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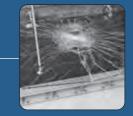






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canopies - safe and economic





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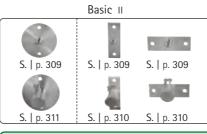
Abgehängte Vordächer im Vergleich | comparison of suspended canopies

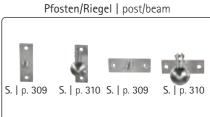


■ Übersicht Sets und Kombinationsmöglichkeiten | overview of sets and combination possibilities















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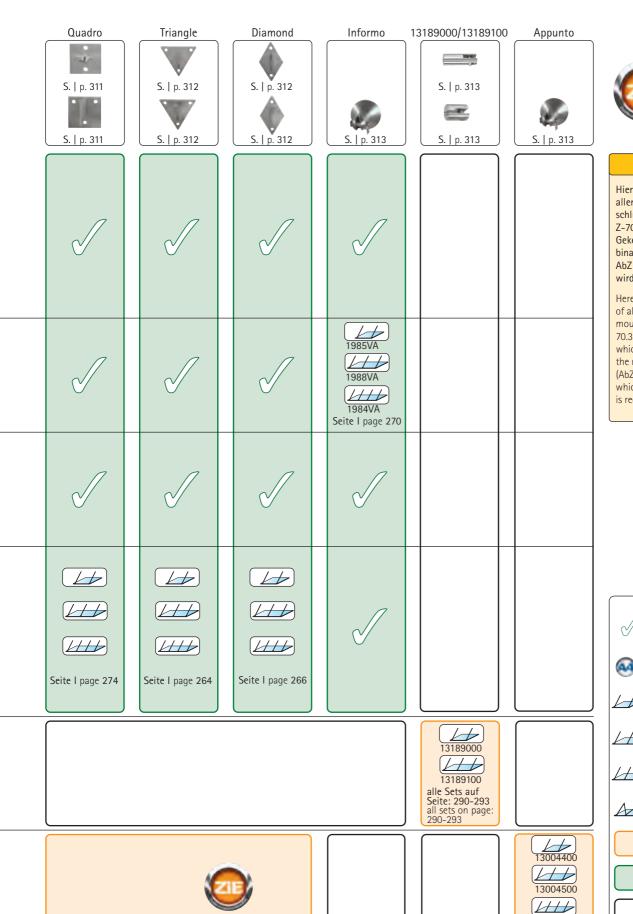














Kurz | In Brief

Hier finden Sie eine Übersicht aller Punkthalter und Wandanschlussplatten, die in der AbZ Z-70.3-85 aufgeführt sind. Gekennzeichnet sind die Kombinationsmöglichkeiten nach AbZ oder ob eine ZiE benötigt wird.

Here you will find an overview of all point fixings and wall mounting plates with AbZ Z-70.3-85. We have indicated which combinations fall under the national technical approval (AbZ) and the combinations for which individual approval (ZiE) is required.



Nach AbZ möglich possible according to AbZ



Material: 1.4404



Vordach 2er-Set 2pc canopy set



Vordach 3er-Set 3pc canopy set



Vordach 4er-Set 4pc canopy set



Vordach M-Set canopy M-set



Vordächer mit ZiE canopies with ZiE



Vordächer nach AbZ canopies acc. to AbZ



Vordächer nicht möglich | canopies





13004600 Seite I page 288









Vordach-Sets: AbZ Z-70.3-74, TRLV und ZiE | canopy sets: AbZ Z-70.3-74, TRLV and ZiE

■ Übersicht Sets und Kombinationsmöglichkeiten Z-70.3-74 overview of sets and combination possibilities Z-70.3-74



































































Beliebige Tragkonstruktion various support structures possible

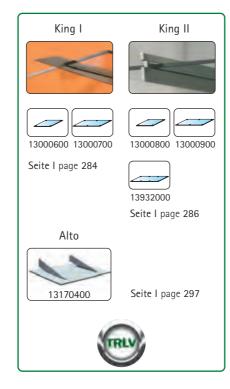
■ Vordach-Sets | canopy sets | TRLV + ZiE

Kurz | In Brief

Die erste Tabelle beinhaltet eine Übersicht aller Punkthalter und Wandanschlussplatten, die in der AbZ Z-70.3-74 aufgeführt sind.

Für King I, King II und Alto gibt es unterschiedliche Sets, die nach der TRLV verbaut werden können.

The first sheet shows all point fixings and wall mounts covered by AbZ Z-70.3-74. The sets of King I, II and Alto may be assembled according to TRLV.







Nach AbZ möglich possible according to AbZ





Vordach 2er-Set 2pc canopy set



Vordach 3er-Set 3pc canopy set





Vordächer mit ZiE canopies with ZiE



canopies acc. to AbZ Vordächer nach TRLV canopies acc. to TRLV

Vordächer nach AbZ





DEUTSCHEMETALL

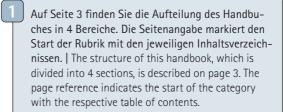






So finden Sie schnell Ihr Produkt | how to find your product quickly





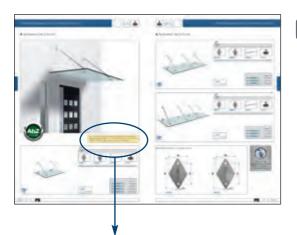
Sollten Sie einen bestimmten Artikel suchen, finden Sie ab Seite 622 das Artikelnummernverzeichnis, mit deren Seitenangabe.

If you are looking for a specific item, you will find the list of item numbers with page references from page 622 onwards.





Auf Seite 250 finden Sie das detailliertere Inhaltsverzeichnis der Überkopfverglasungsrubrik. Seitenangaben führen Sie zu den gesuchten Produkten. A detailed table of contents for the category "overhead glazing" can be found on page 250. The page references lead you to the required products.



Auf den Produktseiten finden Sie Abbildungen und nützliche Zeichnungen. Neben Pflegehinweisen haben wir zusätzlich Verweise auf detaillierte Informationen zum Produkt vermerkt. Illustrations and useful technical drawings can be found on the product pages. Besides the care instructions you will find additional references to detailed product information.



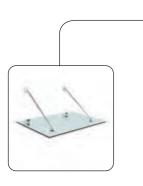
In der Rubrik "Bemessungen und Sicherheit" ab Seite 332 leisten die Informationen wichtige Hilfestellungen bei z. B. Glasdimensionierungen. Außerdem finden Sie Planungsabläufe oder Anwendungsbeispiel – für sicheres Bauen. The chapter "Design and safety", from page 332 onwards, contains information that provides important assistance for glass dimensioning etc. Furthermore you will find planning processes or application examples for safe building.







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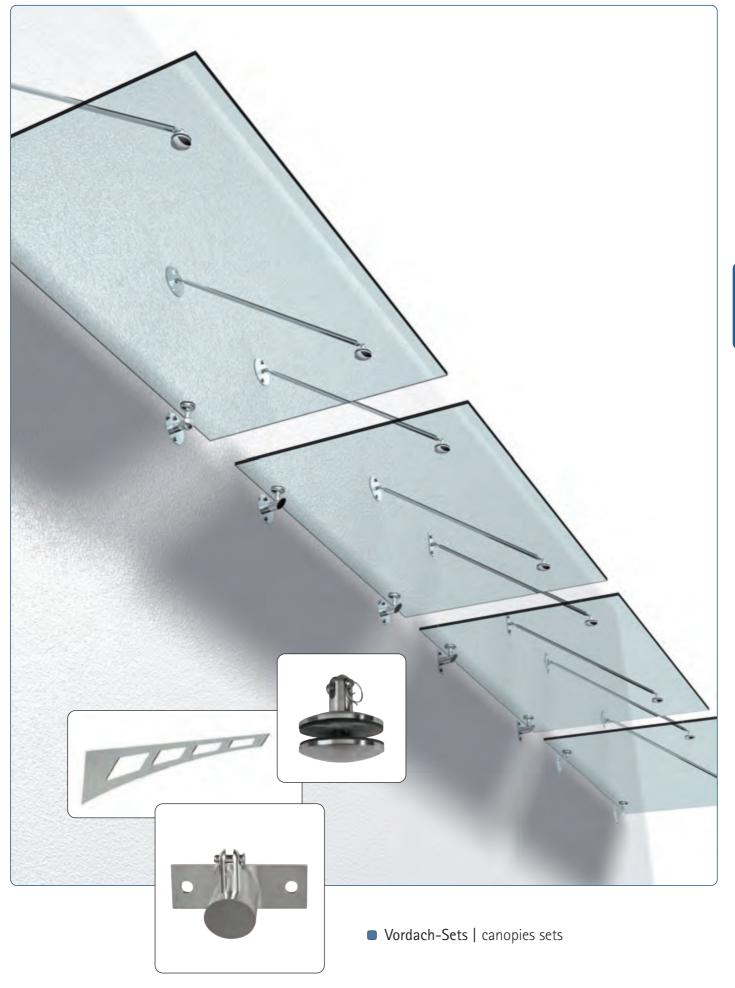
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Systematik + Kombinationsmöglichkeiten | systematics + combination possibilities | AbZ Z-70.3-85

