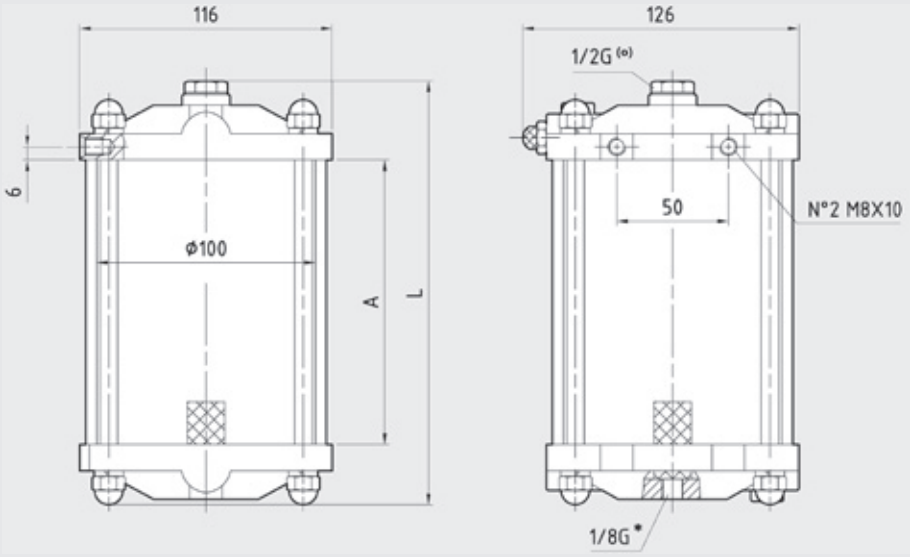
SERIES 09/M
METHACRYLATE TANKS

The tank consists of two die-cast aluminium flanges and a clear methacrylate pipe, all joined together by means for four galvanised steel tie rods. It comes complete with a filter on the air suction side, a filter for fluids inside and a 1/2" filling cap.
Two M8 holes for fixing onto the equipment are provided on the upper and lower flanges.

IMPORTANT:
Never pressurize the tank.

DIMENSIONS AND ORDERING CODES

(o) = Oil filling
* = oil output



Code	Descriptions	A	L
Z52091001075	Methacrylate 750cc tank with pipe	100	160
Z52091001100	Methacrylate 1000cc tank with pipe	130	190
Z52091001120	Methacrylate 1200cc tank with pipe	150	210

SERIES 09
ALLUMINIUM TANKS AND COMPENSATORS

Series 09 has been extended with the addition of an air/oil compensator.

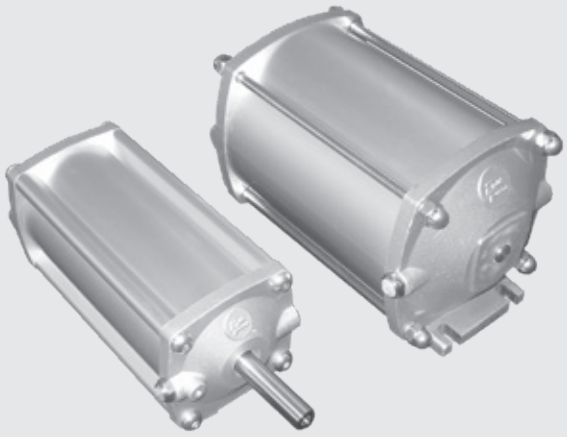
The Ø100 air/oil compensator consists of two aluminium flanges and an anodized jacket with an ISO profile, all joined together by means of eight screws. The Ø160 compensator consists of 2 aluminium flanges, 4 steel tie rods and a Ø160 anodized pipe.

A fixed or moving piston rod and a magnetic or non-magnetic piston are mounted inside. The operating principle is very simple.

It uses the pressure of entering air to move the piston, which in turn pushes oil into the circuit.

The application and the space available will determine which model to use.

Standard models with a Ø100 jacket are available in capacities 1-2-3 litres. Models with a Ø160 jacket are available in capacities 4-5-8-10 litres.



