



**BOONS**

food & industrial supplies

# CLEANING SYSTEMS

TECHNICAL CATALOG



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# 01. BOOSTER UNITS



## DESCRIPTION

BOONS FIS produces booster units - for cleaning applications - that meet the highest quality requirements. Due to the robust, hygienic construction and their specific control these pump units are very reliable and can be used in various sectors.

These installations are all equipped with 1, 2, 3 or 4 stainless steel frequency controlled centrifugal pumps. The use of these type of pumps ensures that the pressure booster unit always produces the correct power in function of the

requested water need. Because of this pressure and flow differences will be avoided and a long service life of the installation is guaranteed.

The automatic start-stop system in combination with the intelligent control ensures low consumption of electricity and water, and reduces maintenance to a minimum.

The SPU-EB, MPU-EB and MPU-GR booster units are equipped with an 200 L or 800 L break tank.



## ADVANTAGES

- **Pump and pump parts** are made of **stainless steel 1.4301 AISI** (no corrosion possible)
- Very **sleek design** and **hygienic** performance
- Automatic **start-stop system**
- Display with readout: **pressure, power (Amp.), speed (Hz), error message** and **start-stop-reset**
- **Constant pressure** in the pipes
- **Noiseless** and **easy and low maintenance**
- **Dry run protection**
- **Lockable** maintenance switch



## TECHNICAL DATA

TYPE	eSPU-20/3-EB	eSPU-20/7-EB	eSPU-20/12-EB	eSPU-25/5-EB	eSPU-25/8-EB
Pump Ebara	EVMS-M 3-20V6	EVMS-M 5-19V6	EVMS-M 10-14V6	EVMS-M 5-19V6	EVMS-M 10-14V6
Number of pumps	1	1	1	1	1
Number of simultaneous users	up to 3	up to 7	up to 12	up to 5	up to 8
Frequency drive	EM-30	EM-30	EM-30	EM-30	EM-30
Motor power	3 kW	7,5 kW	11 kW	7,5 kW	11 kW
Speed	max. 3.515 rpm	max. 3.515 rpm	max. 3.515 rpm	max. 3.515 rpm	max. 3.515 rpm
<b>CONNECTIONS</b>					
Inlet	1,1/4" BSP in	1,1/4" BSP in	2" BSP in	1,1/4" BSP in	2" BSP in
Outlet	1,1/4" BSP in	1,1/4" BSP in	2" BSP in	1,1/4" BSP in	2" BSP in
<b>WATER INLET</b>					
Supply flow	min. 5,4 m <sup>3</sup> /h	min. 9,6 m <sup>3</sup> /h	min. 18 m <sup>3</sup> /h	min. 9,6 m <sup>3</sup> /h	min. 18 m <sup>3</sup> /h
Supply pressure	1,5 - 10 bar	1,5 - 10 bar	1,5 - 10 bar	1,5 - 10 bar	1,5 - 10 bar
Switch-off pressure	< 1,5 bar	< 1,5 bar	< 1,5 bar	< 1,5 bar	< 1,5 bar
Supply temperature	5°C - 70°C	5°C - 70°C	5°C - 70°C	5°C - 70°C	5°C - 70°C
<b>WATER OUTLET</b>					
Set pressure*	20 bar	20 bar	20 bar	25 bar	25 bar
Flow at set pressure	73 l/m	140 l/m	236 l/m	100 l/m	160 l/m
Set pressure ajust. between	13 - 20 bar	13 - 25 bar	11 - 25 bar	13 - 25 bar	11 - 25 bar
Set flow rate ajust. between	25 - 90 l/m	50 - 160 l/m	80 - 300 l/m	50 - 160 l/m	80 - 300 l/m
<b>ELECTRICAL</b>					
Voltage	3 x 400 V + PE	3 x 400 V + PE	3 x 400 V + PE	3 x 400 V + PE	3 x 400 V + PE
Current	5,9 Amp	13,6 Amp	20,3 Amp	13,6 Amp	20,3 Amp
Cable cross section	4 x 2,5 mm <sup>2</sup> HO7RN-F	4 x 2,5 mm <sup>2</sup> HO7RN-F	4 x 4 mm <sup>2</sup> HO7RN-F	4 x 2,5 mm <sup>2</sup> HO7RN-F	4 x 4 mm <sup>2</sup> HO7RN-F
<b>DIMENSIONS</b>					
Length x width x depth	700 x 495 x 1138 mm	700 x 525 x 1433 mm	700 x 560 x 1451 mm	700 x 525 x 1433 mm	700 x 560 x 1451 mm
Weight	77 kg	114 kg	156 kg	114 kg	156 kg
<b>CODE</b>	4.500.160	4.500.161	4.500.162	4.500.163	4.500.164

