

Industrial Plant Division

sikla

Process Industry

Competence Center south

Sikla GmbH In der Lache 17 D-78056 VS-Schwenningen

 Sales & Service

 Phone
 +49 7720 948 920

 Fax
 +49 7720 948 140

 anlagenbau@sikla.de

www.industrie.sikla.com

Competence Center north

Sikla GmbH Spannstiftstraße 37 D-58119 Hagen

Design & EngineeringPhone+49 7720 948 960Fax+49 7720 948 362

Sectors



Softwaretools



More informations you can find on our Serviceportal in the area "Service" under www.industrie.sikla.com.























02/2020

sikla





Coating for corrosive atmosphere

Sikla delivers on request a certified coating structure for salty or acidic atmosphere. The tested coating structure meets the requirements of DIN EN ISO 12944-6 Corrosivity C5 long.

For further information, please contact like us.



HCP-High corrosion protection finishes

The definition "High Corrosion Protection" – stands for optimal corrosion protection for different connecting elements. HCP-finish is a special kind of coating with one result. Sikla is offering you for the applications in corrosive category C1 up to C4 according to DIN EN ISO 12944 the individual adjusted corrosion protection with the following available coating systems:

- hot-dipped galvanised according to DIN EN ISO 461 resp. DIN EN ISO 10684
 High Performance corrosion protection consisting of zinc flake coating
- according to DIN EN 13858 resp. DIN EN ISO 10683 • Innovative zinc-nickel surface coating

The protective effect of all HCP-coating systems is corresponding at least to the well established hot galvanisation with hot dip metal coating.

To select the optimal surface coating for your demands, we attach great importance to the protective effect, the preservation of the functionality (e.g. mobility of the thread), market requirement and economic feasibility.

For projects with special requirements to the corrosion protection our customer service in collaboration with you will find the suitable surface coating.



Our account managers and application engineers are happy to provide more detailed information - to answer your questions, or together with you to develop the supports using our proprietary planning software solutions.

Unless otherwise noted, all specifications apply to predominantly static loads at room temperature. The design loads are understood to be nominal and relate, unless stated otherwise, to the main load direction. The load introduction into the building must be checked on site by the customer.

Allowable loads (Fperm.) describe the maximum exposure to external influences and are for the purposes of the security concept by Eurocode 3 (DIN EN 1993: 2010) to be understood as derived from characteristic values.

When selecting the support components, compliance with the allowable load for each participating product must be observed. As is well known, the weakest link of the load combination on the overall structure is decisive. If the connection geometry's bending strength is low the mentioned torques have to be reduced.

Surface finishes of the support components are suitable for the following environmental conditions:

Surface / material	Corrosivity category according to EN ISO 14713-1
Galvanisation	up to ≤ C1
HCP (High Corrosion Protection)	up to \leq C4
Stainless steel	up to \leq C5I (industry)

This catalogue is intended only for the use of the recipient, and is the full property of Sikla. All technical diagrams and information is correct to the best of our knowledge. Pictures and drawings are not binding. Sikla cannot be held responsible for any printing errors.

Changes and improvements in regards to design are subject to change. Our terms and conditions of sale, delivery and payment can be found in the current Sikla price list.

® Sikla 12/2018 All rights reserved



1. Validity

(1) All of our contracts are concluded exclusively on the basis of these general terms and conditions in the version available online at the time of the order.

(2) Even if we do not expressly refer to these conditions, they shall apply for future transactions within continuing business relationships if they have been agree upon by the contractual partners for an earlier order. Orders that are place by the purchaser verbally, by telephone, fax or EDP are only accepted with application of these conditions.

(3) If the purchaser fails to reject the order confirmation within one week of having received it, these conditions shall apply as accepted in their entirety and without limitation.

(4) If any conflicting conditions of the purchaser or us should replace these general terms and conditions, they must be expressly agreed upon by the partners.

(5) General terms and conditions of business and contractual conditions, particularly purchasing conditions of the purchaser only apply to us if we expressly recognise them. They do not apply to us, even if we do not specifically reject them in an individual case.

2. Conclusion of contract

(1) Our offers are non-binding. Depictions and/or descriptions of goods and services on our website, in our catalogues and brochures are non-binding offers. A binding offer

(Article 145 of German Civil Code) is the order of goods by the purchaser.

(2) Orders issued to us are only accepted by us if they have been confirmed by us in writing or if the delivery taken place without any comment on our part. If orders are issued to us via internet or email, a contract only comes into existence if we have confirmed the order in writing.

(3) If a purchaser receives a requested password for the order via internet, they are only entitled to use this password. The purchaser is responsible for ensuring that the password is not misused. If an order is placed with the password of our purchaser by an unauthorised party, the purchaser shall be obligated to immediately reject our written order confirmation; otherwise the contract with the purchaser over the content of our order confirmation shall take effect.

(4) Our field staff are basically only authorised to broker orders; an order only applies as accepted if it has been confirmed in writing by our main administration or one of our sales offices, or if the goods have been delivered. Individual contractual agreements, particularly specific assurances of characteristics or recommendations for use for our goods, specification of delivery periods, discounts and bonuses, as well as any goodwill agreements require the express written confirmation of our main administration or our local offices to be legally valid, unless contracting powers exist for verbal declarations in accordance with German Commercial Code or prima facie legal principles. Supplements and/or changes made by telephone or verbally also require written confirmation to be valid.

3. Contractual scope

(1) We basically only offer the sale of fastening systems. Consulting services provided before selection of fastening systems, in regard to use or configuration of systems are only owed with an express separate written contract subject to a fee.

(2) Insofar as consulting services have been contractually agreed upon, they are provided exclusively on the basis of the information provided by the customer. We are not obligated to check data or other information provided by the customer for completeness or correctness, insofar as there is no occasion to do so in consideration of the relevant circumstances in the individual case. It is incumbent on the purchaser to provide us with all relevant information. The purchaser remains obligated to check our proposals for suitability for the concrete intended purpose.

4. Prices

(1) A binding specification of prices does not take place until our written confirmation and subject to the reservation that the order data on which the order confirmation is based remains unchanged. Our prices are indicated in Euro without the statutory value-added tax applicable at the time of delivery. Unless otherwise indicated, we deliver freight paid. For small orders with a net goods value of less than \notin 250,000, we must reserve the right to bill a small order surcharge of 10 %, or at least \notin 9.00.

(2) Prices changes are permitted if more than four months pass between the conclusion of contract and agreed delivery date. If wages, material costs or purchase prices increase prior to the completion of the delivery, we shall be entitled to a reasonable price increase corresponding to cost increases. The purchaser shall not be entitled to cancellation of the price increase is only insignificant.

(3) Our invoices are due for payment immediately after receipt of invoice.

(4) The payment period applies as having been observed when the transfer or cheque amount has been redeemed in our account within the period. Complaints for defects do not relieve the purchaser from their payment obligations.

5. Payment conditions

(1) If the purchaser should enter into default of payment, we shall be entitled to bill default interest at a rate of 9 % points above the base rate. In the process, we are always entitled to furnish proof of a higher interest rate and bill accordingly.

(2) We reserve the right to assert a flat rate fee of \notin 20.00 for expenses prior to legal proceedings, particularly for reminders - without prejudice to proof of higher or lower



costs. Cheques and bills of exchange are only accepted for the purpose of fulfilment. Deductions and other fees shall be borne by the purchaser.

(3) If the purchaser fails to pay invoices that are due for payment, fails to meet a payment goal, suffers a worsening of their financial situation after conclusion of contract or we receive unfavourable information after conclusion of contact that calls into question their ability to pay or creditworthiness, we shall be entitled to demand immediate payment of the remaining debt of the purchaser and, in amendment of the agreements that have been made, to require advance payments, provision of securities or immediate payment of all claims based on the same legal relationship after delivery has taken place. We are also entitled to withdraw from the contract based on non-fulfilment after a reasonable grace period. We are entitled to first apply incoming payments to older claims and then to expenses and interest of the main performance and then to the main claim.

(4) Further contractual or statutory claims in the event of default remain unaffected.

(5) The purchaser is only entitled to offsetting and retention rights if their counter-claims have been determined to be legally valid, are undisputed or are recognised by us.

6. Delivery periods, delivery quantities

(1) Delivery periods are only binding for us if we have expressly assured them. Insofar as shipment has been agreed upon, the delivery periods and delivery dates relate to the time of transfer to the forwarder, freight carrier or other third party commissioned with the transport.

(2) The delivery period begins on the day of clarification of all details of the purchase contract with provision of all necessary documents. It shall be extended for the length of time that the purchaser is in default of its duties within a continuing business relationship, even for other contracts.

(3) If shipping instructions are not specified, we will select the transport method that appears to be most beneficial without assuming responsibility for ensuring the least expensive freight and save arrival of goods. The shipment takes place at the risk of the purchaser. In the process, we are entitled to bill a shipping costs share of up to \in 30.00.

(4) We are not responsible for impossibility of delivery or for delivery delays, insofar as they are based on force majeure or other unforeseeable events for which we are not responsible. Such events extend the delivery date accordingly, even if they occur when a delay has already begun.

(5) Insofar as acceptance of the delivery is unreasonable the customer due to the delay, they are entitled to withdraw from the contract with a written declaration to us after the lapse a grace period to be set specified in writing. Compensation for damages and reimbursement of expenses are barred in this case. (6) If the purchaser enters into default of acceptance, we shall be entitled to demand compensation for the damages incurred by us; the risk of accidental worsening and accidental loss transfer to the purchaser as soon as the default begins.

(7) We are entitled to make partial deliveries and provide partial services insofar as this is reasonable for the purchaser.

7. Retention of title

(1) Our deliveries ('goods') remain our property until fulfilment of all of our claims towards the purchaser from the business relationship.

(2) The purchaser is obligated to handle the goods with care until the title has transferred to them. In particular, the purchaser is obligated to sufficiently insure the goods at their own expense against theft, fire and water damage for replacement value. If maintenance and inspection work must be carried out, the purchaser must carry out said work at its own expense and on a timely basis.

(3) The purchaser is entitled to process or modify the goods ('processing'). The processing by the purchaser always takes place on our behalf. Insofar as the goods are processed together with other items not belonging to us, we acquire co-ownership of the new item proportionate to the objective value of our goods to that of the other processed items at the time of the processing. The same applies for the combination of goods. Insofar as combination takes place in the manner that the new goods should be considered the primary item, it applies as agreed that the purchaser transfers proportionate co-ownership to us and protects the sole ownership or co-ownership for us.

(4) The purchaser is entitled to sale of the goods in the normal course of business. In the process, the purchaser hereby assigns all claims from the sale with all ancillary rights in the amount of the final invoice amount agreed upon with us (including VAT). We hereby accept this assignment.

(5) The purchaser also assigns claims for securing its claims that arose as a result of the combination of goods with property of a third party. We hereby accept this assignment.

(6) The purchaser remains entitled to collect the claims in accordance with Article 7, Sections 4 and 5, wherein our authority to collect the claims ourselves remains unaffected. However, we are obligated to refrain from collecting the claim as long as the purchaser meets its payment obligations from the proceeds, has not entered into default of payment, no petition has been made for an initiation of insolvency proceedings and no payments have been cancelled. However, if this is the case, the purchaser must, on request, disclose the assigned claims and the debtors to us, provide all necessary information for collection, hand over the corresponding documents and notify the debtor (third party) of the assignment. The direct debit authorisation can be revoked by us in the event of breach of contract by the purchaser (particularly default of payment).

sikla

(7) Insofar as there is a claim, we shall be entitled to demand information from the purchaser at any time about which deliveries subject to retention of title are still in the purchaser's possession and the location in which they are presently situated. We are further entitled to inspect and seize this delivery from the location at any time.

(8) The purchaser must refrain from pledging or assigns the goods and claims while the retention of title remains in effect. Excluded from this is the transport, delivery and other consumable material that is processed in the normal course of business. In the event of pledging or other thirdparty seizures, the purchaser must immediately notify us in writing so that we can file a dispute in accordance with Article 771 of the German Code of Civil Procedure. Costs that we incur despite winning a legal dispute in accordance with Article 771 of the German Civil Code of Procedure shall be borne by the purchase.

(9) The securities to which we are entitled in this respect shall not exceed a value greater than 15% more than the value of the claims to be secured. In this case, we will release an appropriate share of the securities.

(10) In the event of conduct on the part of the purchaser that is in breach of contract, particularly for default of payment, we shall be entitled to demand surrender of the goods. The surrender only entails a withdrawal from the contract if we have expressly declared a withdrawal. The costs that we have incurred for the return of goods (particularly transport costs) shall be borne by the purchaser.

8. Warranty

(1) Our deliveries and invoices must be immediately inspected by the purchaser and any defects or errors as specified in Articles 377, 388 of German Commercial Code must be reported immediately. Otherwise, the delivery and/or invoice apply as recognised.

(2) The risk transfers to the purchaser along with the transfer in the event of an obligation to collect. The same applies starting with the transfer to the transport person for an obligation to send. For an obligation to collect, the risk transfers upon leaving the factory grounds.

(3) The dimensional and weight specifications in our catalogues and brochures are non-binding. We reserve the right to change the design, dimensions and weight. The technical data specified in our catalogues and brochures are non-binding guidelines. We reserve the right to technical, assortment and price changes. Liability for print errors and defects is excluded.

(4) We are only liability for the usability of the purchase item for the intended use according to the contract. The purchaser's duty to check the suitability and usability for the intended purpose remains unaffected. Liability for planning, consulting, processing information, etc. in any form whatsoever is only assumed insofar as we have notified the purchaser of our recommendations for a specific construction project with which we are familiar (cf. Article 3, Section 2). (5) Insofar as there is a defect in the purchase item, we are entitled to subsequent fulfilment in the form of a rectification of defects or to the delivery of a new item free from defects (subsequent fulfilment) at our own discretion. This is subject to the condition that the defect must be significant. If the subsequent fulfilment is unsuccessful, we shall be entitled to a repeated subsequent fulfilment. In the event that the repeated subsequent fulfilment is also unsuccessful, we decide whether to provide a new delivery or to rectify defects.

If one of the two or both types of subsequent fulfilment is impossible or disproportional, we shall be entitled to refuse them. If the subsequent fulfilment should be impossible or unsuccessful, the purchaser has the right to reduce the purchase price accordingly or to withdraw from the contract in accordance with statutory provisions.

Further claims of the purchaser, regardless of the legal reason, are excluded; this applies in particular for claims based on damages apart from the purchase item and for claims to compensation for lost profit; this also includes claims that do not results from the defective purchase item.

As proof of defects and in observance of the warranty period, we request a copy of the defective product and corresponding invoice.

(6) Claims for defects shall not exist if the defects are based on a violation of specifications for use or configuration, in case of unsuitable or improper use, lack of or negligent handling by the purchaser, natural wear or improper maintenance.

(7) The purchaser is obligated to have all defects occurring during the agreed warranty period rectified by us exclusively. If the purchaser fails to do so, or they rectify these defects themselves or contract a third party to do so, any warranty rights expire and the purchaser must bear any costs incurred.

(8) Returns of goods sold and correctly delivered by us are normally not accepted. Exceptions can only be asserted in special cases after prior coordination. If we declare our readiness to accept a return of goods based on goodwill, the purchaser shall be billed a 15 % fee, or at least a minimum charge of 25 €, for administrative costs to be deducted from the credit note. The return delivery to us must be made freight paid. The goods must be well-packaged. Refinishing that becomes necessary due to deficient packaging or other influences will be billed at cost price. Returns of special designs that cannot be re-sold in another way are not accepted.

(9) The period of limitation for claims for defects is 12 months, beginning with from the transfer of risk. This does not apply insofar as longer warranty periods are prescribed by law. Neither complaints for defects nor the preliminary acceptance of a warranty claim delay the period of limitation of warranty claims, nor do they initiate a new period of limitation for these claims. Neither a separate, new warranty period nor a separate, new period of limitation begins for subsequent improvement or replacement delivery or for spare parts replaced in the course of repairs.



9. Liability

(1) Our liability and the liability of our legal representatives and vicarious agents is excluded unless it is based on intent or gross negligence on the part of our legal representatives and vicarious agents or it is based on a culpable breach of a cardinal duty (duty the proper fulfilment of which constitutes a condition sine qua non and on the fulfilment of which the customer regularly relies and may rely) or another significant contractual duty from impossibility, default, positive breach of an obligation, debt on conclusion of contract, violation of subsequent improvement obligations, breach of a separate information and consulting or warranty contract. as well as illegal activity or in the case of a culpable injury to the life, body or health of a person. The aforementioned regulations shall not imply a change of the burden of proof at the expense of the customer.

(2) Our liability for assured characteristics is limited to compensation for direct damage, unless the assurance would have expressly served the aim of safeguarding the purchaser specifically from the resulting consequential defects. Knowledge and observance of the applicable DIN standards and specifications for use of our products is always the responsibility of the purchaser.

(3) Liability beyond the statutorily prescribed warranty periods is excluded, regardless of the legal reason, insofar as a separate guarantee was not provided. In each case, compensation for damages for each damaging event shall be limited to foreseeable damages typical for the specific type of contract, however not in excess of the following maximum amounts:

for personal injury	€ 500,000.00
but a maximum of	€ 250,000.00
	for individual persons
for property damage	€ 50,000.00

We are basically only liable for third-party products delivered by us to the extent that our suppliers assume and fulfil the warranty for their products towards us.

10. Property rights

We reserve the title and copyright to figures and drawings included in our catalogues and brochures, as well as samples or other documents. These documents must not be made accessible to third parties without our prior consent and must be returned immediately on request. Reprints, even in excerpts, are not permitted. No liability is assumed for the correctness and completeness of this documentation provided to the purchaser or for any other service provided to the purchaser free of charge. The regulations for Sections 8 and 9 apply for the remainder.

11. Place of fulfilment, jurisdiction, applicable law

(1) If the customer is a business person, the place of fulfilment for our deliveries is the delivery location specified on the delivery note or Villingen-Schwenningen, Germany, at our discretion. The place of fulfilment for the payment obligation of the purchaser and jurisdiction is Villingen-Schwenningen, Germany. The UN Sales Law is not applicable and therefore excluded. However, we reserve the right to take legal action in the court of jurisdiction for the location of the main office of the purchaser for legal enforcement.

(2) German law is authoritative for international deliveries.

12. Other provisions

Insofar as parts or the entirety of the preceding general terms and conditions have not become a part of the contract or are invalid, the remainder of the contract remains unaffected. If provisions have not become a part of the contract or have become invalid, the statutory regulations shall apply.

Version: January 2020





Cantilever Bracket AK F 80/30

















Beam Section TP F 80/30

Group: A410

Application

Galvanised hollow-box-section for fabrication of steel frames. Designed for both simple two-dimensional supports and complex volumetric arrangements. Holes designed to receive Self Forming Screw FLS in conjunction with the relevant component.

Technical Data

Туре	Section	Moment of	Radius of	Torsional	Cross section
	modulus	inertia	inertia	moment It	A
	[cm³]	[cm ⁴]	[cm]	[cm⁴]	[cm ²]
TP F 80/30	Wy: 10.38 Wz: 4.78	ly: 35.40 lz: 6.74	iy: 3.63 iz: 1.58	8.58	2.69



Mechanical properties shown above take into account perforations.

The specific values are effective values established by tests, geometrical quantities (analytically determined) can be significantly higher.

Material: Steel, hcp

Approvals / Conformity

CE mark (Declaration of performance see www.sikla.com/service/downloads)

Туре	Weight	Qty.	Part
	[kg/m]	[m]	number
TP F 80/30	4.3	6	113407

6 p, x l







Group: A420

Application

Galvanised hollow-box-section with welded end-plate to serve as cantilever arm. May be used as a crossbar when combined with End Support STA and 4 x Self Forming Screw FLS.

Installation

With 4 x Self Forming Screw FLS when fixed to another siFramo hollow-box-section. Alternatively with two suitable wall anchors through holes "A" when fixed directly to building structure.

Technical Data

Туре	Dimensions of base plate	L	$b_1 \ge l_1$	d
	[mm]	[mm]	[mm]	[mm]
AK F 80/30-400	130 x 80 x 8	400	11 x 20	14
AK F 80/30-800	130 x 80 x 8	800	11 x 20	14
AK F 80/30-E-400	80 x 80 x 8	400	11 x 20	-
AK F 80/30-E-800	80 x 80 x 8	800	11 x 20	-
AK F 80/30-Q-400	190 x 80 x 8	400	11 x 20	14
AK F 80/30-Q-800	190 x 80 x 8	800	11 x 20	14

Configuration: Pla Material: Plate: St Beam section: St

on: Plate welded with Beam Section F 80/30 Steel, HCP on: Steel, HCP

Approvals / Conformity

CE mark (Declaration of performance see www.sikla.com/service/downloads)

Туре	W [kg]	Quantity [pack]	Part number
AK F 80/30-400	2.4	1	113064
AK F 80/30-800	4.2	1	113065
AK F 80/30-E-400	2.2	1	113625
AK F 80/30-E-800	4.0	1	113626
AK F 80/30-Q-400	2.5	1	117292
AK F 80/30-Q-800	4.3	1	117293







End Support STA F 80/30 E

Group: A422

Application

Plug-in component designed to create an endplate at the open end of a Beam Section TP F80/30 a Cantilever bracket AK F80/30.

Installation

The Beam Section TP F 80/30 connected to the End Support STA F 80/30 E has to be screwed with 2 Self Forming Screws FLS F.

Technical Data

Туре	Dimensions of Base plate	Slots in	н	
	[mm]	Base plate for	[mm]	
STA F 80/30-80-E	80 x 80 x 8	M10	178	

Material: Steel, HCP

Approvals / Conformity

CE mark (Declaration of performance see www.sikla.com/service/downloads)

Туре	W	Quantity	Part
	[kg]	[pack]	number
STA F 80/30-80-E	0.8	1	113066





siFramo 80/30





End Support STA F 80/30-Q

Group: A422

Application

Plug-in component designed to create an endplate at the open end of a Beam Section TP F 80 or TP F 80/30. A connection to Cantilever brackets AK F 80 or AK F 80/30 can also be realised e.g. for cable trays and downpipes.

Installation

Depending on the situation, different options are recommended:

- a) With 2 x 4 Self Forming Screws FLS when used to connect 2 Beam Sections.
- b) With 4 Self Forming Screws FLS applied to the insert and 2 suitable M12 wall anchors/fixings when connected to the building structure.

Technical Data

Туре	Dimensions of	L	d	b1 x l1
	base plate [mm]	[mm]	[mm]	[mm]
STA F 80/30	190 x 80 x 8	169	14	11 x 20

Material: Steel, HCP

Approvals / Conformity

CE-mark (Declaration of performance see www.sikla.com/downloads)

Туре	W	Quantity	Part
	[kg]	[pack]	number
STA F 80/30-Q	1.4	1	117294













U-Holder SB F 80/30

Group: A439

Application

Pre-assembled component to clamp Beam Section F 80/30 to the flange side of traditional steel sections.

Scope of delivery

Type SB F 80/30-16: Holder with thread M10 Plate 2 Hexagon nuts M10 2 Washers

Type SB F 80/30-40: Holder with thread M12 Plate 2 Beam Clips SPA 5P AU 2 Hexagon nuts M12

Installation

U-holder to be used in pairs. Type 16 up to flange thickness 16 mm Type 40 up to flange thickness 40 mm

Technical Data

Туре	Thread	Tightening torque	Fz	Fy	My	Mz
		[INM]	per U-Holder [kN]	[KN]	[KINM]	[KINM]
SB F 80/30-16	M10	40	9.5	*	*	*
SB F 80/30-40	M12	85	16	*	*	*

* Please compare the suitable type's dimensions by means of the Simotec user guideline to get the permissible lateral forces and torques.

Material: Steel, FK 8.8, HCP

Туре	W [kg]	Quantity [pack]	Part number
SB F 80/30-16	0.5	20	115840
SB F 80/30-40	1.4	10	115839





Beam Section Holder TPH F 80/30

Group: A425

Application

Form-fitting comprehensive supporting of beam section TP F 80/30. Alternatively the Beam Section Holder TPH may be used to connect only one beam section to an even surface with suitable wall anchors or with cast-in channel accessories. Furthermore the TPH F 80/30 can be used as a cross connection of the beam section TP F 80 or TP F 80/30.

Installation

Connection to the beam section TP F 80 or TP F 80/30 with 6 x Self forming screws FLS in all elongated holes.

Connection to building surface either with approved anchors with connection thread M10 or accessories for cast-in channels using the holes d_1 .

Technical Data

Туре	L x w x th	Ød₁	b₁ x l₁	b₂ x l₂
	[mm]	[mm]	[mm]	[mm]
TPH F 80/30 C	199 x 80 x 4	14	11 x 20	11 x 20

Туре	F _y [kN]	F _z [kN]	M _y [kNm]	M _z [kNm]
TPH F 80/30 C	24.1	20.8	1.0	0.9

Material: Steel, hcp or hot dipped galvanised

Туре	W	Quantity	Part
	[Kg]	[раск]	number
TPH F 80/30 C	0.5	10	116673













Group: A430

Application

The Self Forming Screw FLS creates its own thread inside the wall of the siFramo pilot hole. During the screw-driving operation, the base steel is reshaped and hardened to form an air-tight seal between the threads of the screw and the surrounding steel, making it exceptionally resistant to vibrational loosening and increasing fastening strength.

Technical Data

Application	Tightening torque [Nm]
System siFramo	60
Connection to Channels MS 41	35

Material: Steel, HCP

Warning notice:

The Hilti Group recently launched a thread-forming screw under the product name "MT-TFB OC". This product is visually hard to distinguish from the Sikla original screw "FLS-F", and we would like to notify our customers that the Hilti screw is not compatible with our system. The use of this screw in conjunction with the Sikla system compromises the validity of published load data, declarations of performance and practical stability of installations. In the event of uncertainty on the supply source of thread-forming screws, please contact Sikla customer service.

Approvals / Conformity

MPA tested

Туре	W	Quantity	Part
	[kg]	[pack]	number
FLS F	0.03	100	192512





Part

number

113067



End Cap ADK F 80/30

Group: A430

Application

Plastic end cap to close cut ends of Beam Section F80 to meet both visual and health & safety requirements. Standard Cantilever- and Beam Brackets (AK F80 and TKO F80) already include this end cap.

w

[kg]

0.02

Quantity

[pack]

25

Installation

Mallet required.

Technical Data

Material: PP, yellow, bedingt witterungsbeständig

	Туре	
	ADK F 80/30	
Jø -		
ale II		







Cantilever Bracket AK F 80

































Beam Section TP F 80

Group: A410

Application

Galvanised hollow-box-section for fabrication of steel frames. Designed for both simple two-dimensional supports and complex volumetric arrangements. Holes designed to receive Self Forming Screw FLS in conjunction with the relevant component.

Technical Data

Туре	Section	Moment of	Radius of	Torsional	Cross section
	modulus	inertia	inertia	moment It	A
	[cm ³]	[cm4]	[cm]	[cm4]	[cm ²]
TP F 80	Wy: 15.83	ly: 62.47	iy: 3.58	48.40	4.85
	Wz: 15.83	lz: 62.47	iz: 3.58		

Mechanical properties shown above take into account perforations.

The specific values are effective values established by tests, geometrical quantities (analytically determined) can be significantly higher.

Material: Steel, hcp

Approvals / Conformity

CE mark (Declaration of performance see www.sikla.com/service/downloads)



Туре	Weight	Qty.	Part
	[kg/m]	[m]	number
TP F 80	6.4	6	192539







Cantilever Bracket AK F 80

Group: A420

Application

Galvanised hollow-box-section with welded end-plate to serve as cantilever arm. May be used as a crossbar when combined with End Support STA and 4 x Self Forming Screw FLS. By means of the round holes in the base plate a direct connection to excisting cast-in channels is possible.

Scope of delivery

With pre-assembled End Cap ADK F 80

Installation

With 4 x Self Forming Screw FLS when fixed to another siFramo hollow-box-section. Alternatively with two suitable wall anchors through holes "A" when fixed directly to building structure.

Technical Data

Туре	L	Dimensions of base plate	Slotted holes base plate	А
	[mm]	[mm]	[mm]	[mm]
AK F 80-400	400	190 x 80 x 8	20 x 11	14
AK F 80-800	800	190 x 80 x 8	20 x 11	14
AK F 80-E-600	600	165 x 80 x 8	20 x 11	-

Configuration:Plate welded to Beam Section TP F 80Material:Plate:Plate:Steel, HCPBeam Section:Steel, HCP

Approvals / Conformity

CE mark (Declaration of performance see www.sikla.com/downloads)

Туре	W [kg]	Quantity [pack]	Part number
AK F 80-400	3.4	1	192764
AK F 80-800	5.8	1	192771
AK F 80-E-600	4.5	1	110370















Beam Bracket TKO F 80

Group: A423

Application

Galvanised hollow-box-section with welded end-plate to serve as cantilever arm. May be used as a crossbar when combined with End Support STA/End Support WBD and 4 x Self Forming Screw FLS.

Scope of delivery

With pre-assembled End Cap ADK F 80.

Installation

Depending on the situation, different options are recommended:

- a) Directly to building structure: 4 x suitable wall anchors
- b) To traditional steel beams between 80 120 mm flange dimensions: 1x Assembly Set 5P M12 S
- c) To traditional steel beams > 120 flange dimension: with on-demand Adaptor Plate (tbc)
- d) To Sikla Simotec Steel Beams 100/120: with Bracket Plates FV 100/120 when positive mechanical connection required

Technical Data

Туре	L [mm]	Dimensions of base plate [mm]	Slots in base plate for
TKO F80-400	400	220 x 220 x 12	M12
TKO F80-800	800	220 x 220 x 12	M12

ConfigurationBase plate welded to Beam Section TP F 80Material:Base plate:Base plate:Steel, HCPBeam Section:Steel, HCP

Approvals / Conformity

CE mark (Declaration of performance see www.sikla.com/service/downloads) MPA tested



Туре	W [kg]	Quantity [pack]	Part number
TKO F 80-400	6.6	1	192788
TKO F 80-800	9.2	1	192795











End Support STA F 80

Group: A422

Application

Plug-in component designed to create an endplate at the open end of a Beam Section TP F80 or a Cantilever bracket AK F80. By means of the round holes in the base plate a direct connection to excisting cast-in channels is possible.

Installation

Depending on the version, following mountings solutions are possible:

- a) With 2x4 Self Forming Screws FLS when used to connect 2 Beam Sections.
- b) With 4 Self Forming Screws FLS applied to the octagonal insert and 2 suitable wall anchors/fixings when connected to the building structure.

The Beam Section TP F 80/80 connected to the End Support STA F 80 has to be screwed with 4 Self Forming Screws FLS F. On each of the opposite sides 2 Self Forming Screws FLS F are necessary.

Technical Data

Туре	Dimensions of Base plate [mm]	A [mm]	B [mm]	H [mm]
STA F 80	190 x 80 x 8	14	20 x 11	148
STA F 80-E	165 x 80 x 8	-	20 x 11	148

Configuration:Base plate welded to octagonal element F 80Material:Plate:Steel, HCPOctagonal element:Steel, HCP

Approvals / Conformity

CE mark (Declaration of performance see www.sikla.com/downloads)

Туре	W [kg]	Quantity [pack]	Part number
STA F 80	1.6	1	192856
STA F 80-E	1.5	1	192863











End Support WBD F 80

Group: A421

Application

Plug-in component designed to create a square end plate at the open end of a Beam Section TP F80 or a Beam Bracket/Cantilever bracket AK F80. Variation "T" with octagonal insert allows full utilisation of beam section within the space required by the End Support WBD itself.

Installation

Depending on the situation, different options are recommended:

- a) Directly to building structure: 4 x suitable wall anchors and 4 Self Forming Screws FLS applied to the square/octagonal insert
- b) To traditional steel beams between 80 310 mm flange dimensions: 1 x Assembly Set 5P M12 S, M16 S and 4 Self Forming Screws FLS applied to the square/octagonal insert
- c) To Sikla Simotec steel beams 100/120: with Bracket Plates FV 100/120 when positive mechanical connection required

The Beam Section TP F 80 connected to the End Support WBD F 80 has to be screwed with 4 Self Forming Screws FLS F. On each of the opposite sides 2 Self Forming Screws FLS F are necessary. The permissible distance between base plate WBD and profile must not exceed 30 mm.

Technical Data

Туре	Base plate finish	for flange width [mm]	Dimensions of base plate [mm]	Slots in base plate [l x b]
WBD F 80-80/120	flat	80 - 120	220 x 220 x 12	30 x 14
WBD-P F 80-121/160	corrugated	121 - 160	320 x 260 x 12	20 x 14
WBD-P F 80-161/200	corrugated	161 - 200	320 x 310 x 12	20 x 18
WBD-P F 80-201/310	corrugated	201 - 310	420 x 220 x 12	55 x 18
WBD F 80-T	flat	80 - 120	220 x 220 x 12	30 x 14

Туре	е	L	t1	Slots in base
	[mm]	[mm]	[mm]	plate for
WBD F 80-80/120	max. distance	202	-	M12
WBD-P F 80-121/160	max. distance	202	27	M12
WBD-P F 80-161/200	max. distance	202	27	M16
WBD-P F 80-201/310	max. distance	202	27	M16
WBD F 80-T	max. distance	152	-	M12

Configuration: Plate welded to square F 80 resp. octagonal element F 80 (only WBD F 80-T) Material: Steel, HCP

Approvals / Conformity

CE mark (Declaration of performance see www.sikla.com/service/downloads)

Туре	W [kg]	Quantity [pack]	Part number
WBD F 80-80/120	5.2	1	192801
WBD-P F 80-121/160	8.7	1	117164
WBD-P F 80-161/200	10.2	1	117165
WBD-P F 80-201/310	9.4	1	117166
WBD F 80-T	4.8	1	192849

siFramo 80





Joint GE F 80

Group: A437

Application

Applicable as bracing element of single-arm cantilevers in conjunction with System siFramo 80 and for the reinforcement of frame constructions. The angle α is continuously variable between 25° and 155°.

Installation

Attachment of Joint GE F 80 to Beam Section TP F 80 by means of 4 Self Forming Screws FLS F at the base plate. The support profile TP F 80 plugged onto the octagon is also attached by means of 4 Self Forming Screws, so 8 Self Forming Screws are necessary in total.

After installation at the desired angle the screws have to be tightened with 40 Nm.

Technical Data

Туре	Height H [mm]	Length L [mm]	Width B [mm]	Angle α	Dimensions of base plate [mm]
GE F 80 - 80	140	80	80	25° - 155°	-
GE F 80 - 80 q	140	80	80	25° - 155°	190 x 80 x 8

Material: Steel, HCP

Туре	W [kg]	Quantity [pack]	Part number
GE F 80 - 80	2.1	1	113835
GE F 80 - 80 q	3.0	1	113834





siFramo 80





Joint GE F - ST F 80

Group: A437

Application

Applicable as bracing element of single-arm cantilevers in conjunction with System siFramo 80 and for the reinforcement of frame constructions. The angle α is continuously variable between 25° and 155°.

Scope of delivery

Joint GE F - ST F 80 screwed with Joining Plate

Installation

Attachment of the Joints to steel structure by means of Assembly Set MS 5P M12 S while connecting the base plate. From Type 161/200 the mounting is carried out via the Assembly Set MS 5P M16 S.

Another option is to fix the Joint to concrete walls by means of 4 heavy-duty anchors. The support profile TP F 80 plugged onto the octagon is attached by means of 4 Self Forming Screws.

After installation at the desired angle the screws have to be tightened with 40 Nm.

By loosening the screw connection between Joint and Joining Plate it is possible to rotate the Joint by 90° and to use it for a cross member then (see figure 4).

Technical Data

Туре	Height H	Length L	Width B	Angle α
	[mm]	[mm]	[mm]	
GE F 80/120 - 80	140	220	220	25° - 155°
GE F 121/160 - 80 - 1	140	320	260	25° - 155°
GE F 161/200 - 80 - 1	140	320	310	25° - 155°
GE F 201/310 - 80 - 1	140	220	420	25° - 155°

Material: Steel, HCP

* in stock

Туре	W [kg]	Quantity [pack]	Part number
GE F 80/120 - 80 *	6.2	1	115856
GE F 121/160 - 80 - 1	9.8	1	115857
GE F 161/200 - 80 - 1	11.3	1	115859
GE F 201/310 - 80 - 1	10.4	1	115861







LL(2)





LL(1)

Beam Section Holder TPH F 80

Group: A425

Application

Interface element to connect 90° intersecting Beam Sections F80. Alternatively the Beam Section Holder TPH may be used to connect only one beam section to an even surface with suitable wall anchors or with cast-in channel accessories.

Installation

Connecting one Beam Section F80 90° to another one by using 6 x Self Forming Screw FLS applied through all elongated holes. Connecting to any other surface or member by using 2 x Self Forming Screws FLS through the two elongated holes on the top of the Beam Section Holder TPH F80 plus 2 appropriate fixing elements up to M12 through the two holes "d1".

Technical Data

Туре	L x w x th	Ød₁ [mm]	Elongated hole LL1	Elongated hole LL2 d x a [mm]
TPH F 80 C	199 x 80 x 4	14	11 x 20	11 x 20

Туре	F _x [kN]	F _y [kN]	F _z [kN]	M _y [kNm]	M _z [kNm]
TPH F 80 C	6.2	12.7	12.3	0.6	0.5

The specified load values are permissible loads and contain the partial safety factors $\gamma M2 = 1,25$ (DIN EN 1993-1-8:2010-12, chart 2.1) and $\gamma G = 1,35$ (DIN EN 1990:2010-12, chart A1.2(B)) for permanent actions.

Material: Steel, hcp or hot dipped galvanised

Туре	W	Quantity	Part
	[kg]	[pack]	number
TPH F 80 C	0.8	10	111732











Channel Adapter SA F 80

Group: A427

Application

Interface element to enable a stiff and solid connection between the siFramo profile and strut channel of the international 41/41 mm standard. The 41/41 Channel Adapter SA F80 is equipped with automatically locking spring nuts which means that no accessories from the strut channel's range are required in order to make the connection.

Installation

The Channel Adapter SA F 80-41 requires 4 x Self Forming Screw FLS in order to be connected to the siFramo profile. The strut channel must be inserted with the slot first whilst pressing the two bolt's heads triggering an automatic 90° -locking operation of the two channel spring nuts. The strut channel is now securely held and can be adjusted. Finally the two screws must be tightened with the appropriate torque for the strut channel used.

Technical Data

Туре	Dimension of base plate	Slotted holes	Round holes
	[mm]	[mm]	[mm]
SA F 80-41	190 x 80 x 8	20 x 11	14

Material: Steel, HCP

Туре	W	Quantity	Part
	[kg]	[pack]	number
SA F 80-41	1.4	1	192887









Ô

C

Ø O_{SO}

Ø_{©o}

0

Ø Orc

© _C

e

Ô

Ô

Joining Plate AP

Group: A630

Application

Interface element to enable the connection of standard endplates of Beam Brackets TKO F80 or F100, TKO 100 or 120 to primary steel with flange width >120 mm.

Scope of delivery

Joining Plate AP

4 Countersink Screws M12 x 40

- 4 Hexagon Nuts M12
- 4 Sicherungsscheiben

Installation

Connect the Joining Plate AP to the Beam Bracket TKO's end plate by using the accessories above. Then continue with either heavy-duty anchors or Assembly Set 5P/Beam Clips as required by the building structure.

Technical Data

Туре	Dimension of Base Plate L x B [mm]	Perforation for	Connection to flange width [mm]
AP 121/160	320 x 260 x 12	M12	121 - 160
AP 161/200	320 x 310 x 12	M16	161 - 200
AP 201/240	320 x 360 x 12	M16	201 - 240
AP 241/310	420 x 220 x 12	M16	241 - 310

Material:

Joining Plate: Bolts: Nuts: Washers:

Steel, hot-dipped galvanised Steel DIN 7991, class 8.8, Dacromet/delta seal Steel, class 8, hot-dipped galvanised Steel, hot-dipped galvanised

Туре	W [kg]	Quantity [pack]	Part number
AP 121/160	7.7	1	183953
AP 161/200	9.3	1	183962
AP 201/240	10.4	1	116534
AP 241/310	8.4	1	117767









000

000 000

Welding Adapter ASA F 80 Octagon

Group: A428

Application

Welding plate with octagonal insert to receive siFramo section. May be implemented into the structural steel design in anticipation of siFramo-frames or

used in situ as a connection element when clamping is not an option but hot works are permitted. The octagonal insert allows for full utilisation of beam section within the space required by the Welding Adapter ASA itself.

Scope of delivery

Mounting Plate 100 with welded on octagonal Joint.

Installation

The welding plate of the ASA can be welded directly without previous treatment due to a corrosion-resistant weld-thru coating which is compatible with both the HDG surface of the siFramo section and the health and safety requirements of the welding process. Once the ASA adapter has been connected, the coating may also receive paint without previous treatment. The siFramo section must be connected to the Welding Adapter ASA with 4 x Self Forming Screw FLS.

Technical Data

Туре	Maße Adapter size H [mm]	Maße Mounting Plate size [mm]
ASA F 80 GPL 8kt	160	100 x 100 x 20

Material: Steel, HCP

Approvals / Conformity

CE mark (Declaration of performance see www.sik|a.com/service/downloads).

Туре	W	Quantity	Part
	[kg]	[pack]	number
ASA F 80 GPL 8kt	2.2	1	112212









Group: A430

Application

The Self Forming Screw FLS creates its own thread inside the wall of the siFramo pilot hole. During the screw-driving operation, the base steel is reshaped and hardened to form an air-tight seal between the threads of the screw and the surrounding steel, making it exceptionally resistant to vibrational loosening and increasing fastening strength.

Technical Data

Application	Tightening torque [Nm]
System siFramo	60
Connection to Channels MS 41	35

Material: Steel, HCP

Warning notice:

The Hilti Group recently launched a thread-forming screw under the product name "MT-TFB OC". This product is visually hard to distinguish from the Sikla original screw "FLS-F", and we would like to notify our customers that the Hilti screw is not compatible with our system. The use of this screw in conjunction with the Sikla system compromises the validity of published load data, declarations of performance and practical stability of installations. In the event of uncertainty on the supply source of thread-forming screws, please contact Sikla customer service.

Approvals / Conformity

MPA tested

Туре	W	Quantity	Part
	[Ky]	[pack]	
FLS F	0.03	100	192512







Assembly Set MS 5P

Group: A640

Application

Element for connecting Beam Bracket TKO, Angled Beam Bracket SKO, End Support WBD or Pivot Joint GE F to a beam section.

Scope of delivery

Туре	Beam Clip [Quantity]	Support plate [Quantity]	HR trimming * [Quantity]
M12 S	4 x M12	4 x M12	4 x M12 x 80
M16 S	4 x M16	4 x M16	4 x M16 x 100
M12 S2	2 x M12	2 x M12	2 x M12 x 80

* HR trimming according EN 14399-3 consisting of: Hexagon bolt M12 or M16, 2 washers, 1 hexagon nut

Installation

- 1. Position Beam Clip with the split end on beam section.
- 2. Install support plate and HR trimming and tighten accordingly.

The support plate secures a rectangular assembly of the bolt and prevents its shifting or bending stress. In conjunction with the HR trimming a continuous and predictable preload force is guaranteed.

Technical Data

Туре	Size range [mm]	Tightening torque M _A [Nm] /	F _y perm. per Beam Clip	Shear force load capacity F_z per set = 4 Beam Clips
		Weiterdrehwinkel	[kN]	[kN]
M12 S	1 - 30	60 / 90°	26,3	12,0 *
M16 S	4 - 40	140 / 90°	32,0	13,6 *

* The specified data relate to the worst case with flange thicknesses 30 mnm (M12) or 40 mm (M16) as well as a coefficient of adhesion $\mu_{Haft} = 0,20$. A possibly operating tensile force F_y isn't included.

Material: Steel, HCP

Туре	W [kg]	Qty. [set]	Part number
M12 S	1.2	10	115843
M16 S	2.2	10	115844
M12 S2	0.6	10	115845













U-Holder SB F 80

Group: A439

Application

Pre-assembled component to clamp Beam Section F80, to the flange side of traditional steel sections.

Scope of delivery

Type SB F 80-16: Holder with thread M10 Plate 2 Hexagon nuts M10 2 Washers

Type SB F 80-40: Holder with thread M12 Plate 2 Beam Clips SPA 5P AU 2 Hexagon nuts M12

Installation

U-holder to be used in pairs. Type 16 up to flange thickness 16 mm Type 40 up to flange thickness 40 mm

Technical Data

Туре	Thread	Tightening torque	Fz	Fy	My	Mz
		[Nm]	per U-Holder [kN]	[kN]	[kNm]	[kNm]
SB F 80-16	M10	40	9.5	*	*	*
SB F 80-40	M12	85	16	*	*	*

* Please compare the suitable type's dimensions by means of the Simotec user guideline to get the permissible lateral forces and torques.

Material: Steel, FK 8.8, HCP

Туре	W [kg]	Quantity [pack]	Part number
SB F 80-16	0.6	20	192683
SB F 80-40	1.4	10	194010








End Cap ADK F 80 Group: A430

Application

Plastic end cap to close cut ends of Beam Section F80 to meet both visual and health & safety requirements. Standard Cantilever- and Beam Brackets (AK F80 and TKO F80) already include this end cap.

Installation

Mallet required.

Technical Data

Material: PP, yellow, bedingt witterungsbeständig

Туре	W	Quantity	Part
	[kg]	[pack]	number
ADK F 80	0.03	25	192674









Cantilever Bracket AK F 100

































Beam Section TP F 100

Group: A810

Application

Galvanised hollow-box-section for fabrication of steel frames. Designed for both simple two-dimensional supports and complex volumetric arrangements. Holes designed to receive Self Forming Screw FLS in conjunction with the relevant component.

Technical Data

Туре	Section	Moment of	Radius of	Torsional	Cross section
	modulus	inertia	inertia	moment It	A
	[cm ³]	[cm ⁴]	[cm]	[cm ⁴]	[cm ²]
TP F 100	Wy: 36.93 Wz: 36.93	ly: 179.85 lz: 179.85	iy: 4.80 iz: 4.80	135.00	7.80

Mechanical properties shown above take into account perforations.

The specific values are effective values established by tests, geometrical quantities (analytically determined) can be significantly higher.

Material: Steel, HCP

Approvals / Conformity

Туре	Weight	Qty.	Part
	[kg/m]	[m]	number
TP F 100	10.8	6	112904









Application

Galvanised hollow-box-section with welded end-plate to serve as cantilever arm. May be used as a crossbar when combined with End Support STA and 4 x Self Forming Screw FLS. By means of the round holes in the base plate a direct connection to excisting cast-in channels is possible.

With the types F 100-80 and F 100-80-E a combination of Beam Section F 100 with F 80/80 is possible.

Installation

With 4 x Self Forming Screw FLS when fixed to another siFramo hollow-box-section. Alternatively with two suitable wall anchors through holes "A" when fixed directly to building structure.

Technical Data

Туре	Dimensions of base plate [mm]	L [mm]	d [mm]	b₁ x l₁ [mm]
AK F 100-400	210 x 100 x 8	400	14	11 x 20
AK F 100-800	210 x 100 x 8	800	14	11 x 20
AK F 100-1200	210 x 100 x 8	1200	14	11 x 20
AK F 100-E - 600	185 x 100 x 8	600	-	11 x 20
AK F 100-80 - 400	190 x 100 x 8	400	14	11 x 20
AK F 100-80 - 800	190 x 100 x 8	800	14	11 x 20
AK F 100-80-E - 600	170 x 100 x 8	600	-	11 x 20

Configuration: Plate welded to Beam Section TP F 100 AK F 100-80 with Beam Section F 80 Material: Steel, HCP

Approvals / Conformity

Туре	W [kg]	Quantity [pack]	Part number
AK F 100-400	5.7	1	113068
AK F 100-800	10.1	1	113069
AK F 100-1200	14.7	1	113419
AK F 100-E-600	7.8	1	113070
AK F 100-80 - 400	3.6	1	117143
AK F 100-80 - 800	6.0	1	117144
AK F 100-80-E - 600	4.7	1	117254















Beam Bracket TKO F 100

Group: A823

Application

Galvanised hollow-box-section with welded end-plate to serve as cantilever arm. May be used as a crossbar when combined with End Support STA/End Support WBD and 4 x Self Forming Screw FLS.

Scope of delivery

With pre-assembled End Cap ADK F 100

Installation

Depending on the situation, different options are recommended:

- a) Directly to building structure: 4 x suitable wall anchors
- b) To traditional steel beams between 80 120 mm flange dimensions: 1x Assembly Set 5P M12 S
- c) To traditional steel beams > 120 flange dimension: with on-demand Adaptor Plate (tbc)
- d) To Sikla Simotec Steel Beams 100/120: with Bracket Plates FV 100/120 when positive mechanical connection required

Technical Data

Туре	L [mm]	Dimensions of base plate [mm]	Slots in base plate for
TKO F100-400	400	220 x 220 x 12	M12
TKO F100-800	800	220 x 220 x 12	M12
TKO F100-1200	1200	220 x 220 x 12	M12

Configuration Material: Base plate: Beam Section: Base plate welded to Beam Section TP F 100 Steel, HCP Steel, HCP

Approvals / Conformity

Туре	W [kg]	Quantity [pack]	Part number
TKO F 100-400	8.6	1	113071
TKO F 100-800	12.8	1	113072
TKO F 100-1200	17.5	1	113421











End Support STA F 100

Group: A822

Application

Plug-in component designed to create an endplate at the open end of a Beam Section TP F 100 or a Cantilever bracket AK F 100. Variation types F 100-80 (E) are designed to combine F 100 with F 80 beam sections. Octagonal insert allows full utilisation of beam section within the space required by the End Support STA itself.

Installation

Depending on the situation, different options are recommended:

- a) With 2x4 Self Forming Screws FLS when used to connect 2 Beam Sections.
- b) With 4 Self Forming Screws FLS applied to the octagonal insert and 2 suitable wall anchors/fixings when connected to the building structure.

Technical Data

Туре	Dimensions of base plate [mm]	A [mm]	B [mm]	H [mm]
STA F 100	210 x 100 x 8	14	20 x 11	188
STA F 100-E	185 x 100 x 8	-	20 x 11	188
STA F 100-80	210 x 100 x 8	14	20 x 11	148
STA F 100-80-E	185 x 100 x 8	-	20 x 11	148

Configuration:Base plate welded to Octagon F 100 or F 80Material:Base plate:Base plate:Steel, HCPOctagon:Steel, HCP

Approvals / Conformity

Туре	W [kg]	Quantity [pack]	Part number
STA F 100	2.4	1	113073
STA F 100-E	2.2	1	113074
STA F 100-80	2.0	1	113337
STA F 100-80-E	1.8	1	113481











End Support WBD F 100

Group: A821

Application

Plug-in component designed to create a square end plate at the open end of a Beam Section TP F 100 or a Beam Bracket/Cantilever bracket AK F 100. Variation "T" with octagonal insert allows full utilisation of beam section within the space required by the End Support WBD itself.

Installation

Depending on the situation, different options are recommended:

- a) Directly to building structure: 4 x suitable wall anchors and 4 Self Forming Screws FLS applied to the square/octagonal insert
- b) To traditional steel beams between 80 310 mm flange dimensions: 1x Assembly Set 5P M12 S, M16 S and 4 Self Forming Screws FLS applied to the square/octagonal insert
- d) To Sikla Simotec steel beams 100/120: with Bracket Plates FV 100/120 when positive mechanical connection required

The Beam Section TP F 100 connected to the End Support WBD F 100 has to be screwed with 4 Self Forming Screws FLS F. On each of the opposite sides 2 Self Forming Screws FLS F are necessary. The permissible distance between base plate WBD and profile must not exceed 30 mm.

