

Large cartridge



Large cartridge

Summary

Cartridge 310 cc and pressure container



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Large cartridge and pressure container (SEMCO®)



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Large cartridge

Cartridge 310 cc

Open bottom, female thread 1/4" NPT

Article number	size	colour
BG3002016	310 cc	transparent



Bottom closed to cut open, external thread

Article number	size	colour	material
BG3002017	310 cc	white	HDPE



Piston for cartridg 310 cc, stable version with oversize

Article number	size	colour	material
BG3002018	310 cc	transparent	PE



Piston for cartridges 310 cc

Article number	size	colour	material
BG3002019	310 cc	transparent	PE



Cap below for cartridge 310 cc with external thread

Article number	size	colour
BG3002027	310 cc	transparent



Large cartridge

Pressure container

Description

The pressure vessel consists of a V2A stainless steel housing with aluminium end caps.

The cartridge is secured on both sides by a self-locking safety bayonet coupling and can be locked in place using a set screw.

Pressure vessel for Euro cartridge

Article number	Description
BG3002035	internally sealed
BG3002036	cylinder variant



Functional Principle

The “internally sealed” version is suitable for lower-viscosity, free-flowing media and applications with low delivery pressure. The “cylinder extrusion” version is intended for highly viscous or thixotropic media where air-free and reproducible dispensing is required. The selection of the version is made by the integrator depending on the medium and process requirements.

“Internally Sealed” Version

In this version, due to the design, a small amount of air may pass the piston. When dispensing non-self-leveling media, air may enter the dosing material and influence the dispensing behavior. If no piston is used, refilling of the medium is possible without changing the cartridge.

“Cylinder Extrusion” Version “

Air bypassing the piston is excluded by design. Use is only permitted with cartridges equipped with a piston. Under certain circumstances, medium may be pushed back at the piston, which can lead to contamination of the assembly. In this case, please contact H. Sigrist & Partner AG to evaluate the use of an oversized piston, piston reinforcement, or further measures.

Technical Specifications

Feature	Value
Cartridge type	Euro cartridge
Volume	310 ml
Length internally sealed / cylinder version	~250 mm / 580 mm
Diameter	74 mm
Compressed air connection (hose diameter)	6 mm
Material inlet outlet side	G1/4"
Media-wetted parts	INOX V2A

Specific for version: Internally sealed

Weight excl. attachments	1.1 kg
Short-term technical pressure limit	10 bar*
Maximum approved operating pressure	5 bar*
Thrust force at max. operating pressure	720 N*

Specific for version: Cylinder extrusion

Weight excl. attachments	1.5 kg
Maximum permissible pressure	10 bar*
Thrust force at max. pressure	440 N*

* Based on Euro cartridge type BG3002017 (HDPE)

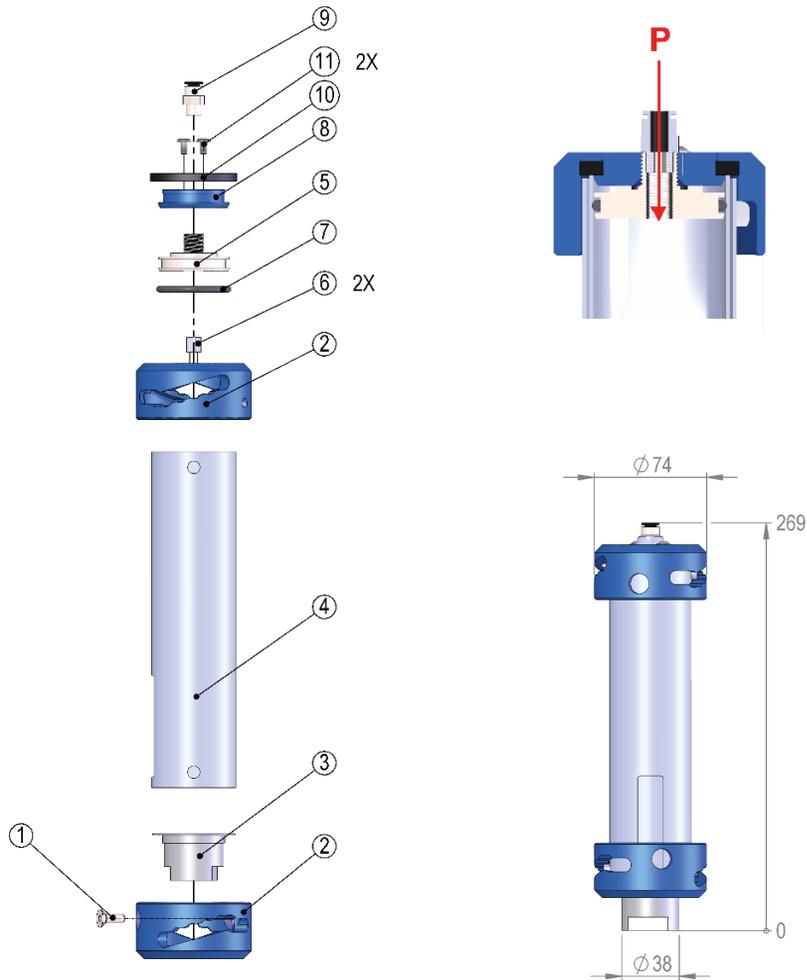
The pressure must be matched to the actually used cartridge manufacturer as well as the application (overall process). The stated values describe technical limit values, not automatically permissible process parameters.

