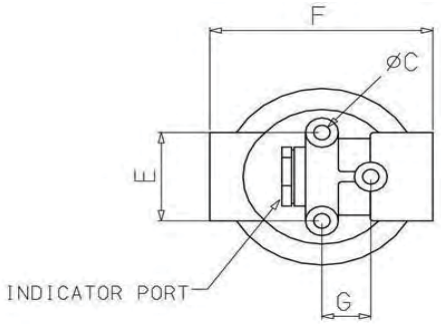
Oil Filter: for hydraulic walking floor applications - PM478



* 10 micron nominal filtration
* Spin on canister
* High internal pressure capacity (30 bar)
* With bypass and visual filter indicator

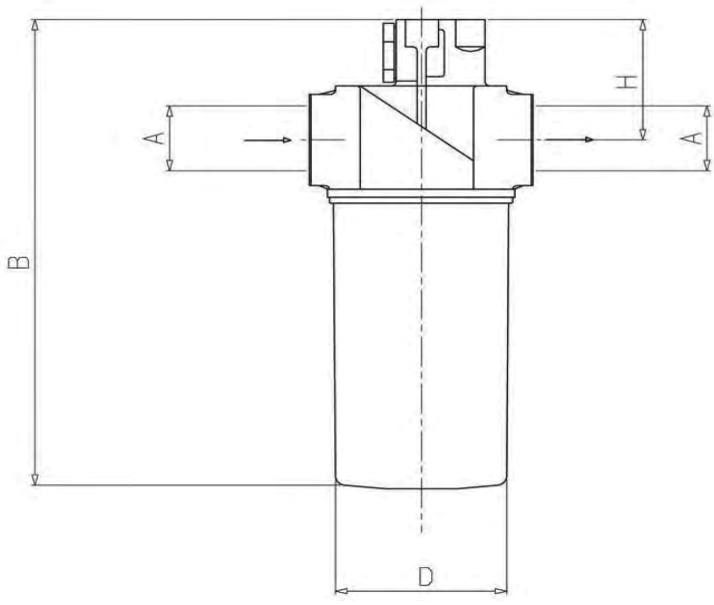
Specification:

Filter condition indicator	Visual 2 bar
Bypass valve	With bypass 2.5 bar
Filter element	Resin-impregnated paper 10 micron nominal
Seals	Nitrile (Buna - N)
Port options	1½" BSP
Flow rate	200 l/m
Max internal pressure	30 bar
Weight	2.3 kg



