



PRODUCT DATA

Chemical Stud Anchors

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Description

Hobson® Chemical Anchor Studs are single unit non-expansion fasteners used in pre-drilled holes into a selected/specified resin. They are comprised of a nut, washer and a chisel or bevelled point stud available in flat cut or external hexagon type head. Fix the stud by inserting a suitable curing resin into the hole using a glass chemical capsule or injection adhesive system.

Insert the stud into the hole and rotate either by hammer drill (for glass capsule) or hand (for injection type) to allow for proper setting into the resin. Load the stud once appropriate curing time has elapsed.

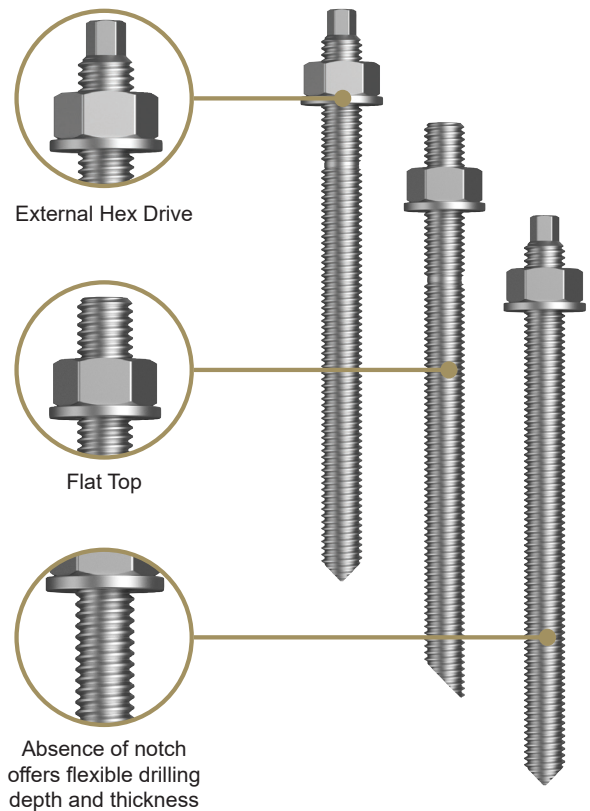
Applications

- Fixing to concrete or masonry
- Holding down machinery
- Commonly used in applications that require non-expansion type fasteners
- Used in applications that require closer edge distance and spacing

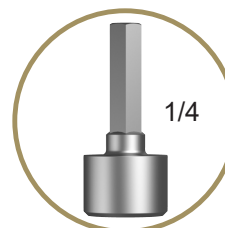
Features:

- | | |
|--|---|
| <ul style="list-style-type: none"> • Good load capability • Non-expanding anchor • Vibration resistance • Complete sealing of hole | <ul style="list-style-type: none"> • Can be installed close to edge • Reduced spacing between anchors • Excellent holding power in weak base materials |
|--|---|

CONSTRUCT



Recommended for use with:



An external hex drive is included in each pack of **External Hex Drive Stud Anchors**.

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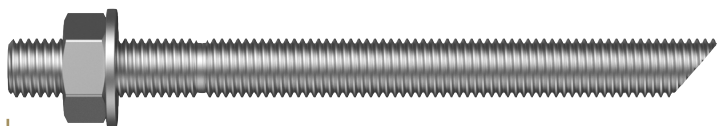


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Chemical Stud Anchors

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Dimensions Flat Top Stud Anchor



(L)

Part Number	Description	Stud Property Class	Coating Specification	Length	Mark Height	Max. Fixture Thickness	Nut Property Class	Washer Hardness/ Dimensional Spec	Stud Tensile Strength UTS	Stud Min. UTS
				L (mm)	(mm)	(mm)			(MPa)	(kN)
MCS58GCM100130	HDG CHEMICAL ANCHOR STUDS WITH FLAT TOP	Class 5.8 AS 4291.1	AS 1214	130	88-92	25	Class 5 DIN 934	HV 100 DIN 125	520	30.2
MCS58GCM120160				160	108-112	32				43.8
MCS58GCM160190				190	123-127	43				81.6
MCS58GCM200260				260	168-172	59				127.0
MCS58GCM240300				300	208-212	64				184.0
MCS88GCM100130	HDG CHEMICAL ANCHOR STUDS WITH FLAT TOP	Class 8.8 AS 4291.1	AS 1214	130	88-92	25	Class 8 DIN 934	HV 200 DIN 125	800	46.4
MCS88GCM120160				160	108-112	32				67.4
MCS88GCM160190				190	123-127	43				125.0
MCS88GCM200260				260	168-172	59			830	203.0
MCS88GCM240300				300	208-212	64				293.0

