



POLSAFE[®]

with self-sealing
gas valve system

PIPELIFE 

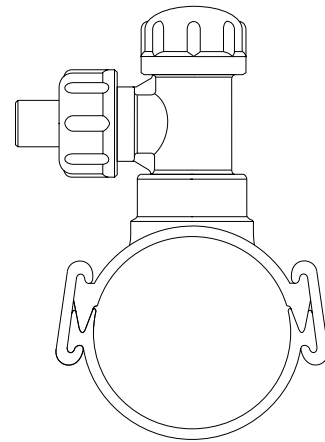
INTRODUCTION



POLSAFE is a programme of fittings for low pressure gas distribution systems. POLSAFE is designed for 25 up to 200 mbar distribution networks

POLSAFE stands for:

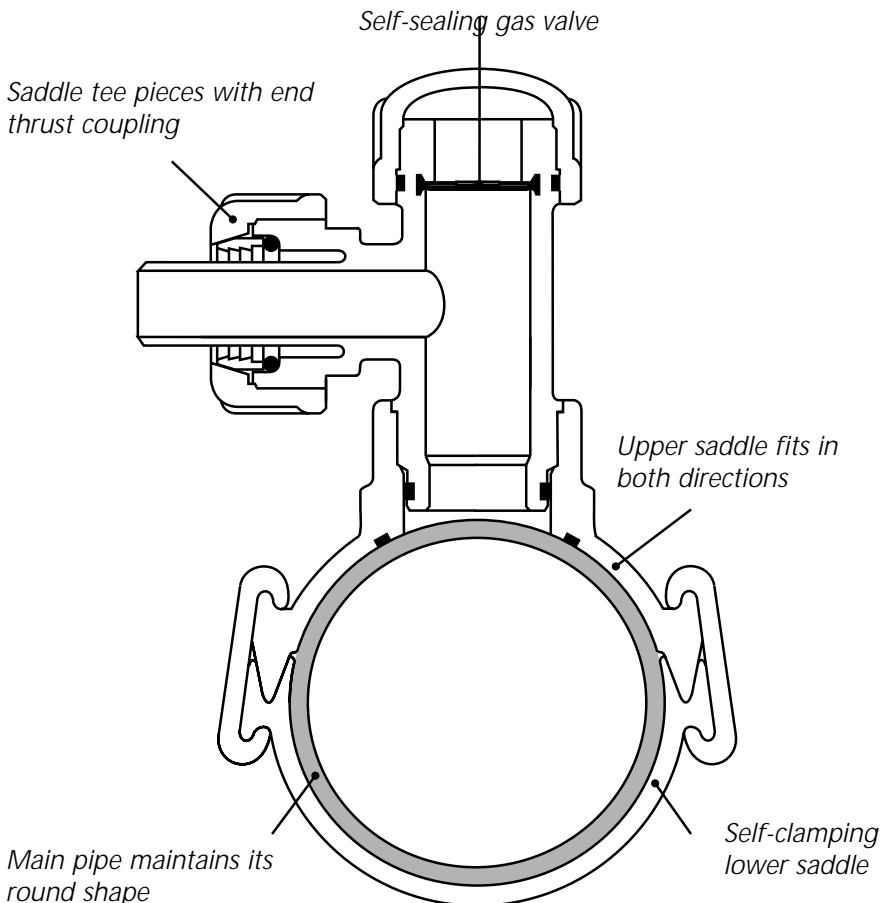
- Closed system
- Self-sealing gas valve
- Integral cutter
- Combination of drilling and balloon entry saddles
- Self-clamping lower saddle
- Maintaining the original round shape of the main pipe
- Simple positioning of saddle pieces
- Saddle tee pieces with an end thrust connector
- Saddle tee pieces for balloon entry saddles
- A much simplified system for positioning or removing a balloon
- Nitrile Butadiene Rubber (NBR) sealing system
- Injection moulding in Ductile PVC
- GIVEG-approval and Gas Quality Mark
- *GASTEC-Quality Approval



The saddle tee pieces are equipped with POLSAFE saddles or with special saddles for PE, CI or AC gas pipes.

Remark: patents have been granted for the gas valve, the POLSAFE tapping set, the balloon positioning equipment and the saddle replacement set.

