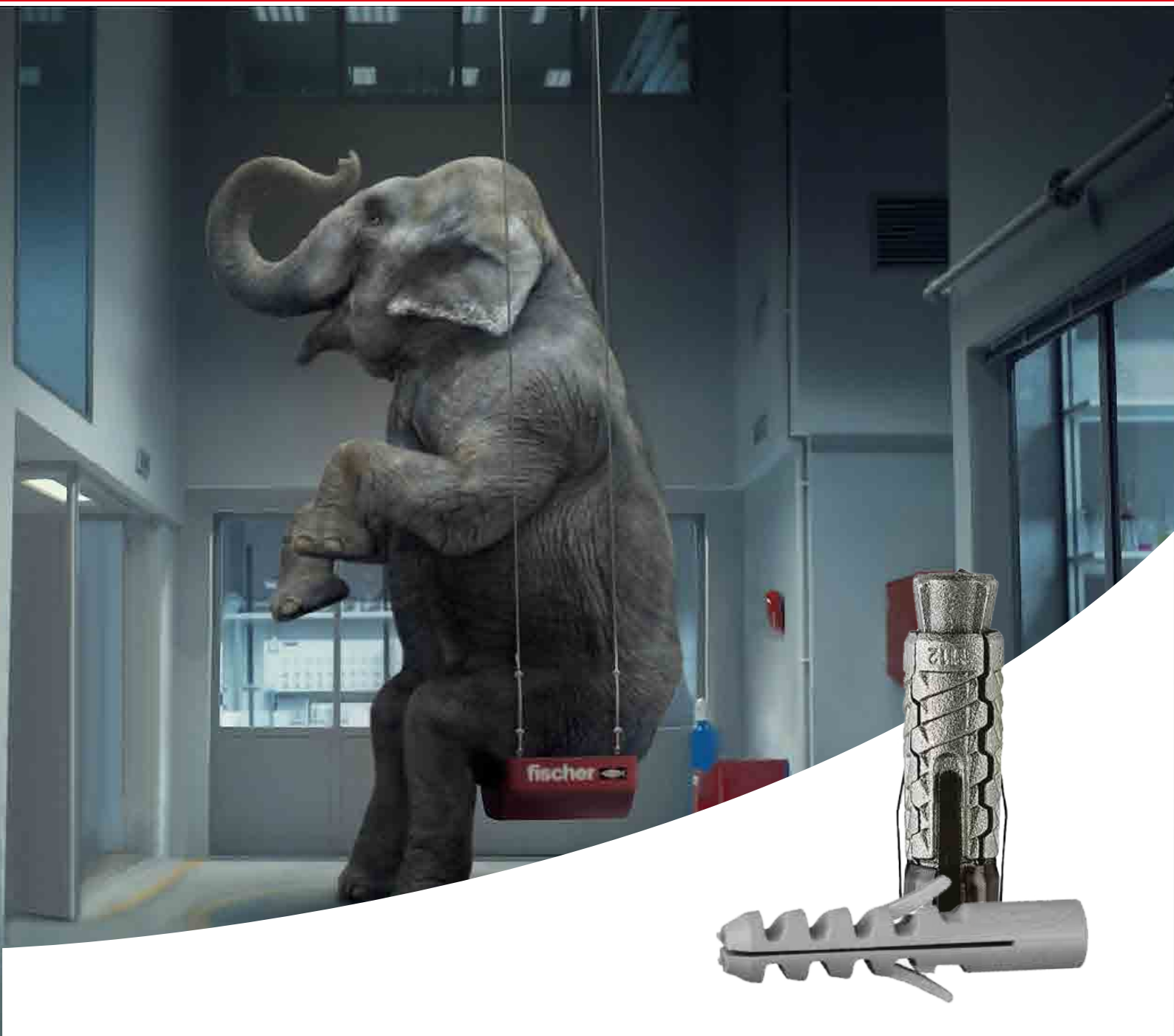


Trade Range Catalogue



A BRAND AND ITS PROMISE
TO PERFORM

**Dear Partners,**

The increasing diversity of building materials, the changing joining principles of different materials and the ever-increasing requirements with regard to processing all demand constant development of our fixing systems. Our goal, therefore, is, and will always be, to provide you with the best technical solution for your current fixing job quickly and with as much flexibility as possible.

Our innovative strength has helped us to become a globally recognised and esteemed specialist when it comes to secure and economical fixings at the building site. Our products range from chemical systems to steel anchors through to plastic fixings. Innovative façade systems, a comprehensive range of screws, special product ranges for thermal insulation composite systems, sanitary, heating, ventilation and electrical installations, adhesives, sealants and foams: we have the ideal solution for every fixing problem. And we always rely on the highest possible quality, maximum safety and ease of installation.

Sustainability has been a key part of our work for decades now. Our active environmental management policy means that we are helping to maintain an intact environment for our generation and for those that follow. We fulfil this requirement not just in the way that we deal with energy, raw materials and auxiliary materials on a day-to-day basis but also in the development of new products. As a concrete result and consequence of this fundamental strategy, in spring 2014 we became the first manufacturer in the world to offer fixings made from predominantly renewable raw materials. This new "greenline" range features a number of different plastic fixings and a two-component injection mortar for heavy loads. All "green" fischer products have the same performance properties as their grey-coloured counterparts. Applications have been submitted for ETA approvals (masonry and option 7 for concrete) for the injection mortar. With this innovative and forward-looking range of products, we are addressing processors and builders who greatly value sustainability when building and renovating, and especially when it comes to installation.

We are close to our customers across the world – with 42 subsidiaries around the globe and sales partners in over 100 countries. We develop and produce our products ourselves – and we can even develop and produce customer-specific solutions if required. We place great value on both outstanding and innovative products and on providing a wide range of services of excellent quality: Qualified technical support staff advise you on an individual basis and on location. Our hotline puts you into direct contact with the fischer technical support team, who are able to provide fast and professional assistance for all fixing jobs. Finally, we also provide design programs and technical handbooks, which we have developed in-house. And, last but not least, the fischer ACADEMY, situated at our headquarters in Tumlingen, provides the ideal conditions for getting to know our products and their many uses in practical training sessions. However, modern training courses in fixing technology are not just available at our company headquarters – fischer trainers can also be found around the globe.

We hope that you enjoy using our fixing systems.



Klaus Fischer



Fischer Middle East HQ
at Jebel Ali, UAE

For almost 68 years, Fischer has garnered a widespread reputation for designing, engineering and building innovative fixing solutions. Since the company was founded in 1948, it has been driven by a constant will to change and strive for better solutions. Presently with 42 subsidiaries in 33 countries, production locations in seven countries, 4423 employees and with over 1500 industrial property rights internationally has made the fischer group of companies one of the most innovative companies worldwide.

With a constant will to grow, Fischer has constantly been expanding its horizons in the Middle Eastern markets. Today the Middle East operations headquartered in the United Arab Emirates, has offices in Saudi Arabia, Qatar, Bahrain, Kuwait, Oman and Pakistan with deep footprints in all the major projects and trade line business across these regions.

fischer world of innovations

Fixing Systems



The fixing systems is the core area and also the largest business field for fischer. With more than 14,000 articles, we offer an extensive range of fixing solutions with standard products, project-based solutions and specialized customer-specific developments. We orient ourselves to the requirements of our customers and as a result, we are one of the few globally leading providers of fixing solutions in the construction industry.

Automotive Systems



It is not often realized, but many vehicles have kinematic components from fischer. Such as air vents, cup holders, storage compartments and other multi functional components that ensure order and comfort inside vehicles. In our highly efficient production, components are produced for all the major players in the automotive industry.

fischer Technik



Our construction kits have been classics on the toy market for generations. Learning is fun here. A technical understanding is thus developed in the nursery and fischer technik continues to aid learning as children grow older. Schools and universities also make use of this. fischerTiP, our ecological creative material made from potato starch allows for boundless creativity for the youngest of children.

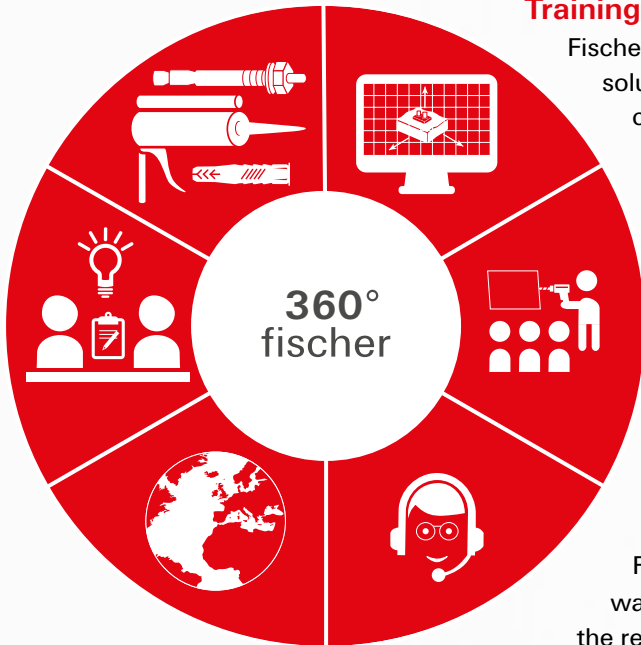
fischer Consulting



With the know-how of the fischer process system, fischer Consulting offers its clients the opportunity to create lean and efficient processes. The system focuses on avoiding any kind of waste in the processes. Both for medium sized companies and for international conglomerates, fischer Consulting provides local support for continuous improvement.



Services beyond our Products



Trainings & Seminars

Fischer being a leader in the research and development of fixing solutions offers seminars and trainings across the region for contractors, consultants and dealers on various topics, enabling proper transfer of our knowledge on various concepts.

Technical Support

Fischer provides technical support, onsite for their customers and business partners. The technical team in the region is always at service to offer technical designs, submittals, mock-ups or carry out pull-out tests at jobsites.

Supply Chain

Fischer Middle East stocks & delivers goods from its central warehouse in the UAE and 8 other warehouses dotted across the region.

Fischer Fixing's Various Other Product Divisions



Fixing Systems



Installation Systems



Advance Curtain Wall Technique



Firestop



Solar Fixing

Approvals, markings and their importance

In the following, excerpts of approvals that are currently issued in Europe and their symbols will be given with their corresponding importance:

Please check whether your application is safety relevant.

An application is safety relevant when failure of anchorages would cause risk to human life or serious injuries and/or lead to considerable economic consequences. In this case please use anchors with a European Technical (ETA) or with a German Approval. You may recognise these anchors by:



European Technical Approval issued by a European approval authority (e.g. DIBt) on the basis of the guidelines for European technical approvals (ETAG)

ETA: European Technical Approval/Options 1–12

CE: European conformity mark confirms the compliance of the building product (e.g. fixing) with the guidelines for European Technical Approvals. Products with the CE mark can be freely traded in the European economic market.



CC = International Code Council, formed from BOCA, ICBO and SBCCI

ICC Evaluation Service Inc. (ICC ES) issues evaluation reports, in this case for the above anchor based upon the Uniform Building Code™ and related codes in the United States of America.



General building authority approval

German approval, issued by the DIBt, Berlin. Proof of compliance of the building product with the general building authority approval, confirmed by a material testing facility.



Fixing of high-quality, aging-resistant **nylon** (polyamide)



PGM Certification Board for Masonry Drill Bits informs on the suitability of hammer drill bits (SDSplus and SDSmax) and percussion drill bits for safe anchor fixings.



Fire-tested fixing

The fixing was subjected to a fire test. A "Examination report regarding testing for fire behaviour" (with F class) is available.



Company Introduction

Note from Prof. Klaus Fischer	page 01
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Approvals & Certifications	04

High Performance Mechanical Fixing

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Rock Fixing Anchor GM	11
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Chemical Fixing

Resin Anchor RM with Threaded Rod FTR	page 19
Universal Chemical FIS V 360	23
Polyester Injection Mortar	25



Foams & Sealants

Anti-fungus Muti Silicon (DMS)	page 28
PU Foam Spray (B3)	30
Zinc-Alu Spray	31
Bright Grade Zinc Spray	32



General Fixing

S Plug	page 34
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Cavity Fixing

Shortest Nylon Plug GK	page 37
Advance Plasterboard fixing metal GKM	39



Insulation Fixing

Rockwool fixing DIPK	page 42
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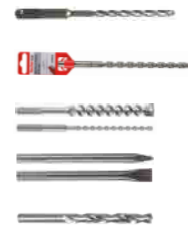
Sanitary Fixing

WB5N	page 45
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Drill Bits & Chisels

SDS Plus II Pointer Economical	page 49
SDS Plus II Pointer	51
SDS Max II & IV Pointer	54
Chisels - SDS Plus & SDS Max	57
High Speed Steed Drill Bits	59

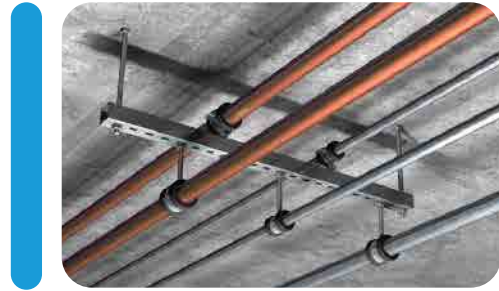


fischer Presence

Worldwide Presence	page 61
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Drop-in anchor in zinc-plated steel for suitable hammer-set installation.



SUITABLE FOR BUILDING MATERIALS



CONCRETE

ADVANTAGES

Hammer-set anchor with internal thread for prepositioned installation.

Suitable for all screws or studs with metric threads.

