

# ABS lifting station Synconta 700

Synthetic prefabricated sump, designed as a single pumping station for the effective dewatering of buildings and areas below the sewer level. Designed as a complete wastewater sump for internal (above-ground), or external (below-ground) installation and for fitting with selected pumps from the ABS Piranha range. Synconta 700 is suitable also for the pumping of sewage containing faecal matter.

## Features

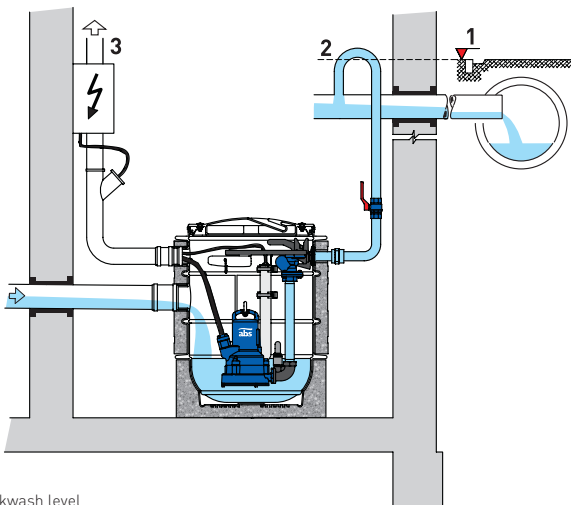
- Robust construction with lockable hollow lid which can be foam-filled for added insulation.
- For external installation a special cast iron sump cover is required for protection against overhead traffic (in accordance with EN 124; Group 1 permissible traffic tonnage 5 kN/m<sup>2</sup>).
- Stainless steel discharge pipe with 1¼" external thread.
- Single DN 100 inflow port for DIN push-on connection. One port DN 70 for venting and use as a cable duct (supplied as standard with plug/cable inlet seal).
- Available with optional polystyrene jacket to insulate against noise and excessive external temperatures.
- Simple pump installation and maintenance. The pump seals automatically onto the discharge line when lowered into the high level coupling.
- Automatic pump and level control by pressure sensor system.
- Maximum allowable temperature of medium 40 °C, short term to 60 °C (max. 5 minutes).

## Materials

Synconta 700	Material
Tank and Lid	Polyethylene
Insulation Jacket	Extruded polystyrene
Discharge Pipe	Stainless steel 1.4301 (AISI 304)
Coupling and Valve	Cast iron EN-GJL-250
Piranha Pump	
Motor Housing	Cast iron EN-GJL-250
Rotor Shaft	Stainless steel 1.4021 (AISI 420)
Volute	Cast iron EN-GJL-250
Impeller	Cast iron EN-GJL-250
Fasteners	Stainless steel 1.4401 (AISI 316)

## Installation

Attention to the backwash level is of vital importance for effective dewatering. All outflow points located below the backwash level must be protected against back flow according to standard EN 12056.



1. Backwash level
2. Discharge pipe must rise above backwash level before entering sewer line
3. External ventilation pipe

Rooms for sewage lifting stations must be large enough that a working area of at least 60 cm width or height is available around all parts which have to be operated or maintained.



## Tank

Synthetic, corrosion-resistant tank supplied as standard with plastic lid, discharge pipework and coupling with non-return ball valve.

Pump, pressure sensor, control panel, sump cover and insulation jacket are not included.

Capacity: 190 litres

Weight: 35 kg (includes installation pipework but not weight of pump)

## Motor

Three phase, water pressure sealed, squirrel cage 2-pole induction motor with triple shaft seals and oil chamber.

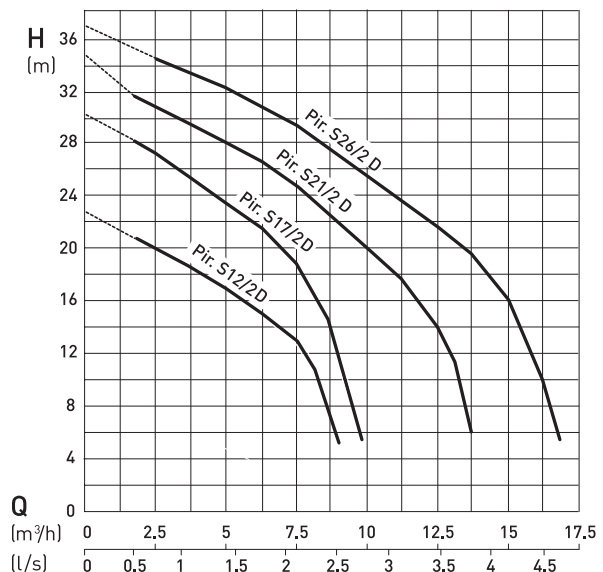
Insulation: Class F for 155 °C

Protection type: IP 68

## Pump Type

ABS Piranha submersible grinder pump with shredding system hydraulics which can cut and pump wastewater containing solids through small diameter discharge lines from 1¼".