The Ø100 tank also consists of two aluminium flanges and an anodized jacket with an ISO profile, all joined together by means of eight screws. The Ø160 tank consists of 2 aluminium flanges, 4 steel tie rods and an anodized pipe.
The tank is supplied complete with a filter on the air intake side, a liquid filter inside and a 1/2" filling cap.
Ø100 models have four M8 holes on the flanges for fixing to the equipment, and Ø160 have four 12mm slots.
Standard models can take such optionals as an internal electromagnetic level gauge or a pressure regulator and gauge.

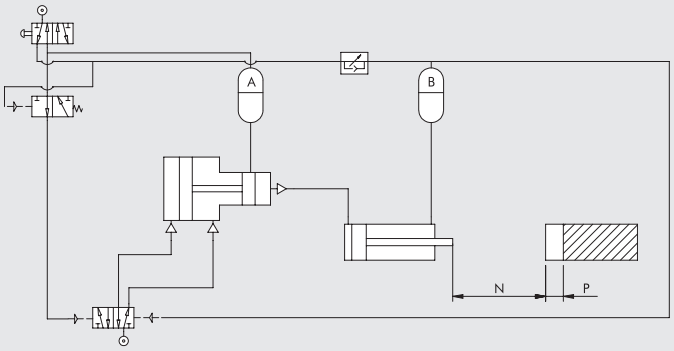
Standard models with a Ø100 jacket are available in capacities 1-2-3 litres. Models with a Ø160 jacket are available in capacities 4-5-8-10 litres.

TECHNICAL DATA		TANKS		COMPENSATORS	
Bore	mm	100	160	100	160
Oil volume	l	1-2-3	4-5-8-10	1-2-3	4-5-8-10
Outer jacket		Alluminium		Alluminium	
Outer Jacket Aluminium	bar	2-8			
Temperature range	°C	-10°÷+70			
Recommended oil		Non aggressive			
Fluid		Filtered air, lubricated or not. If operating with lubricated air the lubrication must be continuous.			

APPLICATIONS

The application of the tank is fairly intuitive - it is mainly used to increase the amount of oil in a system when small leaks occur.

The compensator has numerous applications as it also exploits a compressed air input. It can be used as a normal tank, or as an air/oil cylinder for instance.
The diagram below shows a typical application of a compensator.



The oil in compensator A, which compressed by the air, passes into the chamber of the multiplier and then into the double-acting cylinder with a long stroke. The cylinder performs the approach stroke (N) and stops.
A command then pressurises the multiplier, which intervenes on the work stroke (P), which requires a greater force and hence a higher pressure, and performs the last part of the stroke.
Cylinder retraction is given by compensator B, which is operated by a set pressure and sends oil into the cylinder chamber.
The piston retracts, pushing oil into the multiplier and hence back into compensator A. In this case, the multiplier alone would not have enough oil to perform the cylinder approach stroke (N), which is why the two compensators have been added.

KEY TO CODE

Z52	09	160	1	0400	E
	SERIES	**BORE**	**MODEL**	**CAPACITY [cl]**	**OPTIONAL**
	09	100	**1** Tank	0100 0200 0300	**0** No **L** Electromag. level **R** Pressure regulator **E** Level + regulator
		160	**2** Mobile piston rod compensator	0400 0500 0800 1000	**M** Magnetic **N** Non Magnetic
			3 Fixed piston rod compensator		**M** Magnetic

OPTIONALS AND SPECIAL APPLICATIONS

Our standard models of tanks and compensators have capacities ranging from 1 to 10 litres, but intermediate or greater capacities are available on request.
If special requirements are expressed, the quotation will be accompanied by a new identification code a drawing showing the maximum dimensions.

EXTERNAL SURFACE TREATMENT

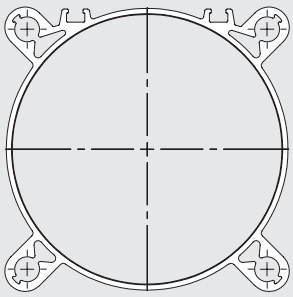
If the compensators or tanks are intended for use in special sectors, such as the food industry, the outer surface can undergo chemical nickel-plating treatment.

This is a heat treatment that increases the hardness of the material to 650±50 HV. The thickness of the nickel plating makes them extremely wear resistant.