** Gastec and GIVEG are the quality marks of the Dutch Center for Gas Technology*



POLSAFE SADDLE TEE PIECE WITH SELF-SEALING GAS VALVE

The POLSAFE saddle tee piece is equipped with a self-sealing gas valve. This valve prevents gas from escaping during and directly after the DRILLING/BORING a pipeline under pressure.

When assembling or removing the temporary cut-off plug, the gas valve functions in the same manner. An end thrust joint with the PE service pipeline is obtained with the end thrust connector.

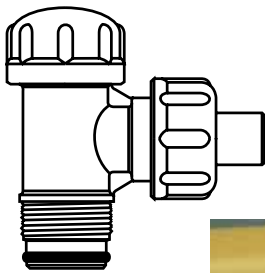
In order to remove the pressure in the service pipeline before or after drilling, a POLSAFE testing cap or a POLSAFE testing plug respectively needs to be used.



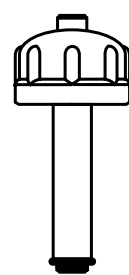
POLSAFE saddle tee piece



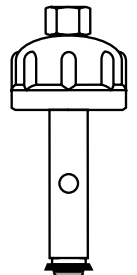
Self-sealing gas valve



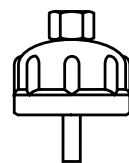
The POLSAFE tapping set cuts a thread in one piece that is completely incorporated in the DRILL. No material gets into the main or service pipeline.



POLSAFE cut-off plug



POLSAFE testing plug



POLSAFE testing cap

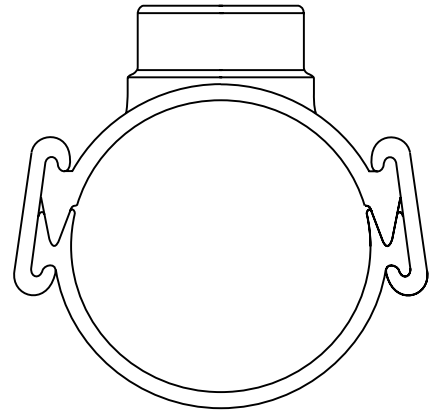
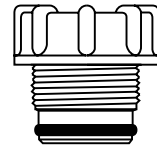
POLSAFE SADDLE



Self-clamping lower saddle



The POLSAFE saddles are easy to assemble. The lower saddle is clamped on the pipe and it immediately fixes itself allowing the use of two hands for further assembly. The upper saddle fits the lower saddle in two positions. The clamping design of the POLSAFE saddle is such that it is out of the question that the pipeline is deformed. If necessary, the saddles can be temporary closed off with the help of a POLSAFE sealing plug



POLSAFE BALLOON ENTRY SADDLE



The POLSAFE balloon entry saddle 1½" for 63, 75, 90 and 110 mm pipe diameters is identical to the gas saddle. The sizes 160 and 200 mm have a connection size of 2". The sizes 250 and 315 mm have a connection size of 2½". The balloon entry saddle is used with POLSAFE saddle tee pieces BG.

POLSAFE GAS SADDLE



The POLSAFE gas saddle has a connection size of 1½". This saddle is used in combination with a saddle tee piece with an end thrust connector.



POLSAFE SADDLE TEE PIECE BG FOR BALLOON ENTRY SADDLE WITH SELF-SEALING GAS VALVE

The POLSAFE saddle tee piece BG was specially developed for the very simple and controlled positioning or removing of balloons.

A POLSAFE tapping set BG must be used when boring pipes.