## Performance Curves



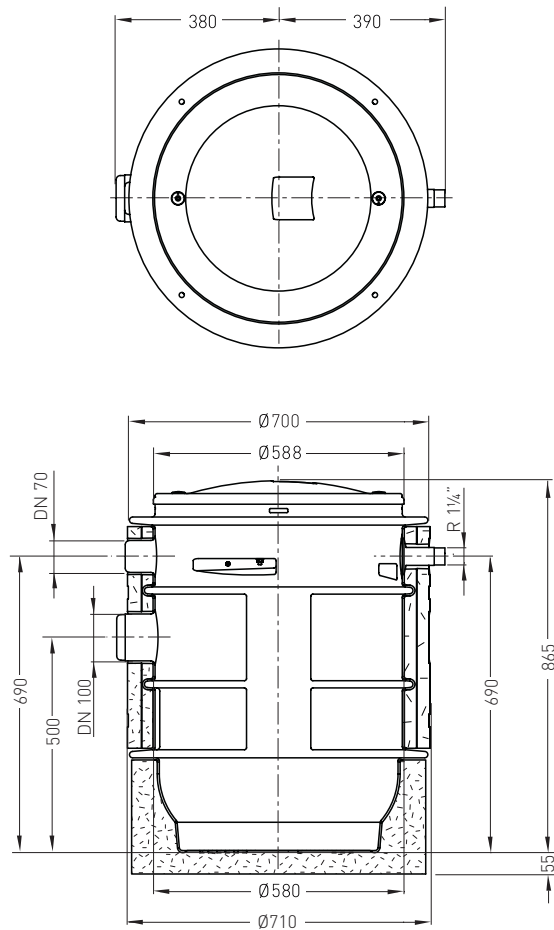
H = Total Head; Q = Discharge Volume. Curves to ISO 9906

## Technical Data

Piranha	Discharge		Motor power *		Rated current (A)	Rated** voltage (V)	Speed (r/min)	Cable *** (H07RN8-F)	Pump weight (kg)
	Pump (flange)	Pipe (thread)	P <sub>1</sub>	P <sub>2</sub>					
S12/2D	DN 32	R 1¼"	1.69	1.20	5.72	230 3~	2900	4G 1.5	32
S12/2D	DN 32	R 1¼"	1.69	1.20	3.29	400 3~	2900	4G 1.5	32
S17/2D	DN 32	R 1¼"	2.31	1.70	6.90	230 3~	2900	4G 1.5	32
S17/2D	DN 32	R 1¼"	2.31	1.70	3.97	400 3~	2900	4G 1.5	32
S21/2D	DN 32	R 1¼"	2.79	2.10	8.26	230 3~	2900	4G 1.5	37
S21/2D	DN 32	R 1¼"	2.79	2.10	4.75	400 3~	2900	4G 1.5	37
S26/2D	DN 32	R 1¼"	3.43	2.60	9.81	230 3~	2900	4G 1.5	40
S26/2D	DN 32	R 1¼"	3.43	2.60	5.64	400 3~	2900	4G 1.5	40

\* P<sub>1</sub> = Power at mains; P<sub>2</sub> = Power at motor shaft. \*\* 230 V can operate as single phase using the appropriate control panel (see accessory table). \*\*\* Special rubber compound, free-end cable.

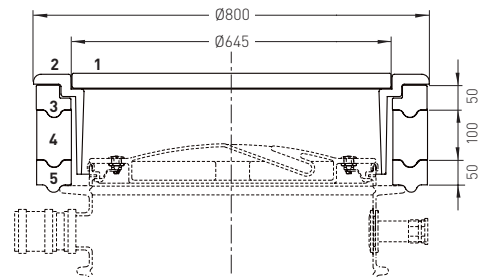
## Dimensions (mm)



## Inlet diameters

Ø	[mm]
DN 70	+0.2 ø75 -1.0
DN 100	+0.3 ø110 -1.0

## Sump Cover



1. Cast iron lid
2. Cast iron frame
3. Synthetic frame-support ring
4. Concrete spacer ring
5. Synthetic support ring (sits on tank rib)

