



RIVQUICK®

Structural blind fasteners, LockBolts, Powerigs
and installation tooling for **HUCK®** products



BOLLHOFF

HUCK® structural blind fasteners and LockBolts are specially designed and manufactured for applications where strength and security is key. Huck fasteners are designed to provide a permanent, vibration resistant joint and guarantee excellent performance.

These fasteners elements have a high resistance to tensile and shear strengths as well as vibrations. They are a good alternative to welding and are generally more efficient than a conventional system "nut and bolt". HUCK® structural blind fasteners and LockBolts offer advantages that no other system can give.

Böllhoff offer a wide range of installation tools, specifically designed for installing HUCK® structural blind fasteners and LockBolts. Huck installation tooling provide a quick and secure installation. A simple visual inspection is sufficient to ensure the installation is complete.

Currently the structural blind rivets and LockBolts are used in various industries and applications such as the construction, bus, trucks and trailers, ventilation and air conditioning systems, rail, automotive and green energy



Useful information

- The company reserves the right to make changes without notice, to the products included in this catalogue, in order to improve the quality.
- For stock availability, please contact us.
- The information contained in this catalogue is provided for information only. They do not represent any guarantee expressed, implied or legal ; all guarantees are contained exclusively in written quote, vouchers and/or purchase orders. It is recommended that the user obtains the updated data and specific information concerning each application.

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**Magna-Lok® structural blind rivets**

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- Wide clamping range : adaptation to a wide variation of the clamping range
- Outstanding hole filling on the blind side: Excellent joint tightness and very resistant to water ingress
- Internal pin locking mechanism: Secure within the rivet body and protected from corrosion
- No bulge after the installation

**Auto-Bulb® structural blind rivets**

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17

- High tensile and shear strength
- Purpose design blind side shape for easy hole location: Ideal for automated assembly
- Large blind side footprint: Ideal for lower strength or thin sheet joint materials
- Visual inspection is fast and simple.

**Magna-Tite® structural blind rivets**

		•			Flat profile	
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18

- Watertight seal, ideal for roofing or similar applications
- Wide clamping range
- Extra large blind side footprint: Ideal for joining of plastic and composites materials, lower strength or thin sheet joint materials
- Visual inspection is fast and simple.

**Magna-Bulb® structural blind rivets**

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21

- Internal pin locking mechanism: secure within the rivet body and protected from corrosion
- Very high shear and high tensile strength
- Extra large blind side footprint: ideal for lower strength or thin sheet joint materials
- High resistance to vibrations
- Visual inspection is fast and simple.

**HuckLok™ structural blind rivets**

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23

- Combines the wide clamping range of the Magna-Lok® and the high shear strength and high tensile strength of the Magna-Bulb®
- Large blind side footprint: Ideal for lower strength or thin sheet joint materials
- High shear and tensile strength and to vibrations
- Wide grip range
- Visual inspection is fast and simple.

**BOM® structural blind rivets**

•							Standard
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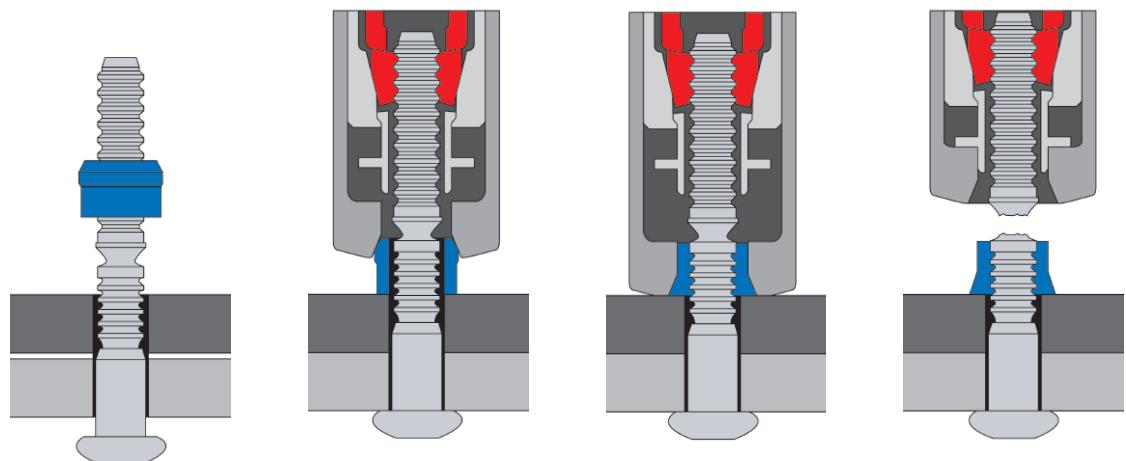
24

- Very high strength/diameter ratio: can be used in demanding structural applications as an alternative to threaded fasteners or welding
- Very resistant to tampering, extremely hard to remove
- Large blind side footprint: ideal for lower strength or thin sheet joint materials
- Very high joint tightness when compared to conventional blind fasteners

Material	Steel	Stainless Steel	Aluminium	Protruding	Countersunk	Protruded	Head
FloorTight® structural blind rivets							
	●						Noyée
							26
<ul style="list-style-type: none"> ■ They offer a superior strength to conventional flooring screws: Reduces the number of fasteners required and number of drilled holes ■ Superior resistance rivet ■ Breaking of the riveting stem inside the rivet: fasteners are totally flush ■ Wide clamping range 							
Magna-Grip® LockBolt							
	●		●		●	●	Rivet
							28
<ul style="list-style-type: none"> ■ Wide clamping range ■ They offer a high resistance to vibrations ■ One stem and one collar cover a wide variety of applications ■ The break of the riveting stem is always flush to the collar 							
C6L® LockBolt							
	●	●	●		●	●	Brazier head
							38
<ul style="list-style-type: none"> ■ High sustainability and high resistance to vibrations ■ Has 6 grooves in the joining area allowing to get a greater clamping range ■ Wide flange collar available: Enables installation into non metallic materials 							
C120L® LockBolt							
	●				●	●	Brazier head
							82
<ul style="list-style-type: none"> ■ 8.8 grade small diameter LockBolt (improved version of C6L) ■ High sustainability and high resistance to vibrations ■ Has 6 grooves in the joining area allowing to get a greater clamping range ■ Wide flange collar available: enables installation into non metallic materials 							
C50L® LockBolt							
	●	●	●		●	●	Brazier head
							94
<ul style="list-style-type: none"> ■ Fasteners elements for difficult conditions ■ 8.8 grade large diameter LockBolt ■ High resistance to vibrations ■ Visual inspection is fast and simple. 							
Hucktainer® LockBolt							
	●			Standard low profile	Medium bearing colour encapsulated	Wide bearing colour encapsulated	
							105
<ul style="list-style-type: none"> ■ Designed specifically for joining composite board in trailer applications. ■ Will not crush or damage the composite plates ■ Integral seal around pin head prevents moisture ingress ■ No bulge on both sides after the installation 							
BobTail® LockBolt							
	●					Brazier head	Flanged head
							110
<ul style="list-style-type: none"> ■ No breaking of the riveting stem: increased corrosion resistance, reduced wastage, low installation noise ■ A better support provided by the collar and the head of the rivet ■ Semi-automatic tooling installation: more accurate and rapidity in the installation ■ Unique helical lock groove: Holds the collar on the stem prior to installation 							

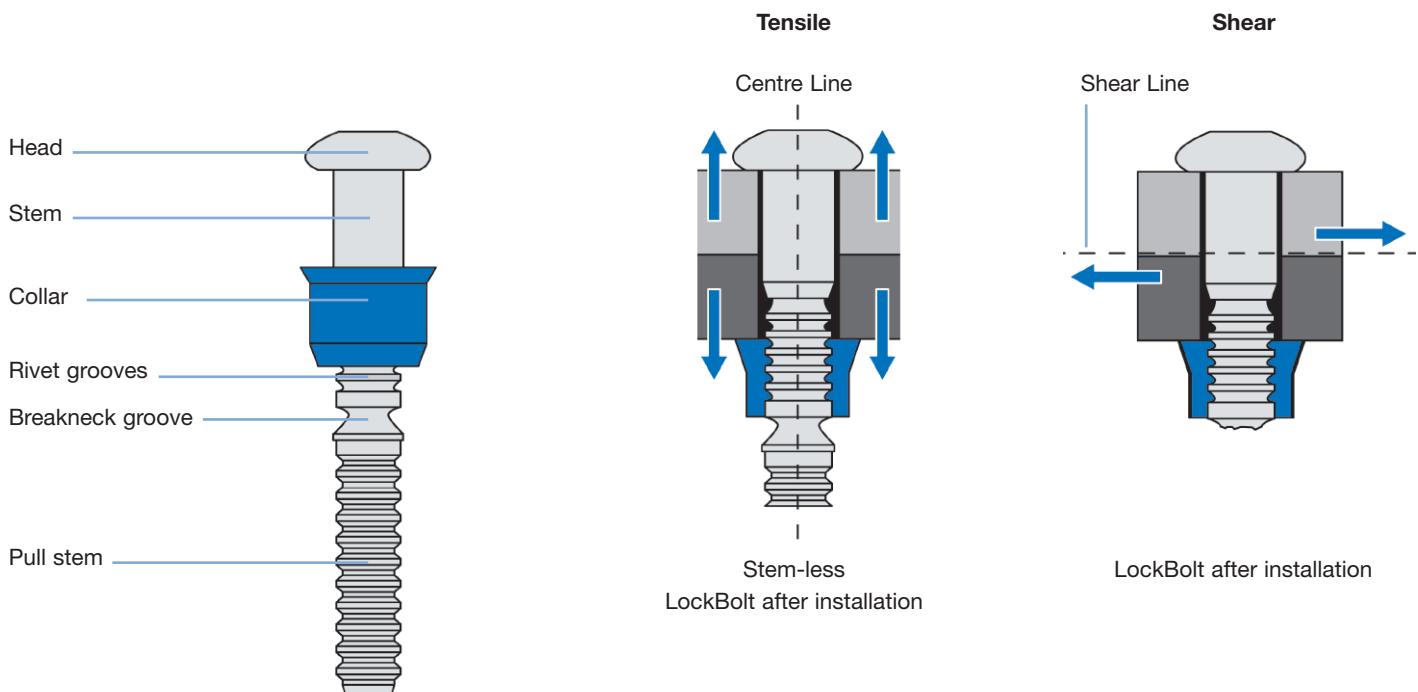
Lockbolt installation sequence

- 1 The stem is placed into the prepared hole. Then the collar is placed over the stem
- 2 The tool is placed over the riveting stem and activated. The initial clamp is generated by the stem head pulled against the material and the collar pushed by the anvil against the joint.
- 3 The clamp increases, the tool swages the collar.
- 4 The stem breaks at the predetermined breaking point, the installation is completed



Shear strength of HUCK® LockBolts vary according to the material strength and minimal diameter of the fastener. By increasing the diameter or the grade of material, the shear strength of the fastener can be increased.

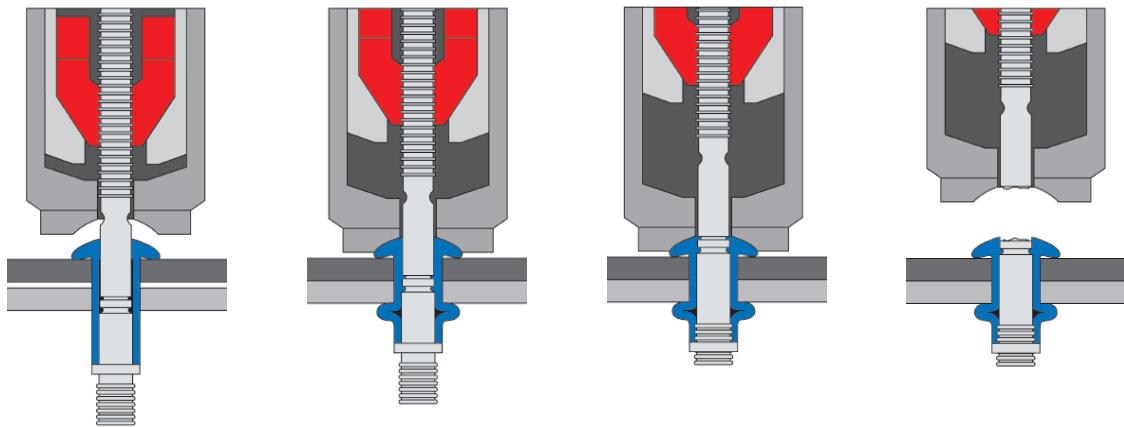
The tensile strength of HUCK® LockBolts is dependent on the shear resistance of the collar material and the number of grooves it fills.



Operation of **HUCK®** structural blind rivets

Blind Fastener installation sequence

- 1 First, the structural blind rivet is inserted into the drill hole and the tool is placed over the pull stem of the rivet
- 2 The tool is activated, the deforming of blind rivet side begins
- 3 Joint tightened and the internal locking mechanism formed
- 4 The stem breaks at the predetermined breaking point and installation is complete.

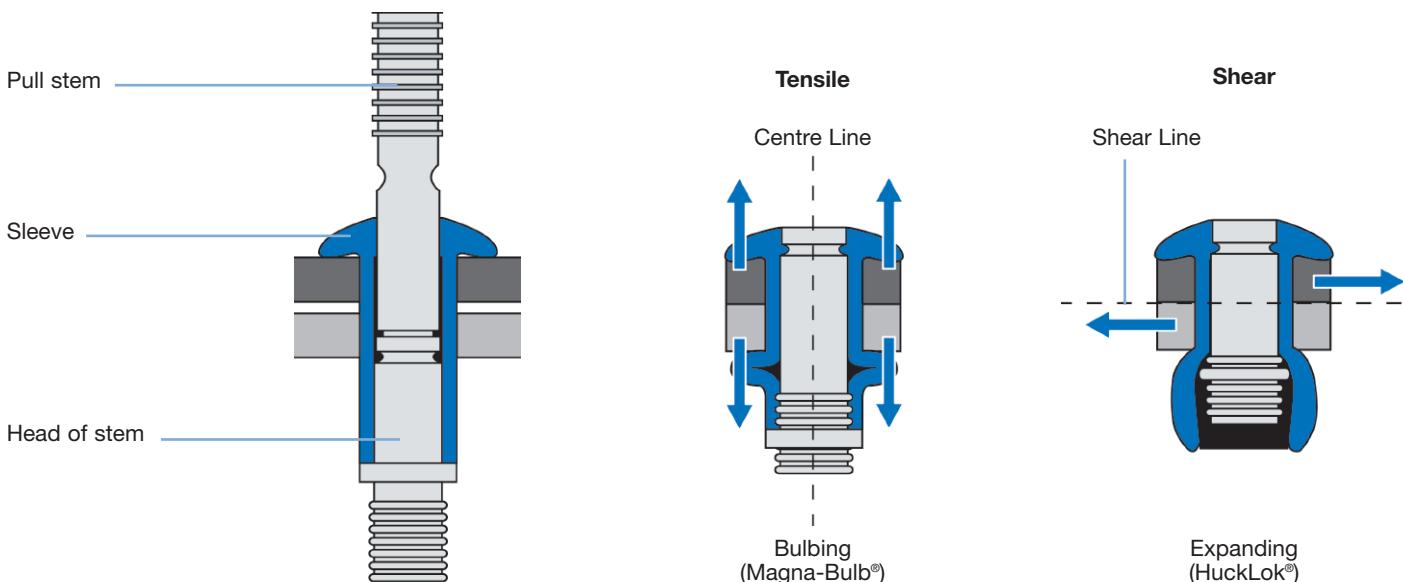


The shear strength of structural blind fasteners is generated by the combined resistance against failure of the stem and sleeve. This takes place along the joint's shear line between fastened plates.

The tensile strength of structural blind fasteners differs to that of Lockbolts, as they form a blind side positive lock either by bulbing or expanding of the sleeve. The sleeve, assisted by the permanently secured stem, therefore resists failure along its centre line.

1. Bulbing – the sleeve of the fastener is compressed, causing it to fold outwards to form a bulb. This forms itself tightly against the joint material. Once the stem is permanently locked into place the stem will break off, completing the installation.

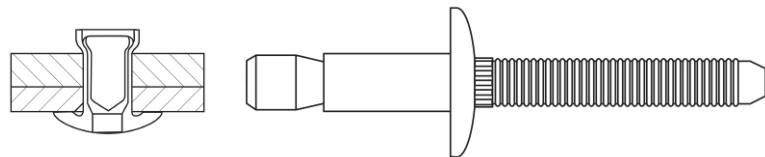
2. Expanding – pulling on the stem causes the head of the stem to draw into the sleeve. This expansion causes a foot print to form against the joint material.





Magna-Lok® - Aluminium

- Wide clamping range: adaptation to a wide variation of the clamping range
- Outstanding hole filling on the blind side: Excellent joint tightness and very resistant to water ingress
- Internal pin locking mechanism: Secure within the rivet body and protected from corrosion
- High shear and tensile strength
- No bulge after the installation Visual inspection is fast and simple.



Body : Aluminium | Stem : Aluminium | Head : Protruding

								Stem holding	
4,8 4,76	18,29				1,57 - 6,86				MGLP-B6-4
	22,35				5,44 - 11,10				MGLP-B6-7
	30,33	9,78	2,16	4,85 - 5,11	14,27 - 19,02	2,2	2,7	0,3	MGLP-B6-12
	25,91				1,57 - 11,10				MGLP-B6-E
6,4 6,35	18,29				2,03 - 6,35				MGLP-B8-4
	24,64				2,03 - 9,53				MGLP-B8-6
	30,99				8,89 - 15,88				MGLP-B8-10
	37,34	13,44	3,02	6,63 - 6,91	14,73 - 22,23	4,0	5,8	0,4	MGLP-B8-14
	43,69				21,08 - 28,58				MGLP-B8-18
9,5 9,53	50,04				27,43 - 34,93				MGLP-B8-22
	35,69				2,03 - 15,88				MGLP-B8-E
	41,91				3,05 - 15,88				MGLP-B12-12
12,7	56,26	20,14	4,47	9,96 - 10,36	15,88 - 28,58	8,5	13,1	1,1	MGLP-B12-18
	65,79				25,4 - 38,10				MGLP-B12-24
	50,80	26,92	6,10	13,49 - 14,30	4,06 - 19,05	18,2	22,06	1,7	MGLP-B16-12

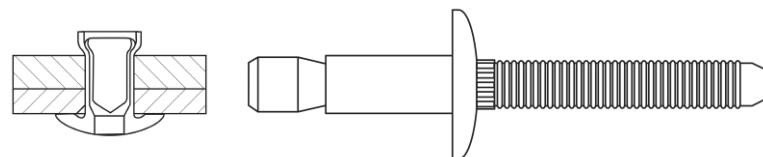
The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **I** = Length - = Min. and Max. grip range - **Ø** = Hole diameter - **k** = Head thickness
d2 = Head diameter - = Minimum tensile strength - = Minimum shear strength



Magna-Lok® - Steel

- Wide clamping range: adaptation to a wide variation of the clamping range
- Outstanding hole filling on the blind side: Excellent joint tightness and very resistant to water ingress
- Internal pin locking mechanism: Secure within the rivet body and protected from corrosion
- High shear and tensile strength
- No bulge after the installation Visual inspection is fast and simple.



Body : Steel | Stem : Steel | Head : Protruding

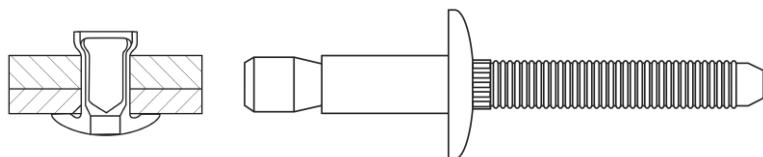
	d_1 (mm)	l (mm)	d_2 (mm)	k (mm)	\varnothing (mm)	min - max (mm)	\downarrow kN min	\uparrow kN min	\leftarrow \rightarrow Stem holding kN min	
4,8 4,76	18,29					1,57 - 6,86				MGLP-R6-4
	22,35					5,44 - 11,10				MGLP-R6-7
	30,33	9,78		2,16	4,85 - 5,11	14,27 - 19,02	4,4	5,8	0,7	MGLP-R6-12
	25,91					1,57 - 11,10				MGLP-R6-E
6,4 6,35	24,64					2,03 - 9,53				MGLP-R8-6
	30,99					8,89 - 15,88				MGLP-R8-10
	37,34					14,73 - 22,23	8,2			MGLP-R8-14
	43,69	13,44		3,02	6,63 - 6,91	21,08 - 28,58		11,1	1,3	MGLP-R8-18
	50,04					27,43 - 34,93				MGLP-R8-22
9,5 9,53	35,69					2,03 - 15,88				MGLP-R8-E
	41,91					3,05 - 15,88	17,8	26,7	2,7	MGLP-R12-12
	56,26	20,14		4,47	9,96 - 10,36	15,88 - 28,58				MGLP-R12-18
12,7	65,79					25,4 - 38,10				MGLP-R12-24
	50,80	26,92	6,10		13,49 - 14,30	4,06 - 19,05	31,1	44,4	4,5	MGLP-R16-12

The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **l** = Length - = Min. and Max. grip range - **Ø** = Hole diameter - **k** = Head thickness
d2 = Head diameter - = Minimum tensile strength - = Minimum shear strength


Magna-Lok® - Stainless steel

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- Outstanding hole filling on the blind side: Excellent joint tightness and very resistant to water ingress
- Internal pin locking mechanism: Secure within the rivet body and protected from corrosion
- High shear and tensile strength
- No bulge after the installation Visual inspection is fast and simple.



Body : Stainless steel | Stem : Stainless steel | Head : Protruding

	d_1 (mm)	l (mm)	d_2 (mm)	k (mm)	\emptyset (mm)	min - max (mm)	\downarrow kN min	\uparrow kN min	$\leftarrow \rightarrow$ kN min	Stem holding kN min	
4,8 4,76	10,52					1,57 - 6,86					MGLP-U6-4
	14,53					5,44 - 11,10					MGLP-U6-7
	20,45					11,56 - 16,89					MGLP-U6-10
	14,53	9,96	2,57		4,85 - 5,11	1,57 - 11,10	4,2		5,8	0,4	MGLP-U6-E
	17,02					5,44 - 13,46					MGLP-U6-E8
	18,59					5,44 - 15,04					MGLP-U6-E9
6,4 6,35	20,45					6,35 - 16,89					MGLP-U6-E10
	18,29					2,03 - 6,35					MGLP-U8-4
	23,37					2,03 - 9,53					MGLP-U8-6
	24,89	13,44	3,02		6,63 - 6,91	2,03 - 11,10	8,0		10,5	0,9	MGLP-U8-7
	30,99					8,89 - 15,88					MGLP-U8-10
	35,69					2,03 - 15,88					MGLP-U8-E
9,5 9,53	41,91	20,14	4,47		9,96 - 10,36	3,05 - 15,88	8,5		13,1	1,1	MGLP-4U12-12
	56,26					15,88 - 28,58					MGLP-U12-18

Magna-Lok® - Stainless steel A4

Body : Stainless steel A4 | Stem : Stainless steel A4 | Head : Protruding

	d_1 (mm)	l (mm)	d_2 (mm)	k (mm)	\emptyset (mm)	min - max (mm)	\downarrow kN min	\uparrow kN min	$\leftarrow \rightarrow$ kN min	Stem holding kN min	
6,4 6,35	23,37	13,44	3,02		6,62 - 6,90	2,03 - 9,53	8,0		10,5	0,88	MGLP-316U8-6

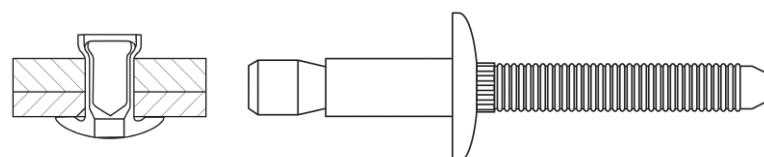
The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **l** = Length - = Min. and Max. grip range - **Ø** = Hole diameter - **k** = Head thickness
d2 = Head diameter - = Minimum tensile strength - = Minimum shear strength



Magna-Lok® - Aluminium

- Wide clamping range : adaptation to a wide variation of the clamping range
- Outstanding hole filling on the blind side: Excellent joint tightness and very resistant to water ingress
- Internal pin locking mechanism: Secure within the rivet body and protected from corrosion
- High shear and tensile strength
- No bulge after the installation Visual inspection is fast and simple.



Body : Aluminium | Stem : Aluminium | Head : Protruded

d1 (mm)	l (mm)	d2 (mm)	k (mm)	Ø (mm)	min - max (mm)	kN min	kN min	Stem holding kN min	
4,8 4,76	18,03				1,57 - 6,86				MGLT-B6-4
	21,97	13,49	2,34	4,85 - 5,11	5,44 - 11,10	2,2	2,7	0,3	MGLT-B6-7
	25,78				1,57 - 11,10				MGLT-B6-E
6,4 6,35	24,64				2,03 - 9,53				MGLT-B8-6
	30,99	15,04	3,02	6,63 - 6,91	8,89 - 15,88	4,0	5,8	0,4	MGLT-B8-10
	35,69				2,03 - 15,88				MGLT-B8-E
9,5 9,53	41,91	22,78	4,47	9,96 - 10,36	3,05 - 14,22	8,5	13,1	1,1	MGLT-B12-12
	65,79				25,4 - 38,10				MGLT-B12-24

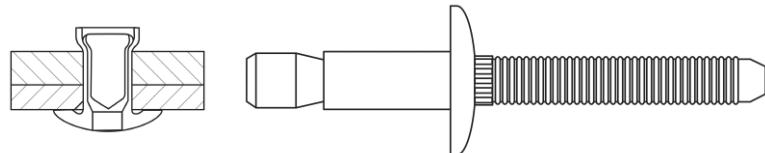
The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **l** = Length - = Min. and Max. grip range - **Ø** = Hole diameter - **k** = Head thickness
d2 = Head diameter - = Minimum tensile strength - = Minimum shear strength



Magna-Lok® - Steel

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- High shear and tensile strength
- No bulge after the installation Visual inspection is fast and simple.



Body : Steel | Stem : Steel | Head : Protruded

								Stem holding	
4,8 4,76	18,03				1,57 - 6,86			0,7	MGLT-R6-4
	21,97	13,49	2,34	4,85 - 5,11	5,44 - 11,10	4,4	5,8		MGLT-R6-7
	25,78				1,57 - 11,10				MGLT-R6-E
6,4 6,35	24,64				2,03 - 9,53				MGLT-R8-6
	30,99	15,04	3,02	6,63 - 6,91	8,89 - 15,88	8,2	11,1	1,3	MGLT-R8-10
	35,69				2,03 - 15,88				MGLT-R8-E

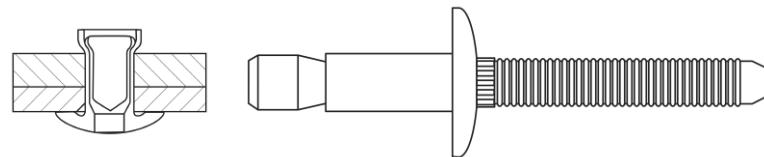
The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **l** = Length - = Min. and Max. grip range - **Ø** = Hole diameter - **k** = Head thickness
d2 = Head diameter - = Minimum tensile strength - = Minimum shear strength



Magna-Lok® - Stainless Steel

- Wide clamping range: adaptation to a wide variation of the clamping range
- Outstanding hole filling on the blind side: Excellent joint tightness and very resistant to water ingress
- Internal pin locking mechanism: Secure within the rivet body and protected from corrosion
- High shear and tensile strength
- No bulge after the installation Visual inspection is fast and simple.



Body : Stainless steel | Stem : Stainless steel | Head : Protruded

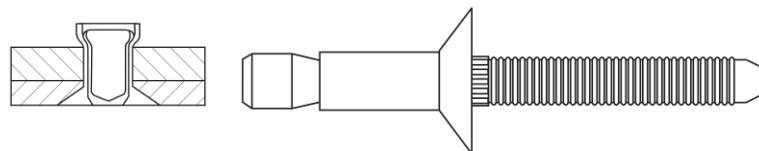
d1 (mm)	l (mm)	d2 (mm)	k (mm)	Ø (mm)	min - max (mm)	kN min	kN min	Stem holding kN min	
6,4 6,35	24,64 30,99 35,69	15,04	3,02	6,63 - 6,91	2,03 - 9,53 8,89 - 15,88 2,03 - 15,88	8,0	10,5	0,9	MGLT-U8-6 MGLT-U8-10 MGLT-U8-E

d1 = Diameter - **l** = Length - = Min. and Max. grip range - **Ø** = Hole diameter - **k** = Head thickness
d2 = Head diameter - = Minimum tensile strength - = Minimum shear strength



Magna-Lok® - Steel

- Wide clamping range: adaptation to a wide variation of the clamping range
- Outstanding hole filling on the blind side: Excellent joint tightness and very resistant to water ingress
- Internal pin locking mechanism: Secure within the rivet body and protected from corrosion
- High shear and tensile strength
- No bulge after the installation Visual inspection is fast and simple.



Body : Steel | Stem : Steel | Head : Countersunk

								Stem holding	
4,8 4,76	20,19 24,43	8,89	1,93	4,85 - 5,11	3,18 - 8,41 7,75 - 12,70	4,4	5,8	0,7	MGL100-R6-6 MGL100-R6-9
6,4 6,35	26,90 33,25	10,41	2,16	6,63 - 6,91	4,06 - 12,07 10,54 - 18,42	8,2	11,1	1,3	MGL100-R8-8 MGL100-R8-12
9,5	42,42	15,93	3,38	9,96 - 10,36	6,10 - 19,05	17,79	26,7	2,66	MGL100-R12-12
12,7	56,77	22,10	5,00	13,49 - 14,30	10,03 - 19,05	31,1	44,4	4,5	MGL100-R16-12

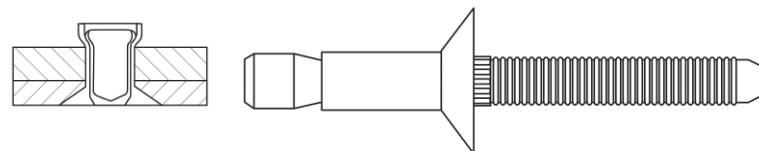
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d1 = Diameter - **l** = Length - = Min. and Max. grip range - **Ø** = Hole diameter - **k** = Head thickness
d2 = Head diameter - = Minimum tensile strength - = Minimum shear strength



Magna-Lok® - Aluminium

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- Internal pin locking mechanism: Secure within the rivet body and protected from corrosion
- High shear and tensile strength
- No bulge after the installation Visual inspection is fast and simple.

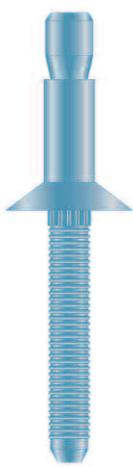


Body : Aluminium | Stem : Aluminium | Head : Countersunk

								Stem holding	
4,8 4,76	20,19				3,18 - 8,41				MGL100-B6-6
	24,43				7,75 - 12,70				MGL100-B6-9
	28,68	8,89	1,93	4,85 - 5,11	12,32 - 16,99				MGL100-B6-12
	31,,85				15,49 - 20,17				MGL100-B6-14
6,4 6,35	26,90				4,06 - 12,07				MGL100-B8-8
	33,25	10,41	2,16	6,63 - 6,91	10,54 - 18,42				MGL100-B8-12
	41,15				13,46 - 27,18				MGL100-B8-E17

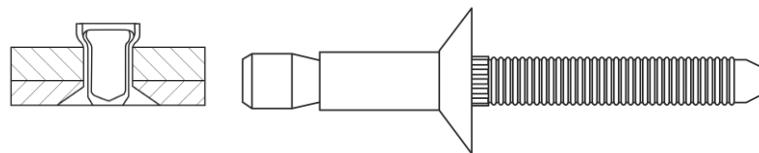
The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **l** = Length - = Min. and Max. grip range - **Ø** = Hole diameter - **k** = Head thickness
d2 = Head diameter - = Minimum tensile strength - = Minimum shear strength



Magna-Lok® - Inox

- Wide clamping range: adaptation to a wide variation of the clamping range
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- Internal pin locking mechanism: Secure within the rivet body and protected from corrosion
- High shear and tensile strength
- No bulge after the installation Visual inspection is fast and simple.

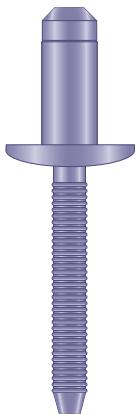


Body : Stainless Steel | Stem : Stainless Steel | Head : Countersunk

								Stem holding	
4,8 4,76	19,35 23,60	8,89	1,93	4,85 - 5,11	3,18 - 8,41 7,75 - 12,70	4,2	5,8	0,4	MGL100-U6-6 MGL100-U6-9
6,4 6,35	26,90 33,25	10,41	2,16	6,63 - 6,91	4,06 - 12,07 10,54 - 18,42	8,0	10,5	0,9	MGL100-U8-8 MGL100-U8-12

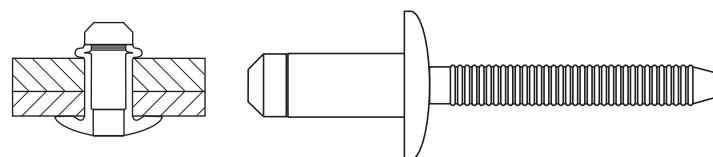
The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **l** = Length - = Min. and Max. grip range - **Ø** = Hole diameter - **k** = Head thickness
d2 = Head diameter - = Minimum tensile strength - = Minimum shear strength



Auto-Bulb™ - Steel

- High tensile and shear strength
- Purpose design blind side shape for easy hole location: Ideal for automated assembly
- Large blind side footprint: Ideal for lower strength or thin sheet joint materials
- Visual inspection is fast and simple.