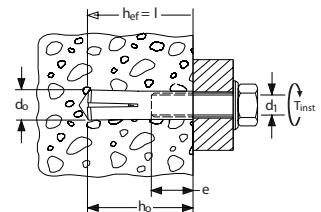
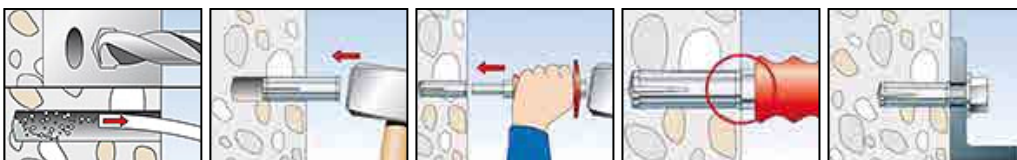
The EMS machine setting tool allows for effortless installation, particularly in the case of series installations.

Surface-flush anchor allows the attached item to be removed and refitted several times.

Fixing Applications for

- ◆ Pipelines and ventilation ducts
- ◆ Shuttering props
- ◆ Air Condition Devices
 - ◆ Diamond and core drilling devices
 - ◆ Cable conduits and wires
 - ◆ Gratings
 - ◆ Steel constructions
 - ◆ Machines
 - ◆ Consoles
 - ◆ Sprinkler systems

INSTALLATION PROCESS



TECHNICAL DATA

Product Description	Art.-No.	Thread d_1 M [mm]	Nominal drill-Ø d_0 [mm]	Min. drill depth at prior insertion mode h_b ≥ [mm]	Min. anchorage depth h_{ef} ≥ [mm]	Min. bolt penetration e_1 ≤ [mm]	Max. bolt penetration e_2 ≤ [mm]	Total length l [mm]	Installation Torque T_{inst} [Nm]	Related setting tool	Qty. per box [pcs.]
Zinc-plated steel											
EA M6 N	535962	6	8	25	25	6	12	25	4	504573 EA-ST 6	100
EA M8 N	535963	8	10	30	30	8	13	30	8	504576 EA-ST 8	100
EA M10 N	535964	10	12	40	40	10	17	40	15	504584 EA-ST 10	50
EA M12 N	535965	12	15	50	50	12	22	50	35	504585 EA-ST 12	50
EA M16 N	535966	16	20	65	65	16	27	65	60	504586 EA-ST 16	25
EA M20 N	535967	20	25	80	80	20	34	80	120	504587 EA-ST 20	25

ACCESSORIES



Setting tool **eA-ST**

em	Art.-No.	Fits	Sales unit [pcs]
EA-ST 6	1) 504573	EA M6 N	1
EA-ST 8	1) 504576	EA M8 N	1
EA-ST 10	1) 504584	EA M10 N	1
EA-ST 12	1) 504585	EA M12 N	1
EA-ST 16	1) 504586	EA M16 N	1
EA-ST 20	1) 504587	EA M20 N	1

1) Without embossing tool

LOADS

Anchor type	EA M6 N M6 gvz	EA M8 N M8 gvz	EA M10 N M10 gvz	EA M12 N M12 gvz	EA M16 N M16 gvz	EA M20 N M20 gvz
Steel						
Effective anchorage depth $h_{ef} \geq$ [mm]	25	30	40	50	65	80
Drill hole depth $h_b \geq$ [mm]	25	30	40	50	65	80
Drill hole diameter d_0 [mm]	8	10	12	15	20	25
Recommended loads N_{req} [kN] for single anchors with large spacing and edge distance in non-cracked concrete						
Tensile N_{req} [kN]	1.5	2.1	3.3	4.8	7.0	9.5
Anchor characteristics						
Minimum edge distance c_{min} [Nm]	115	140	160	200	240	280
Minimum spacing s_{min}	65	95	95	145	180	190
Minimum structural or Minimum member thickness h_{min} [mm]	100	100	100	100	130	160
Clearance-hole in the fixture to be attached ¹⁾ $d_1 \leq$ [mm]	7	9	12	14	18	22
Installation torque T_{inst} [Nm]	4	8	15	35	60	120

Cast iron anchor for pre-positioned installation



SUITABLE FOR BUILDING MATERIALS



CONCRETE



ROCK



NATURAL STONE
with dense structure



SOLID BRICK

ADVANTAGES

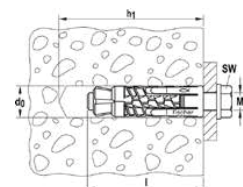
The cast iron shields are shaped specifically to provide maximum grip even on rock and natural stone.

The four part expansion sleeve allows to achieve high loads and to reduce influence of drill hole quality.

The particularly strong sleeve allows to realize secure fixings even on low quality concrete, solid masonry and compact materials.

The harmonic steel spring maximizes expansion and prevents anchor rotation into the drill hole.

INSTALLATION PROCESS



Fixing Applications for

- ◆ Beam Fixing
- ◆ Base Plates
- ◆ Reilings
- ◆ Steel Constructions
- ◆ Stay wires

TECHNICAL DATA



Cast iron anchor **GM**

Product Description	Art.-No.	Drill hole diameter d_0 [mm]	Min. drill hole depth h_1 [mm]	Anchor length l [mm]	Thread M	Min. bolt penetration l_E , min [mm]	Sales unit [pcs]
GM 6	500901	12	60	47	M 6	47	50
GM 8	500902	15	70	50	M 8	50	50
GM 10	500903	18	80	60	M 10	60	25
GM 12	500904	22	100	75	M 12	75	20
GM 16	500905	30	130	102	M 16	102	10
GM 20	500906	36	170	135	M 20	135	5

LOADS

Anchors GM

Highest recommended loads for single anchor¹⁾ in concrete C20/25⁴⁾

Product Description	Effective anchorage depth h_{ef} [mm]	Min. member thickness h_{min} [mm]	Installation torque T_{inst} [Nm]	Non-cracked concrete		
				Recommended load F_{rec} ³⁾ [kN]	Min. spacing s_{min} ²⁾ [mm]	Min. edge distance c_{min} ²⁾ [mm]
GM 6	47	100	10,0	4,0	80	50
GM 8	50	100	25,0	4,7	80	50
GM 10	60	100	45,0	5,9	100	65
GM 12	75	125	75,0	8,4	125	80
GM 16	102	175	120,0	13,4	170	105
GM 20	135	230	230,0	20,7	230	140

¹⁾ Required safety factors are considered.

²⁾ Minimum possible axial spacing resp. edge distance while reducing the recommended load.

³⁾ Valid for tensile load, shear load and oblique load under any angle.

⁴⁾ For higher concrete strength classes up to C50 / 60 highest recommended loads may be possible.

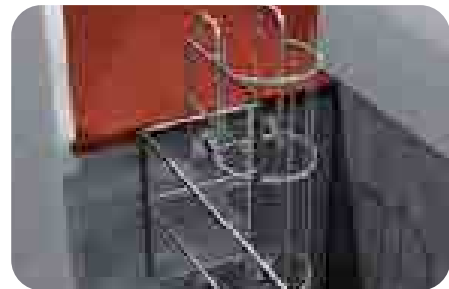
Wedge anchor (bolt anchor) in zinc-plated steel and hot-dipped galvanised steel with A2 clip.



FWA
Zinc-plated
Steel



FWA
Hot-dipped
Galvanised



SUITABLE FOR BUILDING MATERIALS



CONCRETE



NATURAL STONE
with dense structure

ADVANTAGES

Anchor bolt for push-through installation.

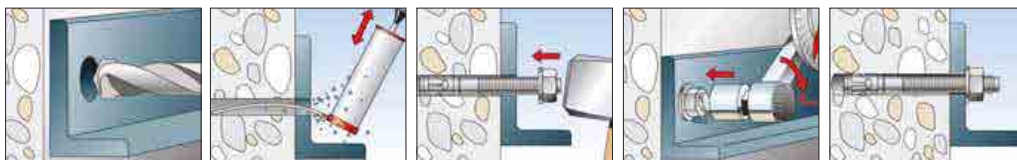
When the hexagon nut is tightened, the cone bolt is pulled into the expansion clip and expands it against the hole wall.

Thread diameter ranges from 6mm to 24mm.

Zinc-plated steel version for indoor use.

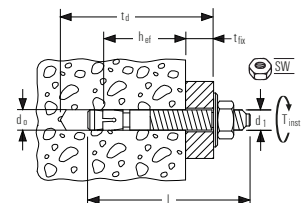
Hot-dipped galvanised version for temporary outdoor use.

INSTALLATION PROCESS



Fixing Applications for

- ◆ Column bases
- ◆ Stormwater overflow tank manholes
- ◆ Ladders
- ◆ Steel constructions
- ◆ Guard rails
- ◆ Consoles
- ◆ Cable conduits
- ◆ Staircases
- ◆ Gates
- ◆ Façades



TECHNICAL DATA

Product Description	Art. No.	Thread	Nominal drill-Ø	Max. fixing thickness	Min. fixing thickness	Min. anchor- age depth	Max. anchor- age depth	Min. drill depth at push-through mode	Total length	Width across flat	Installation torque	Qty. per box
		d ₁ M [mm]	d ₀ [mm]	t _{fix} ≤ [mm]	t _{fix} ≤ [mm]	h _{ef} ≥ [mm]	h _{ef} ≥ [mm]	t _d ≥ [mm]	l [mm]	SW [mm]	T _{inst} [Nm]	[pcs.]
Zinc-plated steel												
FWA 6x40	45536	6	6	3	-	25	-	40	40	10	7.5	100
FWA 6x55	45582	6	6	15	5	25	35	55	55	10	7.5	100
FWA 6 x70	45598	6	6	30	20	25	35	70	70	10	7.5	100
FWA 6 x120	502920	6	6	80	60	25	35	120	120	10	7.5	50
FWA 8 x50	45644	8	8	5	-	25	-	50	50	13	15	50
FWA 8 x60	502893	8	8	15	-	25	-	60	60	13	15	50
FWA 8 x65	45788	8	8	20	5	25	40	65	65	13	15	50
FWA 8 x80	45789	8	8	35	20	25	40	80	80	13	15	50
FWA 8 x95	45790	8	8	50	35	25	40	95	95	13	15	50
FWA 8 x120	45791	8	8	75	60	25	40	120	120	13	15	50
FWA 10x60	502894	10	10	5	-	30	-	60	60	17	30	50
FWA 10x65	45645	10	10	10	-	30	-	65	65	17	30	50
FWA 10x80	45792	10	10	25	5	30	50	80	80	17	30	50
FWA 10x95	45793	10	10	40	20	30	50	95	95	17	30	50
FWA 10x115	45794	10	10	60	40	30	50	115	115	17	30	25
FWA 10x130	45646	10	10	75	55	30	50	130	130	17	30	25
FWA 10x140	503367	10	10	85	65	30	50	140	140	17	30	25
FWA 10x160	503368	10	10	105	85	30	50	160	160	17	30	25
FWA 10x180	503369	10	10	115	105	30	50	180	180	17	30	25
FWA 10x200	503370	10	10	135	115	30	50	200	200	17	30	25
FWA 12x80	45647	12	12	10	-	40	-	80	80	19	50	25
FWA 12x100	45648	12	12	30	10	40	60	100	100	19	50	25
FWA 12x120	45795	12	12	50	30	40	60	120	120	19	50	25
FWA 12x150	45796	12	12	80	60	40	60	150	150	19	50	25
FWA 12x160	503371	12	12	90	70	40	60	160	160	19	50	25
FWA 12x180	503372	12	12	110	90	40	60	180	180	19	50	25
FWA 12x200	503373	12	12	130	110	40	60	200	200	19	50	25
FWA 12x220	503374	12	12	150	130	40	60	220	220	19	50	25
FWA 12x240	503377	12	12	170	150	40	60	240	240	19	50	25
FWA 16x105	45649	16	16	15	-	50	-	95	105	24	100	20
FWA 16x125	502921	16	16	35	5	50	80	115	125	24	100	20
FWA 16x140	45798	16	16	50	20	50	80	130	140	24	100	10
FWA 16x180	45799	16	16	90	60	50	80	170	180	24	100	10
FWA 16x200	503379	16	16	110	80	50	80	190	200	24	100	10
FWA 16x240	503380	16	16	150	120	50	80	230	240	24	100	10
FWA 16x300	503381	16	16	190	160	50	80	290	300	24	100	10
FWA 20x160	45800	20	20	40	20	80	100	150	160	30	200	10
FWA 20x200	503382	20	20	80	60	80	100	190	200	30	200	10
FWA 20x220	56133	20	20	100	80	80	100	210	220	30	200	10

