



Halyard

The Science of Silence
Engineered Solutions



Standard Product Range

www.halyard.eu.com

Pleasure Craft

Commercial

Superyacht



Halyard

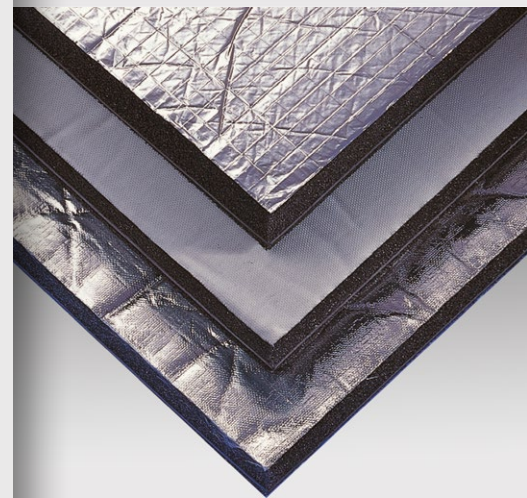
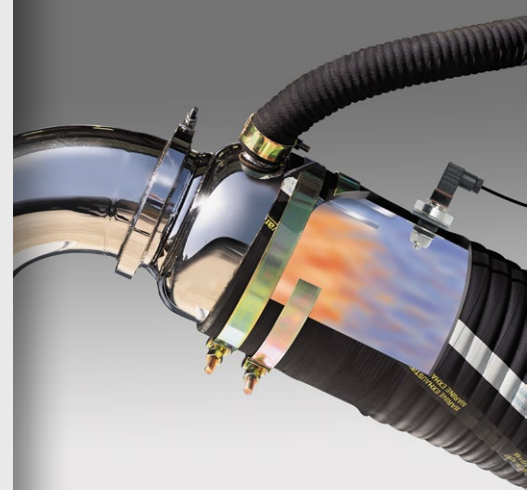
Established in 1979, Halyard has developed an international reputation as market leaders for providing customers with high quality, technically advanced, below decks equipment reducing engine room noise and vibration and making your boating more enjoyable.

Managing engine noise, emissions and vibration, as well as overboard discharges, are becoming increasingly important as we all become far more responsible for the impact we have on our surroundings.

With in-house design and manufacture of individual components through to complete exhaust systems, Halyard offers the most advanced products available with a range of both standard and bespoke solutions designed to suit your needs.

Whether you require a simple silencer, separator, hose, bellows, tube, connector or a sophisticated full exhaust system Halyard have the solution. In addition we can supply you with the Aquadrive antivibration drive system, noise insulating materials or Wave filtration products to remove contaminants before discharging overboard - All products being supported by Halyard and our distributor network.

Whatever your project; yacht or cruiser, lifeboat, pilot boat, commercial vessel, or one-off Superyacht, our designers will get involved from the initial stages, consulting on, designing and specifying products and systems to best meet your requirements with a dedicated team managing each project from enquiry through to commissioning.



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Exhaust Systems and Accessories

*UK manufactured stock or bespoke risers
sprayheads, silencers, separators
and accessories*

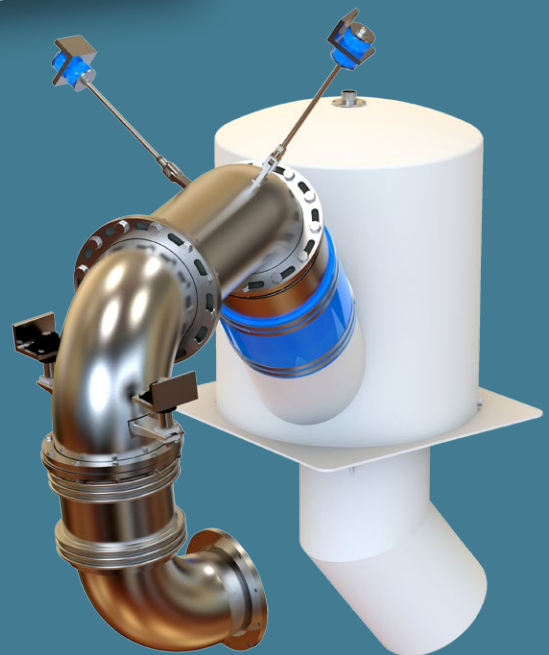


Standard product range:

- To suit exhaust systems from 38mm to 203mm diameter
- Extensive range of different shapes and sizes

Bespoke solutions:

- Designed to meet customers requirements
- To suit exhaust systems up to 406mm diameter
- Lloyd's Type Approval

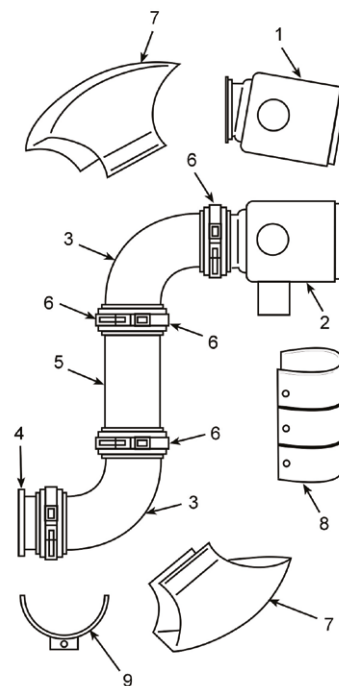


Exhaust Systems and Accessories

Risers and sprayheads

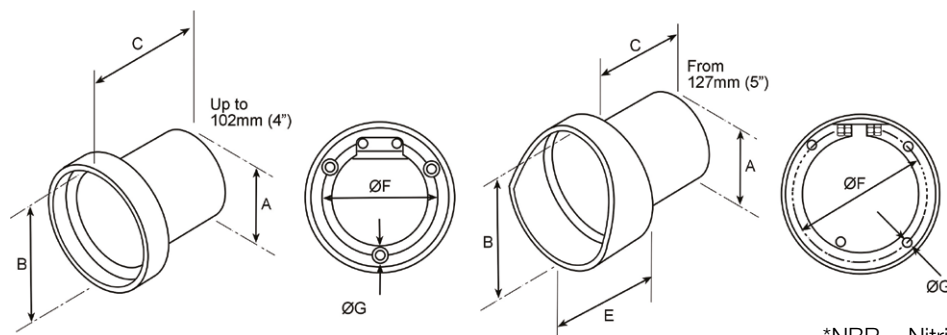
The make-up of a high riser is shown below. Each system is fabricated and assembled to suit the particular engine turbocharger or exhaust output flange and engine specification.

Parts	Description
1	Optional down angled injection head
2	Injection head made to be fitted into the beginning of the rubber exhaust hose and to accept water supply at the appropriate diameter
3	Curved stainless steel bend 90° bend, used in the upper and lower sections
4	Flange connector to suit engine turbo outlet
5	Optional height extension piece
6	Stainless 'V' clamp allowing rotation to ease alignment of the system
7	Curved heat protective jacket
8	Optional heat protecting jacket for height extension
9	Optional support bracket



Through-hull exhaust outlets

Stainless Steel Through-hull Exhaust Outlets												
Part No.	Reference	A		B	C	E	Fixing	G	No. of Fixing Holes	Flap Material*	Bolting Flange Y/N	Weight
		inch	mm	mm	mm	mm	PCD F	mm				
H002524	HF004	1.75	44	89	80	25	65	5.5	3	NBR	N	0.5
H002525	HF005	2	51	102	80	25	80	5.5	3	NBR	N	0.7
H002526	HF006	2.36	60	114	87	25	90	5.5	3	NBR	N	1
H002527	HF010	3	76	127	95	30	102	6.5	3	NBR	N	1.15
H002528	HF015	3.5	89	140	110	35	118	6.5	4	NBR	Y	1.5
H002529	HF020	4	102	152	123	35	130	6.5	4	NBR	Y	1.9
H002531	HF025	5	127	195	145	78	165	9	4	SS	Y	4
H002532	HF030	6	152	220	175	90	190	9	4	SS	Y	5
H002533	HF035	8	203	273	220	100	240	11	4	SS	Y	7.65



Larger sizes and alternative designs available upon request.

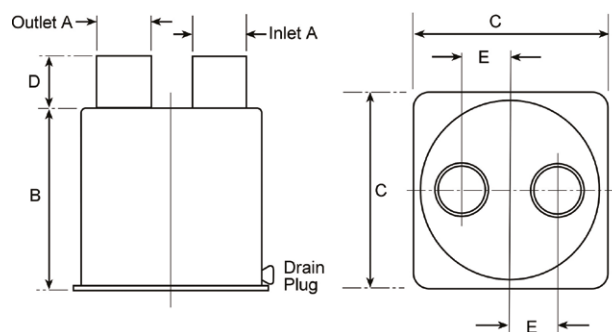
*NBR = Nitrile Rubber, SS = Stainless Steel

Exhaust Systems and Accessories

Silencers - Approximately 40% Noise Reduction

Lift silencers - Top in top out

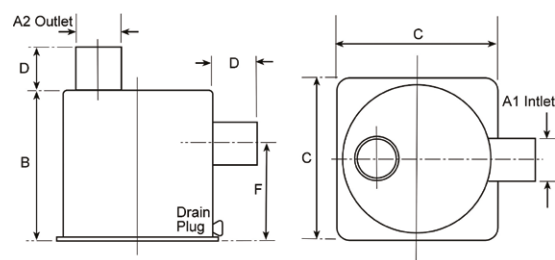
Top In Top Out Lift Silencers								
Part No.	Reference	A		B	C	D	E	Weight kg
		inch	mm	mm	mm	mm	mm	
H001671	HTT005	1.5	38	158	200	50	44	1.5
H001673	HTT025	1.6	40	158	200	50	44	1.5
H001674	HTT030	1.6	40	230	200	53	44	1.9
H001675	HTT040	1.77	45	158	200	50	44	1.5
H001676	HTT045	1.77	45	230	200	50	44	1.9
H001677	HTT055	2	51	158	200	72	44	1.6
H001678	HTT065	2	51	255	275	51	68	3.3
H001679	HTT070	2	51	305	324	80	84	4.9
H001680	HTT085	2.36	60	255	275	73	68	3.5
H001681	HTT090	2.5	63	255	275	64	68	3.5
H001682	HTT110	3	76	255	275	76	68	3.7
H001683	HTT115	3.5	89	305	324	90	84	5.6
H016162	HTT120B	4	102	305	324	102	70	5.6
H001685	HTT125	5	127	370	446	128	83	10.4
H001686	HTT130	6	152	370	446	127	102	10.7
H010299	HTT135	8	203	521	548	201	122	17.9



Alternative sizes available upon request. Reference numbers that end with B are not Lloyd's approved.

Lift silencers - Side in top out

Side In Top Out Lift Silencers										
Part No.	Reference	A1		A2		B	C	D	F	Weight kg
		inch	mm	inch	mm	mm	mm	mm	mm	
H001615	HST005	1.5	38	1.5	38	169	200	38	95	1.5
H001616	HST010	1.5	38	1.5	38	230	200	38	139	1.8
H016156	HST025B	1.6	40	1.57	40	169	200	38	95	2.2
H001618	HST035	1.6	40	1.57	40	255	275	55	165	3.3
H001619	HST055	1.77	45	1.77	45	230	200	50	139	1.9
H009936	HST105	2	51	2	51	230	200	51	139	1.9
H012242	HST110B	2	51	2	51	255	275	51	165	3.3
H001623	HST115	2	51	2	51	305	324	81	200	4.9
H001624	HST145	2.36	60	2.36	60	305	324	75	200	5.1
H001625	HST150	2.36	60	2.36	60	255	275	74	165	3.5
H010352	HST165	2.5	63	2.5	64	255	275	64	165	3.5
H013927	HST200B	3	76	3	76	255	275	76	165	4.4
H013281	HST205B	3	76	3	76	305	324	100	184	6
H001630	HST210	3.5	89	3.5	89	305	324	90	184	5.6
H016159	HST215B	4	102	4	102	305	324	102	184	5.6
H001632	HST220	5	127	5	127	370	446	102	222	10
H001633	HST225	5	127	5	127	343	342	114	219	6.6
H001634	HST230	6	152	6	152	370	446	127	254	11.4
H001635	HST235	6	152	8	203	370	446	152	222	12.4
H001636	HST240	8	203	8	203	585	500	200	392	15.6
H017157	HST250	10	254	10	254	576	635	250	400	30.1



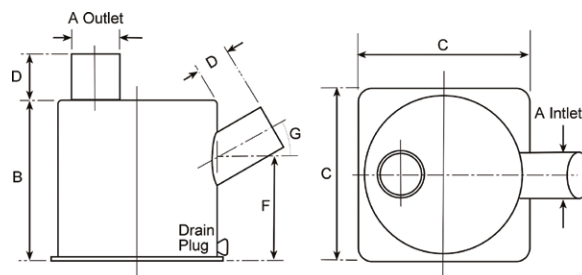
Alternative sizes available upon request. Reference numbers that end with B are not Lloyd's approved.

Exhaust Systems and Accessories

Silencers - Approximately 40% Noise Reduction

Lift silencers - Angle in top out

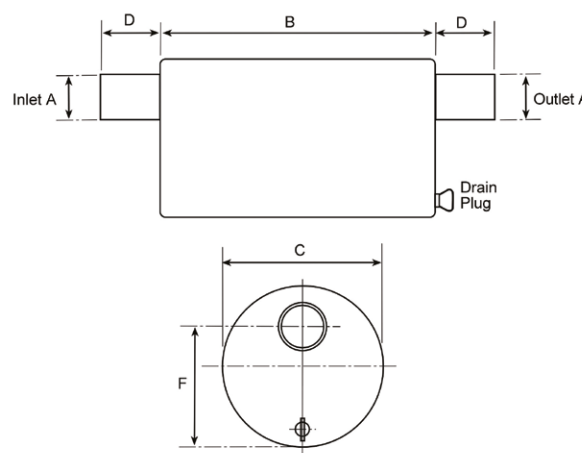
Angle In Top Out Lift Silencers									
Part No.	Reference	A		B	C	D	F	G °	Weight kg
		inch	mm	mm	mm	mm	mm		
H001454	HAT015	2.36	60	270	275	60	175	30	3.6
H001456	HAT020	3	76	270	275	76	175	30	3.9
H001458	HAT025	3.5	89	305	324	91	184	30	5.5
H001459	HAT030	3.5	89	266	275	89	152	30	4.4
H001460	HAT035	4	102	480	324	130	300	35	7.8
H001461	HAT040	4	102	305	324	85	184	35	5.7
H001462	HAT043	4.5	114	480	324	135	300	35	7.9
H001463	HAT045	5	127	480	324	140	300	35	8.7
H001464	HAT050	6	152	370	446	200	222	35	11.2
H010302	HAT055	8	203	521	548	201	323	55	18.6
H017158	HAT060	10	254	660	650	289	374	55	29.6



Alternative sizes available upon request.

Lift silencers - End in end out

End In End Out Lift Silencers									
Part No.	Reference	A		B	C	D	F	Weight kg	
		inch	mm	mm	mm	mm	mm		
H001496	HEE005	1.5	38	250	178	55	141	1.7	
H001497	HEE010	1.6	40	250	178	65	133	1.8	
H001498	HEE020	1.77	45	250	178	65	133	1.8	
H001499	HEE035	2	51	310	178	65	133	2.1	
H001500	HEE040	2	51	420	254	65	195	4.2	
H001501	HEE045	2	51	250	178	65	133	1.8	
H001502	HEE060	2.36	60	310	254	75	195	3.7	
H001503	HEE065	2.36	60	420	254	75	195	4.4	
H001504	HEE070	2.5	63	420	254	75	195	4.4	
H001505	HEE080	3	76	420	254	80	195	4.7	
H001506	HEE090	3.5	89	465	254	89	188	5.2	
H001507	HEE095	4	102	462	305	102	222	6.8	
H001508	HEE100	4.5	114	462	305	114	220	7	
H001509	HEE105	5	127	599	305	126	220	8.8	
H001510	HEE110	6	152	640	346	152	260	11.4	
H010303	HEE115	8	203	695	446	205	297	18.4	



Alternative sizes available upon request.

