

Adapter system for measuring instruments with G1 hygienic connection

Process adapter model 910.61

WIKA data sheet AC 09.20



Applications

- Food, beverage and pharmaceutical industry
- Cosmetic production

Special features

- Large selection of different process adapters for connection to the G1 hygienic connection
- Measuring instrument and process adapters can be combined by the user

Description

The WIKA process adapter system has been specifically developed to meet the requirements of the food, beverage and pharmaceutical industries. The adapter system consists of a pressure gauge or transmitter with a built-in process adapter.

The flexible, modular system allows connection to a wide range of aseptic process connections (e.g. clamp, threaded, VARIVENT® or NEUMO®).

All parts are made of 1.4435 (316L); UNS S31603 stainless steel.

The O-ring for sealing the process (optional) is supplied with a 3.1 material certificate per EN 10204. It is available in either EPDM or FKM and is listed as FDA, USP Class VI, as well as 3-A 18-03.

The WIKA adapter system meets the high requirements of sterile engineering processes and is certified in accordance with the 3-A sanitary standards.

Measuring instrument and process adapter are easily connected and disconnected using a spanner.



Fig. top: Model S-11 pressure transmitter with G1 hygienic connection

Fig. middle: VARIVENT® process adapter

Fig. bottom: Clamp process adapter

Customer benefit

- Stock cost reduction
- Immediate availability of measuring instruments with different process connections
- Avoid long production downtimes

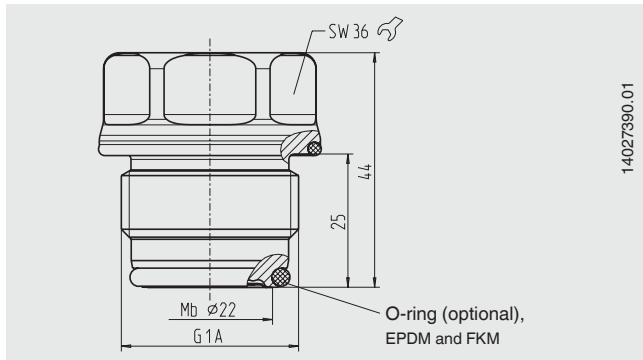
Overview of the components

Pressure measuring instruments with G1 hygienic connection

- Pressure transmitter model S-11, see data sheet PE 81.02 and pressure transmitter model F-21, see data sheet PE 81.19
- Universal pressure transmitter UniTrans model UT-11, see data sheet PE 86.01
- Process pressure transmitter model IPT-11, see data sheet PE 86.11



Dimensions of the G1 hygienic connection in mm



O-ring for sealing (option)

Dimensions: 21.82 x 3.53 mm

Material	Colour	Temperature range	Conformity to	Order no.
EPDM 70	black	-40 ... +145 °C	FDA 21 CFR 177.2600, USP XXV Class VI and 3-A (18-03) sanitary standards Class 2 (max. 8 % milk fat)	14004173
FKM 75	black	-15 ... +200 °C	FDA 21 CFR 177.2600, USP XXIII Class VI and 3-A (18-03) sanitary standards Class 1	14004174

Process adapter model 910.61

- Clamp
- VARIVENT®
- DRD
- Thread per DIN 11851 / SMS / IDF / APV
- DIN 11864
- NEUMO BioControl®
- Weld-on adapter (for welding to vessels)

Overview and dimensions of all process adapters, see from page 4



Pressure transmitter Models S-11, F-21 (G1 hygienic process connection)

Design

Model S-11 pressure transmitter for general applications (see data sheet PE 81.02) or model F-21 with field case (see data sheet PE 81.19) with flush diaphragm, G1 hygienic connection and integrated cooling element



UniTrans universal pressure transmitter Model UT-11 (G1 hygienic connection)

Design

UniTrans model UT-11 universal pressure transmitter (see data sheet PE 86.01) with flush diaphragm, G1 hygienic connection and integrated cooling element



Process pressure transmitter Model IPT-11 (G1 hygienic connection)

Design

Model IPT-11 process pressure transmitter in intrinsically-safe version to ATEX (see data sheet PE 86.11) with flush diaphragm, G1 hygienic connection and integrated cooling element, case from electropolished stainless steel with display