\* Includes 4 bar pre-pressure



# SPU-EB

## TECHNICAL DATA

TYPE	SPU-20/5-EB	SPU-20/9-EB
Pump	Ebara EVMS-M 5-19V6	Ebara EVMS-M 10-14V6
Number of pumps	1	1
Number of simultaneous users	up to 5	up to 9
Frequency drive	EM-30	EM-30
Motor power	7,5 kW	11 kW
Speed	max. 3.515 rpm	max. 3.515 rpm
<b>CONNECTIONS</b>		
Inlet	1.1/2" BSP in	1.1/2" BSP in
Outlet	1.1/4" BSP in	1.1/2" BSP in
<b>WATER INLET</b>		
Supply flow	min. 9,6 m <sup>3</sup> /h	min. 18 m <sup>3</sup> /h
Supply pressure	1,5 - 10 bar	1,5 - 10 bar
Switch-off pressure	< 1,5 bar	< 1,5 bar
Supply temperature	5°C - 70°C	5°C - 70°C
<b>WATER OUTLET</b>		
Set pressure*	20 bar	20 bar
Flow at set pressure	105 l/m	173 l/m
Set pressure ajust. between	13 - 25 bar	11 - 25 bar
Set flow rate ajust. between	50 - 160 l/m	80 - 300 l/m
<b>ELECTRICAL</b>		
Voltage	3 x 400 V + N + PE	3 x 400 V + N + PE
Current	13,6 Amp	20,3 Amp
Cable cross section	5G2.5-CTMB-N	5G4-HO7RN-F
<b>DIMENSIONS</b>		
Length x width x depth	1435 x 1693 x 581 mm	1435 x 1693 x 620 mm
Weight	184 kg	226 kg
<b>CODE</b>	4.500.133	4.500.134

\* Includes 4 bar pre-pressure



# eMPU2-EB

## TECHNICAL DATA

TYPE	eMPU2-20/14-EB	eMPU2-20/24-EB
Pump	Ebara EVMS-M 5-19V6	Ebara EVMS-M 10-14V6
Number of pumps	2	2
Number of simultaneous users	up to 14	up to 24
Frequency drive	EM-30	EM-30
Motor power	15 kW (2 x 7,5 kW)	22 kW (2 x 11 kW)
Speed	max. 3.515 rpm	max. 3.515 rpm
<b>CONNECTIONS</b>		
Inlet	DN65-EN1092-1-13B	DN80-EN1092-1-13B
Outlet	DN50-EN1092-1-13B	DN80-EN1092-1-13B
<b>WATER INLET</b>		
Supply flow	min. 19,2 m <sup>3</sup> /h	min. 36 m <sup>3</sup> /h
Supply pressure	1,5 - 10 bar	1,5 - 10 bar
Switch-off pressure	< 1,5 bar	< 1,5 bar
Supply temperature	5°C - 70°C	5°C - 70°C
<b>WATER OUTLET</b>		
Set pressure*	20 bar	20 bar
Flow at set pressure	280 l/m	472 l/m
Set pressure ajust. between	13 - 25 bar	13 - 25 bar
Set flow rate ajust. between	100 - 320 l/m	160 - 600 l/m
<b>ELECTRICAL</b>		
Voltage	3 x 400 V + PE	3 x 400 V + PE
Current	27,2 Amp	40,6 Amp
Cable cross section	4G6-HO7RN-F	4G10-HO7RN-F
<b>DIMENSIONS</b>		
Length x width x depth	1159 x 1483 x 740 mm	1192 x 1460 x 803 mm
Weight	245 kg	319 kg
<b>CODE</b>	4.500.141	4.500.142

