

## **Condensate collection / Steam distribution**

# CODI® S 671/672 - 02 to 18 with stuffing box PN40 / PN63

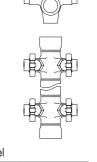
### Vertical installation:

- with flanges (Fig. 671....1)
- with socket weld ends (Fig. 671....3)
- with butt weld ends (Fig. 671....4)

**Horizontal installation:** 

- with flanges (Fig. 672....1)

with socket weld ends
 with butt weld ends
 (Fig. 672....3) Forged steel
 Stainless steel



## CODI® B 675/676 - 02 to 18 with bellows seal (maintenance-free) PN40 / PN63

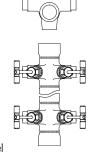
## Vertical installation:

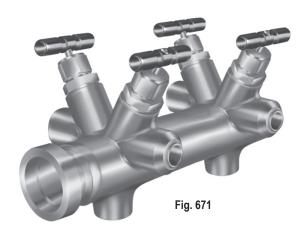
with flanges (Fig. 675....1)
with socket weld ends (Fig. 675....3)
with butt weld ends (Fig. 675....4)

Horizontal installation:

- with flanges (Fig. 676....1)

with socket weld ends
 with butt weld ends
 (Fig. 676....3) Forged steel
 (Fig. 676....4) Stainless steel





## 

Fig. ...-14

Fig. ...-12

Fig. ...-10

## Features:

- Flexibility through compact, modular design (available with 2, 4, 6, 8, 10, 12, 14, 16 or 18 integrated stop valves!)
- All functional parts replaceable in situe no need for manifold removal!
- Valves with low maintenance (CODIS Fig. 671 / 672) or maintenance-free (CODIB - Fig. 675 / 676) with openclose or throttling function.
- Safety back seat when fully opened valve!
- Economic on-site handling and long life (through forged steel and metallic sealing...)
- An insulating jacket provides optimal protection against energy loss (optional) !

