





2015/05 :: | ::www.chemvalve-schmid.com:: | ::info@chemvalve-schmid.com:: | ::T:+41 32 639 50 10:: | ::F:+41 32 639 50 15::

### ::Operating Instructions:: | ::Chapter 6::

Page 1/3

::Check Valve Type CSC, CSCF:: | ::DN050 - 1000:: | ::PN10 - 40:: | ::ANSI150 - 300::

# Operating instructions and safety regulations for putting into operation and maintenance of the Check Valve CSC and CSCF

Please read carefully!

### Security note

Only qualified skilled workers are permitted to install the armature. This should be staff that is well acquainted with setting up, fitting, putting into operation, operating and maintain the tool. The staff must have a qualification at their disposal which corresponds with their function and occupation, such as:

- Instruction and commitment for the observance of all regional and internal regulations and commitments regarding operation.
- Education in accordance with the standards of security engineering, in application and maintenance of adequate equipments of security and labour protection.
- Training in first aid etc.

#### **Proper maintenance**

Inset in pipes for prevention of return flow of the media within the permissible limits of pressure and temperature, observing the chemical and corrosive influences on the valve.

The media-resistance of the valve must be tested for operating conditions.



## Danger notes

During operation the valve is under pressure!

If flange connections or screw plugs are loosened, hot water, steam, corroding liquids or toxic gases will escape. Serious scalds and burns on the whole body are possible! Serious contaminations are possible!

- Work for assembly or maintenance to be done in pressure less condition only.
- During operation, the valve will be hot or extremely cold.
- Work for assembly or maintenance to be done at room temperature only.
- Sharp-edged interior parts can cause cuts on hands. Wearing gloves for exchanging the valve is necessary!

Further measurements, materials and fields of application can be found in the corresponding Data Sheet.







2015/05 :: | ::www.chemvalve-schmid.com:: | ::info@chemvalve-schmid.com:: | ::T:+41 32 639 50 10:: | ::F:+41 32 639 50 15::

## ::Operating Instructions:: | ::Chapter 6::

::Check Valve Type CSC, CSCF:: | ::DN050 - 1000:: | ::PN10 - 40:: | ::ANSI150 - 300::

## Installation

Check valve Type CSC and CSCF for installation between flanges according to the drawings.

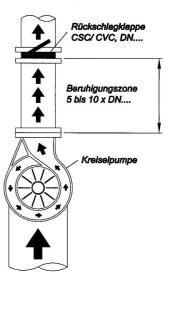
- Installation between flanges according to DIN EN 1092-1, PN 10/ 16/ 25/ 40 or ANSI B16.5 CL.150, 300 lbs with the aid of a centre ring
- The centre ring between the flanges is executed at the body outside diameter by means of the flange connecting screws. Installation between flanges of other norms on inquiry.
- For special applications corresponding regulations have to be noted, e.g. AD-leaflets (working group for pressure devices) or TRD-directives (technical rules for steam boilers)
- The assembly must be carried out according to the recognized rules of technology.

## Note direction of flow ( direction of arrow on housing)!

- The fitting position is horizontal. In vertical position direction of flow is only possible from bottom to top.
- For oscillatory systems (e.g. compressors, diaphragm pumps etc) please pay attention that the standard execution corresponds with the operation.
- Check valve mustn't be built apart
- Using only original spare parts.
- Functional test.

## Important

- Pay attention that the opening of the valve discs is not hindered through the connected flanges.
- For powerful pulsated flow rate we recommend check valves with spring return-mechanism.
- If installed on a pump (on pressure side) there should not be a direct fitting to a pump flange or a subsequent not bow or bend. In addition there must be allowed a 5 to 10-fold distance of the nominal value at the beginning of the tranquillized zone.



## Page 2/3







Page 3/3

2015/05 :: | ::www.chemvalve-schmid.com:: | ::info@chemvalve-schmid.com:: | ::T:+41 32 639 50 10:: | ::F:+41 32 639 50 15::

## ::Operating Instructions:: | ::Chapter 6::

::Check Valve Type CSC, CSCF:: | ::DN050 - 1000:: | ::PN10 - 40:: | ::ANSI150 - 300::

ochnical data	choo	k volv		Cand	Soft	Sooling	(application	limito	ənnli	oc to		nd CG	CE)
	<u>i ciiec</u>	<u>k valv</u>			3011	Seanng		mmus	аррп		CSC a		
CSC-2727M							CSC-2764M						
DN050-1000							DN050-1000						1
t (°C)	-10	RT	100	200	300		t (°C)	-10	RT	100	200	300	1
Ps (bar)	36.5	36.5	29.2	25.2	19		Ps (bar)	36.5	36.5	29.2	25.2	19	
CSC-1111M							CSC-6464M						
DN350-1000							DN050-1000						
t (°C)	-200	RT	150	300	400	500	t (°C)	-200	RT	150	300	400	500
Ps (bar)	40	40	32.7	25.7	23.8	22.8	Ps (bar)	40	40	36.3	29.7	27.4	26.4
CSC-6767M						CSC-3333M							
DN050-1000							DN050-400						1
t (°C)	-100	RT	250			t (°C)	-60	RT	120	200	250	1	
Ps (bar)	40	40	40				Ps (bar)	16	16	16	13.5	8	1
				·		_							-
													1

CSC-7575-						
DN050-300						ļ
t (°C)	-20	RT	20	120	180	
Ps (bar)	6	6	6	4	1	

CSC-7474-					
DN050-300					
t (°C)	-20	RT	20	50	100
Ps (bar)	6	6	6	4	1

Soft Sealing	Temperature Limits	Code
EPDM	-50 up to 130°C	Е
NBR	-30 up to 120°C	Р
VITON	-20 up to 200°C	V
PTFE	-200 up to 200°C	Т

For further technical information please consult the corresponding Data Sheet.