Safety instructions

Before commissioning and during operation, the safety, installation, and operating instructions described in the instruction manual must be strictly observed. Any improper handling or use outside the intended applications may result in personal injury or property damage. In case of uncertainty or questions regarding safe use, please contact our technical support.

Large cartridge

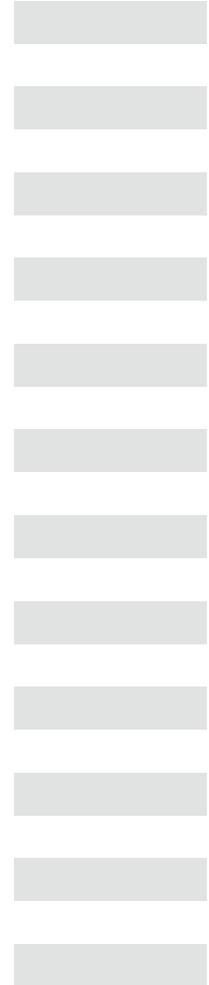
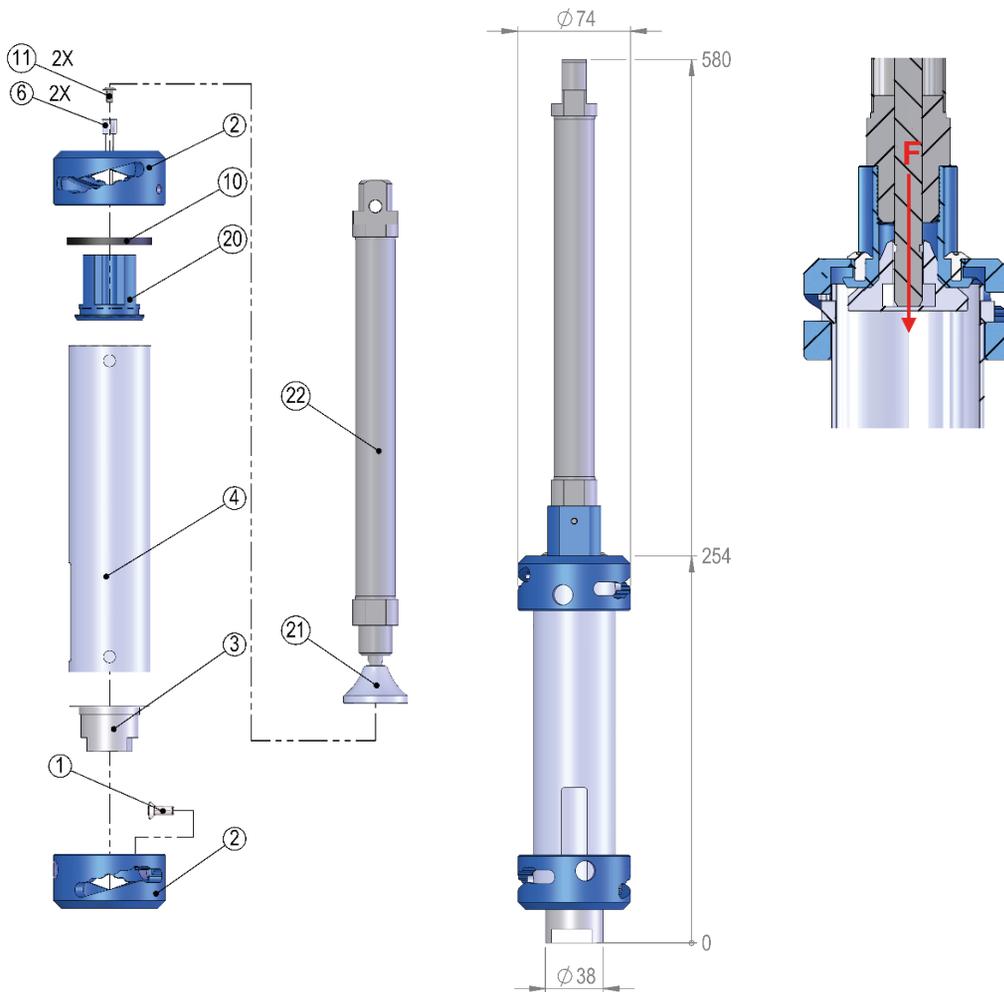
Scope of delivery / Spare parts – Internally sealed variant BG3002035