## Accessories

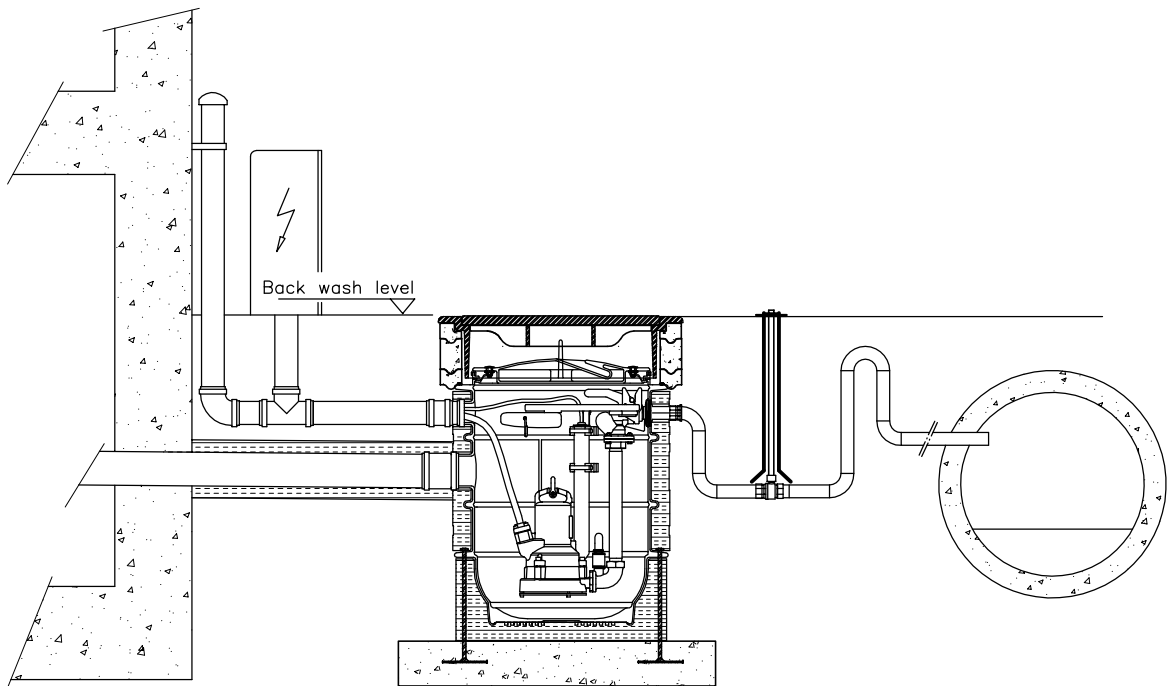
Description	Part no.
Insulation Jacket	62665343
Pressure Sensor	17225-1100-000
Vacuum Breaker	62665297
Sump Cover - for below-ground installations	On request
Control Panel - CP114: 230 V single phase, 7.5 A	62160870
CP114: 230 V single phase, 10.0 A	62160871
CP112: 230 V three phase	15207147
CP112: 400 V	15207145





Installation Drawing Synconta 700  
Below Ground

AN-M 18.147 -00  
Drawn by: B.McDonald  
Issue Date: 03/04/09  
Änderungen vorbehalten  
Technical changes reserved  
Con riserva di modifiche  
Con reserva de modificaciones  
Sous réserve de modification





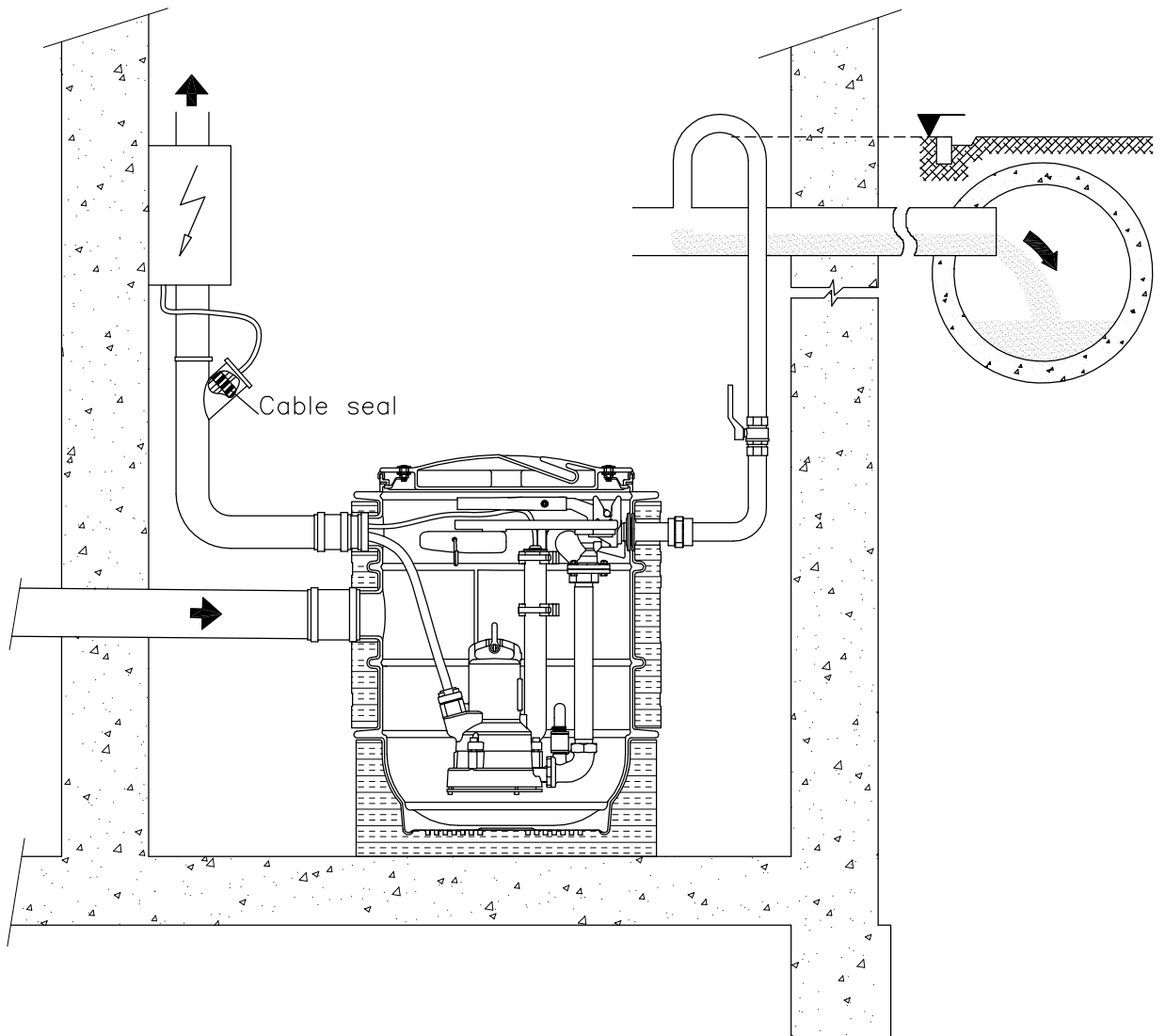
Installation Drawing Synconta 700  
Above Ground

