

ARNOLD® Seal – Sealing and low-friction coatings

The product range at ARNOLD UMFORMTECHNIK GmbH & Co. KG includes a wide variety of base surfaces with appropriate topcoats for the desired properties.

Base surfaces

Standard surfaces can be applied at our in-house electroplating unit. We also make use of a network of outstanding industry partners able to apply the best surface for every application.

- Zinc-galvanised with various passivations (CrVI-free)
- Zinc-nickel-galvanised with various passivations (CrVI-free)
- Zinc flake coatings for various standard product families
- Phosphate coatings
- Further base surfaces on request



Topcoats

ARNOLD UMFORMTECHNIK supplies various organic and inorganic topcoats, seals and low-friction coatings. The appropriate products for the galvanised surfaces or zinc flake coatings can be selected from very many options in the range.

The low-friction coatings meet the VDA 235-104 friction coefficient requirements – total μ of 0.09 to 0.14. Further friction value ranges can be configured on request.

- Low-friction coatings
- Seals
- Seals with integral lubricant
- Organic and anorganic coatings (different colours on request)





ARNOLD seals and low-friction coatings

Corcon®	Seals used to increase corrosion resistance	Caution – no lubricant! Should be used only where there is no friction coefficient requirement.
Combicon [®]	Seals used to increase corrosion resistance, with integral lubricant for friction coefficient adjustment on metric threads	e.g.: VDA 235-104
Fricon®	Low-friction coatings to configure friction coefficient on metric threads	e.g.: VDA 235-104

Corrosion protection properties

ARNOLD corrosion protection surfaces comply with the requirements of VDA 235-104 and 105.

Coating	VDA surface no.	Thread dimensions ¹	Zinc corrosion ² (h)	Base metal corrosion (h)
Galv. zinc coating transparent passivated ³	_	All	72	240²
Galv. zinc coating thick layer passivated ³	20	All	96	240
Galv. zinc-nickel coating transparent passivated ³	25	All	120	720
Galv. zinc-nickel coating black passivated ²	20	All	120	480
Zinc flake coating with or without silver-colour top coat	40	>= M6	-	480
Zinc flake coating with or without silver-colour top coat	42	>= M6	-	720
Zinc flake coating with top coat black ²	50	>= M8	240	480

1) recommended measurement range \cdot 2) only with seal \cdot 3) recommendation for Cleancon $^{\circ}$



Comment

The resistance values stated in the DIN EN ISO 9227 neutral salt spray test table refer to tests carried out on coated screws immediately after coating. Bond strength, abrasion resistance and damage to surface influenced by debris and movement in transit are not taken into consideration. No conclusions relating to corrosion behaviour by the component when in use can be drawn from the results of the salt spray test. Corrosion behaviour depends on the construction and utilisation of the complete system.

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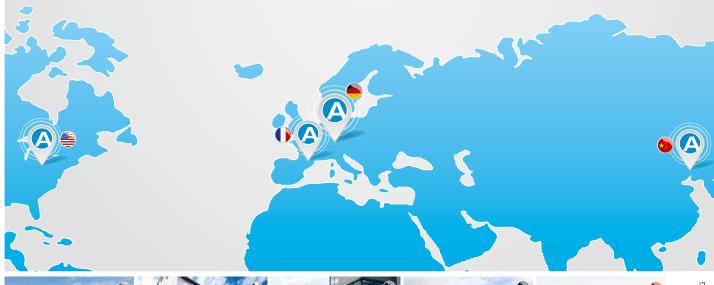


The ARNOLD GROUP

Wherever customers need us.

The ARNOLD GROUP

With a foundation of many years of expertise in the production of intelligent fastening systems and very complex extruded parts, the ARNOLD GROUP has developed over a number of years into a comprehensive supplier and development partner for complex fastening systems. With our new positioning of "BlueFastening Systems" this development process will now continue under a united and harmonised structure. Engineering, fastenings, and functional parts, together with feeder processing systems, all from a single source – efficient, sustained and international.





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ARNOLD

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