FWA 20x240	503383	20	20	120	100	80	100	230	240	30	200	10
FWA 20x300	503387	20	20	160	140	80	100	290	300	30	200	10
FWA 24x200	503388	24	24	50	25	100	125	190	200	36	260	10
FWA 24x250	503389	24	24	100	75	100	125	240	250	36	260	10
FWA 24x300	503390	24	24	150	125	100	125	290	300	36	260	10
Hot-dipped galvanised steel with A2 clip												
FWA 8 x65hdg	502922	8	8	20	5	25	40	65	65	13	15	50
FWA 8 x80hdg	502923	8	8	35	20	25	40	80	80	13	15	50
FWA 8 x95hdg	502924	8	8	50	35	25	40	95	95	13	15	50
FWA 8 x120hdg	502925	8	8	75	60	25	40	120	120	13	15	50
FWA 10x80hdg	502926	10	10	25	5	30	50	80	80	17	30	50
FWA 10x95hdg	502927	10	10	40	20	30	50	95	95	17	30	50
FWA 10x115hdg	502928	10	10	60	40	30	50	115	115	17	30	25
FWA 10x130hdg	502929	10	10	75	55	30	50	130	130	17	30	25
FWA 12x80hdg	502972	12	12	10	-	40	-	80	80	19	50	25
FWA 12x100hdg	502973	12	12	30	10	40	60	100	100	19	50	25
FWA 12x120hdg	502974	12	12	50	30	40	60	120	120	19	50	25
FWA 12x150hdg	502975	12	12	80	60	40	60	150	150	19	50	25
FWA 16x105hdg	502976	16	16	15	-	50	-	95	105	24	100	20
FWA 16x125hdg	502977	16	16	35	5	50	80	115	125	24	100	20
FWA 16x140hdg	502978	16	16	50	20	50	80	130	140	24	100	10
FWA 16x180hdg	502979	16	16	90	60	50	80	170	180	24	100	10
FWA 20x160hdg	502980	20	20	40	20	80	100	150	160	30	200	10

LOADS

		Non-cracked concrete															
Anchor size		M6	M6	M8	M8	M8	M10	M10	M10	M12	M12	M12	M16	M16	M16	M20	M20
Kind of steel		gvz & hdg	gvz & hdg	gvz & hdg	gvz & hdg	gvz & hdg	gvz & hdg	gvz & hdg	gvz & hdg	gvz & hdg	gvz & hdg	gvz & hdg	gvz & hdg	gvz & hdg	gvz & hdg	gvz & hdg	gvz & hdg
Effective anchorage depth	$h_{ef} \geq$ [mm]	100	*80	80	*60	50	65	*50	40	50	*40	30	40	*35	25	30	*25
Drill hole diameter	d_0 [mm]	6	6	8	8	8	10	10	10	12	12	12	16	16	16	20	20
Recommended loads N_{rec} and V_{rec} [kN]																	
Tensile	$^{\circ}0N_{rec}$ [kN]	1.3	2.1	1.4	1.8	2.8	1.8	2.8	3.8	3.2	4.4	5.8	4.4	6.2	8.5	9.7	13.5
Shear	$^{\circ}90V_{rec}$ [kN]	1.3	2.1	1.4	1.8	2.8	1.8	2.8	3.8	3.2	4.4	5.8	4.4	6.2	8.5	9.7	13.5
Recommended bending moment M_{rec} [Nm]																	
	M_{rec} [Nm]	1.4	1.4	3.5	3.5	3.5	6.9	6.9	6.9	13.2	13.2	13.2	31.3	31.3	31.3	72.2	72.2
Component dimensions, minimum spacings and edge distances																	
Minimum edge distance	c_{min} [mm]	40	50	40	45	60	45	60	75	60	75	90	75	100	120	120	150
Minimum spacing	s_{min} [mm]	80	100	80	90	120	90	120	150	120	150	180	150	200	240	240	300
Minimum structural component thickness	h_{min} [mm]	100	100	100	100	100	100	100	100	100	100	120	100	130	160	160	200
Clearance-hole in the fixture to be attached ¹⁾	d_f [mm]	7	7	9	9	9	12	12	12	14	14	14	18	18	18	22	22

All load values apply for non-cracked concrete C20/25 without edge and spacing influences.
Recommended loads: material safety factor γ_M and safety factor for load $\gamma_L = 1.4$ are included.

* preferred embedment depth

¹⁾ Values only suitable for pre-positioned installation mode. Using push-through installation 1 mm have to be added.

Segmented steel shield anchor – the widely accepted traditional fixing.



SUITABLE FOR BUILDING MATERIALS



CONCRETE



HOLLOW BLOCKS

ADVANTAGES

Segmented steel shield anchor with internal thread for pre-positioned installation.

Due to internal metric thread versatile for various head types.

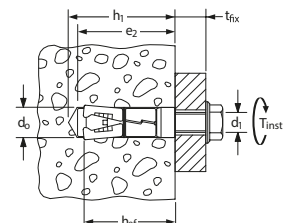
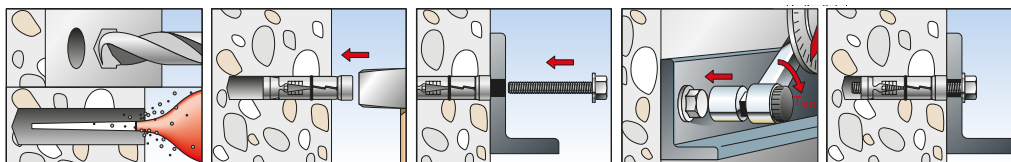
When the screw or hexagon nut is tightened, the cone is pulled into the expansion shields and pushes them against the hole wall.

Three piece shield for even load spread.

Surface-flush fixing allows the attached item to be removed.

Zinc-plated steel version for indoor use.

INSTALLATION PROCESS



Fixing Applications for

- ◆ Air conditioning units in pre-stressed hollow-core concrete slabs
- ◆ Bicycle racks
- ◆ Waste bins

TECHNICAL DATA

Product Description	Art.-No.	Thread d_1 M [mm]	Nominal drill-Ø d_0 [mm]	Total length l [mm]	Min. drill depth at prior insertion mode h_1 ≥ [mm]	Min. anchorage depth h_{ef} ≥ [mm]	Min. bolt penetration e_2 ≥ [mm]	Installation torque T_{inst} [Nm]	Qty. per box [pcs.]
Shield only									
FWB M6 S	44963	6	12	45	50	35	40	10	25
FWB M8 S	44964	8	14	50	60	40	45	25	25
FWB M10 S	44965	10	16	60	70	50	55	40	25
FWB M12 S	44966	12	20	75	85	60	70	75	25
FWB M16 S	44967	16	25	115	130	95	105	180	10
FWB M20 S	44970	20	32	130	150	110	120	220	10

LOADS

Recommended loads for single anchors in non-cracked concrete C20/25 without edge or spacing influences.

Anchor type	FWB 6 S	FWB 8 S	FWB 10 S	FWB 12 S	FWB 16 S	FWB 20 S
Steel	gvz	gvz	gvz	gvz	gvz	gvz
Effective anchorage depth $h_{ef} \geq$ [mm]	35	40	50	60	95	110
Recommended tension loads N_{rec} of single anchors without edge or spacing influence						
in non-cracked concrete C20/25 N_{rec} [kN]	1.5	2.0	4.0	6.0	8.0	8.0
Recommended shear loads V_{rec} of single anchors without edge or spacing influence						
in non-cracked concrete C20/25 V_{rec} [kN]	1.5	2.0	4.0	6.0	8.0	8.0
Component dimensions and installation parameters						
Minimum edge distance c_{min} [mm]	55	60	75	90	145	165
Minimum spacing s_{min} [mm]	110	120	150	180	290	330
Minimum structural component thickness h_{min} [mm]	100	100	100	120	190	220
Nominal drill hole diameter d_0 [mm]	12	14	16	20	25	32
Drill hole depth $h_1 \geq$ [mm]	50	60	70	85	130	150
Clearance-hole in the fixture to be attached ¹⁾ $d_2 \leq$ [mm]	7	9	12	14	18	22
Installation torque T_{inst} [Nm]	10	25	40	75	180	220

All values apply for non-cracked concrete C20/25 with normal reinforcement or not reinforced without edge or spacing influences. Recommended loads: material safety factor γ_M and safety factor for load $\gamma_L = 1.4$ are included.



fischer
FIS V 360 S
Epoxyresin
360 ml e

fischer
FIS P 380 C
POLYESTER
380 ml e

RM-12
RM-12

Threaded rod

The proven bonded anchor for non-cracked concrete



SUITABLE FOR BUILDING MATERIALS



CONCRETE



NATURAL STONE
with dense structure

ADVANTAGES

The pre-portioned resin capsule is especially economical for individual applications and overhead installations.

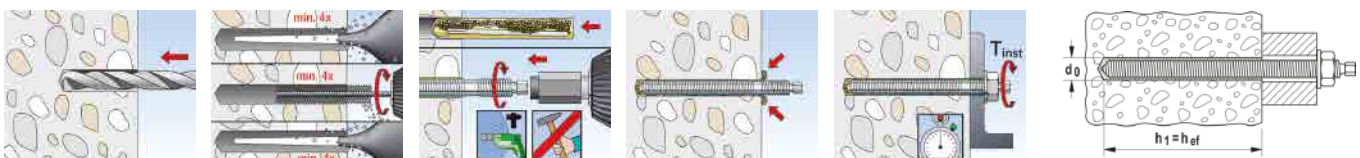
The choice between standard and intensive cleaning allows for individual adaptation either to achieve rapid progress or to obtain the maximum load level.

The wide range of approved steel types allows for use in all corrosion resistance classes and offers the best possible application safety.

The extensive range of RM from M-8 to M30 opens up a wide range of applications and therefore offers great flexibility.

The larger anchorage depths of the RM variants allow for an even greater load level. Thus fewer fixing points are required.

INSTALLATION PROCESS



Fixing Applications for

- ♦ High-bay Warehouses
- ♦ Collision Protection
- ♦ Façade sub-structures

APPROVALS



TECHNICAL DATA



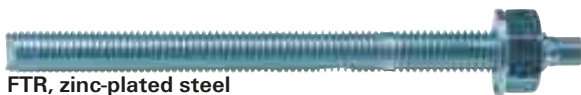
Resin capsule **RM**

Product Description	Art.-No.	Approval ETA	Drill hole diameter d_0 [mm]	Min. drill hole depth h_1 [mm]	Effect. anchoring depth h_{ef} [mm]	Fits	Sales unit [pcs]
RM 8	050270 1)	■	10	80	80	FTR M8 45809	10
RM 10	050271 1)	■	12	90	90	FTR M10 45810	10
RM 12	050272	■	14	110	110	FTR M12 45812	10
RM 12 E	048501	■	14	150	150	FTR M12 52255	10
RM 14	050278	■	16	120	120	-	10
RM 16	050273	■	18	125	125	FTR M16 45813	10
RM 16 E	079838	■	18	190	190	FTR M16 52256	10
RM 20	050274	■	25	170	170	FTR M20 45814	10
RM 20 E	079840	■	25	240	240	-	5
RM 22	512763	-	30	190	190	FTR M22 52257	5
RM 24	050275	■	28	210	210	FTR M24 45815	5
RM 24 E	079842	■	28	290	290	FTR M24 502750	5
RM 27	079843	■	32	250	250	-	5
RM 30	050276	■	35	280	280	FTR M30 45816	5

1) No ETA-approval in combination with internal-threaded anchor RG MI.

Threaded rod FTR

Threaded rod (steel quality 5.8) with pitched area and hexagonal installation drive in zinc-plated and hot-dipped galvanised steel.



FTR, zinc-plated steel



FTR, hot-dipped galvanised steel

ADVANTAGES

- ◆ Threaded rod for use with Injection mortar FIS or -2component resin capsule RM.
- ◆ The resin adheres to the entire surface of the threaded rod, bonding it to the wall of the drilled hole.
- ◆ For pre-positioned installation.
- ◆ Carbon steel grade 5.8.
- ◆ Threaded rods are supplied with an easy-to-use hexagonal installation drive and a setting tool included in each package.
- ◆ Thread diameter 8 to 30 mm.
- ◆ Zinc-plated steel version for indoor use.
- ◆ Hot-dipped galvanised version for temporary outdoor fixings.

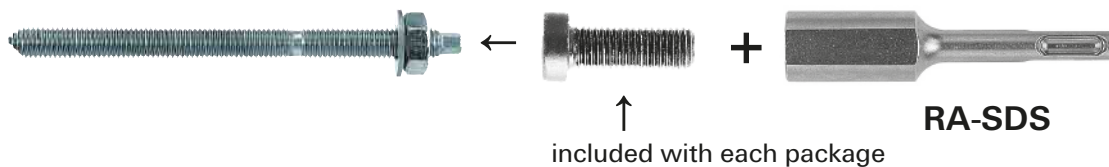
TECHNICAL DATA

Product Description	Art. No.	Thread	Nominal drill-Ø	Total length	Min. anchor-age depth	Max. fixing thick-ness	Min. drill depth at prior insertion mode	Width across flat	Installation torque	Related glas capsule	Qty. per box
		d ₁ M [mm]	d ₀ [mm]	l [mm]	h _{ef} ≥ [mm]	t _{fix} ≤ [mm]	h ₀ [mm]	SW [mm]	T _{inst} [Nm]		[pcs.]
Zinc-plated steel											
FTR M 8 x 110	45809	8	10	110	80	16	80	13	10	50270 RM 8	10
FTR M 10 x 130	45810	10	12	130	90	22	90	17	20	50271 RM 10	10
FTR M 10 x 165	52248	10	12	165	90	57	90	17	20	50271 RM 10	10
FTR M 12 x 160	45812	12	14	160	110	30	110	19	40	50272 RM 12	10
FTR M 12 x 220	52255	12	14	220	110	90	110	19	40	50272 RM 12	10
FTR M 16 x 165	519121	16	18	165	125	20	125	24	60	50273 RM 16	10
FTR M 16 x 190	45813	16	18	190	125	38	125	24	60	50273 RM 16	10
FTR M 16 x 250	52256	16	18	250	125	98	125	24	60	50273 RM 16	10
FTR M 20 x 260	45814	20	25	260	170	70	170	30	120	50274 RM 20	10
FTR M 22 x 255	52257	22	28	255	170	40	170	30	135	79842 RM 24 E	5
FTR M 24 x 300	45815	24	28	300	210	65	210	36	150	50275 RM 24	5
FTR M 24 x 350	502750	24	28	350	210	115	210	36	150	50275 RM 24	5
FTR M 30 x 380	45816	30	35	380	280	70	280	46	300	50276 RM 30	5
Hot-dipped galvanised											
FTR M 8 x 110hdg	502914	8	10	110	80	16	80	13	10	50270 RM 8	10
FTR M 10 x 130hdg	502915	10	12	130	90	22	90	17	20	50271 RM 10	10
FTR M 12 x 160hdg	502916	12	14	160	110	30	110	19	40	50272 RM 12	10
FTR M 16 x 190hdg	502917	16	18	190	125	38	125	24	60	50273 RM 16	10
FTR M 20 x 260hdg	502918	20	25	260	170	70	170	30	120	50274 RM 20	10
FTR M 24 x 300hdg	502919	24	28	300	210	65	210	36	150	50275 RM 24	5

SETTING TOOLS

Setting tool with SDS adapter

For simple installation of bonded anchors for example Resin anchor R, Highbond anchor FHB II



ACCESSORIES DRILL HOLE CLEANING



Item	Art.-No.	Brush diameter [mm]	Thread	Sales unit [pcs]
BS ø 10	078178	11	M 8	1
BS ø 12	078179	13	M 10	1
BS ø 14	078180	16	M 12	1
BS ø 16/18	078181	20	M14, M16	1
BS ø 25	097806	27	M 20	1
BS ø 28	078183	30	M 24	1
BS ø 35	078184	40	M22, M27, M30	1



Machine setting tool **RA-SDS**



Blow-out pump **ABG**

Item	Art.-No.	Fits	Sales unit [pcs]
RA-SDS	062420	Adapter suitable fits set screw	1
ABG big	089300	-	1

LOADS TABLE

Resin anchor R with threaded rod FTR (grade 5.8)

Highest permissible loads for a single anchor^{1) 6)} in concrete C20/25⁴⁾

For the design the complete approval ETA-08/0010 has to be considered.

