

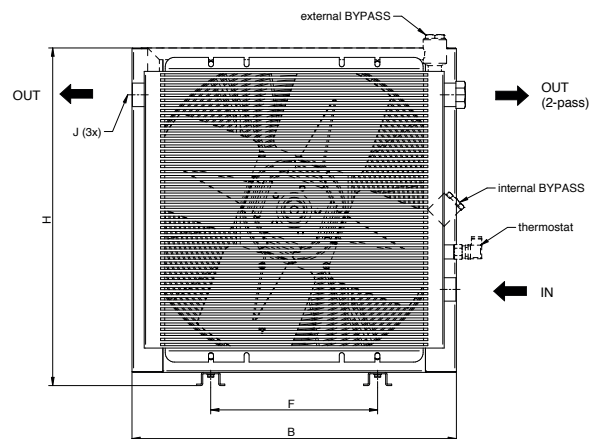
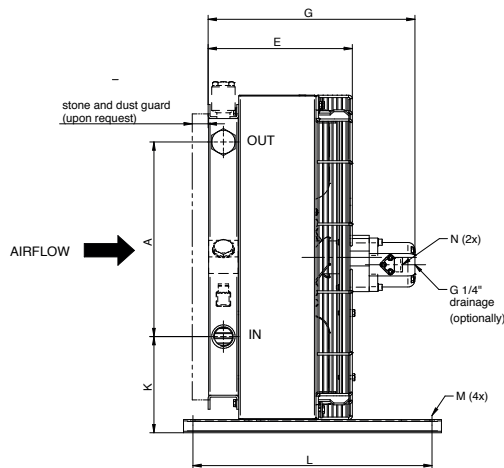


## HCH-aircooler with hydraulic-motor



This cooler type with hydraulic motor is for stationary and mobile applications and has been developed for efficient cooling of hydraulic and lubrication oil and for water/glycol mixtures (at least 15 % glycol). Different hydraulic motors can be used, from 4 cm<sup>3</sup> up to 45 cm<sup>3</sup>. Designs available incl. various accessories and as 1-pass, 2-pass or 3-pass.

Material	
<b>Cooling element</b>	Aluminium (copper or stainless steel upon request)
<b>Air fan</b>	glass fibre reinforced plastic (PAG/PPG)
<b>Sheet metall parts</b>	C-steel powder coated
<b>Protection grid</b>	C-steel galvanised (Cr-VI-free)
<b>Main parts</b>	in black color RAL 9005 (excl. air fan, grid and motor)



HENNLICH Cooling-Technologies		Noise level LpA dB (A) 1m*	Fan speed [rpm]	Power [kW]	Mass [kg]	B	F	H	J	L	A	E	G	Mø
HCH standard sizes														
HCH	C33.26	63	1500	0,1	10	367	203	396	G1"	510	159	225	330	10
HCH	C33.26	80	3000	0,8	10	367	203	396	G1"	510	159	225	330	10
HCH	C40.33	68	1500	0,2	15	442	203	471	G1"	510	234	245	350	10
HCH	C40.33	84	3000	1,7	15	442	203	471	G1"	510	234	245	350	10
HCH	C47.40	71	1500	0,4	19	498	203	527	G1"	510	225	265	370	10
HCH	C47.40	87	3000	2,6	19	498	203	527	G1"	510	225	265	370	10
HCH	C55.48	65	1000	0,2	26	582	356	611	G1"	510	308	280	385	10
HCH	C55.48	76	1500	0,6	26	582	356	611	G1"	510	308	280	385	10
HCH	C64.59	76	1000	0,7	42	694	356	723	G1 1/4"	510	415	315	460	10
HCH	C64.59	85	1500	2,4	42	694	356	723	G1 1/4"	510	415	315	460	10
HCH	C64.76	76	1000	0,7	58	694	356	867	G1 1/4"	510	593	340	485	10
HCH	C64.76	85	1500	2,4	58	694	356	867	G1 1/4"	510	593	340	485	10
HCH	D81.76	74	750	0,7	78	870	508	900	G2"	510	585	380	525	10
HCH	D81.76	81	1000	1,5	78	870	508	900	G2"	510	585	380	525	10
HCH	D94.93	76	750	0,9	115	1025	518	1053	G2"	800	830	410	555	14