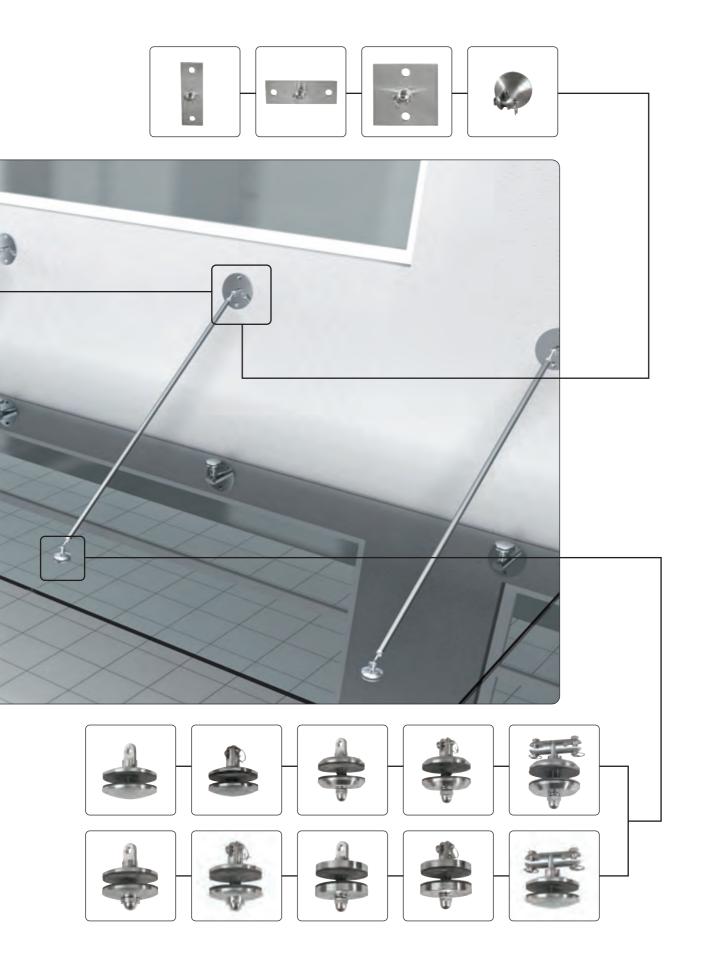












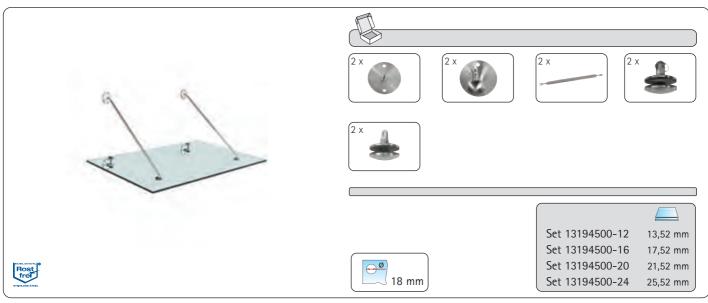






■ Set Basic | AbZ Z-70.3-85







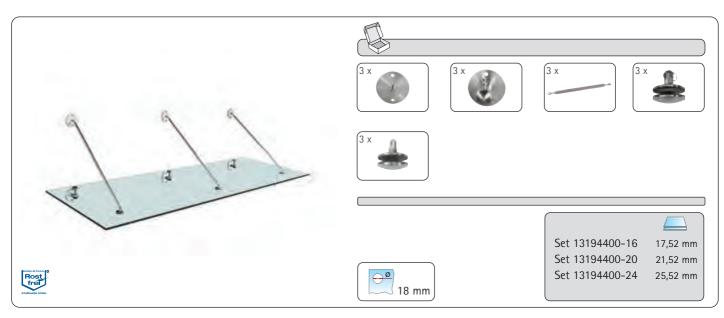


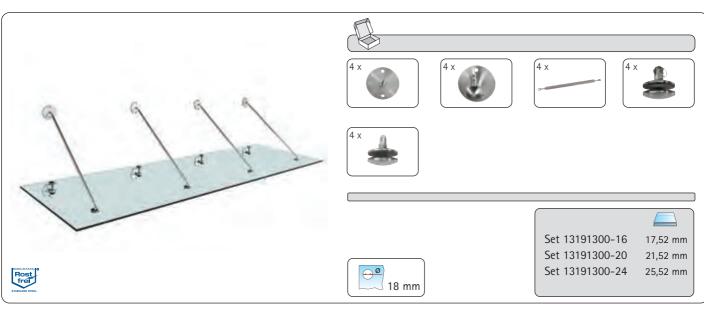


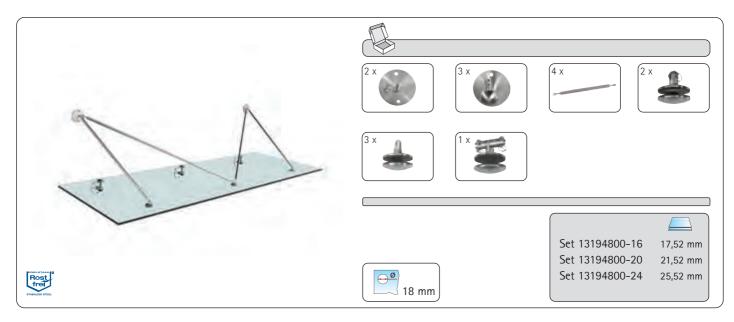




■ Set Basic | AbZ Z-70.3-85









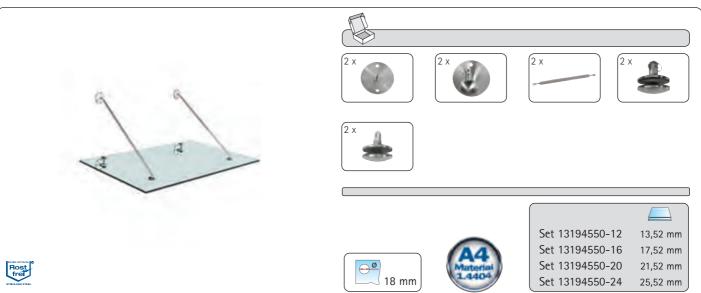






■ Set Basic A4 | AbZ Z-70.3-85









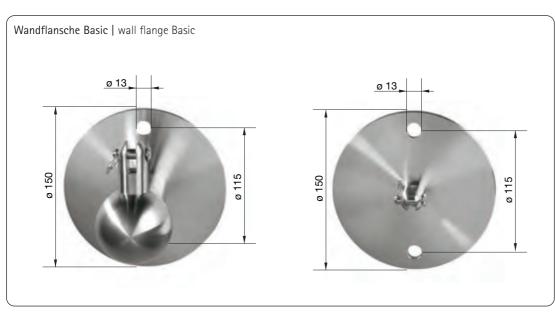






■ Set Basic A4 | AbZ Z-70.3-85









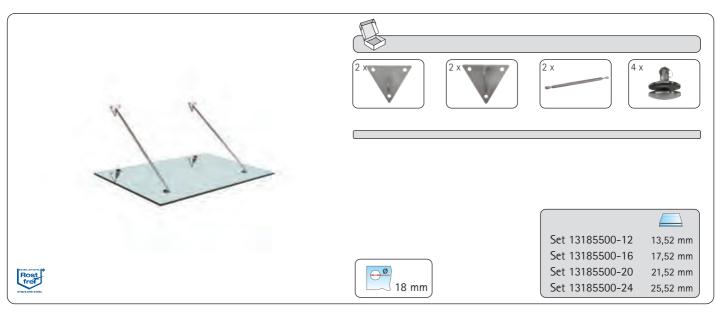






■ Set Triangle | AbZ Z-70.3-85







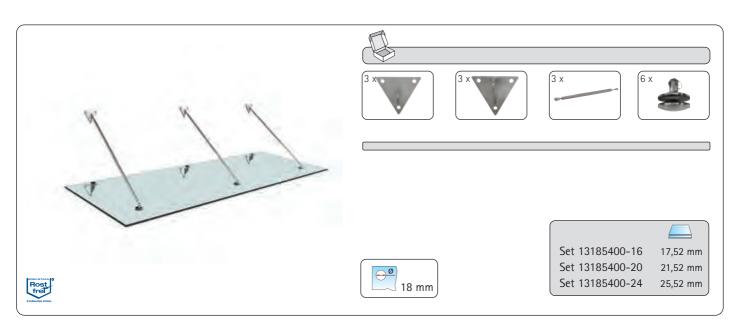


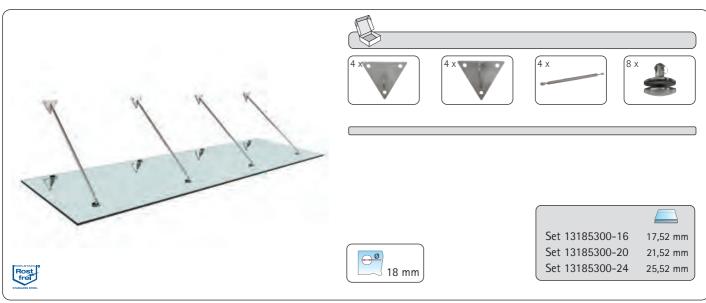


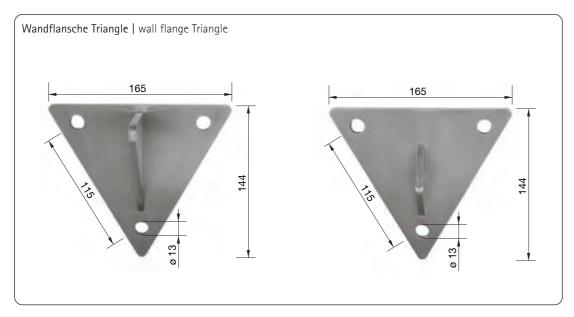




■ Set Triangle | AbZ Z-70.3-85











möglich Informationen siehe Seite 345 | also possible with glass printing see page 345