Technical Data

Туре	Base plate finish	for flange width [mm]	Dimensions of base plate	Slots in base plate [l x b)
WBD F 100-80/120	flat	80 - 120	220 x 220 x 12	30 x 14
WBD-P F 100-121/160	corrugated	121 - 160	320 x 260 x 12	20 x 14
WBD-P F 100-161/200	corrugated	161 - 200	320 x 310 x 12	20 x 18
WBD-P F 100-201/310	corrugated	201 - 310	420 x 220 x 12	55 x 18
WBD F 100-T	flat	80 - 120	220 x 220 x 12	30 x 14

Туре	e [mm]	L [mm]	t₁ [mm]	Slots in base
WBD F 100-80/120	max. distance	232	-	M12
WBD-P F 100-121/160	max. distance	232	27	M12
WBD-P F 100-161/200	max. distance	232	27	M16
WBD-P F 100-201/310	max. distance	232	27	M16
WBD F 100-T	max. distance	192	1	M12

configuration: Plate welded to square F 100 resp. octagonal element F 100 (only WBD F 100-T) material: Steel, HCP

Approvals / Conformity

Туре	W [kg]	Quantity [pack]	Part number
WBD F 100-80/120	6.1	1	113075
WBD-P F 100-121/160	9.7	1	117167
WBD-P F 100-161/200	11.2	1	117168
WBD-P F 100-201/310	10.3	1	117169
WBD F 100-T	5.3	1	113079

siFramo 100





Joint GE F 100

Group: A437

Application

Applicable as bracing element of single-arm cantilevers in conjunction with System siFramo 100 and for the reinforcement of frame constructions. The angle α is continuously variable between 25° and 155°.

Installation

Attachment of the Joints to Beam Section TP F 100 by means of 4 Self Forming Screws FLS F at the base plate. The support profile TP F 80 or TP F 100 (depending on joint type) plugged onto the octagon is also attached by means of 4 Self Forming Screws, so 8 Self Forming Screws are necessary in total. After installation at the desired angle the screws have to be tightened with 40 Nm.

Technical Data

Туре	Height H [mm]	Length L [mm]	Width B [mm]	Angle α	Dimensions of base plate [mm]
GE F 100 - 80	140	100	100	25° - 155°	-
GE F 100 - 80 q	140	100	80	25° - 155°	210 x 100 x 8
GE F 100 - 100	180	100	100	25° - 155°	-
GE F 100 - 100 q	180	100	100	25° - 155°	210 x 100 x 8

Material: Steel, HCP

Туре	W [kg]	Quantity [pack]	Part number
GE F 100 - 80	2.3	1	113838
GE F 100 - 80 q	3.4	1	113032
GE F 100 - 100	3.0	1	113837
GE F 100 - 100 q	4.1	1	113836











Joint GE F - ST F 100

Group: A437

Application

Applicable as bracing element of single-arm cantilevers in conjunction with System siFramo 100 and for the reinforcement of frame constructions. The angle α is continuously variable between 25° and 155°.

Scope of delivery

Joint GE F - ST F 100 screwed with Joining Plate

Installation

Attachment of the Joints to steel structure by means of Assembly Set MS 5P M12 S while connecting the base plate. From Type 161/200 the mounting is carried out via the Assembly Set MS 5P M16 S. Another option is to fix the Joint to concrete walls by means of 4 heavy-duty anchors M12. The support profile TP F 100 plugged onto the octagon is attached by means of 4 Self Forming Screws.

After installation at the desired angle the screws have to be tightened with 40 Nm.

By loosening the screw connection between Joint and Joining Plate it is possible to rotate the Joint by 90° and to use it for a cross member then (see figure 4).

Technical Data

Туре	Height H [mm]	Length L [mm]	Width B [mm]	Angle α
GE F 80/120 - 100	180	220	220	25° - 155°
GE F 121/160 - 100 - 1	180	320	260	25° - 155°
GE F 161/200 - 100 - 1	180	320	310	25° - 155°
GE F 201/310 - 100 - 1	180	220	420	25° - 155°

Material: Steel, HCP

* in stock

Туре	W [kg]	Quantity [pack]	Part number
GE F 80/120 - 100 *	6.9	1	115863
GE F 121/160 - 100 - 1	10.5	1	115864
GE F 161/200 - 100 - 1	11.9	1	115866
GE F 201/310 - 100 - 1	11.1	1	115868







LL(2)





LL(1)

Beam Section Holder TPH F 100

Group: A825

Application

Interface element to connect 90° intersecting Beam Sections F100. Alternatively the Beam Section Holder TPH may be used to connect only one beam section to an even surface with suitable wall anchors or with cast-in channel accessories.

Installation

Connecting one Beam Section F100 90° to another one by using 6 x Self Forming Screw FLS applied through all elongated holes. Connecting to any other surface or member by using 2 x Self Forming Screws FLS through the two elongated holes on the top of the Beam Section Holder TPH F100 plus 2 appropriate fixing elements up to M12 through the two holes "d1".

Technical Data

Туре	Lxbxs	Ø d₁	Elongated hole LL1	Elongated hole LL2
	[mm]	[mm]	d x a [mm]	d x a [mm]
TPH F 100 C	219 x 100 x 4	14	11 x 20	11 x 20
TPH F 100/80 C	199 x 100 x 4	14	11 x 20	11 x 20

Туре	F _x [kN]	F _y [kN]	F _z [kN]	M _y [kNm]	M _z [kNm]
TPH F 100 C	6.2	12.7	12.3	0.6	0.5
TPH F 100/80 C	6.2	12,7	12.3	0.6	0.5

The specified load values are permissible loads and contain the partial safety factors $\gamma M2 = 1,25$ (DIN EN 1993-1-8:2010-12, chart 2.1) and $\gamma G = 1,35$ (DIN EN 1990:2010-12, chart A1.2(B)) for permanent actions.

Туре	W [kg]	Quantity [pack]	Part number
TPH F 100 C	1.2	10	113084
TPH F 100/80 C	1.0	10	113085









Channel Adapter SA F 100

Group: A827

Application

Interface element to enable a stiff and solid connection between the siFramo profile and strut channel of the international 41/41 mm standard. The 41/41 Channel Adapter SA F100 is equipped with automatically locking spring nuts which means that no accessories from the strut channel's range are required in order to make the connection.

Installation

The Channel Adapter SA F100-41 requires 4 x Self Forming Screw FLS in order to be connected to the siFramo profile. The strut channel must be inserted with the slot first whilst pressing the two bolt's heads triggering an automatic 90° -locking operation of the two channel spring nuts. The strut channel is now securely held and can be adjusted. Finally the two screws must be tightened with the appropriate torque for the strut channel used.

Technical Data

Туре	Dimension of base plate	Slotted holes	Round holes
	[mm]	[mm]	[mm]
SA F 100-41	210 x 100 x 8	20 x 11	14

Material: Steel, HCP

Туре	W	Quantity	Part
	[kg]	[pack]	number
SA F 100-41	1.8	1	113081









Ô

C

Ø O_{ro}

Ø_{©o}

0

Ø Orc

© _C

e

Ô

Ô

Joining Plate AP

Group: A630

Application

Interface element to enable the connection of standard endplates of Beam Brackets TKO F80 or F100, TKO 100 or 120 to primary steel with flange width >120 mm.

Scope of delivery

Joining Plate AP

4 Countersink Screws M12 x 40

- 4 Hexagon Nuts M12
- 4 Sicherungsscheiben

Installation

Connect the Joining Plate AP to the Beam Bracket TKO's end plate by using the accessories above. Then continue with either heavy-duty anchors or Assembly Set 5P/Beam Clips as required by the building structure.

Technical Data

Туре	Dimension of Base Plate L x B [mm]	Perforation for	Connection to flange width [mm]
AP 121/160	320 x 260 x 12	M12	121 - 160
AP 161/200	320 x 310 x 12	M16	161 - 200
AP 201/240	320 x 360 x 12	M16	201 - 240
AP 241/310	420 x 220 x 12	M16	241 - 310

Material:

Joining Plate: Bolts: Nuts: Washers:

Steel, hot-dipped galvanised Steel DIN 7991, class 8.8, Dacromet/delta seal Steel, class 8, hot-dipped galvanised Steel, hot-dipped galvanised

Туре	W [kg]	Quantity [pack]	Part number
AP 121/160	7.7	1	183953
AP 161/200	9.3	1	183962
AP 201/240	10.4	1	116534
AP 241/310	8.4	1	117767









Welding Adapter ASA F 100 GPL Square

Group: A828

Application

Welding plate with square insert to receive siFramo section. May be implemented into the structural steel design in anticipation of siFramo-frames or used in situ as a connection element when clamping is not an option but hot works are permitted.

Scope of delivery

Mounting Plate 100 with welded on square joint.

Installation

The welding plate of the ASA can be welded directly without previous treatment due to a corrosion-resistant weld-thru coating which is compatible with both the HDG surface of the siFramo section and the health and safety requirements of the welding process. Once the ASA adapter has been connected, the coating may also receive paint without previous treatment. The siFramo section must be connected to the Welding Adapter ASA with 4 x Self Forming Screw FLS. 8 pieces of Self Forming Screws are to be used for the Beam Section TP F 100/160, whereas 4 Self Forming Screws have to be screwed together on the flat flanks' opposite sides.

Technical Data

Туре	Adapter size H [mm]	Mounting Plate size [mm]
ASA F 100 GPL 4kt	240	120 x 120 x 20
ASA F 100/160 GPL 4kt	240	180 x 120 x 20

Material: Steel, HCP

Approvals / Conformity

Туре	W [kg]	Quantity [pack]	Part number
ASA F 100 GPL 4kt	4.4	1	113339
ASA F 100 GPL 8kt	3.3	1	113080













Group: A430

Application

The Self Forming Screw FLS creates its own thread inside the wall of the siFramo pilot hole. During the screw-driving operation, the base steel is reshaped and hardened to form an air-tight seal between the threads of the screw and the surrounding steel, making it exceptionally resistant to vibrational loosening and increasing fastening strength.

Technical Data

Application	Tightening torque [Nm]
System siFramo	60
Connection to Channels MS 41	35

Material: Steel, HCP

Warning notice:

The Hilti Group recently launched a thread-forming screw under the product name "MT-TFB OC". This product is visually hard to distinguish from the Sikla original screw "FLS-F", and we would like to notify our customers that the Hilti screw is not compatible with our system. The use of this screw in conjunction with the Sikla system compromises the validity of published load data, declarations of performance and practical stability of installations. In the event of uncertainty on the supply source of thread-forming screws, please contact Sikla customer service.

Approvals / Conformity

MPA tested

Туре	W	Quantity	Part
	[Ky]	[pack]	
FLS F	0.03	100	192512







Assembly Set MS 5P

Group: A640

Application

Element for connecting Beam Bracket TKO, Angled Beam Bracket SKO, End Support WBD or Pivot Joint GE F to a beam section.

Scope of delivery

Туре	Beam Clip [Quantity]	Support plate [Quantity]	HR trimming * [Quantity]
M12 S	4 x M12	4 x M12	4 x M12 x 80
M16 S	4 x M16	4 x M16	4 x M16 x 100
M12 S2	2 x M12	2 x M12	2 x M12 x 80

* HR trimming according EN 14399-3 consisting of: Hexagon bolt M12 or M16, 2 washers, 1 hexagon nut

Installation

- 1. Position Beam Clip with the split end on beam section.
- 2. Install support plate and HR trimming and tighten accordingly.

The support plate secures a rectangular assembly of the bolt and prevents its shifting or bending stress. In conjunction with the HR trimming a continuous and predictable preload force is guaranteed.

Technical Data

Туре	Size range [mm]	Tightening torque M _A [Nm] /	F _y perm. per Beam Clip	Shear force load capacity F_z per set = 4 Beam Clips
		Weiterdrehwinkel	[kN]	[kN]
M12 S	1 - 30	60 / 90°	26,3	12,0 *
M16 S	4 - 40	140 / 90°	32,0	13,6 *

* The specified data relate to the worst case with flange thicknesses 30 mnm (M12) or 40 mm (M16) as well as a coefficient of adhesion $\mu_{Haft} = 0,20$. A possibly operating tensile force F_y isn't included.

Material: Steel, HCP

Туре	W [kg]	Qty. [set]	Part number
M12 S	1.2	10	115843
M16 S	2.2	10	115844
M12 S2	0.6	10	115845













U-Holder SB F 100

Group: A839

Application

Pre-assembled component to clamp Beam Section F100 to the flange side of traditional steel sections.

Scope of delivery

Type SB F 100-16: Holder with thread M10 Plate 2 Hexagon nuts M10 2 Washers

Type SB F 100-40: Holder with thread M12 Plate 2 Beam Clips SPA 5P AU 2 Hexagon nuts M12

Installation

U-Holder to be used in pairs. Type 16 up to flange thickness 16 mm Type 40 up to flange thickness 40 mm

Technical Data

Тур	Thread	Tightening torque [Nm]	Fz per U-Holder [kN]	F _y [kN]	M _y [kNm]	M _z [kNm]
SB F 100-16	M10	40	9.5	*	*	*
SB F 100-40	M12	85	16	*	*	*

* Please compare the suitable type's dimensions by means of the Simotec user guideline to get the permissible lateral forces and torques.

Material: Steel, FK 8.8, HCP

Туре	W [kg]	Quantity [pack]	Part number
SB F 100-16	0.7	20	113082
SB F 100-40	1.6	10	113083









End Cap ADK F 100 Group: A430

Application

Plastic end cap to close cut ends of Beam Section F100 to meet both visual and health & safety requirements. Standard Cantilever- and Beam Brackets (AK F100 and TKO F100) already include this end cap.

Installation

Mallet required.

Technical Data

Material: PP, colour yellow, bedingt witterungsbeständig

Туре	W	Quantity	Part
	[kg]	[pack]	number
ADK F 100	0.05	25	113086









Beam Bracket TKO F 100/160

























Beam Section TP F 100/160

Group: A810

Application

Galvanised hollow-box-section for fabrication of steel frames. Designed for both simple two-dimensional supports and complex volumetric arrangements. Holes designed to receive Self Forming Screw FLS in conjunction with the relevant component.

Technical Data

Туре	Section modulus	Moment of inertia	Radius of inertia	Torsional moment It	Cross section A
	[cm ³]	[cm4]	[cm]	[cm4]	[cm ²]
TP F 100/160	Wy: 75.52	ly: 559.42	iy: 6.16	193.00	14.74
	Wz: 46.26	lz: 280.34	iz: 4.36		

Mechanical properties shown above take into account perforations.

The specific values are effective values established by tests, geometrical quantities (analytically determined) can be significantly higher.

Material: Steel, HCP

Approvals / Conformity

Туре	Weight	Qty.	Part
	[kg/m]	[m]	number
TP F 100/160	14.3	6	112905









Beam Bracket TKO F 100/160

Group: A823

Application

Galvanised hollow-box-section with welded end-plate to serve as cantilever arm. May be used as a crossbar when combined with End Support STA/End Support WBD and 4 x Self Forming Screw FLS.

Scope of delivery

With pre-assembled End Cap ADK F 100-160

Installation

Depending on the situation, different options are recommended:

- Directly to building structure: 4x suitable wall anchors. a)
 - To traditional steel beams between 100 180 mm flange dimensions: 1x Assembly Set 5P M12 S.

Technical Data

b)

Туре	L	Dimensions of base plate	Slots in base plate for
	[mm]	[mm]	
TKO F 100/160-800	800	280 x 280 x 12	M12
TKO F 100/160-1200	1200	280 x 280 x 12	M12

Base plate welded to Beam Section TP F 100/160 Configuration: Material: Base plate: Steel, HCP Steel, HCP Beam Section:

Approvals / Conformity

Туре	W [kg]	Quantity [pack]	Part number
TKO F 100/160-800	18.5	1	113097
TKO F 100/160-1200	24.5	1	113420









Corner Bracket WD F 100

Group: A430

Application

Component to be used for connections between two F100 or F100/160 sections when the structural design requires an alternative to the End Support STA F 100 as the default solution. Connections with the Corner Bracket WD F 100 allow flexible constrcutions and

provide a high load capacity at the same time. The central hole allows for the intergration of diagobal cross-bracing allowing

more complex structures the be made.

Installation

To be used in pairs only. 8 pieces of Self Forming Screw FLS are necessary for one Corner Bracket.

Technical Data

Туре	perm. tensile load perforation [kN]
WD F 100 140/140	45,3

Material: Steel, HCP

Approvals / Conformity

CE mark (Declaration of performance see www.sikla.com/service/downloads)

Туре	W	Quantity	Part
	[kg]	[pack]	number
WD F 100 140/140	1.9	1	113095



٢







End Support STA F 100 - 100/160

Group: A822

Application

Plug-in component designed to create an endplate at the open end of a Beam Section TP F 100 and TP F 100/160 or a Cantilever bracket AK F 100.

Installation

For the connection to Beam Section TP F 100 or TP F 100/160 (flange side 100) 4 Self Forming Screws FLS F are necessary. The Beam Section TP F 100/160 connected to the End Support STA F 100 - 100/160 has to be screwed with 8 Self Forming Screws FLS F. On each of the broader sides 4 Self Forming Screws FLS F are necessary.



Туре	Dimensions of base plate Slotting in base plate		н
	[mm]	for	[mm]
STA F 100 - 100/160	270 x 100 x 8	M10	238
STA F 100 - 100/160 E	245 x 100 x 8	M10	238

Configuration: Material: Plate: Octagon: Base plate welded to Octagon F 100/160

Steel, HCP Steel, HCP

Approvals / Conformity

CE-mark (Declaration of performance www.sikla.com/downloads)

Туре	W [kg]	Quantity [pack]	Part number
STA F 100 - 100/160	4.4	1	114878
STA F 100 - 100/160 E	4.2	1	114879











End Support WBD F 100/160

Group: A821

Application

Plug-in component designed to create a square endplate at the open end of a Beam Section TP F100 or a Beam Bracket.

Installation

Depending on the situation, different options are recommended:

- Directly to building structure: 4 x suitable wall anchors and 4 Self Forming Screws FLS applied to the square/octagonal insert. a)
- To traditional steel beams between 80 300 mm flange dimensions: b) 1x Assembly Set 5P M12 S, M16 S and 4 Self Forming Screws FLS applied to the square/octagonal insert.

Technical Data

Туре	For flange width [mm]	Dimensions of base plate [mm]	Slots in base plate for	H [mm]
WBD F 100/160-121/160	121 - 160	320 x 260 x 12	M12	232
WBD F 100/160-161/200	161 - 200	320 x 310 x 12	M16	232
WBD F 100/160-201/300	201 - 300	420 x 220 x 12	M16	232

Base plate welded to square F 100/60 Configuration: Material: Plate: Steel, HCP Square F 100: Steel, HCP

Approvals / Conformity

Туре	W [kg]	Quantity [pack]	Part number
WBD F100/160-121/160	10.53	1	113098
WBD F100/160-161/200	11.95	1	113099
WBD F100/160-201/300	11.14	1	113100













Joint GE F 100

Group: A437

Application

Applicable as bracing element of single-arm cantilevers in conjunction with System siFramo 100 and for the reinforcement of frame constructions. The angle α is continuously variable between 25° and 155°.

Installation

Attachment of the Joints to Beam Section TP F 100 by means of 4 Self Forming Screws FLS F at the base plate. The support profile TP F 80 or TP F 100 (depending on joint type) plugged onto the octagon is also attached by means of 4 Self Forming Screws, so 8 Self Forming Screws are necessary in total. After installation at the desired angle the screws have to be tightened with 40 Nm.

Technical Data

Туре	Height H [mm]	Length L [mm]	Width B [mm]	Angle α	Dimensions of base plate [mm]
GE F 100 - 80	140	100	100	25° - 155°	-
GE F 100 - 80 q	140	100	80	25° - 155°	210 x 100 x 8
GE F 100 - 100	180	100	100	25° - 155°	-
GE F 100 - 100 q	180	100	100	25° - 155°	210 x 100 x 8

Material: Steel, HCP

Туре	W [kg]	Quantity [pack]	Part number
GE F 100 - 80	2.3	1	113838
GE F 100 - 80 q	3.4	1	113032
GE F 100 - 100	3.0	1	113837
GE F 100 - 100 q	4.1	1	113836







siFramo 100/160







Application Applicable as bracing element of single-arm cantilevers in conjunction with System siFramo 100/160 and for the reinforcement of frame constructions. The angle α is continuously variable between 25° and 155°.

Scope of delivery

Joint GE F 100/160

Joint GE F 100/160 screwed with Joining Plate

Installation

Attachment of the Joints to the 160 mm face of Beam Section TP F 100/160 by means of 4 Self Forming Screws FLS F at the base plate. The support profile TP F 80 or TP F 100 (depending on joint type) plugged onto the octagon is also attached by means of 4 Self Forming Screws, so 8 Self Forming Screws are necessary in total.

After installation at the desired angle the screws have to be tightened with 40 Nm.

Technical Data

Тур	Height H [mm]	Length L [mm]	Width B [mm]	Angle α
GE F 160 - 80	140	160	160	25° - 155°
GE F 160 - 100	180	160	160	25° - 155°

Material: Steel, HCP

Туре	W [kg]	Quantity [pack]	Part number
GE F 160 - 80	3.6	1	115854
GE F 160 - 100	4.3	1	115855







000000

н





Welding Adapter ASA F 100/160 Square

Group: A828

Application

Welding plate with square insert to receive siFramo section. May be implemented into the structural steel design in anticipation of siFramo-frames or used in situ as a connection element when clamping is not an option but hot works are permitted.

Scope of delivery

Mounting Plate 100 with welded on square joint.

Installation

The welding plate of the ASA can be welded directly without previous treatment due to a corrosion-resistant weld-thru coating which is compatible with both the HDG surface of the siFramo section and the health and safety requirements of the welding process. Once the ASA adapter has been connected, the coating may also receive paint without previous treatment. The siFramo section must be connected to the Welding Adapter ASA with 4 x Self Forming Screw FLS. 8 pieces of Self Forming Screws are to be used for the Beam Section TP F 100/160, whereas 4 Self Forming Screws have to be screwed together on the flat flanks' opposite sides.

Technical Data

Туре	Adapter size H [mm]	Mounting Plate size [mm]
ASA F 100/160 GPL 4kt	240	180 x 120 x 20

Material: Steel, HCP

Approvals / Conformity

Туре	W	Quantity	Part
	[kg]	[pack]	number
ASA F 100/160 GPL 4kt	6.5	1	113410











Group: A430

Application

The Self Forming Screw FLS creates its own thread inside the wall of the siFramo pilot hole. During the screw-driving operation, the base steel is reshaped and hardened to form an air-tight seal between the threads of the screw and the surrounding steel, making it exceptionally resistant to vibrational loosening and increasing fastening strength.

Technical Data

Application	Tightening torque [Nm]
System siFramo	60
Connection to Channels MS 41	35

Material: Steel, HCP

Warning notice:

The Hilti Group recently launched a thread-forming screw under the product name "MT-TFB OC". This product is visually hard to distinguish from the Sikla original screw "FLS-F", and we would like to notify our customers that the Hilti screw is not compatible with our system. The use of this screw in conjunction with the Sikla system compromises the validity of published load data, declarations of performance and practical stability of installations. In the event of uncertainty on the supply source of thread-forming screws, please contact Sikla customer service.

Approvals / Conformity

MPA tested

Туре	W	Quantity	Part
	[kg]	[pack]	number
FLS F	0.03	100	192512









Group: A640

Application

Element for connecting Beam Bracket TKO, Angled Beam Bracket SKO, End Support WBD or Pivot Joint GE F to a beam section.

Scope of delivery

Туре	Beam Clip [Quantity]	Support plate [Quantity]	HR trimming * [Quantity]
M12 S	4 x M12	4 x M12	4 x M12 x 80
M16 S	4 x M16	4 x M16	4 x M16 x 100
M12 S2	2 x M12	2 x M12	2 x M12 x 80

* HR trimming according EN 14399-3 consisting of: Hexagon bolt M12 or M16, 2 washers, 1 hexagon nut

Installation

- 1. Position Beam Clip with the split end on beam section.
- 2. Install support plate and HR trimming and tighten accordingly.

The support plate secures a rectangular assembly of the bolt and prevents its shifting or bending stress. In conjunction with the HR trimming a continuous and predictable preload force is guaranteed.

Technical Data

Туре	Size range [mm]	Tightening torque M _A [Nm] /	F _y perm. per Beam Clip	Shear force load capacity F_z per set = 4 Beam Clips
		Weiterdrehwinkel	[kN]	[kN]
M12 S	1 - 30	60 / 90°	26,3	12,0 *
M16 S	4 - 40	140 / 90°	32,0	13,6 *

* The specified data relate to the worst case with flange thicknesses 30 mnm (M12) or 40 mm (M16) as well as a coefficient of adhesion $\mu_{Haft} = 0,20$. A possibly operating tensile force F_y isn't included.

Material: Steel, HCP

Туре	W [kg]	Qty. [set]	Part number
M12 S	1.2	10	115843
M16 S	2.2	10	115844
M12 S2	0.6	10	115845







siFramo 100/160





U-Holder SB F 100/160

Group: A839

Application

Pre-assembled component to clamp Beam Section F100/160 to the flange side of traditional steel sections.

Scope of delivery

Type SB F 100/160-40: Holder with thread M12 Plate 2 Beam Clips SPA 5P AU 2 Hexagon nuts M12

Installation

U-Holder to be used in pairs. Type 40 up to flange thickness 40 mm

Technical Data

Тур	Thread	Tightening torque	Fz	Fy	My	Mz
		[Nm]	per U-Holder [kN]	[kN]	[kNm]	[kNm]
SB F 100/160-40	M12	85	16	*	*	*

* Please compare the suitable type's dimensions by means of the Simotec user guideline to get the permissible lateral forces and torques.

Material: Steel, FK 8.8, HCP

Туре	W	Quantity	Part
	[kg]	[pack]	number
SB F 100/160-40	1.7	10	113101









End Cap ADK F 100/160

Group: A430

Application

Plastic end cap to close cut ends of Beam Section F100 to meet both visual and health & safety requirements. Standard Cantilever- and Beam Brackets (AK F100 and TKO F100) already include this end cap.

Installation

Mallet required.

Technical Data

Material: PP, colour yellow, bedingt witterungsbeständig





Type W [kg] Quantity [pack] Part number ADK F 100/160 0.08 25 113102





Joining Beam Bracket QKO 100



















Beam Bracket TKO 100

Group: A625

Application

Element for mounting to floors, ceilings or walls or for assembling crossbars.

Installation

Depending on the situation, different options are recommended:

- a) Fixing to building structure using 4 heavy-duty anchors M12.
- b) Frictional connection to steel beams (flange width 80 120 mm) with Assembly Set 5P M12 S.
- c) Interlocking connection to other beam brackets TKO 100 or 120 by means of Bracket Plates FV 100/120.

Technical Data

Configuration:Base plate welded to IPBI 100 beamMaterial:Steel, hot-dipped galvanised

Approvals / Conformity

Туре	L [mm]	W [kg]	Quantity [pack]	Part number
TKO 100 x 250	250	8.5	1	193099
TKO 100 x 350	350	10.4	1	185402
TKO 100 x 400	400	11.2	1	185411
TKO 100 x 450	450	11.9	1	185420
TKO 100 x 500	500	12.7	1	185429
TKO 100 x 550	550	13.7	1	185438
TKO 100 x 600	600	14.2	1	185447
TKO 100 x 650	650	15.0	1	185456
TKO 100 x 700	700	16.6	1	185465
TKO 100 x 750	750	17.2	1	185474
TKO 100 x 800	800	17.9	1	185483
TKO 100 x 850	850	18.8	1	185492
TKO 100 x 900	900	19.6	1	185501
TKO 100 x 950	950	20.3	1	185510
TKO 100 x 1000	1000	21.2	1	185519
TKO 100 x 1100	1100	22.3	1	185528
TKO 100 x 1200	1200	25.2	1	185537
TKO 100 x 1300	1300	25.8	1	185546
TKO 100 x 1400	1400	28.6	1	185555
TKO 100 x 1500	1500	30.1	1	185564
TKO 100 x 2000	2000	39.0	1	185573















Joining Beam Bracket QKO 100

Group: A624

Application

Element for vertical assembly on concrete or steel beams, especially for risers. In the QKO variant, the flange surface is parallel to the base plate and welded on one side with a support plate. The variant QKOq has the support turned by 90° and thus fixed vertically on the base plate.

Installation

Depending on the situation, different options are recommended:

a) Fixing on concrete by means of 4 heavy duty anchors M12

- b) Frictional connection to steel beams (flange width 80 120 mm) by means of Assembly Set 5P M12 S.
- c) Interlocking connection to TKO 100 or 120 by means of Bracket Plates FV 100/120

Technical Data

Configuration: Material:

Base plate and support flange welded to IPBI 100 Steel, hot-dipped galvanised

Approvals / Conformity

Туре	L [mm]	W [kg]	Quantity [pack]	Part number
QKO 100 x 600	600	17.1	1	183917
QKO 100 x 1000	1000	24.1	1	183926
QKO 100q x 600	600	16.5	1	183935
QKO 100q x 1000	1000	23.5	1	183944





Angled Beam Bracket SKO 100

Group: A622

Application

Beam Bracket suitable as support for horizontal structures or as reinforcement of bearing constructions on site.

Installation

Depending on the situation, different options are recommended:

- a) Fixing to the building structure using 4 heavy-duty anchors M12.
- b) Frictional construction to steel beams (flange width 80 120 mm) with Assembly Set 5P M12 S.
- c) Interlocking connection to Beam Bracket TKO 100 or 120 by means of Bracket Plates FV 100/120.



Technical Data

Configuration:Base plate welded to beam section 100Material:Steel, hot-dipped galvanised

Approvals / Conformity

Туре	W	Quantity	Part
	[kg]	[pack]	number
SKO 100-30 x 760	22.0	1	191531







End Support STA 100

Group: A630

Application

In connection with Beam Bracket TKO 100, the End Support STA 100 enables the construction of crossbars, as well as further conjuctions between building structure and steel construction. By means of the slotted holes a simple compensation of structural deviations is possible from up to 50 mm.

Scope of delivery Base plate welded to beam holder Accessories: 4 Hexagon Bolts M12 x 35 4 Hexagon Nuts M12 8 Washers

Technical Data

Material:	
STA 100:	Steel, hot-dipped galvanised
Bolts:	Steel, class 8.8, hot-dipped galvanised
Nuts:	Steel, class 8.8, hot-dipped galvanised
Washers:	Steel, hot-dipped galvanised

Туре	W	Quantity	Part
	[kg]	[pack]	number
STA 100	6.4	1	183971








T-Adapter TA 100

Group: A630

Application

In combination with Beam Bracket TKO 100, the T-Adapter allows different Tstructures on the floor or hanging T-structures without need of further accessories. Oblong holes permit a simple compensation on structural situations from up to 50 mm.

- Scope of delivery T-Adapter TA 100 Accessories: 4 Hexagon Bolts M12 x 45 4 Hexagon Nuts M12
- 8 Washers

Technical Data С

Beam 100 welded to beam holder
Steel, hot-dipped galvanised
Steel, class 8.8, hot-dipped galvanised
Steel, class 8, hot-dipped galvanised
Steel, hot-dipped galvanised

Туре	L [mm]	W [kg]	Quantity [pack]	Part number
TA 100 x 200	200	5.1	1	191081
TA 100 x 400	400	8.4	1	191166
TA 100 x 600	600	11.8	1	191099









Joining Plate AP

Group: A630

Application

Interface element to enable the connection of standard endplates of Beam Brackets TKO F80 or F100, TKO 100 or 120 to primary steel with flange width >120 mm.

Scope of delivery

Joining Plate AP

- 4 Countersink Screws M12 x 40
- 4 Hexagon Nuts M12

4 Sicherungsscheiben

Installation

Connect the Joining Plate AP to the Beam Bracket TKO's end plate by using the accessories above. Then continue with either heavy-duty anchors or Assembly Set 5P/Beam Clips as required by the building structure.

Technical Data

Type Dimension of Base Plate Perforation for Connection to flange width

			լուոյ
AP 121/160	320 x 260 x 12	M12	121 - 160
AP 161/200	320 x 310 x 12	M16	161 - 200
AP 201/240	320 x 360 x 12	M16	201 - 240
AP 241/310	420 x 220 x 12	M16	241 - 310

Material:

Joining Plate: Bolts: Nuts: Washers: Steel, hot-dipped galvanised Steel DIN 7991, class 8.8, Dacromet/delta seal Steel, class 8, hot-dipped galvanised Steel, hot-dipped galvanised

Туре	W [kg]	Quantity [pack]	Part number
AP 121/160	7.7	1	183953
AP 161/200	9.3	1	183962
AP 201/240	10.4	1	116534
AP 241/310	8.4	1	117767











Bracket Plates FV 100/120

Group: A630

Application

For safe interlocking connection of a Beam Bracket or an End Support STA to other Beam Brackets TKO (adjustment as per grid with 25 or 50 mm).

Scope of delivery

Two identical plates. Accessories: 2 Hexagon Bolts M12 x 35 4 Hexagon Bolts M12 x 45 6 Hexagon Nuts M12 6 Washers

Installation

Mount Bracket Plates to Beam Bracket TKO by using 2 Hexagon Bolts M12 x 35. Then attach requested Beam Bracket TKO or End Support STA by using 4 Hexagon Bolts M12 x 45.

Technical Data

Material:	
Bracket Plates:	Steel, hot-dipped galvanised
Bolts:	Steel, class 8.8, hot-dipped galvanised
Nuts:	Steel, class 8, hot-dipped galvanised
Washers:	Steel, hot-dipped galvanised

Туре	W	Quantity	Part
	[kg]	[pack]	number
FV 100/120	2.5	1	187616











Assembly Set MS 5P

Group: A640

Application

Element for connecting Beam Bracket TKO, Angled Beam Bracket SKO, End Support WBD or Pivot Joint GE F to a beam section.

Scope of delivery

Туре	Beam Clip [Quantity]	Support plate [Quantity]	HR trimming * [Quantity]
M12 S	4 x M12	4 x M12	4 x M12 x 80
M16 S	4 x M16	4 x M16	4 x M16 x 100
M12 S2	2 x M12	2 x M12	2 x M12 x 80

* HR trimming according EN 14399-3 consisting of: Hexagon bolt M12 or M16, 2 washers, 1 hexagon nut

Installation

- 1. Position Beam Clip with the split end on beam section.
- 2. Install support plate and HR trimming and tighten accordingly.

The support plate secures a rectangular assembly of the bolt and prevents its shifting or bending stress. In conjunction with the HR trimming a continuous and predictable preload force is guaranteed.

Technical Data

Туре	Size range [mm]	Tightening torque M _A [Nm] /	F _y perm. per Beam Clip	Shear force load capacity F_z per set = 4 Beam Clips
		Weiterdrehwinkel	[kN]	[kN]
M12 S	1 - 30	60 / 90°	26,3	12,0 *
M16 S	4 - 40	140 / 90°	32,0	13,6 *

* The specified data relate to the worst case with flange thicknesses 30 mnm (M12) or 40 mm (M16) as well as a coefficient of adhesion $\mu_{Haft} = 0,20$. A possibly operating tensile force F_y isn't included.

Material: Steel, HCP

Туре	W [kg]	Qty. [set]	Part number
M12 S	1.2	10	115843
M16 S	2.2	10	115844
M12 S2	0.6	10	115845











End Cap ADK 100 Group: A630

Application

Suitable as end cap for STF 100 Beams, Beam Brackets, Beam Angles and other elements based on the Simotec Beam STF 100 or any HEA 100 shape steel beam. The signal colour is helpful in accident prevention.

Scope of delivery

Loose, two End Caps are necessary for each beam end.

Technical Data

HDPE (for temperature range -20° to + 80°C), yellow, bedingt Material: witterungsbeständig

Туре	W	Quantity	Part
	[kg]	[pack]	number
ADK 100	0.02	50	190433









Joining Beam Bracket QKO 120



















Group: A620

Application

Element for mounting to floors, ceilings or walls, or for assembling crossbars. Types TKO 120 x 1500, 2000 and 3000 are not suitable for cantilever arrangements.

Installation

Depending on the situation, different options are recommended:

- a) Fixation to building structure using 4 heavy duty anchors M12.
- b) Frictional connection to steel beams (flange width 80 120 mm) with Assembly Set 5P M12 S.
- c) Interlocking connection to further Beam Brackets by means of Bracket Plates FV100/120.

The Ø 13 mm holes following a 50 mm grid allow the combination with other products using M12 bolts.

Technical Data

Dimensions of base plate	Slots in base plate for	Ø of punched holes	Grid of holes
[mm]		[mm]	[mm]
220 x 220 x 12	M12	13	50

Configuration:Base plate welded to IPB120Material:Steel, hot-dipped galvanised

Approvals / Conformity

CE mark (Declaration of performance see www.sikla.com/service/downloads)

Туре	L [mm]	W [kg]	Quantity [pack]	Part number
TKO 120 x 350	350	13.3	<u></u> 1	193150
TKO 120 x 600	600	19.9	1	193167
TKO 120 x 800	800	25.2	1	193174
TKO 120 x 1000	1000	30.5	1	193181
TKO 120 x 1500	1500	43.7	1	193198
TKO 120 x 2000	2000	56.9	1	193204
TKO 120 x 3000	3000	83.4	1	193105















Joining Beam Bracket QKO 120

Group: A624

Application

The Joining Beam Bracket enables the attachment of beams on concrete or at other steel girders. The connection of further STF Beam elements is made by Beam Connectors.

In the QKO variant, the flange surface is parallel to the base plate and welded on one side with a support plate. The variant QKOq has the support turned by 90° and thus fixed vertically on the base plate.

Installation

Depending on the situation, different options are recommended:

- a) Fixation to concrete by means of 4 heavy duty anchors M12 or M16.
 b) Frictional connection to steel beams with Assembly Set 5P M12 S for
- flange width 80 120 mm).
- c) Interlocking connection to TKO 100 or 120 by means of Bracket Plates FV 100/120.

Technical Data

Туре	Dimensions of base plate H x H [mm]	Length of beam section A / L [mm]	Slots in base plate for
QKO 120 and QKO 120q x 600	220 x 220	600/700	M12
QKO 120 and QKO 120q x 1000	220 x 220	1000/1100	M12

Configuration: Base plate and support flange welded to an IPB 120 beam section Material: Steel, hot-dipped galvanised

Approvals / Conformity

CE mark (Declaration of performance see www.sikla.com/service/downloads)

Туре	W [kg]	Quantity [pack]	Part number
QKO 120 x 600	23.2	1	193228
QKO 120 x 1000	33.7	1	193235
QKO 120q x 600	22.4	1	193242
QKO 120q x 1000	33.6	1	193259





End Support STA 120 Group: A630

Application

In combination with Beam Bracket TKO 120, the End Support enables the construction of crossbars, as well as further conjuctions between building structure and steel construction. By means of oblong holes a simple compensation of structural deviations is possible from up to 50 mm.

Scope of delivery End Support STA 120 Accessories: 4 Hexagon bolts M12 x 40 8 Washers

Technical Data

Thickness of base plate [mm]	Slot in base for
220 x 220 x 12	M12

Material:	
STA 120:	Steel, hot-dipped galvanised
Bolts:	Steel, class 8.8, hot-dipped galvanised
Nuts:	Steel, class 8, hot-dipped galvanised
Washers:	Steel, hot-dipped galvanised

Туре	W	Quantity	Part
	[kg]	[pack]	number
STA 120	6.8	1	193211







T-Adapter TA 120

Group: A630

Application

In combination with Beam Bracket TKO 120, the T-Adapter permits different Tstructureson the floor or hanging T-structures without need of further accessories. Oblong holes permit a simple compensation on structural situations from up to 50 mm.

Scope of delivery T-Adapter TA 120 Accessories: 4 Hexagon bolts M12 x 40 4 Hexagon nuts M12

8 Washers

Technical Data

Configuration: Beam section 120 welded to beam holder Material: TA 120: Steel, hot-dipped galvanised Bolts: Steel, class 8.8, hot-dipped galvanised Nuts: Steel, class 8, hot-dipped galvanised Steel, hot-dipped galvanised Washers:

Туре	L [mm]	W [kg]	Quantity [pack]	Part number
TA 120 x 200	200	8.1	1	193112
TA 120 x 400	400	14.0	1	193129
TA 120 x 600	600	19.0	1	193136









Ô

C

Ø O Co

Ø_{©o}

0

Ø Orc

© _C

e

Ô

Ô

Joining Plate AP

Group: A630

Application

Interface element to enable the connection of standard endplates of Beam Brackets TKO F80 or F100, TKO 100 or 120 to primary steel with flange width >120 mm.

Scope of delivery

Joining Plate AP

4 Countersink Screws M12 x 40

- 4 Hexagon Nuts M12
- 4 Sicherungsscheiben

Installation

Connect the Joining Plate AP to the Beam Bracket TKO's end plate by using the accessories above. Then continue with either heavy-duty anchors or Assembly Set 5P/Beam Clips as required by the building structure.

Technical Data

Туре	Dimension of Base Plate L x B [mm]	Perforation for	Connection to flange width [mm]
AP 121/160	320 x 260 x 12	M12	121 - 160
AP 161/200	320 x 310 x 12	M16	161 - 200
AP 201/240	320 x 360 x 12	M16	201 - 240
AP 241/310	420 x 220 x 12	M16	241 - 310

Material:

Joining Plate: Bolts: Nuts: Washers:

Steel, hot-dipped galvanised Steel DIN 7991, class 8.8, Dacromet/delta seal Steel, class 8, hot-dipped galvanised Steel, hot-dipped galvanised

Туре	W [kg]	Quantity [pack]	Part number
AP 121/160	7.7	1	183953
AP 161/200	9.3	1	183962
AP 201/240	10.4	1	116534
AP 241/310	8.4	1	117767









Bracket Plates FV 100/120

Group: A630

Application

For safe interlocking connection of a Beam Bracket or an End Support STA to other Beam Brackets TKO (adjustment as per grid with 25 or 50 mm).

Scope of delivery

Two identical plates. Accessories: 2 Hexagon Bolts M12 x 35 4 Hexagon Bolts M12 x 45

- 6 Hexagon Nuts M12
- 6 Washers

Installation

Mount Bracket Plates to Beam Bracket TKO by using 2 Hexagon Bolts M12 x 35. Then attach requested Beam Bracket TKO or End Support STA by using 4 Hexagon Bolts M12 x 45.

Technical Data

Material:	
Bracket Plates:	Steel, hot-dipped galvanised
Bolts:	Steel, class 8.8, hot-dipped galvanised
Nuts:	Steel, class 8, hot-dipped galvanised
Washers:	Steel, hot-dipped galvanised

Туре	W	Quantity [pack]	Part
FV 100/120	2.5	1	187616











Assembly Set MS 5P

Group: A640

Application

Element for connecting Beam Bracket TKO, Angled Beam Bracket SKO, End Support WBD or Pivot Joint GE F to a beam section.

Scope of delivery

Туре	Beam Clip [Quantity]	Support plate [Quantity]	HR trimming * [Quantity]
M12 S	4 x M12	4 x M12	4 x M12 x 80
M16 S	4 x M16	4 x M16	4 x M16 x 100
M12 S2	2 x M12	2 x M12	2 x M12 x 80

* HR trimming according EN 14399-3 consisting of: Hexagon bolt M12 or M16, 2 washers, 1 hexagon nut

Installation

- 1. Position Beam Clip with the split end on beam section.
- 2. Install support plate and HR trimming and tighten accordingly.

The support plate secures a rectangular assembly of the bolt and prevents its shifting or bending stress. In conjunction with the HR trimming a continuous and predictable preload force is guaranteed.

Technical Data

Туре	Size range [mm]	Tightening torque M _A [Nm] / Weiterdrehwinkel	F _y perm. per Beam Clip [kN]	Shear force load capacity F _z per set = 4 Beam Clips [kN]
M12 S	1 - 30	60 / 90°	26,3	12,0 *
M16 S	4 - 40	140 / 90°	32,0	13,6 *

* The specified data relate to the worst case with flange thicknesses 30 mnm (M12) or 40 mm (M16) as well as a coefficient of adhesion $\mu_{Haft} = 0,20$. A possibly operating tensile force F_y isn't included.

Material: Steel, HCP

Туре	W [kg]	Qty. [set]	Part number
M12 S	1.2	10	115843
M16 S	2.2	10	115844
M12 S2	0.6	10	115845









End Cap ADK 120 Group: A630

Application

Suitable as end cap for Beam Brackets 120, Joining Beam Brackets 120 and other elements based on steel beam HEB 120. The signal colour is helpful in accident prevention.

Installation

Loose, two End Caps are necessary for each beam end. Can easily be fitted and keeps securely in place.

Technical Data

Material: HDPE (for temperature range -20 to +80° C), yellow, bedingt witterungsbeständig

Туре	W	Quantity	Part
	[kg]	[pack]	number
ADK 120	0.02	50	173189









Working loads for Pipe Shoe LA - HV Fy Fx Fz Page 7-5





























































Measurements

Supports without insulation insert

Pipe NB	Pipe D	Pipe Clamp B [mm]	Pipe Clamp Material [mm]	Hex. bolts
15	22	85	30 x 5	M10 x 40
20	27	92	30 x 5	M10 x 40
25	34	100	30 x 5	M10 x 40
32	43	111	30 x 5	M10 x 40
40	49	117	30 x 5	M10 x 40
50	61	139	40 x 5	M12 x 45
65	77	156	40 x 5	M12 x 45
80	89	168	40 x 5	M12 x 45
100	115	165	50 x 5	M12 x 50
125	140	183	50 x 5	M12 x 50
150	169	215	50 x 8	M12 x 55
200	220	252	50 x 8	M12 x 55
250	273	306	60 x 8	M16 x 65
300	324	347	60 x 8	M16 x 65
350	356	375	60 x 8	M16 x 65
400	407	423	70 x 8	M16 x 65
500	508	524	70 x 8	M16 x 65
600	610	626	70 x 8	M16 x 65

Supports with insulation insert

Pipe NB	Pipe D	Insulation Thickness [mm]	Insulation Length [mm]	Pipe Clamp B [mm]	Pipe Clamp Material [mm]	Hex. bolts
25	33.7	50	100	180	50 x 5	M12 x 50
32	42.4	50	100	187	50 x 5	M12 x 50
40	48.3	50	100	190	50 x 5	M12 x 50
50	60.3	50	100	199	50 x 5	M12 x 50
65	76.1	60	100	237	50 x 8	M12 x 55
80	88.9	60	100	245	50 x 8	M12 x 55
100	114.3	60	200	278	50 x 8	M16 x 60
125	139.7	60	200	295	50 x 8	M16 x 60
150	168.3	60	200	319	60 x 8	M16 x 65
200	219.1	60	200	363	60 x 8	M16 x 65
250	273.0	60	200	412	60 x 8	M16 x 65
300	323.9	80	200	503	70 x 8	M16 x 65











Working loads for Pipe Shoe LA - HV

Basis for assessment EC 3, working loads for supports at their delivered height (90 mm, 150 mm or 200 mm)

The load values apply to pipe shoes from the HCP range as well as to the high and low temperature pipe shoes. The load values are based on room temperature.

For higher temperatures, the corresponding temperature correction values according to the attached table must be taken into account. For low-temperature pipe shoes, the full loads can be applied over the recommended range of application. For temperatures below -50°C, an individual technical consultation is required.

Axial fixed point forces **Fx** can only be attained by the professional use of antislip protections (e.g. cleats, stoppers). Those have to be planned during the design of the piping and are on the responsibility of the piping manufacturer.

The tests for lifting forces - Fz were performed using a combination of a pipe shoe LA - HV an a guiding or fixed points sets. This results in the values for - Fz in the following combinations:

- beam connection with the FS guiding set or the XS fixed point set.
- cell Connection to siFramo with the guiding bracket **FW F** or the fixed point bracket **XW F**

Further statical product datas are available on request.

Material-dependent temperature correction values (k)



Temperature	16Mo3	S235JR
20°C	1.00	1.00
80°C	0.95	1.00
100°C	0.93	1.00
150°C	0.89	0.90
200°C	0.85	0.81
250°C	0.77	0.71
300°C	0.71	0.61
350°C	0.64	0.52
400°C	0.58	-
450°C	0.53	-
500°C	0.51	-



LA - HV	D _{max}	Fx	Fy	+ Fz	- Fz	- Fz	- Fz	- Fz
		[kN]	[kN]	[kN]	FS 80/120 [kN]	FW F 80 [kN]	XS 80/120 [kN]	XW F 80 [kN]
90	18	9.7	7.4	15.4	14	6.1	15.4	15.4
90	22	9.7	7.4	15.4	14	6.1	15.4	15.4
90	27	9.7	7.4	15.4	14	6.1	15.4	15.4
90	30	9.7	7.4	15.4	14	6.1	15.4	15.4
90	34	9.7	7.4	15.4	14	6.1	15.4	15.4
90	39	9.5	7.3	15.4	14	6.1	15.4	15.4
90	44	9.4	7.1	15.4	14	6.1	15.4	15.4
90	49	9.2	7.0	15.4	14	6.1	15.4	15.4
90	54	9.1	6.9	15.4	14	6.1	15.4	15.4
90	59	8.9	6.7	15.4	14	6.1	15.4	15.4
90	61	8.8	6.7	15.4	14	6.1	15.4	15.4
90	66	8.7	6.5	15.4	14	6.1	15.4	15.4
90	71	8.5	6.4	15.4	14	6.1	15.4	15.4
90	77	8.3	6.2	15.4	14	6.1	15.4	15.4
90	83	8.1	6.0	15.4	14	6.1	15.4	15.4
90	89	7.9	5.9	15.4	14	6.1	15.4	15.4
90	95	7.7	5.7	15.4	14	6.1	15.4	15.4
90	102	7.5	5.5	15.4	14	6.1	15.4	15.4
90	109	7.3	5.3	15.4	14	6.1	15.4	15.4
90	115	7.1	5.1	15.4	14	6.1	15.4	15.4
90	122	6.9	4.9	15.4	14	6.1	15.4	15.4
90	128	6.7	4.8	15.4	14	6.1	15.4	15.4
90	134	6.5	4.6	15.4	14	6.1	15.4	15.4
90	140	6.3	4.4	15.4	14	6.1	15.4	15.4
90	146	6.1	4.3	15.4	14	6.1	15.4	15.4
90	152	5.9	4.1	15.4	14	6.1	15.4	15.4
90	158	5.7	3.9	15.4	14	6.1	15.4	15.4
90	163	5.5	3.8	15.4	14	6.1	15.4	15.4
90	169	5.4	3.6	15.4	14	6.1	15.4	15.4

Basis for assessment EC 3, working loads for Supports in delivery status Sliding Support LA - HV + Guiding Set FS resp. Fixed Point Set XS Sliding Support LA - HV + Guiding Bracket FW F 80 resp. Fixed Point Bracket XW F 80





LA - HV	D _{max}	Fx	Fy	+ Fz	- Fz	- Fz	- Fz	- Fz
		[kN]	[kN]	[kN]	FS 80/120 [kN]	FW F 80 [kN]	XS 80/120 [kN]	XW F 80 [kN]
150	18	8.1	5.4	15.4	14	6.1	15.4	15.4
150	22	8.1	5.4	15.4	14	6.1	15.4	15.4
150	27	8.1	5.4	15.4	14	6.1	15.4	15.4
150	30	8.1	5.4	15.4	14	6.1	15.4	15.4
150	34	8.1	5.4	15.4	14	6.1	15.4	15.4
150	39	8.1	5.3	15.4	14	6.1	15.4	15.4
150	44	8.0	5.2	15.4	14	6.1	15.4	15.4
150	49	7.9	5.1	15.4	14	6.1	15.4	15.4
150	54	7.8	5.0	15.4	14	6.1	15.4	15.4
150	59	7.7	4.9	15.4	14	6.1	15.4	15.4
150	61	7.7	4.8	15.4	14	6.1	15.4	15.4
150	66	7.6	4.7	15.4	14	6.1	15.4	15.4
150	71	7.5	4.6	15.4	14	6.1	15.4	15.4
150	77	7.4	4.5	15.4	14	6.1	15.4	15.4
150	83	7.4	4.4	15.4	14	6.1	15.4	15.4
150	89	7.3	4.3	15.4	14	6.1	15.4	15.4
150	95	7.2	4.1	15.4	14	6.1	15.4	15.4
150	102	7.1	4.0	15.4	14	6.1	15.4	15.4
150	109	6.9	3,9	15.4	14	6.1	15.4	15.4
150	115	6.9	3.7	15.4	14	6.1	15.4	15.4
150	122	6.7	3.6	15.4	14	6.1	15.4	15.4
150	128	6.6	3.5	15.4	14	6.1	15.4	15.4
150	134	6.5	3.3	15.4	14	6.1	15.4	15.4
150	140	6.5	3.2	15.4	14	6.1	15.4	15.4
150	146	6.4	3.1	15.4	14	6.1	15.4	15.4
150	152	6.3	3.0	15.4	14	6.1	15.4	15.4
150	158	6.2	2.8	15.4	14	6.1	15.4	15.4
150	163	6.1	2.7	15.4	14	6.1	15.4	15.4
150	169	6.1	2.6	15.4	14	6.1	15.4	15.4

Basis for assessment EC 3, working loads for Supports in delivery status Sliding Support LA - HV + Guiding Set FS resp. Fixed Point Set XS Sliding Support LA - HV + Guiding Bracket FW F 80 resp. Fixed Point Bracket XW F 80



LA - HV	D _{max}	Fx	Fy	+ Fz	- Fz	- Fz	- Fz	- Fz
		[kN]	[kN]	[kN]	FS 80/120	FW F 80	XS 80/120	XW F 80
200	18	6.6	4.9	15.4	14	6.1	15.4	15.4
200	22	6.6	4.9	15.4	14	6.1	15.4	15.4
200	27	6.6	4.9	15.4	14	6.1	15.4	15.4
200	30	6.6	4.9	15.4	14	6.1	15.4	15.4
200	34	6.6	4.9	15.4	14	6.1	15.4	15.4
200	39	6.5	4.8	15.4	14	6.1	15.4	15.4
200	44	6.4	4.7	15.4	14	6.1	15.4	15.4
200	49	6.4	4.7	15.4	14	6.1	15.4	15.4
200	54	6.3	4.6	15.4	14	6.1	15.4	15.4
200	59	6.3	4.5	15.4	14	6.1	15.4	15.4
200	61	6.3	4.5	15.4	14	6.1	15.4	15.4
200	66	6.2	4.4	15.4	14	6.1	15.4	15.4
200	71	6.2	4.3	15.4	14	6.1	15.4	15.4
200	77	6.1	4.2	15.4	14	6.1	15.4	15.4
200	83	6.0	4.1	15.4	14	6.1	15.4	15.4
200	89	6.0	4.1	15.4	14	6.1	15.4	15.4
200	95	5.9	4.0	15.4	14	6.1	15.4	15.4
200	102	5.8	3.9	15.4	14	6.1	15.4	15.4
200	109	5.7	3.7	15.4	14	6.1	15.4	15.4
200	115	5.7	3.7	15.4	14	6.1	15.4	15.4
200	122	5.6	3.5	15.4	14	6.1	15.4	15.4
200	128	5.5	3.4	15.4	14	6.1	15.4	15.4
200	134	5.5	3.4	15.4	14	6.1	15.4	15.4
200	140	5.4	3.3	15.4	14	6.1	15.4	15.4
200	146	5.3	3.2	15.4	14	6.1	15.4	15.4
200	152	5.3	3.1	15.4	14	6.1	15.4	15.4
200	158	5.2	3.0	15.4	14	6.1	15.4	15.4
200	163	5.2	2.9	15.4	14	6.1	15.4	15.4
200	169	5.1	2.8	15.4	14	6.1	15.4	15.4

Basis for assessment EC 3, working loads for Supports in delivery status Sliding Support LA - HV + Guiding Set FS resp. Fixed Point Set XS Sliding Support LA - HV + Guiding Bracket FW F 80 resp. Fixed Point Bracket XW F 80











Working loads for Pipe Shoe LC - HV

Basis for assessment EC 3, working loads for supports at their delivered height (90 mm, 150 mm or 200 mm)

The load values apply to pipe shoes from the HCP range as well as to the high and low temperature pipe shoes. The load values are based on room temperature.

