



Solving Trenchless Technology Problems for 20 years



Engineering you can trust

Brewis Engineering Limited Handlemaker Road Marston Trading Estate Frome Somerset BA11 4RW United Kingdom. Tel. +44 (0)1373 468864 Fax +44 (0)1373 468865 www.brewisdirect.com

com

www.towingheads



EXPANDING DUCT PULLERS -

Since we invented the expanding duct puller in 1984 we've made every size imaginable from 25mm to 900mm. Ex-stock Sizes 25, 32, 40, 50, 55, 63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315,355, 400, 450, 500 mm. Other sizes, including IPS, on request.





MUDTIGHT GOLD DUCT PULLERS -

This patented puller is bentonite proof to very high pressures. In tests it is easily capable of withstanding the burst pressure of the pipe. It seals on both SDR 11 and 17. This is the best directional drilling puller you can get. Ex-stock Sizes 32, 40, 50, 75, 90, 110, 125, 140, 160, 180 225, 250, 315, 355mm. IPS Sizes 1" to 12"





WELD ON, FUSE ON & BOLT ON PULLERS -Polyethylene Fuse on, steel weld on and bolt on pullers designed to your requirements. Up to 1000mm so far !

PRESSURE TEST ENDS -

This device expands to grip and seal the inside of the pipe to allow it to be pressure tested. It fits one SDR size only. Size range from 25mm to 500mm, in all common SDR's.





HEAVY DUTY SWIVELS –

Our range of heavy duty swivels starts at 8 tons (16,000lb)and goes up to 400 tons (800,000lb). Normally produced with clevis ends but box connections can also be supplied. A universal joint kit is available to suit each size. These swivels are the first choice of rig operators right across Europe and from Hong Kong to Siberia.





SONDE HOUSINGS & DRILL HEADS -

We manufacture several sizes and types of high flow sonde housings for use with mud motors. The standard housing has an annular flow design with the sonde protected inside a capsule. Both battery and wireline sondes can be used. For drilling, the indexing sub is replaced by a fixed position angled drill head with 6 hole blade pattern.





CUSTOM DESIGN & MANUFACTURE –

produce specials quickly and economically.

Please contact us with your requirements.

pipe rollers, drill rods etc.

Our advanced design & manufacturing facilities enable us to

For example - bursting blades, rods and accessories, water drills, inner duct pullers, nose cones, crossovers, sub savers,

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Turning Problems into Products



specialises Brewis Engineering in the desian. development and manufacture of equipment for the Trenchless Technology Industry. Since 1984 we have been solving trenchless technology problems using innovative design and manufacturing know how.

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You may not have heard our name but you will recognize some of the products that we have designed and made.

Our owner and designer, Rod Brewis, invented the expanding towing head that is in daily use around the World. We make a large range of towing heads and pressure test ends from 25mm diameter to 900mm diameter

Bursting rods, lead rods, cross-overs, sub-savers, blades and related items are made to order with many different thread types.

Our range of heavy duty pullback swivels start at 8 tons and go up to 400 tons. Clevis/clevis swivels are standard but we can also make them with pad eyes and API box connections. They are made from high tensile AISI 4145 steel and we always use top class roller bearings. Other features include a one piece shaft for high strength, external power greasing point and a highly effective patented sealing system.

We also manufacture fixed and variable position sonde housings in a range of diameters. All our designs use annular flow around a central capsule. This ensures very high flow rates and gives the added benefit of both insulating and cooling the sonde.

Please contact us if you have a bespoke design requirement, a problem in the field or a manufacturing need. We may be able to help.

Engineering you can trust ...



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About us

Brewis Direct is a trading name of Brewis Engineering Limited.

The business was founded in 1984 by Rod Brewis and became a Limited Company in 2003.

Our roots have always been in the Trenchless Technology Industry and we have a long track record of designing, developing and manufacturing innovative products.

We are an ISO9001 registered company operating from modern premises in Frome, Somerset, about 10 miles south of Bath.

Our machine shop is well equipped with modern CNC machine tools and complementary manual machines for low volume and prototype work. We also have extensive test facilities.







