

Complete fastening solutions
for sprinkler applications



Walraven Sprinkler Installation Guide

How to apply our fastening solutions for efficient sprinkler applications

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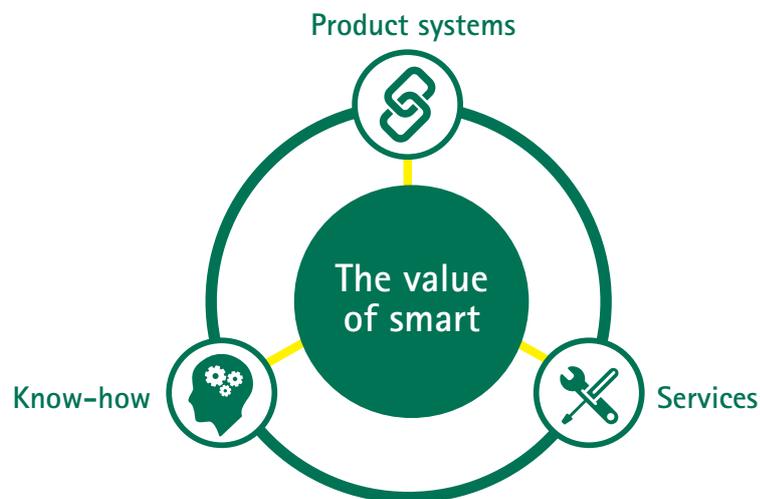
About Walraven

Walraven

Walraven is a fast-growing company. Since 1942, we have grown from a small family business to an international company. Today, we have over 1.400 employees worldwide with production and sales facilities all over Europe, North America, the Middle East, and the Far East. Ever since its foundation, our headquarters has been in the same city in the Netherlands: Mijdrecht.

A multinational with a heart

As a family-owned company, keeping the long-term interests of our employees, customers, and suppliers in mind comes naturally to us. We aim to make a sustainable difference by building a multinational with a heart. We genuinely look after all our internal and external stakeholders and invest time and effort into building personal, meaningful relationships.



Product-systems

We think beyond individual products. Our products are designed to work together seamlessly as a system supporting the installation work to be more efficient, effective, safe and sustainable. We offer a wide range of products, including fastening, passive fire protection, and sanitary systems. Throughout our history, we have applied our expertise to finding smart new solutions for clients. Sometimes big, sometimes small, always meaningful.

Know-how

Our main business is to provide smart solutions for installation work. We have complete control over the entire process, from the initial concept to manufacturing – hence, providing smart installation materials is our speciality. Our global know-how, together with our local presence, enables us to serve our customers better. With our technical and logistical expertise in installation processes, we develop smart solutions that can significantly impact the installation value chain.

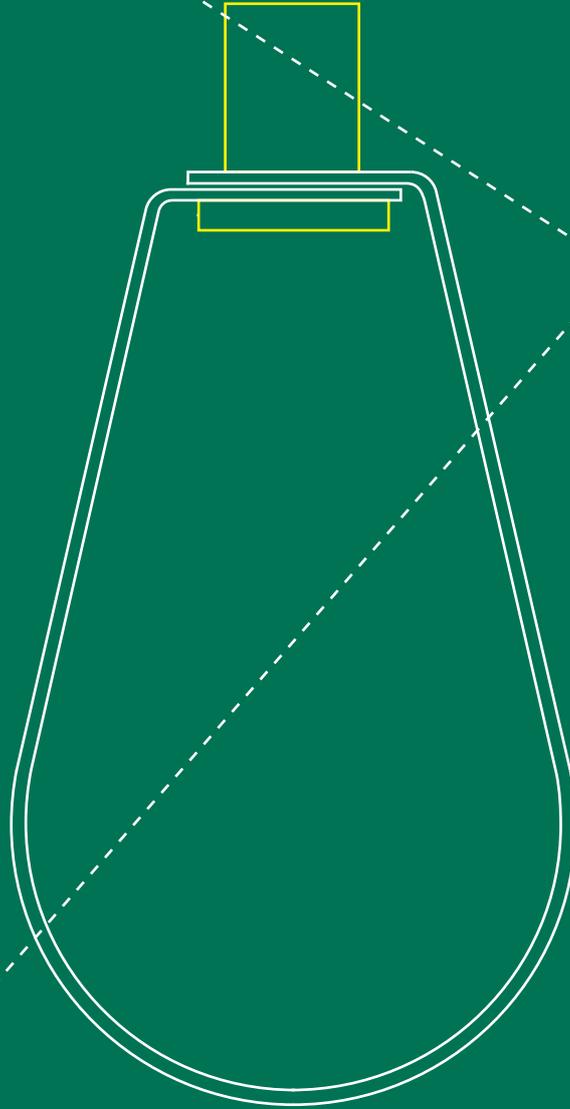
Services

As technology advances and building requirements change, working with fixing and passive fire protection solutions becomes increasingly complex. However, our team of experts is here to help you find the most effective solutions for your construction challenges. We offer tailor-made services that include smart packaging, logistics, and digital solutions to add value to your daily work. Moreover, we take our technical support one step further in co-engineering by offering customised solutions to meet specific project demands.

The combination of our product systems, know-how, and services enables us to deliver our added value.

Walraven. The value of smart

Complete solutions for a
multitude of applications



⊕ Certifications & Quality

⊕ Additional services:
engineering support,
BIM models, prefabrication

⊕ More sustainable Surface protection:
Walraven BIS UltraProtect® 1000

Walraven sprinkler installation solutions

We have over 80 years of experience developing solutions for pipe fixing systems and channel solutions in the Heating, Ventilation, and Air Conditioning (HVAC) market. During this journey, we built a solid portfolio to support the broadest range of applications for every pipe.

Sprinkler installations are among the most challenging applications due to strong regulations in this market. Over the years, we have developed a compliant and certified sprinkler portfolio with VdS, FM and UL approvals.



Pipe support fixings guideline

In the event of a fire, various safety systems can play a crucial role. Walraven offers complete solutions for efficiently installing fixed fire sprinkler systems. Our solution's smart design and broad range of accessories will enable you to save installation time on the job site.

Fixed fire sprinkler systems are installed permanently and designed to automatically detect, report, and suppress fires. Walraven fixing systems are tested above and beyond standard requirements.

Inside the core of buildings, there is a complex network of pipes serving different purposes, including a very crucial one: fire safety. To work properly, a fire sprinkler system must have an efficient pipe support distribution.

To do so, some rules need to be followed:

- Pipe supports shall be fixed directly to the building or, if necessary, to machines, storage racks or other structures. They must not be used to support any other installations. They shall be adjustable in order to secure an even load-bearing capability. Supports shall completely surround the pipe and shall not be welded to the pipe or fittings.
- The part of the structure to which the supports are secured shall be capable of supporting the pipework (see Table 1). Pipes over 50 mm in diameter shall not be supported by corrugated steel sheets or aerated concrete slabs.

Our search for excellence echoes through every system guided by the wisdom of industry standards (e.g., VdS-CEA 4001, EN 12845, NFPA 13 "Installation of Sprinkler Systems," NFPA 14 "Installation of Standpipe and Hose Systems," or NFPA 15 "Water Spray Fixed Systems for Fire Protection).

- Distribution pipes and risers shall have a suitable number of fixed points to account for axial forces. No part of any support shall be made of combustible material, and nails shall not be used.
- Supports for copper or stainless steel pipes shall be provided with a suitable lining with sufficient electrical resistance in order to prevent contact corrosion.
- Make sure to use the appropriate hangers for sprinkler applications, which are also suitable for the outside diameters of the pipe, and that no hangers are mounted on fittings. Where a reducer is installed, a pipe hanger shall be used adjacent to the reducer on the larger pipe.

Depending on the type of piping and the approval that applies to your fixed sprinkler system, different maximum pipe support distances apply. Always follow the valid local guidelines, and please make sure to follow these pipe support distances correctly.

Requirements from EN 12845

Requirements for spacing and location of supports are (based on the EN 12845 standard for fixed fire sprinkler systems):

- When mechanical pipe joints are used:
 - There shall be at least one support within 1 m of each joint
 - There shall be at least one support on each pipe section
- The distance from any terminal sprinkler to a support shall not exceed:
 - 0.9 m for 25 mm diameter piping
 - 1.2 m for piping greater than 25 mm diameter
- The distance from any upright sprinkler to a support shall not be less than 0.15 m
- Vertical pipes shall have additional supports in the following cases:
 - pipes more than 2 m long
 - pipes more than 1 m long feeding single sprinklers
- Pipes that are at a low level or otherwise vulnerable to mechanical impact shall be separately supported except for the following cases:
 - horizontal pipes less than 0.45 m long feeding individual sprinkler
 - drop or rise pipes less than 0.6 m long feeding individual sprinklers



Pipe support system dimensions and parameters

The pipe support systems should be designed according to the requirements of the tables below.

Table 1 – Design parameters for pipe supports

Nominal pipe diameter (DN) mm	Minimum load capacity at 20°C (see note 1) (kg)	Minimum cross section (see note 2) (mm ²)	Minimum length of anchor bolt (see note 3) (mm)
≤ 50	200	30 (M8)	30
50 - 100	350	50 (M10)	40
100 - 150	500	70 (M12)	40
150 - 200	850	125 (M16)	50

Note 1: When the material is heated to 200°C the load bearing capacity should not deteriorate more than 25%.

Note 2: The nominal cross section of threaded rods should be increased so that the minimum cross section is still achieved.

Note 3: The length of anchor bolts depends on the type used and the quality and type of material into which they are to be fixed.
The values given are for concrete.

Tables information from the EN 12845:2024

Table 2 – Minimum dimension of flat iron rods and clips

Nominal pipe diameter (DN) mm	Flat iron rods		Pipe clips	
	galvanised mm	ungalvanised mm	galvanised mm	ungalvanised mm
≤ 50	2.5	3.0	25 x 1.5	25 x 3.0
50 - 100	2.5	3.0	25 x 2.5	25 x 3.0

Tables information from the EN 12845:2024

Fixing of sprinkler pipes to wooden beams

The fixing of supports for sprinkler pipes to wooden beams is subject to the minimum values listed below, and the wooden beams must not be less than 10 cm in length:

Table 3 – Fixing of supports for sprinkler pipes to wooden beams

Pipe size DN (mm)	Bolt diameter (mm)	Woodscrew diameter (mm)
≤ 50	6	2 x 6
50 - 100	8	2 x 8
100 - 150	10	2 x 10
150 - 200	12	2 x 12

Bolts

- Ensure that the pipe supports have washers on both sides unless the pipe support has the same contact surface
- Maintain a minimum spacing between the lower edge of the beam and the pipe support, which should be at least three times the diameter of the support

Woodscrews

- Ensure that the screws have a fastening depth of at least eight times their diameter
- They must be fixed to the side of the wooden beam and have a distance between the screws and the lower edge of the beam of at least five times their diameter

Size of supports

The supports must be steel, at least 3 mm thick, or at least 2.5 mm if galvanised. This does not apply to hangers made of hot-dip galvanised steel, which may have the minimum dimensions 25 x 1.5 mm for pipes up to DN50.

Table 1 sets out the minimum cross-sections of pipe supports (apart from pipe brackets). Pipe supports to hold single pipes that do not meet these requirements must be usable according to CEA4001.

Anchoring in concrete ceilings

Anchors must be approved for the following by the building authorities:

- for single fixings in cracked concrete
- or
- for multiple fixings of non-bearing structures.

The verifications of the building authorities mentioned above refer to European Technical Approvals (ETA). Comparable national approvals – such as the national technical approvals (abZ) of the DIBt (Deutsches Institut für Bautechnik) on anchors for use in lightweight ceiling cladding and dropped ceilings – are considered to be equivalent to the approvals under ETAG 001/Part 6.

The anchors must be sized following approval by the building authorities. The design load is 1.4 times the actual load. In terms of the tensile capacity ($N_{Rk,s}$) following steel failure and the threaded connection (if present), anchors must meet the requirements in the following table:

Table 5: Minimum tensile capacity and minimum threaded

Used as ceiling fixing of pipes of size DN (mm) with one anchor per fixing point	Minimum threaded connection of anchor	Characteristics tensile capacity (steel failure) $N_{Rk,s}$ (N)
≤ 50	M8	≥ 6,000
50 - 100	M10	≥ 10,500
100 - 150	M12	≥ 15,000
150 - 200	M16	≥ 25,500
200 - 250	M20	≥ 30,000
250 - 300	M20	≥ 37,500

If anchors approved for multiple fixings of non-bearing structures are used, the pipe network must be guaranteed to keep working even in the event of an anchor's theoretical failure. For example, one way to achieve this is to use two fixing points (pipe supports) at changes of direction and at the end fixture of protruding pipes, which are independent of each other and have one anchor each that is approved for multiple fixings of non-bearing structures.

In addition, the support spacings at these locations may be reduced. The maximum spacing between the penultimate support and the end of the pipe is 3 m, or 2.5 m, for DN25 pipes. Fixings at changes of direction must be designed so that if a failure of support at a change of direction is assumed, a support spacing of 6 m is not exceeded. Additional securing measures may be omitted if, at the relevant locations, a fixing point uses an anchor authorised for single fixings in cracked concrete.

Get the best sprinkler solutions for your project

Our search for excellence pushes us to continuous improvement. To ensure the quality of our products, we thoroughly certify all our sprinkler product ranges according to the highest standards.

With the state of our world, it is also necessary to think about more sustainable solutions. Our excellent corrosion protection, Walraven BIS UltraProtect® 1000, is a more sustainable option than the standard hot-dip galvanised surface protection.

Our support services extend beyond products; we support you in every aspect of your project. Our products are available in BIM models, our experts are ready to assist, and we can provide a prefabricated system.

Certification and Quality

Design of sprinkler systems

When orchestrating the choreography of sprinkler solutions in a building, it is crucial to assemble the proper system according to guidelines CEA 4001 (VdS), EN 12845, NFPA13, and/or local regulations.

The implementing process includes:

- planning
- installation
- maintenance

It is essential that all parties involved in the acceptance test of the system are engaged in the entire process, from project planning to the test itself. Different loads and distances apply depending on the approvals. Please refer to table 6 for the applicable loads when installing under VdS, FM, or NFPA.



Table 6 – Applicable loads when installing sprinkler system

Pipe size spacing (DN)	FM1951				NFPA13 Schedule 40-Pipe weight incl. water				VdS CEA 4001		
	Test load (kN)	Max. distance (m)	Min. thread size (inch)		Calculated test load (kN)	Max. distance (m)	Min. thread size (metric) (inch)		Min. load capacity (kN)	Max. spacing (m)	Min. thread size
Pipe diameter	-	-	-	-	1.4	3.60	9.5	3/8	2.0	4.0	M8
20	1.512	3.6	M10	3/8	1.5	3.60	9.5	3/8	2.0	4.0	M8
25	1.824	3.6	M10	3/8	1.7	3.66	9.5	3/8	2.0	4.0	M8
32	1.913	3.6	M10	3/8	1.9	3.66	9.5	3/8	2.0	4.0	M8
40	2.313	4.6	M10	3/8	2.4	4.57	9.5	3/8	2.0	4.0	M8
50	2.825	4.6	M10	3/8	2.9	4.57	9.5	3/8	2.0	4.0	M8
65	4.181	4.6	M10	3/8	3.8	4.57	9.5	3/8	3.5	4.0	M10
80	4.715	4.6	M10	3/8	4.8	4.57	9.5	3/8	3.5	4.0	M10
90	5.583	4.6	M10	3/8	5.7	4.57	9.5	3/8	3.5	4.0	M10
100	6.561	4.6	M10	3/8	6.7	4.57	9.5	3/8	3.5	4.0	M10
125	8.896	4.6	M12	1/2	9.0	4.57	12.7	1/2	5.0	4.0	M12
150	11.632	4.6	M12	1/2	11.8	4.57	12.7	1/2	5.0	4.0	M12
200	16.903	4.6	M12	1/2	18.2	4.57	12.7	1/2	8.5	4.0	M16
250	26.044	4.6	M16	5/8	26.7	4.60	15.9	5/8	10.0	4.0	M20
300	35.141	4.6	M16	5/8	36.0	4.60	15.9	5/8	12.5	4.0	M20
350	-	-	-	-	42.9	4.60	-	-	-	4.0	-
400	-	-	-	-	55.7	4.60	-	-	-	4.0	-
450	-	-	-	-	70.1	4.60	-	-	-	4.0	-
500	-	-	-	-	84.4	4.60	-	-	-	4.0	-

Walraven BIS UltraProtect® 1000

In order to protect your installations against harsh conditions, a durable surface protection is needed. Hot Dip Galvanising is often used, but not always the most **sustainable** option.

