Supplementary instructions

Welded socket, threaded and hygienic adapter

VEGAPULS 10, 20, 30 series
VEGABAR 10, 20, 30 series
VEGAPOINT 10, 20, 30 series
VEGASWING series 50

Document ID: 65827

VEGA

Contents

1 Product description

Welded socket

Welded sockets are used for connection of sensors to the process.
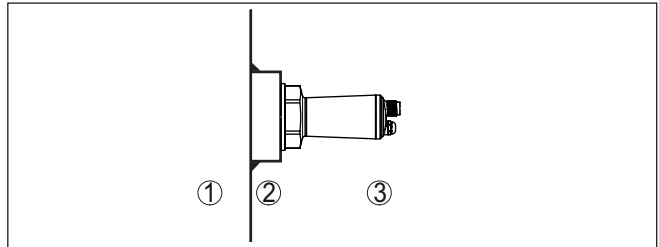
Fig. 1: Function of a welded socket

1   *Vessel*
2   *Welded socket*
3   *Sensor*

Adapter

Threaded adapters are used to adapt sensors with threaded connection to existing welded sockets.
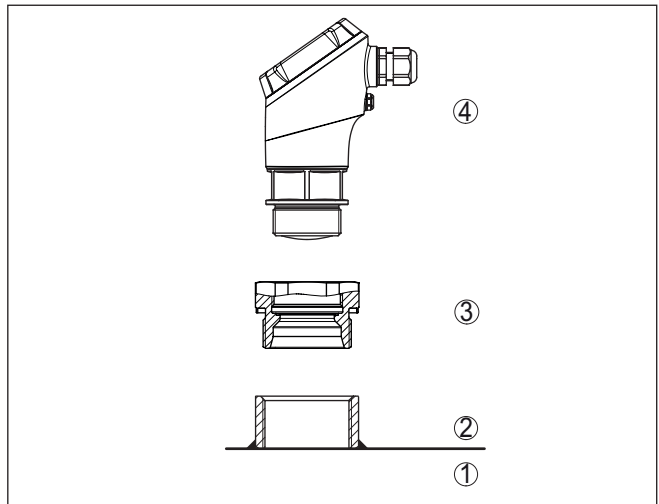
Fig. 2: Function, threaded adapter

1   *Vessel*
2   *Welded socket*
3   *Adapter*
4   *Sensor*

Hygienic adapter

Hygienic adapters are used to adapt sensors with threaded connection and cone or O-ring to existing hygienic welded sockets.

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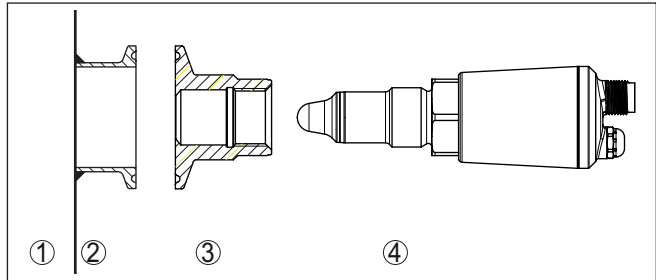
Fig. 3: Function hygienic adapter

1   Vessel
2   Welded socket
3   Hygienic adapter
4   Sensor

Process seal   A process seal is required to use the welded sockets or threaded
                                    adapters. Depending on the version, the process seal is included as
                                    an optional component in the scope of delivery of the welded socket
                                    or the sensor.

Pressure device directive   The welding sockets, threaded and hygienic adapters described here
                                    are not subject to the EU Pressure Equipment Directive if they are
                                    operated at process pressures ≤ 200 bar.

2 Welded socket - VEGABAR series 10, 20, 30

2.1 Threaded fittings

Thread G½ - manometer connection

Part	Feature	Characteristic
Welded socket	Size	G½
	Standard	EN 837
	Material	316L
	Product code/Art. no.	WSBR.XDUXXX
Seal	Material	Klingersil C-4400
	Configuration	Flat seal
	Size	21 x 30 x 2 mm
Welding dummy	Material	Brass
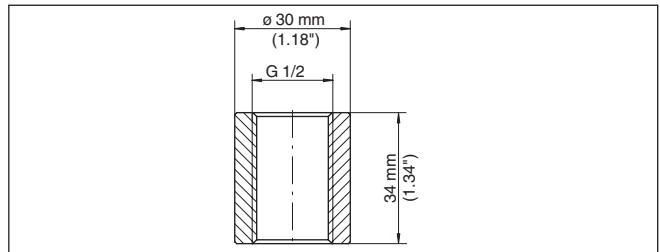
Fig. 4: Dimensions of welded socket, thread G½ (EN 837) - manometer connection

Thread G½ - front-flush

Part	Feature	Characteristic
Welded socket	Size	G½
	Standard	ISO 228-1
	Material	316L
	Product code/Art. no.	WSBR.XC3XXX
Seal	Material	FKM
	Configuration	Seal ring acc. to DIN 3869
	Size	18.5 x 23.9 x 1.5 mm
Welding dummy	Material	Brass
Blind plug	Material	316L
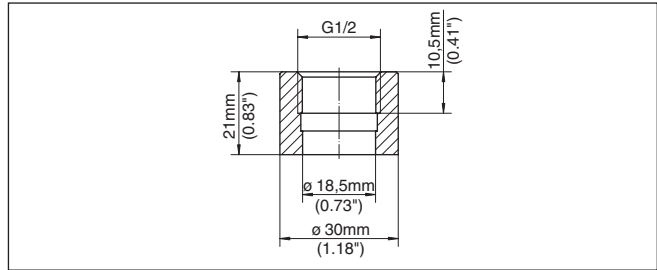
Fig. 5: Dimensions welded socket G½ (ISO 228-1), front-flush - VEGABAR 82

Thread G¾

Part	Feature	Characteristic
Welded socket	Size	G¾
	Standard	DIN 3852-E
	Material	316L
	Product code/Art. no.	WSBR.XN9XXX
Seal	Material	FKM, EPDM, FFKM
	Configuration	Seal ring
	Size	23.47 x 2.62 mm
Welding dummy	Material	Brass
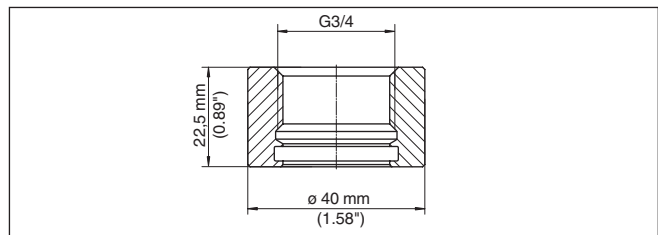
Fig. 6: Dimensions of welded socket, G¾ (DIN 3852-X)

Thread G1

Part	Feature	Characteristic
Welded socket	Size	G1
	Standard	ISO 228-1
	Material	316L
	Product code/Art. no.	WSBR.XC5XAX
Seal	Material	FKM, EPDM
	Configuration	Seal ring acc. to DIN 3869
	Size	29.7 x 35.7 x 2 mm
Welding dummy	Material	Brass
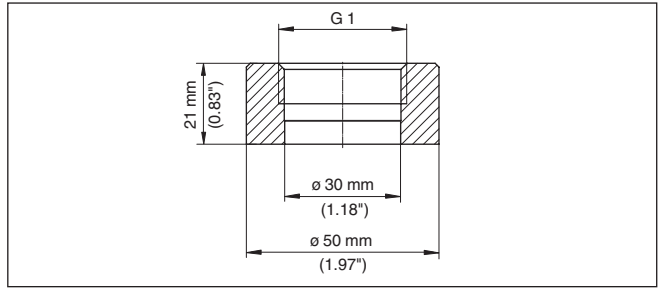
Fig. 7: Dimensions of welded socket, G1 (ISO 228-1)

Thread G1 - Cone seal

Part	Feature	Characteristic
Welded socket	Size	G1
	Standard	ISO 228-1
	Material	316L
	Product code/Art. no.	WSBR.XDHXXX
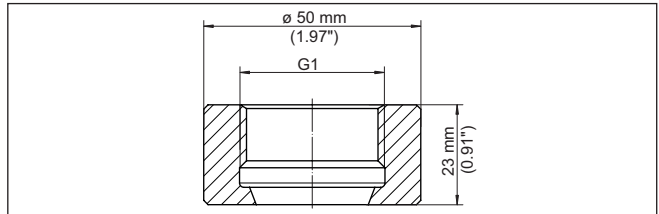
Fig. 8: Dimensions direct welded socket G1 (ISO 228-1) - Cone seal

Thread G1 - O-ring seal

Part	Feature	Characteristic
Welded socket	Size	G1
	Standard	ISO 228-1
	Material	316L
	Product code/Art. no.	WSBR.XLXXXX
Seal	Material	FKM, EPDM, FFKM
	Configuration	Seal ring acc. to DIN 3869
	Size	21.82 x 3.53 mm
Welding dummy	Material	Brass
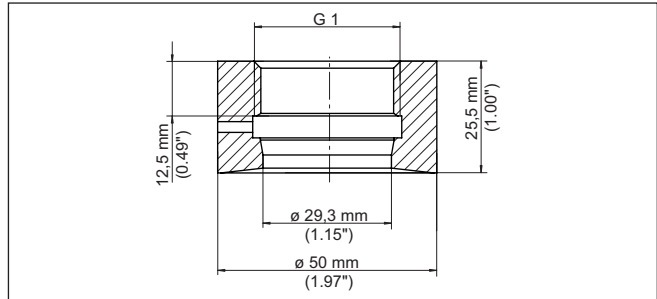
Fig. 9: Dimensions direct welded socket G1 (ISO 228-1) - O-ring seal

Thread G1½

Part	Feature	Characteristic
Welded socket	Size	G1½
	Standard	DIN 3852-A
	Material	316L
	Product code/Art. no.	WSBR.XDAX4X
Seal	Material	Klingersil C-4400
	Configuration	Flat seal
	Size	48 x 55 x 2 mm
Welding dummy	Material	Brass
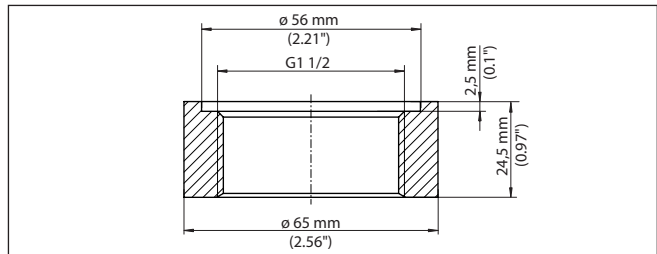
Fig. 10: Dimensions of welded socket, thread G1½ (DIN 3852-A)

M30 x 1.5

Part	Feature	Characteristic
Welded socket	Size	M30 x 1.5
	Standard	DIN 13
	Material	316L
	Product code/Art. no.	WSBR.XALXXX
Seal	Material	FKM, EPDM, FFKM
	Configuration	Seal ring
	Size	20.35 x 1.78 mm

Welded socket, threaded and hygienic adapter •

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Part	Feature	Characteristic
Welding dummy	Material	Brass
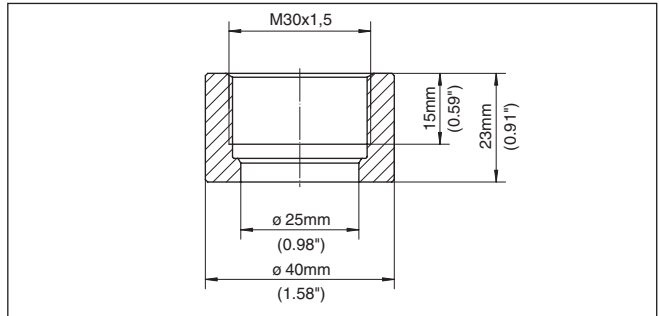
Fig. 11: Dimensions of welded socket, M30 x 1.5