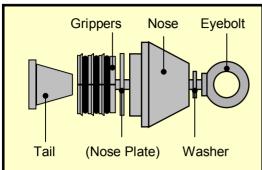


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The Standard Towing Head is a simple device that attaches to the end of a piece of pipe to allow it to be pulled.

It is designed for use with polyethylene pipe of wall thickness between *SDR11 & SDR 17.6. (Other materials and wall thicknesses can also be accommodated upon request.)

It is operated by simply inserting it into the pipe and turning the eyebolt. The turning action draws a cone into four toothed segments which are forced into the wall of the pipe. The harder the eye is pulled the harder the pipe is gripped. The grip is so good that it is possible to stretch the pipe!



Evebolts

The eyebolt is the critical component. Brewis towing heads are fitted with a specially forged, single piece, high tensile steel eyebolt. This has superior strength when compared with a welded eyebolt used by other manufacturers.

Why take the risk with inferior copies?



Standard Diameter to wall thickness Ratio

© Brewis Engineering Limited, March 2004.



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The Standard Towing Head provides a quick, simple and highly effective way to attach a pulling eve to a pipe.

- Installed & removed in seconds.
- De The harder the eye is pulled the harder the pipe is gripped.
- **Proven tooth profile for maximum grip.**
- Huge range of sizes from 20mm to 900mm. (including IPS imperial sizes)
- Detric sizes cover SDR11 to 17.6 on sizes up to 355mm.
- D Single piece, high tensile steel, drop forged Eyebolts.
- Designed in 1984 by Rod Brewis and used all over the world.



Excellence comes as Standard ...



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Maximum Gripping Size



Minimum Gripping Size



Pipe Size	-	Max. Grip	Eyebolt	L	d	t	Weight
	mm	mm	Thread				Kg
Stock Sizes							
25	19	24	M6	31	16	5	0.15
32	24	28.5	M8	30	14	8	0.24
40	30	37	3/8"BSW	43	18.5	9	0.42
50	39	46	1/2" BSW	60	29.5	11	0.98
55	42	49	1/2" BSW	60	29.5	11	1.20
63	48	58	1/2" BSW	60	29.5	11	1.66
75	57	70	1/2" BSW	60	29.5	11	2.46
90	70	82	3/4" BSW	84	38	19	3.90
100	77	93	3/4" BSW	84	38	19	4.80
110	86	99	3/4" BSW	84	38	19	6.25
125	97	111	3/4" BSW	87	38	19	5.60
140	108	130	3/4" BSW	87	38	19	8.60
160	124	148	1" BSW	100	43	22	11.6
180	141	163	1" BSW	100	43	22	15.0
200	157	182	1" BSW	100	43	22	19.0
225	172	201	1" BSW	100	43	22	22.5
250	196	225	1" BSW	100	43	22	31.5
280	220	252	1" BSW	100	43	22	32.5
315	249	282	1 1/2" BSW	155	74	30	43.0
355	280	315	1 1/2" BSW	155	74	30	53.0
400-11	315	335	1 1/2" BSW	155	74	30	62.0
400-17.6	345	358	1 1/2" BSW	155	74	30	72.0
450-11	353	375	1 1/2" BSW	160	74	30	82.0
450-17.6	384	405	1 1/2" BSW	160	74	30	90.0
500-11	395	460	1 1/2" BSW	160	74	30	94.0
500-17.6	432	446	1 1/2" BSW	160	74	30	110.0

Approximate sizes in millimetres.

Please ask about other sizes.

All standard towing heads are designed for SDR11-17.6 polyethylene pipe



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Mudtight GOLD

Sealed Expanding Towing Head

Mudtight GOLD provides a quick and easy way to attach a pulling eye to the end of a polyethylene pipe and at the same time seal the end of the pipe to keep the inside clean.

Simply slide into the pipe and turn the pulling eye to expand the grippers. The harder the pulling force the harder the gripping force. Unscrew the pulling eye to remove.

Specifically designed for trenchless technology applications such as Horizontal Directional Drilling.