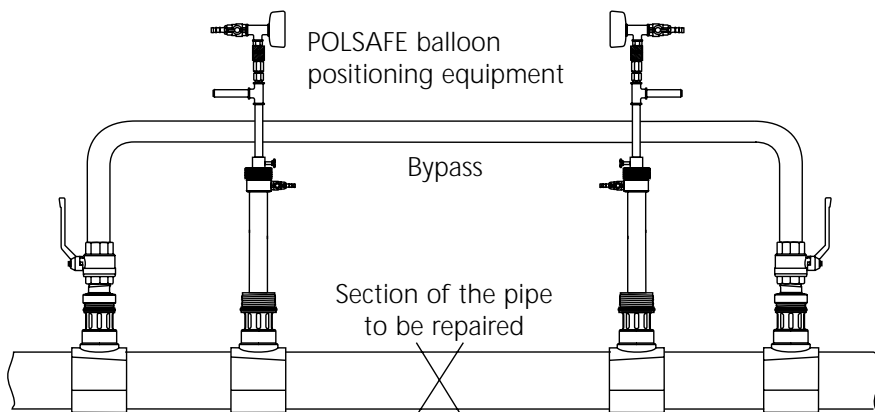
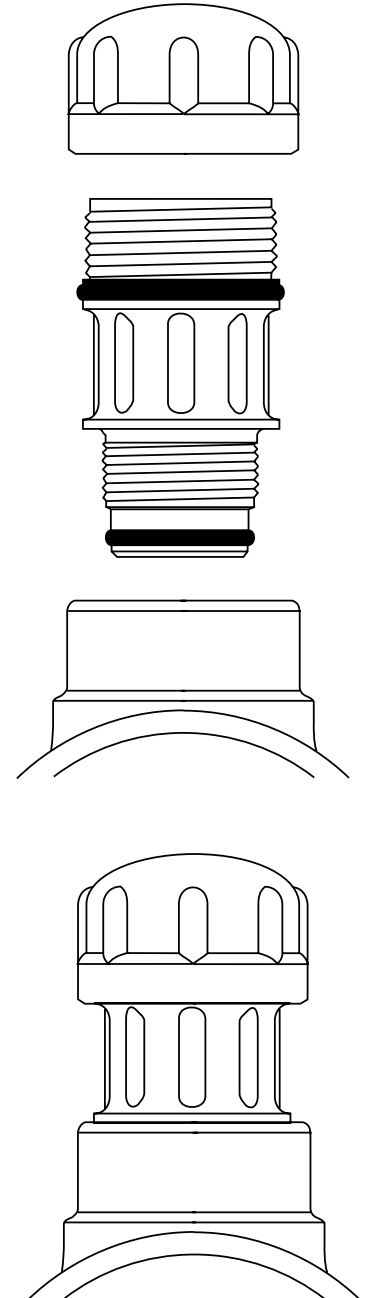
The self-sealing gas valve prevents the escape of gas during the execution of this work.

The POLSAFE balloon positioning equipment is very user-friendly.

It is very simple to make a bypass with the POLSAFE system.



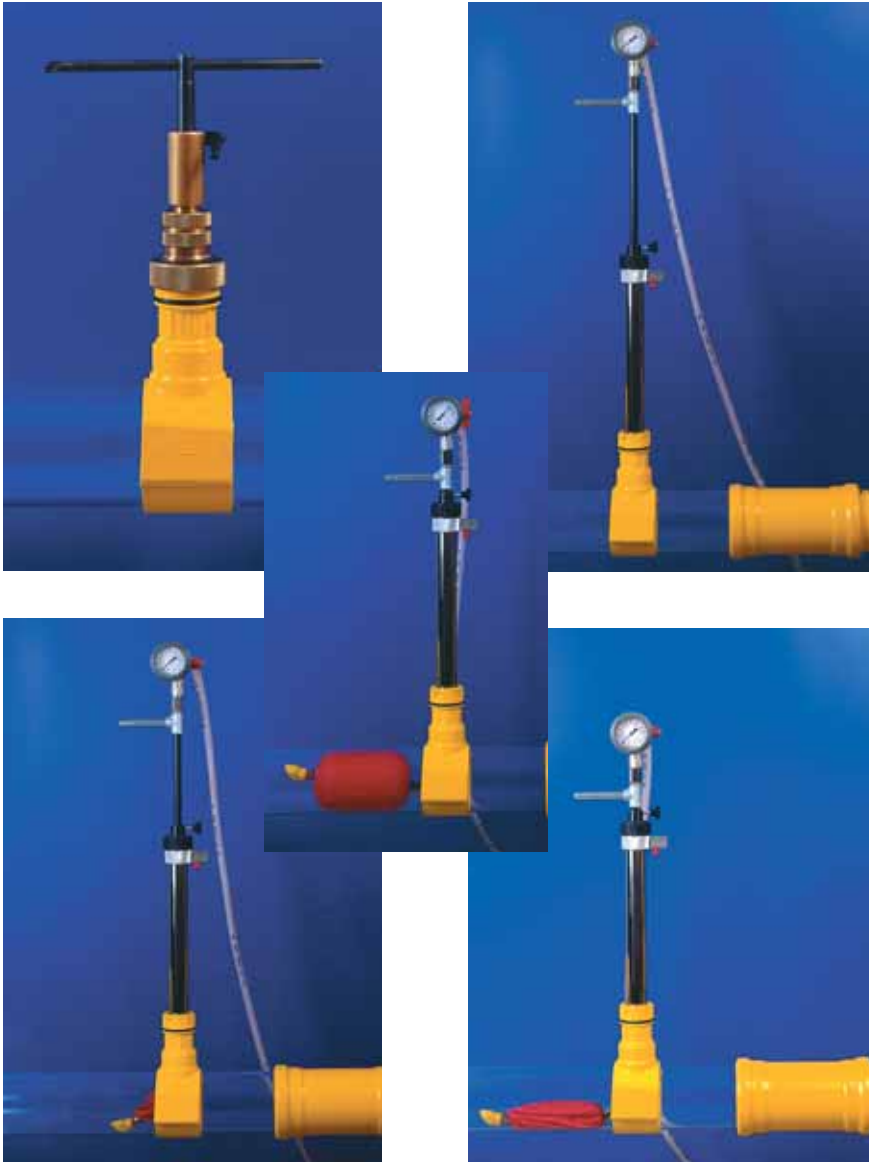
POLSAFE saddle tee piece BG with testing cap



