

## Sanitary Diaphragm Seal Series 32X

### FEATURES

- Stainless steel flush welded diaphragm seals
- Rupture protected due to embedded convolution behind the diaphragm
- Helium leak tested
- Minimized temperature errors
- Suitable for CIP and SIP

### TYPICAL USES

- Food and dairy processing
- Breweries, distilleries, wineries and citrus juice production
- Pharmaceuticals
- Personal hygiene and cosmetics industry
- Biotechnology
- Filtration


**SEAL 32X**

### SPECIFICATIONS

Diaphragm Seal type:	322: Tri-Clamp (DIN 32676-A/B/C) 323: VARIVENT <sup>®</sup> 324: Milk coupling (DIN 11851) 326: SMS 1145 327: RTJ APV (BS 4825-5) 328: IDF (BS 4825-4)
Process Connection:	See all available sizes at page 2 All usual sizes available
Instrument Connection:	G 1/4 (standard) or G 1/2 Female INA Adapter from G 1/2 to G 1/4 Others on request
Pressure Rating: (MAWP)	Find the maximal allowable working pressure at page 2
Accuracy Effect:	+ 0,5% typical
Surface Roughness of diaphragm:	optional: Ra <0,38 µm (15 µin) electro polished
Fill Fluid:	Glycerine, Silicone, Halocarbon <sup>®</sup> , Neobee <sup>®</sup> M20 others available on request

### WETTED COMPONENTS

Diaphragm:	Stainless steel 316L (1.4435) Hastelloy C-276 (2.4819) others on request
Body:	Stainless steel 316L (1.4404) Hastelloy C-276 (2.4819)

### NON-WETTED COMPONENTS

Nut:	Stainless steel 304 (1.4301)
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### MIN./MAX. TEMPERATURE LIMITS

Find the maximal allowable working temperature at page 3

### KEY BENEFITS

- Can be mounted to gauges, transmitters and switches
- No dead space
- Accessories attachable
- Flush diaphragm eliminates clogging
- Minimal fill volume reduces temperature error

### RECOMMENDED INSTRUMENTS

Mechanical:	T5500, Unigauge 1009
Transmitter:	E2-Series
Switch:	A-Series

### RECOMMENDED ACCESSORIES

Direct Reading:	Cooling tower for lowering high process temperatures
Remote Reading:	Capillary Line for remote places and lowering high process temperatures

## Sanitary Diaphragm Seal Series 32X

ORDERING CODE		EXAMPLE:	S15	322	S	51T	XNM
<b>Process Connection Size</b>		<b>MAWP</b>					
<b>Tri-Clamp® (DIN 32676-A compatible with pipe spec DIN 11850/10357) only available for model code 322</b>							
SD25	DN25 Tri-clamp®						
SD40	DN40 Tri-clamp®						
SD50	DN50 Tri-clamp®	limited by clamp					
SD80	DN80 Tri-clamp®						
<b>Tri-Clamp® (DIN 32676-B / ISO 2852 compatible with pipe spec ISO 1127) only available for model code 322</b>							
S10	DN25 Tri-clamp®						
S15	DN40 Tri-clamp®		S15				
S20	DN50 Tri-clamp®	limited by clamp					
S30	DN80 Tri-clamp®						
S40	DN100 Tri-clamp®						
<b>Tri-Clamp® (DIN 32676-C compatible with pipe spec BS 4825, ASME BPE, ISO 2037 and O.D. tube) only available for model code 322</b>							
S75	3/4" Tri-clamp®						
S10	1" Tri-clamp®						
S15	1-1/2" Tri-clamp®						
S20	2" Tri-clamp®	limited by clamp					
S25	2-1/2" Tri-clamp®						
S30	3" Tri-clamp®						
S40	4" Tri-clamp®						
<b>VARIVENT® only available for model code 323</b>							
VAF	VARIVENT® Form F	PN40					
VAN	VARIVENT® Form N	PN40					
<b>Milk coupling (DIN 11851) only available for model code 324</b>							
MD25	Milk coupling DN 25	PN40					
MD32	Milk coupling DN 32	PN40					
MD40	Milk coupling DN 40	PN40					
MD50	Milk coupling DN 50	PN25					
MD80	Milk coupling DN 80	PN25					
MM40	Milk coupling DN 40 male	PN40					
MM50	Milk coupling DN 50 male	PN25					
<b>SMS 1145 only available for model code 326</b>							
SU10	SMS union 1"	PN40					
SU15	SMS union 1-1/2"	PN40					
SU20	SMS union 2"	PN40					
SU25	SMS union 2-1/2"	PN25					
SU30	SMS union 3"	PN25					
SM15	SMS union 1-1/2" male	PN40					
SM20	SMS union 2" male	PN40					
<b>RTJ APV (BS 4825-5) only available for model code 327</b>							
RJ10	RJT APV 1"	PN40					
RJ15	RJT APV 1-1/2"	PN40					
RJ20	RJT APV 2"	PN40					
RJ25	RJT APV 2-1/2"	PN25					
RJ30	RJT APV 3"	PN25					
<b>IDF (BS 4825-4) only available for model code 328</b>							
IC10	1" IDF coupling nut	PN40					
IC15	1-1/2" IDF coupling nut	PN40					
IC20	2" IDF coupling nut	PN40					
IC25	2-1/2" IDF coupling nut	PN25					
IC30	3" IDF coupling nut	PN25					