\* Includes 4 bar pre-pressure



# eMPU2-GR

## TECHNICAL DATA

TYPE	eMPU2-40/5-GR	eMPU2-40/10-GR
Pump	Grundfos	Grundfos
Number of pumps	2	2
Number of simultaneous users	up to 5	up to 10
Frequency drive	Grundfos	Grundfos
Motor power	11,5 kW (1 x 6 kW + 1 x 5,5 kW)	15 kW (2 x 7,5 kW)
Speed	4.258 rpm	4.258 rpm
<b>CONNECTIONS</b>		
Inlet	1,1/4" BSP in	2" BSP in
Outlet	1,1/4" BSP in	1,1/4" BSP in
<b>WATER INLET</b>		
Supply flow	min. 24 m <sup>3</sup> /h	min. 24 m <sup>3</sup> /h
Supply pressure	1,5 - 10 bar	1,5 - 10 bar
Switch-off pressure	< 1,5 bar	< 1,5 bar
Supply temperature	5 - 70°C	5 - 70°C
<b>WATER OUTLET</b>		
Set pressure*	40 bar	40 bar
Flow at set pressure	110 l/m	200 l/m
Set pressure ajust. between	30 - 40 bar	30 - 40 bar
Set flow rate ajust. between	30 - 110 l/m	30 - 200 l/m
<b>ELECTRICAL</b>		
Voltage	3 x 400 V + N + PE	3 x 400 V + N + PE
Current	23 Amp	28,4 Amp
Cable cross section	5G4-HO7RN-F	5G6-HO7RN-F
<b>DIMENSIONS</b>		
Length x width x depth	1260 x 612 x 1191 mm	1260 x 612 x 1191 mm
Weight	251 kg	315 kg
<b>CODE</b>	4.500.139	4.500.140

\* Includes 2 bar pre-pressure



# eMPU4-GR

## TECHNICAL DATA

<b>TYPE</b>	<b>eMPU4-40/20-GR</b>
Pump	Grundfos
Number of pumps	4
Number of simultaneous users	up to 20
Frequency drive	Grundfos
Motor power	30 kW (4 x 7,5 kW)
Speed	4.258 rpm

### CONNECTIONS

Inlet	3,5" BSP in
Outlet	

### WATER INLET

Supply flow	min. 48 m <sup>3</sup> /h
Supply pressure	1,5 - 10 bar
Switch-off pressure	< 1,5 bar
Supply temperature	5 - 70°C

### WATER OUTLET

Set pressure*	40 bar
Flow at set pressure	400 l/m
Set pressure ajust. between	30 - 40 bar
Set flow rate ajust. between	30 - 400 l/m

### ELECTRICAL

Voltage	3 x 400 V + N + PE
Current	57 Amp
Cable cross section	5G20-HO7RN-F

### DIMENSIONS

Length x width x depth	1260 x 1200 x 1191 mm
Weight	640 kg

**CODE** 4.500.170

\* Includes 4 bar pre-pressure





# MPU2-EB

## TECHNICAL DATA

TYPE	MPU2-20/12-EB	MPU2-20/17-EB
Pump	Ebara EVMS-M 5-19V6	Ebara EVMS-M 10-14V6
Number of pumps	2	2
Number of simultaneous users	up to 12	up to 17
Frequency drive	EM-30	EM-30
Motor power	15 kW (2 x 7,5 kW)	22 kW (2 x 11 kW)
Speed	max. 3.515 rpm	max. 3.515 rpm
<b>CONNECTIONS</b>		
Inlet	3" BSP in	3" BSP in
Outlet	DN50-EN1092-1-13B	DN80-EN1092-1-13B
<b>WATER INLET</b>		
Supply flow	min. 19,2 m <sup>3</sup> /h	min. 36 m <sup>3</sup> /h
Supply pressure	1,5 - 10 bar	1,5 - 10 bar
Switch-off pressure	< 1,5 bar	< 1,5 bar
Supply temperature	5°C - 70°C	5°C - 70°C
<b>WATER OUTLET</b>		
Set pressure	20 bar	20 bar
Flow at set pressure	210 l/m	346 l/m
Set pressure ajust. between	13 - 25 bar	13 - 25 bar
Set flow rate ajust. between	100 - 320 l/m	160 - 600 l/m
<b>ELECTRICAL</b>		
Voltage	3 x 400 V + N + PE	3 x 400 V + N + PE
Current	27,2 Amp	41 Amp
Cable cross section	4G6-HO7RN-F	4G10-HO7RN-F
<b>DIMENSIONS</b>		
Length x width x depth	1639 x 1421 x 1747 mm	1665 x 1421 x 1747 mm
Weight	345 kg	419 kg
<b>CODE</b>	4.500.201	4.500.202