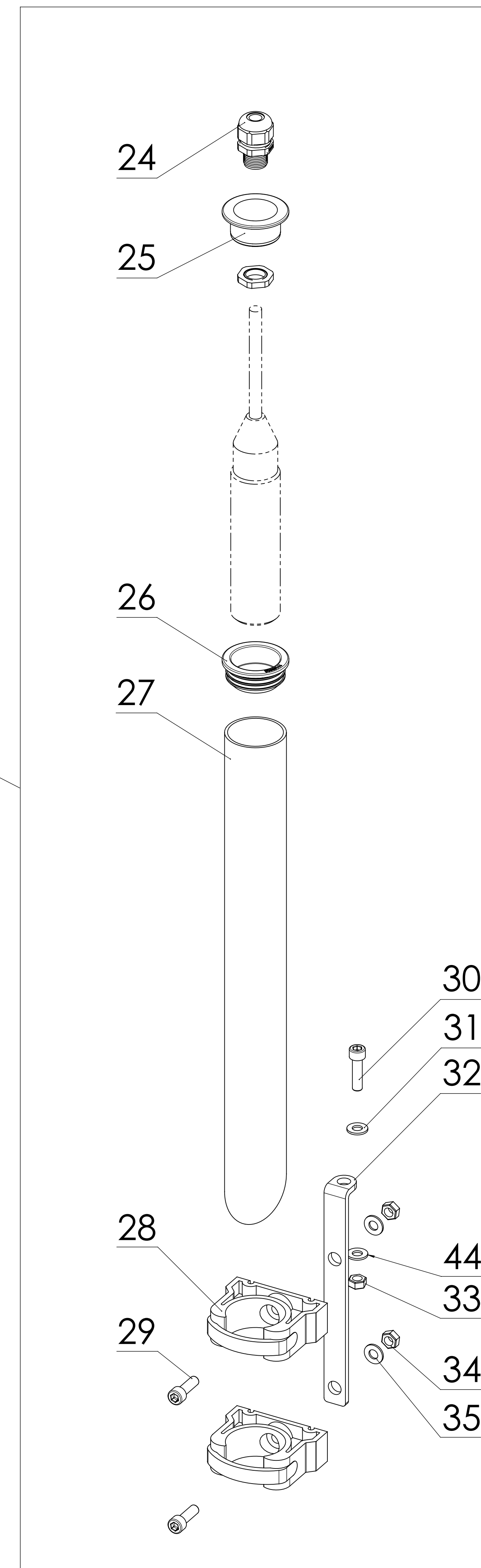
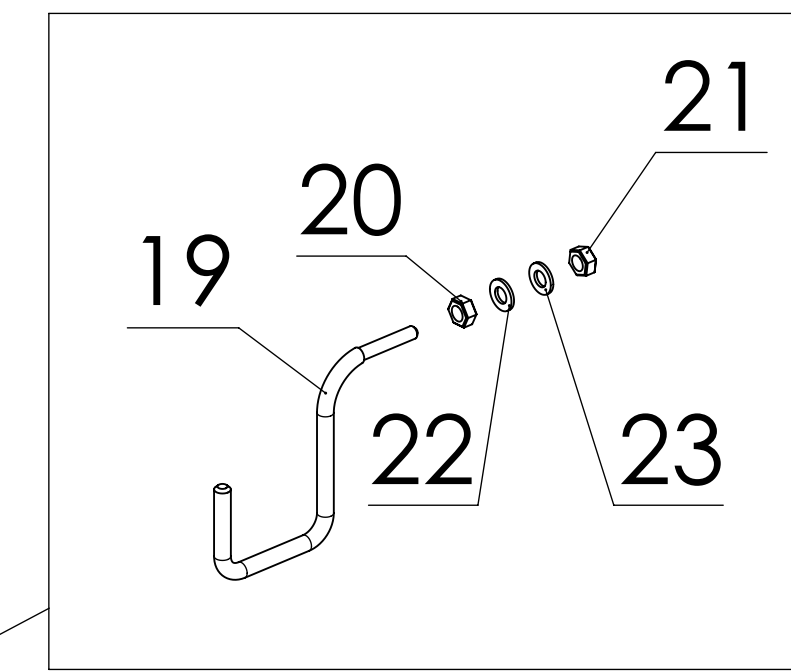