Body : Steel | Stem : Steel | Head : Protruded

	$\frac{v}{\wedge}$ d_1 (mm)	$\frac{v}{\wedge}$ l (mm)	$\frac{v}{\wedge}$ d_2 (mm)	$\frac{v}{\wedge}$ k (mm)	$\frac{\downarrow}{\uparrow}$ \varnothing (mm)	$\frac{\downarrow}{\uparrow}$ min - max (mm)	$\frac{\uparrow}{\downarrow}$ kN min	$\frac{\leftarrow}{\rightarrow}$ kN min	Stem holding kN min	Book icon
4,8	12,0		9,9	2,3	4,9 - 5,1	1,9 - 2,8	3,8	5,3	0,7	ABP-R6-M2
	13,0					2,2 - 3,8				ABP-R6-M3
	14,0					3,2 - 4,8				ABP-R6-M4
	15,0					4,2 - 5,8				ABP-R6-M5
6,4	15,8		13,4	3,2	6,6 - 6,9	1,5 - 3,5	7,1	11,6	1,3	ABP-R8-M2
	17,0					2,8 - 4,8				ABP-R8-M3
	18,1					3,8 - 5,8				ABP-R8-M4
	19,1					4,8 - 6,8				ABP-R8-M5
	20,1					5,8 - 7,8				ABP-R8-M6
	21,1					6,8 - 8,8				ABP-R8-M7
	22,1					7,8 - 9,8				ABP-R8-M8
	23,1					8,8 - 10,8				ABP-R8-M9
	24,1					9,8 - 11,8				ABP-R8-M10
	25,1					10,8 - 12,8				ABP-R8-M11
	33,2					18,8 - 20,8				ABP-R8-M19



Auto-Bulb™ - Stainless Steel

Body : Stainless steel | Stem : Stainless steel | Head : Protruded

	$\frac{v}{\wedge}$ d_1 (mm)	$\frac{v}{\wedge}$ l (mm)	$\frac{v}{\wedge}$ d_2 (mm)	$\frac{v}{\wedge}$ k (mm)	$\frac{\downarrow}{\uparrow}$ \varnothing (mm)	$\frac{\downarrow}{\uparrow}$ min - max (mm)	$\frac{\uparrow}{\downarrow}$ kN min	$\frac{\leftarrow}{\rightarrow}$ kN min	Stem holding kN min	Book icon
6,4	15,05		12,42 - 13,59	2,64 - 3,30	6,6 - 6,9	1,5 - 3,5	8,54	15,1	1,3	ABP-4U8-M2
	16,35					2,8 - 4,8				ABP-4U8-M3
	17,35					3,8 - 5,8				ABP-4U8-M4
	18,35					4,8 - 6,8				ABP-4U8-M5
	19,35					5,8 - 7,8				ABP-4U8-M6
	20,35					6,8 - 8,8				ABP-4U8-M7
	21,35					7,8 - 9,8				ABP-4U8-M8
	22,35					8,8 - 10,8				ABP-4U8-M9
	23,35					9,8 - 11,8				ABP-4U8-M10
	25,35					10,8 - 12,8				ABP-4U8-M12
	32,35					18,8 - 20,8				ABP-4U8-M19

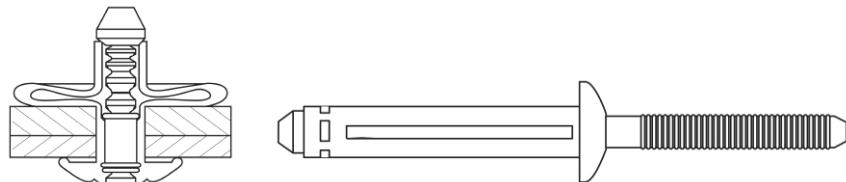
The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **l** = Length - **↓** = Min. and Max. grip range - **Ø** = Hole diameter - **k** = Head thickness
d2 = Head diameter - **↑** = Minimum tensile strength - **↔** = Minimum shear strength



Magna-Tite™ - Aluminium

- Watertight seal, ideal for roofing or similar applications
- Wide clamping range
- Extra large blind side footprint: Ideal for joining of plastic and composites materials, lower strength or thin sheet joint materials
- Visual inspection is fast and simple.



Body : Aluminium | Stem : Aluminium

	d1 (mm)	l (mm)	d2 (mm)	k (mm)	Ø (mm)	min - max (mm)	kN min	kN min	Stem holding kN min	
4,8	25,9	11,8	3,0	5,2 - 5,6		1,3 - 7,9	1,7	2,4	0,3	MTP-B6-5S
	27,2					2,5 - 9,5				MTP-B6-6S
	31,0					6,4 - 12,7				MTP-B6-8S
	34,2					9,5 - 15,9				MTP-B6-10S
	37,3					12,7 - 19,1				MTP-B6-12S
6,4	25,2	13,7	3,2	6,4 - 6,7		1,0 - 6,4	2,6	4,2	0,3	MTP-B8-4S
	28,5					3,2 - 9,5				MTP-B8-6S
	29,2					3,0 - 10,4				MTP-B8-7S
	31,5					6,4 - 12,7				MTP-B8-8S
	34,7					9,5 - 15,9				MTP-B8-10S
	37,9					12,7 - 19,1				MTP-B8-12S

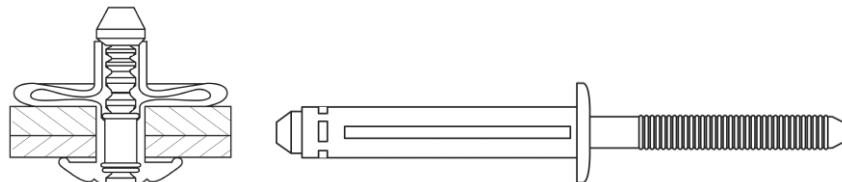
The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **l** = Length - = Min. and Max. grip range - **Ø** = Hole diameter - **k** = Head thickness
d2 = Head diameter - = Minimum tensile strength - = Minimum shear strength



Magna-Tite™ - Aluminium

- Watertight seal, ideal for roofing or similar applications
- Wide clamping range
- Extra large blind side footprint: Ideal for joining of plastic and composites materials, lower strength or thin sheet joint materials
- Visual inspection is fast and simple.



Body : Aluminium | Stem : Aluminium | Head : Low Profile head

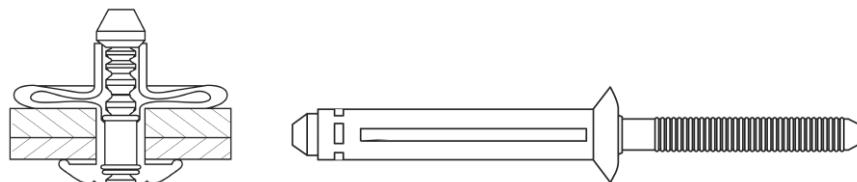
	d_1 (mm)	l (mm)	d_2 (mm)	k (mm)	\varnothing (mm)	min - max (mm)	\downarrow kN min	\uparrow kN min	\leftarrow \rightarrow kN min	Stem holding kN min	
4,8	24,6				5,2 - 5,6	1,3 - 6,4					MTLP-B6-4
	31,0					4,8 - 12,7					MTLP-B6-8
	35,3	11,5		1,3		9,5 - 19,1					MTLP-B6-12
	35,3					1,3 - 19,1	1,7	1,3	0,3		MTLP-B6-12X

d_1 = Diameter - **l** = Length - = Min. and Max. grip range - **\varnothing** = Hole diameter - **k** = Head thickness
 d_2 = Head diameter - = Minimum tensile strength - = Minimum shear strength



Magna-Tite™ - Aluminium

- Watertight seal, ideal for roofing or similar applications
- Wide clamping range
- Extra large blind side footprint: Ideal for joining of plastic and composites materials, lower strength or thin sheet joint materials
- Visual inspection is fast and simple.



Body : Aluminium | Stem : Aluminium

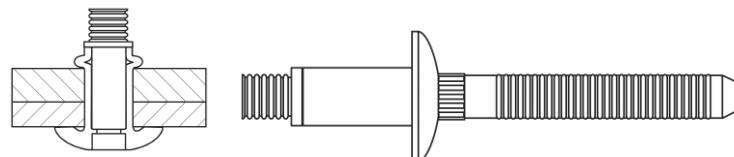
	d_1 (mm)	l (mm)	d_2 (mm)	k (mm)	\varnothing (mm)	min - max (mm)	\downarrow kN min	\uparrow kN min	\leftarrow \rightarrow Stem holding kN min	
4,8	26,4					1,8 - 7,9				MTV-B6-5S
	29,0					4,1 - 10,4				MTV-B6-7S
	31,0	8,7		3,0		6,4 - 12,7		1,7	2,4	MTV-B6-8S
	34,2					9,5 - 15,9				MTV-B6-10S
	37,3					12,7 - 19,1				MTV-B6-12S

d_1 = Diameter - **l** = Length - = Min. and Max. grip range - **\varnothing** = Hole diameter - **k** = Head thickness
 d_2 = Head diameter - = Minimum tensile strength - = Minimum shear strength



Magna-Bulb™ - Steel

- Internal pin locking mechanism: secure within the rivet body and protected from corrosion
- Very high shear and high tensile strength
- Extra large blind side footprint: ideal for lower strength or thin sheet joint materials
- High resistance to vibrations
- Visual inspection is fast and simple.



Body : Steel | Stem : Steel | Head : Protruded

	d_1 (mm)	l (mm)	d_2 (mm)	k (mm)	\varnothing (mm)	min - max (mm)	kN min	kN min	Stem holding kN min	
4,8	15,0	9,9	2,6	4,9 - 5,1		2,2 - 2,8	4,7	8,7	0,7	MBP-R6-M2
	17,1					2,2 - 3,8				MBP-R6-M3
	17,7					3,2 - 4,8				MBP-R6-M4
	18,6					4,2 - 5,8				MBP-R6-M5
	19,7					5,2 - 6,8				MBP-R6-M6
	20,7					6,2 - 7,8				MBP-R6-M7
	21,7					7,2 - 8,8				MBP-R6-M8
	22,7					8,2 - 9,8				MBP-R6-M9
	23,7					9,2 - 10,8				MBP-R6-M10
	24,7					10,2 - 11,8				MBP-R6-M11
	25,7					11,2 - 12,8				MBP-R6-M12
	26,7					12,2 - 13,8				MBP-R6-M13
	27,7					13,2 - 14,8				MBP-R6-M14
6,4	19,3	13,4	3,2	6,6 - 6,9		1,5 - 3,5	8,5	11,6	1,3	MBP-R8-M2
	21,9					2,8 - 4,8		12,0		MBP-R8-M3
	23,9					3,8 - 5,8		12,3		MBP-R8-M4
	23,2					4,8 - 6,8		13,3		MBP-R8-M5
	23,9					5,8 - 7,8		14,2		MBP-R8-M6
	24,9					6,8 - 8,8		MBP-R8-M7		
	25,9					7,8 - 9,8		MBP-R8-M8		
	26,9					8,8 - 10,8		MBP-R8-M9		
	27,9					9,8 - 11,8		MBP-R8-M10		
	28,9					10,8 - 12,8		MBP-R8-M11		
	30,0					11,8 - 13,8		MBP-R8-M12		
	30,9					12,8 - 14,8		MBP-R8-M13		
	37,1					18,8 - 20,8		MBP-R8-M19		
	50,3					31,8 - 33,8		MBP-R8-M32		
7,9	28,1	16,8	3,9	8,3 - 8,6		3,8 - 6,4	13,2	22,2	2,1	MBP-R10-3
	29,3					5,1 - 7,6				MBP-R10-4
	30,6					6,4 - 8,9				MBP-R10-5
	31,9					7,6 - 10,2				MBP-R10-6
	33,2					8,9 - 11,4				MBP-R10-7
	34,4					10,2 - 12,7				MBP-R10-8
	35,7					11,4 - 14,0				MBP-R10-9
	37,0					12,7 - 15,2				MBP-R10-10

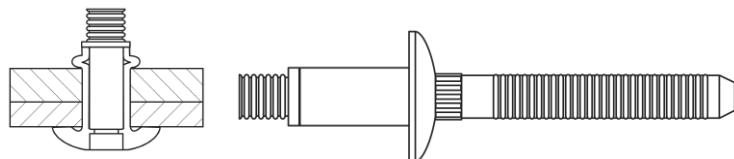
The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **l** = Length - **↓** = Min. and Max. grip range - **Ø** = Hole diameter - **k** = Head thickness
d2 = Head diameter - **↑** = Minimum tensile strength - **◀▶** = Minimum shear strength



Magna-Bulb™ - Steel

- Internal pin locking mechanism: secure within the rivet body and protected from corrosion
- Very high shear and high tensile strength
- Extra large blind side footprint: ideal for lower strength or thin sheet joint materials
- High resistance to vibrations
- Visual inspection is fast and simple.



Body : Steel | Stem : Steel | Head : Protruded

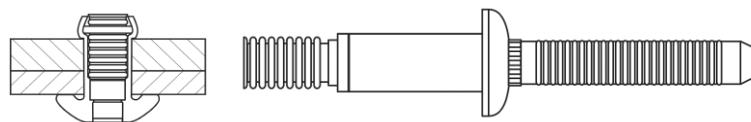
								Stem holding	
4,8	9,4				1,9 - 2,8				MBCP-R6-M2
	11,4				2,2 - 3,8				MBCP-R6-M3
	12,0				3,2 - 4,8				MBCP-R6-M4
	13,0				4,2 - 5,8				MBCP-R6-M5
	14,1	9,9	2,6	4,9 - 5,1	5,2 - 6,8	4,7	8,7	0,7	MBCP-R6-M6
	15,0				6,2 - 7,8				MBCP-R6-M7
	16,1				7,2 - 8,8				MBCP-R6-M8
	17,0				8,2 - 9,8				MBCP-R6-M9
	18,0				9,2 - 10,8				MBCP-R6-M10
	13,1				1,5 - 3,5				MBCP-R8-M2
6,4	15,7				2,8 - 4,8		10,2		MBCP-R8-M3
	17,7				3,8 - 5,8		10,7		MBCP-R8-M4
	17,0				4,8 - 6,8		11,1		MBCP-R8-M5
	18,0				5,8 - 7,8				MBCP-R8-M6
	19,0				6,8 - 8,8				MBCP-R8-M7
	20,0	13,4	3,2	6,6 - 6,9	7,8 - 9,8	7,1			MBCP-R8-M8
	21,0				8,8 - 10,8		13,3	1,3	MBCP-R8-M9
	23,0				10,8 - 12,8				MBCP-R8-M11
	25,0				12,8 - 14,8				MBCP-R8-M13
	28,0				15,8 - 17,8				MBCP-R8-M16
	31,0				18,8 - 20,8				MBCP-R8-M19
	37,1				24,8 - 26,8				MBCP-R8-M25
	43,0				30,8 - 32,8				MBCP-R8-M31

d1 = Diameter - **I** = Length - **↓** = Min. and Max. grip range - **Ø** = Hole diameter - **k** = Head thickness
d2 = Head diameter - **↑** = Minimum tensile strength - **◀ ▶** = Minimum shear strength



HuckLok™ - Steel

- Combines the wide clamping range of the Magna-Lok® and the high shear strength and high tensile strength of the Magna-Bulb®
- Large blind side footprint: Ideal for lower strength or thin sheet joint materials
- High shear and tensile strength and to vibrations
- Wide grip range
- Visual inspection is fast and simple.



Body : Steel | Stem : Steel | Head : Protruded

								Stem holding	
4,8	22,9			4,9 - 5,1	1,6 - 7,9 4,8 - 11,1	4,4	8,5	0,7	HKLP-R6-5U
	26,0								HKLP-R6-7
6,4	28,3				2,0 - 9,5 4,8 - 11,1 7,1 - 13,5 9,5 - 15,9 12,7 - 19,1 15,9 - 22,2 22,2 - 28,6 25,4 - 31,8				HKLP-R8-6*
	29,9								HKLP-R8-7
	30,9								HKLP-R8-8,5
	34,7								HKLP-R8-10
	37,9	11,9	3,0	6,6 - 6,9		8,5	15,6	1,8	HKLP-R8-12
	41,1								HKLP-R8-14
	47,4								HKLP-R8-18
	50,6								HKLP-R8-20

*For best results, it is recommended for thicknesses less than 2.5 mm to use the minimum hole size

The article codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **l** = Length - = Min. and Max. grip range - **Ø** = Hole diameter - **k** = Head thickness
d2 = Head diameter - = Minimum tensile strength - = Minimum shear strength

**BOM® - Steel**

- Very high strength/diameter ratio: can be used in demanding structural applications as an alternative to threaded fasteners or welding
- Very resistant to tampering, extremely hard to remove
- Large blind side footprint: ideal for lower strength or thin sheet joint materials
- Very high joint tightness when compared to conventional blind fasteners



Body : Steel | Stem : Steel

 d1 (mm)	 l (mm)	 d2 (mm)	 k (mm)	 Ø (mm)	 min - max (mm)	 kN min	 kN min	
4,8 4,8 - 5,2	7,2	4,2	5,3 - 5,6	10,3 - 11,9	2,4 - 4,0	8,0	12,5	BOM-R6-2
					4,0 - 5,6			BOM-R6-3
					5,6 - 7,1			BOM-R6-4
					7,2 - 8,7			BOM-R6-5
					8,8 - 10,3			BOM-R6-6
					11,9 - 13,5			BOM-R6-7
					13,5 - 15,1			BOM-R6-8
					15,1 - 16,7			BOM-R6-9
					16,7 - 18,3			BOM-R6-10
					18,3 - 19,8			BOM-R6-11
					21,5 - 23,0			BOM-R6-12
6,4 6,4 - 7,0	9,7	5,6	7,0 - 7,4	11,9 - 13,5	2,4 - 4,0	14,5	22,7	BOM-R8-2
					4,0 - 5,6			BOM-R8-3
					5,6 - 7,1			BOM-R8-4
					7,2 - 8,7			BOM-R8-5
					8,8 - 10,3			BOM-R8-6
					10,3 - 11,9			BOM-R8-7
					13,5 - 15,1			BOM-R8-8
					15,1 - 16,7			BOM-R8-9
					16,7 - 18,3			BOM-R8-10
					18,3 - 19,8			BOM-R8-11
					19,9 - 21,4			BOM-R8-12
					21,5 - 23,0			BOM-R8-13
7,9 7,9 - 8,8	12,2	7,1	8,8 - 9,4	14,3 - 17,5	4,8 - 7,9	23,1	35,8	BOM-R10-4
					8,0 - 11,1			BOM-R10-6
					11,1 - 14,3			BOM-R10-8
					14,3 - 17,5			BOM-R10-10
					17,5 - 20,6			BOM-R10-12
					20,7 - 23,8			BOM-R10-14
					23,8 - 27,0			BOM-R10-16

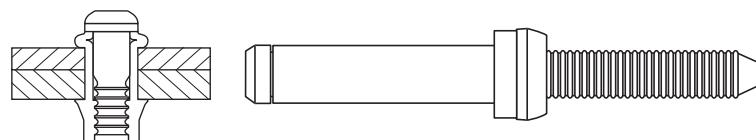
The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **l** = Length -
= Min. and Max. grip range - **Ø** = Hole diameter - **k** = Head thickness
d2 = Head diameter -
= Minimum tensile strength -
= Minimum shear strength



BOM® - Steel

- Very high strength/diameter ratio: can be used in demanding structural applications as an alternative to threaded fasteners or welding
- Very resistant to tampering, extremely hard to remove
- Large blind side footprint: ideal for lower strength or thin sheet joint materials
- Very high joint tightness when compared to conventional blind fasteners



Body : Steel | Stem : Steel

	d_1 (mm)	l (mm)	d_2 (mm)	k (mm)	\emptyset (mm)	↓ min - max ↑ (mm)	↔ kN min	↙ ↔ ↗ kN min	
9,5 9,5 - 10,4	24,6					4,8 - 7,9			BOM-R12-4
	27,8					8,0 - 11,1			BOM-R12-6
	31,0					11,1 - 14,3			BOM-R12-8
	34,1					14,3 - 17,5			BOM-R12-10
	37,3	14,4	8,3		10,5 - 11,1	17,5 - 20,6			BOM-R12-12
	40,5					20,7 - 23,8			BOM-R12-14
	43,7					23,8 - 27,0			BOM-R12-16
	46,8					27,0 - 30,2			BOM-R12-18
	50,0					30,2 - 33,3			BOM-R12-20
12,7 12,7 - 13,9	32,2					6,4 - 9,5			BOM-R16-4
	35,3					9,6 - 12,7			BOM-R16-6
	38,5					12,7 - 15,9			BOM-R16-8
	41,7					15,9 - 19,1			BOM-R16-10
	44,9					19,1 - 22,2			BOM-R16-12
	48,0	19,1	11,1		13,9 - 14,8	22,3 - 25,4	57,8	89,6	BOM-R16-14
	51,2					25,4 - 28,6			BOM-R16-16
	54,4					28,6 - 31,8			BOM-R16-18
	57,6					31,8 - 34,9			BOM-R16-20
	60,7					35,0 - 38,1			BOM-R16-22
	63,9					38,1 - 41,3			BOM-R16-24
15,9 15,9 - 17,3	38,9					6,4 - 12,7			BOM-R20-4GA
	45,2					12,7 - 19,1			BOM-R20-8GA
	51,6	23,9	13,8		17,5 - 18,5	19,1 - 25,4	91,2	126,8	BOM-R20-12GA
	57,9					25,4 - 31,8			BOM-R20-16GA
	64,3					31,8 - 38,1			BOM-R20-20GA
19,1 19,1 - 20,8	44,5					6,4 - 12,7			BOM-R24-4GA
	50,8					12,7 - 19,1			BOM-R24-8GA
	57,2	28,6	16,6		21,0 - 22,2	19,1 - 25,4	129,4	200,6	BOM-R24-12GA
	63,5					25,4 - 31,8			BOM-R24-16GA

The articles codes in blue correspond to the core range (most commonly used references)

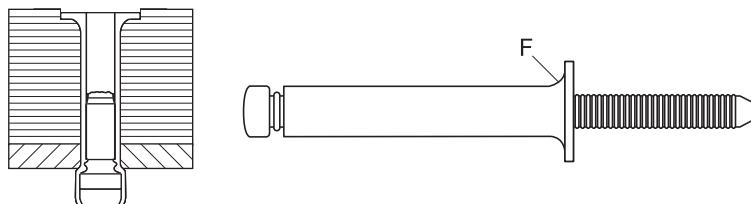
d1 = Diameter - **l** = Length - **↓** = Min. and Max. grip range - **∅** = Hole diameter - **k** = Head thickness
d2 = Head diameter - **↑** = Minimum tensile strength - **↙ ↘** = Minimum shear strength



FloorTight® - Steel

The flooring specialist fastener

- They offer a superior strength to conventional flooring screws: reduces the number of fasteners required and number of drilled holes
- High strength of structural rivets
- Breaking of the riveting stem inside the rivet : fasteners are totally flush
- Wide clamping range



Body : Steel | Stem : Steel | Installation into plywood

d_1 (mm)	l (mm)	d_2 (mm)	k (mm)	\varnothing (mm)	min - max (mm)	kN min	kN min	Stem holding kN min	
8,3 8,26	53,98	*	*	*	19,05 - 34,93 19,05 - 41,28	13,3	19,1	*	PMF-R10-20 PMF-R10-26
	63,50								

* For more information, please contact us - For values of the category F, consult us.

The articles codes in blue correspond to the core range (most commonly used references)

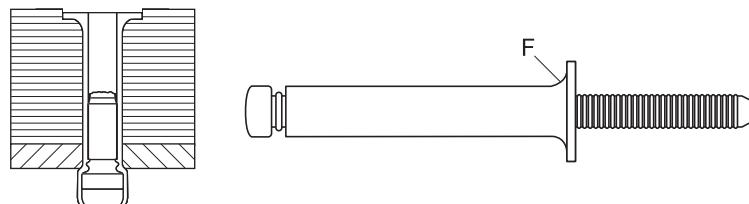
d1 = Diameter - **l** = Length - = Min. and Max. grip range - **Ø** = Hole diameter - **k** = Head thickness
d2 = Head diameter - = Minimum tensile strength - = Minimum shear strength



FloorTight® - Steel

The flooring specialist fastener

- They offer a superior strength to conventional flooring screws: reduces the number of fasteners required and number of drilled holes
- High strength of structural rivets
- Breaking of the riveting stem inside the rivet : fasteners are totally flush
- Wide clamping range



Body : Steel | Stem : Steel | Installation into plywood

								Stem holding	
8,3 7,90	50,8	17,5	1,7	8,3 - 8,6	19,1 - 34,9	12,5	15,6	0,9	PWFCLC-R10-20
	60,3				19,1 - 41,3				PWFCLC-R10-26
8,3 7,90	50,8	17,5	1,7	8,3 - 8,6	19,1 - 34,9	12,5	15,6	0,9	PWFMC-R10-20
	60,3				19,1 - 41,3				PWFMC-R10-26
8,3 7,90	50,8	17,5	1,7	8,3 - 8,6	19,1 - 34,9	12,5	15,6	0,9	PWF-R10-20
	60,3				19,1 - 41,3				PWF-R10-26

* For more information, please contact us - For values of the category F, consult us.

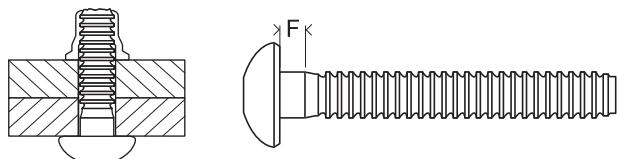
The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **l** = Length - = Min. and Max. grip range - **Ø** = Hole diameter - **k** = Head thickness
d2 = Head diameter - = Minimum tensile strength - = Minimum shear strength



Magna-Grip® - Steel

- Wide clamping range
- They offer a high resistance to vibrations
- One stem and one collar cover a wide variety of applications
- The break of the riveting stem is always flush to the collar



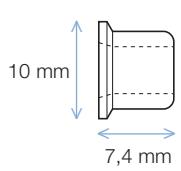
Stem : Steel | Head : Button

v x d1 (mm)	l (mm)	d2 (mm)	k (mm)	\emptyset (mm)	min - max (mm)	kN min	kN min	Clamp load kN	References of the collar			
										Standard	Medium	Wide
4,8 4,65 - 4,75	46,3 51,9	10,0	3,2	5,0 - 5,2	1,6 - 15,9 7,9 - 31,8	7,3	7,7	4,1	MGPB-R6-10G MGPB-R6-20G	MGC-R6U	MGCS-R6U	MGCW-R6U
6,4 6,22 - 6,32	50,8 65,9	13,2	3,9	6,6 - 6,7	1,6 - 15,9 7,9 - 31,8	13,3	9,8	5,3	MGPB-R8-10G MGPB-R8-20G	MGC-R8U	MGCS-R8U	MGCW-R8U
7,9 7,80 - 7,90	60,3 73,0	16,5	5,1	8,2 - 8,3	3,2 - 19,1 15,9 - 34,9	20,5	13,3	9,6	MGPB-R10-12G MGPB-R10-22G	MGC-R10U	-	-
9,5 9,37 - 9,53	74,6 89,8	19,8	6,3	9,8 - 9,9	3,2 - 22,2 20,6 - 41,3	28,9	18,7	14,2	MGPB-R12-14G MGPB-R12-26G	MGC-R12U	-	-

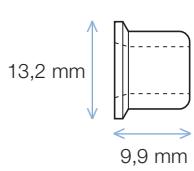
For values of the category F, consult us.

Standard

MGC-R6U

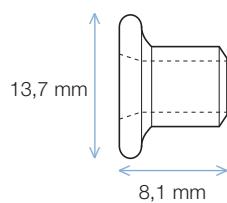


MGC-R8U



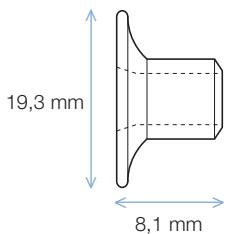
Medium

MGCS-R6U

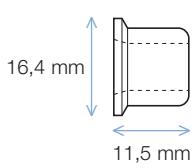


Wide

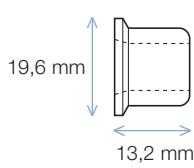
MGCW-R6U



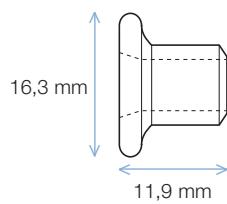
MGC-R10U



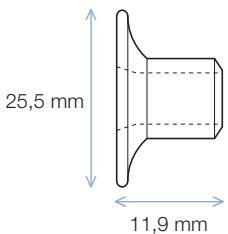
MGC-R12U



MGCS-R8U



MGCW-R8U



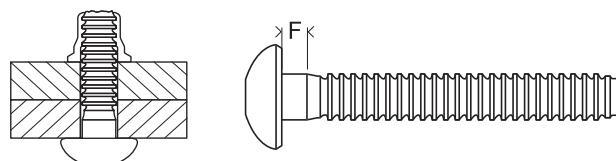
The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **l** = Length - **↓** = Min. and Max. grip range - **∅** = Hole diameter - **k** = Head thickness
d2 = Head diameter - **▲** = Minimum tensile strength - **◀▶** = Minimum shear strength



Magna-Grip® - Aluminium

- Wide clamping range
- They offer a high resistance to vibrations
- One stem and one collar cover a wide variety of applications
- The break of the riveting stem is always flush to the collar



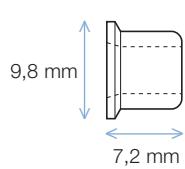
Stem : Aluminium | Head : Button

$\frac{v}{\lambda}$ d_1 (mm)	l (mm)	d_2 (mm)	k (mm)	\emptyset (mm)	min - max (mm)	\downarrow kN min	\uparrow kN min	Clamp load kN	References of the collar			
										Standard	Medium	Wide
4,8 4,65 - 4,75	46,3 51,9	10,0	3,2	5,0 - 5,2	1,6 - 15,9 7,9 - 31,8	4,0	3,3	2,4	MGPB-E6-10 MGPB-E6-20	MGC-F6	MGCS-F6	MGCW-F6
6,4 6,22 - 6,32	50,8 65,9	13,2	3,9	6,6 - 6,7	1,6 - 15,9 7,9 - 31,8	7,2	5,3	4,2	MGPB-E8-10 MGPB-E8-20	MGC-F8	MGCS-F8	MGCW-F8
7,9 7,80 - 7,90	60,3 73,0	16,5	5,1	8,2 - 8,3	3,2 - 19,1 15,9 - 34,9	11,1	9,8	7,1	MGPB-E10-12 MGPB-E10-22	MGC-F10	-	-
9,5 9,37 - 9,53	74,6 89,8	19,8	6,3	9,8 - 9,9	3,2 - 22,2 20,6 - 41,3	17,8	13,3	10,7	MGPB-E12-14 MGPB-E12-26	MGC-F12	-	-

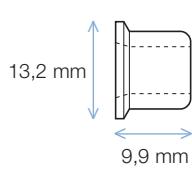
For values of the category F, consult us.

