

We're lowering the cost of high pressure for your business



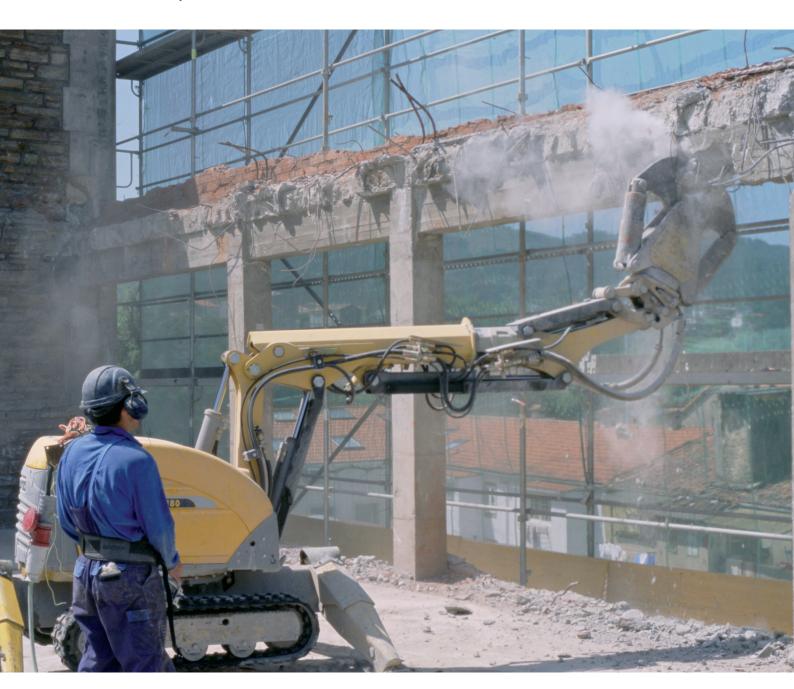






MINIMUM SIZE - MAXIMUM POWER

Why invest in expensive high pressure pumps when you can get high pressure performance from an existing low pressure power source using a compact miniBOOSTER® Hydraulic Intensifier?



FROM LOW TO HIGH

The world leader in hydraulic pressure boosters that maximize power

As the leading producer of oscillating boosters, miniBOOSTER® is recognized as the innovator of solutions that fit virtually any application requiring pressure intensification.

Since our foundation in 1994, we have been improving the way customers get the high pressure they need, whenever needed, using the inexpensive sources of low pressure they already have.

Get the high pressure you need – for a fraction of the cost

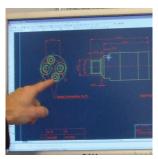
We are dedicated to making the most compact, powerful and reliable miniBooster® oscillating boosters available.

As a result of our innovative technology, our customers can get up to 5000 bar from their existing low pressure power source – without the need for expensive high pressure pumps.

Simpler, safer and more cost effective

If you are currently using a high pressure, air pressure or oil pressure source, why not consider a simpler, safer and more cost effective high pressure solution from the miniBOOSTER® productline — customized to match your application requirements?













A full range of dedicated solutions for a world of applications



We offer a family of products to suit a wide range of applications. Because our sole focus is compact oscillating hydraulic boosters, we know what our customers need.

Innovative Technology – Maximum Modularity. miniBOOSTER®'s proprietary technology enables us to deliver high performance intensification that is reliable, simple and powerful.

The customer defines what is important. We custom build and configure our products to meet the unique requirements for each and every application, making it easy and fast for customers to get exactly what they want, thanks to the modular design of our components and parts.

Focused Know-how - Global Marketplace.

To find out if we can deliver a miniBOOSTER® solution based on your application needs, why not give us a call? Years of experience have given us the insight to find a solution that works best for you.

No matter what part of the market or part of the world you are in, our aim is to boost your performance in the most simple, reliable and powerful way possible.