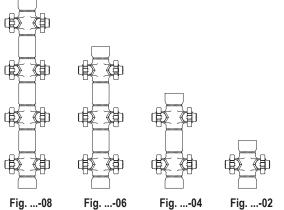




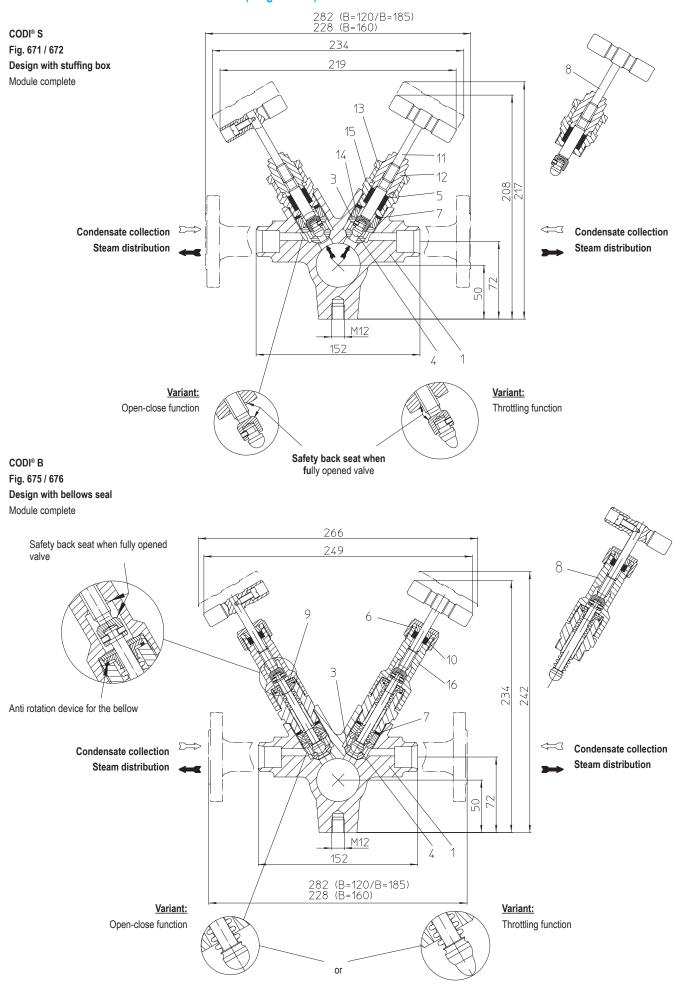
Fig. ...-16

A member of the ARI group

Fig. ...-18



## Condensate collection and Steam distribution (Forged steel)

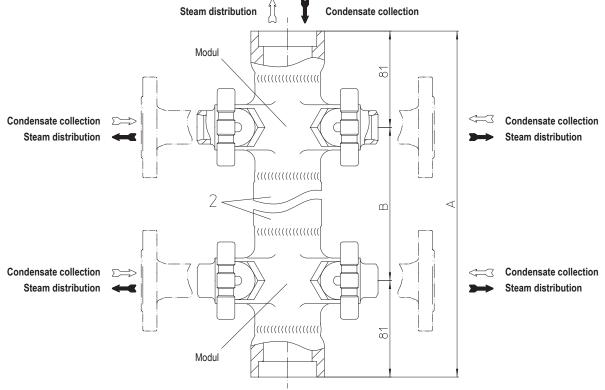




## **Parts**

Pos.	Description	Fig. 45.671 / 45.672 / 45.675 / 45.676 Fig. 46.671 / 45.672 / 45.675 / 45.676	Fig. 55.671 / 45.672 / 45.675 / 45.676		
1	Body	P250GH, 1.0460	X2CrNiMo17-12-2, 1.4404		
2	Connection between the modules	P325GH-TC1, 1.0305	X2CrNiMo17-12-2, 1.4404		
3	Seat *	X8CrNiS18-9, 1.4305			
4	Valve ball	X39CrMoS17+QT, 1.4122+QT			
5	Packing ring (1 set for CODI® S) *	Pure graphite			
6	Union nut	X14CrMoS17+QT, 1.4104+QT			
7	Graphitring	Graphite			
8	Assembly stop valve, cpl *	X6CrNiMoTi17-12-2, 1.4571	X6CrNiMoTi17-12-2, 1.4571		
8.1	Bellows seal	Stainless steel	Stainless steel		
9	Safety washer	X5CrNi18-10, 1.4301	X5CrNi18-10, 1.4301		
10	Packing ring (1 set for CODI® B) *	Pure graphite	Pure graphite		
11	Spindel	X2CrNiMo17-12-2, 1.4404	X2CrNiMo17-12-2, 1.4404		
12	Threaded bushing	X39CrMoS17+QT, 1.4122+QT	X39CrMoS17+QT, 1.4122+QT		
13	Safety nut	X8CrNiS18-9, 1.4305	X8CrNiS18-9, 1.4305		
14	Banjo bolt	X8CrNiS18-9, 1.4305	X8CrNiS18-9, 1.4305		
15	Fitting	X8CrNiS18-9, 1.4305	X8CrNiS18-9, 1.4305		
16	Spindle guiding	X8CrNiS18-9, 1.4305			
	Other interior parts	Stainless steel			

## Flow direction in case of



## Dimensions and weights

Туре		Fig02	Fig04	Fig06	Fig08	Fig10	Fig12	Fig14	Fig16	Fig18
PN40	PN40 B = 120 mm									
Dimension A	(mm)	162	282	402	522	642	762	882	1002	1122
Weight approx.	(kg)	3,5	7,2	10,7	14,7	17,7	21,2	24,7	28,2	31,7
PN40 B = 160 mm										
Dimension A	(mm)	162	322	482	642	802	962	1122	1282	1442
Weight approx.	(kg)	3,5	7,5	11	14,5	18	21,5	25	28,5	32
PN63 B = 185 mm										
Dimension A	(mm)	162	347	532	717	902	1087	1272	1457	1642
Weight approx.	(kg)	4	8,5	12,5	16,5	20,5	24,5	28,5	32,5	36,5