2.2   Hygienic fittings

Clamp 1"

Part	Feature	Characteristic
Welded socket	Size	Clamp 1½"
	Standard	DIN 32676, ISO 2852
	Pressure stage	PN 25
	Product code/Art. no.	WSBR.XAVXXX
Seal	Material	FKM, EPDM
	Configuration	Clamp seal
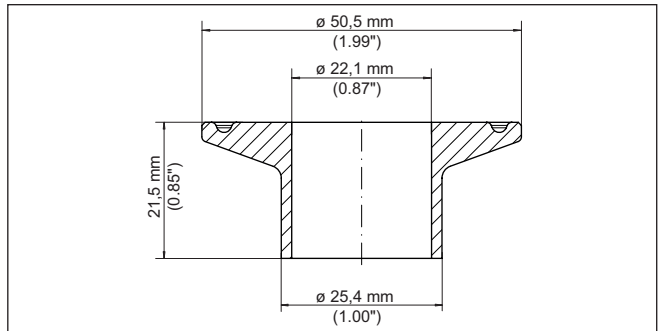
Fig. 12: Dimensions of welded socket, Clamp 1" (DIN 32676, ISO 2852)

Slotted nut DN 40

Component	Feature	Characteristic
Welded socket	Size	DN 40

Component	Feature	Characteristic
	Standard	DIN 11851
	Pressure stage	PN 40
	Material	316L
	Product code/Art. no.	WSBR.XEZXXX
Seal	Material	FKM, EPDM, NBR
	Configuration	Seal ring

Fig. 13: Dimensions of welded socket, slotted nut DN 40 (DIN 11851)

3 Welded socket - VEGAPOINT series 10, 20, 30

3.1 Threaded fittings

Thread G½ - L = 15 mm

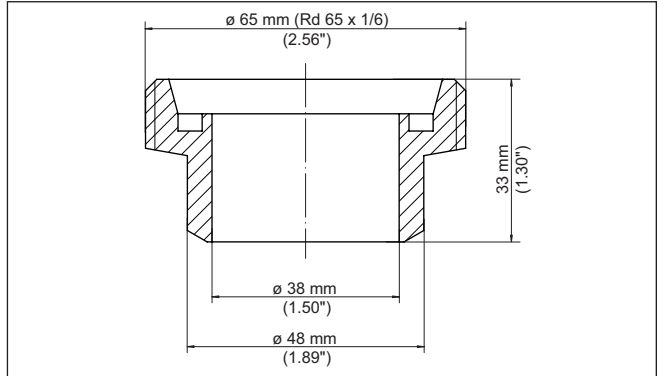| Part	Feature	Characteristic
Welded socket	Size	G½
	Standard	DIN 3852-A
	Pressure stage	PN 25
	Material	316L
	Product code/Art. no.	WSPT.XABXXX
Seal	Material	Klingersil C-4400
	Configuration	Flat seal
	Size	21.5 x 25.7 x 1.5 mm
Welding dummy	Material	Brass
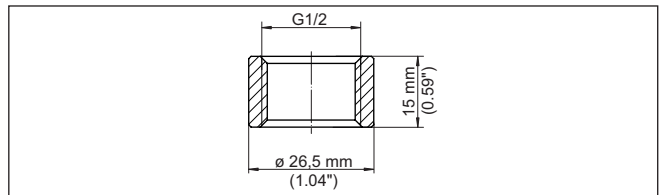
Fig. 14: Dimensions welded socket G1 (DIN 3852-A) - L = 15 mm

Thread G½ - Hygienic version

Part	Feature	Characteristic
Welded socket	Size	G½
	Standard	ISO 228-1
	Pressure stage	PN 25
	Material	316L
	Product code/Art. no.	WSPT.XACXXX
Welding dummy	Material	Brass

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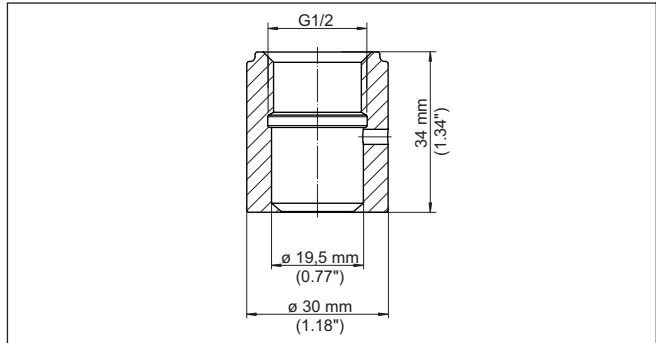
Fig. 15: Dimensions welded socket G½ (ISO 228-1) - Hygienic version

Thread G¾ - L = 26 mm

Part	Feature	Characteristic
Welded socket	Size	G¾
	Standard	ISO 228-1
	Pressure stage	PN 25
	Material	316L
	Product code/Art. no.	WSPT.XGBXXX
Seal	Material	FKM, EPDM
	Configuration	O-ring seal
	Size	21 x 3 mm
Welding dummy	Material	Brass
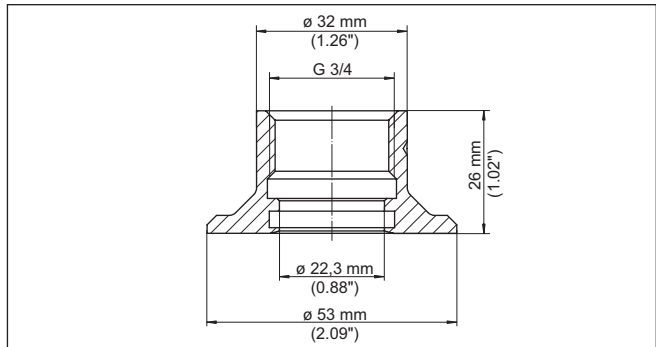
Fig. 16: Dimensions of welded socket, G¾ (ISO 228-1)

Thread G1 - L = 20.5 mm

Part	Feature	Characteristic
Welded socket	Size	G1
	Standard	DIN 3852-A
	Pressure stage	PN 25
	Material	316L
	Product code/Art. no.	WSPT.XAEXXX
Seal	Material	Klingersil C-4400
	Configuration	Flat seal
	Size	33 x 39 x 2 mm
Welding dummy	Material	Brass
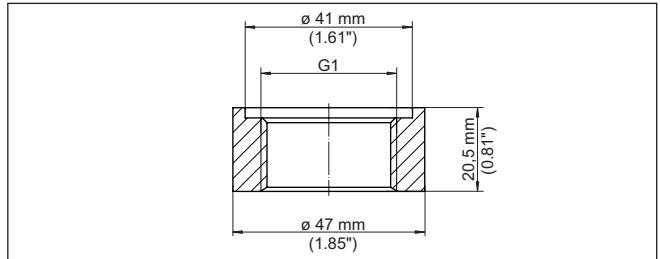
Fig. 17: Dimensions of welded socket, G1 (ISO 228)

Thread G1 - Cone seal

Part	Feature	Characteristic
Welded socket	Size	G1
	Standard	ISO 228-1
	Pressure stage	PN 25
	Material	316L
	Product code/Art. no.	WSPT.XAMXXX
Welding dummy	Material	Brass
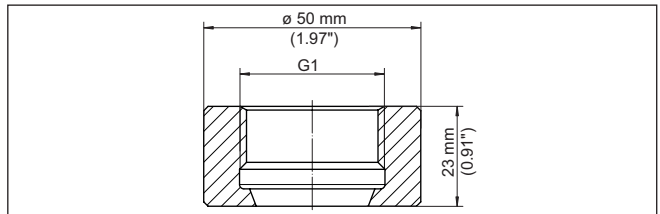
Fig. 18: Dimensions welded socket G1 (ISO 228-1) - Cone seal

Thread G1 - O-ring seal

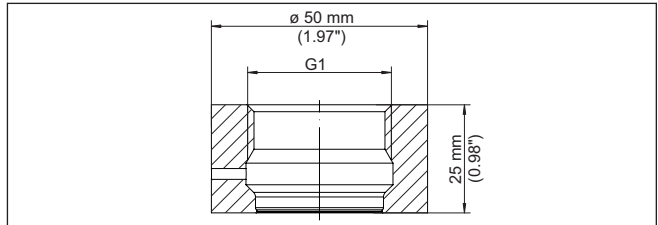| Part	Feature	Characteristic
Welded socket	Size	G1
	Standard	ISO 228-1
	Pressure stage	PN 25
	Material	316L
	Product code/Art. no.	WSPT.XAFXXX
Seal	Material	EPDM
	Configuration	O-ring seal
	Size	21.82 x 3.53 mm
Welding dummy	Material	Brass

Fig. 19: Dimensions welded socket G1 (ISO 228-1) - O-ring seal

3.2 Threaded fittings for pipe mounting

Thread G1 for pipe mounting - Cone sealing

Part	Feature	Characteristic
Welded socket	Size	G1
	Standard	ISO 228-1
	Material	316L
	Product code/Art. no.	WSPT.XAVXXX
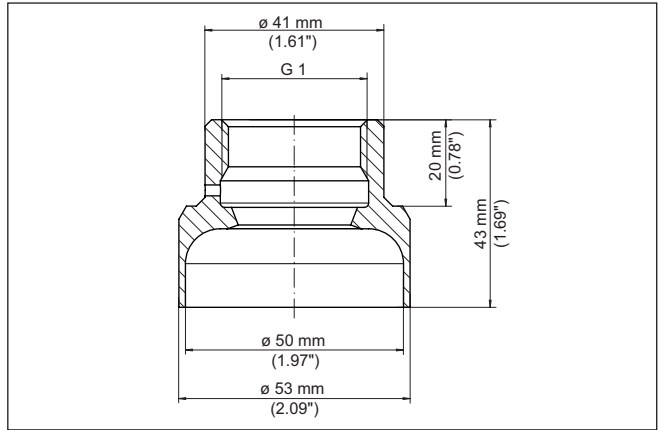
Fig. 20: Dimensions direct welded socket for pipe mounting G1 - Cone sealing

Thread G1 for pipe mounting - O-ring sealing

Part	Feature	Characteristic
Welded socket	Size	G1
	Standard	ISO 228-1
	Material	316L
	Product code/Art. no.	WSPT.XAUXXX
Seal	Material	EPDM
	Configuration	O-ring seal
	Size	21.82 x 3.53 mm
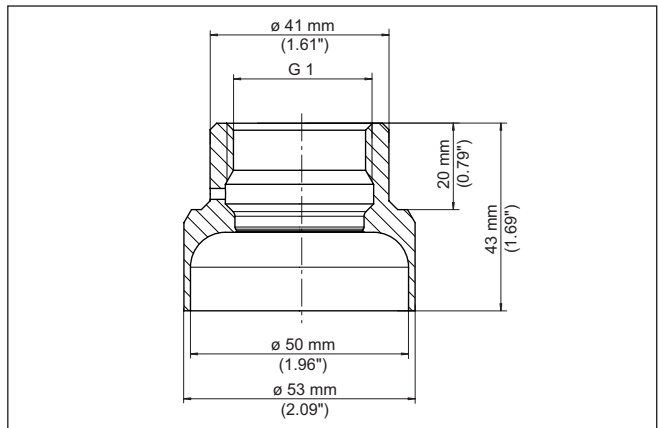
Fig. 21: Dimensions direct welded socket for pipe mounting G1 - O-ring sealing

3.3 Hygienic fittings

Clamp 1"