Work Holding



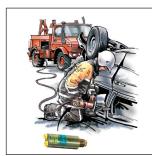
Power Packs



Railroad

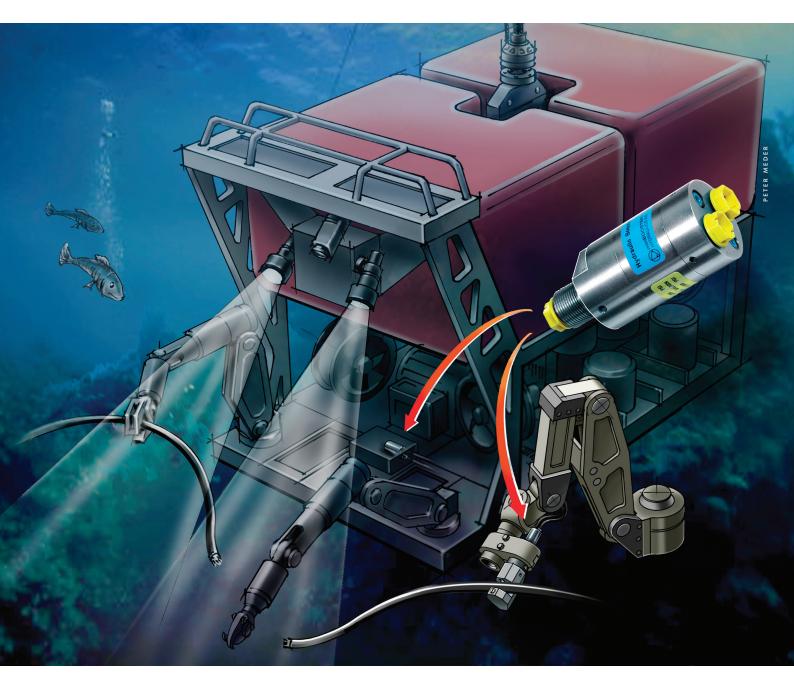


Mobile Applications



Rescue Tools

ANYVVHERE ANYTIME





Offshore

miniBOOSTER® Hydraulic Intensifier is simply the most compact, lightweight solution available for virtually any application. Take advantage of our light, compact, energy saving design to give you lower operating costs. Ask for a risk-free, no obligation proposal to match your application needs today!

Maximize your performance and minimize your costs



Boosters for:

- Oil
- Water
- Dual media

The compact design of our products requires a minimum of space and is easy to integrate into existing or new systems. By taking advantage of lower system pressure, you eliminate the need for expensive hoses, pressure valves and piping. And you reduce the overall cost and the space needed for the hydraulic system.

There are 12 different intensification ratios available to suit your pressure requirements. Every miniBOOSTER® component and sub-system is fully tested before delivery.

With a ready-to-fit miniBOOSTER® you can use any existing low pressure source and get these added benefits at the same time:

- · Space-saving footprint
- · Higher flow rate. Faster performance
- · Energy-saving design

Components or sub-systems in your design

You can order miniBOOSTER® products pre-configured to match your specifications.

Standard components

We offer an extensive range of standard hydraulic pressure boosters for a wide variety of applications.

Standard sub-systems

You can also choose a standard hydraulic intensifier flanged to a standard block with built-in valves which reduces the need for additional piping.

Customized sub-systems

We design and manufacture a manifold block to match your specifications and mount on a standard hydraulic intensifier. Simply let us know what your high pressure requirements are, and we can deliver the pressure booster and valve housings with cartridge valves and filters so it is ready to be fitted.



Our wide product range covers your needs

Find solutions for pressure up to 5,000 bar and flow up to 70 l/min. for almost any fluid media. Simply specify your needs for outlet pressure and flow, and you will easily find the optimal hydraulic intensifier in the scheme below.