POLSAFE bypass set with spherical valve



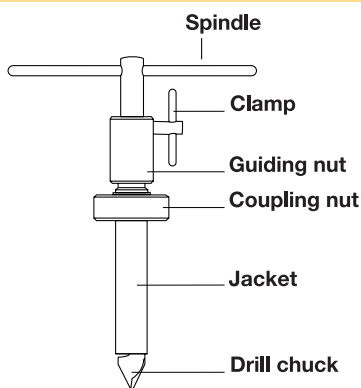
POSITIONING OF A BALLOON



- Use POLSAFE balloon positioning equipment.
- Check the lance and the unit hose for impurities, clean and rub on some silicone grease.
- Put the correct balloon diameter on the unit hose (hand tight).
- Turn the guiding piece of the balloon with the tip in the direction of the grip on the unit hose.
- Push the balloon with the unit hose in the lance and turn the cap of the unit hand tight on the lance.
- Vacuum-seal the balloon with the help of the filling piece and the balloon pump.
- Position the unit hose in the lance
- Check whether the spherical valve is turned off for degassing.
- Carefully push the lance through the gas valve of the saddle tee piece BG, in such a way that the grip is in the desired direction in which the balloon needs to be positioned.
- Unscrew the securing wing nut.
- Push the unit hose downwards to the lowest position so that the balloon is correctly placed in the gaspipe.
- Using the filling piece and the balloon pump, pump up the balloon to the right pressure, as indicated on the pressure gauge, on which the red scale division indicates the diameter of the balloon.

POLSAFE ASSEMBLY INSTRUCTIONS

SADDLE



- Clear the main pipeline by digging to a depth of about 15 cm below the pipe.
- Carefully clean that section of the main pipeline where the saddle is to be installed.
- Click the lower saddle onto the main pipeline.
- Place the upper saddle on the main pipeline.

- Position the wedges. Tighten the wedges by steadily pushing them on simultaneously (with both hands).
- Lightly tap on the wedges with a hammer to further secure them. This should be done by tapping on the one wedge and the other in turn. Continue tapping until the wedges are level with the lower and upper saddle.

POLSAFE ASSEMBLY INSTRUCTIONS

SADDLE TEE PIECE

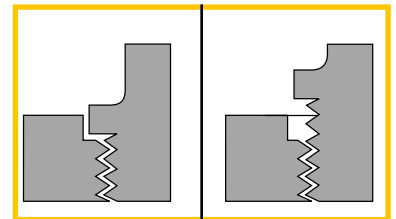
- Turn the saddle tee piece into the saddle by hand until the flange of the saddle tee piece is level with the upper part of the saddle. It is not necessary to use a lubricant as the rubber ring is self-lubricating.
- Turn back the saddle tee piece to the desired position (no more than 1 turn). The underside of the flange must never be higher than the top of the saddle.

END TRUST CONNECTOR

- Check to see if the coupling and the service pipeline are of the same category.
- Saw the pipe off straight and trim off the burrs.
- Unscrew the coupling screw by 2 turns and push the pipe into the connector up to the safety register (3,5 to 4 cm).
- Firmly fasten the screw cap by hand.
- Do not use any grease or lubricant.

TESTING

- Check the gas saddle and the service pipeline to see if it is closed off properly. In the case where this is done from the POLSAFE saddle tee piece a POLSAFE testing cap must be used.



