

Compresso

Pressure maintenance systems with compressors



PNEUMATEX

Pressurisation & Water Quality › Balancing & Control › Thermostatic Control

ENGINEERING ADVANTAGE

Compresso is a precision pressurisation system with compressors for heating, solar and chilled water systems. It is especially suitable in situations where compactness and precision are required. The system capacity range lies between pressurisation with Statico and Transfero.



Technical description – Control unit TecBox

Applications:

Heating, solar and chilled water systems.
For systems according to EN 12828, solar systems according to EN 12976, ENV 12977 with on-site excess temperature protection in case of power blackout.

Media:

Non-aggressive and non-toxic system media.
Addition of antifreeze agent up to 50%.

Pressure:

Min. admissible pressure, PSmin: 0 bar
Max. admissible pressure, PS: see Articles

Temperature:

Max. admissible temperature, TS: 70°C
Min. admissible temperature, TSmin: 5°C
Max. admissible ambient temperature, TU: 40°C
Min. admissible ambient temperature, TUmin: 5°C
Max. admissible temperature for water make-up, TW: 30°C (CPV, CPV...C)

Accuracy:

Precision pressure maintenance $\pm 0,1$ bar.

Supply voltage:

230 V/50 Hz

Electric load:

See Articles.

Enclosure class:

IP according to EN 60529
IP 22 (C 10...F, CPV, CPV...C)
IP 54 (C 20, CX)

Sound pressure level:

59 dB(A) (C 10...F, CPV, CPV...C)
64 dB(A) (C 20)

Material:

In essence: steel, brass and bronze

Function, Equipment, Features:

- BrainCube control. Self-optimising with memory function.
- Silentrün operation. Particularly silent. Pressure-optimised start mode.
- Fillsafe water make-up monitoring. With possibility to control water make-up through a Pleno P. With contact water meter and a break tank type AB according to EN 1717, SVGW-tested (CPV, VPV...C).
- High quality metal cover (C...F) with handles (C10, C20, CPV, CPV...C).
- Floor standing (C10, C20, CPV, CPV...C).
- Variable installation in front of (C10, C20) or next to (C10, C20, CPV, CPV...C) the primary vessel.
- Space-saving assembly on the CU or CG primary vessel up to 800 litres, PS 6 bar (C 10...F).
- With integrated wall mounting bracket (CX).
- Including assembly kit for the air-side connection of the TecBox with the primary vessel.

Addition for CPV

- Vacusplit spray-type degassing of the system and make-up water in a vacuum vessel.
- Eco-interval operation for interval degassing and continuous degassing.
- Cooling version insulated and vapor sealed (CPV...C).
- Isolating valves to the system.

Transportation and storing:

In frostless, dry places.

Approvals:

CE-tested according to the requirements of the European Directives PED/DEP 97/23/EC, 2004/108/EC, 2006/95/EC.

Technical description – Expansion vessels

Applications:

Only together with Control unit TecBox.

See Applications under Technical description - Control unit TecBox.

Media:

Non-aggressive and non-toxic system media.

Addition of antifreeze agent up to 50%.

Pressure:

Min. admissible pressure, PSmin: 0 bar

Max. admissible pressure, PS: see Articles

Temperature:

Max. admissible temperature, TS: 120°C

Min. admissible temperature, TSmin: -10°C

Max. admissible bag temperature, TB: 70°C

Min. admissible bag temperature, TBmin: 5°C

Material:

Steel. Color beryllium.

Airproof butyl bag according to EN 13831.

Function, Equipment, Features:

- Bag can be vented at the top, condensate drain at the bottom.
- Sinus ring for upright assembly (CU, CU...E). Feet for upright assembly (CG, CG...E).
- Airproof butyl bag (CU, CU...E, CG, CG...E), exchangeable (CG, CG...E).
- Endoscopic inspection opening for internal inspections (CU, CU...E). Two flange openings for internal inspections (CG, CG...E).
- Corrosion-protected internal coating for minimum bag wear (CG, CG...E).
- Including flex tube for the water-side connection and lock shield valve with ball valve for fast draining (CU, CG).
- Including assembly kit for the air-side connection of the vessels and lock shield valve for the water-side connection with ball valve for fast draining (CU...E, CG...E).