# MPU4-EB

## TECHNICAL DATA

TYPE	MPU4-20/21-EB	MPU4-20/35-EB
Pump	Ebara EVMS-M 5-19V6	Ebara EVMS-M 10-14V6
Number of pumps	4	4
Number of simultaneous users	up to 21	up to 35
Frequency drive	EM-30	EM-30
Motor power	30 kW (4 x 7,5 kW)	44 kW (4 x 11 kW)
Speed	max. 3.515 rpm	max. 3.515 rpm
<b>CONNECTIONS</b>		
Inlet	3" BSP in	3" BSP in
Outlet	2 x DN50-EN1092-1-13B	2 x DN80-EN1092-1-13B
<b>WATER INLET</b>		
Supply flow	min. 40 m <sup>3</sup> /h	min. 72 m <sup>3</sup> /h
Supply pressure	1,5 - 10 bar	1,5 - 10 bar
Switch-off pressure	< 1,5 bar	< 1,5 bar
Supply temperature	5 - 70°C	5 - 70°C
<b>WATER OUTLET</b>		
Set pressure	20 bar	20 bar
Flow at set pressure	420 l/m	700 l/m
Set pressure ajust. between	13 - 25 bar	13 - 25 bar
Set flow rate ajust. between	100 - 640 l/m	160 - 1200 l/m
<b>ELECTRICAL</b>		
Voltage	3 x 400 V + N + PE	3 x 400 V + N + PE
Current	56 Amp	82 Amp
Cable cross section	5G10-HO7RN-F	5G25-HO7RN-F
<b>DIMENSIONS</b>		
Length x width x depth	2307 x 1421 x 1747 mm	2408 x 1421 x 1747 mm
Weight	590 kg	738 kg
<b>CODE</b>	4.500.203	4.500.205



# MPU2-GR

## TECHNICAL DATA

TYPE	MPU2-40/8-GR
Pump	Grundfos
Number of pumps	2
Number of simultaneous users	up to 8
Frequency drive	Grundfos
Motor power	15 kW (2 x 7,5 kW)
Speed	5.450 rpm

### CONNECTIONS

Inlet	2" BSP in
Outlet	2" BSP in

### WATER INLET

Supply flow	min. 24 m <sup>3</sup> /h
Supply pressure	1,5 - 10 bar
Switch-off pressure	< 1,5 bar
Supply temperature	5 - 70°C

### WATER OUTLET

Set pressure	40 bar
Flow at set pressure	167 l/m
Set pressure ajust. between	30 - 40 bar
Set flow rate ajust. between	30 - 200 l/m

### ELECTRICAL

Voltage	3 x 400 V + N + PE
Current	28,4 Amp
Cable cross section	5G6-HO7RN-F

### DIMENSIONS

Length x width x depth	2224 x 612 x 1555 mm
Weight	385kg

### CODE

4.500.152



# MPU4-GR

## TECHNICAL DATA

TYPE	MPU4-40/17-GR
Pump	Grundfos
Number of pumps	4
Number of simultaneous users	up to 17
Frequency drive	Grundfos
Motor power	30 kW (4 x 7,5 kW)
Speed	5.450 rpm

### CONNECTIONS

Inlet	3" BSP in
Outlet	2 x 2" BSP in

### WATER INLET

Supply flow	min. 48 m <sup>3</sup> /h
Supply pressure	1,5 - 10 bar
Switch-off pressure	< 1,5 bar
Supply temperature	5 - 70°C

### WATER OUTLET

Set pressure	40 bar
Flow at set pressure	333 l/m
Set pressure ajust. between	13 - 25 bar
Set flow rate ajust. between	30 - 400 l/m

### ELECTRICAL

Voltage	3 x 400 V + N + PE
Current	57 Amp
Cable cross section	5G20-HO7RN-F

### DIMENSIONS

Length x width x depth	3484 x 612 x 1555 mm
Weight	700 kg

### CODE

4.500.153



# FREQUENCY INVERTER EM-30 0,4 KW - 11 KW

with plain text display and keyboard, build housing is built with regulated for the operation of 1 frequency pump in IP66 ALU.



