



Hygienic Installation Systems

EHEDG certified



measuring
•
monitoring
•
analysing

LZE



- Hygienic mounting, confirmed by EHEDG reports
- Elastomer-free seal system
- p_{\max} : 10 bar; t_{\max} : 250 °C
- Material: stainless steel 1.4404
- Variable mounting with spherical sleeves
- also suited for small pipe cross-section
- R_a max medium side 0.8 μm
 R_a max external side 1.6 μm



Weld-in sleeves LZE



KOBOLD companies worldwide:

ALGERIA, ARGENTINA, AUSTRALIA, AUSTRIA, BELGIUM, BULGARIA, CANADA, CHILE, CHINA, COLUMBIA, CZECHIA, DOMINICAN REPUBLIC, EGYPT, FRANCE, GERMANY, GREAT BRITAIN, HUNGARY, INDIA, INDONESIA, ITALY, MALAYSIA, MEXICO, MOROCCO, NETHERLANDS, PERU, PHILIPPINES, POLAND, ROMANIA, SINGAPORE, SLOVAKIA, SOUTH KOREA, SPAIN, SWITZERLAND, TAIWAN, THAILAND, TUNISIA, USA, VENEZUELA, VIETNAM

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Description

The KOBOLD mounting system for hygienic measuring points is characterized by a dead space and elastomer-free seal system of the mounting sleeve with the measuring unit. An EHEDG-assessment verifies the hygienic design of the systems. The materials used are safe for use in the food and pharmacy industry.

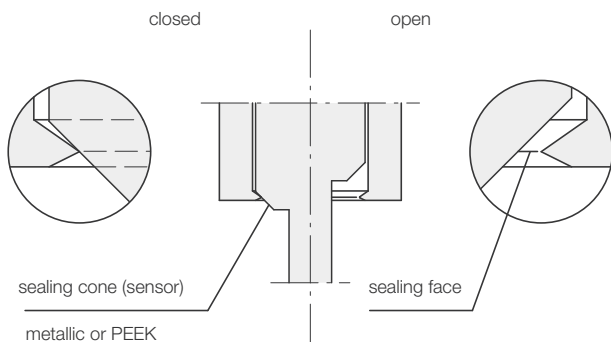
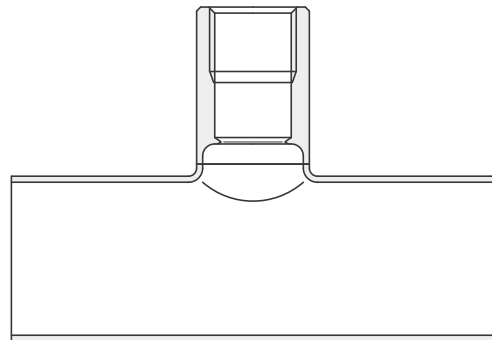
In order to make it possible to install it in existing pipe systems with common food screw connections, a number of adapters (e.g. Tri-Clamp®, Varivent®, conical connection DIN 11851) are available.

The sleeves are equipped with measuring unit connections in three different sizes (M12 x 1.5, G1/2 and G1). The measuring unit you have selected determines the necessary size of the weld-in sleeve.

Function

The KOBOLD measuring units for applications in the area of hygiene have a seal cone on the threaded connection, which is pressed against the seal edge of the weld-in sleeve when screwed into the sleeve. The seal edge is deformed slightly and presses against the cone of the measuring unit with the spring force of the metal. This ensures hygienic installation of the measuring units – without elastomer seals.

Welding in prefabricated fittings is much simpler in many cases than the precise and dead space-free attachment of sleeves in pipeline systems. For this reason, KOBOLD offers weld-in fittings (LZE-R) in various pipe diameters and with the matching connections for the Kobold measuring units.



