

3-WAY CONTROL VALVE TYPE G3CM-T

Nodular Cast Iron, PN25 DN 100 – 125 mm, PN16 DN 150 - 300 mm, Grooved Joints

0-2.6.05-B

Page 1 of 2



TECHNICAL DATA

Materials:

- Valve body, slide	EN-GJS-400-15
- O-ring	NBR 70A
- U-ring	PTFE

Flow characteristic	Almost linear
Leakage rate	Max. 0.5%
Regulating capability	Kvs/Kvr > 25

Connection	Grooved joints acc. to ANSI/AWWA C-606 (Victaulic joints)
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Max. pressure Δp_L , against which the valve can close 16 bar

Nominal pressure
DN 100 - 125mm PN 25, max. 100°C (option 250°C)
DN 150 - 300mm PN 16, max. 100°C (option 250°C)

Slide in Nodular cast iron

APPLICATIONS

Control valve type G3CM-T is a three-way control valve with a slide for quarter turn operation designed for regulating of fresh water, lubricating oil and other liquid media. The valves are designed for use in conjunction with industrial processes, district heating and marine installations with large water or lubricating oil volumes:

- Engine Jacket Cooling Water System
- Lubricating Oil Cooling
- Central Cooling Water System, etc.

The valves are designed for use in conjunction with valve motor type CAR with handle for manual operation or for use in conjunction with a pneumatic actuator.

DESIGN

The valve body and the valve slide are made of nodular cast iron.

FUNCTION

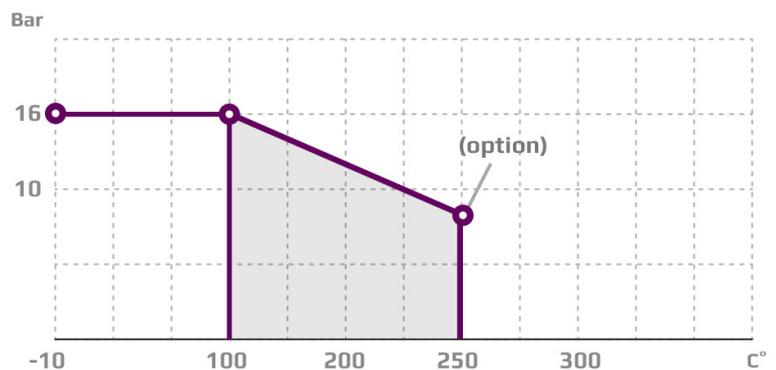
The slide is firmly connected with the motor spindle. When the slide is in the one outer position by turning the spindle, connection A-AB is fully open and connection B-AB is fully closed. In the other outer position connection A-AB is fully closed and connection B-AB is fully open. In the intermediate positions the opening degrees change proportionally. The valve has a small tolerance between body and slide. To minimize the leakage an O-ring is mounted in a groove on the slide.

FEATURES

- Simple design secures reliable controls and reduces costly downtime.
- Grooved ends - ready for coupling installation
- No need for counter flange

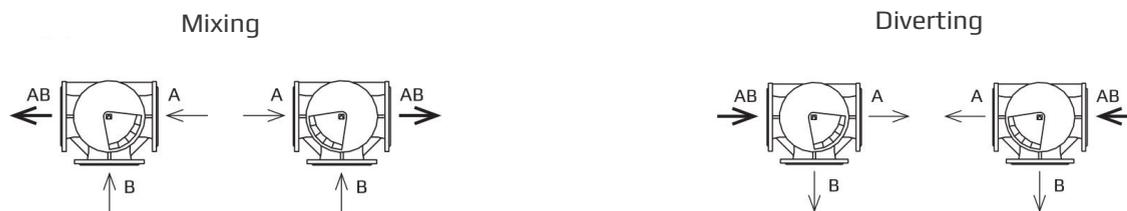
PRESSURE/TEMPERATURE DIAGRAM

According to DIN 2401



Subject to change without notice.

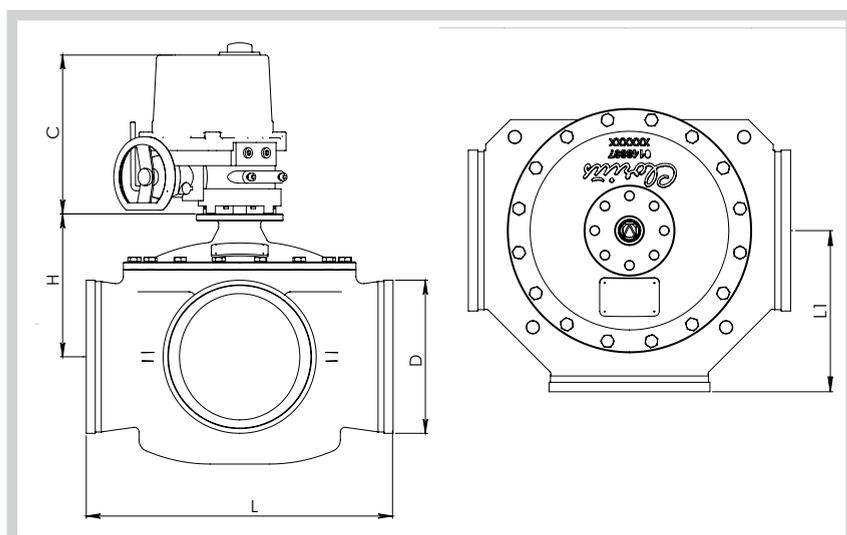
PORT NUMBERING



MOUNTING

The valve connections are marked A, B and AB. The slide is operating between A and B. Check slide position before installation in the pipe. The slide position is marked on the top of the shaft. The valves can be installed vertically as well as horizontally. The valves must be mounted in a way that the valve actuator will be exposed to a minimum of moisture and unnecessary vibrations.

DIMENSION SKETCH



Type	L mm	L1 mm	H mm	B mm	C mm	D (dia.) mm
100 G3CM-T	350	175	132	19	470	114
150 G3CM-T	480	270	216	24	470	168
200 G3CM-T	530	270	236	21	361	219
250 G3CM-T	592	300	273	23	361	273
300 G3CM-T	649	330	305	25.5	361	324

SPECIFICATIONS

Type	Connection DN in mm	k_{vs} -value ⁽¹⁾ Mixing valve m ³ /h	k_{vs} -value ⁽¹⁾ Diverting valve m ³ /h	Weight kg
100 G3CM ⁽²⁾	100	125	107.5	33
150 G3CM	150	310	266.6	88
200 G3CM-T	200	800	1100	92
250 G3CM-T	250	1500	2100	130
300 G3CM-T	300	2000	2650	170

¹⁾ kvs-value for port A and B 50% open. ²⁾ available from 2015