Part	Feature	Characteristic
Welded socket	Size	G1
	Standard	DIN 32676, ISO 2852
	Material	316L
	Product code/Art. no.	WSPT.XANXXX
Seal	Material	FKM, EPDM
	Configuration	Clamp seal

Fig. 22: Dimensions of welded socket, Clamp 1" (DIN 32676, ISO 2852)

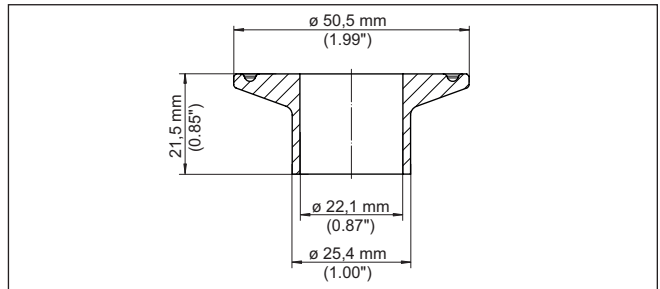# 4   Welded socket - VEGASWING series 50

4.1   Threaded fittings

Thread G¾

Part	Feature	Characteristic
Welded socket	Size	G¾
	Standard	DIN 3852-A, ISO 228-1
	Pressure stage	PN 60
	Material	316L
	Product code/Art. no.	WSSG.XGBXXX
Seal	Material	FKM, EPDM
	Configuration	O-ring
	Size	21 x 3 mm
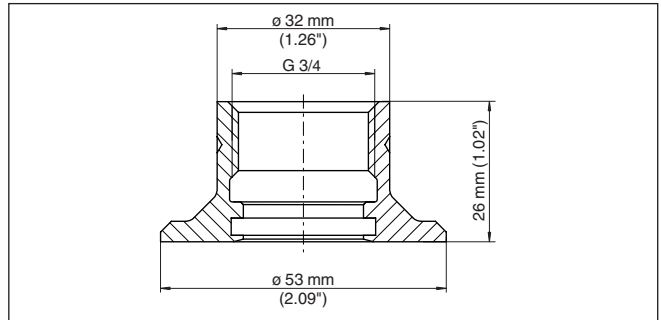
Fig. 23: Dimensions welded socket G¾ (DIN 3852-A, ISO 228-1)

Thread G1

Part	Feature	Characteristic
Welded socket	Size	G1
	Standard	DIN 3852-A, ISO 228-1
	Pressure stage	PN 60
	Material	316L
	Product code/Art. no.	WSSG.XGAXXX
Seal	Material	FKM, EPDM
	Configuration	O-ring
	Size	21 x 3 mm
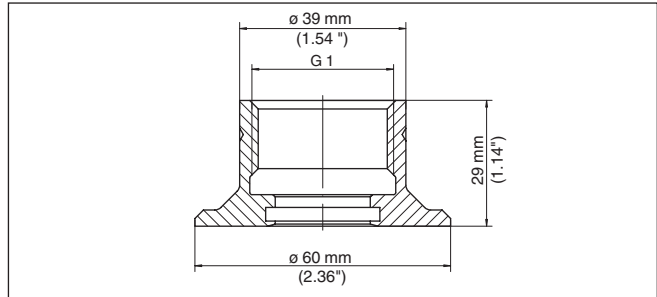
Fig. 24: Dimensions welded socket G1 (DIN 3852-A, ISO 228-1)

Thread G1 with leakage hole

Part	Feature	Characteristic
Welded socket	Size	G1
	Standard	DIN 3852-A, ISO 228-1
	Pressure stage	PN 60
	Material	316L
	Product code/Art. no.	WSSG.XGLXXX
Seal	Material	FKM, EPDM
	Configuration	O-ring
	Size	21.82 x 3.53 mm

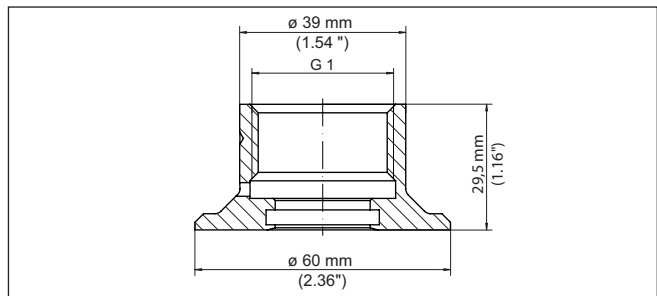*Fig. 25: Dimensions welded socket G1 (DIN 3852-A, ISO 228-1) with leakage hole*

Thread G1 - Cone seal

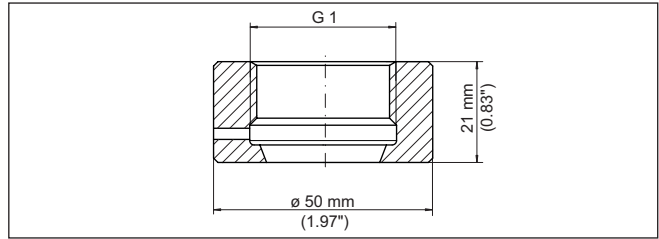| Part	Feature	Characteristic
Welded socket	Size	G1
	Standard	ISO 228-1
	Material	316L
	Product code/Art. no.	WSSG.XAMXXX

Fig. 26: Dimensions direct welded socket G1 (ISO 228-1) - Cone seal

Thread G1 - O-ring seal

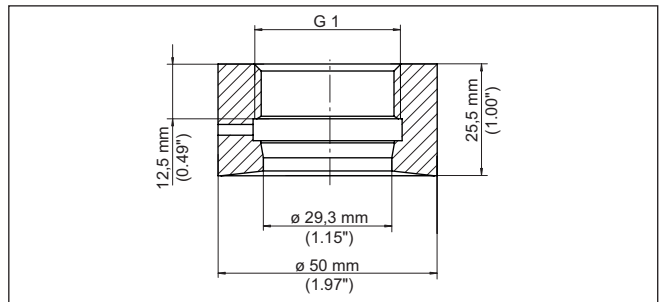| Part	Feature	Characteristic
Welded socket	Size	G1
	Standard	ISO 228-1
	Material	316L
	Product code/Art. no.	WSSG.XAFXXX

Fig. 27: Dimensions direct welded socket G1 (ISO 228-1) - O-ring seal

Thread G1 for pipe mounting - Cone sealing

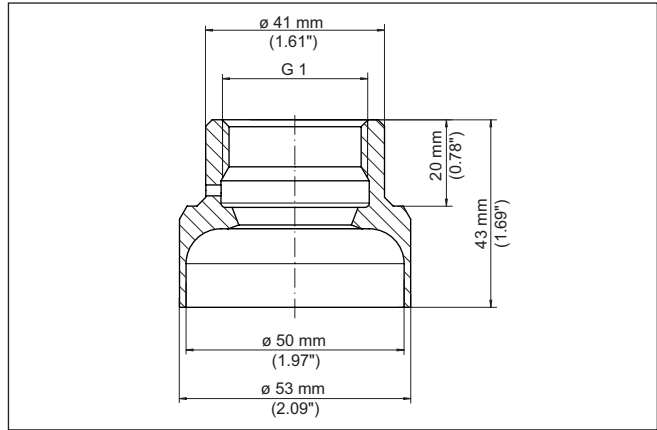| Part	Feature	Characteristic
Welded socket	Size	G1
	Standard	ISO 228-1
	Material	316L
	Product code/Art. no.	WSSG.XAVXXX

Fig. 28: Dimensions direct welded socket for pipe mounting G1 (ISO 228-1) - Cone sealing

Thread G1 for pipe mounting - O-ring sealing

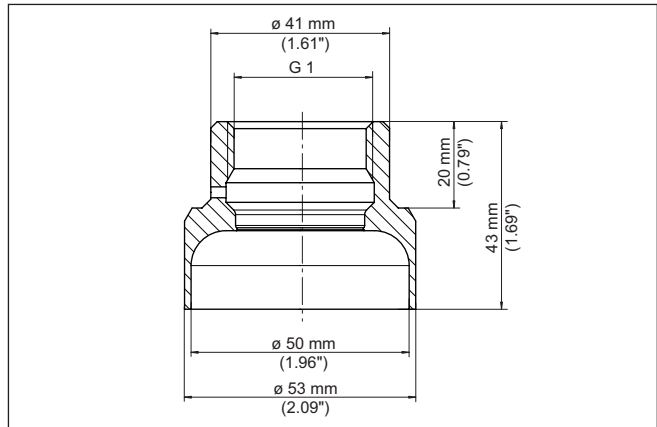| Part	Feature	Characteristic
Welded socket	Size	G1
	Standard	ISO 228-1
	Material	316L
	Product code/Art. no.	WSSG.XAUXXX
Seal	Material	EPDM
	Configuration	O-ring seal
	Size	21.82 x 3.53 mm

Fig. 29: Dimensions direct welded socket for pipe mounting G1 (ISO 228-1) - O-ring sealing

4.2 Hygienic fittings

Clamp 1"

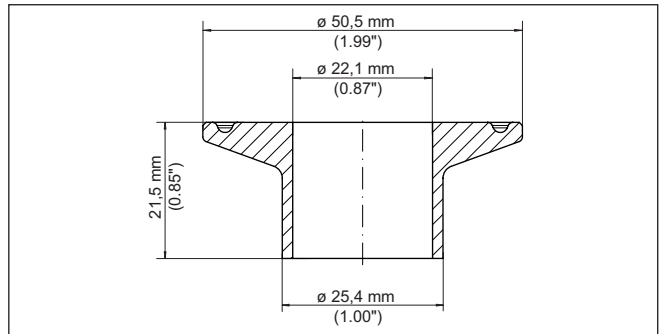| Part	Feature	Characteristic
Welded socket	Size	Clamp 1"
	Standard	DIN 32676, ISO 2852
	Pressure stage	PN 25
	Product code/Art. no.	WSSG.XCLXXX
Seal	Material	FKM, EPDM
	Configuration	Clamp seal

Fig. 30: Dimensions of welded socket, Clamp 1" (DIN 32676, ISO 2852)

5 Threaded adapter - VEGAPULS 10, 20, 30 series

5.1 Adapter

Thread G1½ on thread G2

Part	Feature	Characteristic
Adapter	Size, sensor side	G1½
	Size, process side	G2
	Standard	DIN 3852-X
	Material	PP GF-30
	Pressure stage	3 bar
	Process temperature	-40 … +80 °C (-40 … +176 °F)
	Max. torque	7 Nm (5.163 lbf ft)
	Product code/Art. no.	GEWADA-G.G
Seal, sensor side	Material	EPDM
	Configuration	O-ring seal
	Size	37.82 x 1.78 mm
Seal, process side	Material	FPM
	Configuration	Profile seal
	Size	ø 66.5 x 56.5 x 4 mm
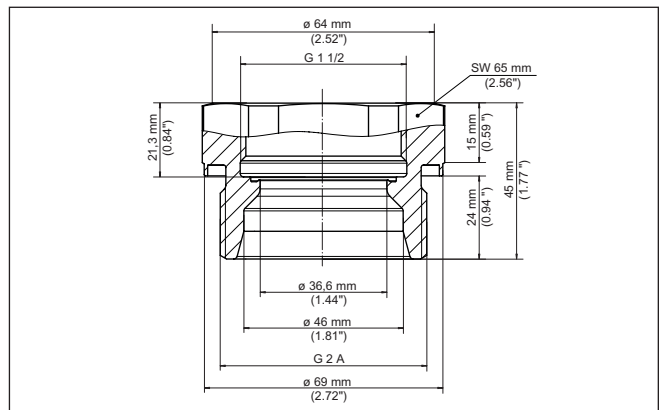
Fig. 31: Dimensions of threaded adapter G1½ (DIN 3852-X) on thread G2 (DIN 3852-X)