Standard

MGC-F6

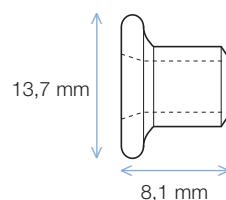


MGC-F8



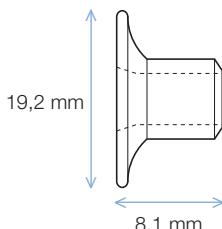
Medium

MGCS-F6

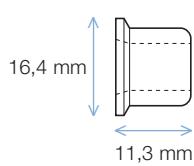


Wide

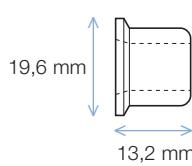
MGCW-F6



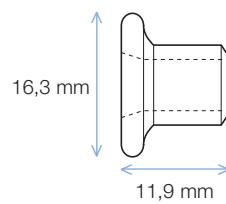
MGC-F10



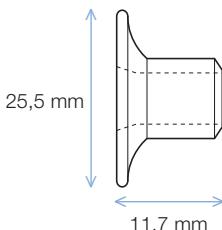
MGC-F12



MGCS-F8



MGCW-F8



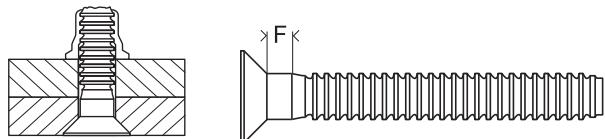
The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **l** = Length - **↓** = Min. and Max. grip range - **∅** = Hole diameter - **k** = Head thickness
d2 = Head diameter - **▲** = Minimum tensile strength - **◀▶** = Minimum shear strength



Magna-Grip® - Steel

- Wide clamping range
- They offer a high resistance to vibrations
- One stem and one collar cover a wide variety of applications
- The break of the riveting stem is always flush to the collar



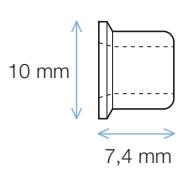
Stem : Steel | Head : Countersunk

v x d1 (mm)	l (mm)	d2 (mm)	k (mm)	Ø (mm)	min - max (mm)	kN min	kN min	Clamp load kN		References of the collar		
										Standard	Medium	Wide
4,8 4,65 - 4,75	46,3 65,9	9,1 2,2	2,6 5,0 - 5,2	5,0 - 5,2	2,7 - 15,9 7,9 - 31,8	7,3	7,7	4,1	MGP90-R6-10G MGP90-R6-20G	MGC-R6U	MGCS-R6U	MGCW-R6U
6,4 6,22 - 6,32	50,8 65,9	12,1 2,9	3,3 6,6 - 6,7	6,6 - 6,7	3,3 - 15,9 7,9 - 31,8	13,3	9,8	5,3	MGP90-R8-10G MGP90-R8-20G	MGC-R8U	MGCS-RU8	MGCW-R8U
7,9 7,80 - 7,90	59,2 71,9	15,1 3,6	4,1 3,6	8,2 - 8,3	4,2 - 19,1 15,9 - 34,9	20,5	13,3	9,6	MGP90-R10-12G MGP90-R10-22G	MGC-R10U	-	-
9,5 9,37 - 9,53	73,9 89,8	18,1 4,3	5,0 4,3	9,8 - 9,9	6,4 - 22,2 20,6 - 41,3	28,9	18,7	14,2	MGP90-R12-14G MGP90-R12-26G	MGC-R12U	-	-

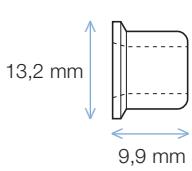
For values of the category F, consult us.

Standard

MGC-R6U

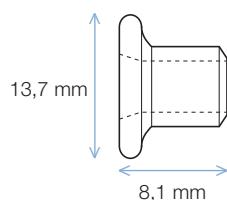


MGC-R8U



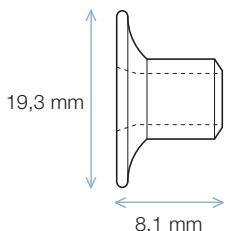
Medium

MGCS-R6U

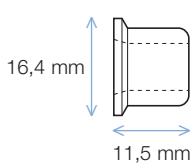


Wide

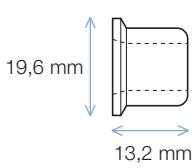
MGCW-R6U



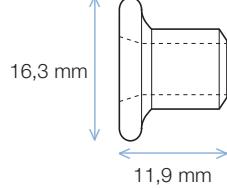
MGC-R10U



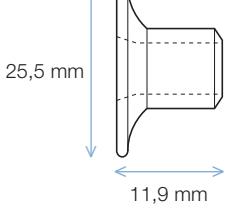
MGC-R12U



MGCS-R8U



MGCW-R8U



The articles codes in blue correspond to the core range (most commonly used references)

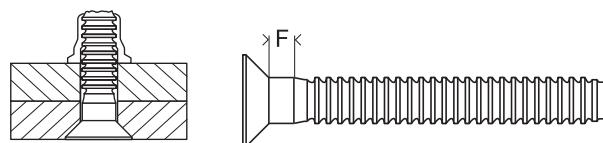
d1 = Diameter - **l** = Length - **↓** = Min. and Max. grip range - **Ø** = Hole diameter - **k** = Head thickness

d2 = Head diameter - **▲** = Minimum tensile strength - **◀▶** = Minimum shear strength



Magna-Grip® - Aluminium

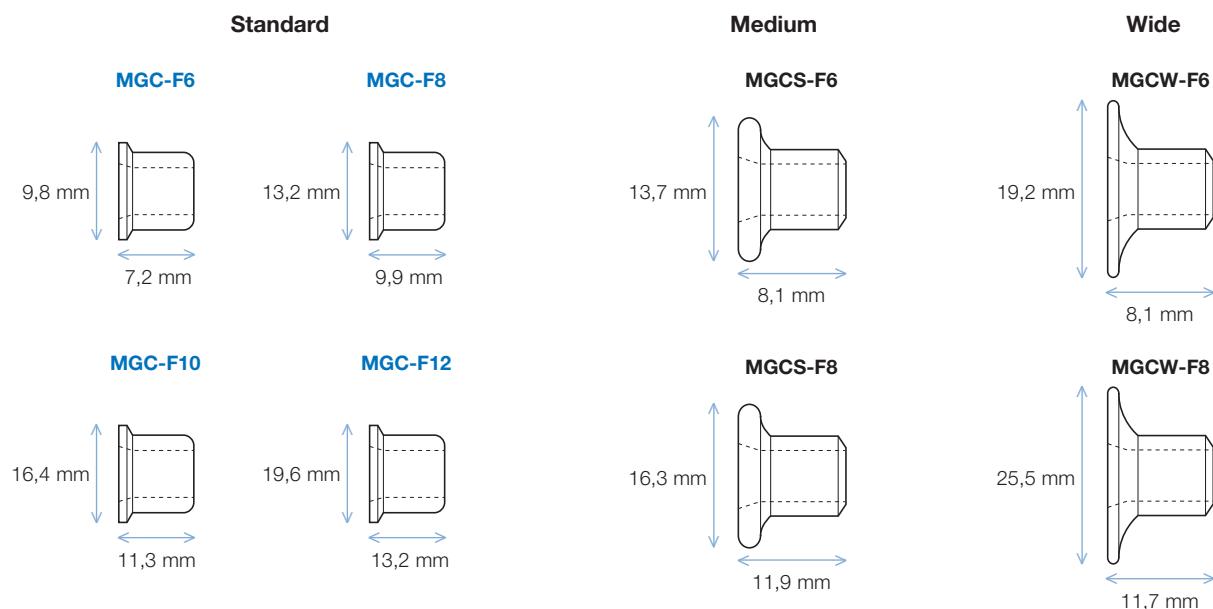
- Wide clamping range
- They offer a high resistance to vibrations
- One stem and one collar cover a wide variety of applications
- The break of the riveting stem is always flush to the collar



Stem : Aluminium | Head : Countersunk

$\frac{v}{\lambda}$ d_1 (mm)	l (mm)	d_2 (mm)	k (mm)	\emptyset (mm)	min - max (mm)	\downarrow kN min	\uparrow kN min	Clamp load kN	Réf. des bagues			
										Standard	Medium	Wide
4,8 4,65 - 4,75	46,3	9,1	2,6	5,0 - 5,2	2,7 - 15,9 7,9 - 31,8	4,0	3,3	2,4	MGP90-E6-10 MGP90-E6-20	MGC-F6	MGCS-F6	MGCW-F6
	65,9	2,2										
6,4 6,22 - 6,32	50,8	12,1	3,3	6,6 - 6,7	3,3 - 15,9 7,9 - 31,8	7,2	5,3	4,2	MGP90-E8-10 MGP90-E8-20	MGC-F8	MGCS-F8	MGCW-F8
	65,9	2,9										
7,9 7,80 - 7,90	59,2	15,1	4,1	8,2 - 8,3	4,2 - 19,1 15,9 - 34,9	11,1	9,8	7,1	MGP90-E10-12 MGP90-E10-22	MGC-F10	-	-
	71,9	3,6										
9,5 9,37 - 9,53	73,9	18,1	5,0	9,8 - 9,9	6,4 - 22,2 20,6 - 41,3	17,8	13,3	10,7	MGP90-E12-14 MGP90-E12-26	MGC-F12	-	-
	89,8	4,3										

For values of the category F, consult us.



The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **l** = Length - **↓** = Min. and Max. grip range - **∅** = Hole diameter - **k** = Head thickness
d2 = Head diameter - **▲** = Minimum tensile strength - **◀▶** = Minimum shear strength

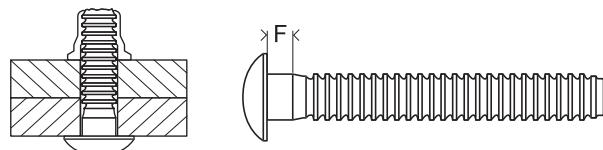


Range of LockBolt



Magna-Grip® - Steel

- Wide clamping range
- They offer a high resistance to vibrations
- One stem and one collar cover a wide variety of applications
- The break of the riveting stem is always flush to the collar



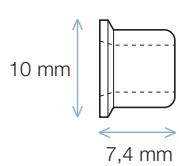
Stem : Steel | Head : Rivet

v x d1 (mm)	l (mm)	d2 (mm)	k (mm)	Ø (mm)	min - max (mm)	kN min	kN min	Clamp load kN	References of the collar	Standard	Medium	Wide
										MGC-R6U	MGCS-R6U	MGCW-R6U
4,8 4,65 - 4,75	46,3 61,1	12,4	2,7	5,0 - 5,2	1,6 - 15,9 7,9 - 31,8	7,3	7,7	4,1	MGP98T-R6-10G MGP98T-R6-20G			

For values of the category F, consult us.

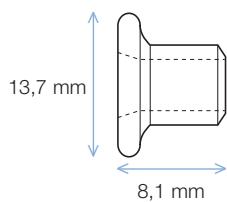
Standard

MGC-R6U



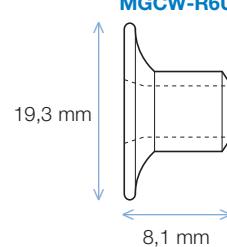
Medium

MGCS-R6U



Wide

MGCW-R6U



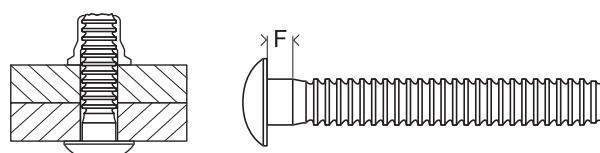
The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **l** = Length - **↓** = Min. and Max. grip range - **Ø** = Hole diameter - **k** = Head thickness
d2 = Head diameter - **▲** = Minimum tensile strength - **◀▶** = Minimum shear strength



Magna-Grip® - Aluminium

- Wide clamping range
- They offer a high resistance to vibrations
- One stem and one collar cover a wide variety of applications
- The break of the riveting stem is always flush to the collar



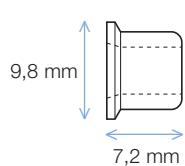
Stem : Aluminium | Head : Rivet

v x d1 (mm)	l (mm)	d2 (mm)	k (mm)	\emptyset (mm)	min - max (mm)	kN min	kN min	Clamp load kN	References of the collar	Standard	Medium	Wide
										MGC-F6	MGCS-F6	MGCW-F6
4,8 4,65 - 4,75	46,3 61,1	12,4	2,7	5,0 - 5,2	1,6 - 15,9 7,9 - 31,8	4,0	3,3	2,4	MGP98T-E6-10 MGP98T-E6-20	MGC-F6	MGCS-F6	MGCW-F6

For values of the category F, consult us.

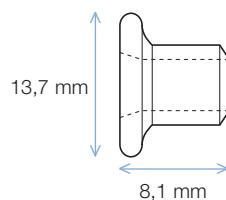
Standard

MGC-F6



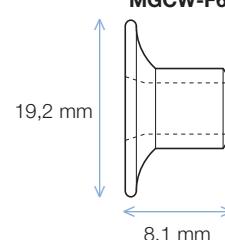
Medium

MGCS-F6



Wide

MGCW-F6



The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **l** = Length - **↓** = Min. and Max. grip range - **∅** = Hole diameter - **k** = Head thickness
d2 = Head diameter - **▲** = Minimum tensile strength - **◀▶** = Minimum shear strength

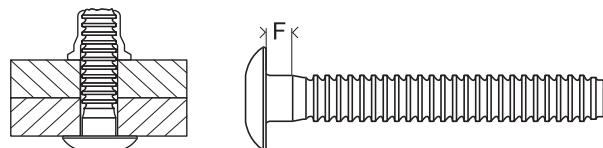


Range of LockBolt



Magna-Grip® - Steel

- Wide clamping range
- They offer a high resistance to vibrations
- One stem and one collar cover a wide variety of applications
- The break of the riveting stem is always flush to the collar



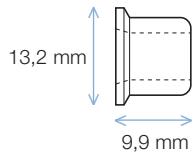
Stem : Steel | Head : Truss

v d1 (mm)	l (mm)	d2 (mm)	k (mm)	Ø (mm)	min - max (mm)	kN min	kN min	Clamp load kN	References of the collar			
										Standard	Medium	Wide
6,4 6,22 - 6,32	50,8 65,9	15,1	3,0	6,6 - 6,7	1,6 - 15,9 7,9 - 31,8	13,3	9,8	5,3	MGPT-R8-10G MGPT-R8-20G	MGC-R8U	MGCS-R8U	MGCW-R8U
7,9 7,80 - 7,90	60,3 73,0	20,4	3,6	8,2 - 8,3	3,2 - 19,1 15,9 - 34,9	20,5	13,3	9,6	MGPT-R10-12G MGPT-R10-22G	MGC-R10U	-	-
9,5 9,37 - 9,53	74,6 89,8	23,6	4,3	9,8 - 9,9	3,2 - 22,2 20,6 - 41,3	28,9	18,7	14,2	MGPT-R12-14G MGPT-R12-26G	MGC-R12U	-	-

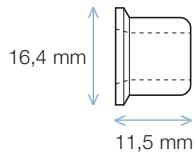
For values of the category F, consult us.

Standard

MGC-R8U

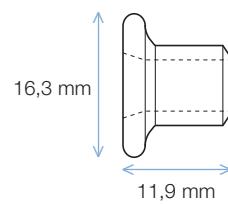


MGC-R10U



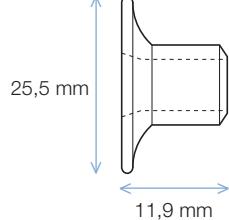
Medium

MGCS-R8U

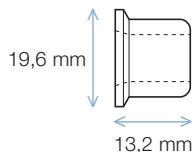


Wide

MGCW-R8U



MGC-R12U



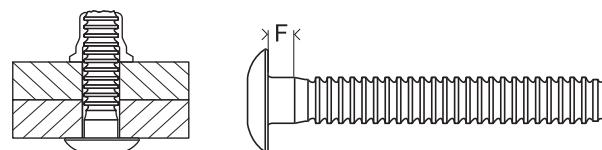
The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **l** = Length - **↓** = Min. and Max. grip range - **Ø** = Hole diameter - **k** = Head thickness
d2 = Head diameter - **▲** = Minimum tensile strength - **◀▶** = Minimum shear strength



Magna-Grip® - Aluminium

- Wide clamping range
- They offer a high resistance to vibrations
- One stem and one collar cover a wide variety of applications
- The break of the riveting stem is always flush to the collar



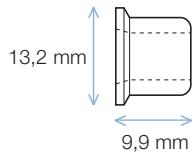
Stem : Aluminium | Head : Truss

$\frac{v}{\lambda}$ d_1 (mm)	l (mm)	d_2 (mm)	k (mm)	\emptyset (mm)	min - max (mm)	\downarrow	\uparrow	Clamp load kN	References of the collar			
										Standard	Medium	Wide
6,4 6,22 - 6,32	50,8 65,9	15,1	3,0	6,6 - 6,7	1,6 - 15,9 7,9 - 31,8	7,2	5,3	4,2	MGPT-E8-10 MGPT-E8-20	MGC-F8	MGCS-F8	MGCW-F8
7,9 7,80 - 7,90	60,3 73,0	20,4	3,6	8,2 - 8,3	3,2 - 19,1 15,9 - 34,9	11,1	9,8	7,1	MGPT-E10-12 MGPT-E10-22	MGC-F10	-	-
9,5 9,37 - 9,53	74,6 89,8	23,6	4,3	9,8 - 9,9	3,2 - 22,2 20,6 - 41,3	17,8	13,3	10,7	MGPT-E12-14 MGPT-E12-26	MGC-F12	-	-

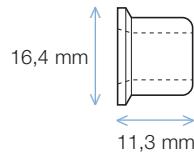
For values of the category F, consult us.

Standard

MGC-F8

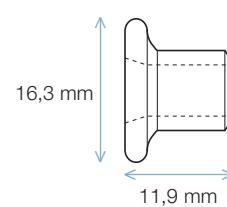


MGC-F10



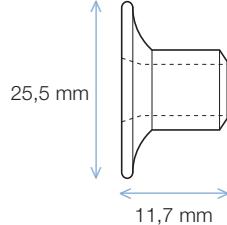
Medium

MGCS-F8

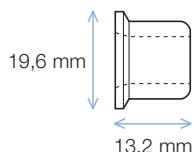


Wide

MGCW-F8



MGC-F12



The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **l** = Length - = Min. and Max. grip range - = Hole diameter - = Head thickness
d2 = Head diameter - = Minimum tensile strength - = Minimum shear strength

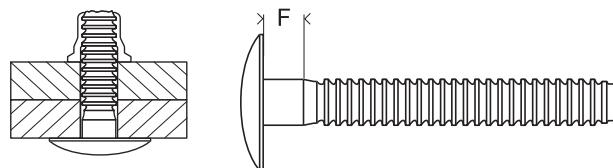


Range of LockBolt



Magna-Grip® - Steel

- Wide clamping range
- They offer a high resistance to vibrations
- One stem and one collar cover a wide variety of applications
- The break of the riveting stem is always flush to the collar



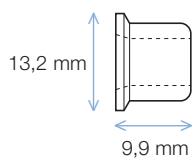
Stem : Steel | Head : Broad Truss

v x d1 (mm)	l (mm)	d2 (mm)	k (mm)	Ø (mm)	min - max (mm)	kN min	kN min	Clamp load kN	References of the collar			
										Standard	Medium	Wide
6,4 6,22 - 6,32	50,8 72,3	24,9	4,1	6,6 - 6,7	1,6 - 15,9 15,9 - 38,1	13,3	9,8	5,3	MGP30-R8-10G MGP30-R8-24G	MGC-R8U	MGCS-R8U	MGCW-R8U
9,5 9,37 - 9,53	87,1 99,8	31,9	5,4	9,9	15,9 - 38,1 28,6 - 50,8	28,9	18,7	14,2	MGP30-R12-24G MGP30-R12-32G	MGC-R12U	-	-

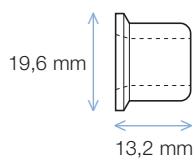
For values of the category F, consult us.

Standard

MGC-R8U

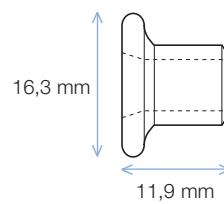


MGC-R12U



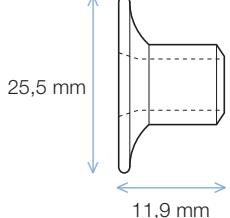
Medium

MGCS-R8U



Wide

MGCW-R8U



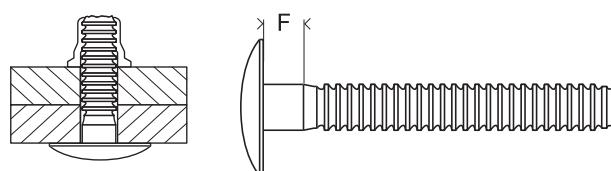
The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **l** = Length - **↓** = Min. and Max. grip range - **Ø** = Hole diameter - **k** = Head thickness
d2 = Head diameter - **▲** = Minimum tensile strength - **◀▶** = Minimum shear strength



Magna-Grip® - Aluminium

- Wide clamping range
- They offer a high resistance to vibrations
- One stem and one collar cover a wide variety of applications
- The break of the riveting stem is always flush to the collar



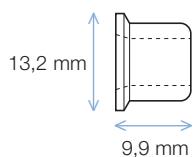
Stem : Aluminium | Head : Broad Truss

$\frac{v}{\lambda}$ d_1 (mm)	l (mm)	d_2 (mm)	k (mm)	\emptyset (mm)	min - max (mm)	\downarrow kN min	\uparrow kN min	Clamp load kN	References of the collar			
										Standard	Medium	Large
6,4 6,22 - 6,32	50,8 72,3	27,1	4,6	6,6 - 6,7	1,6 - 15,9 15,9 - 38,1	7,2	5,3	4,2	MGP30-E8-10 MGP30-E8-24	MGC-F8	MGCS-F8	MGCW-F8
9,5 9,37 - 9,53	87,1 99,8	31,9	5,4	9,9	15,9 - 38,1 28,6 - 50,8	17,8	13,3	10,7	MGP30-E12-24 MGP30-E12-32	MGC-F12	-	-

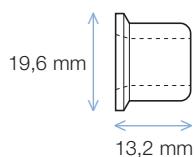
For values of the category F, consult us.

Standard

MGC-F8

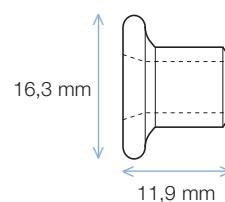


MGC-F12



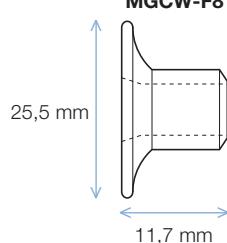
Medium

MGCS-F8



Wide

MGCW-F8

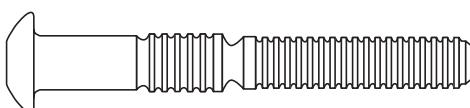
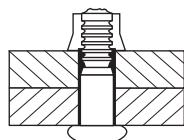


The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **l** = Length - = Min. and Max. grip range - **∅** = Hole diameter - **k** = Head thickness
d2 = Head diameter - = Minimum tensile strength - = Minimum shear strength


C6L® R Lockbolt - Steel

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



Stem : Steel | Head : Brazier

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		∅ (mm)	kN min	kN min	Clamp load kN		min-max (mm)	
												Standard 2LC-R6G	Flanged 3LC-2R6G
4,8 4,85 - 4,95	39,1	10,6	1,6									C6LB-R6-2G	1,6 - 4,8
	40,7	12,2	3,2									C6LB-R6-3G	3,2 - 6,4
	42,3	13,7	4,8									C6LB-R6-4G	4,8 - 7,9
	43,9	15,3	6,4									C6LB-R6-5G	6,4 - 9,5
	45,4	16,9	7,9									C6LB-R6-6G	7,9 - 11,1
	47,0	18,5	9,5									C6LB-R6-7G	9,5 - 12,7
	48,6	20,1	11,1									C6LB-R6-8G	11,1 - 14,3
	50,2	21,7	12,7									C6LB-R6-9G	12,7 - 15,9
	51,8	23,3	14,3									C6LB-R6-10G	14,3 - 17,5
	53,4	24,9	15,9									C6LB-R6-11G	15,9 - 19,1
	55,0	26,4	17,5									C6LB-R6-12G	17,5 - 20,6
	56,6	28,0	19,1									C6LB-R6-13G	19,1 - 22,2
	58,1	29,6	20,6									C6LB-R6-14G	20,6 - 23,8
	59,7	31,2	22,2									C6LB-R6-15G	22,2 - 25,4
	61,3	32,8	23,8									C6LB-R6-16G	23,8 - 27,0
	62,9	34,4	25,4	9,9	3,2	5,0 - 5,2	7,3	7,7		4,6		C6LB-R6-17G	25,4 - 28,6
	64,5	36,0	27,0									C6LB-R6-18G	27,0 - 30,2
	66,1	37,6	28,6									C6LB-R6-19G	28,6 - 31,8
	67,7	39,1	30,2									C6LB-R6-20G	30,2 - 33,3
	69,3	40,7	31,8									C6LB-R6-21G	31,8 - 34,9
	70,8	42,3	33,3									C6LB-R6-22G	33,3 - 36,5
	72,4	43,9	34,9									C6LB-R6-23G	34,9 - 38,1
	74,0	45,5	36,5									C6LB-R6-24G	36,5 - 39,7
	75,6	47,1	38,1									C6LB-R6-25G	38,1 - 41,3
	77,2	48,7	39,7									C6LB-R6-26G	39,7 - 42,9
	78,8	50,3	41,3									C6LB-R6-27G	41,3 - 44,5
	80,4	51,8	42,9									C6LB-R6-28G	42,9 - 46,0
	82,0	53,4	44,5									C6LB-R6-29G	44,5 - 47,6
	83,5	55,0	46,0									C6LB-R6-30G	46,0 - 49,2
	85,1	56,6	47,6									C6LB-R6-31G	47,6 - 50,8
	86,7	58,2	49,2									C6LB-R6-32G	49,2 - 52,4

Standard

Flanged

d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

∅ = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

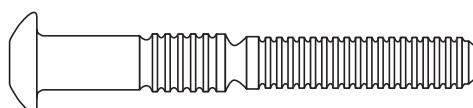
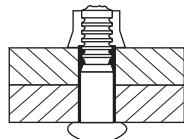
= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C6L® R Lockbolt - Steel

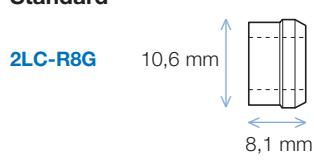
- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



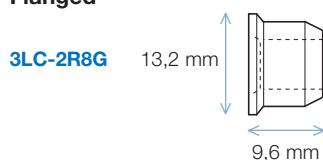
Stem : Steel | Head : Brazier

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		∅ (mm)	kN min	kN min	Clamp load kN		min-max (mm)	
												Standard 2LC-R8G	Flanged 3LC-2R8G
6,4 6,45 - 6,58	42,0	12,9	1,6									C6LB-R8-2G	1,6 - 4,8
	43,6	14,5	3,2									C6LB-R8-3G	3,2 - 6,4
	45,2	16,1	4,8									C6LB-R8-4G	4,8 - 7,9
	46,8	17,6	6,4									C6LB-R8-5G	6,4 - 9,5
	48,4	19,2	7,9									C6LB-R8-6G	7,9 - 11,1
	50,0	20,8	9,5									C6LB-R8-7G	9,5 - 12,7
	51,6	22,4	11,1									C6LB-R8-8G	11,1 - 14,3
	53,2	24,0	12,7									C6LB-R8-9G	12,7 - 15,9
	54,7	25,6	14,3									C6LB-R8-10G	14,3 - 17,5
	56,3	27,2	15,9									C6LB-R8-11G	15,9 - 19,1
	57,9	28,8	17,5									C6LB-R8-12G	17,5 - 20,6
	59,5	30,3	19,1									C6LB-R8-13G	19,1 - 22,2
	61,1	31,9	20,6									C6LB-R8-14G	20,6 - 23,8
	62,7	33,5	22,2									C6LB-R8-15G	22,2 - 25,4
	64,3	35,1	23,8									C6LB-R8-16G	23,8 - 27,0
	65,9	36,7	25,4	13,2	3,9	6,6 - 6,8	13,3	13,6		8,0		C6LB-R8-17G	25,4 - 28,6
	67,4	38,3	27,0									C6LB-R8-18G	27,0 - 30,2
	69,0	39,9	28,6									C6LB-R8-19G	28,6 - 31,8
	70,6	41,5	30,2									C6LB-R8-20G	30,2 - 33,3
	72,2	43,0	31,8									C6LB-R8-21G	31,8 - 34,9
	73,8	44,6	33,3									C6LB-R8-22G	33,3 - 36,5
	75,4	46,2	34,9									C6LB-R8-23G	34,9 - 38,1
	77,0	47,8	36,5									C6LB-R8-24G	36,5 - 39,7
	78,6	49,4	38,1									C6LB-R8-25G	38,1 - 41,3
	80,1	51,0	39,7									C6LB-R8-26G	39,7 - 42,9
	81,7	52,6	41,3									C6LB-R8-27G	41,3 - 44,5
	83,3	54,2	42,9									C6LB-R8-28G	42,9 - 46,0
	84,9	55,7	44,5									C6LB-R8-29G	44,5 - 47,6
	86,5	57,3	46,0									C6LB-R8-30G	46,0 - 49,2
	88,1	58,9	47,6									C6LB-R8-31G	47,6 - 50,8
	89,7	60,5	49,2									C6LB-R8-32G	49,2 - 52,4
													47,6 - 50,8

Standard



Flanged



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

∅ = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

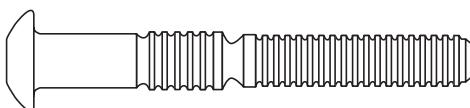
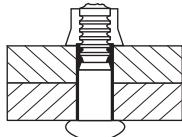
= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C6L® R Lockbolt - Steel

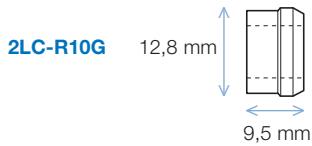
- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



Stem : Steel | Head : Brazier

	d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		Ø (mm)	kN min	kN min	Clamp load kN		min-max (mm)		
													Standard 2LC-R10G	Flanged 3LC-2R10G	
7,9 8,05 - 8,18	51,9	19,7	3,2										C6LB-R10-4G	3,2 - 9,5	1,2 - 7,5
	55,1	22,9	6,4										C6LB-R10-6G	6,4 - 12,7	4,4 - 10,7
	58,3	26,1	9,5										C6LB-R10-8G	9,5 - 15,9	7,5 - 13,9
	61,5	29,2	12,7										C6LB-R10-10G	12,7 - 19,1	10,7 - 17,1
	64,6	32,4	15,9										C6LB-R10-12G	15,9 - 22,2	13,9 - 20,2
	67,8	35,6	19,1										C6LB-R10-14G	19,1 - 25,4	17,1 - 23,4
	71,0	38,8	22,2										C6LB-R10-16G	22,2 - 28,6	20,2 - 26,6
	74,2	41,9	25,4	16,5	5,1	8,2 - 8,3		20,5		21,0			C6LB-R10-18G	25,4 - 31,8	23,4 - 29,8
	77,3	45,1	28,6										C6LB-R10-20G	28,6 - 34,9	26,6 - 32,9
	80,5	48,3	31,8										C6LB-R10-22G	31,8 - 38,1	29,8 - 36,1
	83,7	51,5	34,9										C6LB-R10-24G	34,9 - 41,3	32,9 - 39,3
	86,9	54,6	38,1										C6LB-R10-26G	38,1 - 44,5	36,1 - 42,5
	90,0	57,8	41,3										C6LB-R10-28G	41,3 - 47,6	39,3 - 45,6
	93,2	61,0	44,5										C6LB-R10-30G	44,5 - 50,8	42,5 - 48,8
	96,4	64,2	47,6										C6LB-R10-32G	47,6 - 54,0	45,6 - 52,0

Standard



Flanged



The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

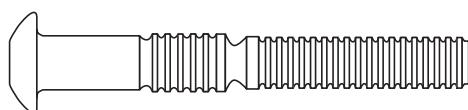
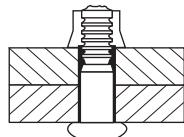
Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range



C6L® R Lockbolt - Steel

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



Stem : Steel | Head : Brazier

	d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		∅ (mm)	kN min	kN min	Clamp load kN		↓ min-max (mm)	
													Standard 2LC-R12G	Flanged 3LC-2R12G
9,5 9,65 - 9,78	57,3	21,7	3,2										C6LB-R12-4G	3,2 - 9,5
	60,5	24,8	6,4										C6LB-R12-6G	6,4 - 12,7
	63,7	28,0	9,5										C6LB-R12-8G	9,5 - 15,9
	66,8	31,2	12,7										C6LB-R12-10G	12,7 - 19,1
	70,0	34,4	15,9										C6LB-R12-12G	15,9 - 22,2
	73,2	37,5	19,1										C6LB-R12-14G	19,1 - 25,4
	76,4	40,7	22,2										C6LB-R12-16G	22,2 - 28,6
	79,5	43,9	25,4	19,8	6,3	9,8 - 9,9		28,9		30,4			C6LB-R12-18G	25,4 - 31,8
	82,7	47,1	28,6										C6LB-R12-20G	28,6 - 34,9
	85,9	50,2	31,8										C6LB-R12-22G	31,8 - 38,1
	89,1	53,4	34,9										C6LB-R12-24G	34,9 - 41,3
	92,2	56,6	38,1										C6LB-R12-26G	38,1 - 44,5
	95,4	59,8	41,3										C6LB-R12-28G	41,3 - 47,6
	98,6	62,9	44,5										C6LB-R12-30G	44,5 - 50,8
	101,8	66,1	47,6										C6LB-R12-32G	47,6 - 54,0

Standard



Flanged



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

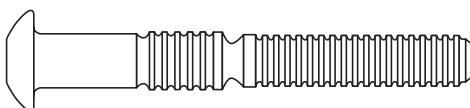
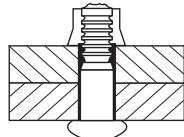
∅ = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)