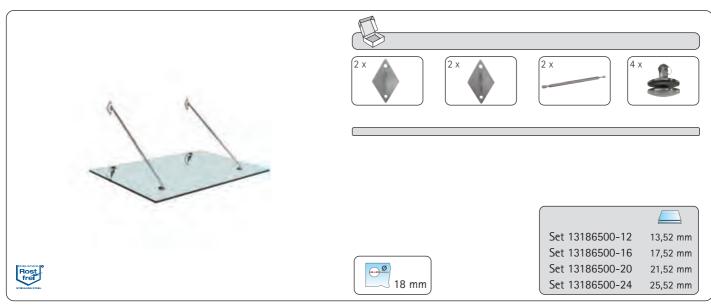






■ Set Diamond | AbZ Z-70.3-85







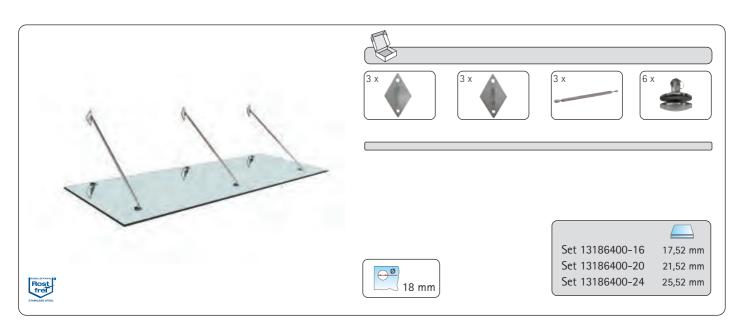


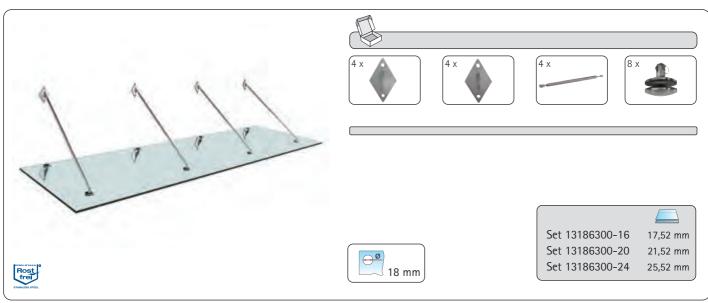


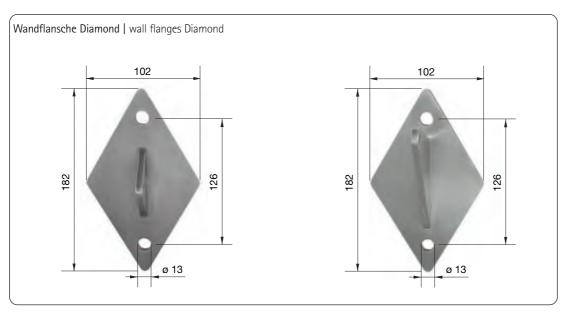




■ Set Diamond | AbZ Z-70.3-85











glass printing see page 345

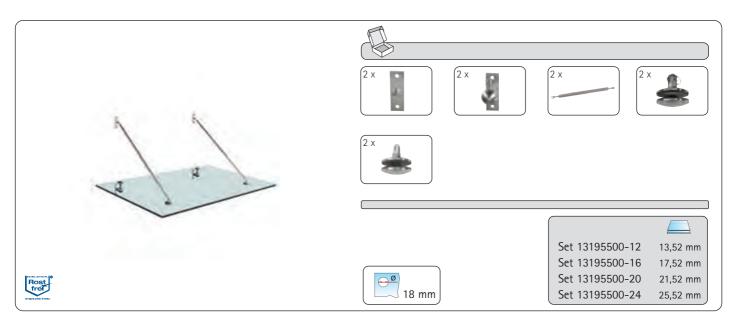






Set Pfosten/Riegel | AbZ Z-70.3-85







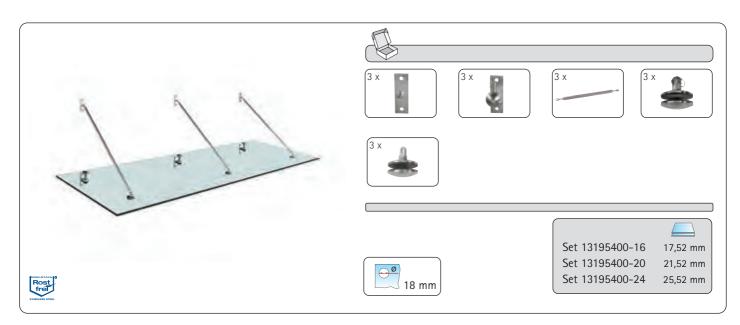


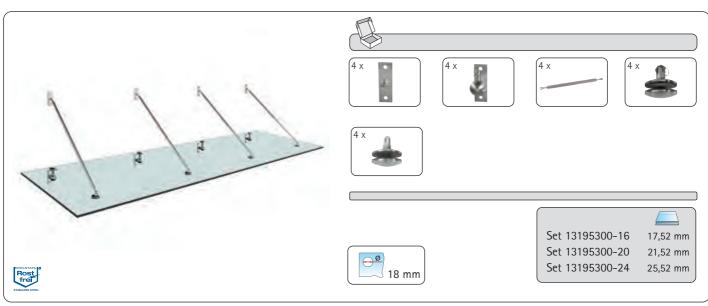


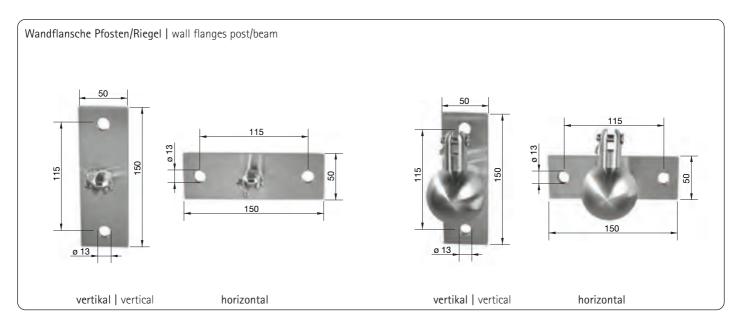




■ Set Pfosten/Riegel | AbZ Z-70.3-85







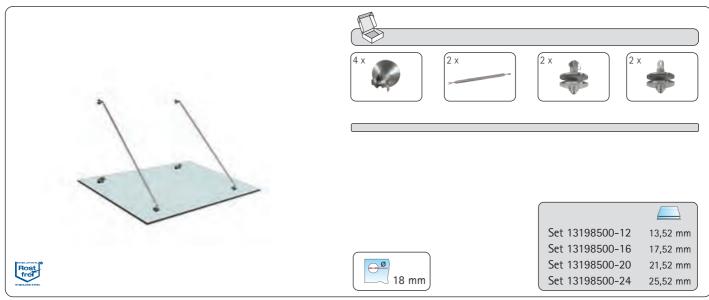






■ Set Informo | AbZ Z-70.3-85







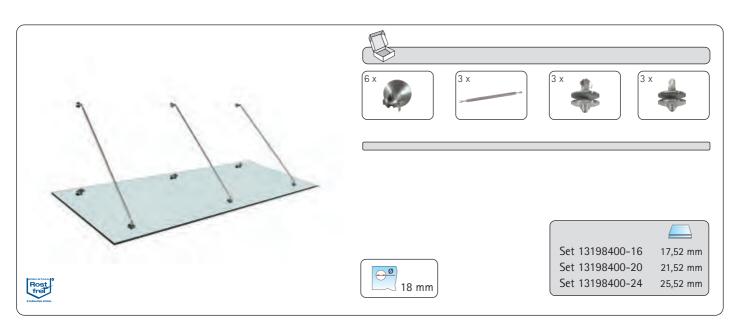


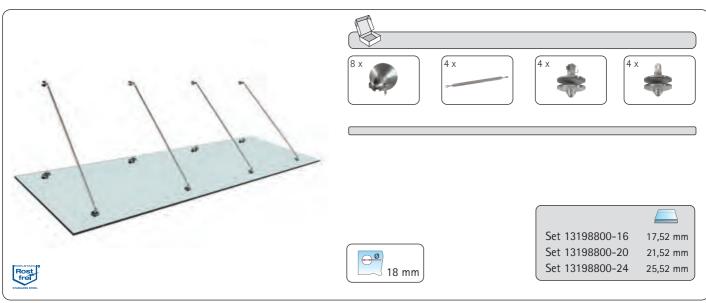






■ Set Informo | AbZ Z-70.3-85











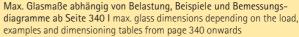






■ Set Basic II | AbZ Z-70.3-85













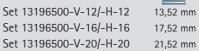












Set 13196500-V-24/-H-24

21,52 mm 25,52 mm





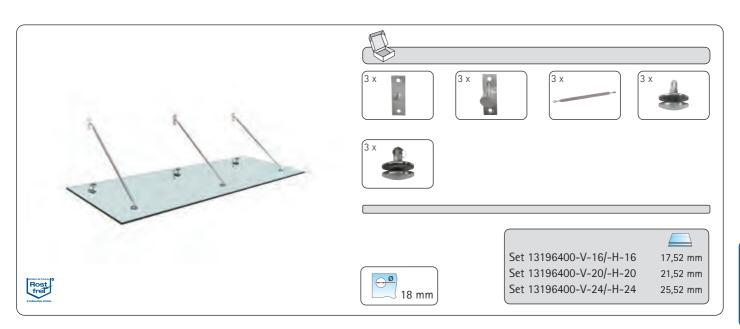


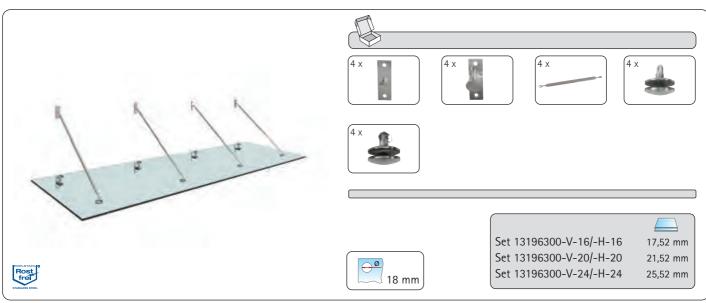


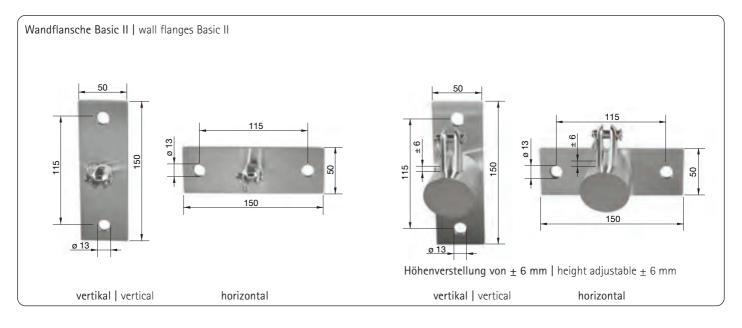




■ Set Basic II | AbZ Z-70.3-85







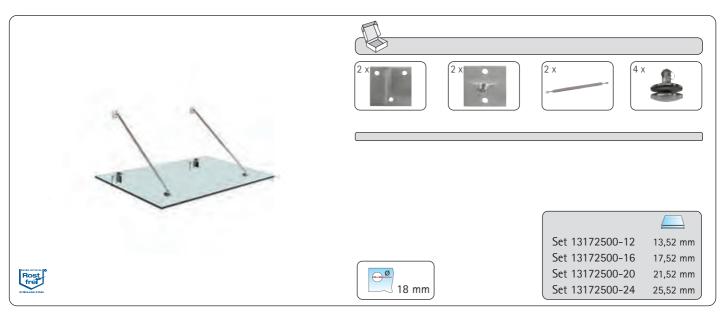






■ Set Quadro | AbZ Z-70.3-85







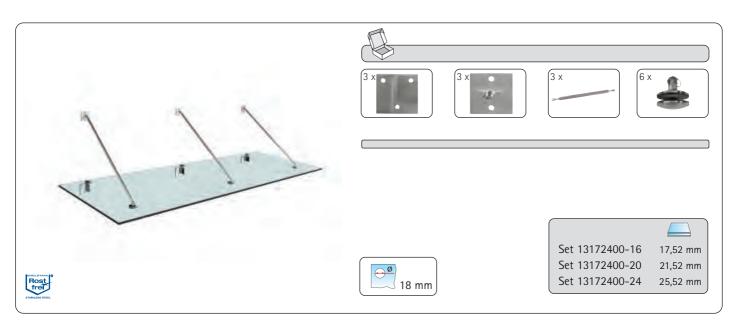


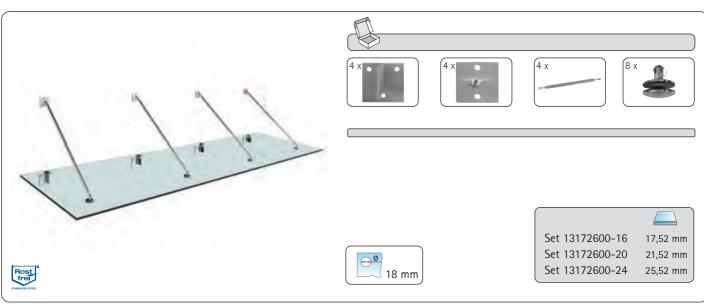


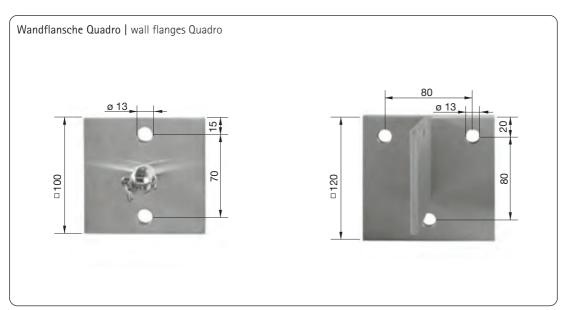




Set Quadro | AbZ Z-70.3-85











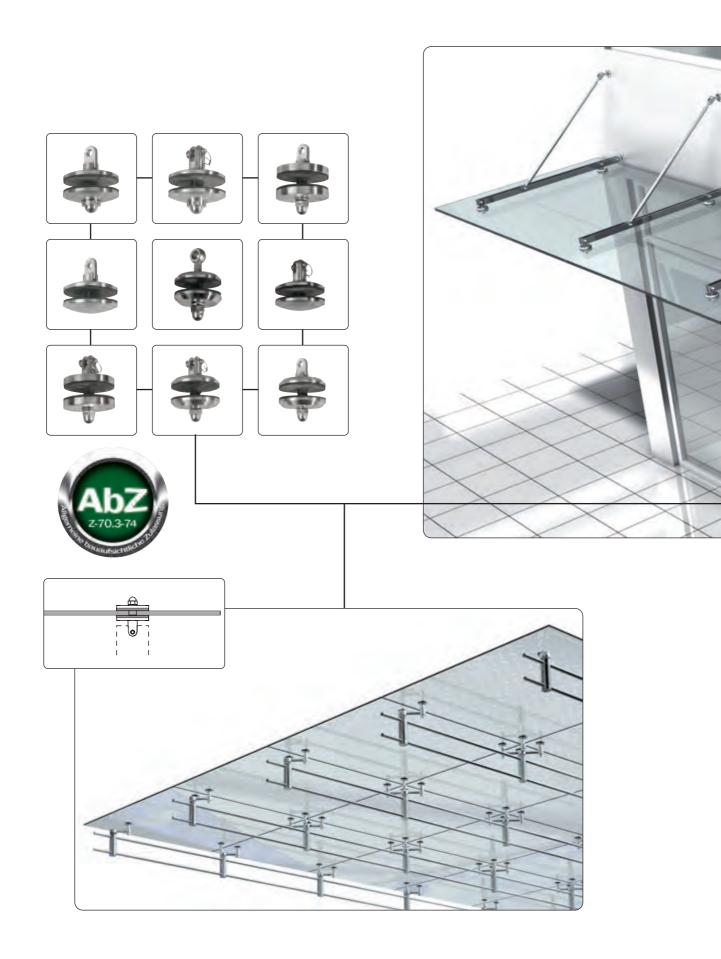
glass printing see page 345







Systematik + Kombinationsmöglichkeiten | systematics + combination possibilities | AbZ Z-70.3-74