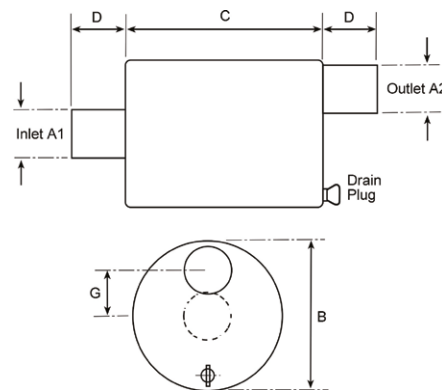
Exhaust Systems and Accessories

Silencers - Approximately 40% Noise Reduction

In-line round body silencers

In-line Round Body Silencers										
Part No.	Reference	A1		A2		B	C	D	G	Weight kg
		inch	mm	inch	mm					
H001524	HILR003	2.38	60	2.38	60	152	212	70	40	1.8
H001525	HILR005	3	76	3	76	203	335	75	59	3.5
H001526	HILR010	3.5	89	3.5	89	203	390	100	53	4.2
H001527	HILR015	4	102	4	102	254	465	102	68	6.4
H001528	HILR020	4.5	114	4.5	114	254	502	114	61	6.8
H001529	HILR025	5	127	5	127	254	546	127	55	7.9
H001530	HILR030	5	127	6	152	305	762	127	65	12.1
H001531	HILR035	6	152	6	152	305	661	152	65	11.4
H001532	HILR040	6	152	8	203	398	880	200	91	22
H001533	HILR045	8	203	8	203	395	880	201	88	23
H001534	HILR050	10	254	10	254	446	1092	254	87	32
H001535	HILR055	12	305	12	305	489	1308	305	87	41

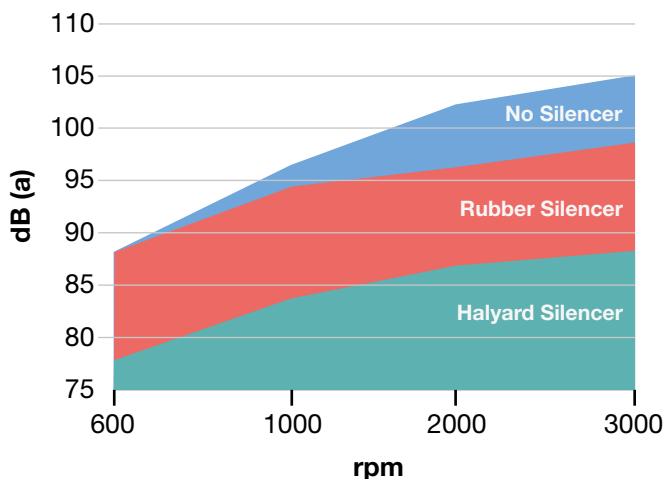
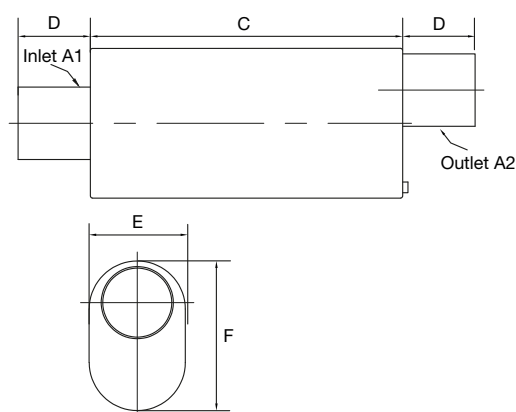
Alternative sizes available upon request.



In-line oval body silencers

In-line Round Body Silencers												
Part No.	Reference	A1		A2		B	C	D	E	F	G	Weight kg
		inch	mm	inch	mm							
H001517	HILO005	5	127	5	127	127	520	140	225	385	118	10.8
H001518	HILO006	5	127	6	152	152	640	150	225	385	105	10.6
H001519	HILO010	6	152	6	152	152	640	150	225	385	105	9.5
H001520	HILO012	6	152	8	203	203	928	203	270	420	93	12.2
H001521	HILO015	8	203	8	203	203	876	203	270	420	93	16.3
H001522	HILO016	8	203	10	254	254	758	203	295	465	87	21.6
H001523	HILO020	10	254	10	254	254	1092	254	365	630	164	39

Alternative sizes available upon request.



Independent Tests

Tests studied the reduction in exhaust noise using our exhaust silencers. Halyard also offers products to reduce airborne noise, vibration or structure borne noise.

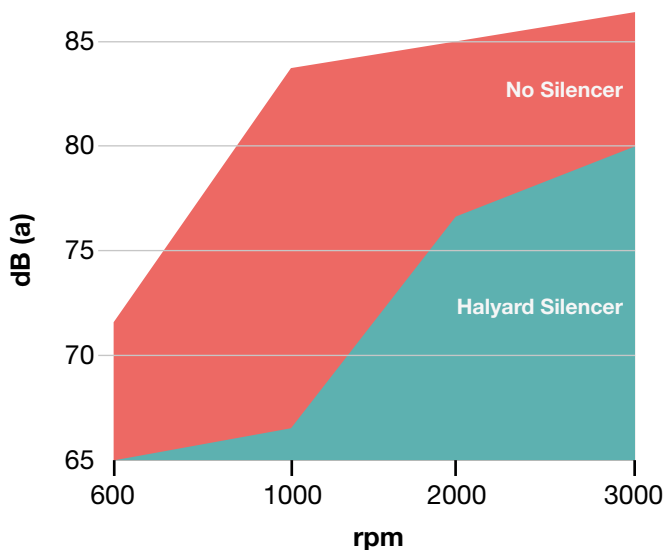
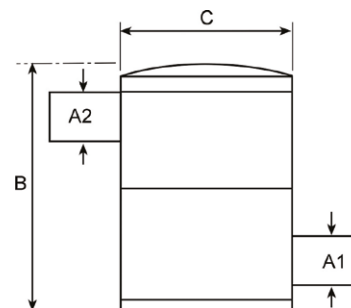
Exhaust Systems and Accessories

Silencers - Approximately 80% Noise Reduction with Lift System

Dual chamber silencers

Dual Chamber Silencers					
Part No.	Reference	A1	A2	B	C
		inch	inch	mm	mm
H008419	HDC025	4	4	600	446
H001488	HDC035	5	5	700	446
H001489	HDC040	5	6	800	446
H001490	HDC045	6	6	800	446
H001491	HDC050	6	8	800	446
H001492	HDC055	8	8	900	648
H001493	HDC060	8	10	900	650
H001494	HDC065	10	10	1000	650
H001495	HDC070	12	12	1000	630

Alternative sizes available upon request.



Independent Tests

Tests studied the reduction in exhaust noise using our exhaust silencers. Halyard also offers products to reduce airborne noise, vibration or structure borne noise.

Dual Chamber Silencers

Motor Boat & Yachting tested two identical 13m (45') power boats with twin diesels of around 450hp. One had no silencers, the other had two Dual Chamber Silencers.



Halyard UK Manufacturing Facilities

Halyard does not rely on outside contractors to produce its products. Halyard exhaust systems including stainless steel risers, water injection spray heads, high temperature GRP silencers separators and tube, marine diesel exhaust hose, silicone hoses and bellows are all designed and produced in-house at our three UK manufacturing facilities. As a result Halyard are uniquely placed to be able to design and manufacture market leading exhaust systems and components to meet your requirements.

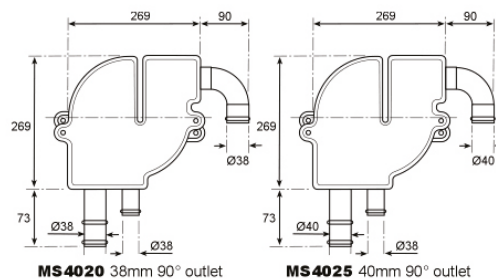
Exhaust Systems and Accessories

Water Separators - Approximately 80% Noise Reduction with Lift System

MS4000 Series water separator

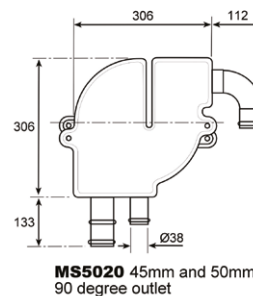
Halyard's exhaust water separator range is available with inlet / outlet diameters from 38mm (1.5") to 76mm (3"). Manufactured from a special high temperature Polyolefin and available from stock, this technology can achieve up to 80% noise attenuation.

MS4020 - MS4025
Exhaust: 38mm and 40mm
Gas Outlet: 38mm and 40mm
Maximum Water Flow: 18 Litres Per Minute
Weight: 1kg

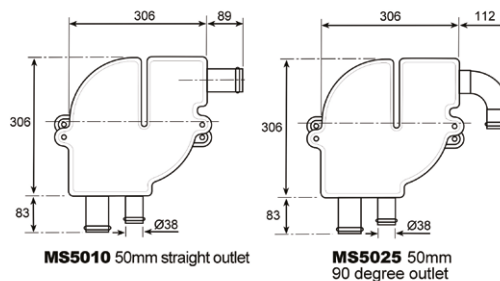


MS5000 Series water separator

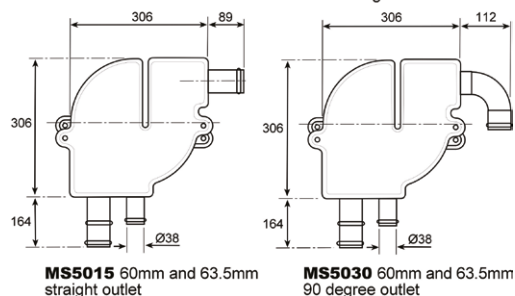
MS5020
Exhaust: 45mm and 50mm
Gas Outlet: 50mm
Maximum Water Flow: 42 Litres Per Minute
Weight: 1.7kg



MS5010 - MS5025
Exhaust: 50mm
Gas Outlet: 50mm
Maximum Water Flow: 42 Litres Per Minute
Weight: 1.7kg

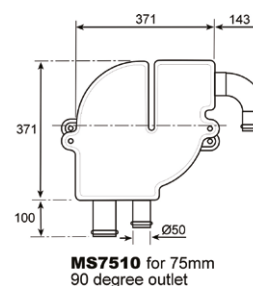


MS5015 - MS5030
Exhaust: 60mm and 63.5mm
Gas Outlet: 50mm
Maximum Water Flow: 42 Litres Per Minute
Weight: 1.7kg



MS7000 Series water separator

MS7510
Exhaust: 75mm
Gas Outlet: 76mm
Maximum Water Flow: 65 Litres Per Minute
Weight: 3.3kg



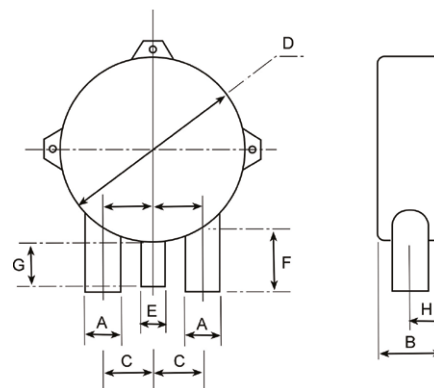
Exhaust Systems and Accessories

Water Separators - Approximately 80% Noise Reduction with Lift System

GRP Mid-size general separator

GRP Mid-size General Separator												
Part No.	Reference	A		B	C	D	E		F	G	H	Weight kg
		inch	mm	mm	mm	mm	inch	mm	mm	mm	mm	
H014054	HFS020	2.1	51	125	75	305	1.5	38	96	76	65	4.4
H001511	HFS025	2.5	63	140	100	346	1.5	38	144	100	70	4.8
H001514	HFS030	3	76	140	110	398	2	51	144	100	70	6.5
H001515	HFS035	3.5	89	140	110	398	2	51	144	107	70	6.5
H001516	HFS040	4	102	170	110	398	2	51	144	107	85	7
H007116	HFS050	5	127	175	125	494	2.5	63	140	107	88	12.5
H010304	HFS060	6	152	215	151	594	2.5	63	175	107	105	17.1

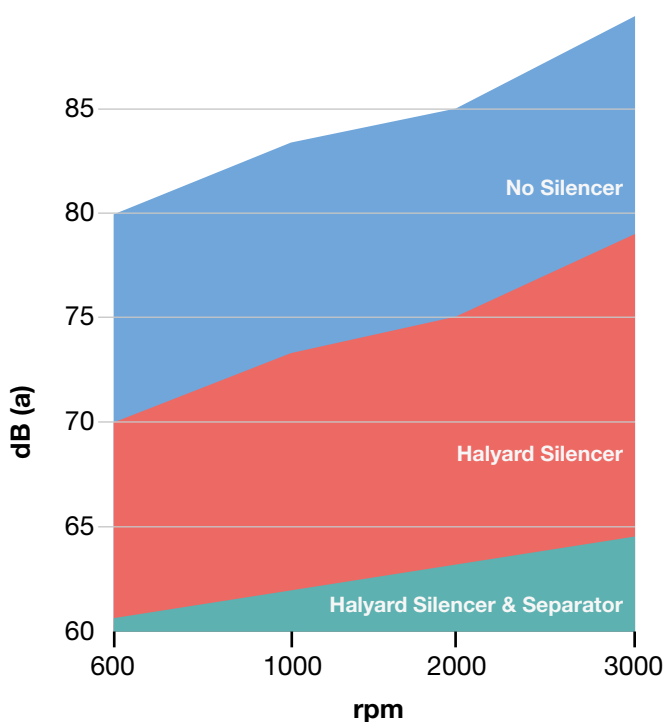
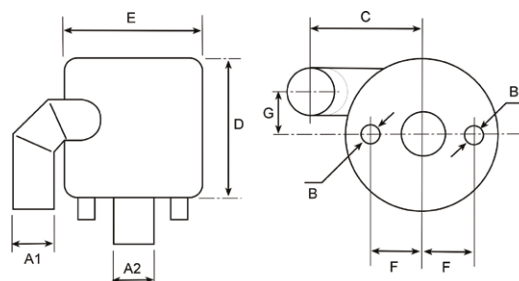
Contact Halyard for technical advice on suitable unit for your specific application.



GRP Mid-engine general separator

GRP Mid-engine General Separator										
Part No.	Reference	A1	A2	B	C	D	E	F	G	Weight kg
		inch	mm	mm	mm	mm	mm	mm	mm	
H001687	HWS030	76	76	38	240	356	346	120	110	7.6
H001688	HWS035	89	89	38	264	356	346	120	110	7.8
H001689	HWS040	102	102	38	282	356	346	120	100	9.5
H001690	HWS050	127	127	51	310	406	398	150	110	11.1
H001691	HWS060	152	152	51	335	406	398	158	100	12.1

Contact Halyard for technical advice on suitable unit for your specific application.



Independent Tests

These tests studied the reduction in exhaust noise using our exhaust silencers. Halyard also offers products to reduce airborne noise, vibration or structure borne noise.

Water Separators and Silencers

Benson Cruisers tested a 50hp diesel with a straight through exhaust, then adding a silencer and separator. The results shown are at tickover and 2,000rpm. Figures were measured 1m from the exhaust outlet.