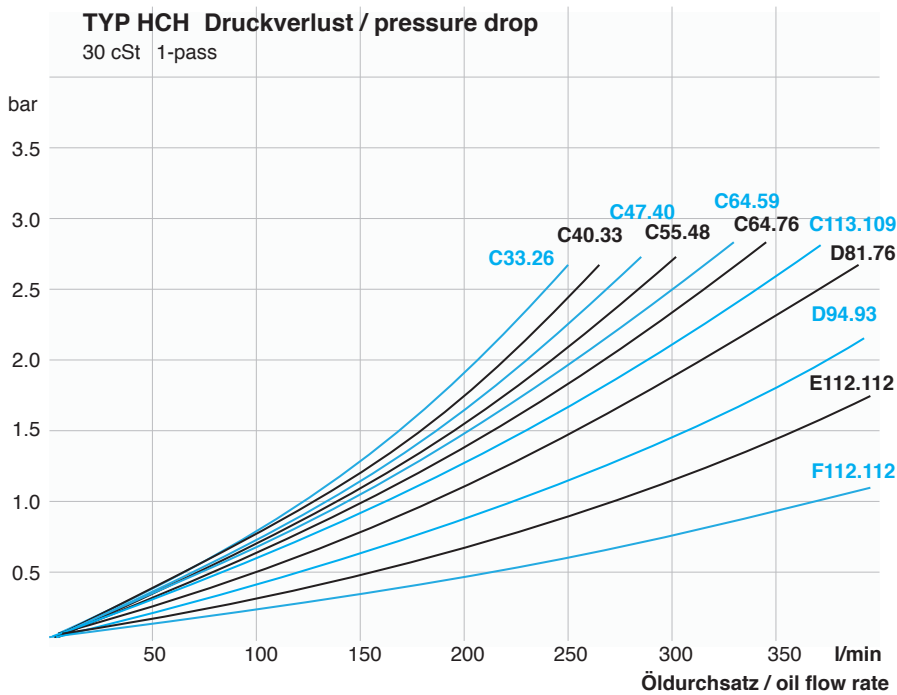


## HCH-aircooler with hydraulic-motor

HENNLICH Cooling-Technologies		Noise level LpA dB (A) 1m*	Fan speed [rpm]	Power [kW]	Mass [kg]	B	F	H	J	L	A	E	G	Mø
HCH standard sizes														
HCH	D94.93	85	1000	1,9	115	1025	518	1053	G2"	800	830	410	555	14
HCH	C113.109	84	750	2,4	125	1190	600	1220	G2"	800	990	415	570	14
HCH	C113.109	89	1000	5,3	125	1190	600	1220	G2"	800	990	415	570	14
HCH	E112.112	96	750	2,4	195	1190	600	1220	SAE2"	800	982	460	615	14
HCH	E112.112	91	1000	5,3	195	1190	600	1220	SAE2"	800	982	460	615	14
HCH	F112.112	98	1250	11,0	220	1190	600	1220	SAE	800	982	490	690	14

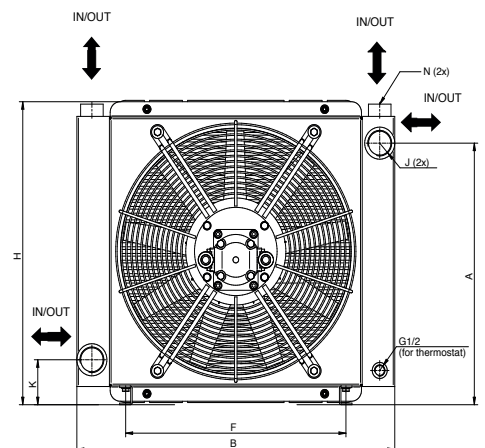
\*\*Data „G“ = approximately, as depending on motor

Other cooler dimensions upon request  
Noise level tolerance  $\pm 3$  dB(A)