Welded socket, threaded and hygienic adapter •

Thread 1½ NPT on thread 2 NPT

Part	Feature	Characteristic
Adapter	Size, sensor side	1½ NPT
	Size, process side	2 NPT
	Material	PP GF-30
	Pressure stage	3 bar
	Process temperature	-40 … +80 °C (-40 … +176 °F)
	Max. torque	7 Nm (5.163 lbf ft)
	Product code/Art. no.	GEWADA-G.N
Seal, sensor side	Material	EPDM
	Configuration	O-ring seal
	Size	37.82 x 1.78 mm

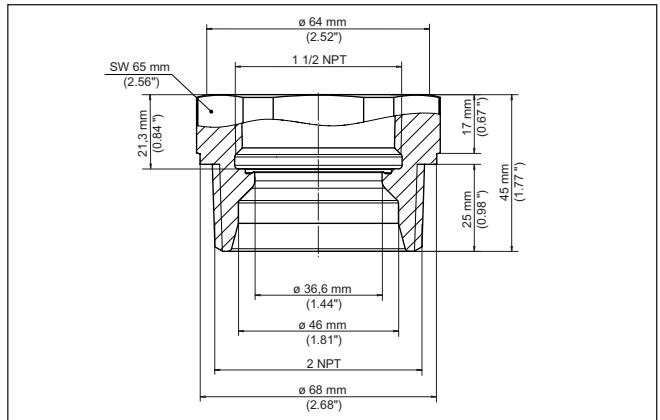*Fig. 32: Dimensions, threaded adapter 1½"NPT on thread 2"NPT*

6 Threaded adapter - VEGAPOINT 10, 20, 30 series

6.1 Adapter

Thread G½ - Thread G1½

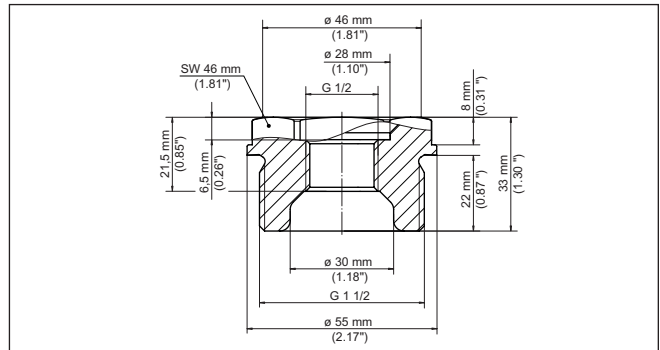| Part	Feature	Characteristic
Adapter	Size, sensor side	G½
	Size, process side	G1½
	Standard	DIN 3852-A
	Material	1.4404
	Pressure stage	PN 25
	Product code/Art. no.	2.64723
Seal	Material	Klingersil C-4400
	Configuration	Flat seal
	Size	ø 68 x 59 x 2.5 mm

Fig. 33: Dimensions of threaded adapter G1½ (DIN 3852-A) on thread G1½ (DIN 3852-A)

7 Hygienic adapter - VEGAPULS 10, 20, 30 series

7.1 Technical data, sealing concept

Common technical data

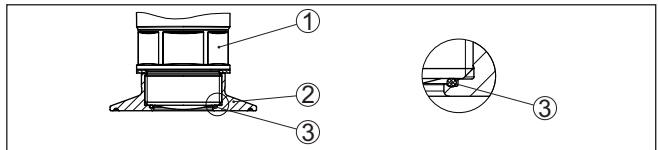| Part	Feature	Characteristic
Hygienic adapter	Material	1.4435
	Surface	Ra ≤ 0.76 µm
	Hygiene certificate	FDA, EG 1935/2004
Max. torque		7 Nm (5.163 lbf ft)

Seal concept

Fig. 34: Seal concept

1   Sensor
2   Hygienic adapter
3   Seal

7.2 Clamp according to DIN 32676, ISO 2852

G1½ - Clamp 2"

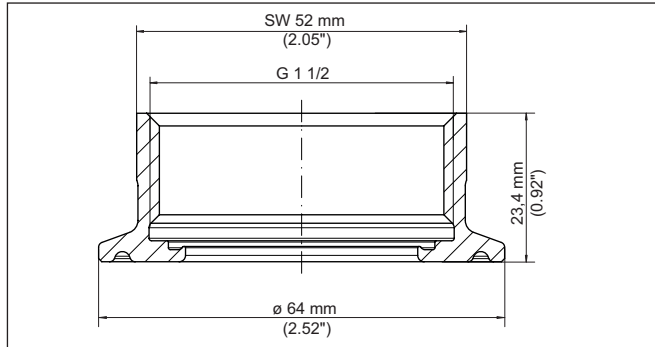| Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G1½
	Standard	DIN 3852-X
	Size, process side	Clamp 2"
	Standard	DIN 32676, ISO 2852
	Pressure stage	PN 40
	Product code/Art. no.	HYGADAPT-R.XC1
Seal	Material EPDM	-40 … +80 °C/-40 … +176 °F
	Configuration	O-ring seal
	Size	37.82 x 1.78 mm

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*Fig. 35: Dimensions of hygienic adapter G½ (DIN 3852-X) on Clamp 2"
(DIN 32676, ISO 2852) PN 40*

7.3 Slotted nut acc. to DIN 11851

G1½ - Slotted nut DN 50

Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G½
	Standard	DIN 3852-X
	Size, process side	DN 50
	Standard	DIN 11851
	Pressure stage	PN 40
	Product code/Art. no.	HYGADAPT-R.XB1
Seal	Material EPDM	-40 … +80 °C/-40 … +176 °F
	Configuration	O-ring seal
	Size	37.82 x 1.78 mm

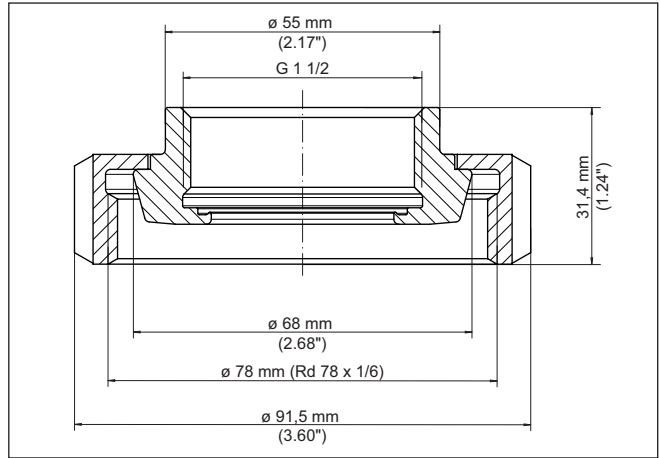*Fig. 36: Dimensions of hygienic adapter G½ (DIN 3852-X) on slotted nut DN 50 (DIN 11851) PN 40*

8 Hygienic adapter - VEGABAR 20, 30 series, VEGAPOINT 10, 20, 30 series

8.1 Technical data, sealing concept

Common technical data

	Feature	Characteristic
Hygienic adapter	Material	1.4435
	Surface	Ra ≤ 0.76 μm
	Hygiene certificate	FDA, EG 1935/2004
Max. torque	Cone seal	100 Nm (73.76 lbf ft)
	O-ring seal	50 Nm (36.88 lbf ft)

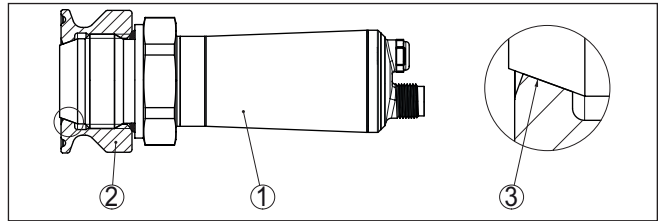**Sealing concept metal/ metal**

Fig. 37: Cone seal G1 VEGABAR metal/metal

1 Sensor
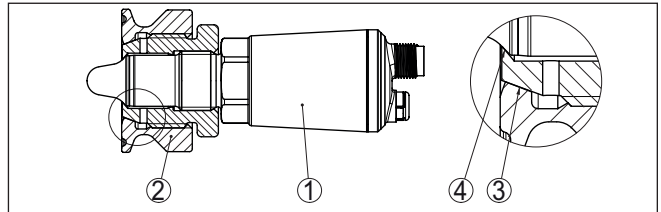*2 Hygienic adapter*
3 Seal metal/metal

Fig. 38: Cone seal G1 VEGAPOINT plastic/metal plus metal/metal

1 Sensor
2 Hygienic adapter
3 Seal plastic/metal
4 Seal metal/metal
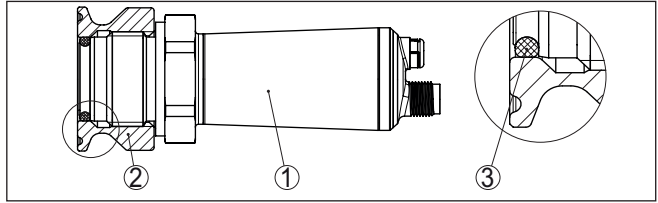
Sealing concept O-ring

Fig. 39: O-ring seal G1 VEGABAR

1   Sensor
2   Hygienic adapter
3   O-ring seal
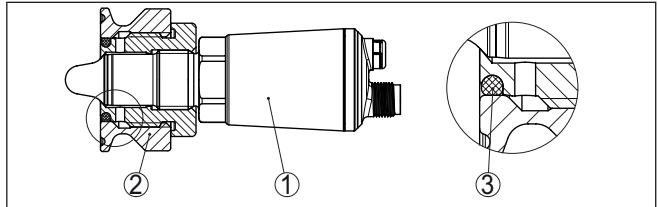

Fig. 40: O-ring seal G1 VEGAPOINT

1   Sensor
2   Hygienic adapter
3   O-ring seal

8.2   Direct welded socket

Thread G1 - Cone seal

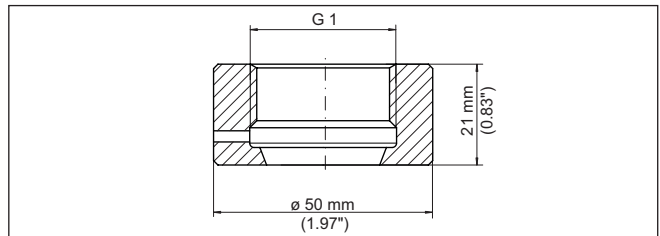| Part	Feature	Characteristic
Welded socket	Size	G1 B
	Standard	ISO 228-1
	Product code/Art. no.	HYGADAPT-C.X7F

Fig. 41: Dimensions direct welded socket G1 - Cone seal

Thread G1 for pipe mounting - Cone sealing

Part	Feature	Characteristic
Welded socket	Size	G1 B
	Standard	ISO 228-1
	Product code/Art. no.	HYGADAPT-C.X7G
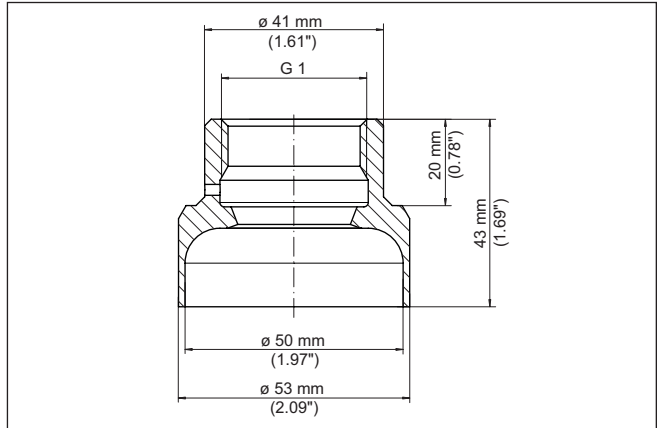
Fig. 42: Dimensions direct welded socket for pipe mounting G1 - Cone sealing

