Aftercooler for compressed air and gases UFK-W, water-cooled

The aftercooler UFK-W is designed to cool compressed air, but can be used for other gases as well.

Product description:

The UFK-W as an additional piece of equipment after the compressor supports an efficient and economical purification of compressed air.
The cooler works in a counterflow procedure where the hot compressed air is cooled down by eliminating heat over the cooling tubes to the cooling water. The generated condensate will be drained by a cyclone separator.
This product series offers 9 different housings ranging from a volume flow of 100 to 5000 m^3/h with fixed nest of boiler tubes and 9 different sizes for a volume flow of 450 to 10500 m^3/h. with removable nest of boiler tubes (related to 7 bar g).

Features:

The Aftercooler can be delivered with fixed nest of boiler tubes as well as with moveable nest of boiler tubes. Furthermore all aftercoolers are equipped with a cyclone separator. The coolers consist of enlarged surface insertions made out of copper. The shell, the pipes and the flanges are made of steel.

Technical Data

Materials:	
Housing	Steel
Radiator tube bundel	Copper
Shell, pipes and flanges	Steel
Surface finish	Polyester resin coating resp. cathodic dip-coating

Aftercooler:	
0100-5000	with fixed nest of boiler tubes for clean cooling water
0450 Z-10500 Z	with moveable nest of boiler tubes for dirty cooling water

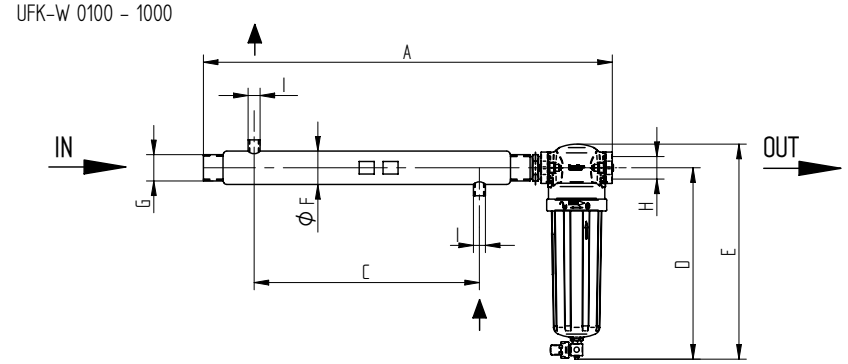
Maximum operating pressure:	
0100 - 5000	16 bar
0450 Z - 5000 Z	16 bar
7000 Z - 10500 Z	10 bar

Maximum operating temperature:	
Air, inlet:	200°C
Water, inlet:	90°C
Separator:	65°C

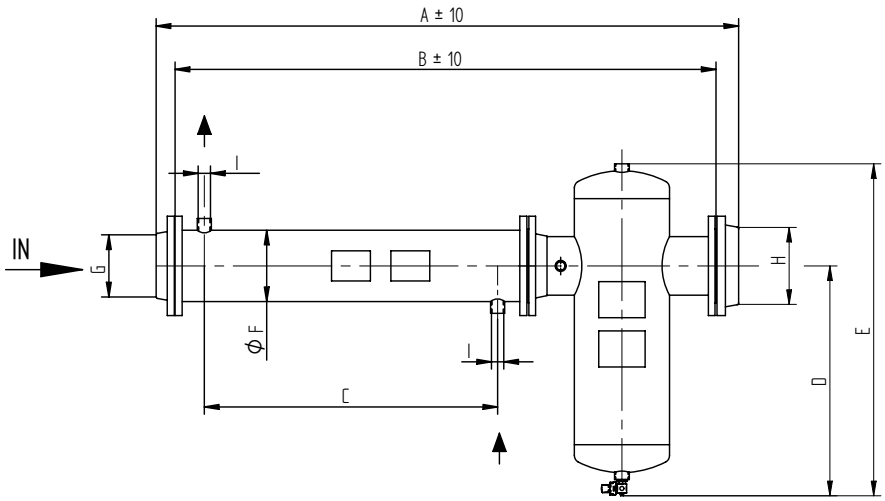
Annotation:
The flow capacity is related to a compressed air volume flow (at 1bar, 20°C) at 7 bar pressure, an air cooler inlet temperature of 120°C and an air cooler outlet temperature which is 10°C higher than the cooling water inlet temperature.

Aftercooler UFK-W 0100-5000

UFK-W 0100 – 1000



UFK-W 1650 – 5000



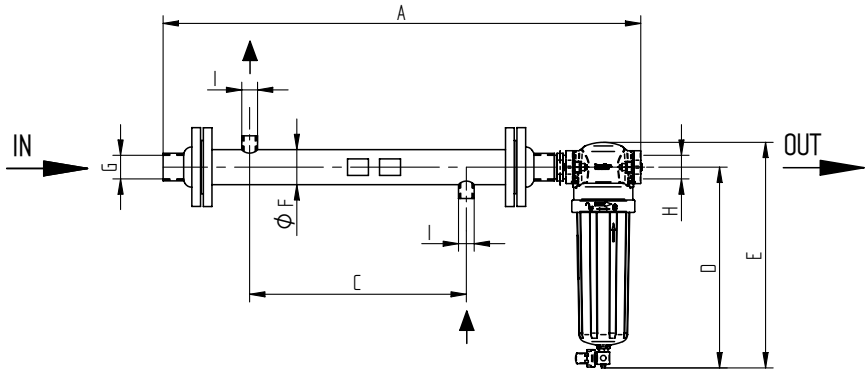
Max. working pressure: 0100-5000: 16 bar	**Maxl. operating temperature:** Air, Inlet: 200°C Water, Inlet: 90°C Separator: 65°C
Test pressure: 0100-5000: 24 bar	**Paint coat:** Polyester resin coating resp. cathodic dip-coating