Dimensions: refer drawing

A	1½ BSP
B	355 mm
C	10 mm
D	127 mm
E	50 mm
F	133 mm
G	35 mm
H	72 mm

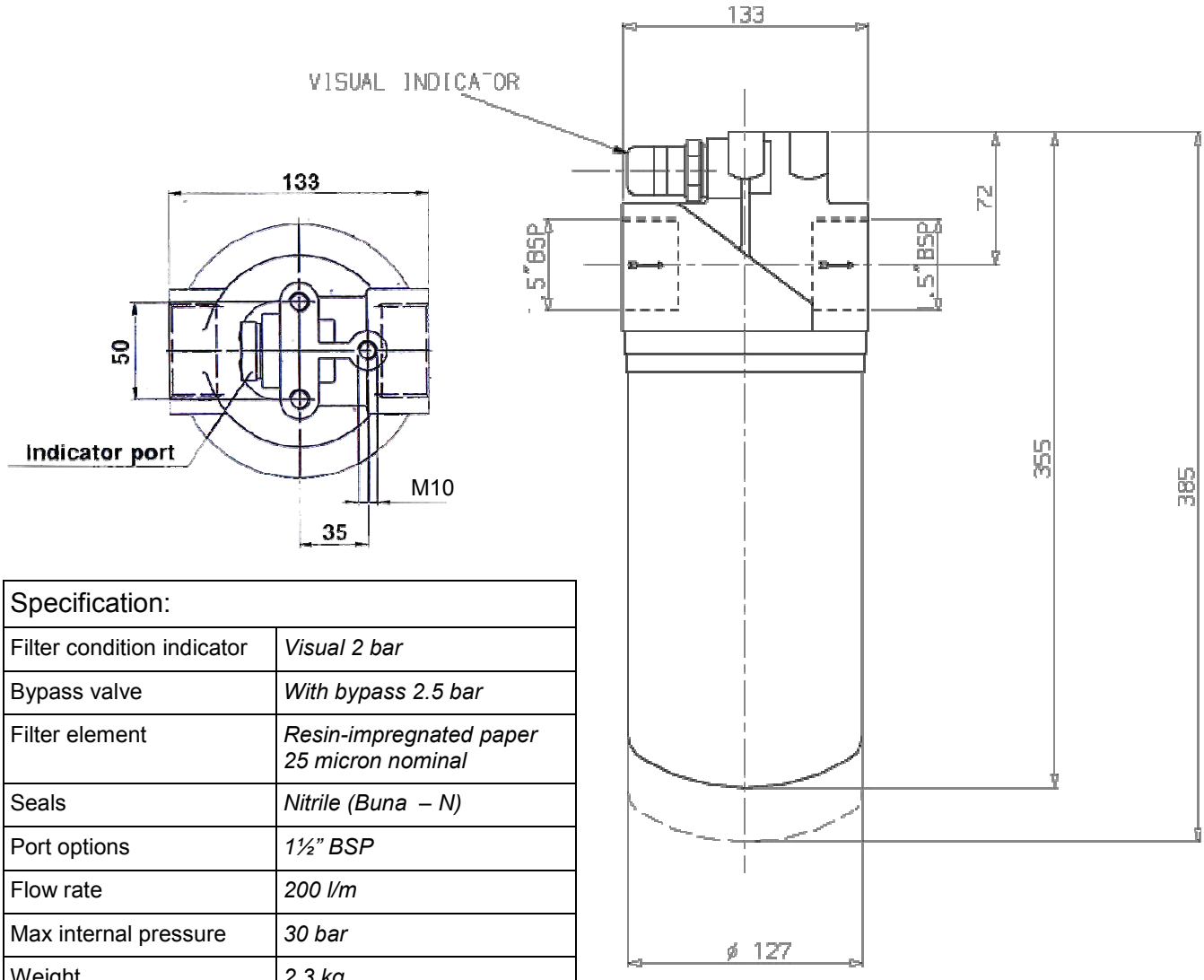


All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

Oil Filter: for tipper applications - PM548

- **25 micron nominal filtration**
- **Spin on canister (Part No: PM549)**
- **High internal pressure capacity (30 bar)**
- **With bypass and visual filter indicator**





Specification:	
Filter condition indicator	*Visual 2 bar*
Bypass valve	*With bypass 2.5 bar*
Filter element	*Resin-impregnated paper 25 micron nominal*
Seals	*Nitrile (Buna – N)*
Port options	*1½" BSP*
Flow rate	*200 l/m*
Max internal pressure	*30 bar*
Weight	*2.3 kg*

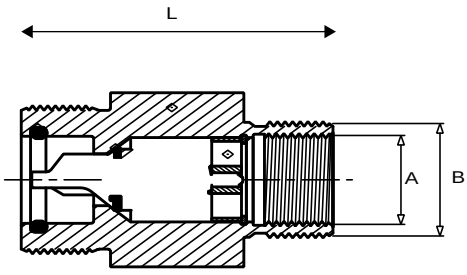
Note: Alternative tank mounted filter PM476

All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.

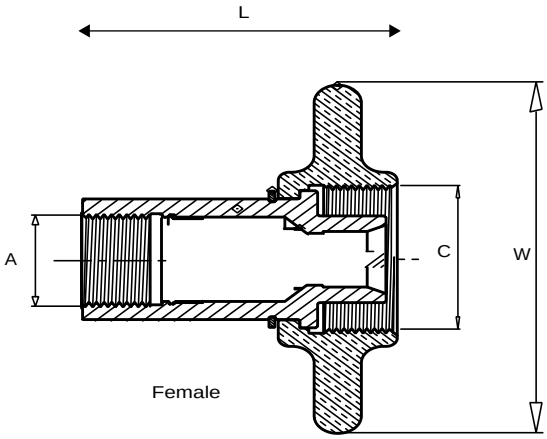
Quick Disconnect Couplings - QDC



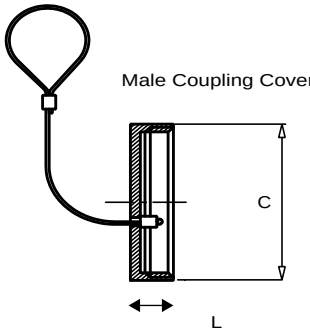
- Screws directly into the cylinder oil inlet port
- Wing nut design ensures easy connection
- Zinc plated for corrosion resistance
- Flat face and ISO 'A' alternatives available