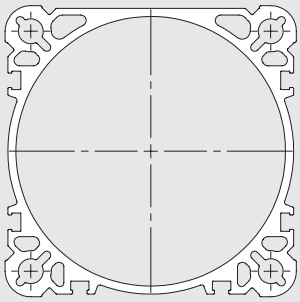
This gives the product a nickel-white colour.

SPECIAL PROFILES

With diam 100 magnetic tanks or compensators, which require external sensors, the profile of the jacket can be altered.
The diagram below shows two possible profiles.



ISO SERIES 3 PROFILE



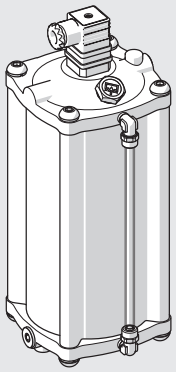
ISO TYPE A PROFILE

TANK OPTIONALS

TANK WITH ELECTROMAGNETIC LEVEL SENSOR

One of the tank accessories available is an electromagnetic level sensor.
It exploits the force of the magnet in the float to change the electrical condition of a reed contact.
Main technical features of our level sensors:

- APPLICATION: mineral oil
- FIXING ELEMENT: anodized aluminium
- PISTON ROD: brass
- FLOAT: foam nylon
- O-RING SEALS: NBR
- CONNECTOR: DIN43650
- CONTACT: NO/NC reed (SPDT)
- MAX SWITCHING POWER: 80W
- MAX SWITCHING CURRENT: 1 A
- MAX SWITCHING VOLTAGE: 250VAC
- TEMPERATURE RANGE: -15°C to +80°C

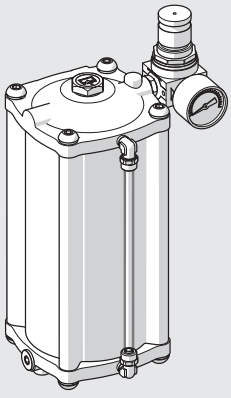


Level sensors for particular applications, such as the food Industry, are available on request.

PRESSURE REGULATOR

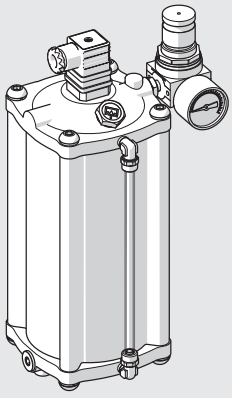
If the tank needs to be pressurised, it is advisable to apply a pressure regulator with a 12 bar gauge at the air inlet.

Tank	Fittings
Z52091001_ _ _ _ R	1/8
Z52091601_ _ _ _ R	1/4



PRESSURE REGULATOR + ELECTROMAGNETIC LEVEL SENSOR

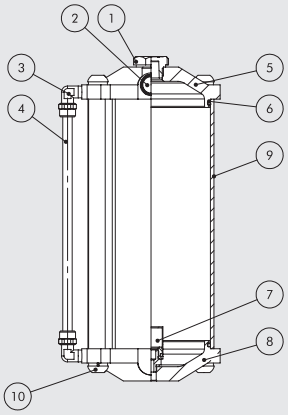
The last option is a tank complete with a pressure regulator and gauge plus an electromagnetic level sensors.



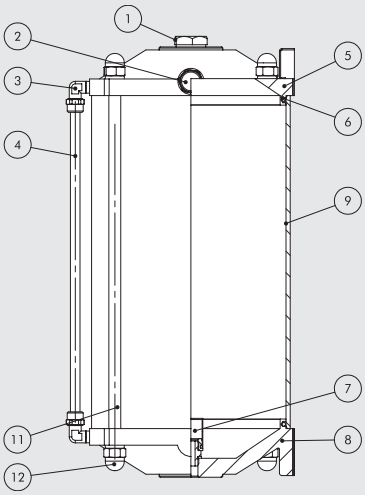
COMPONENTS: TANK Ø100 – Ø160

① CAP: plastic
② SILENCER: nickel-plated brass
③ ELBOWS: nickel-plated brass
④ OIL LEVEL: 8/6 Rilsan clear pipe
⑤ UPPER HEAD: diecast aluminium
⑥ O-RING SEAL: NBR
⑦ OIL FILTER: neutral anodized aluminium
⑧ LOWER HEAD: diecast aluminium
⑨ JACKET: profiled and anodized aluminium Ø100
neutral anodized aluminium Ø160
⑩ NUTS AND SCREWS: white galvanised steel (model Ø100)
⑪ TIE RODS: whiet galvanised steel (model Ø160)
⑫ BLIND NUTS: white galvanised steel (model Ø160)