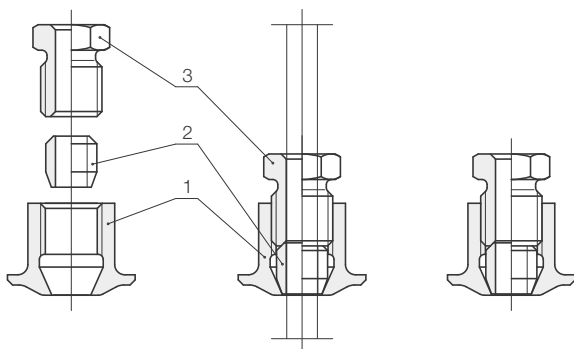
Application Areas

- Food industry, e.g. dairies and breweries
- Pharmaceutical industry
- Biotechnology
- Chemical industry
- CIP/SIP-processes

Technical Details

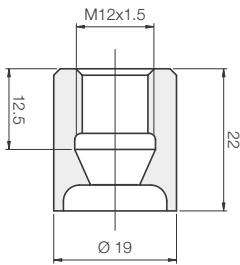
Material:	stainless steel 1.4404, PEEK
Measuring unit connection:	M12 x 1.5 G 1/2 G 1
Temperature range:	• Seal metal /metal -20...+250 °C • Seal metal /PEEK -20...+150 °C
Max. pressure:	50 bar 10 bar
Surfaces:	hygiene class H3 internal: R _a = 0.8 µm external: R _a = 1.6 µm

Two compression fittings with a PEEK-seal are available for the installation of a temperature sensor at a variable height. The sensor is sealed by means of a conically-shaped seal ring made of highly heat-resistant PEEK. By tightening the clamping screw, the gap between the sensor and sleeve is completely filled on one hand and the seal ring is pressed against the sensor on the other.

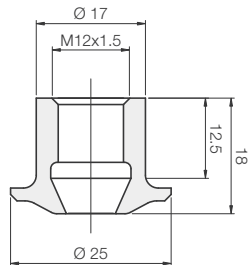


Measuring Unit Connection M12 x 1.5 for measuring units LNM-__M3... / LTS-__M... / LTS-K-__M...

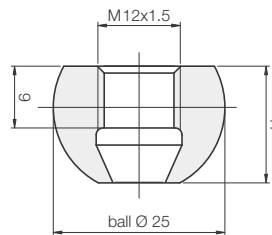
Model LZE-P1
Cylinder sleeve
with collar
for pipes
and flared ends



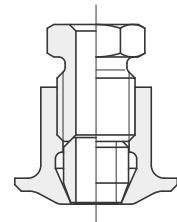
Model LZE-K1
Collar sleeve
for containers



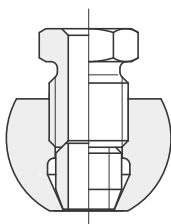
Model LZE-U1
Ball sleeve
for sloping installation



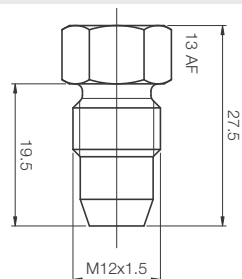
Model LZE-M1
Collar compression
fitting
for temperature sensor
(variable height setting)



Model LZE-S1
Ball compression
fitting
for temperature sensor
(variable height setting)

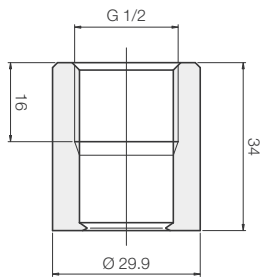


Model LZE-B1
Capped stub
for welding in and closing
off the sleeve

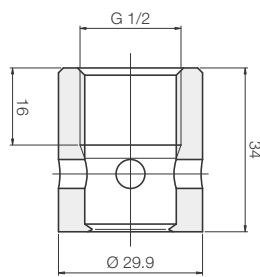


Measuring Unit Connection G 1/2 for meas. units LNM-__G4... / LNZ-... / LNK-K... / LNK-1... / LTS-__T... / LTS-K__T...