Ref.	Article number	Description
1	SR9001026	Countersunk screw M6x16, V2A
2	ME3200038	Bayonet cap
3	BG3600034	Euro cartridge adapter, clamping version
4	ME3200037	Sleeve for pressure vessel
5	ME3251004	Euro cartridge adapter inlet/outlet
6	BG3000667	Set screw M4x10, V2A
7	BG3000819	O-ring FKM
8	ME3200045	Insert for cap
9	PN9000212	Pneumatic fitting R1/8", 6 mm
10	BG3000851	Flat seal for pressure vessel
11	SR9001025	Pan head screw M4x8, V2A

Large cartridge

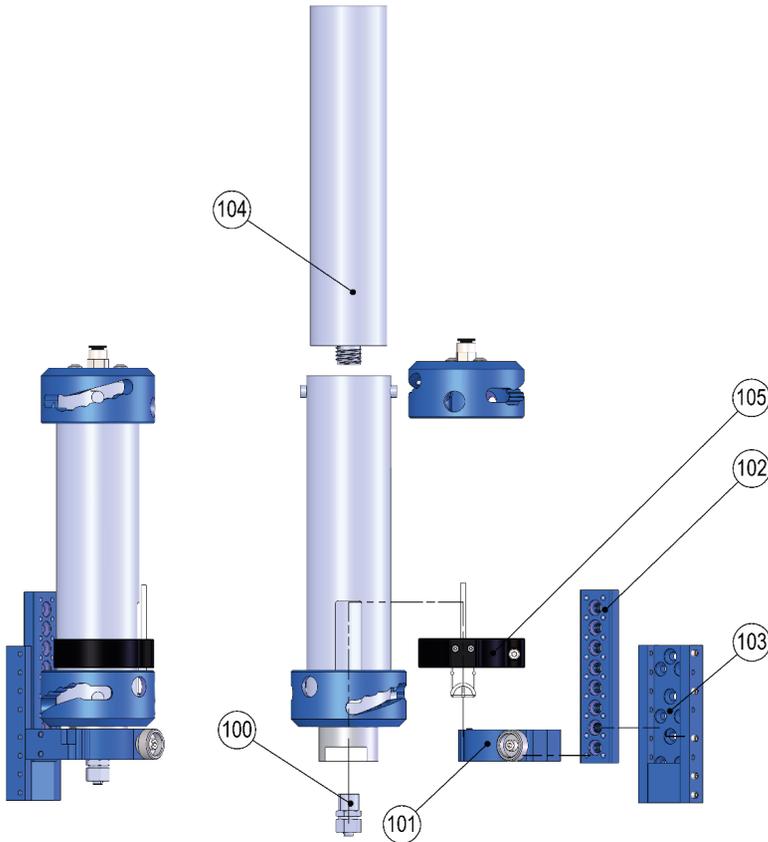
Scope of delivery / Spare parts – Cylinder extrusion variant, BG3002036



