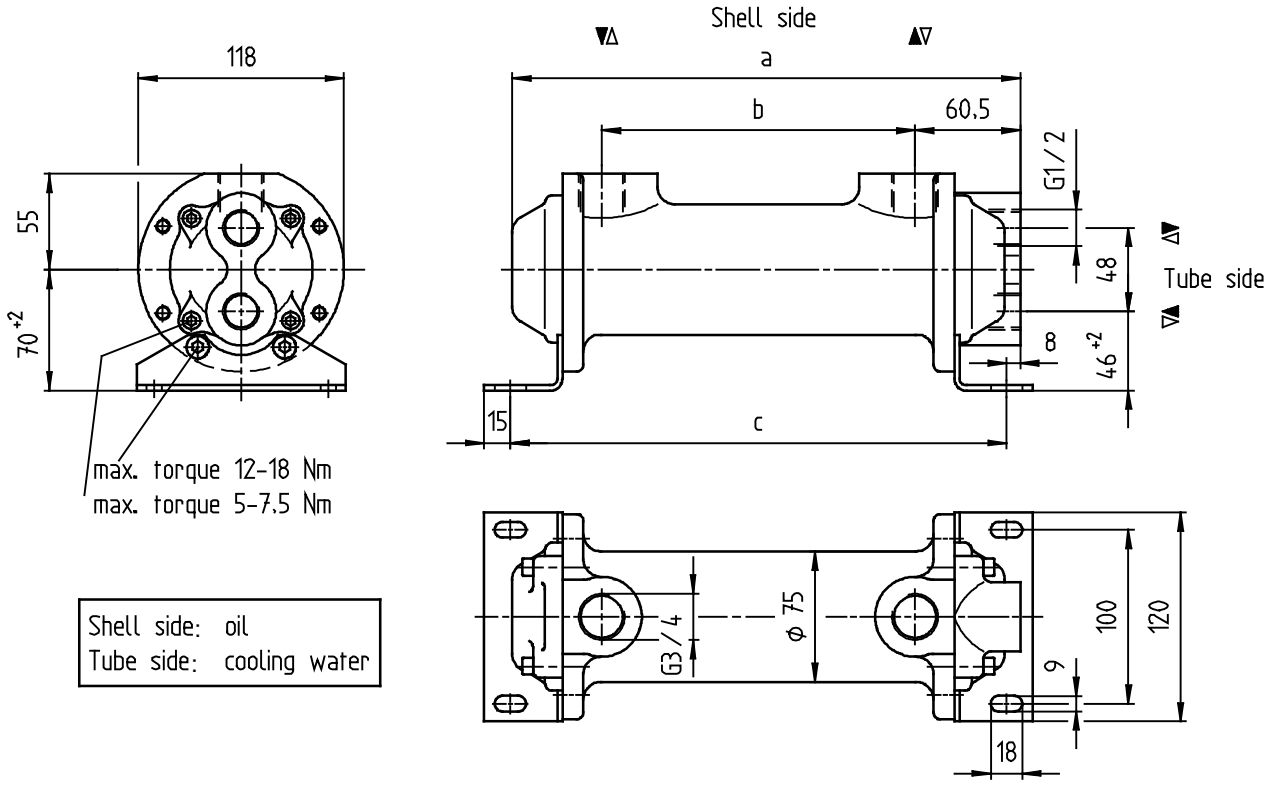
Technical data	UNIVEX® Shell and tube heat exchanger Oil / Water A 075	WE A 075 Issue 2000



At surface temperatures of more than 80°C, protection against accidental contact should be guaranteed in the working area

Details are subject to modification without notice!

Application	Cooling of oil, not highly inflammable fluids, emulsion or water/glycol by untreated water, sea water, river water or brackish water						
Dimensions [mm]	Tube bundle length [mm]	161	241	411			
	a	212	292	462			
	b	100	180	350			
	c	205	285	455			
Surface [m^2]	A	0,15	0,23	0,39			
Volumetric capacity [l]	Shell side	0,28	0,43	0,75			
	Tube side	0,26	0,34	0,51			
Weight [kg]	Total	3,80	4,40	5,60			
	Tube bundle	1,00	1,30	2,00			

Max. allowable working data	Max. allowable working pressure [bar]	Shell side	16
		Tube side	10
	Max. allowable working temperature [°C]	Shell side with oil	120
		Shell side with water/glycol	90
		Shell side with emulsion	90
		Tube side	90

Max. allowable cooling water flow $\dot{V}_K$ = 38 l/min

Components	Cooling tube	Tube plate	Baffle plate	Shell	Inlet/Outlet bonnet	Return bonnet	Spacer	O-ring
Material	CuNi10Fe	CuZn39Pb2	CuZn36	Al anod.	CuSn7 Pb6Zn4		CuZn36	Viton

Type number

A 0 7 5 - 2 4 1

- Type
- Shell diameter
- Tube bundle length

Performance	see overleaf

WE A 075	UNIVEX® Shell and tube heat exchanger Oil / Water A 075	Performance

Estimation formula

The following data are generally known:

Dissipation loss	P_V	[kW]
Oil flow	$\dot{V}_{Öl}$	[l/min]
Inlet temperature	$t_{ÖlE}$	[°C]
Cooling water flow	$\dot{V}_K$	[l/min]
Inlet temperature	t_{KE}	[°C]

From the following can be calculated:

Entry - Temperature - Difference

E T D = $t_{ÖlE} - t_{KE}$ [K]

Specific cooling capacity with ETD = 1 K

$$P_{01} = \frac{P_V}{ETD} \text{ [kW/K]}$$

Oil:

Temperature drop $\Delta t_{Öl} = \frac{36 \times P_V}{\dot{V}_{Öl}}$ [K]

Cooling water:

Temperature rise $\Delta t_K = \frac{14 \times P_V}{\dot{V}_K}$ [K]

Performance curves and pressure loss