### **Operating limits**

Fig. 45.671 / 45.672 Fig. 45.675 / 45.676	PN40 - 1.0460	
Operating pressure PS (bar-g)	32	21
Operating temperature TS (°C)	250	400
Fig. 55.671 / 55.672	PN40 - 1.4404	

Fig. 55.671 / 55.672 Fig. 55.675 / 55.676	PN40 - 1.4404	
Operating pressure PS (bar-g)	32	22
Operating temperature TS (°C)	350	400

Fig. 46.671 / 46.672 Fig. 46.675 / 46.676	PN63 - 1.0460	
Operating pressure PS (bar-g)	45	32
Operating temperature TS (°C)	250	400

#### Standard

Standard				
Primary connection top and bottom:				
Flanges1	acc. to DIN 2501			
Socket weld ends3	acc. to DIN EN 12760			
Butt weld ends4	acc. to DIN EN 12627			
Secondary connection left and	right:			
Flanges1	acc. to DIN 2501			
Socket weld ends3	acc. to DIN EN 12760			
Butt weld ends4	acc. to DIN EN 12627			
Fig02	each 1 secondary connections DN15 / 20 / 25			
Fig04	each 2 secondary connections DN15 / 20 / 25			
Fig06	each 3 secondary connections DN15 / 20 / 25			
Fig08	each 4 secondary connections DN15 / 20 / 25			
Fig10	each 5 secondary connections DN15 / 20 / 25			
Fig12	each 6 secondary connections DN15 / 20 / 25			
Fig14	each 7 secondary connections DN15 / 20 / 25			
Fig16	each 8 secondary connections DN15 / 20 / 25			
Fig18	each 9 secondary connections DN15 / 20 / 25			

Other types of connection on request.

## For ANSI versions refer to data sheet CODI®-ANSI

## Basic types

basic types				
Vertical installation	on	recommended for attachment		
Fig. 671 / 675	-02	1 screw		
Fig. 671 / 675	-04	2 screws		
Fig. 671 / 675	-06	3 screws		
Fig. 671 / 675	-08	3 screws		
Fig. 671 / 675	-10	4 screws		
Fig. 671 / 675	-12	4 screws		
Fig. 671 / 675	-14	5 screws		
Fig. 671 / 675	-16	5 screws		
Fig. 671 / 675	-18	6 screws		
Horizontal install	ation	recommended for attachment		
Fig. 672 / 676	-02	1 screw		
Fig. 672 / 676	-03	2 screws		
Fig. 672 / 676	-04	3 screws		
Fig. 672 / 676	-05	3 screws		
Fig. 672 / 676	-06	4 screws		
Fig. 672 / 676	-07	4 screws		
Fig. 672 / 676	-08	5 screws		
Fig. 672 / 676	-09	5 screws		

## Installation position preferably vertical.

Threaded connection M12 are provided at the back for the attachment to a supporting structure.

## Operating ranges

Fig. 671/672 and Fig. 675/676 both can be applied as condensate collector or steam distributor. Applications are wide spread piping systems, steam tracers on pipes and apparatus. The flow media can be steam, water, oil etc. On the application as steam distributor the steam inlet is at the top flange. At the bottom outlet flange a steam trap shall be installed. On the application as condensate collector the outlet is at the top flange. At the bottom flange a blowdown valve shall be installed. In case of a vertical installation a siphon pipe should be applied. This ensures even temperature distribution thus pressure shocks and noise on condensate return are reduced..

The design is based on a robust module construction with integral stop valves (ball/seat). Body and stop valve are threaded together with a hard seal (metal to metal).

Integral stop valves on CODI S require low maintenance. All functional parts are replaceable in situ. There is no need for manifold removal from the pipe. Fig. 676 (CODI B bellows seal design for horizontal installation) and Fig. 675 (CODI B bellows seal design for vertical installation) are designed for those installations where we find the highest requirements for tight sealing to the open and maintenance free operation of the valve.

A clearance of 50 mm between the construction bracket and the condensate collector/steam distributor ensures that the insulation jacket can be wrapped around it.

During welding at the primary and secondary connections the integral stop valves have to be in an open position. Further precautions are not required..