Ø100



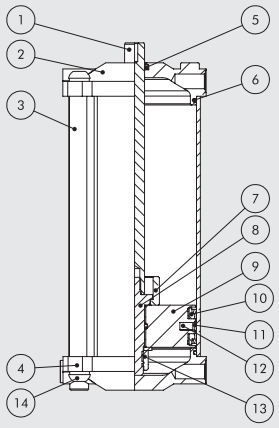
Ø160



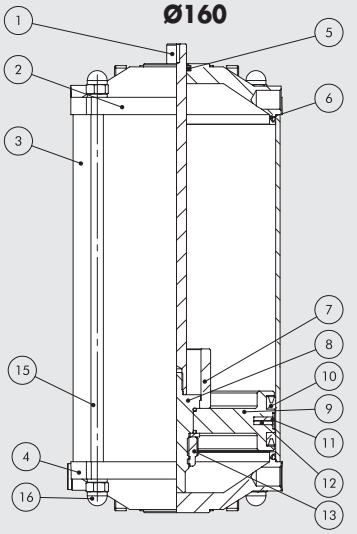
COMPONENTS: MOVING PISTON ROD COMPENSATOR Ø100 – Ø160

① PISTON ROD Ø16: chromed steel - ground
② UPPER HEAD: diecast aluminium
③ JACKET: profiled and anodized aluminium Ø100
neural anodised aluminium Ø160
④ LOWER HEAD: diecast aluminium
⑤ PISTON ROD SCRAPER SEAL: NBR
⑥ O-RING SEAL: NBR
⑦ SPACER: neutral anodized aluminium
⑧ PISTON ROD EXTENSION: white galvanised steel
⑨ PISTON Ø100 – Ø160: aluminium alloy 2011
⑩ PISTON GASKET: NBR
⑪ GUIDING RING: special technopolymer
⑫ MAGNET: plastoferrite (version with magnet only)
⑬ SELF-LOCKING NUT: white galvanised steel
⑭ TCB HEX SCREW: white galvanised steel (model Ø100)
⑮ TIE RODS: white galvanised steel (model Ø160)
⑯ BLIND NUTS: white galvanised steel (model Ø160)

Ø100



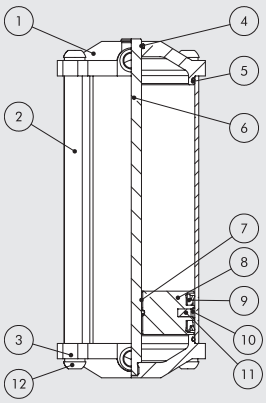
Ø160



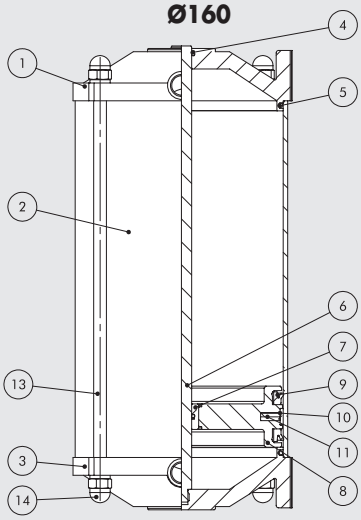
COMPONENTS: FIXED PISTON ROD COMPENSATOR Ø100 – Ø160

① UPPER HEAD: diecast aluminium
② JACKET: profiled and anodized aluminium Ø100
neural anodised aluminium Ø160
③ LOWER HEAD: diecast aluminium
④ ROD O-RING SEAL: NBR
⑤ HEAD O-RING SEAL: NBR
⑥ STELO Ø16: Chromium plated ground steel
⑦ BOCCOLA GUIDA STELO: Bronze
⑧ PISTON ROD Ø100 - Ø160: aluminium alloy 2011
⑨ PISTOSN ROD GASKET: NBR
⑩ GUIDING RING: special technopolymer
⑪ MAGNET: plastoferrite
⑫ TCB HEX. SCREW: white galvanised steel (model Ø100)
⑬ TIE RODS: white galvanised steel (model Ø160)
⑭ BLIND NUTS: white galvanised steel (model Ø160)

