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Chemical Stud Anchors

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.

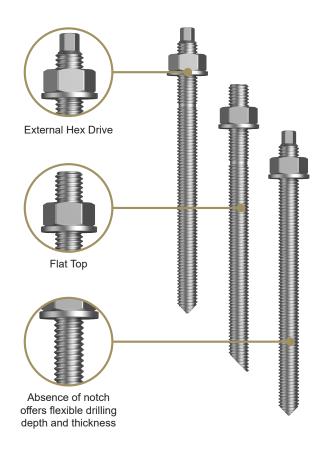
Applications

- · 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:

- · Good load capability
- Non-expanding anchor
- · Vibration resistance
- Complete sealing of hole
- Can be installed close to edge
- Reduced spacing between anchors
- Excellent holding power in weak base materials

CONXIRUCI



Recommended for use with:



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

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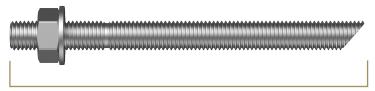




Chemical Stud Anchors

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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				130	88-92	25	Class 5 DIN 934			30.2
MCS58GCM120160	HDG		AS 1214	160	108-112	32		HV 100 DIN 125	520	43.8
MCS58GCM160190	CHEMICAL ANCHOR	OR AS 4291.1		190	123-127	43				81.6
MCS58GCM200260	STUDS WITH FLAT TOP			260	168-172	59				127.0
MCS58GCM240300				300	208-212	64				184.0
MCS88GCM100130				130	88-92	25		HV 200 DIN 125		46.4
MCS88GCM120160	HDG CHEMICAL			160	108-112	32				67.4
MCS88GCM160190	ANCHOR STUDS	Class 8.8 AS 4291.1	AS 1214	190	123-127	43	Class 8 DIN 934		800	125.0
MCS88GCM200260	WITH FLAT TOP			260	168-172	59				203.0
MCS88GCM240300				300	208-212	64			830	293.0

316 Stainless Steel

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

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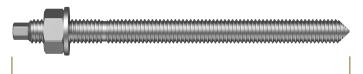




Chemical Stud Anchors

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Dimensions External Hex Drive Stud Anchor





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

(L)

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				110	78-82	5	7	10			520	19.0
MCA58GCM100130H	HDG			130	88-92	7	7	18				30.2
MCA58GCM120160H	CHEMICAL ANCHOR	Class 5.8	10.4044	160	108-112	8	8	24	Class 5			43.8
MCA58GCM160190H	STUDS WITH EXTERNAL	AS 4291.1	AS 1214	190	123-127	12	8	35	DIN 934			81.6
MCA58GCM200260H	HEX DRIVE			260	168-172	12	8	50				127.0
MCA58GCM240300H	-			300	208-212	13	9	56				184.0
MCA58YCM080110H	ZINC		ZINC YELLOW	110	78-82	5	7	10	Class 5	HV 100 DIN 125		19.0
MCA58YCM100130H	YELLOW		ELECTROPLATED TO A MINIMUM	130	88-92	7	7	18				30.2
MCA58YCM120160H	PLATED CHEMICAL	Class 5.8	ZINC	160	108-112	8	8	24				43.8
MCA58YCM160190H	ANCHOR STUDS WITH	AS 4291.1	THICKNESS OF 5µm AS PER	190	123-127	12	8	35	DIN 934		520	81.6
MCA58YCM200260H	EXTERNAL		ISO4042:1999 CLASS Fe/Zn	260	168-172	12	8	50				127.0
MCA58YCM240300H	HEX DRIVE		5c1A	300	208-212	13	9	56				184.0
MCA88GCM120160H	HDG			160	108-112	8	8	24			200	67.4
MCA88GCM160190H	CHEMICAL ANCHOR	Class 8.8	10.1011	190	123-127	12	8	35	Class 8	HV 200	800	125.0
MCA88GCM200260H	STUDS WITH EXTERNAL	TUDS WITH AS 4291.1	Δς 1914	260	168-172	12	8	50	DIN 934			203.0
MCA88GCM240300H	HEX DRIVE			300	208-212	13	9	56			830	293.0