## Handling

The integral stop valves with shut-off plugs shall not be used for throttling of condensate or steam flows.

For throttling purposes the throttling plug shall be applied. The valves are generally equipped with back seats.

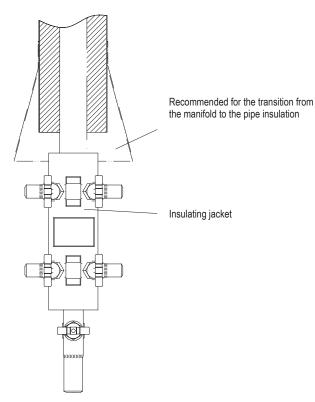
The advantage of Fig. 671/672 is that this additional back seat sealing protects the graphite packing and multiples it's longevity.

On Fig. 675/676 the back seat may be advantageous in case of damages to the bellows. On CODI B 675/676 no twist to the bellow will be effected due to the non-rotation lock.

The stop valves are screwed into the body without using a gasket (hard seal) If necessary, the union nut (pos. 6) can be tightened, but the stem must to be turned with normal forces!



## Insulating jacket / pipe connection

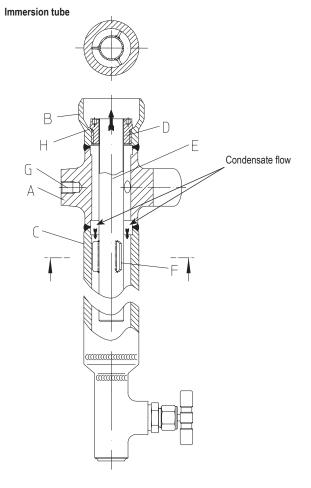


Insulating jacket in mounted position

Cona insulating jackets provide a simple and effective heat insulation (suitable for every Condensate collection / Steam distribution)

## Advantages:

- energy saving
- less radiation of heat to the atmosphere
- · safety of the operation personal
- · robust, non ageing
- · resistance to heat
- · low weight and flexible
- clean handling (no contact with the insulating material)
- free from asbestos
- · water repellent
- · simple disassembly and reusable

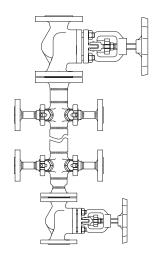


Part	Description			
Α	CODI® Modul			
В	Butt weld end			
С	Welding bushing for the connection with an additional module			
D	Banjo bolt	X5CrNi18-10, 1.4301		
Е	Immersion tube	X6CrNiTi18-10, 1.4541		
F	Spacer X5CrNi18-10, 1.4301			
G	Fixing point			
Н	Metal-to-metal seal between banjo bolt and welding bush			

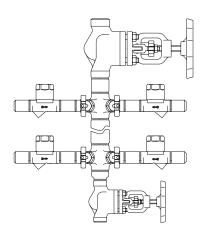
Condensate collector with immersion tube



## Preferred vertical installation

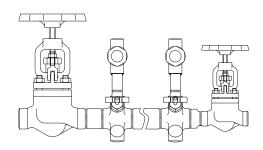


- ... primary stop valve (flanged) for welding neck flange DN 40 acc. to DIN 2635 or DIN 2635 resp. DN 50 acc. to DIN 2635 or DIN 2636
- ... secondary connections (flanged)
  DN 15 to DN 25 acc. to DIN 2635 or DIN 2637
- ... design with blow down valve

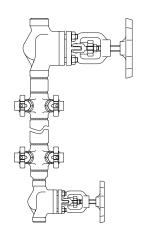


- ... primary stop valve (butt weld ends)
  DN 40 and DN 50 acc. to DIN EN 12627
- ... secondary connections with steam trap (butt weld ends) DN 15 to DN 25 acc. to DIN EN 12627
- ... design with blow down valve