Overview of all model 910.61 process adapters

Material

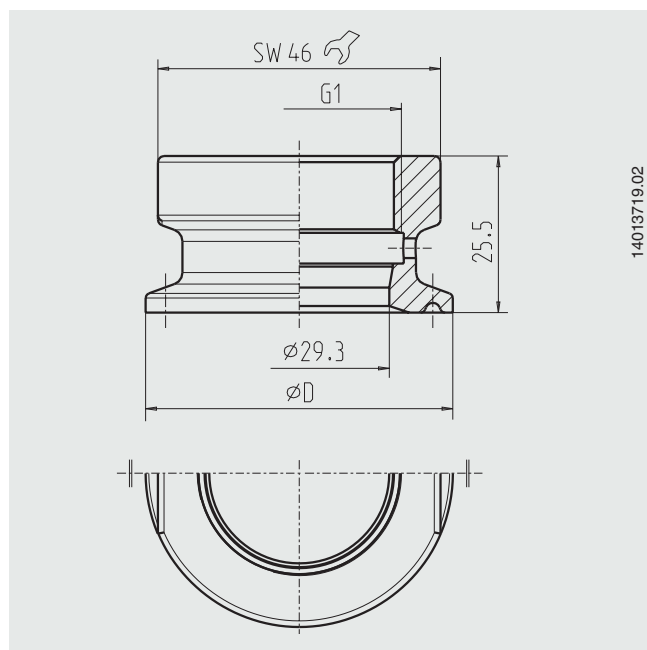
Stainless steel 1.4435 (316L); UNS S31603

Surface roughness of the wetted parts

Ra < 0.4 µm

Process connection	Size	Nominal pressure
Clamp connection per DIN 32676 for pipes per DIN 11866 row B or ISO 1127	DN 33.7, 42.4, 48.3, 60.3	PN 40
Clamp connection per DIN 32676 for pipes per DIN 11866 row C or ASME BPE	DN 1 ½", 2", 2 ½"	PN 40
Clamp connection for pipes per BS4825 Part 3 / O.D.-Tube	DN 1 ½", 2", 2 ½"	PN 40
Clamp connection per ISO 2852 for pipes per ISO 2037 and BS 4528 part 1	DN 33.7 - DN 51	PN 40
Clamp connection per DIN 32676 for pipes per DIN 11850	DN 32, 40, 50	PN 40
Thread per DIN 11851 with female union nut	DN 32, 40, 50	PN 25/40
Thread per SMS standard with female union nut	DN 1 ½", 2"	PN 40
Thread per IDF standard with female union nut	DN 1 ½", 2"	PN 40
Thread per APV-RJT standard with union nut	DN 1 ½", 2"	PN 40
VARIVENT® Form F (EHEDG)	Ø 50 mm	PN 25
VARIVENT® Form N (EHEDG)	Ø 68 mm	PN 25
DRD	Ø 65 mm	PN 40
NEUMO BioControl®	Size 50, 65, 80	PN 16
DIN 11864-1 Form A BS & GS (EHEDG) aseptic threaded connection	DN 32, 40, 50	PN 25/40
Aseptic flange connection DIN 11864-2 form A NF & BF (EHEDG)	DN 32, 40, 50	PN 25/40
Aseptic clamp connection DIN 11864-3 form A BKS & NKS (EHEDG)	DN 32, 40, 50	PN 25/40
Weld-on adapter (for welding to vessels)	Ø 50 mm	PN 40

Clamp connection process adapter



Type of process connection: Clamp connection per
DIN 32676

Pipe standard: Pipes per DIN 11866 row B or ISO 1127

DN	For pipe Outer Ø x wall thickness	PN	Dimensions in mm D	Order no.
25	33.7 x 2	40	50.5	14024493
32	42.4 x 2	40	64	14024574
40	48.3 x 2	40	64	14024575
50	60.3 x 2	40	77.5	14024587

Type of process connection: Clamp connection per
DIN 32676

Pipe standard: Pipes per DIN 11866 row C or ASME BPE

DN	For pipe Outer Ø x wall thickness	PN	Dimensions in mm D	Order no.
1 ½"	38.1 x 1.65	40	50.5	14024494
2"	50.8 x 1.65	40	64	14024576
2 ½"	50.8 x 1.65	40	77.5	14024588

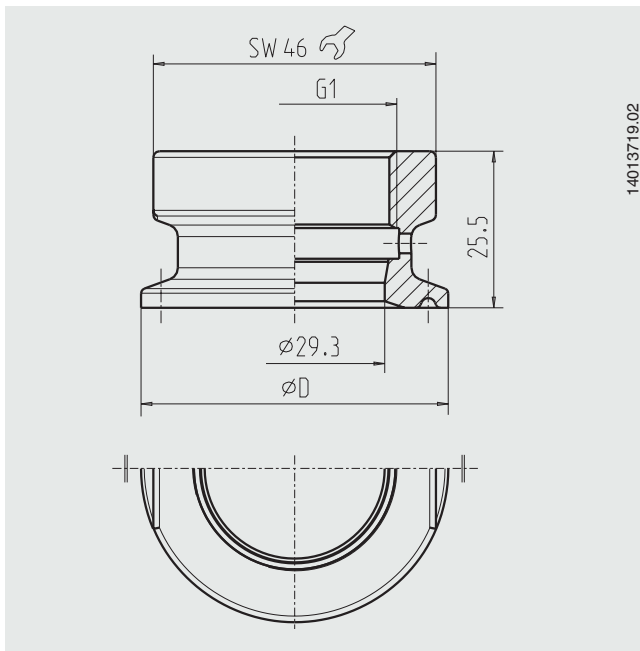
Type of process connection: Clamp connection per
DIN 32676