Transportation and storing:

In frostless, dry places.

Approvals:

CE design-tested according to PED/DEP 97/23/EC.

Warranty:

Compresso CG, CG...E: 5-year warranty for the airproof butyl bag.

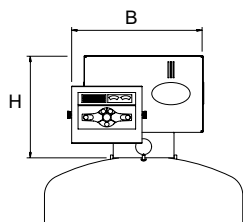
Compresso CU, CU...E: 5-year warranty for the vessel.

Control unit TecBox, Compresso C 10 – Articles

Compresso C 10.1 F

Precision pressure maintenance ± 0.1 bar

1 compressor. Valve manifold with 1 spill valve and safety valve.

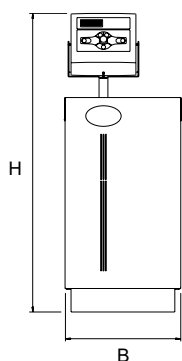


Type	PS [bar]	B	H	T		PA [kW]	EAN	Article No
C 10.1-3 F	3	410	300	460	15	0,6	7640148630474	810 1010
C 10.1-3.75 F	3,75	410	300	460	15	0,6	7640148630481	810 1011
C 10.1-4.2 F	4	410	300	460	15	0,6	7640148630498	810 1012
C 10.1-5 F	5	410	300	460	15	0,6	7640148630504	810 1013
C 10.1-6 F	6	410	300	460	15	0,6	7640148630511	810 1014

Compresso C 10.1

Precision pressure maintenance ± 0.1 bar

1 compressor. Valve manifold with 1 spill valve and safety valve.

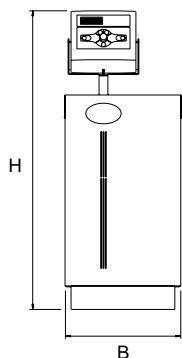


Type	PS [bar]	B	H	T		PA [kW]	EAN	Article No
C 10.1-3	3	390	1000	315	20	0,6	7640148630528	810 1020
C 10.1-3.75	3,75	390	1000	315	20	0,6	7640148630535	810 1021
C 10.1-4.2	4,2	390	1000	315	20	0,6	7640148630542	810 1022
C 10.1-5	5	390	1000	315	20	0,6	7640148630559	810 1023
C 10.1-6	6	390	1000	315	20	0,6	7640148630566	810 1024

Compresso C 10.2

Precision pressure maintenance ± 0.1 bar

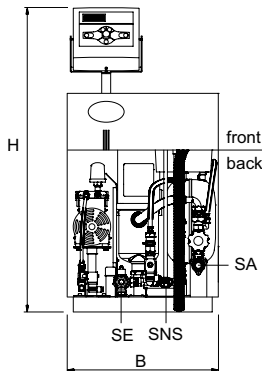
2 compressors. Valve manifold with 2 spill valves and safety valve. Switching is time and load dependant.



Type	PS [bar]	B	H	T		PA [kW]	EAN	Article No
C 10.2-3	3	390	1000	315	33	1,2	7640148630597	810 1060
C 10.2-3.75	3,75	390	1000	315	33	1,2	7640148630603	810 1061
C 10.2-4.2	4,2	390	1000	315	33	1,2	7640148630610	810 1062
C 10.2-5	5	390	1000	315	33	1,2		810 1063
C 10.2-6	6	390	1000	315	33	1,2	7640148630634	810 1064

T = Depth of the device

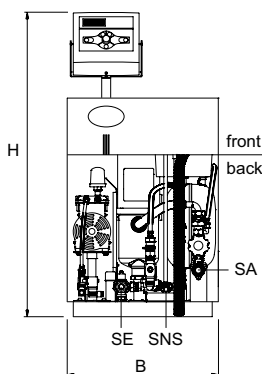
Control unit TecBox, Compresso CPV – Articles



Compresso CPV 10.1

Precision pressure maintenance ± 0.1 bar. Water make-up. Degassing.
1 compressor. Valve manifold with 1 spill valve and safety valve.
Connections: in (SE) Rp1, out (SA) Rp1, water make-up (SNS) Rp1 / 2.

