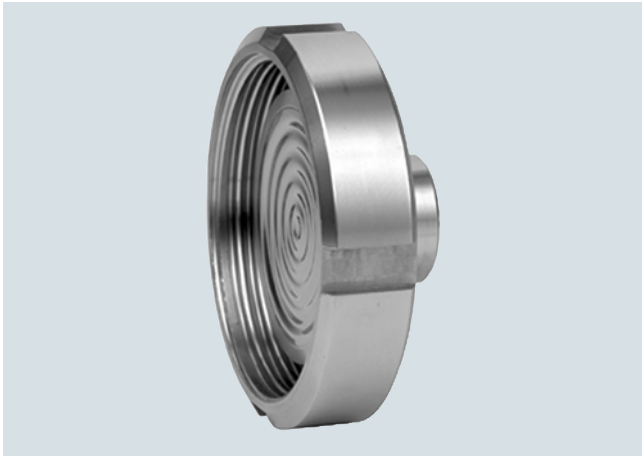


Overview



Quick-release diaphragm seals, to DIN 11851 with slotted union nut



Quick-release diaphragm seals, with clamp connection

Quick-release diaphragm seals are available for the following SITRANS P pressure transmitter series:

- For pressure: P300, DS III with HART, DS III with PROFIBUS PA and DS III with FOUNDATION Fieldbus
- For differential pressure and flow: P500, DS III with HART, DS III with PROFIBUS PA and DS III with FOUNDATION Fieldbus
- The quick-release remote seals are common designs in the food industry. Their design means that the measured medium cannot accumulate in dead volumes. The quick-release clamp present on the remote seal means that quick dismantling is possible for cleaning.

Technical specifications

Quick-release diaphragm seal

Connection, nominal diameter	Nominal pressure
<ul style="list-style-type: none"> • Standard to DIN 11851 with nut <ul style="list-style-type: none"> - DN 25/32/40 - DN 50/65/80 	PN 40 PN 25
<ul style="list-style-type: none"> • Standard to DIN 11851 with thread <ul style="list-style-type: none"> - DN 25/32/40 - DN 50/65/80 	PN 40 PN 25
<ul style="list-style-type: none"> • Standard clamp ISO 2852 <ul style="list-style-type: none"> - DN 25/38/51 - DN 63.5/76.1 	PN 16 PN 10

- Standard clamp DIN 32676, row C Tri-clamp
 - 1 inch, 1½ inch
 - 2 inch, 2½ inch
 - 3 inch

PN 25
 PN 16
 PN 10

- Standard clamp DIN 32676, row A metric
 - DN 25/32/40
 - DN 50
 - DN 65

PN 25
 PN 16
 PN 10

- Varivent
 - DN 25/32/40/50

PN 25

- DRD-flange
 - DN 50

PN 40

Sealing surface

- For stainless steel, mat. No. 1.4404/316L

To EN 1092-1, form B1 or ASME B 16.5RF 125 ... 250 AA

- For the other materials

To EN 1092-1, form B2 or ASME B16.5 RFSF

Materials

- Main body
- Wetted parts
- Capillary

Stainless steel 316L

Stainless steel 316L

Stainless steel, mat. No. 1.4571/316Ti

- Sheath

Spiral protective tube made of stainless steel, mat. No. 1.4301/316

Maximum pressure

See above and the technical data of the pressure transmitter

Tube length

Without tube

Capillary

- Length

Max. 10 m (32.8 ft), longer lengths on request

- Internal diameter

2 mm (0.079 inch)

- Minimum bending radius

150 mm (5.9 inch)

- Sheath

Spiral protective tube made of stainless steel, mat. No. 1.4404/316L

Filling liquid

Food oil (FDA listed)

Permissible ambient temperature

Dependent on the pressure transmitter and the filling liquid of the remote seal

More information can be found in the technical data of the pressure transmitters and in the section "Technical data of filling liquid" in the Technical description to the remote seals

Weight

Approx. 4 kg (8.82 lb)

Certificates and approvals

Classification according to pressure equipment directive (DGRL 2014/68/EU)

For gases of fluid group 1 and liquids of fluid group 1; complies with requirements of article 4, paragraph 3 (sound engineering practice)

EHEDG

Complies with EHEDG recommendations

Pressure Measurement

Remote seals for pressure transmitters
SITRANS P320/P420

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Quick-release diaphragm seals

Selection and Ordering data

Article No.