Pipe standard: Pipes per BS4825 part 3 and O.D.-Tube

DN	For pipe Outer Ø x wall thickness	PN	Dimensions in mm D	Order no.
1 ½"	38.1 x 1.6	40	50.5	14024552
2"	50.8 x 1.6	40	64	14024577
2 ½"	50.8 x 1.6	40	77.5	14024590

1) For maximum pressure range consider pressure rating of clamp.

Clamp connection process adapter



Type of process connection: Clamp connection per ISO 2852

Pipe standard: Pipes per ISO 2037 and BS 4825 part 1

DN	For pipe Outer Ø x wall thickness	PN 1)	Dimensions in mm D	Order no.
33.7	33.7 x 1.2	40	50.5	14024558
38	38 x 1.2	40	50.5	14024566
40	40 x 1.2	40	64	14024582
51	51 x 1.2	40	64	14024586
63.5	63.5 x 1.6	40	77.5	14024591

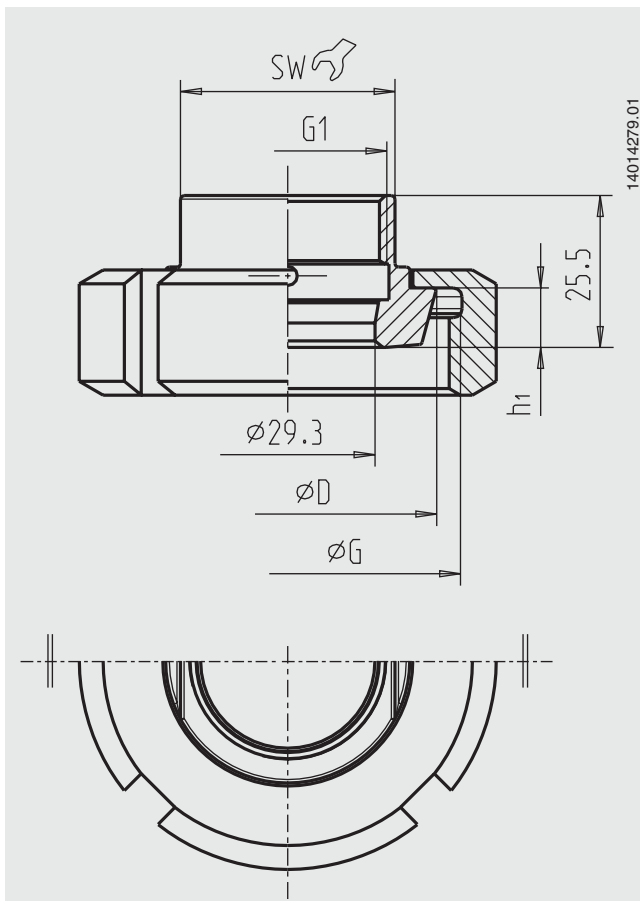
Type of process connection: Clamp connection per DIN 32676

Pipe standard: Pipes per DIN 11850

DN	For pipe Outer Ø x wall thickness	PN 1)	Dimensions in mm D	Order no.
32	34 x 1	40	50.5	14024555
40	40 x 1	40	50.5	14024572
50	52 x 1	40	64	14024584

1) For maximum pressure range consider pressure rating of clamp.

