

# **HYFRA Gamma**

Powerful, easily integrated immersion chillers for water, oil and emulsions



# Easily integrated. Customized. Powerful.

The HYFRA Gamma series is easy to integrate into machines and production layouts. With cooling capacities of 5 to 160 kW (1 to 45 Tons), the HYFRA Gamma models are perfect for a range of filtration and mechanical engineering applications.

# **HYFRA Gamma immersion chillers**

The HYFRA Gamma series consists of fully integrable immersion chillers for water, oil and emulsions. As plug & play solutions, they cover a wide power range of 5 to 160 kW (1 to 45 Tons).

Power levels of up to 28 kW (8 Tons) are possible on bases of only 0.5 m² (5.4 sq.ft) – thanks to the compact design. This results in significant flexibility advantages when planning production area layouts and boosts productivity since facilities can accommodate more machines. Thanks to their horizontally installed compressors, the compact HYFRA Gamma models also significantly reduce heat build-up. The internal components are unaffected by waste heat.

All the models in the series contain a robust agitator, ensuring a uniform medium temperature in the lubricant tank. The HYFRA Gamma series is equipped with fixed

crane lugs so the devices can easily be lifted out of the tank for cleaning at regular intervals.

FleXX technology for demand-based operation and 70 % refrigerant savings with microchannel

Thanks to sector-leading HYFRA microchannel technology, these devices use up to 70 % less refrigerant in comparison to conventional chillers. HYFRA Gamma models are also available with the innovative HYFRA FleXX technology that ensures energy-efficient, extremely precise operation with demand-based controls.



Key data: Immersion chillers HYFRA Gamma

**Output** Power range:

5 - 160 kW (1 - 45 Tons)

Medium:

Water, oil and emulsion

**Solution** Footprint:

5 – 28 kW on footprint of 0.5 m<sup>2</sup>; (1 - 8 Tons on 5.4 sq.ft) Up to 80 kW power in only 1 m (23 Tons on 10.8 sq.ft)

Optimized:

Equipped with HYFRA FleXX technology and various control options

Application:

Filtration and mechanical engineering

# Improved flexibility through intelligent controls

# **HYFRA FleXX technology**

With its FleXX technology, HYFRA is reacting to the various market requirements of machine manufacturers and operators.

Thanks to its high level of flexibility and adaptability, the technology ensures a decisive competitive advantage. Due to the demand-based operation of various components, chillers with FleXX technology are not only highly energy-efficient, economical, and quiet; they also operate with very little wear, greatly reducing life cycle costs.

# **Optional controllers**

The chillers in the HYFRA Gamma series are equipped with FreeSmart controllers – and with a cooling capacity of 160 kW (45 Tons), they come with FreeEvolution controllers. The two variants are freely programmable and have both analog and digital inputs and outputs, an external display (FreeEvolution) and an FDO (fast digital output) interface for quickly reading out operating data.

FreeEvolution is available in three design variants: basic, professional and expert. For example, they offer menu navigation in multiple languages or remote maintenance linkup. Of course we can flexibly integrate special customer requirements into each of the variants.

# **HYFRA** chillers in comparison

			HYFRA Alpha	HYFRA Gamma	HYFRA Sigma	HYFRA eChilly		
			Circulating chillers	Immersion chillers	Recooling systems	Recooling systems		
K	Reduced fo	otprint	✓	✓	✓			
2	Compact version		<b>✓</b>		<b>✓</b>			
7	FleXX technology		<b>✓</b>	<b>✓</b>	<b>✓</b>			
		Water	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>		
	Medium	Oil	✓	✓				
		Emulsion	✓	✓				
***	Cooling capacity		5 – 80 kW / 1 - 23 Tons	5 – 160 kW / 1 - 45 Tons	5 – 320 kW / 1 - 91 Tons	1 – 6 kW / 0.3 - 2 Tons		

# **Technical data: HYFRA Gamma**

HYFRA Gamma			5	13	22	34	52	80			
Performance data											
Archient 9C / 9E	Refrigerant °C / °F										
Ambient °C / °F	Emulsion	Oil	Cooling capacity kW / Tons								
	10 / 50	15 / 59	3.6 / 1.0	10.1 / 2.9	17.6 / 5.0	26.4 / 7.5	39.6 / 11.3	64.3 / 18.3			
32 / 90	10 / 50	20 / 68	4.4 / 1.3	11.9 / 3.4	20.7 / 5.9	30.6 / 8.7	46.2 / 13.1	75.5 / 21.5			
	20 / 68	25 / 77	4.9 / 1.4	13.0 / 3.7	22.4 / 6.4	34.2 / 7.7	52.5 / 14.8	84.5 / 24.0			