Our unique Walraven BIS UltraProtect® 1000 is our answer to a more durable, more sustainable, smoother and more versatile **surface protection** that combines easily with other products.

Sustainable alternative

Walraven BIS UltraProtect® 1000 is the sustainable alternative to the traditional hot dip galvanisation process.

- Seven times less energy use
- No use of tap water
- Own water cleaning system
- Emission of cleaned air
- Up to 55% resources savings

Smooth and versatile

Products feel smooth and are visually appealing. Moreover, the applications are versatile.

- Also suitable for threaded products
- It perfectly matches with products in the Walraven BIS UltraProtect® 1000 system
- Also combines with zinc plated pre-galvanised or hot dip galvanised products

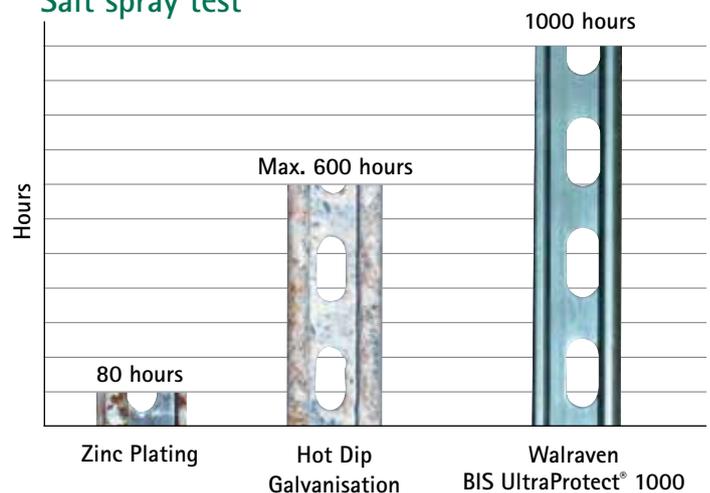
* Until the occurrence of maximum 5% red rust and with a layer thickness of 50 - 80 µm.

Optimal durability

Proven to be suitable for corrosive environments.

- Corrosion resistance class C1-C4 in accordance with ISO 12944-2
- Effortlessly withstands a salt spray test of at least 1000 hours in line with ISO 9227 *

Salt spray test



Additional service & support

From engineering to on-site construction support for all your sprinkler and dry riser projects.

Technical design support

Based on your individual requirements our Technical Support staff will deliver you a well grounded proposal with detailed calculations, BIM content, AutoCAD drawings and parts lists.

At Walraven, our service does not end after you have purchased your products. We pride ourselves on our invaluable after sales support and technical advice.



The Walraven specialists are always ready to support!

Pre-fab & Pre-assembly service

Cutting, grinding, measuring, they all cost a lot of time on the building site. Not to mention the costs of lost materials or faults. We can prefabricate solutions for you and deliver them directly to the building site.





Examples and references

Restaurant L'Osteria – Masaryčka, Czech Republic



Parck District - Prague, Czech Republic



Warehouse building - Poland



Office building - The Netherlands



Truck loading dock - The Netherlands



Application diagrams

Sprinkler fixing solutions are available for the structural shell and the pipe.

Structural shell (substrate)/ component	Aerated Concrete	Concrete	Steel Beam	Trapezoidal Sheet
<p>Shell anchoring/ component attachment</p>	<p>Walraven WGB-M Aerated Concrete Anchor</p>  <p>VdS</p>	<p>Walraven WDI1L / WDI2L</p>  <p>VdS</p> <p>Walraven WHC Hollow Core Anchor</p>  <p>VdS</p> <p>Walraven WT1 Throughbolt Anchor</p>  <p>Walraven W-LX-N Concrete Screw</p> 	<p>Walraven Beam Clamp Model C</p>  <p>UL LISTED FM APPROVED VdS</p> <p>Walraven Swivel Beam Clamp Model P</p>  <p>FM APPROVED VdS</p>	<p>Walraven Trapezoidal Sheet Hanger VdS</p>  <p>VdS</p> <p>Walraven Toggle Plug Clamp Model P</p>  <p>FM APPROVED VdS</p>
<p>Attachment parts/ threaded components</p>	<p>Walraven Threaded Rods and Pins</p> 			
<p>Pipe fixings</p>	<p>Walraven HD500, HD500 (black) Clamps M8, M10, M12, M16</p>  <p>FM APPROVED VdS</p>		<p>Walraven S-LF Loop Hanger M8, M10, M12, M16</p>  <p>FM APPROVED VdS</p>	

Overview of sprinkler fixings

Please find a complete overview below and consult the product sheets on the following pages for detailed technical product information.

	Product designation	Size	Connection	Type	Guidelines
	Walraven Sprinkler Hanger TA41 Part No. 4535xxx	DN15 - DN200	M10, M12	Sendzimir galvanised	FM UL
	Walraven S-LF Sprinkler Hanger Part No. 45555xxx and 45565xxx	DN20 - DN200	M8, M10, M12, M16	Sendzimir galvanised	FM VdS
	Walraven HD500 and HD500 (black) Part No. 33038xxx Part No. 33048xxx, 33068xxx, 33038xxx, 33048xxx	DN10 - DN50 DN65 - DN200	M8, M10, M12, M16	Walraven BIS UltraProtect® 1000 Epoxy powder coated	FM* VdS*

pipe fixings

	Product designation	Size	Type	Guidelines
	Walraven WDI1L Drop-in Anchor Lipped Part No. 610311x	M10, M12	Electrogalvanised	CEA 4001
	Walraven WDI2L Drop-in Anchor Lipped Part No. 6103310830	M8	Electrogalvanised	CEA 4001
	Walraven WHC Hollow Core Anchor Part No. 60964xx	M10 - M12	Electrogalvanised	VdS
	Walraven WGB-M Aerated Concrete Anchor Part No. 610351x	M10 - M12	Electrogalvanised	VdS
	Walraven WT1 Throughbolt Anchor Part No. 6084xxxxx	M8 - M16	Zinc plated	CEA 4001
	Walraven W-LX-N Concrete Screw Anchor Part No. 624333xx	M8/M10 (35 mm) M8/M10 (55 mm)	Zinc plated	CEA 4001

anchors

	Product designation	Size	Type	Guidelines
	Walraven Beam Clamp Model C Part No. 60xxxxx	M8 to M12 Ø 9 to 13 mm Span width up to 26 mm	Electrogalvanised	VdS FM
	Walraven Swivel Beam Clamp Model P Part No. 6078010	M10 Span width up to 17 mm	Electrogalvanised	VdS FM
	Walraven Beam Clamps Part No. 6072002	Span width up to 35 mm	Hot-dip galvanised	CEA 4001
	Walraven Trapezoidal Sheet Hanger VdS Part No. 67850xxx	M8 to M10 Ø 13 mm	Electrogalvanised	VdS
	Walraven Toggle Plug Part No. 0670604 + 0670614	M10 x 100 mm M10 x 200 mm	Electrogalvanised	VdS FM
	Walraven U-anchor Part No. 2084xxxxxx	M8 - M20	Electrogalvanised	CEA 4001
	Profile sections from 2.5 mm wall thickness (Part No. 6505xxx) Cantilever Arms (Part No. 66084xxx)	41x21, 41x41 41x62, 41x82 41x41 mm	Walraven BIS UltraProtect® 1000	CEA 4001
	Installation kit for profile sections Part No. 665xxxxx	-	Walraven BIS UltraProtect® 1000	CEA 4001
	Walraven Wall Plate Part No. 67x30xx	M8 - BSPP 1"	Electrogalvanised	CEA 4001
	Walraven Threaded Rods Part No. 63x3xxx	M8 - M24 1,000 mm	Electrogalvanised Walraven BIS UltraProtect® 1000	CEA 4001

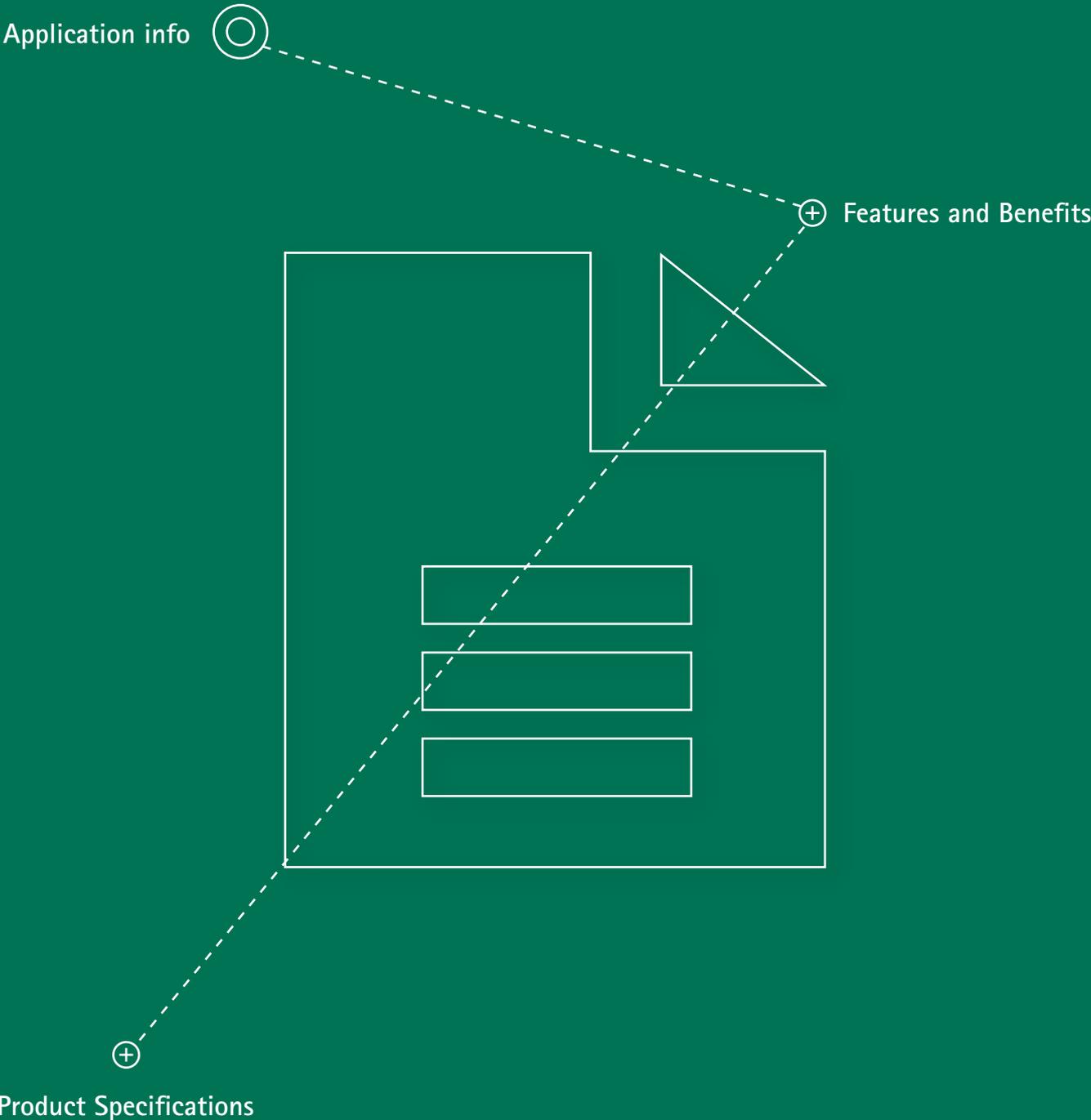
components for pipe supports

* FM/VdS available for some sizes check the technical data sheet for more information.

Note. VdS VdS rules for water extinguishing systems - specifications and testing methods for component parts, edition 1988-05

CEA 4001 VdS CEA guidelines for sprinkler systems: planning and installation, edition 2024-01

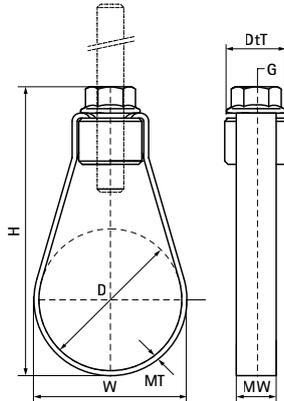
Product info sheets



Walraven S-LF Loop Hanger

(B1217)

for fixing of ceiling mounted sprinkler installation



Features & benefits

- easy installation with flange and cap nut
- for pipe suspension from threaded rod or stud bolts
- single band pipe loop with knurled nut and locking nut
- height adjustable, also after pipe insertion
- material: steel
- clamp: pre-galvanized; nut: zinc plated
- with VdS approval - certificate number G 424001
- with FM approval - certificate number PR470217 (> M10)

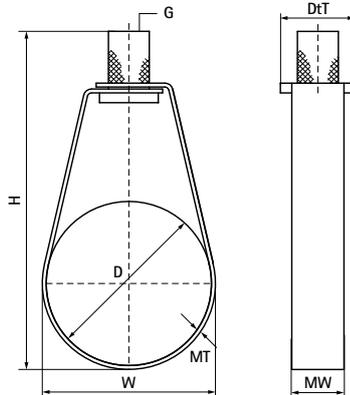


Product Number	Outside Pipe Diameter	DN	Pipe Diameter Imperial	Connection Thread	Material Width x Material Thickness	Total Width x Total Height x Total Depth	Approvals	Maximum Allowed Load Faz
Reference letter	D	D	D	G	MW x MT	W x H x DtT		Fo,z
Unit description	mm		"		mm x mm	mm x mm x mm		N
45555028	27	DN 20	3/4	M8	12 x 1.50	30 x 71 x 19	VdS ITB (KOT)	2,000
45555035	34	DN 25	1	M8	12 x 1.50	37 x 79 x 19	VdS ITB (KOT)	2,000
45555044	42	DN 32	1 1/4	M8	12 x 1.50	45 x 89 x 19	VdS ITB (KOT)	2,000
45555050	48	DN 40	1 1/2	M8	12 x 1.50	51 x 97 x 19	VdS ITB (KOT)	2,000
45555062	60	DN 50	2	M8	12 x 1.50	63 x 112 x 19	VdS ITB (KOT)	2,000
45565028	27	DN 20	3/4	M10	12 x 1.50	30 x 70 x 22	VdS FM ITB (KOT)	2,000
45565035	34	DN 25	1	M10	12 x 1.50	35 x 81 x 22	VdS FM ITB (KOT)	2,000
45565044	42	DN 32	1 1/4	M10	12 x 1.50	45 x 91 x 22	VdS FM ITB (KOT)	2,000
45565050	48	DN 40	1 1/2	M10	12 x 1.50	51 x 108 x 22	VdS FM ITB (KOT)	2,000
45565062	60	DN 50	2	M10	12 x 1.50	63 x 114 x 22	VdS FM ITB (KOT)	2,000
45565077	76	DN 65	2 1/2	M10	15 x 2.50	81 x 140 x 22	VdS FM ITB (KOT)	3,500
45565090	89	DN 80	3	M10	15 x 2.50	94 x 161 x 22	VdS FM ITB (KOT)	3,500
45565108	108			M10	15 x 2.50	113 x 201 x 22	VdS ITB (KOT)	3,500
45565115	114	DN 100	4	M10	15 x 2.50	120 x 204 x 22	VdS FM ITB (KOT)	3,500
45565133	133			M12	15 x 2.50	138 x 223 x 26	VdS ITB (KOT)	5,000
45565142	140	DN 125	5	M12	15 x 2.50	155 x 233 x 26	VdS FM ITB (KOT)	5,000
45565159	159			M12	15 x 2.50	164 x 271 x 26	VdS ITB (KOT)	5,000
45565170	168	DN 150	6	M12	15 x 2.50	173 x 276 x 26	VdS FM ITB (KOT)	5,000
45565221	219	DN 200	8	M16	25 x 2.50	224 x 353 x 34	VdS FM ITB (KOT)	8,500