For higher temperatures, the corresponding temperature correction values according to the attached table must be taken into account. For low-temperature pipe shoes, the full loads can be applied over the recommended range of application. For temperatures below -50°C, an individual technical consultation is required.

Axial fixed point forces **Fx** can only be attained by the professional use of antislip protections (e.g. cleats, stoppers). Those have to be planned during the design of the piping and are on the responsibility of the piping manufacturer.

The tests for lifting forces - Fz were performed using a combination of a pipe shoe LC - HV an a guiding or fixed points sets. This results in the values for - Fz in the following combinations:

- beam connection with the **FS** guiding set or the **XS** fixed point set.
- Connection to siFramo with the guiding bracket **FW F** or the fixed point bracket **XW F**

Further statical product datas are available on request.

Material-dependent temperature correction values (k)



Temperature	16Mo3	S235JR
20°C	1.00	1.00
80°C	0.95	1.00
100°C	0.93	1.00
150°C	0.89	0.90
200°C	0.85	0.81
250°C	0.77	0.71
300°C	0.71	0.61
350°C	0.64	0.52
400°C	0.58	-
450°C	0.53	-
500°C	0.51	-



IC-HV	Dmax	Fx	Fv	+ Fz		- F7	- F7	- F7	- F7
20		[kN]	[kN]	[kN]		FS 80/120	FW F 80	XS 80/120	XW F 80
						[kN]	[kN]	[kN]	[kN]
90	18	11.4	6.4	17	-	14	6.1	17	17
90	22	11.4	6.4	17		14	6.1	17	17
90	27	11.4	6.4	17		14	6.1	17	17
90	30	11.4	6.4	17	1	14	6.1	17	17
90	34	11.4	6.4	17		14	6.1	17	17
90	39	11.4	6.3	17		14	6.1	17	17
90	44	11.3	6.2	17		14	6.1	17	17
90	49	11.3	6.1	17		14	6.1	17	17
90	54	11.3	6.0	17		14	6.1	17	17
90	59	11.2	6.0	17		14	6.1	17	17
90	61	11.2	5.9	17		14	6.1	17	17
90	66	11.2	5.8	17		14	6.1	17	17
90	71	11.2	5.8	17		14	6.1	17	17
90	77	11.1	5.6	17		14	6.1	17	17
90	83	11 1	5.5	17		14	61	17	17
90	89	11 1	5.4	17		14	61	17	17
90	95	11.0	5.3	17		14	61	17	17
90	102	11.0	5.2	17		14	61	17	17
90	102	10.9	5.1	17		14	61	17	17
<u>an</u>	115	10.0	5.0	17		1/	61	17	17
00	122	10.5	J.0 ⊿ Q	17		1/	6.1	17	17
00	100	10.9	4.9	17		14	6.1	17	17
90	120	10.0	4.0	17		14	6.1	17	17
90	1/10	10.0	4.7	17		14	6.1	17	17
00	140	10.0	4.0	17		14	6.1	17	17
90	140	10.7	4.4	17		14	6.1	17	17
00	152	10.7	4.0	17		14	6.1	17	17
90	162	10.0	4.2	17		14	6.1	17	17
90	100	10.0	4.2	17		14	6.1	17	17
90	174	10.0	4.0	17		14	0.1	17	17
90	1/4	10.5	4.0	17		14	0.1	17	17
90	180	10.5	3.9	17		14	0.1	17	17
90	187	10.5	3.7	17		14	6.1	17	17
90	194	10.4	3.6	17		14	6.1	17	17
90	200	10.4	3.5	17		14	6.1	17	1/
90	207	10.3	3.4	17		14	6.1	17	1/
90	214	10.3	3.3	17		14	6.1	17	1/
90	221	10.3	3.1	1/		14	6.1	1/	1/
90	229	10.2	3.0	1/		14	6.1	1/	1/
90	237	10.2	2.9	17		14	6.1	17	17
90	245	10.1	2.7	17		14	6.1	17	17
90	254	10.1	2.6	17	-	14	6.1	17	17
90	262	10.0	2.4	17	-	14	6.1	17	17
90	266	10.0	2.4	17	-	14	6.1	17	17
90	273	9.9	2.2	17	-	14	6.1	17	17
90	282	9.9	2.1	17		14	6.1	17	17
90	291	9.8	1.9	17	-	14	6.1	17	17
90	300	9.8	1.8	17	-	14	6.1	17	17
90	309	9.7	1.6	17		14	6.1	17	17
90	317	9.7	1.5	17	-	14	6.1	17	17
90	324	96	14	17	. –	14	61	17	17

Basis for assessment EC 3, working loads for Supports in delivery status Sliding Support LC - HV + Guiding Set FS resp. Fixed Point Set XS Sliding Support LC - HV + Guiding Bracket FW F 80 resp. Fixed Point Bracket XW F 80



[KN][KN][KN][KN]F80/20FWF 80X8.80/20XW F80150188.64.717146.11717150228.64.717146.11717150278.64.717146.11717150308.64.717146.11717150348.64.717146.11717150398.64.717146.11717150448.64.617146.11717150548.54.517146.11717150598.54.417146.11717150618.54.417146.11717150618.54.417146.11717150618.54.417146.11717150778.54.217146.11717150788.44.017146.11717150958.44.017146.117171501028.44.017146.117171501028.43.917146.11717	LC - HV	D _{max}	Fx	Fy	+ Fz	- Fz	- Fz	- Fz	- Fz
150188.64.717146.11717150228.64.717146.11717150278.64.717146.11717150308.64.717146.11717150348.64.717146.11717150398.64.717146.11717150398.64.617146.11717150448.64.617146.11717150598.54.417146.11717150598.54.417146.11717150618.54.417146.11717150618.54.417146.11717150718.54.217146.11717150778.54.217146.117171501028.44.017146.117171501028.43.917146.117171501028.43.917146.117171501288.43.717146.11717150<			[kN]	[kN]	[kN]	FS 80/120	FW F 80	XS 80/120	XW F 80
150 16 6.0 4.7 17 14 6.1 17 17 150 22 8.6 4.7 17 14 6.1 17 17 150 30 8.6 4.7 17 14 6.1 17 17 150 30 8.6 4.7 17 14 6.1 17 17 150 34 8.6 4.7 17 14 6.1 17 17 150 39 8.6 4.6 17 14 6.1 17 17 150 44 8.6 4.6 17 14 6.1 17 17 150 54 8.5 4.5 17 14 6.1 17 17 150 61 8.5 4.4 17 14 6.1 17 17 150 61 8.5 4.2 17 14 6.1 17 17	150	18	86	17	17	[KIN] 1/	[KIN] 61	[KN] 17	[KN] 17
150228.64.717146.11717150308.64.717146.11717150308.64.717146.11717150398.64.717146.11717150398.64.717146.11717150448.64.617146.11717150498.64.617146.11717150548.54.517146.11717150598.54.417146.11717150618.54.417146.11717150668.54.417146.11717150668.54.217146.11717150778.54.217146.11717150838.54.217146.117171501028.44.017146.117171501028.43.917146.117171501028.43.917146.117171501288.43.717146.11717150<	150	20	0.0	4.7	17	14	61	17	17
150278.64.717146.11717150308.64.717146.11717150348.64.717146.11717150448.64.617146.11717150448.64.617146.11717150498.64.617146.11717150598.54.417146.11717150598.54.417146.11717150618.54.417146.11717150668.54.417146.11717150718.54.217146.11717150785.4.217146.11717150838.54.217146.11717150898.44.017146.117171501028.44.017146.117171501088.33.717146.117171501088.33.517146.117171501288.43.717146.11717150140 <td>150</td> <td>22</td> <td>0.0</td> <td>4.7</td> <td>17</td> <td> 14</td> <td>6.1</td> <td>17</td> <td>17</td>	150	22	0.0	4.7	17	 14	6.1	17	17
15030308.64.717146.11717150348.64.717146.11717150398.64.717146.11717150448.64.617146.11717150548.54.517146.11717150548.54.417146.11717150618.54.417146.11717150668.54.417146.11717150668.54.417146.11717150778.54.217146.11717150788.54.117146.11717150778.54.217146.11717150838.54.117146.117171501028.44.017146.117171501028.43.717146.117171501098.43.717146.117171501288.43.717146.117171501288.33.517146.11717<	150	21	0.0	4.7	17	14	0.1	17	17
150 34 8.6 4.7 17 14 6.1 17 17 150 39 8.6 4.7 17 14 6.1 17 17 150 44 8.6 4.6 17 14 6.1 17 17 150 49 8.6 4.6 17 14 6.1 17 17 150 54 8.5 4.5 17 14 6.1 17 17 150 59 8.5 4.4 17 14 6.1 17 17 150 61 8.5 4.4 17 14 6.1 17 17 150 66 8.5 4.4 17 14 6.1 17 17 150 71 8.5 4.2 17 14 6.1 17 17 150 77 8.5 4.2 17 14 6.1 17 17 150 78 8.5 4.1 17 14 6.1 17 17 150 88 8.5 4.1 17 14 6.1 17 17 150 102 8.4 4.0 17 14 6.1 17 17 150 102 8.4 3.7 17 14 6.1 17 17 150 122 8.4 3.7 17 14 6.1 17 17 150 128 8.4 3.7 17 14 6.1 17 <td< td=""><td>150</td><td>30</td><td>0.0</td><td>4.7</td><td>17</td><td>14</td><td>0.1</td><td>17</td><td>17</td></td<>	150	30	0.0	4.7	17	14	0.1	17	17
150398.64.717146.11717150448.64.617146.11717150548.54.517146.11717150598.54.417146.11717150618.54.417146.11717150618.54.417146.11717150668.54.417146.11717150718.54.317146.11717150778.54.217146.11717150838.54.217146.11717150898.54.117146.11717150958.44.017146.117171501028.43.917146.117171501158.43.817146.117171501288.43.717146.117171501408.33.517146.117171501488.33.317146.117171501588.33.317146.11717150 <td>150</td> <td>34</td> <td>8.0</td> <td>4.7</td> <td>17</td> <td>14</td> <td>0.1</td> <td>17</td> <td>17</td>	150	34	8.0	4.7	17	14	0.1	17	17
150 44 8.6 4.6 17 14 6.1 17 17 150 49 8.6 4.6 17 14 6.1 17 17 150 54 8.5 4.5 17 14 6.1 17 17 150 59 8.5 4.4 17 14 6.1 17 17 150 61 8.5 4.4 17 14 6.1 17 17 150 61 8.5 4.4 17 14 6.1 17 17 150 61 8.5 4.4 17 14 6.1 17 17 150 77 8.5 4.2 17 14 6.1 17 17 150 77 8.5 4.2 17 14 6.1 17 17 150 77 8.5 4.2 17 14 6.1 17 17 150 83 8.5 4.1 17 14 6.1 17 17 150 102 8.4 4.0 17 14 6.1 17 17 150 109 8.4 3.9 17 14 6.1 17 17 150 128 8.4 3.7 17 14 6.1 17 17 150 140 8.3 3.5 17 14 6.1 17 17 150 146 8.3 3.5 17 14 </td <td>150</td> <td>39</td> <td>8.6</td> <td>4.7</td> <td>17</td> <td>14</td> <td>6.1</td> <td>17</td> <td>17</td>	150	39	8.6	4.7	17	14	6.1	17	17
150 49 8.6 4.6 17 14 6.1 17 17 150 54 8.5 4.5 17 14 6.1 17 17 150 59 8.5 4.4 17 14 6.1 17 17 150 61 8.5 4.4 17 14 6.1 17 17 150 66 8.5 4.4 17 14 6.1 17 17 150 71 8.5 4.2 17 14 6.1 17 17 150 77 8.5 4.2 17 14 6.1 17 17 150 78 8.5 4.2 17 14 6.1 17 17 150 89 8.5 4.1 17 14 6.1 17 17 150 95 8.4 4.0 17 14 6.1 17 17 150 102 8.4 4.0 17 14 6.1 17 17 150 109 8.4 3.9 17 14 6.1 17 17 150 128 8.4 3.7 17 14 6.1 17 17 150 140 8.3 3.5 17 14 6.1 17 17 150 140 8.3 3.5 17 14 6.1 17 17 150 163 8.3 3.3 17 14 <	150	44	8.6	4.6	17	14	6.1	17	17
150 54 8.5 4.5 17 14 6.1 17 17 150 61 8.5 4.4 17 14 6.1 17 17 150 66 8.5 4.4 17 14 6.1 17 17 150 66 8.5 4.4 17 14 6.1 17 17 150 71 8.5 4.2 17 14 6.1 17 17 150 77 8.5 4.2 17 14 6.1 17 17 150 83 8.5 4.2 17 14 6.1 17 17 150 89 8.5 4.1 17 14 6.1 17 17 150 95 8.4 4.0 17 14 6.1 17 17 150 102 8.4 4.0 17 14 6.1 17 17 150 102 8.4 3.9 17 14 6.1 17 17 150 128 8.4 3.7 17 14 6.1 17 17 150 128 8.4 3.7 17 14 6.1 17 17 150 146 8.3 3.5 17 14 6.1 17 17 150 146 8.3 3.3 17 14 6.1 17 17 150 163 8.3 3.3 17 14	150	49	8.6	4.6	1/	14	6.1	1/	1/
150 59 8.5 4.4 17 14 6.1 17 17 150 61 8.5 4.4 17 14 6.1 17 17 150 66 8.5 4.4 17 14 6.1 17 17 150 71 8.5 4.2 17 14 6.1 17 17 150 77 8.5 4.2 17 14 6.1 17 17 150 83 8.5 4.2 17 14 6.1 17 17 150 89 8.5 4.1 17 14 6.1 17 17 150 95 8.4 4.0 17 14 6.1 17 17 150 95 8.4 4.0 17 14 6.1 17 17 150 102 8.4 4.0 17 14 6.1 17 17 150 109 8.4 3.9 17 14 6.1 17 17 150 122 8.4 3.7 17 14 6.1 17 17 150 128 8.4 3.7 17 14 6.1 17 17 150 140 8.3 3.5 17 14 6.1 17 17 150 146 8.3 3.5 17 14 6.1 17 17 150 163 8.3 3.3 17 14	150	54	8.5	4.5	1/	14	6.1	1/	1/
150618.54.417146.11717150668.54.417146.11717150718.54.217146.11717150778.54.217146.11717150838.54.217146.11717150898.54.117146.11717150958.44.017146.117171501028.44.017146.117171501098.43.917146.117171501158.43.817146.117171501228.43.717146.117171501288.43.717146.117171501288.43.717146.117171501408.33.517146.117171501468.33.317146.117171501638.33.317146.117171501638.33.217146.117171501638.33.217146.1171715	150	59	8.5	4.4	17	14	6.1	17	17
150668.54.417146.11717150718.54.217146.11717150778.54.217146.11717150838.54.217146.11717150898.54.117146.11717150958.44.017146.117171501028.44.017146.117171501028.43.917146.117171501158.43.817146.117171501288.43.717146.117171501288.43.717146.117171501288.43.717146.117171501408.33.517146.117171501408.33.517146.117171501528.33.417146.117171501638.33.317146.117171501638.33.217146.117171501698.33.217146.117171	150	61	8.5	4.4	17	14	6.1	17	17
150718.54.317146.11717150778.54.217146.11717150838.54.217146.11717150898.54.117146.11717150958.44.017146.117171501028.44.017146.117171501098.43.917146.117171501158.43.817146.117171501228.43.717146.117171501288.43.717146.117171501288.43.717146.117171501408.33.517146.117171501408.33.517146.117171501468.33.517146.117171501528.33.417146.117171501638.33.317146.117171501698.33.217146.117171501878.23.017146.11717	150	66	8.5	4.4	17	14	6.1	17	17
150778.54.217146.11717150838.54.217146.11717150898.54.117146.11717150958.44.017146.117171501028.44.017146.117171501098.43.917146.117171501158.43.817146.117171501158.43.817146.117171501228.43.717146.117171501288.43.717146.117171501348.33.617146.117171501408.33.517146.117171501468.33.517146.117171501528.33.417146.117171501638.33.217146.117171501698.33.217146.117171501878.23.017146.117171501878.23.017146.11717 <td< td=""><td>150</td><td>71</td><td>8.5</td><td>4.3</td><td>17</td><td>14</td><td>6.1</td><td>17</td><td>17</td></td<>	150	71	8.5	4.3	17	14	6.1	17	17
150838.54.217146.11717150898.54.117146.11717150958.44.017146.117171501028.44.017146.117171501098.43.917146.117171501098.43.917146.117171501158.43.817146.117171501228.43.717146.117171501288.43.717146.117171501348.33.617146.117171501408.33.517146.117171501408.33.517146.117171501528.33.417146.117171501638.33.217146.117171501698.33.217146.117171501808.23.017146.117171501878.23.017146.117171501948.23.017146.11717 <t< td=""><td>150</td><td>77</td><td>8.5</td><td>4.2</td><td>17</td><td>14</td><td>6.1</td><td>17</td><td>17</td></t<>	150	77	8.5	4.2	17	14	6.1	17	17
150898.54.117146.11717150958.44.017146.117171501028.44.017146.117171501098.43.917146.117171501158.43.817146.117171501228.43.717146.117171501288.43.717146.117171501288.43.717146.117171501488.33.617146.117171501408.33.517146.117171501468.33.517146.117171501528.33.417146.117171501588.33.317146.117171501698.33.217146.117171501808.23.117146.117171501878.23.017146.117171501848.23.017146.117171501948.23.017146.11717<	150	83	8.5	4.2	17	14	6.1	17	17
150958.44.017146.117171501028.44.017146.117171501098.43.917146.117171501158.43.817146.117171501228.43.717146.117171501288.43.717146.117171501288.43.717146.117171501348.33.617146.117171501408.33.517146.117171501408.33.517146.117171501468.33.517146.117171501528.33.417146.117171501588.33.317146.117171501698.33.217146.117171501808.23.117146.117171501878.23.017146.117171501948.23.017146.117171501878.23.017146.11717	150	89	8.5	4.1	17	14	6.1	17	17
1501028.44.017146.117171501098.43.917146.117171501158.43.817146.117171501228.43.717146.117171501288.43.717146.117171501288.43.717146.117171501348.33.617146.117171501408.33.517146.117171501468.33.517146.117171501528.33.417146.117171501588.33.317146.117171501698.33.217146.117171501698.33.217146.117171501808.23.117146.117171501878.23.017146.117171501948.23.017146.117171502008.22.917146.117171502148.22.717146.11717 <tr< td=""><td>150</td><td>95</td><td>8.4</td><td>4.0</td><td>17</td><td>14</td><td>6.1</td><td>17</td><td>17</td></tr<>	150	95	8.4	4.0	17	14	6.1	17	17
1501098.43.917146.117171501158.43.817146.117171501228.43.717146.117171501288.43.717146.117171501288.43.717146.117171501288.43.717146.117171501348.33.617146.117171501408.33.517146.117171501468.33.517146.117171501528.33.417146.117171501588.33.317146.117171501698.33.217146.117171501698.23.117146.117171501808.23.117146.117171501948.23.017146.117171501948.23.017146.117171502008.22.917146.117171502148.22.717146.11717 <tr< td=""><td>150</td><td>102</td><td>8.4</td><td>4.0</td><td>17</td><td>14</td><td>6.1</td><td>17</td><td>17</td></tr<>	150	102	8.4	4.0	17	14	6.1	17	17
1501158.43.817146.117171501228.43.717146.117171501288.43.717146.117171501348.33.617146.117171501348.33.617146.117171501408.33.517146.117171501468.33.517146.117171501528.33.417146.117171501588.33.317146.117171501638.33.217146.117171501698.33.217146.117171501748.23.217146.117171501808.23.117146.117171501848.23.017146.117171501948.23.017146.117171502078.22.817146.117171502148.22.717146.117171502218.12.717146.11717 <td>150</td> <td>109</td> <td>8.4</td> <td>3.9</td> <td>17</td> <td>14</td> <td>6.1</td> <td>17</td> <td>17</td>	150	109	8.4	3.9	17	14	6.1	17	17
1501228.4 3.7 1714 6.1 17171501288.4 3.7 1714 6.1 17171501348.3 3.6 1714 6.1 17171501348.3 3.6 1714 6.1 17171501408.3 3.5 1714 6.1 17171501468.3 3.5 1714 6.1 17171501528.3 3.4 1714 6.1 17171501588.3 3.3 1714 6.1 17171501638.3 3.2 1714 6.1 17171501698.3 3.2 1714 6.1 1717150174 8.2 3.2 1714 6.1 1717150180 8.2 3.1 1714 6.1 1717150184 8.2 3.0 1714 6.1 1717150194 8.2 3.0 1714 6.1 1717150207 8.2 2.8 1714 6.1 1717150214 8.2 2.7 1714 6.1 1717150221 8.1 2.7 1714 6.1 1717	150	115	8.4	3.8	17	14	6.1	17	17
1501288.43.717146.117171501348.33.617146.117171501408.33.517146.117171501408.33.517146.117171501468.33.517146.117171501528.33.417146.117171501588.33.317146.117171501638.33.317146.117171501698.33.217146.117171501748.23.217146.117171501808.23.117146.117171501878.23.017146.117171501948.23.017146.117171502078.22.817146.117171502148.22.717146.117171502218.12.717146.11717	150	122	8.4	3.7	17	14	6.1	17	17
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	150	128	8.4	3.7	17	14	6.1	17	17
150 140 8.3 3.5 17 14 6.1 17 17 150 140 8.3 3.5 17 14 6.1 17 17 150 146 8.3 3.5 17 14 6.1 17 17 150 152 8.3 3.4 17 14 6.1 17 17 150 152 8.3 3.4 17 14 6.1 17 17 150 158 8.3 3.3 17 14 6.1 17 17 150 163 8.3 3.2 17 14 6.1 17 17 150 169 8.3 3.2 17 14 6.1 17 17 150 174 8.2 3.2 17 14 6.1 17 17 150 187 8.2 3.0 17 14 6.1 17 17 150 194 8.2 3.0 17 14 6.1 17 17 150 207 8.2 2.8 17 14 6.1 17 17 150 214 8.2 2.7 17 14 6.1 17 17 150 221 8.1 2.7 17 14 6.1 17 17	150	134	83	3.6	17	14	61	17	17
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	150	140	8.3	3.5	17	14	61	17	17
150 140 0.3 3.5 17 144 0.1 17 17 150 152 8.3 3.4 17 144 6.1 17 17 150 158 8.3 3.3 17 144 6.1 17 17 150 163 8.3 3.3 17 144 6.1 17 17 150 163 8.3 3.2 17 144 6.1 17 17 150 169 8.3 3.2 17 144 6.1 17 17 150 174 8.2 3.2 17 144 6.1 17 17 150 187 8.2 3.0 17 144 6.1 17 17 150 194 8.2 3.0 17 144 6.1 17 17 150 207 8.2 2.9 17 144 6.1 17 17 150 214 8.2 2.7 17 144 6.1 17 17 150 221 8.1 2.7 17 144 6.1 17 17	150	1/6	0.0 8 3	3.5	17	1/	6.1	17	17
150 152 8.3 3.4 17 14 6.1 17 17 150 158 8.3 3.3 17 14 6.1 17 17 150 163 8.3 3.3 17 14 6.1 17 17 150 163 8.3 3.3 17 14 6.1 17 17 150 169 8.3 3.2 17 14 6.1 17 17 150 169 8.3 3.2 17 14 6.1 17 17 150 174 8.2 3.2 17 14 6.1 17 17 150 187 8.2 3.0 17 14 6.1 17 17 150 194 8.2 3.0 17 14 6.1 17 17 150 207 8.2 2.8 17 14 6.1 17 17	150	150	0.0	2.0	17	14	61	17	17
150 158 8.3 3.3 17 14 6.1 17 17 150 163 8.3 3.3 17 14 6.1 17 17 150 163 8.3 3.3 17 14 6.1 17 17 150 169 8.3 3.2 17 14 6.1 17 17 150 169 8.3 3.2 17 14 6.1 17 17 150 174 8.2 3.2 17 14 6.1 17 17 150 180 8.2 3.0 17 14 6.1 17 17 150 194 8.2 3.0 17 14 6.1 17 17 150 207 8.2 2.9 17 14 6.1 17 17 150 204 8.2 2.7 17 14 6.1 17 17	150	152	0.0	0.4	17	14	6.1	17	17
150 163 8.3 3.5 17 14 6.1 17 17 150 169 8.3 3.2 17 14 6.1 17 17 150 169 8.3 3.2 17 14 6.1 17 17 150 174 8.2 3.2 17 14 6.1 17 17 150 180 8.2 3.1 17 14 6.1 17 17 150 187 8.2 3.0 17 14 6.1 17 17 150 194 8.2 3.0 17 14 6.1 17 17 150 200 8.2 2.9 17 14 6.1 17 17 150 207 8.2 2.8 17 14 6.1 17 17 150 214 8.2 2.7 17 14 6.1 17 17	150	100	0.0	0.0	17	14	6.1	17	17
150 169 8.3 3.2 17 14 6.1 17 17 150 174 8.2 3.2 17 14 6.1 17 17 150 174 8.2 3.2 17 14 6.1 17 17 150 180 8.2 3.1 17 14 6.1 17 17 150 187 8.2 3.0 17 14 6.1 17 17 150 194 8.2 3.0 17 14 6.1 17 17 150 200 8.2 2.9 17 14 6.1 17 17 150 207 8.2 2.8 17 14 6.1 17 17 150 214 8.2 2.7 17 14 6.1 17 17 150 221 8.1 2.7 17 14 6.1 17 17 <td>150</td> <td>100</td> <td>0.0</td> <td>0.0</td> <td>17</td> <td> 14</td> <td>0.1</td> <td>17</td> <td>17</td>	150	100	0.0	0.0	17	 14	0.1	17	17
150 174 8.2 3.2 17 14 6.1 17 17 150 180 8.2 3.1 17 14 6.1 17 17 150 180 8.2 3.1 17 14 6.1 17 17 150 187 8.2 3.0 17 14 6.1 17 17 150 194 8.2 3.0 17 14 6.1 17 17 150 200 8.2 2.9 17 14 6.1 17 17 150 207 8.2 2.8 17 14 6.1 17 17 150 207 8.2 2.7 17 14 6.1 17 17 150 214 8.2 2.7 17 14 6.1 17 17 150 221 8.1 2.7 17 14 6.1 17 17 <td>150</td> <td>109</td> <td>0.0</td> <td>3.2</td> <td>17</td> <td>14</td> <td>0.1</td> <td>17</td> <td>17</td>	150	109	0.0	3.2	17	14	0.1	17	17
150 180 8.2 3.1 17 14 6.1 17 17 150 187 8.2 3.0 17 14 6.1 17 17 150 187 8.2 3.0 17 14 6.1 17 17 150 194 8.2 3.0 17 14 6.1 17 17 150 200 8.2 2.9 17 14 6.1 17 17 150 207 8.2 2.8 17 14 6.1 17 17 150 207 8.2 2.7 17 14 6.1 17 17 150 214 8.2 2.7 17 14 6.1 17 17 150 221 8.1 2.7 17 14 6.1 17 17	150	1/4	0.2	3.Z	17	14	0.1	17	17
150 187 8.2 3.0 17 14 6.1 17 17 150 194 8.2 3.0 17 14 6.1 17 17 150 194 8.2 3.0 17 14 6.1 17 17 150 200 8.2 2.9 17 14 6.1 17 17 150 207 8.2 2.8 17 14 6.1 17 17 150 214 8.2 2.7 17 14 6.1 17 17 150 214 8.2 2.7 17 14 6.1 17 17 150 221 8.1 2.7 17 14 6.1 17 17	150	180	8.2	3.1	17	14	0.1	17	17
150 194 8.2 3.0 17 14 6.1 17 17 150 200 8.2 2.9 17 14 6.1 17 17 150 200 8.2 2.9 17 14 6.1 17 17 150 207 8.2 2.8 17 14 6.1 17 17 150 214 8.2 2.7 17 14 6.1 17 17 150 221 8.1 2.7 17 14 6.1 17 17 150 221 8.1 2.7 17 14 6.1 17 17	150	187	8.2	3.0	17	14	6.1	17	17
150 200 8.2 2.9 17 14 6.1 17 17 150 207 8.2 2.8 17 14 6.1 17 17 150 207 8.2 2.8 17 14 6.1 17 17 150 214 8.2 2.7 17 14 6.1 17 17 150 221 8.1 2.7 17 14 6.1 17 17	150	194	8.2	3.0	17	14	6.1	17	17
150 207 8.2 2.8 17 14 6.1 17 17 150 214 8.2 2.7 17 14 6.1 17 17 150 214 8.2 2.7 17 14 6.1 17 17 150 221 8.1 2.7 17 14 6.1 17 17	150	200	8.2	2.9	1/	14	6.1	1/	1/
150 214 8.2 2.7 17 14 6.1 17 17 150 221 8.1 2.7 17 14 6.1 17 17	150	207	8.2	2.8	1/	14	6.1	1/	1/
<u>150</u> 221 8.1 2.7 17 14 6.1 17 17	150	214	8.2	2.7	17	14	6.1	17	17
	150	221	8.1	2.7	17	14	6.1	17	17
<u>150</u> 229 8.1 2.6 17 14 6.1 17 17	150	229	8.1	2.6	17	14	6.1	17	17
<u>150</u> 237 8.1 2.5 17 14 6.1 17 17	150	237	8.1	2.5	17	14	6.1	17	17
150 245 8.1 2.4 17 14 6.1 17 17	150	245	8.1	2.4	17	14	6.1	17	17
<u>150</u> 254 8.1 2.3 17 14 6.1 17 17	150	254	8.1	2.3	17	14	6.1	17	17
150 262 8.0 2.2 17 14 6.1 17 17	150	262	8.0	2.2	17	14	6.1	17	17
150 266 8.0 2.2 17 14 6.1 17 17	150	266	8.0	2.2	17	14	6.1	17	17
150 273 8.0 2.1 17 14 6.1 17 17	150	273	8.0	2.1	17	14	6.1	17	17
150 282 8.0 2.0 17 14 6.1 17 17	150	282	8.0	2.0	17	14	6.1	17	17
150 291 8.0 1.9 17 14 6.1 17 17	150	291	8.0	1.9	17	 14	6.1	17	17
150 300 7.9 1.8 17 14 6.1 17 17	150	300	7.9	1.8	17	14	6.1	17	17
150 309 7.9 1.7 17 14 6.1 17 17	150	309	7.9	1.7	17	14	6.1	17	17
150 317 7.9 1.6 17 14 6.1 17 17	150	317	7.9	1.6	17	14	6.1	17	17
150 324 7.9 1.5 17 14 6.1 17 17	150	324	7.9	1.5	17	14	6.1	17	17

Basis for assessment EC 3, working loads for Supports in delivery status Sliding Support LC - HV + Guiding Set FS resp. Fixed Point Set XS Sliding Support LC - HV + Guiding Bracket FW F 80 resp. Fixed Point Bracket XW F 80



LC - HV	D _{max}	Fx [kN]	Fy [kN]	+ Fz [kN]	- Fz FS 80/120	- Fz FW F 80	- Fz XS 80/120	- Fz XW F 80
200	18	74	5.0	17	 14	61	17	17
200	22	74	5.0	17	 14	61	17	17
200	27	74	5.0	17	 14	61	17	17
200	30	74	5.0	17	 14	61	17	17
200	34	74	5.0	17	 14	6.1	17	17
200	39	74	49	17	 14	6.1	17	17
200	44	74	4.9	17	 14	6.1	17	17
200	10	7.4	1.0	17	 1/	6.1	17	17
200	5/	7.4	1.0	17	 1/	6.1	17	17
200	59	7.4	4.0	17	 1/	6.1	17	17
200	61	7.4	4.7	17	 14	6.1	17	17
200	66	73	4.6	17	 1/	6.1	17	17
200	71	7.3	4.0	17	 14	6.1	17	17
200	77	7.3	4.0	17	 14	6.1	17	17
200	02	7.0	4.5	17	14	6.1	17	17
200	00	7.3	4.4	17	 14	6.1	17	17
200	09	7.3	4.4	17	14	0.1	17	17
200	95	7.3	4.3	17	14	0.1	17	17
200	102	7.3	4.2	17	14	6.1	17	17
200	109	7.3	4.1	17	14	6.1	17	17
200	115	7.3	4.1	17	 14	6.1	17	17
200	122	7.3	4.0	17	14	6.1	17	17
200	128	7.3	3.9	1/	14	6.1	1/	1/
200	134	1.2	3.9	1/	14	6.1	1/	1/
200	140	1.2	3.8	1/	14	6.1	1/	1/
200	146	7.2	3.7	17	14	6.1	17	17
200	152	7.2	3.6	17	14	6.1	17	17
200	158	7.2	3.6	17	14	6.1	17	17
200	163	7.2	3.5	17	14	6.1	17	17
200	169	7.2	3.5	17	14	6.1	17	17
200	174	7.2	3.4	17	14	6.1	17	17
200	180	7.2	3.3	17	14	6.1	17	17
200	187	7.2	3.2	17	14	6.1	17	17
200	194	7.2	3.2	17	14	6.1	17	17
200	200	7.1	3.1	17	14	6.1	17	17
200	207	7.1	3.0	17	14	6.1	17	17
200	214	7.1	2.9	17	14	6.1	17	17
200	221	7.1	2.9	17	14	6.1	17	17
200	229	7.1	2.8	17	14	6.1	17	17
200	237	7.1	2.7	17	14	6.1	17	17
200	245	7.1	2.6	17	14	6.1	17	17
200	254	7.1	2.5	17	14	6.1	17	17
200	262	7.0	2.4	17	 14	6.1	17	17
200	266	7.0	2.3	17	14	6.1	17	17
200	273	7.0	2.3	17	 14	6.1	17	17
200	282	7.0	2.2	17	 14	6.1	17	17
200	291	7.0	2.1	17	 14	6.1	17	17
200	300	7.0	2.0	17	 14	6.1	17	17
200	309	7.0	1.8	17	 14	6.1	17	17
200	317	7.0	1.8	17	 14	6.1	17	17
200	324	7.0	1.7	17	 14	6.1	17	17

Basis for assessment EC 3, working loads for Supports in delivery status Sliding Support LC - HV + Guiding Set FS resp. Fixed Point Set XS Sliding Support LC - HV + Guiding Bracket FW F 80 resp. Fixed Point Bracket XW F 80











Working loads for Pipe Shoe LD - HV

BBasis for assessment EC 3, working loads for supports at their delivered height (90 mm, 150 mm or 200 mm)

The load values apply to pipe shoes from the HCP range as well as to the high and low temperature pipe shoes. The load values are based on room temperature.

For higher temperatures, the corresponding temperature correction values according to the attached table must be taken into account. For low-temperature pipe shoes, the full loads can be applied over the recommended range of application. For temperatures below -50°C, an individual technical consultation is required.

Axial fixed point forces **Fx** can only be attained by the professional use of antislip protections (e.g. cleats, stoppers). Those have to be planned during the design of the piping and are on the responsibility of the piping manufacturer.

The tests for lifting forces - Fz were performed using a combination of a pipe shoe LD - HV an a guiding or fixed points sets. This results in the values for - Fz in the following combinations:

- beam connection with the FS guiding set or the XS fixed point set.
- Connection to siFramo with the guiding bracket **FW F** or the fixed point bracket **XW F**

Further statical product datas are available on request.

Material-dependent temperature correction values (k)



Temperature	16Mo3	S235JR
20°C	1.00	1.00
80°C	0.95	1.00
100°C	0.93	1.00
150°C	0.89	0.90
200°C	0.85	0.81
250°C	0.77	0.71
300°C	0.71	0.61
350°C	0.64	0.52
400°C	0.58	-
450°C	0.53	-
500°C	0.51	-



LD - HV	D _{max}	Fx [kN]	Fy [kN]	+ Fz [kN]	- Fz FS 80/120 [kN]	- Fz FW F 80 [kN]	- Fz XS 80/120 [kN]	- Fz XW F 80 [kN]
90	221	37.2	12.9	32.8	28	12.2	32.8	32.8
90	229	37.2	12.9	32.8	28	12.2	32.8	32.8
90	237	37.2	12.9	32.8	28	12.2	32.8	32.8
90	245	37.2	12.9	32.8	28	12.2	32.8	32.8
90	254	37.2	12.9	32.8	28	12.2	32.8	32.8
90	262	37.2	12.9	32.8	28	12.2	32.8	32.8
90	266	37.2	12.9	32.8	28	12.2	32.8	32.8
90	273	37.2	12.9	32.8	28	12.2	32.8	32.8
90	282	37.2	12.9	32.8	28	12.2	32.8	32.8
90	291	37.2	12.9	32.8	28	12.2	32.8	32.8
90	300	37.2	12.9	32.8	28	12.2	32.8	32.8
90	309	37.2	12.9	32.8	28	12.2	32.8	32.8
90	317	37.2	12.9	32.8	28	12.2	32.8	32.8
90	324	37.2	12.9	32.8	28	12.2	32.8	32.8
90	333	37.2	12.9	32.8	28	12.2	32.8	32.8
90	342	37.2	12.9	32.8	28	12.2	32.8	32.8
90	350	37.2	12.9	32.8	28	12.2	32.8	32.8
90	356	37.2	13.1	32.8	28	12.2	32.8	32.8
90	365	36.2	12.7	32.8	28	12.2	32.8	32.8
90	374	35.2	12.5	32.8	28	12.2	32.8	32.8
90	382	34.3	12.3	32.8	28	12.2	32.8	32.8
90	388	33.7	12.2	32.8	28	12.2	32.8	32.8
90	396	32.8	12.0	32.8	28	12.2	32.8	32.8
90	407	31.6	11.9	32.8	28	12.2	32.8	32.8
90	418	30.4	11.5	32.8	28	12.2	32.8	32.8
90	429	29.2	11.2	32.8	28	12.2	32.8	32.8
90	440	28.0	11.0	32.8	28	12.2	32.8	32.8
90	451	26.8	10.7	32.8	28	12.2	32.8	32.8
90	457	26.2	10.6	32.8	28	12.2	32.8	32.8
90	468	25.0	10.3	32.8	28	12.2	32.8	32.8
90	477	24.0	10.1	32.8	28	12.2	32.8	32.8
90	487	22.9	9.9	32.8	28	12.2	32.8	32.8
90	498	21.7	9.6	32.8	28	12.2	32.8	32.8
90	508	20.8	9.4	32.8	28	12.2	32.8	32.8
90	519	19.4	9.1	32.8	28	12.2	32.8	32.8
90	530	18.2	8.9	32.8	28	12.2	32.8	32.8
90	541	17.0	8.6	32.8	28	12.2	32.8	32.8
90	552	15.8	8.3	32.8	28	12.2	32.8	32.8
90	563	14.6	8.1	32.8	28	12.2	32.8	32.8
90	574	13.4	7.8	32.8	28	12.2	32.8	32.8
90	585	12.2	7.6	32.8	28	12.2	32.8	32.8
90	596	11.1	7.3	32.8	28	12.2	32.8	32.8
90	604	10.2	7.1	32.8	28	12.2	32.8	32.8
90	610	9.5	7.2	32.8	28	12.2	32.8	32.8

Basis for assessment EC 3, working loads for Supports in delivery status Sliding Support LD - HV + Guiding Set FS resp. Fixed Point Set XS Sliding Support LD - HV + Guiding Bracket FW F 80 resp. Fixed Point Bracket XW F 80





LD - HV	D _{max}	Fx [kN]	Fy [kN]	+ Fz [kN]	- Fz FS 80/120 [kN]	- Fz FW F 80 [kN]	- Fz XS 80/120 [kN]	- Fz XW F 80 [kN]
150	221	30.8	12.7	32.8	28	12.2	32.8	32.8
150	229	30.8	12.7	32.8	28	12.2	32.8	32.8
150	237	30.8	12.7	32.8	28	12.2	32.8	32.8
150	245	30.8	12.7	32.8	28	12.2	32.8	32.8
150	254	30.8	12.7	32.8	28	12.2	32.8	32.8
150	262	30.8	12.7	32.8	28	12.2	32.8	32.8
150	266	30.8	12.7	32.8	28	12.2	32.8	32.8
150	273	30.8	12.7	32.8	28	12.2	32.8	32.8
150	282	30.8	12.7	32.8	28	12.2	32.8	32.8
150	291	30.8	12.7	32.8	28	12.2	32.8	32.8
150	300	30.8	12.7	32.8	28	12.2	32.8	32.8
150	309	30.8	12.7	32.8	28	12.2	32.8	32.8
150	317	30.8	12.7	32.8	28	12.2	32.8	32.8
150	324	30.8	12.7	32.8	28	12.2	32.8	32.8
150	333	30.8	12.7	32.8	28	12.2	32.8	32.8
150	342	30.8	12.7	32.8	28	12.2	32.8	32.8
150	350	30.8	12.7	32.8	28	12.2	32.8	32.8
150	356	30.8	12.9	32.8	28	12.2	32.8	32.8
150	365	30.8	12.4	32.8	28	12.2	32.8	32.8
150	374	29.2	12.2	32.8	28	12.2	32.8	32.8
150	382	28.5	12.0	32.8	28	12.2	32.8	32.8
150	388	28.0	11.8	32.8	28	12.2	32.8	32.8
150	396	27.2	11.6	32.8	28	12.2	32.8	32.8
150	407	26.3	11.5	32.8	28	12.2	32.8	32.8
150	418	25.3	11.1	32.8	28	12.2	32.8	32.8
150	429	24.3	10.8	32.8	28	12.2	32.8	32.8
150	440	23.3	10.5	32.8	28	12.2	32.8	32.8
150	451	22.3	10.2	32.8	28	12.2	32.8	32.8
150	457	21.8	10.0	32.8	28	12.2	32.8	32.8
150	468	20.8	9.8	32.8	28	12.2	32.8	32.8
150	477	20.0	9.5	32.8	28	12.2	32.8	32.8
150	487	19.1	9.3	32.8	28	12.2	32.8	32.8
150	498	18.1	9.0	32.8	28	12.2	32.8	32.8
150	508	17.3	8.8	32.8	28	12.2	32.8	32.8
150	519	16.2	8.4	32.8	28	12.2	32.8	32.8
150	530	15.2	8.1	32.8	28	12.2	32.8	32.8
150	541	14.3	7.9	32.8	28	12.2	32.8	32.8
150	552	13.3	7.6	32.8	28	12.2	32.8	32.8
150	563	12.3	7.3	32.8	28	12.2	32.8	32.8
150	574	11.3	7.0	32.8	28	12.2	32.8	32.8
150	585	10.3	6.7	32.8	 28	12.2	32.8	32.8
150	596	9.3	6.4	32.8	28	12.2	32.8	32.8
150	604	8.6	6.2	32.8	28	12.2	32.8	32.8
150	610	8.1	6.3	32.8	28	12.2	32.8	32.8

Basis for assessment EC 3, working loads for Supports in delivery status Sliding Support LD - HV + Guiding Set FS resp. Fixed Point Set XS Sliding Support LD - HV + Guiding Bracket FW F 80 resp. Fixed Point Bracket XW F 80



LD - HV	D _{max}	Fx [kN]	Fy [kN]	+ Fz [kN]	- Fz FS 80/120 [kN]	- Fz FW F 80 [kN]	- Fz XS 80/120 [kN]	- Fz XW F 80 [kN]
200	221	24.6	11.1	32.8	28	12.2	32.8	32.8
200	229	24.6	11.1	32.8	28	12.2	32.8	32.8
200	237	24.6	11.1	32.8	28	12.2	32.8	32.8
200	245	24.6	11.1	32.8	28	12.2	32.8	32.8
200	254	24.6	11.1	32.8	28	12.2	32.8	32.8
200	262	24.6	11.1	32.8	 28	12.2	32.8	32.8
200	266	24.6	11.1	32.8	28	12.2	32.8	32.8
200	273	24.6	11.1	32.8	28	12.2	32.8	32.8
200	282	24.6	11.1	32.8	28	12.2	32.8	32.8
200	291	24.6	11.1	32.8	28	12.2	32.8	32.8
200	300	24.6	11.1	32.8	28	12.2	32.8	32.8
200	309	24.6	11.1	32.8	28	12.2	32.8	32.8
200	317	24.6	11.1	32.8	28	12.2	32.8	32.8
200	324	24.6	11.1	32.8	28	12.2	32.8	32.8
200	333	24.6	11.1	32.8	28	12.2	32.8	32.8
200	342	24.6	11.1	32.8	28	12.2	32.8	32.8
200	350	24.6	11.1	32.8	28	12.2	32.8	32.8
200	356	25.0	11.3	32.8	 28	12.2	32.8	32.8
200	365	24.1	10.9	32.8	 28	12.2	32.8	32.8
200	374	23.5	10.8	32.8	28	12.2	32.8	32.8
200	382	23.1	10.6	32.8	28	12.2	32.8	32.8
200	388	22.7	10.5	32.8	28	12.2	32.8	32.8
200	396	22.2	10.3	32.8	28	12.2	32.8	32.8
200	407	21.6	10.2	32.8	28	12.2	32.8	32.8
200	418	20.9	9.8	32.8	28	12.2	32.8	32.8
200	429	20.3	9.6	32.8	28	12.2	32.8	32.8
200	440	19.6	9.4	32.8	28	12.2	32.8	32.8
200	451	19.0	9.2	32.8	28	12.2	32.8	32.8
200	457	18.6	9.0	32.8	28	12.2	32.8	32.8
200	468	17.9	8.8	32.8	28	12.2	32.8	32.8
200	477	17.4	8.6	32.8	28	12.2	32.8	32.8
200	487	16.8	8.4	32.8	28	12.2	32.8	32.8
200	498	16.1	8.2	32.8	28	12.2	32.8	32.8
200	508	15.7	8.1	32.8	28	12.2	32.8	32.8
200	519	14.9	7.8	32.8	 28	12.2	32.8	32.8
200	530	14.2	7.5	32.8	 28	12.2	32.8	32.8
200	541	13.6	7.3	32.8	 28	12.2	32.8	32.8
200	552	12.9	7.1	32.8	 28	12.2	32.8	32.8
200	563	12.3	6.9	32.8	 28	12.2	32.8	32.8
200	574	11.6	6.6	32.8	 28	12.2	32.8	32.8
200	585	11.0	6.4	32.8	 28	12.2	32.8	32.8
200	596	10.3	6.2	32.8	 28	12.2	32.8	32.8
200	604	9.9	6.0	32.8	 28	12.2	32.8	32.8
200	610	9.5	6.1	32.8	28	12.2	32.8	32.8

Basis for assessment EC 3, working loads for Supports in delivery status Sliding Support LD - HV + Guiding Set FS resp. Fixed Point Set XS Sliding Support LD - HV + Guiding Bracket FW F 80 resp. Fixed Point Bracket XW F 80







Group: A731, A730, A732

Application

Pipe Shoe - Single Clamp

For pipes on suitable surfaces. Height-adjustable in steps of 2.5mm. When resting on steel beams, a minimum flange width of 80 mm is recommended.

Scope of delivery

Upper and lower part are bolted together allowing height adjustment. The slide plate is fixed to the lower part.

Technical Data

Туре	Height H	Height H		
	as delivered [mm]	Range [mm]		
LA - HV 90	90	88.5 113.5		
LA - HV 150	150	116 168.5		
LA - HV 200	200	171 223.5		

Tightening torque screw connections:

Clamping bolts	tightening torque	height adjustment	tightening torque
DN 15 - 40	40	bolts in the bar	80
DN 50 - 150	50	bolts in the bar	80

Dimensions:

Metal plate: Slide plate incl.: L = 250 mm x B = 100 mmL = 256 mm x B = 105 mm

Material:

Metal plates: Bolts, Nuts: Slide Plate: Temperature slide plate: Media temperature t_r : Steel, HCP Steel, HCP Polyamide 6.0, glass fibre reinforced, black -20° C to $+130^{\circ}$ C -20° C to $+300^{\circ}$ C (if t_f > 270^{\circ}C, remove slide plate)

Approvals / Conformity



Further clamping ranges listed in the "PDF-Overview all Pipe Shoes".

Note: Pipe shoes HV 200 and outside the DN range - minimum quantity and delivery time on request.