Ref.	Article number	Description
1	SR9001026	Countersunk screw M6x16, V2A
2	ME3200038	Bayonet cap
3	BG3600034	Euro cartridge adapter, clamping version
4	ME3200037	Sleeve for pressure vessel
6	BG3000667	Set screw M4x10, V2A
10	BG3000851	Flat seal for pressure vessel
11	SR9001025	Pan head screw M4x8, V2A
20	ME3255058	Adapter for cylinder mounting
21	ME3255060	Plunger for pressure vessel
22	PN9000267	Pneumatic cylinder

Large cartridge

Accessories



Ref.	Article number	Description
100	BG3000760	Fitting for 8/6 mm hose
101	BG3200018	Clamp for cartridge sleeve 310 ml
102	ME3200051	Beam M6
103	ME3200013	Mounting rail, complete
104	BG3002017	Euro cartridge 310 ml, bottom closed
	BG3000656	O-ring as thread seal
105	BG3250026	Capacitive level sensor



Large cartridge

Accessories

Empty signal magnetic

Article number	description
BG3002029	for mounting on cartridge sleeve with telescopic piston 5m



Capacitive level sensor

Article number	description
BG3250026	for Euro-type pressure cartridge compatible with BG3002033, BG3002035, and BG3002036



Assemblage

Article number	description
BG3200018	Clamping for cartridge sleeve 310 ml



Adapter for Euro cartridge internal thread: G1/4"

Article number	description	material
BG3600033	insert variant	INOX
BG3600034	clamp variant	INOX
BG3600035	without collar	INOX
BG3600036	metric	INOX



O-ring

Article number	size	material
BG3000820	black	FKM
BG3000656	black	NBR



Large cartridge, compatible with Semco®

Large cartridge and pressure vessel

Large cartridge, female thread 1/4" NPT, (black for UV applications)

Article number	size	colour	material
BG3002000	75 cc	transparent	HDPE
BG3002001	180 cc	transparent	HDPE
BG3002028	240 cc	transparent	HDPE
BG3002002	360 cc	transparent	HDPE
BG3002004	75 cc	black	HDPE
BG3002005	180 cc	black	HDPE
BG3002006	360 cc	black	HDPE
BG3002007	600 cc	black	HDPE



Pressure container for large cartridges

Article number	size	colour	material
BG3002008	75 cc	black	metal
BG3002009	180 cc	black	metal
BG3002030	240 cc	black	metal
BG3002010	360 cc	black	metal



Pressure container for large cartridges

Mounting possibility of an empty signal

Article number	size	colour	material
BG3002023	180 cc	black	metal
BG3002024	240 cc	black	metal
BG3002025	360 cc	black	metal



Pressure container for large cartridges, closed

Article number	size	colour	material
BG3002037	75 cc	black	metal
BG3002038	180 cc	black	metal
BG3002039	240 cc	black	metal
BG3002040	360 cc	black	metal



Other sizes are available upon request.

Large cartridge, compatible with Semco®

Bayonet cap for pressure vessel of the large cartridge, 75 cc – 360 cc

Bayonet cap



Article number

description

BG3002026

compatible with Semco®

Article is delivered without screw connection

BG3002031

compatible with EFD cartridge

– For a beaded rim <48mm

Article is delivered without screw connection
and pressure adapter

BG3000784

compatible with Semco®

with flat seal

– Recommended for disposable
applications only, as the beaded rim
is subject to high loads.



BG3000857

compatible with Semco®

with internal sealed geometry

– Push-in fitting for 6/4 mm pneumatic hose
– Optimized closure system for one-way
and reusable applications.