Ø100

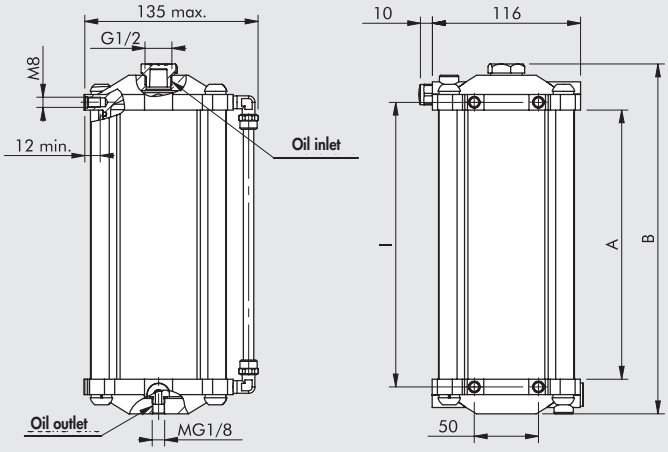


Ø160



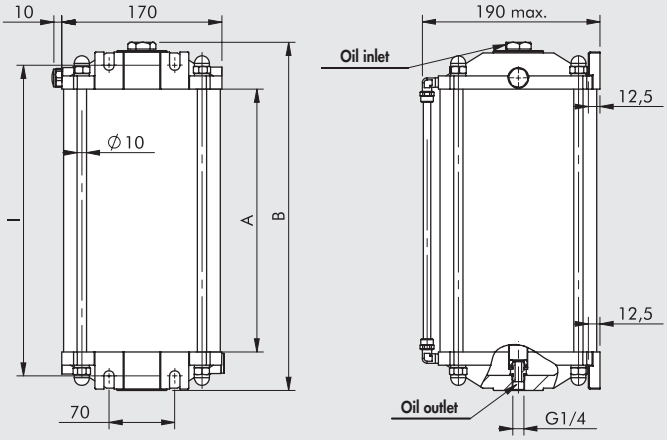
DIMENSIONS: TANK Ø100 – Ø160

Ø100



Code	A	B	I
Z520910010100	210	273	222
Z520910010200	340	403	352
Z520910010300	460	523	472

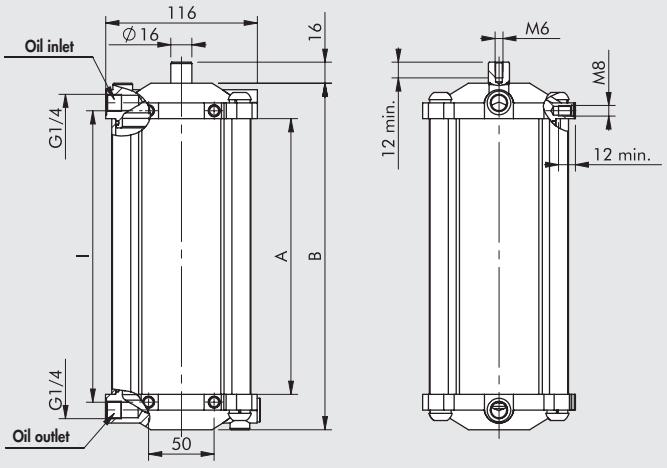
Ø160



Code	A	B	I
Z5209160104000	280	371	331
Z5209160105000	330	421	381
Z5209160108000	480	571	531
Z5209160110000	580	671	631

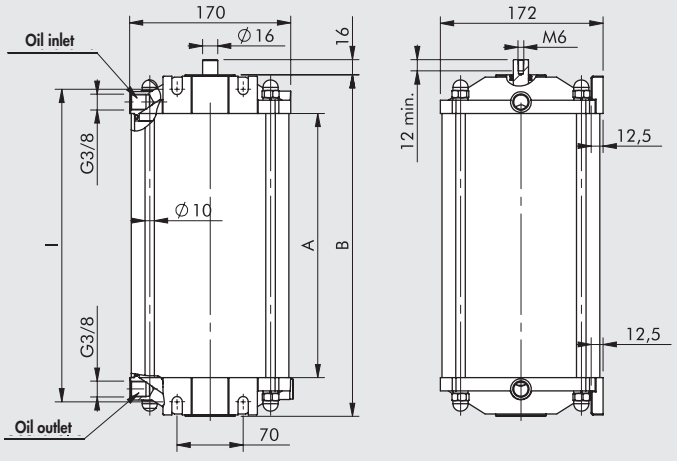
DIMENSIONS: MOVING PISTON ROD COMPENSATOR Ø100 – Ø160