C6L® U Lockbolt - Stainless steel

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



Stem : Stainless steel | Head : Brazier

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		kN min		kN min	Clamp load kN				
												min-max (mm)	Standard 2LC-2CU6	Flanged 3LC-2CU6
4,8 4,85 - 4,95	39,1	10,6	1,6									C6LB-U6-2	1,6 - 4,8	0,4 - 3,6
	40,7	12,2	3,2									C6LB-U6-3	3,2 - 6,4	2,0 - 5,2
	42,3	13,7	4,8									C6LB-U6-4	4,8 - 7,9	3,6 - 6,8
	43,9	15,3	6,4									C6LB-U6-5	6,4 - 9,5	5,2 - 8,4
	45,4	16,9	7,9									C6LB-U6-6	7,9 - 11,1	6,8 - 9,9
	47,0	18,5	9,5									C6LB-U6-7	9,5 - 12,7	8,4 - 11,5
	48,6	20,1	11,1									C6LB-U6-8	11,1 - 14,3	9,9 - 13,1
	50,2	21,7	12,7									C6LB-U6-9	12,7 - 15,9	11,5 - 14,7
	51,8	23,3	14,3									C6LB-U6-10	14,3 - 17,5	13,1 - 16,3
	53,4	24,9	15,9									C6LB-U6-11	15,9 - 19,1	14,7 - 17,9
	55,0	26,4	17,5									C6LB-U6-12	17,5 - 20,6	16,3 - 19,5
	56,6	28,0	19,1									C6LB-U6-13	19,1 - 22,2	17,9 - 21,1
	58,1	29,6	20,6									C6LB-U6-14	20,6 - 23,8	19,5 - 22,6
	59,7	31,2	22,2									C6LB-U6-15	22,2 - 25,4	21,1 - 24,2
	61,3	32,8	23,8									C6LB-U6-16	23,8 - 27,0	22,6 - 25,8
	62,9	34,4	25,4	9,9	3,2	5,0 - 5,2	6,5	8,9	4,6			C6LB-U6-17	25,4 - 28,6	24,2 - 27,4
	64,5	36,0	27,0									C6LB-U6-18	27,0 - 30,2	25,8 - 29,0
	66,1	37,6	28,6									C6LB-U6-19	28,6 - 31,8	27,4 - 30,6
	67,7	39,1	30,2									C6LB-U6-20	30,2 - 33,3	29,0 - 32,2
	69,3	40,7	31,8									C6LB-U6-21	31,8 - 34,9	30,6 - 33,8
	70,8	42,3	33,3									C6LB-U6-22	33,3 - 36,5	32,2 - 35,3
	72,4	43,9	34,9									C6LB-U6-23	34,9 - 38,1	33,8 - 36,9
	74,0	45,5	36,5									C6LB-U6-24	36,5 - 39,7	35,3 - 38,5
	75,6	47,1	38,1									C6LB-U6-25	38,1 - 41,3	36,9 - 40,1
	77,2	48,7	39,7									C6LB-U6-26	39,7 - 42,9	38,5 - 41,7
	78,8	50,3	41,3									C6LB-U6-27	41,3 - 44,5	40,1 - 43,3
	80,4	51,8	42,9									C6LB-U6-28	42,9 - 46,0	41,7 - 44,9
	82,0	53,4	44,5									C6LB-U6-29	44,5 - 47,6	43,3 - 46,5
	83,5	55,0	46,0									C6LB-U6-30	46,0 - 49,2	44,9 - 48,0
	85,1	56,6	47,6									C6LB-U6-31	47,6 - 50,8	46,5 - 49,6
	86,7	58,2	49,2									C6LB-U6-32	49,2 - 52,4	48,0 - 51,2

Standard

Flanged

d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - **↙ ↘** = Minimum tensile strength

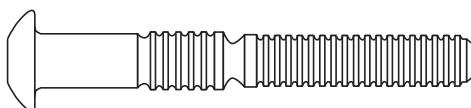
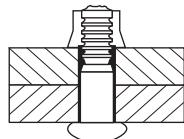
◀ ▶ = Minimum shear strength - **↓ ↑** = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C6L® U Lockbolt - Stainless steel

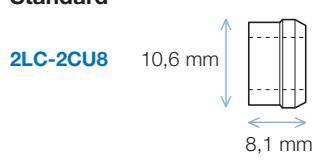
- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



Stem : Stainless steel | Head : Brazier

	d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		kN min		kN min	Clamp load kN			
												min-max (mm)	Standard 2LC-2CU8	Flanged 3LC-2CU8
6,4 6,45 - 6,58	42,0	12,9	1,6									C6LB-U8-2	1,6 - 4,8	0,0 - 3,2
	43,6	14,5	3,2									C6LB-U8-3	3,2 - 6,4	1,6 - 4,8
	45,2	16,1	4,8									C6LB-U8-4	4,8 - 7,9	3,2 - 6,3
	46,8	17,6	6,4									C6LB-U8-5	6,4 - 9,5	4,8 - 7,9
	48,4	19,2	7,9									C6LB-U8-6	7,9 - 11,1	6,3 - 9,5
	50,0	20,8	9,5									C6LB-U8-7	9,5 - 12,7	7,9 - 11,1
	51,6	22,4	11,1									C6LB-U8-8	11,1 - 14,3	9,5 - 12,7
	53,2	24,0	12,7									C6LB-U8-9	12,7 - 15,9	11,1 - 14,3
	54,7	25,6	14,3									C6LB-U8-10	14,3 - 17,5	12,7 - 15,9
	56,3	27,2	15,9									C6LB-U8-11	15,9 - 19,1	14,3 - 17,5
	57,9	28,8	17,5									C6LB-U8-12	17,5 - 20,6	15,9 - 19,0
	59,5	30,3	19,1									C6LB-U8-13	19,1 - 22,2	17,5 - 20,6
	61,1	31,9	20,6									C6LB-U8-14	20,6 - 23,8	19,0 - 22,2
	62,7	33,5	22,2									C6LB-U8-15	22,2 - 25,4	20,6 - 23,8
	64,3	35,1	23,8									C6LB-U8-16	23,8 - 27,0	22,2 - 25,4
	65,9	36,7	25,4	13,2	3,9	6,6 - 6,8		16,7		15,8	8,0	C6LB-U8-17	25,4 - 28,6	23,8 - 27,0
	67,4	38,3	27,0									C6LB-U8-18	27,0 - 30,2	25,4 - 28,6
	69,0	39,9	28,6									C6LB-U8-19	28,6 - 31,8	27,0 - 30,2
	70,6	41,5	30,2									C6LB-U8-20	30,2 - 33,3	28,6 - 31,7
	72,2	43,0	31,8									C6LB-U8-21	31,8 - 34,9	30,2 - 33,3
	73,8	44,6	33,3									C6LB-U8-22	33,3 - 36,5	31,7 - 34,9
	75,4	46,2	34,9									C6LB-U8-23	34,9 - 38,1	33,3 - 36,5
	77,0	47,8	36,5									C6LB-U8-24	36,5 - 39,7	34,9 - 38,1
	78,6	49,4	38,1									C6LB-U8-25	38,1 - 41,3	36,5 - 39,7
	80,1	51,0	39,7									C6LB-U8-26	39,7 - 42,9	38,1 - 41,3
	81,7	52,6	41,3									C6LB-U8-27	41,3 - 44,5	39,7 - 42,9
	83,3	54,2	42,9									C6LB-U8-28	42,9 - 46,0	41,3 - 44,4
	84,9	55,7	44,5									C6LB-U8-29	44,5 - 47,6	42,9 - 46,0
	86,5	57,3	46,0									C6LB-U8-30	46,0 - 49,2	44,4 - 47,6
	88,1	58,9	47,6									C6LB-U8-31	47,6 - 50,8	46 - 49,2
	89,7	60,5	49,2									C6LB-U8-32	49,2 - 52,4	47,6 - 50,8

Standard



Flanged



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

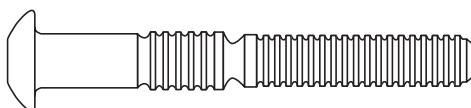
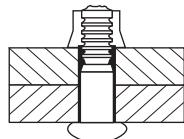
Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - **↙ ↘** = Minimum tensile strength

◀ ▶ = Minimum shear strength - **↓ ↑** = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)


C6L® U Lockbolt - Stainless steel

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



Stem : Stainless steel | Head : Brazier

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		Ø (mm)	kN min	kN min	Clamp load kN		min-max (mm)	
												Standard 2LC-2CU10	Flanged 3LC-2CU10
7,9 8,05 - 8,18	51,9	19,7	3,2									C6LB-U10-4	3,2 - 9,5
	55,1	22,9	6,4									C6LB-U10-6	6,4 - 12,7
	58,3	26,1	9,5									C6LB-U10-8	9,5 - 15,9
	61,5	29,2	12,7									C6LB-U10-10	12,7 - 19,1
	64,6	32,4	15,9									C6LB-U10-12	15,9 - 22,2
	67,8	35,6	19,1									C6LB-U10-14	19,1 - 25,4
	71,0	38,8	22,2									C6LB-U10-16	22,2 - 28,6
	74,2	41,9	25,4	16,5	5,1	8,2 - 8,3	18,9	24,6	12,5		C6LB-U10-18	25,4 - 31,8	
	77,3	45,1	28,6									C6LB-U10-20	28,6 - 34,9
	80,5	48,3	31,8									C6LB-U10-22	31,8 - 38,1
	83,7	51,5	34,9									C6LB-U10-24	34,9 - 41,3
	86,9	54,6	38,1									C6LB-U10-26	38,1 - 44,5
	90,0	57,8	41,3									C6LB-U10-28	41,3 - 47,6
	93,2	61,0	44,5									C6LB-U10-30	44,5 - 50,8
	96,4	64,2	47,6									C6LB-U10-32	47,6 - 54,0
													45,6 - 52,0

Standard

Flanged


The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

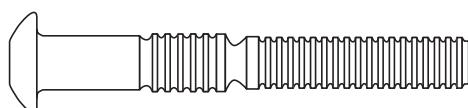
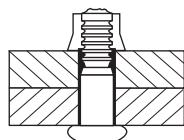
Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range



C6L® U Lockbolt - Stainless steel

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



Stem : Stainless steel | Head : Brazier

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		∅ (mm)	kN min	kN min	Clamp load kN		min-max (mm)	
												Standard 2LC-2CU12	Flanged 3LC-2CU12
9,5 9,65 - 9,78	57,3	21,7	3,2									C6LB-U12-4	3,2 - 9,5
	60,5	24,8	6,4									C6LB-U12-6	6,4 - 12,7
	63,7	28,0	9,5									C6LB-U12-8	9,5 - 15,9
	66,8	31,2	12,7									C6LB-U12-10	12,7 - 19,1
	70,0	34,4	15,9									C6LB-U12-12	15,9 - 22,2
	73,2	37,5	19,1									C6LB-U12-14	19,1 - 25,4
	76,4	40,7	22,2									C6LB-U12-16	22,2 - 28,6
	79,5	43,9	25,4	19,8	6,3	9,8 - 9,9	27,1		35,4	17,9	C6LB-U12-18	25,4 - 31,8	
	82,7	47,1	28,6									C6LB-U12-20	28,6 - 34,9
	85,9	50,2	31,8									C6LB-U12-22	31,8 - 38,1
	89,1	53,4	34,9									C6LB-U12-24	34,9 - 41,3
	92,2	56,6	38,1									C6LB-U12-26	38,1 - 44,5
	95,4	59,8	41,3									C6LB-U12-28	41,3 - 47,6
	98,6	62,9	44,5									C6LB-U12-30	44,5 - 50,8
	101,8	66,1	47,6									C6LB-U12-32	47,6 - 54,0

Standard



Flanged



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

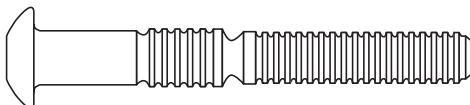
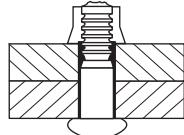
∅ = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)

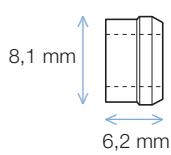
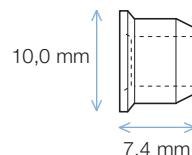

C6L® F Lockbolt - Aluminium 6061

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: Enables installation into non metallic materials
- The stems are also available in Aluminium 2024 Ref: C6LB-C6
- References of the corresponding collar: standard collar 2LC-F6, Flanged collar 3LC-F6
- For the values of clamping force and tensile/shear strength in Aluminium 2024, please consult-us



Stem : Aluminium 6061 | Head : Brazier

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		kN min		kN min	Clamp load kN				
												Standard LC-I6	Flanged 3LC-I6	
4,8 4,85 - 4,95	39,1	10,6	1,6									C6LB-F6-2	1,6 - 4,8	0,4 - 3,6
	40,7	12,2	3,2									C6LB-F6-3	3,2 - 6,4	2,0 - 5,2
	42,3	13,7	4,8									C6LB-F6-4	4,8 - 7,9	3,6 - 6,8
	43,9	15,3	6,4									C6LB-F6-5	6,4 - 9,5	5,2 - 8,4
	45,4	16,9	7,9									C6LB-F6-6	7,9 - 11,1	6,8 - 9,9
	47,0	18,5	9,5									C6LB-F6-7	9,5 - 12,7	8,4 - 11,5
	48,6	20,1	11,1									C6LB-F6-8	11,1 - 14,3	9,9 - 13,1
	50,2	21,7	12,7									C6LB-F6-9	12,7 - 15,9	11,5 - 14,7
	51,8	23,3	14,3									C6LB-F6-10	14,3 - 17,5	13,1 - 16,3
	53,4	24,9	15,9									C6LB-F6-11	15,9 - 19,1	14,7 - 17,9
	55,0	26,4	17,5									C6LB-F6-12	17,5 - 20,6	16,3 - 19,5
	56,6	28,0	19,1									C6LB-F6-13	19,1 - 22,2	17,9 - 21,1
	58,1	29,6	20,6									C6LB-F6-14	20,6 - 23,8	19,5 - 22,6
	59,7	31,2	22,2									C6LB-F6-15	22,2 - 25,4	21,1 - 24,2
	61,3	32,8	23,8									C6LB-F6-16	23,8 - 27,0	22,6 - 25,8
	62,9	34,4	25,4	9,9	3,2	5,0 - 5,2	2,4	3,4	1,6			C6LB-F6-17	25,4 - 28,6	24,2 - 27,4
	64,5	36,0	27,0									C6LB-F6-18	27,0 - 30,2	25,8 - 29,0
	66,1	37,6	28,6									C6LB-F6-19	28,6 - 31,8	27,4 - 30,6
	67,7	39,1	30,2									C6LB-F6-20	30,2 - 33,3	29,0 - 32,2
	69,3	40,7	31,8									C6LB-F6-21	31,8 - 34,9	30,6 - 33,8
	70,8	42,3	33,3									C6LB-F6-22	33,3 - 36,5	32,2 - 35,3
	72,4	43,9	34,9									C6LB-F6-23	34,9 - 38,1	33,8 - 36,9
	74,0	45,5	36,5									C6LB-F6-24	36,5 - 39,7	35,3 - 38,5
	75,6	47,1	38,1									C6LB-F6-25	38,1 - 41,3	36,9 - 40,1
	77,2	48,7	39,7									C6LB-F6-26	39,7 - 42,9	38,5 - 41,7
	78,8	50,3	41,3									C6LB-F6-27	41,3 - 44,5	40,1 - 43,3
	80,4	51,8	42,9									C6LB-F6-28	42,9 - 46,0	41,7 - 44,9
	82,0	53,4	44,5									C6LB-F6-29	44,5 - 47,6	43,3 - 46,5
	83,5	55,0	46,0									C6LB-F6-30	46,0 - 49,2	44,9 - 48,0
	85,1	56,6	47,6									C6LB-F6-31	47,6 - 50,8	46,5 - 49,6
	86,7	58,2	49,2									C6LB-F6-32	49,2 - 52,4	48,0 - 51,2

Standard
LC-I6

Flanged
3LC-I6

d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

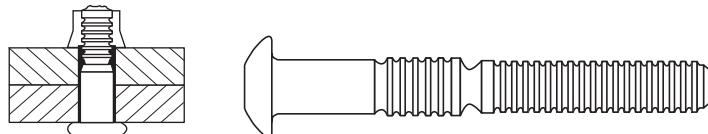
Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range



C6L® F Lockbolt - Aluminium 6061

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: Enables installation into non metallic materials
- The stems are also available in Aluminium 2024 Ref: C6LB-C8
- References of the corresponding collar: standard collar 2LC-F8, Flanged collar 3LC-F8
- For the values of clamping force and tensile/shear strength in Aluminium 2024, please consult-us

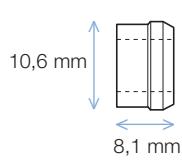


Stem : Aluminium 6061 | Head : Brazier

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		kN min		kN min	Clamp load kN		min-max (mm)	
												Standard LC-I8	Flanged 3LC-I8
6,4 6,45 - 6,58	42,0	12,9	1,6									C6LB-F8-2	1,6 - 4,8
	43,6	14,5	3,2									C6LB-F8-3	3,2 - 6,4
	45,2	16,1	4,8									C6LB-F8-4	4,8 - 7,9
	46,8	17,6	6,4									C6LB-F8-5	6,4 - 9,5
	48,4	19,2	7,9									C6LB-F8-6	7,9 - 11,1
	50,0	20,8	9,5									C6LB-F8-7	9,5 - 12,7
	51,6	22,4	11,1									C6LB-F8-8	11,1 - 14,3
	53,2	24,0	12,7									C6LB-F8-9	12,7 - 15,9
	54,7	25,6	14,3									C6LB-F8-10	14,3 - 17,5
	56,3	27,2	15,9									C6LB-F8-11	15,9 - 19,1
	57,9	28,8	17,5									C6LB-F8-12	17,5 - 20,6
	59,5	30,3	19,1									C6LB-F8-13	19,1 - 22,2
	61,1	31,9	20,6									C6LB-F8-14	20,6 - 23,8
	62,7	33,5	22,2									C6LB-F8-15	22,2 - 25,4
	64,3	35,1	23,8									C6LB-F8-16	23,8 - 27,0
	65,9	36,7	25,4	13,2	3,9	6,6 - 6,8	4,3		6,1	2,8		C6LB-F8-17	25,4 - 28,6
	67,4	38,3	27,0									C6LB-F8-18	27,0 - 30,2
	69,0	39,9	28,6									C6LB-F8-19	28,6 - 31,8
	70,6	41,5	30,2									C6LB-F8-20	30,2 - 33,3
	72,2	43,0	31,8									C6LB-F8-21	31,8 - 34,9
	73,8	44,6	33,3									C6LB-F8-22	33,3 - 36,5
	75,4	46,2	34,9									C6LB-F8-23	34,9 - 38,1
	77,0	47,8	36,5									C6LB-F8-24	36,5 - 39,7
	78,6	49,4	38,1									C6LB-F8-25	38,1 - 41,3
	80,1	51,0	39,7									C6LB-F8-26	39,7 - 42,9
	81,7	52,6	41,3									C6LB-F8-27	41,3 - 44,5
	83,3	54,2	42,9									C6LB-F8-28	42,9 - 46,0
	84,9	55,7	44,5									C6LB-F8-29	44,5 - 47,6
	86,5	57,3	46,0									C6LB-F8-30	46,0 - 49,2
	88,1	58,9	47,6									C6LB-F8-31	47,6 - 50,8
	89,7	60,5	49,2									C6LB-F8-32	49,2 - 52,4
													47,6 - 50,8

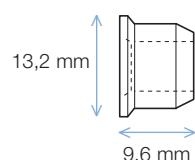
Standard

LC-I8



Flanged

3LC-I8



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

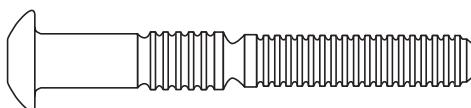
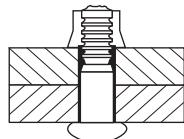
= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C6L® F Lockbolt - Aluminium 6061

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: Enables installation into non metallic materials
- The stems are also available in Aluminium 2024 Ref: C6LB-C10
- References of the corresponding collar: standard collar 2LC-F10, Flanged collar 3LC-F10
- For the values of clamping force and tensile/shear strength in Aluminium 2024, please consult-us



Stem : Aluminium 6061 | Head : Brazier

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)	\emptyset (mm)	kN min	kN min	Effort de serrage kN		min-max (mm)	
											Standard LC-I10	Flanged 3LC-I10
7,9 8,05 - 8,18	51,9	19,7	3,2								C6LB-F10-4	3,2 - 9,5
	55,1	22,9	6,4								C6LB-F10-6	6,4 - 12,7
	58,3	26,1	9,5								C6LB-F10-8	9,5 - 15,9
	61,5	29,2	12,7								C6LB-F10-10	12,7 - 19,1
	64,6	32,4	15,9								C6LB-F10-12	15,9 - 22,2
	67,8	35,6	19,1								C6LB-F10-14	19,1 - 25,4
	71,0	38,8	22,2								C6LB-F10-16	22,2 - 28,6
	74,2	41,9	25,4	16,5	5,1	8,2 - 8,3	6,9	9,5	4,3		C6LB-F10-18	25,4 - 31,8
	77,3	45,1	28,6								C6LB-F10-20	28,6 - 34,9
	80,5	48,3	31,8								C6LB-F10-22	31,8 - 38,1
	83,7	51,5	34,9								C6LB-F10-24	34,9 - 41,3
	86,9	54,6	38,1								C6LB-F10-26	38,1 - 44,5
	90,0	57,8	41,3								C6LB-F10-28	41,3 - 47,6
	93,2	61,0	44,5								C6LB-F10-30	44,5 - 50,8
	96,4	64,2	47,6								C6LB-F10-32	47,6 - 54,0
												45,6 - 52,0

Standard



Flanged



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

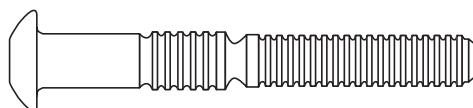
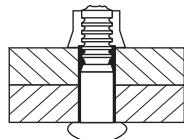
\emptyset = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range



C6L® F Lockbolt - Aluminium 6061

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: Enables installation into non metallic materials
- The stems are also available in Aluminium 2024 Ref: C6LB-C12
- References of the corresponding collar: standard collar 2LC-F12, Flanged collar 3LC-F12
- For the values of clamping force and tensile/shear strength in Aluminium 2024, please consult-us



Stem : Aluminium 6061 | Head : Brazier

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)	\emptyset (mm)	kN min	kN min	Clamp load kN	min-max (mm)	
										Standard LC-I12	Flanged 3LC-I12
9,5 9,65 - 9,78	57,3	21,7	3,2							C6LB-F12-4	3,2 - 9,5
	60,5	24,8	6,4							C6LB-F12-6	6,4 - 12,7
	63,7	28,0	9,5							C6LB-F12-8	9,5 - 15,9
	66,8	31,2	12,7							C6LB-F12-10	12,7 - 19,1
	70,0	34,4	15,9							C6LB-F12-12	15,9 - 22,2
	73,2	37,5	19,1							C6LB-F12-14	19,1 - 25,4
	76,4	40,7	22,2							C6LB-F12-16	22,2 - 28,6
	79,5	43,9	25,4	19,8	6,3	9,9	10,7	13,6	6,1	C6LB-F12-18	25,4 - 31,8
	82,7	47,1	28,6							C6LB-F12-20	28,6 - 34,9
	85,9	50,2	31,8							C6LB-F12-22	31,8 - 38,1
	89,1	53,4	34,9							C6LB-F12-24	34,9 - 41,3
	92,2	56,6	38,1							C6LB-F12-26	38,1 - 44,5
	95,4	59,8	41,3							C6LB-F12-28	41,3 - 47,6
	98,6	62,9	44,5							C6LB-F12-30	44,5 - 50,8
	101,8	66,1	47,6							C6LB-F12-32	47,6 - 54,0

Standard



Flanged



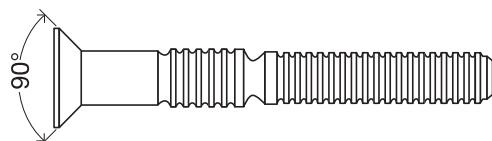
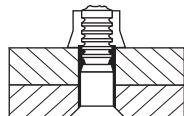
d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

\emptyset = Hole diameter - **k** = Head thickness - **d2** = Head diameter - **↙ ↘** = Minimum tensile strength

◀ ▶ = Minimum shear strength - **↑ ↓** = Min. and Max. grip range

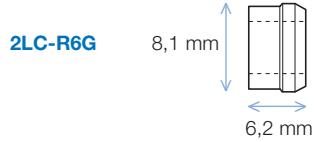
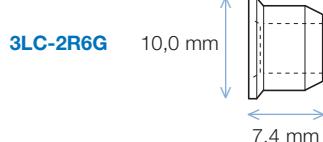

C6L® 90R Lockbolt - Steel

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



Stem : Steel | Head : Countersunk

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		∅ (mm)	kN min	kN min	Clamp load kN		min-max (mm)	
												Standard 2LC-R6G	Flanged 3LC-2R6G
4,8 4,85 - 4,95	39,9	12,2	3,2									C6L90-R6-3G	3,2 - 6,4
	41,5	13,7	4,8									C6L90-R6-4G	4,8 - 7,9
	43,1	15,3	6,4									C6L90-R6-5G	6,4 - 9,5
	44,7	16,9	7,9									C6L90-R6-6G	7,9 - 11,1
	46,3	18,5	9,5									C6L90-R6-7G	9,5 - 12,7
	47,9	20,1	11,1									C6L90-R6-8G	11,1 - 14,3
	49,5	21,7	12,7									C6L90-R6-9G	12,7 - 15,9
	51,0	23,3	14,3									C6L90-R6-10G	14,3 - 17,5
	52,6	24,9	15,9									C6L90-R6-11G	15,9 - 19,1
	54,2	26,4	17,5									C6L90-R6-12G	17,5 - 20,6
	55,8	28,0	19,1									C6L90-R6-13G	19,1 - 22,2
	57,4	29,6	20,6									C6L90-R6-14G	20,6 - 23,8
	59,0	31,2	22,2									C6L90-R6-15G	22,2 - 25,4
	60,6	32,8	23,8									C6L90-R6-16G	23,8 - 27,0
	62,2	34,4	25,4	9,1	2,2	5,0 - 5,2	7,3	7,7	4,6			C6L90-R6-17G	25,4 - 28,6
	63,7	36,0	27,0									C6L90-R6-18G	27,0 - 30,2
	65,3	37,6	28,6									C6L90-R6-19G	28,6 - 31,8
	66,9	39,1	30,2									C6L90-R6-20G	30,2 - 33,3
	68,5	40,7	31,8									C6L90-R6-21G	31,8 - 34,9
	70,1	42,3	33,3									C6L90-R6-22G	33,3 - 36,5
	71,7	43,9	34,9									C6L90-R6-23G	34,9 - 38,1
	73,3	45,5	36,5									C6L90-R6-24G	36,5 - 39,7
	74,9	47,1	38,1									C6L90-R6-25G	38,1 - 41,3
	76,4	48,7	39,7									C6L90-R6-26G	39,7 - 42,9
	78,0	50,3	41,3									C6L90-R6-27G	41,3 - 44,5
	79,6	51,8	42,9									C6L90-R6-28G	42,9 - 46,0
	81,2	53,4	44,5									C6L90-R6-29G	44,5 - 47,6
	82,8	55,0	46,0									C6L90-R6-30G	46,0 - 49,2
	84,4	56,6	47,6									C6L90-R6-31G	47,6 - 50,8
	86,0	58,2	49,2									C6L90-R6-32G	49,2 - 52,4

Standard

Flanged

d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

∅ = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

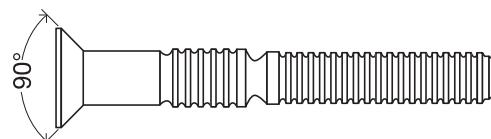
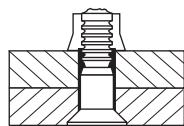
= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C6L® 90R Lockbolt - Steel

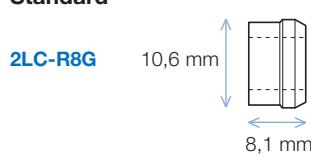
- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



Stem : Steel | Head : Countersunk

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		Ø (mm)	kN min	kN min	Clamp load kN		min-max (mm)	
												Standard 2LC-R8G	Flanged 3LC-2R8G
6,4 6,45 - 6,58	43,1	14,5	3,2									C6L90-R8-3G	3,2 - 6,4
	44,7	16,1	4,8									C6L90-R8-4G	4,8 - 7,9
	46,3	17,6	6,4									C6L90-R8-5G	6,4 - 9,5
	47,9	19,2	7,9									C6L90-R8-6G	7,9 - 11,1
	49,5	20,8	9,5									C6L90-R8-7G	9,5 - 12,7
	51,0	22,4	11,1									C6L90-R8-8G	11,1 - 14,3
	52,6	24,0	12,7									C6L90-R8-9G	12,7 - 15,9
	54,2	25,6	14,3									C6L90-R8-10G	14,3 - 17,5
	55,8	27,2	15,9									C6L90-R8-11G	15,9 - 19,1
	57,4	28,8	17,5									C6L90-R8-12G	17,5 - 20,6
	59,0	30,3	19,1									C6L90-R8-13G	19,1 - 22,2
	60,6	31,9	20,6									C6L90-R8-14G	20,6 - 23,8
	62,2	33,5	22,2									C6L90-R8-15G	22,2 - 25,4
	63,7	35,1	23,8									C6L90-R8-16G	23,8 - 27,0
	65,3	36,7	25,4	12,1	2,9	6,6 - 6,8	13,3	13,6	8,0			C6L90-R8-17G	25,4 - 28,6
	66,9	38,3	27,0									C6L90-R8-18G	27,0 - 30,2
	68,5	39,9	28,6									C6L90-R8-19G	28,6 - 31,8
	70,1	41,5	30,2									C6L90-R8-20G	30,2 - 33,3
	71,7	43,0	31,8									C6L90-R8-21G	31,8 - 34,9
	73,3	44,6	33,3									C6L90-R8-22G	33,3 - 36,5
	74,9	46,2	34,9									C6L90-R8-23G	34,9 - 38,1
	76,4	47,8	36,5									C6L90-R8-24G	36,5 - 39,7
	78,0	49,4	38,1									C6L90-R8-25G	38,1 - 41,3
	79,6	51,0	39,7									C6L90-R8-26G	39,7 - 42,9
	81,2	52,6	41,3									C6L90-R8-27G	41,3 - 44,5
	82,8	54,2	42,9									C6L90-R8-28G	42,9 - 46,0
	84,4	55,7	44,5									C6L90-R8-29G	44,5 - 47,6
	86,0	57,3	46,0									C6L90-R8-30G	46,0 - 49,2
	87,6	58,9	47,6									C6L90-R8-31G	47,6 - 50,8
	89,1	60,5	49,2									C6L90-R8-32G	49,2 - 52,4

Standard



Flanged



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

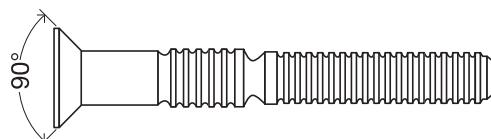
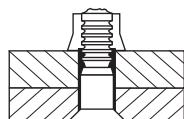
Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)

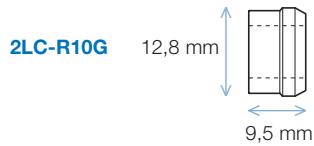

C6L® 90R Lockbolt - Steel

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



Stem : Steel | Head : Countersunk

v x d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		Ø (mm)	kN min	kN min	Clamp load kN		↓ min-max (mm)		
												Standard 2LC-R10G	Flanged 3LC-2R10G	
7,9 8,05 - 8,18	53,0	20,9	4,3									C6L90-R10-4G	3,2 - 9,5	
	55,0	24,1	6,4									C6L90-R10-6G	6,4 - 12,7	
	58,2	27,2	9,5									C6L90-R10-8G	9,5 - 15,9	
	61,4	30,4	12,7									C6L90-R10-10G	12,7 - 19,1	
	64,6	33,6	15,9									C6L90-R10-12G	15,9 - 22,2	
	67,7	36,8	19,1									C6L90-R10-14G	19,1 - 25,4	
	70,9	39,9	22,2									C6L90-R10-16G	22,2 - 28,6	
	74,1	43,1	25,4	15,1	3,6		8,2 - 8,3	20,5	21,0	12,5		C6L90-R10-18G	25,4 - 31,8	
	77,3	46,3	28,6									C6L90-R10-20G	28,6 - 34,9	
	80,4	49,5	31,8									C6L90-R10-22G	31,8 - 38,1	
	83,6	52,6	34,9									C6L90-R10-24G	34,9 - 41,3	
	86,8	55,8	38,1									C6L90-R10-26G	38,1 - 44,5	
	90,0	59,0	41,3									C6L90-R10-28G	41,3 - 47,6	
	93,1	62,2	44,5									C6L90-R10-30G	44,5 - 50,8	
	96,3	64,2	47,6									C6L90-R10-32G	47,6 - 54,0	
														45,6 - 52,0