8.3 Clamp according to DIN 32676, ISO 2852

G1 - Clamp 1½" - Cone seal

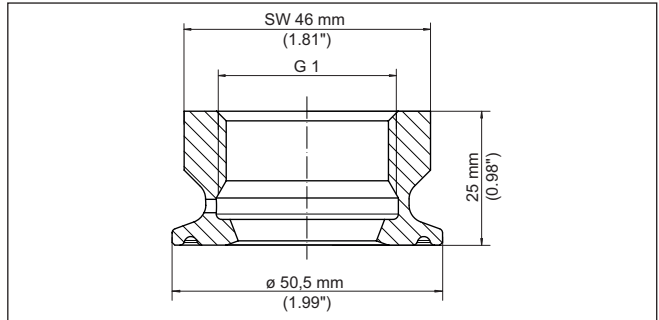| Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G1
	Standard	ISO 228-1
	Size, process side	Clamp 1½"
	Standard	DIN 32676, ISO 2852
	Pressure stage	PN 40
	Product code/Art. no.	HYGADAPT-C.XAT

Fig. 43: Dimensions hygienic adapter G1 (DIN 3852-X) on Clamp 1½"
(DIN 32676, ISO 2852) PN 40 - Cone seal

G1 - Clamp 2" - Cone seal

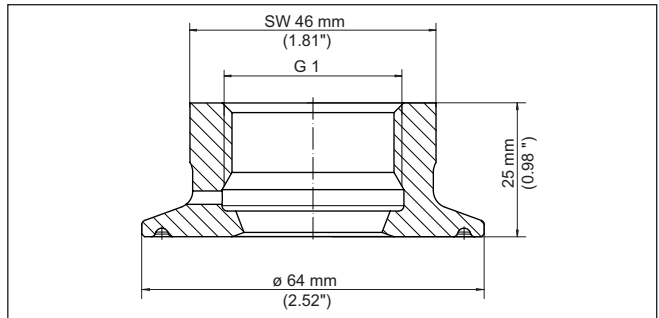| Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G1
	Standard	ISO 228-1
	Size, process side	Clamp 2"
	Standard	DIN 32676, ISO 2852
	Pressure stage	PN 40
	Product code/Art. no.	HYGADAPT-C.XAR

Fig. 44: Dimensions hygienic adapter G1 (DIN 3852-X) on Clamp 2"
(DIN 32676, ISO 2852) PN 40 - Cone seal

Thread G1 - Clamp DN 15-20 - O-ring seal

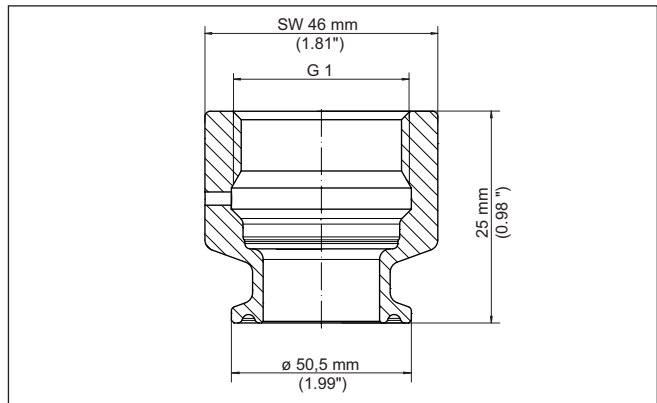| Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G1
	Standard	ISO 228-1
	Size, process side	Clamp DN 15-20
	Standard	DIN 32676, ISO 2852
	Pressure stage	PN 40
	Additional hygienic certificate	EHEDG, 3A [1]
	Product code/Art. no.	HYGADAPT-L.XAZ

Fig. 45: Dimensions hygienic adapter G1 (DIN 3852-X) on Clamp DN 15-20 (DIN 32676, ISO 2852) PN 40 - O-ring seal

Thread G1 - Clamp 1½" - O-ring seal

Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G1
	Standard	ISO 228-1
	Size, process side	Clamp 1½"
	Standard	DIN 32676, ISO 2852
	Pressure stage	PN 40
	Additional hygienic certificate	EHEDG, 3A [2]
	Product code/Art. no.	HYGADAPT-L.XAT

[1] EHEDG in preparation
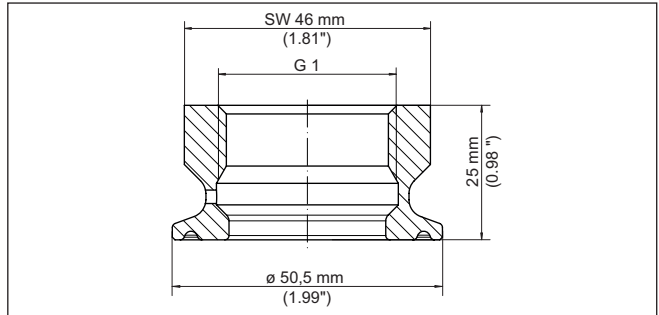[2] EHEDG in preparation

Welded socket, threaded and hygienic adapter •

*Fig. 46: Dimensions hygienic adapter G1 (DIN 3852-X) on Clamp 1½"
(DIN 32676, ISO 2852) PN 40 - O-ring seal*

Thread G1 - Clamp 2" - O-ring seal

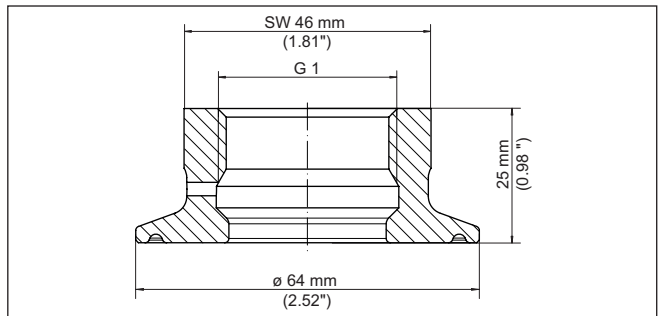| Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G1
	Standard	ISO 228-1
	Size, process side	Clamp 2"
	Standard	DIN 32676, ISO 2852
	Pressure stage	PN 40
	Additional hygienic certificate	EHEDG, 3A [3]
	Product code/Art. no.	HYGADAPT-L.XAR

*Fig. 47: Dimensions hygienic adapter G1 (DIN 3852-X) on Clamp 2"
(DIN 32676, ISO 2852) PN 40 - O-ring seal*

[3] EHEDG in preparation

VEGA

8.4 Slotted nut acc. to DIN 11851

Thread G1 - Slotted nut DN 40 - Cone seal

Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G1
	Standard	ISO 228-1
	Size, process side	DN 40
	Standard	DIN 11851
	Pressure stage	PN 40
	Product code/Art. no.	HYGADAPT-C.XEZ

ø 48 mm
(1.89")

G 1

33 mm
(1.30")

ø 56 mm
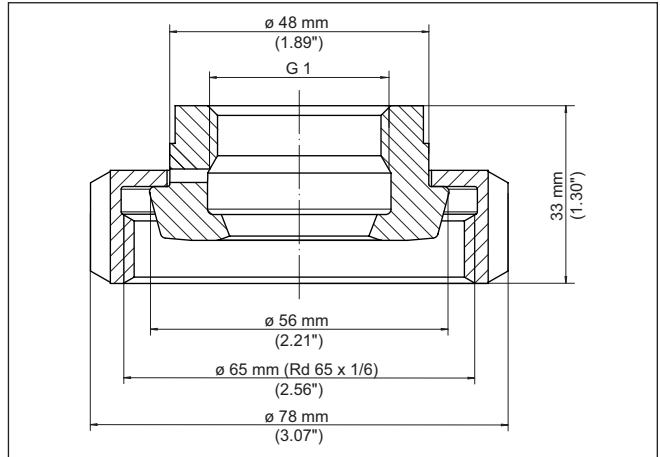(2.21")

ø 65 mm (Rd 65 x 1/6)
(2.56")

ø 78 mm
(3.07")

Fig. 48: Dimensions hygienic adapter G1 (DIN 3852-X) on slotted nut DN 40 (DIN 11851) PN 40 - Cone seal

Thread G1 - Slotted nut DN 50 - Cone seal

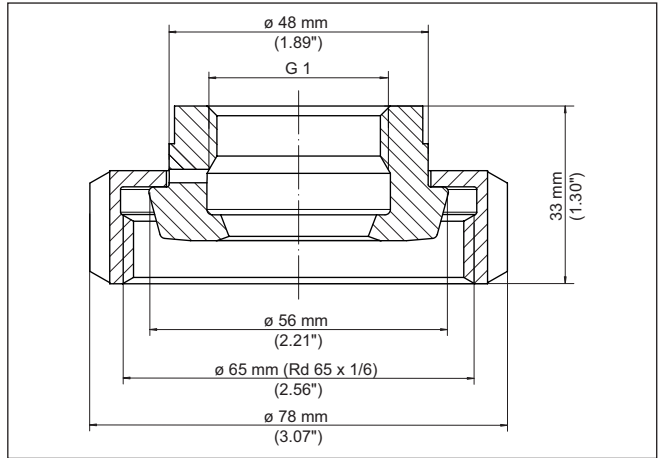| Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G1
	Standard	ISO 228-1
	Size, process side	DN 50
	Standard	DIN 11851
	Pressure stage	PN 25
	Product code/Art. no.	HYGADAPT-C.XNB

Fig. 49: Dimensions hygienic adapter G1 (DIN 3852-X) on slotted nut DN 40 (DIN 11851) PN 40 - Cone seal

Thread G1 - Slotted nut DN 40 - O-ring seal

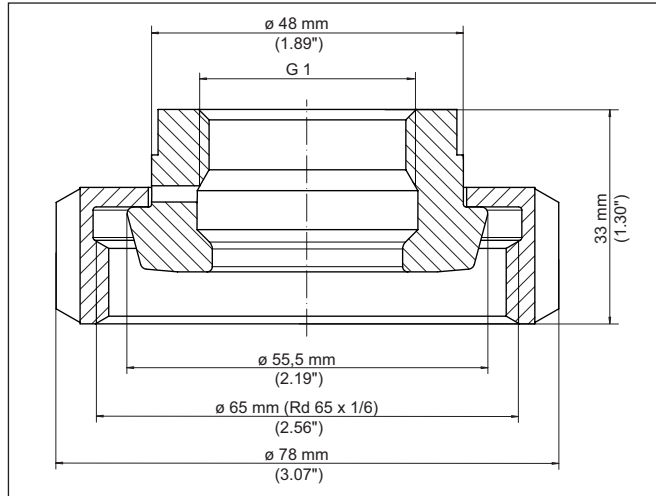| Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G1
	Standard	ISO 228-1
	Size, process side	DN 40
	Standard	DIN 11851
	Pressure stage	PN 40
	Additional hygienic certificate	EHEDG, 3A [4]
	Product code/Art. no.	HYGADAPT-L.XEZ

[4] EHEDG in preparation

Fig. 50: Dimensions hygienic adapter G1 (DIN 3852-X) on slotted nut DN 40 (DIN 11851) PN 40 - O-ring seal