**Sanitary Diaphragm Seal  
Series 32X**

<b>ORDERING CODE</b>		<b>EXAMPLE:</b>	<b>S15</b>	<b>322</b>	<b>S</b>	<b>51T</b>	<b>XNM</b>
<b>Model</b>							
322	Hygienic diaphragm seal type "Tri-Clamp"			322			
323	Hygienic diaphragm seal type "VARIVENT <sup>®</sup> "						
324	Hygienic diaphragm seal type "Milk coupling DIN 11851"						
326	Hygienic diaphragm seal type "SMS 1145"						
327	Hygienic diaphragm seal type "RTJ APV (BS 4825-5)"						
328	Hygienic diaphragm seal type "IDF (BS 4825-4)"						
<b>Diaphragm and Wetted Parts Material</b>							
S	Body Stainless steel 316L (1.4404) and diaphragm 316L (1.4435)				S		
H	Hastelloy <sup>®</sup> C-276 (2.4819)						
O	other Materials (on request)						
<b>Instrument Connection Size</b>							
13T	G 1/4 Female						
51T	G 1/2 Female <sup>1)</sup>					51T	
INA	Adapter from G 1/2 to G 1/4						
<i>1) Please contact sales department for further details</i>							
<b>Options (If choosing an option(s) must include a "X")</b>							
			<b>Max. Allowable Process Temperatur:</b>		<b>Application:</b>		
CF	Halocarbon <sup>®</sup> 4.2		-57 to 200 °C	-70 to 300 °F	Inert/Oxygen		
CG	Glycerine (1)		-18 to 204 °C	0 to 400 °F	Food		
CK	Silicone oil 50 cSt (2)		-40 to 260 °C	-40 to 500 °F	General purpose		
DJ	Silicone oil 10 cSt		-40 to 260 °C	-40 to 500 °F	Fast response time		
FJ	Distilled water (1)		4 to 85 °C	40 to 185 °F	Food & Beverage		
GQ	White oil (silicone free)		-12 to 204 °C	10 to 400 °F	Food		
NM	Neobee <sup>®</sup> M20		-15 to 204 °C	5 to 400 °F	Food & Pharma		
(1) Not available for compound or vacuum pressure applications							
(2) Only suitable for capillary systems ≤ 3 m (10 ft)							
<b>Nut Material</b>							
YW	Stainless steel 316L (1.4435)						
<b>Cleaning</b>							
6W	Cleaned for oxidizing processes other than oxygen						
YF	Cleaned silicone free (not available for silicone filling)						
<b>Connection Surface</b>							
BP	Electro polished wetted parts						
<b>Tagging</b>							
NH	Stainless steel tag, wired						
NH1	Stainless steel tag, extra large and wired						
NN	Paper tag, bonded						
<b>Testing/Certificates</b>							
CD2	Material test report according to EN 10204 / 2.2						
C3	Material report according to EN 10204 /3.1						
MQ	Positive Material Identification (PMI)						