316 Stainless Steel

MCS16PCM080110	CHEMICAL ANCHOR STUDS WITH FLAT TOP	316 A4-70 STAINLESS STEEL	NA	110	78-82	17	A4 - DIN 934	A4 - DIN 125	700	25.6
MCS16PCM100130				130	88-92	25				40.6
MCS16PCM120160				160	108-112	32				59.0
MCS16PCM160190				190	123-127	43				109.9
MCS16PCM200260				260	168-172	59				171.5
MCS16PCM240300		316 A4-50 STAINLESS STEEL		300	208-212	64			500	176.5

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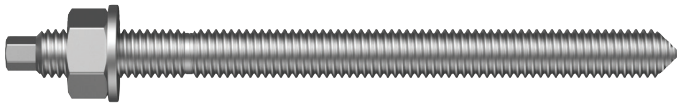


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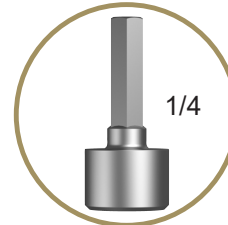
Chemical Stud Anchors

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Dimensions External Hex Drive Stud Anchor



(L)



An external hex drive is included in each pack of **External Hex Drive Stud Anchors**.

Part Number	Description	Stud Property Class	Coating Specification	Length	Mark Height	Hex Drive	Hex Drive Height	Max. Fixture Thickness	Nut Property Class	Washer Hardness/ Dimensional Spec	Stud Tensile Strength UTS	Stud Min. UTS
				L (mm)	(mm)	AF (mm)	(mm)	(mm)			(MPa)	(kN)
MCA58GCM080110H	HDG CHEMICAL ANCHOR STUDS WITH EXTERNAL HEX DRIVE	Class 5.8 AS 4291.1	AS 1214	110	78-82	5	7	10	Class 5 DIN 934	HV 100 DIN 125	520	19.0
MCA58GCM100130H				130	88-92	7	7	18				30.2
MCA58GCM120160H				160	108-112	8	8	24				43.8
MCA58GCM160190H				190	123-127	12	8	35				81.6
MCA58GCM200260H				260	168-172	12	8	50				127.0
MCA58GCM240300H				300	208-212	13	9	56				184.0
MCA58YCM080110H	ZINC YELLOW PLATED CHEMICAL ANCHOR STUDS WITH EXTERNAL HEX DRIVE	Class 5.8 AS 4291.1	ZINC YELLOW ELECTROPLATED TO A MINIMUM ZINC THICKNESS OF 5µm AS PER ISO4042:1999 CLASS Fe/Zn 5c1A	110	78-82	5	7	10	Class 5 DIN 934	HV 100 DIN 125	520	19.0
MCA58YCM100130H				130	88-92	7	7	18				30.2
MCA58YCM120160H				160	108-112	8	8	24				43.8
MCA58YCM160190H				190	123-127	12	8	35				81.6
MCA58YCM200260H				260	168-172	12	8	50				127.0
MCA58YCM240300H				300	208-212	13	9	56				184.0
MCA88GCM120160H	HDG CHEMICAL ANCHOR STUDS WITH EXTERNAL HEX DRIVE	Class 8.8 AS 4291.1	AS 1214	160	108-112	8	8	24	Class 8 DIN 934	HV 200 DIN 125	800	67.4
MCA88GCM160190H				190	123-127	12	8	35				125.0
MCA88GCM200260H				260	168-172	12	8	50			830	203.0
MCA88GCM240300H				300	208-212	13	9	56				293.0

316 Stainless Steel

MCA16PCM080110H	CHEMICAL ANCHOR STUDS WITH EXTERNAL HEX DRIVE	316 A4-70 STAINLESS STEEL	NA	110	78-82	5	7	10	A4 - DIN 934	A4 - DIN 125	700	25.6
MCA16PCM100130H				130	88-92	7	7	18				40.6
MCA16PCM120160H				160	108-112	8	8	24				59.0
MCA16PCM160190H				190	123-127	12	8	35				109.9
MCA16PCM200260H				260	168-172	12	8	50				171.5
MCA16PCM240300H		316 A4-50 STAINLESS STEEL		300	208-212	13	9	56			500	176.5

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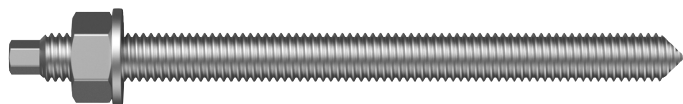


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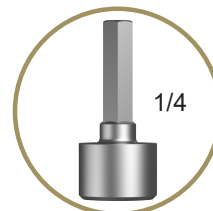
Chemical Stud Anchors

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Dimensions External Hex Drive Stud Anchor (No Notch)



(L)



An external hex drive is included in each pack of **External Hex Drive Stud Anchors**.