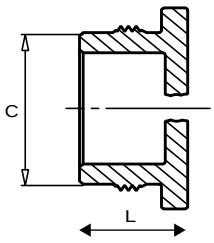
Male



Female



Male Coupling Cover Cap



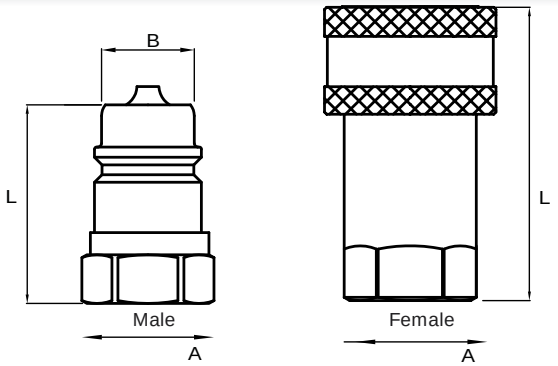
Female Coupling Retainer

Size/Type	Part no.	Mass (kgs)	A	B	C	L	W	Rated flow (l/min)	Pressure drop (bar)	MWP (bar)
¾" FEMALE	QDC075F/W	0.8	¾" BSP	-	44	75	115	150	5.8	250
¾" MALE	QDC075F	0.7	¾" BSP	1¼"BSP	-	78				
¾" RETAINER	QDC075/R	0.1	-	-	44	25				
¾" COVER	QDC075/C	0.1	-	-	44	13				
1" FEMALE	QDC100F/W	0.85	1" BSP	-	54	80	115	200	2.7	200
1" MALE	QDC100F	0.09	1" BSP	1¼"BSP	-	83				
1" RETAINER	QDC100/R	0.15	-	-	54	25				
1" COVER	QDC100/C	0.15	-	-	54	18				

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Quick Disconnect Couplings - ISO 'A'





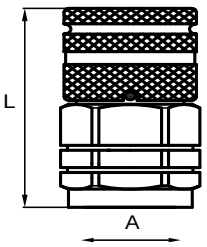
ISO 'A' COUPLING

Size/Type	Part no.	Mass (kgs)	A	B	L	Rated flow (l/min)	Pressure drop (bar)	MWP (bar)
¾" FEMALE	QDC075F/W/ISO	0.4	¾" BSP		82	180	4	250
¾" MALE	QDC075F/ISO	0.3	¾" BSP		-	-	-	-
¾" RETAINER	QDC075/ISO/R							
¾" COVER	QDC075/ISO/C							
1" FEMALE	QDC100F/W/ISO	0.6	1" BSP		127	320	4	230
1" MALE	QDC100F/ISO	0.5	1" BSP		-	-	-	-
1" RETAINER	QDC100/ISO/R							
1" COVER	QDC100/ISO/C							

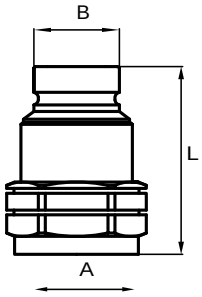
Quick Disconnect Couplings - ISO Flat Face Coupling



FEMALE coupling with female connector



MALE coupling with female connector

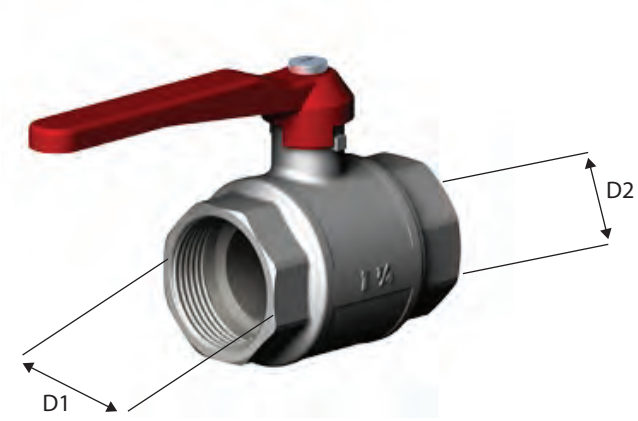


ISO - FLAT FACE COUPLING

Size/Type	Part no.	Mass (kgs)	A	B	L	Rated flow (l/min)	Pressure drop (bar)	MWP (bar)
¾" FEMALE	QDC075FFF	0.4	¾" BSP	-	135	250	3	250
¾" MALE	QDC075FFM	0.4	¾" BSP	-	-	-	-	-
1" FEMALE	QDC100FFF	0.6	1" BSP	-	154	130	3	250
1" MALE	QDC100FFM	0.6	1" BSP	-	-	-	-	-