316 Stainless Steel

MCA16PCM080110H		316 A4-70		110	78-82	5	7	10		A4 - DIN 125	700	25.6
MCA16PCM100130H	-			130	88-92	7	7	18	A4 - DIN 934			40.6
MCA16PCM120160H	CHEMICAL ANCHOR	STAINLESS STEEL		160	108-112	8	8	24				59.0
MCA16PCM160190H	STUDS WITH		NA	190	123-127	12	8	35				109.9
MCA16PCM200260H	HEX DRIVE			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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Chemical Stud Anchors

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Dimensions External Hex Drive Stud Anchor (No Notch)



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

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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)
MCA58GPM120220H				220	8	8	84		HV 100 DIN 125	520	40.0
MCA58GPM120300H				300	8	8	164	Class 5			43.8
MCA58GPM160220H				220	12	8	65				81.6
MCA58GPM160260H				260	12	8	105				
MCA58GPM160300H	HDG CHEMICAL ANCHOR STUDS	Class 5.8		300	12	8	145				
MCA58GPM160350H	WITH EXTERNAL HEX DRIVE	AS 4291.1	AS 1214	350	12	8	195	DIN 934			
MCA58GPM160500H	TIEX DRIVE			500	12	8	345				
MCA58GPM200350H				350	12	8	140	-			127.0
MCA58GPM200400H				400	12	8	190				
MCA58GPM200480H				480	12	8	270				

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)
MCA88GPM120220H			AS 1214	220	8	8	84		HV 200 DIN 125	800	67.4
MCA88GPM120300H		Class 8.8		300	8	8	164	Class 8 DIN 934			67.4
MCA88GPM160220H				220	12	8	65			830	115
MCA88GPM160260H	HIGH TENSILE HDG			260	12	8	105				115
MCA88GPM160300H	CHEMICAL			300	12	8	145				115
MCA88GPM160350H	ANCHOR STUDS WITH	AS/NZ 4291.1		350	12	8	195				115
MCA88GPM160500H	EXTERNAL HEX DRIVE			500	12	8	345				115
MCA88GPM200350H	HEXBINIE			350	12	9	140				147
MCA88GPM200400H				400	12	9	190				147
MCA88GPM200480H				480	12	9	270				147

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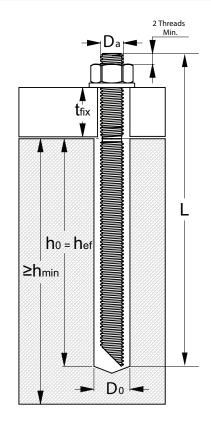


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Chemical Stud Anchors

Installation Parameters

Anchor		M8	M10	M12	M16	M20	M24	
Nominal Hole Ø	d ₀ (mm)	10	12	14	18	24	28	
Stud Full Length	L (mm)	110	130	160	190	260	300	
Effective Anchorage Depth	h _{ef,} rec	80	90	110	125	170	210	
Fixture Clearence 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} + 30	mm ≥ 100m	ım	h _{ef} + 2 d ₀			
Minimum Spacing	S _{min} (mm)	40	50	60	90	100	120	
Minimum Edge Distance	C _{min} (mm)	40	50	00	80	100	120	



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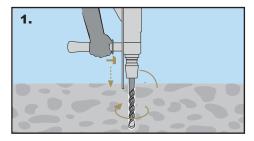


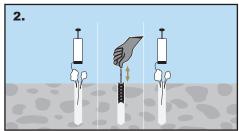


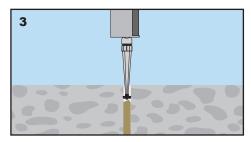
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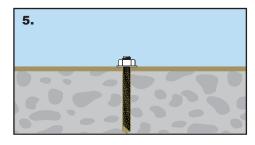
Installation











Installation Guide

 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.

- 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 \emptyset 20 mm hole) or compressed air (6 bar minimum) to clean dust and debris. Repeat 3x.
 - **ii.** Using the correct wire brush (brush $\emptyset \ge$ hole \emptyset , 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.

- Prepare chemical (polyester, vinylester, epoxy, etc).
 Note: follow the appropriate installation guide from the chemical manufacturer.
- 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.

 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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