Threaded connection process adapter

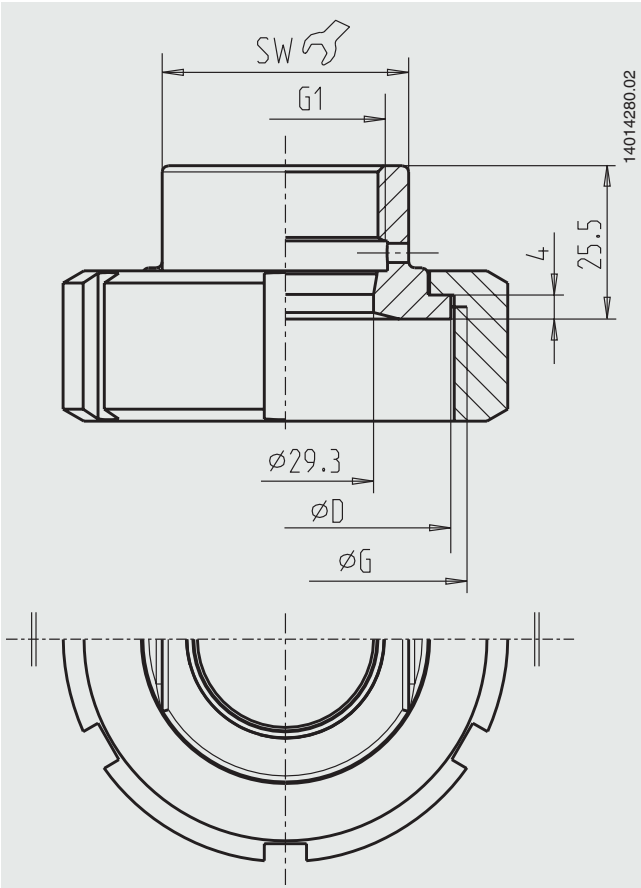


Type of process connection: Thread per DIN 11851 with female union nut

DN	For pipe Outer Ø x wall thickness	PN 1)	Dimensions in mm				Order no.
			D	G	h1	SW	
32	35 x 1.5	40	50	Rd58x1/6	10	36	14024465
40	41 x 1.5	40	56	Rd65x1/6	10	41	14024477
50	53 x 1.5	25	68.5	Rd78x1/6	11	55	14024487

1) Permissible pressure in bar; these pressures may only be applied when using suitable O-ring materials up to a temperature of -10 ... +140 °C.

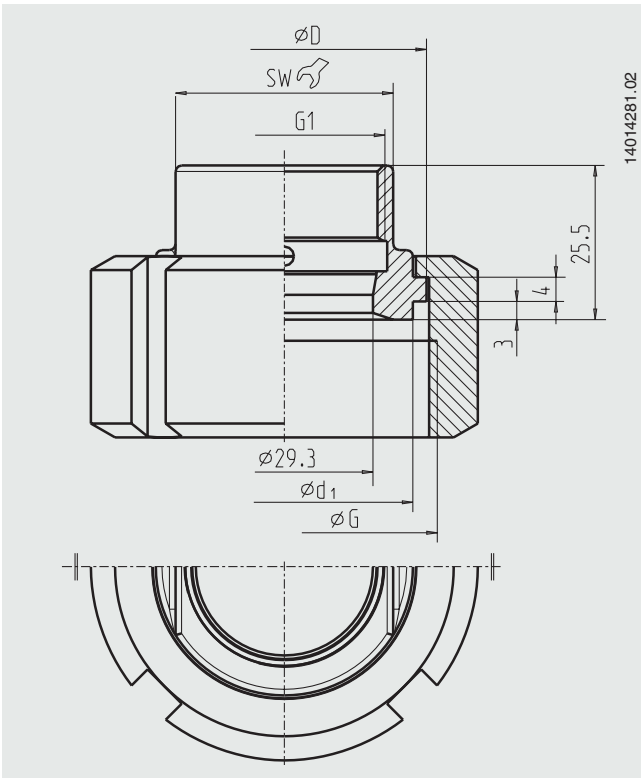
Threaded connection process adapter



Type of process connection: Thread per SMS standard with female union nut

DN	For pipe Outer \varnothing x wall thickness	PN 1)	Dimensions in mm			Order no.
			D	G	SW	
1 1/2"	38 x 1.2	40	55	Rd60x1/6	41	14024488
2"	51 x 1.2	40	65	Rd70x1/6	46	14024489

1) Permissible pressure in bar; these pressures may only be applied when using suitable O-ring materials up to a temperature of -10 ... +140 °C.