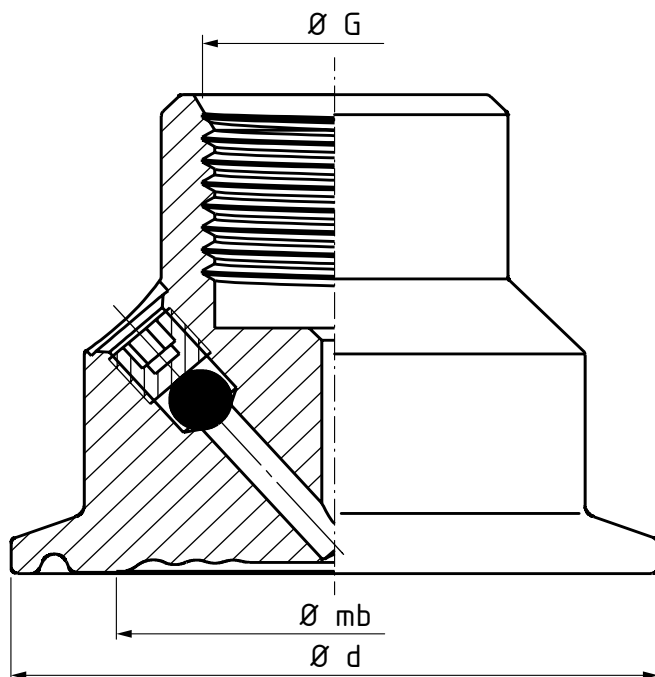


## Sanitary Diaphragm Seal Series 322 "Tri Clamp"

### DIMENSIONS IN MM [INCH]

For reference only, consult Ashcroft for specific dimensional drawings

### DIAPHRAGM SEAL 322



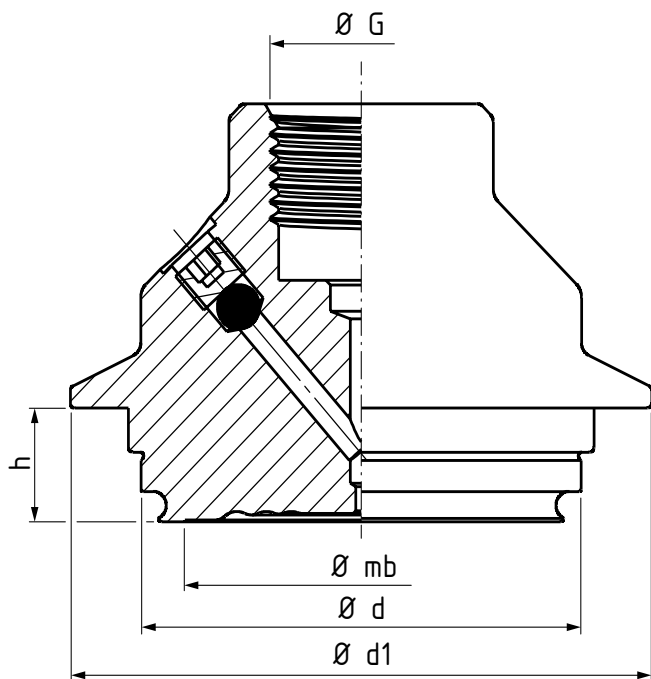
TRI-CLAMP BS4825 - ISO 1127 AND ASME-BPE					
CON. SIZE	CODE	Ød	Ømb	G	WEIGHT KG
1/2-3/4"	S75	25 [0,98]	17 [0,67]	G 1/4	0,2
1"	S10	50,5 [1,99]	23 [0,91]		0,3
1,5"	S15	50,5 [1,99]	34 [1,34]		0,3
2"	S20	64 [2,52]	46 [1,81]		0,5
2,5"	S25	77,5 [3,05]	58 [2,28]		0,6
3"	S30	91 [3,58]	69 [2,72]		0,9
4"	S40	119 [4,69]	95 [3,74]		1,5