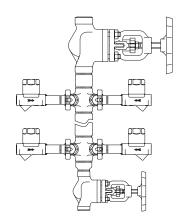




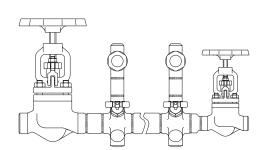
- ... primary stop valve (butt weld ends)
  DN 40 and DN 50 acc. to DIN EN 12627
- ... secondary connections with steam trap (socket weld ends or butt weld ends)
  DN 15 to DN 25 acc. to DIN EN 12760 or DN 15 to DN 25 acc. to DIN EN 12627 (butt weld ends)
- ... design with blow down valve



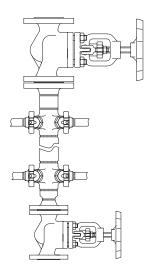
- ... primary stop valve (butt weld ends)
  DN 40 and DN 50 acc. to DIN EN 12627
- ... secondary connections (butt weld ends) DN 15 to DN 25 acc. to DIN EN 12627
- ... design with blow down valve



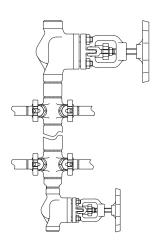
- ... primary stop valve (butt weld ends)
  DN 40 and DN 50 acc. to DIN EN 12627
- $\dots$  secondary connections with steam trap (socket weld ends) DN 15 to DN 25 acc. to DIN EN 12627
- ... design with blow down valve



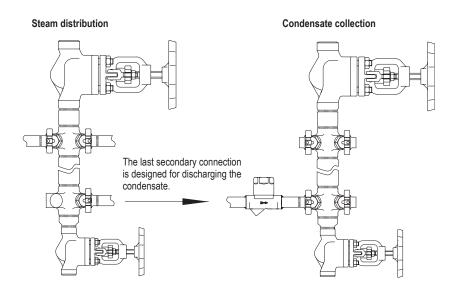




 $\dots$  primary stop valve and secondary connections - design with blow down valve

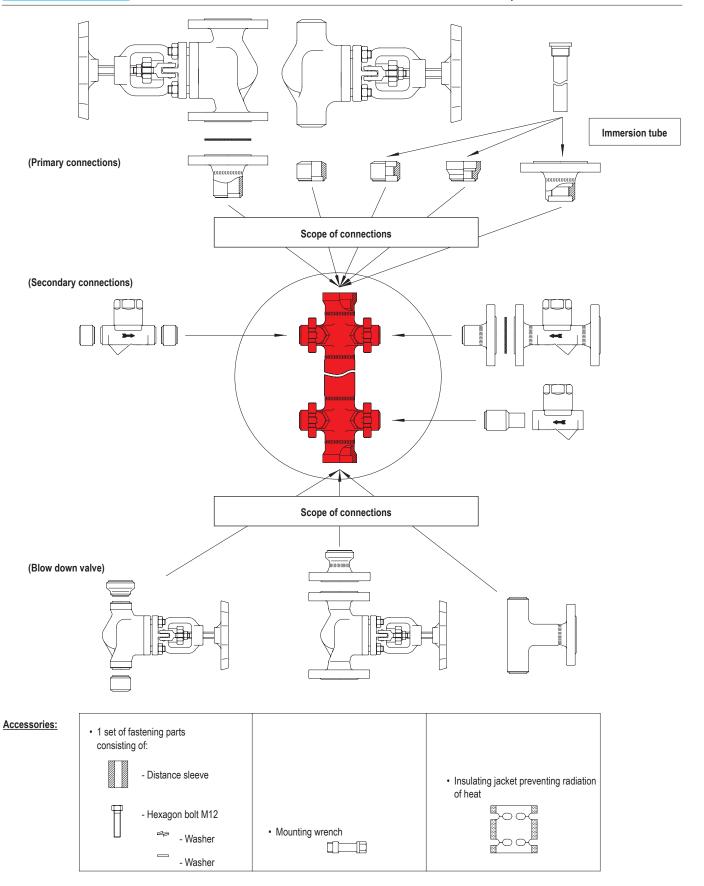


 $\dots$  primary stop valve and secondary connections - design with blow down valve



- $\dots$  primary stop valve and secondary connections design with blow down valve
- ... steam trap at the condensate collector





## Inquiry- / order-data

for inquiries or when placing orders, please use the order form attached.













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