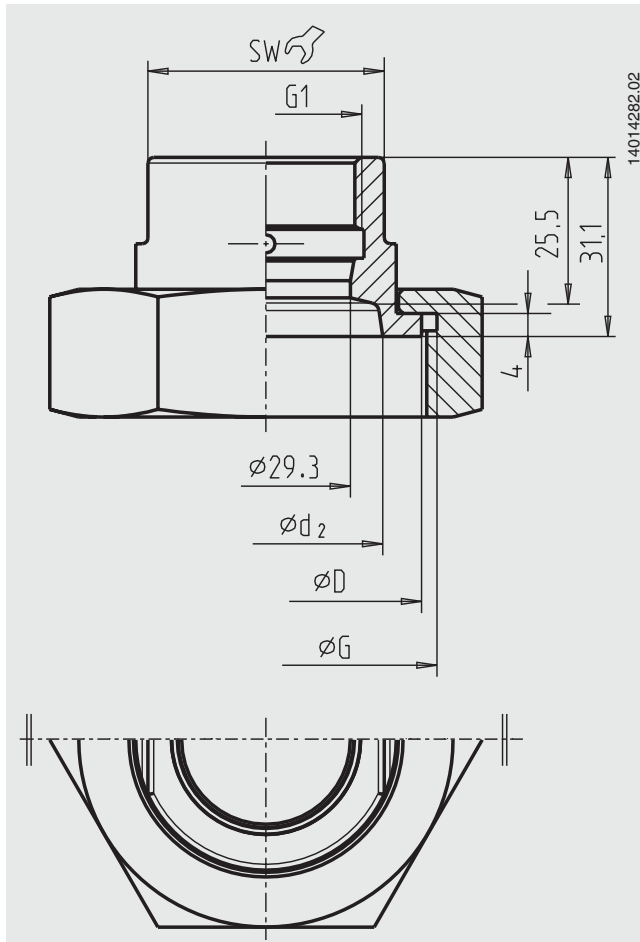


Type of process connection: Thread per IDF standard with female union nut

DN	For pipe Outer \varnothing x wall thickness	PN 1)	Dimensions in mm			Order no.	
			d1	G	D	SW	
1 1/2"	38.6 x 1.5	40	42.5	1 1/2" IDF	47	36	14024592
2"	51.6 x 1.5	40	56	2" IDF	60.5	46	14024593

1) Permissible pressure in bar; these pressures may only be applied when using suitable O-ring materials up to a temperature of -10 ... +140 °C.

Threaded connection process adapter



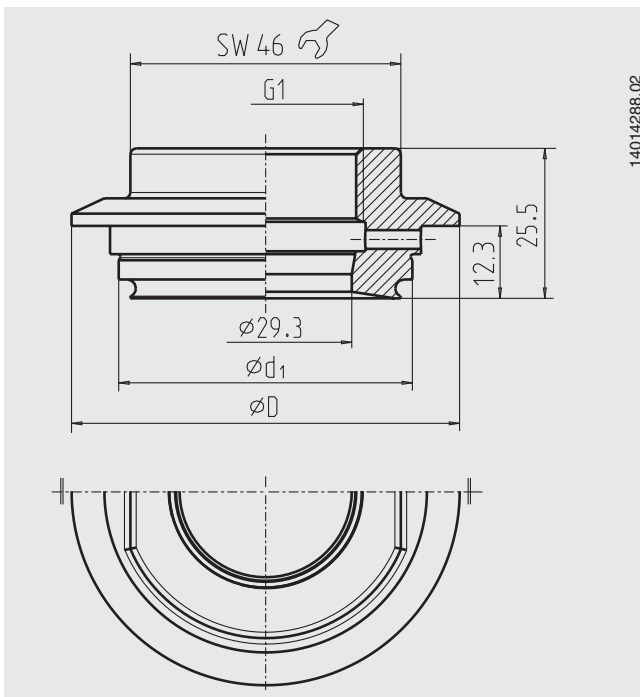
Type of process connection: Thread per APV-RJT standard with union nut

DN	For pipe Outer ϕ x wall thickness	PN 1)	Dimensions in mm			
			d ₂	D	G	SW
1 1/2"	38.1 x 1.6	40	40.5	54	2 5/16 x 8	41
2"	50.8 x 1.6	40	53.2	66.7	2 7/8 x 6	46

1) Permissible pressure in bar; these pressures may only be applied when using suitable O-ring materials up to a temperature of -10 ... +140 °C.