Benefits from using **Mudtight** GOLD

- Minimal increase in outside diameter means bore size can be kept down.
- **D** Patented seal on the inside of the pipe seals both SDR11 & 17.6
- Tensile tested to the yield strength of the pipe.*
- Pressure tight to pipe bursting.*
- **Protects the end of the pipe.**
- Rear eye to retain the tail .
- Available from 32mm to 355mm ex stock.
- Quick and easy to fit, saves time & eliminates the need to clean out afterwards.

* Dependent on size and prevailing conditions.

The Ultimate Towing Head

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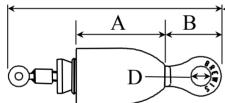


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Size		L	Α	B	D	g	G	x	X	у	Y	OD	ID	KG
METR	lC	Overall	Nose	Eyebolt	Eye	Min.	Max.	Min.	Max.	Min.	Max.	Outside	Inside	
		Length	Length	Length	Ø	Grip	Grip	Seal Ø	Seal Ø	Seal Ø	Seal Ø	Ø	Ø	
32	mm	183	77.0	38.0	19.0	24.8	28.0	24.7	28.0	*	*	37.7	32.7	0.5
40	mm	205	89.5	56.0	20.0	30.9	40.0	30.9	34.0	*	*	47.8	40.8	0.9
50	mm	215	106.0	56.0	20.0	37.2	44.6	39.1	44.0	42.9	46.0	57.8	50.8	1.3
63	mm	249	127.0	60.0	30.0	48.0	60.0	49.5	54.0	53.7	57.0	72.0	63.8	2.4
75	mm	249	125.0	60.0	30.0	58.4	73.0	58.9	64.1	64.1	68.0	84.9	75.9	3.3
90	mm	355	138.0	105.0	38.0	70.6	81.0	71.1	76.0	77.1	81.0	100.0	91.0	6.1
110	mm	355	155.0	105.0	38.0	87.0	99.0	87.1	91.0	95.7	99.0	120.0	111.5	9.1
125	mm	355	165.5	105.0	38.0	98.6	109.0	99.1	104.0	107.7	111.4	139.7	127.0	9.7
140	mm	355	157.5	105.0	38.0	110.0	123.0	111.2	115.0	121.4	126.0	151.5	142.6	10.6
160	mm	484	219.0	145.0	45.0	124.4	146.0	126.9	132.0	137.6	142.0	171.0	162.0	18.4
180	mm	484	235.0	145.0	45.0	143.0	162.0	142.6	150.0	156.2	161.0	197.0	184.0	23.0
200	mm	520	272.0	145.0	45.0	157.0	180.0	156.6	166.0	170.6	180.0	217.0	204.0	27.0
225	mm	558	284.5	145.0	45.0	178.0	205.0	177.0	186.0	192.5	200.8	243.0	229.0	30.0
250	mm	558	300.0	145.0	45.0	198.0	228.0	197.0	207.0	216.0	224.0	268.0	253.5	40.0
280	mm	615	317.5	145.0	45.0	222.0	251.0	221.0	230.0	242.5	251.0	299.6	283.6	60.0
315	mm	685	340.5	160.0	72.0	250.0	285.0	249.0	262.0	273.0	285.0	335.0	319.0	75.0
355	mm	685	334.5	160.0	72.0	280.0	320.0	280.0	293.0	307.0	318.0	376.0	359.5	80.0