Ø100



Code	A	B	I
Z520910020100N/M	210	264	222
Z520910020200N/M	340	394	352
Z520910020300N/M	460	514	472

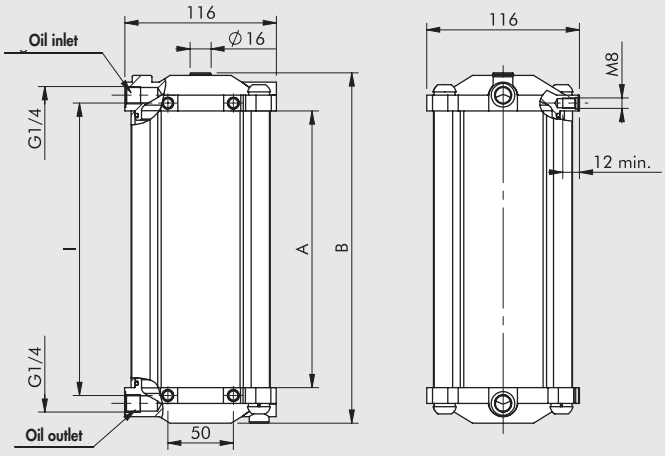
Ø160



Code	A	B	I
Z520916020400N/M	280	362	331
Z520916020500N/M	330	412	381
Z520916020800N/M	480	562	531
Z520916021000N/M	580	662	631

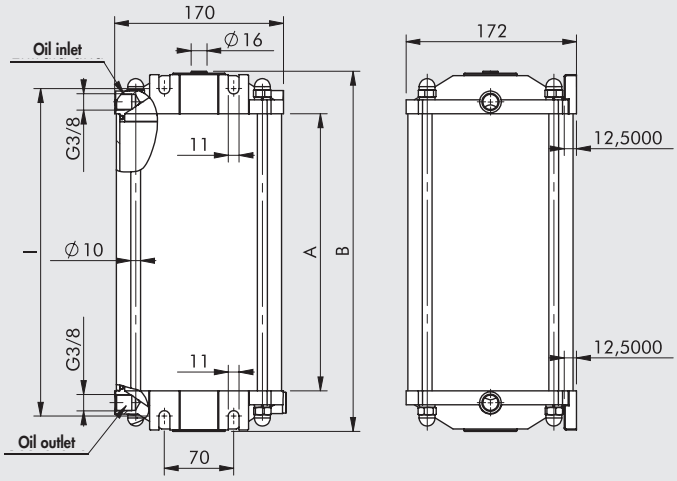
DIMENSIONS: FIXED PISTON ROD COMPENSATOR Ø100 – Ø160

Ø100



Code	A	B	I
Z520910030100N/M	210	266	222
Z520910030200N/M	340	396	352
Z520910030300N/M	460	516	472

Ø160



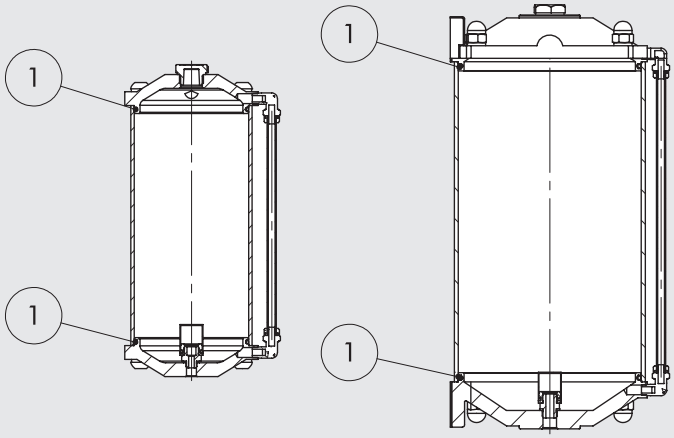
Code	A	B	I
Z520916030400N/M	280	364	331
Z520916030500N/M	330	414	381
Z520916030800N/M	480	564	531
Z520916031000N/M	580	664	631

