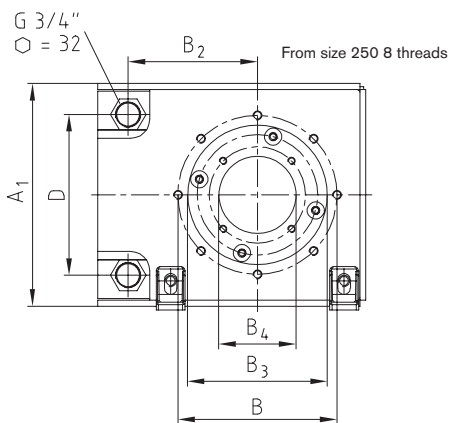
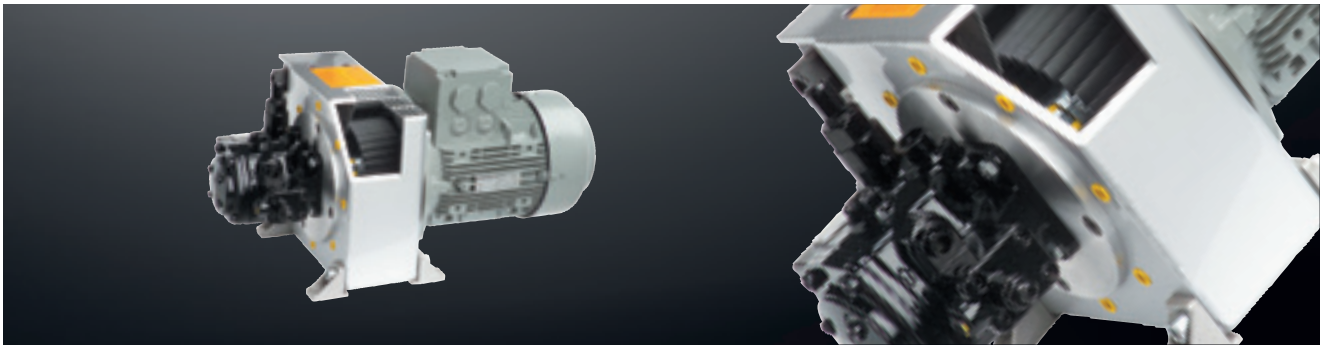
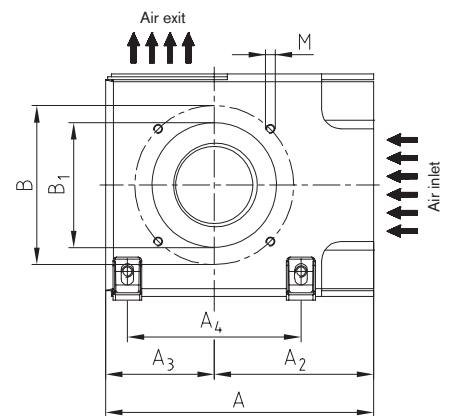
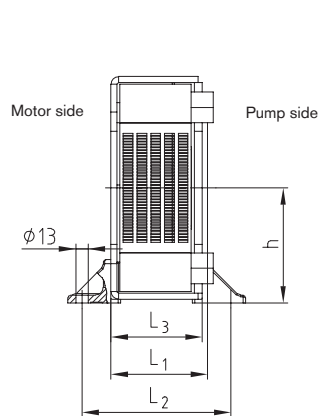


### Bellhousing with integrated oil/air cooler



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 (Welle)	kW with 1500 rpm		L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	A	A <sub>1</sub>	A <sub>2</sub>	A <sub>3</sub>	A <sub>4</sub>	B	B <sub>1</sub>	B <sub>2</sub>	B <sub>3</sub>	min. B <sub>4</sub>	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 / 100M	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	5,5	PIK 300/1/...	144	199,5	139,5	359	300	205	154	260	265	230	175	234	30	242	M12	154
(38x80)	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  $\geq 1900$  rpm a steel fan must be used.

#### Assembly

With assembly and disassembly of the oil connection pipes please hold up with a hexagon tool (max. tightening torque 40 Nm). No reduction of the cross-section behind the cooler. Return flow filters should be installed in front of the cooler (dynamic pressure, danger of bursting). Tensions inside the connection pipes must be avoided! Vibration of piping must be avoided (should possibly be intercepted in front of the connection). Supply and discharge to be chosen alternatively. Please note that many hydraulic systems generate pressure peaks of far more than 12 bar in the reverse motion (danger of bursting)! Please observe our assembly instructions at [www.ktr.com](http://www.ktr.com).