DN	Order no.
1 1/2"	14024490
2"	14024492

Process adapter VARIVENT®



Type of process connection: VARIVENT® Form F and VARIVENT® Form N

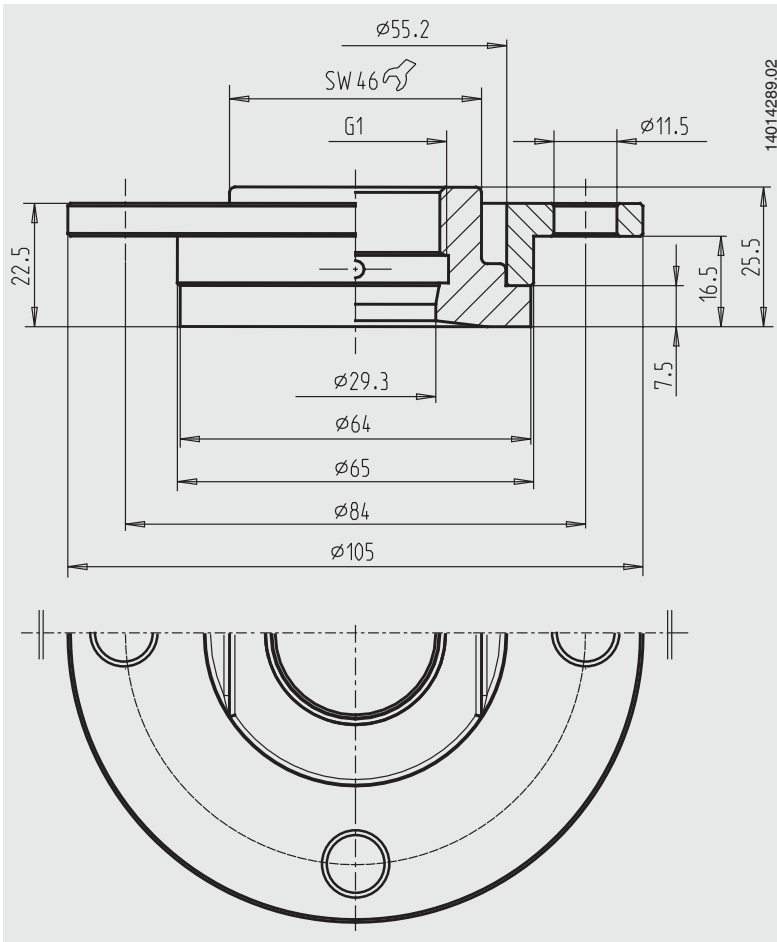
- Form F (mounting ϕ 50 mm, clamp ϕ 66 mm) for VARINLINE® Access Unit DN 25 and 1"
- Form N (mounting ϕ 68 mm, clamp ϕ 84 mm) for VARINLINE® Access Unit DN 40 - DN 125 and 1 1/2" - 4"

Case connection	PN 1)	Dimensions in mm		Order no.
		d ₁	D	
Form F	25	50	66	14024594
Form N	25	68	84	14024596

1) Pay attention to the pressure rating of the VARINLINE® access unit.

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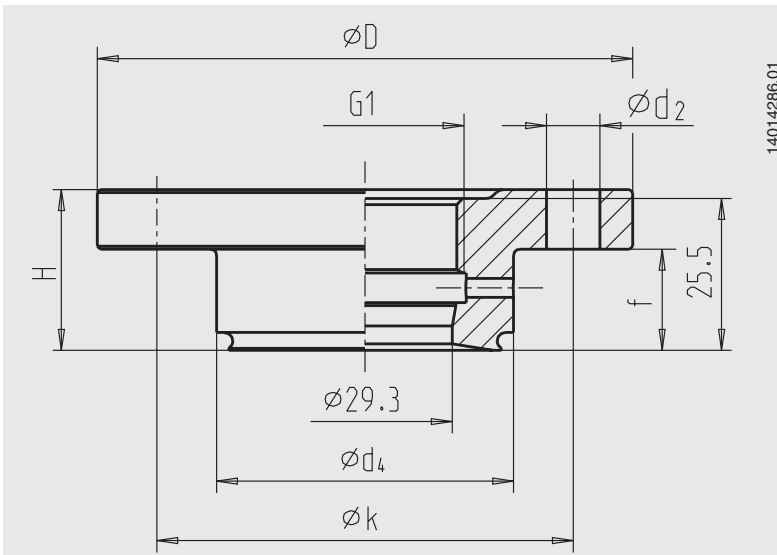
Process adapter DRD



Type of process connection: DRD connection
(for welding flange)

Connection	PN	Order no.
DRD	40	14024670

Process adapter NEUMO BioControl®



Type of process connection:
NEUMO BioControl® connection

Size	PN 1)	Dimensions in mm					
		d4	k	f	H	d2	D
Size 50	16	50	70	17	27	4 x 9	90
Size 65	16	68	95	17	27	4 x 9	120
Size 80	16	87.5	115	25	37	4 x 11	140

1) Permissible pressure in bar; these pressures may only be applied when using suitable O-ring materials up to a temperature of -10 ... +140 °C.