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Size		L	Α	В	D	g	G	X	X	v	Y	OD	ID	KG
IPS		Overall	Nose	Eyebolt	Eye	Min.	Max.	Min.	Max.	Min.	Max.	Outside		
		Length	Length	Length	Ø	Grip	Grip	Seal Ø	Seal Ø	Seal Ø	Seal Ø	Ø	Ø	
1"	mm	185	81.0	35.5	19.5	24.0	34.0	24.8	28.6			39.8	34.0	0.7
	inch	7.28	3.19	1.40	0.77	0.94	1.34	SDR 9.	33-13.5			1.57	1.34	
1.25"	mm	200	84.0	55.0	19.5	30.0	42.7	30.9	35.0	34.3	38.7	49.7	42.7	0.9
	inch	7.87	3.31	2.17	0.77	1.18	1.68	SDR 9.	33-11.0	SDR 1	13.5-D	1.96	1.68	
1.5"	mm	205	89.0	55.0	19.5	35.3	48.8	37.2	42.5	40.4	45.1	55.8	48.8	1.2
	inch	8.07	3.50	2.17	0.77	1.39	1.92	SDR 1	1-13.5		17-D	2.20	1.92	
2"	mm	250	115	58.0	29.5	42.7	60.9	44.4	50.0	51.3	56.0	67.9	60.9	2.2
	inch	9.84	4.53	2.28	1.16	1.68	2.40	SDR 9		SDR S4		2.67	2.40	
2.5"	mm	250	122	58.0	29.5	57.0	73.6	57.0	62.6	62.8	67.8	82.6	73.6	3.0
	inch	9.84	4.80	2.28	1.16	2.24	2.90		1-13.5		7-21.0	3.25	2.90	
3"	mm	354	163	106.0	38.1	64.8	89.5	66.4	74.9	73.0	81.7	98.1	89.5	6.0
	inch	13.94	6.42	4.17	1.50	2.55	3.52	SDR 9.33	3,11,11.5	SDR 1	3.5-21	3.86	3.52	
4"	mm	380	163	106.0	38.1	84.2	114.9	85.6	96.3		104.8	123.9	114.9	
	inch	14.96	6.42	4.17	1.50	3.31	4.52		3,11,11.5			4.88	4.52	
5"	mm	380	270	110.0	38.1	109.0	142.6	111.2	121.0	121.4	131.3	151.5	142.6	
	inch	14.96	10.63	4.33	1.50	4.29	5.61		1-13.5		7-21.6	5.96	5.61	
6"	mm	520	270	149.0	45.0	132.0	170.0		144.8		156.0	183.0	170.0	22.0
	inch	20.47	10.63	5.87	1.77	5.20	6.69		1-13.5		17-26	7.20	6.69	
8"	mm	555	290	149.0	45.0	170.5	223.5	171.0	187.0	187.0	204.0	240.0	223.5	35.0
	inch	21.85	11.42	5.87	1.77	6.71	8.80	SDR 1	1-13.5	SDR	17-26	9.45	8.80	

© Brew is Direct, 2004. This product is patented.

The sizes stated above are current production specifications. We reserve the right to alter specifications without notification.

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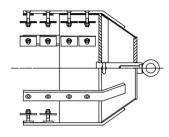
Bolt On, Fuse On & Weld On Towing Heads



Bolt On Towing Heads

Bolt on Towing Heads are normally used on large diameter pipe where the weight and expense of an expanding towing head is prohibitive. They are normally bolted to a length of pipe which is then butt fused onto the pipe to be installed. A baffle may be welded into the pipe if it is to be ballasted with water.

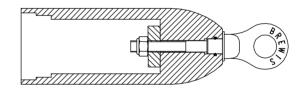
Our bolt on towing heads have a heavy duty construction and are made to order.



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PE Fuse On Towing Heads

Our range of Fuse-On Towing Heads are machined from solid polyethylene bar. They have a sealed eyebolt to keep the pipe clean and a stepped design at the back to allow easy butt fusion to SDR11 or SDR17.6.



Weld On Steel Towing Heads

Made to order to suit the steel pipe being installed. A removable pad eye can be incorporated to connect from the swivel to different heads.

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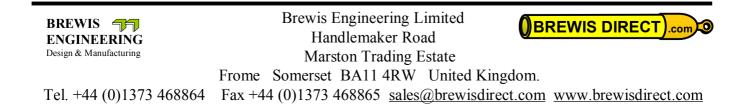
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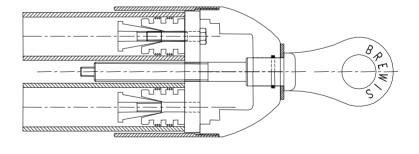
Multi Duct Pullers are used for pulling bundles of pipe or ducts in to a single hole, outer duct or sleeve.

There can be any variation on the number and size of pipes on a particular installation. These products are therefore made to order.

