



Features of the CW Series

- Direct acting proportional controller for regulating the cooling-water return temperature.
- Reduced capital costs (for new plants) coolant and energy consumption due to higher discharge temperatures
- The valve prevents short-circuiting and automatically balances large systems.
- Straight-through body with solid-state expansion thermostat and setting device.
- Standard valve type CW 41 with pressure gauge (0–6 bar) and thermometer (–30 to +100 °C).
- MCW 41 = CW 41 with diaphragm actuator. (Retro-fitting of diaphragm actuator possible).

Application

CW 41	for industrial cooling water
CW 44	
CW 41/4 CW 44 k	for saline fluids, ammoniacal cooling water and chlorinated hydrocarbons (wetted internal parts made from stainless steel)
MCW 41	for heavily contaminated cooling systems

Specification *)

Type	PN	ΔP [bar]	Material		Pressure/Temperature		
			EN	ASTM	PS [bar]	TS ²⁾ [°C]	p / T ²⁾ [bar / °C]
CW 41	16	6	5.3103	A 395 ¹⁾	16	– 10 / 110	16 / 110
CW 41/4	16	6	5.3103	A 395 ¹⁾	16	– 10 / 110	16 / 110
CW 44	25	16	1.0460	A 105 ¹⁾	25	– 2 / 120	25 / 110
CW 44 K	25	16	1.0460	A 105 ¹⁾	25	– 10 / 85	25 / 85

1) ASTM nearest equivalent grade is stated for guidance only.
Physical and chemical properties comply with EN.

2) Temperature that is admissible for only a short time depends on type of thermostat:
n-thermostat 110 °C, w-thermostat 100 °C, k-thermostat 85 °C

*) For more information on pressure/temperature ratings and end connections see data sheets.

Temperature Ratings

Type	Thermostat / cone combination	Adjustment range
CW 41	wr or ws	20 °C – 60 °C
CW 41/4	nr or ns	3 °C – 100 °C
	kr or ks	–32 °C – 74 °C
CW 44	n	–2 °C – 106 °C
CW 44 K	k	–37 °C – 71 °C
w = wax thermostat r = reduced cone for small flowrates n = standard thermostat s = standard cone for large flowrates k = thermostat for brine		

End Connections and Overall Lengths

Type	End connection	Overall length L [mm]							
		DN 10	DN 15	DN 20	DN 25	DN 40	DN 50	DN 80	DN 100
		3/8"	1/2"	3/4"	1"	1 1/2"	2"	3"	4"
CW 41	Flanged EN PN 16	—	—	—	160	200	230	310	350
CW 41/4	Flanged EN PN 16	—	—	—	160	200	230	310	350
CW 44	Screw sockets	95	95	95	95	—	—	—	—
CW 44 K	Screw sockets	95	95	95	95	—	—	—	—

Flowrates (k_v values)

Type	Cone		DN 25	DN 40, DN 50	DN 80, DN 100
CW 41	r	K _{VS} value [m ³ /h]	2.1	6.5	20
CW 41/4		K _{VO} (Preset bleed flow) [m ³ /h]	0.12	0.31	1.0
	s	K _{VS} value [m ³ /h]	10.5	31	98
		K _{VO} (Preset bleed flow) [m ³ /h]	0.55	1.5	5.0

			G 3/8	G 1/2	G 3/4	G 1
CW 44	—	K _{VS} value [m ³ /h]	0.66	0.66	1.37	1.37
CW 44 K	—	K _{VO} (Preset bleed flow) [m ³ /h]	0.04	0.04	0.04	0.04