## Sanitary Diaphragm Seal Series 323 "VARIVENT®"

**DIMENSIONS IN MM [INCH]**

For reference only, consult Ashcroft for specific dimensional drawings

**DIAPHRAGM SEAL 323**

**VARIVENT® COMPATIBLE CONNECTION  
(TRADEMARK OF TUCHENHAGEN GMBH)**

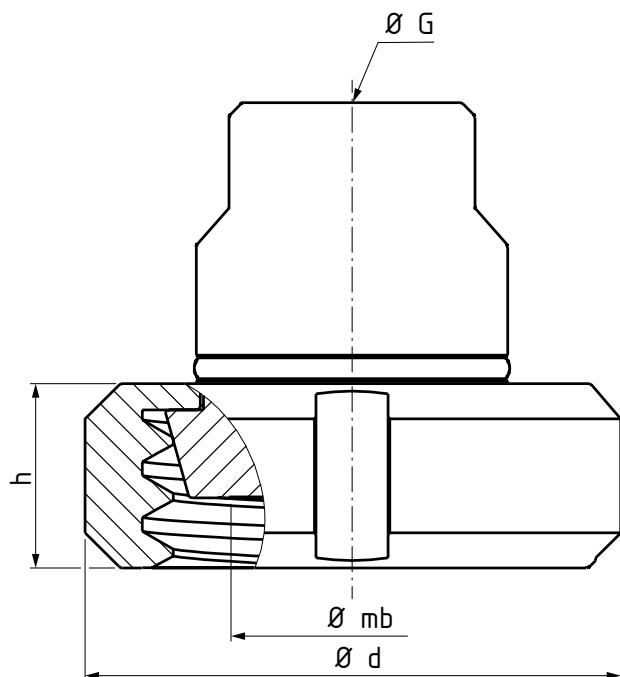
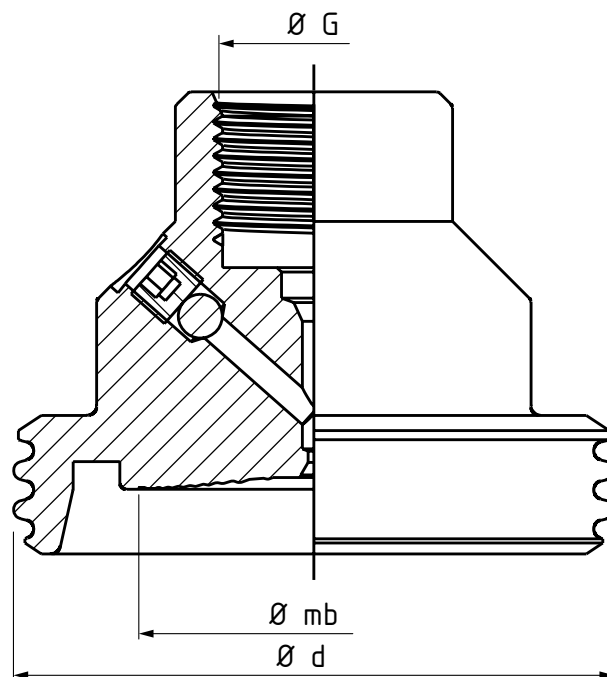
CON. TYPE	CODE	$\varnothing d1$	$\varnothing d$	h	$\varnothing mb$	G	WEIGHT KG
VARIVENT® FORM F	VAF	66 [2,6]	50 [1,97]	12,3 [0,48]	40 [1,57]	G 1/2 or INA other connection using adapter from G 1/2	0,5
VARIVENT® FORM N	VAN	84 [3,31]	68 [2,68]		57 [2,24]		1,1



