

## Pano BLUESEAL<sup>®</sup> lug cap

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### Closure types



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### Type declaration

Closure type and diameter + 8-digit code:

- 1st digit = internal code
- 2nd digit = button function
- 3rd digit = compound type
- 4th digit = interior priming
- 5th digit = interior adhesive lacquer
- 6th digit = exterior basecoat
- 7th digit = number of print colours
- 8th digit = exterior protective lacquer

Version 02 · 2017-06-01

## Regular lug cap Pano BLUESEAL<sup>®</sup>

Closure type	RUP/RUB 38	TWS/TSB 48	TWS/TSB 53	TWS/TSB 58	TWS/TSB 63
Jar finish	Acc. DIN EN ISO 9100 1-14				
Closure diameter [mm]	42.03	49.83	56.31	60.21	66.43
Closure height max. [mm]	9.8	9.15	9.95	9.95	10.1
<b>Composition</b>					
Plate	Tin plate acc. EN 10202:2001, tin weight 2.0 g/m <sup>2</sup> per side				
Sealing material	PVC-free sealing compound based on thermoplastic elastomers (TPE), with food contact approval				
Interior system	Multi-layer coating with food contact approval				
Exterior system	Coating system				
Printing	Acc. customer specifications				
<b>Packaging</b>					
Weight / closure	3.6 g	5.0 g	6.6 g	7.1 g	8.6 g
Box capacity / No.	3 200	2 900	1 900	1 750	1 500
Weight / box	13.0 kg	15.5 kg	13.5 kg	13.4 kg	13.75 kg
Closures / europallet (24 boxes)	76 800	69 600	45 600	42 000	36 000
Closures / one-way pallet (30 boxes)	96 000	87 000	57 000	52 500	45 000

All measurements and weights are approx. values and do not constitute specification details.

## Regular lug cap Pano BLUESEAL<sup>®</sup>

Closure type	TWS/TSB 66	TWS/TSB 70	TWS/TSB 77	TWS/TSB 82
Jar finish	Acc. DIN EN ISO 9100 1-14			
Closure diameter [mm]	69.3	73.37	80.05	85.14
Closure height max. [mm]	10.1	10.1	11.1	11.1
<b>Composition</b>				
Plate	Tin plate acc. EN 10202:2001, tin weight 2.0 g/m <sup>2</sup> per side			
Sealing material	PVC-free sealing compound based on thermoplastic elastomers (TPE), with food contact approval			
Interior system	Multi-layer coating with food contact approval			
Exterior system	Coating system			
Printing	Acc. customer specifications			
<b>Packaging</b>				
Weight / closure	9.0 g	10.4 g	12.7 g	14.0 g
Box capacity / No.	1400	1200	1000	800
Weight / box	13.3 kg	13.5 kg	13.8 kg	12.2 kg
Closures / europallet (24 boxes)	33600	28800	24000	19200
Closures / one-way pallet (30 boxes)	42000	36000	30000	24000

All measurements and weights are approx. values and do not constitute specification details.

## Deep lug cap Pano BLUESEAL<sup>®</sup>

Closure type	DOB/DTO 58	DOB/DTO 66	DOB/DTO 82
Jar finish	Acc. DIN EN ISO 9100 1-14		
Closure diameter [mm]	60.21	68.3	85.04
Closure height max. [mm]	15.0	15.0	15.05
<b>Composition</b>			
Plate	Tin plate acc. EN 10202:2001, tin weight 2.0 g/m <sup>2</sup> per side		
Sealing material	PVC-free sealing compound based on thermoplastic elastomers (TPE), with food contact approval		
Interior system	Multi-layer coating with food contact approval		
Exterior system	Coating system		
Printing	Acc. customer specifications		
<b>Packaging</b>			
Weight / closure	8.5 g	10.7 g	15.0 g
Box capacity / No.	1100	900	550
Weight / box	10.35 kg	10.6 kg	9.25 kg
Closures / europallet (24 boxes)	26 400	21 600	13 200
Closures / one-way pallet (30 boxes)	33 000	27 000	16 500

All measurements and weights are approx. values and do not constitute specification details.

## Interior system / Corrosion protection

The interior coating system is tailored to the corrosion protection for the specific filling.

Classification of filling goods		Epoxy lacquering code	Shelf life	BPA-NI lacquering code	Shelf life
S1	Dry, solid filling goods, no vinegar, no salt, no SO <sub>2</sub>	34	36 months	02	36 months
	Aqueous filling goods, no vinegar, no salt, no SO <sub>2</sub>				max. 3 months
S2	Oily filling goods	34	36 months	78	36 months
	Slight acetic filling goods (vinegar content <0.6%), no salt, no SO <sub>2</sub>				24 months
S3	Filling goods without vinegar, <1.5% salt, no SO <sub>2</sub>	34	36 months	78	36 months
	Low acetic filling goods (vinegar content <1.5%), <1.5% salt, no SO <sub>2</sub>				24 months
S4	Filling goods without vinegar, salt <3.5%, SO <sub>2</sub> <20 ppm	64	36 months	58	24 months
	Acetic filling goods (vinegar content <3.5%), salt <3.5%, SO <sub>2</sub> <20 ppm				
S5	Strong acetic filling goods (vinegar content from 3.5%), salt <3.5%, SO <sub>2</sub> <80 ppm	64	36 months	-	-
	Neutral filling goods, salt <3.5%, SO <sub>2</sub> max. 80 ppm				

02 denotes a single protection lacquering without a primer. 34 and 78 are internal codations for single protection lacquerings.  
64 and 58 denote double protection lacquerings.

## Application remarks

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### BLUESEAL<sup>®</sup> Compound types

Thermoplastic Elastomers (powered by Provalin<sup>®</sup>)

Identification	Application
E	Cold filling, without treatment
T	Cold and hot filling, pasteurisation: max. 95°C, 1 h, without counter pressure, minimum 5-7% head space
K*	Hot filling, retorting: max. 121°C, 1 h, 2.5 bar counter pressure, minimum vacuum: -0.35 bar, maximum difference pressure: 1 bar, minimum 7-9% head space

At the initial filling stage, it is recommended to test suitability for the subsequent treatment procedure. Please request separate declaration of conformity for verification of food contact approval.

On request, we also offer all three compound types in white: C correlates to application of compound E, M correlates to T, W correlates to K\*.

### Sealing

Can be used with all PANO DVV glass capping machines and all known steam vacuum capping machines from different manufacturers.

### Button function

Identification	
O	Without button
B	Button function

### Storage

Store in a dry place, temperature range +5°C to +30°C, for a maximum of 2 years after production date, stacking height: max. 2 pallets

If you have any questions, please contact our technical customer support.

The above information is based on the current state of our knowledge and does not constitute a guarantee for product features. It should not be regarded as any assumption of warranty and no obligations for use can be inferred from it. The use of our product for any purpose other than that specifically recommended by us is at the risk of the user, unless written confirmation was obtained from us as to the suitability of the product for the intended purpose. All information on our products is provided to the best of our knowledge, but owing to the many influences in processing and in the use of our products, we do not assume any liability. In addition, please refer to our general sales and delivery terms for all of our products.

Version 02 · 2017-06-01