## DESCRIPTION

- Freely programmable pump controller with keypad and backlit text display
- Display for all operational messages, setpoints and commissioning values
- Two adjustable digital inputs
- As standard thermistor input
- Speed control system for 1 pump
- Adjustable multi mode for operation 2-6 EM30-inverter controllers on MARH regulator
- Password protector
- Connection for one transducer 0..10V or one transducer 4..20mA
- Adjustable PI controller for fast pressure regulation
- Adjustable zero flow cutoff for switching off the pump to "Standby"
- Manual mode with adjustable fixed speed for the emergency supply in case of sensor failure
- Adjustable leakage monitoring
- Adjustable electronic dry run protection
- Adjustable electronic pressure monitoring
- Sensor monitoring with emergency transfer to fixed speed
- Adjustable operating mode
- PM mode for IE4 motors
- Adjustable motor characteristic
- Error memory
- Temperature dependent fan control



## 02. SMU - SINGLE MOBILE UNIT

### DESCRIPTION

The SMU-K-20/1-GR is a mobile cleaning system, built from a centrifugal frequency controlled pressure booster pump with integrated satellite. It's available with 2 chemical supplies for diluted or concentrated chemicals ( foam and/or disinfection product).

The unit is operated by a mechanical switch, which allows you to choose between rinsing, foaming and disinfecting.



### ADVANTAGES

- Delivered with **certificate of used type of stainless steel (AISI 1.4301)** - no use of ferritic steel types (400-series) that are magnetic and corrosion sensitive
- **Robust** construction and **elegant finish**
- **Stainless steel protective cap** for motor/pump
- Easy in maintenance
- **Centrifugal frequency controlled** pressure boosting pump with **integrated satellite**
- **Mechanical switch** which allows you to choose between rinsing, foaming and disinfecting

### TECHNICAL DATA

Type	SMU-K-20/1-GR	SMU-20/1-GR
Number of users	1	1
Pump	Grundfos CRIE 1-9	Grundfos CRIE 1-9
Inlet water	adaptor Nito 3/4"	adaptor Nito 3/4"
Water temperature	max. 70° C	max. 70° C
Flow	35 l/m at 20 bar	35 l/m at 20 bar
Water pressure (supply)	0,5 bar - 10 bar	0,5 bar - 10 bar
Compressed air pressure (supply)	-	6 - 10 bar
Compressed air flow (supply)	-	min. 150 l/m
Voltage	3 x 400 V + PE - 50 Hz	3 x 400 V + PE - 50 Hz
Power	3,5 kW	2,2 kW
Dimensions L x W x H	1010 x 690 x 1025 mm	1010 x 690 x 1025 mm
Code	4.500.180	4.500.181



## 03. SWU - SINGLE WALL UNIT

### DESCRIPTION

The SWU is a cleaning system, built from a centrifugal frequency controlled pressure booster pump with integrated satellite. It's available with 2 chemical supplies for diluted or concentrated chemicals (foam and/or disinfection product).

The unit is operated by a mechanical switch, which allows you to choose between rinsing, foaming and disinfecting.



### ADVANTAGES

- Delivered with **certificate of used type of stainless steel (AISI 1.4301)** - no use of ferritic steel types (400-series) that are magnetic and corrosion sensitive
- **Robust** construction and **elegant finish**
- **Stainless steel protective cap** for motor/pump
- Easy in maintenance
- **Centrifugal frequency controlled** pressure boosting pump with **integrated satellite**
- **Mechanical switch** which allows you to choose between rinsing, foaming and disinfecting