Thread G1 - Slotted nut DN 50 - O-ring seal

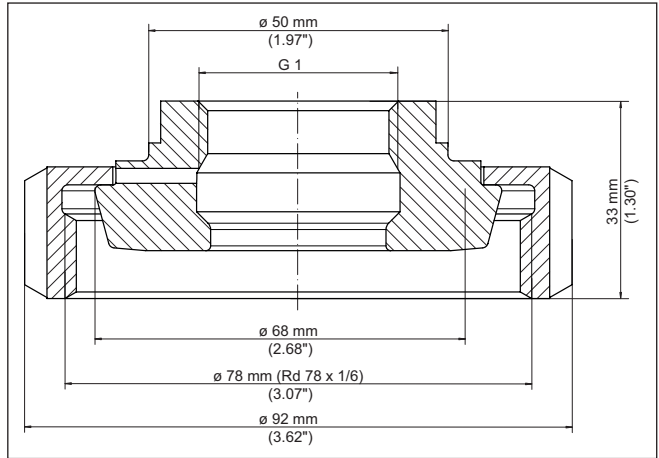| Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G1
	Standard	ISO 228-1
	Size, process side	DN 50
	Standard	DIN 11851
	Pressure stage	PN 25
	Additional hygienic certificate	EHEDG, 3A [5]
	Product code/Art. no.	HYGADAPT-L.XEZ

[5] EHEDG in preparation

Fig. 51: Dimensions hygienic adapter G1 (DIN 3852-X) on slotted nut DN 50 (DIN 11851) PN 40 - O-ring

8.5 Slotted nut acc. to DIN 11864-1

Thread G1 - Slotted nut DN 40 - Cone seal

Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G1
	Standard	ISO 228-1
	Size, process side	DN 40
	Standard	DIN 11864-1
	Pressure stage	PN 40
	Product code/Art. no.	HYGADAPT-C.XE2

VEGA

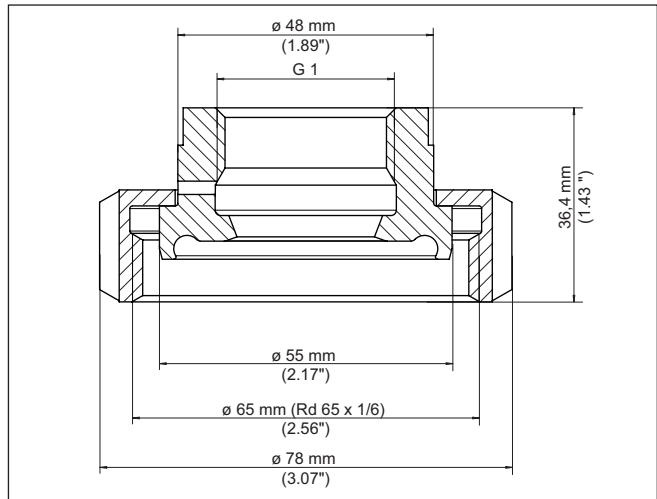*Fig. 52: Dimensions hygienic adapter G¾ (DIN 3852-X) on slotted nut DN 40 (DIN 11864-1) PN 16 - Cone seal*

Thread G1 - Slotted nut DN 50 - Cone seal

Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G1
	Standard	ISO 228-1
	Size, process side	DN 50
	Standard	DIN 11864-1
	Pressure stage	PN 25
	Product code/Art. no.	HYGADAPT-C.XE3

Dimensions:

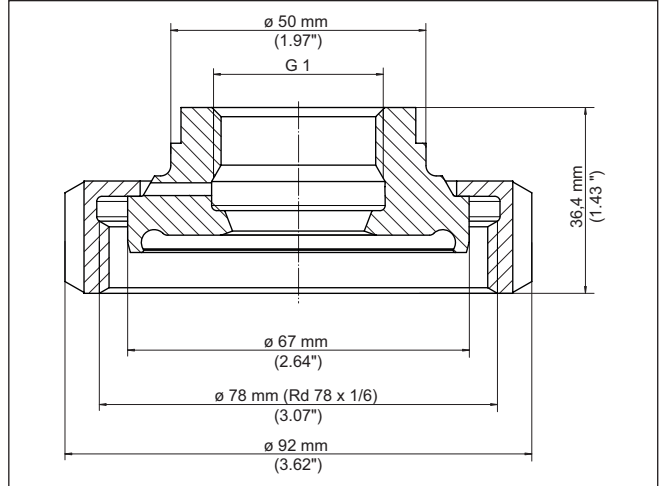*Fig. 53: Dimensions hygienic adapter G¾ (DIN 3852-X) on slotted nut DN 50 (DIN 11864-1) PN 25 - Cone seal*

Thread G1 - Slotted nut DN 40 - O-ring seal

Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G1
	Standard	ISO 228-1
	Size, process side	DN 40
	Standard	DIN 11864-1
	Pressure stage	PN 40
	Additional hygienic cer-tificate	EHEDG, 3A [6]
	Product code/Art. no.	HYGADAPT-L.XE2

[6] EHEDG in preparation

VEGA

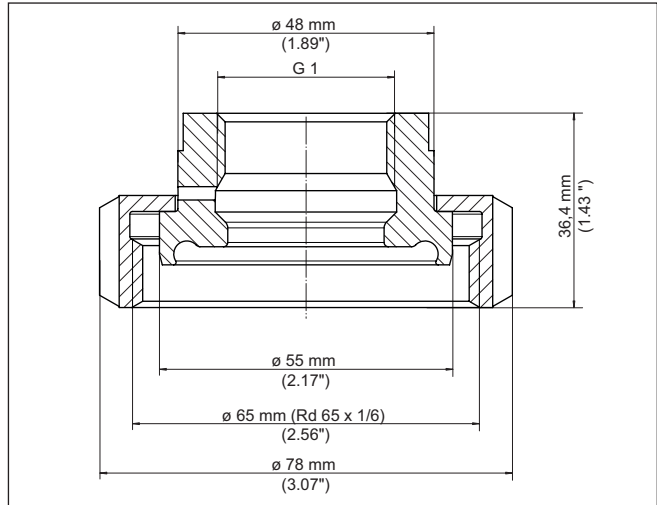*Fig. 54: Dimensions hygienic adapter G¾ (DIN 3852-X) on slotted nut DN 40 (DIN 11864-1) PN 40 - O-ring seal*

Thread G1 - Slotted nut DN 50 - O-ring seal

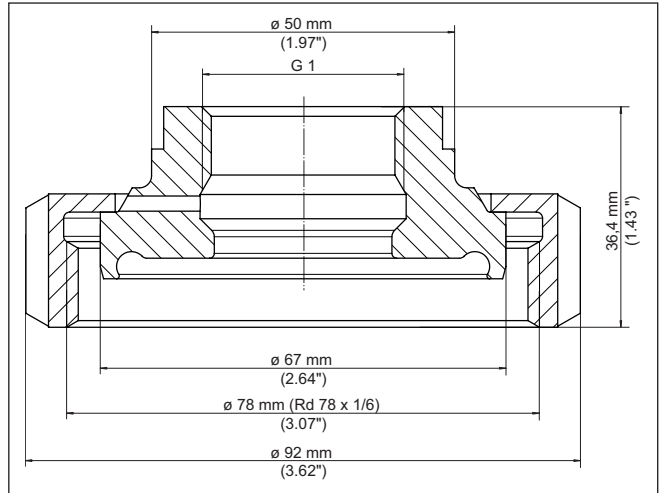| Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G1
	Standard	ISO 228-1
	Size, process side	DN 50
	Standard	DIN 11864-1
	Pressure stage	PN 25
	Additional hygienic certificate	EHEDG, 3A [7]
	Product code/Art. no.	HYGADAPT-L.XE3

[7] EHEDG in preparation

Fig. 55: Dimensions hygienic adapter G¾ (DIN 3852-X) on slotted nut DN 50 (DIN 11864-1) PN 25 - O-ring seal

8.6 Further hygienic fittings

Thread G1 - Varivent
Form F DN 25 - Cone seal

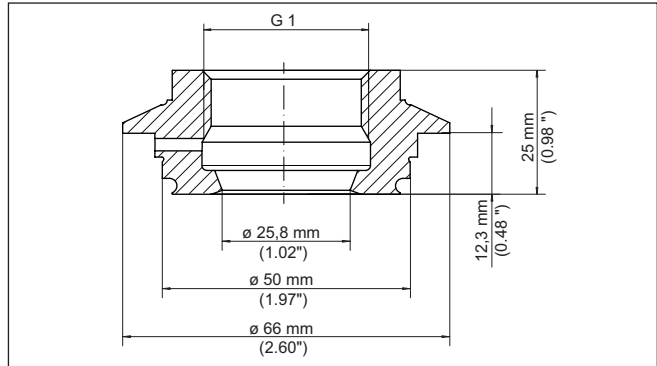| Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G1
	Standard	ISO 228-1
	Size, process side	DN 32
	Standard	Varivent
	Pressure stage	PN 25
	Material	1.4435
	Surface	Ra ≤ 0.76 µm
	Product code/Art. no.	HYGADAPT-C.XFS

Fig. 56: Dimensions hygienic adapter G1 (DIN 3852-X) on Varivent Form F DN 25 - Cone seal

Thread G1 - Varivent Form N DN 40 … DN 100 - Cone seal

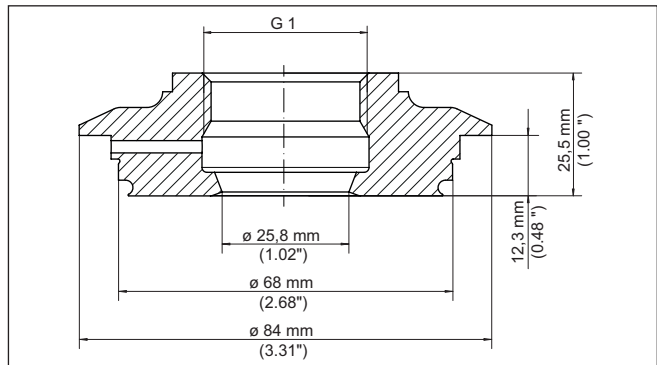| Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G1
	Standard	ISO 228-1
	Size, process side	DN 40
	Standard	Varivent
	Pressure stage	PN 25
	Material	1.4435
	Surface	Ra ≤ 0.76 μm
	Product code/Art. no.	HYGADAPT-C.XFR

Fig. 57: Dimensions hygienic adapter G1 (DIN 3852-X) on Varivent Form N DN 40 … DN 100 - Cone seal

Thread G1 - Varivent Form F DN 25 - O-ring seal

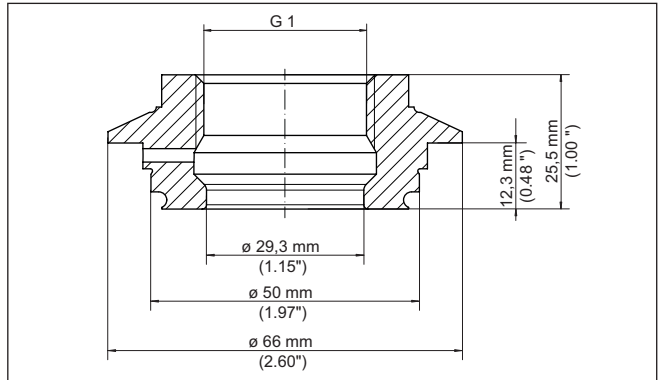| Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G1
	Standard	ISO 228-1
	Size, process side	DN 40
	Standard	Varivent
	Pressure stage	PN 25
	Material	1.4435
	Surface	Ra ≤ 0.76 μm
	Additional hygienic certificate	EHEDG, 3A [8]
	Product code/Art. no.	HYGADAPT-L.XFS