Part Number	Description	Stud Property Class	Coating Specification	Length	Hex Drive	Hex Drive Height	Max. Fixture Thickness	Nut Property Class	Washer Hardness/ Dimensional Spec	Stud Tensile Strength UTS	Stud Min. UTS
				L (mm)	AF (mm)	(mm)	(mm)			(MPa)	(kN)
MCA58GPM080110H	HDG CHEMICAL ANCHOR STUDS WITH EXTERNAL HEX DRIVE	Class 5.8 AS 4291.1	AS 1214	110	5	7	10	Class 5 DIN 934	HV 100 DIN 125	520	19.0
MCA58GPM100130H				130	7	7	18				30.2
MCA58GPM120160H				160	8	8	24				43.8
MCA58GPM120220H				220	8	8	84				
MCA58GPM120300H				300	8	8	164				
MCA58GPM160190H				190	12	8	35				81.6
MCA58GPM160220H				220	12	8	65				
MCA58GPM160260H				260	12	8	105				
MCA58GPM160300H				300	12	8	145				
MCA58GPM160350H				350	12	8	195				
MCA58GPM160500H				500	12	8	345				
MCA58GPM200260H				260	12	8	50				127.0
MCA58GPM200350H				350	12	8	140				
MCA58GPM200400H				400	12	8	190				
MCA58GPM200480H				480	12	8	270				
MCA58GPM240300H				300	13	9	56				184.0

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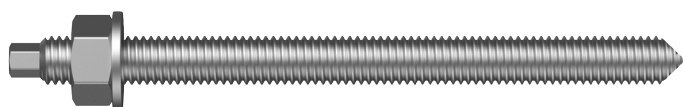


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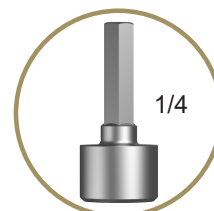
Chemical Stud Anchors

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Dimensions External Hex Drive Stud Anchor (No Notch)



(L)



An external hex drive is included in each pack of **External Hex Drive Stud Anchors**.

Part Number	Description	Stud Property Class	Coating Specification	Length	Hex Drive	Hex Drive Height	Max. Fixture Thickness	Nut Property Class	Washer Hardness/ Dimensional Spec	Stud Tensile Strength UTS	Stud Min. UTS
				L (mm)	AF (mm)	(mm)	(mm)			(MPa)	(kN)
MCA88GPM080110H	HIGH TENSILE HDG CHEMICAL ANCHOR STUDS WITH EXTERNAL HEX DRIVE	Class 8.8 AS/NZ 4291.1	AS 1214	110	5	7	10	Class 8 DIN 934	HV 200 DIN 125	800	29.2
MCA88GPM100130H				130	7	7	18				46.4
MCA88GPM120160H				160	8	8	24				67.4
MCA88GPM120220H				220	8	8	84				
MCA88GPM120300H				300	8	8	164				125
MCA88GPM160190H				190	12	8	35				
MCA88GPM160220H				220	12	8	65				
MCA88GPM160260H				260	12	8	105				
MCA88GPM160300H				300	12	8	145				
MCA88GPM160350H				350	12	8	195				
MCA88GPM160500H				500	12	8	345				
MCA88GPM200260H				260	12	8	50			830	203
MCA88GPM200350H				350	12	9	140				
MCA88GPM200400H				400	12	9	190				
MCA88GPM200480H				480	12	9	270				
MCA88GPM240300H				300	13	9	56				293

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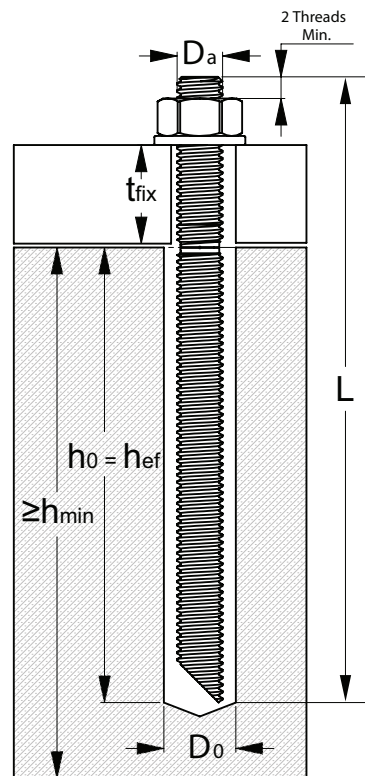
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Installation Parameters

