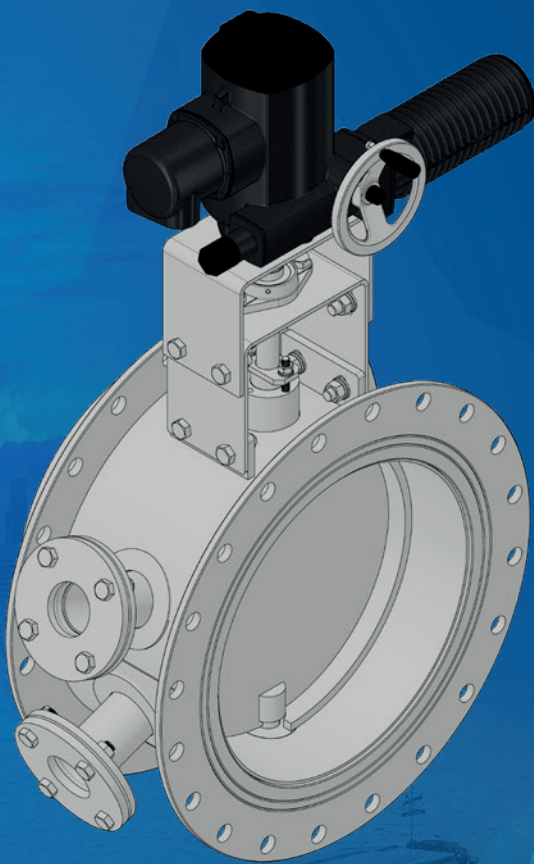


WCV[®] High performance
**WATER-COOLED
VALVES**



discom

EXHAUST TECHNOLOGY

Solutions for a better world

Product information

The Discom water-cooled valves series WCV® allows the customer to reduce infrared signature of a vessel and provide heat reduction over the hull.

The design of WCV® marine valves enable the evacuation of hot exhaust gas through aluminium hull without direct sea water injection into exhaust gas piping before the hull side valve.

The high-performance water-cooled valves can be produced in a fully tight design as an option.

MAIN FEATURES

- Used materials 254SMO or CuNiFe alloy
- Pneumatically or electrically actuated with manual override
- Shock proof execution (up to 250g)
- Mechanical open-closed indicator
- NO/NC limit switch (4 off)
- Remote control
- Compact design
- Resistance to high temperatures, corrosion and aggressive mediums

STANDARD SCOPE OF SUPPLY

- High-performance water-cooled valve equipped with a pre-calibrated pneumatic or electric actuator
- Manual handwheel
- Switch box with open-closed indicator and limit switches
- Solenoid valve with coils, plug sockets and a cable
- Air silencers

PERFORMANCE DATA

- Exhaust operating temperature up to +600° C (other temperatures upon special request)
- Sea water temperature up to +45° C (other temperatures upon special request)
- Valve casing temperature not more than +60° C
- Exhaust temperature drop up to 200° C
- Reference value of pressure drop 5...8 mbar (exhaust side)
- Protection rating IP65 (others upon special request)
- Leak rate < 1.5%

OPTIONS

- Digital open-closed indicator
- Compressed air shut off valve
- Junction box
- Fully tight design
- Counter-flanges for both exhaust gas and sea water sides
- Wide range of electric actuator respond time

CERTIFICATION

- There is a possibility to apply for approval certificate issued by the major MCS like ABS, BV, DNV-GL, LR, RINA, PRS, RS

Table 1. Example of typical dimensions of water-cooled valve with pneumatic actuator.

Valve NB, mm	Exhaust flow range, m ³ /h	ØA, mm	ØB, mm	ØC, mm	ØD, mm	E, mm	F, mm	ØG, mm	H, mm	I, mm	K, mm	Flange NB (exhaust side)
150	6...9	168.3	190.3	214.3	315	211	168	42.4	485.0	185	554	NB200 DIN2576
200	9...12	219.1	241.1	263.1	395	211	172	42.4	493.0	215	597	NB250 DIN2576
250	12...14	273.0	295.0	317.0	445	259	216	48.3	498.0	250	657	NB300 DIN2576
300	15...19	323.9	345.9	367.9	505	259	225	48.3	497.0	275	717	NB350 DIN2576
350	19...22	355.6	381.6	407.6	565	300	244	60.3	495.0	300	777	NB400 DIN2576
400	22...30	406.4	432.4	458.4	615	300	263	76.1	495.0	335	827	NB450 DIN2576
450	30...40	457.2	483.2	519.2	670	365	282	76.1 x 2 (40°)	575.0	370	870	NB500 DIN2576
500	53...60	508.0	550.0	592.0	730	365	300	76.1 x 2 (40°)	575.0	405	930	NB550 DIN86044
600	65...80	609.6	651.6	693.6	835	400	319	76.1 x 2 (40°)	575.0	450	1035	NB650 DIN86044
700	85...92	711.2	751.2	971.2	907	460	356	88.9 x 2 (40°)	575.0	500	1107	NB750 DIN86044
800	95...105	812.8	852.8	892.8	1010	510	393	88.9 x 2 (40°)	575.0	550	1210	NB850 DIN86044
900	100...125	914.4	954.4	994.4	1110	575	429	114.3 x 2 (40°)	595.0	600	1310	NB950 DIN86044
1000	130...150	1016.0	1058.0	1100.0	1266	625	465	114.3 x 2 (40°)	595.0	650	1410	NB1050 DIN86044