Type	Non-cracked concrete						
	Effective anchorage depth h_{ef} [mm]	Minimum member thickness h_{min} [mm]	Installation torque T_{inst} [Nm]	Permissible tensile load $N_{perm}^{3)}$ [kN]	Permissible shear load $V_{perm}^{3)}$ [kN]	Min. spacing $s_{min}^{2)}$ [mm]	Min. edge distance $c_{min}^{2)}$ [mm]
RM 8	80	110	10,0	8,8	4,2	40	40
RM 10	90	120	20,0	12,3	7,6	45	45
RM 12	110	150	40,0	19,8	11,0	55	55
RM 12E	150	200	40,0	21,1	11,0	75	75
RG M 16	125	160	60,0	28,4	20,5	65	65
RM 16E	190	250	60,0	39,3	20,5	95	95
RM 20	170	220	120,0	45,8	32,0	85	85
RM 20E	240	300	120,0	60,9	32,0	120	120
RM 24	210	280	150,0	64,1	46,1	105	105
RM 24E	290	380	150,0	87,7	46,1	145	145
RM 27	250	330	200,0	85,8	60,1	125	125
RM 30	280	370	300,0	100,5	73,3	140	140

¹⁾ The partial safety factors for material resistance as regulated in the approval as well as a partial safety factor for load actions of $\gamma_L = 1,4$ are considered. As a single anchor counts e.g. an anchor with a spacings $\geq 3 \times h_{ef}$ and an edge distance $c \geq 1,5 \times h_{ef}$. Accurate data see approval.

²⁾ Minimum possible axial spacings resp. edge distance while reducing the permissible load.

³⁾ For combinations of tensile loads, shear loads, bending moments as well as reduced edge distances or spacings (anchor groups) see approval.

⁴⁾ For higher concrete strength classes up to C50/60 higher permissible loads may be possible.

⁶⁾ The given loads are valid for fixations in dry and humid concrete for temperatures in the substrate up to +50°C (resp. short term up to 80°C) and best possible drillhole cleaning according approval.

The versatile injection mortar for anchoring in cracked concrete and masonry



SUITABLE FOR BUILDING MATERIALS



CONCRETE



HOLLOW BLOCKS



LIME BRICK



SOLID BRICK



AERATED CONCRETE



SOLID BLOCK

ADVANTAGES

FIS V has a number of system approvals, for example in cracked and non-cracked concrete, masonry and for rebar connections. FIS V is therefore the universal injection mortar with guaranteed safety for almost every application.

The cement in the FIS V vinyl ester mortar generates the highest temperature resistance up to $^{\circ}120+C$. This means that FIS V can be used in a wide range of temperatures and works reliably even when subjected to increased demands.

The extensive range of accessories is ideally suited for the injection mortar FIS V; increases the great flexibility of the system; and allows for a wide range of applications.

Fixing Applications for

- ◆ Rescue ladders
- ◆ Steel Constructions
- ◆ Silos Installation

APPROVALS



TECHNICAL DATA

Item	Art.-No.	Approval	Languages on the cartridge	Contents	Sales unit [pcs]
FIS S	520742	DIBt — ETA —	—	10 static mixer	10
FIS V 360 S in bucket	503025	DIBt ● ETA ■	GB, I, P, E, PRC, JP	20 cartridges 360 ml, 20 x static mixer FIS S	1

CURING TIME

Cartridge temperature (mortar)	Gelling time	Temperature at anchoring base	Curing time
		- 5°C - ± 0°C	24 hrs.
		± 0°C - + 5°C	3 hrs.
+ 5°C - +10°C	9 min.	+ 5°C - +10°C	90 min.
+ 10°C - +20°C	5 min.	+ 10°C - +20°C	60 min.
+ 20°C - + 30°C	4 min.	+ 20°C - + 30°C	45 min.
+ 30°C - + 40°C	2 min.	+ 30°C - + 40°C	35 min.

The above times apply from the moment of contact between resin and hardener in the static mixer.

For installation, the cartridge temperature must be at least +5 °C. For longer installation times, i.e. when interruptions occur in work, the mixer should be replaced.

DRILL HOLE DIAMETER

FIS V with threaded rods

Anchor type								
Threaded rod dia [-]	M 8	M 10	M 12	M 16	M 20	M 24	M 27	M 30
Drill hole diameter d_0 [mm]	10	12	14	18	24	28	28	35

FIS V with rebar

Anchor type								
Threaded rod dia [-]	T 8	T 10	T 12	T 14	T 16	T 20	T 25	T 28
Drill hole diameter d_0 [mm]	10/12	12/14	14/16	18	20	25	30	35

LOADS

fischer Injection mortar FIS V, FIS VS and FIS VW with rebars.

Anchor design according to fischer specification

Recommended resistance ¹⁾

Anchor type		FIS V ø 8	FIS V ø 10	FIS V ø 12	FIS V ø 14	FIS V ø 16	FIS V ø 20	FIS V ø 25	FIS V ø 28	
h_{ef} [mm]		80	90	110	120	125	170	250	250	
non-cracked concrete										
temperature range (+80°C / +50°C)										
tension static	C 20/25 N_R	[kN]	10.5	14.8	21.7	25.1	29.9	48.3	84.1	89.0
	C 50/60 N_R	[kN]	13.3	18.7	27.4	31.7	37.7	60.9	106.0	112.2
shear static \geq	C 20/25 V_R	[kN]	6.6	10.3	14.8	20.2	26.3	41.4	64.3	81.0

¹⁾ The loads apply to reinforcing steel with $f_{yk} = 500 \text{ N/mm}^2$ and careful drill hole cleaning according to the approval. The rebar may be installed in dry or wet concrete. ²⁾ (short term temperature / long term temperature)

³⁾ Material safety factor γ_{M1} and safety factor for action $\gamma_L = 1.4$ are included. Material safety factor γ_{M2} depends on the failure mode of the anchor.

fischer Injection mortar FIS V, FIS VS and FIS VW with threaded Rods.



Anchor design according to fischer specification

Recommended resistance ¹⁾²⁾

Anchor type		FIS V M6								FIS V M8								
		gvz 5.8	gvz 8.8	A4-50	A4-70	A4-80	C-50	C-70	C-80	gvz 5.8	gvz 8.8	A4-50	A4-70	A4-80	C-50	C-70	C-80	
h_{ef} [mm]		60								80								
non-cracked concrete																		
temperature range (+80°C / +50°C) ²⁾																		
tension static	C 20/25 N_R	[kN]	4.8	4.8	2.7	4.8	4.8	2.7	4.8	4.8	9.0	10.5	4.7	9.9	10.5	4.7	10.5	10.5
	C 50/60 N_R	[kN]	5.2	6.1	2.7	5.3	6.1	2.7	6.1	6.1	9.0	13.3	4.7	9.9	13.3	4.7	12.4	13.3
shear static \geq	C 20/25 V_R	[kN]	2.9	4.6	1.5	3.2	4.3	1.5	4.0	4.3	5.1	8.6	2.7	6.0	8.1	2.7	7.4	8.1

Anchor type		FIS V M10								FIS V M12								
		gvz 5.8	gvz 8.8	A4-50	A4-70	A4-80	C-50	C-70	C-80	gvz 5.8	gvz 8.8	A4-50	A4-70	A4-80	C-50	C-70	C-80	
h_{ef} [mm]		90								110								
non-cracked concrete																		
temperature range (+80°C / +50°C) ²⁾																		
tension static	C 20/25 N_R	[kN]	13.8	14.8	7.2	14.8	14.8	7.2	14.8	14.8	20.5	21.7	10.7	21.7	21.7	10.7	21.7	21.7
	C 50/60 N_R	[kN]	13.8	18.7	7.2	15.7	18.7	7.2	18.7	18.7	20.5	27.4	10.7	22.5	27.4	10.7	27.4	27.4
shear static \geq	C 20/25 V_R	[kN]	8.6	13.1	4.5	9.2	12.4	4.5	11.4	12.4	12.0	19.4	6.3	13.7	18.3	9.3	17.1	18.3

Anchor type		FIS V M16								FIS V M20								
		gvz 5.8	gvz 8.8	A4-50	A4-70	A4-80	C-50	C-70	C-80	gvz 5.8	gvz 8.8	A4-50	A4-70	A4-80	C-50	C-70	C-80	
h_{ef} [mm]		125								170								
non-cracked concrete																		
temperature range (+80°C / +50°C) ²⁾																		
tension static	C 20/25 N_R	[kN]	29.9	29.9	19.7	29.9	29.9	19.7	29.9	29.9	48.3	48.3	30.7	48.3	48.3	30.7	48.3	48.3
	C 50/60 N_R	[kN]	37.6	37.7	19.7	37.7	37.7	19.7	37.7	37.7	58.6	60.9	30.7	60.9	60.9	30.7	60.9	60.9
shear static \geq	C 20/25 V_R	[kN]	22.3	36.0	11.7	25.2	33.8	11.7	31.4	33.8	34.9	56.0	18.3	39.4	52.6	18.3	49.1	52.6

Anchor type		FIS V M24								FIS V M30								
		gvz 5.8	gvz 8.8	A4-50	A4-70	A4-80	C-50	C-70	C-80	gvz 5.8	gvz 8.8	A4-50	A4-70	A4-80	C-50	C-70	C-80	
h_{ef} [mm]		210								280								
non-cracked concrete																		
temperature range (+80°C / +50°C) ²⁾																		
tension static	C 20/25 N_R	[kN]	67.9	67.9	44.2	67.9	67.9	44.2	67.9	67.9	106.8	106.8	70.2	106.8	106.8	70.2	106.8	106.8
	C 50/60 N_R	[kN]	84.3	85.5	44.2	85.5	85.5	44.2	85.5	85.5	133.8	134.6	70.2	134.6	134.6	70.2	134.6	134.6
shear static \geq	C 20/25 V_R	[kN]	50.9	80.6	26.7	56.8	75.7	26.7	70.9	75.7	80.6	128.6	42.3	90.2	120.8	42.3	112.6	120.8

¹⁾ The loads apply to fischer threaded rods and careful drill hole cleaning according to the approval. The anchor may be installed in dry or wet concrete. ²⁾ (short term temperature / long term temperature)

The expansion-free polyester resin anchoring system for masonry.



SUITABLE FOR BUILDING MATERIALS



CONCRETE



HOLLOW BLOCKS



LIME BRICK



SOLID BRICK



AERATED CONCRETE

ADVANTAGES

FISP is the economical solution for anchoring in masonry.

FISP is 2 component Injection Mortar based on polyester resin.

Expansion-free anchoring. Allows low axial spacing and edge distances.

Extensive range of accessories for a wide variety of applications.

Fixing Applications for

- ◆ Gates
- ◆ Wall Consoles
- ◆ Cable trays

TECHNICAL DATA

Product Description	Art.-No.	Contents	Sales unit [pcs]
FIS P 380 C	59234	1 cartridge 380 ml + 1 static mixer	6
FIS S	520742	10 static mixer	10

DISPENSERS



Dispenser FIS AM



Dispenser FIS AC

Item	Art.-No.	Adapted for	Performance data	Sales unit [pcs]
FIS AM	533749	FIS V 360	–	1
FIS AC	533750	FIS P 380	–	1

LOADS

Recommended loads for fischer FIP 380 C

Product Description Size		M8	M10	M12	M16	M20	M24
Recommended tensile load N_{rec} ¹⁾	(kN)	4.2	6.3	8.6	12.0	18.8	24.0
Characteristic axial spacing	$S_{cr} \geq$	80	90	110	125	170	210
Characteristic edge spacing	$C_{cr} \geq$	120	135	165	190	255	315
Maximum torque	T_{inst}	10	20	40	80	150	200

¹⁾ Recommended N_{rec} applicable only when the specified edge and axial spacing are maintained.