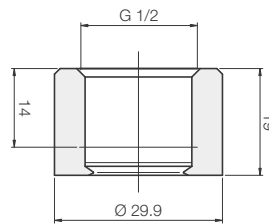
Model LZE-Z2
Cylinder sleeve
for containers



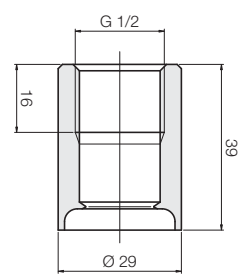
Model LZE-T2
Cylinder sleeve
with test hole
for containers,
with leak monitoring



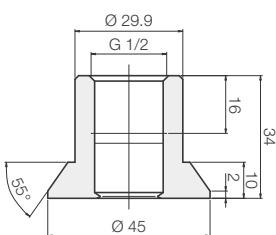
Model LZE-N2
Cylinder sleeve
low form
for containers



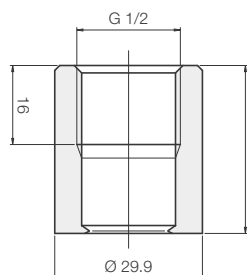
Model LZE-P2
Cylinder sleeve
with collar
for pipes
and flared ends



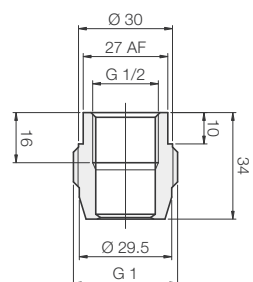
Model LZE-K2
Collar sleeve
for thick-walled
containers



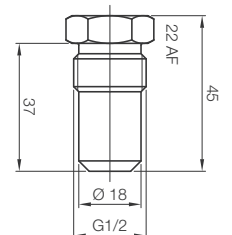
Model LZE-U2
Ball sleeve
for sloping installation



Model LZE-D2
G 1 process adapter
for adaptation to
G1 threads



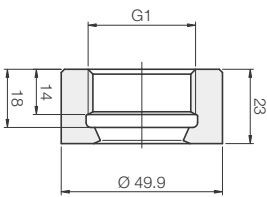
Model LZE-B2
Capped stub
for welding in and
closing off the sleeve



Measuring Unit Connection G 1 for measuring units LNK-2, LNK-3, LNK-4 / LNP

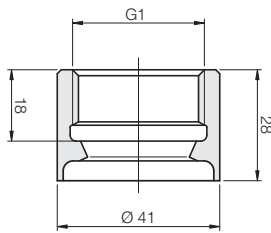
Model LZE-Z3
Cylinder sleeve

for containers



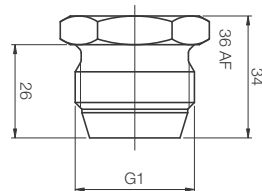
Model LZE-P3
Cylinder sleeve with collar

for pipes and flared ends



Model LZE-B3
Capped stub

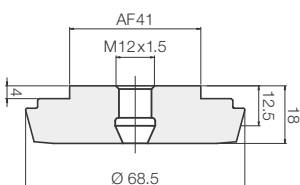
for welding in and closing off the sleeve



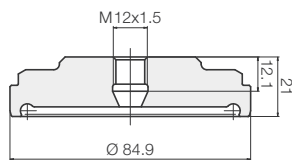
Adapter for Existing Process Connections

Measuring Unit Connection M12 x 1.5 for measuring units LNM-__M3... / LTS-__M... / LTS-K-__M...