Type	PS [bar]	B	H	T	[kg]	DPp [bar]	VNS [l/h]	PA	EAN	Article No
CPV 10.1-3	3	500	1000	490	47	1,5-2,5	300	1,7	7640148630665	810 1100
CPV 10.1-3.75	3,75	500	1000	490	47	1,5-3,25	300	1,7	7640148630672	810 1101
CPV 10.1-4.2	4,2	500	1000	490	47	1,5-3,7	300	1,7	7640148630689	810 1102
CPV 10.1-5	5	500	1000	490	47	1,5-4,5	300	1,7	7640148630696	810 1103



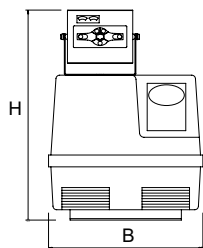
Compresso CPV 10.1 C, Cooling version

Insulated and vapor sealed.
Precision pressure maintenance ± 0.1 bar. Water make-up. Degassing.
1 compressor. Valve manifold with 1 spill valve and safety valve.
Connections: in (SE) Rp1, out (SA) Rp1, water make-up (SNS) Rp1 / 2.

Type	PS [bar]	B	H	T	[kg]	DPp [bar]	VNS [l/h]	PA	EAN	Article No
CPV 10.1-3C	3	500	1000	490	48	1,5-2,5	300	1,7	7640148630702	810 1110
CPV 10.1-3.75C	3.75	500	1000	490	48	1,5-3,25	300	1,7	7640148630719	810 1111
CPV 10.1-4.2C	4.2	500	1000	490	48	1,5-3,7	300	1,7	7640148630726	810 1112
CPV 10.1-5C	5	500	1000	490	48	1,5-4,5	300	1,7	7640148630733	810 1113

T = Depth of the device

Control unit TecBox, Compresso C 20 – Articles

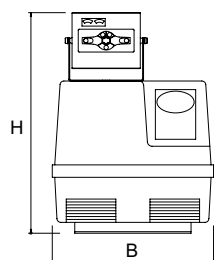


Compresso C 20.1

Precision pressure maintenance ± 0.1 bar

1 compressor. Valve manifold with 1 spill valve and safety valve. With sound absorbing case.

Type	PS [bar]	B	H	T		PA [kW]	EAN	Article No
C 20.1-6	6	520	750	360	35	1,5	7640148630573	810 1034
C 20.1-10	10	520	750	360	35	1,5	7640148630580	810 1035

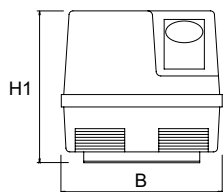


Compresso C 20.2

Precision pressure maintenance ± 0.1 bar

2 compressors. Valve manifold with 2 spill valves and safety valve. Switching is time and load dependant. Consists of primary and extension module each with sound absorbing case.