### TECHNICAL DATA

Type	SWU-K-20/1-GR	SWU-20/1-GR
Number of users	1	1
Pump	Grundfos CRIE 1-9	Grundfos CRIE 1-9
Inlet water	adaptor Nito 3/4"	adaptor Nito 3/4"
Water temperature	max. 70° C	max. 70° C
Flow	35 l/m at 20 bar	35 l/m at 20 bar
Water pressure (supply)	0,5 bar - 10 bar	0,5 bar - 10 bar
Compressed air pressure (supply)	-	6 - 10 bar
Compressed air flow (supply)	-	min. 150 l/m
Voltage	3 x 400 V + PE - 50 Hz	3 x 400 V + PE - 50 Hz
Power	3,5 kW	2,2 kW
Dimensions L x W x D	1010 x 690 x 1025 mm	1010 x 690 x 1025 mm
Code	4.500.182	4.500.183



## 04. CBU - CENTRAL CHEMICALS DOSING UNIT



### DESCRIPTION

The CBU is a central chemical dosing unit which is connected through stainless steel piping to the CS central satellites (1 satellite and 1 reel set are provided for every cleaning location). The unit is standardly assembled on a sandblasted stainless steel frame.

The frequency controlled boosting pump of 7 bar (type Grundfos CRIE) controls the dosing pump. The dosing pump is controlled by pulse and flow measurement and ensures a perfectly accurate dosage.

The built in PLC with BOONS FIS programming ensures the perfect operation of the unit and the display allows a simple adaptation of the parameters.

A stainless steel water tank of 120 liter with automatic filling provides a good and mixed dosage. The unit is also equipped with dry running protection.



### ADVANTAGES

- **Frequency controlled** pressure booster pump (no pressure drop during cleaning) and dosing pump(s)
- Extra **protection** through pressure transmitter
- **Dry run protection** pump en dosing pump(s)
- 100% **accurate chemical dosage** which allows a **large chemical saving** up to 40%
- **Elektronical dosing pump(s)** with code setting
- Chemistry dosing is done through **flow measurement** and **pulsation control**. This always ensures an accurate dosage regardless of the consumption.
- Very **sleek design** and **hygienic** performance with lockable doors (stainless steel housing)
- 120 liter watertank with **automatic filling** and **temperature control**





## TECHNICAL DATA

Type	CBU6-F (FOAMING)	CBU10-D (DESINFECTING)
Foam 1	✓	-
Disinfection	-	✓
Amount of users	up to 6 simult.	up to 10 simult.
Chemical pressure	7 bar	7 bar
Flow foam 1	46 l/u	-
Dosage foam 1	1,5% - 5%	-
Flow disinfection	-	46 l/u
Dosage disinfection	-	0,2% - 4%
Volume break tank	120 liter	120 liter
Power	1,2 kW	1,2 kW
Dimensions L x W x H (mm)	650 x 700 x 1600	650 x 700 x 1600
Code	4.600.020	4.600.030

\* Includes 2,5 bar pre-pressure



# CBU



## 05. DECENTRALISED CLEANING SYSTEM

**UNDER DEVELOPMENT**  
available by the end of 2020

### 05.01 DSW SATELLITE



### 05.02 DSM SATELLITE



## 06. CENTRALISED CLEANING SYSTEM

### DESCRIPTION

The CS central satellites are connected through piping with the CBU central chemical dosing unit and are standardly equipped with 1 rinse function and 1 stop function.

Depending on the chosen CBU, these can be extended with 1 or 2 foam functions, 1 extra rinse function and 1 disinfection function.

Pneumatically activated stainless steel ball valves provide the activation of the rinsing water and the chemicals in the pipes. To avoid returning and mixing of different products in the pipes, non return valves in stainless steel are provided. The satellite is operated by means of a pneumatically operated selector switch (max. 5 position including the stop function), built into a sloping stainless steel housing. These satellites are connected to a hose reel with cleaning hose and accessories.

In addition to a superior hygienic design, these satellites are extremely easy to use and to clean, both at the front and at the back, and this without disassembling the satellites.