To keep lead time and cost down our puller uses components from our stock ranges of towing heads, typically an appropriate size of Mudtight Gold Nose together with Standard or Pressure Tight Towing Head gripping components.

This combination gives a simple to use Multi Duct Puller with an outside sleeve for maximum security.

If the contract requires a particular set bundle of pipes or ducts to be installed on many occasions it may be appropriate to engineer a sealed unit like the Polly Puller shown in the picture (bottom left).



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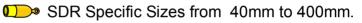
Pressure Test Ends

Pressure Test Ends are used for pressure testing pipe systems either before or after installation. They expand and grip in the same manner as an expanding towing head which means they are quick and simple to fit and also easily removed.

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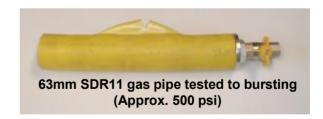
They have an expanding O ring which seals on the inside of the pipe.

Features -



D Small bore, zinc plated steel for use in the Gas Industry.

- Large Bore Stainless Steel for Water Industry.
- Description of the serve for high pressure testing.
- D The internal pressure acting on the base forces the teeth to grip harder as the pipe expands.
- Description Tested to the bursting pressure of the pipe.



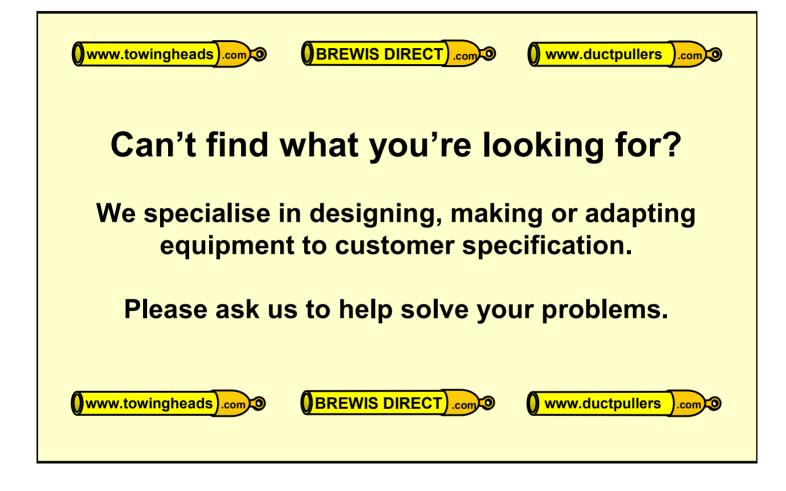
Under pressure, nothing better ...

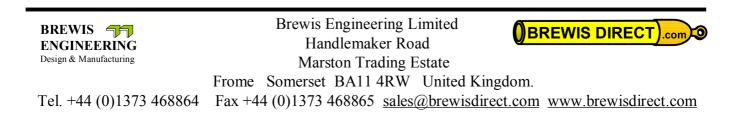
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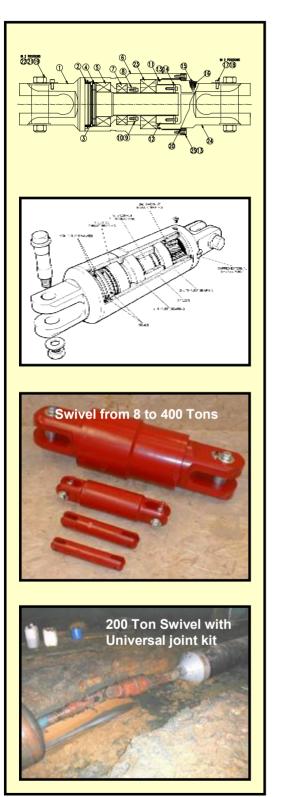
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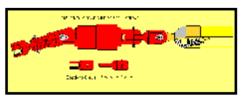


Heavy Duty Pullback Swivels

The final phase of Directional Drilling is pulling in the pipe. A Drilling Swivel is attached to the pipe string between the back reamer and towing head. This allows the reamer to rotate whilst the pipe does not.