Туре	D (pipe)	W	Quantity	Part
	[mm]	[kg]	[pack]	number
	10 - 22	2.0	4	112000
LA - HV 90 23-27 (DN 20) HCP	23 - 21	2.0		110025
LA - HV 90 30-34 (DN 23) HCP	30 - 34	2.9	-	110035
LA - HV 90 40-44 (DN 32) HCP	40 - 44	2.9	4	110030
LA - HV 90 43-49 (DN 40) HCP	45 - 49	3.0	-	110037
	57 - 01 70 - 77	3.1		110030
LA - HV 90 72-77 (DN 65) HCP	12-11	3.Z	-	110039
LA - HV 90 84-89 (DN 80) HCP	84 - 89	3.3	-	110040
LA - HV 90 109-115 (DN 100) HCP	109 - 115	3.0		110041
LA - HV 90 134-140 (DN 125) HCP	134 - 140	3.7	1	110042
LA - HV 90 163-169 (DN 150) HCP	163 - 169	4.8	I	110043
	10 00	0.4	4	110000
LA - HV 150 18-22 (DN 15) HCP	18 - 22	3.1		112388
LA - HV 150 23-27 (DN 20) HCP	23 - 27	3.1	1	112389
LA - HV 150 30-34 (DN 25) HCP	30 - 34	3.2		110044
LA - HV 150 40-44 (DN 32) HCP	40 - 44	3.2	1	110045
LA - HV 150 45-49 (DN 40) HCP	45 - 49	3.3	1	110046
LA - HV 150 57-61 (DN 50) HCP	57 - 61	3.5	1	110047
LA - HV 150 /2-// (DN 65) HCP	12 - 11	3.6	1	110048
LA - HV 150 84-89 (DN 80) HCP	84 - 89	3.6	1	110049
LA - HV 150 109-115 (DN 100) HCP	109 - 115	3.9	1	110050
LA - HV 150 134-140 (DN 125) HCP	134 - 140	4.1	1	110051
LA - HV 150 163-169 (DN 150) HCP	163 - 169	5.1	1	110052
LA - HV 200 18-22 (DN 15) HCP	18 - 22	3.5	1	112390
LA - HV 200 23-27 (DN 20) HCP	23 - 27	3.5	1	112391
LA - HV 200 30-34 (DN 25) HCP	30 - 34	3.5	1	110053
LA - HV 200 40-44 (DN 32) HCP	40 - 44	3.6	1	110054
LA - HV 200 45-49 (DN 40) HCP	45 - 49	3.6	1	110055
LA - HV 200 57-61 (DN 50) HCP	57 - 61	3.8	1	110056
LA - HV 200 72-77 (DN 65) HCP	72 - 77	3.9	1	110057
LA - HV 200 84-89 (DN 80) HCP	84 - 89	3.9	1	110058
LA - HV 200 109-115 (DN 100) HCP	109 - 115	4.3	1	110059
LA - HV 200 134-140 (DN 125) HCP	134 - 140	4.4	1	110060
LA - HV 200 163-169 (DN 150) HCP	163 - 169	54	1	110061



Rohrlager LA - HV HCP Pipe Shoes LA - HV HCP

Тур / Туре LA - HV 90	D (Rohr/Pipe)	G / W	Verp. / Qty.	Artikel Nr.
	[mm]	[kg]	[Stk.] / [pack]	Part No.
LA - HV 90 14-18 HCP	14,00 - 18,00	2,8	1	801663
LA - HV 90 18-22 (DN 15) HCP	18,00 - 22,00	2,8	1	112386
LA - HV 90 23-27 (DN 20) HCP	23,00 - 27,00	2,8	1	112387
LA - HV 90 26-30 HCP	26,00 - 30,00	2,9	1	801664
LA - HV 90 30-34 (DN 25) HCP	30,00 - 34,00	2,9	1	110035
LA - HV 90 35-39 HCP	35,00 - 39,00	2,9	1	801665
LA - HV 90 40-44 (DN 32) HCP	40,00 - 44,00	2,9	1	110036
LA - HV 90 45-49 (DN 40) HCP	45,00 - 49,00	3,0	1	110037
LA - HV 90 50-54 HCP	50,00 - 54,00	3,0	1	801666
LA - HV 90 55-59 HCP	55,00 - 59,00	3,0	1	801667
LA - HV 90 57-61 (DN 50) HCP	57,00 - 61,00	3,1	1	110038
LA - HV 90 62-66 HCP	62,00 - 66,00	3,2	1	801668
LA - HV 90 67-71 HCP	67,00 - 71,00	3,2	1	801669
LA - HV 90 72-77 (DN 65) HCP	72,00 - 77,00	3,2	1	110039
LA - HV 90 78-83 HCP	78,00 - 83,00	3,3	1	801670
LA - HV 90 84-89 (DN 80) HCP	84,00 - 89,00	3,3	1	110040
LA - HV 90 89-95 HCP	89,00 - 95,00	3,5	1	801671
LA - HV 90 96-102 HCP	96,00 - 102,00	3,5	1	801672
LA - HV 90 102-109 HCP	102,00 - 109,00	3,6	1	801673
LA - HV 90 109-115 (DN 100) HCP	109,00 - 115,00	3,6	1	110041
LA - HV 90 115-122 HCP	115,00 - 122,00	3,6	1	801674
LA - HV 90 122-128 HCP	122,00 - 128,00	3,7	1	801675
LA - HV 90 128-134 HCP	128,00 - 134,00	3,7	1	801676
LA - HV 90 134-140 (DN 125) HCP	134,00 - 140,00	3,7	1	110042
LA - HV 90 140-146 HCP	140,00 - 146,00	3,8	1	801677
LA - HV 90 146-152 HCP	146,00 - 152,00	3,8	1	801678
LA - HV 90 152-158 HCP	152,00 - 158,00	3,9	1	801679
LA - HV 90 157-163 HCP	157,00 - 163,00	3,9	1	801680
LA - HV 90 163-169 (DN 150) HCP	163,00 - 169,00	4,8	1	110043



Rohrlager LA - HV HCP Pipe Shoes LA - HV HCP

Тур / Туре LA - HV 150	D (Rohr/Pipe)	G / W	Verp. / Qty.	Artikel Nr.
	[mm]	[kg]	[Stk.] / [pack]	Part No.
LA - HV 150 14-18 HCP	14,00 - 18,00	3,1	1	801681
LA - HV 150 18-22 (DN 15) HCP	18,00 - 22,00	3,1	1	112388
LA - HV 150 23-27 (DN 20) HCP	23,00 - 27,00	3,1	1	112389
LA - HV 150 26-30 HCP	26,00 - 30,00	3,2	1	801682
LA - HV 150 30-34 (DN 25) HCP	30,00 - 34,00	3,2	1	110044
LA - HV 150 35-39 HCP	35,00 - 39,00	3,2	1	801683
LA - HV 150 40-44 (DN 32) HCP	40,00 - 44,00	3,2	1	110045
LA - HV 150 45-49 (DN 40) HCP	45,00 - 49,00	3,3	1	110046
LA - HV 150 50-54 HCP	50,00 - 54,00	3,3	1	801684
LA - HV 150 55-59 HCP	55,00 - 59,00	3,3	1	801685
LA - HV 150 57-61 (DN 50) HCP	57,00 - 61,00	3,5	1	110047
LA - HV 150 62-66 HCP	62,00 - 66,00	3,5	1	801686
LA - HV 150 67-71 HCP	67,00 - 71,00	3,5	1	801687
LA - HV 150 72-77 (DN 65) HCP	72,00 - 77,00	3,6	1	110048
LA - HV 150 78-83 HCP	78,00 - 83,00	3,6	1	801688
LA - HV 150 84-89 (DN 80) HCP	84,00 - 89,00	3,6	1	110049
LA - HV 150 89-95 HCP	89,00 - 95,00	3,8	1	801689
LA - HV 150 96-102 HCP	96,00 - 102,00	3,8	1	801690
LA - HV 150 102-109 HCP	102,00 - 109,00	3,9	1	801691
LA - HV 150 109-115 (DN 100) HCP	109,00 - 115,00	3,9	1	110050
LA - HV 150 115-122 HCP	115,00 - 122,00	4,0	1	801692
LA - HV 150 122-128 HCP	122,00 - 128,00	4,0	1	801693
LA - HV 150 128-134 HCP	128,00 - 134,00	4,0	1	801694
LA - HV 150 134-140 (DN 125) HCP	134,00 - 140,00	4,1	1	110051
LA - HV 150 140-146 HCP	140,00 - 146,00	4,1	1	801695
LA - HV 150 146-152 HCP	146,00 - 152,00	4,1	1	801696
LA - HV 150 152-158 HCP	152,00 - 158,00	4,2	1	801697
LA - HV 150 157-163 HCP	157,00 - 163,00	4,2	1	801698
LA - HV 150 163-169 (DN 150) HCP	163,00 - 169,00	5,1	1	110052



Rohrlager LA - HV HCP Pipe Shoes LA - HV HCP

Тур / Туре LA - HV 200	D (Rohr/Pipe)	G / W	Verp. / Qty.	Artikel Nr.
	[mm]	[kg]	[Stk.] / [pack]	Part No.
LA - HV 200 14-18 HCP	14,00 - 18,00	3,5	1	801699
LA - HV 200 18-22 (DN 15) HCP	18,00 - 22,00	3,5	1	112390
LA - HV 200 23-27 (DN 20) HCP	23,00 - 27,00	3,5	1	112391
LA - HV 200 26-30 HCP	26,00 - 30,00	3,5	1	801700
LA - HV 200 30-34 (DN 25) HCP	30,00 - 34,00	3,5	1	110053
LA - HV 200 35-39 HCP	35,00 - 39,00	3,6	1	801701
LA - HV 200 40-44 (DN 32) HCP	40,00 - 44,00	3,6	1	110054
LA - HV 200 45-49 (DN 40) HCP	45,00 - 49,00	3,6	1	110055
LA - HV 200 50-54 HCP	50,00 - 54,00	3,6	1	801702
LA - HV 200 55-59 HCP	55,00 - 59,00	3,6	1	801703
LA - HV 200 57-61 (DN 50) HCP	57,00 - 61,00	3,8	1	110056
LA - HV 200 62-66 HCP	62,00 - 66,00	3,8	1	801704
LA - HV 200 67-71 HCP	67,00 - 71,00	3,9	1	801705
LA - HV 200 72-77 (DN 65) HCP	72,00 - 77,00	3,9	1	110057
LA - HV 200 78-83 HCP	78,00 - 83,00	3,9	1	801706
LA - HV 200 84-89 (DN 80) HCP	84,00 - 89,00	3,9	1	110058
LA - HV 200 89-95 HCP	89,00 - 95,00	4,1	1	801707
LA - HV 200 96-102 HCP	96,00 - 102,00	4,2	1	801708
LA - HV 200 102-109 HCP	102,00 - 109,00	4,2	1	801709
LA - HV 200 109-115 (DN 100) HCP	109,00 - 115,00	4,3	1	110059
LA - HV 200 115-122 HCP	115,00 - 122,00	4,3	1	801710
LA - HV 200 122-128 HCP	122,00 - 128,00	4,3	1	801711
LA - HV 200 128-134 HCP	128,00 - 134,00	4,4	1	801712
LA - HV 200 134-140 (DN 125) HCP	134,00 - 140,00	4,4	1	110060
LA - HV 200 140-146 HCP	140,00 - 146,00	4,4	1	801713
LA - HV 200 146-152 HCP	146,00 - 152,00	4,5	1	801714
LA - HV 200 152-158 HCP	152,00 - 158,00	4,5	1	801715
LA - HV 200 157-163 HCP	157,00 - 163,00	4,6	1	801716
LA - HV 200 163-169 (DN 150) HCP	163,00 - 169,00	5,4	1	110061







> 109 mm

H L L

Pipe Shoe LC - HV HCP

Group: A731, A730, A732

Application

Pipe Shoe - Double Clamp

For pipes on suitable surfaces. Height-adjustable in steps of 2.5 mm. When resting on steel beams, a minimum flange width of 80 mm is recommended.

Scope of delivery

Upper and lower part are bolted together allowing height adjustment. The slide plate is fixed to the lower part.

Technical Data

Туре	Height H	Height H		
	as delivered [mm]	range [mm]		
LC - HV 90	90	88.5 113.5		
LC - HV 150	150	116 168.5		
LC - HV 200	200	171 223.5		

Tightening torque screw connections:

Clamping bolts	tightening torque [Nm]	height adjustment	tightening torque [Nm]
DN 15 - 40	40	bolts in the bar	80
DN 50 - 200	50	bolts in the bar	80
DN 250 - 300	60	bolts in the bar	80

Dimensions:

Metal plate: Slide plate incl.: L = 250 mm x B = 100 mm L = 256 mm x B = 105 mm

Material:Metal parts:Bolts, Nuts:Slide plate:FTemperatur slide plate:

Steel, HCP Steel, HCP Polyamide 6.0, glass fibre reinforced, black -20° C to $+130^{\circ}$ C -20° C to $+300^{\circ}$ C (if t_f > 270°C, remove slide plate)

Approvals / Conformity

Media temperature t_f :



Further clamping ranges listed in the "PDF-Overview all Pipe Shoes".

Note: Pipe shoes HV 200 and outside the DN range - minimum quantity and delivery time on request.


Туре	D (pipe)	W	Quantity	Part
I C - HV 90 18-22 (DN 15) HCP	18 - 22	3.5	[pack]	112392
LC - HV 90 23-27 (DN 20) HCP	23 - 27	3.5	1	112393
LC - HV 90 30-34 (DN 25) HCP	30 - 34	3.6	1	110062
LC - HV 90 40-44 (DN 32) HCP	40 - 44	3.7	1	110063
LC - HV 90 45-49 (DN 40) HCP	45 - 49	3.7	1	110064
LC - HV 90 57-61 (DN 50) HCP	57 - 61	4.1	1	110065
LC - HV 90 72-77 (DN 65) HCP	72 - 77	4.3	1	110066
LC - HV 90 84-89 (DN 80) HCP	84 - 89	4.4	1	110067
LC - HV 90 109-115 (DN 100) HCP	109 - 115	5.1	1	110068
LC - HV 90 134-140 (DN 125) HCP	134 - 140	5.4	1	110069
LC - HV 90 163-169 (DN 150) HCP	163 - 169	7.1	1	110070
LC - HV 90 215-221 (DN 200) HCP	215 - 221	8.3	1	110071
LC - HV 90 266-273 (DN 250) HCP	266 - 273	11.1	1	110072
LC -HV 90 317-324 (DN 300) HCP	317 - 324	12.0	1	110073
· · ·				
LC - HV 150 18-22 (DN 15) HCP	18 - 22	4.0	1	112394
LC - HV 150 23-27 (DN 20) HCP	23 - 27	4.0	1	112395
LC - HV 150 30-34 (DN 25) HCP	30 - 34	4.0	1	110074
LC - HV 150 40-44 (DN 32) HCP	40 - 44	4.1	1	110075
LC - HV 150 45-49 (DN 40) HCP	45 - 49	4.2	1	110076
LC - HV 150 57-61 (DN 50) HCP	57 - 61	4.6	1	110077
LC - HV 150 72-77 (DN 65) HCP	72 - 77	4.8	1	110078
LC - HV 150 84-89 (DN 80) HCP	84 - 89	4.9	1	110079
LC - HV 150 109-115 (DN 100) HCP	109 - 115	5.5	1	110080
LC - HV 150 134-140 (DN 125) HCP	134 - 140	5.8	1	110081
LC - HV 150 163-169 (DN 150) HCP	163 - 169	7.8	1	110082
LC - HV 150 215-221 (DN 200) HCP	215 - 221	8.8	1	110083
LC - HV 150 266-273 (DN 250) HCP	266 - 273	11.6	1	110084
LC - HV 150 317-324 (DN 300) HCP	317 - 324	12.6	1	110085
LC - HV 200 18-22 (DN 15) HCP	18 - 22	4.5	1	112396
LC - HV 200 23-27 (DN 20) HCP	23 - 27	4.5	1	112397
LC - HV 200 30-34 (DN 25) HCP	30 - 34	4.6	1	110086
LC - HV 200 40-44 (DN 32) HCP	40 - 44	4.9	1	110087
LC - HV 200 45-49 (DN 40) HCP	45 - 49	4.9	1	110088
LC - HV 200 57-61 (DN 50) HCP	57 - 61	5.2	1	110089
LC - HV 200 72-77 (DN 65) HCP	72 - 77	5.3	1	110090
LC - HV 200 84-89 (DN 80) HCP	84 - 89	5.4	1	110091
LC - HV 200 109-115 (DN 100) HCP	109 - 115	6.1	1	110092
LC - HV 200 134-140 (DN 125) HCP	134 - 140	6.2	1	110093
LC - HV 200 163-169 (DN 150) HCP	163 - 169	8.4	1	110094
LC - HV 200 215-221 (DN 200) HCP	215 - 221	9.5	1	110095
LC - HV 200 266-273 (DN 250) HCP	266 - 273	12.0	1	110096
LC - HV 200 317-324 (DN 300) HCP	317 - 324	13.0	1	110097



Rohrlager LC - HV HCP Pipe Shoes LC - HV HCP

Typ / Type LC - HV 90	D (Rohr/Pipe)	G / W	Verp. / Qty.	Artikel Nr.
	[mm]	[kg]	[Stk.] / [pack]	Part No.
LC - HV 90 14-18 HCP	14,00 - 18,00	3,5	1	801717
LC - HV 90 18-22 (DN 15) HCP	18,00 - 22,00	3,5	1	112392
LC - HV 90 23-27 (DN 20) HCP	23,00 - 27,00	3,5	1	112393
LC - HV 90 26-30 HCP	26,00 - 30,00	3,6	1	801718
LC - HV 90 30-34 (DN 25) HCP	30,00 - 34,00	3,6	1	110062
LC - HV 90 35-39 HCP	35,00 - 39,00	3,6	1	801719
LC - HV 90 40-44 (DN 32) HCP	40,00 - 44,00	3,7	1	110063
LC - HV 90 45-49 (DN 40) HCP	45,00 - 49,00	3,7	1	110064
LC - HV 90 50-54 HCP	50,00 - 54,00	3,8	1	801720
LC - HV 90 55-59 HCP	55,00 - 59,00	3,8	1	801721
LC - HV 90 57-61 (DN 50) HCP	57,00 - 61,00	4,1	1	110065
LC - HV 90 62-66 HCP	62,00 - 66,00	4,2	1	801722
LC - HV 90 67-71 HCP	67,00 - 71,00	4,3	1	801723
LC - HV 90 72-77 (DN 65) HCP	72,00 - 77,00	4,3	1	110066
LC - HV 90 78-83 HCP	78,00 - 83,00	4,4	1	801724
LC - HV 90 84-89 (DN 80) HCP	84,00 - 89,00	4,4	1	110067
LC - HV 90 89-95 HCP	89,00 - 95,00	4,8	1	801725
LC - HV 90 96-102 HCP	96,00 - 102,00	4,9	1	801726
LC - HV 90 102-109 HCP	102,00 - 109,00	4,9	1	801727
LC - HV 90 109-115 (DN 100) HCP	109,00 - 115,00	5,1	1	110068
LC - HV 90 115-122 HCP	115,00 - 122,00	5,1	1	801728
LC - HV 90 122-128 HCP	122,00 - 128,00	5,2	1	801729
LC - HV 90 128-134 HCP	128,00 - 134,00	5,3	1	801730
LC - HV 90 134-140 (DN 125) HCP	134,00 - 140,00	5,4	1	110069
LC - HV 90 140-146 HCP	140,00 - 146,00	5,4	1	801731
LC - HV 90 146-152 HCP	146,00 - 152,00	5,5	1	801732
LC - HV 90 152-158 HCP	152,00 - 158,00	5,6	1	801733
LC - HV 90 157-163 HCP	157,00 - 163,00	5,6	1	801734
LC - HV 90 163-169 (DN 150) HCP	163,00 - 169,00	7,1	1	110070

LC - HV	90 168-174 HCP	168,00 - 174,00	7,3	1	801735
LC - HV	90 174-180 HCP	174,00 - 180,00	7,4	1	801736
LC - HV	90 181-187 HCP	181,00 - 187,00	7,6	1	801737
LC - HV	90 188-194 HCP	188,00 - 194,00	7,7	1	801741
LC - HV	90 194-200 HCP	194,00 - 200,00	7,8	1	801738
LC - HV	90 201-207 HCP	201,00 - 207,00	8,0	1	801739
LC - HV	90 208-214 HCP	208,00 - 214,00	8,1	1	801740
LC - HV	90 215-221 (DN 200) HCP	215,00 - 221,00	8,3	1	110071
LC - HV	90 222-229 HCP	222,00 - 229,00	8,4	1	801742
LC - HV	90 230-237 HCP	230,00 - 237,00	8,5	1	801743
LC - HV	90 238-245 HCP	238,00 - 245,00	8,7	1	801744
LC - HV	90 246-254 HCP	246,00 - 254,00	8,9	1	801745
LC - HV	90 255-262 HCP	255,00 - 262,00	9,1	1	801746
LC - HV	90 259-266 HCP	259,00 - 266,00	9,1	1	801747
LC - HV	90 266-273 (DN 250) HCP	266,00 - 273,00	11,1	1	110072
LC - HV	90 274-282 HCP	274,00 - 282,00	11,2	1	801748
LC - HV	90 283-291 HCP	283,00 - 291,00	11,4	1	801749
LC - HV	90 292-300 HCP	292,00 - 300,00	11,6	1	801750
LC - HV	90 301-309 HCP	301,00 - 309,00	11,8	1	801751
LC - HV	90 310-317 HCP	310,00 - 317,00	12,0	1	801752
LC - HV	90 317-324 (DN 300) HCP	317,00 - 324,00	12,0	1	110073

Rohrlager LC - HV HCP Pipe Shoes LC - HV HCP

Typ / Type LC - HV 150	D (Rohr/Pipe)	G / W	Verp. / Qty.	Artikel Nr.
	[mm]	[kg]	[Stk.] / [pack]	Part No.
LC - HV 150 14-18 HCP	14,00 - 18,00	3,9	1	801753
LC - HV 150 18-22 (DN 15) HCP	18,00 - 22,00	4,0	1	112394
LC - HV 150 23-27 (DN 20) HCP	23,00 - 27,00	4,0	1	112395
LC - HV 150 26-30 HCP	26,00 - 30,00	4,0	1	801754
LC - HV 150 30-34 (DN 25) HCP	30,00 - 34,00	4,0	1	110074
LC - HV 150 35-39 HCP	35,00 - 39,00	4,1	1	801755
LC - HV 150 40-44 (DN 32) HCP	40,00 - 44,00	4,1	1	110075
LC - HV 150 45-49 (DN 40) HCP	45,00 - 49,00	4,2	1	110076
LC - HV 150 50-54 HCP	50,00 - 54,00	4,2	1	801756
LC - HV 150 55-59 HCP	55,00 - 59,00	4,3	1	801757
LC - HV 150 57-61 (DN 50) HCP	57,00 - 61,00	4,6	1	110077
LC - HV 150 62-66 HCP	62,00 - 66,00	4,7	1	801758
LC - HV 150 67-71 HCP	67,00 - 71,00	4,7	1	801759
LC - HV 150 72-77 (DN 65) HCP	72,00 - 77,00	4,8	1	110078
LC - HV 150 78-83 HCP	78,00 - 83,00	4,8	1	801760
LC - HV 150 84-89 (DN 80) HCP	84,00 - 89,00	4,9	1	110079
LC - HV 150 89-95 HCP	89,00 - 95,00	5,3	1	801761
LC - HV 150 96-102 HCP	96,00 - 102,00	5,3	1	801762
LC - HV 150 102-109 HCP	102,00 - 109,00	5,4	1	801763
LC - HV 150 109-115 (DN 100) HCP	109,00 - 115,00	5,5	1	110080
LC - HV 150 115-122 HCP	115,00 - 122,00	5,6	1	801764
LC - HV 150 122-128 HCP	122,00 - 128,00	5,7	1	801765
LC - HV 150 128-134 HCP	128,00 - 134,00	5,7	1	801766
LC - HV 150 134-140 (DN 125) HCP	134,00 - 140,00	5,8	1	110081
LC - HV 150 140-146 HCP	140,00 - 146,00	5,9	1	801767
LC - HV 150 146-152 HCP	146,00 - 152,00	6,0	1	801768
LC - HV 150 152-158 HCP	152,00 - 158,00	6,0	1	801769
LC - HV 150 157-163 HCP	157,00 - 163,00	6,1	1	801770
LC - HV 150 163-169 (DN 150) HCP	163,00 - 169,00	7,8	1	110082

LC - HV 150 168-174 HCP	168,00 - 174,00	7,8	1	801771
LC - HV 150 174-180 HCP	174,00 - 180,00	7,9	1	801772
LC - HV 150 181-187 HCP	181,00 - 187,00	8,1	1	801773
LC - HV 150 188-194 HCP	188,00 - 194,00	8,2	1	801777
LC - HV 150 194-200 HCP	194,00 - 200,00	8,3	1	801774
LC - HV 150 201-207 HCP	201,00 - 207,00	8,5	1	801775
LC - HV 150 208-214 HCP	208,00 - 214,00	8,6	1	801776
LC - HV 150 215-221 (DN 200) HCP	215,00 - 221,00	8,8	1	110083
LC - HV 150 222-229 HCP	222,00 - 229,00	8,9	1	801778
LC - HV 150 230-237 HCP	230,00 - 237,00	9,0	1	801779
LC - HV 150 238-245 HCP	238,00 - 245,00	9,2	1	801780
LC - HV 150 246-254 HCP	246,00 - 254,00	9,4	1	801781
LC - HV 150 255-262 HCP	255,00 - 262,00	9,5	1	801782
LC - HV 150 259-266 HCP	259,00 - 266,00	9,6	1	801783
LC - HV 150 266-273 (DN 250) HCP	266,00 - 273,00	11,6	1	110084
LC - HV 150 274-282 HCP	274,00 - 282,00	11,7	1	801784
LC - HV 150 283-291 HCP	283,00 - 291,00	11,9	1	801785
LC - HV 150 292-300 HCP	292,00 - 300,00	12,1	1	801786
LC - HV 150 301-309 HCP	301,00 - 309,00	12,3	1	801787
LC - HV 150 310-317 HCP	310,00 - 317,00	12,5	1	801788
LC - HV 150 317-324 (DN 300) HCP	317,00 - 324,00	12,6	1	110085



Rohrlager LC - HV HCP Pipe Shoes LC - HV HCP

Тур / Туре LC - HV 200	D (Rohr/Pipe)	G / W	Verp. / Qty.	Artikel Nr.
	[mm]	[kg]	[Stk.] / [pack]	Part No.
LC - HV 200 14-18 HCP	14,00 - 18,00	4,5	1,0	801789
LC - HV 200 18-22 (DN 15) HCP	18,00 - 22,00	4,5	1,0	112396
LC - HV 200 23-27 (DN 20) HCP	23,00 - 27,00	4,5	1,0	112397
LC - HV 200 26-30 HCP	26,00 - 30,00	4,6	1,0	801790
LC - HV 200 30-34 (DN 25) HCP	30,00 - 34,00	4,6	1,0	110086
LC - HV 200 35-39 HCP	35,00 - 39,00	4,6	1,0	801791
LC - HV 200 40-44 (DN 32) HCP	40,00 - 44,00	4,9	1,0	110087
LC - HV 200 45-49 (DN 40) HCP	45,00 - 49,00	4,9	1,0	110088
LC - HV 200 50-54 HCP	50,00 - 54,00	4,8	1,0	801792
LC - HV 200 55-59 HCP	55,00 - 59,00	4,8	1,0	801793
LC - HV 200 57-61 (DN 50) HCP	57,00 - 61,00	5,2	1,0	110089
LC - HV 200 62-66 HCP	62,00 - 66,00	5,2	1,0	801794
LC - HV 200 67-71 HCP	67,00 - 71,00	5,3	1,0	801795
LC - HV 200 72-77 (DN 65) HCP	72,00 - 77,00	5,3	1,0	110090
LC - HV 200 78-83 HCP	78,00 - 83,00	5,4	1,0	801796
LC - HV 200 84-89 (DN 80) HCP	84,00 - 89,00	5,4	1,0	110091
LC - HV 200 89-95 HCP	89,00 - 95,00	5,8	1,0	801797
LC - HV 200 96-102 HCP	96,00 - 102,00	5,9	1,0	801798
LC - HV 200 102-109 HCP	102,00 - 109,00	6,0	1,0	801799
LC - HV 200 109-115 (DN 100) HCP	109,00 - 115,00	6,1	1,0	110092
LC - HV 200 115-122 HCP	115,00 - 122,00	6,1	1,0	801800
LC - HV 200 122-128 HCP	122,00 - 128,00	6,2	1,0	801801
LC - HV 200 128-134 HCP	128,00 - 134,00	6,3	1,0	801802
LC - HV 200 134-140 (DN 125) HCP	134,00 - 140,00	6,2	1,0	110093
LC - HV 200 140-146 HCP	140,00 - 146,00	6,4	1,0	801803
LC - HV 200 146-152 HCP	146,00 - 152,00	6,5	1,0	801804
LC - HV 200 152-158 HCP	152,00 - 158,00	6,6	1,0	801805
LC - HV 200 157-163 HCP	157,00 - 163,00	6,6	1,0	801806
LC - HV 200 163-169 (DN 150) HCP	163,00 - 169,00	8,4	1,0	110094

LC - HV 200 168-174 HCP	168,00 - 174,00	8,3	1,0	801807
LC - HV 200 174-180 HCP	174,00 - 180,00	8,5	1,0	801808
LC - HV 200 181-187 HCP	181,00 - 187,00	8,6	1,0	801809
LC - HV 200 188-194 HCP	188,00 - 194,00	8,7	1,0	801813
LC - HV 200 194-200HCP	194,00 - 200,00	8,9	1,0	801810
LC - HV 200 201-207 HCP	201,00 - 207,00	9,0	1,0	801811
LC - HV 200 208-214 HCP	208,00 - 214,00	9,1	1,0	801812
LC - HV 200 215-221 (DN 200) HCP	215,00 - 221,00	9,5	1,0	110095
LC - HV 200 222-229 HCP	222,00 - 229,00	9,4	1,0	801814
LC - HV 200 230-237 HCP	230,00 - 237,00	9,6	1,0	801815
LC - HV 200 238-245 HCP	238,00 - 245,00	9,7	1,0	801816
LC - HV 200 246-254 HCP	246,00 - 254,00	9,9	1,0	801817
LC - HV 200 255-262 HCP	255,00 - 262,00	10,1	1,0	801818
LC - HV 200 259-266 HCP	259,00 - 266,00	10,1	1,0	801819
LC - HV 200 266-273 (DN 250) HCP	266,00 - 273,00	12,0	1,0	110096
LC - HV 200 274-282 HCP	274,00 - 282,00	12,2	1,0	801820
LC - HV 200 283-291 HCP	283,00 - 291,00	12,4	1,0	801821
LC - HV 200 292-300 HCP	292,00 - 300,00	12,6	1,0	801822
LC - HV 200 301-309 HCP	301,00 - 309,00	12,8	1,0	801823
LC - HV 200 310-317 HCP	310,00 - 317,00	13,0	1,0	801824
LC - HV 200 317-324 (DN 300) HCP	317,00 - 324,00	13,0	1,0	110097





Pipe Shoe LD - HV HCP

Group: A731, A730, A732

Application

Pipe Shoe - Dual Base

For pipes on suitable surfaces. Height-adjustable in steps of 2.5 mm. When resting on steel beams, a minimum flange width of 80 mm is recommended.

Scope of delivery

The upper part and the two lower parts are bolted together allowing height adjustment. The slide plates are fixed to the lower parts. In order to reduce the spacings of the lugs the pipe clamps from DN 300 are rotated by 45° (see illustration).

Installation

To guarantee that both sliding plates rest correctly, both webs must be adjusted to exactly the same height.

Technical Data

Туре	Height H	Height H	B [mm]	B [mm]
	as delivered [mm]	range [mm]	DN 200 - 300	DN 350 - 600
LD - HV 90	90	88.5 113.5	285	325
LD - HV 150	150	116 168.5	285	325
LD - HV 200	200	171 223.5	285	325

Tightening torque screw connections:

Clamping bolts	tightening torque [Nm]	height adjustment	tightening torque [Nm]
DN 200	50	bolts in the bar	80
DN 250 - 600	60	bolts in the bar	80

Dimensions: Metal plate: Slide plate incl.:	L = 250 mm L = 256 mm
Material: Metal parts: Bolts, Nuts: Slide plate: Temperature slide plate: Media temperature t _f :	Steel, HCP Steel, HCP Polyamide 6.0, glass fibre reinforced, black -20°C to +130°C -20°C to +300°C (if $t_f > 270°C$, remove slide plate)

Approvals / Conformity



Further clamping ranges listed in the "PDF-Overview all Pipe Shoes".

Note: Pipe shoes HV 200 and outside the DN range - minimum quantity and delivery time on request.







Туре	D (pipe) [mm]	W [kg]	Quantity [pack]	Part number
LD - HV 90 215-221 (DN 200) HCP	215 - 221	11.9	1	112398
LD - HV 90 266-273 (DN 250) HCP	266 - 273	14.5	1	112399
LD - HV 90 317-324 (DN 300) HCP	317 - 324	15.7	1	112400
LD - HV 90 349-356 (DN 350) HCP	349 - 356	16.6	1	110098
LD - HV 90 397-407 (DN 400) HCP	397 - 407	19.0	1	110099
LD - HV 90 498-508 (DN 500) HCP	498 - 508	22.4	1	110100
LD - HV 90 600-610 (DN 600) HCP	600 - 610	25.1	1	110101
LD - HV 150 215-221 (DN 200) HCP	215 - 221	13.2	1	112401
LD - HV 150 266-273 (DN 250) HCP	266 - 273	15.9	1	112402
LD - HV 150 317-324 (DN 300) HCP	317 - 324	17.0	1	112403
LD - HV 150 349-356 (DN 350) HCP	349 - 356	18.1	1	110102
LD - HV 150 397-407 (DN 400) HCP	397 - 407	20.4	1	110103
LD - HV 150 498-508 (DN 500) HCP	498 - 508	24.1	1	110104
LD - HV 150 600-610 (DN 600) HCP	600 - 610	26.4	1	110105
LD - HV 200 215-221 (DN 200) HCP	215 - 221	14.3	1	112404
LD - HV 200 266-273 (DN 250) HCP	266 - 273	16.9	1	112405
LD - HV 200 317-324 (DN 300) HCP	317 - 324	18.0	1	112406
LD - HV 200 349-356 (DN 350) HCP	349 - 356	19.0	1	110106
LD - HV 200 397-407 (DN 400) HCP	397 - 407	21.4	1	110107
LD - HV 200 498-508 (DN 500) HCP	498 - 508	24.8	1	110108
LD - HV 200 600-610 (DN 600) HCP	600 - 610	27.5	1	110109

Rohrlager LD - HV HCP Pipe Shoes LD - HV HCP

Typ / Type LD - HV 90	D (Rohr/Pipe)	G / W	Verp. / Qty.	Artikel Nr.
	[mm]	[kg]	[Stk.] / [pack]	Part No.
LD - HV 90 215-221 (DN 200) HCP	215,00 - 221,00	11,9	1	112398
LD - HV 90 222-229 HCP	222,00 - 229,00	12,0	1	801829
LD - HV 90 230-237 HCP	230,00 - 237,00	12,2	1	801830
LD - HV 90 238-245 HCP	238,00 - 245,00	12,3	1	801831
LD - HV 90 246-254 HCP	246,00 - 254,00	12,5	1	801832
LD - HV 90 255-262 HCP	255,00 - 262,00	12,7	1	801833
LD - HV 90 259-266 HCP	259,00 - 266,00	12,7	1	801834
LD - HV 90 266-273 (DN 250) HCP	266,00 - 273,00	14,5	1	112399
LD - HV 90 274-282 HCP	274,00 - 282,00	14,8	1	801835
LD - HV 90 283-291 HCP	283,00 - 291,00	15,0	1	801836
LD - HV 90 292-300 HCP	292,00 - 300,00	15,2	1	801837
LD - HV 90 301-309 HCP	301,00 - 309,00	15,4	1	801838
LD - HV 90 310-317 HCP	310,00 - 317,00	15,6	1	801839
LD - HV 90 317-324 (DN 300) HCP	317,00 - 324,00	15,7	1	112400
LD - HV 90 325-333 HCP	325,00 - 333,00	16,0	1	801840
LD - HV 90 334-342 HCP	334,00 - 342,00	16,2	1	801841
LD - HV 90 343-350 HCP	343,00 - 350,00	16,3	1	801842
LD - HV 90 349-356 (DN 350) HCP	349,00 - 356,00	16,6	1	110098
LD - HV 90 358-365 HCP	358,00 - 365,00	16,9	1	801843
LD - HV 90 366-374 HCP	366,00 - 374,00	17,1	1	801844
LD - HV 90 375-382 HCP	375,00 - 382,00	17,3	1	801845
LD - HV 90 381-388 HCP	381,00 - 388,00	17,4	1	801846
LD - HV 90 389-396 HCP	389,00 - 396,00	17,6	1	801847
LD - HV 90 397-407 (DN 400) HCP	397,00 - 407,00	19,0	1	110099
LD - HV 90 408-418 HCP	408,00 - 418,00	19,9	1	801848
LD - HV 90 419-429 HCP	419,00 - 429,00	20,2	1	801849
LD - HV 90 430-440 HCP	430,00 - 440,00	20,5	1	801850
LD - HV 90 441-451 HCP	441,00 - 451,00	20,8	1	801851
LD - HV 90 447-457 HCP	447,00 - 457,00	20,9	1	801852

LD - HV	90 458-468 HCP	458,00 - 468,00	21,2	1	801853
LD - HV	90 467-477 HCP	467,00 - 477,00	21,5	1	801854
LD - HV	90 477-487 HCP	477,00 - 487,00	21,8	1	801855
LD - HV	90 488-498 HCP	488,00 - 498,00	22,1	1	801856
LD - HV	90 498-508 (DN 500) HCP	498,00 - 508,00	22,4	1	110100
LD - HV	90 509-519 HCP	509,00 - 519,00	22,6	1	801857
LD - HV	90 520-530 HCP	520,00 - 530,00	22,9	1	801858
LD - HV	90 531-541 HCP	531,00 - 541,00	23,3	1	801859
LD - HV	90 542-552 HCP	542,00 - 552,00	23,6	1	801860
LD - HV	90 553-563 HCP	553,00 - 563,00	23,9	1	801861
LD - HV	90 564-574 HCP	564,00 - 574,00	24,2	1	801862
LD - HV	90 575-585 HCP	575,00 - 585,00	24,5	1	801863
LD - HV	90 586-596 HCP	586,00 - 596,00	24,8	1	801864
LD - HV	90 594-604 HCP	594,00 - 604,00	25,0	1	801865
LD - HV	90 600-610 (DN 600) HCP	600,00 - 610,00	25,1	1	110101



Rohrlager LD - HV HCP Pipe Shoes LD - HV HCP

Typ / Type LD - HV 150	D (Rohr/Pipe)	G / W	Verp. / Qty.	Artikel Nr.
	[mm]	[kg]	[Stk.] / [pack]	Part No.
LD - HV 150 215-221 (DN 200) HCP	215,00 - 221,00	13,2	1	112401
LD - HV 150 222-229 HCP	222,00 - 229,00	13,3	1	801870
LD - HV 150 230-237 HCP	230,00 - 237,00	13,5	1	801871
LD - HV 150 238-245 HCP	238,00 - 245,00	13,6	1	801872
LD - HV 150 246-254 HCP	246,00 - 254,00	13,8	1	801873
LD - HV 150 255-262 HCP	255,00 - 262,00	14,0	1	801874
LD - HV 150 259-266 HCP	259,00 - 266,00	14,0	1	801875
LD - HV 150 266-273 (DN 250) HCP	266,00 - 273,00	15,9	1	112402
LD - HV 150 274-282 HCP	274,00 - 282,00	16,1	1	801876
LD - HV 150 283-291 HCP	283,00 - 291,00	16,3	1	801877
LD - HV 150 292-300 HCP	292,00 - 300,00	16,5	1	801878
LD - HV 150 301-309 HCP	301,00 - 309,00	16,7	1	801879
LD - HV 150 310-317 HCP	310,00 - 317,00	16,9	1	801880
LD - HV 150 317-324 (DN 300) HCP	317,00 - 324,00	17,0	1	112403
LD - HV 150 325-333 HCP	325,00 - 333,00	17,3	1	801881
LD - HV 150 334-342 HCP	334,00 - 342,00	17,5	1	801882
LD - HV 150 343-350 HCP	343,00 - 350,00	17,7	1	801883
LD - HV 150 349-356 (DN 350) HCP	349,00 - 356,00	18,1	1	110102
LD - HV 150 358-365 HCP	358,00 - 365,00	18,2	1	801884
LD - HV 150 366-374 HCP	366,00 - 374,00	18,4	1	801885
LD - HV 150 375-382 HCP	375,00 - 382,00	18,6	1	801886
LD - HV 150 381-388 HCP	381,00 - 388,00	18,8	1	801887
LD - HV 150 389-396 HCP	389,00 - 396,00	18,9	1	801888
LD - HV 150 397-407 (DN 400) HCP	397,00 - 407,00	20,4	1	110103
LD - HV 150 408-418 HCP	408,00 - 418,00	21,2	1	801889
LD - HV 150 419-429 HCP	419,00 - 429,00	21,5	1	801890
LD - HV 150 430-440 HCP	430,00 - 440,00	21,8	1	801891
LD - HV 150 441-451 HCP	441,00 - 451,00	22,1	1	801892
LD - HV 150 447-457 HCP	447,00 - 457,00	22,3	1	801893

LD - HV 150 458-468 HCP	458,00 - 468,00	22,6	1	801894
LD - HV 150 467-477 HCP	467,00 - 477,00	22,8	1	801895
LD - HV 150 477-487 HCP	477,00 - 487,00	23,1	1	801896
LD - HV 150 488-498 HCP	488,00 - 498,00	23,4	1	801897
LD - HV 150 498-508 (DN 500) HCP	498,00 - 508,00	24,1	1	110104
LD - HV 150 509-519 HCP	509,00 - 519,00	24,0	1	801898
LD - HV 150 520-530 HCP	520,00 - 530,00	24,3	1	801899
LD - HV 150 531-541 HCP	531,00 - 541,00	24,6	1	801900
LD - HV 150 542-552 HCP	542,00 - 552,00	24,9	1	801901
LD - HV 150 553-563 HCP	553,00 - 563,00	25,2	1	801902
LD - HV 150 564-574 HCP	564,00 - 574,00	25,5	1	801903
LD - HV 150 575-585 HCP	575,00 - 585,00	25,8	1	801904
LD - HV 150 586-596 HCP	586,00 - 596,00	26,1	1	801905
LD - HV 150 594-604 HCP	594,00 - 604,00	26,3	1	801906
LD - HV 150 600-610 (DN 600) HCP	600,00 - 610,00	26,4	1	110105

Rohrlager LD - HV HCP Pipe Shoes LD - HV HCP

Typ / Type LD - HV 200	D (Rohr/Pipe)	G / W	Verp. / Qty.	Artikel Nr.
	[mm]	[kg]	[Stk.] / [pack]	Part No.
LD - HV 200 215-221 (DN 200) HCP	215,00 - 221,00	14,3	1	112404
LD - HV 200 222-229 HCP	222,00 - 229,00	14,4	1	801911
LD - HV 200 230-237 HCP	230,00 - 237,00	14,5	1	801912
LD - HV 200 238-245 HCP	238,00 - 245,00	14,7	1	801913
LD - HV 200 246-254 HCP	246,00 - 254,00	14,9	1	801914
LD - HV 200 255-262 HCP	255,00 - 262,00	15,0	1	801915
LD - HV 200 259-266 HCP	259,00 - 266,00	15,1	1	801916
LD - HV 200 266-273 (DN 250) HCP	266,00 - 273,00	16,9	1	112405
LD - HV 200 274-282 HCP	274,00 - 282,00	17,1	1	801917
LD - HV 200 283-291 HCP	283,00 - 291,00	17,3	1	801918
LD - HV 200 292-300 HCP	292,00 - 300,00	17,5	1	801919
LD - HV 200 301-309 HCP	301,00 - 309,00	17,7	1	801920
LD - HV 200 310-317 HCP	310,00 - 317,00	17,9	1	801921
LD - HV 200 317-324 (DN 300) HCP	317,00 - 324,00	18,0	1	112406
LD - HV 200 325-333 HCP	325,00 - 333,00	18,3	1	801922
LD - HV 200 334-342 HCP	334,00 - 342,00	18,5	1	801923
LD - HV 200 343-350 HCP	343,00 - 350,00	18,7	1	801924
LD - HV 200 349-356 (DN 350) HCP	349,00 - 356,00	19,0	1	110106
LD - HV 200 358-365 HCP	358,00 - 365,00	19,3	1	801925
LD - HV 200 366-374 HCP	366,00 - 374,00	19,5	1	801926
LD - HV 200 375-382 HCP	375,00 - 382,00	19,7	1	801927
LD - HV 200 381-388 HCP	381,00 - 388,00	19,8	1	801928
LD - HV 200 389-396 HCP	389,00 - 396,00	20,0	1	801929
LD - HV 200 397-407 (DN 400) HCP	397,00 - 407,00	21,4	1	110107
LD - HV 200 408-418 HCP	408,00 - 418,00	22,3	1	801930
LD - HV 200 419-429 HCP	419,00 - 429,00	22,6	1	801931
LD - HV 200 430-440 HCP	430,00 - 440,00	22,9	1	801932
LD - HV 200 441-451 HCP	441,00 - 451,00	23,2	1	801933
LD - HV 200 447-457 HCP	447,00 - 457,00	23,3	1	801934

LD - HV 200 458-468 HCP	458,00 - 468,00	23,6	1	801935
LD - HV 200 467-477 HCP	467,00 - 477,00	23,9	1	801936
LD - HV 200 477-487 HCP	477,00 - 487,00	24,1	1	801937
LD - HV 200 488-498 HCP	488,00 - 498,00	24,4	1	801938
LD - HV 200 498-508 (DN 500) HCP	498,00 - 508,00	24,8	1	110108
LD - HV 200 509-519 HCP	509,00 - 519,00	25,0	1	801939
LD - HV 200 520-530 HCP	520,00 - 530,00	25,3	1	801940
LD - HV 200 531-541 HCP	531,00 - 541,00	25,6	1	801941
LD - HV 200 542-552 HCP	542,00 - 552,00	25,9	1	801942
LD - HV 200 553-563 HCP	553,00 - 563,00	26,2	1	801943
LD - HV 200 564-574 HCP	564,00 - 574,00	26,5	1	801944
LD - HV 200 575-585 HCP	575,00 - 585,00	26,8	1	801945
LD - HV 200 586-596 HCP	586,00 - 596,00	27,1	1	801946
LD - HV 200 594-604 HCP	594,00 - 604,00	27,4	1	801947
LD - HV 200 600-610 (DN 600) HCP	600,00 - 610,00	27,5	1	110109







Group: A734

Application

Pipe Shoe with insulation

With PUR insulation insert for pipes on suitable surfaces. Height-adjustable in steps of 2.5 mm. When resting on steel beams, a minimum flange width of 80 mm is recommended.

Scope of delivery

Upper and lower part are bolted together allowing height adjustment. The slide plate is fixed to the lower part. Pipe Clamp, load spread metal sheet and insulation insert are pre-assembled.

Technical Data

NB	Form	Height H as delivered [mm]	Height H range [mm]
DN 25 - 50	Single clamp	150	137.5 167.5
DN 65 - 80	Single clamp	150	147.5 177.5
DN 100 - 250	Double clamp	150	150 180
DN 300	Double clamp	150	150 160

Tightening torque screw connections:

Clamping bolts	tightening torque [Nm]	height adjustment	tightening torque [Nm]
DN 25 - 80	25	bolts in the bar	80
DN 100 - 300	30	bolts in the bar	80

Insulation thickness:

NB	insulation thickness [mm]
DN 25 - 50	50
DN 65 - 250	60
DN 300	80

The Installation instructions of the DIN 4140 must be observed (adv. existing Columns are with Sealing paste to close).

Processing information:

If pipe tolerances cause a gap it is necessary to use a sealant.







Dimensions: Metal plate: Slide plate incl.:

Material: Metal parts: Grub screws, nuts: Slide plate: Insulation insert: Load spread sheet

Temperature range insulation: Temperature range sliding plate: Media temperature: L = 250 mm x B = 100 mm L = 256 mm x B = 105 mm

Steel, HCP Steel, HCP Polyamide 6.0, glass fibre reinforced, black PUR, 200 kg/m³ Steel 1.0350, pre-galvanised according to DIN EN 10346 -70°C to +120°C -20°C to +130°C Realizable media temperatures are to be calculated individually to avoid possible condensation.

Approvals / Conformity



Туре	D (pipe) [mm]	W [kg]	Quantity [pack]	Part number
LK - HV 150 DN 25	33.7	4.1	1	110110
LK - HV 150 DN 32	42.4	4.2	1	110111
LK - HV 150 DN 40	48.3	4.3	1	110112
LK - HV 150 DN 50	60.3	4.4	1	110113
LK - HV 150 DN 65	76.1	6.2	1	110114
LK - HV 150 DN 80	88.9	6.6	1	110115
LK - HV 150 DN 100	114.3	12.0	1	110116
LK - HV 150 DN 125	139.7	13.9	1	110117
LK - HV 150 DN 150	168.3	14.5	1	110118
LK - HV 150 DN 200	219.1	16.6	1	110119
LK - HV 150 DN 250	273.0	18.6	1	110120
LK - HV 150 DN 300	323.9	24.2	1	110121





Pipe Shoe GFK

Group: A731, A730, A732

Application

For GFK pipes on suitable surfaces. Height-adjustable in steps of 2.5 mm. When resting on steel beams, a Minimum flangen width of 80 mm is recommended.

Scope of delivery

Upper and lower part are bolted together allowing height adjustment. The slide plate is fixed to the lower part.

Technical Data

clamping screws

Tightening torque screw connections:

tightening torqur



 [Nm]

 DN 25
 10

 DN 50 - 200
 15

 DN 250 - 600
 35

Hinweis

In the course of an extension of the product range, pipe shoes have been introduced in new dimensions. All diameters from 14 - 610 mm are covered.

The previous pipe shoes LC GFKB - HV 150 and the pipe shoes LC GFKE - HV 150 are no longer available.

Example:

LC GFKB - HV 150 DN 100 (Part No. K112410) is replaced by LC HV 150 115 - 122 HCP (Part No. 801764)

In addition, the HV 90 and HV 200 height adjustment ranges are now available.





Pipe Shoes





Guiding Bracket FW F Group: A705

Application

Element for modification of Sliding Pipe Shoes to Guided Pipe Shoes.

Installation

Connection to Beam Section F 80 or F 100 by means of 4 Self-Forming Screws FLS F.

Technical Data

Material: Steel, hot-dipped galvanised

Туре	W [kg]	Quantity [pack]	Part number
FW F 80	0.6	1	110349
FW F 100	0.7	1	113088







Fixed Point Bracket XW F

Group: A705

Application

Element for modification of Sliding Pipe Shoes to Fixed Point Pipe Shoes.

Installation

The slide plate of the Pipe Shoe is disassembled. Connection to the Beam Section F 80 or F 100 by means of 4 Self Forming Screws FLS F.

Axial fixed point forces can only be attained by the professional use of anti-slip protections (e.g. cleats, stoppers). Those have to be planned during the design of the piping and are on the responsibility of the piping manufacturer.

Technical Data

Material: Steel, HCP

Туре	W [kg]	Quantity [pack]	Part number
XW F 80	1.3	1	110356
XW F 100	1.6	1	113087









Axial stop AS F

Group: A705

Application

Modification of Simotec pipe shoes to a single-sided axial stop, for use with siFramo profiles. Using the Axial stop, the pipe shoe can move axially through the pipe to a predefined degree of displacement, with restricted limits in one axial direction.

Scope of delivery

Axial stop AS F consists of:

- 1 Fixed point bracket
- 1 Axial stop
- 2 Threaded rod M12
- 8 Hexagon nut M12 8

Installation

The sliding plate of the pipe shoe is dismantled. The shoe bracket is connected to the beam section F 80 or F 100 with 4 FLS F self-forming screws. The required amount of axial movement is determined using the supplied nuts, with a maximum displacement of 125 mm, equating to half of the sliding plate. Forces in the axial direction can only be achieved if anti-slip devices (e.g. cleats/stoppers) are used properly. These must be provided when designing the pipeline and are the responsibility of the pipeline manufacturer.

Technical Data

Load capacities correspond to the values of the fixed point bracket XW F, see documentation in the catalogue. However, maximum axial load is 12 kN per Axial stop.

Material: Steel, HCP

Туре	W [kg]	Quantity [pack]	Part number
AS F 80	1.6	1	802787
AS F 100	1.8	1	802788









Axial stop variabel VAS F

Group: A705

Application

Modification of the Simotec pipe shoes to a double-sided variable axial stop, for use with siFramo profiles. Using the Axial stop, the pipe shoe can move axially through the pipe to a predefined degree of displacement, with restricted limits in both axial directions.

