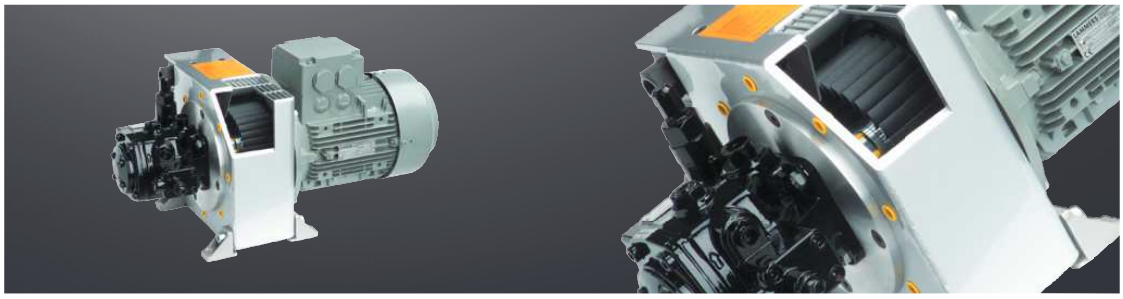
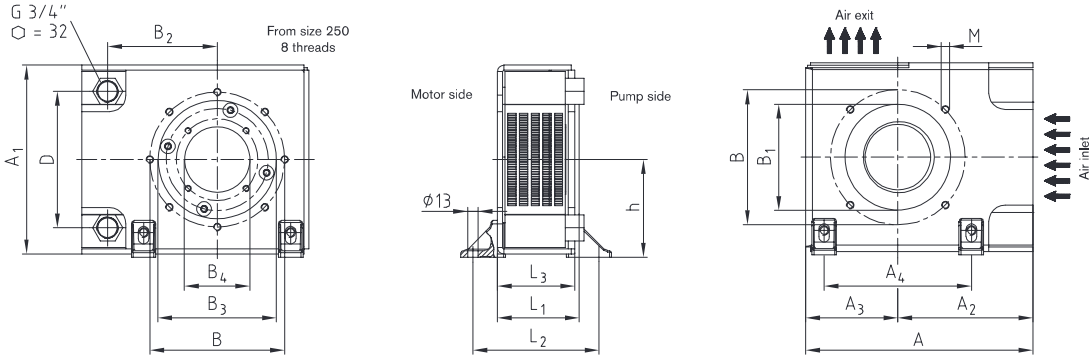
Oil/air coolers type PIK
Cooling systems

Bellhousing with integrated oil/air cooler





View pump side | View motor side

Bellhousing with integrated oil/air cooler type PIK (patent pending)																		
IEC motor		PIK oil cooler type	Dimensions [mm] *															
Size (shaft)	kW with 1500 rpm		L_1	L_2	L_3	A	A_1	A_2	A_3	A_4	B	B_1	B_2	B_3	Min. B_4	D	M	h
80	0.55	PIK 200/1/...	100	154.5	94.5	275	225	163	112.5	180	165	130	130	145	20	167	M10	116.5
(19 x 40)	0.75	PIK 200/2/...	110	154.5	94.5	275	225	163	112.5	180	165	130	130	145	20	167	M10	116.5
90S/90L	1.1	PIK 200/4/...	124	154.5	94.5	275	225	163	112.5	180	165	130	130	145	20	167	M10	116.5
(24 x 50)	1.5																	
100L/112M	2.2	PIK 250/2/... **	124	175.5	115.5	308	250	180	125	220	215	180	150	190	20	192	M12	129
(28 x 60)	3, 4	PIK 250/4/... **	135	175.5	115.5	305	250	180	125	220	215	180	150	190	20	192	M12	129
132S/132M (38 x 80)	5.5	PIK 300/1/...	144	199.5	139.5	359	300	205	154	260	265	230	175	234	30	242	M12	154
	7.5	PIK 300/3/...	155	199.5	139.5	359	300	205	154	260	265	230	175	234	30	242	M12	154
		PIK 300/4/...	168	199.5	139.5	359	300	205	154	260	265	230	175	234	30	242	M12	154
160M/160L	11	PIK 350/1/...	188	243.5	183.5	405	360	230	175	310	300	250	200	260	50	292	M16	184
(42 x 110)	15	PIK 350/2/...	204	243.5	183.5	405	360	230	175	310	300	250	200	260	50	292	M16	184
180M/180L	18.5																	
(48 x 110)	22																	

* Dimensions following the VDMA standard 24561
** In case of an engine speed of ≥1900 rpm a steel fan must be used.