Fig. 58: Dimensions hygienic adapter G1 (DIN 3852-X) on Varivent Form F DN 25 - O-ring seal

Thread G1 - Varivent Form N DN 40 … DN 100 - O-ring seal

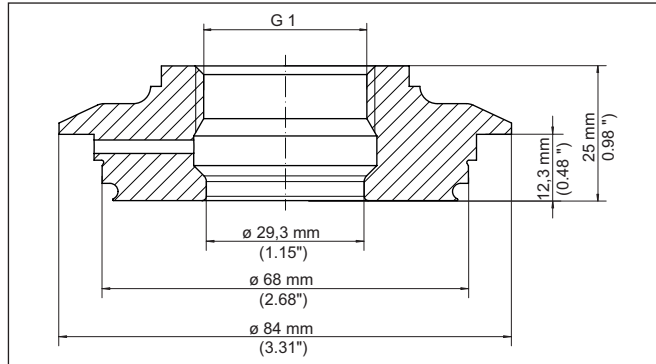| Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G1
	Standard	ISO 228-1
	Size, process side	DN 40
	Standard	Varivent
	Pressure stage	PN 25
	Material	1.4435
	Surface	Ra ≤ 0.76 μm
	Additional hygienic certificate	EHEDG, 3A [9]
	Product code/Art. no.	HYGADAPT-L.XFR

[8] EHEDG in preparation
[9] EHEDG in preparation

Fig. 59: Dimensions hygienic adapter G1 (DIN 3852-X) on Varivent Form N DN 40 … DN 100 - O-ring seal

Thread G1 - SMS DN 38 - Cone seal

Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G1
	Standard	ISO 228-1
	Size, process side	DN 40
	Standard	SMS
	Pressure stage	PN 6
	Material	1.4435
	Surface	Ra ≤ 0.76 µm
	Hygiene certificate	FDA, EG 1935/2004, EHEDG [10]
	Product code/Art. no.	HYGADAPT-C.XFA

[10] EHEDG in preparation
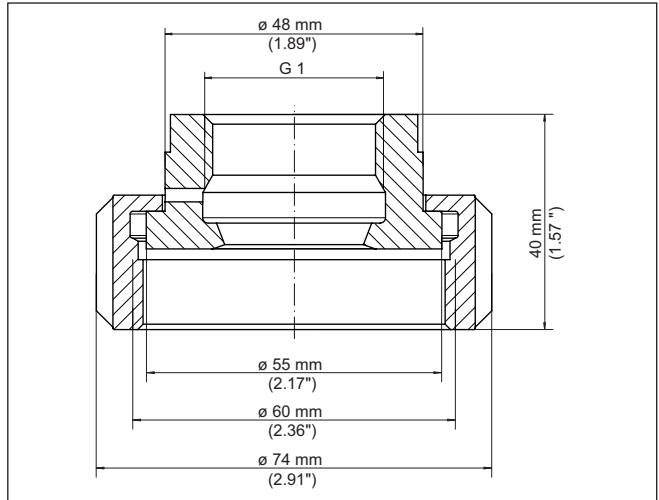
Welded socket, threaded and hygienic adapter •

Fig. 60: Dimensions hygienic adapter G1 (DIN 3852-X) on SMS DN 38 - Cone seal

Thread G1 - SMS DN 38 - O-ring seal

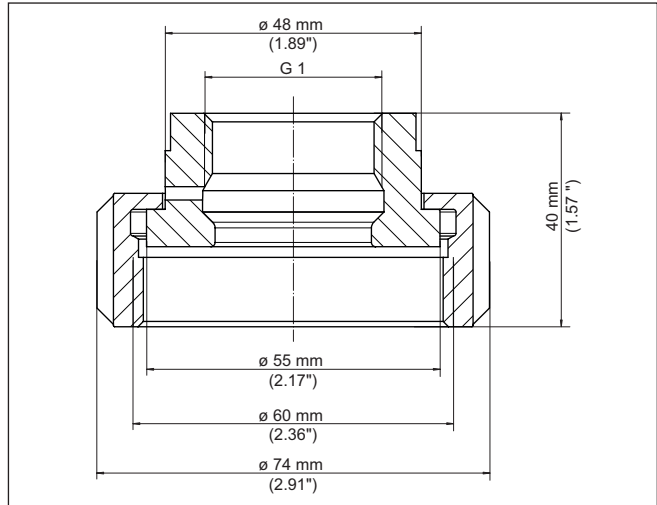| Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G1
	Standard	ISO 228-1
	Size, process side	DN 40
	Standard	SMS
	Pressure stage	PN 6
	Material	1.4435
	Surface	Ra ≤ 0.76 µm
	Additional hygienic certificate	EHEDG, 3A [11]
	Product code/Art. no.	HYGADAPT-L.XFA

[11] EHEDG in preparation

Fig. 61: Dimensions hygienic adapter G1 (DIN 3852-X) on SMS DN 38 - O-ring seal

9 Hygienic adapter - VEGAPOINT 10, 20, 30 series

9.1 Technical data, sealing concept

Common technical data

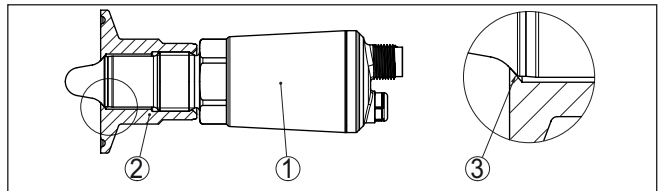| Part	Feature	Characteristic
Hygienic adapter	Material	1.4435
	Surface	Ra ≤ 0.76 µm
	Hygiene certificate	FDA, EG 1935/2004
Max. torque	Cone seal plastic/metal	50 Nm (36.88 lbf ft)

Sealing concept plastic/ metal

Fig. 62: Cone seal G½ VEGAPOINT plastic/metal

1   Sensor
2   Hygienic adapter
3   Seal plastic/metal

9.2 Direct welded socket

Thread G½ - Cone seal

Part	Feature	Characteristic
Welded socket	Size	G½ B
	Standard	ISO 228-1
	Product code/Art. no.	HYGADAPT-P.X7F
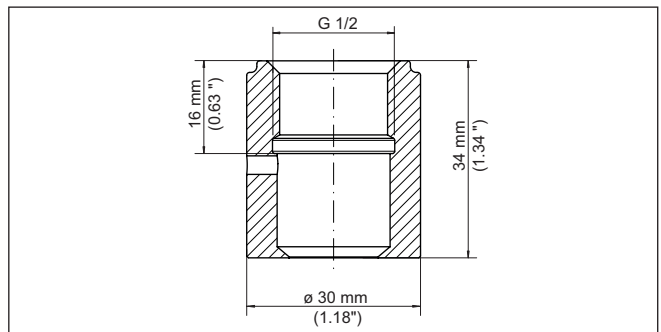
Fig. 63: Dimensions direct welded socket G½ - Cone seal

9.3 Clamp according to DIN 32676, ISO 2852

Thread G½ - Clamp 1½" - Cone seal

Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G½
	Standard	DIN 3852-X
	Size, process side	Clamp 1½"
	Standard	DIN 32676, ISO 2852
	Pressure stage	PN 40
	Product code/Art. no.	HYGADAPT-P.XAT

Fig. 64: Dimensions hygienic adapter G½ (DIN 3852-X) on Clamp 1½" (DIN 32676, ISO 2852) PN 40 - Cone seal

Thread G½ - Clamp 2"- cone seal

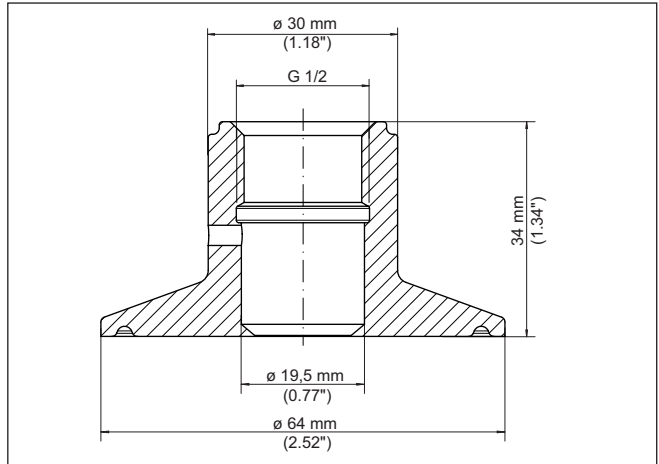| Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G½
	Standard	DIN 3852-X
	Size, process side	Clamp 2"
	Standard	DIN 32676, ISO 2852
	Pressure stage	PN 40
	Product code/Art. no.	HYGADAPT-C.XAR

*Fig. 65: Dimensions hygienic adapter G½ (DIN 3852-X) on Clamp 2"
(DIN 32676, ISO 2852) PN 40 - Cone seal*

9.4 Slotted nut acc. to DIN 11851

**Thread G½ - Slotted nut
DN 25 - Cone seal**

Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G½
	Standard	DIN 3852-X
	Size, process side	DN 25
	Standard	DIN 11851
	Pressure stage	PN 40
	Product code/Art. no.	HYGADAPT-P.XE5

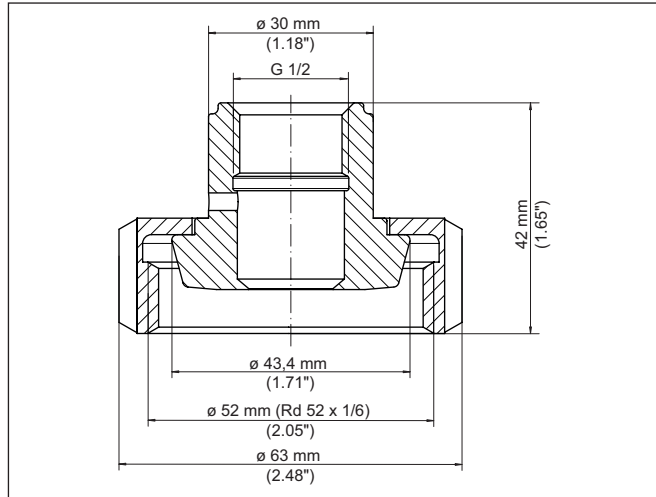*Fig. 66: Dimensions hygienic adapter G½ (DIN 3852-X) on slotted nut DN 25 (DIN 11851) PN 40 - Cone seal*

Thread G½ - Slotted nut DN 40 - Cone seal

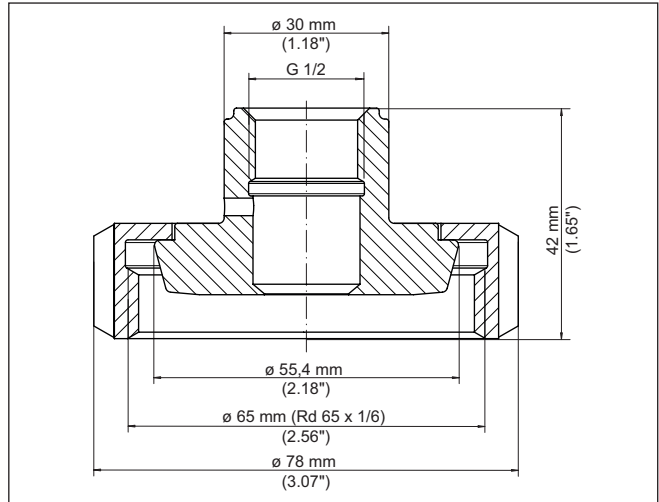| Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G½
	Standard	DIN 3852-X
	Size, process side	DN 40
	Standard	DIN 11851
	Pressure stage	PN 40
	Product code/Art. no.	HYGADAPT-P.XEZ