## Sanitary Diaphragm Seal Series 324 "Milk coupling (DIN 11851)"

**DIMENSIONS IN MM [INCH]**

For reference only, consult Ashcroft for specific dimensional drawings

**DIAPHRAGM SEAL 324 - FEMALE**

**DIAPHRAGM SEAL 324 - MALE**

**MILK COUPLING (DIN 11851)**

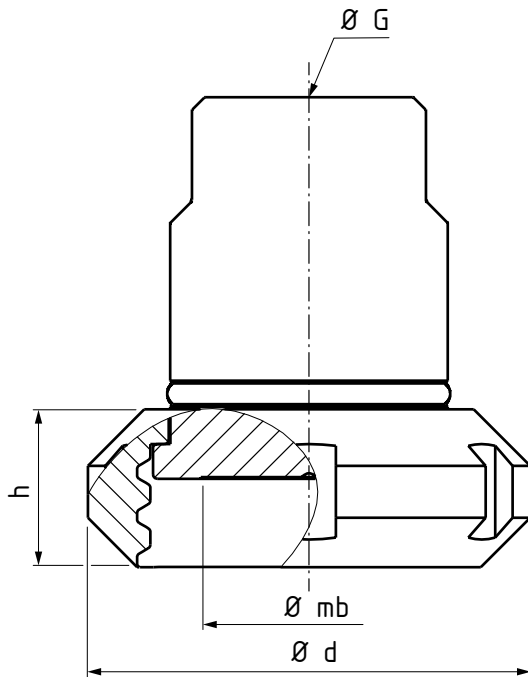
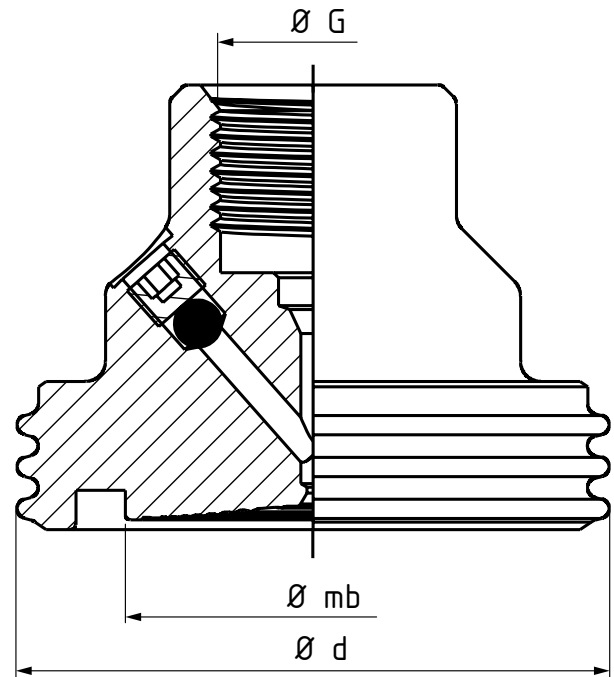
CON. TYPE	CON. SIZE	CODE	Ød	Ømb	h	G	WEIGHT KG
FEMALE	DN25	DN25	63 [2,48]	30 [1,18]	21 [0,83]	G 1/2 or INA other connection using adapter from G 1/2	0,5
	DN32	DN32	70 [2,76]	36 [1,42]			0,6
	DN40	DN40	78 [3,07]	40 [1,58]			0,7
	DN50	DN50	92 [3,62]	50 [1,97]	22 [0,87]		1,1
	DN65	DN65	112 [4,41]	52 [2,05]	25 [0,98]		1,5
	DN80	DN80	127 [5]	72 [2,83]	29 [1,14]		2
MALE	DN40	MM40	65 [2,56]	38 [1,5]	-		0,5
	DN50	MM50	78 [3,07]	50 [1,97]	-		0,7



## Sanitary Diaphragm Seal Series 326 "SMS 1145"

**DIMENSIONS IN MM [INCH]**

For reference only, consult Ashcroft for specific dimensional drawings

**DIAPHRAGM SEAL 326 - FEMALE**

**DIAPHRAGM SEAL 326 - MALE**

**SMS 1145**

CON. TYPE	CON. SIZE	CODE	Ød	Ømb	h	G	WEIGHT KG
FEMALE	1"	SU10	51 [2,01]	25 [0,98]	19 [0,75]	G 1/2 or INA other connection using adapter from G 1/2	0,3
	1,5"	SU15	74 [2,91]	36 [1,42]	23 [0,91]		0,7
	2"	SU20	84 [3,31]	48 [1,89]	24 [0,94]		0,9
	2,5"	SU25	100 [3,94]	52 [2,05]	28 [1,1]		1,3
	3"	SU30	114 [4,49]	72 [2,83]	31 [1,22]		2
MALE	1,5"	SM15	60 [2,36]	34 [1,34]	-		0,5
	2"	SM20	70 [2,76]	46 [1,81]	-		0,7