Features -

- Sizes from 8 to 400 US ton pullback load.
- Patented sealing system keeps bentonite out but allows power greasing.
- Side grease point to allow easier greasing.
- Manufactured from AISI 4145 High Tensile steel.
- One piece shaft / clevis gives maximum strength.
- **D** Unique three bearings design proven in the field over and over again.
- Standard Clevis/clevis design.
- De API Box Connections and pad eyes available to order.
- Universal Joint Kits can be made if required.

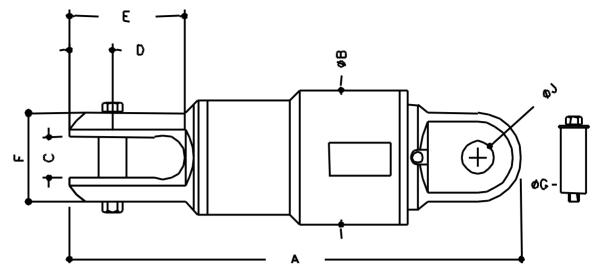


Serious drillers use serious swivels ...

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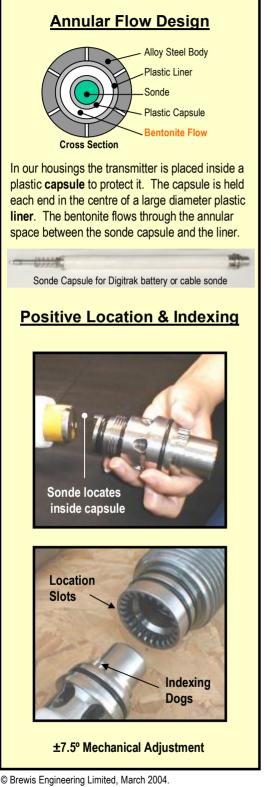


Dimension	Α	В	С	D	Е	F	G	J
	Overall	Maximum	Clevis	Clevis	Clevis	Clevis	Pin	Pin
	Length	Diameter	Width	Centre to	Depth	Width	Max. Ø	Clearance
			Internal	End		External		Ø
METRIC	DIMEN	ISIONS -	Millime	tres				
Metric Tonnes	Α	В	С	D	Е	F	G	J
^P 6	351	70	27.0	34.8	73.6	69.9	21.9	22.0
r 11	407	83	27.0	41.7	90.1	82.6	21.9	22.0
^a 14	419	96	27.0	35.0	80.9	70.0	26.5	27.0
1 20 e	483	111	36.0	41.3	101.1	82.5	31.3	31.8
¹ 27	538	127	46.0	47.6	113.0	95.3	37.5	38.0
в 36	606	144	46.0	52.5	131.5	105.0	44.0	44.5
° 50	715	160	52.0	63.5	156.5	127.0	51.3	52.0
y 73	746	178	58.0	70.0	175.0	140.0	60.0	60.7
90	846	225	64.3	76.0	198.5	152.0	61.5	62.2
136†	970	290	71.0	87.5	227.0	175.0	69.5	70.0
181	1168	343	77.0	101.6	260.0	203.0	76.0	76.5
250	1528	430	128.5	139.7	372.4	279.4	100.5	100.6
350	1810	490	155.0	170.0	450.0	340.0	150.5	151.0

IMPERI	L DIME	NSIONS	- Inche	S				
US Tons	Α	В	С	D	Е	F	G	J
P 8	13.82	2.75	1.06	1.37	2.90	2.75	0.86	0.87
r 12	16.02	3.25	1.06	1.64	3.55	3.25	0.86	0.87
^a 15	16.50	3.78	1.06	1.38	3.19	2.76	1.04	1.06
1 20	19.02	4.37	1.42	1.63	3.98	3.25	1.23	1.25
¹ 30	21.18	5.00	1.81	1.87	4.45	3.75	1.48	1.50
в 40	23.86	5.67	1.81	2.07	5.18	4.13	1.73	1.75
° _d 55	28.15	6.30	2.05	2.50	6.16	5.00	2.02	2.05
у 75	29.37	7.01	2.28	2.76	6.89	5.51	2.36	2.39
100	33.31	8.86	2.53	2.99	7.81	5.98	2.42	2.45
150†	38.19	11.42	2.80	3.44	8.94	6.89	2.74	2.76
200	45.98	13.50	3.03	4.00	10.24	7.99	2.99	3.01
300	60.16	16.93	5.06	5.50	14.66	11.00	3.96	3.96
400	71.26	19.29	6.10	6.69	17.72	13.39	5.93	5.94