Fig. 67: Dimensions hygienic adapter G½ (DIN 3852-X) on slotted nut DN 40 (DIN 11851) PN 40 - Cone seal

9.5 Slotted nut acc. to DIN 11864-1

Thread G½ - Slotted nut DN 25 - Cone seal

Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G½
	Standard	DIN 3852-X
	Size, process side	DN 25
	Standard	DIN 11864-1
	Pressure stage	PN 40
	Product code/Art. no.	HYGADAPT-P.XU5

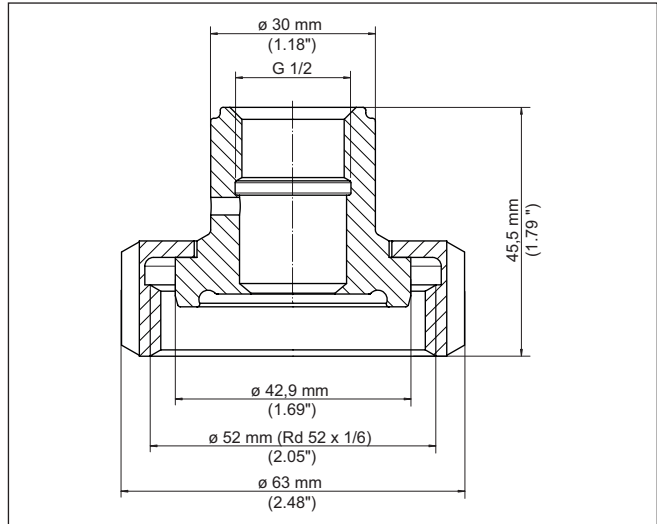*Fig. 68: Dimensions hygienic adapter G½ (DIN 3852-X) on slotted nut DN 25 (DIN 11851-1) PN 40 - Cone seal*

Thread G½ - Slotted nut DN 40 - Cone seal

Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G½
	Standard	DIN 3852-X
	Size, process side	DN 25
	Standard	DIN 11864-1
	Pressure stage	PN 40
	Product code/Art. no.	HYGADAPT-P.XE2

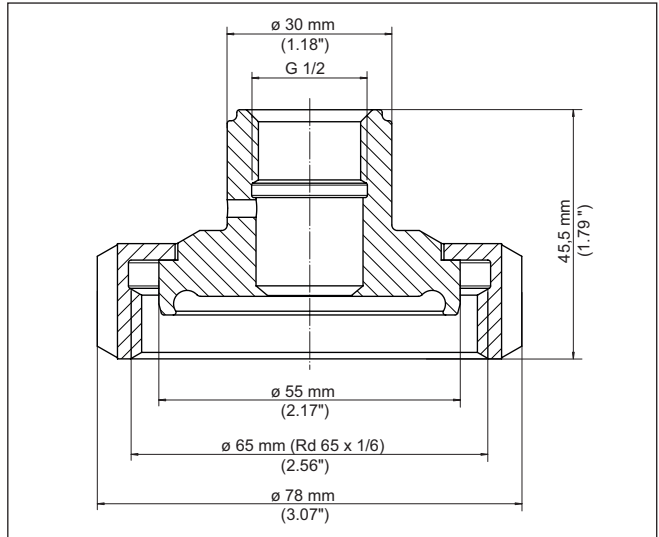*Fig. 69: Dimensions hygienic adapter G½ (DIN 3852-X) on slotted nut DN 40 (DIN 11864-1) PN 40 - Cone seal*

9.6 Further hygienic fittings

Thread G½ - Varivent Form N DN 40 … DN 100 - Cone seal

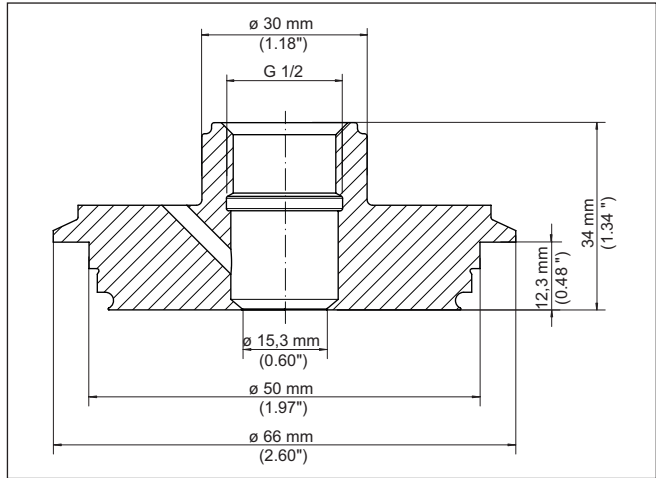| Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G1
	Standard	DIN 3852-X
	Size, process side	DN 40
	Standard	Varivent
	Pressure stage	PN 25
	Product code/Art. no.	HYGADAPT-P.XFR

Fig. 70: Dimensions hygienic adapter G½ (DIN 3852-X) on Varivent Form N DN 40 … DN 100 - Cone seal

Thread G½ - Varivent Form F DN 25 - Cone seal

Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G1
	Standard	DIN 3852-X
	Size, process side	DN 32
	Standard	Varivent
	Pressure stage	PN 25
	Product code/Art. no.	HYGADAPT-P.XFS

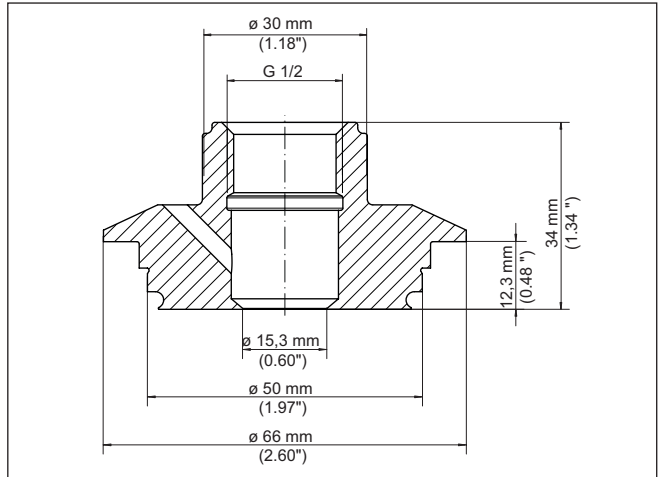*Fig. 71: Dimensions hygienic adapter G½ (DIN 3852-X) on Varivent Form F DN 25 - Cone seal*

Thread G½ - SMS DN 38 - Cone seal

Part	Feature	Characteristic
Hygienic adapter	Size, sensor side	G1
	Standard	DIN 3852-X
	Size, process side	DN 40
	Standard	SMS
	Pressure stage	PN 6
	Product code/Art. no.	HYGADAPT-P.XFA

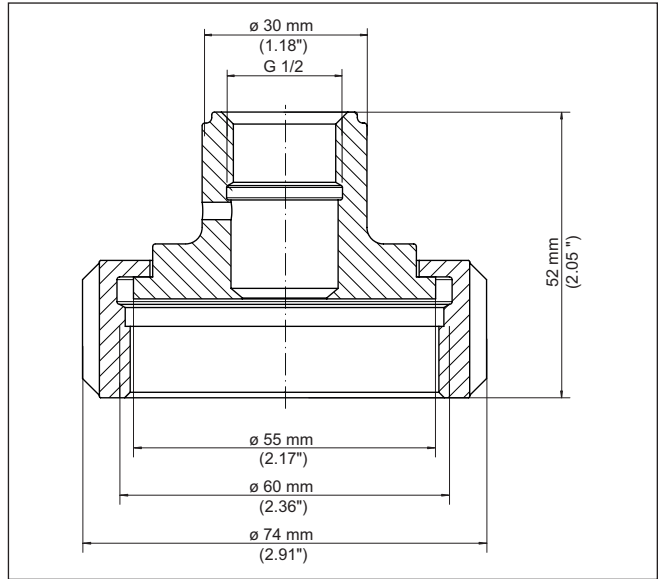*Fig. 72: Dimensions hygienic adapter G½ (DIN 3852-X) on SMS DN 38 - Cone seal*

10 Welding, mounting

10.1 Welding instructions

Information:
The following welding instructions are for information only. It is important that the welding regulations are always observed. The AD leaflets must also be noted when welding on pressure vessels.

Preparations

When welding stainless steel, utmost cleanliness is necessary. Rusty tools or screwed parts, e.g., are not allowed. Also make sure that no mild steel is processed in the vicinity.

Use sufficient inert gas for tack welding. Make sure that you only tack weld, not spot-weld. For tacking and welding, use pure argon protective gas.

Welding dummy

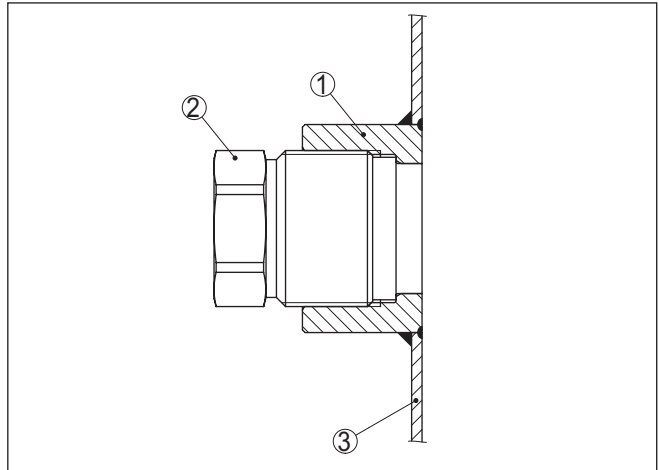A suitable welding dummy must be used to avoid warping the welded socket.

Fig. 73: Welding dummy

1   Welded socket
2   Dummy
3   Pipeline or vessel wall

Welding procedure

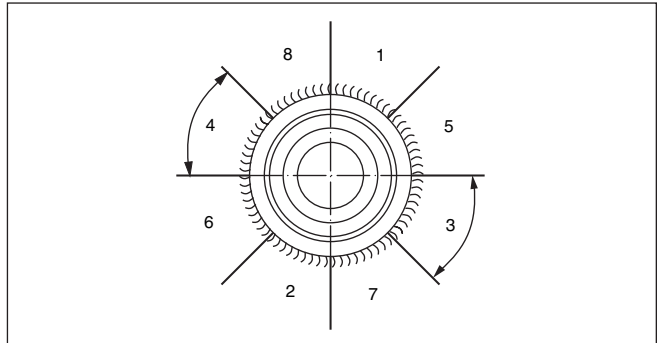It is generally recommended to divide the weld joint into several segments.

Fig. 74: Segmental welding

After welding a segment, go to the other side and weld the segment that lies exactly opposite. Interrupt the welding process after two segments and wait until the weld joint cools or carefully cool the weld joint yourself before you start welding again.

Pressure bearing capacity

The pressure bearing capacity of the welded socket depends on the quality of the weld as well as the material of the welded socket. In the case of threaded sockets, the total thread length must be utilized for pressure loading.

10.2 Mounting instructions threaded and hygienic adapter

Preparations

Use suitable spanners to screw the sensor into the adapter. The specifications are stated in the appropriate chapters of this manual or in the operating instructions manual of the respective sensor.

Mounting

Place the parts, especially with hygienic adapters, on a suitable, clean surface (e.g. workbench) and screw them together with the respective specified torque.

Note:
Avoid damage to the surface of the process fitting and adapter. Any damage can particularly impair the hygienic properties.

Note:
The cone seals metal/metal or plastic/metal provide a secure sealing when tightened once.

Loosening and retightening reduces the quality of the contact surfaces. Leakage, product leakage and contamination can be the result.

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