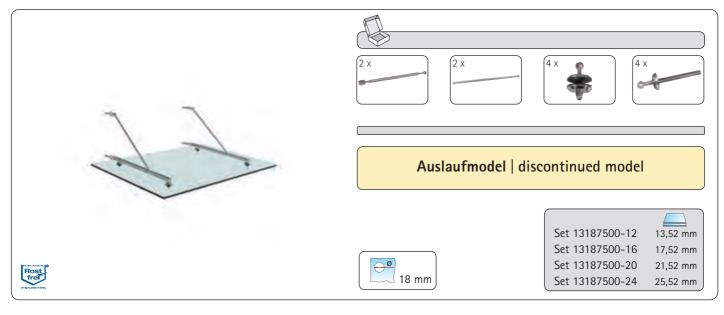






■ Set Tec | AbZ Z-70.3-74







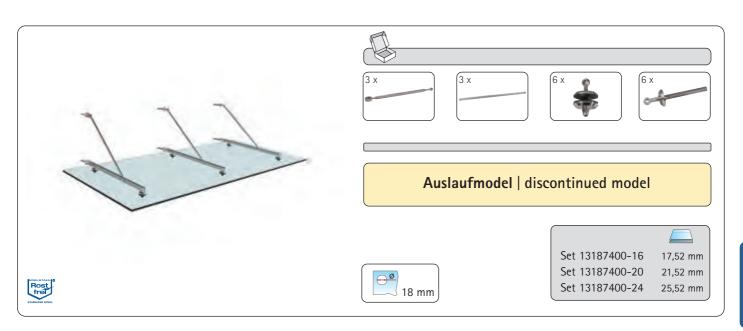


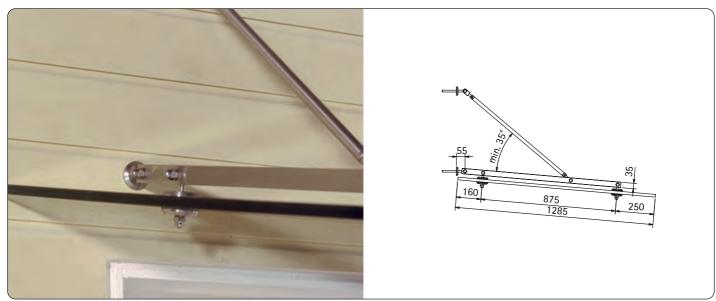






■ Set Tec | AbZ Z-70.3-74













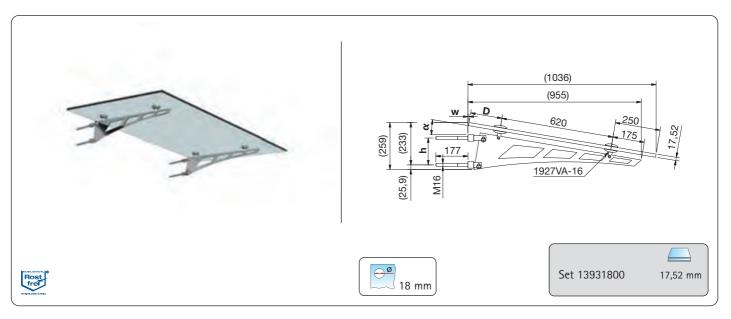






■ Set Schwert | AbZ Z-70.3-74





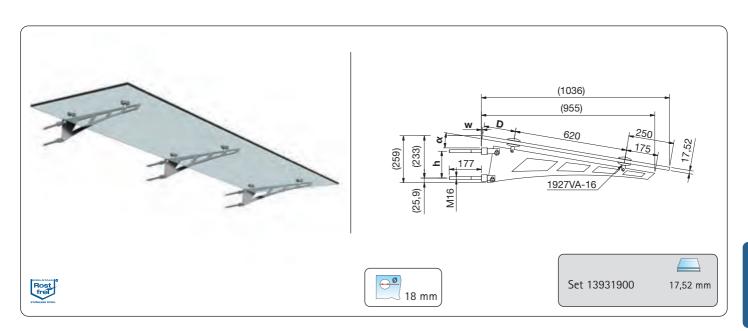


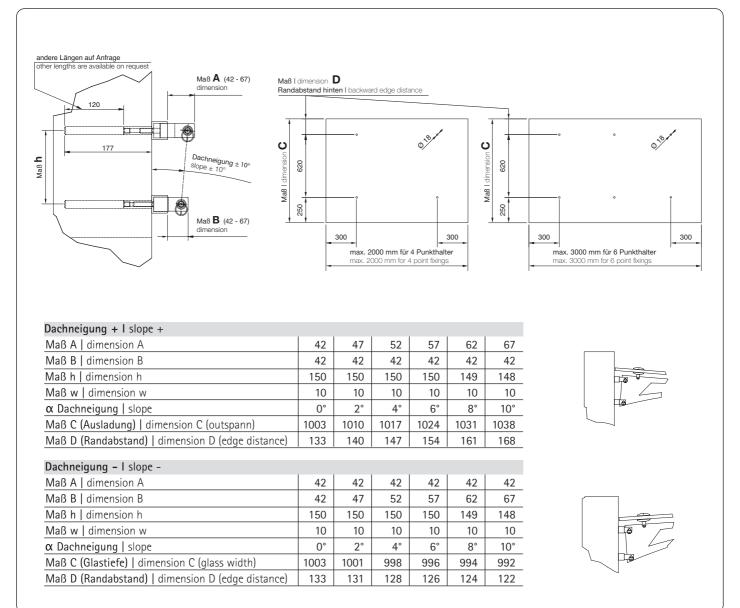






■ Set Schwert | AbZ Z-70.3-74













Set Schwert II I ZiE



6 650 550 380 380 18 mm

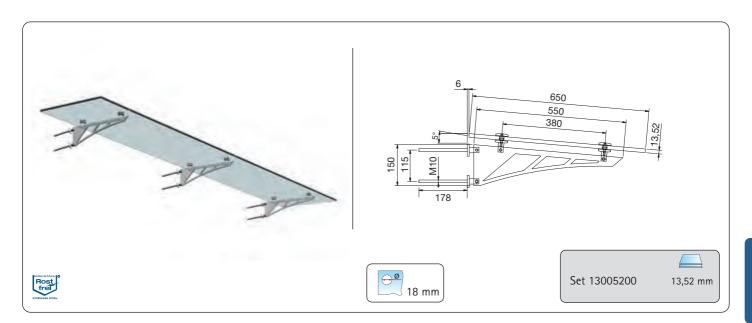


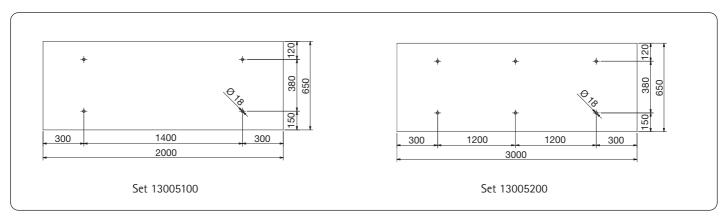






Set Schwert II I ZiE









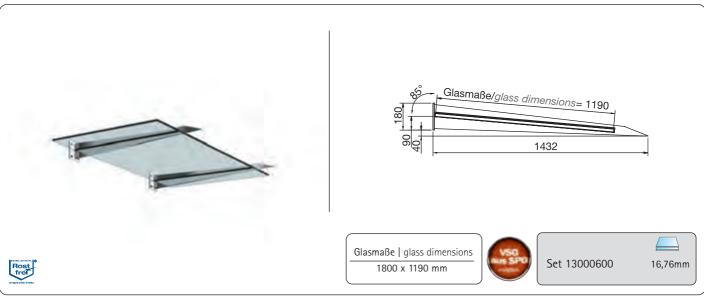






Set King I | TRLV







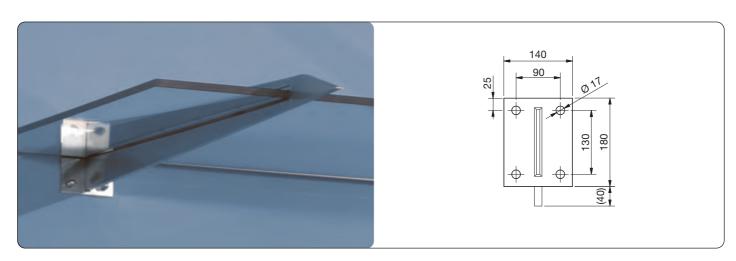






Set King I | TRLV









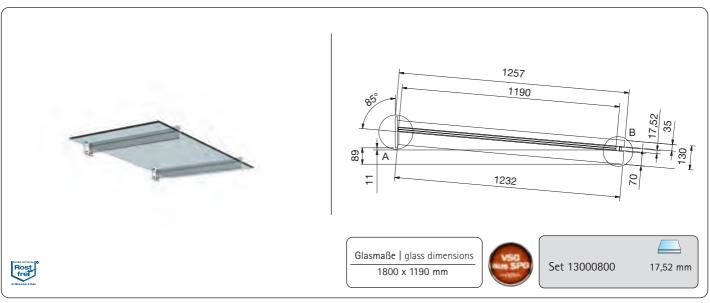






■ Set King II | TRLV





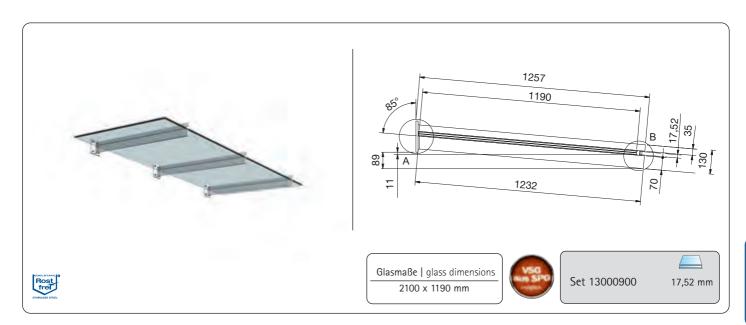


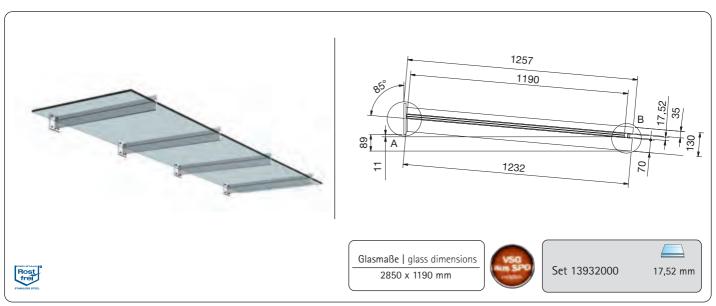


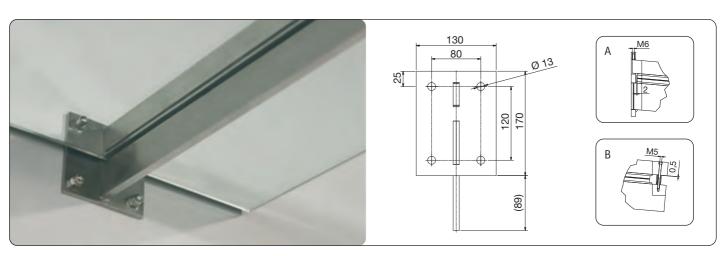




■ Set King II | TRLV







Überkopfverglasung Sets | overhead glazing sets

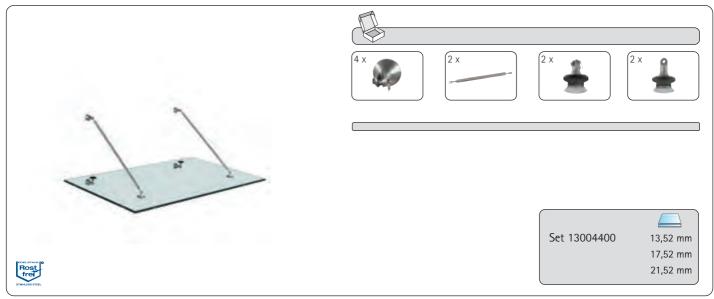






■ Set Appunto | ZiE





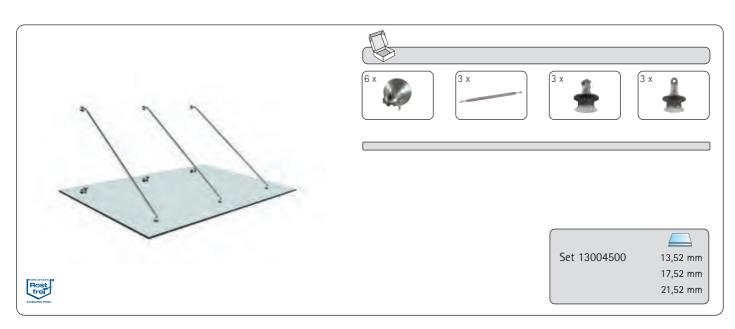


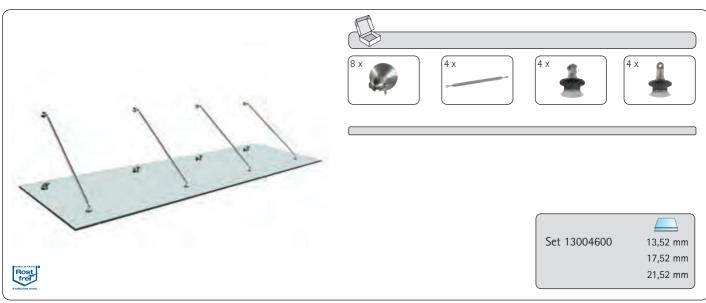




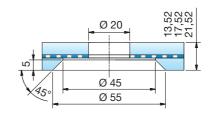


Set Appunto | ZiE