Order code

Quick release diaphragm seal

Flange type design, with flexible capillary tube or directly connected to a

- SITRANS P320/P420 transmitter for gauge pressure or absolute pressure (only together with negative pressure service), 7MF03../7MF04.. order separately
Scope of delivery: 1 off
- SITRANS P320/P420 transmitter for differential pressure and flow, 7MF03../7MF04.. order separately
Scope of delivery: 1 off

7MF0830 -

7MF0832 -

- 0 A 0

Click on the Article No. for the online configuration in the PIA Life Cycle Portal.

Nominal diameter Nominal pressure

Connection standard DIN 11851 with nut

DN 25	PN 40	0BM
DN 32	PN 40	0CD
DN 40	PN 40	0DM
DN 50	PN 25	0EK
DN 65	PN 25	0FL
DN 80	PN 25	0GK

Connection standard DIN 11851 with thread

DN 25	PN 40	1BM
DN 32	PN 40	1CD
DN 40	PN 40	1DM
DN 50	PN 25	1EK
DN 65	PN 25	1FL
DN 80	PN 25	1GK

Connection standard Clamp ISO 2852

DN 25	PN 16	2BK
DN 38	PN 16	2CQ
DN 51	PN 16	2FH
DN 63.5	PN 10	2FJ
DN 76.1	PN 10	2GJ

Connection standard Clamp DIN 32676, row C Tri-clamp

DN 1"	PN 25	3KV
DN 1½"	PN 25	3LV
DN 2"	PN 16	3MV
DN 2½"	PN 16	3NV
DN 3"	PN 10	3PV

Connection standard Clamp DIN 32676, row A metric

DN 25	PN 25	4BL
DN 32	PN 25	4CC
DN 40	PN 25	4DL
DN 50	PN 16	4EJ
DN 65	PN 10	4FK

Varivent

DN 25/32	PN 25	5CL
DN 40/50	PN 25	5DK

DRD-flange

DN 50	PN 40	6EM
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Other version
Add Order code and plain text

9AA H1Y

Selection and Ordering data

Article No.

Order code

Quick release diaphragm seal

Flange type design, with flexible capillary tube or directly connected to a

- SITRANS P320/P420 transmitter for gauge pressure or absolute pressure (only together with negative pressure service), 7MF03../7MF04.. order separately
Scope of delivery: 1 off
- SITRANS P320/P420 transmitter for differential pressure and flow, 7MF03../7MF04.. order separately
Scope of delivery: 1 off

7MF0830 -

7MF0832 -

- 0 A 0

Transmitter connection

Without capillary tube, direct mount straight connection (for gauge pressure)

Connection via capillary tube

Length of capillary

1 m	10
1,6 m	11
2 m	12
2,5 m	13
3 m	14
4 m	15
5 m	16
6 m	17
7 m	18
8 m	20
9 m	21
10 m	22

Other version
Add Order code and plain text

98 L1Y

Filling liquid

Food-grade oil (FDA listed)