† - Ammended Feb 02

High Flow Sonde Housings





The **Brewis** High Flow Sonde Housing has been specifically designed to give the high flow rates needed to drive mud motors. It is a rear load housing which uses an annular flow design.

C

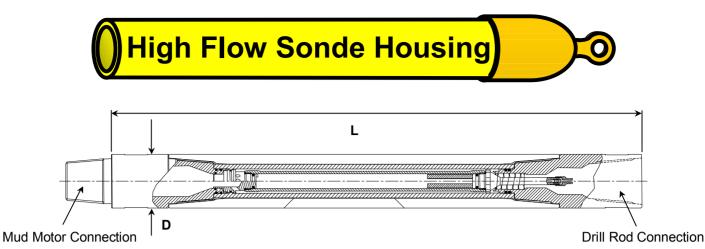
It can also be configured as a boring head or used with a bent sub and tri-cone cutter.

Benefits of the Brewis Sonde Housing -

- High flow, low clog design enables use with mud motors.
- **D** 24 step mechanical indexing eliminates the need for fiddly adjustment screws.
- Annular flow design cools and cushions the transmitter during long bores.
- Precision manufacture from 4145 alloy steel ensures strength and long life.
- Will fit all Digitrak[™] 2 & 4 battery transmitters and eclipse cable transmitters.
- $1 = 4 \text{ diameters} 3 \frac{1}{8}, 3 \frac{5}{8}, 4 \frac{3}{4}, 6 \frac{1}{2}$

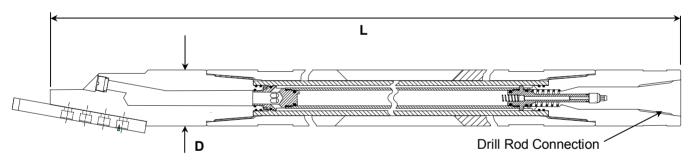


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High Flow Sonde Housing - Digitrak[™] 2 & 4 Battery & Eclipse

D Inches	D mm	L mm	Weight Kg	Mud Motor Connection	Drill Rod Connection
3.125"	80mm	1089	37kg	2 3/8" API Reg	2 3/8" API Reg
3.625"	92mm	1089	40kg	2 3/8" API Reg	2 3/8" API IF
4.750"	120mm	1180	75kg	3 1/2" APHF	3 1/2" API IF
6.50"	165mm	1294	177kg	4 1/2" API Reg	4 1/2" API IF



High Flow **Boring Head** - Digitrak[™] 2 & 4 Battery & Eclipse

D Inches	D mm	L mm	Weight Kg		Drill Rod Connection
3.625"	92mm	1213		6mm Jet	2 3/8" API IF
4.750"	120mm	1388		8mm Jet	3 1/2" API IF
6.50"	165mm	1619		x3 10mm Jets	4 1/2" API IF



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Designed to accommodate the very latest Digitrak[™] Short Steering Tool, the housing is similar to the standard Brewis high flow housing but is made from non magnetic stainless steel.

Benefits of the Brewis SST Housing -

- Proven in the field from China to Mexico.
- High flow, low clog design enables use with mud motors.
- **(D)** 24 step mechanical indexing eliminates the need for fiddly adjustment screws. (36 Step on $6\frac{1}{2}$ " housing).
- De Annular flow design cools and cushions the transmitter during long bores.
- **Precision manufacture from non-magnetic** stainless steel ensures strength and long life.
- Designed to accommodate Digitrak[™] SST cable transmitter.
- Positive location of sonde capsule eliminates wear between metal & plastic components.
- Openant Stressen 1 and Stressen 3 5/8", 4 3/4", 6 1/2"

"...the best sonde housing in the world; that's no brag, it's a fact."