### ADVANTAGES

- Delivered with a **certificate of used type of stainless steel (AISI 1.4301)** - no use of ferritic steel types (400-series) that are magnetic and corrosion sensitive
- **Easy control button:**
  - F = foam (white)
  - D = disinfection (yellow)
  - R = rinse (blue)
  - Stop (red)
- Very **precise control** and **dosage**
- Can **no longer be disrupted**
- **Stainless steel check valves** prevent mixing of chemical products
- Components of high quality **A-brands** with **high chemical resistance** (Viton or EPDM seals in function of the used chemicals)
- Operated by means of a **stainless steel pneumatic selector switch**
- Very **sleek design** and **hygienic** performance with a minimum of pipes against the walls



## 06.01 CS SATELLITE



### TECHNICAL DATA

Type	CS-F-R	CS-FD-R	CS-FF-R	CS-FFD-R	CS-F-RR	CS-FD-RR	CS-FF-RR	
Rinse max. 20-60 bar	✓	✓	✓	✓	✓✓	✓✓	✓✓	
Foam max. 6-8 bar	✓	✓	✓✓	✓✓	✓	✓	✓✓	
Disinfect max. 6-8 bar	-	✓	-	✓	-	✓	-	
Connection rinse	3/8" int.	3/8" int.	3/8" int.	3/8" int.	3/8" int. (2x)	3/8" int. (2x)	3/8" int. (2x)	
Connection foam	3/8" int.	3/8" int.	3/8" int. (2x)	3/8" int. (2x)	3/8" int.	3/8" int.	3/8" int. (2x)	
Connection disinfection	-	3/8" int.	-	3/8" int.	-	3/8" int.	-	
Connection compressed air	Ø 6 mm	Ø 6 mm	Ø 6 mm	Ø 6 mm	Ø 6 mm	Ø 6 mm	Ø 6 mm	
Water temperature	max. 70°C	max. 70°C	max. 70°C	max. 70°C	max. 70°C	max. 70°C	max. 70°C	
Water pressure	20-60 bar	20-60 bar	20-60 bar	20-60 bar	20-60 bar	20-60 bar	20-60 bar	
Pressure compressed air	6-8 bar	6-8 bar	6-8 bar	6-8 bar	6-8 bar	6-8 bar	6-8 bar	
Flow compressed air	150 l/m	150 l/m	150 l/m	150 l/m	150 l/m	150 l/m	150 l/m	
Outlet manifold	1/2" ext.	1/2" ext.	1/2" ext.	1/2" ext.	1/2" ext.	1/2" ext.	1/2" ext.	
Dim. L x W x H (mm)	270 x 420 x 245				450 x 420 x 245			
Code	4.600.100	4.600.101	4.600.102	4.600.103	4.600.110	4.600.111	4.600.112	

## 06.02 CS SATELLITE WITH HOUSING



### TECHNICAL DATA

Type	CS-F-R	CS-FD-R	CS-FF-R	CS-FFD-R	CS-F-RR	CS-FD-RR	CS-FF-RR
Rinse max. 20-60 bar	✓	✓	✓	✓	✓✓	✓✓	✓✓
Foam max. 6-8 bar	✓	✓	✓✓	✓✓	✓	✓	✓✓
Disinfect max. 6-8 bar	-	✓	-	✓	-	✓	-
Connection rinse	1/2" ext.	1/2" ext.	1/2" ext.	1/2" ext.	1/2" ext. (2x)	1/2" ext. (2x)	1/2" ext. (2x)
Connection foam	1/2" ext.	1/2" ext.	1/2" ext. (2x)	1/2" ext. (2x)	1/2" ext.	1/2" ext.	1/2" ext. (2x)
Connection disinfection	-	1/2" ext.	-	1/2" ext.	-	1/2" ext.	-
Connection compressed air	Ø 6 mm	Ø 6 mm	Ø 6 mm	Ø 6 mm	Ø 6 mm	Ø 6 mm	Ø 6 mm
Water temperature	max. 70°C	max. 70°C	max. 70°C	max. 70°C	max. 70°C	max. 70°C	max. 70°C
Water pressure	20-60 bar	20-60 bar	20-60 bar	20-60 bar	20-60 bar	20-60 bar	20-60 bar
Pressure compressed air	6-8 bar	6-8 bar	6-8 bar	6-8 bar	6-8 bar	6-8 bar	6-8 bar
Flow compressed air	150 l/m	150 l/m	150 l/m	150 l/m	150 l/m	150 l/m	150 l/m
Outlet manifold	1/2" ext.	1/2" ext.	1/2" ext.	1/2" ext.	1/2" ext.	1/2" ext.	1/2" ext.
Dim. L x W x H (mm)	510 x 217 x 669						
Code	4.600.200	4.600.201	4.600.202	4.600.203	4.600.210	4.600.211	4.600.212



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