Outlet pressure bar	Average outlet flow (I/min)	Inlet pressure (bar)	Inlet flow (I/min)	Connection	Weight (kg)	Ratio	Model: Steel	Model: Stainless steel	Comments	Models
24 - 800	0.3 - 0.5	20 - 200	2.0 - 8.0	Tube	0.7	1.2 - 7.5	HC1			
24 - 800	0.3 - 2.5	20 - 200	2.0 - 15.0	Tube	1.0	1.2 - 20.0	HC2	HC2W		
24 - 500	0.3 - 2.5	20 - 200	2.0 - 15.0	Manifold NG6/DO3	2.5	1.2 - 20.0	HC3			
24 - 800	0.3 - 2.5	20 - 200	2.0 - 15.0	Tube	3.0	1.2 - 20.0	HC5		Double acting	
26 - 800	0.7 - 5.5	20 - 200	2.0 - 35.0	Tube	3.7	1.3 - 9.8	HC4	HC4W		
24 - 800	0.7 - 11.0	20 - 200	2.0 - 15.0	Tube	3.8	1.2 - 20.0	HC2D		Dual acting	60
26 - 800	1.5 - 11.0	20 - 200	5.0 - 70.0	Tube	9.5	1.3 - 8.2	HC6			0
24 - 800	11.2 - 56.0	20 - 200	5.0 - 70.0	Tube	20.0	1.2 - 8.2	HC6D		Dual acting	(%)
100 - 2000	0.3 - 1.6	20 - 200	2.0 - 14.0	Tube	1.5	5.0 - 20.0	HC7	HC7W		
100 - 2000	0.3 - 1.6	20 - 200	2.0 - 14.0	Tube	5.0	5.0 - 20.0	HC8	HC8W		
220 - 5000	0.3 - 1.8	20 - 200	5.0 - 20.0	Tube	9.9	8.2 - 25.0	HC9			
20 - 800	6.0 - 41.0	20 - 200	5.0 - 70.0	Tube	22.0	1.0 - 10.1	HC6D2	HC6D2W	2 media	

One company providing you with a world of opportunities



From left:
Henning Davidsen,
Mads Peter Clausen,
Peter M. Clausen
(Chairman of the Board)
Christen M. Espersen
(President),
Jørgen Clausen,

miniBOOSTER® is an innovation company owned by a group of investors that includes Peter M. Clausen and Jørgen M. Clausen from Danfoss A/S along with Christen Espersen and Henning Davidsen.

We're the leader in oscillating booster innovation, offering the widest range of products for an everexpanding world of applications.

In fact, oscillating booster technology is our sole focus. Which is one of the reasons why we changed our name from Iversen to miniBOOSTER®. We're dedicated to developing technology that lets customers get the high pressure they need using the low pressure sources they have – whenever, wherever they need it.

Today, we are the world's largest oscillating booster producer, with solutions for pressures up to 5,000 bar, flows up to 70 l/min and almost every fluid media. Customized solutions are also available.



We distribute our products worldwide and promise prompt delivery backed by a rock-solid guarantee of satisfaction.

Selected customer references:



Mercedes-Benz



















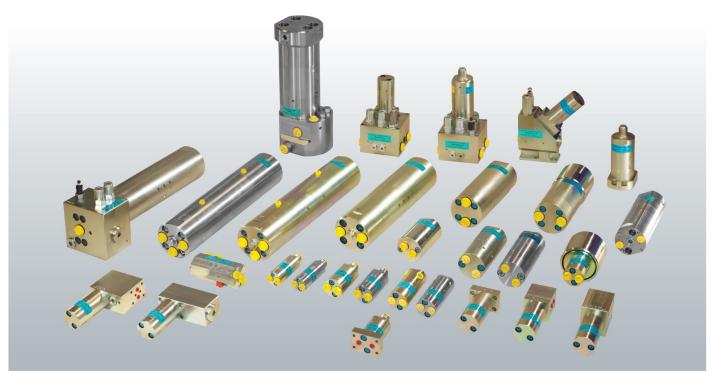


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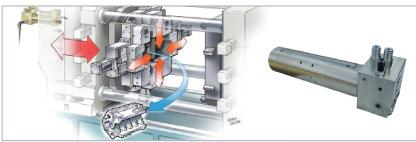




The only full range of hydraulic intensifying solutions











MINIMUM SIZE – MAXIMUM POWER



Our wide product range covers your needs
For almost any fluid media, simply specify your needs for outlet pressure up to 5,000 bar and inlet flow up to 70 l/min, You will easily find the optimal hydraulic intensifier in the table below.