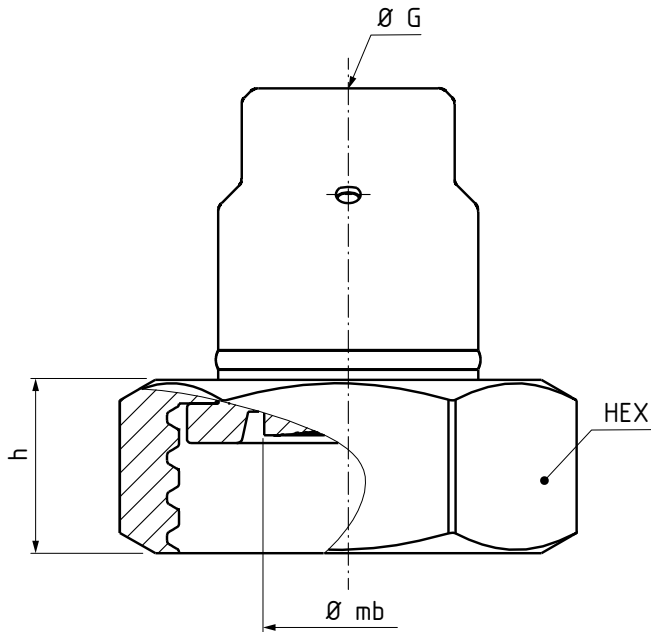


**Sanitary Diaphragm Seal  
Series 327 "RTJ APV (BS 4825-5)"**

**DIMENSIONS IN MM [INCH]**

For reference only, consult Ashcroft for specific dimensional drawings

**DIAPHRAGM SEAL 327**



RTJ APV (BS 4825-5)						
CON. SIZE	CODE	HEX	Ømb	h	G	WEIGHT KG
1"	RJ10	51 [2,01]	21 [0,83]	22 [0,87]	G 1/2 or INA other connection using adapter from G 1/2	0,4
1,5"	RJ15	65 [2,56]	34 [1,34]			0,6
2"	RJ20	79 [3,11]	46 [1,81]			0,9
2,5"	RJ25	92 [3,62]	60 [2,36]			1,2
3"	RJ30	105 [4,13]	72 [2,83]			1,7

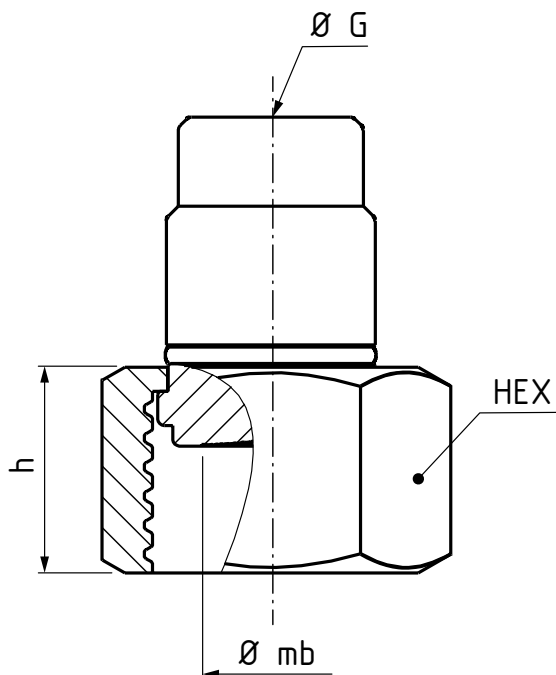


## Sanitary Diaphragm Seal Series 328 "IDF (BS 4825-4)"

### DIMENSIONS IN MM [INCH]

For reference only, consult Ashcroft for specific dimensional drawings

### DIAPHRAGM SEAL 328



IDF (BS 4825-4)						
CON. SIZE	CODE	HEX	Ømb	h	G	WEIGHT KG
1"	IC10	46 [1,81]	24 [0,94]	30 [1,18]	G 1/2 or INA other connection using adapter from G 1/2	0,4
1,5"	IC15	60 [2,36]	34 [1,34]			0,7
2"	IC20	75 [2,95]	45 [1,77]			1
2,5"	IC25	90 [3,54]	60 [2,36]			1,6
3"	IC30	105 [4,13]	72 [2,83]			2