²⁾ All tests were performed using grade 5.8 studs. All concrete was in dry condition and holes were thoroughly cleaned as per our installation recommendation. Concrete strength were determined using 100mm cubes.



The silicone sealant with an acetate base for internal and external applications



ADVANTAGES

Thanks to the practical elasticity of %25, DMS is ideally suited to connection joints with expansion. This guarantees long-lasting jointing.

The fungicidal properties ensure a clean look over the long term.

The good resistance to UV, weathering and ageing means that DMS can be used both indoors and outdoors, and offers a high level of security over the long term.

The very good hold on smooth surfaces prevents damp from forming in the substrate and guarantees reliable functioning.

TECHNICAL DATA



Multi-silicone DMS

Fixing Applications for

- ◆ Bathrooms, showers and toilets
- ◆ Connection joints to sinks
- ◆ Wash Basins
- ◆ Expansion joints between tiles
- ◆ Joints between timber and tiles
- ◆ Seal welds for display cabinets and glass blocks

BUILDING MATERIALS

- ◆ Stainless steel
- ◆ Anodised layer
- ◆ Epoxy
- ◆ Tiles
- ◆ Glazed surfaces
- ◆ Glass
- ◆ H-PVC
- ◆ Ceramics
- ◆ Painted wood
- ◆ Polyester

Product Description	Art.-No.	Colour	Contents [ml]
DMS GR (EN/FR/AR)	040389	grey	280
DMS SW (EN/FR/AR)	504413	black	280
DMS TP (EN/FR/AR)	040385	transparent	280
DMS W (EN/FR/AR)	040386	white	280

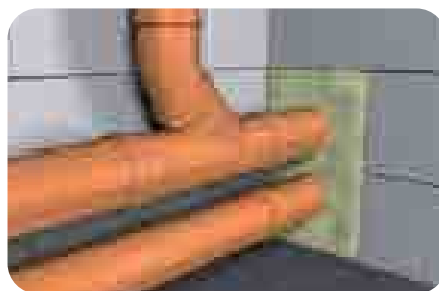
SEALANT GUNS



Applicator Gun KPM1

Product Description	Art No.	Adapted For	Qty. Per Box
KPM1 Applicator Gun	53115	FiAM, FFRS, UFS 310, FBS 0.2	1

The B3 high-quality PU Foam Spray



ADVANTAGES

The Foam yield up to 45 litre

The rapid installation foam has been approved as watertight by an external inspection and is thus suitable for use in wet conditions. It fulfils the requirements of a well foam.

The low level of foam expansion during the curing period avoids reworking, thus guaranteeing a simple and time-saving application.

The ergonomic handle sits perfectly in the hand and allows for easy use.

TECHNICAL DATA



Fixing Applications for

- ◆ Insulating and filling window connection joints, around window
- ◆ Filling Pipe Penetrations
- ◆ Insulating and filling in roofing work and dry construction
- ◆ Insulating and filling finished elements wall connections, wall penetrations and cavities
- ◆ Insulating and filling pipe penetrations
- ◆ Ventilation ducts

BUILDING MATERIALS

Bonds to all standard building materials such as:

- ◆ Concrete
- ◆ Anodised layer
- ◆ Gypsum plasterboard
- ◆ Wood
- ◆ Sand-lime brick
- ◆ Plastics (not on PE, PP, Teflon, silicone)
- ◆ Masonry
- ◆ Metals with priming coat
- ◆ Plaster

Product Description	Art.-No.	Content per can [ml]	Max. foam yield (free foaming) [l]	Sales Unit [Pcs]
PUP 1 /750 B3	098011	750	45	12

Ideal for repairing damaged zinc coatings using colour-matching corrosion protection.



ADVANTAGES

Zinc Alu Spray represents a subtle repair to damaged hot-dip galvanised areas thanks to its colour matching with the hot-dip galvanisation.

Excellent holding properties on blank metal, it guarantees a lasting connection to the base material.

The fast-drying Zinc Alu Spray guarantees good, weatherproof corrosion protection and, as such, is suitable for use both indoors and out.

Fixing Applications for

- ◆ Repairing damaged zinc coatings
- ◆ Sheet metal coverings
- ◆ Metal constructions
 - ◆ Climate control and ventilation technology
 - ◆ Guard rails
 - ◆ For post-galvanising and repairing damaged areas of galvanised parts
 - ◆ drilling and cutting points and welded joints

TECHNICAL DATA



Zinc-Alu Spray FTC-ZA

BUILDING MATERIALS

- ◆ All iron and steel surfaces
- ◆ Hot-dip galvanised surfaces following drilling, ironwork or welding
- ◆ Non-ferrous heavy metal

Product Description	Art.-No.	Contents [ml]	Sales unit [pcs]
FTC-ZA (EN/FR/ES/PT)	509241	400	12

Bright color as newly galvanised metals in combination with heat resistant corrosion protection due to flake technology.



ADVANTAGES

In the salt spray test in line with DIN EN ISO 9227, coated metal parts displayed no corrosion, even after 300 hours.

The color "bright grade" has been perfectly adapted to that of hot-dip galvanisation. This acts as an optical color compensator.

The innovative metal flakes form a highly resistant protective layer, even against extreme weather influences. This guarantees longlasting protection.

Thanks to the excellent holding properties on blank metal, it guarantees a lasting connection to the base material.

TECHNICAL DATA



Zinc Spray Bright Grade FTC-ZB

Fixing Applications for

- ◆ For all metals that need corrosion protection
- ◆ Conductive interlayer for spot welding
- ◆ For HVAC systems
- ◆ For post-galvanising and repairing damaged areas of galvanised parts
- ◆ For the coating of drilling and cutting points as well as welded joints

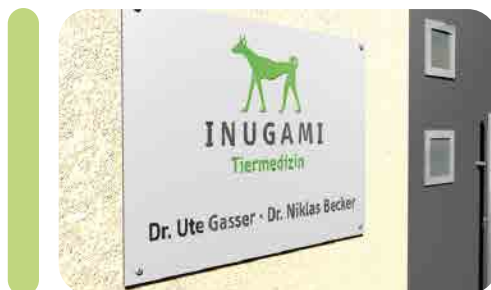
BUILDING MATERIALS

- ◆ All iron and steel surfaces
- ◆ Hot-dip galvanised surfaces following drilling, ironwork or welding
- ◆ Non-ferrous heavy metal
- ◆ Blank laminations

Type	Art.-No.	Contents [ml]	Sales unit [pcs]
FTC-ZB (EN/FR/ES/PT)	537223	400	12



The installation-friendly nylon plug with 2 way expansion.



SUITABLE FOR BUILDING MATERIALS



CONCRETE



NATURAL STONE
with dense structure



LIME BRICK



SOLID BRICK

ADVANTAGES

The rimless plug sleeve allows for the plug to be set as deep as required below the plaster to the bearing substrate to achieve the maximum load-bearing capacity.

As the plug only expands in two directions, it is possible to direct the expansion forces so that they run parallel to the edge of the building material by turning the plug. This allows for smaller edge distances.

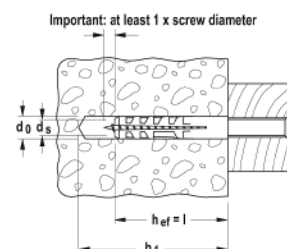
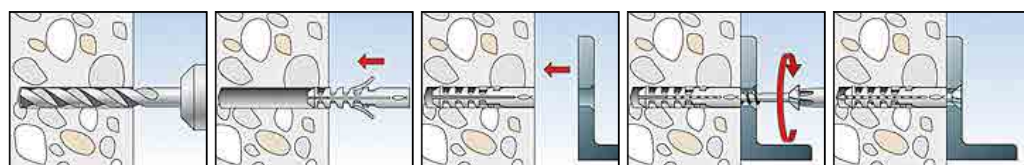
The slimline plug geometry makes it easy to push the plug into the drill hole. For a fast and simple installation.

The anti-rotation lock prevents the plug rotating in the drill hole, thus guaranteeing a high level of installation safety.

Fixing Applications for

- ◆ Cross meter
- ◆ Letter boxes
- ◆ Folding Shutters
- ◆ Motion detectors
- ◆ Information boards
- ◆ Curtain rails
- ◆ Skirting
- ◆ Electrical installations
- ◆ Light shelves
- ◆ Mirror cabinets

INSTALLATION PROCESS



TECHNICAL DATA

Product Description	Art.-No.	Drill hole diameter d_0 [mm]	Anchor length l [mm]	Min. drill hole depth h_1 [mm]	Wood and chip-board screws d_s [mm]	Sales unit [pcs]
	Standard					
S 4	050104	4	20	25	2 - 3	200
S 5	050105	5	25	35	3 - 4	100
S 5	—	5	25	35	3 - 4	200
S 6	050106	6	30	40	4 - 5	100
S 6	—	6	30	40	4 - 5	200
S 8	050108	8	40	55	4,5 - 5	100
S 8	—	8	40	55	4,5 - 5	200
S 10	050110	10	50	70	6 - 8	50
S 10	—	10	50	70	6 - 8	100
S 12	050112	12	60	80	8 - 10	25
S 14	050114	14	75	90	10 - 12	20
S 16	050116	16	80	100	12 (1/2")	10
S 20	050120	20	90	120	16	5

LOADS

S-Plug

Highest recommended loads¹⁾ for a single anchor.

The given loads are valid for woodscrews with the specified diameter.

Type			S4	S5	S6	S8	S10	S12	S14	S16	S20
Screw diameter	\emptyset	[mm]	3	4	5	6	8	10	12	12	16
Min. edge distance in concrete	cmin	[mm]	20	25	30	40	50	60	70	80	100
Recommended loads in the respective base material F_{rec}²⁾											
Concrete	$\geq C20/25$	[kN]	0,16	0,28	0,40	0,60	1,10	1,50	1,85	2,26	3,88
Solid brick	$\geq Mz 12$	[kN]	0,14	0,24	0,28	0,50	- 3)	- 3)	- 3)	- 3)	- 3)
Solid sand-lime brick	$\geq KS 12$	[kN]	0,14	0,24	0,28	0,55	- 3)	- 3)	- 3)	- 3)	- 3)
Aerated concrete	$\geq PB4, PP4 (G4)$	[kN]	-	-	0,05	0,07	0,16	0,28	0,40	- 3)	- 3)
Plaster wall		[kN]		-	-	0,15	0,23	0,37	0,60	- 3)	- 3)

¹⁾ Includes the safety factor 7.

²⁾ Valid for tensile load, shear load and oblique load under any angle.

³⁾ Due to that the failure of the substrate varies too much no reproducible values can be given.



The fastest installation in gypsum plasterboard fixing



SUITABLE FOR BUILDING MATERIALS



GYPSUM &
PLASTER BOARD

ADVANTAGES

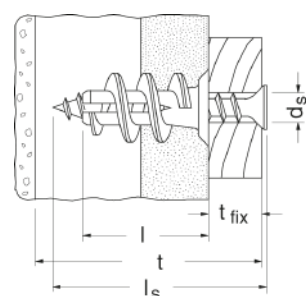
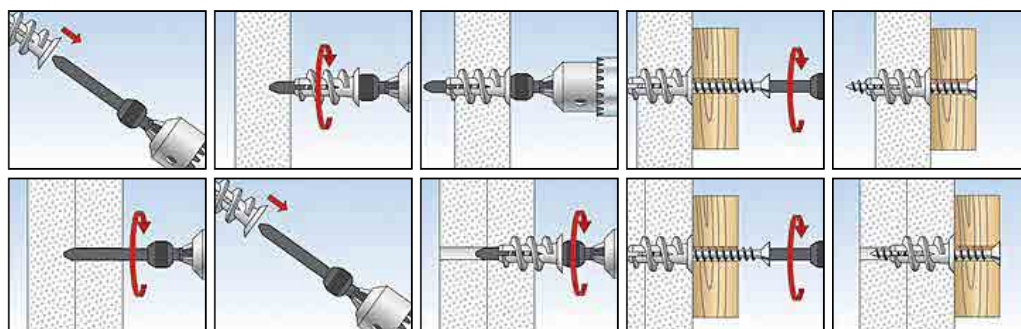
The sharp, self-tapping thread of the GK enables a secure, positive fit fixing. This achieves a high load-bearing capacity.

The short fixing length means that only a small amount of space is required behind the board. As a result, the GK can also be used in the case of unknown board thickness and cavity depth.

The cross-drive recess in the head of the fixing means that the GK can also be screwed out like a screw without a setting tool.

The GK can be used with the most wide-ranging screws, hooks and eye screws. This allows for a broad range of applications.

INSTALLATION PROCESS



Fixing Applications for

- ◆ Pictures
- ◆ Fitting accessories
- ◆ Shelf Fixing
- ◆ Lightings
- ◆ Electrical installations
- ◆ Series installations

TECHNICAL DATA



Plasterboard fixing **GK**



Plasterboard fixing **GKS**

Product Description	Art.-No.	Anchor length l [mm]	Min. thickness to first supporting layer t [mm]	Max. fixture thick- ness t _{fix} [mm]	Screw d _s x l _s [mm]	Actuation	Sales unit [pcs]
GK	052389 ¹⁾	22	25	–	4,5 - 5,0 x LS	–	100
GKS	052390 ²⁾	22	25	13	4,5 x 35	PZ2	50

1) Min. screw length = length of plug 22 mm + thickness of building component.

2) Supplied with plasterboard screw.