Scope of delivery:

Adapter, ME3251000 / O-ring, BG3000819



BG3002032

compatible with EFD cartridge

with internal sealed geometry

– For a beaded rim <48mm
– Push-in fitting for 6/4 mm pneumatic hose
– Optimized closure system for disposable and reusable applications.

Scope of delivery:

Adapter, ME3251000 / O-ring, BG3000819

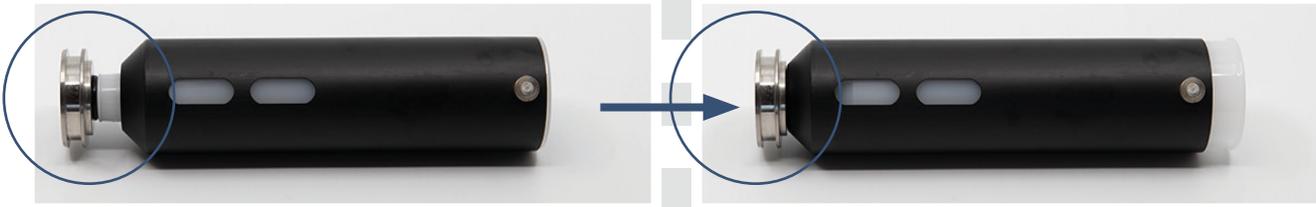
Other sizes are available upon request.

Large cartridge, compatible with Semco® Adapter INOX and o-ring

Adapter for large cartridge, inlet / outlet



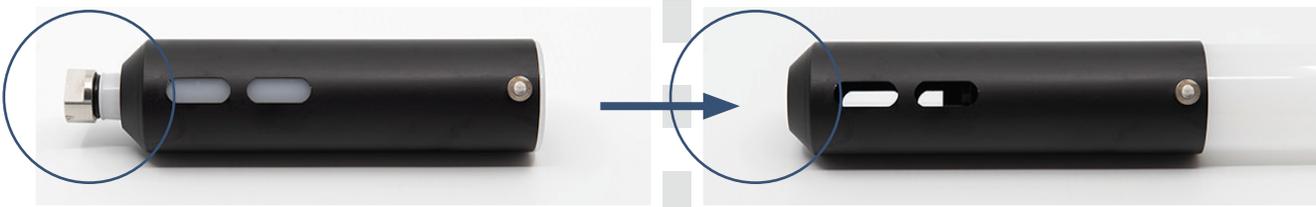
Article number	description
ME3251000	Internal thread: G1/8", External thread: G1/4" (o-ring: BG3000819, BG3000820, BG3000656)



Adapter for large cartridge, without collar, INOX



Article number	description
ME3251001	1/4 NPT internal thread, Output thread: G1/8" (o-ring: BG3000820, BG3000656)



O-ring

Article number	size	colour	material
BG3000819	34 x 4 mm	noir	FKM
BG3000820	14 x 2.5 mm	noir	FKM
BG3000656	13 x 2.5 mm	noir	NBR
BG3000759	38 x 3 mm	noir	EPDM



Large cartridge, compatible with Semco®

Piston and caps

Piston for large cartridges

Article number	size	colour	material
BG3002011	75 - 360 cc	transparent	PE
BG3002012	75 - 360 cc	black	PE



Top cap for large cartridges

Article number	size	colour	material
BG3002014	75 - 360 cc	red	LDPE



Screw plug for cartridges

Article number	size	colour	material
BG3002021	1/4"	red	PE



Screw plug Semco® for cartridges

Article number	size	colour
BG3002041	1/4"	red



Handle for pressure container compatible with Semco®

Article number	description
BG3001256	-clamping function of the cartridge container by rotating the handle designed for using a finger switch 30 / 55 cc (sold separately)



Large cartridge, compatible with Semco® Empty signal and assemblage



Empty signal for large cartridges

Article number	description
BG3000219	Empty signal capacitive 180 - 360 cc
BG100131	Sensor connection cable M12(w.) - 4-pin, connection cable with open cable ends, 5m

Assemblage



Article number	description
BG3200027	Clamp for pressure vessel large cartridge 75 cc - 360 cc

Notes

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solutions*

**Download product catalogues
DE / FR / EN**



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