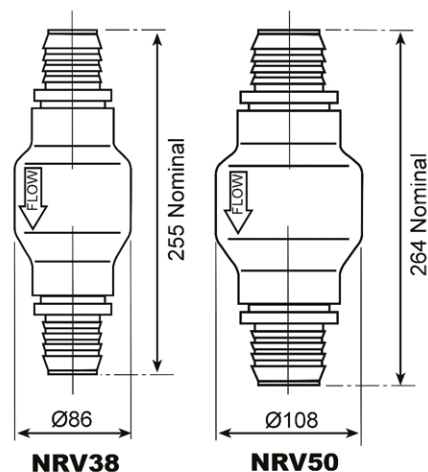
Exhaust Systems and Accessories

Accessories

Non-return valves

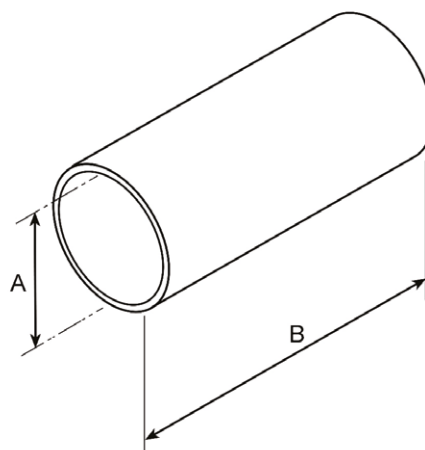
Designed for use where there is a risk of water being pushed back up the separator drain.

Separator Non-return Valves			
Part No.	Reference	Drain Dia Inch	Drain Dia mm
H008743	HRV38	1.5	38
H008744	HRV50	2	51



GRP Exhaust connectors

GRP Exhaust Connectors					
Part No.	Reference	A		B	Weight kg
		inch	mm	mm	
H001536	HJ010	1.5	38	175	0.1
H001537	HJ015	1.6	40	175	0.1
H001538	HJH020	1.77	45	175	0.1
H001539	HJ030	2	51	200	0.15
H001540	HJ040	2.36	60	200	0.2
H001541	HJ045	2.5	63	200	0.25
H001542	HJ055	3	76	250	0.4
H001543	HJ060	3.5	89	250	0.5
H001544	HJ065	4	102	300	0.65
H001545	HJ070	4.5	114	300	0.75
H001546	HJ075	5	127	300	0.85
H001547	HJ080	6	152	350	1.1
H007269	HJ082	7	178	350	1.35
H001548	HJ085	8	203	350	1.7
H001549	HJ090	10	254	400	2.4
H001550	HJ095	12	305	400	2.7



Exhaust Systems and Accessories

Accessories

Glass reinforced tube

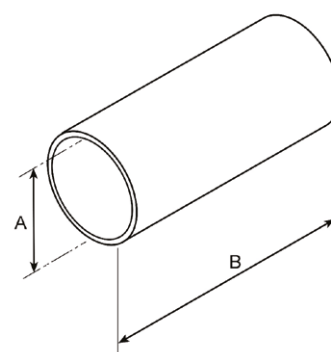
Diameters from 2" to 24" are supplied with peel-ply wrapping - a special layer which the customer peels off to leave a coarse surface requiring minimal grinding.

Lloyd's Approved resins with special temperature ratings are used in the manufacture of this tube (applies to tube over 2" or 51mm only).



Part numbers H000526 – H000530, do not have Lloyd's Approval.

Glass Reinforced Tube						
Part No.	Reference	A Nominal OD		Nominal Wall Thickness	Weight kg per m	B Standard Length
		inch	mm			m
H000526	HT001	0.75	19	3.2	0.25	1.2
H000527	HT005	1	25	2.8	0.33	1.2
H000528	HT010	1.5	38	2.8	0.5	1.2
H000529	HT015	1.6	40	2.3	0.5	1.2
H000530	HT020	1.75	44	2.4	0.6	1.2
H009939	HT030	2	51	3	0.7	3
H009940	HT040	2.36	60	3	0.9	3
H009953	HT045	2.5	63	3	1	3
H009954	HT055	3	76	4	1.3	3
H009965	HT060	3.5	89	4	1.5	3
H009966	HT065	4	102	4	1.9	3
H010014	HT070	4.5	114	4	2.2	3
H010017	HT075	5	127	4	2.5	3
H010018	HT080	6	152	4	2.9	3
H010028	HT082	7	178	4.5	3.7	3
H010030	HT085	8	203	4.5	4.5	3
H010034	HT090	10	254	4.5	5.5	3
H010036	HT095	12	305	4.5	6.8	3
H010040	HT100	13.6	346	4.5		3
H010041	HT105	15.7	398	4.5		3
H010371	HT115	19.3	489	4.5		3
H010042	HT120	23.3	593	5		3



Bow thruster GRP tubes

Bow Thruster Tube		
Part No.	Reference	Description
H008493	HBT140/15	140mm bore by 5mm wall x 1.5m
H001470	HBT185/15	185mm bore by 6mm wall x 1.5m
H001477	HBT250/15	250mm bore by 8mm wall x 1.5m
H001482	HBT300/15	300mm bore by 9mm wall x 1.5m

Other sizes available to special order.

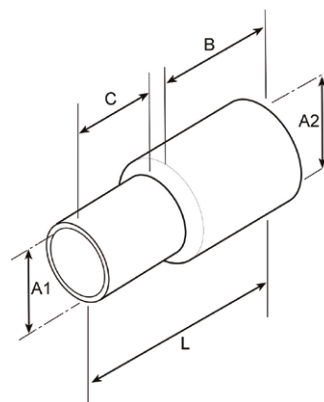


Exhaust Systems and Accessories

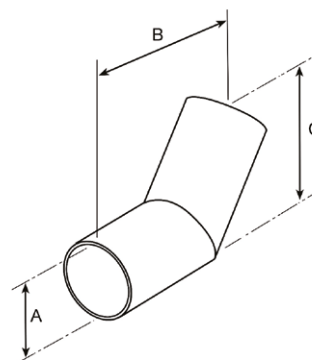
Accessories

GRP Adaptors and bends

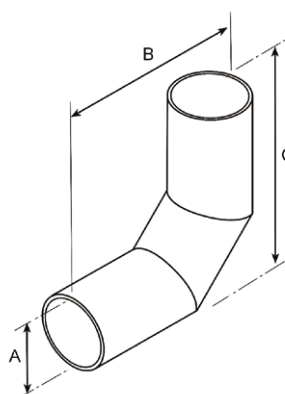
GRP Adaptors									
Part No.	Reference	A1		A2		B	C	L	Weight kg
		inch	mm	inch	mm				
H001442	HA020	2	51	3	76	102	78	205	0.4
H001443	HA035	2.5	63	3	76	102	95	222	0.4
H001444	HA050	3	76	3.5	89	125	102	252	0.5
H001445	HA055	3	76	4	102	142	102	269	0.6
H001446	HA060	3.5	89	4	102	142	125	293	0.7
H001447	HA065	3.5	89	4.5	114	140	125	290	0.9
H001448	HA070	4	102	5	127	158	142	326	1.1
H001449	HA075	4	102	6	152	177	142	370	1.7
H001450	HA095	5	127	6	152	177	158	361	1.8
H001451	HA096	6	152	7	178	240	177	467	1.9
H001452	HA110	6	152	8	203	225	177	452	2.1
H001453	HA115	8	203	10	254	279	225	555	3.5



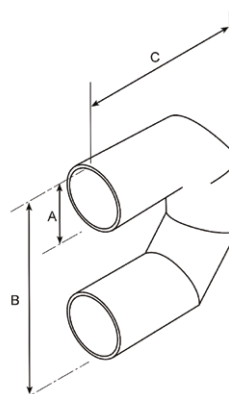
GRP 45° Bends						
Part No.	Reference	A		B	C	Weight kg
		inch	mm			
H001409	H45025	2	51	161	103	0.2
H001410	H45035	2.36	60	166	111	0.3
H001411	H45040	2.5	63	188	123	0.4
H001412	H45050	3	76	213	142	0.6
H001414	H45055	3.5	89	282	181	0.8
H001415	H45060	4	102	243	173	0.7
H001417	H45065	4.5	114	181	208	1
H001418	H45070	5	127	339	230	1.2
H001419	H45075	6	152	376	263	2
H007270	H45077	7	178	599	374	2.5
H001420	H45080	8	203	710	438	4.5
H001421	H45085	10	254	776	501	5.5



GRP 90° Bends						
Part No.	Reference	A	B	C	D	Weight kg
H001422	H90005	1.5	38	121	121	0.3
H001424	H90025	2	51	150	150	0.4
H001425	H90035	2.36	60	158	158	0.5
H001426	H90040	2.5	63	177	177	0.5
H001427	H90050	3	76	197	197	0.8
H001428	H90055	3.5	89	229	229	1
H001429	H90060	4	102	242	242	1.2
H001430	H90065	4.5	114	269	269	1.5
H001431	H90070	5	127	308	308	1.8
H001433	H90075	6	152	358	358	2.5
H001435	H90077	7	178	542	542	4
H001436	H90080	8	203	580	580	5.6
H010290	H90085	10	254	659	659	6.5
H001438	H90090	12	305	762	762	8



GRP 180° Bends						
Part No.	Reference	A	B	C	D	Weight kg
H001398	H180015	1.75	44	124	133	0.3
H001399	H180025	2	51	154	153	0.6
H001400	H180035	2.36	60	150	181	0.6
H001401	H180040	2.5	63	166	192	0.7
H001402	H180050	3	76	187	214	1.1
H001403	H180055	3.5	89	219	268	1.6
H001404	H180060	4	102	228	293	1.8
H001405	H180070	5	127	310	380	3
H001406	H180075	6	152	327	427	3.6
H007310	H180080	7	178	455	531	5
H001407	H180085	8	203	547	684	7



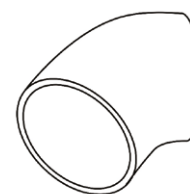
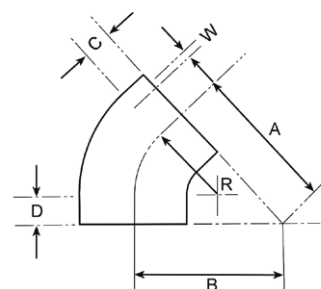
Exhaust Systems and Accessories

Accessories

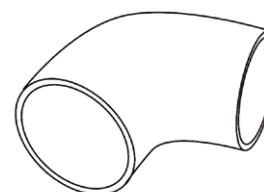
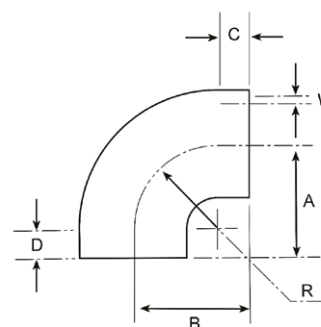
Flexible exhaust bends



Flexible 45° Black EPDM Bends 100°C max							
Part No.	Reference	Bore	A	B	C	D	W
H003337	CBR450040	51	125	125	50	50	5
H003338	CBR450050	76	145	145	50	50	6.5
H003339	CBR450055	89	155	155	50	50	6.5
H003340	CBR450060	102	160	160	50	50	7
H003341	CBR450065	127	240	240	50	50	8
H003342	CBR450070	152	350	350	60	60	8
H003343	CBR450075	203	400	400	65	65	10
H003344	CBR450080	254	425	425	65	65	12



Flexible 90° Black EPDM Bends 100°C max								
Part No.	Reference	Bore	A	B	C	D	R	W
H003345	CBR90040	51	125	125	50	50	50	5
H003346	CBR90045	63	145	145	50	50	95	5
H003347	CBR90050	76	145	145	50	50	95	6.5
H003348	CBR90055	89	155	155	50	50	100	6.5
H003349	CBR90060	102	160	160	50	50	110	7
H003350	CBR90065	127	240	240	50	50	187	8
H003351	CBR90070	152	350	350	60	60	250	8
H003352	CBR90070	203	400	400	65	65	300	10
H003353	CBR90080	254	425	425	65	65	350	12



Flexible 45° Silicone Bends 180°C max								
Part No.	Reference	Bore	A	B	C	D	R	W
H003319	CB45040	51	125	125	50	50	50	5.5
H003320	CB45050	76	145	145	50	50	95	7
H003321	CB45055	102	102	160	160	50	110	7
H003322	CB45065	127	240	240	50	50	187	7
H003318	CB45070	152	350	350	60	60	250	7

Flexible 90° Silicone Bends 180°C max								
Part No.	Reference	Bore	A	B	C	D	R	W
H003324	CB90040	51	125	125	50	50	50	5.5
H003325	CB90045	63	145	145	50	50	95	5.5
H003326	CB90050	76	145	145	50	50	95	7
H003327	CB90055	89	155	155	50	50	100	7
H003328	CB90060	102	160	160	50	50	110	7
H003329	CB90065	127	240	240	50	50	187	7
H003330	CB90070	152	350	350	60	60	250	7
H003331	CB90075	203	400	350	65	65	300	7

Extremely high temperature bends rated to 260°C are available to special order.



Exhaust Systems and Accessories

Exhaust Hose & Silicone

Nitrile Supreme exhaust hose

Supreme Exhaust Hose Nitrile -10°C to 100°C								
Part No.	Bore		OD	Bend Radius	Weight	Vacuum	Working Pressure	Buersting Pressure
	inch	mm						
HS38	1.5	38	46	150	0.68	0.4	3	10
HS41	1.57	40	48	160	0.71	0.4	3	10
HS44	1.75	44	53	170	0.79	0.4	3	10
HS51	2	51	60	180	0.98	0.4	3	10
HS60	2.36	60	69	190	1.14	0.3	2	8
HS63	2.5	63.5	73	200	1.2	0.3	2	8
HS76	3	76	85	380	1.35	0.2	2	8
HS89	3.5	89	99	400	1.58	0.2	1	4
HS102	4	102	112	460	1.9	0.2	1	4
HS113	4.5	113	125	480	2.08	0.2	1	4
HS127	5	127	137	650	2.4	0.2	1	4
HS152	6	152	163	700	2.98	0.2	1	4
HS177	7	178	191	1000	3.5	0.2	1	4
HS203	8	203	219	1626	6.73	0.2	1	4
HS254	10	254	271	2540	9.04	0.2	1	4
HS304	12	304	321	3658	10.76	0.2	1	4



New part number dependent on length required.
High temperature Polyacrylic lined exhaust hoses are also available (range -10°C to 140°C).

Other sizes available, contact Halyard for details.



Silicone exhaust hose

Silicone Exhaust Hose - 40° normal (180°C max continous operating temp)			
Part No.	Reference	Bore	
		inch	mm
H003391	SS051	2	51
H003392	SS063	2.5	63
H003393	SS076	3	76
H003394	SS089	3.5	89
H003395	SS102	4	102
H003397	SS127	5	127
H003398	SS152	6	152
H003400	SS204	8	203
H003403	SS304	12	305



Halyard silicone marine exhaust hose is also available with wire re-enforcement.
Extremely high temperature hoses rated to 260°C are available to special order.
Other sizes available, contact Halyard for details.

Exhaust Systems and Accessories

Accessories

Flexible bellows

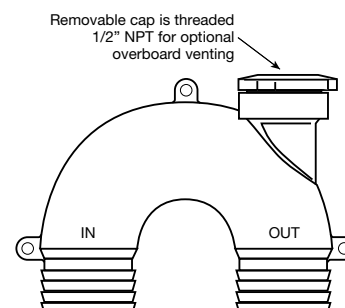
Silicone High Temperature Flexible Exhaust Bellows (180°C max continuous operating temp)					
Part No.	Reference	Bore		Description	Length mm
		inch	mm		
H007926	CB1051	2	50.8	Flexible bellows - single hump	170
H003301	CB1076	3	76	Flexible bellows - single hump	170
H003302	CB1090	3.5	89	Flexible bellows - single hump	220
H003303	CB1102	4	102	Flexible bellows - single hump	220
H003304	CB1127	5	127	Flexible bellows - single hump	220
H003305	CB1152	6	152	Flexible bellows - single hump	220
H003307	CB1203	8	203	Flexible bellows - single hump	220
H003308	CB1254	10	254	Flexible bellows - single hump	250
H003309	CB1305	12	305	Flexible bellows - single hump	300
H003311	CB2152	6	152	Flexible bellows - double hump	350
H003312	CB2178	7	178	Flexible bellows - double hump	350
H003314	CB2254	10	254	Flexible bellows - double hump	350
H003315	CB2305	12	305	Flexible bellows - double hump	350
H003317	CB2355	14	355	Flexible bellows - double hump	220
H008903	CB2127	5	127	Flexible bellows - double hump	360



Flexible exhaust bellows nitrile lined is also available. Prices on application (-10°C to 100°C rating) Polyacrylic lined exhaust hose also available. Prices on application (-10°C to 140°C rating) extremely high temperature bellows also available (260°C rating).