Installation tool **GKW**

Product Description	Art.-No.	Sales unit [pcs]
GKW	052393	10

LOADS

Plasterboard fixing GK

Highest recommended loads ¹⁾ for a single anchor.

The given loads are valid for chipboard screws with the specified diameters.

Type			GK
Chipboard screw	∅	[mm]	4,0 - 5,0
Recommended loads in the respective base material F_{rec} ²⁾			
Gypsum plasterboard	9,5 mm	[kN]	0,07
Gypsum plasterboard	12,5 mm	[kN]	0,08
Gypsum plasterboard	2 x 12,5 mm	[kN]	0,11

¹⁾ Includes the safety factor 4.

³⁾ If the failure of the base material is not possible.

²⁾ Valid for tensile load, shear load and oblique load under any angle.

The self-tapping metal fixing for gypsum plasterboard and gypsum fibreboard fixing



SUITABLE FOR BUILDING MATERIALS



GYPSUM &
PLASTER BOARD

ADVANTAGES

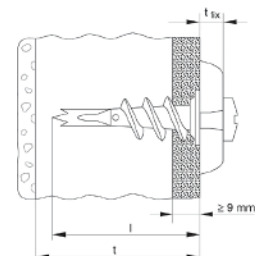
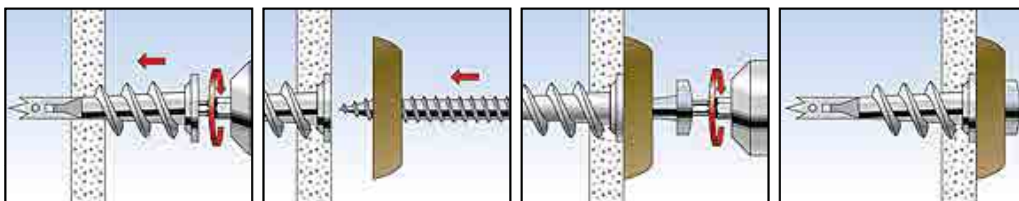
Due to its material properties, the GKM can be used in gypsum plasterboard and gypsum fibreboard, and can be used with the most wide-ranging screws, hooks and eye screws. This allows for a broad range of applications.

The sharp, self-tapping thread enables a secure, positive fit fixing. This achieves a high load-bearing capacity.

The cross-drive recess means that a standard screwdriver or bit can be used. **No special setting tool is required.**

The short fixing length means that only a small amount of space is required behind the board. As a result, the GKM can also be used in the case of unknown board thickness and cavity

INSTALLATION PROCESS



Fixing Applications for

- ◆ Lighting
- ◆ Fitting accessories for furnitures
- ◆ Electrical installations
- ◆ Pictures

TECHNICAL DATA



Plasterboard fixing metal **GKM**

Product Description	Art.-No.	Anchor length l [mm]	Min. thickness to first supporting layer t [mm]	Max. fixture thick- ness t _{fix} [mm]	Screw d _s x l _s [mm]	Actuation	Sales unit [pcs]
GKM	024556	31	35	–	4,5 - 5,0 x LS	–	100
GKM 12	040432¹⁾	31	35	12	4,5 x 35	PZ2	100
GKM 27	040434²⁾	31	35	27	4,5 x 50	PZ2	100

1) Supplied with plasterboard screws with pan head.

2) Supplied with plasterboard screws with countersunk head.

LOADS

Plasterboard fixing metal GKM

Highest recommended loads¹⁾ for a single anchor.

The given loads are valid for chipboard screws with the specified diameters.

Type		GKM
Chipboard screw	∅ [mm]	4,0 - 5,0
Recommended loads in the respective base material F_{rec}²⁾		
Gypsum plasterboard	9,5 mm [kN]	0,07
Gypsum plasterboard	12,5 mm [kN]	0,08
Gypsum plasterboard	2 x 12,5 mm [kN]	0,11

¹⁾ Required safety factors are considered. ²⁾ Valid for tensile load, shear load and oblique load under any angle.

Insulation Fixing



The cost-effective drive anchor with plastic nail



SUITABLE FOR BUILDING MATERIALS



HOLLOW BLOCKS



CONCRETE



NATURAL STONE
with dense structure



LIME WEIGHT



SOLID BRICK

ADVANTAGES

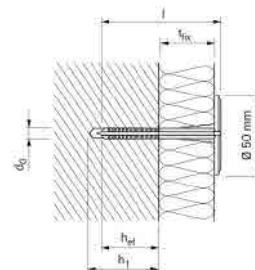
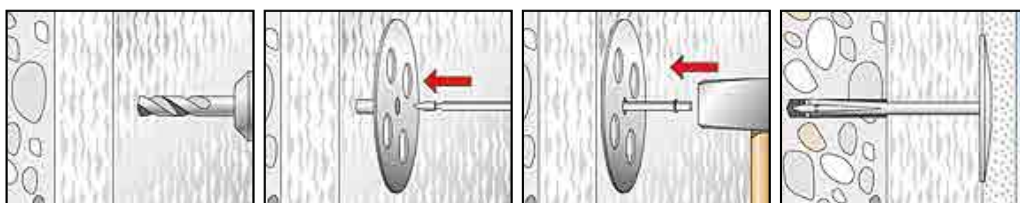
The glass-fibre-reinforced plastic nail (GRP nail) reduces the heat transmission and prevents marks on the plaster surface.

The simple hammer-set installation allows for a quick installation process and thus reduces workload.

The well-proven design with low anchorage depth reduces the amount of drilling required, thus achieving a high level of efficiency.

The DIPK can be used universally in rear-ventilated curtain façades, as well as in plaster façades.

INSTALLATION PROCESS



Fixing Applications for

To fix pressure-resistant insulating materials in façades, such as:

- ◆ Polystyrene boards
- ◆ Insulating materials in rear ventilated facades
- ◆ Wool
- ◆ Cork boards / coir matting
- ◆ PU panels

TECHNICAL DATA



Render fixing DIPK

Product Description	Art.-No.	Drill hole diameter d_0 [mm]	Usable length t_{fix} [mm]	Min. drill hole depth h_1 [mm]	Effect. anchoring depth h_{ef} [mm]	Nail length [mm]	Fixing length l [mm]	Sales unit [pcs]
DIPK 8/20-40	041865	8	20 - 40	40	30	77	70	200
DIPK 8/40-60	041866	8	40 - 60	40	30	97	90	200
DIPK 8/60-80	041867	8	60 - 80	40	30	117	110	200
DIPK 8/80-100	041868	8	80 - 100	40	30	137	130	200
DIPK 8/100-120	041869	8	110 - 120	40	30	157	150	200
DIPK 10/10-30	043966	10	10 - 30	40	30	67	60	200
DIPK 10/40-60	043967	10	40 - 60	40	30	97	90	200
DIPK 10/60-80	043968	10	60 - 80	40	30	117	110	200
DIPK 10/80-100	043969	10	80 - 100	40	30	137	130	200
DIPK 10/100-120	043970	10	110 - 120	40	30	157	150	200
DIPK 10/120-140	043971 1)	10	120 - 140	40	30	117	170	200
DIPK 10/140-160	043972 1)	10	140 - 160	40	30	137	190	200

1) Installation with setting tool, included in each package.



Complete fixing sets for free-standing toilets and bidets



SUITABLE FOR BUILDING MATERIALS



CONCRETE



NATURAL STONE
with dense structure



LIME BRICK



SOLID BRICK

ADVANTAGES

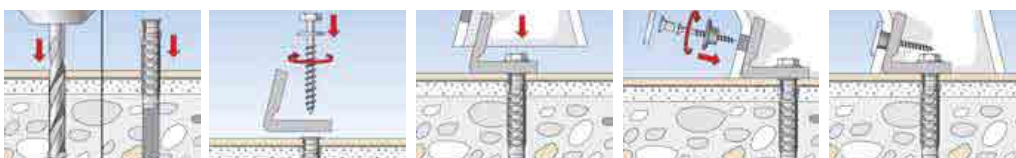
Complete fixing sets including brass screws allow for quick and easy installation.

A pronounced rim prevents contact between the screw and ceramics, thus ensuring nothing gets damaged during fixing.

The WB5N's assembly bracket with pre drilled rows of holes allows for a flexible fixing with two directions.

The WCN is also suitable for fixing ceramic shelves and mirrors, and can thus be used for a wide range of applications.

INSTALLATION PROCESS



Fixing Applications for

- ◆ Free-standing toilets
- ◆ Bidets
- ◆ Ceramic Shelves
- ◆ Mirrors

TECHNICAL DATA



WC fixing **WB 5N**

Product Description	Art.-No.	Contents	Sales unit [pcs]
WB 5N	018652	2 S plugs UX 10, 2 Screws 7x65 zinc-plated, 2 Nylon angles, 2 washers 8mm, 2 screws A2 stainless steel, 2 flanged sleeves, 2 cover caps chrom	50

Vertical fixings for floor-mounted toilets and bidets, with vertical holes



SUITABLE FOR BUILDING MATERIALS



CONCRETE



NATURAL STONE
with dense structure



SOLID BRICK

Fixing Applications for

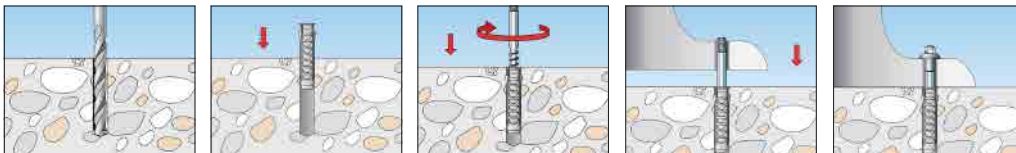
- ◆ Free-standing toilets
- ◆ Bidets
- ◆ Ceramic Shelves
- ◆ Mirrors

ADVANTAGES

A pronounced rim prevents contact between the screw and ceramics, thus ensuring nothing gets damaged during fixing

Corrosion resistant materials.

INSTALLATION PROCESS



TECHNICAL DATA



WB2 Stainless steel

Product Description	Art.-No.	Drill hole diameter [mm]	Drill hole dept [mm]	Ceramic hole diameter [mm]	Ceramic thickness [mm]	Description	Sales unit [pack]
WB2 Stainless steel	501004	8	55	8,5÷12	25	4 SX8 plugs, 4 7/32" stainless steel screws, 4 blind brass nut nickel-plated, 4 nylon bushes in one polybag	50



The two-flute cutter SDS Plus's most economical solution



SUITABLE FOR BUILDING MATERIALS



CONCRETE



MASONRY

ADVANTAGES

Allows for faster drilling dust removal.

SDS Plus Economical offers consistent quality and reliable performance

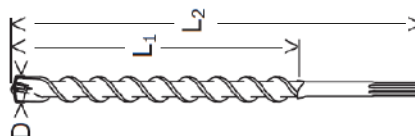
Fischer SDS Plus Economical's shank perfectly fits in all SDS plus hammers

Fixing Applications for

To create approval-compliant drill holes in:

- ◆ Concrete
- ◆ Masonry

TECHNICAL DATA



Product Description	Art. No.	Drill hole diameter	Working length	Total length	Type of Packaging	Contents	Sales unit
		d_o [mm]	L_1 [mm]	L_2 [mm]		[pcs.]	[pcs.]
SDS Plus Economical 5/50/110	538475	4	50	110	Polybag	1	1
SDS Plus Economical 5/50/110	614900	5	50	110	Polybag	1	1
SDS Plus Economical 5/100/160	614901	5	100	160	Polybag	1	1
SDS Plus Economical 6/50/110	614905	6	50	110	Polybag	1	1
SDS Plus Economical 6/100/160	614906	6	100	160	Polybag	1	1
SDS Plus Economical 6/150/210	538476	6	150	210	Polybag	1	1
SDS Plus Economical 7/50/110	538477	7	50	110	Polybag	1	1
SDS Plus Economical 7/100/160	538478	7	100	160	Polybag	1	1
SDS Plus Economical 8/50/110	614910	8	50	110	Polybag	1	1
SDS Plus Economical 8/100/160	614911	8	100	160	Polybag	1	1
SDS Plus Economical 8/150/210	614912	8	150	210	Polybag	1	1
SDS Plus Economical 8/200/260	614913	8	200	260	Polybag	1	1
SDS Plus Economical 9/150/210	538479	9	150	210	Polybag	1	1
SDS Plus Economical 10/100/160	614921	10	100	160	Polybag	1	1
SDS Plus Economical 10/150/210	614922	10	150	210	Polybag	1	1
SDS Plus Economical 10/200/260	538480	10	200	260	Polybag	1	1
SDS Plus Economical 10/250/310	538481	10	250	310	Polybag	1	1
SDS Plus Economical 11/100/160	538482	11	100	160	Polybag	1	1
SDS Plus Economical 12/100/160	614925	12	100	160	Polybag	1	1
SDS Plus Economical 12/150/210	614926	12	150	210	Polybag	1	1
SDS Plus Economical 12/200/260	614927	12	200	260	Polybag	1	1
SDS Plus Economical 13/100/160	538483	13	100	160	Polybag	1	1
SDS Plus Economical 14/100/160	614930	14	100	160	Polybag	1	1
SDS Plus Economical 14/200/260	614932	14	200	260	Polybag	1	1
SDS Plus Economical 15/100/160	614935	15	100	160	Polybag	1	1
SDS Plus Economical 16/150/210	614941	16	150	210	Polybag	1	1
SDS Plus Economical 16/250/310	614942	16	250	310	Polybag	1	1
SDS Plus Economical 17/150/210	614945	17	150	210	Polybag	1	1
SDS Plus Economical 18/150/210	614948	18	150	210	Polybag	1	1
SDS Plus Economical 18/250/300	614950	18	250	300	Polybag	1	1
SDS Plus Economical 19/150/210	538484	19	150	210	Polybag	1	1
SDS Plus Economical 20/150/210	538485	20	150	210	Polybag	1	1
SDS Plus Economical 20/250/310	614955	20	250	310	Polybag	1	1
SDS Plus Economical 22/200/260	614960	22	200	260	Polybag	1	1
SDS Plus Economical 25/200/260	614965	25	200	260	Polybag	1	1
SDS Plus Economical 26/200/260	614970	26	200	260	Polybag	1	1

The two-flute cutter is setting new standards when it comes to drilling speed.