Durch die Klemmung der oberen Glasscheibe inklusive der PVB-Folie kann eine sehr gute Resttragfähigkeit erzielt werden. Lediglich die zweite, untere Glasscheibe des VSG wird mit einer Senkung versehen. Diese wird nun durch den Senkkopf formschlüssig und durch die PVB-Folie im Verbund zur ersten Glasscheibe gehalten. Die PVB-Folie dient als tragendes Element.

Excellent residual load-bearing capacity can be obtained by clamping the upper glass panel and PVB film. Only the second, lower LSG panel is equipped with a countersink. The glass is then positively supported by the countersink fixture and the PVB film interconnected to the first glass panel. The PVB film acts as the load-bearing element.

Überkopfverglasung Sets | overhead glazing sets

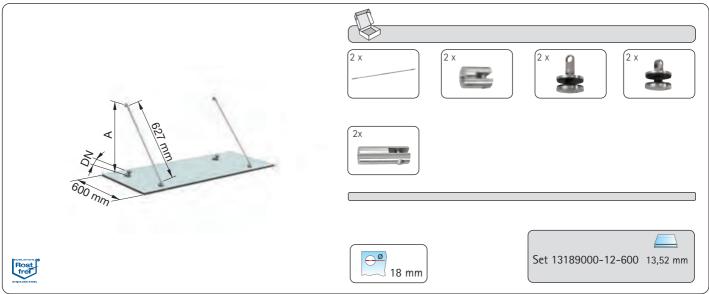






■ Set 1890VA | ZiE





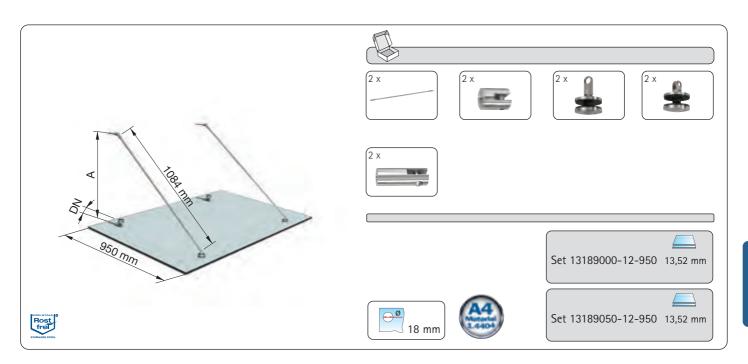




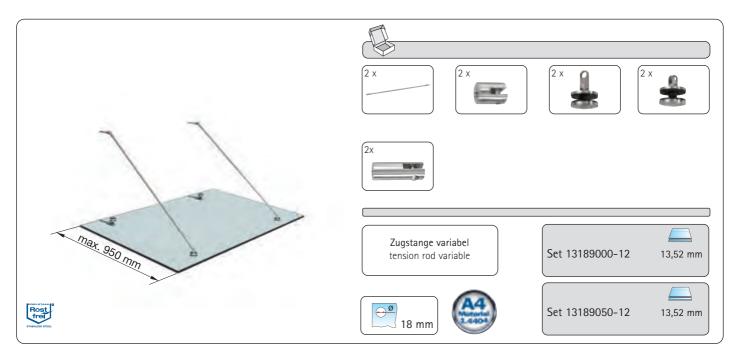




■ Set 1890VA | ZiE



Set Art. Nr.	Dachneigung (DN) slope (DN)	Einbauhöhe Mitte-Mitte (A) installation height centre-centre(A)	Dachneigung (DN) slope (DN)	Einbauhöhe Mitte-Mitte (A) installation height centre-centre(A)
Set 13189000-12-600	5°	436 mm	10°	395 mm
Set 13189000-12-950	5°	700 mm	10°	632 mm
Set 13189050-12-950	5°	700 mm	10°	632 mm