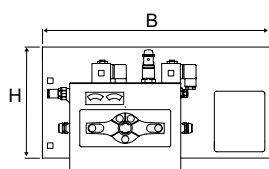
Type	PS [bar]	B	H	H1	T		PA [kW]	EAN	Article No
C 20.2-6	6	520	750	500	360	69	3,0	7640148630641	810 1074
C 20.2-10	10	520	750	500	360	69	3,0	7640148630658	810 1075



Compresso CX

Precision pressure maintenance ± 0.1 bar

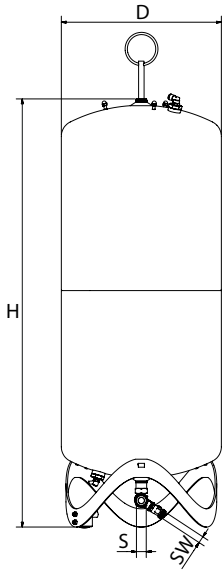
For oil-free external compressed air. 1 air inlet and 1 air exit valve



Type	PS [bar]	B	H	T		PA [kW]	EAN	Article No
CX-6	6	450	250	260	15	0,1	7640148630740	810 1204
CX-10	10	450	250	260	15	0,1	7640148630757	810 1206
CX-16	16	450	250	260	15	0,1	7640148630764	810 1208

T = Depth of the device

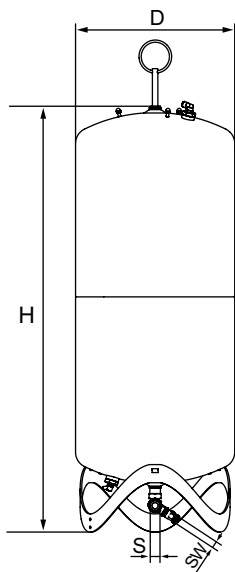
Expansion vessels



Compresso CU

Primary vessel. Measuring foot for content measurement. Including flex tube for the water-side connection and lock shield valve with ball valve for fast draining.

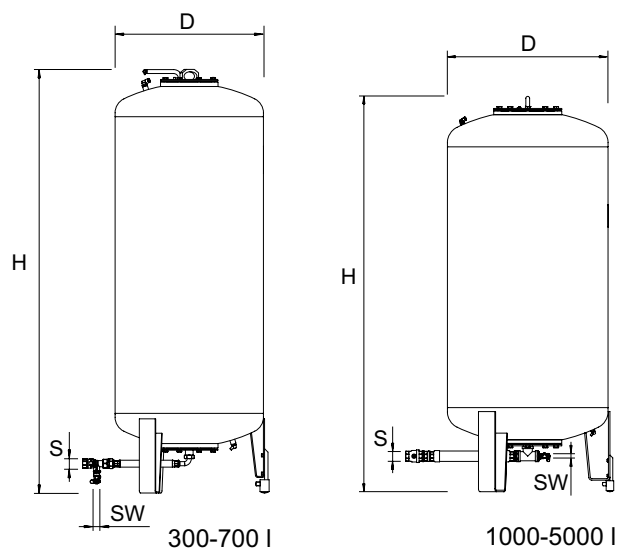
Type	VN [l]	D	H	[kg]	S	SW	EAN	Article No
6 bar (PS)								
CU 200.6	200	500	1335	36	Rp1	G3/4	7640148630771	712 1000
CU 300.6	300	560	1469	45	Rp1	G3/4	7640148630788	712 1001
CU 400.6	400	620	1528	65	Rp1	G3/4	7640148630795	712 1002
CU 500.6	500	680	1623	76	Rp1	G3/4	7640148630801	712 1003
CU 600.6	600	740	1633	83	Rp1	G3/4	7640148630818	712 1004
CU 800.6	800	740	2127	108	Rp1	G3/4	7640148630825	712 1005



Compresso CU...E

Secondary vessel. Including flex tube for the water-side connection and lock shield valve with ball valve for fast draining, assembly kit for the air-side connection of the vessels.

