

# Avibulb® & Avinox®

High strength steel (Avibulb®) and stainless steel (Avinox®) breakstem fasteners with excellent bulbing tail formation. Ideal for thin sheet materials.



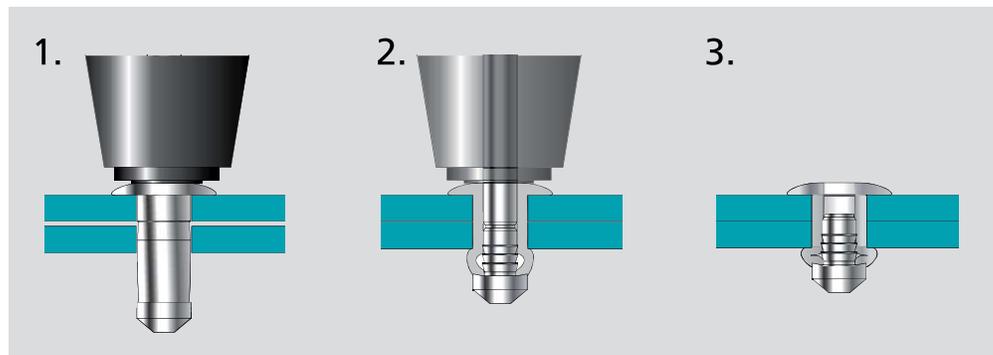
## Key features and benefits

- High shear and tensile strength providing strong, vibration resistant joints
- Stainless steel Avinox® for high corrosion resistance and applications requiring elevated temperatures
- Provides a large blind side bearing area against the rear sheet
- Spreads the tail bearing load/clamp load on the rear sheet making it ideal for use in thin sheet materials
- Good hole fill compensates for irregular, oversized, slotted or misaligned holes
- Retained stem avoids damage, electrical problems or rattling caused by loose stems

## Specifications

Sizes:  
1/8" – 3/16"  
(3.2 mm – 4.8 mm)  
Avibulb® up to 6.0 mm  
Material:  
Steel, Stainless Steel  
Head Style:  
Dome

## Typical placing sequence



Please visit our website for fastener placing animations and technical data.

## Assembly applications

- Automotive
- Cabinets and enclosures
- Heating and ventilation
- Telecommunications
- General light industrial

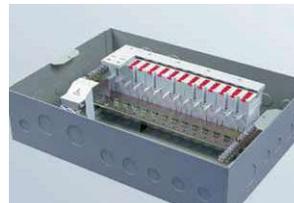
Telecommunications cabinets



Electronic components



Ladders



# Avibulb® XT & Avinox® XT

Avibulb® XT (steel) and Avinox® XT (stainless steel) are high performance structural breakstem fasteners with excellent bulbing tail formation, ideal for thin sheet materials. The new fasteners feature a wide grip range, especially suited for applications with varying sheet thicknesses.



## Key features and benefits

- High shear and tensile strength and high residual clamp load providing strong, vibration resistant joints
- Multi-grip capability accommodates wide variations in material thickness
- Spreads the tail bearing load/clamp load on the rear sheet making it ideal for use in thin sheet materials
- Suitable also in softer materials
- Retained stem avoids damage, electrical problems or rattling caused by loose stems
- Underhead recess accommodates burrs around holes and spreads the load evenly on the top sheet
- Stainless steel Avinox® XT for high corrosion resistance and applications requiring elevated temperatures

## Specifications

Size:

1/4" (6.4 mm)

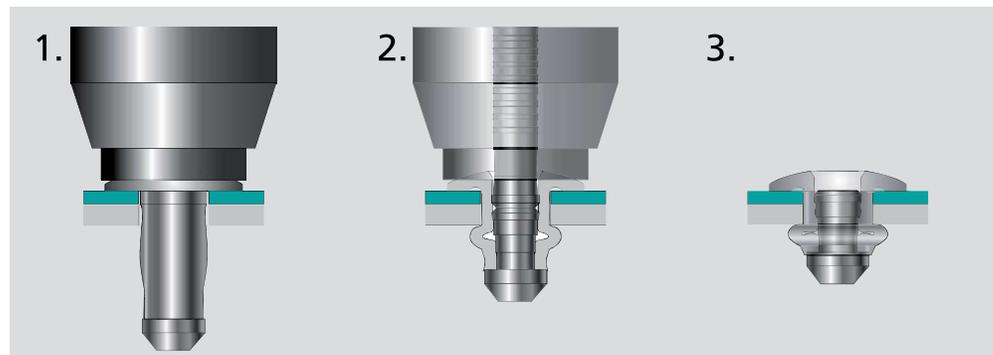
Materials:

Steel, Stainless Steel

Head Style:

Dome

## Typical placing sequence



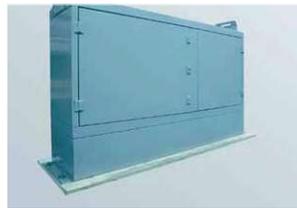
Avdel Patent Protected

Please visit our website for fastener placing animations and technical data.