Siphon breakers

Bronze Siphon Breakers					
Part No.	Reference	Inlet Diameter		Max Height*	Max Width
		mm	Inch		
H000566	SB050	13	1/2	140	60
H000567	SB065	16	5/8	140	63
H000568	SB075	19	3/4	130	76
H000569	SB100	25	1	170	89
H000564	SB005	Spare valve component			
H000565	SB010	1/2" BSP Syphon valve assembly only			



The bronze used in our siphon breaker is silicon brass C87800, ASTM B176 and ASTM ZS144A containing no zinc. Siphon breakers containing zinc may corrode, particularly if the vessel's anodes are wasted and the siphon breaker is electrically connected to the bonding system.

Silicon brass is also a superior material as it will resist water erosion. As water flows through the siphon breaker erosion wear can occur; silicon brass is better able to cope with this than materials containing nickel or zinc.

*The max height includes the 'U' bend at the top of each unit.

Exhaust Systems and Accessories

Accessories

Hose clamps

Stainless Steel Hose Clamps			
Part No.	Reference	Hose OD Range - mm	To Suit Hose of Bore - mm
H000505	HCSS4043	40 - 43	
H000506	HCSS4447	44 - 47	38
H000507	HCSS4851	48 - 51	40
H000508	HCSS5255	52 - 55	45
H000509	HCSS5659	56 - 59	
H000510	HCSS6063	60 - 63	51
H000511	HCSS6467	64 - 67	58
H000512	HCSS6873	68 - 73	60/63
H000513	HCSS7479	74 - 79	65/70
H000514	HCSS8085	80 - 85	
H000515	HCSS8691	86 - 91	76
H000516	HCSS9297	92 - 97	
H000517	HCSS98103	98 - 103	90
H000483	HCSS104112	104 - 112	
H000484	HCSS112121	113 - 121	102/110
H000485	HCSS121130	122 - 130	113/120
H000486	HCSS131139	131 - 139	127
H000487	HCSS140150	140 - 150	
H000488	HCSS150162	150 - 162	140
H000489	HCSS162174	162 - 174	152
H000490	HCSS174187	174 - 187	
H000491	HCSS187200	187 - 200	178
H000492	HCSS201213	200 - 213	
H000493	HCSS213226	213 - 226	203
H000494	HCSS226239	226 - 239	
H000495	HCSS239252	239 - 252	
H011109	HCSS260280	260 - 280	254
H000499	HCSS315325	315 - 325	
H000503	HCSS370380	370 - 380	
H012776	HCSS270285	270 - 285	
H000498	HCSS290305	290 - 305	
H000500	HCSS320335	320 - 335	
H000504	HCSS376-400	375 - 400	
H015470	HCSS387413	387 - 413	



Bore size of clamp versus OD of hose must be checked on each order.

Hot lag

Hot Lag		
Part No.	Reference	Description
H000532	HTL05090	5m x 100mm wide, 6mm thick

Hot lag is designed for lagging hot exhaust systems with a thermal insulator which is asbestos free. It has a nominal width of 100mm (4") by 5mm (0.25") and may be held in place with stainless steel hose clips.





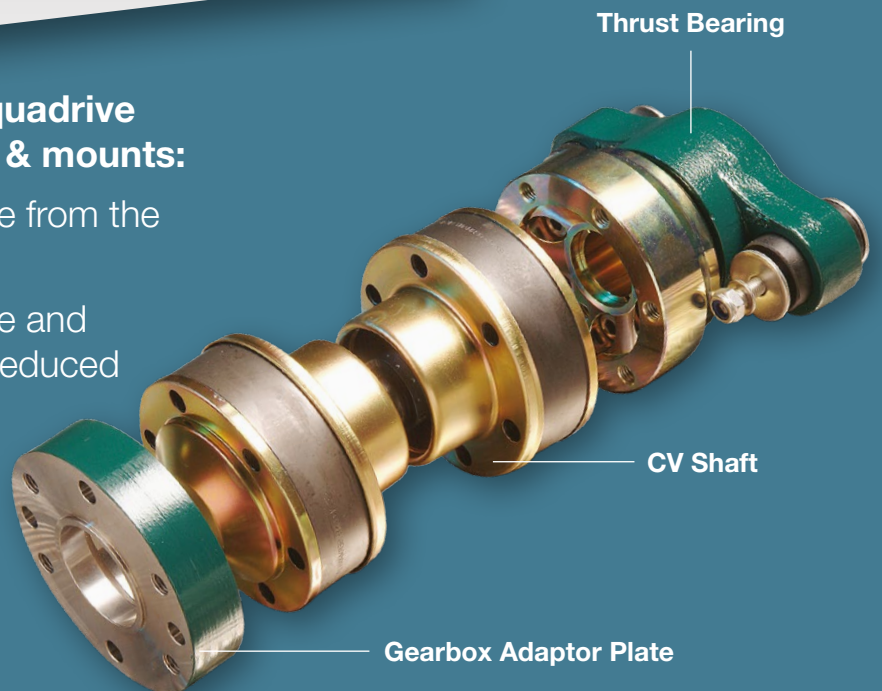
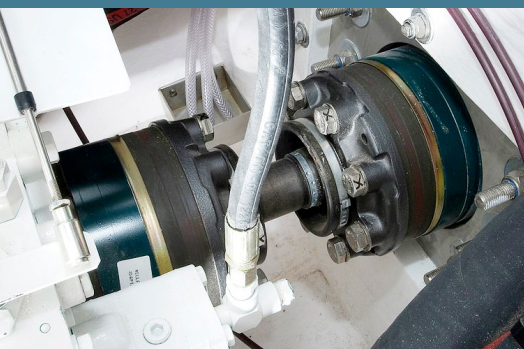
Aquadrive Antivibration System

*Over 30 years' experience of installations
and aftersales service*



UK distributor for Aquadrive antivibration system & mounts:

- Isolation of the engine from the hull structure
- Cabin & cockpit noise and vibration are greatly reduced by 50% or more



Thrust Bearing

CV Shaft

Gearbox Adaptor Plate

Aquadrive Antivibration System

Moduline

CVB05.10 Aquadrive Moduline - for shaft diameter up to 1.5" or 40mm

CVB05.10 Aquadrive Moduline for shaft diameters up to 1.5" or 40mm

Component Parts

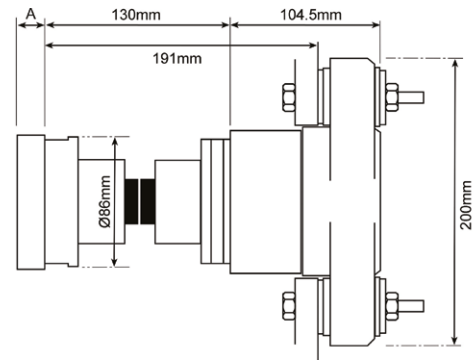
CV05 130mm Aquadrive Shaft
Yanmar, Volvo 4" or 5" Coupling
B10 Thrust Bearing Assembly

Please note CVB05.10 is not available in custom length. See CVB10.10 instead. Non-standard coupling kits on application.

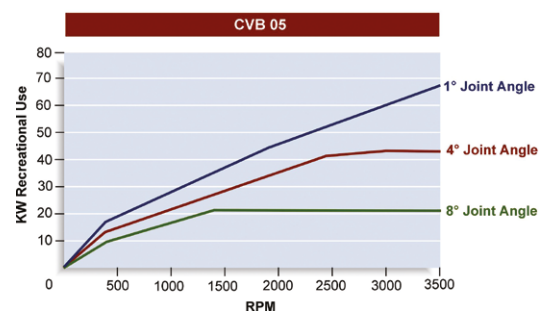
The CVB05.10 Moduline Aquadrive is designed for use with engines up to 45hp or for commercial installations up to 25hp at 1200 shaft rpm.

45hp = 34kW

Weight: 10kg



A - The gearbox coupling adds approx 30mm to the overall length



CVB10.10 Aquadrive Moduline - for shaft diameter up to 1.5" or 40mm

CVB10.10 Aquadrive Moduline for shaft diameters up to 1.5" or 40mm

Component Parts

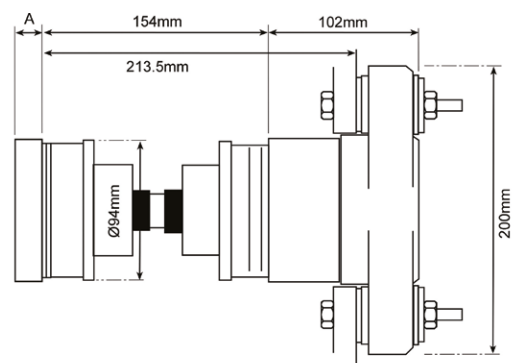
CV10 154mm Aquadrive Shaft
Yanmar, Volvo 4" or 5" Coupling
B10 Thrust Bearing Assembly
Custom length Aquadrive shafts available upon request

Non-standard coupling kits on application.

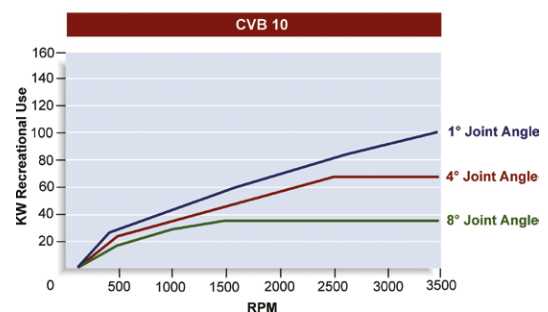
The CVB10.10 Moduline Aquadrive is designed for use with engines up to 65hp or for commercial installations up to 40hp at 1200 shaft rpm. Used as a drive shaft alone the CV10 series shaft will take up to 100hp at 2500rpm.

60hp = 45kW

Weight: 11.5kg



A - The gearbox coupling adds approx 25mm to the overall length



1hp = 0.746kW

Aquadrive Antivibration System

Moduline

CVB15.10 Aquadrive Moduline - for shaft diameter up to 1.5" or 40mm

CVB15.10 Aquadrive Moduline for shaft diameters up to 1.5" or 40mm

Component Parts

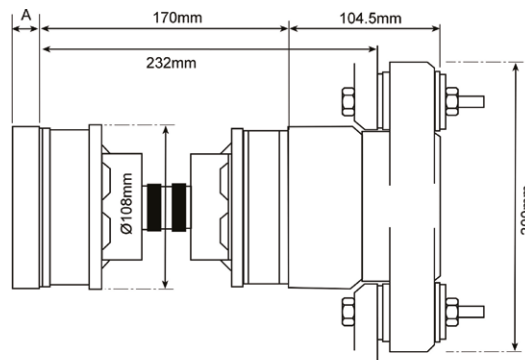
CV15 170mm Aquadrive Shaft
 Yanmar, Volvo 4" or 5" Coupling
 Standard Gearbox Coupling Kit
 B10 Thrust Bearing Assembly
 Custom length Aquadrive shafts available upon request

Non-standard coupling kits on application.

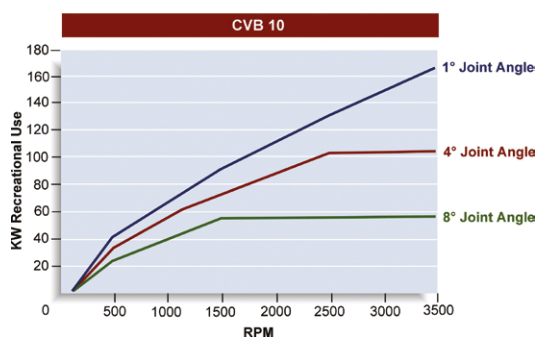
The CVB15.10 Moduline Aquadrive is designed for use with engines up to 100hp or for commercial installations up to 75hp at 1200 shaft rpm. Used as a drive shaft alone the CV15 series shaft will take up to 175hp at 2500rpm.

100hp = 75kW

Weight: 14kg



A - The gearbox coupling adds approx 25mm to the overall length



CVB15.11 Aquadrive Moduline - flanged or for shafts up to 2" or 50mm

CVB15.11 Aquadrive Moduline for shaft diameters up to 2" or 50mm

Component Parts

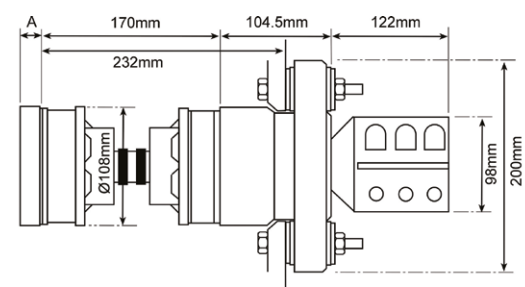
CV15 170mm Aquadrive Shaft
 Yanmar, Volvo 4" or 5" Coupling
 Standard Gearbox Coupling Kit
 B10 Thrust Bearing Assembly
 Custom length Aquadrive shafts available upon request

Non-standard coupling kits on application.

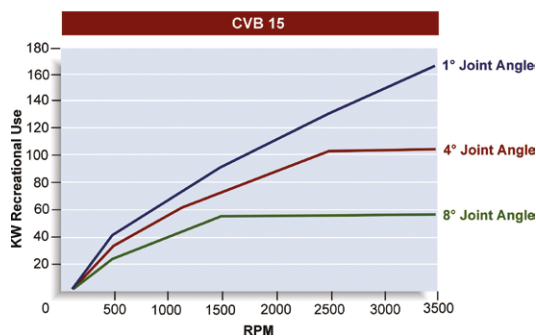
The CVB15.11 Moduline Aquadrive is designed for use with engines up to 100hp or for commercial installations up to 75hp at 1200 shaft rpm. Used as a drive shaft alone the CV15 series shaft will take up to 175hp at 2500rpm.

100hp = 75kW

Weight: 19kg



A - The gearbox coupling adds approx 30mm to the overall length



1hp = 0.746kW

Aquadrive Antivibration System

Moduline

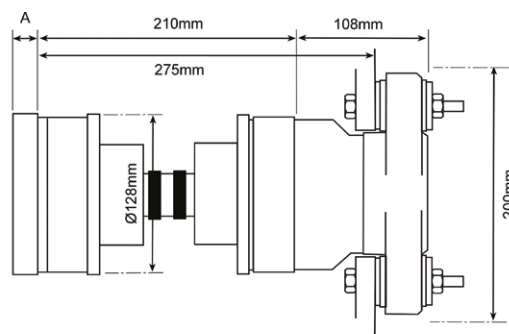
CVB21.10 Aquadrive Moduline - for shaft diameter up to 1.5" or 40mm

CVB21.10 Aquadrive Moduline for shaft diameters up to 1.5" or 40mm

Component Parts

- CV21 210mm Aquadrive Shaft
- Yanmar, Volvo 4" or 5" Coupling
- Standard Gearbox Coupling Kit
- B10 Thrust Bearing Assembly
- Custom length Aquadrive shafts available upon request

Non-standard coupling kits on application.