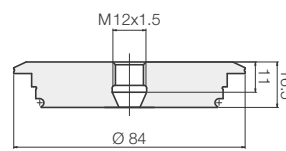
Model LZE-L1
Conical connection
DIN 11851
DN 50



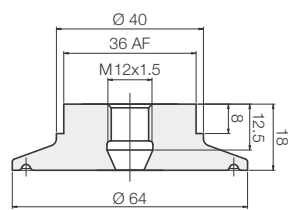
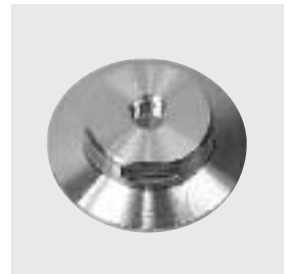
Model LZE-A1
Aseptic lap-joint flange
DIN 11864
DN 65



Model LZE-V1
VARIVENT®

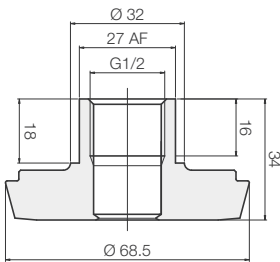


Model LZE-C1
Tri-Clamp®
DN 50

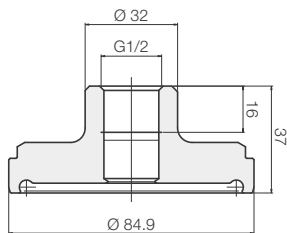
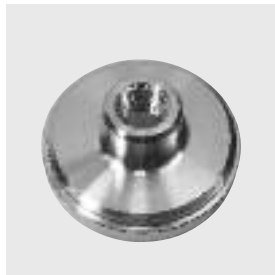


Measuring Unit Connection G 1/2 for meas. units LNM-__G4... / LNZ-... / LNK-K... / LNK-1... / LTS-__T... / LTS-K__T...

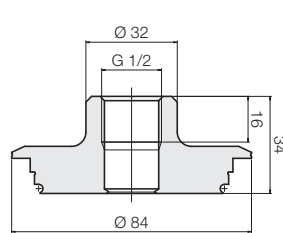
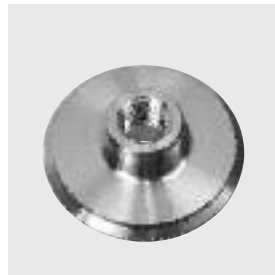
Model LZE-L2
Conical connection
DIN 11851
DN 50



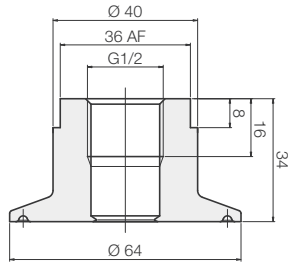
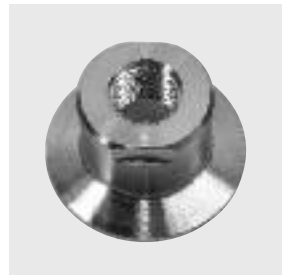
Model LZE-A2
Aseptic lap-joint flange
DIN 11864
DN 65



Model LZE-V2
VARIVENT®

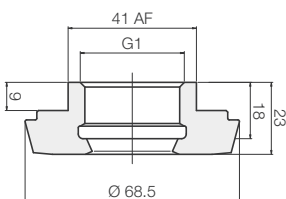


Model LZE-C2
Tri-Clamp®
DN 50

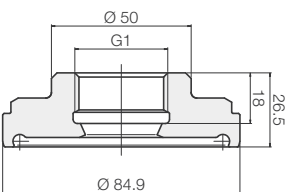


Measuring Unit Connection G 1 for measuring units LNK-2, LNK-3, LNK-4 / LNP

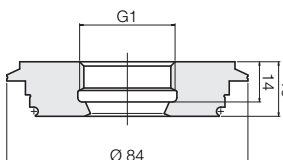
Model LZE-L3
Conical connection
DIN 11851
DN 50



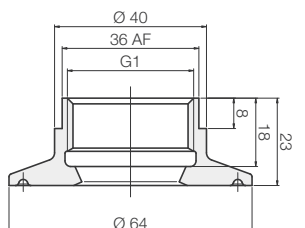
Model LZE-A3
Aseptic lap-joint flange
DIN 11864
DN 65



Model LZE-V3
VARIVENT®

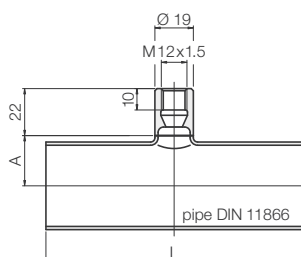


Model LZE-C3
Tri-Clamp®
DN 50



Measuring Unit Connection M12 x 1.5 for measuring units
LNM-__M3... / LTS-__M... / LTS-K-__M...