Size	Capacity at 7 bar g m^3/h[1)]	Weight (kg)	A mm	B mm	C mm	D mm	E mm	Ø F mm	G	H	I	Cyclone separator
0100	100	6,3	965	-	600	322	369	42,4	G 1“	G ¾“	G ⅜“	DF-C 0210
0300	300	10,0	975	-	600	322	369	60,3	G 1½“	G 1“	G ½“	DF-C 0320
0450	450	15,2	1090	-	600	510	573	88,9	G 2“	G 1½“	G ¾“	DF-C 0450
0650	650	16,3	1090	-	600	510	573	88,9	G 2“	G 2“	G ¾“	DF-C 0750
1000	1000	31,2	1780	-	1100	510	573	114,3	G 2½“	G 2“	G 1“	DF-C 1100
1650	1650	70	2000	1895	1100	560	740	139,7	DN 80	DN 80	G 1“	SG-Z 1650
2250	2250	102	1860	1745	1100	680	890	168,3	DN 125	DN 125	G 1¼“	SG-Z 2750
3500	3500	142	1960	1845	1100	805	1055	193,7	DN 150	DN 150	G 1¼“	SG-Z 5000
5000	5000	227	2085	1955	1100	980	1295	244,5	DN 200	DN 200	G 1¼“	SG-Z 7500

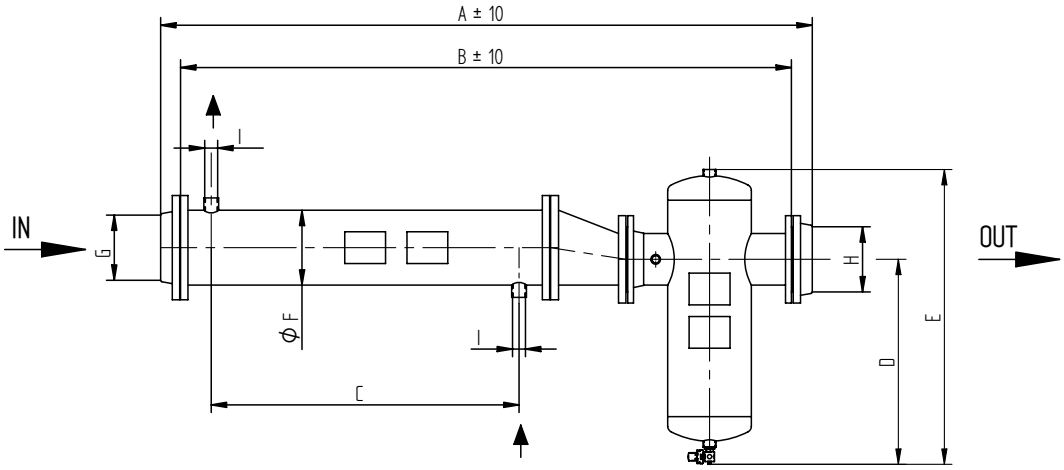
1) m^3/h related to 1 bar abs. and 20°C

Aftercooler UFK-W 0450 Z-10500 Z

UFK-W 0450 Z – 1000 Z



UFK-W 1650 Z – 10500 Z



Max. working pressure:		**Max. operating temperature:**	
0450Z - 5000Z:	16 bar	Air, Inlet:	200°C
7000Z - 10500Z:	10 bar	Water, Inlet:	90°C
		Abscheider:	65°C
Test pressure:		**Paint coat:**	Polyester resin coating resp. cathodic dip-coating
0450Z - 5000Z:	24 bar		
7000Z - 10500Z:	15 bar		

Size	Capacity at 7 bar g $m^3/h^{1)}$	Weight (kg)	A mm	B mm	C mm	D mm	E mm	Ø F mm	G	H	I	Cyclone separator
0450 Z	450	32,2	1120	-	520	510	573	88,9	G 2“	G 1½“	G ¾“	DF-C0450
0650 Z	650	33,2	1120	-	520	510	573	88,9	G 2“	G 2“	G ¾“	DF-C0750
1000 Z	1000	49,4	1690	-	1050	510	573	114,3	G 2½“	G 2“	G 1“	DF-C1100
1650 Z	1650	102	1975	1870	1300	560	740	139,7	DN 80	DN 80	G 1“	SG-Z 1650
2250 Z	2250	107	1855	1740	1050	680	890	168,3	DN 125	DN 125	G 1¼“	SG-Z 2750
3500 Z	3500	147	1955	1840	1050	805	1055	193,7	DN 150	DN 150	G 1¼“	SG-Z 5000
5000 Z	5000	232	2080	1950	1050	980	1295	244,5	DN 200	DN 200	G 1¼“	SG-Z 7500
7000 Z	7000	252	2290	2155	1050	980	1295	273	DN 250	DN 200	G 1¼“	SG-Z 7500
10500 Z	10500	362	2480	2330	1050	1275	1655	323,9	DN 300	DN 250	G 2“	SG-Z 10500

1) m^3/h related to 1 bar abs. and 20°C