## Assembly applications

- Automotive
- Truck and trailer
- Cabinets and enclosures
- Heating and ventilation
- Telecommunications
- Domestic appliances
- Renewable energies
- Industrial equipment

Telecommunications cabinets



Industrial refrigeration



Vehicle panels



Solar panels



Washing machine



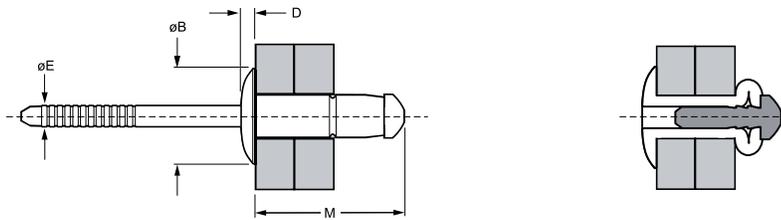
Heating and ventilation





English	Français	Deutsch	Italiano	Español
Dome head	Tête plate	Flachrundkopf	Testa tonda	Cabeza alomada
Body: Low carbon steel*	Corps: Acier bas carbone*	Hülse: Stahl*	Corpo: Acciaio a basso tenore di carbonio*	Cuerpo: Acero bajo en carbono*
Zinc plated	Revêtement zingué	Verzinkt	Zincato, Passivazione	Zincado
Clear trivalent passivated	Passivation claire trivalente	Klar chromatiert, Cr6-frei	chiara trivalente	Pasivado claro trivalente
Stem: Medium carbon steel**	Tige: Acier au carbone**	Dorn: Stahl**	Gambo: Acciaio a medio tenore di carbonio**	Vástago: Acero medio en carbono**
Zinc plated	Revêtement zingué	Verzinkt	Zincato, Passivazione	Zincado
Clear trivalent passivated	Passivation claire trivalente	Klar chromatiert, Cr6-frei	chiara trivalente	Pasivado claro trivalente

\*: BS3111 Type 0, SAE 1008, DIN 1654, QSt 34-3 / BS3111 Type 0, SAE 1015 DIN 1711, RSt 38-2, Werkstoff 1.0401  
 \*\*: BS3111 Type 1, SAE 1030/1037/1040/1045, Werkstoff 1.1178/1.1176/1.1186/1.1191



Ø nom.	ØB		M		M	ØB	D	ØE	lbf (kN) <sup>1)2)</sup>	lbf (kN) <sup>1)</sup>	Part No.
	min.	max.	min.	max.							
1/8" (3.2)	.039 (1.0)	.118 (3.0)	.130 (3.3)	.134 (3.4)	.358 (9.1)	.268 (6.8)	.055 (1.4)	.080 (2.0)	270 (1.20)	292 (1.30)	OBN01-00408
	.118 (3.0)	.197 (5.0)			.461 (11.7)				393 (1.75)		OBN01-00411
	.197 (5.0)	.276 (7.0)			.551 (14.0)				562 (2.50)		OBN01-00414
5/32" (4.0)	.039 (1.0)	.118 (3.0)	.161 (4.1)	.169 (4.3)	.409 (10.4)	.315 (8.0)	.059 (1.4)	.103 (2.6)	539 (2.40)	629 (2.80)	OBN01-00509
	.118 (3.0)	.197 (5.0)			.508 (12.9)				787 (3.50)		OBN01-00512
	.197 (5.0)	.276 (7.0)			.618 (15.7)				921 (4.10)		OBN01-00516
	.275 (7.0)	.354 (9.0)			.713 (18.1)				740 (3.30)		562 (2.50)
3/16" (4.8)	.059 (1.5)	.138 (3.5)	.193 (4.9)	.201 (5.1)	.476 (12.1)	.378 (9.6)	.059 (1.5)	.126 (3.2)	809 (3.60)	854 (3.80)	OBN01-00611
	.138 (3.5)	.236 (6.0)			.579 (14.7)				944 (4.20)		OBN01-00614
	.236 (6.0)	.335 (8.5)			.693 (17.6)				1258 (5.60)		OBN01-00618
.236" (6.0)	.059 (1.5)	.157 (4.0)	.240 (6.1)	.248 (6.3)	.551 (14.0)	.484 (12.3)	.083 (2.1)	.158 (4.0)	944 (4.20)	1213 (5.40)	OBN01-06010
	.118 (3.0)	.236 (6.0)			.669 (17.0)				1213 (5.40)		OBN01-06013
	.236 (6.0)	.354 (9.0)			.787 (20.0)				1910 (8.50)		OBN01-06016
	.354 (9.0)	.472 (12.0)			.906 (23.0)				1910 (8.50)		OBN01-06019

dimensions in inches and (mm) / en pouces et (millimètre) / alle Maße in Zoll und (mm) / in pollici e (millimetri) / en pulgadas y (milímetros)