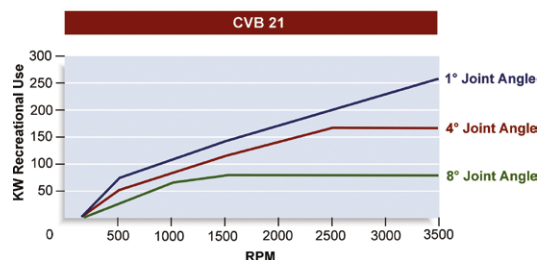


A - The gearbox coupling adds approx 35mm to the overall length

The CVB21.10 Moduline Aquadrive is designed for use with engines up to 175hp or for commercial installations up to 130hp at 1200 shaft rpm. Used as a drive shaft alone the CV21 series shaft will take up to 270hp at 2500rpm.

175hp = 130kW

Weight: 20kg



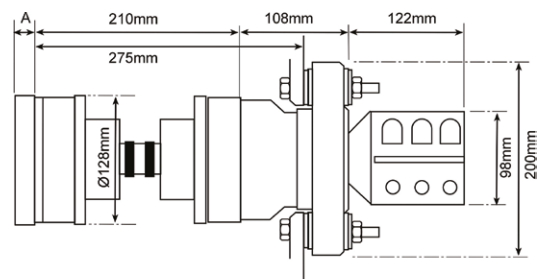
CVB21.11 Aquadrive Moduline - flanged or for shafts up to 2" or 50mm

CVB21.11 Aquadrive Moduline for shaft diameters up to 2" or 50mm

Component Parts

- CV21 210mm Aquadrive Shaft
- Yanmar, Volvo 4" or 5" Coupling
- Standard Gearbox Coupling Kit
- B10 Thrust Bearing Assembly
- Custom length Aquadrive shafts available upon request

Non-standard coupling kits on application.

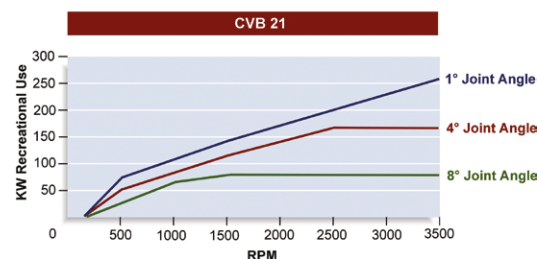


A - The gearbox coupling adds approx 35mm to the overall length

The CVB21.11 Moduline Aquadrive is designed for use with engines up to 175hp or for commercial installations up to 130hp at 1200 shaft rpm. Used as a drive shaft alone the CV21 series shaft will take up to 270hp at 2500rpm.

175hp = 130kW

Weight: 26kg



1hp = 0.746kW

Aquadrive Antivibration System

Moduline

CVB21.20 Aquadrive Moduline

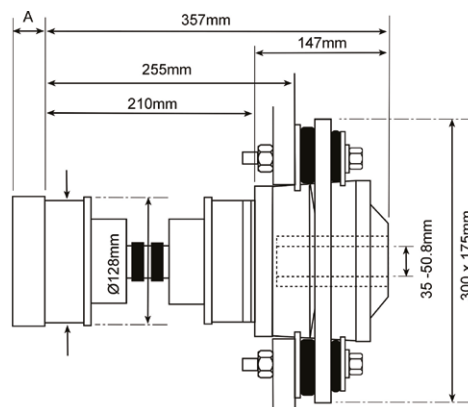
CVB21.20 Aquadrive Unit
Component Parts
CV21 210mm Aquadrive Shaft Yanmar, Volvo 4" or 5" Coupling Standard Gearbox Coupling Kit B20 Thrust Bearing Assembly Custom length Aquadrive shafts available upon request

Non-standard coupling kits on application.

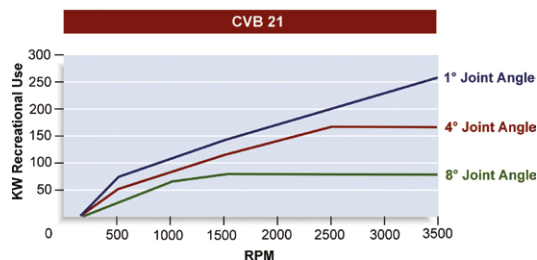
The CVB21.20 Moduline Aquadrive is designed for use with engines up to 200hp or for commercial installations up to 130hp at 1700 shaft rpm. Used as a drive shaft alone the CV21 series shaft will take up to 270hp at 2500rpm.

200hp = 150kW

Weight: 31kg



A - The gearbox coupling adds approx 35mm to the overall length



CVB30.20 Aquadrive Moduline

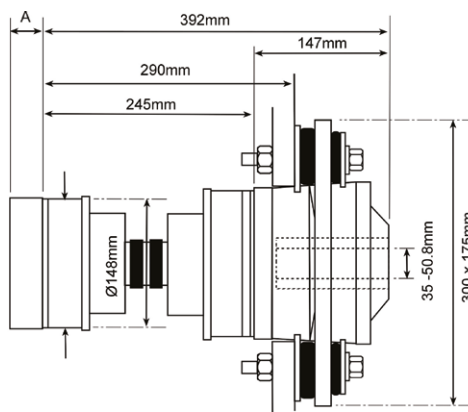
CVB30.20 Aquadrive Unit
Component Parts
CV30 245mm Aquadrive Shaft Yanmar, Volvo 4" or 5" Coupling Standard Gearbox Coupling Kit B20 Thrust Bearing Assembly Custom length Aquadrive shafts available upon request

Non-standard coupling kits on application.

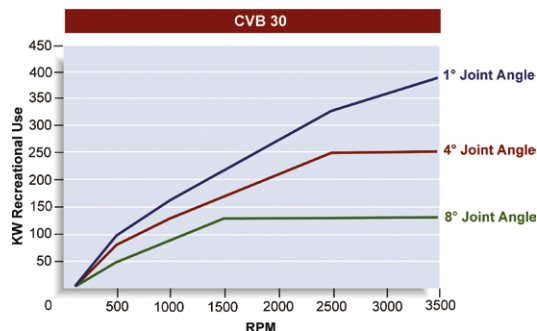
The CVB30.20 Moduline Aquadrive is designed for use with engines up to 250hp or for commercial installations up to 175hp at 1200 shaft rpm. Used as a drive shaft alone the CV30 series shaft will take up to 400hp at 2500rpm.

200hp = 150kW

Weight: 36kg



A - The gearbox coupling adds approx 40mm to the overall length



1hp = 0.746kW

Aquadrive Antivibration System

Moduline

CVB32.30 Aquadrive Moduline

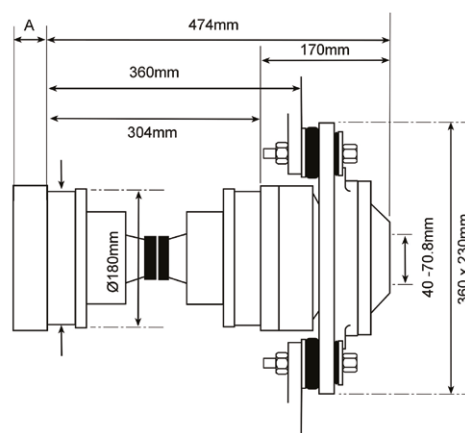
CVB32.30 Aquadrive Unit
Component Parts
CV32 304mm Aquadrive Shaft Yanmar, Volvo 4" or 5" Coupling Standard Gearbox Coupling Kit B30 Thrust Bearing Assembly Custom length Aquadrive shafts available upon request

Non-standard coupling kits on application.

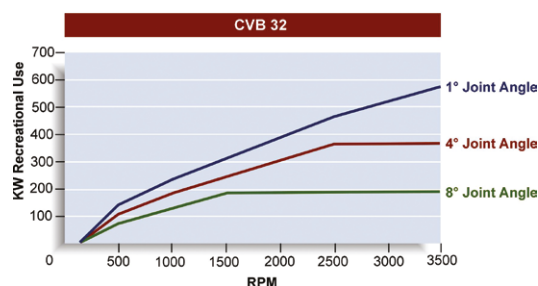
The CVB32.30 Moduline Aquadrive is designed for use with engines up to 350hp or for commercial installations up to 250hp. The final choice depends on the hull and the reduction ratio. Used as a drive shaft alone the CV32 series shaft will take up to 600hp at 2500rpm.

350hp = 260kW

Weight: 58kg



A - The gearbox coupling adds approx 45mm to the overall length



CVB42.30 Aquadrive Moduline

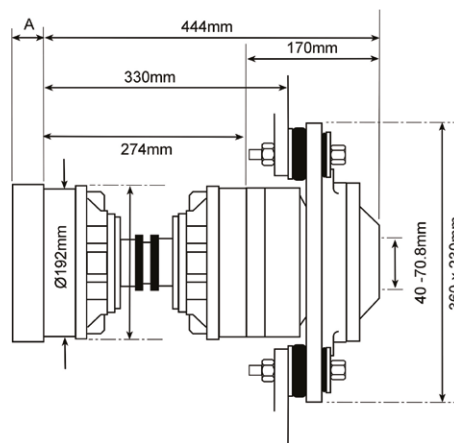
CVB42.30 Aquadrive Unit
Component Parts
CV42 274mm Aquadrive Shaft Yanmar, Volvo 4" or 5" Coupling Standard Gearbox Coupling Kit B30 Thrust Bearing Assembly Custom length Aquadrive shafts available upon request

Non-standard coupling kits on application.

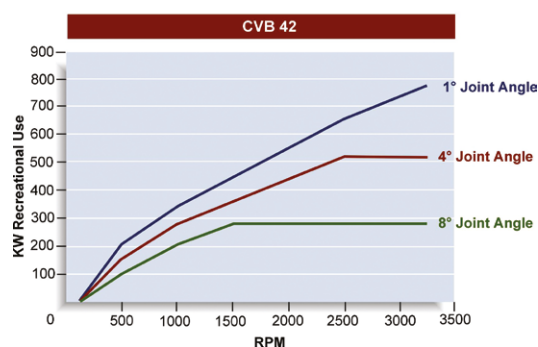
The CVB42.30 Moduline Aquadrive is designed for use with engines up to 350hp or for commercial installations up to 250hp. The final choice depends on the hull and the reduction ratio. Used as a drive shaft alone the CV32 series shaft will take up to 600hp at 2500rpm.

350hp = 260kW

Weight: 64kg



A - The gearbox coupling adds approx 50mm to the overall length



1hp = 0.746kW

Aquadrive Antivibration System

Classic

HDL42.680 Aquadrive Classic

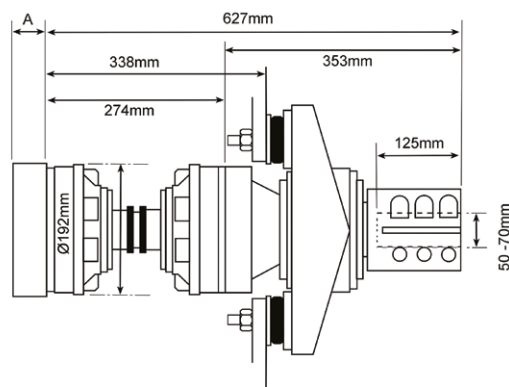
HDL42.680 Aquadrive Classic
Component Parts
274mm Aquadrive Shaft Standard Gearbox Coupling Kit HDL680 Thrust Bearing Assembly Custom length Aquadrive shafts available upon request

Non-standard coupling kits on application.

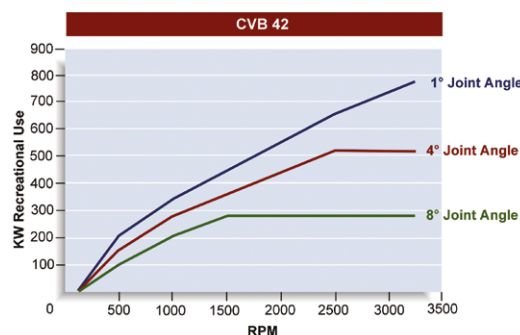
The 42.680 Aquadrive is designed for use with engines up to 550hp or for commercial installations up to 400hp. The final choice depends on the hull and the reduction ratio. Used as a drive shaft alone the CV42 series shaft will take up to 800hp at 2500rpm.

550hp = 410kW

Weight: 84kg



A - The gearbox coupling adds approx 50mm to the overall length

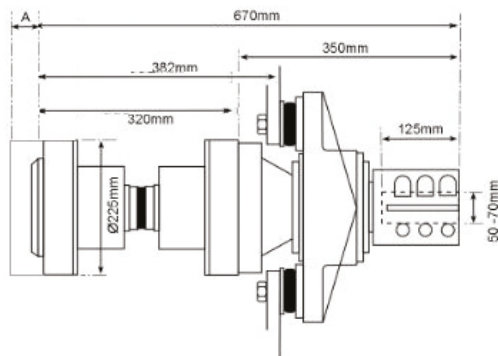


HDL48.690 Intermediate size Aquadrive

The 48.690 Aquadrive series fills the gap between the 42 series and the 60 series. It is designed for use with engines in the 400hp to 900 hp range dependent on reduction ratio and torque. Used as a drive shaft alone the CV48 series shaft will take up to 1000hp at 2500rpm.

900hp = 675kW

Weight: 110kg



A - The gearbox coupling adds approx 50mm to the overall length

1hp = 0.746kW

Aquadrive Antivibration System

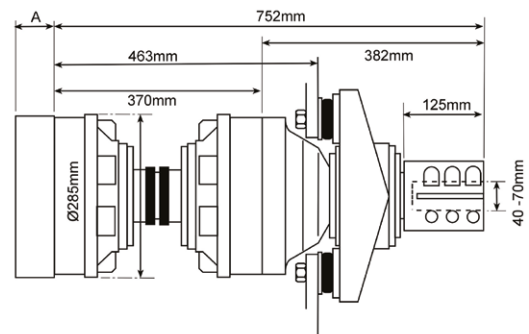
Classic

HDL60.700 Series Aquadrive Classic

The 60.700 Aquadrive is designed for use with engines up to 1200hp, or for commercial installations up to 700hp. The final choice depends on the hull and the reduction ratio. Used as a drive shaft alone the CV42 series shaft will take up to 1400hp at 2300rpm.

1200hp = 900kW

Weight: 157kg



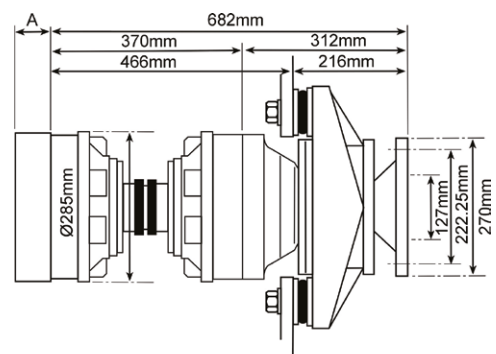
A - The gearbox coupling adds approx 60mm to the overall length

HDL60.780 Series Aquadrive Classic

The 60.780 Aquadrive is designed for use with engines up to 1200hp, or for commercial installations up to 900hp. The final choice depends on the hull and the reduction ratio. Used as a drive shaft alone the CV42 series shaft will take up to 1400hp at 2300rpm.