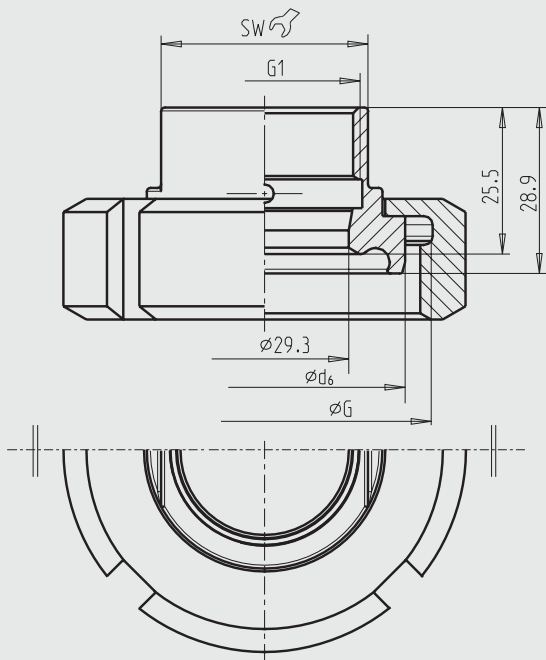
Size	Order no.
Size 50	14024633
Size 65	14024634
Size 80	14024635

Threaded connection process adapter

Type of process connection: Aseptic threaded connection DIN 11864-1 Form A (EHEDG), liner with union nut or threaded coupling with male thread

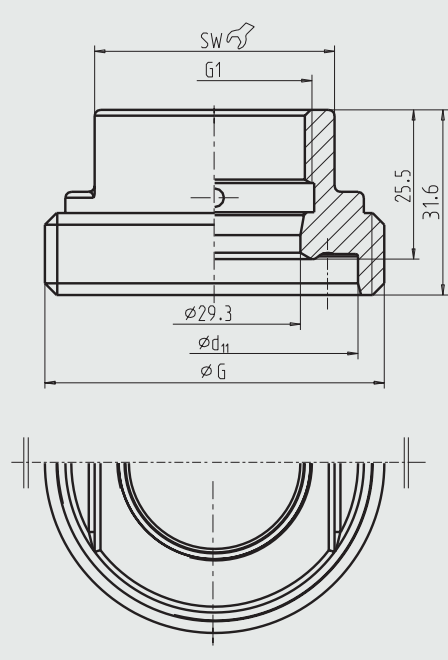
Pipe standard: Pipes per DIN 11866 row A or DIN 11850 row 2

DIN 11864-1 Form A BS (liner with union nut)



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DIN 11864-1 Form A GS (threaded coupling with male thread)



14014283.02

DN	For pipe Outer ϕ x wall thickness	PN 1)	Dimensions in mm			Order no.
			d_6	G	SW	
32	35 x 1.5	40	48.9	Rd58x1/6	36	14024636
40	41 x 1.5	40	54.9	Rd65x1/6	41	14024638
50	53 x 1.5	25	66.9	Rd78x1/6	55	14024641

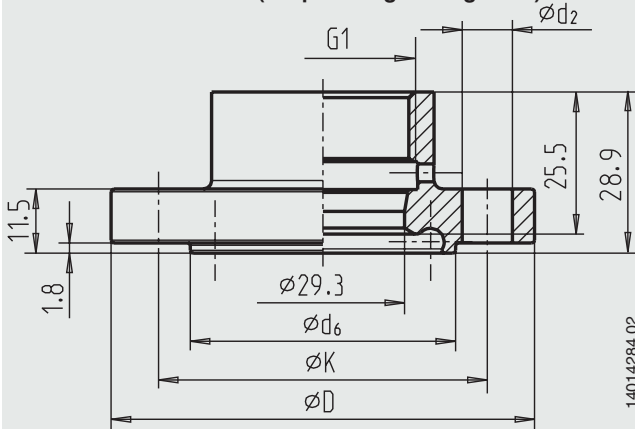
DN	For pipe Outer ϕ x wall thickness	PN 1)	Dimensions in mm			Order no.
			d_{11}	G	SW	
32	35 x 1.5	40	49	Rd58x1/6	41	14024637
40	41 x 1.5	40	55	Rd65x1/6	50	14024639
50	53 x 1.5	25	67	Rd78x1/6	60	14024643

Flange connection process adapter

Type of process connection: Aseptic threaded connection DIN 11864-2 Form A (EHEDG), aseptic flange with groove or notch

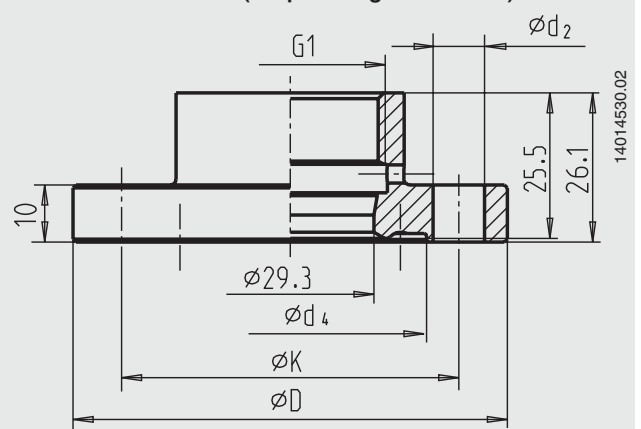
Pipe standard: Pipes per DIN 11866 row A or DIN 11850 row 2

