

# Circulating chillers

## HYFRA Alpha

### Reliable. Efficient. Stand-alone.

Our HYFRA Alpha series can be customized to satisfy specific customer requirements thanks to a variety of technological options. With cooling capacity of 5 to 80 kW, HYFRA Alpha models provide broad coverage for the machine tooling sector – particularly for filtration technology.



#### Key data HYFRA Alpha

- ✓ **Power range:**  
5 – 80 kW
- ✓ **Medium:**  
Water, oil and emulsion
- ✓ **Footprint:**  
5 – 28 kW on footprint of 0.5 m<sup>2</sup>  
Up to 80 kW power in only 1 m<sup>2</sup>
- ✓ **Optimized:**  
Equipped with HYFRA FleXX Technology and various control options
- ✓ **Application:**  
Mainly filtration

# Technical data HYFRA Alpha Oil

HYFRA Alpha model no. (kW)		5	7	9	13	16	18	22	28	34	42	52	56	67	80	
<b>Performance data</b>																
Ambient °C	Refrigerant °C	<b>Cooling capacity kW <sup>c)</sup></b>														
	Oil															
32	15	3.6	5.6	7.0	10.1	12.2	14.8	17.6	22.1	26.4	32.1	38.9	42.9	51.4	60.7	
	20	4.4	6.6	8.2	11.9	14.3	17.3	20.7	26.0	30.6	37.7	45.5	50.7	59.9	71.3	
37	15	3.2	5.5	6.4	9.5	11.3	13.8	17.4	20.9	24.6	30.3	35.2	40.5	47.9	57.1	
	20	4.0	6.5	7.6	11.1	13.4	16.4	20.7	24.6	28.9	35.6	42.1	47.8	56.5	67.2	
42	15	3.6	5.1	6.3	9.1	9.5	13.6	16.3	20.3	23.6	25.7	33.3	39.3	45.8	48.4	
	20	3.8	6.1	7.5	10.6	11.8	16.1	19.2	24.2	28.1	31.6	40.2	45.8	54.9	59.7	
<b>Technical data</b>																
Refrigerant		R134a					R410A									
Refrigerant charge	kg	1.5	1.1	1.2	1.4	2.1	2.2	2.3	2.7	3.0	4.5	5.5	6.0			
Sound pressure level <sup>a)</sup> user side	dB(A)	68					66			64	70		71		72	
Power consumption max. <sup>b)</sup>	kW	3.8	4.8	5.4	6.6	7.5	11.0	12.7	15.6	14.6	18.8	26.3	26.7	33.1	36.9	
Current consumption max. <sup>b)</sup>	A	7.6	9.4	9.7	12.1	14.4	21.6	26.3	28.2	25.1	32.1	47.8	48.3	58.5	63.7	
Condenser		1					2			1		2				
Max. airflow rate	m <sup>3</sup> /h	4500					5000			5500	10000	10800	15500			
Medium pressure	bar	1.0					2.0			1.0		2.0				
Nominal fluid	m <sup>3</sup> /h	5.0					10.0					15.0	20.0			
Fluid connection	inch	1 1/2					2					3				
<b>Dimensions and weight</b>																
Length	mm	715							1000							
Width	mm	715							1000							
Height	mm	1554							2000							
Empty weight	kg	170			190	240	250	310	340	370	450	480				

a) Sound pressure level measured in free field at 1 m distance and 1.2 m (tolerance +/- 1 dB (A))  
incl. compressor operation without start / stop phase

b) at 42 °C ambient temperature and 20 °C medium temperature

c) Cooling capacity determined using ISO-VG 5;  
Max. viscosity ISO-VG 32/Options available upon request

# Technical data HYFRA Alpha Emulsion

HYFRA Alpha model no. (kW)		5	7	9	13	16	18	22	28	34	42	52	56	67	80		
<b>Performance data</b>																	
Ambient °C	Refrigerant °C	<b>Cooling capacity kW <sup>c)</sup></b>															
	Emulsion																
32	15	4.4	6.6	8.2	11.9	14.3	17.3	20.7	26.0	30.6	37.7	45.5	50.7	59.9	71.3		
	20	4.9	7.3	9.1	13.0	15.8	19.0	22.4	28.7	34.2	42.2	51.8	56.0	67.1	79.8		
37	15	4.0	6.5	7.6	11.1	13.4	16.4	20.7	24.6	28.9	35.6	42.1	47.8	56.5	67.2		
	20	4.5	7.1	8.3	12.2	14.8	17.9	22.4	26.3	31.8	38.6	49.0	52.4	62.4	73.0		
42	15	3.8	6.1	7.5	10.6	11.8	16.1	19.2	24.2	28.1	31.6	40.2	45.8	54.9	59.7		
	20	4.3	6.8	8.3	11.6	13.4	17.7	21.1	26.3	30.9	35.7	47.3	51.3	60.6	67.4		
<b>Technical data</b>																	
Refrigerant		R134a					R410A										
Refrigerant charge	kg	1.5	1.1	1.2	1.4	2.1	2.2	2.3	2.7	3.0	4.5	5.5	6.0				
Sound pressure level <sup>a)</sup> user side	dB(A)	68					66			64	70		71		72		
Power consumption max. <sup>b)</sup>	kW	3.4	4.4	5.0	6.2	7.1	7.5	9.2	12.0	13.3	17.5	26.3	26.7	33.1	36.9		
Current consumption max. <sup>b)</sup>	A	6.6	8.4	8.7	11.1	13.4	14.4	19.1	21.0	22.6	29.6	47.8	48.3	58.5	63.7		
Condenser		1					2			1		2					
Max. airflow rate	m <sup>3</sup> /h	4500								5500	10000	15500					
Medium pressure	bar	1.0															
Nominal water flow	m <sup>3</sup> /h	3.5					6.5					11.0	13.0				
Fluid connection	inch	1 1/4					1 1/2					2					
<b>Dimensions and weight</b>																	
Length	mm	715								1000							
Width	mm	715								1000							
Height	mm	1554								2000							
Empty weight	kg	160	170	190	240	250	310	340	370	450	480						