1200hp = 900kW

Weight: 210kg



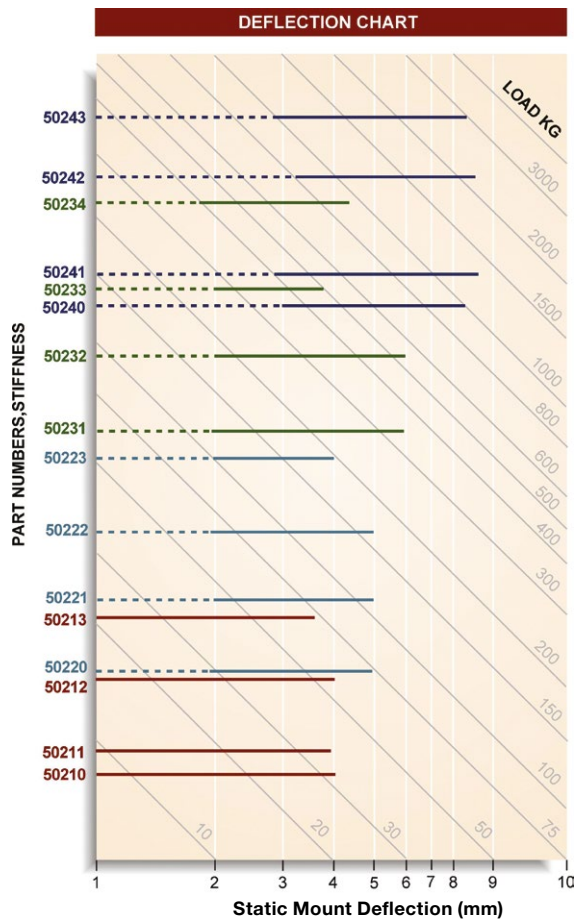
A - The gearbox coupling adds approx 60mm to the overall length

1hp = 0.746kW

Aquadrive Engine Mounts

Aquadrive system engine mounts

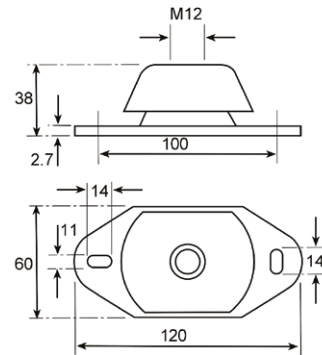
Engine Mounts	Weight
50210 Series engine mounts complete with stud and any stiffness grade	0.5kg
50220 Series engine mounts complete with stud and any stiffness grade	1.1kg
50230 Series engine mounts complete with stud and any stiffness grade	2.6kg
50240 Series engine mounts complete with stud and any stiffness grade	9.5kg



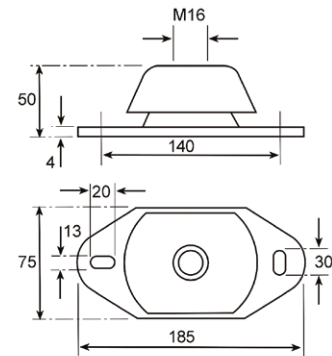
It is essential to select the correct rubber grade and mount for the engine or generator in question. For reference, the chart above shows the level of deflection (or squash) that will occur on each model of mount for a given loading.

In general you should aim for 3mm on the 50210, 4mm on the 50220, 5mm on the 50230 and 6mm on the 50240. The numbering system is simple: A 50223 mount is the 50220 model with number three rubber hardness and so on. Some engines, particularly those with less than four cylinders, require particular care and your distributor will help with these.

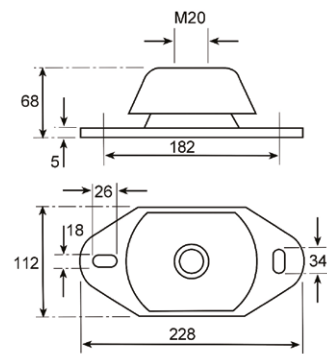
50210 Mounts



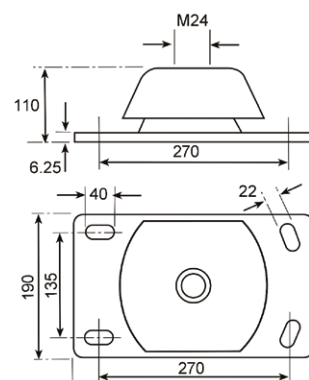
50220 Mounts

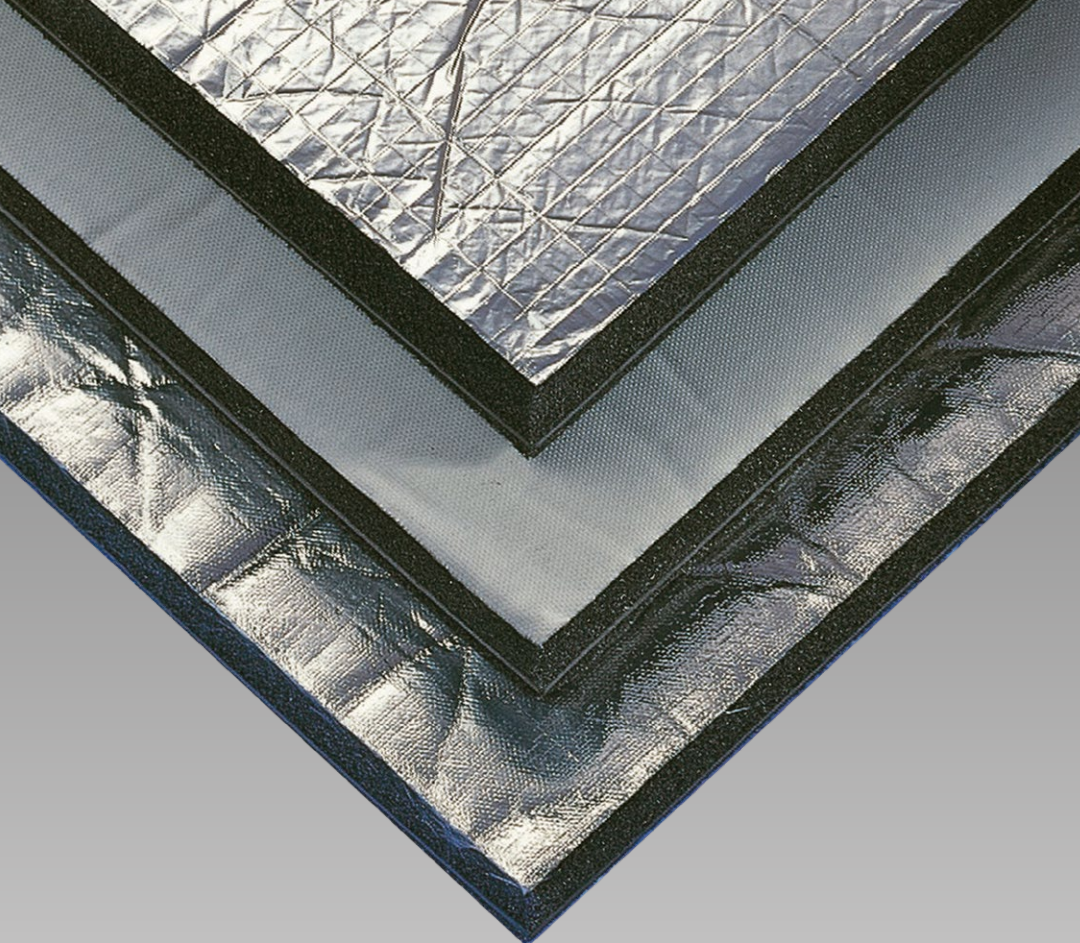


50230 Mounts



50240 Mounts



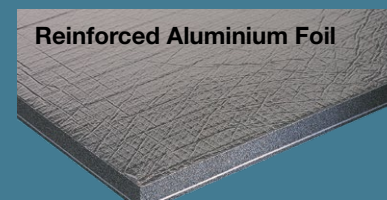
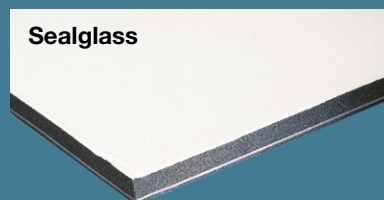
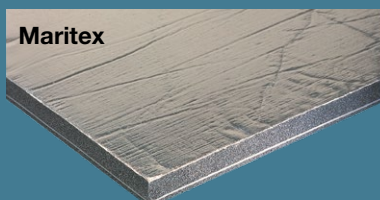


Noise Insulation Material and Accessories

A proven range of high quality UK manufactured sound insulation material

A range of technically advanced noise insulation materials:

- Compliant with the European Recreational Craft Directive
- Standard sizes 12mm, 32mm and 45mm
- Range of tapes & accessories

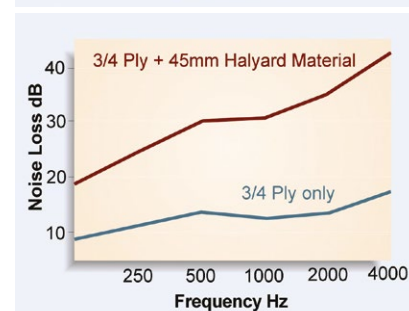
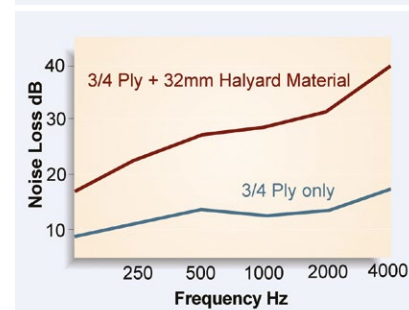
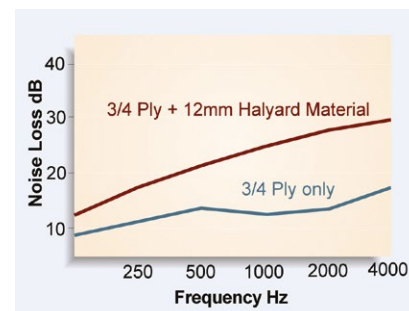


Noise Insulation Material and Accessories

Halyard noise insulation sq material

Halyard Noise Insulation uses high performance barrier materials to achieve excellent acoustic results with low frequency noise associated with diesel engines and other onboard noise generating equipment.

Part No.	Reference	Noise Insulation	Sheets per box
12mm (1/2") Materials (2.4 sq metre packs)			
H000535	S3002	Maritex Faced Noise Insulation	4
H000537	S3004	Sealglass Faced Noise Insulation	4
H000536	S3003	Reinforced Aluminium Foil Faced Noise Insulation	4
12mm (1/2") Self Adhesive Materials (2.4 sq metre packs)			
H000554	S5002	Maritex Faced Noise Insulation	4
H000556	S5004	Sealglass Faced Noise Insulation	4
H000555	S5003	Reinforced Aluminium Foil Faced Noise Insulation	4
32mm (1 1/2") Materials (2.4 sq metre packs)			
H000540	S3017	Maritex Faced Noise Insulation	4
H000538	S3015	Sealglass Faced Noise Insulation	4
H000539	S3016	Reinforced Aluminium Foil Faced Noise Insulation	4
32mm (1 1/2") Self Adhesive Materials (2.4 sq metre packs)			
H000559	S5017	Maritex Faced Noise Insulation	4
H000557	S5015	Sealglass Faced Noise Insulation	4
H000558	S5016	Reinforced Aluminium Foil Faced Noise Insulation	4
45mm (1 3/4") Materials (1.2 sq metre packs)			
H000543	S3039	Maritex Faced Noise Insulation	2
H000541	S3037	Sealglass Faced Noise Insulation	2
H000536	S3038	Reinforced Aluminium Foil Faced Noise Insulation	2
45mm (1 3/4") Self Adhesive Materials (1.2 sq metre packs) - physical fixing required when hanging from the underside			
H00562	S5039	Maritex Faced Noise Insulation	2
H00560	S5037	Sealglass Faced Noise Insulation	2
H000561	S5038	Reinforced Aluminium Foil Faced Noise Insulation	2
Marine Firebatt 2000			
H016454	FB2025	Firebatt 2000 25mm 2.4 sq metre	4
H016455	FB2040	Firebatt 2000 40mm 2.4 sq metre	4
H016456	FB2075	Firebatt 2000 75mm 1.2 sq Metre	2



Packing (12mm and 32mm materials):

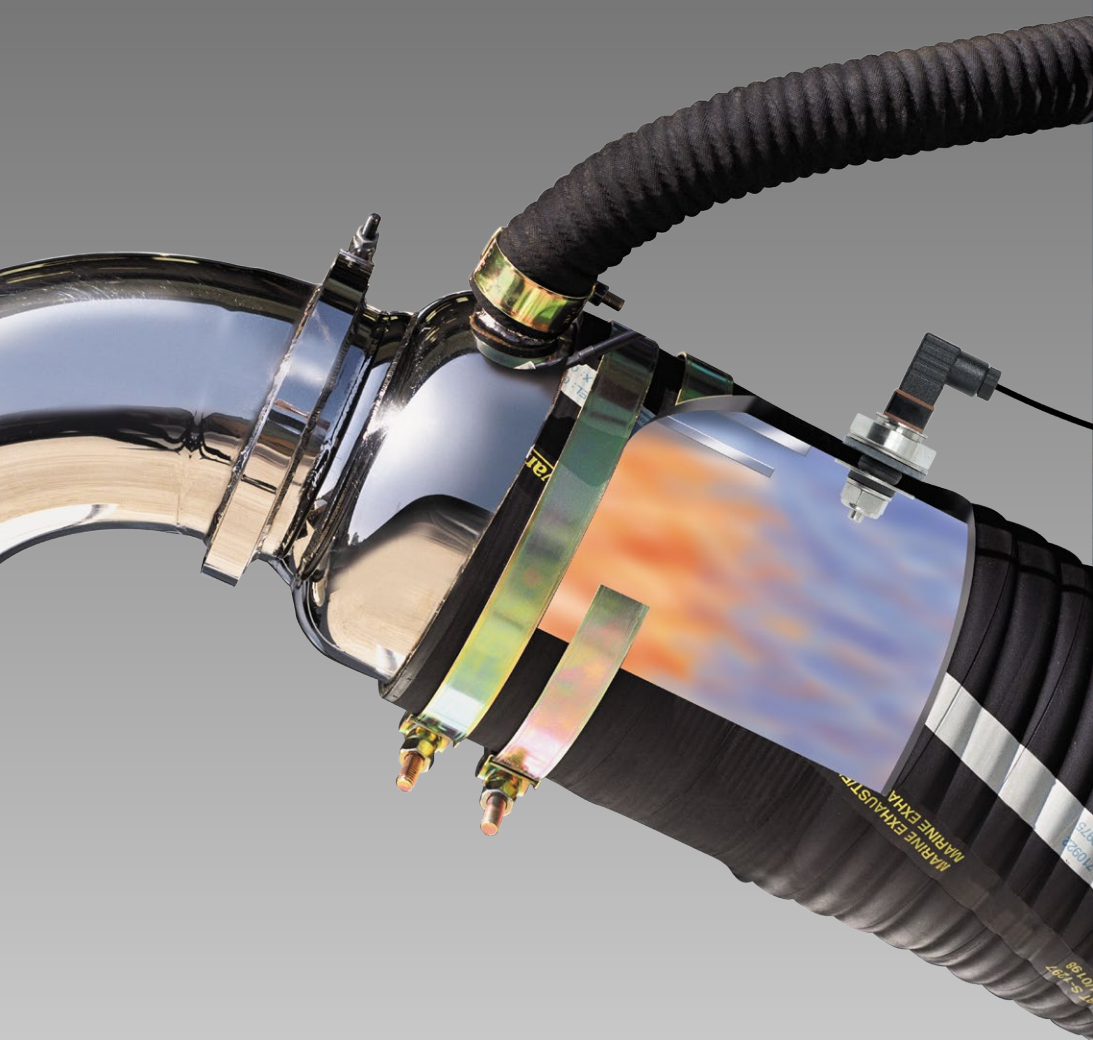
12mm and 32mm (1/2" and 1 1/4") materials are packed four sheets to a box. Each sheet is 1000mm x 600mm (39" x 24") making the total area 2.4 sq. meters (26 sq. ft.). Box weight is approximately 14kgs for 12mm and 19kgs for 32mm.

Packing (45mm materials):

45mm (1 3/4") materials are packed two sheets to each box. Each sheet is 1000mm x 600mm (39" x 24") making the total area 1.2 sq. meters (13 sq. ft.). Box weight is approximately 16kgs.