Walraven Sprinkler Clamp TA41

(B1215)

for sprinkler pipes



Features & benefits

- one-part clamp
- for sprinkler pipes up to 8" (221 mm)
- with knurled nut for fixing to stud bolt or threaded rod
- material: steel
- clamp: pre-galvanized; nut: zinc plated
- with FM approval - certificate number 3024336
- UL listed - certificate number VFXT.EX9140



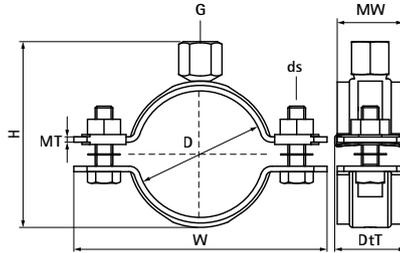
EPD

Product Number	Outside Pipe Diameter	DN	Pipe Diameter Imperial	Connection Thread	Material Width x Material Thickness	Total Width x Total Height x Total Depth	Approvals	Maximum Allowed Load Faz
Reference letter	D	D	D	G	MW x MT	W x H x DtT		Fa,z
Unit description	mm		"		mm x mm	mm x mm x mm		N
4535021	23	DN 15	1/2	M10	16 x 1.00	86 x 51 x 16	FM UL ITB (KOT) EPD	1,500
4535027	28	DN 20	3/4	M10	16 x 1.00	86 x 48 x 16	FM UL ITB (KOT) EPD	1,500
4535034	35	DN 25	1	M10	16 x 1.00	37 x 89 x 16	FM UL ITB (KOT) EPD	1,500
4535042	44	DN 32	1 1/4	M10	16 x 1.00	46 x 98 x 16	FM UL ITB (KOT) EPD	1,500
4535048	50	DN 40	1 1/2	M10	16 x 1.00	52 x 105 x 16	FM UL ITB (KOT) EPD	1,500
4535060	62	DN 50	2	M10	16 x 1.00	64 x 117 x 16	FM UL ITB (KOT) EPD	1,500
4535076	77	DN 65	2 1/2	M10	22 x 2.00	81 x 130 x 22	FM UL ITB (KOT) EPD	4,500
4535089	90	DN 80	3	M10	22 x 2.00	94 x 143 x 22	FM UL ITB (KOT) EPD	4,500
4535114	115	DN 100	4	M10	22 x 2.00	119 x 175 x 22	FM UL ITB (KOT) EPD	4,500
4535140	142	DN 125	5	M12	27 x 3.00	148 x 213 x 25	FM UL ITB (KOT)	5,200
4535168	170	DN 150	6	M12	27 x 3.00	176 x 250 x 25	FM UL ITB (KOT)	5,200
4535219	221	DN 200	8	M12	27 x 3.00	227 x 312 x 25	FM UL ITB (KOT)	5,200

Walraven Heavy Duty Clamp HD500 (M8/10) (BUP1000)

(B1004)

for steel pipes



Features & benefits

- two-part clamp with two locking bolts
- heavy design
- bolts secured with anti-loss washer
- with CO₂ welded connection nut
- material: steel
- surface protection:
- product is part of the Walraven BIS UltraProtect® 1000 system
- suitable for in- and outdoor applications
- stands min. 1,000 hours salt spray test (max. 5% red rust) according to ISO 9227
- also available: noise insulating lining of silicone rubber (reddish brown), heat resistant up to +200 °C (A 35 15)
- tested for fire safety



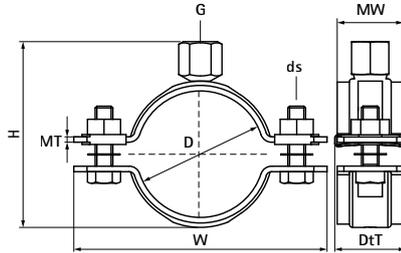
EPD

Product Number	Outside Pipe Diameter	DN	Pipe Diameter Imperial	Connection Thread	Total Width x Total Height x Total Depth	Material Width x Material Thickness	Screw Size	Approvals	Maximum Allowed Load Faz
Reference letter	D	D	D	G	W x H x DtT	MW x MT	ds		Fa,z
Unit description	mm		"		mm x mm x mm	mm x mm			N
33038019	15 - 19	DN 10	3/8	M8/M10	75 x 46 x 30	30 x 2.50	M8	RAL-GZ 656 ITB (KOT) CE ETA RAL-GZ 655/B EPD	2,100
33038023	19 - 23	DN 15	1/2	M8/M10	78 x 50 x 30	30 x 2.50	M8	VdS RAL-GZ 656 ITB (KOT) CE ETA RAL-GZ 655/B EPD	2,100
33038030	25 - 30	DN 20	3/4	M8/M10	84 x 57 x 30	30 x 2.50	M8	VdS RAL-GZ 656 ITB (KOT) CE ETA RAL-GZ 655/B EPD	2,100
33038036	31 - 36	DN 25	1	M8/M10	91 x 63 x 30	30 x 2.50	M8	VdS RAL-GZ 656 ITB (KOT) CE ETA RAL-GZ 655/B EPD	2,100
33038042	37 - 42			M8/M10	98 x 69 x 30	30 x 2.50	M8	VdS RAL-GZ 656 ITB (KOT) CE ETA RAL-GZ 655/B EPD	2,100
33038045	40 - 45	DN 32	1 1/4	M8/M10	101 x 72 x 30	30 x 2.50	M8	VdS RAL-GZ 656 ITB (KOT) CE ETA RAL-GZ 655/B EPD	2,100
33038052	47 - 52	DN 40	1 1/2	M8/M10	109 x 79 x 30	30 x 2.50	M8	VdS RAL-GZ 656 ITB (KOT) CE ETA RAL-GZ 655/B EPD	2,100
33038058	53 - 58			M8/M10	115 x 85 x 30	30 x 2.50	M8	RAL-GZ 656 VdS ITB (KOT) CE ETA RAL-GZ 655/B EPD	2,100
33038065	59 - 65	DN 50	2	M8/M10	122 x 92 x 30	30 x 2.50	M8	RAL-GZ 656 VdS ITB (KOT) CE ETA RAL-GZ 655/B EPD	2,100
33038071	66 - 71			M8/M10	129 x 98 x 30	30 x 2.50	M8	RAL-GZ 655/B RAL-GZ 656 ITB (KOT) CE ETA EPD	2,100

Walraven Heavy Duty Clamp HD500 (M10)

(B1008)

for steel pipes



Features & benefits

- two-part clamp with two locking bolts
- locking nut is captive, hidden in plastic holder
- heavy design
- bolts secured with anti-loss washer
- with CO₂ welded connection nut
- material: steel
- surface protection: product is part of the Walraven BIS UltraProtect® 1000 system
- suitable for in- and outdoor applications
- stands min. 1,000 hours salt spray test (max. 5% red rust) according to ISO 9227
- FM & VdS certified for sprinkler installations

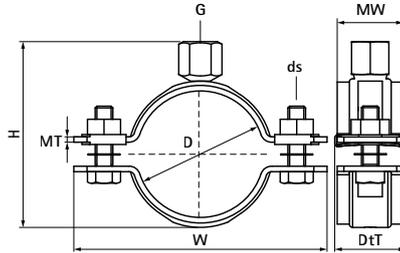


Product Number	Outside Pipe Diameter	DN	Pipe Diameter Imperial	Connection Thread	Total Width x Total Height x Total Depth	Material Width x Material Thickness	Screw Size	Approvals	Maximum Allowed Load Faz
Reference letter	D	D	D	G	W x H x DtT	MW x MT	ds		Fa,z
Unit description	mm		"		mm x mm x mm	mm x mm			N
33018030	25 - 30	DN 20	¾	M10	85 x 49 x 32	30 x 2,50	M8	FM VdS CE ETA EPD	2,100
33018036	31 - 36	DN 25	1	M10	91 x 55 x 32	30 x 2,50	M8	FM VdS CE ETA EPD	2,100
33018045	40 - 45	DN 32	1¼	M10	102 x 64 x 32	30 x 2,50	M8	FM VdS CE ETA EPD	2,100
33018052	47 - 52	DN 40	1½	M10	109 x 71 x 32	30 x 2,50	M8	FM VdS CE ETA EPD	2,100
33018065	59 - 65	DN 50	2	M10	121 x 84 x 32	30 x 2,50	M8	FM VdS CE ETA EPD	2,100

Walraven Heavy Duty Clamp HD500 (M10/12) (BUP1000)

(B1005)

for steel pipes



Features & benefits

- two-part clamp with two locking bolts
- heavy design
- bolts secured with anti-loss washer
- with CO₂ welded connection nut
- material: steel
- surface protection:
- product is part of the Walraven BIS UltraProtect® 1000 system
- suitable for in- and outdoor applications
- stands min. 1,000 hours salt spray test (max. 5% red rust) according to ISO 9227
- also available: noise insulating lining of silicone rubber (reddish brown), heat resistant up to +200 °C (A 35 15)
- tested for fire safety



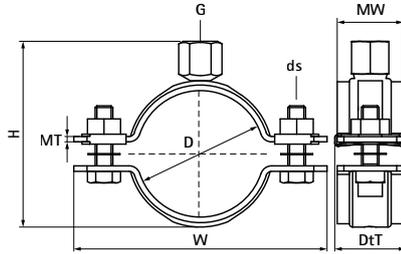
EPD

Product Number	Outside Pipe Diameter	DN	Pipe Diameter Imperial	Connection Thread	Total Width x Total Height x Total Depth	Material Width x Material Thickness	Screw Size	Approvals	Maximum Allowed Load Faz
Reference letter	D	D	D	G	W x H x DtT	MW x MT	ds		Fa,z
Unit description	mm		"		mm x mm x mm	mm x mm			N
33048078	72 - 78	DN 65	2½	M10/M12	136 x 115 x 30	30 x 3.00	M8	CE ETA RAL-GZ 655/B RAL-GZ 656 VdS ITB (KOT) FM EPD	4,000
33048085	79 - 85			M10/M12	144 x 122 x 30	30 x 3.00	M8	CE ETA RAL-GZ 655/B RAL-GZ 656 VdS ITB (KOT) EPD	4,000
33048092	86 - 92	DN 80	3	M10/M12	152 x 129 x 30	30 x 3.00	M8	CE ETA RAL-GZ 655/B RAL-GZ 656 VdS ITB (KOT) FM EPD	4,000
33048106	98 - 106			M10/M12	165 x 143 x 30	30 x 3.00	M8	CE ETA RAL-GZ 655/B RAL-GZ 656 VdS ITB (KOT) EPD	4,000
33048116	108 - 116	DN 100	4	M10/M12	175 x 153 x 30	30 x 3.00	M8	CE ETA RAL-GZ 655/B RAL-GZ 656 VdS ITB (KOT) EPD	4,000
33048123	116 - 123			M10/M12	182 x 160 x 30	30 x 3.00	M8	CE ETA RAL-GZ 655/B RAL-GZ 656 ITB (KOT) EPD	4,000
33048133	125 - 133			M10/M12	193 x 170 x 30	30 x 3.00	M8	CE ETA RAL-GZ 655/B RAL-GZ 656 ITB (KOT) EPD	4,000
33048140	132 - 140	DN 125	5	M10/M12	200 x 177 x 30	30 x 3.00	M8	CE ETA RAL-GZ 655/B RAL-GZ 656 VdS ITB (KOT) EPD	4,000
33048154	148 - 154			M10/M12	215 x 191 x 30	30 x 3.00	M8	CE ETA RAL-GZ 655/B ITB (KOT) EPD	4,000
33048169	159 - 169	DN 150	6	M10/M12	240 x 207 x 38	38 x 4.00	M10	CE ETA VdS ITB (KOT) EPD RAL-GZ 655/B	8,200
33048183	173 - 183			M10/M12	254 x 221 x 38	38 x 4.00	M10	CE ETA ITB (KOT) EPD RAL-GZ 655/B	8,200
33048202	192 - 202			M10/M12	274 x 240 x 38	38 x 4.00	M10	CE ETA ITB (KOT) EPD RAL-GZ 655/B	8,200
33048219	208 - 219			M10/M12	290 x 256 x 38	38 x 4.00	M10	CE ETA ITB (KOT) EPD RAL-GZ 655/B	8,200
33048227	217 - 227	DN 200	8	M10/M12	299 x 265 x 38	38 x 4.00	M10	CE ETA ITB (KOT) EPD RAL-GZ 655/B	8,200

Walraven Heavy Duty Clamp HD500 (M16) (BUP1000)

(B1006)

for steel pipes



Features & benefits

- two-part clamp with two locking bolts
- heavy design
- bolts secured with anti-loss washer
- with CO₂ welded connection nut
- material: steel
- surface protection:
- product is part of the Walraven BIS UltraProtect® 1000 system
- suitable for in- and outdoor applications
- stands min. 1,000 hours salt spray test (max. 5% red rust) according to ISO 9227
- also available: noise insulating lining of silicone rubber (reddish brown), heat resistant up to +200 °C (A 35 15)
- tested for fire safety