Anchor		M8	M10	M12	M16	M20	M24
Nominal Hole Ø	d_0 (mm)	10	12	14	18	24	28
Effective Anchorage Depth	$h_{ef, rec}$	80	90	110	125	170	210
Fixture Clearance Ø	(mm)	9	12	14	18	22	26
Brush Size Ø	(mm)	12	14	16	20	26	30
Max. Fixture Thickness	t_{fix} (mm)	17	25	32	43	64	59
Min. Depth of Base Material	h_{min} (mm)	$h_{ef} + 30mm \geq 100mm$			$h_{ef} + 2 d_0$		
Minimum Spacing	S_{min} (mm)	40	50	60	80	100	120
Minimum Edge Distance	C_{min} (mm)						



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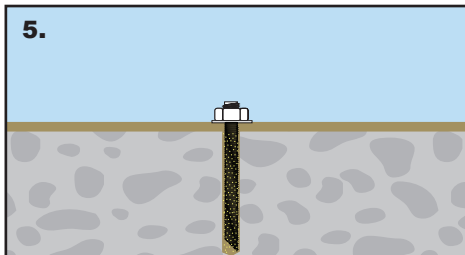
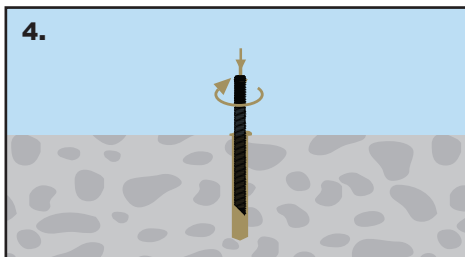
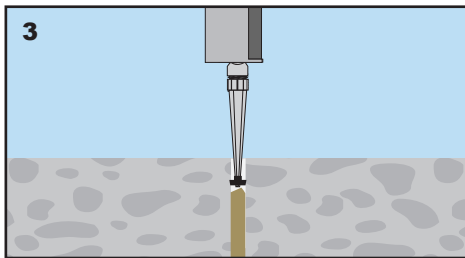
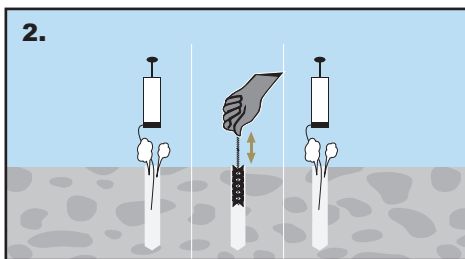
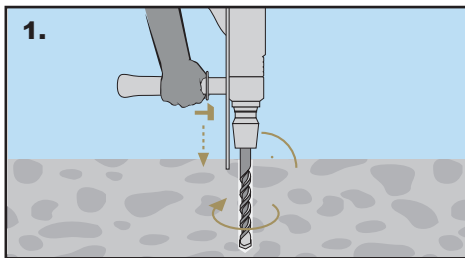


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Installation



Installation Guide

1. Drill a hole of suitable diameter and anchorage depth for the chemical stud being installed. See table for hole diameter and effective embedment depth.
Note: diamond drill bit not to be used where indicated by the manufacturer.
2. Clean the hole of dust and debris following the chemical manufacturer's instructions. As a minimum, follow the AEFAC (Australian Engineered Fasteners and Anchors Council) certified installer method
 - i. From the bottom of the hole, use a hand pump (maximum Ø20 mm hole) or compressed air (6 bar minimum) to clean dust and debris. Repeat 3x.
 - ii. Using the correct wire brush (brush Ø ≥ hole Ø, refer to installation specifications table), clean the hole from the bottom using a rotating motion as you pull out of the hole. Repeat 3x.
 - iii. From the bottom of the hole, use a hand pump (maximum Ø20 mm hole) or compressed air (6 bar minimum) to clean dust and debris. Repeat 3x.
3. Prepare chemical (polyester, vinylester, epoxy, etc).
Note: follow the appropriate installation guide from the chemical manufacturer.
4. Insert stud anchor into the hole. As the stud is being inserted, rotate slowly to ensure even distribution of chemical. A hammer drill with a suitable drive bit may be used for hex drive style studs with chemical capsules.
Note: following insertion, the stud should be set at the bottom of the hole with excess chemical visible at the top of the hole.
5. Follow the chemical manufacturer's instructions for curing time before applying any load. Do not disturb stud anchor during curing process. Once chemical is fully cured, the fixture can be installed and secured.

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