Right

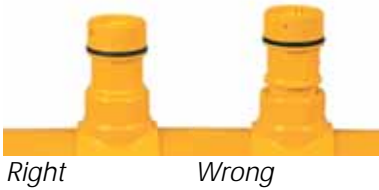
Wrong

BORING A PIPE

- Use a POLSAFE tapping set type AB or BG.
- Remove the cap from the saddle tee piece.
- Unscrew the guiding nut sufficiently, about 30 mm, between the underside of the bolt and the upper side of the jacket.
- Pull back the drill chuck into the jacket completely.
- Push the jacket down through the gas valve in the saddle tee piece.
- Tighten the coupling nut onto the saddle tee piece. Always ensure that the drill chuck remains in the jacket during the insertion, this prevents damage to the gas valve.
- Unfasten the clamp of the guiding nut and push the spindle down until the drill chuck touches the pipe.
- Fasten the clamp.
- Now make a hole, by turning the spindle clockwise. Continue turning until the guiding nut cannot be turned any further when it has reached the upper part of the jacket.
- Unfasten the clamp of the guiding nut and pull the spindle upward to the stop. Then the drill chuck will be in the jacket.
- Loosen the coupling nut and pull the jacket out of the saddle tee piece.
- Fix the cap on the saddle tee piece.
- Unfasten the clamp of the guiding nut, push the drill chuck out of the jacket and remove the pipe waste.
- Pull back the drill chuck into the jacket (this prevents damage during transport)

POLSAFE ASSEMBLY INSTRUCTIONS

SADDLE TEE PIECE BG



Screw the saddle tee piece BG in the saddle by hand until the flange of the saddle tee piece touches the upper side of the saddle.

If necessary, use a wrench or a spanner in the final phase of tightening.

No. 50 for saddle tee piece BG 1½"
 No. 65 for saddle tee piece BG 2"
 No. 80 for saddle tee piece BG 2½"

POLSAFE TAPPING SET AB/BG

The POLSAFE tapping set AB/BG can be used when boring plastic pipes, for saddle tee pieces type AB and BG. The tapping set consists of a universal top part, three adapters with rotating stainless steel cases and three drill chucks.

After choosing the correct parts, the tapping set can be assembled very quickly. Before boring cast iron (CI) and asbest cement (AC) gas pipelines, it is necessary to put on a different upper part, an adapter (with a transition piece for AC) and special drills. The jackets AB and BG must be combined with these pieces.

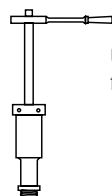
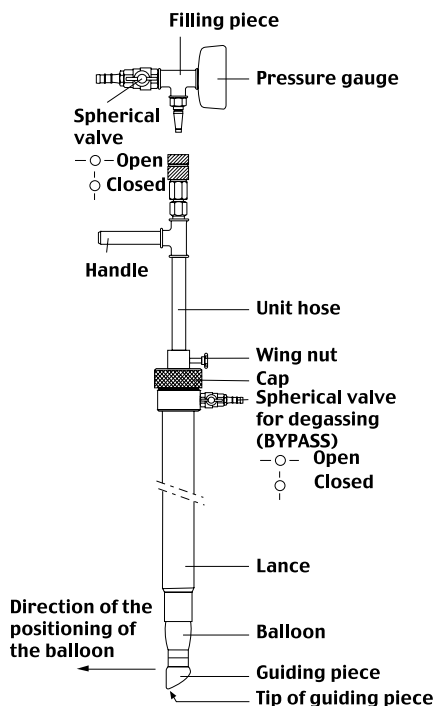
REMOVAL OF A BALLOON

- Vacuum-seal the balloon until totally sealed with the help of the balloon pump and then close off the spherical valve on the filling piece.
- Pull the unit hose upwards out of the lance, whereby the lance must be kept in place in the saddle tee piece BG (if necessary the unit hose can be turned clockwise while pulling up the unit hose, this makes the balloon coil up).

- Secure the unit hose in the highest position with the wing nut.
- Carefully pull the lance out of the saddle tee pipe BG.

Remark:

The lance of the POLSAFE balloon positioning equipment type BZA-2-P-double must be attached to the saddle tee piece BG with the fastening cap before positioning and removing balloons.