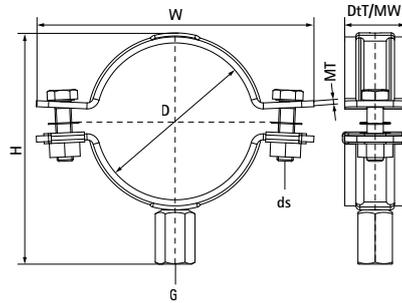


Product Number	Outside Pipe Diameter	DN	Pipe Diameter Imperial	Connection Thread	Total Width x Total Height x Total Depth	Material Width x Material Thickness	Screw Size	Approvals	Maximum Allowed Load Faz
Reference letter	D	D	D	G	W x H x DtT	MW x MT	ds		Fa,z
Unit description	mm		"		mm x mm x mm	mm x mm			N
33068169	159 - 169	DN 150	6	M16	241 x 193 x 38	38 x 4.00	M10	RAL-GZ 655/B ITB (KOT) ETA CE EPD	8,200
33068183	173 - 183			M16	255 x 207 x 38	38 x 4.00	M10	RAL-GZ 655/B VdS ITB (KOT) ETA CE EPD	8,200
33068202	192 - 202			M16	274 x 226 x 38	38 x 4.00	M10	RAL-GZ 655/B VdS ITB (KOT) ETA CE EPD	8,200
33068219	208 - 219			M16	291 x 243 x 38	38 x 4.00	M10	RAL-GZ 655/B VdS ITB (KOT) ETA CE EPD	8,200
33068227	217 - 227	DN 200	8	M16	299 x 263 x 38	38 x 4.00	M10	RAL-GZ 655/B ITB (KOT) ETA CE EPD	8,200
33068241	229 - 241			M16	322 x 277 x 38	38 x 4.00	M12	RAL-GZ 655/B ITB (KOT) ETA CE EPD	8,200
33068254	244 - 254			M16	335 x 290 x 38	38 x 4.00	M12	RAL-GZ 655/B ITB (KOT) ETA CE EPD	8,200
33068264	254 - 264			M16	345 x 300 x 38	38 x 4.00	M12	RAL-GZ 655/B ITB (KOT) ETA CE EPD	8,200
33068279	267 - 279	DN 250	10	M16	360 x 315 x 38	38 x 4.00	M12	RAL-GZ 655/B ITB (KOT) ETA CE EPD	8,200
33068289	279 - 289			M16	367 x 324 x 48	48 x 5.00	M12	ITB (KOT) ETA CE RAL-GZ 655/B	12,000
33068302	292 - 302			M16	380 x 337 x 48	48 x 5.00	M12	ITB (KOT) ETA CE RAL-GZ 655/B	12,000
33068325	315 - 325	DN 300	12	M16	403 x 358 x 48	48 x 5.00	M12	ITB (KOT) ETA CE RAL-GZ 655/B	12,000
33068360	350 - 360	DN 350	14	M16	439 x 395 x 48	48 x 5.00	M12	ITB (KOT) ETA CE RAL-GZ 655/B EPD	12,000
33068374	364 - 374			M16	453 x 409 x 48	48 x 5.00	M12	ITB (KOT) ETA CE RAL-GZ 655/B EPD	12,000
33068389	379 - 389			M16	468 x 424 x 48	48 x 5.00	M12	ITB (KOT) ETA CE RAL-GZ 655/B EPD	12,000
33068408	398 - 408	DN 400	16	M16	487 x 443 x 48	48 x 5.00	M12	ITB (KOT) ETA CE RAL-GZ 655/B EPD	12,000
33068418	408 - 418			M16	498 x 441 x 48	48 x 5.00	M12	ITB (KOT) ETA CE RAL-GZ 655/B EPD	12,000
33068436	424 - 436			M16	515 x 471 x 48	48 x 5.00	M12	ITB (KOT) ETA CE RAL-GZ 655/B EPD	12,000
33068458	448 - 458	DN 450	18	M16	537 x 493 x 48	48 x 5.00	M12	ITB (KOT) ETA CE RAL-GZ 655/B EPD	12,000
33068509	499 - 509	DN 500	20	M16	588 x 544 x 48	48 x 5.00	M12	ITB (KOT) ETA CE RAL-GZ 655/B EPD	12,000

Walraven Heavy Duty Clamp HD500 (M8/10) (Black)

(B1040)

for steel and stainless steel pipes, including fire mains



Features & benefits

- two-part clamp with two locking bolts
- up to and including 5": locking nut is captive, hidden in plastic holder
- heavy design
- bolts secured with anti-loss washers
- with 360° CO₂ welded connection nut
- suitable for fire mains (DIN1988-600)
- with M8/10 connection for higher flexibility
- can be used with stainless steel pipe; the epoxy powder coating prevents contact corrosion between clamp and pipe
- material: steel
- surface protection:
 - black (RAL 9005) epoxy powder coating (60 µm)
 - product is part of the Walraven BIS UltraProtect® 1000 system
- suitable for in- and outdoor applications
- stands min. 1,000 hours salt spray test (max. 5% red rust) according to ISO 9227



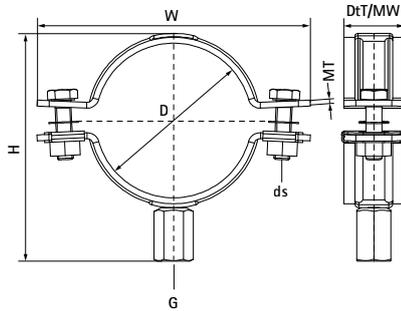
EPD

Product Number	Outside Pipe Diameter	DN	Pipe Diameter Imperial	Connection Thread	Total Width x Total Height x Total Depth	Material Width x Material Thickness	Screw Size	Approvals	Maximum Allowed Load Faz
Reference letter	D	D	D	G	W x H x DtT	MW x MT	ds		Fa,z
Unit description	mm		"		mm x mm x mm	mm x mm			N
3303B016	12 - 16			M8/M10	71.7 x 43 x 32.3	30 x 2.50	M8	ITB (KOT) EPD	2,100
3303B023	19 - 23	DN 15	1/2	M8/M10	78.5 x 50 x 32.3	30 x 2.50	M8	ITB (KOT)	2,100
3303B026	22 - 26			M8/M10	81.5 x 53 x 32.3	30 x 2.50	M8	ITB (KOT) EPD	2,100
3303B030	25 - 30	DN 20	3/4	M8/M10	85 x 57 x 32.3	30 x 2.50	M8	VdS ITB (KOT) EPD	2,100
3303B036	31 - 36	DN 25	1	M8/M10	90.5 x 63 x 32.3	30 x 2.50	M8	VdS ITB (KOT) EPD	2,100
3303B042	37 - 42			M8/M10	97.6 x 69 x 32.3	30 x 2.50	M8	VdS ITB (KOT) EPD	2,100
3303B052	47 - 52	DN 40	1 1/2	M8/M10	108.8 x 79 x 32.3	30 x 2.50	M8	VdS ITB (KOT) EPD	2,100
3303B058	53 - 58			M8/M10	114 x 85 x 32.3	30 x 2.50	M8	VdS ITB (KOT)	2,100
3303B065	59 - 65	DN 50	2	M8/M10	120.8 x 92 x 32.3	30 x 2.50	M8	VdS ITB (KOT) EPD	2,100

Walraven Heavy Duty Clamp HD500 (M10/12) (Black)

(B1041)

for steel and stainless steel pipes, including fire mains



Features & benefits

- two-part clamp with two locking bolts
- up to and including 5": locking nut is captive, hidden in plastic holder
- heavy design
- bolts secured with anti-loss washers
- with 360° CO₂ welded connection nut
- suitable for fire mains (DIN1988-600)
- with M10/12 connection for higher flexibility
- can be used with stainless steel pipe; the epoxy powder coating prevents contact corrosion between clamp and pipe
- material: steel
- surface protection:
 - black (RAL 9005) epoxy powder coating (60 µm)
- product is part of the Walraven BIS UltraProtect® 1000 system
- suitable for in- and outdoor applications
- stands min. 1,000 hours salt spray test (max. 5% red rust) according to ISO 9227
- tested for fire safety



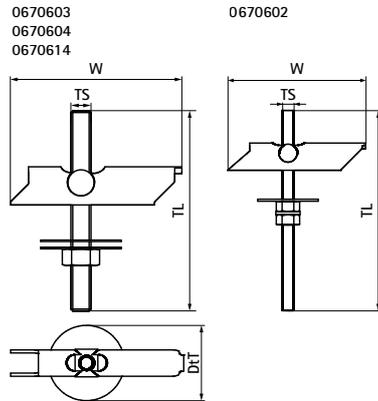
EPD

Product Number	Outside Pipe Diameter	DN	Pipe Diameter Imperial	Connection Thread	Total Width x Total Height x Total Depth	Material Width x Material Thickness	Screw Size	Approvals	Maximum Allowed Load Faz
<i>Reference letter</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>G</i>	<i>W x H x DtT</i>	<i>MW x MT</i>	<i>ds</i>		<i>F_{a,z}</i>
<i>Unit description</i>	<i>mm</i>		<i>"</i>		<i>mm x mm x mm</i>	<i>mm x mm</i>			<i>N</i>
3304B078	72 - 78	DN 65	2½	M10/M12	137 x 115 x 32.3	30 x 3.00	M8	VdS ITB (KOT)	4,000
3304B092	86 - 92	DN 80	3	M10/M12	151 x 129 x 32.3	30 x 3.00	M8	VdS ITB (KOT) EPD	4,000
3304B116	108 - 116	DN 100	4	M10/M12	175 x 153 x 32.3	30 x 3.00	M8	VdS ITB (KOT)	4,000

Walraven Toggle Plug (Stud-end)

(L1025)

fixing to hollow walls & ceilings



Features & benefits

- U-profile with rotating shaft with stud bolt
- for fixing in hollow walls and hollow ceilings or profiled roofing sheets
- with VdS-approval - certificate number G 4890027 (M10) max. DN 50 - 2"
- with FM-approval - certificate number 3047342 max. DN 40 - 1 1/2"
- load capacity of the plug is influenced by the surface
- material: metal parts made of steel; protective washer made of rubber (0670602 without rubber washer)
- zinc plated

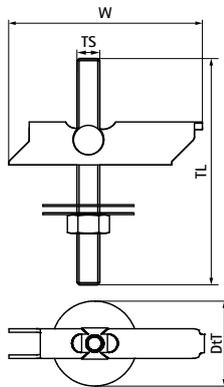


Product Number	Thread Size	Thread Length	Drill Hole Diameter	Width Across Flats	Min. Hollow Depth	Maximum Substrate Thickness	Total Width x Total Height x Total Depth	Approvals
Reference letter	TS	TL	d0	WAF			W x H x D/T	
Unit description		mm	mm	mm	mm	mm	mm x mm x mm	
0670602	M6	100	17	10	70	55	70 x 102 x 30	ITB (KOT)
0670603	M8	100	20	13	75	50	74 x 102 x 40	ITB (KOT)
0670604	M10	100	25	17	85	45	85 x 102 x 40	VdS ITB (KOT) FM
0670614	M10	200	25	17	85	145	85 x 202 x 40	VdS FM

Walraven Stainless Steel Toggle Plug (Stud-end)

(M9525)

fixing to hollow walls & ceilings



Features & benefits

- U-profile with rotating shaft with stud bolt
- for fixing in hollow walls and hollow ceilings or profiled roofing sheets
- with VdS-approval - certificate number G 4890027 max. DN 50 - 2"
- load capacity of the plug is influenced by the surface
- material: stainless steel A2 (1.4301/AISI 304), protective washer made of rubber

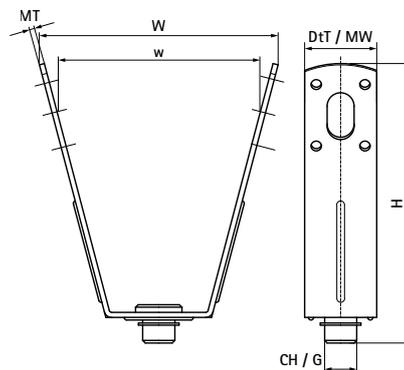


Product Number	Thread Size	Thread Length	Drill Hole Diameter	Width Across Flats Min.	Hollow Depth	Maximum Substrate Thickness	Total Width x Total Height x Total Depth	Approvals
<i>Reference letter</i>	TS	TL	d0	WAF			W x H x DtT	
<i>Unit description</i>		mm	mm	mm	mm	mm	mm x mm x mm	
0670673	M8	100	22	13	85	50	74 x 102 x 40	VdS

Walraven Roofing Sheet Hanger VdS

(K2505)

fixing to trapeze roofing sheet



Features & benefits

- for mounting to profiled roofing sheet by means of pop rivets or threaded rod
- for fixing pipes up to DN 50 in stationary water extinguishing systems to profiled roofing sheets according to VdS guidelines
- variable distance to roof hanger by using a threaded rod
- material: steel
- pre-galvanized
- with VdS-approval - certificate number G 4070033

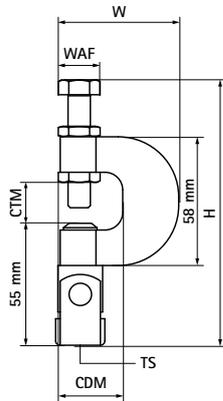


Product Number	Connection	Connection Thread	Connection Hole	Width	Material Width x Material Thickness	Total Width x Total Height x Total Depth	Maximum Allowed Load Faz
<i>Reference letter</i>		<i>G</i>	<i>CH</i>	<i>w</i>	<i>MW x MT</i>	<i>W x H x DtT</i>	<i>F_{0,2}</i>
<i>Unit description</i>			<i>mm</i>	<i>mm</i>	<i>mm x mm</i>	<i>mm x mm x mm</i>	<i>N</i>
6785001	Hole		13	82	25 x 2.50	98 x 100 x 25	2,300
6785008	Female thread	M8		82	25 x 2.50	98 x 115 x 25	2,300
6785010	Female thread	M10		82	25 x 2.50	98 x 115 x 25	2,300

Walraven Swivel Beam Clamp Model P

(K2030)

for clamping on beam flange



Features & benefits

- multidirectional clamp
- for suspension on pitched flanges without welding or drilling
- up to flange thickness 17 mm
- according to VdS-regulations an additional safety strap should be used when supporting pipes above DN65
- articulation to 45° sideways, 90° forwards
- safety strap is obliged with VdS applications 1 and 4
- material: steel
- zinc plated
- with VdS-approval - certificate number G 4020003

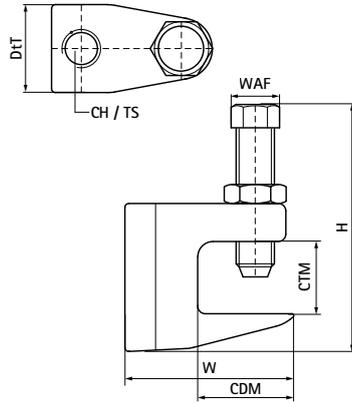


Product Number	Maximum Clamping Thickness	Maximum Clamping Depth	Total Width x Total Height x Total Depth	Thread Size	Width Across Flats	Maximum Allowed Load	Approvals
<i>Reference letter</i>	CTM	CDM	$W \times H \times Dt$	TS	WAF	$F_{a,z}$	
<i>Unit description</i>	mm	mm	mm x mm x mm		mm	N	
6078010	17	27	53 x 168 x 28	M10	17	2,500	FM VdS

Walraven Beam Clamp Model C (BUP1000)

(K2003)

for clamping on beam flange



Features & benefits

- for a solid fixing to steel construction without the need for welding or drilling
- according to VdS-regulations an additional safety strap should be used when supporting pipes above DN65
- bolt with hexagon head according to DIN 933 strength class 8.8, screw point with cup ring according to EN ISO 4753 and lock nut
- product is part of the Walraven UltraProtect® 1000 system
- suitable for in- and outdoor applications
- stands min. 1,000 hours salt spray test (max. 5% red rust) according to ISO 9227
- FM approval and UL listed for hanger rod size M10

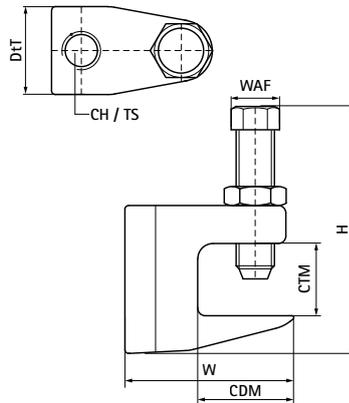


Product Number	Maximum Clamping Thickness	Maximum Clamping Depth	Total Width x Total Height x Total Depth	Connection Hole	Thread Size	Width Across Flats	Maximum Allowed Load Faz	Approvals
Reference letter	CTM	CDM	W x H x DtT	CH	TS	WAF	Fa,z	
Unit description	mm	mm	mm x mm x mm	mm		mm	N	
6008008	23	20	50 x 62 x 21		M8	17	2,500	VdS ITB (KOT)
6008010	20	20	44 x 62 x 21		M10	17	2,500	VdS FM UL ITB (KOT)
6008910	20	20	44 x 62 x 21	11		17	2,500	VdS FM UL ITB (KOT)