Senior Field Engineer from leading transmitter manufacturer

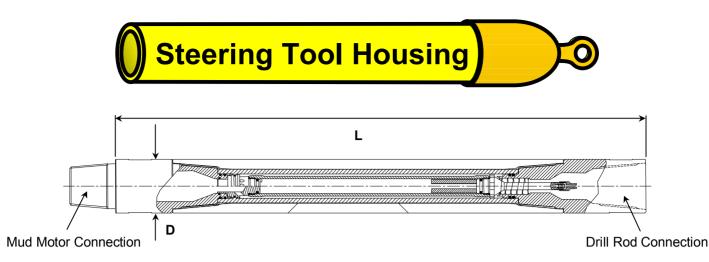
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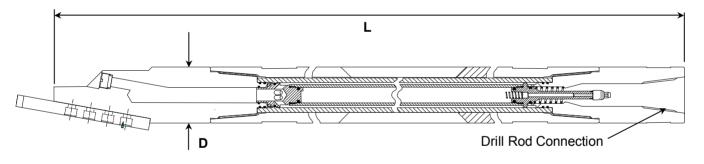


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Non Magnetic High Flow Sonde Housing - 24" Digitrak Short Steering Tool

D Inches	D mm	L mm	Weight Kg	Mud Motor Connection	Drill Rod Connection
3.625"	92mm	1208		2 3/8" API Reg	2 3/8" API IF
4.750"	120mm	1305	85kg	3 1/2" API IF	2 7/8" API IF
6.50"	165mm	1417		4 1/2" API Reg	4 1/2" APHF



Non Magnetic High Flow Boring Head - 24" Digitrak Short Steering Tool

D Inches	D mm	L mm	Weight Kg		Drill Rod Connection
3.625"	92mm	1293	52kg	6mm Jet	2 3/8" API IF
4.750"	120mm	1512	105kg	8mm Jet	2 7/8" API IF
6.50"	165mm	1743	220kg	x3 10mm Jets	4 1/2" APHF



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Pipe Bursting Equipment



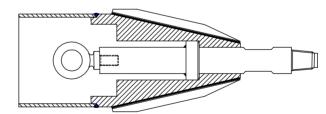
Pipe bursting or pipe splitting techniques usually work by pulling a cutting head through an existing pipe, followed by an expander cone and the replacement pipe.

C

Either a cable or a string of **BURSTING RODS** is used to pull the cutter and expander through the existing pipe.

Brewis have been making bursting rods, blades, expander cones and accessories ever since the very first rigs were imported into the country.

- Diameter & thread to suit your rig. Typically 2" (50mm), 1³/₄" (44mm), 40mm, 35mm.
- Parallel & Taper threads, solid & hollow bar.
- Manufactured from High Tensile Alloy Steel.
- Crossovers, Male/Female Adaptors, Lead Rods, Support Rods, Pulling Eyes etc. to suit.



180mm Expander/Splitter for Pitch Fibre Pipe

ROD RE-CUTTING & STRAIGHTENING SERVICE

After prolonged use the rod threads can wear out and the joints become unreliable.

We can cut off and re-thread your existing rods making them as good as new but at significantly less cost!

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Heavy Duty Stackable Pipe Roller

Heavy Duty Pipe Roller



Arms folded away





BREWIS ENGINEERING Design & Manufacturing

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The Brewis Heavy Duty Pipe Roller is designed to take pipe up to 1000mm in diameter.

O

It has a very rugged construction with four moving rollers. These rollers have sealed bearings so that the pipe can be pulled very easily. This is particularly important with large diameter ballasted pipe which may weigh nearly 1000kg per metre.

Two of the rollers are on fold away arms to allow the unit to be stacked.

- Pipe up to 1000mm Diameter. 0 Rugged Construction. Four roller design with sealed bearings to give very low friction during pipe installation.
 - Fold away arms to allow stacking.
 - 20 Rollers can be stacked on a 4' x 4' pallet.
- Large footprint to prevent sinking in soft ground.









BREWIS 77 ENGINEERING Design & Manufacturing

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