a) Sound pressure level measured in free field at 1 m distance and 1.2 m (tolerance +/- 1 dB (A)) incl. compressor operation without start / stop phase

b) at 42 °C ambient temperature and 20 °C medium temperature

c) Cooling capacity determined using ISO-VG 5;  
Max. viscosity ISO-VG 32/Options available upon request

# Circulating chillers HYFRA Alpha c

## Compact. Cost-optimized. Plug-in.

Up to 40 % height reduction for improved integration into various plant layouts.



### Key data HYFRA Alpha c

- ✓ **Power range:**  
5 – 16 kW
- ✓ **Medium:**  
Water, oil and emulsion
- ✓ **Footprint:**  
5 – 28 kW on footprint of 0.5 m<sup>2</sup>
- ✓ **Optimized:**  
Up to 40 % height reduction
- ✓ **Application:**  
Mainly filtration

## Technical data HYFRA Alpha c Oil/Emulsion

HYFRA Alpha c model no. (kW)		c 5	c 7	c 9	c 13	c 16
<b>Performance data</b>						
Ambient °C	Refrigerant °C	Cooling capacity kW <sup>c)</sup>				
	Oil					
32	15	3.2	5.2	6.6	9.7	11.8
	20	4.0	6.2	7.8	11.5	13.9
37	15	2.8	5.1	6.0	9.1	10.9
	20	3.6	6.1	7.2	10.7	13.0
42	15	3.2	4.7	5.9	8.7	9.1
	20	3.4	5.7	7.1	10.2	11.4

<b>Technical data</b>						
Refrigerant		R134a	R410A			
Refrigerant charge	kg	0.9			1.0	
Sound pressure level <sup>a)</sup> user side	dB(A)	71				74
Power consumption max. <sup>b)</sup>	kW	3.5	4.5	5.1	6.3	7.5
Current consumption max. <sup>b)</sup>	A	7.0	8.8	9.1	11.5	14.4
Condenser		1				
Max. airflow rate	m <sup>3</sup> /h	3300				4500
Medium pressure	bar	1.0				
Nominal fluid	m <sup>3</sup> /h	3.5				
Fluid connection	inch	1 1/2				

<b>Dimensions and weight</b>						
Length	mm	710				
Width	mm	820				
Height	mm	930				
Empty weight	kg	119	117	119	125	

a) Sound pressure level measured in free field at 1 m distance and 1.2 m (tolerance +/- 1 dB (A)) incl. compressor operation without start / stop phase

b) at 42 °C ambient temperature and 20 °C medium temperature

c) Cooling capacity determined using ISO-VG 5;  
Max. viscosity ISO-VG 32/Options available upon request

HYFRA Alpha c model no. (kW)		c 5	c 7	c 9	c 13	c 16
<b>Performance data</b>						
Ambient °C	Refrigerant °C	Cooling capacity kW <sup>c)</sup>				
	Emulsion					
32	15	4	6.2	7.8	11.5	13.9
	20	4.5	6.9	8.7	12.6	15.4
37	15	3.6	6.1	7.2	10.7	13
	20	4.1	6.7	7.9	11.8	14.4
42	15	3.4	5.7	7.1	10.2	11.4
	20	3.9	6.4	7.9	11.2	13

<b>Technical data</b>						
Refrigerant		R134a	R410A			
Refrigerant charge	kg	0.9			1.0	
Sound pressure level <sup>a)</sup> user side	dB(A)	71				74
Power consumption max. <sup>b)</sup>	kW	3.2	4.2	4.8	6.0	6.9
Current consumption max. <sup>b)</sup>	A	6.0	7.8	8.1	10.5	13.4
Condenser		1				
Max. airflow rate	m <sup>3</sup> /h	3300				4500
Medium pressure	bar	1.0				
Nominal water flow	m <sup>3</sup> /h	3.5				
Fluid connection	inch	1 1/4				

<b>Dimensions and weight</b>						
Length	mm	710				
Width	mm	820				
Height	mm	930				
Empty weight	kg	119	117	119	125	