Standard

Flanged


The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

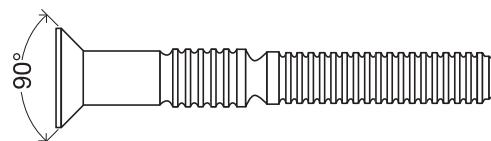
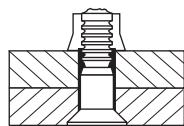
Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range



C6L® 90R Lockbolt - Steel

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



Stem : Steel | Head : Countersunk

v x d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		∅ (mm)	kN min	kN min	Clamp load kN		↓ min-max (mm)		
												Standard 2LC-R12G	Flanged 3LC-2R12G	
9,5 9,65 - 9,78	60,6	24,8	6,4									C6L90-R12-6G	6,4 - 12,7	4,0 - 10,3
	63,8	28,0	9,5									C6L90-R12-8G	9,5 - 15,9	7,1 - 13,5
	66,9	31,2	12,7									C6L90-R12-10G	12,7 - 19,1	10,3 - 16,7
	70,1	34,4	15,9									C6L90-R12-12G	15,9 - 22,2	13,5 - 19,8
	73,3	37,5	19,1									C6L90-R12-14G	19,1 - 25,4	16,7 - 23,0
	76,5	40,7	22,2									C6L90-R12-16G	22,2 - 28,6	19,8 - 26,2
	79,6	43,9	25,4	18,1	4,3		9,9	28,9	30,4	17,9		C6L90-R12-18G	25,4 - 31,8	23,0 - 29,4
	82,8	47,1	28,6									C6L90-R12-20G	28,6 - 34,9	26,2 - 32,5
	86,0	50,2	31,8									C6L90-R12-22G	31,8 - 38,1	29,4 - 35,7
	89,2	53,4	34,9									C6L90-R12-24G	34,9 - 41,3	32,5 - 38,9
	92,3	56,6	38,1									C6L90-R12-26G	38,1 - 44,5	35,7 - 42,1
	95,5	59,8	41,3									C6L90-R12-28G	41,3 - 47,6	38,9 - 45,2
	98,7	62,9	44,5									C6L90-R12-30G	44,5 - 50,8	42,1 - 48,4
	101,9	66,1	47,6									C6L90-R12-32G	47,6 - 54,0	45,2 - 51,6

Standard



Flanged



The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

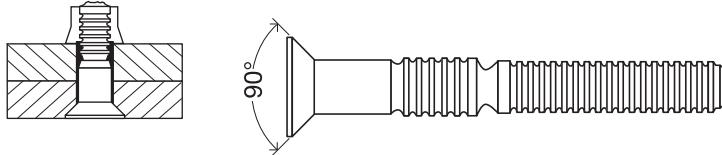
∅ = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range



C6L® 90U Lockbolt - Stainless steel

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: Enables installation into non metallic materials
- The stems are also available in Steel Ref: C6L90-R6
- References of the corresponding collar: standard collar 2LC-R6G, Flanged collar 3LC-2R6G
- For the values of clamping force and tensile/shear strength in Steel, please consult-us



Stem : Stainless steel | Head : Countersunk

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		kN min	kN min	Clamp load kN		min-max (mm)	
											Standard 2LC-2CU6	Flanged 3LC-2CU6
4,8 4,85 - 4,95	39,9	12,2	3,2							C6L90-U6-3	3,2 - 6,4	2,0 - 5,2
	41,5	13,7	4,8							C6L90-U6-4	4,8 - 7,9	3,6 - 6,8
	43,1	15,3	6,4							C6L90-U6-5	6,4 - 9,5	5,2 - 8,4
	44,7	16,9	7,9							C6L90-U6-6	7,9 - 11,1	6,8 - 9,9
	46,3	18,5	9,5							C6L90-U6-7	9,5 - 12,7	8,4 - 11,5
	47,9	20,1	11,1							C6L90-U6-8	11,1 - 14,3	9,9 - 13,1
	49,5	21,7	12,7							C6L90-U6-9	12,7 - 15,9	11,5 - 14,7
	51,0	23,3	14,3							C6L90-U6-10	14,3 - 17,5	13,1 - 16,3
	52,6	24,9	15,9							C6L90-U6-11	15,9 - 19,1	14,7 - 17,9
	54,2	26,4	17,5							C6L90-U6-12	17,5 - 20,6	16,3 - 19,5
	55,8	28,0	19,1							C6L90-U6-13	19,1 - 22,2	17,9 - 21,1
	57,4	29,6	20,6							C6L90-U6-14	20,6 - 23,8	19,5 - 22,6
	59,0	31,2	22,2							C6L90-U6-15	22,2 - 25,4	21,1 - 24,2
	60,6	32,8	23,8							C6L90-U6-16	23,8 - 27,0	22,6 - 25,8
	62,2	34,4	25,4							C6L90-U6-17	25,4 - 28,6	24,2 - 27,4
	63,7	36,0	27,0	9,1	2,2	5,0 - 5,2	6,5	8,9	4,6	C6L90-U6-18	27,0 - 30,2	25,8 - 29,0
	65,3	37,6	28,6							C6L90-U6-19	28,6 - 31,8	27,4 - 30,6
	66,9	39,1	30,2							C6L90-U6-20	30,2 - 33,3	29,0 - 32,2
	68,5	40,7	31,8							C6L90-U6-21	31,8 - 34,9	30,6 - 33,8
	70,1	42,3	33,3							C6L90-U6-22	33,3 - 36,5	32,2 - 35,3
	71,7	43,9	34,9							C6L90-U6-23	34,9 - 38,1	33,8 - 36,9
	73,3	45,5	36,5							C6L90-U6-24	36,5 - 39,7	35,3 - 38,5
	74,9	47,1	38,1							C6L90-U6-25	38,1 - 41,3	36,9 - 40,1
	76,4	48,7	39,7							C6L90-U6-26	39,7 - 42,9	38,5 - 41,7
	78,0	50,3	41,3							C6L90-U6-27	41,3 - 44,5	40,1 - 43,3
	79,6	51,8	42,9							C6L90-U6-28	42,9 - 46,0	41,7 - 44,9
	81,2	53,4	44,5							C6L90-U6-29	44,5 - 47,6	43,3 - 46,5
	82,8	55,0	46,0							C6L90-U6-30	46,0 - 49,2	44,9 - 48,0
	84,4	56,6	47,6							C6L90-U6-31	47,6 - 50,8	46,5 - 49,6
	86,0	58,2	49,2							C6L90-U6-32	49,2 - 52,4	48,0 - 51,2

Standard



Flanged



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

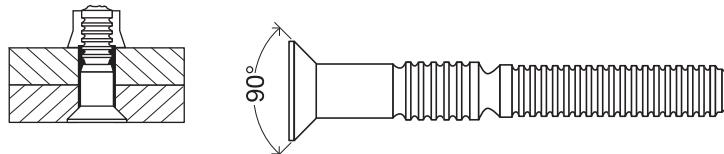
= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C6L® 90U Lockbolt - Stainless steel

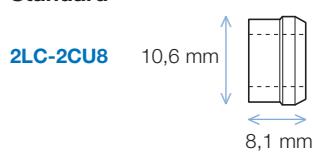
- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: Enables installation into non metallic materials
- The stems are also available in Steel Ref: C6L90-R8
- References of the corresponding collar: standard collar 2LC-R8G, Flanged collar 3LC-2R8G
- For the values of clamping force and tensile/shear strength in Steel, please consult-us



Stem : Stainless steel | Head : Countersunk

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		kN min	kN min	Clamp load kN	min-max (mm)	
										Standard 2LC-2CU8	Flanged 3LC-2CU8
6,4 6,45 - 6,58	43,1	14,5	3,2							C6L90-U8-3	3,2 - 6,4
	44,7	16,1	4,8							C6L90-U8-4	4,8 - 7,9
	46,3	17,6	6,4							C6L90-U8-5	6,4 - 9,5
	47,9	19,2	7,9							C6L90-U8-6	7,9 - 11,1
	49,5	20,8	9,5							C6L90-U8-7	9,5 - 12,7
	51,0	22,4	11,1							C6L90-U8-8	11,1 - 14,3
	52,6	24,0	12,7							C6L90-U8-9	12,7 - 15,9
	54,2	25,6	14,3							C6L90-U8-10	14,3 - 17,5
	55,8	27,2	15,9							C6L90-U8-11	15,9 - 19,1
	57,4	28,8	17,5							C6L90-U8-12	17,5 - 20,6
	59,0	30,3	19,1							C6L90-U8-13	19,1 - 22,2
	60,6	31,9	20,6							C6L90-U8-14	20,6 - 23,8
	62,2	33,5	22,2							C6L90-U8-15	22,2 - 25,4
	63,7	35,1	23,8							C6L90-U8-16	23,8 - 27,0
	65,3	36,7	25,4	12,1	2,9	6,6 - 6,8	16,7	15,8	8,0	C6L90-U8-17	25,4 - 28,6
	66,9	38,3	27,0							C6L90-U8-18	27,0 - 30,2
	68,5	39,9	28,6							C6L90-U8-19	28,6 - 31,8
	70,1	41,5	30,2							C6L90-U8-20	30,2 - 33,3
	71,7	43,0	31,8							C6L90-U8-21	31,8 - 34,9
	73,3	44,6	33,3							C6L90-U8-22	33,3 - 36,5
	74,9	46,2	34,9							C6L90-U8-23	34,9 - 38,1
	76,4	47,8	36,5							C6L90-U8-24	36,5 - 39,7
	78,0	49,4	38,1							C6L90-U8-25	38,1 - 41,3
	79,6	51,0	39,7							C6L90-U8-26	39,7 - 42,9
	81,2	52,6	41,3							C6L90-U8-27	41,3 - 44,5
	82,8	54,2	42,9							C6L90-U8-28	42,9 - 46,0
	84,4	55,7	44,5							C6L90-U8-29	44,5 - 47,6
	86,0	57,3	46,0							C6L90-U8-30	46,0 - 49,2
	87,6	58,9	47,6							C6L90-U8-31	47,6 - 50,8
	89,1	60,5	49,2							C6L90-U8-32	49,2 - 52,4

Standard



Flanged



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

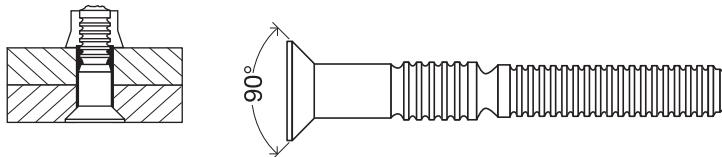
Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)


C6L® 90U Lockbolt - Stainless steel

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: Enables installation into non metallic materials
- The stems are also available in Steel Ref: C6L90-R10
- References of the corresponding collar: standard collar 2LC-R10G, Flanged collar 3LC-2R10G
- For the values of clamping force and tensile/shear strength in Steel, please consult-us



Stem : Stainless steel | Head : Countersunk

v x d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		∅ (mm)	kN min	kN min	Clamp load kN		↓ min-max (mm)		
												Standard 2LC-2CU10	Flanged 3LC-2CU10	
7,9 8,05 - 8,18	53,0	20,9	4,3									C6L90-U10-4	3,2 - 9,5	1,2 - 7,5
	55,0	24,1	6,4									C6L90-U10-6	6,4 - 12,7	4,4 - 10,7
	58,2	27,2	9,5									C6L90-U10-8	9,5 - 15,9	7,5 - 13,9
	61,4	30,4	12,7									C6L90-U10-10	12,7 - 19,1	10,7 - 17,1
	64,6	33,6	15,9									C6L90-U10-12	15,9 - 22,2	13,9 - 20,2
	67,7	36,8	19,1									C6L90-U10-14	19,1 - 25,4	17,1 - 23,4
	70,9	39,9	22,2									C6L90-U10-16	22,2 - 28,6	20,2 - 26,6
	74,1	43,1	25,4	15,1	3,6		8,2 - 8,3	18,9	24,6	12,5		C6L90-U10-18	25,4 - 31,8	23,4 - 29,8
	77,3	46,3	28,6									C6L90-U10-20	28,6 - 34,9	26,6 - 32,9
	80,4	49,5	31,8									C6L90-U10-22	31,8 - 38,1	29,8 - 36,1
	83,6	52,6	34,9									C6L90-U10-24	34,9 - 41,3	32,9 - 39,3
	86,8	55,8	38,1									C6L90-U10-26	38,1 - 44,5	36,1 - 42,5
	90,0	59,0	41,3									C6L90-U10-28	41,3 - 47,6	39,3 - 45,6
	93,1	62,2	44,5									C6L90-U10-30	44,5 - 50,8	42,5 - 48,8
	96,3	64,2	47,6									C6L90-U10-32	47,6 - 54,0	45,6 - 52,0

Standard

Flanged


The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

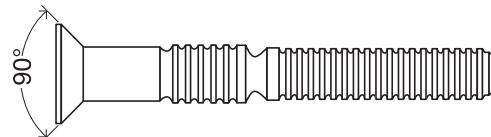
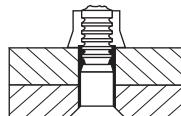
∅ = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range



C6L® 90U Lockbolt - Stainless steel

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: Enables installation into non metallic materials
- The stems are also available in Steel Ref: C6L90-R12
- References of the corresponding collar: standard collar 2LC-R12G, Flanged collar 3LC-2R12G
- For the values of clamping force and tensile/shear strength in Steel, please consult-us



Stem : Stainless steel | Head : Countersunk

v x d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		∅ (mm)	kN min	kN min	Clamp load kN		min-max (mm)	
												Standard 2LC-2CU12	Flanged 3LC-2CU12
9,5 9,65 - 9,78	60,6	24,8	6,4								C6L90-U12-6	6,4 - 12,7	4,0 - 10,3
	63,8	28,0	9,5								C6L90-U12-8	9,5 - 15,9	7,1 - 13,5
	66,9	31,2	12,7								C6L90-U12-10	12,7 - 19,1	10,3 - 16,7
	70,1	34,4	15,9								C6L90-U12-12	15,9 - 22,2	13,5 - 19,8
	73,3	37,5	19,1								C6L90-U12-14	19,1 - 25,4	16,7 - 23,0
	76,5	40,7	22,2								C6L90-U12-16	22,2 - 28,6	19,8 - 26,2
	79,6	43,9	25,4	18,1	4,3	9,8 - 9,9	27,1	35,4	17,9		C6L90-U12-18	25,4 - 31,8	23,0 - 29,4
	82,8	47,1	28,6								C6L90-U12-20	28,6 - 34,9	26,2 - 32,5
	86,0	50,2	31,8								C6L90-U12-22	31,8 - 38,1	29,4 - 35,7
	89,2	53,4	34,9								C6L90-U12-24	34,9 - 41,3	32,5 - 38,9
	92,3	56,6	38,1								C6L90-U12-26	38,1 - 44,5	35,7 - 42,1
	95,5	59,8	41,3								C6L90-U12-28	41,3 - 47,6	38,9 - 45,2
	98,7	62,9	44,5								C6L90-U12-30	44,5 - 50,8	42,1 - 48,4
	101,9	66,1	47,6								C6L90-U12-32	47,6 - 54,0	45,2 - 51,6

Standard



Flanged



The articles codes in blue correspond to the core range (most commonly used references)

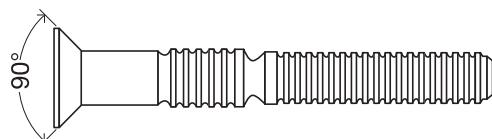
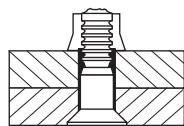
d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

∅ = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range

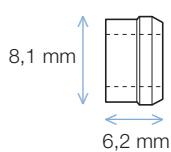
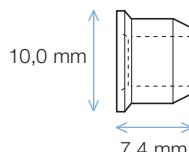

C6L® 90C Lockbolt - Aluminium

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



Stem : Aluminium | Head : Countersunk

v x d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		∅ (mm)	kN min	kN min	Clamp load kN		↓ min-max (mm)	
												Standard 2LC-F6	Flanged 3LC-F6
4,8 4,85 - 4,95	39,9	12,2	3,2									C6L90-C6-3	3,2 - 6,4
	41,5	13,7	4,8									C6L90-C6-4	4,8 - 7,9
	43,1	15,3	6,4									C6L90-C6-5	6,4 - 9,5
	44,7	16,9	7,9									C6L90-C6-6	7,9 - 11,1
	46,3	18,5	9,5									C6L90-C6-7	9,5 - 12,7
	47,9	20,1	11,1									C6L90-C6-8	11,1 - 14,3
	49,5	21,7	12,7									C6L90-C6-9	12,7 - 15,9
	51,0	23,3	14,3									C6L90-C6-10	14,3 - 17,5
	52,6	24,9	15,9									C6L90-C6-11	15,9 - 19,1
	54,2	26,4	17,5									C6L90-C6-12	17,5 - 20,6
	55,8	28,0	19,1									C6L90-C6-13	19,1 - 22,2
	57,4	29,6	20,6									C6L90-C6-14	20,6 - 23,8
	59,0	31,2	22,2									C6L90-C6-15	22,2 - 25,4
	60,6	32,8	23,8									C6L90-C6-16	23,8 - 27,0
	62,2	34,4	25,4	9,1	2,2	5,0 - 5,2	4,4	4,7	2,4			C6L90-C6-17	25,4 - 28,6
	63,7	36,0	27,0									C6L90-C6-18	27,0 - 30,2
	65,3	37,6	28,6									C6L90-C6-19	28,6 - 31,8
	66,9	39,1	30,2									C6L90-C6-20	30,2 - 33,3
	68,5	40,7	31,8									C6L90-C6-21	31,8 - 34,9
	70,1	42,3	33,3									C6L90-C6-22	33,3 - 36,5
	71,7	43,9	34,9									C6L90-C6-23	34,9 - 38,1
	73,3	45,5	36,5									C6L90-C6-24	36,5 - 39,7
	74,9	47,1	38,1									C6L90-C6-25	38,1 - 41,3
	76,4	48,7	39,7									C6L90-C6-26	39,7 - 42,9
	78,0	50,3	41,3									C6L90-C6-27	41,3 - 44,5
	79,6	51,8	42,9									C6L90-C6-28	42,9 - 46,0
	81,2	53,4	44,5									C6L90-C6-29	44,5 - 47,6
	82,8	55,0	46,0									C6L90-C6-30	46,0 - 49,2
	84,4	56,6	47,6									C6L90-C6-31	47,6 - 50,8
	86,0	58,2	49,2									C6L90-C6-32	49,2 - 52,4

Standard
2LC-F6

Flanged
3LC-F6

d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

∅ = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

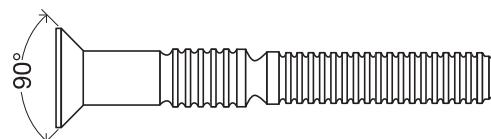
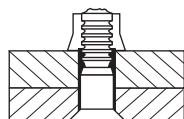
= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C6L® 90C Lockbolt - Aluminium

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials

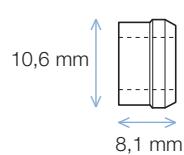


Stem : Aluminium | Head : Countersunk

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		kN min	kN min	Clamp load kN		min-max (mm)	
											Standard 2LC-F8	Flanged 3LC-F8
6,4 6,45 - 6,58	43,1	14,5	3,2								C6L90-C8-3	3,2 - 6,4
	44,7	16,1	4,8								C6L90-C8-4	4,8 - 7,9
	46,3	17,6	6,4								C6L90-C8-5	6,4 - 9,5
	47,9	19,2	7,9								C6L90-C8-6	7,9 - 11,1
	49,5	20,8	9,5								C6L90-C8-7	9,5 - 12,7
	51,0	22,4	11,1								C6L90-C8-8	11,1 - 14,3
	52,6	24,0	12,7								C6L90-C8-9	12,7 - 15,9
	54,2	25,6	14,3								C6L90-C8-10	14,3 - 17,5
	55,8	27,2	15,9								C6L90-C8-11	15,9 - 19,1
	57,4	28,8	17,5								C6L90-C8-12	17,5 - 20,6
	59,0	30,3	19,1								C6L90-C8-13	19,1 - 22,2
	60,6	31,9	20,6								C6L90-C8-14	20,6 - 23,8
	62,2	33,5	22,2								C6L90-C8-15	22,2 - 25,4
	63,7	35,1	23,8								C6L90-C8-16	23,8 - 27,0
	65,3	36,7	25,4	12,1	2,9	6,6 - 6,8	8,0	8,3	4,2		C6L90-C8-17	25,4 - 28,6
	66,9	38,3	27,0								C6L90-C8-18	27,0 - 30,2
	68,5	39,9	28,6								C6L90-C8-19	28,6 - 31,8
	70,1	41,5	30,2								C6L90-C8-20	30,2 - 33,3
	71,7	43,0	31,8								C6L90-C8-21	31,8 - 34,9
	73,3	44,6	33,3								C6L90-C8-22	33,3 - 36,5
	74,9	46,2	34,9								C6L90-C8-23	34,9 - 38,1
	76,4	47,8	36,5								C6L90-C8-24	36,5 - 39,7
	78,0	49,4	38,1								C6L90-C8-25	38,1 - 41,3
	79,6	51,0	39,7								C6L90-C8-26	39,7 - 42,9
	81,2	52,6	41,3								C6L90-C8-27	41,3 - 44,5
	82,8	54,2	42,9								C6L90-C8-28	42,9 - 46,0
	84,4	55,7	44,5								C6L90-C8-29	44,5 - 47,6
	86,0	57,3	46,0								C6L90-C8-30	46,0 - 49,2
	87,6	58,9	47,6								C6L90-C8-31	47,6 - 50,8
	89,1	60,5	49,2								C6L90-C8-32	49,2 - 52,4

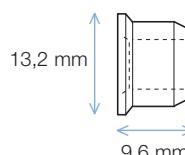
Standard

2LC-F8



Flanged

3LC-F8



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

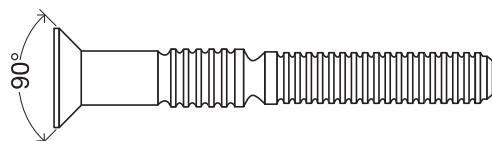
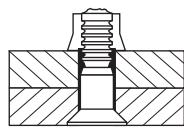
Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)


C6L® 90C Lockbolt - Aluminium

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



Stem : Aluminium | Head : Countersunk

v x d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		∅ (mm)	kN min	kN min	Clamp load kN				
												Standard 2LC-F10	Flanged 3LC-F10	
7,9 8,05 - 8,18	53,0	20,9	4,3									C6L90-C10-4	3,2 - 9,5	1,2 - 7,5
	55,0	24,1	6,4									C6L90-C10-6	6,4 - 12,7	4,4 - 10,7
	58,2	27,2	9,5									C6L90-C10-8	9,5 - 15,9	7,5 - 13,9
	61,4	30,4	12,7									C6L90-C10-10	12,7 - 19,1	10,7 - 17,1
	64,6	33,6	15,9									C6L90-C10-12	15,9 - 22,2	13,9 - 20,2
	67,7	36,8	19,1									C6L90-C10-14	19,1 - 25,4	17,1 - 23,4
	70,9	39,9	22,2									C6L90-C10-16	22,2 - 28,6	20,2 - 26,6
	74,1	43,1	25,4	15,1	3,6		8,2 - 8,3	12,7	13,0	6,7		C6L90-C10-18	25,4 - 31,8	23,4 - 29,8
	77,3	46,3	28,6									C6L90-C10-20	28,6 - 34,9	26,6 - 32,9
	80,4	49,5	31,8									C6L90-C10-22	31,8 - 38,1	29,8 - 36,1
	83,6	52,6	34,9									C6L90-C10-24	34,9 - 41,3	32,9 - 39,3
	86,8	55,8	38,1									C6L90-C10-26	38,1 - 44,5	36,1 - 42,5
	90,0	59,0	41,3									C6L90-C10-28	41,3 - 47,6	39,3 - 45,6
	93,1	62,2	44,5									C6L90-C10-30	44,5 - 50,8	42,5 - 48,8
	96,3	64,2	47,6									C6L90-C10-32	47,6 - 54,0	45,6 - 52,0

Standard

Flanged

d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

∅ = Hole diameter - **k** = Head thickness - **d2** = Head diameter - **↙ ↘** = Minimum tensile strength

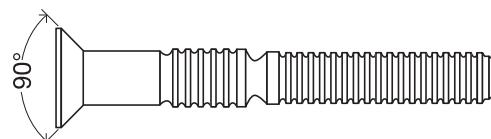
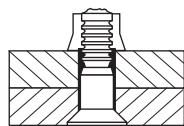
◀ ▶ = Minimum shear strength - **↑ ↓** = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C6L® 90C Lockbolt - Aluminium

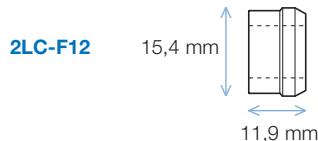
- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



Stem : Aluminium | Head : Countersunk

v x d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		∅ (mm)	kN min	kN min	Clamp load kN		↓ min-max (mm)	
												Standard 2LC-F12	Flanged 3LC-F12
9,5 9,65 - 9,78	60,6	24,8	6,4									C6L90-C12-6	6,4 - 12,7
	63,8	28,0	9,5									C6L90-C12-8	9,5 - 15,9
	66,9	31,2	12,7									C6L90-C12-10	12,7 - 19,1
	70,1	34,4	15,9									C6L90-C12-12	15,9 - 22,2
	73,3	37,5	19,1									C6L90-C12-14	19,1 - 25,4
	76,5	40,7	22,2									C6L90-C12-16	22,2 - 28,6
	79,6	43,9	25,4	18,1	4,3	9,8 - 9,9	18,7	18,7	18,7	9,8		C6L90-C12-18	25,4 - 31,8
	82,8	47,1	28,6									C6L90-C12-20	28,6 - 34,9
	86,0	50,2	31,8									C6L90-C12-22	31,8 - 38,1
	89,2	53,4	34,9									C6L90-C12-24	34,9 - 41,3
	92,3	56,6	38,1									C6L90-C12-26	38,1 - 44,5
	95,5	59,8	41,3									C6L90-C12-28	41,3 - 47,6
	98,7	62,9	44,5									C6L90-C12-30	44,5 - 50,8
	101,9	66,1	47,6									C6L90-C12-32	47,6 - 54,0
													45,2 - 51,6

Standard



Flanged



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

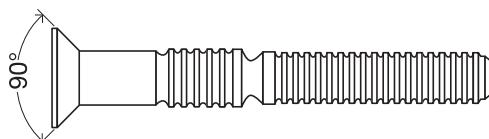
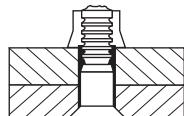
∅ = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)


C6L® 90F Lockbolt - Aluminium 6061

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials

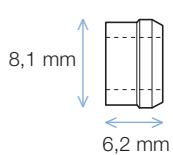


Stem : Aluminium 6061 | Head : Countersunk

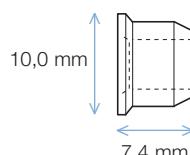
d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		kN min		kN min	Clamp load kN		
											Standard LC-I6	Flanged 3LC-I6
4,8 4,85 - 4,95	39,9	12,2	3,2								C6L90-F6-3	3,2 - 6,4
	41,5	13,7	4,8								C6L90-F6-4	4,8 - 7,9
	43,1	15,3	6,4								C6L90-F6-5	6,4 - 9,5
	44,7	16,9	7,9								C6L90-F6-6	7,9 - 11,1
	46,3	18,5	9,5								C6L90-F6-7	9,5 - 12,7
	47,9	20,1	11,1								C6L90-F6-8	11,1 - 14,3
	49,5	21,7	12,7								C6L90-F6-9	12,7 - 15,9
	51,0	23,3	14,3								C6L90-F6-10	14,3 - 17,5
	52,6	24,9	15,9								C6L90-F6-11	15,9 - 19,1
	54,2	26,4	17,5								C6L90-F6-12	17,5 - 20,6
	55,8	28,0	19,1								C6L90-F6-13	19,1 - 22,2
	57,4	29,6	20,6								C6L90-F6-14	20,6 - 23,8
	59,0	31,2	22,2								C6L90-F6-15	22,2 - 25,4
	60,6	32,8	23,8								C6L90-F6-16	23,8 - 27,0
	62,2	34,4	25,4	9,1	2,2		5,0 - 5,2		2,4	1,6		25,4 - 28,6
	63,7	36,0	27,0								C6L90-F6-17	24,2 - 27,4
	65,3	37,6	28,6								C6L90-F6-18	27,0 - 30,2
	66,9	39,1	30,2								C6L90-F6-19	25,8 - 29,0
	68,5	40,7	31,8								C6L90-F6-20	28,6 - 31,8
	70,1	42,3	33,3								C6L90-F6-21	30,2 - 33,3
	71,7	43,9	34,9								C6L90-F6-22	31,8 - 34,9
	73,3	45,5	36,5								C6L90-F6-23	33,3 - 36,5
	74,9	47,1	38,1								C6L90-F6-24	34,9 - 38,1
	76,4	48,7	39,7								C6L90-F6-25	36,5 - 39,7
	78,0	50,3	41,3								C6L90-F6-26	38,1 - 41,3
	79,6	51,8	42,9								C6L90-F6-27	39,7 - 42,9
	81,2	53,4	44,5								C6L90-F6-28	41,3 - 44,5
	82,8	55,0	46,0								C6L90-F6-29	42,9 - 46,0
	84,4	56,6	47,6								C6L90-F6-30	44,5 - 47,6
	86,0	58,2	49,2								C6L90-F6-31	46,0 - 49,2
											C6L90-F6-32	47,6 - 50,8
												46,5 - 49,6
												49,2 - 52,4
												48,0 - 51,2

Standard

LC-I6


Flanged

3LC-I6


d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

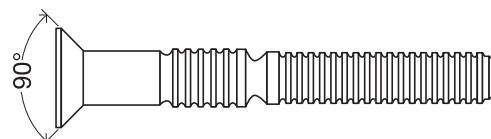
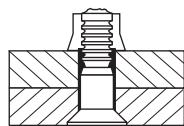
Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range



C6L® 90F Lockbolt - Aluminium 6061

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials

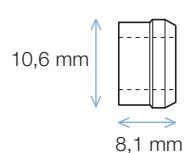


Stem : Aluminium 6061 | Head : Countersunk

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)	\emptyset (mm)	kN min	kN min	Clamp load kN		min-max (mm)	
											Standard LC-I8	Flanged 3LC-I8
6,4 6,45 - 6,58	43,1	14,5	3,2							C6L90-F8-3	3,2 - 6,4	1,6 - 4,8
	44,7	16,1	4,8							C6L90-F8-4	4,8 - 7,9	3,2 - 6,3
	46,3	17,6	6,4							C6L90-F8-5	6,4 - 9,5	4,8 - 7,9
	47,9	19,2	7,9							C6L90-F8-6	7,9 - 11,1	6,3 - 9,5
	49,5	20,8	9,5							C6L90-F8-7	9,5 - 12,7	7,9 - 11,1
	51,0	22,4	11,1							C6L90-F8-8	11,1 - 14,3	9,5 - 12,7
	52,6	24,0	12,7							C6L90-F8-9	12,7 - 15,9	11,1 - 14,3
	54,2	25,6	14,3							C6L90-F8-10	14,3 - 17,5	12,7 - 15,9
	55,8	27,2	15,9							C6L90-F8-11	15,9 - 19,1	14,3 - 17,5
	57,4	28,8	17,5							C6L90-F8-12	17,5 - 20,6	15,9 - 19,0
	59,0	30,3	19,1							C6L90-F8-13	19,1 - 22,2	17,5 - 20,6
	60,6	31,9	20,6							C6L90-F8-14	20,6 - 23,8	19,0 - 22,2
	62,2	33,5	22,2							C6L90-F8-15	22,2 - 25,4	20,6 - 23,8
	63,7	35,1	23,8							C6L90-F8-16	23,8 - 27,0	22,2 - 25,4
	65,3	36,7	25,4	12,1	2,9	6,6 - 6,8	4,3	6,1	2,8	C6L90-F8-17	25,4 - 28,6	23,8 - 27,0
	66,9	38,3	27,0							C6L90-F8-18	27,0 - 30,2	25,4 - 28,6
	68,5	39,9	28,6							C6L90-F8-19	28,6 - 31,8	27,0 - 30,2
	70,1	41,5	30,2							C6L90-F8-20	30,2 - 33,3	28,6 - 31,7
	71,7	43,0	31,8							C6L90-F8-21	31,8 - 34,9	30,2 - 33,3
	73,3	44,6	33,3							C6L90-F8-22	33,3 - 36,5	31,7 - 34,9
	74,9	46,2	34,9							C6L90-F8-23	34,9 - 38,1	33,3 - 36,5
	76,4	47,8	36,5							C6L90-F8-24	36,5 - 39,7	34,9 - 38,1
	78,0	49,4	38,1							C6L90-F8-25	38,1 - 41,3	36,5 - 39,7
	79,6	51,0	39,7							C6L90-F8-26	39,7 - 42,9	38,1 - 41,3
	81,2	52,6	41,3							C6L90-F8-27	41,3 - 44,5	39,7 - 42,9
	82,8	54,2	42,9							C6L90-F8-28	42,9 - 46,0	41,3 - 44,4
	84,4	55,7	44,5							C6L90-F8-29	44,5 - 47,6	42,9 - 46,0
	86,0	57,3	46,0							C6L90-F8-30	46,0 - 49,2	44,4 - 47,6
	87,6	58,9	47,6							C6L90-F8-31	47,6 - 50,8	46,0 - 49,2
	89,1	60,5	49,2							C6L90-F8-32	49,2 - 52,4	47,6 - 50,8