1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos

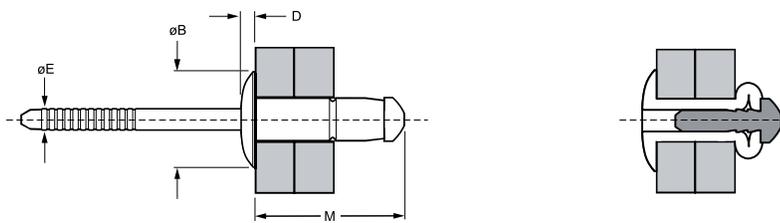
2) through stem / avec tige / bei tragendem Restdorn / attraverso il gambo / con el vástago en la zona de cortadura



English	Français	Deutsch	Italiano	Español
Dome head	Tête plate	Flachrundkopf	Testa tonda	Cabeza alomada
Body: Stainless steel* Polished	Corps: Inox* Poli	Hülse: Edelstahl* Blank	Corpo: Acciaio inox* Lucido	Cuerpo: Acero inoxidable* Pulido
Stem: Stainless steel** Natural	Tige: Inox** Brut	Dorn: Edelstahl** Unbehandelt	Gambo: Acciaio inox** Nessuna finitura	Vástago: Acero inoxidable** Natural

\*: BS 3111 394S17, Werkstoff 1.4567

\*\* : BS 3111 321S31, AISI 321, Werkstoff 1.4541 / AISI 304, Werkstoff 1.4301



Ø nom.	ØB		D		M	ØB max.	D max.	ØE max.	Shear Force lbf (kN) <sup>1) 2)</sup>	Tensile Force lbf (kN) <sup>1)</sup>	Part No.
	min.	max.	min.	max.							
1/8" (3.2)	.039 (1.0)	.118 (3.0)	.130 (3.3)	.134 (3.4)	.360 (9.0)	.260 (6.6)	.043 (1.1)	.083 (2.1)	360 (1.60)	450 (2.00)	OBE61-00408
	.118 (3.0)	.197 (5.0)			.460 (11.5)				382 (1.70)		OBE61-00411
	.197 (5.0)	.276 (7.0)			.560 (14.1)				719 (3.20)		OBE61-00414
5/32" (4.0)	.039 (1.0)	.118 (3.0)	.161 (4.1)	.169 (4.3)	.410 (10.3)	.315 (8.0)	.059 (1.5)	.102 (2.6)	629 (2.80)	899 (4.00)	OBE61-00509
	.118 (3.0)	.197 (5.0)			.510 (12.9)				1169 (5.20)		OBE61-00512
	.197 (5.0)	.276 (7.0)			.620 (15.6)				1169 (5.20)		OBE61-00516
3/16" (4.8)	.059 (1.5)	.138 (3.5)	.193 (4.9)	.201 (5.1)	.510 (12.8)	.378 (9.6)	.059 (1.5)	.126 (3.2)	1236 (5.50)	1124 (5.00)	OBE61-00611
	.138 (3.5)	.236 (6.0)			.610 (15.4)						OBE61-00614
	.236 (6.0)	.335 (8.5)			.730 (18.4)						OBE61-00618
	.276 (7.0)	.394 (10.0)			.780 (19.9)						OBE61-00619

dimensions in inches and (mm) / en pouces et (millimètre) / alle Maße in Zoll und (mm) / in pollici e (millimetri) / en pulgadas y (milímetros)

1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos

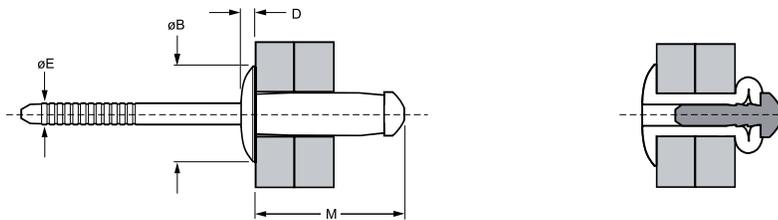
2) includes stem in shear plane, where applicable / Avec présence de la tige dans le plan de cisaillement / mit Restdorn in Scherebene, wo zutreffend / Include il gambo nel taglio piano, dove applicabile / Cuando esté incluido el vástago en la zona de cortadura

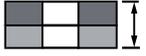
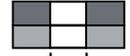