Walraven Beam Clamp Model C

(K2005)

for clamping on beam flange



Features & benefits

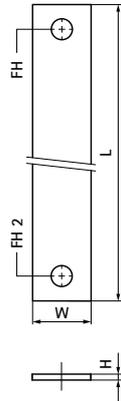
- for a solid fixing to steel construction without the need for welding or drilling
- according to VdS-regulations an additional safety strap should be used when supporting pipes above DN65
- bolt with hexagon head according to DIN 933 strength class 8.8, screw point with cup ring according to EN ISO 4753 and lock nut
- material: beam clamp made of cast iron; bolt of hardened steel, nut of steel, zinc plated
- 6003016 and 6003310 with VdS approval - certificate number G 4030026
- FM approval and UL listed for hanger rod sizes M10, M12 and M16
- see also: Walraven Safety Strap (page K 20 06)

Product Number	Maximum Clamping Thickness	Maximum Clamping Depth	Total Width x Total Height x Total Depth	Connection Hole	Thread Size	Width Across Flats	Maximum Allowed Load Faz	Approvals
Reference letter	CTM	CDM	W x H x D x T	CH	TS	WAF	F _{a,z}	
Unit description	mm	mm	mm x mm x mm	mm		mm	N	
6003206	18	18	38 x 55 x 21		M6	13	1,200	ITB (KOT)
6003006	23	20	50 x 62 x 21		M6	17	2,500	ITB (KOT)
6003208	18	18	38 x 55 x 21		M8	13	1,200	VdS ITB (KOT)
6003008	23	20	44 x 62 x 21		M8	17	2,500	VdS ITB (KOT)
6003010	20	20	44 x 62 x 21		M10	17	2,500	VdS FM UL ITB (KOT)
6003310	28	23	58 x 78 x 30		M10	19	2,500	VdS FM UL ITB (KOT)
6003012	26	22	58 x 74 x 24		M12	17	3,500	VdS FM UL ITB (KOT)
6003016	28	23	58 x 78 x 30		M16	19	5,500	VdS FM UL ITB (KOT)
6003906	18	18	38 x 57 x 19	7		13	1,200	
6003905	18	18	38 x 57 x 19	9		13	1,200	VdS ITB (KOT)
6003908	23	20	50 x 62 x 21	9		17	2,500	VdS ITB (KOT)
6003910	20	20	44 x 62 x 21	11		17	2,500	VdS FM UL ITB (KOT)
6003912	26	22	58 x 74 x 24	13		17	3,500	VdS FM UL ITB (KOT)

Walraven Safety Strap for Beam Clamp Model C

(K2006)

to prevent displacement



Features & benefits

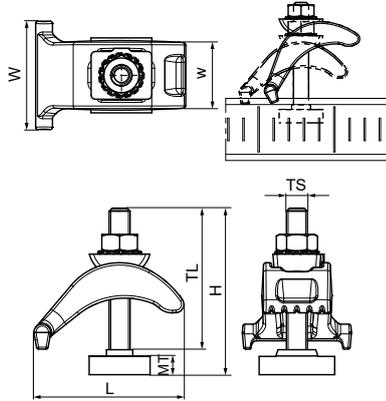
- Safety Strap needs to be bent by hand
- material: steel
- pre-galvanized

Product Number	Fixing Hole	Fixing Hole 2	Total Width x Total Height x Total Length
<i>Reference letter</i>	<i>FH</i>	<i>FH 2</i>	<i>W x H x L</i>
<i>Unit description</i>	<i>mm</i>	<i>mm</i>	<i>mm x mm x mm</i>
6015110	10.5	12.5	25 x 3 x 350
6015112	12.5	16.5	40 x 3 x 400

Walraven RapidStrut® 'Heavy Duty' Beam Clamp

(H3640)

to connect Strut rails to steel beams



Features & benefits

- solid cast iron beam clamp for suspension of heavy loads onto beams without welding or drilling
- up to flange thickness 35 mm
- for fixing of all Walraven RapidStrut® to a steel beam
- material: steel
- hot dip galvanized

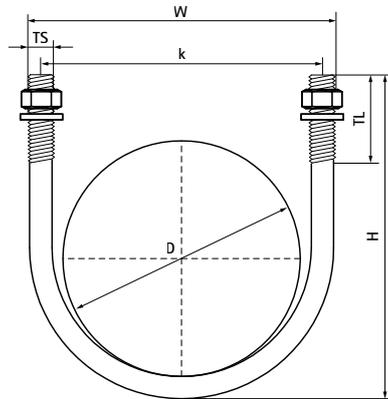


Product Number	For Rail Type	Clamping Range	Total Width x Total Height x Total Length	Thread Size	Thread Length	Width	Material Thickness	Maximum Allowed Load Faz	Maximum Allowed Load Fax	Torque Moment For Installation
<i>Reference letter</i>		<i>CR</i>	<i>W x H x L</i>	<i>TS</i>	<i>TL</i>	<i>w</i>	<i>MT</i>	<i>Fa,z</i>	<i>Fa,x</i>	<i>T inst.</i>
<i>Unit description</i>		<i>mm</i>	<i>mm x mm x mm</i>		<i>mm</i>	<i>mm</i>	<i>mm</i>	<i>N</i>	<i>N</i>	<i>Nm</i>
6072002	41x21, 41x41, 41x51, 41x62, 41x82	1 - 35	52 x 80 x 72	M10	63	35	9.00	7,800	1,500	30

Walraven U-Bolt Clamp

(B1025)

for steel pipes



Features & benefits

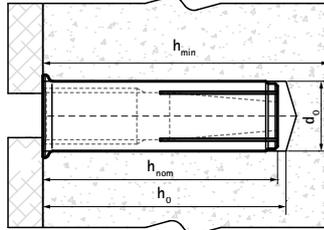
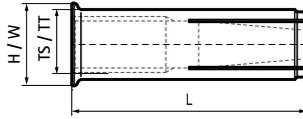
- U-Bolt with thread
- including nuts and washers
- material: steel
- zinc plated

Product Number	Outside Pipe Diameter	Pipe Diameter Imperial	DN	Thread Size	Thread Length	Total Width x Total Height x Total Depth	Heart To Heart Distance
<i>Reference letter</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>TS</i>	<i>TL</i>	<i>W x H x DtT</i>	<i>k</i>
<i>Unit description</i>	<i>mm</i>	<i>"</i>			<i>mm</i>	<i>mm x mm x mm</i>	<i>mm</i>
2084306017	17.2	3/8	DN 10	M6	19	30 x 42 x 10	24
2084306021	21.5	1/2	DN 15	M6	25	36 x 48 x 10	30
2084306027	26.9	3/4	DN 20	M6	30	45 x 63 x 10	35
2084306034	33.7	1	DN 25	M6	30	48 x 71 x 10	42
2084308027	26.9	3/4	DN 20	M8	30	43 x 63 x 13	35
2084308034	33.7	1	DN 25	M8	30	50 x 71 x 13	42
2084308042	42.4	1 1/4	DN 32	M8	30	59 x 79 x 13	51
2084308049	48.3	1 1/2	DN 40	M8	30	65 x 80 x 13	57
2084308060	60.3	2	DN 50	M8	30	77 x 92 x 13	69
2084308076	76.1	2 1/2	DN 65	M8	30	93 x 108 x 13	85
2084310090	88.9	3	DN 80	M10	40	109 x 131 x 17	99
2084310114	114.3	4	DN 100	M10	50	137 x 167 x 17	127
2084310140	140	5	DN 125	M10	55	162 x 188 x 17	152
2084310168	168	6	DN 150	M10	55	188 x 215 x 17	178
2084310220	220	8	DN 200	M10	55	246 x 268 x 17	236
2084312140	139.7	5	DN 125	M12	50	164 x 191 x 19	152
2084314168	168.3	6	DN 150	M14	50	194 x 220 x 21	178
2084316219	219.1	8	DN 200	M16	60	252 x 282 x 24	236
2084316273	273	10	DN 250	M16	60	206 x 335 x 24	287

Walraven WDI1L Drop-in Anchor Lipped

(L0310)

standard drop-in anchor with a lip collar



Features & benefits

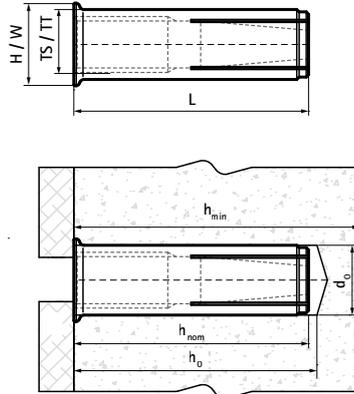
- simple and quick installation procedure
- collar with a lip for flush anchor setting at any hole depth
- medium load capacity
- ETA ETAG001 Part 6 approval for multiple use for non-structural applications
- fire resistance class R30-R120 for design of anchorages under exposure to fire (M8-M16)
- complies with VdS CEA 4001:2024-01 (08) for applications with sprinkler systems in concrete (M8-M12)
- for loads and more information, refer to the product data sheet and/or the ETA report
- substrate type: cracked concrete, non-cracked concrete
- material: steel
- zinc plated

Product Number	Thread Size	Thread Type	Total Width x Total Height x Total Length	Drill Hole Diameter	Min. Drill Hole Depth	Standard Embedment Depth	Minimum Substrate Thickness
<i>Reference letter</i>	<i>TS</i>	<i>TT</i>	<i>W x H x L</i>	<i>d0</i>	<i>h0 min</i>	<i>hnom</i>	<i>hmin</i>
<i>Unit description</i>			<i>mm x mm x mm</i>	<i>mm</i>	<i>mm</i>	<i>mm</i>	<i>mm</i>
6103106	M6	Metric	8 x 8 x 25	8	30	≥ 25	80
6103108	M8	Metric	10 x 10 x 30	10	32	≥ 30	80
6103110	M10	Metric	12 x 12 x 40	12	42	≥ 40	80
6103112	M12	Metric	15 x 15 x 50	15	53	≥ 50	100
6103116	M16	Metric	20 x 20 x 65	20	70	≥ 65	130

Walraven WDI2L Drop-in Anchor Lipped

(L0322)

standard Drop-in Anchor with a lip collar



Features & benefits

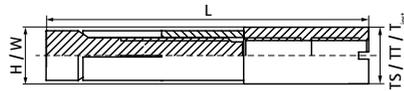
- simple and quick installation procedure
- collar with a lip for flush anchor setting at any hole depth
- medium load capacity
- European Technical Assessment according to EAD 330747-00-0601 (May 2018) for fastener for use in concrete for redundant non-structural systems
- European Technical Assessment according to EAD 330232-00-0601 (October 2016) for mechanical fastener for use in non-cracked concrete
- fire resistance class R30-R120 for design of anchorages under exposure to fire
- complies with VdS CEA 4001:2024-01 (08) for applications with sprinkler systems in concrete (M8-M20)
- for loads and more information, refer to the product data sheets and/or the ETA reports
- substrate type: cracked concrete, non-cracked concrete
- material: steel
- zinc plated

Product Number	Thread Size	Thread Type	Total Width x Total Height x Total Length	Drill Hole Diameter	Min. Drill Hole Depth	Standard Embedment Depth	Minimum Substrate Thickness
Reference letter	TS	TT	W x H x L	d ₀	h _{0 min}	h _{nom}	h _{min}
Unit description			mm x mm x mm	mm	mm	mm	mm
6103310830	M8	Metric	11 x 11 x 30	10	33	≥ 30	100

Walraven WGB-M Aerated Concrete Anchor

(L0382)

for soft substrate



Features & benefits

- internal thread connection allows flexible distance from the anchor to the fixture
- load can be applied immediately after installation
- installation does not require drilling
- four-way expansion provides high permissible loads, even in tensile areas of roofs and ceilings
- high load safety due to undercutting expansion
- fire resistance class R30-R120 for design of anchorages under exposure to fire
- with VdS-approval - certificate number G 4980083 for applications with stationary fire extinguishing systems
- material: steel
- zinc plated

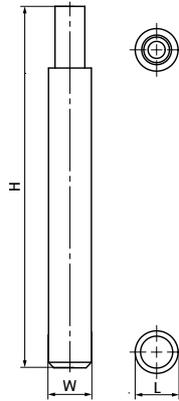


Product Number	Thread Size	Thread Type	Total Width x Total Height x Total Length	Minimum Screw Depth	Minimum Substrate Thickness	Torque Moment For Installation
<i>Reference letter</i>	<i>TS</i>	<i>TT</i>	<i>W x H x L</i>	<i>ls,min</i>	<i>hmin</i>	<i>Tinst.</i>
<i>Unit description</i>			<i>mm x mm x mm</i>	<i>mm</i>	<i>mm</i>	<i>Nm</i>
6103510	M10	Metric	16 x 16 x 92	10	175	8
6103512	M12	Metric	16 x 16 x 92	12	175	8

Walraven WGB-M Setting Tool

(L0383)

for installation of WGB-M



Features & benefits

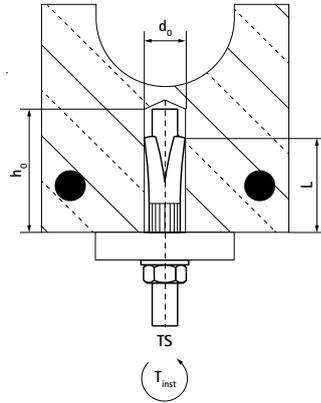
- for use with WGB-M M10 or M12 aerated concrete anchors
- solid metal construction ensures high durability and many years of service

Product Number	For Thread Size	Total Width x Total Height x Total Length
<i>Reference letter</i>	<i>fts</i>	<i>W x H x L</i>
<i>Unit description</i>		<i>mm x mm x mm</i>
6902511	M10/M12	18 x 130 x 18

Walraven WHC Hollow Core Anchor

(L0381)

for hollow core concrete slabs



Features & benefits

- designed specifically for use in precast pre-stressed hollow core concrete slabs
- very high load capacity
- fire resistance class R30-R120 for design of anchorages under exposure to fire
- with VdS-approval - certificate number G 4070019

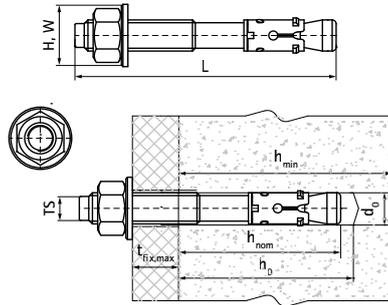


Product Number	Thread Size	Thread Type	Total Width x Total Height x Total Length	Drill Hole Depth	Drill Hole Diameter	Torque Moment For Installation
<i>Reference letter</i>	<i>TS</i>	<i>TT</i>	<i>W x H x L</i>	<i>h0</i>	<i>d0</i>	<i>Tinst.</i>
<i>Unit description</i>			<i>mm x mm x mm</i>	<i>mm</i>	<i>mm</i>	<i>Nm</i>
6096408	M8	Metric	12 x 12 x 44	55	12	20
6096410	M10	Metric	16 x 16 x 53	60	16	30
6096412	M12	Metric	18 x 18 x 58	70	18	40