Überkopfverglasung Sets | overhead glazing sets

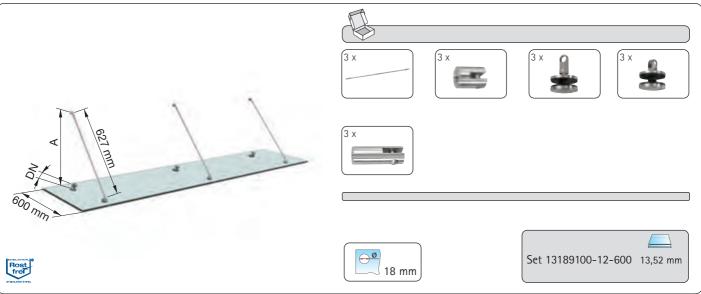






■ Set 1891VA | ZiE





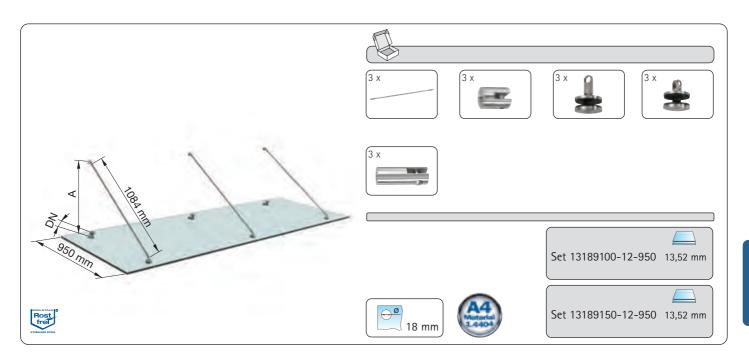




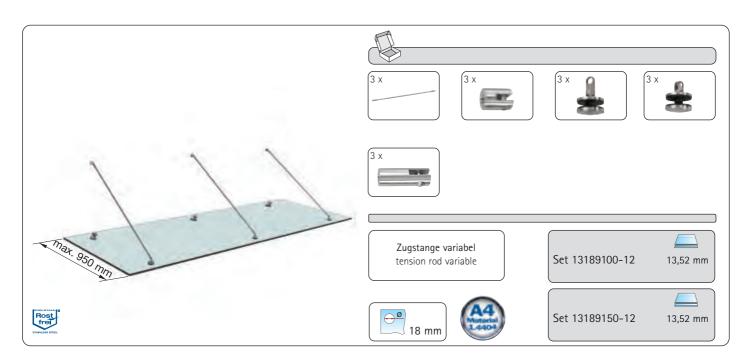




■ Set 1891VA | ZiE



Set Art. Nr.	Dachneigung (DN) slope (DN)	Einbauhöhe Mitte-Mitte (A) installation height centre-centre (A)	Dachneigung (DN) slope (DN)	Einbauhöhe Mitte-Mitte (A) installation height centre-centre(A)
Set 13189100-12-600	5°	436 mm	10°	395 mm
Set 13189100-12-950	5°	700 mm	10°	632 mm
Set 13189150-12-950	5°	700 mm	10°	632 mm



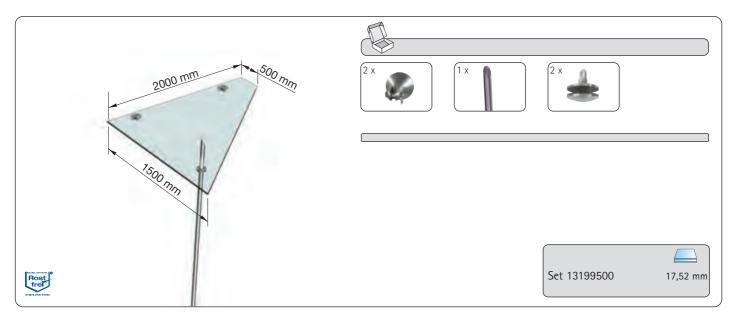






Set Zigmento | ZiE





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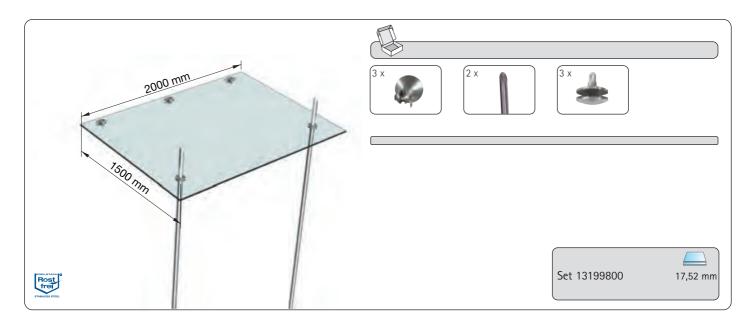






■ Set Zigmento 2 Stützen | 2 posts | ZiE





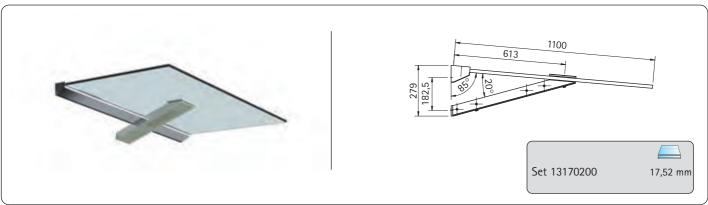






■ Set Sera I | ZiE













■ Set Alto II | ZiE





13170400-17GLAS

Glasmaße | glass dimensions 1600 x 1100 mm



13,52 mm

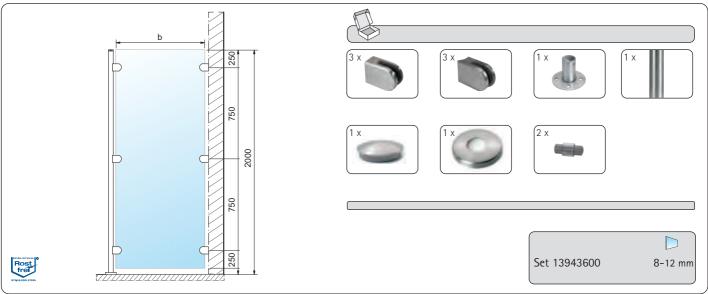






■ Set Windfang | windscreen











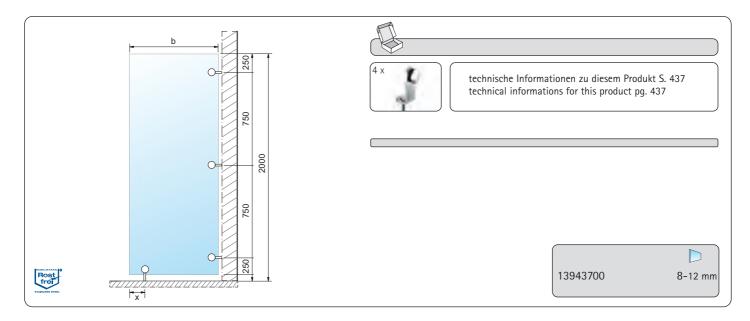




■ Set Windfang | windscreen



Statikinfo zu diesem Set S. 347 statics information for this set pg. 347



Überkopfverglasung Sets | overhead glazing sets







■ Set Windfang | windscreen



technische Informationen zu diesem Produkt S. 437 technical informations for this product pg. 437 13943800 8-12 mm Rost frei







■ Anwendungen Windfang | applications windscreen



mit Rahmen und 6 Punkthaltern | with frame and 6 point fixings



mit 5 Punkthaltern | with 5 point fixings



mit Rahmen und 4 Punkthaltern | with frame and 4 point fixings



Variante mit Profilbefestigung – technische Informationen auf Seite 521 Variation with profile fixation – technical information on page 521



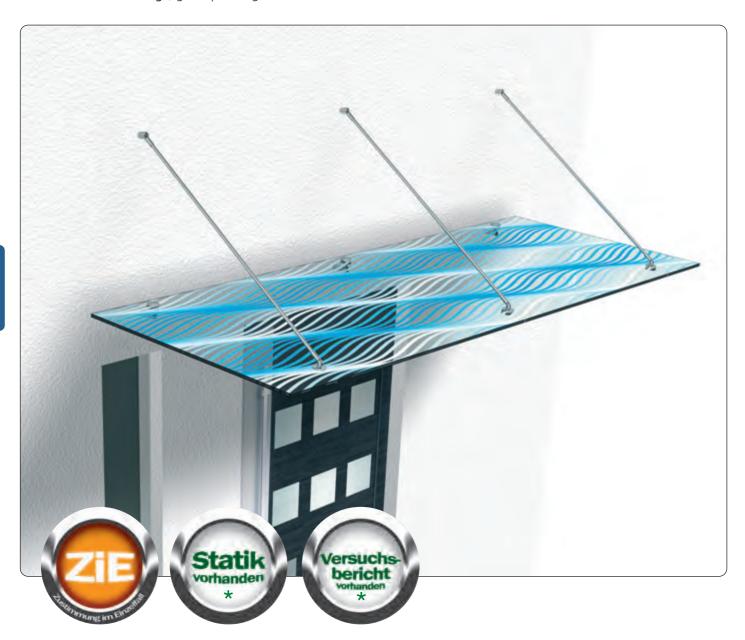
mit Rahmenkonstruktion und Punkthaltern with frame construction and point fixings

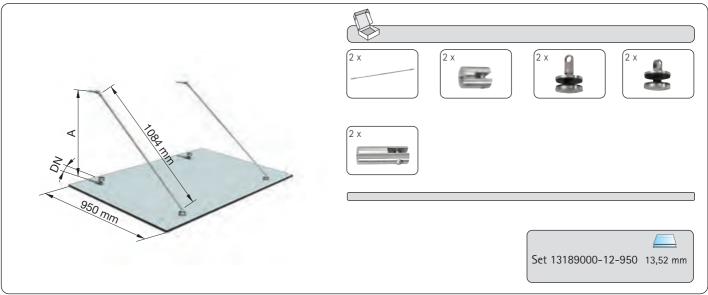






■ Set Glasbedruckung | glass printing





*In Abhängigkeit von dem jeweiligen Druckverfahren | *depending on the respective printing method





DEUTSCHEMETALL®







■ Gestalteter Wetterschutz | creatively designed weather protection

Bedruckte Vordächer schaffen Atmosphäre, werten das Gebäude auf und dienen im Eingangsbereich als echtes Schmuckelement. Dieses Thema ist über die AbZ bei den Top-Connect Vordächern geregelt. Es sind bei der Bedruckung von Vordächern bestimmte nicht bedruckbare Bereiche einzuhalten.