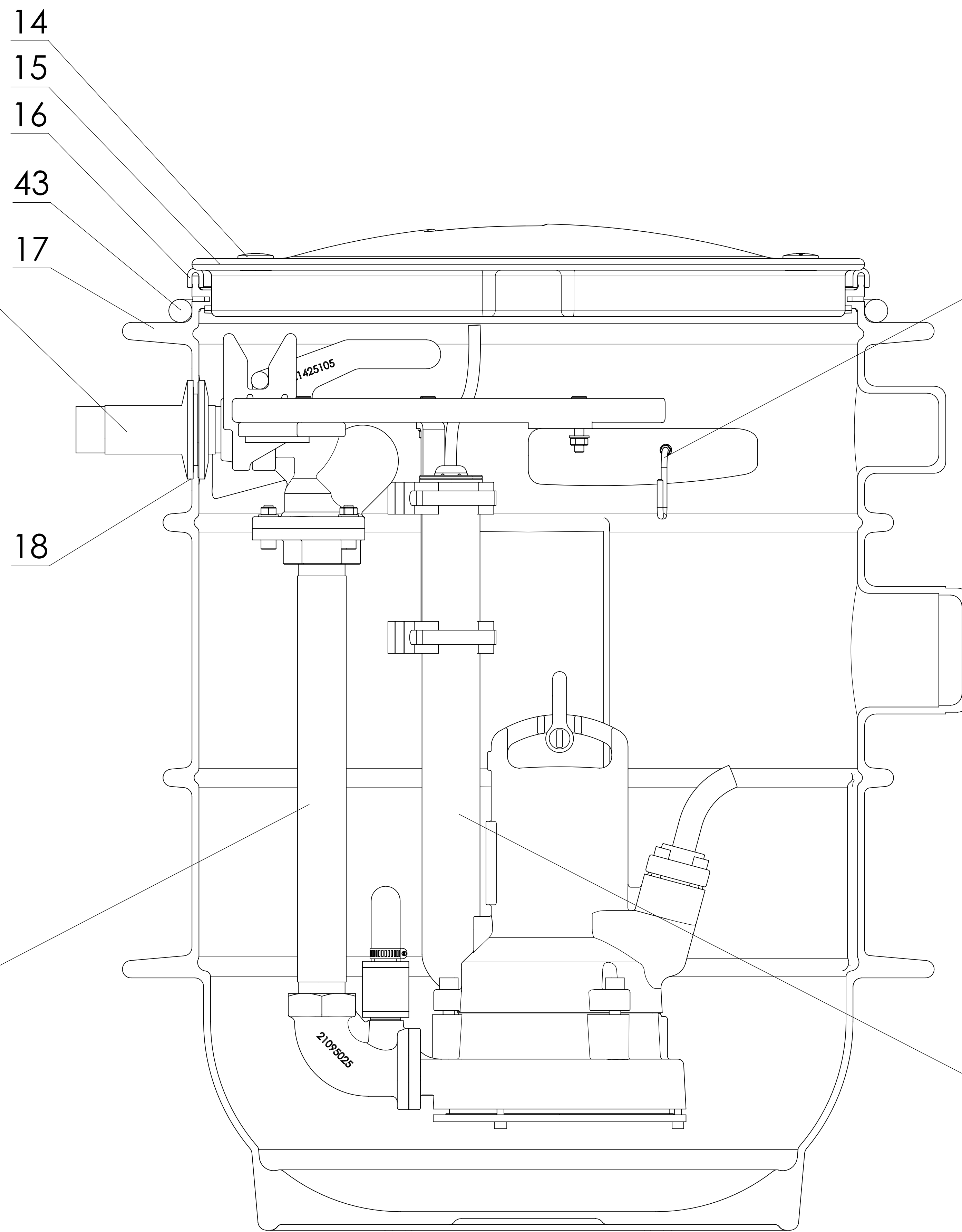
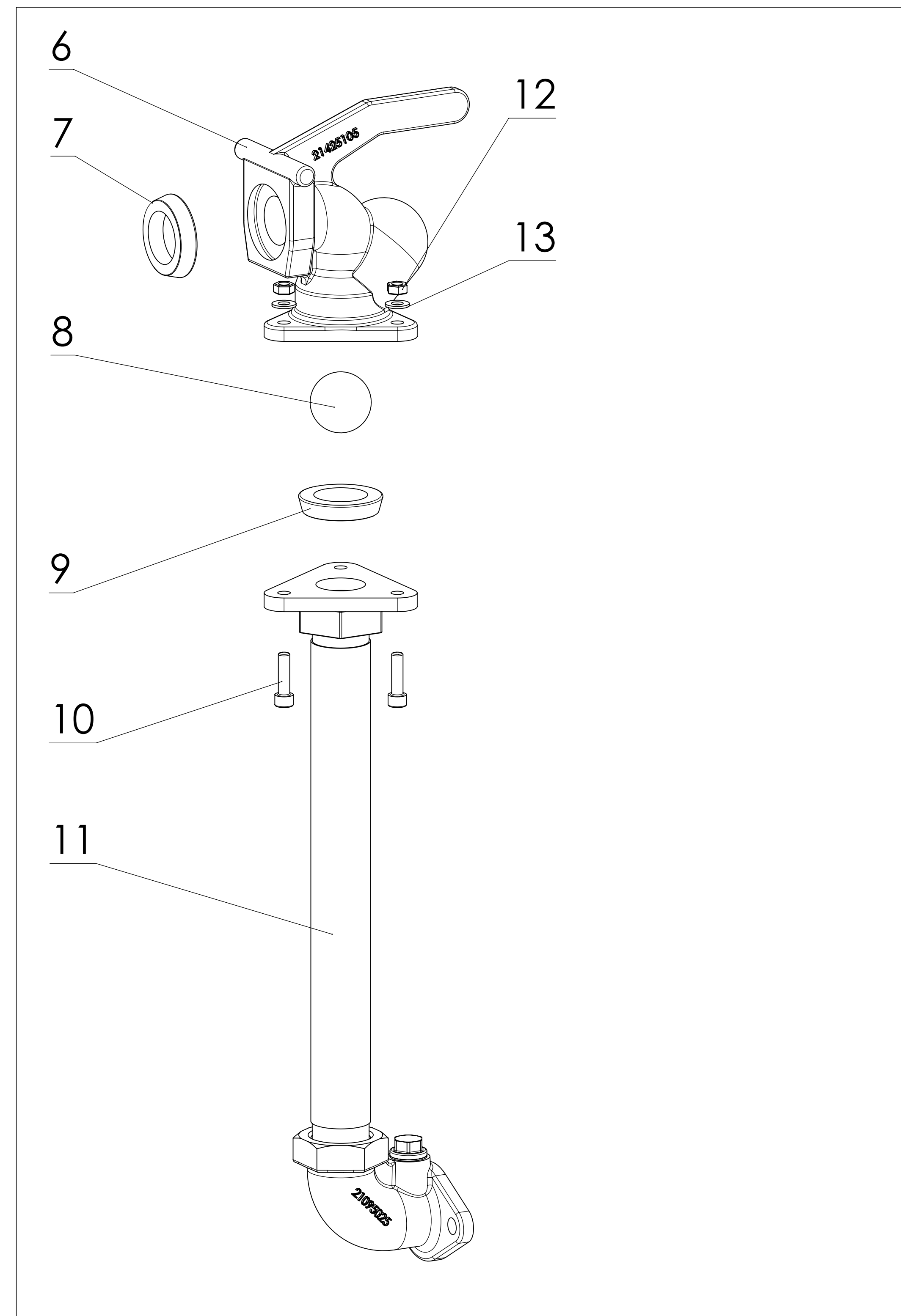