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

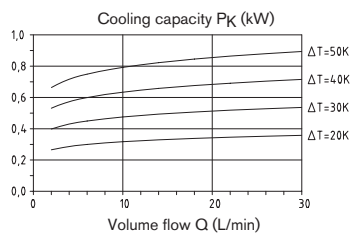
Ordering example:	PIK	300	3	5	15
	Bellhousing with integrated oil cooler	Flange diameter of IEC motor	Serial model code (code referring to length)	In-house modification code	Standard type 15 - V1 design

# Oil/air coolers type PIK Cooling systems

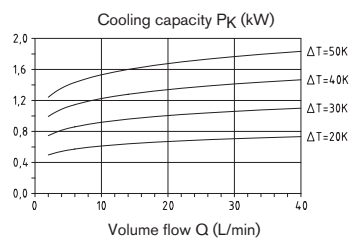
## Oil/air cooler type PIK 200 - 350

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

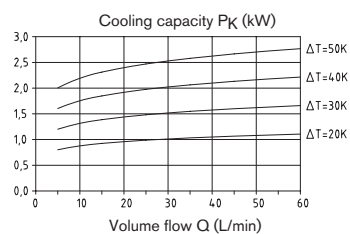
PIK 200



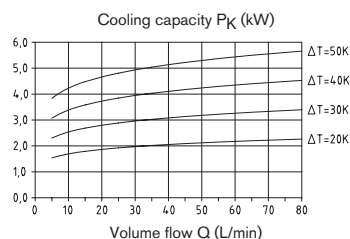
PIK 250



PIK 300



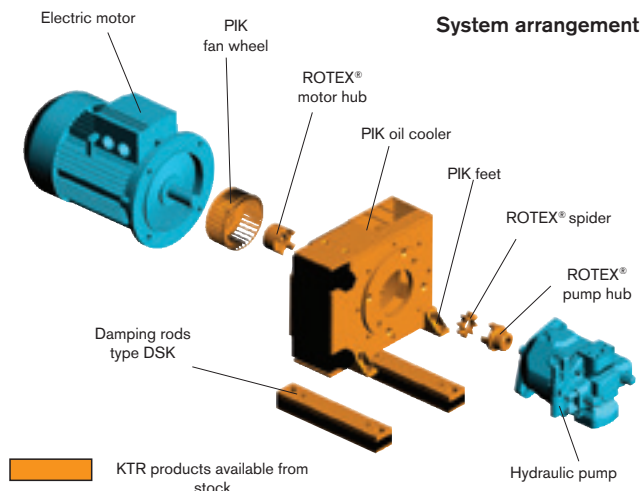
PIK 350



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

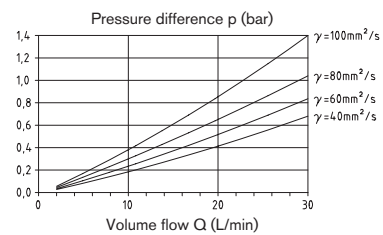
## 2. Operating pressure

The permissible operating pressure for the oil cooler is 12 bar with dynamic operation. Max. operating pressure with static load is 20 bar. (All figures apply for the medium pressure cooler.)

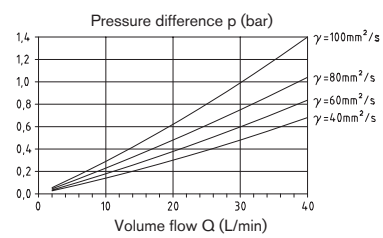


3. Pressure difference depending on oil flow and oil viscosity

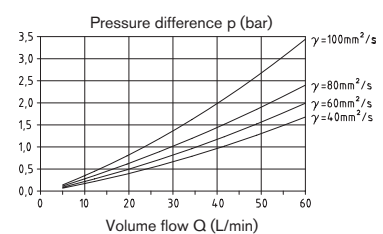
PIK 200



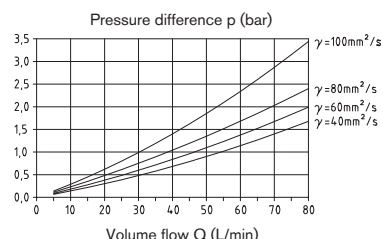
PIK 250



PIK 300



PIK 350



Viscosity measured up to 100 mm<sup>2</sup>/s.  
Higher viscosity on request.

## 4. Fan wheel

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 m<sup>3</sup>/h with 1500 rpm

PIK 200 = ca. 90 m<sup>3</sup>/h

PIK 250 = ca. 200 m<sup>3</sup>/h

PIK 300 = ca. 400 m<sup>3</sup>/h

PIK 350 = ca. 860 m<sup>3</sup>/h

## 5. Cooler connection

R <sup>3</sup>/<sub>4</sub>" internal thread

## 6. Oil flow

With higher flow rates than specified in the diagramme, please consult with us. Phone: +49 5971 798-0

Any questions? Please contact us.

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