Outlet Pressure bar	Average outlet flow (I/min)	Inlet pressure (bar)	Inlet flow (I/min)	Connection	Weight (kg)	Ratio	Model: Steel	Model: Stainless steel	Comments	Models
24 - 800	0.3 - 0.5	20 - 207	2.0 - 8.0	TubeFlangeCartridge	0.7	1.2 - 7.5	HC1	HC1W		W STATE OF THE STA
24 - 800	0.3 - 2.5	20 - 207	2.0 - 15.0	TubeFlangeCartridge	1.0	1.2 - 20.0	HC2	HC2W		
24 - 800	0.7 - 11.0	20 - 207	2.0 - 15.0	• Tube • Flange	3.8	1.2 - 20.0	HC2D	HC2DW		
80 - 1,380	1.5 - 5.0	20 - 207	2.0 - 14.0	• Tube • Flange	8.0	4.0 - 13.0		HC2DHW		
20 - 800	2.0 - 3.0	20 - 207	2.0 - 15.0	• Tube • Flange	4.15	1.2 - 12.0	HC2D2	HC2D2W	2-media	
80 - 1,380	0.6 - 1.6	20 - 207	2.0 - 8.0	• Tube • Flange	8.0	4.0 - 12.0		HC2D2HW	2-media	
24 - 500	0.3 - 2.5	20 - 207	2.0 - 15.0	FlangeCartridge	2.5	1.2 - 20.0	НС3	HC3W		
26 - 800	1.5 - 7.0	20 - 207	2.0 - 35.0	• Tube • Flange	3.7	1.3 - 9.8	HC4	HC4W		S
100 - 3,000	1.2 - 3.5	20 - 207	2.0 - 38.0	• Tube • Flange	4.0	5.1 - 17.3	НС4Н			
24 - 800	0.3 - 2.5	20 - 207	2.0 - 15.0	• Tube • Flange	3.0	1.2 - 20.0	HC5		Double- acting	
26 - 800	2.5 - 15.0	20 - 207	5.0 - 70.0	• Tube • Flange	9.5	1.3 - 8.2	нс6			
124 - 5,000	1.0 - 7.0	20 - 207	5.0 - 50.0	• Tube • Flange	11.0	6.2 - 25.0	нс6н			The same of the sa
24 - 800	11.2 - 56.0	20 - 207	5.0 - 70.0	• Tube • Flange	20.0	1.2 - 8.2	HC6D	HC6DW		
80 - 1,380	3.0 - 12.5	20 - 207	5.0 - 50.0	• Tube • Flange	35.0	4.0 - 16.0		HC6DHW		
20 - 800	6.0 - 41.0	20 - 207	5.0 - 70.0	• Tube • Flange	24.0	1.0 - 10.1	HC6D2	HC6D2W	2-media	
100 - 2,000	0.3 - 1.6	20 - 207	2.0 - 14.0	TubeFlangeCartridge	1.5	5.0 - 20.0	НС7	HC7W		
100 - 2,000	0.3 - 1.6	20 - 207	2.0 - 14.0	TubeFlangeCartridge	4.5	5.0 - 20.0	НС8			
220 - 5,000	0.3 - 1.8	20 - 207	5.0 - 20.0	• Tube • Flange	9.9	8.2 - 25.0	НС9			
20 - 1,380	2.0 - 5.6	20 - 207	5.0 - 30.0	• Tube • Flange	25.0	5.2 - 15.0	HC9D2	HC9D2W	2-media	



Intensifier systems

miniBOOSTER carries a wide range of intensifier systems that provides "plug-and-play" solutions for your applications. The systems protect the high-pressure tools and provide a high bypass flow, which speeds up your process.









Intensifiers with integrated control valves

The HC22, 25, 72 and 75 provides a compact integration of a control valve and a intensifier that easily can be mounted in your equipment securing speed and protection of both intensifier and tooling.

Key benefit features are:

- 11 different intensification outlets
- An optional orifice to reduce inlet flow
- Weight is only 2.3 kg
- Available in stainless steel
- HC22 with adjustable outlet pressure max 800 bar
- HC25 for fast forward movement max 800 bar
- HC72 with adjustable outlet pressure max 2,000 bar
- HC75 for fast forward movement max 2,000 bar

Intensifier systems with high bypass flow

The M-HC intensifier systems provide high bypass flow and pressure on demand, designed to boost the system pressure when needed and only when high pressure is required.

Key benefit features are:

- Pressure on demand
- Solenoid-activated or automatically activated
- High pressure up to 700 bar (10,000 psi)
- Fast fill system flows up to 400 L/min
- Inlet pressure up to 350 bar
- Extended service life
- Robust and flexible design, several intensifications ratios
- Tube or flange connection

Portable intensifier systems

The M-HC7 portable intensifier system is a rugged unit designed for demanding industrial applications. The M-HC7 can be used with any power source providing a minimum of 20 bar and 2 L/min.