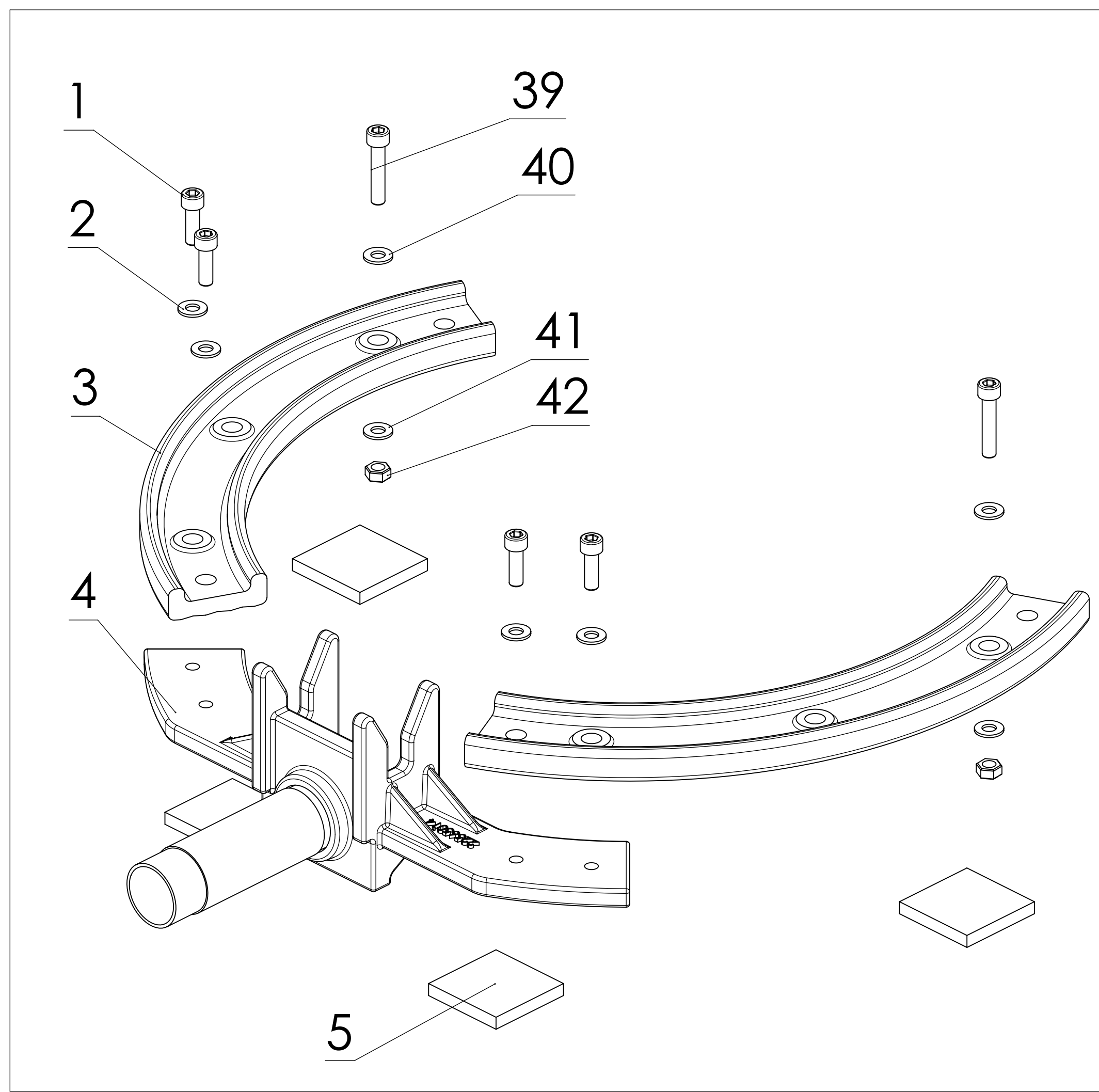
AN-M 18.146 -00