Walraven WT1 Throughbolt Anchor

(L0341)

ultimate performance expansion anchor for cracked concrete



Features & benefits

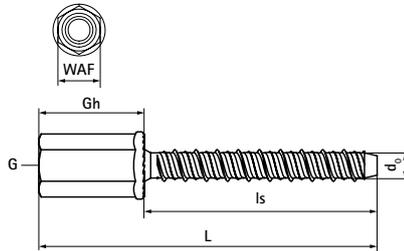
- superior load capacity
- ETA Option 1 approval for cracked and non-cracked concrete
- fire resistance class R30-R120 for design of anchorages under exposure to fire
- seismic performance category C1 and C2 for design of anchorages under seismic action
- complies with VdS CEA 4001: 2024-01 (08) for applications with sprinkler systems in concrete elements
- substrate type: cracked concrete, non-cracked concrete, stone
- pre- and through-fixing
- material: steel
- zinc plated
- for loads and more information, refer to the product data sheet and/or the ETA reports

Product Number	Thread Size	Total Length	Drill Hole Diameter	Drill Hole Depth	Minimum Substrate Thickness	Maximum Fixture Thickness	Standard Embedment Depth	ETA Seismic Rating	Recommended Load In Cracked Concrete C20/25	Recommended Load In Uncracked Concrete C20/25	Total Height	Total Width
Reference letter	TS	L	d0	h0	hmin	tfix,max	hnom		N	N	H	W
Unit description		mm	mm	mm	mm	mm	mm				mm	mm
608408080	M8	80	8	60	80	14	55	C1	2,700	3,900	16	16
608408095	M8	95	8	60	80	29	55	C1	2,700	3,900	16	16
608408115	M8	115	8	60	80	49	55	C1	2,700	3,900	16	16
608410090	M10	90	10	75	90	10	68	C1 & C2	5,200	8,500	20	20
608410115	M10	115	10	75	90	35	68	C1 & C2	5,200	8,500	20	20
608410135	M10	135	10	75	90	55	68	C1 & C2	5,200	8,500	20	20
608412110	M12	110	12	80	105	14	80	C1 & C2	7,100	13,300	24	24
608412120	M12	120	12	85	105	24	80	C1 & C2	7,100	13,300	24	24
608412150	M12	150	12	85	105	54	80	C1 & C2	7,100	13,300	24	24
608416145	M16	145	16	105	130	28	97	C1	12,900	16,100	30	30

Walraven W-LX-N Concrete Screw

(L0359)

unibody zinc-plated concrete screw with an internal M8/M10 thread



Features & benefits

- very high load capacity
- approved for use in precast prestressed hollow core slabs
- up to 3 anchoring depths provide maximum installation flexibility
- reduced edge and anchor spacing distances
- removable
- unique tip and thread geometry prevents concrete spalling
- fire resistance class R30-R120 for design of anchorages under exposure to fire
- complies with VdS CEA 4001:2024-01 (08) for applications with sprinkler systems in concrete elements
- substrate type: cracked concrete, non-cracked concrete, precast pre-stressed hollow core slabs
- for loads and more information, refer to the product data sheet and/or the ETA report
- material: steel
- zinc plated

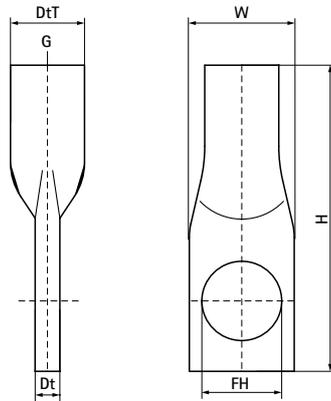


Product Number	Connection Thread	Connection Height	Screw Length	Anchor Size	Width Across Flats	Drill Hole Diameter	Total Width x Total Height x Total Length
Reference letter	G	Gh	Is		WAF	d0	W x H x L
Unit description		mm	mm		mm	mm	mm x mm x mm
62433304	M8/M10	25	35	6	13	6	16 x 16 x 60
62433305	M8/M10	25	55	6	13	6	16 x 16 x 80
62433314	M8	15	35	6	13	6	16 x 16 x 50
62433315	M8	15	55	6	13	6	16 x 16 x 70
62433324	M10	15	35	6	13	6	16 x 16 x 50
62433325	M10	15	55	6	13	6	16 x 16 x 70

Walraven Suspension Eye (Female Threaded)

(K4505)

for angle threaded rod ties and hangers



Features & benefits

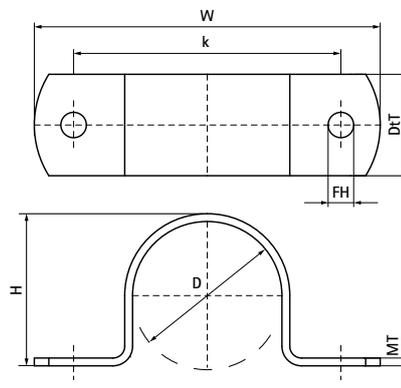
- closed design to maximize loading
- material: steel
- zinc plated

Product Number	Connection Thread	Total Width x Total Height x Total Depth	Depth	Fixing Hole	Maximum Allowed Load Faz
<i>Reference letter</i>	<i>G</i>	<i>W x H x DtT</i>	<i>Dt</i>	<i>FH</i>	<i>F_{0,z}</i>
<i>Unit description</i>		<i>mm x mm x mm</i>	<i>mm</i>	<i>mm</i>	<i>N</i>
6803008	M8	14 x 45 x 10	3	8.5	2,580
6803010	M10	17 x 50 x 12	4	10.5	3,540
6803012	M12	21 x 54 x 15	5.5	10.5	7,750

Walraven Industrial Saddle

(B1505)

for steel pipes



Features & benefits

- one-part saddle
- material: steel
- hot dip galvanized

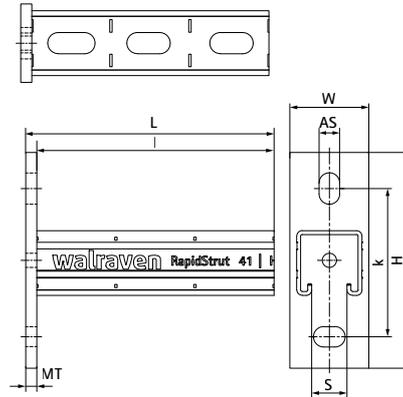
EPD

Product Number	Outside Pipe Diameter	Pipe Diameter Imperial	Fixing Hole	Fixing Slot	Heart To Heart Distance	Material Thickness	Total Width x Total Height x Total Depth
Reference letter	D	D	FH	FS	k	MT	W x H x Dt
Unit description	mm	"	mm	mm	mm	mm	mm x mm x mm
4608027	26.9	3/4	9		57.5	2.50	88 x 30 x 25
4608033	33.7	1	9		63.5	2.50	94 x 36 x 25
4608042	42.4	1 1/4	9		72.5	2.50	103 x 45 x 25
4608048	48.3	1 1/2	9		78.5	2.50	109 x 51 x 25
4608060	60.3	2	9		90	2.50	120 x 63 x 25
4608077	76.1	2 1/2	9		107	2.50	137 x 80 x 25
4608089	88.9	3	9		119	2.50	149 x 89 x 25
4608110	110		11		146	4.00	176 x 114 x 30
4608114	114.3	4	11		150	4.00	180 x 118 x 30
4608125	125		11		161	4.00	191 x 129 x 30
4608140	139.7	5	11		176	4.00	206 x 144 x 30
4608160	160	6	11		196	4.00	226 x 160 x 30
4608168	168.3	6	11		208	4.00	238 x 172 x 40
4608200	200			15x10,5	260	4.00	290 x 205 x 40
4608219				15x10,5	279	4.00	309 x 219 x 40
4608225	225	8		15x10,5	285	5.00	315 x 230 x 40
4608250	250			15x10,5	310	5.00	340 x 255 x 40
4608315	315	12		15x10,5	375	5.00	375 x 320 x 40

Walraven RapidStrut® Cantilever Arm (BUP1000)

(H0806)

fixing to wall, floor or ceiling



Features & benefits

- base plate with welded RapidStrut® Profile
- for quick and adjustable fixing of one or multiple pipes
- CO₂ welded
- with continuous perforation
- with sawing marks each 50 mm on all 3 sides of the profile
- well balanced relation between base plate and profile for optimal use of load performance
- material: profiles made of steel 1.0038 (S235JR)
- material: base plate type 21 H made of steel 1.0044 (S275JR)
- material: base plate type 41 M and H made of steel 1.0045 (S355JR)
- product is part of the Walraven UltraProtect® 1000 system
- suitable for in- and outdoor applications
- stands min. 1,000 hours salt spray test (max. 5% red rust) according to ISO 9227
- Walraven RapidStrut® type 41 H and above tested for fire safety according to EN 1366-1
- for more information about the max. allowed load (Faz) please refer to the loading tables or our online datasheet 'Walraven RapidStrut® Data Sheet'

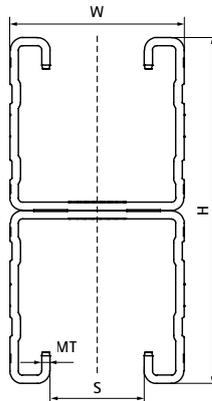


Product Number	Type	Length	Total Width x Total Height x Total Length	Material Thickness	Anchoring Slot	Profile Opening	Heart To Heart Distance
Reference letter		<i>l</i>	<i>W x H x L</i>	<i>MT</i>	<i>AS</i>	<i>S</i>	<i>k</i>
Unit description		mm	mm x mm x mm	mm	mm	mm	mm
66082120	21 H	205	50 x 110 x 205	5.00	18x11	22	70
66082130	21 H	300	50 x 110 x 305	5.00	18x11	22	70
66082145	21 H	450	50 x 110 x 455	5.00	18x11	22	70
66082160	21 H	600	50 x 110 x 605	5.00	18x11	22	70
66084030	41 M	300	50 x 137.5 x 307	7.00	20x13	22	95
66084045	41 M	450	50 x 137.5 x 457	7.00	20x13	22	95
66084060	41 M	600	50 x 137.5 x 607	7.00	20x13	22	95
66084115	41 H	150	50 x 137.5 x 157	7.00	20x13	22	95
66084120	41 H	200	50 x 137.5 x 207	7.00	20x13	22	95
66084130	41 H	300	50 x 137.5 x 307	7.00	20x13	22	95
66084140	41 H	400	50 x 137.5 x 407	7.00	20x13	22	95
66084145	41 H	450	50 x 137.5 x 457	7.00	20x13	22	95
66084150	41 H	500	50 x 137.5 x 507	7.00	20x13	22	95
66084160	41 H	600	50 x 137.5 x 607	7.00	20x13	22	95
66084175	41 H	750	50 x 137.5 x 757	7.00	20x13	22	95
66084198	41 H	1,000	50 x 137.5 x 1,007	7.00	20x13	22	95
66084199	41 H	1,200	50 x 137.5 x 1,207	7.00	20x13	22	95

Walraven RapidStrut® channel (pg)

(H0410)

for medium weight fixing applications



Features & benefits

- universal channel system
- distance between channel end and first hole is always equal
- inward formed flanges with serrated profile for extra grip
- with continuous smart hole pattern including round anchor holes
- with sawing marks each 50 mm on all 3 sides of the profile
- pre-galvanized
- Walraven RapidStrut® 41|H and 62|H tested for fire safety according to EN 1363-1
- for more information about the max. allowed load (Faz) please refer to the loading tables or our online datasheet 'Walraven RapidStrut® Data Sheet'

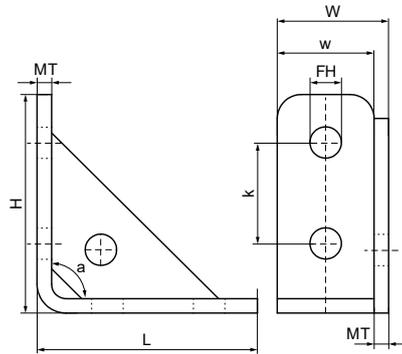
EPD

Product Number	Type	Total Width x Total Height x Total Length	Material Thickness	Profile Opening
Reference letter		W x H x L	MT	S
Unit description		mm x mm x mm	mm	mm
6505224054	21 L	41 x 21 x 540	1.50	22
6505224	21 L	41 x 21 x 2,000	1.50	22
6505324	21 L	41 x 21 x 3,000	1.50	22
6505624	21 L	41 x 21 x 6,000	1.50	22
6505222	21 M	41 x 21 x 2,000	2.00	22
6505322	21 M	41 x 21 x 3,000	2.00	22
6505622	21 M	41 x 21 x 6,000	2.00	22
6505225	21 H	41 x 21 x 2,000	2.50	22
6505325	21 H	41 x 21 x 3,000	2.50	22
6505625	21 H	41 x 21 x 6,000	2.50	22
6505244	41 L	41 x 41 x 2,000	1.50	22
6505344	41 L	41 x 41 x 3,000	1.50	22
6505644	41 L	41 x 41 x 6,000	1.50	22
6505242	41 M	41 x 41 x 2,000	2.00	22
6505342	41 M	41 x 41 x 3,000	2.00	22
6505642	41 M	41 x 41 x 6,000	2.00	22
6505245	41 H	41 x 41 x 2,000	2.50	22
6505345	41 H	41 x 41 x 3,000	2.50	22
6505645	41 H	41 x 41 x 6,000	2.50	22
6505365	62 H	41 x 62 x 3,000	2.50	22
6505665	62 H	41 x 62 x 6,000	2.50	22
6505385	82 H	41 x 82 x 3,000	2.50	22
6505685	82 H	41 x 82 x 6,000	2.50	22

Walraven RapidStrut® Connector 90° Rigid (BUP1000)

(H2825)

for rigid angle connections



Features & benefits

- reinforced connector to make rigid fabrications with Walraven RapidStrut® rails
- easy fitting due to rounded edges
- material: steel 1.0332
- product is part of the Walraven UltraProtect® 1000 system
- suitable for in- and outdoor applications
- stands min. 1,000 hours salt spray test (max. 5% red rust) according to ISO 9227

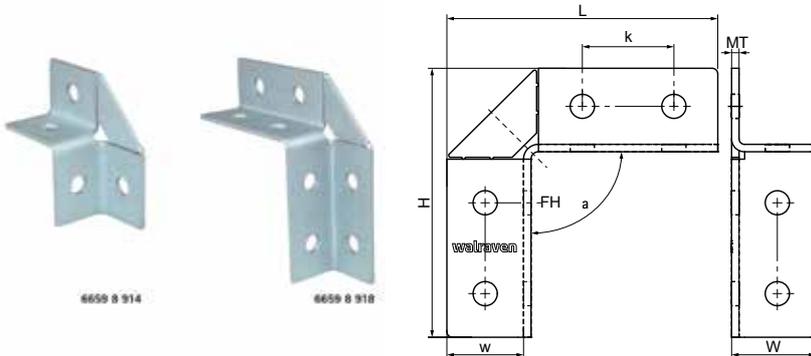


Product Number	For Rail Type	Angle	Total Width x Total Height x Total Length	Material Thickness	Width	Fixing Hole	Heart To Heart Distance	Torque Moment For Installation	Maximum Allowed Load Faz	Maximum Allowed Load Fax
<i>Reference letter</i>		<i>a</i>	<i>W x H x L</i>	<i>MT</i>	<i>w</i>	<i>FH</i>	<i>k</i>	<i>T inst.</i>	<i>Fa,z</i>	<i>Fa,x</i>
<i>Unit description</i>		°	<i>mm x mm x mm</i>	<i>mm</i>	<i>mm</i>	<i>mm</i>	<i>mm</i>	<i>Nm</i>	<i>N</i>	<i>N</i>
66588291	41x21, 41x41, 41x51, 41x62, 41x82	90	46 x 91 x 91	6.00	40	13.3	41	30	4,000	3,000