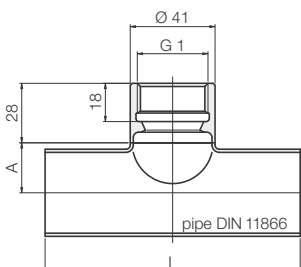
Model LZE-R1



Ordering designation	DN	Pipe dimensions	L [mm]	A [mm]
LZE-R1 15	15	19 x 1.5	70	10.5
LZE-R1 25	25	29 x 1.5	100	16.5
LZE-R1 40	40	41 x 1.5	120	23.5
LZE-R1 50	50	53 x 1.5	140	30.5
LZE-R1 65	65	70 x 2.0	160	38.5
LZE-R1 80	80	85 x 2.0	180	47.0

Measuring Unit Connection G 1 for measuring units
LNK-2, LNK-3, LNK-4 / LNP

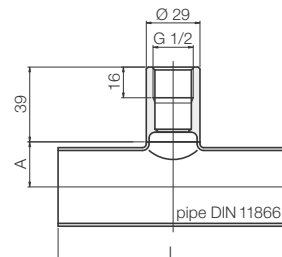
Model LZE-R3



Ordering designation	DN	Pipe dimensions	L [mm]	A [mm]
LZE-R3 40	40	41 x 1.5	120	23.5
LZE-R3 50	50	53 x 1.5	140	29.5
LZE-R3 65	65	70 x 2.0	160	39.5
LZE-R3 80	80	85 x 2.0	180	47.5

Measuring Unit Connection G 1/2 for measuring units
LNM-__G4... / LNZ-... / LNK-K... / LNK-1... /
LTS-__T... / LTS-K__T...

Model LZE-R2



Bestell-bezeichnung	DN	Pipe dimensions	L [mm]	A [mm]
LZE-R2 25	25	29 x 1.5	100	16.5
LZE-R2 40	40	41 x 1.5	120	23
LZE-R2 50	50	53 x 1.5	140	29.5
LZE-R2 65	65	70 x 2.0	160	40
LZE-R2 80	80	85 x 2.0	180	49

Capsule for Temperature Probe LTS

Model LZE-H



in preparation

Mounting Sleeves, EHEDG certified

Description	Measuring unit connection		
	M12x1.5	G 1/2	G 1
cylinder sleeve		LZE-Z2	LZE-Z3
cylinder sleeve with test hole		LZE-T2	
cylinder sleeve low form		LZE-N2	
cylinder sleeve with collar	LZE-P1	LZE-P2	LZE-P3
collar sleeve	LZE-K1	LZE-K2	
ball sleeve	LZE-U1	LZE-U2	
collar compression fitting	LZE-M1		
ball compression fitting	LZE-S1		
adapter:			
conical connection DIN 11851	LZE-L1	LZE-L2	LZE-L3
aseptic lap-joint flange DIN 11864	LZE-A1	LZE-A2	LZE-A3
VARIVENT®	LZE-V1	LZE-V2	LZE-V3
Tri-Clamp®	LZE-C1	LZE-C2	LZE-C3
G 1 adapter		LZE-D2	
capped stub*	LZE-B1	LZE-B2	LZE-B3

* all sleeves must be equipped a capped stub to prevent warping during welding

Weld-in Fittings, EHEDG certified

Model	Description	Measuring unit connection	Pipe nominal width
LZE-R	weld-in fittings	1 = M12x1.5 2 = G 1/2 3 = G 1	15 = DN 15 (only with 1 = M12x1.5) 25 = DN 25 (only with 3 = G 1) 40 = DN 40 50 = DN 50 65 = DN 65 80 = DN 80