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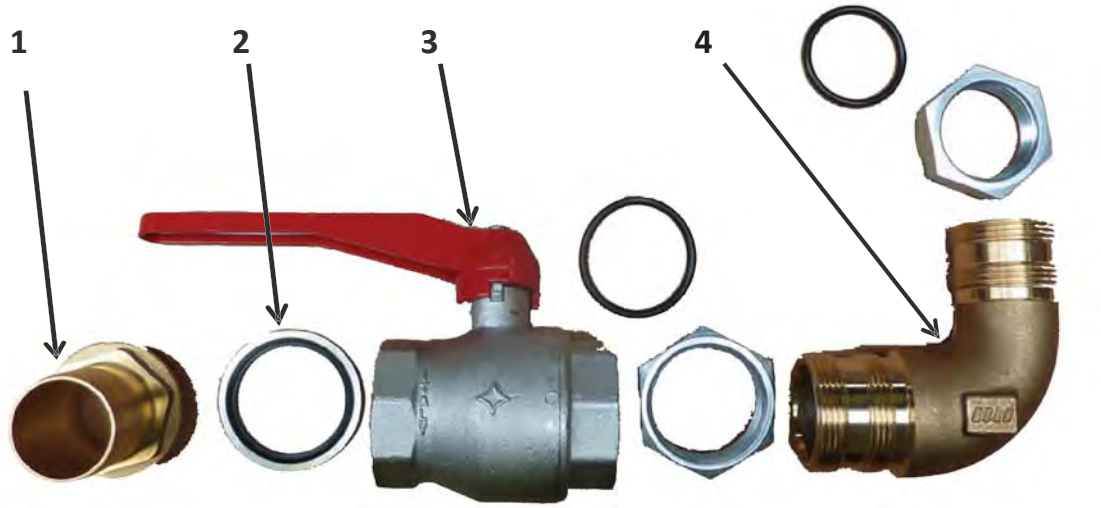
Shut-Off Valve - Ball Valve



Part No	Type	D1	Thread	D2	Thread
VS5	Ball	1.25" BSP	Female	1.25" BSP	Female
VS6	Ball	2" BSP	Female	2" BSP	Female
VS7	Ball	1.5" BSP	Male	1.5" BSP	Female
VS10	Ball	1.5" BSP	Female	1.5" BSP	Female

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Ball Valve Kit: To Fit All CX Series - 1.5" Suction Pipe **- BVK**



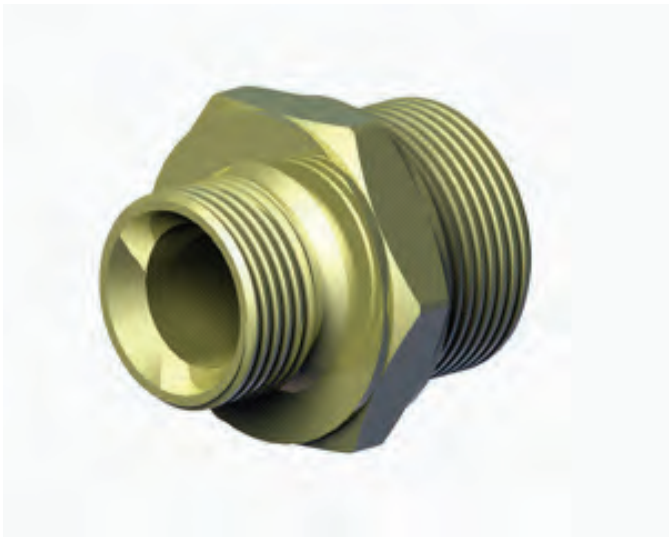
- Low pressure tank outlet valve and push-on fitting
- Elbow and ball valve can be oriented to suit
- Tank adaptor 1.25" BSP
- Replaces NR1639
- Push on hose adaptor 1.5"



BVK_	1 PUSH FITTING		2 DOWTY SEAL		3 BALL VALVE		4 ELBOW	
	Part	Size	Part	Size	Part	Size	Part	Size
BVK01	NR1541	1.5"	DPP45K/SC	1.5"	VS10	1.5"-1.5"	NR1739	1.25 - 1.5"

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High Pressure Adaptor BSP G" Thread - NR611/**



Stright Male - Male

	1/8”	1/4”	3/8”	1/2”	5/8”	3/4”	7/8”	1”	1.1/4”
1/8”									
1/4”									
3/8”		NR611/19	NR611/30						
1/2”		NR611/50	NR611/25	NR611/44					
5/8”				NR611/16					
3/4”				NR611/45	NR611/6	NR611/42			
7/8”						NR611/11			
1”				NR611/46		NR611/27	NR611/12	NR611/43	
1.1/4”						NR611/40		NR611/47	
1.1/2”								NR611/41	NR611/48

For appropriate sealing washer refer to DPP45** specification sheet

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Sealing Washer to suit BSP (G" Thread)- DPP45***