Technical Data										
Refrigerant		R134a		R410A						
Max. power consumption (emulsion)	kW	3.0	5.8 8.	0.4	12.5	18.4	28.9			
Max. power consumption (oil)	kW			0.4			20.9			
Max. airflow rate	m³/h / cfm	4500 / 2649			5500 / 3237	10000 / 5886	15500 / 9123			

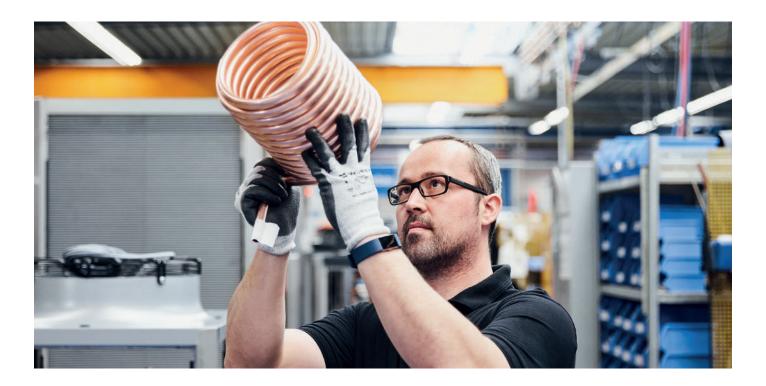
Dimensions and weight										
Length	mm / in	785 / 30.9			1000 / 39.4					
Width	mm / in	785 / 30.9			1000 / 39.4					
Height	mm / in	1320 / 52.0		1420 / 55.9		2940 / 115.7				
Empty weight	kg / lbs	170 / 375	190	/ 419	250 / 551	310 / 683	370 / 816	480 / 1058		

For detailed technical data, see: www.hyfra.com All values listed are rounded approximations.

# We are HYFRA



HYFRA is your partner for customized process cooling. Our program ranges from plug & play compact devices to customized systems with extensive service options.



The name HYFRA stands for long-term, sustainable partnership. We want to offer our customers the best solutions for process cooling. With each consultation, with each action, with each system we deliver and commission, and with our 24/7 service promise, we support our customers' efforts to be successful for the long term.

### Made in Germany since 1981

Our highly efficient cooling systems and air heat exchangers are key for reliably safeguarding processes. With over 35 years of experience, highly qualified employees and our own production facilities at our location in Krunkel, Rhineland-Palatinate, HYFRA systems provide premium quality "Made in Germany."

## Worldwide service availability

Whether its remote diagnostics via data transmission or on-site repairs, HYFRA Service is available worldwide and always finds the solution to malfunctions quickly. In addition, we provide customer support for regular maintenance and repair. Qualified service teams will install the entire HYFRA cooling system if necessary.

# **Customized service solutions for all** requirements



# **Turnkey Solutions**

Depend on reliability and leave the project management to our experienced experts – from system planning to acceptance. We will take on the responsibility for material procurement for system construction and carry out all of the installation work with our technicians. With our help, you will have an operational cooling system from a single source.



# Repair & Maintenance

HYFRA Service is available worldwide so we can guarantee 100% system availability as soon as possible if a malfunction occurs. In case of failure, our own service team and our local partner's experienced cooling system technician will find a quick solution. We will provide you with transparent information on the costs and duration of service measures at any time.



# **Training**

Optimal operation and maintenance enable a cooling system to develop its full potential and work perfectly at all times. We provide customized training for your operating personnel and maintenance technicians. We will thoroughly train them to use our systems properly so that your company reaps the long-term benefits of perfect production results.



# **Modification & Customization**

We can customize HYFRA standard models to satisfy your detailed requirements. A variety of equipment and control options are available. As required, we will also provide a modification kit if your conditions change.



### **Maintenance & Service**

In order to deliver top performance continuously, cooling systems must be serviced regularly. This also helps effectively avoid expensive repairs and unexpected production downtime. And maintenance measures can significantly extend your system's life cycle. At HYFRA, you can select one of several service packages with one-year terms. They include maintenance and services such as start up and training sessions as well.

# The HYFRA Service promise

# **Expert**

### Efficient

### Reliable



2017-09 Subject to technical changes.

HYFRA is one of the most experienced suppliers of customized process cooling solutions. We cover the entire range of industrial process cooling solutions from plug & play compact machines to individually developed systems with extensive services. Our highly efficient, reliable machines are the key to our customers' success.

As a LENNOX International company, we help mechanical engineers in more than 50 countries to continually set new standards of performance.

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