

Pano BLUESEAL[®] lug cap

Closure types



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

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Regular lug cap Pano BLUESEAL[®]

| 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 |
| Composition | | | | | |
| Plate | Tin plate acc. EN 10202:2001, tin weight 2.0 g/m ² 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 | | | | |
| Packaging | | | | | |
| 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[®]

| 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 |
| Composition | | | | |
| Plate | Tin plate acc. EN 10202:2001, tin weight 2.0 g/m ² 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 | | | |
| Packaging | | | | |
| 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[®]

| 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 |
| Composition | | | |
| Plate | Tin plate acc. EN 10202:2001, tin weight 2.0 g/m ² 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 | | |
| Packaging | | | |
| 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 ₂ | 34 | 36 months | 03 | 36 months |
| | Aqueous filling goods, no vinegar, no salt, no SO ₂ | | | | 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 ₂ | | | | |
| S3 | Filling goods without vinegar, <1.5% salt, no SO ₂ | 34 | 36 months | 78 | 36 months |
| | Low acetic filling goods (vinegar content <1.5%), <1.5% salt, no SO ₂ | | | | |
| S4 | Filling goods without vinegar, salt <3.5%, SO ₂ <20 ppm | 64 | 36 months | 58 | 36 months |
| | Acetic filling goods (vinegar content <3.5%), salt <3.5%, SO ₂ <20 ppm | | | | |
| S5 | Strong acetic filling goods (vinegar content from 3.5%), salt <3.5%, SO ₂ <80 ppm | 64 | 36 months | - | - |
| | Neutral filling goods, salt <3.5%, SO ₂ max. 80 ppm | | | | |

03 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

BLUESEAL[®] Compound types

Thermoplastic Elastomers (powered by Provalin[®])

| 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.