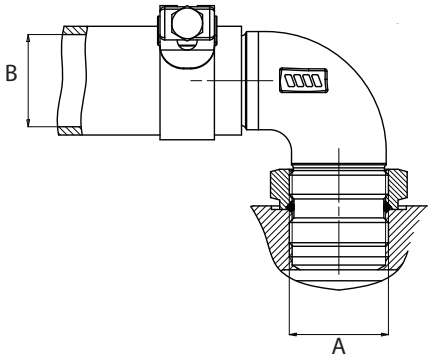


	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	1.1/4"	1.1/2"	2"
Part No	DPP45A	DPP45B/SC	DPP45C	DPP45D/SC	DPP45E	DPP45F/SC	DPP45G	DPP45H/SC	DPP45J/SC	DPP45K/SC	DPP45M

Part number is followed by /SC for self centering version ie DPP45H/SC
Not all versions are available in self centering style

High / Low Pressure Adaptor G" Thread - Push-On Elbow 90°

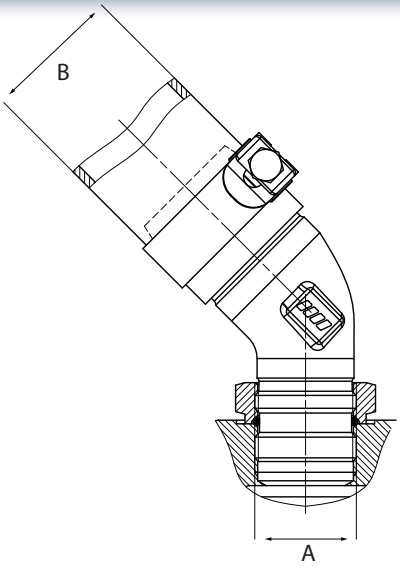




Part	A	B
NR1677	1/2"	1.25"
NR1678	3/4"	1"
NR1679	3/4"	1.25"
NR1644	3/4"	1.5"
NR1664	1"	1.5"
NR1639	1.25"	1.5"
NR1682	1.25	2"

High / Low Pressure Adaptor G" Thread - Push-On Elbow 45°

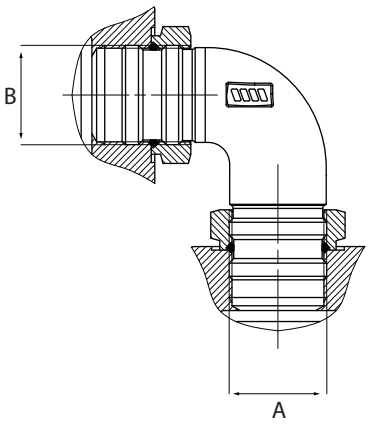




Part	A	B
NR1742	1.25"	1.5"
NR1683	1.25"	2"

High / Low Pressure Adaptor G" Thread Elbow 90°





Part	A	B
NR1738	1" BSP	1" BSP
NR1739	1.5" BSP	1.25" BSP
NR1752	1.5" BSP	1.5" BSP

For appropriate sealing washer refer to DPP45** specification sheet

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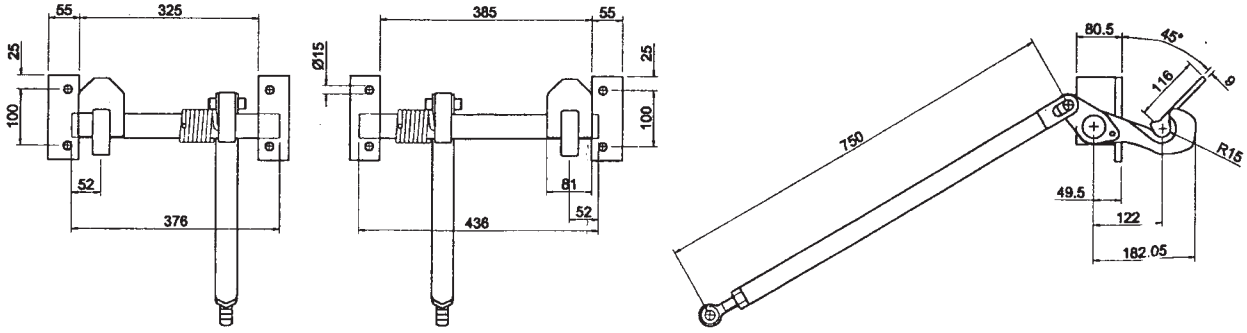
Rev Aug 2015

Automatic Tailgate Release 26Tonne

ATR26:

Suitable for 26 Tonne GVW

Weight - 30kg





All dimensions are given in mm unless otherwise stated. Technical Specifications are subject to change without notice.







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