Type	VN [l]	D	H	[kg]	S	SW	EAN	Article No
6 bar (PS)								
CU 200.6 E	200	500	1335	36	Rp1	G3/4	7640148630832	712 2000
CU 300.6 E	300	560	1469	45	Rp1	G3/4	7640148630849	712 2001
CU 400.6 E	400	620	1528	65	Rp1	G3/4	7640148630856	712 2002
CU 500.6 E	500	680	1623	76	Rp1	G3/4	7640148630863	712 2003
CU 600.6 E	600	740	1633	83	Rp1	G3/4	7640148630870	712 2004
CU 800.6 E	800	740	2127	108	Rp1	G3/4	7640148630887	712 2005

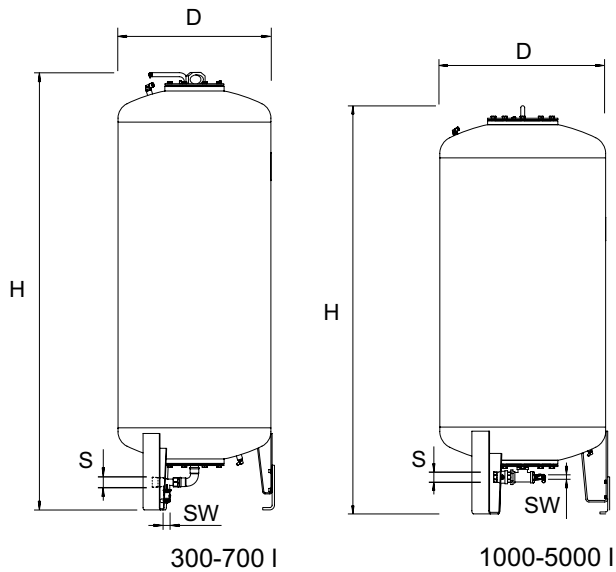


Compresso CG

Primary vessel. Measuring foot for content measurement.

Type*	VN [l]	D	H**	[kg]	S	SW	EAN	Article No
6 bar (PS)								
CG 300.6	300	500	1916	140	Rp1	G3/4	7640148630894	712 1006
CG 500.6	500	650	1956	190	Rp1	G3/4	7640148630900	712 1007
CG 700.6	700	750	1986	210	Rp1	G3/4	7640148630917	712 1008
CG 1000.6	1000	850	2190	290	Rp1 1/2	G3/4	7640148630924	712 1009
CG 1500.6	1500	1016	2332	400	Rp1 1/2	G3/4	7640148630931	712 1010
CG 2000.6	2000	1016	2839	680	Rp1 1/2	G3/4	7640148630948	712 1015
CG 3000.6	3000	1300	2944	840	Rp1 1/2	G3/4	7640148630955	712 1012
CG 4000.6	4000	1300	3588	950	Rp1 1/2	G3/4	7640148630962	712 1013
CG 5000.6	5000	1300	4210	1050	Rp1 1/2	G3/4	7640148630979	712 1014
10 bar (PS)								
CG 300.10	300	500	1944	160	Rp1	G3/4	7640148631075	712 3000
CG 500.10	500	650	1987	220	Rp1	G3/4	7640148631082	712 3001
CG 700.10	700	750	2018	250	Rp1	G3/4	7640148631099	712 3002
CG 1000.10	1000	850	2192	340	Rp1 1/2	G3/4	7640148631105	712 3003
CG 1500.10	1500	1016	2378	460	Rp1 1/2	G3/4	7640148631112	712 3004
CG 2000.10	2000	1016	2872	760	Rp1 1/2	G3/4	7640148631129	712 3009
CG 3000.10	3000	1300	2972	920	Rp1 1/2	G3/4	7640148631136	712 3006
CG 4000.10	4000	1300	3617	1060	Rp1 1/2	G3/4	7640148631143	712 3007
CG 5000.10	5000	1300	4262	1180	Rp1 1/2	G3/4	7640148631150	712 3008

Compresso CG...E
Secondary vessel.