Hi - Speed

Low Vibration



SUITABLE FOR BUILDING MATERIALS



CONCRETE



MASONRY

ADVANTAGES

The optimized drill geometry allows for rapid drilling progress, reduced wear and tear, and less effort.

The centering tip allows for easy and precise drilling and prevents slipping on smooth surfaces.

The "Power Breakers" on the drill bit head have a "destructive effect". They create micro-cracks in the material and achieve a noticeably improved drilling speed.

The larger reinforcement chamfers (+35%) guarantee that the drill acts in the best possible way when it hits concrete reinforcements. This considerably reduces the risk of problems caused by drill jamming.

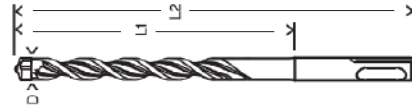
Fixing Applications for

To create approval-compliant drill holes in:

- ◆ Concrete
- ◆ Masonry

The new Vario KVS helix offers further benefits. The narrow crown width behind the drill bit head reduces friction and ensures a more powerful transfer of energy during impact drilling. The improved helix allows for an ideal transportation of the drill residue. The spiral shape increases stability and, with it, the break resistance.

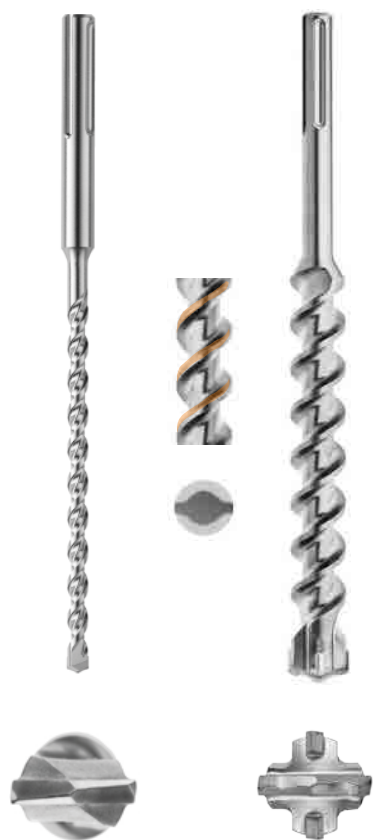
TECHNICAL DATA



Product Description	Art. No.	Drill hole diameter	Working length	Total length	Type of Packaging	Contents	Sales unit
		d ₀ [mm]	L ₁ [mm]	L ₂ [mm]		[pcs.]	[pcs.]
SDS Plus II 4/50/110	531753	4	50	110	Plastic clip	1	1
SDS Plus II 4/100/160	531754	4	100	160	Plastic clip	1	1
SDS Plus II 5/50/110	531755	5	50	110	Plastic clip	1	1
SDS Plus II 5/100/160	531756	5	100	160	Plastic clip	1	1
SDS Plus II 5/150/210	531757	5	150	210	Plastic clip	1	1
SDS Plus II 5/250/310	531759	5	250	310	Plastic clip	1	1
SDS Plus II 6/50/110	531765	6	50	110	Plastic clip	1	1
SDS Plus II 6/100/160	531766	6	100	160	Plastic clip	1	1
SDS Plus II 6/150/210	531767	6	150	210	Plastic clip	1	1
SDS Plus II 6/200/260	531768	6	200	260	Plastic clip	1	1
SDS Plus II 6/250/310	531769	6	250	310	Plastic clip	1	1
SDS Plus II 7/50/110	531775	7	50	110	Plastic clip	1	1
SDS Plus II 7/100/160	531776	7	100	160	Plastic clip	1	1
SDS Plus II 7/150/210	531777	7	150	210	Plastic clip	1	1
SDS Plus II 7/200/250	531778	7	200	250	Plastic clip	1	1
SDS Plus II 8/50/110	531779	8	50	110	Plastic clip	1	1
SDS Plus II 8/100/160	531780	8	100	160	Plastic clip	1	1
SDS Plus II 8/150/210	531781	8	150	210	Plastic clip	1	1
SDS Plus II 8/200/260	531782	8	200	260	Plastic clip	1	1
SDS Plus II 8/250/310	531783	8	250	310	Plastic clip	1	1
SDS Plus II 8/350/400	531784	8	350	400	Plastic clip	1	1
SDS Plus II 8/400/460	531785	8	400	460	Plastic clip	1	1
SDS Plus II 8/550/600	531786	8	550	600	Plastic clip	1	1
SDS Plus II 9/100/160	531788	9	100	160	Plastic clip	1	1
SDS Plus II 9/150/210	531789	9	150	210	Plastic clip	1	1
SDS Plus II 10/50/110	531791	10	50	110	Plastic clip	1	1
SDS Plus II 10/100/160	531792	10	100	160	Plastic clip	1	1
SDS Plus II 10/150/210	531793	10	150	210	Plastic clip	1	1
SDS Plus II 10/200/260	531794	10	200	260	Plastic clip	1	1
SDS Plus II 10/250/310	531795	10	250	310	Plastic clip	1	1
SDS Plus II 10/300/350	531796	10	300	350	Plastic clip	1	1
SDS Plus II 10/400/450	531797	10	400	450	Plastic clip	1	1
SDS Plus II 10/550/600	531798	10	550	600	Plastic clip	1	1
SDS Plus II 10/750/800	531799	10	750	800	Plastic clip	1	1
SDS Plus II 10/950/1000	531800	10	950	1000	Plastic clip	1	1
SDS Plus II 11/100/160	531801	11	100	160	Plastic clip	1	1
SDS Plus II 11/250/310	531802	11	250	310	Plastic clip	1	1
SDS Plus II 12/100/160	531803	12	100	160	Plastic clip	1	1
SDS Plus II 12/150/210	531804	12	150	210	Plastic clip	1	1
SDS Plus II 12/200/260	531805	12	200	260	Plastic clip	1	1
SDS Plus II 12/250/310	531806	12	250	310	Plastic clip	1	1
SDS Plus II 12/300/360	531807	12	300	360	Plastic clip	1	1
SDS Plus II 12/400/450	531808	12	400	450	Plastic clip	1	1
SDS Plus II 12/550/600	531809	12	550	600	Plastic clip	1	1

Product Description	Art. No.	Drill hole diameter	Working length	Total length	Type of Packaging	Contents	Sales unit
		d ₀ [mm]	L ₁ [mm]	L ₂ [mm]		[pcs.]	[pcs.]
SDS Plus II 12/550/600	531809	12	550	600	Plastic clip	1	1
SDS Plus II 12/950/1000	531810	12	950	1000	Plastic clip	1	1
SDS Plus II 13/100/160	531811	13	100	160	Plastic clip	1	1
SDS Plus II 13/150/210	531812	13	150	210	Plastic clip	1	1
SDS Plus II 13/200/260	531813	13	200	260	Plastic clip	1	1
SDS Plus II 13/250/310	531814	13	250	310	Plastic clip	1	1
SDS Plus II 14/100/160	531815	14	100	160	Plastic clip	1	1
SDS Plus II 14/150/210	531816	14	150	210	Plastic clip	1	1
SDS Plus II 14/200/260	531817	14	200	260	Plastic clip	1	1
SDS Plus II 14/250/310	531818	14	250	310	Plastic clip	1	1
SDS Plus II 14/400/450	531819	14	400	450	Plastic clip	1	1
SDS Plus II 14/550/600	531820	14	550	600	Plastic clip	1	1
SDS Plus II 14/950/1000	531821	14	950	1000	Plastic clip	1	1
SDS Plus II 15/100/160	531822	15	100	160	Plastic clip	1	1
SDS Plus II 15/150/210	531823	15	150	210	Plastic clip	1	1
SDS Plus II 15/200/260	531824	15	200	260	Plastic clip	1	1
SDS Plus II 15/400/450	531825	15	400	450	Plastic clip	1	1
SDS Plus II 16/100/160	531826	16	100	160	Plastic clip	1	1
SDS Plus II 16/150/210	531827	16	150	210	Plastic clip	1	1
SDS Plus II 16/200/260	531828	16	200	260	Plastic clip	1	1
SDS Plus II 16/250/310	531829	16	250	310	Plastic clip	1	1
SDS Plus II 16/400/450	531830	16	400	450	Plastic clip	1	1
SDS Plus II 16/550/600	531831	16	550	600	Plastic clip	1	1
SDS Plus II 16/750/800	531832	16	750	800	Plastic clip	1	1
SDS Plus II 16/950/1000	531833	16	950	1000	Plastic clip	1	1
SDS Plus II 17/150/210	531834	17	150	210	Plastic clip	1	1
SDS Plus II 17/400/450	531835	17	400	450	Plastic clip	1	1
SDS Plus II 18/150/200	531836	18	150	200	Plastic clip	1	1
SDS Plus II 18/250/300	531837	18	250	300	Plastic clip	1	1
SDS Plus II 18/400/450	531838	18	400	450	Plastic clip	1	1
SDS Plus II 18/550/600	531839	18	550	600	Plastic clip	1	1
SDS Plus II 18/950/1000	531840	18	950	1000	Plastic clip	1	1
SDS Plus II 19/150/200	531841	19	150	200	Plastic clip	1	1
SDS Plus II 19/400/450	531842	19	400	450	Plastic clip	1	1
SDS Plus II 20/150/200	531843	20	150	200	Plastic clip	1	1
SDS Plus II 20/250/300	531844	20	250	300	Plastic clip	1	1
SDS Plus II 20/400/450	531845	20	400	450	Plastic clip	1	1
SDS Plus II 20/550/600	531846	20	550	600	Plastic clip	1	1
SDS Plus II 20/950/1000	531847	20	950	1000	Plastic clip	1	1
SDS Plus II 22/200/250	531849	22	200	250	Plastic clip	1	1
SDS Plus II 22/400/450	531850	22	400	450	Plastic clip	1	1
SDS Plus II 22/550/600	531851	22	550	600	Plastic clip	1	1
SDS Plus II 22/950/1000	531852	22	950	1000	Plastic clip	1	1
SDS Plus II 24/200/250	531853	24	200	250	Plastic clip	1	1
SDS Plus II 24/400/450	531854	24	400	450	Plastic clip	1	1
SDS Plus II 25/200/250	531855	25	200	250	Plastic clip	1	1
SDS Plus II 25/400/450	531856	25	400	450	Plastic clip	1	1
SDS Plus II 25/550/600	531857	25	550	600	Plastic clip	1	1
SDS Plus II 26/200/250	531858	25	200	250	Plastic clip	1	1
SDS Plus II 26/400/450	531859	25	400	450	Plastic clip	1	1

The hammer drill bits with SDS Max drill chuck



LONG LIFE

Low Vibration

2 - Cutter
Ø 12 - 15mm
4 - Cutter
Ø 15 - 50mm



SUITABLE FOR BUILDING MATERIALS



CONCRETE



MASONRY



RE-ENFORCED
CONCRETE



ADVANTAGES

The SDS Max drill chuck ensures optimum transfer of force and allows for rapid drilling progress for large volume drill holes.

The drill bit head with four cutting edges prevents jamming in the concrete reinforcement.

The quadruple flute reliably transports the drilling dust from the drill hole, thus reducing wear.

The core-reinforced flute ensures maximum transfer of energy, and guarantees a low-vibration drilling.

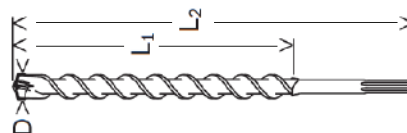
The PGM®-compliant cutting element guarantees perfect-fit drill holes to fulfil the highest safety requirements.