Drawn by: B.McDonald

Issue Date: 09/04/09

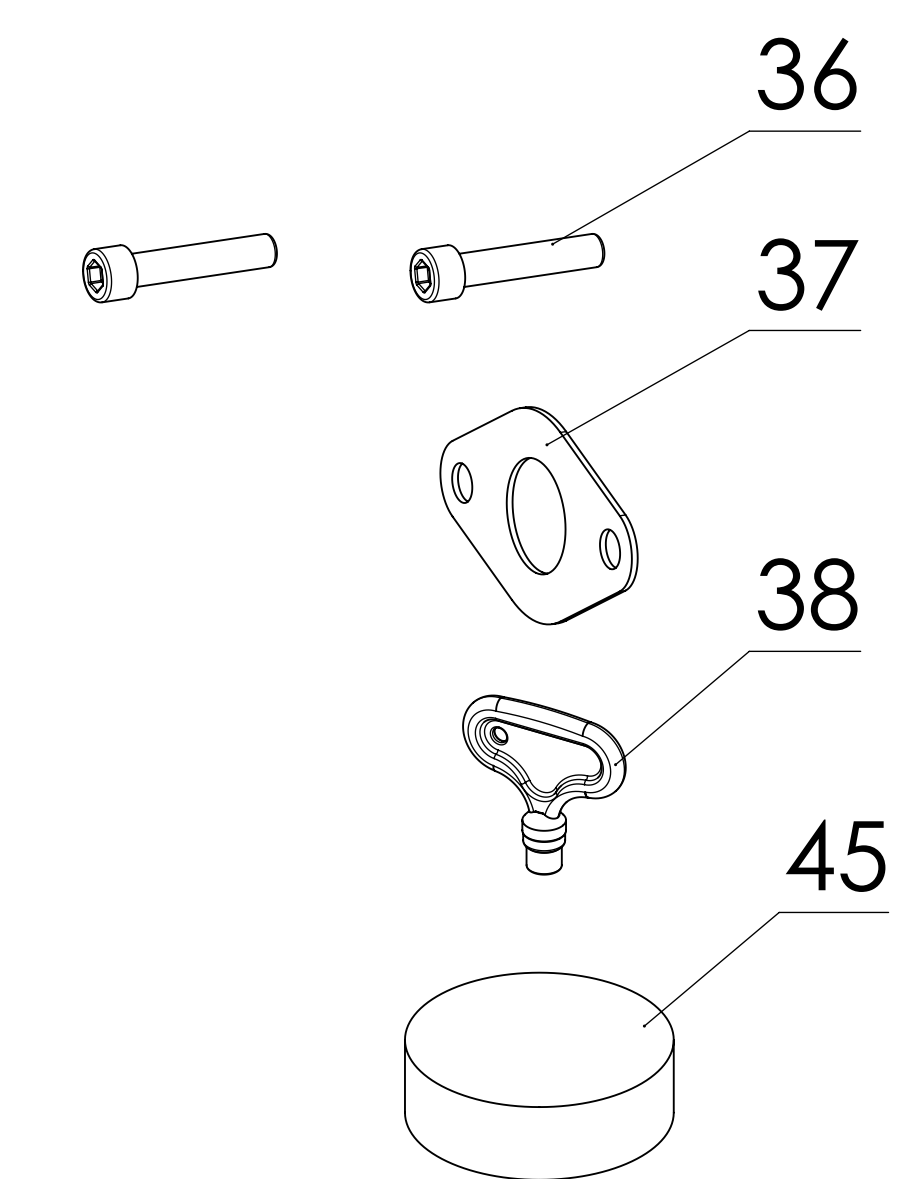
Änderungen vorbehalten  
Technical changes reserved  
Con riserva di modifiche  
Con reserva de modificaciones  
Sous réserve de modification





ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	4	11210243	Screw Cyl M8x25 DIN912 1.4401
2	4	11470016	Washer A8.4 DIN125 1.4401
3	2	32485010	Ring DPC Upper & Lower Sanissett GG25
4	1	25105008	Pipework Discharge Synconta 700
5	4	44275012	Vibration Damper Sanimat 1000
6	1	31425105	Pedestal Bracket Synconta 700
7	1	43070179	Seal Pedestal Piranha 60x38x12
8	1	44270051	Ball Phenolic Resin Ø43mm
9	1	43070179	Seal Pedestal Piranha 60x38x12
10	3	11210238	Screw Cyl M8x30 DIN912 1.4401
11	1	25105007	Pipework Pump Synconta 700
12	3	11400084	Nut Hex M8 DIN985 1.4401
13	3	11470016	Washer A8.4 DIN125 1.4401
14	2	13245005	Latch Quad Panel
15	1	42485023	Lid Synconta 700
16	1.8	43075143	Seal U-Shaped
17	1	42885034	Tank Synconta 700
18	1	43075121	Seal Discharge Synconta 601
19	1	14995002	Float Hook
20	1	11400061	Nut Hex M5 DIN934 1.4301
21	1	11400049	Nut Hex M5 DIN985 1.4401
22	1	11470017	Washer A5.3 DIN125 1.4401
23	1	11470017	Washer A5.3 DIN125 1.4401
24	1	12940082	Cable Gland PG11
25	1	42850011	Stopper Ø19 Cable Hole
26	1	11150002	Seal ID40xOD46x20
27	1	41385043	Pressure Pipe Sanimat 2002 445mm
28	2	15075004	Pipe Clamp Ø50mm
29	2	11210243	Screw Cyl M8x25 DIN912 1.4401
30	1	11210238	Screw Cyl M8x30 DIN912 1.4401
31	1	11470016	Washer A8.4 DIN125 1.4401
32	1	41425082	Bracket KS Synconta 801S
33	1	11400084	Nut Hex M8 DIN985 1.4401
34	2	11400084	Nut Hex M8 DIN985 1.4401
35	2	11470016	Washer A8.4 DIN125 1.4401
36	2	11210251	Screw Cyl M10x50 DIN912 1.4401
37	1	43070159	Gasket Discharge Piece Piranha
38	1	13245004	Key Synconta 801S
39	2	11210234	Screw Cyl M8x40 DIN912 1.4401
40	2	11470016	Washer A8.4 DIN125 1.4401
41	2	11470016	Washer A8.4 DIN125 1.4401
42	2	11400084	Nut Hex M8 DIN985 1.4401
43	1	11125011	O-Ring D20x580 EPDM Synconta 700
44	1	11470016	Washer A8.4 DIN125 1.4401
45	1	43075075	Seal Nirolift Cable D80 EPDM

### PARTS IN PLASTIC BAG



ASSEMBLY DRAWING / ZUSAMMENSTELLUNG /  
ASSEMBLAGE  
SYNCONTA 700

AN-S 18.125 -F  
CAD CODE: L\ ANS18125  
DATE/NAME: 02/03/09 Barry Mc Donnell  
Product/Center: EM Andargen s.r.l. / Andargen s.r.l. / Andargen s.r.l.