Halyard noise insulation tapes & accessories

Part No.	Reference	Tapes
Halyard Noise Insulation Joining Tape		
H000557	S4021	5m x 50mm Sealglass Tape
H000548	S4025	5m x 50mm Maritex Tape
H000550	S4026	20m x 50mm Maritex Tape
H000552	S4036	50m x 50mm Aluminium Foil Tape
Halyard Noise Insulation Accessories		
H000554	S4000	10m x 25mm Hatch Noise Tape
H000545	S4010	3m x 19mm Hatch Noise Tape
H000553	S4041	1200mm x 1000mm x 2.4mm Barrier Layer



Exhaust Alert System

Dedicated alarm system detecting trouble before serious damage occurs

Engine and generator exhaust overheat monitoring alarm system:

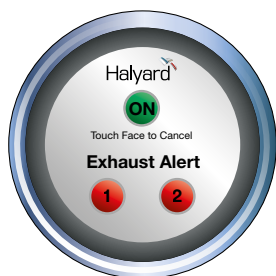
- Redesigned control unit in a stylish new housing
- Single and twin engine monitoring
- OEM or retrofit



Exhaust Alert System

Water-cooled Exhaust Overheat Alarm System

NEW Exhaust Alert



NEW for 2017

Halyard's redesigned Exhaust Alert provides the same class leading exhaust overheat monitoring alarm system housed in a stylish new standard 52mm diameter, IP67 gauge. Available with a choice of chrome or black bezel and black or white gauge face to compliment your existing dashboard.

Contact Halyard for further information.

Exhaust Alert - Original system

Part No.	Reference	Exhaust Alert System
Sets		
H000419	AS150	Single engine system including control box, helm display with 10 metre cable, and through hose temperature sensor with 3 metre cable
H000424	AS180	Single engine system for OEM use (supplied to wire into custom engine dash panel)
H000430	AS250	Twin engine system including control box, helm display with 10 metre cable, and two through hose temperature sensors each with 3 metre cable
H000433	AS280	Twin engine system for OEM use (supplied to wire into custom engine dash panel)
H000437	AS350	Triple engine system including control box, helm display with 10 metre cable, and three through hose temperature sensors each with 3 metre cable
H000439	AS380	Triple engine system for OEM use (supplied to wire into custom engine dash panel)
Options		
H000447	AS777	Optional siren to supplement buzzer on helm display
Spares		
H000441	AS700	Control box
H000442	AS705	Control box OEM
H000443	AS710	Single engine helm display with 10m of cable
H000444	AS720	Twin engine helm display with 10m of cable
H000445	AS730	Triple engine helm display with 10m of cable
H000446	AS900	Through hose sensor, 120 deg C, with 3m of cable
H000447	AS905	Through hose sensor, 120 deg C, with bush fitting - allows replacement of a burnt out sensor without removing the exhaust hose



Helm Display



Control Box



Sensor



Siren





Wave Filtration Systems

*A range of technically advanced
onboard filtration systems*



- **Wavestream** bilge filter systems
- **Wavebrite** grey water filter system
- **Flostream** drinking water filter system
- **Prostream** watermaker filter protection system
- **Waveair** holding tank vent filter system



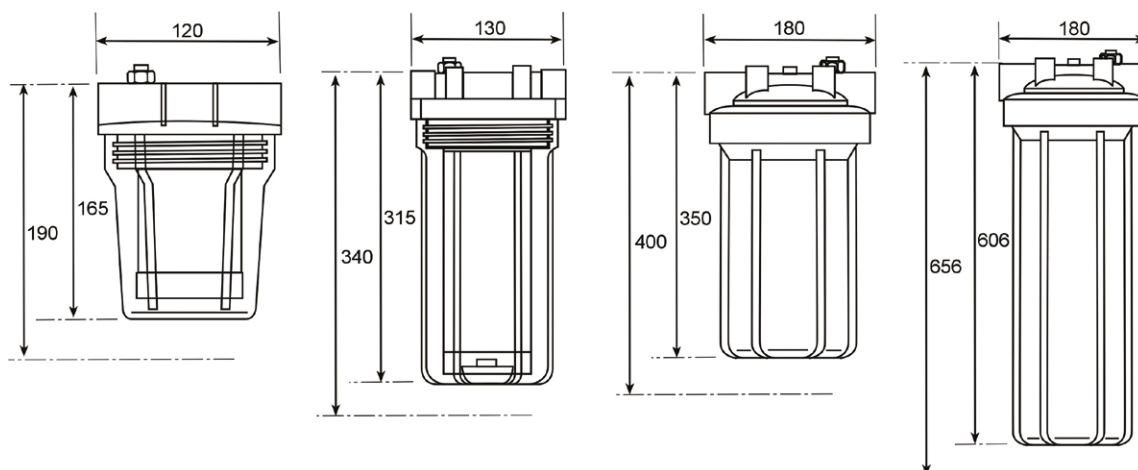
Wave Filtration Systems

Bilge Filtration System

Wavestream bilge filters

Wavestream bilge filters are Boat Safety Scheme compliant and allow the pump-out of machinery space bilges. Wavestream provides an efficient way of managing bilge water removal without the need for holding tanks whilst still protecting the environment.

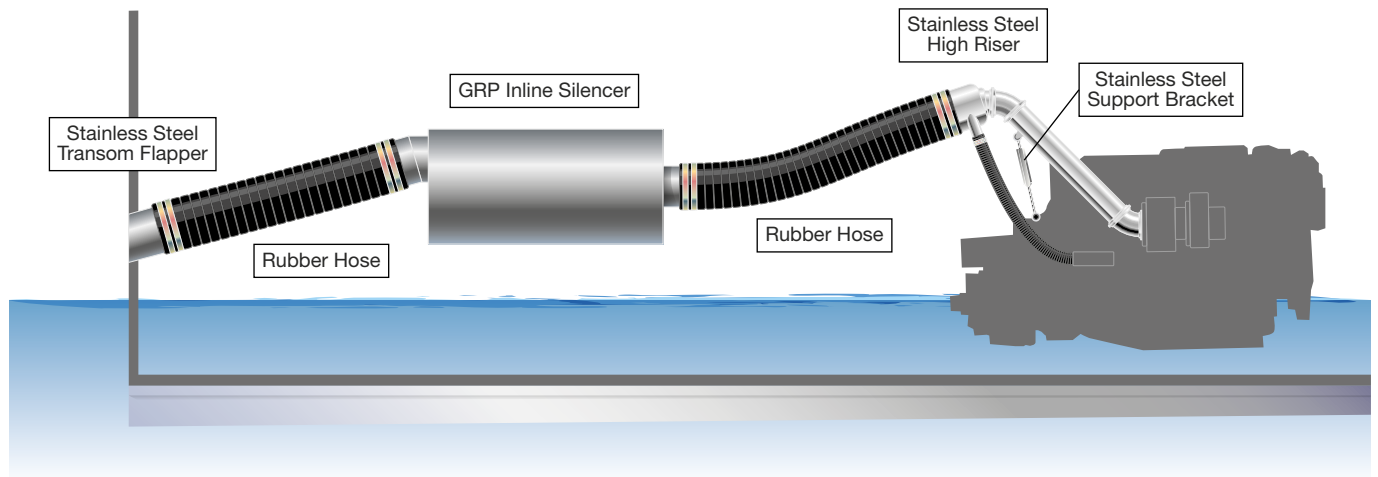
Part No.	Reference	Wavestream Filtration
Wavestream Micro System		
Designed for the bilges of day boats, RIBs and small sports boats or where minimal space is available, the micro unit is easy to connect into the bilge system, using 3/4" BSP connections. The unit takes a space only 190mm high by 120mm diameter. Filter cartridges can be replaced in seconds.		
H000610	WS500	Wavestream Micro system complete with mounting bracket
H000612	WS501	Wavestream Micro system complete with spare filter cartridge
H000611	WS500c	Spare cartridge for Wavestream Micro system
Wavestream 1000 System		
The 1000 system has a larger filter element to cope with the demands of larger pleasure boats up to 20m. 3/4" BSP connections are used and the flow rate, at 40 litres, is the same as the micro system but filter cartridge replacement intervals double.		
H000596	WS1000	Wavestream 1000 system complete with mounting bracket
H000598	WS1001	Wavestream 1000 system complete with spare filter cartridge
H000597	WS1000c	Spare cartridge for Wavestream 1000 system
Wavestream 2000 System		
Recommended for larger pleasure craft and commercial boats, the 2000 system will handle bilge pump flow rates up to 265 litres per minute with a 117mm diameter filter cartridge and 1 1/2" BSP connections		
H000601	WS2000	Wavestream 2000 system complete with mounting bracket
H000604	WS2001	Wavestream 2000 system complete with spare filter cartridge
H000602	WS2000c	Spare cartridge for Wavestream 2000 system
Wavestream 3000 System		
The 3000 is designed for large commercial craft and ships. It incorporates a massive filter cartridge almost 500mm long, with significantly increased capacity. The flow rate and BSP connections are common with the 2000 series.		
H007262	WS3000	Wavestream 3000 system complete with mounting bracket
H000609	WS3001	Wavestream 3000 system complete with spare filter cartridge
H000608	WS3000c	Spare cartridge for Wavestream 3000 system
BSP screw-in hose barsbs for Wavestream Filtration System		
H000613	WS5160	Pair for WS500/1000 3/4" BSP to 5/8" hose (16mm)
H000614	WS5190	Pair for WS500/1000 3/4" BSP to 3/4" hose (19mm)
H000615	WS5254	Pair for WS500/1000 3/4" BSP to 1" hose (25mm)
H000606	WS2317	Pair for WS2000/3000 1.5" BSP to 1.25" hose
H000607	WS2381	Pair for WS2000/3000 1.5" BSP to 1.5" hose
H007260	WS2508	Pair for WS2000/3000 1.5" BSP to 2" hose
Wavestream bilge filters are Boat Safety Scheme compliant and allow the pumping of engine space bilges, using a Wavestream is a much easier less costly method compared with holding tanks and they are all Lloyd's Type Approved for use at 40 l/min		



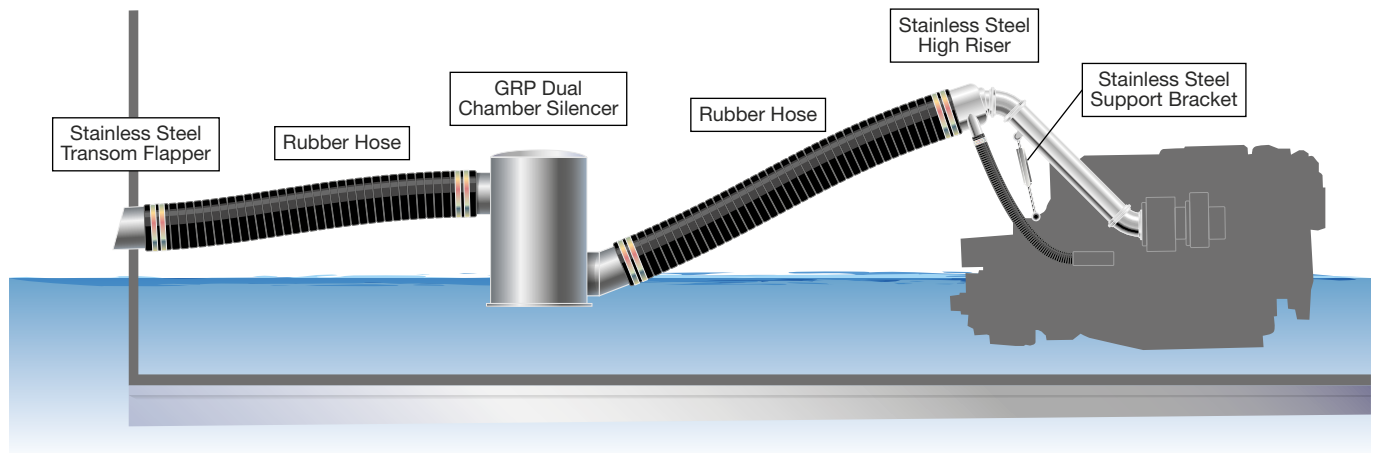
System Drawings

Typical Exhaust System Layout Diagrams

Standard inline silencer with discharge above waterline



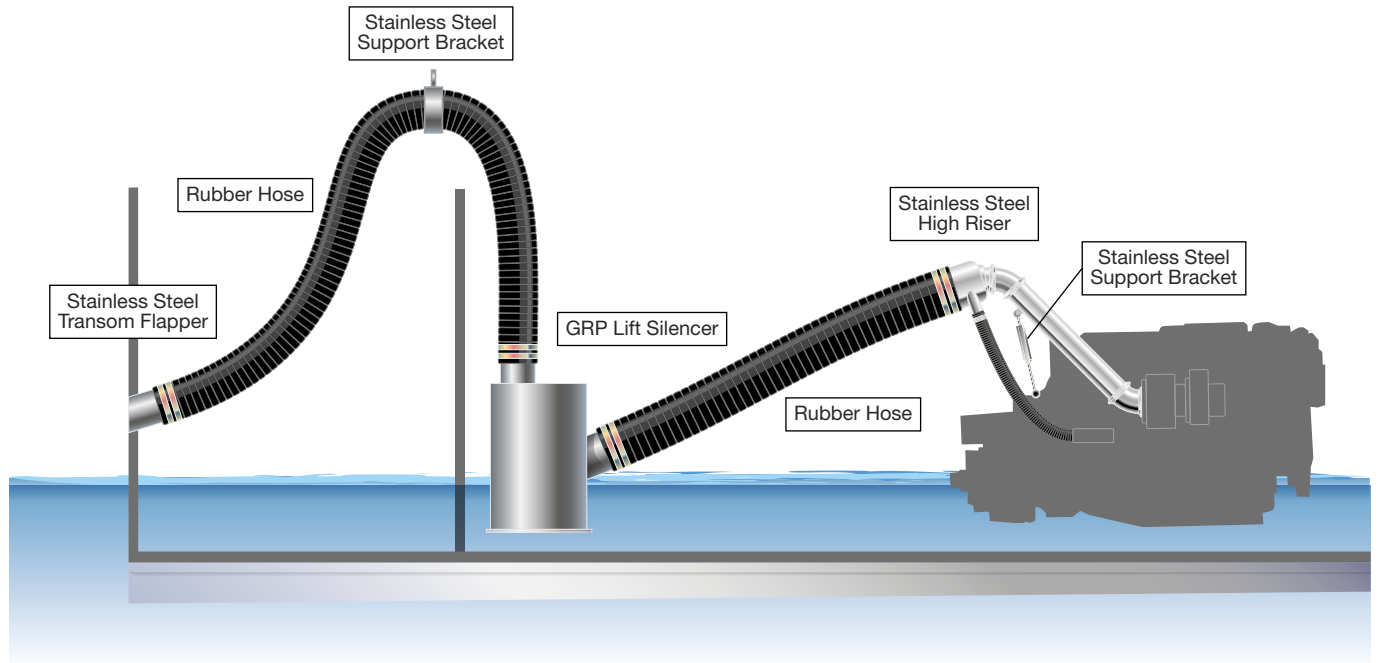
Dual chamber silencer with above water discharge