English	Français	Deutsch	Italiano	Español
Dome head	Tête plate	Flachrundkopf	Testa tonda	Cabeza alomada
Body: Low carbon steel* Zinc plated Clear trivalent passivated	Corps: Acier bas carbone* Revêtement zingué Passivation claire trivalente	Hülse: Stahl* Verzinkt Klar chromatiert, Cr6-frei	Corpo: Acciaio a basso tenore di carbonio* Zincato, Passivazione chiara trivalente	Cuerpo: Acero bajo en carbono* Zincado, Pasivado claro trivalente
Stem: Medium carbon steel** Zinc plated Clear trivalent passivated	Tige: Acier au carbone** Revêtement zingué Passivation claire trivalente	Dorn: Stahl** Verzinkt Klar chromatiert, Cr6-frei	Gambo: Acciaio a medio tenore di carbonio** Zincato, Passivazione chiara trivalente	Vástago: Acero medio en carbono** Zincado, Pasivado claro trivalente

\*: C15C, Werkstoff 1.0234, EN 10263-2

\*\* : C45RC, Werkstoff 1.1061, EN 10263-4



ø nom.					M max.	øB max.	D max.	øE max.	 lbf (kN) <sup>1)2)</sup>	 lbf (kN) <sup>1)</sup>	Part No.
	min.	max.	min.	max.							
1/4" (6.4)	.059 (1.5)	.217 (5.5)	.260 (6.6)	.276 (7.0)	.681 (17.3)	.528 (13.4)	.122 (3.1)	.192 (4.87)	2495 (11.10)	1528 (6.80)	OBN01-00816
	.197 (5.0)	.354 (9.0)			.839 (21.3)						OBN01-00820

dimensions in inches and (mm) / en pouces et (millimètre) / alle Maße in Zoll und (mm) / in pollici e (millimetri) / en pulgadas y (milímetros)

1) typical values with test method according to ISO 14589 (2000) / Valeurs moyennes obtenues selon la méthode de test de la norme ISO 14589 (2000) / typische Werte ermittelt nach Testmethode ISO 14589 (2000) / valori tipici con il metodo di prova secondo la normativa ISO 14589 (2000) / valores típicos según ensayos ISO 14589 (2000)

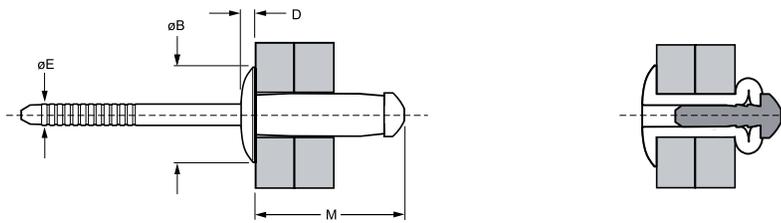
2) through stem / avec tige / bei tragendem Restdorn / attraverso il gambo / con el vástago en la zona de cortadura

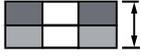
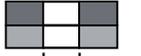


English	Français	Deutsch	Italiano	Español
Dome head	Tête plate	Flachrundkopf	Testa tonda	Cabeza alomada
Body: Stainless steel* Bright	Corps: Inox* Poli	Hülse: Edelstahl* Blank	Corpo: Acciaio inox* Lucido	Cuerpo: Acero inoxidable* Pulido
Stem: Stainless steel** Natural	Tige: Inox** Brut	Dorn: Edelstahl** Unbehandelt	Gambo: Acciaio inox** Nessuna finitura	Vástago: Acero inoxidable** Natural

\*: BS 3111 394S17, BS 3111 321S31, Werkstoff 1.4567

\*\* : AISI 321, AISI 304, Werkstoff 1.4541, Werkstoff 1.4301



Ø nom.					M max.	ØB max.	D max.	ØE max.	 lbf (kN) <sup>1) 2)</sup>	 lbf (kN) <sup>1)</sup>	Part No.
	min.	max.	min.	max.							
1/4" (6.4)	.059 (1.5)	.217 (5.5)	.260 (6.6)	.276 (7.0)	.661 (16.8)	.528 (13.4)	.122 (3.1)	.194 (4.93)	3215 (14.30)	1799 (8.00)	OBE61-00815
	.197 (5.0)	.354 (9.0)			.819 (20.8)						OBE61-00819

dimensions in inches and (mm) / en pouces et (millimètre) / alle Maße in Zoll und (mm) / in pollici e (millimetri) / en pulgadas y (milímetros)

1) typical values with test method according to ISO 14589 (2000) / Valeurs moyennes obtenues selon la méthode de test de la norme ISO 14589 (2000) / typische Werte ermittelt nach Testmethode ISO 14589 (2000) / valori tipici con il metodo di prova secondo la normativa ISO 14589 (2000) / valores típicos según ensayos ISO 14589 (2000)

2) includes stem in shear plane, where applicable / Avec présence de la tige dans le plan de cisaillement / mit Restdorn in Scherebene, wo zutreffend / Include il gambo nel taglio piano, dove applicabile / Cuando esté incluido el vástago en la zona de cortadura