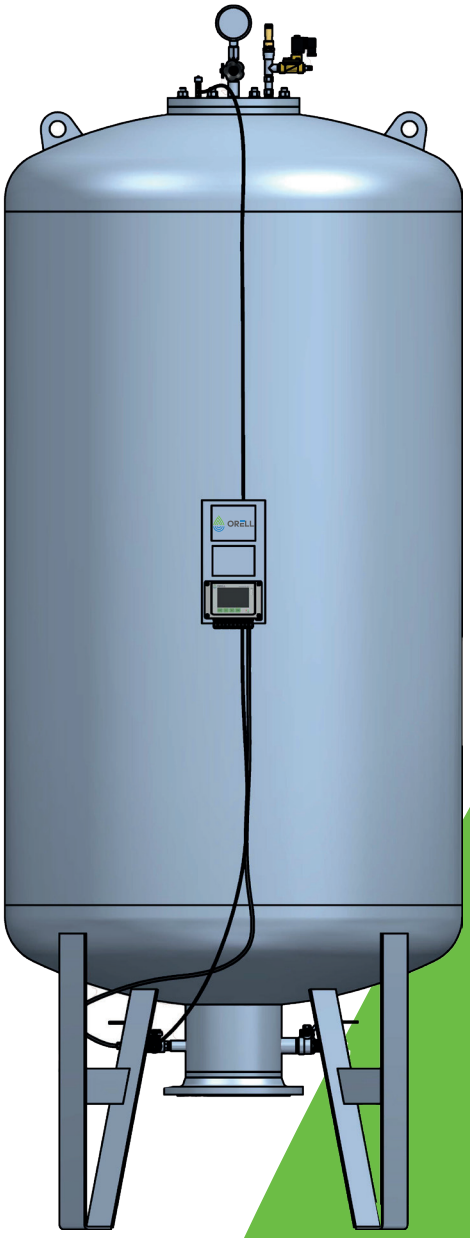
Shock Absorbers without bladder
for waste water



General description

The damper consists of a cylindrical stainless steel container and is equipped with a level control system. The level control regulates the pre-charge pressure, or the water level in the container, via a compressed air connection.

Once the setpoint in the container is exceeded, the solenoid valve opens and compressed air flows in. This continues until the water level drops back to the setpoint and the solenoid valve closes.

This process takes place under operating pressure and allows energy to be stored in the form of compressed air, which automatically adapts to the system.

As a result, the damping volume is minimized while still ensuring that, in the event of an emergency pump shutdown, sufficient water can be fed back into the pipeline.

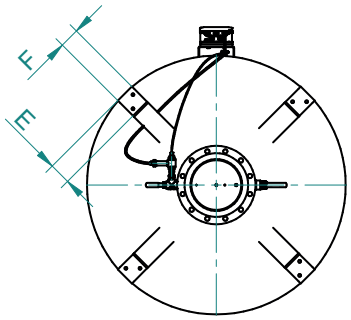
The surge damper with level control ensures safe operation of the system without pressure surges or vacuum in the pipeline.

Shock Absorbers without bladder

for waste water

Technical data

Body material:	Stainless steel 1.4404 / 1.4571 welded.
Volume range:	100 to 20,000 liters
Max. Operating pressure:	10 / 16 bar
Connection types:	Straight flange or 90° elbow (DIN / EN 1092-1).
Temperature range:	0 °C to +80 °C.
Design:	Vertical, on four feet

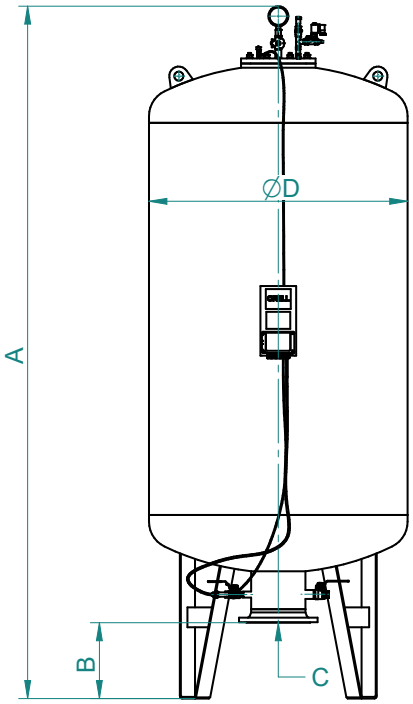


Conveying medium

Raw sewage, waste water and industrial water. Other media on request.

System

The pre-charge pressure or the water level in the tank is set via the water level in the tank by means of a compressed air connection.



Assembly instructions

Gate valve and drainage on site. For maintenance and cleaning of the pressure shock absorber, a distance of 800 mm above the maintenance opening.