NOTES

GASKETS KIT FOR SPARE PARTS: TANK Ø100 – Ø160

Code	Bore
Z5209K10001	100
Z5209K10001	160

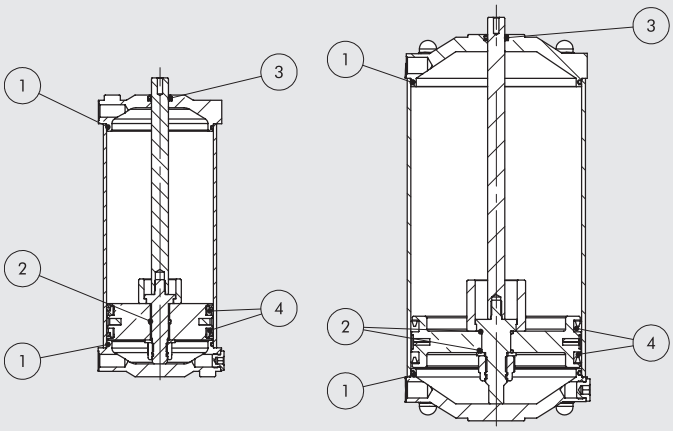
Ø100 **Ø160**



GASKETS KIT FOR SPARE PARTS: MOVING PISTON ROD COMPENSATOR Ø100 – Ø160

Code	Bore
Z5209K10002	100
Z5209K16002	160

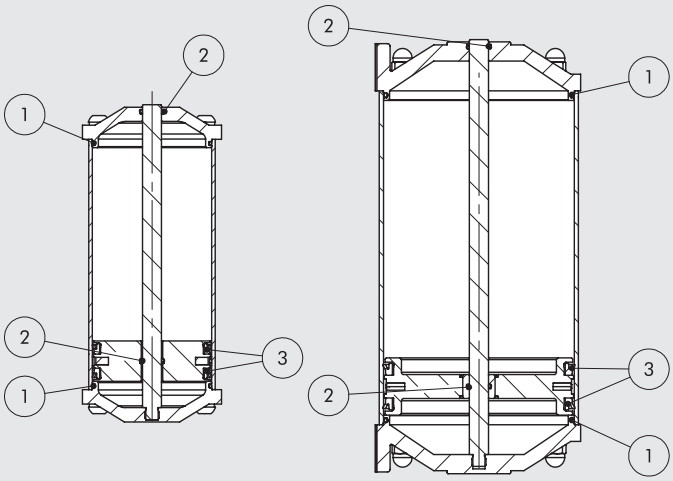
Ø100 **Ø160**



GASKETS KIT FOR SPARE PARTS: FIXED PISTON ROD COMPENSATOR Ø100 – Ø160

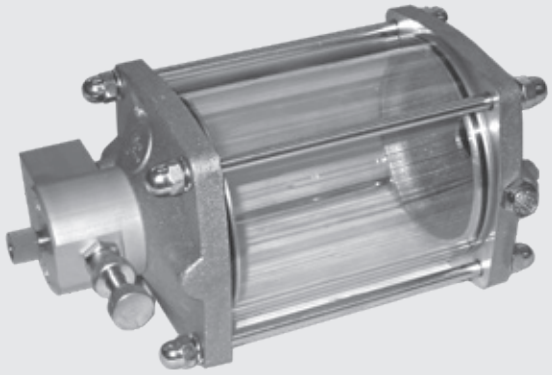
Code	Bore
Z5209K10003	100
Z5209K16003	160