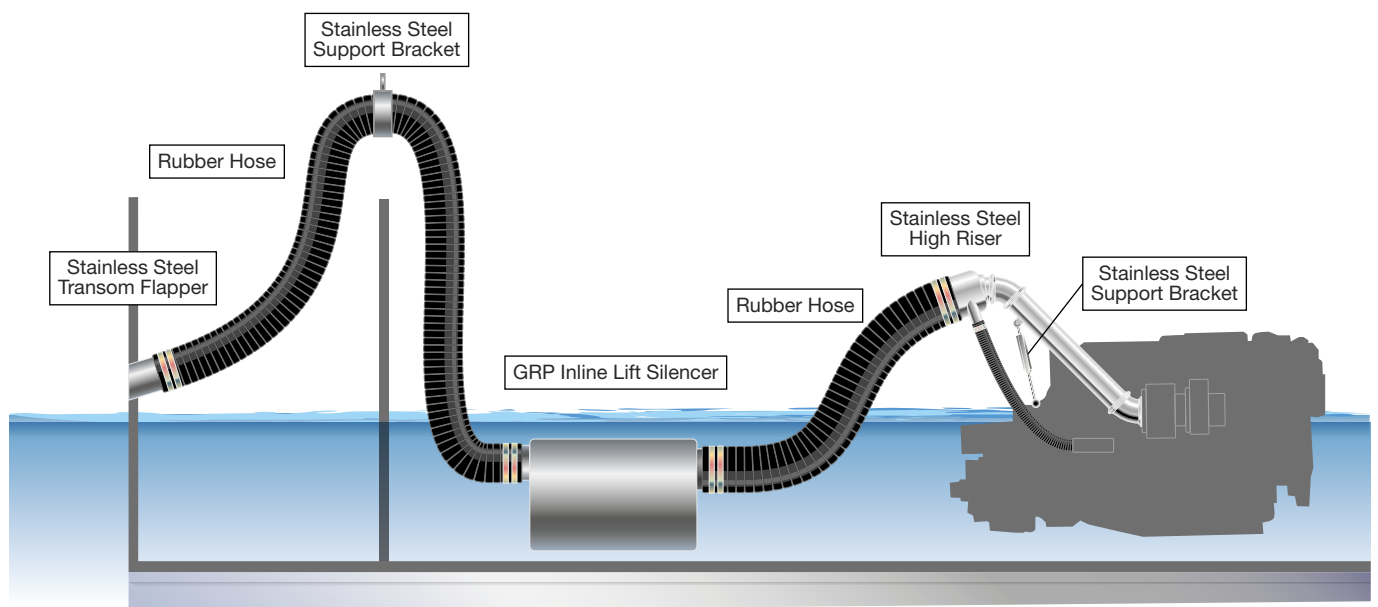
System Drawings

Typical Exhaust System Layout Diagrams

Single chamber lift silencer with discharge above waterline



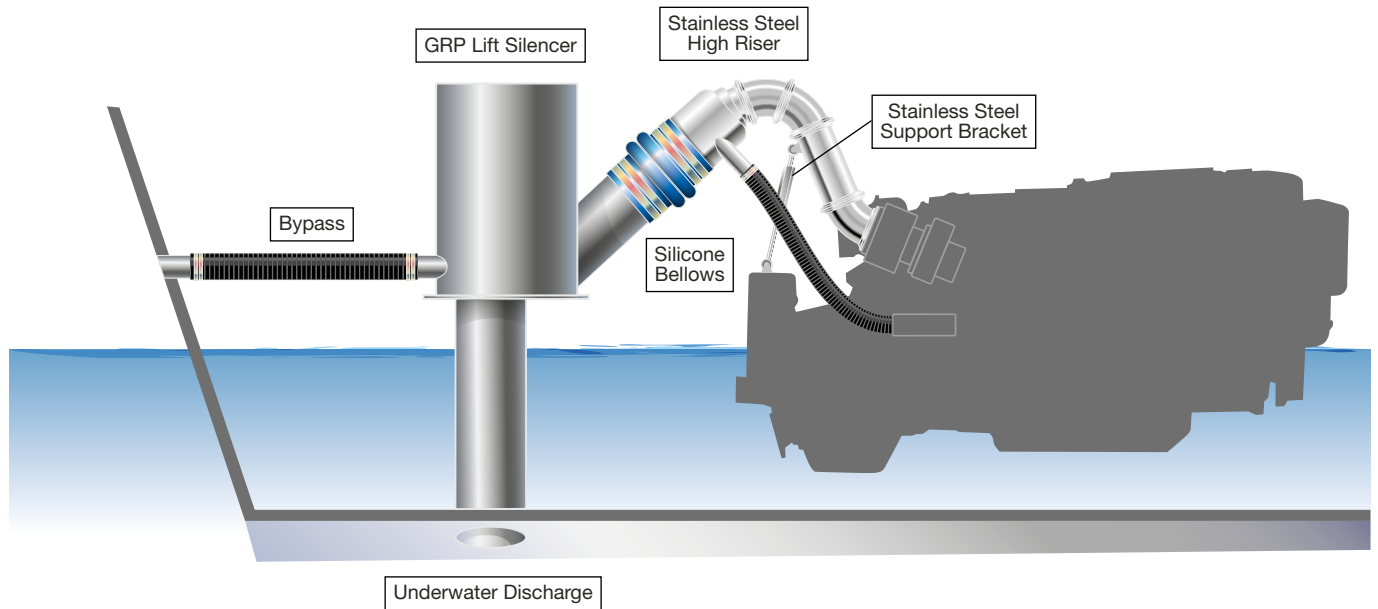
Standard inline lift silencer with discharge above waterline



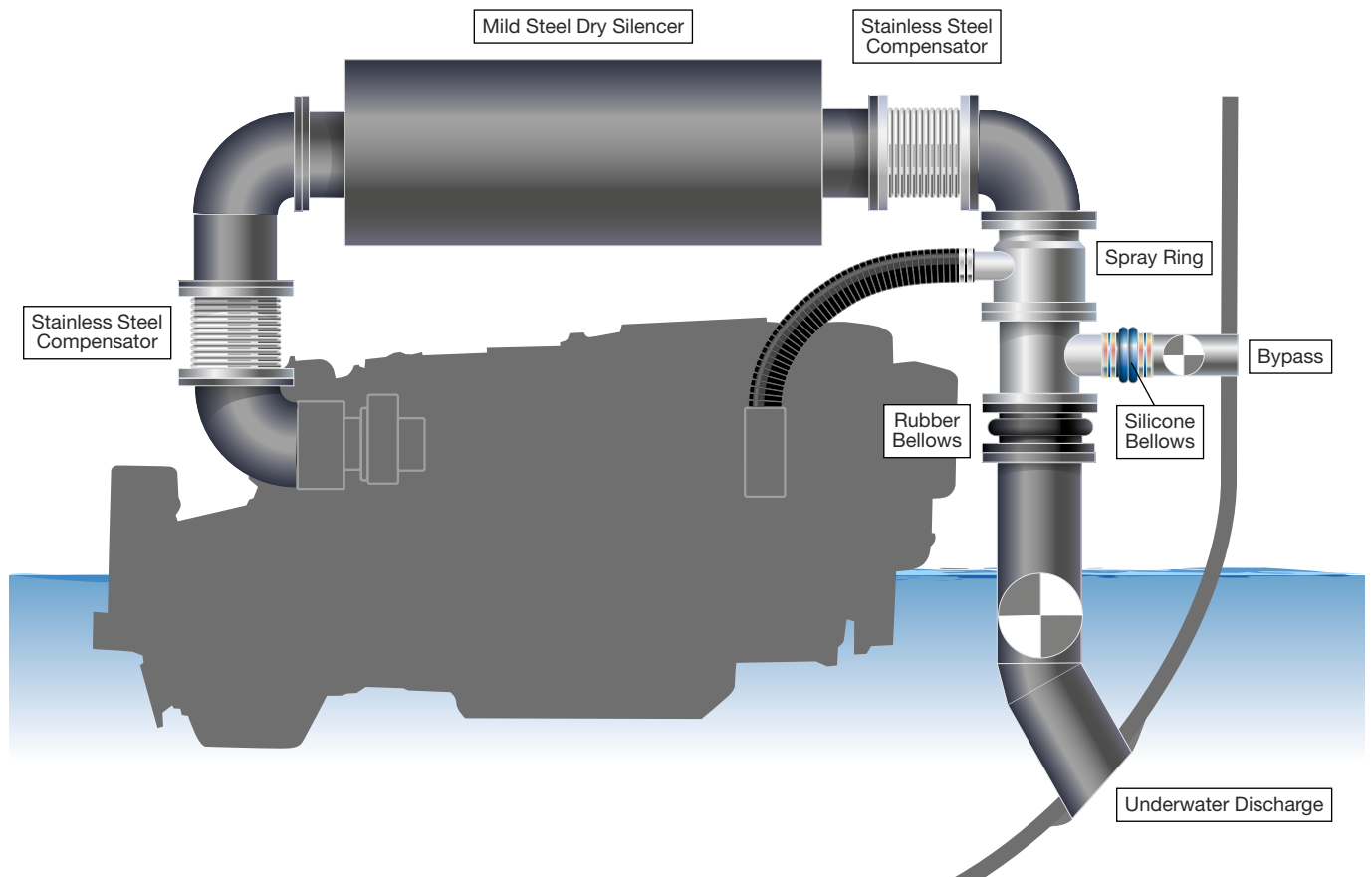
System Drawings

Typical Exhaust System Layout Diagrams

Single chamber lift silencer with bypass and underwater discharge



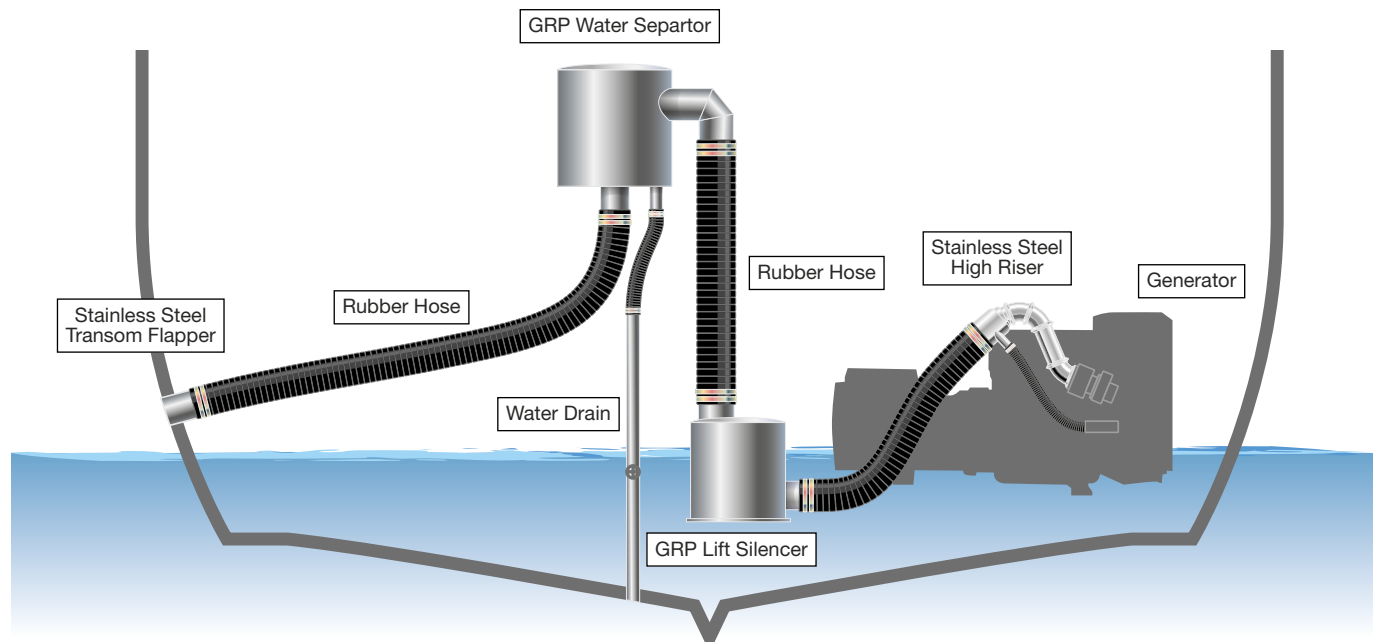
Dry silencer to spray ring with bypass and underwater discharge



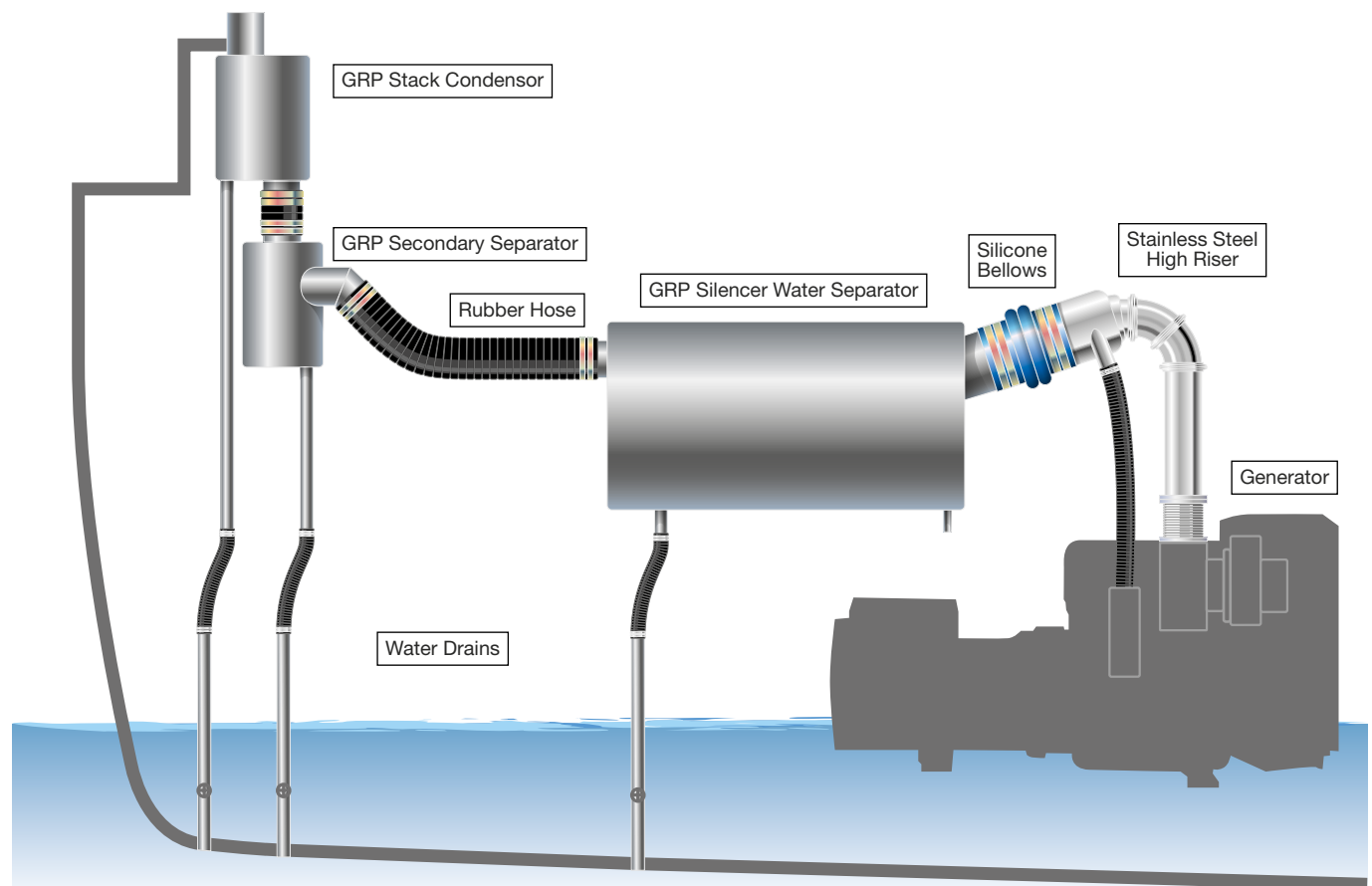
System Drawings

Typical Exhaust System Layout Diagrams

Single chamber lift silencer and separator with discharge above waterline



Combined silencer and separator with gas discharge up the stack



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