



## CW 1 - 17 - Water cooled aftercoolers

### Features & Benefits

- ▶ Close temperature approach thanks to counter-current heat exchange
- ▶ Robust shell-and-tube design: stainless steel tubes within coated shell
- ▶ Negligible pressure drop
- ▶ Compact design
- ▶ Detailed calculations available on request

### General Specifications

- ▶ Water cooled aftercooler
- ▶ Operating pressure of compressed air: 0-16 barg / 0-232 psig
- ▶ Operating temperature of compressed air: 2-200°C / 35-392°F
- ▶ Flow Rate: 132 to 45570 Nm<sup>3</sup>/hr / 78 to 26821 cfm



Compressed air will always be 100% saturated with water when it leaves a compressor. But also the outlet temperature has an important influence on the water load downstream the compressor. In order to minimize the load – and thus size – of the downstream refrigeration or adsorption dryer, it is therefore recommended to install a highly efficient aftercooler between the compressor and the dryer.

Pneumatech's water cooled aftercoolers CW 1-17 are robust shell-and-tube heat exchangers with excellent efficiency. Hot compressed air or gas passes through the stainless steel tubes while cooling water flows in counter-current around the tubes. This results in a minimal temperature difference between the outgoing compressed air and the incoming cooling water. Detailed design calculations are available on request.

Technical specifications for CW 1-17																		
Pneumatech Variant → Specifications ↓	Units	CW 1	CW 2	CW 3	CW 4	CW 5	CW 6	CW 7	CW 8	CW 9	CW 10	CW 11	CW 12	CW 13	CW 14	CW 15	CW 16	CW 17
Flow <sup>(1)</sup>	m <sup>3</sup> /hr	132	235	367	661	955	1323	2205	3087	3969	7056	8967	11025	16170	22050	26460	33810	45570
	cfm	78	138	216	389	562	779	1298	1817	2336	4153	5278	6489	9517	12978	15574	19900	26821
Connections Air side	inch	DN 50	DN 50	DN 50	DN 50	DN 50	DN 80	DN 80	DN 125	DN 125	DN 200	DN 200	DN 250	DN 300	DN 400	DN 400	DN 450	DN 500
Connections Water side	inch	DN 20	DN 20	DN 20	DN 20	DN 20	DN 20	DN 20	DN 32	DN 32	DN 50	DN 65	DN 80	DN 80	DN 100	DN 150	DN 200	DN 200
Operating Pressure	barg	0-16	0-16	0-16	0-16	0-16	0-16	0-16	0-16	0-16	0-16	0-16	0-10	0-10	0-10	0-10	0-10	0-10
	psig	0-232	0-232	0-232	0-232	0-232	0-232	0-232	0-232	0-232	0-232	0-232	0-232	0-232	0-232	0-232	0-232	0-232
Dimensions	A (mm)	806	816	816	870	870	1500	1510	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300
	A (inch)	31.7	32.1	32.1	34.3	34.3	59.1	59.4	51.2	51.2	51.2	51.2	51.2	51.2	51.2	51.2	51.2	51.2
	B (mm)	60.3	60.3	60.3	60.3	60.3	88.9	88.9	139.7	139.7	219	219	273	323.9	406	406	457	508
	B (inch)	2.4	2.4	2.4	2.4	2.4	3.5	3.5	5.5	5.5	8.6	8.6	10.7	12.8	16.0	16.0	18.0	20.0

1. Refers to 1 barg and 20°C at 7 barg operating pressure and inlet temperature of 120°C.