Other version
Add Order code and plain text

E

Z P1Y

Selection and Ordering data	Order code	Selection and Ordering data	Order code
Further designs		Further designs	
Add "-Z" to Article No. and specify Order code.		Add "-Z" to Article No. and specify Order code.	
Factory certificates		<u>PVC protective tube</u>	
Quality inspection certificate (Five-step factory calibration) to IEC 60770-2	C11	1 m	S70
Inspection certificate to EN 10204-3.1 - material of body and wetted parts	C12	1,6 m	S71
Inspection certificate (EN 10204-3.1) - PMI test of pressure containing and wetted parts	C15	2 m	S72
Certificate of FDA-approved fill oil (to EN10204-2.2)	C17	2,5 m	S73
Functional safety (SIL2/3) Devices suitable for use according to IEC 61508 and IEC 61511 (Includes SIL conformity declaration)	C20	3 m	S74
		4 m	S75
		5 m	S76
		6 m	S77
		7 m	S78
		8 m	S79
		9 m	S80
		10 m	S81
Negative pressure services		Customer-specific tube length	
Negative pressure service (for gauge and absolute pressure transmitters)	D81	Customer-specific tube length (specify in plain text)	Y44
Negative pressure service (for differential pressure transmitters)	D83	Specification of process conditions¹⁾	
Extended negative pressure service (for gauge and absolute pressure transmitters)	D85	Ambient temperature range	
Extended negative pressure service (for differential pressure transmitters)	D88	• -10 ... +50 °C (14 ... +122 °F) preset	D66
		• -40 ... +50 °C (-40 ... +122 °F)	D67
		• -10 ... +85 °C (14 ... +185 °F)	D68
		Process temperature min. ... °C/(°F)/max. ... °C/(°F)	Y50
Capillary connection (only for 7MF0830)			
Single-side mounted at differential pressure transmitters at high-side	S03		
Single-side mounted at differential pressure transmitters at low-side	S04		
Cooling element	S08		
Capillary coating			
<u>PE protective tube</u>			
1 m	S10		
1,6 m	S11		
2 m	S12		
2,5 m	S13		
3 m	S14		
4 m	S15		
5 m	S16		
6 m	S17		
7 m	S18		
8 m	S19		
9 m	S20		
10 m	S21		
<u>PTFE protective tube</u>			
1 m	S40		
1,6 m	S41		
2 m	S42		
2,5 m	S43		
3 m	S44		
4 m	S45		
5 m	S46		
6 m	S47		
7 m	S48		
8 m	S49		
9 m	S50		
10 m	S51		

¹⁾ See also "Specification of process conditions for selection and ordering data", page 1/338.