Scope of delivery

Axial stop VAS F consists of: 1 Fixed point bracket 2 Axial stops 2 Threaded rods M12 x 500 12 Hexagon nuts M12

Installation

The sliding plate of the pipe shoe is dismantled. The shoe bracket is connected to the beam section F 80 or F 100 with 4 FLS F self-forming screws. The 500 mm threaded rods are cut to the required length on site. The required amount of axial movement is adjusted using the supplied nuts, with a maximum displacement of 125 mm, equating to half of the sliding plate Forces in the axial direction can only be achieved if anti-slip devices (e.g. cleats/stoppers) are used properly. These must be provided when designing the pipeline and are the responsibility of the pipeline manufacturer.

Technical Data

Load capacities correspond to the values of the fixed point bracket XW F, see documentation in the catalogue. However, maximum axial load is 12 kN per axial stop.

Material: Steel, HCP

Туре	W [kg]	Quantity [pack]	Part number
VAS F 80	2.5	1	802789
VAS F 100	2.7	1	802790











Guiding Bracket FW F L/Z

Group: A705

Application

Using this Guiding Bracket it's possible to guide Pipe Shoes with different plate thicknesses. The different versions of Type Z are suitable for the respective specified maximum plate thickness (t)and so additionally allow the absorption of lifting forces.

Scope of delivery

Delivery as set comprising 2 Guiding Brackets.

Installation

Installation on top of Beam Section TP F 80 repectively F 100 with 2 Self Forming Screws FLS F per Guiding Bracket, i.e. per set 4 Self Forming Screws have to be used altogether. You can find the Self Forming Screw in the siFramo chapters (section Siconnect).

There are 3 mm of free play in the vertical z-axis for Type Z. There are 3 mm of free play in the vertical y-axis for all Types.

Technical Data

Туре	perm. load Fy [kN]	perm. torque via Fy* [kNm]	perm. load Fz [kN]
FW F 80, all Types Z	1.9	0.4	5.0
FW F 80, Typ L	1.9	-	-
FW F 100, all Types Z	1.9	0.4	6.4
FW F 100, Typ L	1.9	-	-

* the torque is calculated by M = Fy x h, whereas the perm. load for Fy may not be exceeded. Dimension h refers from the middle of the pipe to the top of the base plate.

The perm. loads have been determined by load tests following DIN EN 13480-3 annex J.

The used Pipe Shoe has to be verified separately.

Material: Steel, HCP

* suitable for Sikla Pipe Shoes

Туре	t [mm]	W [kg]	Qty. [set]	Part number
FW F 80 Z 6	6	0.5	25	113628
FW F 80 Z 9	9	0.5	25	113629
FW F 80 Z 12 *	12	0.5	25	113630
FW F 80 Z 15	15	0.5	25	113975
FW F 80 L	-	0.5	25	113627
FW F 100 Z 6	6	0.6	25	113632
FW F 100 Z 9	9	0.6	25	113633
FW F 100 Z 12 *	12	0.6	25	113634
FW F 100 Z 15	15	0.6	25	113976
FW F 100 L	-	0.6	25	113631











Group: A705

Application

Element for completing Guided Pipe Shoes based on Sliding Pipe Shoes. Max. beam flange width t \leq 30 mm

Scope of delivery

Pre-assembled Guiding Set consisting of: 4 clamping hooks 2 threaded rods Lift-off: 2 for FS 240/260 4 for FS 280/300 Hexagon nuts: Each 4 for FS 80/120, FS 140/160 and FS 180/220 8 for FS 240/260 and 12 for FS 280/300

Technical Data

Flanschdicke [mm]	Trägerbreite 80 - 220 mm Anzugsmoment [Nm]	Trägerbreite 221 - 300 mm Anzugsmoment [Nm]
5 - 10	40	15
11 - 20	25	15
21 - 30	20	15

Material:

Metal sheets: Threaded rods, hexagon nuts: Clamping hooks:

Steel, HCP Steel, HCP Cast iron, HCP

Туре	For flange width [mm]	W [kg]	Qty. [set]	Part number
FS 80/120	80 - 120	2.0	1	110350
FS 140/160	121 - 160	2.1	1	110351
FS 180/220	161 - 220	2.3	1	110352
FS 240/260	221 - 260	2.8	1	110353
FS 280/300	261 - 300	3.3	1	112887











Fixed Point Set XS

Group: A705

Application

Modification of Sliding Pipe Shoes to Fixed Point Pipe Shoes. The slide plate has to be removed. Max. beam flange width t \leq 30 mm

Scope of delivery

Pre-assembled Fixed Point Set consisting of: 4 clamping hooks 2 threaded rods 1 fixed point crossbar 2 Lift-off (XS 280/300) Hexagon nuts: Each 4 for XS 80/120 and XS 140/160 Each 6 for XS 180/220 and XS 240/260 10 for XS 280/300

Installation

Axial fixed point forces can only be attained by the professional use of anti-slip protections (e.g. cleats, stoppers). Those have to be planned during the design of the piping and are on the responsibility of the piping manufacturer.

Technical Data

Flanschdicke [mm]	Trägerbreite 80 - 220 mm Anzugsmoment [Nm]	Trägerbreite 221 - 300 mm Anzugsmoment [Nm]
5 - 10	40	15
11 - 20	25	15
21 - 30	20	15

Steel, HCP
Steel, HCP
Cast iron, HCP

Approvals / Conformity

TÜVRheinland	Regular Production Surveillance	
CERTIFIED	www.tuv.com ID 0000080821	

Туре	For flange width [mm]	W [kg]	Qty. [set]	Part number
XS 80/120	80 - 120	2.3	1	110357
XS 140/160	121 - 160	2.4	1	110358
XS 180/220	161 - 220	2.5	1	110359
XS 240/260	221 - 260	2.6	1	110360
XS 280/300	261 - 300	3.2	1	110361











Axial stop AS

Group: A705

Application

Modification of Simotec pipe shoes to a single-sided axial stop, for use with traditional steel beams. Using the Axial stop, the pipe shoe can move axially through the pipe to a predefined degree of displacement, with restricted limits in one axial direction.

Max. Beam flange thickness t \leq 30 mm

Scope of delivery

Axial stop AS consists of: 4 Clamping hooks 2 Threaded rod 1 Axial stop Lift-off preventions: 2 pieces for 240/260 4 pieces for 280/300 Hexagon nuts: 8 on AS 80/120 and AS 140/180 and 240/260 4 for 200/220 12 for AS 280/300

Installation

The specified tightening torques must be observed for the connection to the beam. The required amount of axial movement is adjusted using the supplied nuts, with a maximum displacement of 125 mm, equating to half of the sliding plate Forces in the axial direction can only be achieved if anti-slip devices (e.g. cleats/stoppers) are used properly. These must be provided when designing the pipeline and are the responsibility of the pipeline manufacturer.

Technical Data

Load capacities correspond to the values of the fixed point set XS, see documentation in the catalogue. However, maximum axial load is 12 kN per axial stop.

Tightenning Torque

Flange Thickness [mm]	Beam Width 80 - 220mm Tightenning Torque [Nm]	Beam Width 221 - 300mm Tightenning Torque [Nm]
5 - 10	40	15
11 - 20	25	15
21 - 30	20	15

Material:

Metal parts, grub screws, nuts: Clamping hooks: Steel, HCP Cast iron, HCP

Туре	For flange width [mm]	W [kg]	Qty. [set]	Part number
AS 80/120	80 - 120	2.5	1	802791
AS 140/180	121 - 180	2.6	1	802792
AS 200/220	161 - 220	2.6	1	802793
AS 240/260	221 - 260	3.1	1	802794
AS 280/300	261 - 300	3.7	1	802795











Axial stop variable VAS

Group: A705

Application

Modification of Simotec pipe shoes to a double-sided variable axial stop, for use with traditional steel beams. Using the Axial stop, the pipe shoe can move axially through the pipe to a predefined degree of displacement, with restricted limits in both axial directions.

Max. Beam flange thickness t ≤ 30 mm

Scope of delivery

Axial stop variable VAS consists of: 4 Clamping hooks 2 Grub screws 2 Axial stop Lift-off preventions: 2 pieces for 240/260 4 pieces for 280/300 Hexagon nuts: 8 on AS 80/120 and AS 140/180 and 240/260 4 for 200/220 12 for AS 280/300

Installation

The specified tightening torques must be observed for the connection to the beam. The 500 mm threaded rods are cut to the required length on site. The required amount of axial movement is adjusted using the supplied nuts, with a maximum displacement of 125 mm, equating to half of the sliding plate Forces in the axial direction can only be achieved if anti-slip devices (e.g. cleats/stoppers) are used properly. These must be provided when designing the pipeline and are the responsibility of the pipeline manufacturer.

Technical Data

Load capacities correspond to the values of the fixed point set XS, see the documentation in the catalogue. However, maximum axial load is 12 kN per axial stop.

Tightenning Torque

Flange Thickness [mm]	Beam Width 80 - 220 mm Tightenning Torque [Nm]	Beam Width 221 - 300mm Tightenning Torque [Nm]
5 - 10	40	15
11 - 20	25	15
21 - 30	20	15

Material:

Steel, HCP Metal parts, grub screws, nuts: Clamping hooks:

Cast iron, HCP

Туре	For flange width [mm]	W [kg]	Qty. [set]	Part number
VAS 80/140	80 - 140	3.4	1	802796
VAS 160/260	141 - 260	3.9	1	802799
VAS 280/300	261 - 300	4.4	1	802800











Sliding Set LR - H 20

Group: A710

Application

Serves as a slide bearing base for pipes of DN 15 up to DN 300, to be fixed on steel beams with flange widths of 80mm up to 300mm and max. flange thickness of 20mm

Scope of delivery

Preassembled Slide Bearing Set containing:

2 clamping hooks with slide bearers

1 slide bar

1 connecting rod M10 + nuts

Installation

Position the preassembled clamping hooks onto the beam flange and tighten the nuts (to 10Nm). For beam widths < 100mm both nuts of the PA bearing blocks have to be removed. The pipe slides directly on the PA bearing blocks without lateral guidance. If larger lateral movement (> 40mm) along the Y axis is required or nominal pipe sizes > DN 100 are used, a broader PA bearing block of Type 100 is recommended.

Technical Data

PA block:

Туре	Н	L	В	D
	[mm]	[mm]	[mm]	[mm]
30	20	30	40	10,2
100	20	30	120	10,2

Туре	for flange width [mm]
80/120	80 - 120
140/160	121 - 160
180/220	161 - 220
240/260	221 - 260
280/300	261 - 300

Material:Clamping hooks:SteeRod, nuts:SteePA block:PolyTemperature range:-20 t

Steel, HCP Steel, HCP Polyamide 6.0, 30 % glass fibre reinforced, black -20 to +130° C (at the PA block)

*in stock

Туре	W [kg]	Quantity [pack]	Part number
LR - H 20 30-80/120 *	0.7	10	113647
LR - H 20 30-140/160	0.7	1	113648
LR - H 20 30-180/220	0.7	1	113649
LR - H 20 30-240/260	0.7	1	113650
LR - H 20 30-280/300	0.8	1	113651
LR - H 20 100-80/120 *	0.8	10	113653
LR - H 20 100-140/160	0.8	1	113654
LR - H 20 100-180/220	0.9	1	113655
LR - H 20 100-240/260	0.9	1	113656
LR - H 20 100-280/300	0.9	1	113657









Guided Support FR - H 20 (DN 15 - 50)

Group: A740

Application

Guided Support for attachment of steel or stainless steel pipes of DN 15 up to DN 50 on steel beams with width of 80 up to 300 mm and max. flange thickness of 20 mm.

Scope of delivery

Preassembled Guided Support including contact corrosion protection by means of a U-bolt sheath and PA slide bearing blocks. U-bolt with welded-on semiwashers and 2 hex nuts to secure position.

Guided Support set contains:

- 2 clamping hooks with slide bearers
- 1 slide bar
- 1 connecting rod M10
- 1 U-Bolt fixing plate
- 4 nuts M10

Installation

Position the preassembled clamping hooks onto the beam flange and tighten the nuts (to 10 Nm). For beam width < 100mm both nuts of the middle of the PA bearing blocks have to be removed. Fasten U-bolt to U-Bolt fixing plate with the hex nuts (to 15 Nm).

The pipe slides directly on the PA bearing blocks. Axial guiding of the pipe is ensured by the U-bolt.

Technical Data

DN	D	. н	в
	[mm]	[mm]	[mm]
15	22	20	72
20	27	20	72
25	34	20	72
32	42	20	97
40	48	20	97
50	60	20	97

Туре	for flange width [mm]
80/120	80 - 120
140/160	121 - 160
180/220	161 - 220
240/260	221 - 260
280/300	261 - 300

Material:	
U-Bolt	Steel, HCP
U-bolt sheath:	Polyamide 6.0, free of halogens
sheet metal parts:	Steel, HCP
Rod, nuts:	Steel, HCP
PA block:	Polyamide 6.0, 30 % glass fibre reinforced, black
Temperature range:	-20 to +130° C (at the PA block and shrinking tube)



* in stock

Туре	W [kg]	Quantity [pack]	Part number
FR - H 20 DN 15 - 80/120	0.9	10	113658
FR - H 20 DN 15 - 140/160	1.0	1	113659
FR - H 20 DN 15 - 180/220	1.0	1	113660
FR - H 20 DN 15 - 240/260	1.1	1	113662
FR - H 20 DN 15 - 280/300	1.1	1	113663
FR - H 20 DN 20 - 80/120	0.9	10	113664
FR - H 20 DN 20 - 140/160	1.0	1	113665
FR - H 20 DN 20 - 180/220	1.0	1	113666
FR - H 20 DN 20 - 240/260	1.1	1	113667
FR - H 20 DN 20 - 280/300	1.1	1	113668
FR - H 20 DN 25 - 80/120 *	0.9	10	113669
FR - H 20 DN 25 - 140/160	1.0	1	113671
FR - H 20 DN 25 - 180/220	1.0	1	113672
FR - H 20 DN 25 - 240/260	1.1	1	113673
FR - H 20 DN 25 - 280/300	1.1	1	113674
FR - H 20 DN 32 - 80/120	0.9	10	113675
FR - H 20 DN 32 - 140/160	1.0	1	113676
FR - H 20 DN 32 - 180/220	1.1	1	113677
FR - H 20 DN 32 - 240/260	1.1	1	113678
FR - H 20 DN 32 - 280/300	1.2	1	113679
FR - H 20 DN 40 - 80/120	0.9	10	113680
FR - H 20 DN 40 - 140/160	1.0	1	113681
FR - H 20 DN 40 - 180/220	1.1	1	113682
FR - H 20 DN 40 - 240/260	1.1	1	113683
FR - H 20 DN 40 - 280/300	1.2	1	113684
FR - H 20 DN 50 - 80/120 *	1.0	10	113685
FR - H 20 DN 50 - 140/160	1.1	1	113686
FR - H 20 DN 50 - 180/220	1.1	1	113687
FR - H 20 DN 50 - 240/260	1.2	1	113688
FR - H 20 DN 50 - 280/300	1.2	1	113690







Group: A740

Application

Guided Support for attachment of steel or stainless steel pipes of DN 65 up to DN 300 on steel beams with width of 80 up to 300 mm and max. flange thickness of 20 mm.

Scope of delivery

Preassembled Guided Support including contact corrosion protection by means of a U-bolt sheath and PA slide bearing blocks. U-bolt with welded-on semi-washers and 2 hexagon nuts to secure position.



Guided Support set contains:

- 4 clamping hooks
- 1 slide bar
- 2 connecting rods M10
- 8 nuts M10

Installation

Position the preassembled clamping hooks onto the beam flange and tighten the nuts (to 10 Nm). For beam width < 100mm the four nuts of the PA bearing blocks have to be removed. Fasten U-bolt to Hook Sleeves with the hex nuts (to 15 Nm).

The pipe slides directly on the PA bearing blocks. Axial guiding of the pipe is ensured by the U-bolt.

Technical Data

DN	D	н	В
	[mm]	[mm]	[mm]
65	76	20	124
80	89	20	136
100	114	20	162
125	140	20	190
150	170	20	218
175	194	20	244
200	219	20	270
225	245	20	300
250	273	20	328
300	324	20	378

Туре	for flange width [mm]
80/120	80 - 120
140/160	121 - 160
180/220	161 - 220
240/260	221 - 260
280/300	261 - 300

Material: U-Bolt U-Bolt sheath: Sheet metal parts: Rods, nuts: PA block: Temperature range:

Steel, HCP Polyamide 6.0, free of halogens Steel, HCP Steel, HCP Polyamide 6.0, 30 % glass fibre reinforced, black -20 to +130° C (at the PA block and shrinking tube)



* in stock

FR - H 20 DN 65 - 80/120 1.7 10 113691 FR - H 20 DN 65 - 140/160 1.9 1 113693 FR - H 20 DN 65 - 180/220 2.0 1 113693 FR - H 20 DN 65 - 280/300 2.1 1 113694 FR - H 20 DN 80 - 80/120* 1.8 5 113695 FR - H 20 DN 80 - 140/160 1.9 1 113697 FR - H 20 DN 80 - 180/220 2.1 1 113707 FR - H 20 DN 80 - 280/300 2.3 1 113707 FR - H 20 DN 100 - 80/120* 1.8 5 113708 FR - H 20 DN 100 - 180/220 2.1 1 113706 FR - H 20 DN 100 - 180/220 2.1 1 113706 FR - H 20 DN 100 - 280/300 2.3 1 113706 FR - H 20 DN 125 - 180/220 2.2 1 113707 FR - H 20 DN 125 - 180/220 2.2 1 113708 FR - H 20 DN 125 - 180/220 2.3 1 113716 FR - H 20 DN 150 - 80/120* 2.0 5 113718 FR - H 20 DN 150 - 180/220 2.3 1 113717 <td< th=""><th>Туре</th><th>W [ka]</th><th>Quantity [pack]</th><th>Part number</th></td<>	Туре	W [ka]	Quantity [pack]	Part number
FR - H 20 DN 65 - 140/160 1.9 1 113692 FR - H 20 DN 65 - 180/220 2.0 1 113693 FR - H 20 DN 65 - 280/300 2.1 1 113694 FR - H 20 DN 80 - 80/120* 1.8 5 113696 FR - H 20 DN 80 - 140/160 1.9 1 113697 FR - H 20 DN 80 - 180/220 2.1 1 113699 FR - H 20 DN 80 - 280/300 2.3 1 113700 FR - H 20 DN 100 - 80/120* 1.8 5 113702 FR - H 20 DN 100 - 140/160 2.0 1 113703 FR - H 20 DN 100 - 280/300 2.3 1 113707 FR - H 20 DN 100 - 280/300 2.3 1 113707 FR - H 20 DN 102 - 280/300 2.4 1 113707 FR - H 20 DN 125 - 80/120* 1.9 5 113708 FR - H 20 DN 125 - 80/120 2.1 1 13710 FR - H 20 DN 125 - 240/260 2.3 1 113710 FR - H 20 DN 125 - 280/300 2.4 1 113713 FR - H 20 DN 150 - 180/220 2.3 1 113714 F	FR - H 20 DN 65 - 80/120	1.7	10	113691
FR - H 20 DN 65 - 180/220 2.0 1 113693 FR - H 20 DN 65 - 240/260 2.1 1 113694 FR - H 20 DN 65 - 280/300 2.1 1 113695 FR - H 20 DN 80 - 80/120* 1.8 5 113696 FR - H 20 DN 80 - 140/160 1.9 1 113697 FR - H 20 DN 80 - 240/260 2.2 1 113700 FR - H 20 DN 80 - 240/260 2.2 1 113703 FR - H 20 DN 100 - 140/160 2.0 1 113705 FR - H 20 DN 100 - 140/200 2.1 1 113705 FR - H 20 DN 100 - 240/260 2.2 1 113706 FR - H 20 DN 100 - 280/300 2.3 1 113705 FR - H 20 DN 125 - 140/160 2.1 1 113706 FR - H 20 DN 125 - 240/260 2.3 1 113717 FR - H 20 DN 125 - 280/300 2.4 1 113716 FR - H 20 DN 150 - 240/260 2.4 1 113717 FR - H 20 DN 150 - 240/260 2.5 1 113716 <t< td=""><td>FR - H 20 DN 65 - 140/160</td><td>1.9</td><td>1</td><td>113692</td></t<>	FR - H 20 DN 65 - 140/160	1.9	1	113692
FR - H 20 DN 65 - 240/260 2.1 1 113694 FR - H 20 DN 86 - 280/300 2.1 1 113695 FR - H 20 DN 80 - 80/120* 1.8 5 113696 FR - H 20 DN 80 - 140/160 1.9 1 113697 FR - H 20 DN 80 - 240/260 2.2 1 113700 FR - H 20 DN 80 - 280/300 2.3 1 113703 FR - H 20 DN 100 - 80/120* 1.8 5 113702 FR - H 20 DN 100 - 140/160 2.0 1 113705 FR - H 20 DN 100 - 240/260 2.2 1 113706 FR - H 20 DN 100 - 280/300 2.3 1 113707 FR - H 20 DN 102 - 240/260 2.3 1 113707 FR - H 20 DN 125 - 80/120* 1.9 5 113708 FR - H 20 DN 125 - 80/120* 2.2 1 113716 FR - H 20 DN 125 - 240/260 2.3 1 113717 FR - H 20 DN 150 - 80/120* 2.0 5 113718 FR - H 20 DN 150 - 80/120 2.1 5 113718 FR - H 20 DN 150 - 80/120 2.1 5 113718	FR - H 20 DN 65 - 180/220	2.0	1	113693
FR H 20 DN 65 280/300 2.1 1 113695 FR H 20 DN 80 -140/160 1.9 1 113697 FR H 20 DN 80 -140/160 2.2 1 113699 FR H 20 DN 80 -240/260 2.2 1 113700 FR H 20 DN 80 -280/300 2.3 1 113703 FR H 20 DN 100 180/220 2.1 1 113705 FR H 20 DN 100 280/300 2.3 1 113706 FR H 20 DN 125 80/120* 1.9 5 113708 FR H 20 DN 125 80/300 2.4 1 113717 FR H 20 DN 150 180/20 2.3 1	FR - H 20 DN 65 - 240/260	2.1	1	113694
FR - H 20 DN 80 - 80/120* 1.8 5 113696 FR - H 20 DN 80 - 140/160 1.9 1 113697 FR - H 20 DN 80 - 180/220 2.1 1 113699 FR - H 20 DN 80 - 240/260 2.2 1 113700 FR - H 20 DN 100 - 80/120* 1.8 5 113702 FR - H 20 DN 100 - 180/220 2.1 1 113703 FR - H 20 DN 100 - 180/220 2.1 1 113706 FR - H 20 DN 100 - 280/300 2.3 1 113707 FR - H 20 DN 125 - 80/120* 1.9 5 113708 FR - H 20 DN 125 - 180/220 2.2 1 113710 FR - H 20 DN 125 - 180/220 2.2 1 113716 FR - H 20 DN 125 - 180/220 2.3 1 113711 FR - H 20 DN 150 - 80/120* 2.0 5 113713 FR - H 20 DN 150 - 140/160 2.2 1 113716 FR - H 20 DN 150 - 180/220 2.3 1 113717 FR - H 20 DN 150 - 180/220 2.3 1 113716 FR - H 20 DN 150 - 180/220 2.4 1 113717	FR - H 20 DN 65 - 280/300	2.1	1	113695
FR - H 20 DN 80 - 140/160 1.9 1 113697 FR - H 20 DN 80 - 180/220 2.1 1 113699 FR + H 20 DN 80 - 240/260 2.2 1 113701 FR + H 20 DN 100 - 80/120* 1.8 5 113702 FR + H 20 DN 100 - 80/120* 1.8 5 113703 FR + H 20 DN 100 - 140/160 2.0 1 113706 FR + H 20 DN 100 - 240/260 2.2 1 113706 FR + H 20 DN 100 - 280/300 2.3 1 113706 FR + H 20 DN 125 - 80/120* 1.9 5 113708 FR + H 20 DN 125 - 140/160 2.1 1 113707 FR + H 20 DN 125 - 240/260 2.3 1 113717 FR + H 20 DN 125 - 240/260 2.3 1 113715 FR + H 20 DN 150 - 80/120* 2.0 5 113713 FR + H 20 DN 150 - 80/120* 2.3 1 113716 FR + H 20 DN 150 - 240/260 2.4 1 113716 FR + H 20 DN 150 - 240/260 2.5 1 113717 FR + H 20 DN 150 - 240/260 2.5 1 113717	FR - H 20 DN 80 - 80/120 *	1.8	5	113696
FRHH20N80 $240/260$ 2.211113699FRHH20DN80 $280/300$ 2.31113700FRHH20DN100 $80/120^{*}$ 1.85113702FRHH20DN100 $80/120^{*}$ 1.85113703FRHH20DN100 $240/260$ 2.21113706FRHH20DN100 $280/300$ 2.31113707FRHH20DN100 $280/300$ 2.31113706FRHH20DN125 $80/120^{*}$ 1.95113708FRH20DN125 $80/220$ 2.21113710FRH20DN125 $240/260$ 2.31113711FRH20DN150 $80/120^{*}$ 2.05113713FRH20DN150 $80/120^{*}$ 2.05113713FRH20DN150 $80/120^{*}$ 2.05113713FRH20DN150 $280/300$ 2.51113714FRH20DN150 $280/300$ 2.51113716FRH20DN150 $280/300$ 2.51113726FRH	FR - H 20 DN 80 - 140/160	1.9	1	113697
FRHH20N80 $-240/260$ 2.21113700FRHH20DN100 $-80/120^{+}$ 1.85113703FRHH20DN100 $-140/160$ 2.01113703FRHH20DN100 $-140/160$ 2.01113703FRHH20DN100 $-240/260$ 2.211113706FRHH20DN100 $-280/300$ 2.31113708FRHH20DN125 $-140/160$ 2.11113709FRHH20DN125 $-140/160$ 2.21113716FRHH20DN125 $-240/260$ 2.31113717FRH20DN150 $-140/160$ 2.21113714FRH20DN150 $-140/160$ 2.31113715FRH20DN150 $-140/160$ 2.31113717FRH20DN150 $-240/260$ 2.51113718FRH20DN150 $-240/260$ 2.51113717FRH20DN150 $-240/260$ 2.51113720FRH20DN <td>FR - H 20 DN 80 - 180/220</td> <td>2.1</td> <td>1</td> <td>113699</td>	FR - H 20 DN 80 - 180/220	2.1	1	113699
FR - H 20 DN 80 - 280/300 2.3 1 113701 FR - H 20 DN 100 - 80/120* 1.8 5 113702 FR - H 20 DN 100 - 140/160 2.0 1 113703 FR - H 20 DN 100 - 240/260 2.2 1 113706 FR - H 20 DN 100 - 240/260 2.2 1 113706 FR - H 20 DN 100 - 280/300 2.3 1 113707 FR - H 20 DN 125 - 80/120* 1.9 5 113708 FR - H 20 DN 125 - 180/220 2.2 1 113710 FR - H 20 DN 125 - 240/260 2.3 1 113719 FR - H 20 DN 125 - 240/260 2.3 1 113711 FR - H 20 DN 150 - 80/120* 2.0 5 113713 FR - H 20 DN 150 - 140/160 2.2 1 113716 FR - H 20 DN 150 - 240/260 2.4 1 113716 FR - H 20 DN 150 - 240/260 2.5 1 113717 FR - H 20 DN 150 - 240/260 2.5 1 113718 FR - H 20 DN 175 - 140/160 2.3 1 113720 FR - H 20 DN 175 - 140/160 2.3 1 113722	FR - H 20 DN 80 - 240/260	2.2	1	113700
FRHH1.85113702FRH20N100-140/1602.01113703FRH20DN100-140/2602.11113706FRH40DN100-240/2602.21113706FRH40DN100-280/3002.31113707FRH40DN125-80/1201.95113708FRH20DN125-140/1602.111113719FRH20DN125-240/2602.31113711FRH20DN125-240/2602.41113713FRH20DN150-80/1202.31113713FRH20DN150-240/2602.41113716FRH20DN150-240/2602.41113715FRH20DN150-240/2602.51113717FRH20DN150-280/3002.51113718FRH20DN150-280/3002.51113720FRH20DN75-240/2602.51113726FRH20DN75-240/2602.51113726FRH20DN2520 <td>FR - H 20 DN 80 - 280/300</td> <td>2.3</td> <td>1</td> <td>113701</td>	FR - H 20 DN 80 - 280/300	2.3	1	113701
FRHHH100140/1602.01113703FRHH20 DN 100180/2202.111113705FRHH20 DN 100240/2602.21113706FRH20 DN 102280/3002.31113707FRH20 DN 12580/120*1.95113708FRH20 DN 125180/2202.21113710FRH20 DN 125280/3002.41113713FRH20 DN 125280/3002.41113713FRH20 DN 15080/120*2.05113713FRH20 DN 150180/2202.31113714FRH20 DN 150180/2202.31113716FRH20 DN 150180/2202.31113716FRH20 DN 150280/3002.51113718FRH20 DN 150280/3002.51113719FRH20 DN 175180/2202.41113720FRH20 DN 175280/3002.51113722FRH20 DN 175280/3002.51113724FRH20 DN 200180/2202.41113726FRH20 DN 200280/3002.51113726FRH20 DN 200280/3002.6 <td< td=""><td>FR - H 20 DN 100 - 80/120 *</td><td>1.8</td><td>5</td><td>113702</td></td<>	FR - H 20 DN 100 - 80/120 *	1.8	5	113702
FRHHH100180/2202.111113705FRHH20 DN 100-240/2602.21113706FRHH20 DN 100-280/3002.31113707FRHH20 DN 125-140/1602.11113709FRHH20 DN 125-140/1602.11113710FRHH20 DN 125-240/2602.31113711FRHH20 DN 125-240/2602.31113712FRHH20 DN 150-80/1202.31113714FRH20 DN 150-140/1602.21113714FRH20 DN 150-140/1602.31113715FRH20 DN 150-240/2602.41113716FRH20 DN 150-280/3002.51113717FRH20 DN 175-140/1602.31113712FRH20 DN 175-140/1602.31113720FRH20 DN 175-280/2602.51113722FRH20 DN 175-280/3002.51113722FRH20 DN 200-280/3002.51113726FRH20 DN 200-280/3002.61113726FRH20 DN 200-280/3002.61113726 <td< td=""><td>FR - H 20 DN 100 - 140/160</td><td>2.0</td><td>1</td><td>113703</td></td<>	FR - H 20 DN 100 - 140/160	2.0	1	113703
FRHHH20N100240/2602.21113706FRHH20N100280/3002.31113707FRHH20DN12580/120*1.95113708FRHH20DN125140/1602.111113710FRHH20N125240/2602.31113711FRHH20N150240/2602.31113713FRHH20DN150280/3002.41113713FRH20DN150140/1602.211113714FRH20DN150240/2602.31113715FRH20DN150280/3002.51113716FRH20DN17580/1202.151113717FRH20DN175180/2202.41113720FRH20DN175280/3002.51113723FRH20DN175280/3002.51113723FRH20DN175280/3002.51113723FRH20DN20180/2202.41113726FRH20DN20 <td< td=""><td>FR - H 20 DN 100 - 180/220</td><td>2.1</td><td>1</td><td>113705</td></td<>	FR - H 20 DN 100 - 180/220	2.1	1	113705
FRH20DN100280/3002.31113707FRHH20DN125 $80/120^{+}$ 1.95113708FRHH20DN125 $180/220$ 2.21113710FRH20DN125 $280/300$ 2.41113711FRH20DN125 $280/300$ 2.41113713FRH20N150 $80/120^{+}$ 2.05113713FRH20DN150 $140/160$ 2.21113714FRH20DN150 $140/160$ 2.31113715FRH20DN150 $240/260$ 2.51113716FRH20DN150 $240/260$ 2.51113717FRH20DN150 $240/260$ 2.51113717FRH20DN175 $80/120$ 2.15113718FRH20DN175 $40/260$ 2.51113720FRH20DN175 $240/260$ 2.51113723FRH20DN20 $80/120^{*}$ 2.15113723FRH20DN20 $80/120^{*}$ 2.15113726FRH20DN20 $80/120^{*}$ 2.51113	FR - H 20 DN 100 - 240/260	2.2	1	113706
FR - H 20 DN 125 - 80/120 *1.95113708FR - H 20 DN 125 - 140/1602.111113709FR - H 20 DN 125 - 180/2202.21113710FR - H 20 DN 125 - 240/2602.31113711FR - H 20 DN 125 - 280/3002.41113713FR - H 20 DN 150 - 80/120 *2.05113713FR - H 20 DN 150 - 140/1602.21113714FR - H 20 DN 150 - 180/2202.31113715FR - H 20 DN 150 - 240/2602.41113716FR - H 20 DN 150 - 280/3002.51113717FR - H 20 DN 150 - 280/3002.51113719FR - H 20 DN 175 - 80/1202.15113718FR - H 20 DN 175 - 80/1202.41113720FR - H 20 DN 175 - 140/1602.31113720FR - H 20 DN 175 - 280/3002.51113723FR - H 20 DN 175 - 280/3002.51113723FR - H 20 DN 200 - 80/120 *2.15113723FR - H 20 DN 200 - 140/1602.31113726FR - H 20 DN 200 - 180/2202.41113726FR - H 20 DN 225 - 80/1202.65113728FR - H 20 DN 225 - 80/2002.91113730FR - H 20 DN 225 - 80/3003.01113736FR - H 20 DN 225 - 80/3003.01113736FR - H 20 DN 225 - 80/3003.01113736FR - H 20 DN 250 - 80/3003.01113736 <td< td=""><td>FR - H 20 DN 100 - 280/300</td><td>2.3</td><td>1</td><td>113707</td></td<>	FR - H 20 DN 100 - 280/300	2.3	1	113707
FR - H 20 DN 125 - 140/1602.11113709FR - H 20 DN 125 - 180/2202.21113710FR - H 20 DN 125 - 240/2602.31113711FR - H 20 DN 125 - 280/3002.41113712FR - H 20 DN 150 - 80/120 *2.05113713FR - H 20 DN 150 - 140/1602.21113714FR - H 20 DN 150 - 180/2202.31113715FR - H 20 DN 150 - 240/2602.41113716FR - H 20 DN 150 - 280/3002.51113717FR - H 20 DN 150 - 280/3002.51113717FR - H 20 DN 175 - 80/1202.15113718FR - H 20 DN 175 - 80/2002.41113720FR - H 20 DN 175 - 140/1602.31113721FR - H 20 DN 175 - 180/2202.41113723FR - H 20 DN 175 - 280/3002.51113723FR - H 20 DN 175 - 280/3002.51113724FR - H 20 DN 200 - 80/120 *2.41113726FR - H 20 DN 200 - 80/202.41113726FR - H 20 DN 200 - 180/2202.41113728FR - H 20 DN 200 - 280/3002.61113726FR - H 20 DN 225 - 80/1202.91113730FR - H 20 DN 225 - 180/2202.91113733FR - H 20 DN 225 - 180/2202.91113733FR - H 20 DN 250 - 180/2203.01113733FR - H 20 DN 250 - 180/2203.01113733FR - H	FR - H 20 DN 125 - 80/120 *	1.9	5	113708
FR - H 20 DN 125 - 180/2202.21113710FR - H 20 DN 125 - 240/2602.31113711FR - H 20 DN 125 - 280/3002.41113712FR - H 20 DN 150 - 80/120 *2.05113713FR - H 20 DN 150 - 140/1602.21113714FR - H 20 DN 150 - 240/2602.31113715FR - H 20 DN 150 - 280/3002.51113717FR - H 20 DN 150 - 280/3002.51113717FR - H 20 DN 175 - 80/1202.15113718FR - H 20 DN 175 - 140/1602.31113720FR - H 20 DN 175 - 180/2202.41113720FR - H 20 DN 175 - 180/2202.41113721FR - H 20 DN 175 - 280/3002.51113723FR - H 20 DN 175 - 280/3002.51113724FR - H 20 DN 175 - 280/3002.51113723FR - H 20 DN 200 - 140/1602.31113725FR - H 20 DN 200 - 180/2202.41113726FR - H 20 DN 200 - 280/3002.61113727FR - H 20 DN 225 - 80/1202.65113728FR - H 20 DN 225 - 180/2202.91113733FR - H 20 DN 250 - 80/1202.75113734FR - H 20 DN 250 - 180/2203.01113735FR - H 20 DN 250 - 180/2203.01113736FR - H 20 DN 250 - 180/2203.01113736FR - H 20 DN 250 - 180/2203.01113736FR - H	FR - H 20 DN 125 - 140/160	2.1	1	113709
FR - H 20 DN 125 - 240/2602.31113711FR - H 20 DN 125 - 280/3002.41113712FR - H 20 DN 150 - 80/120 *2.05113713FR - H 20 DN 150 - 140/1602.21113714FR - H 20 DN 150 - 180/2202.31113715FR - H 20 DN 150 - 240/2602.41113716FR - H 20 DN 150 - 280/3002.51113717FR - H 20 DN 175 - 80/1202.15113718FR - H 20 DN 175 - 140/1602.31113720FR - H 20 DN 175 - 180/2202.41113720FR - H 20 DN 175 - 240/2602.51113721FR - H 20 DN 175 - 280/3002.51113723FR - H 20 DN 200 - 80/120 *2.15113723FR - H 20 DN 200 - 140/1602.31113724FR - H 20 DN 200 - 240/2602.51113725FR - H 20 DN 200 - 280/3002.61113726FR - H 20 DN 200 - 280/3002.61113726FR - H 20 DN 225 - 80/1202.91113730FR - H 20 DN 225 - 180/2202.91113730FR - H 20 DN 250 - 180/2202.91113736FR - H 20 DN 250 - 240/2602.91113736FR - H 20 DN 250 - 140/1602.91113736FR - H 20 DN 250 - 180/2203.01113736FR - H 20 DN 250 - 140/1602.91113736FR - H 20 DN 250 - 240/2603.01113736FR -	FR - H 20 DN 125 - 180/220	2.2	1	113710
FR - H 20 DN 125 - 280/3002.41113712FR - H 20 DN 150 - 80/120 *2.05113713FR - H 20 DN 150 - 140/1602.21113714FR - H 20 DN 150 - 180/2202.31113715FR - H 20 DN 150 - 240/2602.41113716FR - H 20 DN 150 - 280/3002.51113717FR - H 20 DN 175 - 80/1202.15113718FR - H 20 DN 175 - 140/1602.31113720FR - H 20 DN 175 - 180/2202.41113721FR - H 20 DN 175 - 240/2602.51113721FR - H 20 DN 175 - 280/3002.51113723FR - H 20 DN 200 - 80/120 *2.15113723FR - H 20 DN 200 - 140/1602.31113724FR - H 20 DN 200 - 180/2202.41113725FR - H 20 DN 200 - 240/2602.51113726FR - H 20 DN 200 - 240/2602.51113726FR - H 20 DN 200 - 240/2602.6513728FR - H 20 DN 225 - 80/1202.6513728FR - H 20 DN 225 - 140/1602.81113732FR - H 20 DN 225 - 240/2602.91113736FR - H 20 DN 250 - 240/2602.91113736FR - H 20 DN 250 - 240/2603.01113736FR - H	FR - H 20 DN 125 - 240/260	2.3	1	113711
FR - H 20 DN 150 - 80/120 *2.05113713FR - H 20 DN 150 - 140/1602.21113714FR - H 20 DN 150 - 180/2202.31113715FR - H 20 DN 150 - 240/2602.41113716FR - H 20 DN 150 - 280/3002.51113717FR - H 20 DN 175 - 80/1202.15113718FR - H 20 DN 175 - 140/1602.31113720FR - H 20 DN 175 - 180/2202.41113720FR - H 20 DN 175 - 280/3002.51113721FR - H 20 DN 175 - 280/3002.51113723FR - H 20 DN 175 - 280/3002.51113723FR - H 20 DN 200 - 80/120 *2.15113723FR - H 20 DN 200 - 140/1602.31113726FR - H 20 DN 200 - 140/1602.51113726FR - H 20 DN 200 - 280/3002.61113727FR - H 20 DN 200 - 280/3002.61113728FR - H 20 DN 225 - 80/1202.65113728FR - H 20 DN 225 - 140/1602.81113730FR - H 20 DN 225 - 180/2202.91113733FR - H 20 DN 250 - 140/1602.91113736FR - H 20 DN 250 - 140/1602.91113736FR - H 20 DN 250 - 280/3003.11113736FR -	FR - H 20 DN 125 - 280/300	2.4	1	113712
FR - H 20 DN 150 - 140/1602.21113714FR - H 20 DN 150 - 180/2202.31113715FR - H 20 DN 150 - 240/2602.41113716FR - H 20 DN 150 - 280/3002.51113717FR - H 20 DN 175 - 80/1202.15113718FR - H 20 DN 175 - 140/1602.31113720FR - H 20 DN 175 - 180/2202.41113720FR - H 20 DN 175 - 240/2602.51113721FR - H 20 DN 175 - 280/3002.51113723FR - H 20 DN 175 - 280/3002.51113723FR - H 20 DN 200 - 80/120 *2.15113723FR - H 20 DN 200 - 140/1602.31113726FR - H 20 DN 200 - 140/1602.31113726FR - H 20 DN 200 - 280/3002.61113727FR - H 20 DN 200 - 280/3002.61113727FR - H 20 DN 200 - 280/3002.61113728FR - H 20 DN 225 - 80/1202.91113730FR - H 20 DN 225 - 140/1602.81113733FR - H 20 DN 225 - 280/3003.01113733FR - H 20 DN 250 - 140/1602.91113736FR - H 20 DN 250 - 280/3003.11113736FR -	FR - H 20 DN 150 - 80/120 *	2.0	5	113713
FR - H 20 DN 150 - 180/2202.31113715FR - H 20 DN 150 - 240/2602.41113716FR - H 20 DN 150 - 280/3002.51113717FR - H 20 DN 175 - 80/1202.15113718FR - H 20 DN 175 - 140/1602.31113720FR - H 20 DN 175 - 140/2002.41113720FR - H 20 DN 175 - 240/2602.51113721FR - H 20 DN 175 - 280/3002.51113723FR - H 20 DN 200 - 80/120 *2.15113723FR - H 20 DN 200 - 80/120 *2.15113723FR - H 20 DN 200 - 140/1602.31113724FR - H 20 DN 200 - 180/2202.41113725FR - H 20 DN 200 - 280/3002.61113727FR - H 20 DN 200 - 280/3002.61113728FR - H 20 DN 202 - 240/2602.91113730FR - H 20 DN 225 - 140/1602.81113732FR - H 20 DN 225 - 140/1602.91113733FR - H 20 DN 225 - 240/2602.91113733FR - H 20 DN 225 - 240/2602.91113733FR - H 20 DN 250 - 80/1202.75113734FR - H 20 DN 250 - 80/1202.75113734FR - H 20 DN 250 - 240/2603.01113736FR - H 20 DN 250 - 240/2603.01113736FR - H 20 DN 250 - 280/3003.11113736FR - H 20 DN 250 - 280/3003.11113736FR -	FR - H 20 DN 150 - 140/160	2.2	1	113714
FR - H 20 DN 150 - 240/2602.41113716FR - H 20 DN 150 - 280/3002.51113717FR - H 20 DN 175 - 80/1202.15113718FR - H 20 DN 175 - 140/1602.31113720FR - H 20 DN 175 - 180/2202.41113720FR - H 20 DN 175 - 240/2602.51113721FR - H 20 DN 175 - 280/3002.51113723FR - H 20 DN 200 - 80/120 *2.15113723FR - H 20 DN 200 - 80/120 *2.15113723FR - H 20 DN 200 - 140/1602.31113724FR - H 20 DN 200 - 180/2202.41113725FR - H 20 DN 200 - 280/3002.61113727FR - H 20 DN 200 - 280/3002.61113728FR - H 20 DN 225 - 80/1202.65113728FR - H 20 DN 225 - 140/1602.81113730FR - H 20 DN 225 - 140/1602.91113733FR - H 20 DN 225 - 240/2602.91113733FR - H 20 DN 225 - 280/3003.01113735FR - H 20 DN 250 - 140/1602.91113735FR - H 20 DN 250 - 180/2203.01113737FR - H 20 DN 250 - 280/3003.11113736FR - H 20 DN 250 - 280/3003.11113736FR - H 20 DN 250 - 280/3003.11113737FR - H 20 DN 300 - 140/1603.01113740FR - H 20 DN 300 - 140/1603.01113741FR -	FR - H 20 DN 150 - 180/220	2.3	1	113715
FR - H 20 DN 150 - 280/3002.51113717FR - H 20 DN 175 - 80/1202.15113718FR - H 20 DN 175 - 140/1602.31113719FR - H 20 DN 175 - 180/2202.41113720FR - H 20 DN 175 - 240/2602.51113721FR - H 20 DN 175 - 280/3002.51113723FR - H 20 DN 200 - 80/120 *2.15113723FR - H 20 DN 200 - 140/1602.31113724FR - H 20 DN 200 - 180/2202.41113725FR - H 20 DN 200 - 240/2602.51113726FR - H 20 DN 200 - 280/3002.61113727FR - H 20 DN 200 - 280/3002.61113727FR - H 20 DN 225 - 80/1202.91113730FR - H 20 DN 225 - 140/1602.81113730FR - H 20 DN 225 - 240/2602.91113733FR - H 20 DN 225 - 240/2602.91113736FR - H 20 DN 250 - 140/1602.91113735FR - H 20 DN 250 - 140/1602.91113735FR - H 20 DN 250 - 240/2603.01113736FR - H 20 DN 250 - 240/2603.01113737FR - H 20 DN 250 - 280/3003.11113736FR - H 20 DN 250 - 280/3003.11113737FR - H 20 DN 300 - 80/1202.85113739FR - H 20 DN 300 - 80/1202.85113739FR - H 20 DN 300 - 140/1603.01113741FR - H 2	FR - H 20 DN 150 - 240/260	2.4	1	113716
FR - H 20 DN 175 - 80/1202.15113718FR - H 20 DN 175 - 140/1602.31113719FR - H 20 DN 175 - 180/2202.41113720FR - H 20 DN 175 - 240/2602.51113721FR - H 20 DN 175 - 280/3002.51113723FR - H 20 DN 200 - 80/120 *2.15113723FR - H 20 DN 200 - 140/1602.31113724FR - H 20 DN 200 - 180/2202.41113725FR - H 20 DN 200 - 240/2602.51113726FR - H 20 DN 200 - 280/3002.61113727FR - H 20 DN 225 - 80/1202.65113728FR - H 20 DN 225 - 140/1602.81113730FR - H 20 DN 225 - 140/1602.91113733FR - H 20 DN 225 - 240/2602.91113733FR - H 20 DN 225 - 280/3003.01113733FR - H 20 DN 225 - 240/2602.91113735FR - H 20 DN 250 - 140/1602.91113735FR - H 20 DN 250 - 140/1602.91113735FR - H 20 DN 250 - 240/2603.01113736FR - H 20 DN 250 - 280/3003.11113737FR - H 20 DN 250 - 280/3003.11113736FR - H 20 DN 250 - 280/3003.11113736FR - H 20 DN 250 - 280/3003.11113737FR - H 20 DN 300 - 80/1202.85113739FR - H 20 DN 300 - 140/1603.01113740FR - H	FR - H 20 DN 150 - 280/300	2.5	1	113717
FR - H 20 DN 175 - 140/1602.31113719FR - H 20 DN 175 - 180/2202.41113720FR - H 20 DN 175 - 240/2602.51113721FR - H 20 DN 175 - 280/3002.51113723FR - H 20 DN 200 - 80/120 *2.15113723FR - H 20 DN 200 - 140/1602.31113724FR - H 20 DN 200 - 180/2202.41113725FR - H 20 DN 200 - 240/2602.51113726FR - H 20 DN 200 - 280/3002.61113727FR - H 20 DN 225 - 80/1202.65113728FR - H 20 DN 225 - 140/1602.81113729FR - H 20 DN 225 - 140/1602.91113730FR - H 20 DN 225 - 240/2602.91113733FR - H 20 DN 250 - 140/1602.91113735FR - H 20 DN 250 - 240/2603.01113736FR - H 20 DN 250 - 240/2603.01113737FR - H 20 DN 250 - 240/2603.01113736FR - H 20 DN 250 - 280/3003.11113736FR - H 20 DN 250 - 280/3003.11113737FR - H 20 DN 250 - 280/3003.11113737FR - H 20 DN 250 - 280/3003.11113736FR - H 20 DN 250 - 280/3003.11113737FR - H 20 DN 300 - 80/1202.85113739FR - H 20 DN 300 - 140/1603.01113740FR - H 20 DN 300 - 140/1603.01113741FR - H	FR - H 20 DN 175 - 80/120	2.1	5	113718
FR - H 20 DN 175 - 180/2202.41113720FR - H 20 DN 175 - 240/2602.51113721FR - H 20 DN 175 - 280/3002.51113722FR - H 20 DN 200 - 80/120 *2.15113723FR - H 20 DN 200 - 140/1602.31113724FR - H 20 DN 200 - 180/2202.41113725FR - H 20 DN 200 - 240/2602.51113726FR - H 20 DN 200 - 280/3002.61113727FR - H 20 DN 200 - 280/3002.61113727FR - H 20 DN 225 - 80/1202.65113728FR - H 20 DN 225 - 140/1602.81113730FR - H 20 DN 225 - 180/2202.91113730FR - H 20 DN 225 - 240/2602.91113733FR - H 20 DN 250 - 140/1602.91113735FR - H 20 DN 250 - 140/1602.91113735FR - H 20 DN 250 - 140/1602.91113735FR - H 20 DN 250 - 240/2603.01113736FR - H 20 DN 250 - 240/2603.01113737FR - H 20 DN 250 - 280/3003.11113737FR - H 20 DN 250 - 280/3003.11113738FR - H 20 DN 250 - 280/3003.11113739FR - H 20 DN 300 - 80/1202.85113739FR - H 20 DN 300 - 140/1603.01113740FR - H 20 DN 300 - 180/2203.21113741FR - H 20 DN 300 - 180/2203.21113742 <td>FR - H 20 DN 175 - 140/160</td> <td>2.3</td> <td>1</td> <td>113719</td>	FR - H 20 DN 175 - 140/160	2.3	1	113719
FR - H 20 DN 175 - 240/2602.51113721FR - H 20 DN 175 - 280/3002.51113722FR - H 20 DN 200 - 80/120 *2.15113723FR - H 20 DN 200 - 140/1602.31113724FR - H 20 DN 200 - 180/2202.41113725FR - H 20 DN 200 - 240/2602.51113726FR - H 20 DN 200 - 280/3002.61113727FR - H 20 DN 225 - 80/1202.65113728FR - H 20 DN 225 - 80/1202.65113728FR - H 20 DN 225 - 140/1602.81113729FR - H 20 DN 225 - 140/1602.81113730FR - H 20 DN 225 - 240/2602.91113733FR - H 20 DN 225 - 240/2602.91113733FR - H 20 DN 250 - 80/1202.75113734FR - H 20 DN 250 - 140/1602.91113735FR - H 20 DN 250 - 240/2603.01113736FR - H 20 DN 250 - 280/3003.11113737FR - H 20 DN 250 - 280/3003.11113736FR - H 20 DN 250 - 280/3003.11113736FR - H 20 DN 250 - 280/3003.11113738FR - H 20 DN 300 - 80/1202.85113739FR - H 20 DN 300 - 140/1603.01113740FR - H 20 DN 300 - 140/203.21113741FR - H 20 DN 300 - 140/2603.21113741FR - H 20 DN 300 - 180/2203.21113741FR - H 2	FR - H 20 DN 175 - 180/220	2.4	1	113720
FR - H 20 DN 175 - 280/3002.51113722FR - H 20 DN 200 - 80/120 *2.15113723FR - H 20 DN 200 - 140/1602.31113724FR - H 20 DN 200 - 180/2202.41113725FR - H 20 DN 200 - 240/2602.51113726FR - H 20 DN 200 - 280/3002.61113727FR - H 20 DN 225 - 80/1202.65113728FR - H 20 DN 225 - 80/1202.65113728FR - H 20 DN 225 - 140/1602.81113730FR - H 20 DN 225 - 180/2202.91113730FR - H 20 DN 225 - 240/2602.91113733FR - H 20 DN 225 - 280/3003.01113733FR - H 20 DN 250 - 80/1202.75113734FR - H 20 DN 250 - 140/1602.91113735FR - H 20 DN 250 - 140/1602.91113737FR - H 20 DN 250 - 240/2603.01113737FR - H 20 DN 250 - 280/3003.11113737FR - H 20 DN 250 - 280/3003.11113738FR - H 20 DN 300 - 80/1202.85113739FR - H 20 DN 300 - 140/1603.01113740FR - H 20 DN 300 - 140/1603.01113741FR - H 20 DN 300 - 180/2203.21113741FR - H 20 DN 300 - 180/2203.21113741FR - H 20 DN 300 - 180/2203.21113742	FR - H 20 DN 175 - 240/260	2.5	1	113721
FR - H 20 DN 200 - 80/120 *2.15113723FR - H 20 DN 200 - 140/1602.31113724FR - H 20 DN 200 - 180/2202.41113725FR - H 20 DN 200 - 240/2602.51113726FR - H 20 DN 200 - 280/3002.61113727FR - H 20 DN 225 - 80/1202.65113728FR - H 20 DN 225 - 140/1602.81113729FR - H 20 DN 225 - 180/2202.91113730FR - H 20 DN 225 - 240/2602.91113732FR - H 20 DN 225 - 240/2602.91113733FR - H 20 DN 225 - 280/3003.01113735FR - H 20 DN 250 - 80/1202.75113734FR - H 20 DN 250 - 140/1602.91113735FR - H 20 DN 250 - 240/2603.01113737FR - H 20 DN 250 - 280/3003.11113737FR - H 20 DN 300 - 80/1202.85113739FR - H 20 DN 300 - 140/1603.01113741FR - H 20 DN 300 - 140/1603.21113741FR - H 20 DN 300 - 180/2203.21113741FR - H 20 DN 300 - 240/2603.21113742	FR - H 20 DN 175 - 280/300	2.5	1	113722
FR - H 20 DN 200 - 140/1602.31113724FR - H 20 DN 200 - 180/2202.41113725FR - H 20 DN 200 - 240/2602.51113726FR - H 20 DN 200 - 280/3002.61113727FR - H 20 DN 225 - 80/1202.65113728FR - H 20 DN 225 - 140/1602.81113729FR - H 20 DN 225 - 140/1602.91113730FR - H 20 DN 225 - 240/2602.91113732FR - H 20 DN 225 - 240/2602.91113733FR - H 20 DN 250 - 80/1202.75113734FR - H 20 DN 250 - 140/1602.91113735FR - H 20 DN 250 - 180/2203.01113736FR - H 20 DN 250 - 240/2603.01113736FR - H 20 DN 250 - 240/2603.01113737FR - H 20 DN 250 - 280/3003.11113738FR - H 20 DN 300 - 80/1202.85113739FR - H 20 DN 300 - 140/1603.01113740FR - H 20 DN 300 - 140/1603.01113740FR - H 20 DN 300 - 140/1603.01113741FR - H 20 DN 300 - 180/2203.21113741FR - H 20 DN 300 - 240/2603.21113741FR - H 20 DN 300 - 240/2603.21113742	FR - H 20 DN 200 - 80/120 *	2.1	5	113723
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	FR - H 20 DN 200 - 140/160	2.3	1	113724
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	FR - H 20 DN 200 - 180/220	2.4	1	113725
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	FR - H 20 DN 200 - 240/260	2.5	1	113726
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	FR - H 20 DN 200 - 280/300	2.6	1	113727
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	FR - H 20 DN 225 - 80/120	2.6	5	113728
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	FR - H 20 DN 225 - 140/160	2.8	1	113729
FR - H 20 DN 225 - 240/2602.91113732FR - H 20 DN 225 - 280/3003.01113733FR - H 20 DN 250 - 80/1202.75113734FR - H 20 DN 250 - 140/1602.91113735FR - H 20 DN 250 - 180/2203.01113736FR - H 20 DN 250 - 240/2603.01113737FR - H 20 DN 250 - 280/3003.11113737FR - H 20 DN 300 - 80/1202.85113739FR - H 20 DN 300 - 140/1603.01113740FR - H 20 DN 300 - 180/2203.21113741FR - H 20 DN 300 - 240/2603.21113742	FR - H 20 DN 225 - 180/220	2.9	1	113730
FR - H 20 DN 225 - 280/3003.01113733FR - H 20 DN 250 - 80/1202.75113734FR - H 20 DN 250 - 140/1602.91113735FR - H 20 DN 250 - 180/2203.01113736FR - H 20 DN 250 - 240/2603.01113737FR - H 20 DN 250 - 280/3003.11113738FR - H 20 DN 300 - 80/1202.85113739FR - H 20 DN 300 - 140/1603.01113740FR - H 20 DN 300 - 180/2203.21113741FR - H 20 DN 300 - 240/2603.21113742	FR - H 20 DN 225 - 240/260	2.9	1	113732
FR - H 20 DN 250 - 80/1202.75113734FR - H 20 DN 250 - 140/1602.91113735FR - H 20 DN 250 - 180/2203.01113736FR - H 20 DN 250 - 240/2603.01113737FR - H 20 DN 250 - 280/3003.11113738FR - H 20 DN 300 - 80/1202.85113739FR - H 20 DN 300 - 140/1603.01113740FR - H 20 DN 300 - 180/2203.21113741FR - H 20 DN 300 - 240/2603.21113742	FR - H 20 DN 225 - 280/300	3.0	1	113733
FR - H 20 DN 250 - 140/1602.91113735FR - H 20 DN 250 - 180/2203.01113736FR - H 20 DN 250 - 240/2603.01113737FR - H 20 DN 250 - 280/3003.11113738FR - H 20 DN 300 - 80/1202.85113739FR - H 20 DN 300 - 140/1603.01113740FR - H 20 DN 300 - 180/2203.21113741FR - H 20 DN 300 - 240/2603.21113742	FR - H 20 DN 250 - 80/120	2.7	5	113734
FR - H 20 DN 250 - 180/2203.01113736FR - H 20 DN 250 - 240/2603.01113737FR - H 20 DN 250 - 280/3003.11113738FR - H 20 DN 300 - 80/1202.85113739FR - H 20 DN 300 - 140/1603.01113740FR - H 20 DN 300 - 180/2203.21113741FR - H 20 DN 300 - 240/2603.21113742	FR - H 20 DN 250 - 140/160	2.9	1	113735
FR - H 20 DN 250 - 240/260 3.0 1 113737 FR - H 20 DN 250 - 280/300 3.1 1 113738 FR - H 20 DN 300 - 80/120 2.8 5 113739 FR - H 20 DN 300 - 140/160 3.0 1 113740 FR - H 20 DN 300 - 180/220 3.2 1 113741 FR - H 20 DN 300 - 240/260 3.2 1 113742	FR - H 20 DN 250 - 180/220	3.0	1	113736
FR - H 20 DN 250 - 280/3003.11113738FR - H 20 DN 300 - 80/1202.85113739FR - H 20 DN 300 - 140/1603.01113740FR - H 20 DN 300 - 180/2203.21113741FR - H 20 DN 300 - 240/2603.21113742	FR - H 20 DN 250 - 240/260	3.0	1	113737
FR - H 20 DN 300 - 80/1202.85113739FR - H 20 DN 300 - 140/1603.01113740FR - H 20 DN 300 - 180/2203.21113741FR - H 20 DN 300 - 240/2603.21113742	FR - H 20 DN 250 - 280/300	3.1	1	113738
FR - H 20 DN 300 - 140/1603.01113740FR - H 20 DN 300 - 180/2203.21113741FR - H 20 DN 300 - 240/2603.21113742	FR - H 20 DN 300 - 80/120	2.8	5	113739
FR - H 20 DN 300 - 180/2203.21113741FR - H 20 DN 300 - 240/2603.21113742	FR - H 20 DN 300 - 140/160	3.0	1	113740
FR - H 20 DN 300 - 240/260 3.2 1 113742	FR - H 20 DN 300 - 180/220	3.2	1	113741
	FR - H 20 DN 300 - 240/260	3.2	1	113742