## General motor data

<b>Hydraulic motor [cm<sup>3</sup>]</b>
6, 8, 11, 14, 16, 20, 25
34, 45
<b>Motor pmax</b>
250 bar (170 bar)
<b>Motor bearing</b>
> size C64.59
<b>Max. oil temperature [Tmax]</b>
120 °C
<b>Max. oil pressure</b>
26 bar (statically, standard conditions)



New:  
The Flex-Design => with in and outlets in all directions => for flexible connection

## Selection of cooler:

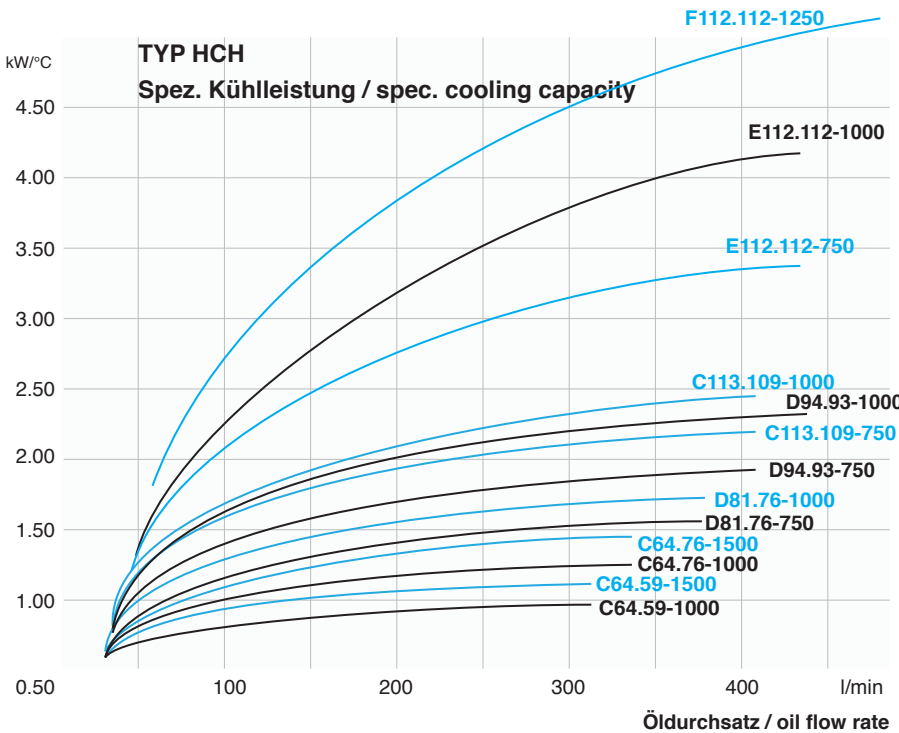
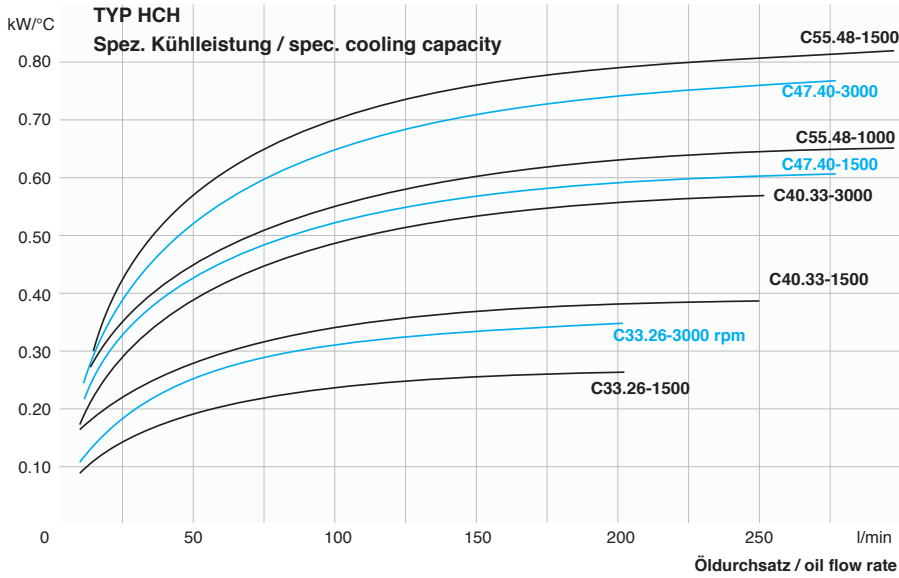
The pressure drop can be determined for each type by using the oil flow rate based on a viscosity of 30cst. For other viscosities please ask our application engineers.