Printings on canopies add atmosphere, increase a building's value and make the entrance area a really decorative element. This topic is regulated for Top Connect canopies in the national technical approval (AbZ). When adding print effects to canopies, certain areas should not be printed on



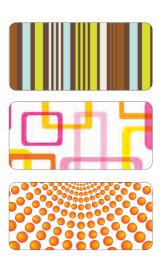


Motiv Firmenlogo

Möglichkeiten + Technik | possibilities and technology

Um die Transparenz zu verringern, aus gestalterischen Gründen oder zur Erhöhung der Rutschsicherheit kann die Scheibenoberfläche ganzflächig oder individuell mittels Siebdrucktechnik farblich gestaltet werden. Neben der Siebdrucktechnik stehen mittlerweile - insbesondere für Einzelanfertigungen - Großformatdrucker zur Verfügung. In der Regel werden die Farben im Vorspannofen durch Erhitzung auf der Oberfläche dauerhaft fixiert (Emaillierung). Die Emaillierung wirkt sich festigkeitsreduzierend für das Glas aus. Dieses ist durch die AbZ abgedeckt, wenn der gekennzeichnete Bereich (siehe Seite 345) nicht emailliert ist. Eine Alternative zur Emaillierung bietet die farbige oder bedruckte PVB-Folie (durch AbZ abgedeckt - bei geforderten Eigenschaften der Folie). Oder gewinnen Sie gleich Energie für Ihre Außenbeleuchtung mit einlaminierten PV-Zellen.

The surface of the panels can be individually or completely coloured using screen printing in order to reduce transparency, for design reasons or to reduce the risk of people slipping. Besides screen printing, large-format printers are also now available, especially for one-off jobs. Normally, the colours are permanently added in a tempering oven by heating the surface (enamelling). The enamelling process reduces the strength of the glass. This is covered by the national technical approval (AbZ) if the marked area is not enamelled (see drawing above). Coloured or printed PVB film is an alternative to enamelling and is also covered by the national technical approval (AbZ) when the required properties of the film are met (see page 345). Or you can generate energy for your outdoor lighting by using laminated PV cells.







Glas | glass (2 x 6mm TVG), 1600 x 950 mm, 4 Bohrungen | bores

zu Artikel Nr. | for item no. 13189000-12-950

13189000-3GLAS

13,52 mm



Bedruckung auf Anfrage | Glass print on demand

Kontaktieren Sie uns! Freie Wahl oder eigenes Design! Wir haben einige Motive zur Auswahl oder wir drucken Ihr Motiv oder Logo. Kosten auf Anfrage. | Contact us! Free choice or own design! We have a number of motifs you can choose from or we can print your motif or logo. Prices on request.







■ Set Solarpanel | solar panel



Informationen auf Anfrage Information on request









■ Königsweg zum Klimaschutz | the ideal solution for climate protection

Sonnenenergie hat gegenüber allen anderen Formen der Energiegewinnung das mit Abstand positivste Image. Sie ist sauber, innovativ und steht für fortschrittliches Denken. Gebäude mit solarthermischer Energienutzung werden deutlich aufgewertet, und nicht zuletzt macht es auch Spaß zu erleben, wie Solartechnik lautlos, effizient und zuverlässig ihre Arbeit verrichtet. Pauli + Sohn hat nun Punkthalter für alle Arten von Solarplatten entwickelt.

Compared with all other forms of energy generation, solar energy has by far the most positive image. It is clean and innovative and has become synonymous with a progressive way of thinking. The status of buildings with solar thermal energy generation is considerably enhanced and it is also fun to experience how quiet, efficient and reliable solar technology really is. Pauli + Sohn has now developed point fixings for all kinds of solar panels.



■ Zukunft mit Solar | a solar future

Mit dem Unternehmen HUF HAUS hat Pauli + Sohn im Sommer 2008 eine Spezialanfertigung des Punkthalters entwickelt.

So sind in dem neuen Musterhaus die vier Grundpfeiler des Lebens auf rund 700 m² Wohnfläche bis ins kleinste Detail spürbar – von innovativer Technik über die hochwertige Materialauswahl bis zu kunstvollen Dekoobjekten.

So werden wir auch neue Projekte für die Solartechnik entwickeln. Angedacht ist ein Vordach-Set mit Solarpaneelen, einsetzbar für das Sammeln von Energie für die Beleuchtung im Aussenbereich inklusive der Technik im Hintergrund. Pauli + Sohn developed a special point fixing design with the company HUF HAUS in summer 2008. As a result, the four cornerstones of life can be perceived to the smallest detail over a living area of around 700 m² in the new show house – from innovative technology and high-quality materials to artistic decorations. We are also developing new solar technology projects. A canopy set with solar panels that can be used to gather energy for outdoor lighting, including the technology in the background, is being planned.







■ Inhalt | content



overhead glazing components





mounting plate für brickwork + concrete











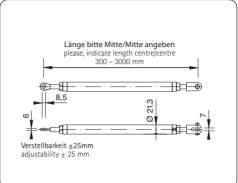






Produkte | components

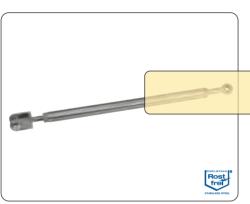


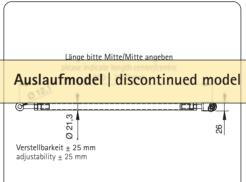


Art. Nr.: | item no.: 13902300

Stangenverbindung mit Öse/Gabel rod connection with eye/fork

A2 (1.4301) Material:



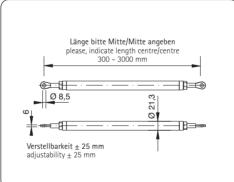


Art. Nr.: | item no.: 13902400

Stangenverbindung für Tec (1875) rod connection for Tec (1875)

A2 (1.4301)

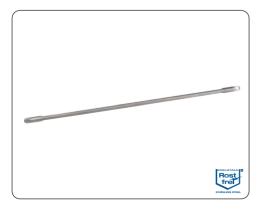


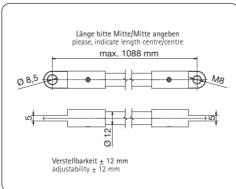


Art. Nr.: | item no.: 13903800

Stangenverbindung mit 2 Ösen rod connection with 2 eyes

Material: A2 (1.4301)





Art. Nr.: | item no.: 13908200

Stangenverbindung rod connection

A2 (1.4301) Material:





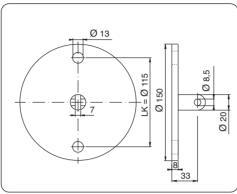






■ Produkte | components



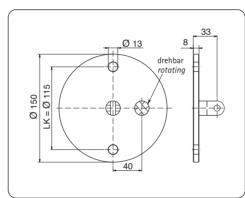


Art. Nr.: | item no.: 13903400

Wand-Stangenverbindung Basic, oben upper wall rod connection Basic

Material: A2 (1.4301)



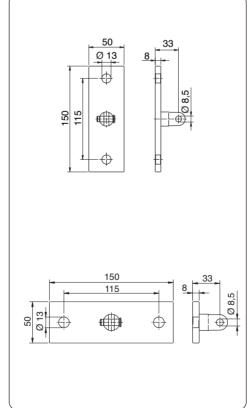


Art. Nr.: | item no.: 13903500

Wand-Stangenverbindung Basic, oben upper wall rod connection Basic

Material: A2 (1.4301)





Art. Nr.: | item no.: 13191200

Wand-Stangenverbindung, oben vertikal/horizontal upper wall rod connection vertical/horizontal

A2 (1.4301) Material:

13191200-V

13191200-H

-V = vertikal | vertical -H = horizontal

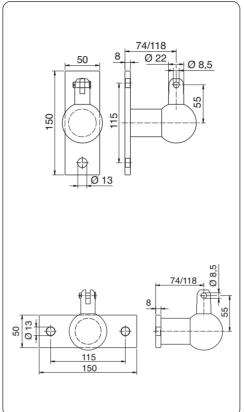






Produkte | components





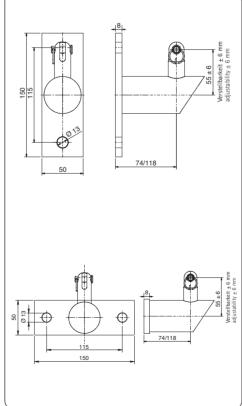
Art. Nr.: | item no.: 13194200

Wandbefestigung Basic, unten vertikal/horizontal lower wall mount Basic vertical/horizontal

A2 (1.4301) Material: 13194200-V 13194200-V-118 118=verlängert | extended 13194200-H 13194200-H-118 118=verlängert | extended

-V = vertikal | vertical -H = horizontal





Art. Nr.: | item no.: 13194300

Wandbefestigung Basic II, unten vertikal/horizontal lower wall mount Basic II vertical/horizontal

Material:

13194300-V 13194300-V-118 118=verlängert | extended 13194300-H 13194300-H-118 118=verlängert | extended

A2 (1.4301)

= vertikal | vertical -H = horizontal







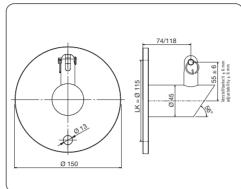






■ Produkte | components





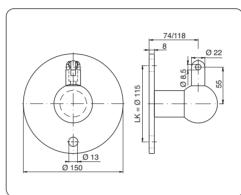
Art. Nr.: | item no.: 13194100

Wandbefestigung Basic II, unten lower wall mount Basic II

Material: A2 (1.4301) 13194100

13194100-118 118=verlängert | extended





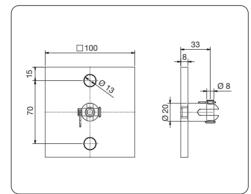
Art. Nr.: | item no.: 13194000

Wandbefestigung Basic, unten lower wall mount Basic

Material: A2 (1.4301) 13194000

13194000-118 118=verlängert | extended



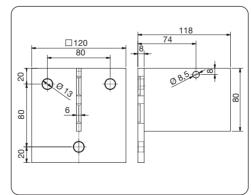


Art. Nr.: | item no.: 13902100

Wand- Stangenbefestigung Quadro, oben upper rod connection Quadro

A2 (1.4301) Material:





Art. Nr.: | item no.: 13902200

Wandbefestigung Quadro, unten lower wall mount Quadro

Material: A2 (1.4301)

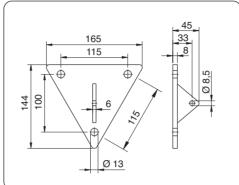






Produkte | components



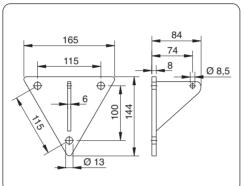


Art. Nr.: | item no.: 13902500

Wand-Stangenverbindung Triangle, oben upper wall rod connection Triangle

Material: A2 (1.4301)



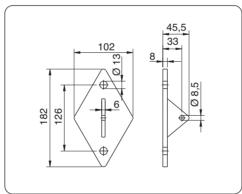


Art. Nr.: | item no.: 13902600

Wandbefestigung Triangle, unten lower wall mount Triangle

Material: A2 (1.4301)