Fixing Applications for

To create approval-compliant drill holes in:

- ◆ Concrete
- ◆ Masonry
- ◆ Re-Enforced Concrete

TECHNICAL DATA



Product Description	Art. No.	Drill hole diameter	Working length	Total length	Type of Packaging	Contents [pcs.]	Sales unit [pcs.]
		d ₀ [mm]	L ₁ [mm]	L ₂ [mm]			
SDS Max II 12/200/340	504188	12	200	200	Plastic tube	1	1
SDS Max II 12/400/540	504189	12	400	400	Plastic tube	1	1
SDS Max II 12/800/920	098278	12	800	800	Plastic tube	1	1
SDS Max II 14/200/340	504192	14	200	200	Plastic tube	1	1
SDS Max II 14/400/540	504194	14	400	400	Plastic tube	1	1
SDS Max II 14/1000/1120	098279	14	1000	1000	Plastic tube	1	1
SDS Max II 15/200/340	504196	15	200	200	Plastic tube	1	1
SDS Max IV 15/400/540	524562	15	400	540	Plastic tube	1	1
SDS Max IV 16/200/340	504198	16	200	340	Plastic tube	1	1
SDS Max IV 16/400/540	504199	16	400	540	Plastic tube	1	1
SDS Max IV 16/800/920	504200	16	800	920	Plastic tube	1	1
SDS Max IV 16/1200/1320	504206	16	1200	1320	Plastic tube	1	1
SDS Max IV 18/200/340	504207	18	200	340	Plastic tube	1	1
SDS Max IV 18/400/540	504208	18	400	540	Plastic tube	1	1
SDS Max IV 18/800/920	504209	18	800	920	Plastic tube	1	1
SDS Max IV 18/1200/1320	504213	18	1200	1320	Plastic tube	1	1
SDS Max IV 20/200/320	504214	20	200	320	Plastic tube	1	1
SDS Max IV 20/400/520	504217	20	400	520	Plastic tube	1	1
SDS Max IV 20/800/920	504222	20	800	920	Plastic tube	1	1
SDS Max IV 20/1200/1320	504223	20	1200	1320	Plastic tube	1	1
SDS Max IV 22/200/320	504224	22	200	320	Plastic tube	1	1
SDS Max IV 22/400/520	504225	22	400	520	Plastic tube	1	1
SDS Max IV 22/800/920	504226	22	800	920	Plastic tube	1	1
SDS Max IV 24/200/320	504228	24	200	320	Plastic tube	1	1
SDS Max IV 24/400/520	504229	24	400	520	Plastic tube	1	1
SDS Max IV 25/200/320	504235	25	200	320	Plastic tube	1	1
SDS Max IV 25/400/520	504236	25	400	520	Plastic tube	1	1
SDS Max IV 25/800/920	504237	25	800	920	Plastic tube	1	1
SDS Max IV 25/1200/1320	504238	25	1200	1320	Plastic tube	1	1
SDS Max IV 25/2000/2120	098287	25	2000	2120	Plastic tube	1	1
SDS Max IV 28/250/370	504240	28	250	370	Plastic tube	1	1
SDS Max IV 28/450/570	504241	28	450	570	Plastic tube	1	1
SDS Max IV 28/550/670	504242	28	550	670	Plastic tube	1	1
SDS Max IV 28/800/920	504243	28	800	920	Plastic tube	1	1
SDS Max IV 30/250/370	504245	30	250	370	Plastic tube	1	1
SDS Max IV 30/450/570	504246	30	450	570	Plastic tube	1	1
SDS Max IV 30/800/920	057779	30	800	920	Plastic tube	1	1
SDS Max IV 30/1230/1350	040187	30	1230	1350	Plastic tube	1	1
SDS Max IV 30/1620/1740	040188	30	1620	1740	Plastic tube	1	1
SDS Max IV 30/2020/2140	040189	30	2020	2140	Plastic tube	1	1
SDS Max IV 32/450/570	504248	32	450	570	Plastic tube	1	1
SDS Max IV 32/800/920	504249	32	800	920	Plastic tube	1	1
SDS Max IV 35/250/370	504251	35	250	370	Plastic tube	1	1
SDS Max IV 35/450/570	504256	35	450	570	Plastic tube	1	1

Product Description	Art. No.	Drill hole diameter	Working length	Total length	Type of Packaging	Contents	Sales unit
		d ₀ [mm]	L ₁ [mm]	L ₂ [mm]		[pcs.]	[pcs.]
SDS Max IV 35/550/670	504257	35	550	670	Plastic tube	1	1
SDS Max IV 35/800/920	504258	35	800	920	Plastic tube	1	1
SDS Max IV 35/1200/1320	504259	35	1200	1320	Plastic tube	1	1
SDS Max IV 35/1620/1740	040191	35	1620	1740	Plastic tube	1	1
SDS Max IV 35/2020/2140	040192	35	2020	2140	Plastic tube	1	1
SDS Max IV 38/450/570	504268	38	450	570	Plastic tube	1	1
SDS Max IV 40/250/370	504269	40	250	370	Plastic tube	1	1
SDS Max IV 40/450/570	504270	40	450	570	Plastic tube	1	1
SDS Max IV 40/800/920	504271	40	800	920	Plastic tube	1	1
SDS Max IV 45/450/570	504271	45	450	570	Plastic tube	1	1

High-performance chisel with SDS Plus and SDS Max drill chuck



**ROUND
BODY**

**Extremely Hard
52+/-3 HRC**



SUITABLE FOR BUILDING MATERIALS



CONCRETE



MASONARY

ADVANTAGES

The SDS Plus and SDS Max drill chuck for the chisel allow for use with professional hammer drilling machines and ensure a proven and safe transfer of force.

The use of a high quality, specially hardened steel with surface protection increases the life span of the tools

The high oscillation endurance allows for high work comfort and contributes to the achievement of clean results.

Fixing Applications for

Suitable for creating holes, slots and installation paths in:

- ◆ Concrete
- ◆ Masonry
- ◆ Re-Enforced Concrete

TECHNICAL DATA

SDS Plus Chisel Pointed/Flat -



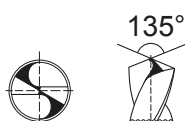
Product Description	Art. No.	Type	Length	Width	Contents [pcs.]	Sales unit [pcs.]
			L [mm]	B [mm]		
SDS Plus Pointed 250	504277	Pointed	250	-	1	1
SDS Plus Flat 20/250	504278	Flat	250	20	1	1

SDS Max Chisel Pointed/Flat -



Product Description	Art. No.	Type	Length	Width	Contents [pcs.]	Sales unit [pcs.]
			L [mm]	B [mm]		
SDS Max Pointed 400	504282	Pointed	400	-	1	1
SDS Max Pointed 600	504283	Pointed	600	-	1	1
SDS Max Flat 25/400	504286	Flat	400	25	1	1
SDS Max Flat 25/600	504287	Flat	600	25	1	1

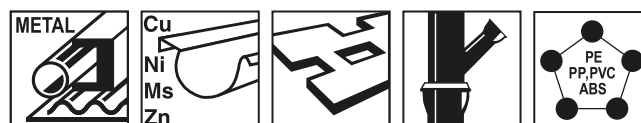
Metal Drill Bits HSS-G Fully Grounded Split Point – Basic Plus , DIN 338



TOLERANCE	H8
MATERIAL	HSS
POINT GRINDING	SPLIT POINT
POINT ANGLE	135° FROM Ø 3,0 MM
POINT THINNING	DIN 1412, FORM C
SURFACE	BRIGHT



FIXING APPLICATIONS



ADVANTAGES

High-quality steel drill bit with high resistance against breaking forces.

Clean and fast chip removal.

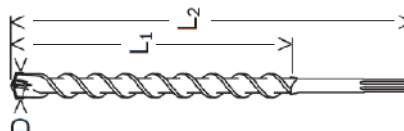
Precision-ground HSS-G drill bit enables up to 40% faster drilling rate and up to 50% lower feed pressure than standard-ground HSS drill bits with a chisel edge.

SUITABLE FOR BASE MATERIALS

To create approval-compliant drill holes in:

- ◆ Steel Alloys
- ◆ Cast Iron
- ◆ Sintered Iron
- ◆ Graphite
- ◆ Bronze
- ◆ Tempered Cast Iron
- ◆ Bronze Iron and
- ◆ Hard Plastic

TECHNICAL DATA



Product Description	Art. No.	Drill hole diameter	Working length	Total length	Type of Packaging	Contents [pcs.]	Sales unit [pcs.]
		d_0 [mm]	L_1 [mm]	L_2 [mm]			
HSS Drill Bit 1.5/18/40	539200	1.5	18	40	Plastic Box	10	1
HSS Drill Bit 2.0/24/49	539201	2	24	49	Plastic Box	10	1
HSS Drill Bit 2.5/30/57	539202	2.5	30	57	Plastic Box	10	1
HSS Drill Bit 3.0/33/61	539203	3	33	61	Plastic Box	10	1
HSS Drill Bit 3.5/39/70	539204	3.5	39	70	Plastic Box	10	1
HSS Drill Bit 4.0/43/75	539205	4	43	75	Plastic Box	10	1
HSS Drill Bit 4.5/47/80	539206	4.5	47	80	Plastic Box	10	1
HSS Drill Bit 5.0/52/86	539207	5	52	86	Plastic Box	10	1
HSS Drill Bit 5.5/57/93	539208	5.5	57	93	Plastic Box	10	1
HSS Drill Bit 6.0/57/93	539209	6	57	93	Plastic Box	10	1
HSS Drill Bit 6.5/63/101	539210	6.5	63	101	Plastic Box	10	1
HSS Drill Bit 7.0/69/109	539211	7	69	109	Plastic Box	10	1
HSS Drill Bit 7.5/69/109	539212	7.5	69	109	Plastic Box	10	1
HSS Drill Bit 8.0/75/117	539213	8	75	117	Plastic Box	10	1
HSS Drill Bit 8.5/75/117	539214	8.5	75	117	Plastic Box	5	1
HSS Drill Bit 9.0/81/125	539215	9	81	125	Plastic Box	5	1
HSS Drill Bit 9.5/81/125	539216	9.5	81	125	Plastic Box	5	1
HSS Drill Bit 10.0/87/133	539217	10	87	133	Plastic Box	5	1
HSS Drill Bit 10.5/87/133	539218	10.5	87	133	Plastic Box	5	1
HSS Drill Bit 11.0/94/142	539219	11	94	142	Plastic Box	5	1
HSS Drill Bit 11.5/94/142	539220	11.5	94	142	Plastic Box	5	1
HSS Drill Bit 12.0/101/151	539221	12	101	151	Plastic Box	5	1
HSS Drill Bit 12.5/101/151	539222	12.5	101	151	Plastic Box	5	1
HSS Drill Bit 13.0/101/151	539223	13	101	151	Plastic Box	5	1

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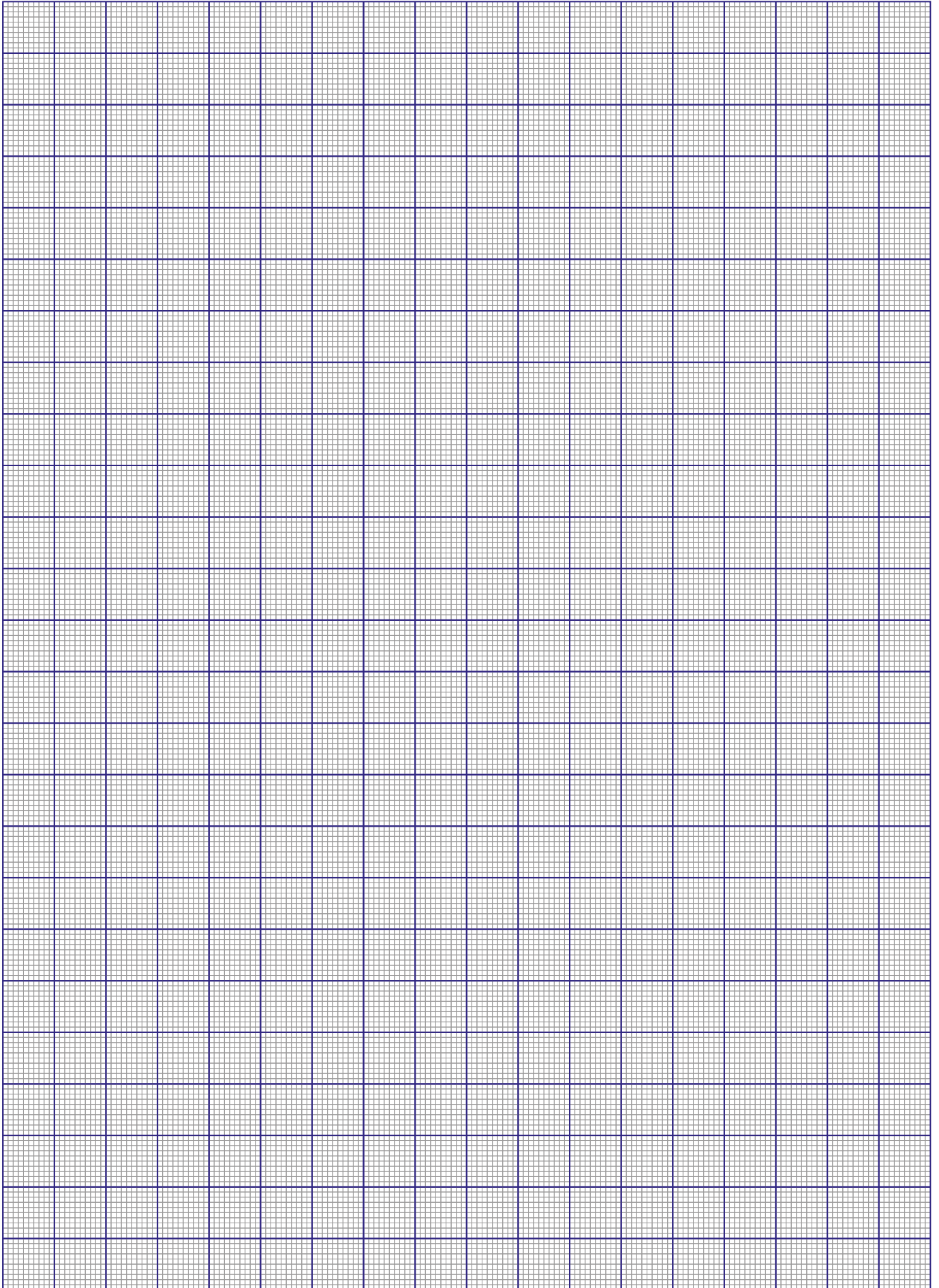
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The information in this catalogue is intended for general guidance only and is given without engagement. Additional information and advice on specific applications is available from our Technical Support Team. For this however, we require a precise description of your particular application.

All the data in this catalogue concerning work with our fixing elements must be adapted to suit local conditions and the type of materials in use. If no detailed performance specifications are given for certain articles and types, please contact our Technical Service Department for advice.

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