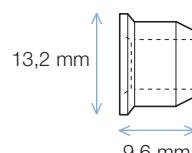
Standard

LC-I8



Flanged

3LC-I8



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

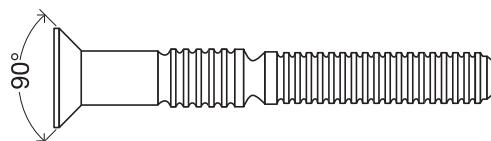
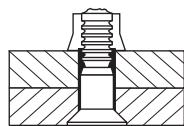
= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C6L® 90F Lockbolt - Aluminium 6061

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



Stem : Aluminium 6061 | Head : Countersunk

v x d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		∅ (mm)	kN min	kN min	Clamp load kN		min-max (mm)	
												Standard LC-I10	Flanged 3LC-I10
7,9 8,05 - 8,18	53,0	20,9	4,3									C6L90-F10-4	3,2 - 9,5
	55,0	24,1	6,4									C6L90-F10-6	6,4 - 12,7
	58,2	27,2	9,5									C6L90-F10-8	9,5 - 15,9
	61,4	30,4	12,7									C6L90-F10-10	12,7 - 19,1
	64,6	33,6	15,9									C6L90-F10-12	15,9 - 22,2
	67,7	36,8	19,1									C6L90-F10-14	19,1 - 25,4
	70,9	39,9	22,2									C6L90-F10-16	22,2 - 28,6
	74,1	43,1	25,4	15,1	3,6	8,2 - 8,3	6,9		9,5	4,3	C6L90-F10-18	25,4 - 31,8	
	77,3	46,3	28,6									C6L90-F10-20	28,6 - 34,9
	80,4	49,5	31,8									C6L90-F10-22	31,8 - 38,1
	83,6	52,6	34,9									C6L90-F10-24	34,9 - 41,3
	86,8	55,8	38,1									C6L90-F10-26	38,1 - 44,5
	90,0	59,0	41,3									C6L90-F10-28	41,3 - 47,6
	93,1	62,2	44,5									C6L90-F10-30	44,5 - 50,8
	96,3	64,2	47,6									C6L90-F10-32	47,6 - 54,0
													45,6 - 52,0

Standard



Flanged



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

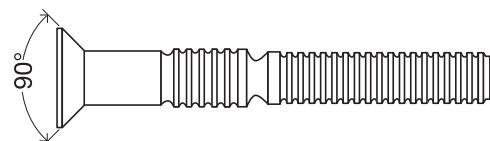
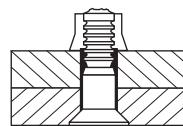
∅ = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range



C6L® 90F Lockbolt - Aluminium 6061

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



Stem : Aluminium 6061 | Head : Countersunk

v x d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		∅ (mm)	kN min	kN min	Clamp load kN		min-max (mm)	
												Standard LC-I12	Flanged 3LC-I12
9,5 9,65 - 9,78	60,6	24,8	6,4									C6L90-F12-6	6,4 - 12,7
	63,8	28,0	9,5									C6L90-F12-8	9,5 - 15,9
	66,9	31,2	12,7									C6L90-F12-10	12,7 - 19,1
	70,1	34,4	15,9									C6L90-F12-12	15,9 - 22,2
	73,3	37,5	19,1									C6L90-F12-14	19,1 - 25,4
	76,5	40,7	22,2									C6L90-F12-16	22,2 - 28,6
	79,6	43,9	25,4	18,1	4,3	9,8 - 9,9	10,7		13,6	6,1		C6L90-F12-18	25,4 - 31,8
	82,8	47,1	28,6									C6L90-F12-20	28,6 - 34,9
	86,0	50,2	31,8									C6L90-F12-22	31,8 - 38,1
	89,2	53,4	34,9									C6L90-F12-24	34,9 - 41,3
	92,3	56,6	38,1									C6L90-F12-26	38,1 - 44,5
	95,5	59,8	41,3									C6L90-F12-28	41,3 - 47,6
	98,7	62,9	44,5									C6L90-F12-30	44,5 - 50,8
	101,9	66,1	47,6									C6L90-F12-32	47,6 - 54,0
													45,2 - 51,6

Standard



Flanged



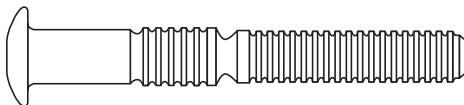
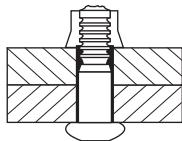
d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

∅ = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range

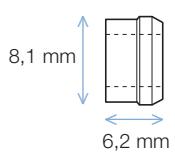
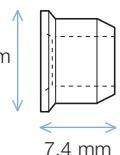

C6L® R Lockbolt - Steel

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



Stem : Steel | Head : Truss

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		∅ (mm)	kN min	kN min	Clamp load kN		min-max (mm)	
												Standard 2LC-R6G	Flanged 3LC-2R6G
4,8 4,85 - 4,95	39,1	10,6	1,6									C6LT-R6-2G	1,6 - 4,8
	40,7	12,2	3,2									C6LT-R6-3G	3,2 - 6,4
	42,3	13,7	4,8									C6LT-R6-4G	4,8 - 7,9
	43,9	15,3	6,4									C6LT-R6-5G	6,4 - 9,5
	45,4	16,9	7,9									C6LT-R6-6G	7,9 - 11,1
	47,0	18,5	9,5									C6LT-R6-7G	9,5 - 12,7
	48,6	20,1	11,1									C6LT-R6-8G	11,1 - 14,3
	50,2	21,7	12,7									C6LT-R6-9G	12,7 - 15,9
	51,8	23,3	14,3									C6LT-R6-10G	14,3 - 17,5
	53,4	24,9	15,9									C6LT-R6-11G	15,9 - 19,1
	55,0	26,4	17,5									C6LT-R6-12G	17,5 - 20,6
	56,6	28,0	19,1									C6LT-R6-13G	19,1 - 22,2
	58,1	29,6	20,6									C6LT-R6-14G	20,6 - 23,8
	59,7	31,2	22,2									C6LT-R6-15G	22,2 - 25,4
	61,3	32,8	23,8									O6LT-R6-16G	23,8 - 27,0
	62,9	34,4	25,4	11,9	2,3	5,0 - 5,2	7,3	7,7		4,6		C6LT-R6-17G	25,4 - 28,6
	64,5	36,0	27,0									C6LT-R6-18G	27,0 - 30,2
	66,1	37,6	28,6									C6LT-R6-19G	28,6 - 31,8
	67,7	39,1	30,2									C6LT-R6-20G	30,2 - 33,3
	69,3	40,7	31,8									C6LT-R6-21G	31,8 - 34,9
	70,8	42,3	33,3									C6LT-R6-22G	33,3 - 36,5
	72,4	43,9	34,9									C6LT-R6-23G	34,9 - 38,1
	74,0	45,5	36,5									C6LT-R6-24G	36,5 - 39,7
	75,6	47,1	38,1									C6LT-R6-25G	38,1 - 41,3
	77,2	48,7	39,7									C6LT-R6-26G	39,7 - 42,9
	78,8	50,3	41,3									C6LT-R6-27G	41,3 - 44,5
	80,4	51,8	42,9									C6LT-R6-28G	42,9 - 46,0
	82,0	53,4	44,5									C6LT-R6-29G	44,5 - 47,6
	83,5	55,0	46,0									C6LT-R6-30G	46,0 - 49,2
	85,1	56,6	47,6									C6LT-R6-31G	47,6 - 50,8
	86,7	58,2	49,2									C6LT-R6-32G	49,2 - 52,4

Standard
2LC-R6G

Flanged
3LC-2R6G

d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

∅ = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

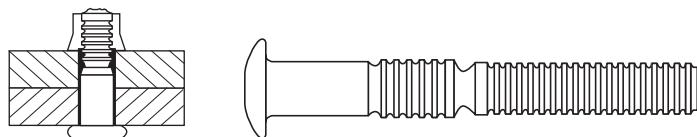
= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C6L® R Lockbolt - Steel

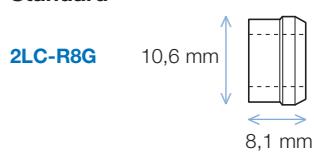
- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



Stem : Steel | Head : Truss

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		kN min		kN min	Clamp load kN		
											Standard 2LC-R8G	Flanged 3LC-2R8G
6,4 6,45 - 6,58	42,0	12,9	1,6								C6LT-R8-2G	1,6 - 4,8
	43,6	14,5	3,2								C6LT-R8-3G	3,2 - 6,4
	45,2	16,1	4,8								C6LT-R8-4G	4,8 - 7,9
	46,8	17,6	6,4								C6LT-R8-5G	6,4 - 9,5
	48,4	19,2	7,9								C6LT-R8-6G	7,9 - 11,1
	50,0	20,8	9,5								C6LT-R8-7G	9,5 - 12,7
	51,6	22,4	11,1								C6LT-R8-8G	11,1 - 14,3
	53,2	24,0	12,7								C6LT-R8-9G	12,7 - 15,9
	54,7	25,6	14,3								C6LT-R8-10G	14,3 - 17,5
	56,3	27,2	15,9								C6LT-R8-11G	15,9 - 19,1
	57,9	28,8	17,5								C6LT-R8-12G	17,5 - 20,6
	59,5	30,3	19,1								C6LT-R8-13G	19,1 - 22,2
	61,1	31,9	20,6								C6LT-R8-14G	20,6 - 23,8
	62,7	33,5	22,2								C6LT-R8-15G	22,2 - 25,4
	64,3	35,1	23,8								O6LT-R8-16G	23,8 - 27,0
	65,9	36,7	25,4	15,1	3,0	6,6 - 6,8	13,3	13,6	8,0		C6LT-R8-17G	25,4 - 28,6
	67,4	38,3	27,0								C6LT-R8-18G	27,0 - 30,2
	69,0	39,9	28,6								C6LT-R8-19G	28,6 - 31,8
	70,6	41,5	30,2								C6LT-R8-20G	30,2 - 33,3
	72,2	43,0	31,8								C6LT-R8-21G	31,8 - 34,9
	73,8	44,6	33,3								C6LT-R8-22G	33,3 - 36,5
	75,4	46,2	34,9								C6LT-R8-23G	34,9 - 38,1
	77,0	47,8	36,5								C6LT-R8-24G	36,5 - 39,7
	78,6	49,4	38,1								C6LT-R8-25G	38,1 - 41,3
	80,1	51,0	39,7								C6LT-R8-26G	39,7 - 42,9
	81,7	52,6	41,3								C6LT-R8-27G	41,3 - 44,5
	83,3	54,2	42,9								C6LT-R8-28G	42,9 - 46,0
	84,9	55,7	44,5								C6LT-R8-29G	44,5 - 47,6
	86,5	57,3	46,0								C6LT-R8-30G	46,0 - 49,2
	88,1	58,9	47,6								C6LT-R8-31G	47,6 - 50,8
	89,7	60,5	49,2								C6LT-R8-32G	49,2 - 52,4

Standard



Flanged



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

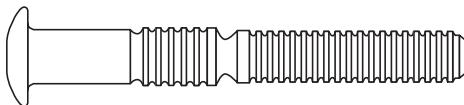
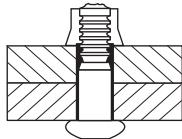
= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C6L® R Lockbolt - Steel

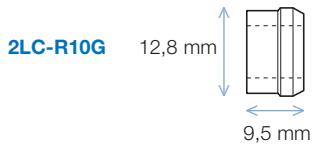
- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



Stem : Steel | Head : Truss

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		∅ (mm)	kN min	kN min	Clamp load kN		min-max (mm)	
												Standard 2LC-R10G	Flanged 3LC-2R10G
7,9 8,05 - 8,18	51,9	19,7	3,2									C6LT-R10-4G	3,2 - 9,5
	55,1	22,9	6,4									C6LT-R10-6G	6,4 - 12,7
	58,3	26,1	9,5									C6LT-R10-8G	9,5 - 15,9
	61,5	29,2	12,7									C6LT-R10-10G	12,7 - 19,1
	64,6	32,4	15,9									C6LT-R10-12G	15,9 - 22,2
	67,8	35,6	19,1									C6LT-R10-14G	19,1 - 25,4
	71,0	38,8	22,2									C6LT-R10-16G	22,2 - 28,6
	74,2	41,9	25,4	20,2	3,6	8,2 - 8,3	20,5	21,0	12,5		C6LT-R10-18G	25,4 - 31,8	
	77,3	45,1	28,6									C6LT-R10-20G	28,6 - 34,9
	80,5	48,3	31,8									C6LT-R10-22G	31,8 - 38,1
	83,7	51,5	34,9									C6LT-R10-24G	34,9 - 41,3
	86,9	54,6	38,1									C6LT-R10-26G	38,1 - 44,5
	90,0	57,8	41,3									C6LT-R10-28G	41,3 - 47,6
	93,2	61,0	44,5									C6LT-R10-30G	44,5 - 50,8
	96,4	64,2	47,6									C6LT-R10-32G	47,6 - 54,0
													45,6 - 52,0

Standard



Flanged



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

∅ = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

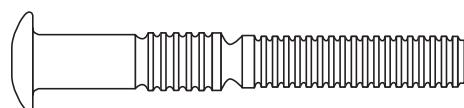
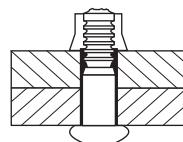
= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C6L® R Lockbolt - Steel

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



Stem : Steel | Head : Truss

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		∅ (mm)	kN min	kN min	Clamp load kN		min-max (mm)	
												Standard 2LC-R12G	Flanged 3LC-2R12G
9,5 9,65 - 9,78	57,3	21,7	3,2									C6LT-R12-4G	3,2 - 9,5
	60,5	24,8	6,4									C6LT-R12-6G	6,4 - 12,7
	63,7	28,0	9,5									C6LT-R12-8G	9,5 - 15,9
	66,8	31,2	12,7									C6LT-R12-10G	12,7 - 19,1
	70,0	34,4	15,9									C6LT-R12-12G	15,9 - 22,2
	73,2	37,5	19,1									C6LT-R12-14G	19,1 - 25,4
	76,4	40,7	22,2									C6LT-R12-16G	22,2 - 28,6
	79,5	43,9	25,4	23,4	4,3		9,8 - 9,9	28,9	30,4	17,9		C6LT-R12-18G	25,4 - 31,8
	82,7	47,1	28,6									C6LT-R12-20G	28,6 - 34,9
	85,9	50,2	31,8									C6LT-R12-22G	31,8 - 38,1
	89,1	53,4	34,9									C6LT-R12-24G	34,9 - 41,3
	92,2	56,6	38,1									C6LT-R12-26G	38,1 - 44,5
	95,4	59,8	41,3									C6LT-R12-28G	41,3 - 47,6
	98,6	62,9	44,5									C6LT-R12-30G	44,5 - 50,8
	101,8	66,1	47,6									C6LT-R12-32G	47,6 - 54,0
													45,2 - 51,6

Standard



Flanged



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

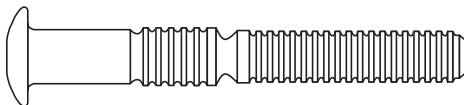
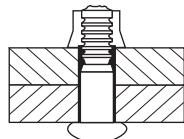
∅ = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)

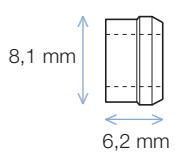
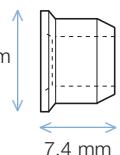

C6L® U Lockbolt - Stainless Steel

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



Stem : Stainless steel | Head : Truss

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		∅ (mm)	kN min	kN min	Clamp load kN		min-max (mm)	
												Standard 2LC-2CU6	Flanged 3LC-2CU6
4,8 4,85 - 4,95	39,1	10,6	1,6									C6LT-U6-2	1,6 - 4,8
	40,7	12,2	3,2									C6LT-U6-3	3,2 - 6,4
	42,3	13,7	4,8									C6LT-U6-4	4,8 - 7,9
	43,9	15,3	6,4									C6LT-U6-5	6,4 - 9,5
	45,4	16,9	7,9									C6LT-U6-6	7,9 - 11,1
	47,0	18,5	9,5									C6LT-U6-7	9,5 - 12,7
	48,6	20,1	11,1									C6LT-U6-8	11,1 - 14,3
	50,2	21,7	12,7									C6LT-U6-9	12,7 - 15,9
	51,8	23,3	14,3									C6LT-U6-10	14,3 - 17,5
	53,4	24,9	15,9									C6LT-U6-11	15,9 - 19,1
	55,0	26,4	17,5									C6LT-U6-12	17,5 - 20,6
	56,6	28,0	19,1									C6LT-U6-13	19,1 - 22,2
	58,1	29,6	20,6									C6LT-U6-14	20,6 - 23,8
	59,7	31,2	22,2									C6LT-U6-15	22,2 - 25,4
	61,3	32,8	23,8									C6LT-U6-16	23,8 - 27,0
	62,9	34,4	25,4	11,9	2,3	5,0 - 5,2	6,5	8,9	4,6			C6LT-U6-17	25,4 - 28,6
	64,5	36,0	27,0									C6LT-U6-18	27,0 - 30,2
	66,1	37,6	28,6									C6LT-U6-19	28,6 - 31,8
	67,7	39,1	30,2									C6LT-U6-20	30,2 - 33,3
	69,3	40,7	31,8									C6LT-U6-21	31,8 - 34,9
	70,8	42,3	33,3									C6LT-U6-22	33,3 - 36,5
	72,4	43,9	34,9									C6LT-U6-23	34,9 - 38,1
	74,0	45,5	36,5									C6LT-U6-24	36,5 - 39,7
	75,6	47,1	38,1									C6LT-U6-25	38,1 - 41,3
	77,2	48,7	39,7									C6LT-U6-26	39,7 - 42,9
	78,8	50,3	41,3									C6LT-U6-27	41,3 - 44,5
	80,4	51,8	42,9									C6LT-U6-28	42,9 - 46,0
	82,0	53,4	44,5									C6LT-U6-29	44,5 - 47,6
	83,5	55,0	46,0									C6LT-U6-30	46,0 - 49,2
	85,1	56,6	47,6									C6LT-U6-31	47,6 - 50,8
	86,7	58,2	49,2									C6LT-U6-32	49,2 - 52,4

Standard
2LC-2CU6

Flanged
3LC-2CU6

d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

∅ = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

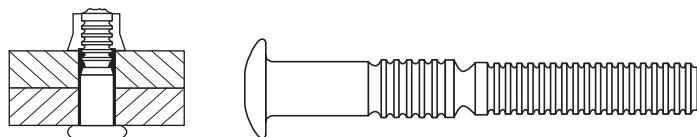
= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C6L® U Lockbolt - Stainless Steel

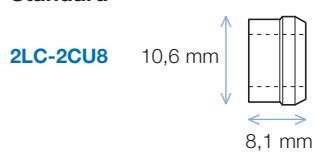
- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



Stem : Stainless steel | Head : Truss

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		∅ (mm)	kN min	kN min	Clamp load kN		↓ min-max (mm)	
												Standard 2LC-2CU8	Flanged 3LC-2CU8
6,4 6,45 - 6,58	42,0	12,9	1,6									C6LT-U8-2	1,6 - 4,8
	43,6	14,5	3,2									C6LT-U8-3	3,2 - 6,4
	45,2	16,1	4,8									C6LT-U8-4	4,8 - 7,9
	46,8	17,6	6,4									C6LT-U8-5	6,4 - 9,5
	48,4	19,2	7,9									C6LT-U8-6	7,9 - 11,1
	50,0	20,8	9,5									C6LT-U8-7	9,5 - 12,7
	51,6	22,4	11,1									C6LT-U8-8	11,1 - 14,3
	53,2	24,0	12,7									C6LT-U8-9	12,7 - 15,9
	54,7	25,6	14,3									C6LT-U8-10	14,3 - 17,5
	56,3	27,2	15,9									C6LT-U8-11	15,9 - 19,1
	57,9	28,8	17,5									C6LT-U8-12	17,5 - 20,6
	59,5	30,3	19,1									C6LT-U8-13	19,1 - 22,2
	61,1	31,9	20,6									C6LT-U8-14	20,6 - 23,8
	62,7	33,5	22,2									C6LT-U8-15	22,2 - 25,4
	64,3	35,1	23,8									C6LT-U8-16	23,8 - 27,0
	65,9	36,7	25,4	15,1	3,0	6,6 - 6,8	16,7		15,8	8,0		C6LT-U8-17	25,4 - 28,6
	67,4	38,3	27,0									C6LT-U8-18	27,0 - 30,2
	69,0	39,9	28,6									C6LT-U8-19	28,6 - 31,8
	70,6	41,5	30,2									C6LT-U8-20	30,2 - 33,3
	72,2	43,0	31,8									C6LT-U8-21	31,8 - 34,9
	73,8	44,6	33,3									C6LT-U8-22	33,3 - 36,5
	75,4	46,2	34,9									C6LT-U8-23	34,9 - 38,1
	77,0	47,8	36,5									C6LT-U8-24	36,5 - 39,7
	78,6	49,4	38,1									C6LT-U8-25	38,1 - 41,3
	80,1	51,0	39,7									C6LT-U8-26	39,7 - 42,9
	81,7	52,6	41,3									C6LT-U8-27	41,3 - 44,5
	83,3	54,2	42,9									C6LT-U8-28	42,9 - 46,0
	84,9	55,7	44,5									C6LT-U8-29	44,5 - 47,6
	86,5	57,3	46,0									C6LT-U8-30	46,0 - 49,2
	88,1	58,9	47,6									C6LT-U8-31	47,6 - 50,8
	89,7	60,5	49,2									C6LT-U8-32	49,2 - 52,4
													47,6 - 50,8

Standard



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

Flanged



∅ = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

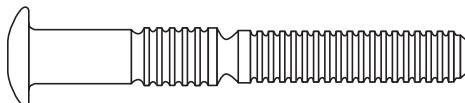
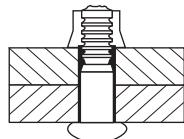
= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C6L® U Lockbolt - Stainless Steel

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



Stem : Stainless steel | Head : Truss

	d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		∅ (mm)	kN min	kN min	Clamp load kN		min-max (mm)		
													Standard 2LC-2CU10	Flanged 3LC-2CU10	
7,9 8,05 - 8,18	51,9	19,7	3,2										C6LT-U10-4	3,2 - 9,5	1,2 - 7,5
	55,1	22,9	6,4										C6LT-U10-6	6,4 - 12,7	4,4 - 10,7
	58,3	26,1	9,5										C6LT-U10-8	9,5 - 15,9	7,5 - 13,9
	61,5	29,2	12,7										C6LT-U10-10	12,7 - 19,1	10,7 - 17,1
	64,6	32,4	15,9										C6LT-U10-12	15,9 - 22,2	13,9 - 20,2
	67,8	35,6	19,1										C6LT-U10-14	19,1 - 25,4	17,1 - 23,4
	71,0	38,8	22,2										C6LT-U10-16	22,2 - 28,6	20,2 - 26,6
	74,2	41,9	25,4	20,2	3,6	8,2 - 8,3		18,9		24,6	12,5		C6LT-U10-18	25,4 - 31,8	23,4 - 29,8
	77,3	45,1	28,6										C6LT-U10-20	28,6 - 34,9	26,6 - 32,9
	80,5	48,3	31,8										C6LT-U10-22	31,8 - 38,1	29,8 - 36,1
	83,7	51,5	34,9										C6LT-U10-24	34,9 - 41,3	32,9 - 39,3
	86,9	54,6	38,1										C6LT-U10-26	38,1 - 44,5	36,1 - 42,5
	90,0	57,8	41,3										C6LT-U10-28	41,3 - 47,6	39,3 - 45,6
	93,2	61,0	44,5										C6LT-U10-30	44,5 - 50,8	42,5 - 48,8
	96,4	64,2	47,6										C6LT-U10-32	47,6 - 54,0	45,6 - 52,0

Standard



Flanged



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

∅ = Hole diameter - **k** = Head thickness - **d2** = Head diameter - **↙ ↘** = Minimum tensile strength

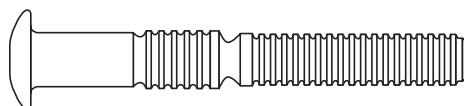
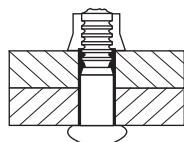
◀ ▶ = Minimum shear strength - **↑ ↓** = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C6L® U Lockbolt - Stainless Steel

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



Stem : Stainless steel | Head : Truss

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		∅ (mm)	kN min	kN min	Clamp load kN		min-max (mm)	
												Standard 2LC-2CU12	Flanged 3LC-2CU12
9,5 9,65 - 9,78	57,3	21,7	3,2									C6LT-U12-4	3,2 - 9,5
	60,5	24,8	6,4									C6LT-U12-6	6,4 - 12,7
	63,7	28,0	9,5									C6LT-U12-8	9,5 - 15,9
	66,8	31,2	12,7									C6LT-U12-10	12,7 - 19,1
	70,0	34,4	15,9									C6LT-U12-12	15,9 - 22,2
	73,2	37,5	19,1									C6LT-U12-14	19,1 - 25,4
	76,4	40,7	22,2									C6LT-U12-16	22,2 - 28,6
	79,5	43,9	25,4	23,4	4,3	9,8 - 9,9	27,1		35,4	17,9		C6LT-U12-18	25,4 - 31,8
	82,7	47,1	28,6									C6LT-U12-20	28,6 - 34,9
	85,9	50,2	31,8									C6LT-U12-22	31,8 - 38,1
	89,1	53,4	34,9									C6LT-U12-24	34,9 - 41,3
	92,2	56,6	38,1									C6LT-U12-26	38,1 - 44,5
	95,4	59,8	41,3									C6LT-U12-28	41,3 - 47,6
	98,6	62,9	44,5									C6LT-U12-30	44,5 - 50,8
	101,8	66,1	47,6									C6LT-U12-32	47,6 - 54,0
													45,2 - 51,6

Standard



Flanged



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

∅ = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

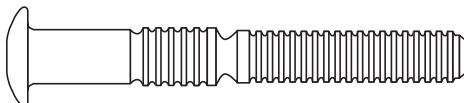
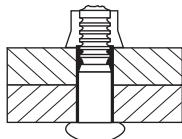
= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C6L® C Lockbolt - Aluminium

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials

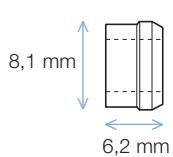


Stem : Aluminium | Head : Truss

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		kN min		kN min	Clamp load kN	min-max (mm)		
											Standard 2LC-F6	Flanged 3LC-F6	
4,8 4,85 - 4,95	39,1	10,6	1,6								C6LT-C6-2	1,6 - 4,8	0,4 - 3,6
	40,7	12,2	3,2								C6LT-C6-3	3,2 - 6,4	2,0 - 5,2
	42,3	13,7	4,8								C6LT-C6-4	4,8 - 7,9	3,6 - 6,8
	43,9	15,3	6,4								C6LT-C6-5	6,4 - 9,5	5,2 - 8,4
	45,4	16,9	7,9								C6LT-C6-6	7,9 - 11,1	6,8 - 9,9
	47,0	18,5	9,5								C6LT-C6-7	9,5 - 12,7	8,4 - 11,5
	48,6	20,1	11,1								C6LT-C6-8	11,1 - 14,3	9,9 - 13,1
	50,2	21,7	12,7								C6LT-C6-9	12,7 - 15,9	11,5 - 14,7
	51,8	23,3	14,3								C6LT-C6-10	14,3 - 17,5	13,1 - 16,3
	53,4	24,9	15,9								C6LT-C6-11	15,9 - 19,1	14,7 - 17,9
	55,0	26,4	17,5								C6LT-C6-12	17,5 - 20,6	16,3 - 19,5
	56,6	28,0	19,1								C6LT-C6-13	19,1 - 22,2	17,9 - 21,1
	58,1	29,6	20,6								C6LT-C6-14	20,6 - 23,8	19,5 - 22,6
	59,7	31,2	22,2								C6LT-C6-15	22,2 - 25,4	21,1 - 24,2
	61,3	32,8	23,8								C6LT-C6-16	23,8 - 27,0	22,6 - 25,8
	62,9	34,4	25,4	11,9	2,3	5,0 - 5,2	4,4		4,7	2,4	C6LT-C6-17	25,4 - 28,6	24,2 - 27,4
	64,5	36,0	27,0								C6LT-C6-18	27,0 - 30,2	25,8 - 29,0
	66,1	37,6	28,6								C6LT-C6-19	28,6 - 31,8	27,4 - 30,6
	67,7	39,1	30,2								C6LT-C6-20	30,2 - 33,3	29,0 - 32,2
	69,3	40,7	31,8								C6LT-C6-21	31,8 - 34,9	30,6 - 33,8
	70,8	42,3	33,3								C6LT-C6-22	33,3 - 36,5	32,2 - 35,3
	72,4	43,9	34,9								C6LT-C6-23	34,9 - 38,1	33,8 - 36,9
	74,0	45,5	36,5								C6LT-C6-24	36,5 - 39,7	35,3 - 38,5
	75,6	47,1	38,1								C6LT-C6-25	38,1 - 41,3	36,9 - 40,1
	77,2	48,7	39,7								C6LT-C6-26	39,7 - 42,9	38,5 - 41,7
	78,8	50,3	41,3								C6LT-C6-27	41,3 - 44,5	40,1 - 43,3
	80,4	51,8	42,9								C6LT-C6-28	42,9 - 46,0	41,7 - 44,9
	82,0	53,4	44,5								C6LT-C6-29	44,5 - 47,6	43,3 - 46,5
	83,5	55,0	46,0								C6LT-C6-30	46,0 - 49,2	44,9 - 48,0
	85,1	56,6	47,6								C6LT-C6-31	47,6 - 50,8	46,5 - 49,6
	86,7	58,2	49,2								C6LT-C6-32	49,2 - 52,4	48,0 - 51,2

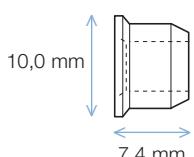
Standard

2LC-F6



Flanged

3LC-F6



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

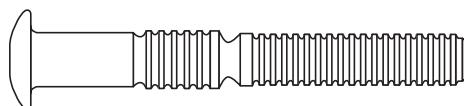
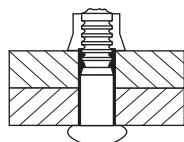
= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C6L® C Lockbolt - Aluminium

- High sustainability and high resistance to vibrations
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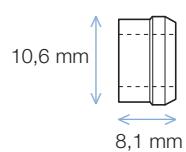


Tige : Aluminium | Tête : Plate

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		Ø (mm)	kN min	kN min	Clamp load kN		↓ min-max (mm)	
												Standard 2LC-F8	Flanged 3LC-F8
6,4 6,45 - 6,58	42,0	12,9	1,6									C6LT-C8-2	1,6 - 4,8
	43,6	14,5	3,2									C6LT-C8-3	3,2 - 6,4
	45,2	16,1	4,8									C6LT-C8-4	4,8 - 7,9
	46,8	17,6	6,4									C6LT-C8-5	6,4 - 9,5
	48,4	19,2	7,9									C6LT-C8-6	7,9 - 11,1
	50,0	20,8	9,5									C6LT-C8-7	9,5 - 12,7
	51,6	22,4	11,1									C6LT-C8-8	11,1 - 14,3
	53,2	24,0	12,7									C6LT-C8-9	12,7 - 15,9
	54,7	25,6	14,3									C6LT-C8-10	14,3 - 17,5
	56,3	27,2	15,9									C6LT-C8-11	15,9 - 19,1
	57,9	28,8	17,5									C6LT-C8-12	17,5 - 20,6
	59,5	30,3	19,1									C6LT-C8-13	19,1 - 22,2
	61,1	31,9	20,6									C6LT-C8-14	20,6 - 23,8
	62,7	33,5	22,2									C6LT-C8-15	22,2 - 25,4
	64,3	35,1	23,8									C6LT-C8-16	23,8 - 27,0
	65,9	36,7	25,4	15,1	3,0	6,6 - 6,8	8,0	8,3		4,2		C6LT-C8-17	25,4 - 28,6
	67,4	38,3	27,0									C6LT-C8-18	27,0 - 30,2
	69,0	39,9	28,6									C6LT-C8-19	28,6 - 31,8
	70,6	41,5	30,2									C6LT-C8-20	30,2 - 33,3
	72,2	43,0	31,8									C6LT-C8-21	31,8 - 34,9
	73,8	44,6	33,3									C6LT-C8-22	33,3 - 36,5
	75,4	46,2	34,9									C6LT-C8-23	34,9 - 38,1
	77,0	47,8	36,5									C6LT-C8-24	36,5 - 39,7
	78,6	49,4	38,1									C6LT-C8-25	38,1 - 41,3
	80,1	51,0	39,7									C6LT-C8-26	39,7 - 42,9
	81,7	52,6	41,3									C6LT-C8-27	41,3 - 44,5
	83,3	54,2	42,9									C6LT-C8-28	42,9 - 46,0
	84,9	55,7	44,5									C6LT-C8-29	44,5 - 47,6
	86,5	57,3	46,0									C6LT-C8-30	46,0 - 49,2
	88,1	58,9	47,6									C6LT-C8-31	47,6 - 50,8
	89,7	60,5	49,2									C6LT-C8-32	49,2 - 52,4
													47,6 - 50,8