Key benefit features are:

- Output flow up to 15 L/min
- 30 L/min with Twin Intensifier
- High pressure up to 2,000 bar
- · No additional utilities are required
- Weight is only 10 kg easily carried where it is needed
- Easy-to-read 4" diameter gauge keeps pressure setting within 1% of target.



Other products

miniBOOSTER products carry a wide range of filters, valve housings, cartridge valves and accessories.

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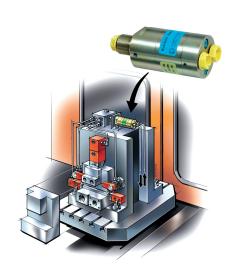
<u>Filters</u> Steel	Stainless steel	Models
In-Line Filter		
High Pressure T-filter	FILW HT-10-1	
T-filter		
Filter Housing		
NG6 Filter		

Accessories

Mixed Material	Models
Adapter Kits	
Adapters	
Pilot Operated Check Valves	

Valve Housing

Steel	Stainless steel	Models
CV1	CV1W	
CV2	CV2W	
CV3	CV3W	
CV4	CV4W	
CV5	CV5W	







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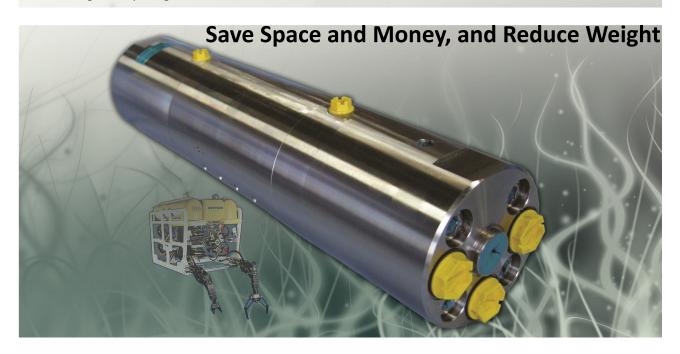
Dual Media Intensifier

Ideal solution for ROV tooling

The miniBOOSTER HC6D2W is designed and manufactured for operation wherever it is needed. Constructed of premium quality stainless steel and available in a range of intensification ratios.

Examples of usage:

- ► High-pressure cleaning
- Seal testing
- Methanol injection
- Chemical injection
- High-pressure unit to 800 bar. Higher pressures upon request
- Capable of pumping sea water & methanol
- Simple design and field replaceable seals extend serviceability
- Eliminates need for IPU in many applications (Intermediate Power Unit)
- Capable of 5.8 l/min at 700 bar (1.5 GPM at 10.000 psi)
- Measures only 100 mm x 445 mm
- Low weight only 24 kg



MINIMUM SIZE – MAXIMUM POWER



Description

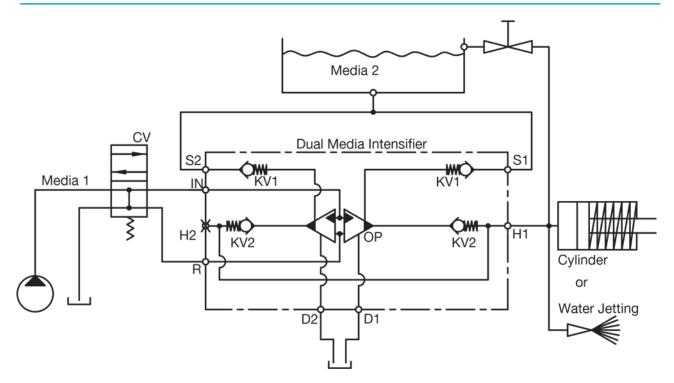
The HC6D2W is a dual media unit which is capable handling of up to 28 I/min flow on the high-pressure end. Like other miniBOOSTER models, the HC6D2W raises supplied pressure to a higher outlet pressure and automatically compensates for consumption of oil to maintain the high pressure.

Adjustment of the outlet pressure is carried out by varying the supplied pressure. Relative to its flow capability, the HC6D2W is a compact unit weighing only 24 kg.



ROV mounted with a HC6D2W (Dual Media Intensifier)

Drawing



6D2-105 Issue 1



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