Assembly

With assembly and disassembly of the oil connection pipes please hold up with a hexagon key (max. tightening torque 40 Nm). No reduction of the cross section behind the cooler. Return filter to be installed in front of the cooler (dynamic pressure, danger of bursting). Tensions inside the connection pipes have to be avoided! Vibration of the piping has to be avoided (should possibly be intercepted in front of the connector). Supply and discharge to be chosen alternatively. Please note that not a few hydraulic systems generate pressure peaks of more than 12 bar in the return flow (danger of bursting)! Please observe our assembly instructions at www.ktr.com.

For PIK sizes 200 and 350 please specify the IEC motor sizes in your order.

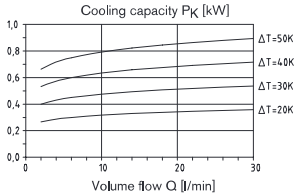
Ordering example:	PIK	300	3	5	15
	Bellhousing with integrated oil cooler	Flange diameter of IEC motor	Serial model code (code referring to length)	In-house modification code	Standard type 15 - V1 design

Oil/air coolers type PIK
Cooling systems

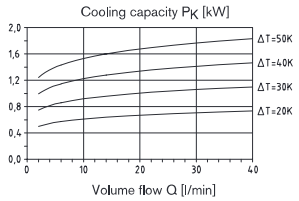
Oil/air coolers type PIK 200 - 350

1. Cooling capacity for a speed of 1500 rpm depending on the temperature difference between oil intake and air intake and oil volume

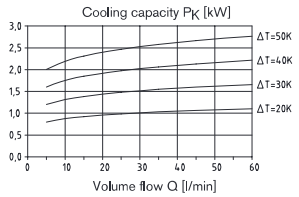
PIK 200



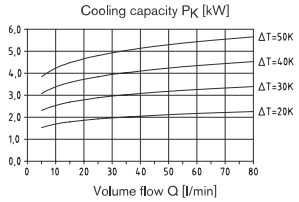
PIK 250



PIK 300



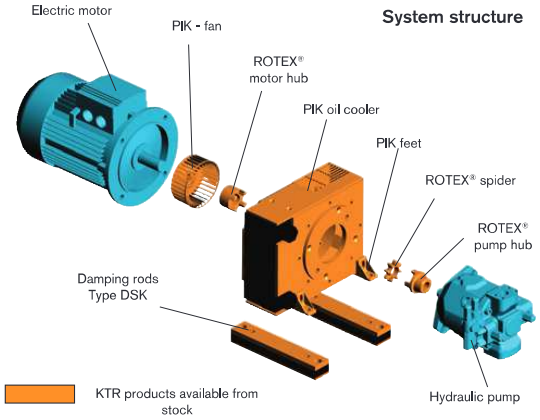
PIK 350



The diagrammes shown are based on actual measurements of the PIK oil cooler performed in KTR's R&D test center. With 3000 rpm the cooling capacity is increased by approx. 50 %.

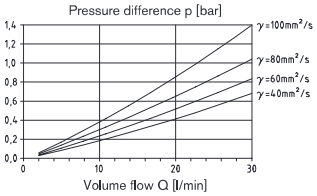
2. Operating pressure

The permissible operating pressure for the oil cooler is 12 bar. Max. operating pressure with static load 20 bar (all values apply for the average pressure cooler).

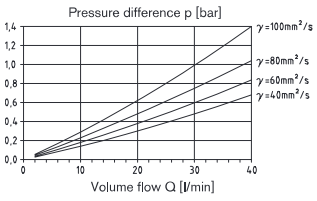


3. Pressure difference depending on oil flow and oil viscosity

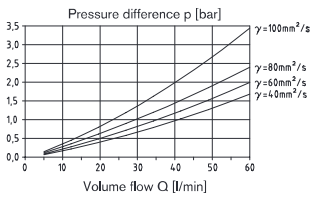
PIK 200



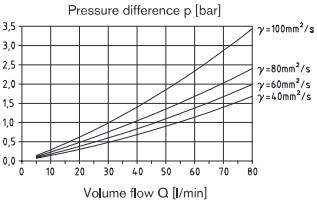
PIK 250



PIK 300



PIK 350



Viscosity measured up to 100 mm²/s.
Higher viscosity on request.

4. Fan

Torsional direction view onto the pump – **right** – standard type.
Performance of the fan with 1500 rpm
PIK 200 = 25 W
PIK 250 = 40 W
PIK 300 = 125 W
PIK 350 = 230 W
Air pressure rate in m³/h with 1500 rpm
PIK 200 = approx. 90 m³/h
PIK 250 = approx. 200 m³/h
PIK 300 = approx. 400 m³/h
PIK 350 = approx. 860 m³/h

5. Cooler connection

R ³/₄" internal thread

6. Oil flow

With an oil flow exceeding the figures stated in the above diagramme, please consult with our engineering department. Phone: +49 5971 798-0

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