D

Fixed Point XR - H 20 (DN 15 - 50)

Group: A770

Application

Fixed Point for attachment of steel or stainless steel pipes of DN 15 up to DN 50 on steel beams with width of 80 up to 300 mm and max. flange thickness of 20 mm.

Scope of delivery

Preassembled Fixed Point including contact corrosion protection by means of a U-bolt sheath and PA slide bearing blocks. U-bolt with 2 hex nuts to secure position.

Guided Support set contains

- 2 clamping hooks with slide bearers
- 1 slide bar
- 1 connecting rod M10
- 1 U-Bolt fixing plate
- 4 nuts M10

Installation

Position the preassembled clamping hooks onto the beam flange and tighten the nuts (to 10 Nm). For beam width < 100mm both nuts of the middle of the PA bearing blocks have to be removed. Fasten U-bolt to U-Bolt fixing plate with the hex nuts (to 30 Nm). The pipe is pressed against the PA bearing blocks by the clamping action of the U-bolt thus ensuring a fixed position of the pipe.

Technical Data



DN	D	Н	В
-	[mm]	[mm]	[mm]
15	22	20	72
20	27	20	72
25	34	20	72
32	42	20	97
40	48	20	97
50	60	20	97

Туре	for flange width [mm]
80/120	80 - 120
140/160	121 - 160
180/220	161 - 220
240/260	221 - 260
280/300	261 - 300

Material: U-bolt U-bolt sheath: sheet metal parts: Rod, nuts: PA block: Temperature range:

Steel, HCP Polyamide 6.0, free of halogens Steel, HCP Steel, HCP Polyamide 6.0, 30 % glass fibre reinforced, black -20 to +130° C (at the PA block and shrinking tube)

* in stock



Туре	W	Quantity	Part
	[kg]	[pack]	number
XR - H 20 DN 15 - 80/120	0.9	10	113744
XR - H 20 DN 15 - 140/160	1.0	1	113745
XR - H 20 DN 15 - 180/220	1.0	1	113746
XR - H 20 DN 15 - 240/260	1.1	1	113747
XR - H 20 DN 15 - 280/300	1.1	1	113748
XR - H 20 DN 20 - 80/120	0.9	10	113749
XR - H 20 DN 20 - 140/160	1.0	1	113750
XR - H 20 DN 20 - 180/220	1.0	1	113751
XR - H 20 DN 20 - 240/260	1.1	1	113752
XR - H 20 DN 20 - 280/300	1.1	1	113753
XR - H 20 DN 25 - 80/120 *	0.9	10	113754
XR - H 20 DN 25 - 140/160	1.0	1	113755
XR - H 20 DN 25 - 180/220	1.0	1	113756
XR - H 20 DN 25 - 240/260	1.1	1	113757
XR - H 20 DN 25 - 280/300	1.1	1	113758
XR - H 20 DN 32 - 80/120	0.9	10	113760
XR - H 20 DN 32 - 140/160	1.0	1	113761
XR - H 20 DN 32 - 180/220	1.1	1	113762
XR - H 20 DN 32 - 240/260	1.1	1	113763
XR - H 20 DN 32 - 280/300	1.2	1	113764
XR - H 20 DN 40 - 80/120	0.9	10	113765
XR - H 20 DN 40 - 140/160	1.0	1	113766
XR - H 20 DN 40 - 180/220	1.1	1	113767
XR - H 20 DN 40 - 240/260	1.1	1	113768
XR - H 20 DN 40 - 280/300	1.2	1	113769
XR - H 20 DN 50 - 80/120 *	1.0	10	113770
XR - H 20 DN 50 - 140/160	1.1	1	113771
XR - H 20 DN 50 - 180/220	1.1	1	113772
XR - H 20 DN 50 - 240/260	1.2	1	113773
XR - H 20 DN 50 - 280/300	1.2	1	113774

Pipe Shoes







Group: A770

Application

Fixed Point for attachment of steel or stainless steel pipes of DN 65 up to DN 300 on steel beams with width of 80 up to 300 mm and max. flange thickness of 20 mm.

Scope of delivery

Preassembled Fixed Point including contact corrosion protection by means of a U-bolt sheath and PA slide bearing blocks. U-bolt with 2 hex nuts to secure position.

Guided Support set contains:

- 4 clamping hooks
- 1 slide bar
- 2 connecting rods M10
- 8 nuts M10

Installation

Position the preassembled clamping hooks onto the beam flange and tighten the nuts (to 10 Nm). For beam width < 100mm the four nuts of the PA bearing blocks have to be removed. Fasten U-bolt to Hook Sleeves with the hex nuts (to 50 Nm).

The pipe is pressed against the PA bearing blocks by the clamping action of the U-bolt thus ensuring a fixed position of the pipe.

Technical Data



DN	D	Н	В	
	[mm]	[mm]	[mm]	
65	76	20	124	
80	89	20	136	
100	114	20	162	
125	140	20	190	
150	170	20	218	
175	194	20	244	
200	219	20	270	
225	245	20	300	
250	273	20	328	
300	324	20	378	

Туре	for flange width [mm]
80/120	80 - 120
140/160	121 - 160
180/220	161 - 220
240/260	221 - 260
280/300	261 - 300

Material: U-bolt

Rods, nuts:

Pa block:

Steel, HCP U-bolt sheath: Polyamide 6.0, free of halogens Sheet metal parts: Steel, HCP Steel, HCP Polyamide 6.0, 30 % glass fibre reinforced, black Temperature range: -20 to +130° C (at the PA block and shrinking)





* in stock

Туре	W	Quantity	Part
XR - H 20 DN 65 - 80/120	1.7	10	113775
XR - H 20 DN 65 - 140/160	1.9	1	113776
XR - H 20 DN 65 - 180/220	2.0	1	113777
XR - H 20 DN 65 - 240/260	2.1	1	113778
XR - H 20 DN 65 - 280/300	2.1	1	113779
XR - H 20 DN 80 - 80/120 *	1.8	5	113780
XR - H 20 DN 80 - 140/160	2.0	1	113781
XR - H 20 DN 80 - 180/220	2.1	1	113782
XR - H 20 DN 80 - 240/260	2.2	1	113783
XR - H 20 DN 80 - 280/300	2.3	1	113784
XR - H 20 DN 100 - 80/120 *	1.8	5	113785
XR - H 20 DN 100 - 140/160	2.0	1	113787
XR - H 20 DN 100 - 180/220	2.1	1	113788
XR - H 20 DN 100 - 240/260	2.2	1	113789
XR - H 20 DN 100 - 280/300	2.3	1	113790
XR - H 20 DN 125 - 80/120 *	1.9	5	113791
XR - H 20 DN 125 - 140/160	2.1	1	113792
XR - H 20 DN 125 - 180/220	2.2	1	113793
XR - H 20 DN 125 - 240/260	2.3	1	113794
XR - H 20 DN 125 - 280/300	2.4	1	113796
XR - H 20 DN 150 - 80/120 *	2.0	5	113802
XR - H 20 DN 150 - 140/160	2.2	1	113797
XR - H 20 DN 150 - 180/220	2.3	1	113798
XR - H 20 DN 150 - 240/260	2.4	1	113799
XR - H 20 DN 150 - 280/300	2.5	1	113800
XR - H 20 DN 175 - 80/120	2.1	5	113803
XR - H 20 DN 175 - 140/160	2.3	1	113804
XR - H 20 DN 175 - 180/220	2.4	1	113805
XR - H 20 DN 175 - 240/260	2.5	1	113806
XR - H 20 DN 175 - 280/300	2.5	1	113807
XR - H 20 DN 200 - 80/120 *	2.1	5	113808
XR - H 20 DN 200 - 140/160	2.3	1	113809
XR - H 20 DN 200 - 180/220	2.4	1	113811
XR - H 20 DN 200 - 240/260	2.5	1	113812
XR - H 20 DN 200 - 280/300	2.6	1	113813
XR - H 20 DN 225 - 80/120	2.6	5	113814
XR - H 20 DN 225 - 140/160	2.8	1	113815
XR - H 20 DN 225 - 180/220	2.9	1	113816
XR - H 20 DN 225 - 240/260	2.9	1	113817
XR - H 20 DN 225 - 280/300	3.0	1	113818
XR - H 20 DN 250 - 80/120	2.7	5	113819
XR - H 20 DN 250 - 140/160	2.9	1	113820
XR - H 20 DN 250 - 180/220	3.0	1	113821
XR - H 20 DN 250 - 240/260	3.0	1	113822
XR - H 20 DN 250 - 280/300	3.1	1	113823
XR - H 20 DN 300 - 80/120	2.8	5	113824
XR - H 20 DN 300 - 140/160	3.0	1	113825
XR - H 20 DN 300 - 180/220	3.2	1	113826
XR - H 20 DN 300 - 240/260	3.2	1	113827
XR - H 20 DN 300 - 280/300	3.3	1	113828
Pipe Shoes





Glass Fabric Tape GSK

Group: 1291

Application

Inlay for pipe clamps for thermic and galvanic separation (prevention of contact corrosion). The Glass Fabric Tape is classified in the hydrolytic class I (best class) according to DIN 12111 regarding resistance to water. So it has an excellent resistance to acid and neutral solutions.

Scope of delivery

In rolls, self-adhesive on one side, coated with PE peel-off foil on the adhesive side.

Technical Data

Temperature range: Density: Tensile strength: Resistant to:

Up to +500°C permanent exposure 2,6 g/cm³ 3.400 - 3.700 N/mm² Oils, greases, solvents and organic acids.

Туре	Width [mm]	Thickness [mm]	Roll [m]	Part number
30 x 2	30	2.0	10	114865
40 x 2	40	2.0	10	114866
50 x 2	50	2.0	10	114867
60 x 2	60	2.0	10	114868
70 x 2	70	2.0	10	114869
80 x 2	80	2.0	10	800284







Rubber Profile SAL EPDM sk

Group: 1294

Application

Inlay for pipe clamps for galvanic separation (prevention of contact corrosion).

Scope of delivery

In rolls, self-adhesive on one side, coated with peel-off foil on the adhesive side.

Technical Data

Material: Hardness: Temperature range: Resistant against: Conditionally resistant against: Not resistant against: EPDM, black 70+/-5° Shore A -40°C up to +100° Aging, weather, ozone and strong bases Acids, brines and wear out Oils and petrol

Туре	Width [mm]	Thickness [mm]	Roll [m]	Qty. [m]	Part number
30 x 1.0	30	1.0	20	20	188075
40 x 1.0	40	1.0	20	20	188084
50 x 1.0	50	1.0	20	20	188093
60 x 1.0	60	1.0	20	20	188102
70 x 1.0	70	1.0	20	20	188111
80 x 1.0	80	1.0	20	20	800285

Pipe Shoes





Angle Adapter WKA F

Group: A705

Application

The set WKA F is used to simulate a beam flange with a width of 180 mm on siFramo profiles. It is intended for the connection of third-party pipe shoes. With the help of additional sets, guided supports and fixed points can be realized from sliding pipe shoes.

Scope of delivery

2 Angle Adapters WKA F

2 Threaded Stud M12 x 265

4 Self Forming Screw FLS F

Installation

Angle adapters must be attached to both sides of the siFramo profile with 2 Formlock screws each. If necessary, shorter threaded studs from the external guide set can be replaced by the studs included in the scope of delivery.

Note:

When using an end support, the distance e_2 must be taken into account. For square end support distances are 200 mm and 220 mm and for octagonal end supports 150 mm and 180 mm, depending on the profile used.

Technical Data

Туре	В	L	н	bxl	е
	[mm]	[mm]	[mm]	[mm]	[mm]
WKA F 80	50	180	80	11 x 20	180
WKA F 100	40	180	100	11 x 20	180

Туре	Fx [kN]	Fy [kN]	Fz [kN]
WKA F 80	±14	±6	±12
WKA F 100	±14	±6	±12

Note:

These values only apply in conjunction with Sikla components. When using third-party systems, the load specifications of the used guide or fixed point sets must be taken into account.

Туре	W [kg]	Qty. [set]	Part number
WKA F 80	3.0	1	117412
WKA F 100	3.3	1	117413







Pipe Shoes





Insulating template ISC Group: A705

Application

Insulating template for a quick and easy cutting of the sheet metal jacket.

Scope of delivery

The content consits of a set containing two templates.

Technical Data

Material: Steel, HCP

Туре	W	Qty.	Part
	[kg]	[set]	number
ISC LA	0.23	25	113332
ISC LC/LD	0.35	25	113333























Page **8**-20







Simotec 8-1















Bolt Anchor AN BZ plus

Group: 1408

Application

Anchor for push-through mounting in M&E services and plant construction in concrete tensile zones. This anchor combines high permissible loads with close edge and centre distances.

Suitable for anchoring in cracked and non-cracked concrete - fixation of

- pipelines, channels, brackets, etc. in closed rooms except for damp locations.
- No special drill required. Bore dia = thread size
 Simple and quiel mounting due to its much thread
- Simple and quick mounting due to its push-through concept
- Drive-in hammer zone for preventing any thread damage

Scope of delivery

Supplied with washer and hexagon nut.

Installation

- 1. Drill bore hole according to the minimum bore hole depth perpendicularly to the surface.
- 2. Remove dirt from hole.
- 3. Drive the anchor into concrete up to its embedment mark.
- 4. Immediately resilient after tightening with the torque wrench T_{inst} indicated in the table below. Advices of the mounting instruction are to be respected!

Technical Data

Standard anchoring depth:





Anchor size	M8	M10	M12	M16
Perm. load ¹⁾ tension C20/25 ²⁾ [kN]	2.4	4.3	7.6	11.9
C25/30 ²⁾ [kN]	2.6	4.7	8.3	13.0
C30/37 ²⁾ [kN]	2.9	5.2	9.3	14.5
C40/50 ²⁾ [kN]	3.4	6.1	10.8	16.8
C50/60 ²⁾ [kN]	3.7	6.6	11.8	18.5
Perm. load ¹⁾ oblique \geq C20/25 ²⁾ [kN]	7.0	11.5	17.1	31.4
Perm. bending moment ¹⁾ [Nm]	13.1	26.9	46.9	123.4
Min. thickness of component $h_{min} \ge [mm]$	100	120	140	170
(3 h_{ef}) Charact. centre distance s_{cr} [mm]	138	180	210	255
(1,5 h_{ef}) Charact. edge distance c_{cr} [mm]	69	90	105	127.5
Min. centre distance s at/edge distance c ≥ [mm]	40/70	45/70	60/100	60/100
Min. edge distance c at/centre distance s ≥ [mm]	40/80	45/90	60/140	60/180
Effective anchoring depth hef [mm]	46	60	70	85
Nominal diameter of drill d ₀ [mm]	8	10	12	16
Depth of bore hole $h_1 \ge [mm]$	60	75	90	110
Anchoring torque T _{inst} [Nm]	20	25	45	90
Perm. load ³⁾ for fire exposure				
Perm. load R30 perm. F [kN]	1.25	2.25	4.0	6.25
Perm. load R60 perm. F [kN]	1.1	1.9	3.0	5.6
Perm. load R90 perm. F [kN]	0.8	1.4	2.4	4.4
Perm. load R120 perm. F [kN]	0.7	1.2	2.2	4.0

¹⁾ Loads for single anchors without influence of edge distances

²⁾ Cracked concrete (option 1)

³⁾ Edge/Centre distances in case of fire - respective approval is to be respected

Reduced anchoring depth:



Anchor size	M8	M10	M12	M16
Perm. load ¹⁾ tension C20/25 ²⁾ [kN]	2.4	3.6	6.1	9.0
C25/30 ²⁾ [kN]	2.6	3.9	6.6	9.8
C30/37 ²⁾ [kN]	2.9	4.3	7.4	10.9
C40/50 ²⁾ [kN]	3.4	5.1	8.6	12.7
C50/60 ²⁾ [kN]	3.7	5.5	9.4	13.9
Perm. load ¹⁾ oblique \geq C20/25 ²⁾ [kN]	7.0	10.4	14.5	21.6
Perm. bending moment ¹⁾ [Nm]	13.1	26.9	46.9	123.4
Min. thickness of component $h_{min} \ge [mm]$	80	80	100	140
(3 h _{ef}) Charact. centre distance s _{cr} [mm]	105	120	150	195
$(1,5 h_{ef})$ Charact. edge distance c_{cr} [mm]	52.5	60	75	97.5
Effective anchoring depth hef [mm]	35	40	50	65
Nominal diameter of drill do [mm]	8	10	12	16
Depth of bore hole $h_1 \ge [mm]$	49	55	70	90
Anchoring torque T _{inst} [Nm]	20	25	45	90
Perm. load ³⁾ for fire exposure				
Perm. load R30 perm. F [kN]	1.25	1.82	3.18	4.72
Perm. load R60 perm. F [kN]	1.1	1.82	3.0	4.72
Perm. load R90 perm. F [kN]	0.8	1.3	1.9	3.5
Perm. load R120 perm. F [kN]	0.6	1.0	1.3	2.5

¹⁾ Loads for single anchors without influence of edge distances ²⁾ Cracked concrete (option 1)

The safety factor accord. to ETAG is respected. Values of the mentioned approval are valid and could be seen in the latest issue under www.sikla.com/service/downloads.

Material: Steel, galvanised

Approvals / Conformity

Sikla Approval ETA-10/0259 FM-Approval for M10, M12, M16 only for Standard anchoring depth VdS compliant for all sizes Shock approval issued by the Federal Office for Civil Defence, Bern (Switzerland)



The types marked * are not part of the Seismic-Approval.

 $t_{fix} = max.$ effective length [mm]

The types marked with * are not part of the Seismic approval. ¹⁾ Delivery date on request - goods are procured to order.

 $t_{fix} = max.$ usable length [mm]



Туре	Thread connection	Standard anchoring depth t _{fix}	Reduced anchoring depth t _{fix}	Total length [mm]	W [kg]	Quantity [pack]	Part number
8/6/60 s *	M8	-	6	60	0.03	100	114134
8/10/21/75	M8	10	21	75	0.03	100	114135
8/30/41/95	M8	30	41	95	0.04	100	114136
8/50/61/115	M8	50	61	115	0.04	100	114137
8/100/111/165	M8	100	111	165	0.06	50	114138
10/10/70 s *	M10	-	10	70	0.05	50	114139
10/10/30/90	M10	10	30	90	0.06	50	114140
10/20/40/100 ¹⁾	M10	20	40	100	0.06	50	114141
10/30/50/110	M10	30	50	110	0.07	50	114142
10/50/70/130	M10	50	70	130	0.08	50	114143
10/75/95/155	M10	75	95	155	0.09	50	114144
10/100/120/18 0 ¹⁾	M10	100	120	180	0.10	50	114145
12/10/85 s *	M12	-	10	85	0.08	25	114146
12/15/35/110	M12	15	35	110	0.10	25	114147
12/30/50/125	M12	30	50	125	0.11	25	114148
12/50/70/145	M12	50	70	145	0.13	25	114149
12/65/85/160 1)	M12	65	85	160	0.14	25	114150
12/85/105/180	M12	85	105	180	0.15	25	114151
12/105/125/20 0 ¹⁾	M12	105	125	200	0.17	25	114152
12/160/255 * 1)	M12	160	-	255	0.18	20	114153
16/5/105 s * ¹⁾	M16	-	5	105	0.17	20	114154
16/25/45/145	M16	25	45	145	0.23	20	114155
16/50/70/170 ¹⁾	M16	50	70	170	0.26	20	114156
16/100/220 * ¹⁾	M16	100	-	220	0.35	10	114157







Resin Anchor Rod VMU-A

Group: 1409

Application

Anchor Rod for put-before mounting to be used with Injection System VMU. For anchoring in concrete tensile pressure zones or in brickwork. Due to the variable anchoring depth the effective embedment depth can be adjusted to the requested load. Suitable for attaching pipelines, channels, brackets, etc. in closed rooms - except for damp locations (stainless steel version available on request).

- No special drill required
- Heavy loads
- Small edge and centre distance
- Approved for use under seismic action according to the performance category C1

Scope of delivery

Pre-assembled with washer and hexagon nut.

Installation

- 1. Drill hole according to min. setting depth vertically to the surface.
- 2. Careful cleaning of drill hole with Steel brush and Blow-Out Pump
- 3. Screw Mixing Nozzle onto the cartridge; foreshots to be removed and fill 2/3 of drill hole with resin starting from botton of the hole.
- 4. Drive the anchor manually into plastered borehole up to its embedment mark
- 5. When reaching the embedment mark, plaster must be apparent.
- 6. Respect hardening time, when tighten the anchor with instructed torque

Image 2: $h_{ef} + t_{fix}$ = usable length of threaded rod (without nut and washer)

Detailed assembly instruction is attached to the product.

Technical Data

Detailed technical information see respective injection systems.

Material: Steel, galvanised

Approvals / Conformity

Sikla Approval ETA-15/0270, ETA-17/307



¹⁾ Delivery date on request - goods are procured on an order-related basis.

Туре	Usable length in concrete [mm]	W [kg]	Quantity [pack]	Part number
VMU-A 8 x 110 ¹⁾	100	0.05	10	110444
VMU-A 8 x 145 ¹⁾	135	0.06	10	110445
VMU-A 10 x 130	120	0.09	10	110447
VMU-A 10 x 150	140	0.10	10	110448
VMU-A 12 x 120	105	0.14	10	110449
VMU-A 12 x 155	140	0.14	10	110450
VMU-A 16 x 160 ¹⁾	140	0.27	10	110451

Fastenings





Injection System VMU plus - Resin

Group: 1409

Application

The Sikla Injection System VMU plus is an universal chemical fastening system for almost all applications and building material. The Resin VMU plus can be used in non-cracked concrete, solid and perforated brick as well as in cracked concrete. To be used with a Resin Anchor Rod VMU-A or a standard threaded rod with proof of strength (approval certificate 3.1). By means of the dispenser gun the components are injected through the mixer nozzle into the drill hole or with perforated brick into the perforated sleeve. The injection adhesive cures and gives a secure fastening to the base material. For perforated bricks a perforated sleeve has to be used additionally.

The VMU plus is approved for use under seismic action according to the performance category C1 (Concrete).

Scope of delivery

One cartridge is delivered with two static mixers ATN VM-X.

Installation

- Drill hole and clean with steel brush or blow-out pump. For several drills, first prepare the drill holes to avoid interruptions while injecting the mortar.
- 2. Inject the adhesive.
- 3. Immediately insert (screw in with spiral rotation) the Resin Anchor Rod VMU-A.

Opened cartridges can be re-used with a new mixer nozzle.

Technical Data

Material: Vinylester basis, styrol-free

Extract from permissible service conditions of ETA-15/0270 (Resin Anchor Rod VMU-A) accessible online:

Approvals / Conformity

Sikla Approval ETA-15/0270, ETA-17/307



Туре	Content	W	Quantity	Part
		[Kg]	[pack]	number
VMU plus 280	280 ml	0.56	1	114176
Mixing Nozzle ANT VM-X		0.01	1	190829







Resin Anchor Rod VMZ-A

Group: 1409

Application

Anchor Rod for push-through and put-before mounting in concrete tensile zones in M&E services and plant construction (for anchoring heavy loads). Suitable for attaching pipelines, channels, brackets, etc. in closed rooms - except for damp locations.

(Stainless steel version available on request).

- No special drill required
- ♦ Heavy loads
- Small edge and centre distance
- Approved for use under seismic action according to the performance category C1 and C2 (M10 - M16)

Scope of delivery

Pre-assembled with washer and hexagon nut.

Installation

- 1. Drill hole according to min. setting depth vertically to the surface.
- 2. Careful cleaning of drill hole with Steel brush and Blow-Out Pump.
- 3. Screw Mixing Nozzle onto the cartridge; foreshots to be removed and fill 2/3 of drill hole with resin starting from botton of the hole.
- 4. Drive the anchor manually into plastered borehole up to its embedment mark.
- 5. When reaching the embedment mark, plaster must be apparent.
- 6. Respect hardening time, when tighten the anchor with instructed torque.

Detailed assembly instruction is attached to the product.

Technical Data





Тур	M8	M10	M12	M12	M16
	50	60	80	125	125
Perm. load ¹⁾ tension C20/25 ²⁾ [kN]	6.1	8.0	12.3	24.0	24.0
Perm. load ¹⁾ tension C25/30 ²⁾ [kN]	6.6	8.7	13.4	26.2	26.2
C30/37 ²⁾ [kN]	7.4	9.7	14.9	27.1	29.1
C40/50 ²⁾ [kN]	8.6	11.3	17.3	27.1	33.9
C50/60 ²⁾ [kN]	8.6	11.9	19.0	27.1	37.1
Perm. load ¹⁾ oblique V C20/25 ²⁾ [kN]	8.0	12.0	19.4	19.4	36.0
≥ C30/37 ²⁾ [kN]	8.0	12.0	19.4	19.4	36.0
Perm. bending moments M [Nm]	17.1	34.3	60	60	152
Min. thickness of component $h_{min} \ge [mm]$	80	100	110	160	170
Charact. centre distance S _{cr,N} [mm]	150	180	240	375	375
Charact. edge distance C _{cr,N} [mm]	75	90	120	187,5	187,5
Min. centre distance s _{min} [mm]	40	40	40	50	60
Min. egde distance c _{min} [mm]	40	40	50	50	60
Effective anchoring depth hef [mm]	50	60	80	125	125
Nominal diameter of drill d _o [mm]	10	12	14	14	18
Depth of bore hole h ₀ [mm]	55	65	85	130	133
Anchoring torque T _{inst} [Nm]	10	15	25	30	50
Loads under fire exposure					
Perm. load R 30 perm. F [kN]	1.69	3.38	5.8	5.8	7.62
Perm. load R 60 perm. F [kN]	0.07	0.83	3.11	3.11	5.81
Perm. load R 90 perm. F [kN]			1.14	1.14	4.01
Perm. load R 120 perm. F [kN]					3.11

¹⁾ Loads for single anchors without influence of edge and centre distances, if constant temperature of 50°C and und currently 80°C is not exceeded.

²⁾ Cracking concrete 50°C/80°C

The safety factor according to ETAG is included. For the dimensioning, respect the data of the approval notification.

Material: Steel, galvanised

Approvals / Conformity

Sikla Approval ETA 10/0260



¹⁾ Delivery date on request - goods are procured on an order-related basis.



Туре	Thread connection	t _{fix} = Max. usable length [mm]	Total length [mm]	W [kg]	Quantity [pack]	Part number
VMZ-A 50 M8-15/80	M8	15	80	0.04	10	190712
VMZ-A 50 M8-30/95	M8	30	95	0.04	10	190721
VMZ-A 60 M10-10/85	M10	10	85	0.06	10	190739
VMZ-A 60 M10- 30/105 ¹⁾	M10	30	105	0.06	10	190748
VMZ-A 60 M10- 60/135 ¹⁾	M10	60	135	0.09	10	190757
VMZ-A 80 M12- 10/110	M12	10	110	0.12	10	190766
VMZ-A 80 M12- 25/125	M12	25	125	0.13	10	190775
VMZ-A 80 M12- 50/150 ¹⁾	M12	50	150	0.15	10	190784
VMZ-A 125 M12- 25/170 ¹⁾	M12	25	170	0.18	10	117350
VMZ-A 125 M16- 30/180 ¹⁾	M16	30	180	0.28	10	190793
VMZ-A 125 M16- 60/210 ¹⁾	M16	60	210	0.36	10	190802

Fastenings





Injection System VMZ - Resin

Group: 1409

Application

Resin for Resin Anchor Rod VMZ-A. Excellent load capacity in broken and unbroken concrete. The resin mixture hardens resulting in strong bond with the concrete and a perfectly formed expansion sleeve around the conical rod. The inner bond between the conical rod and the resin mixture is broken by applying a torque moment after the hardening process. The VMZ is approved for use under seismic action according to the performance category C1 and C2 (M10 - M16).

Scope of delivery

Per cartridge two Mixing Nozzle ANT VM-X are attached.

Installation

Resin and hardener are separated in the cartridge. A dispensing tool is used to push both components through a mixing nozzle. In the nozzle the resin and hardener are mixed and filled into the the cleaned drill hole.

After a longer break in work, exchange of the mixing nozzle allows further use of the resin.

Reach of resin:

Туре	Number of drill holes per cartridge
VMZ-A M8	73
VMZ-A M10	49
VMZ-A M12	34
VMZ-A M16	20

Technical Data

Detailed technical information could be seen in the data sheets of Resin Anchor Rod VMZ, as well as in the Approval ETA-10/0260.

Material: Vinylester basis, styrol-free

Approvals / Conformity

Sikla Approval ETA-10/0260



Туре	Content	W [kg]	Quantity [pack]	Part number
VMZ 280	280 ml	0.56	1	501634
Mixing Nozzle ANT VM-X		0.01	1	190829



Fastenings



W Quantity

Part



Injection System VMZ / VMU plus - Accessories Group: 8106

Application

Dispenser:

Professional tool to press the resin out of the cartridge. By means of the nozzle resin and hardener are mixed and pressed out equally. Suitable for silicone cartidges also.

Steel brush: To clean the drill hole.

Blow-Out pump: To clean the drill hole.

Mixer extension:

For extending the static mixer for greater drilling depths.

Type Dispens Steel Bro Steel bro Steel bro Steel bro Blow-Ou Mischve
Mischve

	[kg]	[pack]	number
Dispenser ANT VM-P 345 P	1.20	1	190874
Steel Brush VMZ-STB (RB 10) M8	0.02	1	190838
Steel brush VMZ-STB (RB 12) M10	0.02	1	190847
Steel brush VMZ-STB (RB 14) M12	0.03	1	190856
Steel brush VMZ-STB (RB 18) M16	0.04	1	190865
Blow-Out Pump ANT VM-AP 360	0.27	1	190883
Mischverlängerung VM-XE 10/200	0.12	12	117520







VM-SH

Perforated Sleeve SH

Group: 1410

Application

Perforated sleeve to be used in perforated brick in combination with Anchor Rods VMU. The version VM-SH is equipped with a convenient arrester clack, avoiding a slipping into the drill hole.

For larger anchoring depths, the metal sleeves VM-SH are available.

Installation

- 1. Drill hole and blow out/brush.
- 2. Flush insert Perforated Sleeve into drill hole. In case of several drill holes, prepare all dowel drills in order to avoid interruptions during injection of the adhesive. The Perforated Sleeve will be filled almost completely with the injection adhesive.
- 3. Insert Anchor Rod with spiral, rotating movement. The adhesive being displaced by the Anchor Rod escapes through the perforation and effectuates an adhesion of the system in the hollow spaces of the wall during hardening process. The hardened injection adhesive gives a secure fastening to the base material.

Technical Data

Maximum usable length $t_{\mbox{\tiny fix}}\,[\mbox{mm}]$ for the application in solid or perforated brick

	VM-SH	VM-SH	VM-SH	VM-SH	VM-SH
	12 x 80	16 x 85	16 x 130	20 x 85	20 x 130
VMU-A 8-20/110	20	15	-	-	-
VMU-A 8-55/145	55	50	5	-	-
VMU-A 10-30/130	-	35	-	-	-
VMU-A 10-50/150	-	55	10	-	-
VMU-A 12-15/120	-	-	-	20	-
VMU-A 12-50/155	-	-	-	55	10
VMU-A 16-15/160	-	-	-	55	10

Material:	Plastic (polypropylene)
Material sold by the metre:	Metal

¹⁾ Delivery date on request - goods are procured on an order-related basis.

Туре	Drill hole Ø x depth [mm]	Size	W [kg]	Quantity [pack]	Part number
VM-SH 12 x 80	12 x 80	M8	0.02	10	116925
VM-SH 16 x 85 1)	16 x 85	M8 - M10	0.03	10	116926
VM-SH 16 x 130	16 x 130	M8 - M10	0.04	10	116927
VM-SH 20 x 85	20 x 85	M12 - M16	0.04	10	116928
VM-SH 20 x 130	20 x 130	M12 - M16	0.07	10	116929
VM-SH 12 x 1000 1)	12 x	M8	0.06	50	110564
VM-SH 16 x 1000 1)	16 x	M10	0.07	50	110565
VM-SH 22 x 1000 1)	22 x	M12 - M16	0.11	25	110566







Group: 1401

Application

Drop-In Anchor for single fixing in non-cracked concrete and multiple fixing in cracked concrete. Suitable for fixing pipelines, channels, etc. meeting the respective approval requirements. The anchor must only be used for dry interiors. For damp locations and outdoor constructions the stainless steel version is required.

- No special drill required
- Setting tool for distance-controlled forced expansion
- Suitable for push-through mounting

Installation

As expansion tool use the respective Setting Tool for Drop-In Anchor or the Plug-on Setting Tool ASW. The "intelligent" expansion cone facilitates the mounting with bore dia. tolerances or varying concrete quality. By the controlled deformation of the cone during installation, the needed edge and centre distances are decreasing considerably.

Technical Data

Single fixing: Extract from application conditions of ETA-10/0257 Admissible loads not affected by centre and edge distances. Total safety factor respected according ETAG 001 ($Y_M Y_F$).







Anchor size	M8x30*	M8x40	M10x30	M10x40	M12x50	M16
Nominal diameter of drill d₀ = [mm]	10	10	12	12	15	20
Depth of bore hole $h_0 = [mm]$	30	40	30	40	50	65
Installation torque T _{inst} = [Nm]	8	8	15	15	35	60
Diameter of clearance hole in the connecting element $d_f \leq [mm]$	9	9	12	12	14	18
Thread length Lth [mm]	13	20	12	15	18	23
Min. screwing depth L _{sdmin} [mm]	9	9	10	11	13	18
Min. thickness of concrete slab h _{min} [mm]	100	100	120	120	130	160
Min. centre distance s _{min} [mm]	60	80	100	100	120	150
Min. edge distance c _{min} [mm]	95	95	115	135	165	200
Perm. tensile load in non-cracked concrete (Screw 5.6 up to 8.8)						
C20/25 [kN]	3.3	3.6	3.3	5.1	/.1	10.5
C25/30 [kN]	3.6	3.8	3.6	5.6	7.8	11.5
C30/37 [kN]	4	4	4	6.2	8.6	12.8
C40/50 [kN]	4.7	4.4	4.7	7.2	10	14.9
C50/60 [kN]	5.1	4.6	5.1	7.9	11	16.3
Lateral load (Screw 5.6) ≥ C20/25 zul. V [kN]	3.9	3.9	4	4.1	9	16.8
Lateral load (Screw 5.8) ≥ C20/25 zul. V [kN]	3.9	3.9	4	4.1	11.1	18
Lateral load (Screw 8.8) ≥ C20/25 zul. V [kN]	3.9	3.9	4	4.1	11.1	18
Perm. bending moment (Screw 5.6) M _{zul} [Nm]	8.1	8.1	15.8	15.8	27.8	71
Perm. bending moment (Screw 5.8) M _{zul} [Nm]	10.9	10.9	21.1	21.1	37.1	94.9
Perm. bending moment (Screw 8.8) M _{zul} [Nm]	17.1	17.1	33.7	34.3	60	152
Charact. centre distance s _{cr} [mm]	90	120	90	120	150	195
Charact. edge distance c_{cr} [mm]	45	60	45	60	75	97,5
Loads under fire exposure steel ≥ 5.6						
Perm. load R30 perm. F [kN]	0.9	1.8	0.9	1.8	3.2	4.7
Perm. load R60 perm. F [kN]	0.9	1.3	0.9	1.8	3.1	4.7
Perm. load R90 perm. F [kN]	0.8	0.8	0.9	1.2	1.8	3.3
Perm. load R120 perm. F [kN]	0.5	0.5	0.7	0.8	1.2	2.2

* Application for indeterminated static systems

Multiple fixing:

Extract from application conditions of ETA-10/0258

For multiple mounting solutions of non-load-bearing systems acc. ETAG 001, part 6.

Safety factor acc. ETAG 001 is included ($Y_M Y_F$).

The perm. loads per fixing point for the respective countries are regulated in ETAG 001, part 6.



Anchor size	M8x25	M8x30	M8x40
Nominal diameter of drill d ₀ = [mm]	10	10	10
Depth of bore hole $h_0 = [mm]$	25	30	40
Installation torque T _{inst} = [Nm]	8	8	8
Diameter of clearance hole in the connecting	9	9	9
element $d_f \leq [mm]$	10	10	
I nread length L _{th} [mm]	12	13	20
Min. screw depth L _{sdmin} [mm]	8	9	9
Standard/Min. thickness of component	100/80	100	100
Min contro distorce e [mm]	50		00
	50	60	80
Min. edge distance c _{min} [mm]	100	95	95
Dama tanaila la ad ana la d <i>h</i> ara ana la da ana ata			
Perm. tensile load cracked/non-cracked concrete	10		
C12/15 and C16/20 [KN]	1.2	-	-
C20/25 to C50/60 [KN]	1.9	1./	2
Perm. bending moment (Steel 4.6) M _{zul} [Nm]	6.4	6.4	6.4
Perm. bending moment (Steel 5.6) M _{zul} [Nm]	8.1	8.1	8.1
Perm. bending moment (Steel 5.8) M _{zul} [Nm]	10.9	10.9	10.9
Perm. bending moment (Steel 8.8) M _{zul} [Nm]	17.1	17.1	17.1
Charact. centre distance s _{cr} [mm]	/5	180	210
Charact. edge distance c _{cr} [mm]	38	90	105
Loads under fire exposure screw ≥ 4.8			
Perm. load R30 perm F [kN]	0.6	0.9	1.1
Perm. load R60 perm. F [kN]	0.6	0.9	0.9
Perm. load R90 perm. F [kN]	0.6	0.6	0.6
Perm. load R120 perm. F [kN]	0.5	0.5	0.5
Loads under fire exposure screw ≥ 5.6			
Perm. load R30 perm. F [kN]	0.6	0.9	1.5
Perm. load R60 perm. F [kN]	0.6	0.9	1.5
Perm. load R90 perm. F [kN]	0.6	0.9	0.9
Perm. load R120 perm. F [kN]	0.5	0.5	0.5
Charact. centre distance s _{cr,fi} [mm]	100	180	210
Charact. edge distance c _{cr} , fi [mm]	50	90	105



Anchor size	M10x25	M10x30	M10x40	M12x25	M12x50	M16
Nominal diameter of drill d ₀ =	12	12	12	15	15	20
[mm]						
Depth of bore hole $h_0 = [mm]$	25	30	40	25	50	65
Installation torque T _{inst} = [Nm]	15	15	15	35	35	60
Diameter of clearance hole in	12	12	12	14	14	18
the connecting						
element $d_f \leq [mm]$	10	10	45	10	10	
I nread length L _{th} [mm]	12	12	15	12	18	23
Min. screw depth L _{sdmin} [mm]	10	10	11	12	13	18
Standard/IVIIn. thickness of	100/80	120	120	100/80	130	160
b / b [mm]						
Min_centre distance s [mm]	60	100	100	100	120	150
Min_edge_distance c [mm]	100	115	135	110	165	200
	100	115	100	110	105	200
Perm tensile load						
cracked/non-cracked concrete						
C12/15 and C16/20 [kN]	1.7	-	-	1.7	-	-
C20/25 to C50/60 [kN]	2.1	2	2	2.1	2.4	6.3
perm. bending moment (Steel	12.8	12.8	12.8	22.2	22.2	56.9
4.6) M _{zul} [Nm]						
perm. bending moment (Steel	15.8	15.8	15.8	27.8	27.8	71
5.6) M _{zul} [Nm]						
perm. bending moment (Steel	21.1	21.1	21.1	37.1	37.1	94.9
5.8) M _{zul} [Nm]						
perm. bending moment (Steel	34.3	33.7	34.3	60	60	152
8.8) M _{zul} [Nm]						
Charact. centre distance scr	75	230	170	75	170	400
[mm]						
Charact. edge distance c _{cr}	38	115	85	38	85	200
[mm]						
4.8						
Perm. load R30 perm. F [kN]	0.6	0.9	1.5	0.6	1.5	4
Perm. load R60 perm. F [kN]	0.6	0.9	1.5	0.6	1.5	4
Perm. load R90 perm. F [kN]	0.6	0.9	1.1	0.6	1.5	3
Perm. load R120 perm. F [kN]	0.5	0.7	0.9	0.5	1.2	2.4
Loads under fire exposure						
screw ≥ 5.6						
Perm. load R30 perm. F [kN]	0.6	0.9	1.5	0.6	1.5	4
Perm. load R60 perm. F [kN]	0.6	0.9	1.5	0.6	1.5	4
Perm. load R90 perm. F [kN]	0.6	0.9	1.5	0.6	1.5	3.7
Perm. load R120 perm. F [kN]	0.5	0.7	1.0	0.5	1.2	2.4
Charact. centre distance s _{cr,fi}	100	170	170	100	200	400
[mm]						
Charact adap distance a fi						-

Valid are the values of the mentioned approval which can be seen on our website www.sikla.com/downloads.

Material: Steel, galvanised

Approvals / Conformity



For the multiple use for non-structural applicatons Sikla approval ETA-10/0258 (M8 - M12), for installation in non-cracked concrete Sikla approval ETA-10/0257, fire protection testing, VdS-conform, FM-Approval \geq M10



¹⁾ Delivery date on request - goods are procured order-related.

Туре	Drill hole Ø x depth [mm]	Thread Ø x length [mm]	W [kg]	Quantity [pack]	Part number
ES M8 x 25	10 x 25	M8 x 12	0.01	100	116618
ES M8 x 30	10 x 30	M8 x 13	0.01	100	110467
ES M8 x 40	10 x 40	M8 x 20	0.01	100	110468
ES M10 x 25	12 x 25	M10 x 12	0.02	50	116619
ES M10 x 30	12 x 30	M10 x 12	0.02	50	110506
ES M10 x 40	12 x 40	M10 x 15	0.02	50	110469
ES M12 x 25 ¹⁾	15 x 25	M12 x 12	0.02	50	116620
ES M12 x 50	15 x 50	M12 x 18	0.04	50	110470
ES M16 x 65	20 x 65	M16 x 23	0.10	25	110471







Group: 8103

Application

The use of the Plug-on Setting Tool facilitates the assembly of Drop-In Anchors significantly. The reduction of assembly time and of the assembly effort enables an economical installation of the anchors.

Scope of delivery

ASW: Expanding mandrel incl. collar drill ANT BB: Collar drill

Technical Data



Туре	Suitable for Drop-in anchor	Suitable Collar drill BB
ASW M8 x 25	AN ES M8 x 25	ANT BB 10 x 25
ASW M8 x 30	AN ES M8 x 30	ANT BB 10 x 30
ASW M8 x 40	AN ES M8 x 40	ANT BB 10 x 40
ASW M10 x 25	AN ES M10 x 25	ANT BB 12 x 25
ASW M10 x 30	AN ES M10 x 30	ANT BB 12 x 30
ASW M10 x 40	AN ES M10 x 40	ANT BB 12 x 40

Material:

Expanding mandrel: Steel, galvanised Collar drill: Steel, hardened

¹⁾ Delivery date on request - goods are procured on an order-related basis.



Type	W/	Quantity	Part
Type	[kg]	[pack]	number
ASW M8 x 25	0.20	1	116636
ASW M8 x 30	0.20	1	116637
ASW M8 x 40	0.23	1	116638
ASW M10 x 25	0.21	1	116639
ASW M10 x 30	0.21	1	116640
ASW M10 x 40	0.24	1	116641
ANT BB 10 x 25	0.11	1	116666
ANT BB 10 x 30	0.11	1	116667
ANT BB 10 x 40	0.12	1	116668
ANT BB 12 x 25 ¹⁾	0.12	1	116669
ANT BB 12 x 30 ¹⁾	0.12	1	116670
ANT BB 12 x 40 ¹⁾	0.12	1	116671

Fastenings





Expanding Mandrel ANT MSH Group: 8103

Application

Setting tool for Drive Plug equipped with check mark. The Expanding Mandrel with hand shield is set on top of the anchor sleeve and creates a visible mark, confirming the correct assembly.

Technical Data

Steel, electrogalvanised Material:

¹⁾ Delivery date on request - goods are procured on an order-related basis.