DIN 11864-2 Form A NF (aseptic flange with groove)



14014284.02

DIN 11864-1 Form A BF (aseptic flange with notch)



14014530.02

DN	For pipe Outer ϕ x wall thickness	PN 1)	Dimensions in mm				Order no.
			d_6	d_2	D	K	
32	35 x 1.5	40	47.6	4 x ϕ 9	76	59	14024654
40	41 x 1.5	40	53.6	4 x ϕ 9	82	65	14024657
50	53 x 1.5	25	65.6	4 x ϕ 9	94	77	14024660

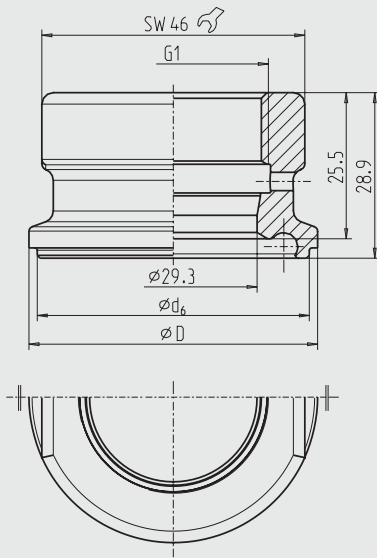
DN	For pipe Outer ϕ x wall thickness	PN 1)	Dimensions in mm				Order no.
			d_4	d_2	D	K	
32	35 x 1.5	40	47.7	4 x ϕ 9	76	59	14024645
40	41 x 1.5	40	53.7	4 x ϕ 9	82	65	14024655
50	53 x 1.5	25	65.7	4 x ϕ 9	94	77	14024659

1) Permissible pressure in bar; these pressures may only be applied when using suitable O-ring materials up to a temperature of -10 ... +140 °C.

Clamp connection process adapter

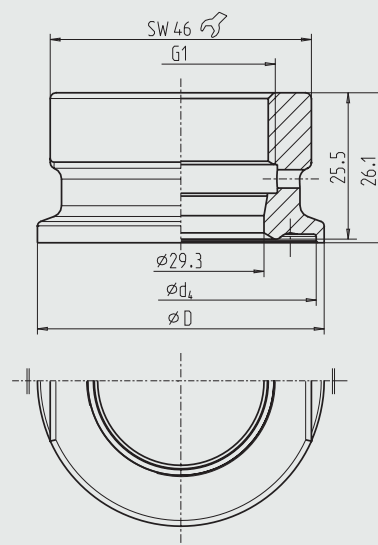
Type of process connection: Aseptic threaded connection DIN 11864-3 Form A (EHEDG), clamp with groove or notch
Rohrnorm: Rohre nach DIN 11866 row A or DIN 11850 row 2

DIN 11864-3 form A NKS (clamp with groove)



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DIN 11864-3 form A BKS (clamp with notch)



14014531.02

DN	For pipe Outer ϕ x wall thickness	PN 1)	Dimensions in mm		Order no.
			d_6	D	
32	35 x 1.5	40	47.6	50.5	14024663
40	41 x 1.5	40	53.6	64	14024666
50	53 x 1.5	25	65.6	77.5	14024668

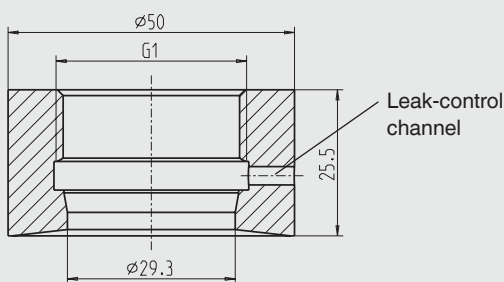
DN	For pipe Outer ϕ x wall thickness	PN 1)	Dimensions in mm		Order no.
			d_4	D	
32	35 x 1.5	40	47.7	50.5	14024661
40	41 x 1.5	40	53.7	64	14024665
50	53 x 1.5	25	65.7	77.5	14024667

1) Permissible pressure in bar; these pressures may only be applied when using suitable O-ring materials up to a temperature of -10 ... +140 °C.

Weld-on process adapter

Type of process connection: Weld-in connection with or without leak-control channel, diameter 50 mm

Weld-on adapter



14024252.01

Design	PN	Order no.
Weld-in connection with leak-control channel	40	14070974
Weld-in connection without leak-control channel	40	14070973

Ordering information

To order the described product the given order number is sufficient.

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