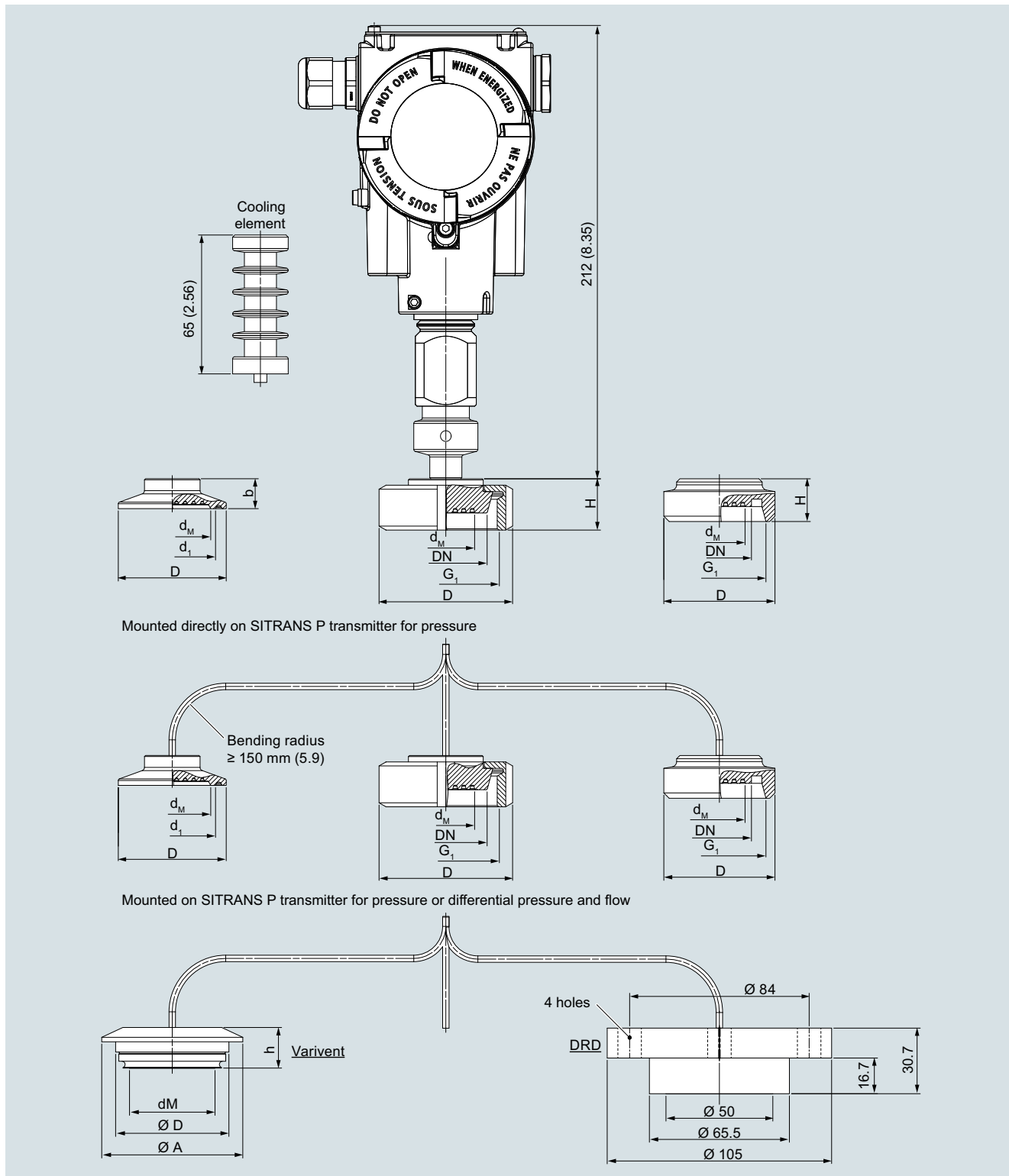
Pressure Measurement

Remote seals for pressure transmitters
SITRANS P320/P420

Quick-release diaphragm seals

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Dimensional drawings



Quick-release diaphragm seal, dimensions in mm (inch)

Quick-release diaphragm seals

Connection to DIN 11851 with slotted union nut

Nominal diameter	Ø d _M mm	Ø D mm	H mm	G ₁ mm
DN 25	25	63	36	Rd 52x1/6
DN 32	32	70	36	Rd 52x1/6
DN 40	40	78	36	Rd 65x1/6
DN 50	52	112	36	Rd 78x1/6
DN 65	65	112	36	Rd 95x1/6
DN 80	72	127	36	Rd 110x1/6

Connection to DIN 11851 with threaded socket

Nominal diameter	Ø d _M mm	H mm	G ₁ mm
DN 25	25	36	Rd 52x1/6
DN 32	32	36	Rd 52x1/6
DN 40	40	36	Rd 65x1/6
DN 50	52	36	Rd 78x1/6
DN 65	65	36	Rd 95x1/6
DN 80	72	36	Rd 110x1/6

Clamp connection to ISO 2852 for pipes to ISO 2037

Nominal diameter	Nominal pressure	d _M mm	d ₁ mm	b mm	D mm
DN 25	PN 16	22.6	43.5	14	50.5
DN 38	PN 16	34	43.5	12	50.5
DN 51	PN 16	46	56.5	14	64
DN 63.5	PN 10	51	70.5	14	77.5
DN 76.1	PN 10	65	83.5	14	91

Clamp connection to DIN 32676 row C (Tri-Clamp) for pipes to ASME BPE

Nominal diameter	Nominal pressure	d _M mm (inch)	d ₁ mm (inch)	b mm (inch)	D mm (inch)
1"	PN 25	22.6 (0.89)	43.5 (1.71)	14 (0.55)	50.5 (1.99)
1½"	PN 25	34 (1.34)	43.5 (1.71)	12 (0.47)	50.5 (1.99)
2"	PN 16	46 (1.81)	56.5 (2.22)	14 (0.55)	64 (2.52)
2½"	PN 16	51 (2.01)	70.5 (2.78)	14 (0.55)	77.5 (3.05)
3"	PN 16	65 (2.56)	83.5 (3.29)	14 (0.55)	91 (3.58)

Clamp connection to DIN 32676 row A (metric) for pipes to EN 10357 (DIN 11850)

Nominal diameter	Nominal pressure	Ø d _M mm	d ₁ mm	b mm	D mm
DN 25	PN 25	22.6	43.5	14	50.5
DN 32	PN 25	27	43.5	12	50.5
DN 40	PN 25	34	43.5	12	50.5
DN 50	PN 16	46	56.5	14	64
DN 65	PN 16	65	83.5	14	91

Varivent

Nominal diameter	d _M mm (inch)	A mm (inch)	D mm (inch)	h mm (inch)
DN 25, DN 32, 1", 1¼"	40 (1.57)	66 (2.6)	50 (1.97)	19 (0.75)
DN 40 ... 125, 1 ½" ... 6"	58 (2.28)	84 (3.331)	68 (2.68)	19 (0.75)

d_M Effective diaphragm diameter