Туре	For Drop-In Anchor	W [kg]	Quantity [pack]	Part number
M8 x 25	M8 x 25	0.42	1	117514
M8 x 30	M8 x 30	0.42	1	111834
M8 x 40	M8 x 40	0.38	1	111835
M10 x 25	M10 x 25	0.50	1	117515
M10 x 30	M10 x 30	0.50	1	111836
M10 x 40	M10 x 40	0.45	1	111837
M12 x 25 ¹⁾	M12 x 25	0.45	1	117516
M12 x 50	M12 x 50	0.47	1	111838
M16 x 65	M16 x 65	0.50	1	111839







Screwbolt TSM-IM

Group: 1402

Application

Suitable for quick and safe fixation of Sikla pipe clamps and further components to concrete and masonry ceilings or walls. To be applied in dry rooms not exposed to high corrosion resistance requirements.

- European Technical Assessment for anchoring in cracked and non-cracked concrete (Option 1)
- European Technical Assessment for multiple use for non-structural systems in concrete and precast pre-stressed hollow core slabs
- ZApproved for applications under seismic impact of category C1 (Types, diameters and anchoring depths are shown in the "type overview" and ETA-16/0655
- Also fixes into pressure-resistant natural stones and different solid bricks (not part of ETA approval / guideline)
- Small edge and axial distance due to low expansion pressure
- Low drilling effort

Installation

Screw in the bolt screw in pre-drilled hole. The special thread guarantees a mechanical form lock with the base material. Fine adjustment of depth is possible if the screwbolt is initially installed too deep.

Technical Data

Single fixing:

Extract from application conditions of ETA-16/0655 Admissible loads not affected by centre and edge distances. Total safety factor respected according ETAG 001 ($Y_{\rm M}$ and $Y_{\rm F}$).

Diameter 6 mm

	Embedment depth 40 mm	Embedment depth 55 mm
Drive	SW 13	SW 13
Nominal diameter of drill do [mm]	6	6
Depth of bore hole h1 [mm]	45	60
Approved loads cracked concrete		
C20/25 [kN]	1.0	1.9
Approved loads non-cracked concrete		
C20/25 [kN]	1.9	4.3
Minimum thickness of concrete slab h _{min} [mm]	80	80
Char. spacing s _{cr,N}	93	132
Char. edge distance c _{cr,N}	46.5	66
Diameter of clearance hole in the fixture \leq [mm]	8	8

Multiple fixing:

Extract from application conditions of ETA-16/0656

For multiple mounting solutions of non-load-bearings systems acc. ETAG001, part 6.

Safety factor acc. ETAG 001 is included (Y_M and Y_F).

The perm. loads per fixing point for the respective countries are regulated in ETAG 001, part 6.

Diameter 6 mm



	Embedment depth 35 mm	Embedment depth 55 mm
Drive	SW 13	SW 13
Nominal diameter of drill do [mm]	6	6
Depth of bore hole h1 [mm]	40	60
Approved loads cracked concrete		
C20/25 [kN]	1.4	3.6
Approved loads non-cracked concrete		
C20/25 [kN]	1,4	3,6
Minimum thickness of concrete slab hmin [mm]	80	100
Char. spacing s _{cr,N}	81	132
Char. edge distance $c_{cr,N}$	40.5	66
Diameter of clearance hole in the fixture ≤ [mm]	8	8

Further technical information (load capacities under fire exposure, appr. loads in further concrete classes and precast pre-stressed hollow core slabs) are shown in the following overview.

Material: Steel, electrogalvanized

Approvals / Conformity ETA-16/0655 and ETA-16/0656



* Only to be used as multiple fixing for non-load-bearing systems in concrete and prestressed concrete hollow plate ceilings.

Туре	Length [mm]	Thread connection	W [kg]	Quantity [pack]	Part number
6 x 35 K *	35	M8/M10	0.04	50	115028
6 x 55	55	M8/M10	0.04	50	115721







Screwbolt TSM LP VZ 30

Group: 1405

Application

Suitable for quick and safe fixation of Sikla Channels or Mounting Plates to concrete and masonry ceilings or walls. To be applied in dry rooms not exposed to high corrosion resistance requirements.

- European Technical Assessment for anchoring in cracked and non-cracked concrete (Option 1)
- European Technical Assessment for multiple use for non-structural systems in concrete and precast pre-stressed hollow core slabs
- Approved for applications under seismic impact of category C1 (Types, diameters and anchoring depths are shown in the "type overview" and ETA-16/0655)
- Also fixes into pressure-resistant natural stones and different solid bricks (not part of ETA approval / guideline)
- Small edge and axial distance due to low expansion pressure
- Low drilling effort

Installation

For installation an impact wrench or rotary screwgun with a Torx bit T30 is to be used. Screw in the bolt screw in pre-drilled hole. The special thread guarantees a mechanical form lock with the base material. Fine adjustment of depth is possible if the screwbolt is initially installed too deep. The screwgun or impact wrench should not be used with any hammer-action setting engaged on the tool.

Technical Data

Single fixing:

Extract from application conditions of ETA-16/0655 Admissible loads not affected by centre and edge distances. Total safety factor respected according ETAG 001 ($Y_{\rm M}$ and $Y_{\rm F}$).

Diameter 6 mm

	Embedment depth	Embedment depth
	40 mm	55 mm
Drive	T30	T30
Nominal diameter of drill do [mm]	6	6
Depth of bore hole h1 [mm]	45	60
Approved loads cracked concrete		
C20/25 [kN]	1.0	1.9
Approved loads non-cracked concrete		
C20/25 [kN]	1.9	4.3
Minimum thickness of concrete slab hmin [mm]	80	80
Char. spacing s _{cr,N}	93	132
Char. edge distance c _{cr,N}	46.5	66
Diameter of clearance hole in the fixture \leq	8	8
[mm]		

Multiple fixing:

Extract from application conditions of ETA-16/0656

For multiple mounting solutions of non-load-bearings systems acc. ETAG001, part 6.

Safety factor acc. ETAG 001 is included (Y_M and Y_F).

The perm. loads per fixing point for the respective countries are regulated in ETAG 001, part 6.

Diameter 6 mm





	Embedment depth 35 mm	Embedment depth 55 mm
Drive	T30	T30
Nominal diameter of drill do [mm]	6	6
Depth of bore hole h1 [mm]	40	60
Approved loads cracked concrete		
C20/25 [kN]	1.4	3.6
Approved loads non-cracked concrete		
C20/25 [kN]	1.4	3.6
Minimum thickness of concrete slab hmin [mm]	80	100
Char. spacing s _{cr,N}	81	132
Char. edge distance c _{cr,N}	40.5	66
Diameter of clearance hole in the fixture ≤ [mm]	8	8

Further technical information (load capacities under fire exposure, appr. loads in further concrete classes and precast pre-stressed hollow core slabs) are shown in the following overview.

Material: Steel, electrogalvanized

Approvals / Conformity

ETA-16/0655 and ETA-16/0656



* Only to be used as multiple fixing for non-load-bearing systems in concrete and prestressed concrete hollow plate ceilings.

Туре	Length [mm]	Head-Ø [mm]	W [kg]	Quantity [pack]	Part number
6 x 40 *	40	18	0.01	100	115026
6 x 60	60	18	0.02	100	115722
LPS 6 x 40 *	40	14.5	0.01	100	116691
LPS 6 x 60	60	14.5	0.02	100	116692







Screwbolt TSM-S

Group: 1407

Application

Suitable for quick and safe fixation of Sikla Channels or Mounting Plates to concrete and masonry ceilings or walls. To be applied in dry rooms not exposed to high corrosion resistance requirements.

- European Technical Assessment for anchoring in cracked and non-cracked concrete (Option 1)
- European Technical Assessment for multiple use for non-structural systems in concrete and precast pre-stressed hollow core slabs
- Approved for applications under seismic impact of category C1 and C2 (Types, diameters and anchoring depths are shown in the "type overview" and ETA-16/0655
- Also fixes into pressure-resistant natural stones and different solid bricks (not part of ETA approval / guideline)
- Flexible use for high or standard load performances due to 3 anchoring depths
- Small edge and axial distance due to low expansion pressure
- Low drilling effort

Installation

Screw in the bolt screw in pre-drilled hole. The special thread guarantees a mechanical form lock with the base material. Fine adjustment of depth is possible if the screwbolt is initially installed too deep.

Technical Data

Single fixing: Extract from application conditions of ETA-16/0655 Admissible loads not affected by centre and edge distances. Total safety factor respected according ETAG 001 (Y_M and Y_F).

Diameter 6 mm

	Embedment depth 40 mm	Embedment depth 55 mm
Drive	SW 13	SW 13
Nominal diameter of drill d ₀ [mm]	6	6
Depth of bore hole h ₁ [mm]	45	60
Approved loads cracked concrete		
C20/25 [kN]	1.0	1.9
Approved loads non-cracked concrete		
C20/25 [kN]	1.9	4.3
Minimum thickness of concrete slab hmin [mm]	80	80
Char. spacing s _{cr,N}	93	132
Char. edge distance c _{cr,N}	46.5	66
Diameter of clearance hole in the fixture \leq [mm]	8	8

Diameter 8 mm



	Embedment depth 45 mm	Embedment depth 55 mm	Embedment depth 65 mm
Drive	SW 13	SW 13	SW 13
Nominal diameter of drill d ₀ [mm]	8	8	8
Depth of bore hole h1 [mm]	55	65	75
Approved loads cracked concrete			
C20/25 [kN]	2.4	4.3	5.7
Approved loads non-cracked concrete			
C20/25 [kN]	3.6	5.7	7.6
Minimum thickness of concrete slab h _{min} [mm]	80	80	80
Char. spacing s _{cr,N}	105	129	156
Char. edge distance c _{cr,N}	52.5	64.5	78
Diameter of clearance hole in the fixture ≤ [mm]	12	12	12

Diameter 10 mm

	Embedment depth 55 mm	Embedment depth 75 mm	Embedment depth 85 mm
Drive	SW 15	SW 15	SW 15
Nominal diameter of drill d ₀	10	10	10
[mm]			
Depth of bore hole h1 [mm]	65	85	95
Approved loads cracked			
concrete			
C20/25 [kN]	4.3	8.0	9.6
Approved loads non-cracked			
concrete			
C20/25 [kN]	5.7	9.5	11.9
Minimum thickness of	80	90	102
concrete slab h _{min} [mm]			
Char. spacing s _{cr,N}	129	180	204
Char. edge distance c _{cr,N}	64.5	90	102
Diameter of clearance hole in the fixture ≤ [mm]	14	14	14

Diameter 12 mm



	Embedment depth 65 mm	Embedment depth 85 mm	Embedment depth 100 mm
Drive	SW 17	SW 17	SW 17
Nominal diameter of drill d ₀ [mm]	12	12	12
Depth of bore hole h1 [mm]	75	95	110
Approved loads cracked concrete			
C20/25 [kN]	5.7	9.4	12.3
Approved loads non-cracked concrete			
C20/25 [kN]	7.6	13.2	17.2
Minimum thickness of concrete slab h _{min} [mm]	80	101	120
Char. spacing s _{cr,N}	150	201	240
Char. edge distance c _{cr,N}	75	100.5	120
Diameter of clearance hole in the fixture ≤ [mm]	16	16	16

Multiple fixing:

Extract from application conditions of ETA-16/0656

For multiple mounting solutions of non-load-bearings systems acc. ETAG001, part 6.

Safety factor acc. ETAG 001 is included (Y_M and Y_F).

The perm. loads per fixing point for the respective countries are regulated in ETAG 001, part 6.

Diameter 6 mm

	Embedment depth 35 mm	Embedment depth 55 mm
Drive	SW 13	SW 13
Nominal diameter of drill do [mm]	6	6
Depth of bore hole h1 [mm]	40	60
Approved loads cracked concrete		
C20/25 [kN]	1.4	3.6
Approved loads non-cracked concrete		
C20/25 [kN]	1.4	3.6
Minimum thickness of concrete slab hmin [mm]	80	100
Char. spacing s _{cr,N}	81	132
Char. edge distance $c_{cr,N}$	40.5	66
Diameter of clearance hole in the fixture \leq	8	8
[mm]		

Further technical information (load capacities under fire exposure, appr. loads in further concrete classes and precast pre-stressed hollow core slabs) are shown in the following overview.

Material: Steel, electrogalvanized

Approvals / Conformity ETA-16/0655 and ETA-16/0656





* Only to be used as multiple fixing for non-load-bearing systems in concrete and prestressed concrete hollow plate ceilings.
 ¹⁾ Liefertermin auf Anfrage – Ware wird auftragsbezogen beschafft.

Туре	Length [mm]	W [kg]	Quantity [pack]	Part number
6 x 40 *	40	0.02	100	115737
6 x 50	50	0.02	100	115720
6 x 60	60	0.02	100	115723
6 x 80	80	0.02	100	115738
6 x 100 ¹⁾	100	0.03	100	115739
8 x 50	50	0.03	50	115731
8 x 60	60	0.04	50	115732
8 x 70	70	0.04	50	115734
8 x 80	80	0.04	50	115735
8 x 90 ¹⁾	90	0.05	50	115736
8 x 100 ¹⁾	100	0.05	50	115728
8 x 120 ¹⁾	120	0.06	50	115729
8 x 140 ¹⁾	140	0.07	50	115730
10 x 60	60	0.06	50	115740
10 x 70	70	0.06	50	115741
10 x 80 ¹⁾	80	0.07	50	115743
10 x 90 ¹⁾	90	0.07	50	115744
10 x 100 ¹⁾	100	0.08	50	115745
10 x 140 ¹⁾	140	0.11	50	115746
12 x 110 ¹⁾	110	0.12	25	115747
12 x 130	130	0.13	25	115748
12 x 150	150	0.15	25	115749







Screwbolt TSM-ST

Group: 1402

Application

Suitable for quick and safe fixation of Sikla pipe clamps and further components with an internal thread M8 to concrete and masonry ceilings or walls. To be applied in dry rooms not exposed to high corrosion resistance requirements.

- European Technical Assessment for anchoring in cracked and non-cracked concrete (Option 1)
- European Technical Assessment for multiple use for non-structural systems in concrete and precast pre-stressed hollow core slabs
- Approved for applications under seismic impact of category C1 (Types, diameters and anchoring depths are shown in the "type overview" and ETA-16/0655
- Also fixes into pressure-resistant natural stones and different solid bricks (not part of ETA approval / guideline)
- Small edge and axial distance due to low expansion pressure
- Fixings in isolated ceilings can be realised with the long versions of the TSM-ST)
- Low drilling effort

Installation

Screw in the bolt screw in pre-drilled hole. The special thread guarantees a mechanical form lock with the base material. Fine adjustment of depth is possible if the screwbolt is initially installed too deep.

Technical Data

Single fixing: Extract from application conditions of ETA-16/0655 ZAdmissible loads not affected by centre and edge distances. Total safety factor respected according ETAG 001 (Y_M and Y_F).

Diameter 6 mm

	Embedment depth 40 mm	Embedment depth 55 mm
Drive	SW 10	SW 10
Nominal diameter of drill d ₀ [mm]	6	6
Connection thread	M8 x 16	M8 x 16
Depth of bore hole h1 [mm]	45	60
Approved loads cracked concrete		
C20/25 [kN]	1.0	1.9
Approved loads non-cracked concrete		
C20/25 [kN]	1.9	4.3
Minimum thickness of concrete slab hmin [mm]	80	80
Char. spacing s _{cr,N}	93	132
Char. edge distance c _{cr,N}	46.5	66
Diameter of clearance hole in the fixture ≤	8	8
[mm]		

Multiple fixing:

Extract from application conditions of ETA-16/0656

For multiple mounting solutions of non-load-bearings systems acc. ETAG001, part 6. Safety factor acc.

ETAG 001 is included (Y_M and Y_F).

The perm. loads per fixing point for the respective countries are regulated in ETAG 001, part 6.

Diameter 6 mm





	Embedment depth 35 mm	Embedment depth 55 mm
Drive	SW 13	SW 13
Nominal diameter of drill do [mm]	6	6
Connection thread	M8 x 16	M8 x 16
Depth of bore hole h1 [mm]	40	60
Approved loads cracked concrete		
C20/25 [kN]	1.4	3.6
Approved loads non-cracked concrete		
C20/25 [kN]	1.4	3.6
Minimum thickness of concrete slab h _{min} [mm]	80	100
Char. spacing s _{cr,N}	81	132
Char. edge distance c _{cr,N}	40.5	66
Diameter of clearance hole in the fixture ≤ [mm]	8	8

Further technical information (load capacities under fire exposure, appr. loads in further concrete classes and precast pre-stressed hollow core slabs) are shown in the following overview.

Material: Steel, electrogalvanized

Approvals / Conformity

ETA-16/0655 and ETA-16/0656



* Only to be used as multiple fixing for non-load-bearing systems in concrete and prestressed concrete hollow plate ceilings.

¹⁾ Liefertermin auf Anfrage – Ware wird auftragsbezogen beschafft.

Туре	Length [mm]	W [kg]	Quantity [pack]	Part number
6 x 35 K *	35	0.02	100	115030
6 x 55 ¹⁾	55	0.02	100	115725
6 x 75 ¹⁾	75	0.02	100	115726
6 x 95 ¹⁾	95	0.03	100	115727
6 x 135 ¹⁾	135	0.04	100	117835
6 x 155 ¹⁾	155	0.04	100	117836
6 x 175	175	0.05	100	117837
6 x 195 ¹⁾	195	0.06	100	117838





Universal Plug ANA

Group: 1415

Application

The Universal Plug with collar is suitable for all concrete material and masonry, perforated and hollow bricks, boards. The torsion protection prevents rotation in the drill hole. The installation in cavities causes a knot and therefore an interlocking connection. The stiff plug neck prevents damage of tiles and plaster. The collar serves as stop an prevents the plug from slipping deeper into the drill hole.

Technical Data

Temperature range: -40°C up to +70°C

Recommended loads (max) kN:

Туре	concrete B25	perforated brick	light concrete	plaster- board	chip board
6 ¹⁾	0,60	0,45	0,30		
6 ²⁾	0,40	0,30	0,15	0,15	0,40
8 ¹⁾	1,10	0,90	0,50	-	-
8 ²⁾	0,80	0,60	0,30	0,18	0,45
10 ¹⁾	1,80	1,20	0,50	-	-
10 ²⁾	1,00	0,60	0,40	0,20	0,60
12 ¹⁾	3,00	1,80	1,20		-
1 4 ¹⁾	4,00	2,20	1,30		-

¹⁾ Wood screw with max. diameter

²⁾ Chip board screw with max. diameter safety factor 5.0

* Delivery date on request - goods are procured on an order-related basis.

Туре	Ø [mm]	Length [mm]	Screw-Ø min/max	W [kg]	Quantity [pack]	Part number
6 x 30 *	6	30	3.5 - 5.0	0.01	100	402430
8 x 40	8	40	4.5 - 6.0	0.01	100	402431
10 x 50	10	50	6.0 - 8.0	0.01	50	402432
12 x 60	12	60	8.0 - 10.0	0.01	25	402433
14 x 70	14	70	10.0	0.01	20	402434



















07/2023 IuA






































Assembly Group BG14 F80-M10

Group: 1102

Application

An Assembly Group containing components to make up a permanent pipe connection with the pipe clamp Stabil D-3G. The Assembly Group is designed for use with the Beam Section TP F 80. It is connected using the Self Forming Screw FLS F, and the height is adjusted via the Threaded Rod M10. The pipe clamp with sound absorption lining ensures sound absorption in accordance with DIN 4109.

Scope of delivery

Each Assembly Group is pre-assembled, packed and labeled.



Parts list: Item 1 Pipe Clamp Stabil D-3G with lining Assembly Kit MKit F 80 M10 consists of: Item 2 Threaded Rod GST M10 x 200 Item 3 Hexagon Nut M10 Item 4 Mounting Plate GPL F80-M10 Item 5 Self Forming Screw FLS F

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

 $\begin{array}{l} L_{\text{max, vertical}} = 150 \mbox{ mm} \\ L_{\text{max, horizontal}} = not \mbox{ recommended} \end{array}$

Material:

Pipe clamp and conncetion parts: Screws and nuts: Sound absorption lining: Steel, HCP Steel, HCP SBR/EPDM, black, bonded in

Туре	Size range [mm]	B₁ [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
DN 15	19 - 23	50	68	0.35	1	110200
DN 20	24 - 28	50	75	0.38	1	110201
DN 25	33 - 37	50	81	0.40	1	110202
DN 32	40 - 45	50	93	0.42	1	110203
DN 40	47 - 52	50	104	0.44	1	110204
DN 50	60 - 65	50	117	0.46	1	110205
DN 65	73 - 78	50	150	0.56	1	110206
DN 80	88 - 93	50	164	0.61	1	110207
DN 100	108 - 115	50	187	0.67	1	110208











Assembly Group BG15 F80-M10

Group: 1102

Application

An Assembly Group for use as a guided support with the pipe clamp Stabil D-3G. The Assembly Group is designed for use with the Beam Section TP F 80. It is connected using the Self Forming Screw FLS F, and the height is adjusted via the Threaded Rod M10. The pipe clamp with sound absorption lining ensures sound absorption in accordance with DIN 4109.

Scope of delivery

Each Assembly Group is pre-assembled, packed and labeled.

Parts list: Item 1 Pipe Clamp Stabil D-3G with lining Assembly Kit MKit FR F 80 S M10 / L M10 consists of: Item 2 Threaded Rod GST M10 x 200 Item 3 Hexagon Nut M10 Item 4 Slide Set GS F80 2G / GS F80 2G2 Item 5 Self Forming Screw FLS F

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

 $\begin{array}{l} L_{max, \ vertical} = 150 \ mm \\ L_{max, \ horizontal} = not \ recommended \end{array}$

Material:

Pipe clamp and connecting parts: Bolts and nuts: Sound absorption lining: Steel, HCP Steel, HCP SBR/EPDM, black, captively bonded in

Туре	Size range [mm]	B₁ [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
DN 15	19 - 23	67	68	0.86	1	110218
DN 20	24 - 28	67	75	0.89	1	110219
DN 25	33 - 37	67	81	0.91	1	110220
DN 32	40 - 45	67	93	0.93	1	110221
DN 40	47 - 52	67	104	0.95	1	110222
DN 50	60 - 65	67	117	0.97	1	110223
DN 65	73 - 80	67	150	1.55	1	110224
DN 80	88 - 93	67	164	1.65	1	110225
DN 100	108 - 115	67	187	1.77	1	110226







Group: 1102

Application

An Assembly Group containing components to make up a permanent pipe connection with the heavy Pipe Clamp Stabil $I-1/_2$ ". The Assembly Group is designed for use with the Beam Section TP F 80. It is connected using the Self Forming Screw FLS F, and the height is adjusted via the Threaded Tube $1/_2$ ".

Scope of delivery

Each Assembly Group is pre-assembled, packed and labeled.

Parts list: Item 1 Pipe Clamp Stabil I- $1/_2$ " Assembly Kit MKit F 80 $1/_2$ " consists of: Item 2 Threaded Tube $1/_2$ " x 200 Item 3 Locking Nut NT G $1/_2$ " Item 4 Mounting Plate GPL F80- $1/_2$ " Item 5 Self Forming Screw FLS F

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

 $\begin{array}{l} L_{max, \ vertical} = 200 \ mm \\ L_{max, \ horizontal} = 150 \ mm \end{array}$

Material:

Pipe clamp and connecting parts: Steel, Bolts and nuts: Steel,

Steel, HCP Steel, HCP

Туре	Size range [mm]	B₁ [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
DN 15	17 - 22	50	85	0.83	1	110209
DN 20	23 - 27	50	92	0.84	1	110210
DN 25	30 - 34	50	100	0.87	1	110211
DN 32	40 - 44	50	112	0.91	1	110212
DN 40	45 - 49	50	117	0.93	1	110213
DN 50	57 - 61	50	139	1.15	1	110214
DN 65	73 - 77	50	156	1.23	1	110215
DN 80	85 - 89	50	168	1.29	1	110216
DN 100	109 - 115	50	194	1.58	1	110217















Assembly Group BG15 F80-1/2"

Group: 1102

Application

An Assembly Group for use as a guided support with the heavy Pipe Clamp Stabil $I-1/_2$ ". The Assembly Group is designed for use with the Beam Section TP F 80. It is connected using the Self Forming Screw FLS F, and the height is adjusted via the Threaded Tube $1/_2$ ".

Scope of delivery

Each Assembly Group is pre-assembled, packed and labeled.

Parts list:

Item 1 Pipe Clamp Stabil I- $\frac{1}{2}$ " Assembly Kit MKit FR F 80 S $\frac{1}{2}$ " / L $\frac{1}{2}$ " consists of: Item 2 Threaded Tube GR $\frac{1}{2}$ " x 200 Item 3 Locking Nut NT G $\frac{1}{2}$ " Item 4 Slide Set GS F80 1G / Slide Set GS F80 1G2 Item 5 Self Forming Screw FLS F

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

 $\begin{array}{l} L_{max, \ vertical} = 200 \ mm \\ L_{max, \ horizontal} = not \ recommended \end{array}$

Material:

Pipe clamp and connecting parts: St Bolts and nuts: St

Steel, HCP Steel, HCP

Туре	Size range [mm]	B₁ [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
DN 15	16 - 22	102	85	1.98	1	110227
DN 20	23 - 27	102	92	1.99	1	110228
DN 25	30 - 34	102	100	2.02	1	110229
DN 32	39 - 44	102	112	2.06	1	110230
DN 40	44 - 49	102	117	2.08	1	110231
DN 50	57 - 61	102	139	2.30	1	110232
DN 65	73 - 77	102	156	3.74	1	110233
DN 80	85 - 89	102	168	3.86	1	110234
DN 100	109 - 116	102	194	4.44	1	110235







Group: 1102

Application

An Assembly Group containing components to make up a permanent pipe connection with the insulated Chilled Water Clamp RB for chiller plants and cool water systems. The Assembly Group is designed for use with the Beam Section TP F 80. It is connected using Self Forming Screw FLS F, and the height is adjusted via the Threaded Tube $1/2^{"}$.

Scope of delivery

Each Assembly Group is pre-assembled, packed and labeled.

Parts list: Item 1 Chilled Water Clamp RB Assembly Kit MKit F 80 $^{1}/_{2}$ " consists of: Item 2 Threaded Tube GR $^{1}/_{2}$ " x 200 Item 3 Locking Nut NT G $^{1}/_{2}$ " Item 4 Mounting Plate GPL F80- $^{1}/_{2}$ " Item 5 Self Forming Screw FLS F

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

 $L_{max, vertical} = 200 \text{ mm}$ $L_{max, horizontal} = 150 \text{ mm}$

Material:

Connecting parts: Bolts and nuts: Insulating body: Steel, HCP Steel, HCP PUR foam (250 kg/m³ , B2), μ = 1200 λ = 0,045 W/mK (0°C) -50°C to +105°C

Area of use:

Туре	Nominal widths [DN]	B₁ [mm]	B [mm]	t [mm]	W [kg]	Quantity [pack]	Part number
21/30	15	50	81	30	0.73	1	110283
27/30	20	50	87	30	0.73	1	110284
33/30	25	50	93	30	0.74	1	110285
42/30	32	50	102	30	0.75	1	110286
48/30	40	50	108	30	0.75	1	110287
60/30	50	50	120	30	0.84	1	110289
76/30	65	50	136	30	0.96	1	110290
89/30	80	50	149	30	1.01	1	110291
114/40	100	50	195	30	1.59	1	110292











Assembly Group BG45 F80-1/2"

Group: 1102

Application

An Assembly Group for use as a guided support with the insulated Chilled Water Clamp RB for chiller plants and cool water systems. The Assembly Group is designed for use with the Beam Section TP F 80. It is connected using Self Forming Screw FLS F, and the height is adjusted via the Threaded Tube $1/_2$ ".

Scope of delivery

Each Assembly Group is pre-assembled, packed and labeled.

Parts list: Item 1 Chilled Water Clamp RB Assembly Kit MKit FR F 80 S 1/2" consists of: Item 2 Threaded Tube GR 1/2" x 200 Item 3 Locking Nut NT 1/2" Item 4 Slide Set GS F80 1G Item 5 Self Forming Screw FLS F

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

 $L_{max, vertical} = 200 \text{ mm}$ $L_{max, horizontal} = not recommended$

Material:

Connecting parts: Bolts and nuts: Insulating body:

Area of use:

Steel, HCP Steel, HCP PUR foam (250 kg/m³, B2), μ = 1200 λ = 0,045 W/mK (0°C) -50°C to +105°C

Туре	Nominal widths [DN]	B₁ [mm]	B [mm]	t [mm]	W [kg]	Quantity [pack]	Part number
21/30	15	102	81	30	1.88	1	110299
27/30	20	102	87	30	1.88	1	110300
33/30	25	102	93	30	1.89	1	110301
42/30	32	102	102	30	1.90	1	110302
48/30	40	102	108	30	1.90	1	110303
60/30	50	102	120	30	1.99	1	110304
76/30	65	102	136	30	2.11	1	110305
89/30	80	102	149	30	2.16	1	110306
114/40	100	102	195	40	2.74	1	110307





Assembly Group BG51 F80

Group: 1102

Application

An Assembly Group for the supporting of pipes without complex requirements and without heat insulation. This allows free sliding of the pipe in all dimensions on the Beam Section TP F 80.

Scope of delivery

Each Assembly Group is pre-assembled, packed and labeled. An Assembly Group comprises 3 U-UB pads.

Parts list:

Item 1 Pad U-UB F 80

Installation

According to the anticipated sideways movement of the supported pipes, 1 to 3 U-UB pads should be clicked into the beam section.



Number U-UB pad	Width B [mm]	t [mm]
1	40	5
2	80	5
3	120	5

Technical Data

Material: Polyamide PA 6.0 Area of use: -20°C to +130°C

Туре	Nominal widths	W	Quantity	Part
	[DN]	[kg]	[pack]	number
F 80	15 - 150	0.03	1	112742













Assembly Group BG22 F80

Group: 1102

Application

An Assembly Group for the fastening of pipes without complex requirements and without heat insulation. By adapting the hexagon nuts supplied, both guided supports and fixed points can be created.

Scope of delivery

Each Assembly Group is pre-assembled, packed and labeled. For U-bolts with a size of DN 100 upwards, always use two U Bolt Fastening UB Fs.

Parts list:

Item 1 U Bolt Fastening UB F Item 2 Self Forming Screw FLS F Item 3 U Bolt RUB Item 4 Pad U-UB F 80

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site. When used as a guided support, the nuts located both above and below the UB fastening must be tightened, enabling the pipe to freely move. In the case of fixed points, the permissible forces of the structural connection and bending forces of the bolt must not be exceeded.

Technical Data

Material: Pipe clamp and connecting parts: Bolts and nuts: U-UB Pad:

Steel, HCP Steel, HCP Polyamide PA 6.0

Туре	OD of pipe [mm]	B₁ [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
DN 15	21.3	85	30	0.28	1	110236
DN 20	26.9	85	40	0.32	1	110237
DN 25	33.7	85	48	0.32	1	110238
DN 32	42.4	85	56	0.34	1	110239
DN 40	48.3	85	62	0.34	1	110240
DN 50	60.3	146	76	0.94	1	110241
DN 65	76.1	146	94	0.97	1	110242
DN 80	88.9	146	106	1.00	1	110243
DN 100	114.3	181	136	1.06	1	110244
DN 125	139.7	209	164	1.14	1	110245
DN 150	168.3	237	192	1.23	1	110246





Assembly Group BG52 F80/100

Group: 1102

Application

An Assembly Group for the creation of guided supports for pipes without complex requirements and generally without insulation. As an alternative to U-bolts, this U-clamp is ideal for space-saving, direct assembly on the supporting structure. The slide plate reduces the friction between the pipe and supporting structure (siFramo sections).

A galvanic separation between the pipe and U-clamp and the supporting structure is achieved through the plastic linings and slide plate, meaning that VA pipes can also be secured, for example.

Scope of delivery

Each Assembly Group is pre-assembled, packed and labeled.

Parts list: Item 1 U-Camp RUC I Item 2 Self Forming Screw FLS F

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

Material:Clamp body:Steel, HCPLining and slide plate:Thermoplastic resinsArea of use:-20°C to +90°C (at lining and slide plate)

Туре	Nominal widths [DN]	B [mm]	W [kg]	Quantity [pack]	Part number
27	15	134	0.28	1	114656
33	20	140	0.29	1	114657
40	25	147	0.32	1	114658
48	32	155	0.34	1	114659
55	40	161	0.36	1	114660
67	50	173	0.41	1	114661
83	65	189	0.48	1	114662
95	80	202	0.52	1	114663
121	100	227	0.61	1	114664
152	125	259	0.71	1	114665
181	150	287	0.83	1	114666
232	200	338	0.99	1	114667
286	250	392	1.20	1	114668
336	300	443	1.34	1	114669













Assembly Group BG16 F100-1/2"

Group: 1102

Application

An Assembly Group containing components to make up a permanent pipe connection with the heavy Pipe Clamp Stabil $I-1/_2$ ". The Assembly Group is designed for use with the Beam Section TP F 100. It is connected using the Self Forming Screw FLS F, and the height is adjusted via the Threaded Tube $1/_2$ ".

Scope of delivery

Each Assembly Group is pre-assembled, packed and labeled.

Parts list: Item 1 Pipe Clamp Stabil I- $1/2^{"}$ Assembly Kit MKit F 100 $1/2^{"}$ consists of: Item 2 Threaded Tube GR $1/2^{"}$ x 200 Item 3 Locking Nut NT G $1/2^{"}$ Item 4 Mounting Plate GPL F 100- $1/2^{"}$ Item 5 Self Forming Screw FLS F

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

 $\begin{array}{l} L_{max, \ vertical} = 200 \ mm \\ L_{max, \ horizontal} = 150 \ mm \end{array}$

Material:

Pipe clamp and connecting parts: S Bolts and nuts: S

Steel, HCP Steel, HCP

Туре	Size range [mm]	B₁ [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
DN 15	16 - 22	50	85	0.85	1	113842
DN 20	23 - 27	50	92	0.88	1	113843
DN 25	30 - 34	50	100	0.91	1	113844
DN 32	39 - 44	50	112	0.95	1	113845
DN 40	44 - 49	50	117	0.97	1	113846
DN 50	57 - 61	50	139	1.19	1	113847
DN 65	73 - 77	50	156	1.27	1	113848
DN 80	85 - 89	50	168	1.33	1	113849
DN 100	109 - 116	50	194	1.62	1	113850











Assembly Group BG17 F100-1/2"

Group: 1102

Application

An Assembly Group for use as a guided support with the heavy Pipe Clamp Stabil I-1/2". The Assembly Group is designed for use with the Beam Section TP F 100. It is connected using the Self Forming Screw FLS F, and the height is adjusted via the Threaded Tube 1/2".

Scope of delivery

Each Assembly Group is pre-assembled, packed and labeled.

Parts list: Item 1 Pipe Clamp Stabil I-1/2" Assembly Kit MKit FR F 100 S ¹/₂" / L ¹/₂" consists of: Item 2 Threaded Tube 1/2" x 200 Item 3 Locking Nut NT G 1/2" Item 4 Slide Set GS F 100 1G / Slide Set GS F 100 1G2 Item 5 Self Forming Screw FLS F

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

 $L_{\text{max, vertical}} = 200 \text{ mm}$ L_{max, horizontal} = not recommended

Material:

Туре

DN 15

Pipe clamp and connecting parts: Steel, HCP Bolts and nuts:

.5.		Sleel, F	10P		
Size range [mm]	B₁ [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
16 - 22	102	85	2.00	1	113851
23 - 27	102	92	2.01	1	113852
30 - 34	102	100	2.04	1	113853

DN 20	23 - 27	102	92	2.01	1	113852
DN 25	30 - 34	102	100	2.04	1	113853
DN 32	39 - 44	102	112	2.08	1	113854
DN 40	44 - 49	102	117	2.10	1	113855
DN 50	57 - 61	102	139	2.32	1	113856
DN 65	73 - 77	102	156	3.76	1	113857
DN 80	85 - 89	102	168	3.88	1	113858
DN 100	109 - 116	102	194	4.46	1	113859









Assembly Group BG49 F100-1/2"

Group: 1102

Application

An Assembly Group containing components to make up a permanent pipe connection with the insulated Chilled Water Clamp RB for chiller plants and cool water systems. The Assembly Group is designed for use with the Beam Section TP F 100. It is connected using Self Forming Screw FLS F, and the height is adjusted via the Threaded Tube $1/_2$ ".

Scope of delivery

Each Assembly Group is pre-assembled, packed and labeled.

Parts list:

Item 1 Chilled Water Clamp RB Assembly Kit MKit F 100 $^{1}/_{2}$ " consists of: Item 2 Threaded Tube GR $^{1}/_{2}$ " x 200 Item 3 Locking Nut NT G $^{1}/_{2}$ " Item 4 Mounting Plate GPL F 100- $^{1}/_{2}$ " Item 5 Self Forming Screw FLS F

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

 $L_{max, vertical} = 200 \text{ mm}$ $L_{max, horizontal} = 150 \text{ mm}$

Material:

Assembly parts: Bolts and nuts: Insulating body:

Steel, HCP Steel, HCP PUR foam (250 kg/m³, B2) μ = 1200, λ = 0,045 W/mK (0°C) -50°C to +105°C

Туре	Nominal widths [DN]	B₁ [mm]	B [mm]	t [mm]	W [kg]	Quantity [pack]	Part number
21/30	15	50	81	30	0.77	1	113860
27/30	20	50	87	30	0.77	1	113861
33/30	25	50	93	30	0.78	1	113862
42/30	32	50	102	30	0.79	1	113863
48/30	40	50	108	30	0.79	1	113864
60/30	50	50	120	30	0.88	1	113865
76/30	65	50	136	30	1.00	1	113866
89/30	80	50	149	30	1.05	1	113867
114/40	100	50	195	40	1.63	1	113868









Assembly Group BG50 F100-1/2"

Group: 1102

Application

An Assembly Group for use as a guided support with the insulated Chilled Water Clamp RB for chiller plants and cool water systems. The Assembly Group is designed for use with the Beam Section TP F 100. It is connected using Self Forming Screw FLS F, and the height is adjusted via the Threaded Tube $1/_2$ ".

Scope of delivery

Each Assembly Group is pre-assembled, packed and labeled.

Parts list: Item 1 Chilled Water Clamp RB Assembly Kit MKit FR F 100 S $^{1}/_{2}$ " consists of: Item 2 Threaded Tube GR $^{1}/_{2}$ " x 200 Item 3 Locking Nut NT 1/2" Item 4 Slide Set GS F100 1G Item 5 Self Forming Screw FLS F

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

 $\begin{array}{l} L_{max, \ vertical} = 200 \ mm \\ L_{max, \ horizontal} = not \ recommended \end{array}$

Material:

Assembly parts: Bolts and nuts: Insulating body:

Area of use:

Steel, HCP Steel, HCP PUR foam (250 kg/m³, B2) μ = 1200, λ = 0,045 W/mK (0°C) -50°C to +105°C

Туре	Nominal widths [DN]	B₁ [mm]	B [mm]	t [mm]	W [kg]	Quantity [pack]	Part number
21/30	15	102	81	30	1.90	1	113869
27/30	20	102	87	30	1.90	1	113870
33/30	25	102	93	30	1.91	1	113871
42/30	32	102	102	30	1.92	1	113872
48/30	40	102	108	30	1.92	1	113873
60/30	50	102	120	30	2.01	1	113874
76/30	65	102	136	30	2.13	1	113875
89/30	80	102	149	30	2.18	1	113876
114/40	100	102	195	40	2.76	1	113877





Assembly Group BG54 F100

Group: 1102

Application

An Assembly Group for the supporting of pipes without complex requirements and without heat insulation on siFramo beam sections. This allows free sliding of the pipe in all directions on the Beam Section TP F 100.

Scope of delivery

Each Assembly Group is pre-assembled, packed and labeled. An Assembly Group comprises 3 U-UB pads.

Parts list:

Item 1 Pad U-UB F 100

Installation

According to the anticipated sideways movement of the supported pipes, 1 to 3 U-UB pads should be clicked into the beam section.



Number U-UB pad	Width B [mm]	t [mm]
1	40	5
2	80	5
3	120	5

Technical Data

Material: Polyamide PA 6.0 Area of use: -20°C to +130°C

Туре	Nominal widths	W	Quantity	Part
	[DN]	[kg]	[pack]	number
F 100	15 - 300	0.03	1	113913













Assembly Group BG22 F100

Group: 1102

Application

An Assembly Group for the fastening of pipes without complex requirements and without heat insulation on SiFramo sections. By adapting the hexagon nuts supplied, both guided supports and fixed points can be created.

Scope of delivery

Each Assembly Group is pre-assembled, packed and labeled. For U-bolts with a size of DN 100 upwards, always use two U Bolt Fastening UB Fs.

Parts list:

Item 1 U Bolt Fastening UB F Item 2 Self Forming Screw FLS F Item 3 U Bolt RUB Item 4 Pad U-UB F 100

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site. When used as a guided support, the nuts located both above and below the UB fastening must be tightened, enabling the pipe to freely move.. In the case of permanent pipe connections, the permissible forces of the structural connection and bending forces of the bolt must not be exceeded.

Technical Data

Material: Pipe clamp and connecting parts: Bolts and nuts: U-UB pad:

Steel, HCP Steel, HCP Polyamide PA 6.0

Туре	OD of pipe [mm]	B₁ [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
DN 15	21.3	85	30	0.28	1	113977
DN 20	26.9	85	40	0.32	1	113978
DN 25	33.7	85	48	0.32	1	113979
DN 32	42.4	85	56	0.34	1	113980
DN 40	48.3	85	62	0.34	1	113981
DN 50	60.3	146	76	0.94	1	113982
DN 65	76.1	146	94	0.97	1	113983
DN 80	88.9	146	106	1.00	1	113984
DN 100	114.3	181	136	1.06	1	113985
DN 125	139.7	209	164	1.14	1	113986
DN 150	168.3	237	192	1.23	1	113987
DN 200	219.1	293	248	2.03	1	116919
DN 250	273.0	347	302	2.30	1	116920
DN 300	323.9	397	352	2.94	1	116921







Group: 1102

Application

An Assembly Group containing components to make up a permanent pipe connection with the heavy Pipe Clamp Stabil $I_2^{1/2}$ ". The Assembly Group is designed for use with the Beam System 100 and steel beams up to a flange width of 100 mm. It is connected using the Assembly Set MS 5P, and the height is adjusted via the Threaded Tube 1/2".

Scope of delivery

Each Assembly Group is pre-assembled, packed and labeled.

Pa	rts	list:

Item 1	Pipe Clamp Stabil I-1/2".	
	Assembly Kit MKit T 100 ¹ / ₂ " consists of:	
ltem 2	Threaded Tube GR 1/2" x 200	
Item 3	Locking Nut NT G 1/2"	
Item 4	Mounting Plate GPL Stabil R ¹ /2"-100	
Item 5	Beam Clip SPA 5P AU M12 HCP	
	Hexagon Bolt M12x60 HCP	
	Hexagon Nut M12 HCP	
	Washer HCP	

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

 $L_{max, vertical} = 200 \text{ mm}$ $L_{max, horizontal} = 150 \text{ mm}$

Material:

Pipe clamp and connecting parts: Bolts and nuts:

Steel, HCP Steel, HCP

Туре	Size range [mm]	B₁ [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
DN 15	16 - 22	50	85	1.75	1	112724
DN 20	23 - 27	50	92	1.76	1	112725
DN 25	30 - 34	50	100	1.79	1	112726
DN 32	39 - 44	50	112	1.83	1	112727
DN 40	44 - 49	50	117	1.85	1	112728
DN 50	57 - 61	50	139	2.07	1	112729
DN 65	73 - 77	50	156	2.15	1	112730
DN 80	85 - 89	50	168	2.21	1	112731
DN 100	109 - 116	50	194	2.50	1	112732









Assembly Group BG61 T100-1/2"

Group: 1102

Application

An Assembly Group containing components to make up a permanent pipe connection with the insulated Chilled Water Clamp RB for chiller plants and cool water systems. The Assembly Group is designed for use with the 100 beam system and steel beams up to a flange width of 100 mm. It is connected using the Assembly Set MS 5P, and the height is adjusted via the Threaded Tube ½".

Scope of delivery

Each Assembly Group is pre-assembled, packed and labeled.





Parts list:	
Item 1	Chilled Water Clamp RB
	Assembly Kit MKit F 80 ¹ / ₂ " consists of:
Item 2	Threaded Tube GR ¹ / ₂ " x 200
Item 3	Locking Nut NT G ¹ / ₂ "
Item 4	Mounting Plate GPL Stabil R ¹ /2"-100
Item 5	Beam Clip SPA 5P AU M12 HCP
	Hexagon Bolt M12x60 HCP
	Hexagon Nut M12 HCP
	Washer HCP

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

 $\begin{array}{l} L_{\text{max, vertical}} = 200 \text{ mm} \\ L_{\text{max, horizontal}} = 150 \text{ mm} \end{array}$

Material:

Connecting parts: Bolts and nuts: Insulating body:

Area of use:

s: Steel, HCP Steel, HCP PUR foam (250 kg/m³, B2), μ = 1200 λ = 0,045 W/mK (0°C) -50°C to +105°C

Туре	Nominal widths [DN]	B₁ [mm]	B [mm]	t [mm]	W [kg]	Quantity [pack]	Part number
21/30	15	50	81	30	1.65	1	112733
27/30	20	50	87	30	1.65	1	112734
33/30	25	50	93	30	1.66	1	112735
42/30	32	50	102	30	1.67	1	112736
48/30	40	50	108	30	1.67	1	112737
60/30	50	50	120	30	1.76	1	112738
76/30	65	50	136	30	1.88	1	112739
89/30	80	50	149	30	1.93	1	112740
114/40	100	50	195	40	2.51	1	112741









Assembly Group BG11 MS41-M10

Group: 1102

Application

An Assembly Group containing components to make up a permanent pipe connection with the pipe clamp Stabil D-3G. The Assembly Group is designed for use with the Sikla 41 channel system. The height is adjusted using the Threaded Rod M10. The pipe clamp with sound absorption lining ensures sound absorption in accordance with DIN 4109.

Scope of delivery

Each Assembly Group is pre-assembled, packed and labeled.

Parts list:

Item 1 Pipe Clamp Stabil D-3G with lining Assembly Kit MKit MS41 M10 consists of: Item 2 Threaded Rod GST M10 x 200 Item 3 Hexagon Nut M10 Item 4 Holding Bracket HK 41/10 Item 5 Threaded Plate NT HZ41-M10

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

 $L_{max, vertical} = 150 mm$ $L_{max, horizontal} = not recommended$

Material:

Pipe clamp and connecting parts: Bolts and nuts: Sound absorption lining: Steel, HCP Steel, HCP SBR/EPDM, black, captively bonded in

Туре	Size range [mm]	B₁ [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
DN 15	19 - 23	35	68	0.27	1	110144
DN 20	24 - 28	35	75	0.30	1	110145
DN 25	33 - 37	35	81	0.32	1	110146
DN 32	40 - 45	35	93	0.34	1	110147
DN 40	47 - 52	35	104	0.36	1	110148
DN 50	60 - 65	35	117	0.38	1	110149
DN 65	73 - 78	35	150	0.48	1	110150
DN 80	88 - 93	35	164	0.53	1	110151
DN 100	108 - 115	35	187	0.59	1	110152











Assembly Group BG13 MS41-M10

Group: 1102

Application

An Assembly Group for use as a guided support with the pipe clamp Stabil D-3G. The Assembly Group is designed for use with the Sikla 41 channel system. The height is adjusted using the Threaded Rod M10. The pipe clamp with sound absorption lining ensures sound absorption in accordance with DIN 4109.

Scope of delivery

Each Assembly Group is pre-assembled, packed and labeled.

Parts list: Item 1 Pipe Clamp Stabil D-3G with lining Assembly Kit MKit MS41 S M10 / L M10 consists of: Item 2 Threaded Rod GST M10 x 200 Item 3 Hexagon Nut NT M10 Item 4 Slide Set GS 2G-PL / Slide Set GS 2G2-PL Item 5 T-Head Bolt TBO HZ41 M10 x 20

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

 $\begin{array}{l} L_{max, \ vertical} = 150 \ mm \\ L_{max, \ horizontal} = not \ recommended \end{array}$

Material:

Pipe clamp and connecting parts: Bolts and nuts: Sound absorption lining:

Steel, HCP Steel, HCP SBR/EPDM, black, captively bonded in

Туре	Size range [mm]	B₁ [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
DN 15	19 - 23	140	68	0.90	1	110180
DN 20	24 - 28	140	75	0.93	1	110182
DN 25	33 - 37	140	81	0.95	1	110183
DN 32	40 - 45	140	93	0.97	1	110184
DN 40	47 - 52	140	104	0.99	1	110185
DN 50	60 - 65	140	117	1.01	1	110186
DN 65	73 - 78	140	150	1.62	1	110187
DN 80	88 - 93	140	164	1.72	1	110188
DN 100	108 - 115	140	187	1.84	1	110189







Assembly Group BG11 MS41-1/2"

Group: 1102

Application

An Assembly Group containing components to make up a permanent pipe connection with the heavy Pipe Clamp Stabil $I_2^{-1/2}$. The Assembly Group is designed for use with the Sikla 41 channel system. The height is adjusted via the Threaded Tube $1/2^{\circ}$.

Scope of delivery

Each Assembly Group is pre-assembled, packed and labeled.

Parts list: Item 1 Pipe Clamp Stabil I- $\frac{1}{2}$ " Assembly Kit MKit MS 41 $\frac{1}{2}$ " consists of: Item 2 Threaded Tube GR 2 m $\frac{1}{2}$ " x 200 Item 3 Locking Nut NT G $\frac{1}{2}$ " Item 4 Adapter AD IG/IG $\frac{1}{2}$ "/M16 Item 5 Holding Bracket HK 41/16 Item 6 T-Head Bolt TBO HZ41 M16 x 25

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

 $\begin{array}{l} L_{max, \ vertical} = 200 \ mm \\ L_{max, \ horizontal} = 150 \ mm \end{array}$

Material:

Pipe clamp and connecting parts: Bolts and nuts: Steel, HCP Steel, HCP

Туре	Size range [mm]	B₁ [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
DN 15	16 - 22	35	85	0.92	1	110153
DN 20	23 - 27	35	92	0.93	1	110154
DN 25	30 - 34	35	100	0.96	1	110155
DN 32	39 - 44	35	112	1.04	1	110156
DN 40	44 - 49	35	117	1.02	1	110157
DN 50	57 - 61	35	139	1.24	1	110158
DN 65	73 - 77	35	156	1.32	1	110159
DN 80	85 - 89	35	168	1.38	1	110160
DN 100	109 - 116	35	194	1.67	1	110161











Assembly Group BG13 MS41-¹/₂"

Group: 1102

Application

An Assembly Group for use as a guided support with the heavy Pipe Clamp Stabil $1-1/2^{"}$. The Assembly Group is designed for use with the Sikla 41 channel system. The height is adjusted via the Threaded Tube $1/2^{"}$.

Scope of delivery

Each Assembly Group is pre-assembled, packed and labeled.

Parts list: Item 1 Pipe Clamp Stabil I- $1/2^{"}$ Assembly Kit MKit FR MS 41 S $1/2^{"}$ consists of: Item 2 Threaded Tube GR $1/2^{"}$ x 200 Item 3 Locking Nut NT G $1/2^{"}$ Item 4 Adapter AD IG/IG $1/2^{"}$ / $1/2^{"}$ s Item 5 Slide Set GS H3G-PL / Slide Set GS H3G2-PL Item 6 T-Head Bolt TBO HZ41 M10 x 20

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

 $\begin{array}{l} L_{\text{max, vertical}} = 200 \ mm \\ L_{\text{max, horizontal}} = not \ recommended \end{array}$

Material:

Pipe clamp and connecting parts: Steel, HCP Bolts and nuts: Steel, HCP

			,	-		
Туре	Size range [mm]	B₁ [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
DN 15	16 - 22	190	85	2.17	1	110191
DN 20	23 - 27	190	92	2.18	1	110192
DN 25	30 - 34	190	100	2.21	1	110193
DN 32	39 - 44	190	112	2.29	1	110194
DN 40	44 - 49	190	117	2.27	1	110195
DN 50	57 - 61	190	139	2.49	1	110196
DN 65	73 - 77	190	156	3.97	1	110197
DN 80	85 - 89	190	168	4.09	1	110198
DN 100	109 - 116	190	194	4.67	1	110199







Application

An Assembly Group containing components to make up a permanent pipe connection with the insulated Chilled Water Clamp RB for chiller plants and cool water systems. The Assembly Group is designed for use with the Sikla 41 channel system. The height is adjusted via the Threaded Tube 1/2".