The specific cooling capacity (y-axis) can be determined with the oil flow rate (x-axis) and the intersection of the cooler type. In order to get the actual cooling capacity it has to be multiplied with the temperature-difference of the max. oil temperature (= cooler inlet) and the max. air temperature suctioned to the cooler.



# HCH aircooler

HENNLICH - Cooling - Technologies GmbH



**Example:**

Max. oil temperature: 70 °C  
Max. air temperature: 30 °C  
( $\Delta t = 40$  °C temperature difference)

Oil flow rate: 300 l/min

For cooler type E112.112-1000 with spec. cooling capacity of 3,8 kW/°C (acc. chart) multiplied by  $\Delta t = 40$  °C results a cooling capacity of 152 kW.

To calculate thermal dissipation loss or cooling power we provide support in any case!

The characteristic curves are based on data of typical hydraulic oil at 60 °C and can differ due to other physical figures.

Please note that dust, dirt or circulating air can cause a loss of capacity. Therefore consider some safety or contact a Hennlich Cooling technician!

Motor type plate has to be noted as well.

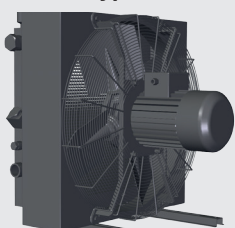
For higher temperatures up to 250°C compact solutions are going to be provided.

Higher pressure rates upon request.

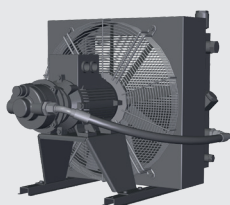
If water/glycol is used, the cooling characteristics are better.

Please send us the mixture and the technical data or fill in and send us the technical questionnaire on our website: [www.hennlich.at](http://www.hennlich.at)

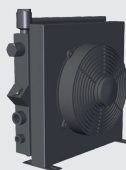
**Other Types:**



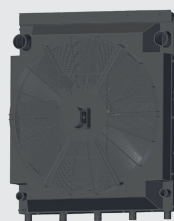
HCA with AC-Motor



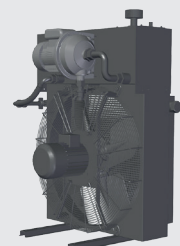
HCP with AC-Motor + pump



HCD with 12/24VDC



HCC for diesel engines



HCS cooling systems



## Key code

## HCH - C33.26 – 11 - 100 - TSS - Z

Cooler type	
HCH	air cooler with hydraulic-motor
HCHF	flex-design with hydraulic-motor
HCHX	aircooler with ATEX-design
HCHM	aircooler with marine-design
Cooler size	
C33.26 bis XXXX	acc. table
Hydraulic motor	
6	~ 6 cm <sup>3</sup>
8	~ 8 cm <sup>3</sup>
11	~ 11 cm <sup>3</sup>
14	~ 14 cm <sup>3</sup>
16	~ 16 cm <sup>3</sup>
20	~ 20 cm <sup>3</sup>
25	~ 25 cm <sup>3</sup>
34	~ 34 cm <sup>3</sup>
45	~ 45 cm <sup>3</sup>
Bypass accessories	
1XX	1-pass excl. bypass valve)
2XX	standard 2-pass
3XX	standard 3-pass
5XX	2-pass with accesories
X2X	bypass valve (2 bar)
X5X	bypass valve (5 bar)
XX4	thermostat 40 °C
XX5	thermostat 50 °C
XX6	thermostat 60 °C
XX7	thermostat 70 °C
XX8	thermostat 80 °C
XX9	thermostat 90 °C
X25	with internal thermal-bypass (2 bar, 50 °C)
X26	with internal thermal-bypass (2 bar, 60 °C)
Internal codes	
TSS	internal codes
Internal codes	
Z	Options for stone and dust guard, painting, filter, accessories, ...