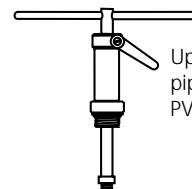
Upper part for CI and AC



Adapter for jackets AB and BG



Transition piece for AC



Upper part for plastic pipeline materials PVC, Ductile PVC, PE



DRILL AB 1½"
 DRILL BG 1½"
 DRILL BG 2"
 DRILL BG 2½"



jacket AB 1½"
 jacket BG 1½"
 jacket BG 2"
 jacket BG 2½"



drill CHUCK AB 1½"
 drill CHUCK BG 1½"
 drill CHUCK BG 2"
 drill CHUCK BG 2½"

PROGRAMME OF FITTINGS

Polsafe gas saddle with Gastec QA-mark

Nom. ø	Art. nr.	Nom. ø	Art. nr.
63 x 1 ½ "	320309	160 x 1 ½ "	320331
75 x 1 ½ "	320310	200 x 1 ½ "	320332
90 x 1 ½ "	320311	250 x 1 ½ "	320333
110 x 1 ½ "	320312	*315 x 1 ½ "	320316

*) type M



Polsafe saddle tee piece with end trust connector for PE SDR 17,6 with Gastec QA-mark

Nom. ø	Art. nr.	Nom. ø	Art. nr.
25 x 1 ½ "	320300	40 x 1 ½ "	320302
32 x 1 ½ "	320301	63 x 2 "	380344



Polsafe saddle tee piece with end trust connector for PE SDR 11 with Gastec QA-mark

Nom. ø	Art. nr.	Nom. ø	Art. nr.
25 x 1 ½ "	320300	*32 x 1 ½ "	320303

*non standard model in colour grey

PROGRAMME OF FITTINGS



Polsafe balloon entry saddle			
Nom. ø	Art. nr.	Nom. ø	Art. nr.
63 x 1 ½ "	320309	160 x 1 ½ "	320331
75 x 1 ½ "	320310	200 x 1 ½ "	320332
90 x 1 ½ "	320311	250 x 1 ½ "	320333
110 x 1 ½ "	320312	*315 x 1 ½ "	320316

*) different model



Polsafe saddle tee piece BG for gasfree positioning of balloons and fittings	
Nom. ø	Art. nr.
1 ½ "	For balloons 63 to 110 mm
2 "	For balloons 160 and 200 mm
2 ½ "	



Polsafe cut-off plug			
Nom. ø	Art. nr.	Nom. ø	Art. nr.
1 ½ "	320321	2 "	320322



Polsafe cut-off plug for saddle tee piece (temporary disconnection)	
Nom. ø	Art. nr.
	320317

*SDR 17,6 and SDR 11



Polsafe testing plug for saddle tee piece for testing the service pipeline after drilling	
Nom. ø	Art. nr.
	320341

Polsafe testing cap for saddle tee piece	
Nom. ø	Art. nr.
	320318

Polsafe testing cap for saddle tee piece BG			
Nom. ø	Art. nr.	Nom. ø	Art. nr.
1 ½ "	320342	2 "	320343

PROGRAMME OF FITTINGS

Polsafe tapping set AB (for drilling)

Nom. ø	Art. nr.	Nom. ø	Art. nr.
drill 1 1/2"	320323	Reserve drill chuck 1 1/2"	320330

Polsafe tapping set AB/BG with exchange parts

Nom. ø	Art. nr.	Nom. ø	Art. nr.
Upper part			
jacket AB 1 1/2"		Drill chuck AB 1 1/2"	
jacket BG 1 1/2"		Drill chuck AB 1 1/2"	
jacket BG 2"		Drill chuck BG 2"	

Polsafe Bypassing set consisting of 2 fittings

Nom. ø	Art. nr.	Nom. ø	Art. nr.
1 1/2" with GK 1 1/2" connection			
2" with GK 2" connection			
<i>Remark: the polsafe bypassing set must be used in combination with spherical valves to prevent the escape of gas</i>			

Polsafe balloon position equipment

Nom. ø	Art. nr.
Type BZA-1-P standard (St), Single balloon	
ø 63 thru 110	

Polsafe balloon position equipment

Nom. ø	Art. nr.
Type BZA-2-P pressure gauging (PG), Single balloon	
ø 63 thru 110	

Polsafe balloon position equipment

Nom. ø	Art. nr.
Type BZA-1-P double (Do), Double balloon	
ø 110	

Polsafe balloon position equipment

Nom. ø	Art. nr.
Type BZA-1-P double (Do), Double balloon	
ø 110	



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