Walraven RapidStrut® Connector 90° / 2D (BUP1000)

(H2823)

for rigid angle connections



Features & benefits

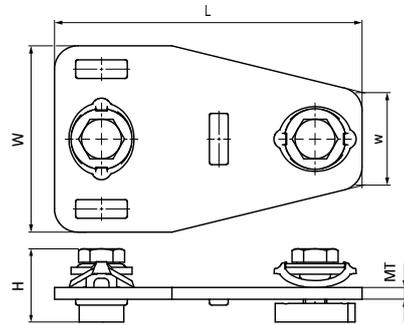
- flexible connector allows different rail positioning
- strong connection by surrounding the rail
- material: steel 1.0332
- product is part of the Walraven UltraProtect® 1000 system
- suitable for in- and outdoor applications
- stands min. 1,000 hours salt spray test (max. 5% red rust) according to ISO 9227



Product Number	For Rail Type	Angle	Total Width x Total Height x Total Length	Material Thickness	Width	Fixing Hole	Heart To Heart Distance
<i>Reference letter</i>		<i>a</i>	<i>W x H x L</i>	<i>MT</i>	<i>w</i>	<i>FH</i>	<i>k</i>
<i>Unit description</i>		°	<i>mm x mm x mm</i>	<i>mm</i>	<i>mm</i>	<i>mm</i>	<i>mm</i>
66598914	41x21, 41x41, 41x51, 41x62, 41x82	90	45 x 96 x 96	4.00	41	13	
66598918	41x21, 41x41, 41x51, 41x62, 41x82	90	45 x 145 x 145	4.00	41	13	49

Walraven RapidStrut® Rail T-Connector G2 (BUP1000)

(H28109)



Features & benefits

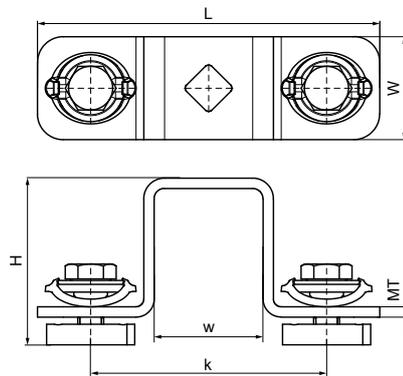
- connector with pre-assembled Walraven RapidStrut® Slide nut(s)
- to make fabrication with Walraven RapidStrut® Rail
- ready-to-use pre-assembled for a quick fixing, and retains assembly in place before final tightening
- 'Direct Twist' technology for easy and secure installation
- visual guide to check the position of the slide nut
- optimized for easy installation with electrical tools
- material: metal parts made of steel 1.0332; spring(s) made of POM (polyoxymethylene), green
- product is part of the Walraven Walraven UltraProtect® 1000 system
- suitable for in- and outdoor applications
- stands min. 1,000 hours salt spray test (max. 5% red rust) according to ISO 9227

Product Number	For Rail Type	Total Width x Total Height x Total Length	Material Thickness	Width	Torque Moment For Installation	Maximum Allowed Load Faz	Maximum Allowed Load Fax
<i>Reference letter</i>		<i>W x H x L</i>	<i>MT</i>	<i>w</i>	<i>T inst.</i>	<i>Fa,z</i>	<i>Fa,x</i>
<i>Unit description</i>		<i>mm x mm x mm</i>	<i>mm</i>	<i>mm</i>	<i>Nm</i>	<i>N</i>	<i>N</i>
665885213	41x21, 41x41, 41x51, 41x62, 41x82	80 x 31.4 x 131	5.00	40	40	4,000	2,270

Walraven RapidStrut® Cross Connector G2 (BUP1000)

(H28134)

to make Strut rail fabrications



Features & benefits

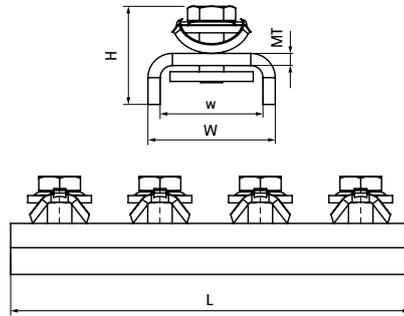
- connector with pre-assembled Walraven RapidStrut® Slide nut(s)
- to make fabrication with Walraven RapidStrut® Rail
- ready-to-use pre-assembled for a quick fixing, and retains assembly in place before final tightening
- 'Direct Twist' technology for easy and secure installation
- visual guide to check the position of the slide nut
- optimized for easy installation with electrical tools
- material: metal parts made of steel 1.0332; spring(s) made of POM (polyoxymethylene), green
- product is part of the Walraven UltraProtect® 1000 system
- suitable for in- and outdoor applications
- stands min. 1,000 hours salt spray test (max. 5% red rust) according to ISO 9227

Product Number	For Rail Type	Total Width x Total Height x Total Length	Material Thickness	Width	Torque Moment For Installation
<i>Reference letter</i>		<i>W x H x L</i>	<i>MT</i>	<i>w</i>	<i>T_{inst.}</i>
<i>Unit description</i>		<i>mm x mm x mm</i>	<i>mm</i>	<i>mm</i>	<i>Nm</i>
665885402	41x21	40 x 34.75 x 132	4.00	40	40
665885404	41x41	40 x 54.75 x 132	4.00	40	40
665885405	41x51	40 x 64.75 x 132	4.00	40	40
665885406	41x62	40 x 74.75 x 132	4.00	40	40
665885408	41x82	40 x 94.75 x 132	4.00	40	40

Walraven RapidStrut® Rail Connector - U-shaped G2 (BUP1000)

(H2889)

to make Strut rail fabrications



Features & benefits

- connector with pre-assembled Walraven RapidStrut® Slide nut(s)
- to make fabrication with Walraven RapidStrut® Rail
- ready-to-use pre-assembled for a quick fixing, and retains assembly in place before final tightening
- material: metal parts made of steel 1.0332; spring(s) made of POM (polyoxymethylene), green
- product is part of the Walraven UltraProtect® 1000 system
- suitable for in- and outdoor applications
- stands min. 1,000 hours salt spray test (max. 5% red rust) according to ISO 9227

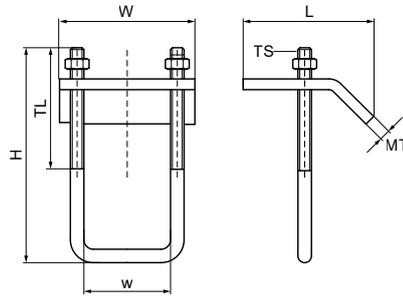


Product Number	For Rail Type	Total Width x Total Height x Total Length	Material Thickness	Width	Heart To Heart Distance	Torque Moment For Installation
<i>Reference letter</i>		<i>W x H x L</i>	<i>MT</i>	<i>w</i>	<i>k</i>	<i>T inst.</i>
<i>Unit description</i>		<i>mm x mm x mm</i>	<i>mm</i>	<i>mm</i>	<i>mm</i>	<i>Nm</i>
665885421	41x21, 41x41, 41x51, 41x62, 41x82	52 x 39.9 x 163	5.00	42	41	30

Walraven RapidStrut® Rail Beam Clamp (HDG)

(H3605)

to connect Strut rails to steel beams



Features & benefits

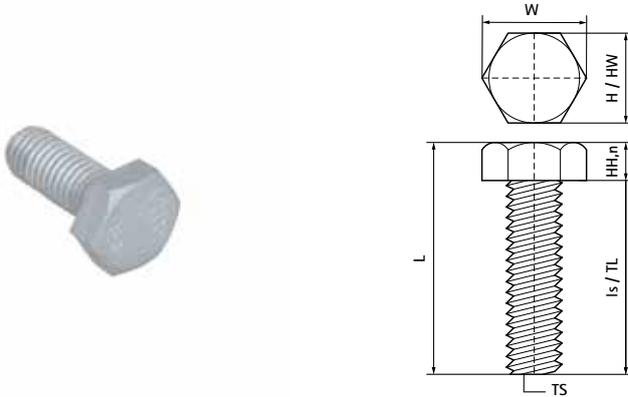
- for a solid fixing to steel construction without the need for welding or drilling
- always use 2 beam clamps per fixing
- material: steel 1.0332
- hot dip galvanized
- Also available in stainless steel 1.4401 (AISI 316).



Product Number	For Rail Type	Clamping Range	Total Width x Total Height x Total Length	Thread Size	Thread Length	Width	Material Thickness	Maximum Allowed Load Faz	Torque Moment For Installation
<i>Reference letter</i>		<i>CR</i>	<i>W x H x L</i>	<i>TS</i>	<i>TL</i>	<i>w</i>	<i>MT</i>	<i>F_{a,z}</i>	<i>T_{inst.}</i>
<i>Unit description</i>		<i>mm</i>	<i>mm x mm x mm</i>		<i>mm</i>	<i>mm</i>	<i>mm</i>	<i>N</i>	<i>Nm</i>
66581711	41x21, 41x41, 41x51, 41x62, 41x82	1 - 17.5	80 x 100 x 69	M10	60	44	5.50	5,700	15
66581721	41x51, 41x62, 41x82, 41x21, 41x41	1 - 20	80 x 140 x 69	M10	75	44	6.00	5,700	15

Walraven Hexagon Head Bolt (BUP1000)

(K4519)



Features & benefits

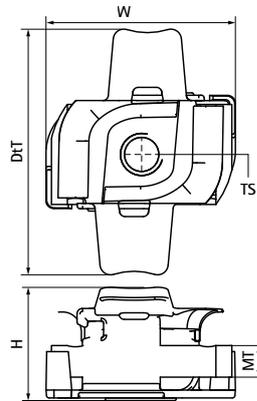
- according to DIN 933
- material: steel, strength class 8.8
- product is part of the Walraven UltraProtect® 1000 system
- suitable for in- and outdoor applications
- stands min. 1,000 hours salt spray test (max. 5% red rust) according to ISO 9227

Product Number	Thread Size	Screw Length	Thread Length	Head Shape	Nominal Head Height	Head Width	Key Driver Size	Total Width x Total Height x Total Length
<i>Reference letter</i>	<i>TS</i>	<i>Is</i>	<i>TL</i>		<i>HH,n</i>	<i>HW</i>	<i>Drive</i>	<i>W x H x L</i>
<i>Unit description</i>		<i>mm</i>	<i>mm</i>		<i>mm</i>	<i>mm</i>		<i>mm x mm x mm</i>
61480825	M8	25	21.25	Hexagon Head	5.3	13	WAF13	15.01 x 13 x 30.3
61480830	M8	30	26.25	Hexagon Head	5.3	13	WAF13	15.01 x 13 x 35.3
61480860	M8	60	56.25	Hexagon Head	5.3	13	WAF13	15.01 x 13 x 65.3
61480880	M8	80	76.25	Hexagon Head	5.3	13	WAF13	15.01 x 13 x 85.3
61481016	M10	16	11.5	Hexagon Head	6.4	17	WAF17	19.63 x 17 x 22.4
61481025	M10	25	20.5	Hexagon Head	6.4	17	WAF17	19.63 x 17 x 31.4
61481030	M10	30	25.5	Hexagon Head	6.4	17	WAF17	19.63 x 17 x 36.4
61481060	M10	60	55.5	Hexagon Head	6.4	17	WAF17	19.63 x 17 x 66.4
61481080	M10	80	75.5	Hexagon Head	6.4	17	WAF17	19.63 x 17 x 86.4
61481225	M12	25	19.75	Hexagon Head	7.5	19	WAF19	21.94 x 19 x 32.5
61481230	M12	30	24.75	Hexagon Head	7.5	19	WAF19	21.94 x 19 x 37.5
61481260	M12	60	54.75	Hexagon Head	7.5	19	WAF19	21.94 x 19 x 67.5
61481280	M12	80	74.75	Hexagon Head	7.5	19	WAF19	21.94 x 19 x 87.5

Walraven RapidStrut® Slide Nut with Plastic Tabs (BUP1000)

(H2435)

to connect construction parts to the rail



Features & benefits

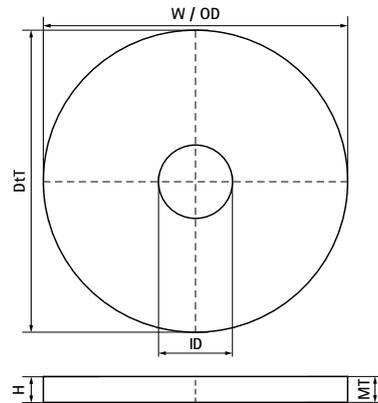
- slide nut with plastic 'tabs'
- for all types of Walraven RapidStrut® Rail
- for tight fixing of accessories (e.g. connectors) on rail
- with plastic tabs which simplifies inserting and positioning
- material: slide nut made of steel 1.0332; tabs made of PP (polypropylene), green
- product is part of the Walraven UltraProtect® 1000 system
- suitable for in- and outdoor applications
- stands min. 1,000 hours salt spray test (max. 5% red rust) according to ISO 9227
- M10 & M12 tested for fire safety according to EN 1366-1.
- Tested values in combination with Walraven RapidStrut® Rail 41x41x2.5mm.

Product Number	For Rail Type	Thread Size	Material Thickness	Torque Moment For Installation	Maximum AI-lowed Load Fax	Maximum AI-lowed Load Faz	Total Width x Total Height x Total Depth
<i>Reference letter</i>		<i>TS</i>	<i>MT</i>	<i>T_{inst.}</i>	<i>F_{a,x}</i>	<i>F_{a,z}</i>	<i>W x H x DtT</i>
<i>Unit description</i>			<i>mm</i>	<i>Nm</i>	<i>N</i>	<i>N</i>	<i>mm x mm x mm</i>
651868006	41x21, 41x41, 41x51, 41x62, 41x82	M6	5.00	7	950	2,660	35.7 x 21.28 x 47.13
651868008	41x21, 41x41, 41x51, 41x62, 41x82	M8	6.00	25	2,200	4,500	35.7 x 21.28 x 47.13
651868010	41x21, 41x41, 41x51, 41x62, 41x82	M10	8.00	40	2,550	5,000	35.7 x 21.28 x 47.13
651868012	41x21, 41x41, 41x51, 41x62, 41x82	M12	9.00	50	2,950	5,000	35.7 x 21.28 x 47.13

Walraven RapidStrut® Washer – Flat (zp)

(H2485)

fixing to Strut rail



Features & benefits

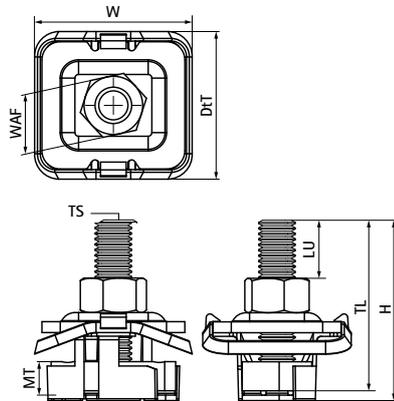
- flat washer
- material: steel 1.0332
- zinc plated
- tested for fire safety

Product Number	For Rail Type	Total Width x Total Height x Total Length	Inner Diameter	Outer Diameter	Material Thickness
<i>Reference letter</i>		<i>W x H x L</i>	<i>ID</i>	<i>OD</i>	<i>MT</i>
<i>Unit description</i>		<i>mm x mm x mm</i>	<i>mm</i>	<i>mm</i>	<i>mm</i>
6533506	41x21, 41x41, 41x51, 41x62, 41x82	40 x 3 x 40	6.4	40	3.00
6533508	41x21, 41x41, 41x51, 41x62, 41x82	40 x 3 x 40	8.4	40	3.00
6533510	41x21, 41x41, 41x51, 41x62, 41x82	40 x 3 x 40	10.5	40	3.00
6533512	41x21, 41x41, 41x51, 41x62, 41x82	40 x 3 x 40	13	40	3.00

Walraven RapidStrut® Hammerfix G2 (BUP1000)

(H2449)

for quick connection of clamps to the rail



Features & benefits

- slide nut with stud bolt, washer and Walraven RapidStrut® spring
- ready-to-use pre-assembled for a quick fixing, and retains assembly in place before final tightening
- material: metal parts made of steel 1.0332; spring(s) made of POM (polyoxymethylene), green
- product is part of the Walraven UltraProtect® 1000 system
- suitable for in- and outdoor applications
- stands min. 1,000 hours salt spray test (max. 5% red rust) according to ISO 9227
- Tested values in combination with Walraven RapidStrut® Rail 41x41x2.5mm.
- M10 & M12 are tested for fire safety according to EN 1366-1.