Ø100 **Ø160**



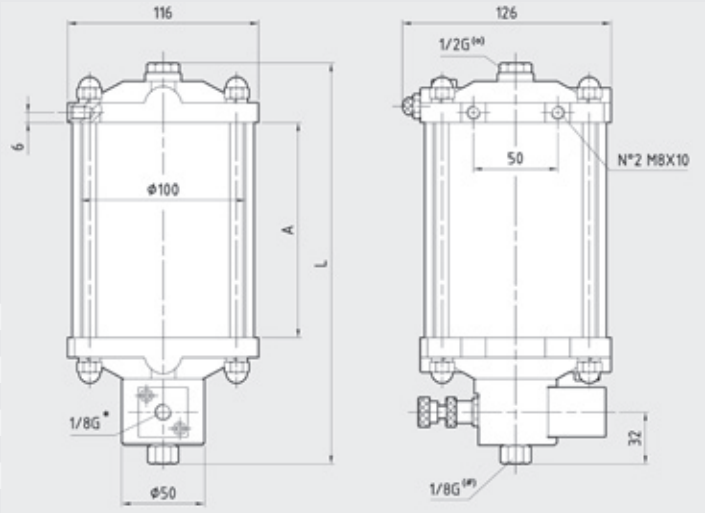
The reservoir is comprised of two die-cast aluminium flanges and a clear methacrylate or aluminium pipe, joined together by four galvanised steel tie rods.
It is equipped with a filter on the air intake side, a filter for the fluids inside and a 1/2 G filling plug.
The upper flange, at the back, comes with M8 holes for fixing to the equipment.

IMPORTANT:
Never pressurize the reservoir.



DIMENSIONS AND ORDERING CODE

* = Air supply
(#) = Oil outlet
(o) = Oil inlet



Code	Description	A	L
Z52101001912075	750cc tank with methacrylate pipe	100	210
Z52101001912100	1000cc tank with methacrylate pipe	130	240
Z52101001912120	1200cc tank with methacrylate pipe	150	260

APPLICATIONS

The suction pumping unit is located at the bottom of the lubricator and comes complete with an out-flow regulator.
A pneumatic pulse actuates the valve piston rod, which plunges into the chamber and forces fluid out through the fitting hole at the bottom.
When the signal is interrupted, the amount of liquid can be regulated on the knob provided as the piston rod retracts.

APPLICATION EXAMPLE

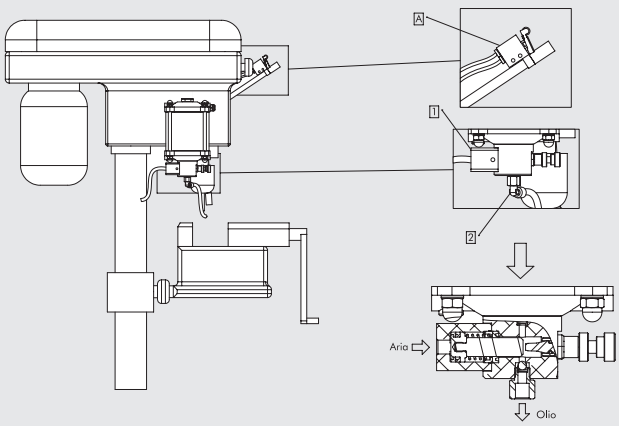
The figure shows a lubricator mounted on a machine tool.

OPERATION:

A mechanically- or electrically-operated valve (A), mounted on the machine tool, sends a compressed air pulse directly to the valve (1).

The valve piston rod plunges into the chamber and forces fluid out through flow port (2).

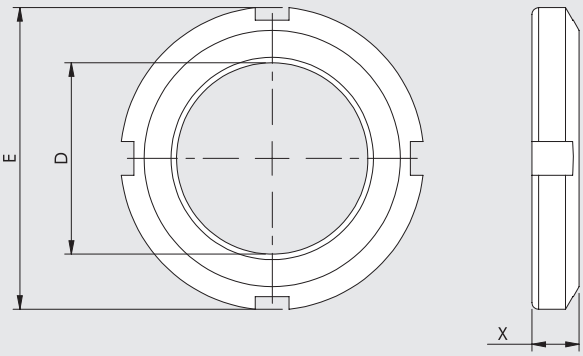
This application is used to lubricate the part or tool at a precise point and at exactly the right moment



THREADED RING NUT - SERIES 47

Made of stainless steel.
Comes in 5 models.

CODE	D	E	X
Z5247GF3552	M35x1.5	52	8
Z5247GF3652	M36x1.5	52	8
Z5247GF4058	M40x1.5	58	9
Z5247GF4868	M48x1.5	68	10
Z5247GF6885	M68x2	85	12



APPLICATIONS

Used for the support and easy positioning of cylinders with an externally threaded body.