Important note

To prevent the damper from emptying via the pumps in the event of an emergency shutdown, a quick-closing shut-off device (e.g. flap) is required. The external compressed air supply should have a pressure of 8 to 10 bar pressure. At least ⅓ above the manometric pressure of the system. Volume flow of 100-200 l/min with storage tank of at least 10 litres.

Accessories

- Fill level indicator see D1121

Type	Gas vol. V0 litres	Weight kg	Dimensions in mm				Possible connections C in PN 10 straight, 90° pipe bent or T-piece		Size B straight	Size B 90° pipe bent	Size B T-piece
			A	D	E	F					
DDA OB 100 – 10 / 90 -RF	106	110	1230	508	86	50	DN 100	Other connection sizes on request	35 – 48 mm	on request	on request
DDA OB 200 – 10 / 90 -RF	208	130	1750	508	86	50	DN 100		35 – 48 mm		
DDA OB 300 – 10 / 90 -RF	315	225	1840	600	86	50	DN 150		35 – 48 mm		
DDA OB 500 – 10 / 90 -RF	519	280	1790	800	86	50	DN 150		35 – 48 mm		
DDA OB 750 – 10 / 90 -RF	774	335	1990	900	100	100	DN 150		35 – 48 mm		
DDA OB 1000 – 10 / 90 -RF	1029	431	2390	900	100	100	DN 150		35 – 48 mm		
DDA OB 1500 – 10 / 90-RF	1550	685	2450	1100	100	100	DN 250		35 – 48 mm		
DDA OB 2000 – 10 / 90 -RF	2050	804	2970	1100	100	100	DN 250		35 – 48 mm		
DDA OB 3000 – 10 / 90-RF	3075	1190	3160	1300	100	100	DN 250		35 – 48 mm		
DDA OB 4000 – 10 / 90-RF	4100	1390	3190	1500	150	150	DN 250		35 – 48 mm		
DDA OB 5000 – 10 / 90-RF	5120	1605	3760	1500	150	150	DN 250		35 – 48 mm		

In accordance with PED 2014/68/EC, CE marked. Manufacturer's tolerances not taken into account. ional approvals on request. Subject to change without prior notice.

Compressed-air Piston Compressor for DDA OB series

Construction

Single-stage, 2 cylinders, air-cooled, mobile, assembled in Switzerland

Technical features	
Suction capacity	240 l/min
Flow rate at 6 bar	180 l/min
Max. pressure	10 bar
Switching limits	7.5 bis 9.5 bar
Pressure vessel volume	40 L
Oil quantity (mineral oil EP 550)	0.5 L
Voltage	230 V
Electrical fuse protection (slow blow)	10 A
AC motor 1 x 230 V, 50 Hz	1.5 kW
Max. operating speed	910 U/min
LPA1 sound pressure level (acc. to DIN 45 635 T 13; 1 m distance	74 dB (A)
Dimensions: length x width x height	80 x 39 x 71 cm
Weight	51 kg

Standard equipment

- Piston compressor with fan propeller
- Single-phase AC motor
- V-belt drive with tensioner
- Protective grid (belt)
- Sound-absorbing air inlet filter
- After-cooler pressure pipe
- Automatic pressure switch with motor protection and pressure release valve
- Non-return valve
- Manometer
- Safety valve
- Condensate-outflow valve
- Internally coated pressure vessel
- 10 year warranty against rusting through
- Carry and push handles with protective insulation
- 3m electric supply cable with 230 V plug
- Filter regulator with manometer and 2 couplings

Compressed-air Piston Compressor for DDA OB series

Construction

Single-stage, 1 cylinder, air-cooled, mobile, assembled in Switzerland

Technical features	
Suction capacity	160 l/min
Flow rate at 6 bar	86 l/min
Flow rate at 20 bar	45 l/min
Max. pressure	20 bar
Pressure vessel volume	4 L
Voltage	230 V
Electrical fuse protection (slow blow)	10 A
AC motor	1.1 kW
Synchronous nominal speed	3000 U/min
Sound pressure level	71 dB (A)
Dimensions: length x width x height	61 x 35 x 57 cm
Weight	31 kg

Standard equipment

- Compressor block
- Manometer
- Safety valve
- Built-on pressure reducer
- Condensate-outflow valve
- Aluminium compressed air vessel
- Filled with high performance fluid

Switzerland, Germany

ORELL Tec AG
Bonnstrasse 3
CH–3186 Düdingen
Tel. +41 26 492 70 00
info@orelltec.com
www.orelltec.com

Austria

ORELL Tec Austria GmbH
Gewerbestrasse 5
AT–4654 Bad Wimsbach-Neydharting
Tel. +43 7242 90 98 98
info.at@orelltec.com
www.orelltec.com

International

ORELL Tec AG
Bonnstrasse 3
CH–3186 Düdingen
Tel. +41 26 492 70 00
info@orelltec.com
www.orelltec.com