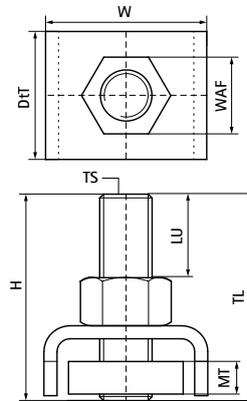


Product Number	For Rail Type	Thread Size	Thread Length	Usable Length	Material Thickness	Width Across Flats	Torque Moment For Installation	Maximum Allowed Load Fax	Maximum Allowed Load Faz	Total Width x Total Height x Total Depth
Reference letter		TS	TL	LU	MT	WAF	T _{inst.}	F _{a,x}	F _{a,z}	W x H x DfT
Unit description			mm	mm	mm	mm	Nm	N	N	mm x mm x mm
652785804	41x21, 41x41, 41x51, 41x62, 41x82	M8	40	14.06	6.00	13	11	1,100	3,120	43.22 x 44.85 x 40.8
652785805	41x21, 41x41, 41x51, 41x62, 41x82	M8	50	24.06	6.00	13	11	1,100	3,120	43.22 x 54.85 x 40.8
652785806	41x21, 41x41, 41x51, 41x62, 41x82	M8	60	34.06	6.00	13	11	1,100	3,120	43.22 x 64.85 x 40.8
652785808	41x21, 41x41, 41x51, 41x62, 41x82	M8	80	54.06	6.00	13	11	1,100	3,120	43.22 x 84.85 x 40.8
652785810	41x21, 41x41, 41x51, 41x62, 41x82	M8	100	74.06	6.00	13	11	1,100	3,120	43.22 x 104.85 x 40.8
652785004	41x21, 41x41, 41x51, 41x62, 41x82	M10	40	10.56	8.00	17	15	1,250	5,000	43.22 x 42.85 x 40.8
652785006	41x21, 41x41, 41x51, 41x62, 41x82	M10	60	30.56	8.00	17	15	1,250	5,000	43.22 x 62.85 x 40.8
652785008	41x21, 41x41, 41x51, 41x62, 41x82	M10	80	50.56	8.00	17	15	1,250	5,000	43.22 x 82.85 x 40.8
652785010	41x21, 41x41, 41x51, 41x62, 41x82	M10	100	70.56	8.00	17	15	1,250	5,000	43.22 x 102.85 x 40.8
652785204	41x21, 41x41, 41x51, 41x62, 41x82	M12	40	7.56	9.00	19	22	2,440	5,000	43.22 x 41.85 x 40.8
652785206	41x21, 41x41, 41x51, 41x62, 41x82	M12	60	27.56	9.00	19	22	2,440	5,000	43.22 x 61.85 x 40.8

Walraven RapidStrut® Tee-Bolt 'U' (BUP1000)

(H2462)

for quick connection of clamps to the rail



Features & benefits

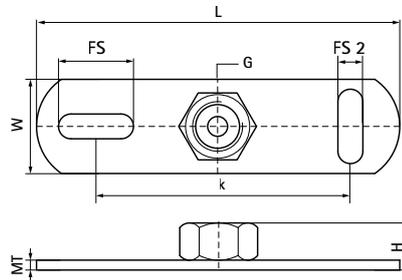
- slide nut with stud bolt and U-shaped washer
- U-shaped for extra stability
- ready-to-use pre-assembled
- material: steel 1.0332
- product is part of the Walraven UltraProtect® 1000 system
- suitable for in- and outdoor applications
- stands min. 1,000 hours salt spray test (max. 5% red rust) according to ISO 9227
- tested for fire safety

Product Number	For Rail Type	Thread Size	Thread Length	Usable Length	Material Thickness	Width Across Flats	Torque Moment For Installation	Maximum Allowed Load	Total Width x Total Height x Total Depth
<i>Reference letter</i>		<i>TS</i>	<i>TL</i>	<i>LU</i>	<i>MT</i>	<i>WAF</i>	<i>T_{inst.}</i>	<i>F_{0,2}</i>	<i>W x H x DtT</i>
<i>Unit description</i>			<i>mm</i>	<i>mm</i>	<i>mm</i>	<i>mm</i>	<i>Nm</i>	<i>N</i>	<i>mm x mm x mm</i>
65278606	41x21, 41x41, 41x51, 41x62, 41x82	M16	60	25.5	10.00	24	40	10,000	50 x 60 x 40

Walraven Wall Plate Resistance Welded

(K1510)

fixing to ceiling or floor



Features & benefits

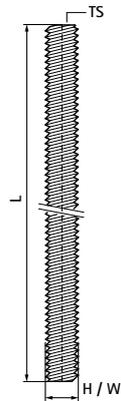
- fixings to ceiling or floor (only tension loads recommended)
- slots at 90° to each other to simplify fixing
- with resistance welded connection nut
- material: steel
- zinc plated

Product Number	Connection Thread	Total Width x Total Height x Total Length	Material Thickness	Fixing Slot	Fixing Slot 2	Heart To Heart Distance	Maximum Allowed Load Faz
Reference letter	G	W x H x L	MT	FS	FS 2	k	F _{0,z}
Unit description		mm x mm x mm	mm	mm	mm	mm	N
6713008	M8	38 x 12 x 145	4.00	30x11	25x11	100	3,200
6713010	M10	38 x 17 x 145	4.00	30x11	25x11	100	3,500
6713012	M12	38 x 17 x 145	4.00	30x11	25x11	100	3,500
6713016	M16	38 x 17 x 145	4.00	30x11	25x11	100	3,800
6713021	G½"	38 x 19 x 145	4.00	30x11	25x11	100	3,800

Walraven Stud Bolt

(K5505)

for threaded connections, hangers and ties,



Features & benefits

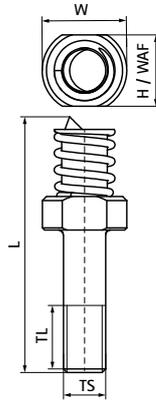
- according to DIN 976-1
- material: steel, strength class 4.8
- zinc plated
- thread with 60° angle provides best performance
- M10 and M12 tested for fire safety according to EN 1363-1

Product Number	Norm / Standard	Thread Size	Total Height	Total Width	Total Length
Reference letter		TS	H	W	L
Unit description			mm	mm	mm
6313602	DIN 976-1	M6	6	6	20
6313802	DIN 976-1	M8	8	8	25
6313803	DIN 976-1	M8	8	8	30
6313804	DIN 976-1	M8	8	8	40
6313805	DIN 976-1	M8	8	8	50
6313806	DIN 976-1	M8	8	8	60
6313807	DIN 976-1	M8	8	8	70
6313808	DIN 976-1	M8	8	8	80
6313809	DIN 976-1	M8	8	8	90
6313810	DIN 976-1	M8	8	8	100
6313812	DIN 976-1	M8	8	8	120
6313815	DIN 976-1	M8	8	8	150
6313818	DIN 976-1	M8	8	8	180
6313820	DIN 976-1	M8	8	8	200
6313830	DIN 976-1	M8	8	8	300
6323002	DIN 976-1	M10	10	10	25
6323003	DIN 976-1	M10	10	10	30
6323004	DIN 976-1	M10	10	10	40
6323005	DIN 976-1	M10	10	10	50
6323006	DIN 976-1	M10	10	10	60
6323007	DIN 976-1	M10	10	10	70
6323008	DIN 976-1	M10	10	10	80
6323009	DIN 976-1	M10	10	10	90
6323010	DIN 976-1	M10	10	10	100
6323012	DIN 976-1	M10	10	10	120
6323015	DIN 976-1	M10	10	10	150
6323016	DIN 976-1	M10	10	10	160
6323018	DIN 976-1	M10	10	10	180
6323020	DIN 976-1	M10	10	10	200
6323024	DIN 976-1	M10	10	10	240
6323030	DIN 976-1	M10	10	10	300
6323220	DIN 976-1	M12	12	12	200

Walraven Replacement Punching Pins

(K2512)

spare parts for Hole Punching Plier



Features & benefits

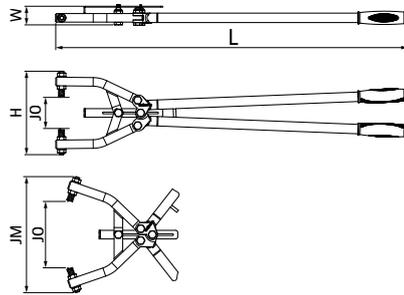
- replacement punching pins for Walraven Hole Punching Pliers
- fits both pliers size

Product Number	Total Width x Total Height x Total Length	Thread Size	Thread Length	Width Across Flats	Hole Diameter
<i>Reference letter</i>	<i>W x H x L</i>	<i>TS</i>	<i>TL</i>	<i>WAF</i>	
<i>Unit description</i>	<i>mm x mm x mm</i>		<i>mm</i>	<i>mm</i>	<i>mm</i>
6920013	20 x 20 x 61	M10	16	17	10.5

Walraven Hole Punching Plier

(K2510)

accessories for Walraven Roofing sheet hangers



Features & benefits

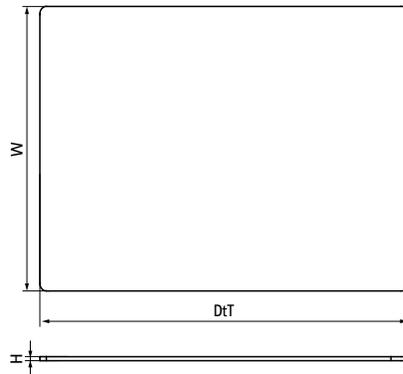
- for trapezium shaped roofing sheets up to max. 1.5 mm thickness
- robust and durable design
- supplied with \varnothing 10.5 mm punching pins
- with durable protective rubber handles
- material: steel, rubber (handles)
- surface protection: green (RAL 6026) powder-coated

Product Number	Jaw Opening	Maximum Space Claim Jaw	Hole Diameter	Maximum Plate Thickness	Total Width x Total Height x Total Length	Rotatable?
<i>Reference letter</i>	<i>JO</i>	<i>JM</i>			<i>W x H x L</i>	
<i>Unit description</i>	<i>mm</i>	<i>mm</i>	<i>mm</i>	<i>mm</i>	<i>mm x mm x mm</i>	
6920012	25 - 90	210	10.5	1.5	42 x 158 x 690	No
6920017	80 - 170	280	10.5	1.5	47.5 x 200 x 818.5	No

Walraven IKS-2000® Text Card (DIN 2403)

(N3505)

for labeling of installations



Features & benefits

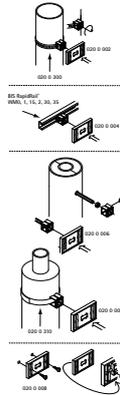
- text card colours according to DIN 2403
- various printing possibilities (full-colours, logo, symbols, barcode, etc.)
- full-colour only on white text card
- individual printed text as service on demand (1 colour or full-colour)
- material: hard PVC (polyvinylchloride)
- resistant to UV, ozone and chemicals
- resistant to scratches, washable

Product Number	Colour	Total Width x Total Height x Total Depth
<i>Reference letter</i>		<i>W x H x DtT</i>
<i>Unit description</i>		<i>mm x mm x mm</i>
0200101	White	54 x 1 x 86
0200102	Green	54 x 1 x 86
0200103	Blue	54 x 1 x 86
0200104	Red	54 x 1 x 86
0200105	Grey	54 x 1 x 86
0200106	Yellow	54 x 1 x 86

Walraven IKS-2000® Text Card Holder

(N3005)

for labeling of installations



Features & benefits

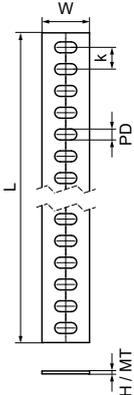
- individual pipe identification according to standard
- text card holders with click-effect for use in combination with individual printed textcards
- fixing of text card holders with stainless steel mounting band (0200300) or with velcro band (0200310)
- material: mounting cube made of PA (polyamide - nylon6); text card holder made of PP (polypropylene)
- temperature resistance from -15 °C to +80 °C

Product Number	Model	Colour	Total Width x Total Height x Total Depth
<i>Reference letter</i>			<i>W x H x DtT</i>
<i>Unit description</i>			<i>mm x mm x mm</i>
0200002	For use with suspension band	Green	34 x 89.3 x 58
0200006	For use with hook and loop band	Green	34 x 89.3 x 58
0200008	For use by glueing or screws	Green	9.8 x 89.3 x 58
0200032	For use by glueing or screws incl. cover	Green	9.8 x 89.3 x 58
0200040	Transparent cover only	Transparent	2 x 85.1 x 53.5
0200007	For use with tie-wrap (included)	Green	89.3 x 58 x 34
0209002	For use with suspension band	Blue	89.3 x 58 x 34
0209006	For use with hook and loop band	Blue	89.3 x 58 x 34
0209008	For use by glueing or screws	Blue	9.8 x 89.3 x 58

Walraven IKS-2000® Mounting Band

(N3010)

mounting band for labeling system



Features & benefits

- for fastening of IKS Text Card Holders
- advised for fixing directly on pipes or on hard isolation
- material: stainless steel 1.4404 (AISI 316L)

Product Number	Total Width x Total Height x Total Length	Material Thickness	Perforation Diameter	Heart To Heart Distance
<i>Reference letter</i>	<i>W x H x L</i>	<i>MT</i>	<i>PD</i>	<i>k</i>
<i>Unit description</i>	<i>mm x mm x mm</i>	<i>mm</i>	<i>mm</i>	<i>mm</i>
0200300	13 x 0.4 x 20,000	0.40	6x3	6

Walraven IKS-2000® Hook and loop

(N3015)

mounting band for labeling system

Features & benefits

- for fastening of IKS Text Card Holders
- advised for fixing on soft isolation



Product Number	Total Width	Total Height	Total Length	Total Depth
<i>Reference letter</i>	<i>W</i>	<i>H</i>	<i>L</i>	<i>DtT</i>
<i>Unit description</i>	<i>mm</i>	<i>mm</i>	<i>mm</i>	<i>mm</i>
0200310	260	15	260	260

Find out how we can support you

Would you like to find out more about any of the solutions described in this brochure?
Or would you like to discuss how we could help you find the best possible solution for your project?
Get in touch today!

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