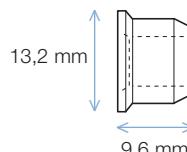
Standard

2LC-F8



Flanged

3LC-F8



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

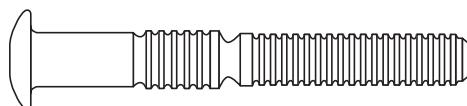
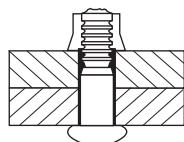
= Minimum shear strength - = Min. and Max. grip range

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C6L® C Lockbolt - Aluminium

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Stem : Aluminium | Head : Truss

	d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		Ø (mm)	kN min	kN min	Clamp load kN		min-max (mm)		
													Standard 2LC-F10	Flanged 3LC-F10	
7,9 8,05 - 8,18	51,9	19,7	3,2										C6LT-C10-4	3,2 - 9,5	1,2 - 7,5
	55,1	22,9	6,4										C6LT-C10-6	6,4 - 12,7	4,4 - 10,7
	58,3	26,1	9,5										C6LT-C10-8	9,5 - 15,9	7,5 - 13,9
	61,5	29,2	12,7										C6LT-C10-10	12,7 - 19,1	10,7 - 17,1
	64,6	32,4	15,9										C6LT-C10-12	15,9 - 22,2	13,9 - 20,2
	67,8	35,6	19,1										C6LT-C10-14	19,1 - 25,4	17,1 - 23,4
	71,0	38,8	22,2										C6LT-C10-16	22,2 - 28,6	20,2 - 26,6
	74,2	41,9	25,4	20,2	3,6	8,2 - 8,3		12,7		13,0	6,7		C6LT-C10-18	25,4 - 31,8	23,4 - 29,8
	77,3	45,1	28,6										C6LT-C10-20	28,6 - 34,9	26,6 - 32,9
	80,5	48,3	31,8										C6LT-C10-22	31,8 - 38,1	29,8 - 36,1
	83,7	51,5	34,9										C6LT-C10-24	34,9 - 41,3	32,9 - 39,3
	86,9	54,6	38,1										C6LT-C10-26	38,1 - 44,5	36,1 - 42,5
	90,0	57,8	41,3										C6LT-C10-28	41,3 - 47,6	39,3 - 45,6
	93,2	61,0	44,5										C6LT-C10-30	44,5 - 50,8	42,5 - 48,8
	96,4	64,2	47,6										C6LT-C10-32	47,6 - 54,0	45,6 - 52,0

Standard



Flanged



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - **↙ ↘** = Minimum tensile strength

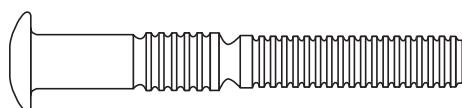
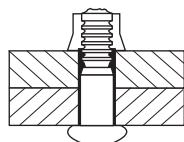
◀ ▶ = Minimum shear strength - **↑ ↓** = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



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Stem : Aluminium | Head : Truss

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		∅ (mm)	kN min	kN min	Clamp load kN		min-max (mm)	
												Standard 2LC-F12	Flanged 3LC-F12
9,5 9,65 - 9,78	57,3	21,7	3,2									C6LT-C12-4	3,2 - 9,5
	60,5	24,8	6,4									C6LT-C12-6	6,4 - 12,7
	63,7	28,0	9,5									C6LT-C12-8	9,5 - 15,9
	66,8	31,2	12,7									C6LT-C12-10	12,7 - 19,1
	70,0	34,4	15,9									C6LT-C12-12	15,9 - 22,2
	73,2	37,5	19,1									C6LT-C12-14	19,1 - 25,4
	76,4	40,7	22,2									C6LT-C12-16	22,2 - 28,6
	79,5	43,9	25,4	23,4	4,3		9,8 - 9,9	18,7	18,7	9,8		C6LT-C12-18	25,4 - 31,8
	82,7	47,1	28,6									C6LT-C12-20	28,6 - 34,9
	85,9	50,2	31,8									C6LT-C12-22	31,8 - 38,1
	89,1	53,4	34,9									C6LT-C12-24	34,9 - 41,3
	92,2	56,6	38,1									C6LT-C12-26	38,1 - 44,5
	95,4	59,8	41,3									C6LT-C12-28	41,3 - 47,6
	98,6	62,9	44,5									C6LT-C12-30	44,5 - 50,8
	101,8	66,1	47,6									C6LT-C12-32	47,6 - 54,0
													45,2 - 51,6

Standard



Flanged



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

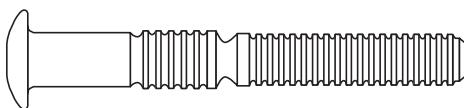
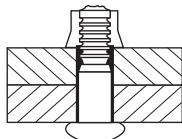
∅ = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)

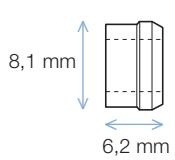
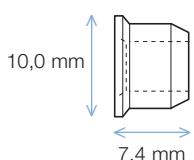

C6L® F Lockbolt - Aluminium 6061

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



Stem : Aluminium 6061 | Head : Truss

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		kN min		kN min	Clamp load kN			
												Standard LC-I6	Flanged 3LC-I6
4,8 4,85 - 4,95	39,1	10,6	1,6									C6LT-F6-2	1,6 - 4,8
	40,7	12,2	3,2									C6LT-F6-3	3,2 - 6,4
	42,3	13,7	4,8									C6LT-F6-4	4,8 - 7,9
	43,9	15,3	6,4									C6LT-F6-5	6,4 - 9,5
	45,4	16,9	7,9									C6LT-F6-6	7,9 - 11,1
	47,0	18,5	9,5									C6LT-F6-7	9,5 - 12,7
	48,6	20,1	11,1									C6LT-F6-8	11,1 - 14,3
	50,2	21,7	12,7									C6LT-F6-9	12,7 - 15,9
	51,8	23,3	14,3									C6LT-F6-10	14,3 - 17,5
	53,4	24,9	15,9									C6LT-F6-11	15,9 - 19,1
	55,0	26,4	17,5									C6LT-F6-12	17,5 - 20,6
	56,6	28,0	19,1									C6LT-F6-13	19,1 - 22,2
	58,1	29,6	20,6									C6LT-F6-14	20,6 - 23,8
	59,7	31,2	22,2									C6LT-F6-15	22,2 - 25,4
	61,3	32,8	23,8									C6LT-F6-16	23,8 - 27,0
	62,9	34,4	25,4	11,9	2,3	5,0 - 5,2	2,4		3,4	1,6		C6LT-F6-17	25,4 - 28,6
	64,5	36,0	27,0									C6LT-F6-18	27,0 - 30,2
	66,1	37,6	28,6									C6LT-F6-19	28,6 - 31,8
	67,7	39,1	30,2									C6LT-F6-20	30,2 - 33,3
	69,3	40,7	31,8									C6LT-F6-21	31,8 - 34,9
	70,8	42,3	33,3									C6LT-F6-22	33,3 - 36,5
	72,4	43,9	34,9									C6LT-F6-23	34,9 - 38,1
	74,0	45,5	36,5									C6LT-F6-24	36,5 - 39,7
	75,6	47,1	38,1									C6LT-F6-25	38,1 - 41,3
	77,2	48,7	39,7									C6LT-F6-26	39,7 - 42,9
	78,8	50,3	41,3									C6LT-F6-27	41,3 - 44,5
	80,4	51,8	42,9									C6LT-F6-28	42,9 - 46,0
	82,0	53,4	44,5									C6LT-F6-29	44,5 - 47,6
	83,5	55,0	46,0									C6LT-F6-30	46,0 - 49,2
	85,1	56,6	47,6									C6LT-F6-31	47,6 - 50,8
	86,7	58,2	49,2									C6LT-F6-32	49,2 - 52,4

Standard
LC-I6

Flanged
3LC-I6

d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

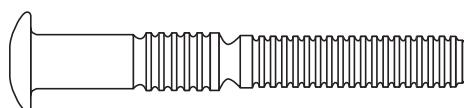
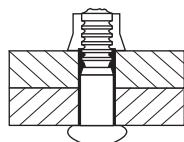
Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range



C6L® F Lockbolt - Aluminium 6061

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials

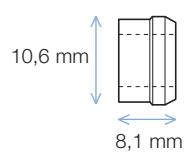


Stem : Aluminium 6061 | Head : Truss

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		Ø (mm)	kN min	kN min	Clamp load kN		↓ min-max (mm)	
												Standard LC-I8	Flanged 3LC-I8
6,4 6,45 - 6,58	42,0	12,9	1,6									C6LT-F8-2	1,6 - 4,8
	43,6	14,5	3,2									C6LT-F8-3	3,2 - 6,4
	45,2	16,1	4,8									C6LT-F8-4	4,8 - 7,9
	46,8	17,6	6,4									C6LT-F8-5	6,4 - 9,5
	48,4	19,2	7,9									C6LT-F8-6	7,9 - 11,1
	50,0	20,8	9,5									C6LT-F8-7	9,5 - 12,7
	51,6	22,4	11,1									C6LT-F8-8	11,1 - 14,3
	53,2	24,0	12,7									C6LT-F8-9	12,7 - 15,9
	54,7	25,6	14,3									C6LT-F8-10	14,3 - 17,5
	56,3	27,2	15,9									C6LT-F8-11	15,9 - 19,1
	57,9	28,8	17,5									C6LT-F8-12	17,5 - 20,6
	59,5	30,3	19,1									C6LT-F8-13	19,1 - 22,2
	61,1	31,9	20,6									C6LT-F8-14	20,6 - 23,8
	62,7	33,5	22,2									C6LT-F8-15	22,2 - 25,4
	64,3	35,1	23,8									C6LT-F8-16	23,8 - 27,0
	65,9	36,7	25,4	15,1	3,0	6,6 - 6,8	4,3		6,1	2,8		C6LT-F8-17	25,4 - 28,6
	67,4	38,3	27,0									C6LT-F8-18	27,0 - 30,2
	69,0	39,9	28,6									C6LT-F8-19	28,6 - 31,8
	70,6	41,5	30,2									C6LT-F8-20	30,2 - 33,3
	72,2	43,0	31,8									C6LT-F8-21	31,8 - 34,9
	73,8	44,6	33,3									C6LT-F8-22	33,3 - 36,5
	75,4	46,2	34,9									C6LT-F8-23	34,9 - 38,1
	77,0	47,8	36,5									C6LT-F8-24	36,5 - 39,7
	78,6	49,4	38,1									C6LT-F8-25	38,1 - 41,3
	80,1	51,0	39,7									C6LT-F8-26	39,7 - 42,9
	81,7	52,6	41,3									C6LT-F8-27	41,3 - 44,5
	83,3	54,2	42,9									C6LT-F8-28	42,9 - 46,0
	84,9	55,7	44,5									C6LT-F8-29	44,5 - 47,6
	86,5	57,3	46,0									C6LT-F8-30	46,0 - 49,2
	88,1	58,9	47,6									C6LT-F8-31	47,6 - 50,8
	89,7	60,5	49,2									C6LT-F8-32	49,2 - 52,4
													47,6 - 50,8

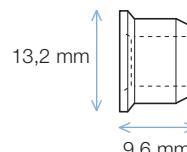
Standard

LC-I8



Flanged

3LC-I8



d1 = Diameter - l = Length of the stem - l2 = Position of the breakneck groove - l3 = Length without grooves

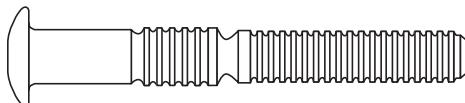
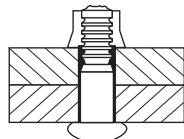
Ø = Hole diameter - k = Head thickness - d2 = Head diameter - ↓ = Minimum tensile strength

◀ ▶ = Minimum shear strength - ↗ = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)

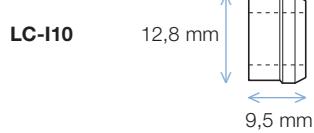

C6L® F Lockbolt - Aluminium 6061

- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



Stem : Aluminium 6061 | Head : Truss

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		∅ (mm)	kN min	kN min	Clamp load kN			min-max (mm)
											Standard LC-I10	Flanged 3LC-I10	
7,9 8,05 - 8,18	51,9	19,7	3,2								C6LT-F10-4	3,2 - 9,5	1,2 - 7,5
	55,1	22,9	6,4								C6LT-F10-6	6,4 - 12,7	4,4 - 10,7
	58,3	26,1	9,5								C6LT-F10-8	9,5 - 15,9	7,5 - 13,9
	61,5	29,2	12,7								C6LT-F10-10	12,7 - 19,1	10,7 - 17,1
	64,6	32,4	15,9								C6LT-F10-12	15,9 - 22,2	13,9 - 20,2
	67,8	35,6	19,1								C6LT-F10-14	19,1 - 25,4	17,1 - 23,4
	71,0	38,8	22,2	20,2	3,6	8,2 - 8,3	6,9		9,5	4,3	C6LT-F10-16	22,2 - 28,6	20,2 - 26,6
	74,2	41,9	25,4								C6LT-F10-18	25,4 - 31,8	23,4 - 29,8
	77,3	45,1	28,6								C6LT-F10-20	28,6 - 34,9	26,6 - 32,9
	80,5	48,3	31,8								C6LT-F10-22	31,8 - 38,1	29,8 - 36,1
	83,7	51,5	34,9								C6LT-F10-24	34,9 - 41,3	32,9 - 39,3
	86,9	54,6	38,1								C6LT-F10-26	38,1 - 44,5	36,1 - 42,5
	90,0	57,8	41,3								C6LT-F10-28	41,3 - 47,6	39,3 - 45,6
	93,2	61,0	44,5								C6LT-F10-30	44,5 - 50,8	42,5 - 48,8
	96,4	64,2	47,6								C6LT-F10-32	47,6 - 54,0	45,6 - 52,0

Standard

Flanged

d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

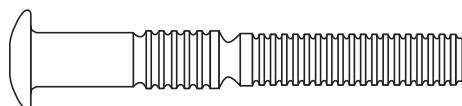
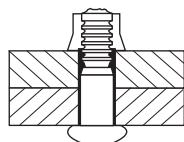
∅ = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range



C6L® F Lockbolt - Aluminium 6061

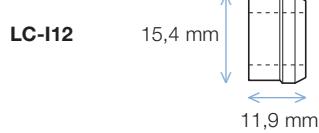
- High sustainability and high resistance to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range
- Wide flange collar available: enables installation into non metallic materials



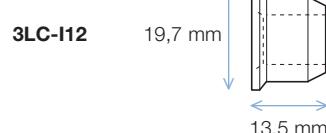
Stem : Aluminium 6061 | Head : Truss

	d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		∅ (mm)	kN min	kN min	Clamp load kN		min-max (mm)		
													Standard LC-I12	Flanged 3LC-I12	
9,5 9,65 - 9,78	57,3	21,7	3,2										C6LT-F12-4	3,2 - 9,5	0,8 - 7,1
	60,5	24,8	6,4										C6LT-F12-6	6,4 - 12,7	4,0 - 10,3
	63,7	28,0	9,5										C6LT-F12-8	9,5 - 15,9	7,1 - 13,5
	66,8	31,2	12,7										C6LT-F12-10	12,7 - 19,1	10,3 - 16,7
	70,0	34,4	15,9										C6LT-F12-12	15,9 - 22,2	13,5 - 19,8
	73,2	37,5	19,1										C6LT-F12-14	19,1 - 25,4	16,7 - 23,0
	76,4	40,7	22,2										C6LT-F12-16	22,2 - 28,6	19,8 - 26,2
	79,5	43,9	25,4	23,4	4,3	9,9		10,7		13,6	6,1		C6LT-F12-18	25,4 - 31,8	23,0 - 29,4
	82,7	47,1	28,6										C6LT-F12-20	28,6 - 34,9	26,2 - 32,5
	85,9	50,2	31,8										C6LT-F12-22	31,8 - 38,1	29,4 - 35,7
	89,1	53,4	34,9										C6LT-F12-24	34,9 - 41,3	32,5 - 38,9
	92,2	56,6	38,1										C6LT-F12-26	38,1 - 44,5	35,7 - 42,1
	95,4	59,8	41,3										C6LT-F12-28	41,3 - 47,6	38,9 - 45,2
	98,6	62,9	44,5										C6LT-F12-30	44,5 - 50,8	42,1 - 48,4
	101,8	66,1	47,6										C6LT-F12-32	47,6 - 54,0	45,2 - 51,6

Standard



Flanged



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

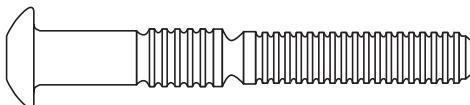
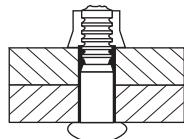
∅ = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range



C120L® R Lockbolt - Steel

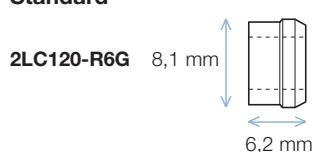
- C120L® is a 8.8 grade small diameter LockBolt (improved version of C6L) with a semi-circular head, reduced and countersunk
- Standard stem and head (for a installation into non metallic materials)



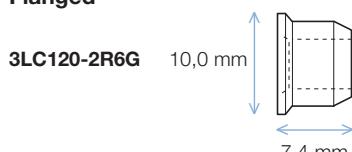
Stem : Steel | Head : Brazier

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		kN min		kN min	min-max (mm)	
										Standard 2LC120-R6G	Flanged 3LC120-2R6G
4,8	39,1	10,6	1,6							C120LB-R6-2G	1,59 - 4,76
	40,7	12,2	3,2							C120LB-R6-3G	3,18 - 6,35
	42,3	13,7	4,8							C120LB-R6-4G	4,76 - 7,94
	43,9	15,3	6,4							C120LB-R6-5G	6,35 - 9,53
	45,4	16,9	7,9							C120LB-R6-6G	7,94 - 11,11
	47,0	18,5	9,5							C120LB-R6-7G	9,53 - 12,70
	48,6	20,1	11,1							C120LB-R6-8G	11,11 - 14,29
	50,2	21,7	12,7							C120LB-R6-9G	12,70 - 15,88
	51,8	23,3	14,3							C120LB-R6-10G	14,29 - 17,46
	53,4	24,9	15,9							C120LB-R6-11G	15,88 - 19,05
	55,0	26,4	17,5							C120LB-R6-12G	17,46 - 20,64
	56,6	28,0	19,1							C120LB-R6-13G	19,05 - 22,23
	58,1	29,6	20,6							C120LB-R6-14G	20,64 - 23,81
	59,7	31,2	22,2							C120LB-R6-15G	22,23 - 25,40
	61,3	32,8	23,8							C120LB-R6-16G	23,81 - 26,99
	62,9	34,4	25,4	9,9	3,2	5,0 - 5,2	9,8	10,8	5,3	C120LB-R6-17G	25,40 - 28,58
	64,5	36,0	27,0							C120LB-R6-18G	26,99 - 30,16
	66,1	37,6	28,6							C120LB-R6-19G	28,58 - 31,75
	67,7	39,1	30,2							C120LB-R6-20G	30,16 - 33,34
	69,3	40,7	31,8							C120LB-R6-21G	31,75 - 34,93
	70,8	42,3	33,3							C120LB-R6-22G	33,34 - 36,51
	72,4	43,9	34,9							C120LB-R6-23G	34,93 - 38,10
	74,0	45,5	36,5							C120LB-R6-24G	36,51 - 39,69
	75,6	47,1	38,1							C120LB-R6-25G	38,10 - 41,28
	77,2	48,7	39,7							C120LB-R6-26G	39,69 - 42,86
	78,8	50,3	41,3							C120LB-R6-27G	41,28 - 44,45
	80,4	51,8	42,9							C120LB-R6-28G	42,86 - 46,04
	82,0	53,4	44,5							C120LB-R6-29G	44,45 - 47,63
	83,5	55,0	46,0							C120LB-R6-30G	46,04 - 49,21
	85,1	56,6	47,6							C120LB-R6-31G	47,63 - 50,80
	86,7	58,2	49,2							C120LB-R6-32G	49,21 - 52,39

Standard



Flanged



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

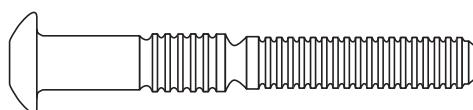
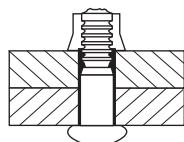
Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range



C120L® R Lockbolt - Steel

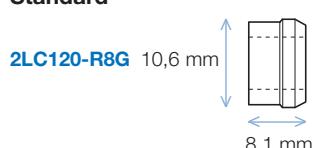
- C120L® is a 8.8 grade small diameter LockBolt (improved version of C6L) with a semi-circular head, reduced and countersunk
- Standard stem and head (for a installation into non metallic materials)



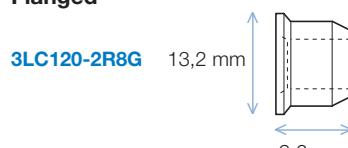
Stem : Steel | Head : Brazier

	d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		kN min		kN min	Clamp load kN	min-max (mm)	
												Standard 2LC120-R8G	Flanged 3LC120-2R8G
6,4	42,0	12,9	1,6									C120LB-R8-2G	1,59 - 4,76
	43,6	14,5	3,2									C120LB-R8-3G	3,18 - 6,35
	45,2	16,1	4,8									C120LB-R8-4G	4,76 - 7,94
	46,8	17,6	6,4									C120LB-R8-5G	6,35 - 9,53
	48,4	19,2	7,9									C120LB-R8-6G	7,94 - 11,11
	50,0	20,8	9,5									C120LB-R8-7G	7,94 - 11,11
	51,6	22,4	11,1									C120LB-R8-8G	11,11 - 14,29
	53,2	24,0	12,7									C120LB-R8-9G	12,70 - 15,88
	54,7	25,6	14,3									C120LB-R8-10G	14,29 - 17,46
	56,3	27,2	15,9									C120LB-R8-11G	15,88 - 19,05
	57,9	28,8	17,5									C120LB-R8-12G	17,46 - 20,64
	59,5	30,3	19,1									C120LB-R8-13G	19,05 - 22,23
	61,1	31,9	20,6									C120LB-R8-14G	20,64 - 23,81
	62,7	33,5	22,2									C120LB-R8-15G	22,23 - 25,40
	64,3	35,1	23,8									C120LB-R8-16G	23,81 - 26,99
	65,9	36,7	25,4	13,2	3,9	6,6 - 6,8	16,9	19,1		10,2		C120LB-R8-17G	25,40 - 28,58
	67,4	38,3	27,0									C120LB-R8-18G	26,99 - 30,16
	69,0	39,9	28,6									C120LB-R8-19G	28,58 - 31,75
	70,6	41,5	30,2									C120LB-R8-20G	30,16 - 33,34
	72,2	43,0	31,8									C120LB-R8-21G	31,75 - 34,93
	73,8	44,6	33,3									C120LB-R8-22G	33,34 - 36,51
	75,4	46,2	34,9									C120LB-R8-23G	34,93 - 38,10
	77,0	47,8	36,5									C120LB-R8-24G	36,51 - 39,69
	78,6	49,4	38,1									C120LB-R8-25G	38,10 - 41,28
	80,1	51,0	39,7									C120LB-R8-26G	39,69 - 42,86
	81,7	52,6	41,3									C120LB-R8-27G	41,28 - 44,45
	83,3	54,2	42,9									C120LB-R8-28G	42,86 - 46,04
	84,9	55,7	44,5									C120LB-R8-29G	44,45 - 47,63
	86,5	57,3	46,0									C120LB-R8-30G	46,04 - 49,21
	88,1	58,9	47,6									C120LB-R8-31G	47,63 - 50,80
	89,7	60,5	49,2									C120LB-R8-32G	49,21 - 52,39

Standard



Flanged



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

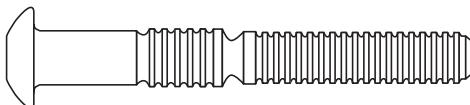
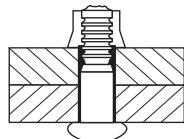
Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)

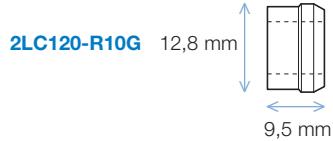
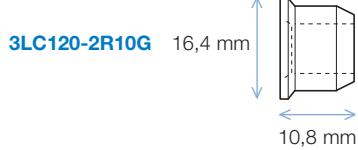

C120L® R Lockbolt - Steel

- C120L® is a 8.8 grade small diameter LockBolt (improved version of C6L) with a semi-circular head, reduced and countersunk
- Standard stem and head (for a installation into non metallic materials)



Stem : Steel | Head : Brazier

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		kN min	kN min	Clamp load kN		min-max (mm)	
											Standard 2LC120-R10G	Flanged 3LC120-2R10G
7,9	51,9	19,7	3,2								3,18 - 9,53	1,19 - 7,54
	55,1	22,9	6,4								6,35 - 12,70	4,37 - 10,72
	58,3	26,1	9,5								9,53 - 15,88	7,54 - 13,89
	61,5	29,2	12,7								12,70 - 19,05	10,72 - 17,07
	64,6	32,4	15,9								15,88 - 22,23	13,89 - 20,24
	67,8	35,6	19,1								19,05 - 25,40	17,07 - 23,42
	71,0	38,8	22,2								22,23 - 28,58	20,24 - 26,59
	74,2	41,9	25,4	16,5	5,1	8,2 - 8,3	28,0	29,8	18,7		25,40 - 31,75	23,42 - 29,77
	77,3	45,1	28,6								28,58 - 34,93	26,59 - 32,94
	80,5	48,3	31,8								31,75 - 38,10	29,77 - 36,12
	83,7	51,5	34,9								34,93 - 41,28	32,94 - 39,29
	86,9	54,6	38,1								38,10 - 44,45	36,12 - 42,47
	90,0	57,8	41,3								41,28 - 47,63	39,29 - 45,64
	93,2	61,0	44,5								44,45 - 50,80	42,47 - 48,82
	96,4	64,2	47,6								47,63 - 53,98	45,64 - 51,99

Standard

Flanged

d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

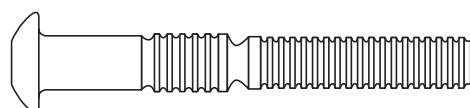
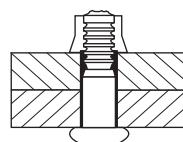
= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C120L® R Lockbolt - Steel

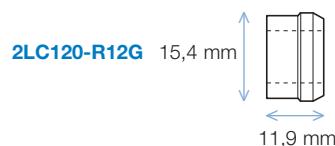
- C120L® is a 8.8 grade small diameter LockBolt (improved version of C6L) with a semi-circular head, reduced and countersunk
- Standard stem and head (for a installation into non metallic materials)



Stem : Steel | Head : Brazier

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)			Clamp load kN	min-max (mm)	
									Standard 2LC120-R12G	Flanged 3LC120-2R12G
9,5 9,65 - 9,78	57,3	21,7	3,2						C120LB-R12-4G	3,18 - 9,53
	60,5	24,8	6,4						C120LB-R12-6G	6,35 - 12,70
	63,7	28,0	9,5						C120LB-R12-8G	9,53 - 15,88
	66,8	31,2	12,7						C120LB-R12-10G	12,70 - 19,05
	70,0	34,4	15,9						C120LB-R12-12G	15,88 - 22,23
	73,2	37,5	19,1						C120LB-R12-14G	19,05 - 25,40
	76,4	40,7	22,2						C120LB-R12-16G	22,23 - 28,58
	79,5	43,9	25,4	19,8	6,3	9,9	41,4	42,7	C120LB-R12-18G	25,40 - 31,75
	82,7	47,1	28,6						C120LB-R12-20G	28,58 - 34,93
	85,9	50,2	31,8						C120LB-R12-22G	31,75 - 38,10
	89,1	53,4	34,9						C120LB-R12-24G	34,93 - 41,28
	92,2	56,6	38,1						C120LB-R12-26G	38,10 - 44,45
	95,4	59,8	41,3						C120LB-R12-28G	41,28 - 47,63
	98,6	62,9	44,5						C120LB-R12-30G	44,45 - 50,80
	101,8	66,1	47,6						C120LB-R12-32G	47,63 - 53,98

Standard



Flanged



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - **↙ ↘** = Minimum tensile strength

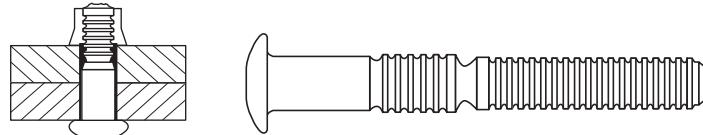
← → = Minimum shear strength - **↑ ↓** = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C120L® R Lockbolt - Steel

- C120L® is a 8.8 grade small diameter LockBolt (improved version of C6L) with a semi-circular head, reduced and countersunk
- Standard stem and head (for a installation into non metallic materials)



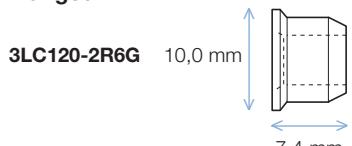
Stem : Steel | Head : Truss

4,8	d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		kN min		kN min	Clamp load kN	↓ min-max (mm)	
												Standard 2LC120-R6G	Flanged 3LC120-2R6G
	39,1	10,6	1,6									C120LT-R6-2G	1,59 - 4,76
	40,7	12,2	3,2									C120LT-R6-3G	3,18 - 6,35
	42,3	13,7	4,8									C120LT-R6-4G	4,76 - 7,94
	43,9	15,3	6,4									C120LT-R6-5G	6,35 - 9,53
	45,4	16,9	7,9									C120LT-R6-6G	7,94 - 11,11
	47,0	18,5	9,5									C120LT-R6-7G	9,53 - 12,70
	48,6	20,1	11,1									C120LT-R6-8G	11,11 - 14,29
	50,2	21,7	12,7									C120LT-R6-9G	12,70 - 15,88
	51,8	23,3	14,3									C120LT-R6-10G	14,29 - 17,46
	53,4	24,9	15,9									C120LT-R6-11G	15,88 - 19,05
	55,0	26,4	17,5									C120LT-R6-12G	17,46 - 20,64
	56,6	28,0	19,1									C120LT-R6-13G	19,05 - 22,23
	58,1	29,6	20,6									C120LT-R6-14G	20,64 - 23,81
	59,7	31,2	22,2									C120LT-R6-15G	22,23 - 25,40
	61,3	32,8	23,8									C120LT-R6-16G	23,81 - 26,99
	62,9	34,4	25,4	11,9	2,3		5,0 - 5,2	9,8		10,8	5,3	C120LT-R6-17G	25,40 - 28,58
	64,5	36,0	27,0									C120LT-R6-18G	26,99 - 30,16
	66,1	37,6	28,6									C120LT-R6-19G	28,58 - 31,75
	67,7	39,1	30,2									C120LT-R6-20G	30,16 - 33,34
	69,3	40,7	31,8									C120LT-R6-21G	31,75 - 34,93
	70,8	42,3	33,3									C120LT-R6-22G	33,34 - 36,51
	72,4	43,9	34,9									C120LT-R6-23G	34,93 - 38,10
	74,0	45,5	36,5									C120LT-R6-24G	36,51 - 39,69
	75,6	47,1	38,1									C120LT-R6-25G	38,10 - 41,28
	77,2	48,7	39,7									C120LT-R6-26G	39,69 - 42,86
	78,8	50,3	41,3									C120LT-R6-27G	41,28 - 44,45
	80,4	51,8	42,9									C120LT-R6-28G	42,86 - 46,04
	82,0	53,4	44,5									C120LT-R6-29G	44,45 - 47,63
	83,5	55,0	46,0									C120LT-R6-30G	46,04 - 49,21
	85,1	56,6	47,6									C120LT-R6-31G	47,63 - 50,80
	86,7	58,2	49,2									C120LT-R6-32G	49,21 - 52,39

Standard



Flanged



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

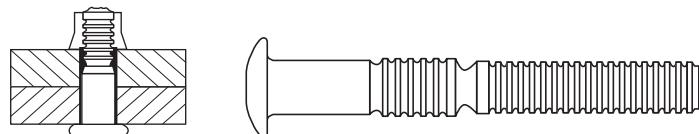
= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C120L® R Lockbolt - Steel