Type*	VN [l]	D	H**	[kg]	S	SW	EAN	Article No
6 bar (PS)								
CG 300.6E	300	500	1944	140	Rp1	G3/4	7640148630986	712 2006
CG 500.6E	500	650	1987	190	Rp1	G3/4	7640148630993	712 2007
CG 700.6E	700	750	2018	210	Rp1	G3/4	7640148631006	712 2008
CG 1000.6E	1000	850	2192	290	Rp1 1/2	G3/4	7640148631013	712 2009
CG 1500.6E	1500	1016	2378	400	Rp1 1/2	G3/4	7640148631020	712 2010
CG 2000.6E	2000	1016	2872	680	Rp1 1/2	G3/4	7640148631037	712 2015
CG 3000.6E	3000	1300	2972	840	Rp1 1/2	G3/4	7640148631044	712 2012
CG 4000.6E	4000	1300	3617	950	Rp1 1/2	G3/4	7640148631051	712 2013
CG 5000.6E	5000	1300	4262	1050	Rp1 1/2	G3/4	7640148631068	712 2014
10 bar (PS)								
CG 300.10E	300	500	1944	160	Rp1	G3/4	7640148631167	712 4000
CG 500.10E	500	650	1987	220	Rp1	G3/4	7640148631174	712 4001
CG 700.10E	700	750	2018	250	Rp1	G3/4	7640148631181	712 4002
CG 1000.10E	1000	850	2192	340	Rp1 1/2	G3/4	7640148631198	712 4003
CG 1500.10E	1500	1016	2378	460	Rp1 1/2	G3/4	7640148631204	712 4004
CG 2000.10E	2000	1016	2872	760	Rp1 1/2	G3/4	7640148631211	712 4009
CG 3000.10E	3000	1300	2972	920	Rp1 1/2	G3/4	7640148631228	712 4006
CG 4000.10E	4000	1300	3617	1060	Rp1 1/2	G3/4	7640148631235	712 4007
CG 5000.10E	5000	1300	4262	1180	Rp1 1/2	G3/4	7640148631242	712 4008

*) Applications > 10 bar and special vessels upon request.

**) Tolerance 0 /-100.

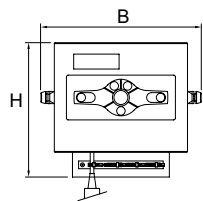
Accessories for control modules

Communication module for BrainCube control

Max. admissible ambient temperature, TU: 40°C

Enclosure class: IP 54

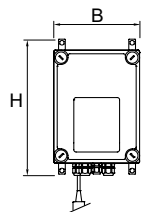
Supply voltage: 230 V/50 Hz



ComCube DCD

RS 485 interface for communicating with BrainCube, 6 digital inputs for the use of external volt free signals (NO), 9 volt free digital outputs, freely programmable; all outputs can be inverted. Wall mounted, fixing elements for cable management.

Type	B	H	T	[kg]	PA [kW]	EAN	Article No
DCD	270	230	260	0,5	0,1	7640148638715	814 1000



ComCube DCA

2 separated analogue outputs 4-20 mA for connection to BMS, isolation voltage 2.5 kVAC. All cabling inside the casing, wall mounted.

Type	B	H	T	[kg]	PA [kW]	EAN	Article No
DCA	190	260	180	0,5	0,1	7640148638739	814 1010

T = Depth of the device

Software expansion

Usage options as Master / Slave, parallel, expanded capacity or 100% redundancy.

Remote switching of Master / Slave possible. Cabling on site, commissioning by Pneumatex Service.

Including assembly kit with shut-offs for the air-side connection of the TecBoxes with the primary vessel.

Master-Slave DMS 2

parallel operation of 2 Compresso C 10, C 20.

Type	EAN	Article No
DMS 2 C	7640148638753	814 1020

Master-Slave DMS 3

parallel operation of 3 Compresso C 10, C 20.

Type	EAN	Article No
DMS 3 C	7640148638777	814 1025

Master-Slave DMS 4

parallel operation of 4 Compresso C 10, C 20.

Type	EAN	Article No
DMS 4 C	7640148638791	814 1030

Additional information:

System design: Datasheet *Planning and calculation*. Online calculation: Software *SelectPI*

Abbreviations and terminology: Datasheet *Planning and calculation*.

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05.2012