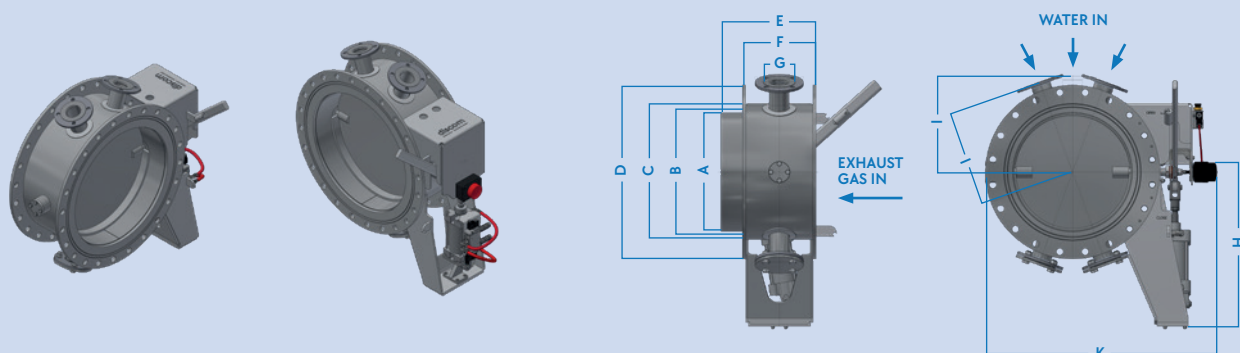
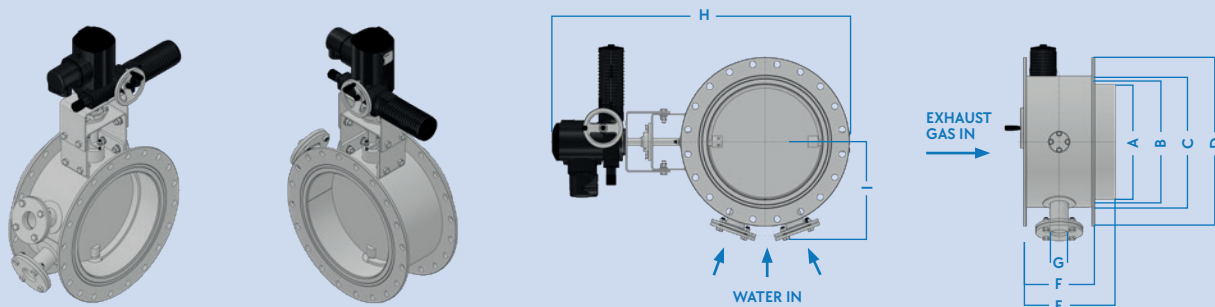


Table 2. Example of typical dimensions of water-cooled valve with electric actuator.

Valve NB, mm	Exhaust flow range, m ³ /h	ØA, mm	ØB, mm	ØC, mm	ØD, mm	E, mm	F, mm	ØG, mm	H, mm	I, mm	Flange NB (exhaust side)
150	6...9	168.3	190.3	214.3	285	211	168	42.4	778	185	NB200 DIN2576
200	9...12	219.1	241.1	263.1	340	211	172	42.4	823	215	NB250 DIN2576
250	12...14	273.0	295.0	317.0	445	259	216	48.3	902	250	NB300 DIN2576
300	15...19	323.9	345.9	367.9	505	259	225	48.3	970	275	NB350 DIN2576
350	19...22	355.6	381.6	407.6	565	300	244	60.3	1035	300	NB400 DIN2576
400	22...30	406.4	432.4	458.4	615	300	263	76.1	1095	335	NB450 DIN2576
450	30...40	457.2	483.2	519.2	670	365	282	76.1 x 2 (40°)	1095	370	NB500 DIN2576
500	53...60	508.0	550.0	592.0	730	365	300	76.1 x 2 (40°)	1235	405	NB550 DIN86044
600	130...150	609.6	651.6	693.6	860	400	319	76.1 x 2 (40°)	1235	450	NB650 DIN86044



Note: Any other NB or special overall dimensions are upon customer request. All above mentioned drawings and other graphic data are provided for the reference and can be used as preliminary information only! Please contact us if detailed information is required.

FOR MORE INFORMATION PLEASE CONTACT US

Discom B.V.

Staalindustrieweg 5
2952 AT Alblasterdam
The Netherlands

Ph.: +31 7868 10 960

Fax: +31 7868 10 970

E-mail: info@discom.eu

www.discom.eu



discom

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