Scope of delivery

Each Assembly Group is pre-assembled, packed and labeled.

Parts list: Item 1 Chilled Water Clamp RB Assembly Kit MKit MS41 1/2" consists of: Item 2 Threaded Tube 1/2" x 200 Item 3 NT ¹/₂" locking nut Item 4 Adapter AD IG/IG 1/2"/M16 Item 5 Holding Bracket HK 41/16 Item 6 T-Head Bolt TBO HZ41 M16 x 25

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

 $L_{\text{max, vertical}} = 200 \text{ mm}$ L_{max. horizontal} = not recommended

100

Material:

Connecting parts: Bolts and nuts: Insulating body:

Steel, HCP Steel, HCP PUR foam (250 kg/m³ , B2), μ = 1200 $\lambda = 0.045 \text{ W/mK} (0^{\circ}\text{C})$ -50°C to +105°C

Area of use.

114/40

Area or us	e50 C	10 + 10	50				
Туре	Nominal widths [DN]	B₁ [mm]	B [mm]	t [mm]	W [kg]	Quantity [pack]	Part number
21/30	15	35	81	30	1.82	1	113904
27/30	20	35	87	30	1.82	1	113905
33/30	25	35	93	30	1.83	1	113906
42/30	32	35	102	30	1.84	1	113907
48/30	40	35	108	30	1.84	1	113908
60/30	50	35	120	30	1.93	1	113909
76/30	65	35	136	30	1.05	1	113910
89/30	80	35	149	30	1.10	1	113911

195

40

1.68

35





113912







Group: 1102

Application

An Assembly Group for use as a guided support with the insulated Chilled Water Clamp RB for chiller plants and cool water systems. The Assembly Group is designed for use with the Sikla 41 channel system. The height is adjusted via the Threaded Tube $\frac{1}{2}$ ".

Scope of delivery

Each Assembly Group is pre-assembled, packed and labeled.

Parts list: Item 1 Chilled Water Clamp RB Assembly Kit MKit FR MS41 S $1/_2$ " consists of: Item 2 Threaded Tube GR $1/_2$ " x 200 Item 3 Locking Nut NT G $1/_2$ " Item 4 Adapter AD IG/IG $1/_2$ "/ $1/_2$ " Item 5 Slide Set H3G-PL Item 6 T-Head Bolt TBO HZ41 M10 x 20

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

 $L_{max, vertical} = 200 \text{ mm}$ $L_{max, horizontal} = not recommended$

Material:

Connecting parts: Bolts and nuts: Insulating body:

Steel, HCP Steel, HCP PUR foam (250 kg/m³, B2), μ = 1200 λ = 0,045 W/mK (0°C) -50°C to +105°C

Area of use:

Туре	Nominal widths [DN]	B₁ [mm]	B [mm]	t [mm]	W [kg]	Quantity [pack]	Part number
21/30	15	190	81	30	2.07	1	110268
27/30	20	190	87	30	2.07	1	110269
33/30	25	190	93	30	2.08	1	110270
42/30	32	190	102	30	2.09	1	110271
48/30	40	190	108	30	2.09	1	110272
60/30	50	190	120	30	2.18	1	110273
76/30	65	190	136	30	2.30	1	110274
89/30	80	190	149	30	2.35	1	110275
114/40	100	190	195	40	2.93	1	110276









Assembly Group BG57 MS41

Group: 1102

Application

An Assembly Group for the creation of guided supports for pipes without complex requirements and without heat insulation. As an alternative to U-bolts, this U-clamp is ideal for space-saving, direct assembly on the supporting structure. The slide plate reduces the friction between the pipe and supporting structure. A galvanic separation between the pipe and U-clamp and the supporting structure is achieved through the captive plastic linings and slide plate, meaning that VA pipes can also be secured, for example.

Scope of delivery

Each Assembly Group is pre-assembled, packed and labeled.

Parts list:

Item 1 U-Camp RUC I Assembly Kit MKit MS RUC I consists of: Item 2 Threaded Plate NT CC 41-M10 Item 3 U Washer US 10/125 Item 4 Hexagon Bolt SKT M10 x 25

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

Material:	
Clamp body:	Steel, HCP
Lining and slide plate:	Thermoplastic resins
Area of use:	-20°C to +90°C (at lining and slide plate)



Туре	Nominal widths [DN]	B [mm]	W [kg]	Quantity [pack]	Part number
27	15	134	0.34	1	114670
33	20	140	0.35	1	114671
40	25	147	0.38	1	114672
48	32	155	0.40	1	114673
55	40	161	0.42	1	114674
67	50	173	0.47	1	114675
83	65	189	0.54	1	114676
95	80	202	0.58	1	114677
121	100	227	0.67	1	114678







U Bolt RUB 3570 A HCP

8

ø

Page 10-7

8

8

Pipe Clamp Stabil I-1/2" ss







































Pipe Clamp Stabil I-1/2" HCP Group: A022

Application

Heavy pipe clamp for industrial application.

Scope of delivery

Two-piece pipe clamp with all around welded 1/2" nut with clamping bolts and nuts.

Installation

Suitable for single-point fixing directly with 1/2" threaded tube or connected by respective adapters up to 1" threaded tube.

Technical Data

Material:	
Clamp:	Steel, HCP
Bolts:	Steel, class 8.8
Nuts:	Steel, class 8

Туре	Material b x s [mm]	Clamping screws	B [mm]	Max. adm. load (tension) [kN]
22	30 x 5	M10 x 35	86	4.7
27	30 x 5	M10 x 35	93	4.7
34	30 x 5	M10 x 35	102	4.7
44	30 x 5	M10 x 35	114	4.7
49	30 x 5	M10 x 35	119	4.7
61	40 x 5	M12 x 40	136	8
77	40 x 5	M12 x 40	152	8
89	40 x 5	M12 x 40	165	8
115	50 x 5	M12 x 40	192	11

Туре	For pipe [NB]	W [kg]	Quantity [pack]	Part number
22	15	0.28	25	188147
27	20	0.31	25	188156
34	25	0.32	25	188165
44	32	0.36	25	188174
49	40	0.38	25	188183
61	50	0.60	25	188192
77	65	0.68	25	188201
89	80	0.74	25	188210
115	100	1.03	10	188219







Pipe Clamp Stabil I-1/2" ss Group: 1719

Application

Heavy pipe clamp for industrial application.

Scope of delivery

Two-piece pipe clamp with all around welded 1/2" nut with clamping bolts and nuts.

Installation

Suitable for single-point fixing directly with 1/2" threaded tube or connected by respective adapters up to 1" threaded tube.

Technical Data

Material: Stainless steel 1.4404



Туре	Material b x s [mm]	Clamping bolts	B [mm]	Max. perm. working load (tension) [kN]
22	30 x 5	M10 x 35	86	4.7
27	30 x 5	M10 x 35	93	4.7
34	30 x 5	M10 x 35	102	4.7
44	30 x 5	M10 x 35	114	4.7
49	30 x 5	M10 x 35	119	4.7
61	40 x 5	M12 x 40	136	8
77	40 x 5	M12 x 40	152	8
89	40 x 5	M12 x 40	165	8
115	50 x 5	M12 x 40	192	11

Туре	For pipe [NB]	W [kg]	Quantity [pack]	Part number
22	15	0.30	25	188228
27	20	0.32	25	188237
34	25	0.35	25	188246
44	32	0.40	25	188255
49	40	0.40	25	188264
61	50	0.62	25	188273
77	65	0.67	25	188282
89	80	0.75	25	188291
115	100	1.05	10	188300





Chilled Water Clamp RB

Group: 1253

Application

Insulated pipe clamp made of PUR-foam for chiller plants and cool water systems.

Scope of delivery

Two-piece polyurethane-integral foam with steel holders with inside connection ears (laid in foam).

Installation

Screw in upper part and position the pipe. Tighten closely lower part with displaced caoutchouc part to upper part (PUR part to caoutchouc, caoutchouc part to PUR).

Advantage: Sealant is not longer required!

Technical Data

Insulation core: PL Pressure resistance: Fc Diffusion resistance: μ

Temperature range: Einfügungsdämmung: PUR-foam (250 kg/m³, B2) For static load: 4,3 N/mm² at 23° C μ = 1200 λ = 0.045 W/mK at 0° C From - 50° C up to + 105° C bis zu 16 dB(A)



Туре	Max. load
15/30	0.27
17/30	0.27
18/30	0.28
21/30	0.33
22/30	0.34
27/30	0.42
28/30	0.44
33/30	0.53
35/30	0.55
42/30	0.66
48/30	0.75
54/30	0.87
57/30	0.89
60/30	1.20
76/30	1.48
89/30	1.73
114/40	2.67
133/40	3.11
139/40	3.27
159/40	3.72
168/40	4.40
204/60	5.20
219/60	5.26

* Delivery time on request



Туре	Pipe D _a [mm]	Insulation thickness [mm]	Clamp width [mm]	Thread connection	W [kg]	Quantity [pack]	Part number
15/30 *	15	36	40	¹ / ₂ "/M10/M8	0.19	10	117484
17/30 *	17	35	40	¹ / ₂ "/M10/M8	0.19	10	193310
18/30 *	18	35	40	¹ / ₂ "/M10/M8	0.19	10	193327
21/30	21	33	40	¹ / ₂ "/M10/M8	0.19	10	168528
22/30	22	33	40	¹ / ₂ "/M10/M8	0.19	10	193334
27/30	27	31	40	¹ / ₂ "/M10/M8	0.19	10	168537
28/30	28	30	40	¹ / ₂ "/M10/M8	0.19	10	193341
33/30	33	32	40	¹ / ₂ "/M10/M8	0.20	10	168546
35/30	35	31	40	¹ / ₂ "/M10/M8	0.21	10	193358
42/30	42	31	40	¹ / ₂ "/M10/M8	0.22	10	168555
48/30	48	30	40	¹ / ₂ "/M10/M8	0.22	10	168564
54/30	54	32	40	¹ / ₂ "/M10/M8	0.24	10	193365
57/30 *	57	30	40	¹ / ₂ "/M10/M8	0.25	10	193372
60/30	60	30	50	¹ / ₂ "/M10/M8	0.27	10	168582
76/30	76	30	50	¹ / ₂ "/M10/M8	0.41	10	168607
89/30	89	31	50	¹ / ₂ "/M10/M8	0.46	5	168616
114/40	114	41	60	¹ / ₂ "/M10/M8	1.03	5	193419
133/40	133	43	60	¹ / ₂ "/M10/M8	1.15	5	193426
139/40	139	40	60	¹ / ₂ "/M10/M8	1.15	5	193433
159/40	159	40	60	¹ / ₂ "/M12	1.28	4	193440
168/40	168	40	60	¹ / ₂ "/M12	1.32	4	193457
204/60	204	68	100	³ / ₄ "/M16	3.30	1	193464
219/60	219	61	100	³ / ₄ "/M16	3.23	1	193471





U Bolt RUB 3570 A HCP

Group: 1810

Application

For pipeline systems in industrial and residential buildings and Sprinkler installations according to VdS and FM standards. For horizontal and vertical pipelines, the U-Bolts are applied as Fixed Points and as Guiding Supports.

Scope of delivery

Four hexagon nuts included in loose form.

Installation

When used as Guided Support, nuts have to be arranged and fixed on both sides, at the top and at the bottom of the profile. Thereby the pipe should remain flexible. When used as Fixed Point the admissible loads of the connecting elements shouldn't exceed the bending loads of the U-bolt.

Technical Data

Material: Steel, HCP

Туре	NB	B [mm]	L₁ [mm]	L₂ [mm]	Thread	W [kg]	Quantity [pack]	Part number
26.9	³ / ₄ "	40	60	40	M 10	0.12	50	162179
33.7	1"	48	66	40	M 10	0.12	50	162188
42.4	1 ¹ / ₄ "	56	76	50	M 10	0.14	50	162197
48.3	1 ¹ / ₂ "	62	82	50	M 10	0.14	50	162203
60.3	2"	76	97	50	M 12	0.23	50	162212
76.1	2 ¹ / ₂ "	94	113	50	M 12	0.26	50	162221
88.9	3"	106	126	50	M 12	0.29	50	162230
114.3	4"	136	155	60	M 16	0.63	25	162249
139.7	5"	164	175	60	M 16	0.71	25	162258
168.3	6"	192	201	60	M 16	0.80	10	162267
193.7		218	233	60	M 16	0.90	10	162276
219.1	8"	248	263	70	M 20	1.61	10	162285
274.0	10"	302	314	70	M 20	1.88	10	162294
323.9	12"	352	365	70	M 20	2.52	1	162300







U Clamp RUC I

Group: A023

Application

Guided Support for the installation of siFramo Beam Sections, Channels 41 and steel girders (H-, I- and Double-U) to support overlying pipelines. This U Clamp can be used as an alternative to U Bolts for a direct installation to the substructure. The sliding plate reduces friction between pipe and substructure. The plastic layer and the sliding plate ensure a galvanic isolation between pipe and U Clamp as well as substructure, so it's possible to fasten e.g. stainless steel pipes.

Scope of delivery

U Clamp RUC I with pre-assembled plastic layer. Sliding plate enclosed.

Installation

Depending on the existing substructure the following options are possible:

- a) On top of siFramo Beam Sections with Self Forming Screws FLS
- b) On top of Channels 41 with bolts M10 and suitable Channel Nut
- c) On top of steel girders (H-, I- and Double-U) with bolts M10

Approvals / Conformity

Туре	perm. load Fy [kN]	perm. load Fz [kN]
27 - 121	0.6	2.3
152 - 336	0.2	0.8

The perm. loads have been determined by load tests following DIN EN 13480-3 annex J.

For the installation on top of steel girders and Channels 41 the load capacities of these substructures (and connection parts) have to be verified.

	Materi	al:							
Clamp body:					eel, HO	CP			
Layer and sliding plate: Thermoplastic resins									
Temperature range: -20°C to +90°C (at layer and sliding plate))	
	Туре	NB	Material	В	L	Dimensions of	W	Quantity	Part
			[mm]	[mm]	[mm]	elongated hole [mm]	[kg]	[pack]	number
	27	15	40 x 4	134	91	11 x 20	0.22	25	113393
	33	20	40 x 4	140	97	11 x 20	0.23	25	113394
	40	25	40 x 4	147	104	11 x 20	0.26	25	113395
	48	32	40 x 4	155	112	11 x 20	0.29	25	113396
	55	40	40 x 4	161	118	11 x 20	0.30	25	113397
	67	50	40 x 4	173	130	11 x 20	0.35	25	113398
	83	65	40 x 4	189	146	11 x 20	0.42	25	113399
	95	80	40 x 4	202	159	11 x 20	0.46	25	113400
	121	100	40 x 4	227	184	11 x 20	0.55	25	113401
	152	125	40 x 4	259	216	11 x 20	0.65	10	113402
	181	150	40 x 4	287	244	11 x 20	0.77	10	113403
	232	200	40 x 4	338	295	11 x 20	0.93	10	113404
	286	250	40 x 4	392	349	11 x 20	1.14	5	113405
	336	300	40 x 4	443	400	11 x 20	1.35	1	113406











Slide Set GS F 80 2G

Group: A436

Application

Pipe guide for twin-clamp connection designed to clutch the Beam Section F80 fixed by 2 x Self Forming Screws FLS.

Installation

Pipe clamp connection points "2G" receive M10 studs or M16 by adapter connection.

Technical Data





Туре	Max. lever arm [mm]	Max. glide path s [mm]
GS F 80 2G	150	100
GS F 80 2G2	150	135

Perm. load elevated position: 1,2 kN Perm. load suspended position: 0,6 kN Permanent temperature range: 130° C Static friction coefficient µ0: 0,20 Sliding friction coefficient µ: 0,15

Material: Slide element: Slide bar: Retaining plate:	Steel, I Polyan Steel, I	HCP nide (glass-fibre r HCP	einforced)
Туре	W [ka]	Quantity [pack]	Part number
GS F 80 2G	0.6	10	196700
GS F 80 2G2	0.7	10	196717
GS F 100 2G2	0.8	10	113093









Slide Set GS F 80 1G

Group: A436

Application

Slide Set in solid construction for installation on top of siFramo Beam Sections TP F. $1/_2$ " thread connection allows direct connection to pipe clamp Stabil I $-1/_2$ " by means of threaded tube without further adaption parts.

Installation

Installation on top of Beam Section TP F with two Self Forming Screws FLS F.

Technical Data

Туре	a [mm]	b [mm]	c [mm]	perm. load support [kN]	perm. load suspended [kN]
GS F 80 1G	-	102	80.5	17.0	5.4
GS F 80 1G2	210	102	80.5	12.0	8.4

The perm. loads have been determined by load tests following DIN EN 13480-3 annex J.

The pipe clamp and the possibly used $^{1\!/_{2}"}$ threaded tube have to be verified seperately.





Тур	max. Hebelarm	max. Gleitweg s
GS F 80 1G	200	100
GS F 80 1G2	300	135

Temperature range (permanent exposure):	1
Static friction coefficient µ0:	С
Sliding friction coefficient µ:	С

130°C 0,20 0,15

Material: Metal components: Slide bar:

Steel, HCP			
Polyamide,	glass fib	ore reinfor	ced

Туре	W [kg]	Quantity [pack]	Part number
GS F 80 1G	1.3	10	113885
GS F 80 1G2	1.7	10	113886
GS F 100 1G	1.4	10	113091
GS F 100 1G2	1.8	10	113092









Mounting Plate GPL F 80

Group: A838

Application

Interface component to connect threaded bar and threaded tube to Beam Section F80/F100.

Installation

Requires 2 x Self Forming Screw FLS per Mounting Plate GPL.

Technical Data

Туре	Tension [kN]	Lateral force [kN]	Perm. bending moment [Nm]
GPL F 80-1/2"	8,0	13,0	53
GPL F 80-M10	8,0	13,0	15
GPL F 80-M12	8,0	13,0	26
GPL F 80-M16	8,0	13,0	62
GPL F 100-1/2"	8,0	13,0	53
GPL F 100-M10	8,0	13,0	15
GPL F 100-M12	8,0	13,0	26
GPL F 100-M16	8,0	13,0	62



Dimensions of base plate GPL F 80: Dimensions of base plate GPL F 100: Material:

Туре	W	Quantity	Part
	[kg]	[pack]	number
GPL F 80-1/2"	0.1	50	192900
GPL F 80-M10	0.1	50	113004
GPL F 80-M12	0.1	50	112911
GPL F 80-M16	0.1	50	195833
GPL F 100-1/2"	0.2	50	113089
GPL F 100-M10	0.2	50	113338
GPL F 100-M12	0.2	50	113646
GPL F 100-M16	0.2	50	113090




Mounting Plate GPL HCP Group: 1827

Application

Element for fixation to wall, ceiling and floor for installations in M&E services.

Technical Data

Permissible anchor values may restrict the application.

Version / Type	Tension [kN]	Perm. bending moment* [Nm]	Max. lever arm [mm]	Welding method
Stabil M10	4.0	17.2	200	R
Stabil M12	4.0	29.6	300	R
Stabil M16	8.5	70.3	300	М
Stabil R 1/2"	8.5	95.0	350	М

R = resistance welding

M = fusion welding

Limitation due to the Mounting Plate or the load capacity of the Threaded Stud or the Threaded Tube. $\sigma_{perm} \le 160 \text{ N/mm}^2 \text{ f}_{perm} < 5 \text{ mm}$

Steel, HCP Material:

Туре	Dimension L x W x Th [mm]	Elongated hole d x a [mm]	Centre distance I [mm]	W [kg]	Quantity [pack]	Part number
Stabil M10	120 x 40 x 4	11 x 25	80	0.15	50	112684
Stabil M12	120 x 40 x 4	11 x 25	80	0.16	50	112685
Stabil M16	120 x 40 x 5	11 x 25	80	0.20	50	112686
Stabil 1/2"	120 x 40 x 5	11 x 25	80	0.21	50	112683







Mounting Plate GPL Stabil HCP

Group: 1827

Application

Attachment component to connect Beam Bracket Profil 100 or Channel MS.

Installation

Requires assembly to Beam Bracket Profil with Set MS 5P or two T-Head Bolts TBO HZ 41 M12 at Channel MS.

Technical Data

LxB	s	1	Perforation	Tension	Lateral force	Perm. bending moment
[mm]	[mm]	[mm]	[mm]	[kN]	[kN]	[Nm]
200 x 40	8	112	13	18,0	13,0	29,6

Туре	W	Quantity	Part
	[kg]	[pack]	number
GPL Stabil R 1/2"-100	0.52	50	183791











U Bolt Fastening UB F

Group: A430

Application

U Bolt Fastening to connect standard U-Bolts required for pipework to the supporting Beam Sections, Cantilever Brackets and Beam Brackets F80 or F100.

Scope of delivery For U-bolts \geq 4" always 2 U-bolt fastenings F 80 are needed.

Technical Data

Туре	d	bxl	В
	[mm]	[mm]	[mm]
UB F ¹ / ₂ " - 1 ¹ / ₂ "	-	65 x 11	85
UB F 2" - 3"	-	20 x 13	165
UB F 4" - 6"	17	-	45
UB F 8" - 12"	22	-	45
UB F 378 - 530	26	-	45

Material: Steel, HCP or hot-dipped galvanised

Туре	W [kg]	Quantity [pack]	Part number
UB F ¹ / ₂ " - 1 ¹ / ₂ "	0.13	25	192931
UB F 2" - 3"	0.44	10	196212
UB F 4" - 6"	0.18	20	113124
UB F 8" - 12"	0.18	20	113125









Pad U-UB F 80

Group: A430

Application

Insulation and surface protection pad to be used on demand when a pipes expansion and contraction occurs directly on the TP F section.

Technical Data

Material: Range of temperature: Polyamide PA 6.0 -20° up to +130° C

Туре	W [kg]	Quantity [pack]	Part number
U-UB F 80	0.01	50	198797
U-UB F 100	0.01	50	113094







Threaded Tube GR HCP

Group: 1813

Application

- To be used as
- a direct connection element between Mounting Plate and Pipe Clamp or
- a suport rod in combination with Socket Angle or Universal Joints as angular support.

Scope of delivery Standard length = 2 m; shorter pre-cut parts available on request.

Technical Data

Thread according to DIN EN ISO 228

Туре	Length	Weight [kg/m]	Qty. [m]	Part number
G ¹ / ₂ "	2 m	1.02	2	110717





Threaded Rod GST HCP

Group: 1817

Technical Data

Material: Steel Class 4.8, HCP

Туре	Length	Weight [kg/m]	Qty. [m]	Part number
M10	1 m	0.49	25	114842
M10	2 m	0.49	50	114112
M10	3 m	0.49	30	116569
M12	1 m	0.70	25	114843
M12	2 m	0.70	20	114113
M12	3 m	0.70	30	116570
M16	1 m	1.30	10	114844
M16	2 m	1.30	20	116572
M16	3 m	1.30	15	116571





Threaded Stud GST HCP

Group: 1816

Technical Data

Material: Steel Class 4.8, HCP

Туре	Length [mm]	W [kg]	Quantity [pack]	Part number
M10/40	40	0.02	100	162407
M10/70	70	0.03	100	162416
M10/110	110	0.05	100	162425
M12/70	70	0.05	100	162443
M12/110	110	0.07	100	162452
M12/200	200	0.14	100	162461
M12/250	250	0.18	100	180686
M12/300	300	0.20	100	180695
M12/400	400	0.27	100	180713





Locking Nut NT G HCP Group: 1813

Application

Suitable for Sikla Threaded Tubes and terminal nuts (e.g. with Slide Sets), especially to lock a nut.

Technical Data

Туре	W	Quantity	Part
	[kg]	[pack]	number
G ¹ / ₂ "	0.04	25	110755





Hexagon Nut NT HCP Group: 1871

Technical Data

Steel, Quality class 8, HCP Material:

Туре	W [kg]	Quantity [pack]	Part number
M10	0.01	100	162391
M12	0.01	100	162382
M16	0.03	100	163019





Beam Connection LKA



















Beam System Eye-Plate HP 80/99

Group: A299

Application

Connecting component for the direct attachment of rod hanger assemblies to beam sections with a flange width 80-99mm. The pre-welded Eye-Plate serves as a basic element for the connection of the Rod Hanger Load Chain Assembly LKV in sizes M10 up to M16 rod and Pipe Clamps type Stabil Form C LK.

Installation

The Beam System Eye-Plate HP 80/99 is clamped to the supporting steel beam section by means of Assembly Set MS 5P M12 S2. The Eye-Plate can also be fastened directly to concrete by means of 2no. M12 anchors.

Type A: Load Chain runs crosswise to the beam Type B: Load Chain runs longitudinally to the beam

Technical Data

Туре	max. perm. tensile load [kN]
M10	11.2
M12	12.1
M16	12.5

The implementation and construction requirements of the components, their design as well as their verifications and load tests were carried out following the standards VGB R 510 L part I, KTA 3205.3 and DIN EN 13480-3.

L	В	S
[mm]	[mm]	[mm]
200	60	12

Material: Steel, HCP

Hinweis: Delivery time on request

Туре	W [kg]	Quantity [pack]	Part number
HP 80/99 - A M10	1.2	10	113029
HP 80/99 - A M12	1.3	10	113030
HP 80/99 - A M16	1.5	10	113031
HP 80/99 - B M10	1.2	10	113026
HP 80/99 - B M12	1.3	10	113027
HP 80/99 - B M16	1.5	10	113028



Type A with load chain







Beam Connection LKA

Group: A299

Application

Connecting assembly for the direct attachment of rod hanger assemblies to beam sections with a flange width 100-310mm. The pre-welded Eye-Plate which is fastened to the siFramo80/30 section serves as a basic element for the connection of the Rod Hanger Load Chain Assembly LKV in sizes M10 up to M16 rod and Pipe Clamps type Stabil Form C LK.

Scope of delivery

One assembly set consists of:

1 Beam Section siFramo 80/30 (see length variants in table below) with prewelded siFramo Eye-Plate HP F 80 2 U-Holders SB F 80/30-40

Installation

Connect the Beam Section siFramo 80/30 length with pre-welded siFramo Eye-Plate HP F 80 to the underside of the existing steel beam by means of the U-Holders SB F 80/30-40. Tightening torque for the U-Holder clamps : 40 Nm Type A: Load Chain runs crosswise to the beam Type B: Load Chain runs longitudinally to the beam

Technical Data

Max. perm. tensile load according beam width:

Туре	100 - 199 mm	200 - 310 mm
M10	10.9 kN	10.8 kN
M12	11.5 kN	11.3 kN
M16	12.1 kN	11.9 kN

The implementation and construction requirements of the components, their design as well as their verifications and load tests were carried out following the standards VGB R 510 L part I, KTA 3205.3 and DIN EN 13480-3.

Beam width	L	В	н
[mm]	[mm]	[mm]	[mm]
100 - 160	300	80	30
161 - 310	440	80	30

Material: Steel, HCP

Туре	W	Quantity	Part
	[Kg]	[pack]	number
LKA-A 100/160 M10	5.0	2	115833
LKA-A 100/160 M12	5.0	2	115834
LKA-A 100/160 M16	5.0	2	115835
LKA-A 161/300 M10	5.6	2	115836
LKA-A 161/300 M12	5.6	2	115837
LKA-A 161/300 M16	5.6	2	115838
LKA-B 100/160 M10	5.0	2	115826
LKA-B 100/160 M12	5.0	2	115827
LKA-B 100/160 M16	5.0	2	115828
LKA-B 161/300 M10	5.6	2	115829
LKA-B 161/300 M12	5.6	2	115831
LKA-B 161/300 M16	5.6	2	115832







07/2023 IuA

Rod Hangers





B

sikla

S

Weld-on Eye-Plate HPA

Group: A299

Application

Weld-on Eye Plate to primary steel beam sections and steel plates. The Weldon Eye-Plate serves as a basic element for the connection of the Rod Hanger Load Chain Assembly LKV in sizes M10 up to M16 rod and Pipe Clamps type Stabil Form C LK. It may also be welded directly to the Welding Plates type SPL if required.

Installation

Align the Weld-on Eye Plate to the primary steel section and weld in place. The weld-on eye plate can be welded directly without prior treatment due to a weldable corrosion-resistant coating (no zinc impurity to weld). Recommended fillet weld 4mm thick (throat thickness = 4mm)

Technical Data

Туре	max. perm. tensile load [kN]
M10	11.2
M12	12.1
M16	12.5

The implementation and construction requirements of the components, their design as well as their verifications and load tests were carried out following the standards VGB R 510 L part I, KTA 3205.3 and DIN EN 13480-3.

Туре	L	В	S	D
	[mm]	[mm]	[mm]	[mm]
M10	65	45	8	11
M12	65	45	8	13
M16	65	45	8	17

Туре	W	Quantity	Part
	[kg]	[pack]	number
HPA M10-2	0.2	10	113017
HPA M12-2	0.2	10	113018
HPA M16-2	0.2	10	113019









siFramo Eye-Plate HP F 80

Group: A299

Application

Connecting component for the direct attachment of rod hanger assemblies to the siFramo 80 system.

The pre-welded Eye-Plate serves as a basic element for the connection of the Rod Hanger Load Chain Assembly LKV in sizes M10 up to M16 rod and Pipe Clamps type Stabil Form C LK.

Installation

The siFramo Eye-Plate HP F 80 is fastened to the supporting siFramo 80 section by means of 4no. FLS F screws. The siFramo Eye-Plate can also be fastened directly to concrete by means of 2no. M10 anchors.

Type A: Load Chain runs crosswise to the beam Type B: Load Chain runs longitudinally to the beam

Technical Data

Туре	max. perm. tensile load [kN]
M10	11.2
M12	12.1
M16	12.5

The implementation and construction requirements of the components, their design as well as their verifications and load tests were carried out following the standards VGB R 510 L part I, KTA 3205.3 and DIN EN 13480-3.

L	В	S
[mm]	[mm]	[mm]
110	80	8

Туре	W [kg]	Quantity [pack]	Part number
HP F 80 - A M10	0.6	10	113023
HP F 80 - A M12	0.6	10	113024
HP F 80 - A M16	0.6	10	113025
HP F 80 - B M10	0.6	10	113020
HP F 80 - B M12	0.6	10	113021
HP F 80 - B M16	0.6	10	113022







S

Type A







Application

Connecting component for the direct attachment of rod hanger assemblies to the siFramo 100 system.

The pre-welded Eye-Plate serves as a basic element for the connection of the Rod Hanger Load Chain Assembly LKV in sizes M10 up to M16 rod and Pipe Clamps type Stabil Form C LK.

Installation

The siFramo Eye-Plate HP F 100 is fastened to the supporting siFramo 100 section by means of 4no. FLS F screws. The siFramo Eye-Plate can also be fastened directly to concrete by means of 2no. M10 anchors.

Type A: Load Chain runs crosswise to the beam Type B: Load Chain runs longitudinally to the beam

Technical Data

Туре	max. perm. tensile load [kN]
M10	11.2
M12	12.1
M16	12.5

The implementation and construction requirements of the components, their design as well as their verifications and load tests were carried out following the standards VGB R 510 L part I, KTA 3205.3 and DIN EN 13480-3.

L	В	S
[mm]	[mm]	[mm]
110	100	8

Туре	W [kg]	Quantity [pack]	Part number
HP F 100 - A M10	0.8	10	115050
HP F 100 - A M12	0.8	10	115051
HP F 100 - A M16	0.8	10	115052
HP F 100 - B M10	0.8	10	115047
HP F 100 - B M12	0.8	10	115048
HP F 100 - B M16	0.8	10	115049











Rod Hanger Load Chain Assembly LKV

Group: A299

Application

The Rod Hanger Load Chain Assembly group connects components in the load chain with their counterparts, such as lugs, eye-plates and Pipe Clamp Stabil Form C LK.

Scope of delivery

Rod Hanger Load Chain Assembly LKV:

- 1 eye nut
- 1 threaded clevis with pin
- 1 turnbuckle
- 1 tie rod
- 3 lock nuts

The length of the upper threaded rod has to be determined and cut according to the overall suspension height required. In order to avoid unintentional rotation during assembly, the threaded clevis and turnbuckle components have to be locked off with 2no. hex nuts.

Installation

Preassemble the rod hanger components and connect to the Eye-Plate by means of the threaded clevis

(push-through installation of pin to form complete rod hanger suspension from sub-structure). The turnbuckle enables adjustable height setting in the assembled state. In order to avoid unintentional rotation the threaded clevis, turnbuckle and eye nut have to be locked (3 hexagon nuts).

Technical Data

Туре	max. perm. tensile load [kN]
M10	11.2
M12	12.1
M16	14.0

DiThe implementation and construction requirements of the components, their design as well as their verifications and load tests were carried out following the standards VGB R 510 L part I, KTA 3205.3 and DIN EN 13480-3.

Туре	combinable Type Pipe Clamp C LK
LKV M10	22 - 89
LKV M12	22 - 89
LKV M16	115 - 324

Туре	W [kg]	Qty. [set]	Part number
LKV M10	0.4	10	113919
LKV M12	0.7	10	113920
LKV M16	1.4	10	113921





Threaded Rod GST HCP

Group: 1817

Technical Data Material: Steel Class 4.8, HCP

Туре	Length	Weight [kg/m]	Qty. [m]	Part number
M10	1 m	0.49	25	114842
M10	2 m	0.49	50	114112
M10	3 m	0.49	30	116569
M12	1 m	0.70	25	114843
M12	2 m	0.70	20	114113
M12	3 m	0.70	30	116570
M16	1 m	1.30	10	114844
M16	2 m	1.30	20	116572
M16	3 m	1.30	15	116571





Extension Sleeve AD IG/IG HCP

Group: 1832

Application

Joining element for extending threaded roada at Suspension heights of the Sikla load chains of more than 3 meters threaded length. Version with Slot for visual inspection of the screw depths of the two threaded Ends. The HCP surface of the Extension sleeve is used in combination with other HCP components a continuous corrosion protection for all Indiviual components. The extension sleeve is designed for with two Hexagon nuts (not included).

Technical Data

Туре	max. perm. tensile load [kN]
M10	18,6
M12	27,0
M16	39,2

Туре	Length [mm]	A/F	W [kg]	Quantity [pack]	Part number
M10 x 30	30	17 mm	0.04	100	116700
M12 x 35	35	17 mm	0.04	50	116701
M16 x 40	40	22 mm	0.07	50	116702







Stabil Form C LK

Group: A299

Application

Industrial pipe clamp following VGB-R 510 L for standard industrial pipe supports. The pipe clamp Stabil Form C LK can be used as pendulum suspension or as part of a rod hanger.

Scope of delivery

With screws and nuts (class 8.8 or 8) and bolts incl. splint. The pipe clamp is delivered pre-assembled.

Technical Data

Туре	perm. load	recommended Rod
	[kN]	Hanger Arrangement LKV
22 - 89	4.0	LKV M10 / LKV M12
115 - 169	5.4	LKV M16
220 - 324	9.3	LKV M16

The implementation and construction requirements of the components, their design as well as their verifications and load tests were carried out following the standards VGB R 510 L part I, KTA 3205.3 and DIN EN 13480-3.

Туре	D [mm]	a₁ [mm]	a₂ [mm]	L [mm]	L ₁ [mm]	L ₂ [mm]	L₃ [mm]	B x S [mm]
22	22	7	10	90	29	12	33	30 x 5
27	27	7	10	93	29	12	34	30 x 5
34	34	7	10	107	29	12	35	30 x 5
44	44	7	10	113	29	12	36	30 x 5
49	49	7	10	126	29	12	36	30 x 5
61	61	7	10	144	28	18	40	40 x 5
77	77	7	10	183	28	18	41	40 x 5
89	89	7	10	189	28	18	41	40 x 5
115	115	11	16	221	38	23	41	50 x 6
140	140	11	16	234	38	23	41	50 x 6
169	169	11	16	249	38	23	41	50 x 6
220	220	11	16	280	38	23	47	50 x 8
273	273	11	16	311	38	23	56	60 x 8
324	324	11	16	336	38	23	56	60 x 8

W [kg]	Quantity [pack]	Part number
0.45	25	113103
0.48	25	113104
0.54	25	113105
0.57	25	113106
0.58	25	113107
0.98	10	113108
1.17	10	113109
1.24	10	113110
1.83	10	113111
1.98	10	113112
2.16	1	113113
3.74	1	113114
5.24	1	113115
5.84	1	113116
	W [kg] 0.45 0.48 0.54 0.57 0.58 0.98 1.17 1.24 1.83 1.98 2.16 3.74 5.24 5.84	W Quantity [pack] 0.45 25 0.48 25 0.54 25 0.57 25 0.58 25 0.98 10 1.17 10 1.24 10 1.83 10 2.16 1 3.74 1 5.24 1 5.84 1











Cantilever Bracket AK HCP Ø

Page 12-5



















07/2023 IuA





Ζ

Y

Channel MS 41 HCP

Group: 1811

Application

Element for easily and efficiently pre-assembling crossbars, wall brackets and supporting structures on construction sites or in workshops.

Scope of delivery

Available as single or double channels. Double channels are joined together by clinching.

Installation

All Channels MS 41 hcp are serrated inside and provide numerous combination options with other high corrosion protected system components.

Technical Data

Material: Steel, HCP

D = Double channel

Type W/H/th [mm]	Section modulus [cm ³]	Moment of inertia [cm ⁴]	Radius of gyration [cm]
41/21/2.0	W _v : 0.82	l _v : 0.92	i _v : 0.76
	W _z : 2.11	l _z : 4.33	i _z : 1.65
41/41/2.5	W _y : 2.95	l _y : 6.17	i _y : 1.43
	W _z : 4.40	l _z : 9.02	i _z : 1.73
41/21/2.0 D	W _y : 2.35	l _y : 4.94	i _y : 1.24
	W _z : 4.22	l _z : 8.65	i _z : 1.64
41/41/2.5 D	W _y : 8.96	l _y : 36.74	i _y : 2.46
	W _z : 8.80	l _z : 18.03	i _z : 1.72



Type W/H/th [mm]	Cross section A [cm ²]	Distance e [cm]	Max. point carrying capacity F _{max} [kN]	Max. torsional moment Mg [Nm]
41/21/2.0	1.60	1.12	4,0	44,5
41/41/2.5	3.03	2.10 6,0		44,5
41/21/2.0 D	3.21	2.10	4.0*	44.5
41/41/2.5 D	6.07	4.10	6.0*	44.5

Notice: All values take into account the perforation of the channels. For load charts, see chapter "Pressix CC 41".

Approvals / Conformity



This product is has obtained the "RAL Gütezeichen Rohrbefestigung" and is subject to external surveillance according to RAL GZ-655.

* = no RAL quality label

Туре	Length [m]	Weight [kg/m]	Qty. [m]	Part number
41/21/2.0	6	1.32	6	193860
41/41/2.5	6	2.36	6	161497
41/21/2.0 D *	6	2.64	6	193884
41/41/2.5 D *	6	4.74	6	166748











Channel MS 41/21/2.0

Permissible load with centrical load application

L	41/21/2.0	41/21/2.0 D		
[cm]	[N]	[N]		
20	3049	7792		
40	1522	3892		
60	1013	2591		
80	718	1939		
100	456	1547		
120	312	1285		
140	225	1097		
160	168	950		
180	128	743		
200	100	594		
220	78	483		
240	61	398		
260	47	331		
280	36	278		
300	27	234		
320	19	197		
340	12	167		
360	6	141		
380		118		
400		98		
420		81		
440		66		
460		52		
480		39		
500		28		

The influence of the channel slots and the channels dead weight are taken into account in the values. Calculations according RAL-GZ 655-C.

 $\sigma_{perm} \le 185 \text{ N/mm}^2$ f $\le L/200$











Channel MS 41/41/2.5

Permissible load with centrical load application

L	41/41/2.5	41/41/2.5 D
[cm]	[N]	[N]
20	10900	33160
40	5447	16573
60	3627	11041
80	2716	8273
100	2169	6610
120	1803	5500
140	1541	4706
160	1192	4109
180	934	3643
200	749	3270
220	611	2964
240	505	2708
260	423	2491
280	356	2281
300	302	1971
320	257	1716
340	220	1504
360	188	1325
380	160	1173
400	137	1042
420	116	929
440	97	830
460	80	743
480	66	665
500	52	597
520	40	535
540	29	479
560	18	429
580	9	383
600		341

The influence of the channel slots and the channels dead weight are taken into account in the values. Calculations according RAL-GZ 655-C.

 $\begin{array}{l} \sigma_{\text{perm}} \leq 185 \ N/mm^2 \\ f \leq L/200 \end{array}$







Cantilever Bracket AK HCP

Group: 1854

Application

Ready-to-use bracket for mounting pipes to walls or other building structures.

Installation

When used in combination with sliding elements, a tied rod is absolutely essential for absorbing the forces running along the centre line of the pipe. For cantilever lengths > 500 mm we recommend the integration of a prop-up.

Technical Data









Anchor load classes A = 1.5 kN B = 2.5 kN C = 3.5 kND = 6.0 kN

Restrictions

 $\begin{array}{l} \sigma_{\text{zul}} \leq 160 \text{ N/mm}^2 \\ f_{\text{perm}} \leq L/150 \text{ for } L > 450 \text{ mm} \\ f_{\text{perm}} \leq 3 \text{ mm} \text{ for } L \leq 450 \text{ mm} \end{array}$





Туре	L [mm]	Wall plate [mm]	b [mm]	Dimensions of elongated hole [mm]	W [kg]	Quantity [pack]	Part number
41/41 - 320	320	134 x 40 x 8	100	13 x 18	0.95	10	181667
41/41 - 570	570	134 x 40 x 8	100	13 x 18	1.50	10	181676
41/41 - 820	820	134 x 40 x 8	100	13 x 18	2.00	1	161479
41/62 - 320	320	134 x 40 x 8	100	13 x 18	1.40	10	180119
41/62 - 570	570	134 x 40 x 8	100	13 x 18	2.25	10	180128
41/62 - 820	820	134 x 40 x 8	100	13 x 18	3.05	1	180137
41/21 D - 320	320	134 x 40 x 8	100	13 x 18	1.25	10	180146
41/21 D - 570	570	134 x 40 x 8	100	13 x 18	2.25	10	180155
41/21 Dq - 320	321	134 x 40 x 8	100	13 x 18	1.20	10	180164
41/21 Dq - 570	571	134 x 40 x 8	100	13 x 18	1.95	10	190424







End Support WBD C HCP

Group: 1856

Application

In combination with Sikla Channels MS 41/41, End Support WBD is ideal for setting up support structures attached to walls, floors and ceilings and for direct fixing to steel beams. In combination with Joining Plate AP, a fixing to beams with flange width > 120 mm is possible.

Scope of delivery

Base plate with welded U-profile

Accessories (pre-assembled):

- 2 Holding Brackets and 2 Hexagon Bolts, 2 welded hexagon nuts (WBD C for single channels)
- 1 Holding Bracket, 1 T-Bolt, nut, bolt and washer (WBD C for double channels)

Installation

Depending on the situation, different options are recommended:

- a) Frictional connection to steel beams using Assembly Set MS 5P M12 S.
- Fixing to the building structure using at least 2 heavy-duty anchors M12. Please observe loads and approvals of anchors.

For ceiling mounting, the bolt connecting channel and end support must pass through both parts.

Technical Data

Туре	For Sikla Channel	Dimensions of Base Plate [mm]	For beam width [mm]	Holes for
41/41-45 C0	41/41	220 x 220 x 12	80 - 120	M12
	41/45			
41/41-45 D C0	41/41 D	220 x 220 x 12	80 - 120	M12
	41/45 D			

Material: End Support WBD: Steel, HCP Holding Bracket: Cast iron, HCP Accessories: Steel, HCP

Туре	W [kg]	Quantity [pack]	Part number
41/41-45 C0	5.09	1	179498
41/41-45 D C0	5.16	1	179561





Fixing Bracket MW S HCP Group: 1826

Application

Designed for general mounting purposes as a direct lateral attachment link integrated in binding and bridging beams of concrete or wood, and for similar applications. It may serve as a connecting bracket for framework structures consisting of channels.

Technical Data

Туре	Working load	Sprinkler System
90/60/90°	7.5 kN	≤ DN 150

Туре	Angle steel	В	b	d	s	W	Quantity	Part
	profile DIN 1029	[mm]	[mm]	[mm]	[mm]	[kg]	[pack]	number
90/60/90°	90/60/6	40	15	13	50	0.26	25	162072







Channel Bracket SH HCP

Group: 1812

Application

Comprehensive bracing construction of Sikla Channels:
directly to the building structure or
onto other channels for frame construction

Technical Data

Steel, HCP Material:

Туре	b x s [mm]	L [mm]	Ø d₁ [mm]	Ø d₂ [mm]	W [kg]	Quantity [pack]	Part number
SH 41/21	40 x 4	80	11	11	0.16	50	189992
SH 41/41	40 x 4	80	11	11	0.21	50	183116
SH 41/41 D	40 x 4	80	13	13	0.32	10	183143









Beam Clip SPA 5P HCP

Group: 1831

Application

Universal clamping element for bi-lateral attachment of crossbars for pipe runs, ducts, cable lines and equipment to steel beams.

Installation

Position the Beam Clip with the slit side on the component, the lug has to be positioned on the steel girder. Then insert the appropriate hexagon bolt und tighten it with washer and nut.

Determination of the required screw length Lmin:

Arrangement A

Hexagon bolt with Holding Bracket





M16: $L_{min} = a + b + 57$ [mm]







Inserted T-Head Bolt HZ

Arrangement B



M12: $L_{min} = b + 53$ [mm] M16: $L_{min} = b + 63$ [mm]

Technical Data

Туре	Clamping range	В	L	D
	[mm]	[mm]	[mm]	[mm]
M12	1 - 30	44	60	13
M16	4 - 40	48	72	17

Туре	Tightening torque M _A [Nm]	F _z permitted per Beam clip [kN] ¹⁾	Shear force load capacity F _x per 2 Beam Clips [kN] ²⁾
M12	85	13.8	3.2
M16	150	16.7	3.6



- ¹⁾ The specified data relate to the application of a standard hexagon bolt with strength class 8.8.
- ²⁾ The specified data relate to the worst case with flange thicknesses 30 mm (M12) or 40 mm (M16) as well as a coefficient of static friction $\mu_R = 0.20$. A possibly operating tensile force F_z isn't included.

Туре	W [kg]	Quantity [pack]	Part number
M12	0.16	20	114880
M16	0.27	20	114881





Holding Bracket HK HCP

Group: 1828

Application

Safety element for Sikla Channels to be used instead of simple washers. The Holding Bracket prevents the edges along the opening of the channels from bending, and ensures optimum load distribution. When loads are imposed along the Channels, Holding Brackets HK 41 provide for additional safety due to embossed teeth, which penetrate the channel. Suitable for single and double channels.

Special blanking guarantee high safety and shear forces after reaching form closure, especially for bolted through connecting elements.

Technical Data





Туре	Suitable for Sikla channels of width [mm]	Bore [mm]	W [kg]	Quantity [pack]	Part number
41/10	41	11	0.06	50	179606
41/12	41	13	0.07	50	179615
41/16	41	17	0.07	50	179624





Channel Nut NT HZ 41 HCP

Group: 1814

Application Suitable for Channels MS 41 HCP.

Technical Data

	M10	M12	M16
Tightening torque 8.8 ¹⁾ [Nm]	40	80	80

1) Using lower steel classes, the value are to be reduced accordingly.



Channel thickness [mm]	M10 FZ ≤ [kN]	M12 FZ ≤ [kN]	M16 FZ ≤ [kN]	M10 FQ ≤ [kN]	M12 FQ ≤ [kN]	M16 FQ ≤ [kN]
1.5	6.0	7.5	7.5	5.5	7.5	6
2.0	7.5	10	10	5.5	9	6
2.5	8.5	11	11	5.5	9	6
3.0	8.5	13	13	5.5	9	6

Note: The permissible load capacities of the channels are to be respected.

Туре	W	Quantity	Part
	[kg]	[pack]	number
HZ 41-M10	0.03	50	162115
HZ 41-M12	0.06	50	162133
HZ 41-M16	0.05	50	182279





Hexagon Bolt SKT HCP Group: 1870

Technical Data

Steel, HCP Material:

Туре	Length [mm]	W [kg]	Quantity [pack]	Part number
M10/25	25	0.02	100	162568
M10/40	40	0.03	100	162577
M12/25	25	0.03	100	162586
M12/30	30	0.04	100	164144
M12/40	40	0.04	50	162595
M12/60	60	0.06	50	164153
M12/80	80	0.07	50	164162
M12/100	100	0.09	50	164171
M16/50	50	0.10	100	162601
M16/80	80	0.14	25	164180
M16/100	100	0.17	25	171866





Washer US HCP

Group: 1872

Technical Data Material: Steel, HCP

Туре	D [mm]	d [mm]	s [mm]	W [kg]	Quantity [pack]	Part number
10/125	20.0	10.5	2.0	0.01	100	162346
10/40	40.0	10.5	3.0	0.03	100	162373
12/125	24.0	13.0	2.5	0.01	100	162355
12/40	40.0	13.0	3.0	0.02	100	162364
16/125	30.0	17.0	3.0	0.01	100	179156













Mounting Plate GPL Stabil HCP

Group: A630

Application

Permits the Connection of Beam Bracket TKO 100 or 120 of the product range siFramo 80/100 and structural Elements 100/120 at a 90° degree twistet bracket. The GPL 220x220 Server as a Counter plate the means of threaded rod M12 and accessories screwed. Also it can be used as a simple Support for Setting up of pipe shoes.

Technical Data

Туре	Dimension of base plate	Perforation for	Connection to flange width
	L x B [mm]	für	B [mm]
GPL 220 x 220	220 x 220 x 12	M12	80 - 120

Туре	W	Quantity	Part
	[kg]	[pack]	number
GPL 220 x 220	4.2	1	194959











Welding Plate SPL

Group: A430

Application

Interface element to enable a welded connection of load chains, spring hangers etc. to Beam Section TP F. Our type "SPL universal" enables a welded connection to primary steel with flange width up to 300 mm. At the same time it's possible to install type "SPL universal" to Beam Section TP F if a larger installation surface is needed.

The welding plate can be welded directly without previous treatment due to a corrosion-resistant weld-thru coating which is compatible with both the HDG surface of the siFramo section and the health and safety requirements of the welding process.

Installation

Depending on the type, different installation methods are recommended:

- a) Installation of SPL F 80 or 100 with 4 Self Forming Screws FLS to Beam Section TP F.
- b) Installation of SPL universal with Flange Screws SCR FLA TT M10 x 30 (part no. 116479) to Beam Section TP F.
- c) Installation of SPL universal by means of 1 Assembly Set 5P M12 S to primary steel with flange width between 100 and 300 mm.

Technical Data

Туре	Installation surface [mm]	Mounting Plate size [mm]
SPL F 80	90 x 70	190 x 80 x 8
SPL F 100	110 x 90	210 x 100 x 8
SPL universal	220 x 220	370 x 370 x 12

Material: Steel, HCP

Note: Mounting accessories are not included in the scope of delivery!

Туре	W [kg]	Quantity [pack]	Part number
SPL F 80	0.9	1	117833
SPL F 100	1.3	1	117834
SPL universal	11.9	1	113636




Accessories







Group: A630

Application

Support plate for gratings in combination with Sikla components on steel beams. The support plate is clamped to the steel girder and closes the gap between the base plate and the cut-out grating. This creates a fall-through protection and eliminates the need for welded upstands on the grating edge.

Installation

The grating support is clamped to the steel beam together with the base plate of the Sikla component using the MS 5P mounting set. Subsequent assembly is possible. The grating support can be used on one or both sides and can be combined with all base plate sizes. The recesses for the screws of the assembly sets are matched to all beams widths and to the two sizes M12 and M16. Assembly note: Turn hexagon head screw (screw head on top of the panel, thread downwards to avoid a tripping edge, see figure 3).

Technical Data

Maximum load on the support: $F_z = 5.5 \text{ kN}$

Туре	L	В	t	L1	L_2	d	d₁	d_2
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
AG 80/310	360	160	8	163	260	10	21	18

Material: Steel, HCP

Туре	W	Quantity	Part
	[kg]	[pack]	number
AG 80/310	3.5	1	802766