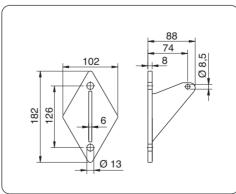


Art. Nr.: | item no.: 13902700

Wand-Stangenverbindung Diamond, oben upper wall rod connection Diamond

Material: A2 (1.4301)





Art. Nr.: | item no.: 13902800

Wandbefestigung Diamond, unten lower wall mount Diamond

A2 (1.4301) Material:

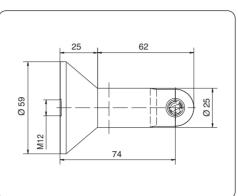






■ Produkte | components



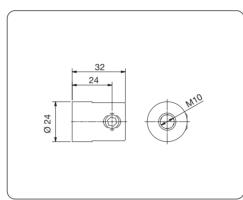


Art. Nr.: | item no.: 13907100

Wandbefestigung Informo wall mount Informo

A2 (1.4301) Material:



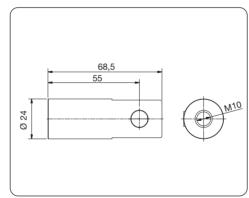


Art. Nr.: | item no.: 13908300

Wand-Stangenverbindung, oben upper wall rod connection

Material: A2 (1.4301)

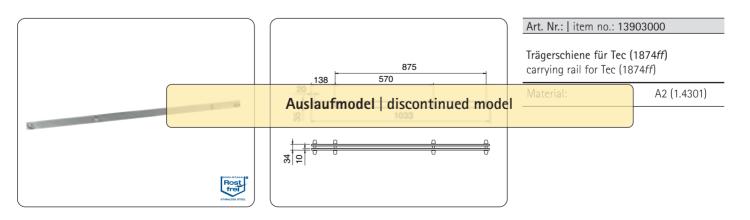




Art. Nr.: | item no.: 13908600

Wandbefestigung, unten lower wall mount

Material: A2 (1.4301)



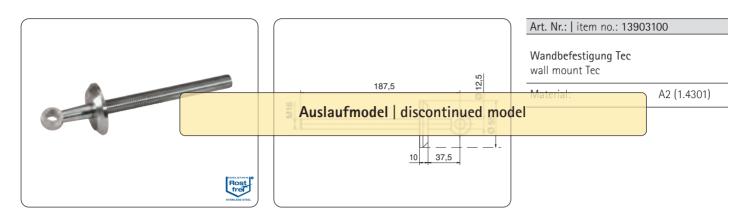


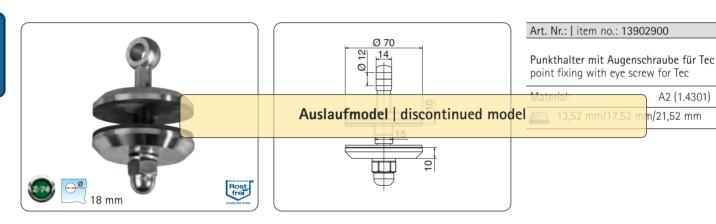




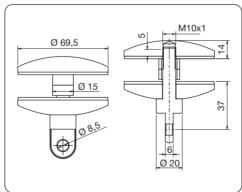
A2 (1.4301)

■ Produkte | components







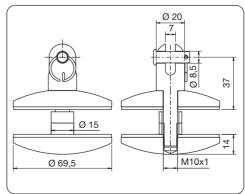


Art. Nr.: | item no.: 13192600

Punkthalter Credo mit Öse point fixing Credo with eye

Material:	A2 (1.4301)
13192600-12	13,52 mm
13192600-16	17,52 mm
13192600-20	21,52 mm
13192600-24	25,52 mm





Art. Nr.: | item no.: 1927VA

Punkthalter Credo mit Gabel point fixing Credo with fork

Material:	A2 (1.4301)
13192700-12	13,52 mm
13192700-16	17,52 mm
13192700-20	21,52 mm
13192700-24	25,52 mm



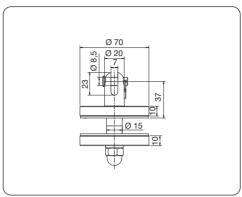






Produkte | components



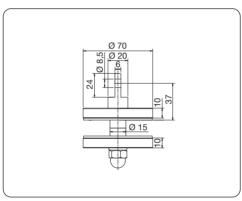


Art. Nr.: | item no.: 13192800

Punkthalter "Classic" mit Gabel point fixing "Classic" with fork

Material:	A2 (1.4301)
13192800	17,52 mm
	21,52 mm
13192800-12	13,52 mm
13192800-24	25,52 mm



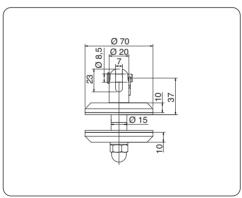


Art. Nr.: | item no.: 13192900

Punkthalter "Classic" mit Öse point fixing "Classic" with eye

Material:	A2 (1.4301)
13192900	17,52 mm
	21,52 mm
13192900-12	13,52 mm
13192900-24	25,52 mm



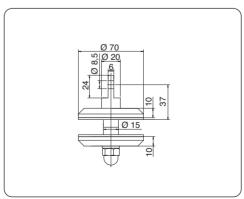


Art. Nr.: | item no.: 13193000

Punkthalter "gefast" mit Gabel point fixing "chamfered" with fork

Material:	A2 (1.4301)
13193000	17,52 mm
	21,52 mm
13193000-12	13,52 mm
13193000-24	25,52 mm





Art. Nr.: | item no.: 13193100

Punkthalter "gefast" mit Öse point fixing "chamfered" with eye

Material:	A2 (1.4301)
13193100	17,52 mm
	21,52 mm
13193100-12	13,52 mm
13193100-24	25,52 mm

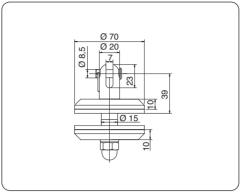






Produkte | components





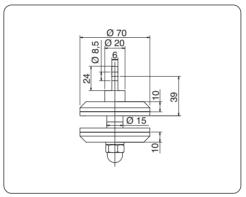
Art. Nr.: | item no.: 13905100

Punkthalter "gefast" mit Gabel für zylindrisch gekrümmtes Glas point fixing "chamfered" with fork for cylindrically curved glass

A2 (1.4301) Material:

____ 17,52 mm





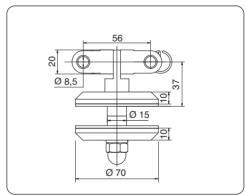
Art. Nr.: | item no.: 13905200

Punkthalter "gefast" mit Öse für zylindrisch gekrümmtes Glas point fixing "chamfered" with eye for cylindrically curved glass

A2 (1.4301) Material:

17,52 mm





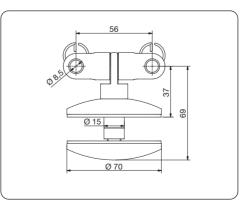
Art. Nr.: | item no.: 13193400

Punkthalter "gefast" mit 2 Gabeln verstellbar

point fixing "chamfered" with 2 forks adjustable

Material:	A2 (1.4301)
13193400	17,52 mm
13193400-20	21,52 mm
13193400-24	25,52 mm





Art. Nr.: | item no.: 13192500

Punkthalter Credo mit 2 Gabeln, verstellbar

point fixing Credo with 2 forks, adjustable

Material:	A2 (1.4301)
13192500-12	13,52 mm
13192500-16	17,52 mm
13192500-20	21,52 mm
13192500-24	25,52 mm

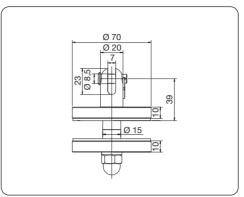






Produkte | components





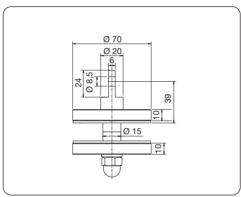
Art. Nr.: | item no.: 13905400

Punkthalter "Classic" mit Gabel für zylindrisch gekrümmtes Glas point fixing "Classic" with fork for cylindrically curved glass

Material: A2 (1.4301)

____ 17,52 mm





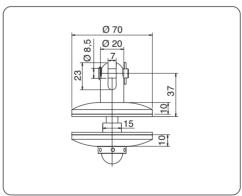
Art. Nr.: | item no.: 13905500

Punkthalter "Classic" mit Öse für zylindrisch gekrümmtes Glas point fixing "Classic" with eye for cylindrically curved glass

A2 (1.4301) Material:

17,52 mm



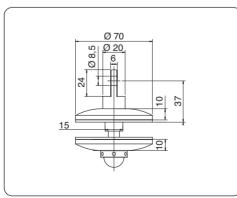


Art. Nr.: | item no.: 13198200

Punkthalter "Informo" mit Gabel, sphärisch point fixing "Informo" with fork, spherical

Material:	A2 (1.4301)
13198200	13,52 mm
13198200-16	17,52 mm
13198200-20	21,52 mm
13198200-24	25,52 mm





Art. Nr.: | item no.: 13198300

Glasplattenhalterung "Informo" mit Öse, sphärisch glass panel mount "Informo" with eye, spherical

Material:	A2 (1.4301)
13198300	13,52 mm
13198300-16	17,52 mm
13198300-20	21,52 mm
13198300-24	25,52 mm

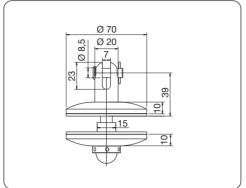






Produkte | components





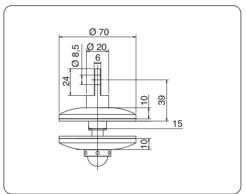
Art. Nr.: | item no.: 13907800

Punkthalter "Informo" mit Gabel für zylindrisch gekrümmtes Glas point fixing "Informo" with fork for cylindrically curved glass

Material: A2 (1.4301)

17,52 mm





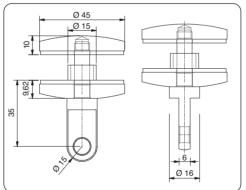
Art. Nr.: | item no.: 13907900

Punkthalter "Informo" mit Öse für zylindrisch gekrümmtes Glas point fixing "Informo" with eye for cylindrically curved glass

A2 (1.4301) Material:

17,52 mm





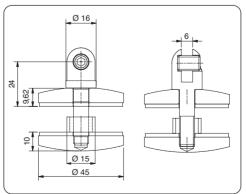
Art. Nr.: | item no.: 13908400

Punkthalter mit Öse point fixing with eye

Material: A2 (1.4301)

13,52 mm





Art. Nr.: | item no.: 13908500

Punkthalter mit Gabel point fixing with fork

Material: A2 (1.4301)

13,52 mm