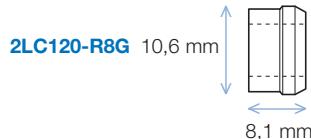
- C120L® is a 8.8 grade small diameter LockBolt (improved version of C6L) with a semi-circular head, reduced and countersunk
- Standard stem and head (for a installation into non metallic materials)



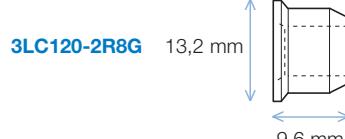
Stem : Steel | Head : Truss

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		kN min		kN min	↓ min-max (mm)	
										Standard 2LC120-R8G	Flanged 3LC120-2R8G
6,4	42,0	12,9	1,6							C120LT-R8-2G	1,59 - 4,76
	43,6	14,5	3,2							C120LT-R8-3G	3,18 - 6,35
	45,2	16,1	4,8							C120LT-R8-4G	4,76 - 7,94
	46,8	17,6	6,4							C120LT-R8-5G	6,35 - 9,53
	48,4	19,2	7,9							C120LT-R8-6G	7,94 - 11,11
	50,0	20,8	9,5							C120LT-R8-7G	7,94 - 11,11
	51,6	22,4	11,1							C120LT-R8-8G	11,11 - 14,29
	53,2	24,0	12,7							C120LT-R8-9G	12,70 - 15,88
	54,7	25,6	14,3							C120LT-R8-10G	14,29 - 17,46
	56,3	27,2	15,9							C120LT-R8-11G	15,88 - 19,05
	57,9	28,8	17,5							C120LT-R8-12G	17,46 - 20,64
	59,5	30,3	19,1							C120LT-R8-13G	19,05 - 22,23
	61,1	31,9	20,6							C120LT-R8-14G	20,64 - 23,81
	62,7	33,5	22,2							C120LT-R8-15G	22,23 - 25,40
	64,3	35,1	23,8							C120LT-R8-16G	23,81 - 26,99
	65,9	36,7	25,4	15,1	3,0	6,6 - 6,8	16,9	19,1	10,2	C120LT-R8-17G	25,40 - 28,58
	67,4	38,3	27,0							C120LT-R8-18G	26,99 - 30,16
	69,0	39,9	28,6							C120LT-R8-19G	28,58 - 31,75
	70,6	41,5	30,2							C120LT-R8-20G	30,16 - 33,34
	72,2	43,0	31,8							C120LT-R8-21G	31,75 - 34,93
	73,8	44,6	33,3							C120LT-R8-22G	33,34 - 36,51
	75,4	46,2	34,9							C120LT-R8-23G	34,93 - 38,10
	77,0	47,8	36,5							C120LT-R8-24G	36,51 - 39,69
	78,6	49,4	38,1							C120LT-R8-25G	38,10 - 41,28
	80,1	51,0	39,7							C120LT-R8-26G	39,69 - 42,86
	81,7	52,6	41,3							C120LT-R8-27G	41,28 - 44,45
	83,3	54,2	42,9							C120LT-R8-28G	42,86 - 46,04
	84,9	55,7	44,5							C120LT-R8-29G	44,45 - 47,63
	86,5	57,3	46,0							C120LT-R8-30G	46,04 - 49,21
	88,1	58,9	47,6							C120LT-R8-31G	47,63 - 50,80
	89,7	60,5	49,2							C120LT-R8-32G	49,21 - 52,39

Standard



Flanged



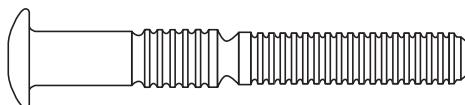
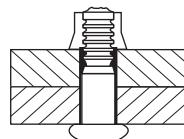
d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range

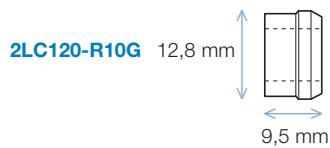
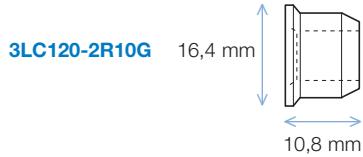

C120L® R Lockbolt - Steel

- C120L® is a 8.8 grade small diameter LockBolt (improved version of C6L) with a semi-circular head, reduced and countersunk
- Standard stem and head (for a installation into non metallic materials)



Stem : Steel | Head : Truss

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		Ø (mm)	kN min	kN min	Clamp load kN	min-max (mm)	
											Standard 2LC120-R10G	Flanged 3LC120-2R10G
7,9	51,9	19,7	3,2							18,7	C120LT-R10-4G	3,18 - 9,53
	55,1	22,9	6,4								C120LT-R10-6G	6,35 - 12,70
	58,3	26,1	9,5								C120LT-R10-8G	9,53 - 15,88
	61,5	29,2	12,7								C120LT-R10-10G	12,70 - 19,05
	64,6	32,4	15,9								C120LT-R10-12G	15,88 - 22,23
	67,8	35,6	19,1								C120LT-R10-14G	19,05 - 25,40
	71,0	38,8	22,2								C120LT-R10-16G	22,23 - 28,58
	74,2	41,9	25,4	20,2	3,6	8,2 - 8,3	28,0	29,8			C120LT-R10-18G	25,40 - 31,75
	77,3	45,1	28,6								C120LT-R10-20G	28,58 - 34,93
	80,5	48,3	31,8								C120LT-R10-22G	31,75 - 38,10
	83,7	51,5	34,9								C120LT-R10-24G	34,93 - 41,28
	86,9	54,6	38,1								C120LT-R10-26G	38,10 - 44,45
	90,0	57,8	41,3								C120LT-R10-28G	41,28 - 47,63
	93,2	61,0	44,5								C120LT-R10-30G	44,45 - 50,80
	96,4	64,2	47,6								C120LT-R10-32G	47,63 - 53,98

Standard

Flanged


d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

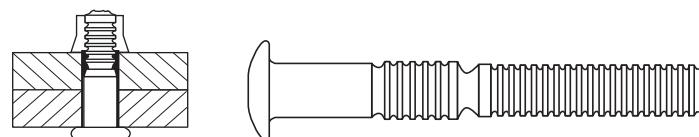
= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C120L® R Lockbolt - Steel

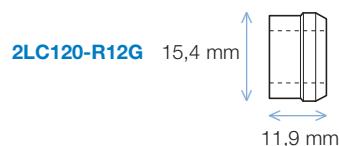
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- Standard stem and head (for a installation into non metallic materials)



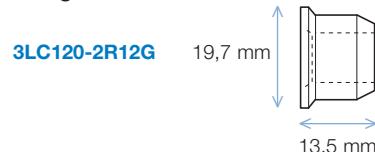
Stem : Steel | Head : Truss

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)	\emptyset (mm)	kN min	kN min	Clamp load kN	min-max (mm)	
										Standard 2LC120-R12G	Flanged 3LC120-2R12G
9,5 9,65 - 9,78	57,3	21,7	3,2							C120LT-R12-4G	3,18 - 9,53
	60,5	24,8	6,4							C120LT-R12-6G	6,35 - 12,70
	63,7	28,0	9,5							C120LT-R12-8G	9,53 - 15,88
	66,8	31,2	12,7							C120LT-R12-10G	12,70 - 19,05
	70,0	34,4	15,9							C120LT-R12-12G	15,88 - 22,23
	73,2	37,5	19,1							C120LT-R12-14G	19,05 - 25,40
	76,4	40,7	22,2	23,4	4,3	9,9	41,4	42,7	22,2	C120LT-R12-16G	22,23 - 28,58
	79,5	43,9	25,4							C120LT-R12-18G	25,40 - 31,75
	82,7	47,1	28,6							C120LT-R12-20G	28,58 - 34,93
	85,9	50,2	31,8							C120LT-R12-22G	31,75 - 38,10
	89,1	53,4	34,9							C120LT-R12-24G	34,93 - 41,28
	92,2	56,6	38,1							C120LT-R12-26G	38,10 - 44,45
	95,4	59,8	41,3							C120LT-R12-28G	41,28 - 47,63
	98,6	62,9	44,5							C120LT-R12-30G	44,45 - 50,80
	101,8	66,1	47,6							C120LT-R12-32G	47,63 - 53,98

Standard



Flanged



d1 = Diameter - l = Length of the stem - l2 = Position of the breakneck groove - l3 = Length without grooves

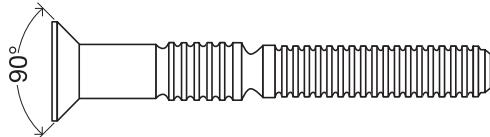
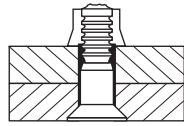
\emptyset = Hole diameter - k = Head thickness - d2 = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)


C120L® R Lockbolt - Steel

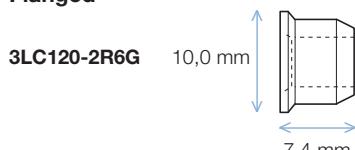
- C120L® is a 8.8 grade small diameter LockBolt (improved version of C6L) with a semi-circular head, reduced and countersunk
- Standard stem and head (for a installation into non metallic materials)



Stem : Steel | Head : Countersunk 90°

	d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		kN min	kN min	Clamp load kN	min-max (mm)	
											Standard 2LC120-R6G	Flanged 3LC120-2R6G
4,8	39,9	12,2	3,2								C120L90-R6-3G	3,18 - 6,35
	270,1	13,7	4,8								C120L90-R6-4G	4,76 - 7,94
	271,7	15,3	6,4								C120L90-R6-5G	6,35 - 9,53
	273,2	16,9	7,9								C120L90-R6-6G	7,94 - 11,11
	274,8	18,5	9,5								C120L90-R6-7G	9,53 - 12,70
	276,4	20,1	11,1								C120L90-R6-8G	11,11 - 14,29
	278,0	21,7	12,7								C120L90-R6-9G	12,70 - 15,88
	279,6	23,3	14,3								C120L90-R6-10G	14,29 - 17,46
	281,2	24,9	15,9								C120L90-R6-11G	15,88 - 19,05
	282,8	26,4	17,5								C120L90-R6-12G	17,46 - 20,64
	284,4	28,0	19,1								C120L90-R6-13G	19,05 - 22,23
	285,9	29,6	20,6								C120L90-R6-14G	20,64 - 23,81
	287,5	31,2	22,2								C120L90-R6-15G	22,23 - 25,40
	289,1	32,8	23,8								C120L90-R6-16G	23,81 - 26,99
	290,7	34,4	25,4	9,1	2,2	5,0 - 5,2	9,8	10,8	5,3		C120L90-R6-17G	25,40 - 28,58
	292,3	36,0	27,0								C120L90-R6-18G	26,99 - 30,16
	293,9	37,6	28,6								C120L90-R6-19G	28,58 - 31,75
	295,5	39,1	30,2								C120L90-R6-20G	30,16 - 33,34
	297,1	40,7	31,8								C120L90-R6-21G	31,75 - 34,93
	298,6	42,3	33,3								C120L90-R6-22G	33,34 - 36,51
	300,2	43,9	34,9								C120L90-R6-23G	34,93 - 38,10
	301,8	45,5	36,5								C120L90-R6-24G	36,51 - 39,69
	303,4	47,1	38,1								C120L90-R6-25G	38,10 - 41,28
	305,0	48,7	39,7								C120L90-R6-26G	39,69 - 42,86
	306,6	50,3	41,3								C120L90-R6-27G	41,28 - 44,45
	308,2	51,8	42,9								C120L90-R6-28G	42,86 - 46,04
	309,8	53,4	44,5								C120L90-R6-29G	44,45 - 47,63
	311,3	55,0	46,0								C120L90-R6-30G	46,04 - 49,21
	312,9	56,6	47,6								C120L90-R6-31G	47,63 - 50,80
	314,5	58,2	49,2								C120L90-R6-32G	49,21 - 52,39

Standard

Flanged


d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

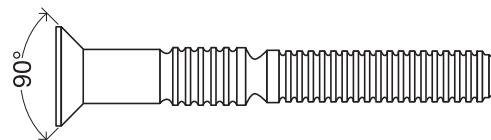
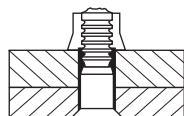
Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range



C120L® R Lockbolt - Steel

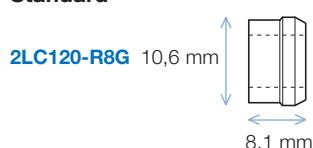
- C120L® is a 8.8 grade small diameter LockBolt (improved version of C6L) with a semi-circular head, reduced and countersunk
- Standard stem and head (for a installation into non metallic materials)



Stem : Steel | Head : Countersunk 90°

	d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)	\emptyset (mm)	kN min	kN min	Clamp load kN		min-max (mm)	
												Standard 2LC120-R8G	Flanged 3LC120-2R8G
6,4	43,1	14,5	3,2									C120L90-R8-3G	3,18 - 6,35
	1479,6	16,1	4,8									C120L90-R8-4G	4,76 - 7,94
	1481,2	17,6	6,4									C120L90-R8-5G	6,35 - 9,53
	1482,8	19,2	7,9									C120L90-R8-6G	7,94 - 11,11
	1484,4	20,8	9,5									C120L90-R8-7G	7,94 - 11,11
	1486,0	22,4	11,1									C120L90-R8-8G	11,11 - 14,29
	1487,6	24,0	12,7									C120L90-R8-9G	12,70 - 15,88
	1489,1	25,6	14,3									C120L90-R8-10G	14,29 - 17,46
	1490,7	27,2	15,9									C120L90-R8-11G	15,88 - 19,05
	1492,3	28,8	17,5									C120L90-R8-12G	17,46 - 20,64
	1493,9	30,3	19,1									C120L90-R8-13G	19,05 - 22,23
	1495,5	31,9	20,6									C120L90-R8-14G	20,64 - 23,81
	1497,1	33,5	22,2									C120L90-R8-15G	22,23 - 25,40
	1498,7	35,1	23,8									C120L90-R8-16G	23,81 - 26,99
	1500,3	36,7	25,4	12,1	2,9	6,6 - 6,8	16,9	19,1	10,2			C120L90-R8-17G	25,40 - 28,58
	1501,8	38,3	27,0									C120L90-R8-18G	26,99 - 30,16
	1503,4	39,9	28,6									C120L90-R8-19G	28,58 - 31,75
	1505,0	41,5	30,2									C120L90-R8-20G	30,16 - 33,34
	1506,6	43,0	31,8									C120L90-R8-21G	31,75 - 34,93
	1508,2	44,6	33,3									C120L90-R8-22G	33,34 - 36,51
	1509,8	46,2	34,9									C120L90-R8-23G	34,93 - 38,10
	1511,4	47,8	36,5									C120L90-R8-24G	36,51 - 39,69
	1513,0	49,4	38,1									C120L90-R8-25G	38,10 - 41,28
	1514,5	51,0	39,7									C120L90-R8-26G	39,69 - 42,86
	1516,1	52,6	41,3									C120L90-R8-27G	41,28 - 44,45
	1517,7	54,2	42,9									C120L90-R8-28G	42,86 - 46,04
	1519,3	55,7	44,5									C120L90-R8-29G	44,45 - 47,63
	1520,9	57,3	46,0									C120L90-R8-30G	46,04 - 49,21
	1522,5	58,9	47,6									C120L90-R8-31G	47,63 - 50,80
	1524,1	60,5	49,2									C120L90-R8-32G	49,21 - 52,39

Standard



Flanged



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

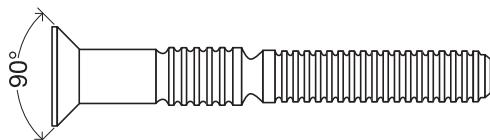
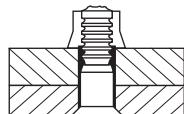
Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)

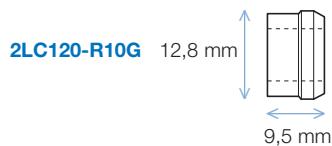
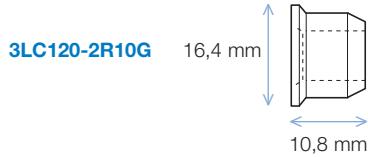

C120L® R Lockbolt - Steel

- C120L® is a 8.8 grade small diameter LockBolt (improved version of C6L) with a semi-circular head, reduced and countersunk
- Standard stem and head (for a installation into non metallic materials)



Stem : Steel | Head : Countersunk 90°

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		Ø (mm)	kN min	kN min	Clamp load kN	min-max (mm)	
											Standard 2LC120-R10G	Flanged 3LC120-2R10G
7,9	53,0	20,9	4,3							18,7	C120L90-R10-4G	3,18 - 9,53
	55,0	24,1	6,4								C120L90-R10-6G	6,35 - 12,70
	58,2	27,2	9,5								C120L90-R10-8G	9,53 - 15,88
	61,1	30,4	12,7								C120L90-R10-10G	12,70 - 19,05
	64,6	33,6	15,9								C120L90-R10-12G	15,88 - 22,23
	67,7	36,8	19,1								C120L90-R10-14G	19,05 - 25,40
	70,9	39,9	22,2	15,2	3,6	8,2 - 8,3	28,0	29,8			C120L90-R10-16G	22,23 - 28,58
	74,1	43,1	25,4								C120L90-R10-18G	25,40 - 31,75
	77,3	46,3	28,6								C120L90-R10-20G	28,58 - 34,93
	80,4	49,5	31,8								C120L90-R10-22G	31,75 - 38,10
	83,6	52,6	34,9								C120L90-R10-24G	34,93 - 41,28
	86,8	55,8	38,1								C120L90-R10-26G	38,10 - 44,45
	90,0	59,0	41,3								C120L90-R10-28G	41,28 - 47,63
	93,1	62,2	44,5								C120L90-R10-30G	44,45 - 50,80
	96,3	64,2	47,6								C120L90-R10-32G	47,63 - 53,98

Standard

Flanged

d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

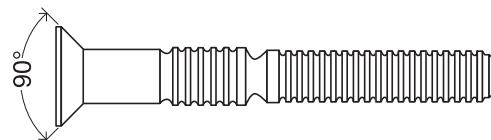
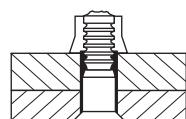
= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C120L® R Lockbolt - Steel

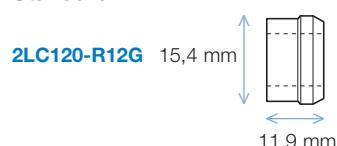
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- Standard stem and head (for a installation into non metallic materials)



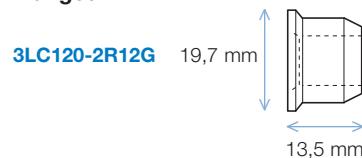
Stem : Steel | Head : Countersunk 90°

	d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		Ø (mm)	kN min	kN min	Clamp load kN	min-max (mm)	
												Standard 2LC120-R12G	Flanged 3LC120-2R12G
9,5 9,65 - 9,78	60,6	24,8	6,4									C120L90-R12-6G	6,35 - 12,70
	63,8	28,0	9,5									C120L90-R12-8G	9,53 - 15,88
	66,9	31,2	12,7									C120L90-R12-10G	12,70 - 19,05
	70,1	34,4	15,9									C120L90-R12-12G	15,88 - 22,23
	73,3	37,5	19,1									C120L90-R12-14G	19,05 - 25,40
	76,5	40,7	22,2									C120L90-R12-16G	22,23 - 28,58
	79,6	43,9	25,4	18,1	4,3	9,9	41,4	42,7	22,2			C120L90-R12-18G	25,40 - 31,75
	82,8	47,1	28,6									C120L90-R12-20G	28,58 - 34,93
	86,0	50,2	31,8									C120L90-R12-22G	31,75 - 38,10
	89,2	53,4	34,9									C120L90-R12-24G	34,93 - 41,28
	92,3	56,6	38,1									C120L90-R12-26G	38,10 - 44,45
	95,5	59,8	41,3									C120L90-R12-28G	41,28 - 47,63
	98,7	62,9	44,5									C120L90-R12-30G	44,45 - 50,80
	101,9	66,1	47,6									C120L90-R12-32G	47,63 - 53,98

Standard



Flanged



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

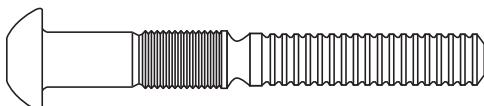
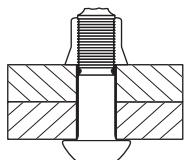
= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C50L® Lockbolt - Steel

- Fasteners suitable for extreme conditions
- 8.8 grade large diameter LockBolt
- High resistance to vibrations
- Easy visual inspection of the installation quality

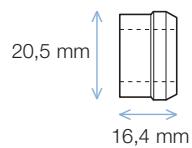


Stem : Steel | Head : Brazier

	d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		kN min		kN min	Clamp load kN	↓ min-max (mm)		
												Standard LC-2R16G	Flanged 3LC-2R16G	
12,7 12,52 - 13,08	85,3	31,6	4,8									C50LR-BR16-4	6,4 - 12,7	3,2 - 9,5
	91,7	37,9	11,1									C50LR-BR16-8	12,7 - 19,1	9,5 - 15,9
	98,0	44,3	17,5									C50LR-BR16-12	19,1 - 25,4	15,9 - 22,2
	104,4	50,6	23,8									C50LR-BR16-16	25,4 - 31,8	22,2 - 28,6
	110,7	57,0	30,2									C50LR-BR16-20	31,8 - 38,1	28,6 - 34,9
	117,1	63,3	36,5									C50LR-BR16-24	38,1 - 44,5	34,9 - 41,3
	123,4	69,7	42,9									C50LR-BR16-28	44,5 - 50,8	41,3 - 47,6
	129,8	76,0	49,2									C50LR-BR16-32	50,8 - 57,2	47,6 - 54,0
	136,1	82,4	55,6									C50LR-BR16-36	57,2 - 63,5	54,0 - 60,3
	142,5	88,7	61,9									C50LR-BR16-40	63,5 - 69,9	60,3 - 66,7
	148,8	95,1	68,3									C50LR-BR16-44	69,9 - 76,2	66,7 - 73,0
	155,2	101,4	74,6	23,6	8,1	13,1 - 14,3	75,8	64,1	53,6			C50LR-BR16-48	76,2 - 82,6	73,0 - 79,4
	161,5	107,8	81,0									C50LR-BR16-52	82,6 - 88,9	79,4 - 85,7
	167,9	114,1	87,3									C50LR-BR16-56	88,9 - 95,3	85,7 - 92,1
	174,2	120,5	93,7									C50LR-BR16-60	95,3 - 101,6	92,1 - 98,4
	180,6	126,8	100,0									C50LR-BR16-64	101,6 - 108,0	98,4 - 104,8
	186,9	133,2	106,4									C50LR-BR16-68	108,0 - 114,3	104,8 - 111,1
	193,3	139,5	112,7									C50LR-BR16-72	114,3 - 120,7	111,1 - 117,5
	199,6	145,9	119,1									C50LR-BR16-76	120,7 - 127,0	117,5 - 123,8
	206,0	152,2	125,4									C50LR-BR16-80	127,0 - 133,4	123,8 - 130,2
	212,3	158,6	131,8									C50LR-BR16-84	133,4 - 139,7	130,2 - 136,5
	218,7	164,9	138,1									C50LR-BR16-88	139,7 - 146,1	136,5 - 142,9
	225,0	171,3	144,5									C50LR-BR16-92	146,1 - 152,4	142,9 - 149,2

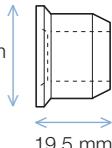
Standard

LC-2R16G



Flanged

3LC-2R16G



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

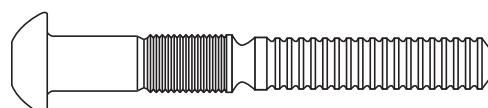
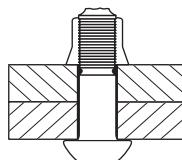
= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C50L® Lockbolt - Steel

- Fasteners suitable for extreme conditions
- 8.8 grade large diameter LockBolt
- High resistance to vibrations
- Easy visual inspection of the installation quality

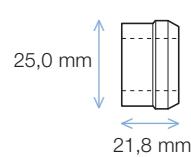


Stem : Steel | Head : Brazier

	d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		Ø (mm)	kN min	kN min	Clamp load kN		↓ min-max (mm)		
													Standard LC-2R20G	Flanged 3LC-2R20G	
15,9 15,67 - 16,31	97,6	37,2	4,8										C50LR-BR20-4	6,4 - 12,7	2,3 - 8,6
	104,0	43,5	11,1										C50LR-BR20-8	12,7 - 19,1	8,6 - 15,1
	110,3	49,9	17,5										C50LR-BR20-12	19,1 - 25,4	15,1 - 21,4
	116,7	56,2	23,8										C50LR-BR20-16	25,4 - 31,8	21,4 - 27,8
	123,0	62,6	30,2										C50LR-BR20-20	31,8 - 38,1	27,8 - 34,1
	129,4	68,9	36,5										C50LR-BR20-24	38,1 - 44,5	34,1 - 40,5
	135,7	75,3	42,9										C50LR-BR20-28	44,5 - 50,8	40,5 - 46,8
	142,1	81,6	49,2										C50LR-BR20-32	50,8 - 57,2	46,8 - 53,2
	148,4	88,0	55,6										C50LR-BR20-36	57,2 - 63,5	53,2 - 59,5
	154,8	94,3	61,9										C50LR-BR20-40	63,5 - 69,9	59,5 - 65,9
	161,1	100,7	68,3										C50LR-BR20-44	69,9 - 76,2	65,9 - 72,2
	167,5	107,0	74,6	30,4	11,0	17,5	120,5	100,1	85,4				C50LR-BR20-48	76,2 - 82,6	72,2 - 78,6
	173,8	113,4	81,0										C50LR-BR20-52	82,6 - 88,9	78,6 - 84,9
	180,2	119,7	87,3										C50LR-BR20-56	88,9 - 95,3	84,9 - 91,3
	186,5	126,1	93,7										C50LR-BR20-60	95,3 - 101,6	91,3 - 97,6
	192,9	132,4	100,0										C50LR-BR20-64	101,6 - 108,0	97,6 - 104,0
	199,2	138,8	106,4										C50LR-BR20-68	108,0 - 114,3	104,0 - 110,3
	205,6	145,1	112,7										C50LR-BR20-72	114,3 - 120,7	110,3 - 116,7
	211,9	151,5	119,1										C50LR-BR20-76	120,7 - 127,0	116,7 - 123,0
	218,3	157,8	125,4										C50LR-BR20-80	127,0 - 133,4	123,0 - 129,4
	224,6	164,2	131,8										C50LR-BR20-84	133,4 - 139,7	129,4 - 135,7
	231,0	170,5	138,1										C50LR-BR20-88	139,7 - 146,1	135,7 - 142,1
	237,3	176,9	144,5										C50LR-BR20-92	146,1 - 152,4	142,1 - 148,4

Standard

LC-2R20G



Flanged

3LC-2R20G



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

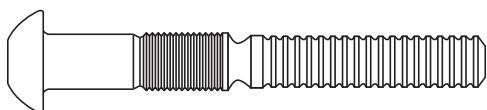
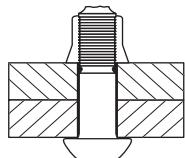
= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C50L® Lockbolt - Steel

- Fasteners suitable for extreme conditions
- 8.8 grade large diameter LockBolt
- High resistance to vibrations
- Easy visual inspection of the installation quality



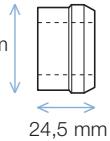
Stem : Steel | Head : Brazier

	d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		kN min		kN min	Clamp load kN	↓ min-max (mm)		
												Standard LC-2R24G	Flanged 3LC-2R24G	
19,1 18,82 - 19,51	110,3	39,3	4,8									C50LR-BR24-4	6,4 - 12,7	
	116,7	45,7	11,1									C50LR-BR24-8	12,7 - 19,1	
	123,0	52,0	17,5									C50LR-BR24-12	19,1 - 25,4	
	129,4	58,4	23,8									C50LR-BR24-16	25,4 - 31,8	
	135,7	64,7	30,2									C50LR-BR24-20	31,8 - 38,1	
	142,1	71,1	36,5									C50LR-BR24-24	38,1 - 44,5	
	148,4	77,4	42,9									C50LR-BR24-28	44,5 - 50,8	
	154,8	83,8	49,2									C50LR-BR24-32	50,8 - 57,2	
	161,1	90,1	55,6									C50LR-BR24-36	57,2 - 63,5	
	167,5	96,5	61,9									C50LR-BR24-40	63,5 - 69,9	
	173,8	102,8	68,3									C50LR-BR24-44	69,9 - 76,2	
	180,2	109,2	74,6	36,5	13,5	20,6	20,6	178,4	144,1	126,3		C50LR-BR24-48	76,2 - 82,6	
	186,5	115,5	81,0									C50LR-BR24-52	82,6 - 88,9	
	192,9	121,9	87,3									C50LR-BR24-56	88,9 - 95,3	
	199,2	128,2	93,7									C50LR-BR24-60	95,3 - 101,6	
	205,6	134,6	100,0									C50LR-BR24-64	101,6 - 108,0	
	211,9	140,9	106,4									C50LR-BR24-68	108,0 - 114,3	
	218,3	147,3	112,7									C50LR-BR24-72	114,3 - 120,7	
	224,6	153,6	119,1									C50LR-BR24-76	120,7 - 127,0	
	231,0	160,0	125,4									C50LR-BR24-80	127,0 - 133,4	
	237,3	166,3	131,8									C50LR-BR24-84	133,4 - 139,7	
	243,7	172,7	138,1									C50LR-BR24-88	139,7 - 146,1	
	250,0	179,0	144,5									C50LR-BR24-92	146,1 - 152,4	
														141,3 - 147,7

Standard

LC-2R24G

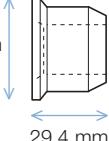
30,1 mm



Flanged

3LC-2R24G

38,7 mm



d1 = Diameter - l = Length of the stem - l2 = Position of the breakneck groove - l3 = Length without grooves

Ø = Hole diameter - k = Head thickness - d2 = Head diameter - ↓ = Minimum tensile strength

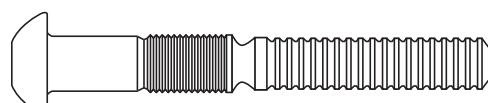
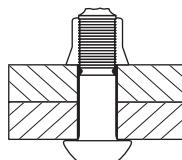
◀ ▶ = Minimum shear strength - ↑ = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C50L® Lockbolt - Steel

- Fasteners suitable for extreme conditions
- 8.8 grade large diameter LockBolt
- High resistance to vibrations
- Easy visual inspection of the installation quality

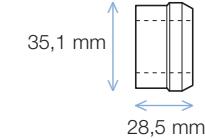


Stem : Steel | Head : Brazier

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)	\emptyset (mm)	kN min	kN min	Clamp load kN		min-max (mm)		
											Standard LC-2R28G	Flanged 3LC-2R28G	Low Profile 8LC-2R28G
22,2	123,9	49,6	11,1	42,1	14,7	23,8	246,7	193,1	174,6	C50LR-BR28-8	12,7 - 19,1	7,1 - 13,5	12,7 - 25,4
	130,2	56,0	17,5							C50LR-BR28-12	19,1 - 25,4	13,5 - 19,9	19,1 - 31,8
	136,6	62,3	23,8							C50LR-BR28-16	25,4 - 31,8	19,9 - 26,2	25,4 - 38,1
	142,9	68,7	30,2							C50LR-BR28-20	31,8 - 38,1	26,2 - 32,6	31,8 - 44,5
	149,3	75,0	36,5							C50LR-BR28-24	38,1 - 44,5	32,6 - 38,9	38,1 - 50,8
	155,6	81,4	42,9							C50LR-BR28-28	44,5 - 50,8	38,9 - 45,3	44,5 - 57,2
	162,0	87,7	49,2							C50LR-BR28-32	50,8 - 57,2	45,3 - 51,6	50,8 - 63,5
	168,3	94,1	55,6							C50LR-BR28-36	57,2 - 63,5	51,6 - 58,0	57,2 - 69,9
	174,7	100,4	61,9							C50LR-BR28-40	63,5 - 69,9	58,0 - 64,3	63,5 - 76,2
	181,0	106,8	68,3							C50LR-BR28-44	69,9 - 76,2	64,3 - 70,7	69,9 - 82,6
	187,4	113,1	74,6							C50LR-BR28-48	76,2 - 82,6	70,7 - 77,0	76,2 - 88,9
	193,7	119,5	81,0							C50LR-BR28-52	82,6 - 88,9	77,0 - 83,4	82,6 - 95,3
	200,1	125,8	87,3							C50LR-BR28-56	88,9 - 95,3	83,4 - 89,7	88,9 - 101,6
	206,4	132,2	93,7							C50LR-BR28-60	95,3 - 101,6	89,7 - 96,1	95,3 - 108,0
	212,8	138,5	100,0							C50LR-BR28-64	101,6 - 108,0	96,1 - 102,4	101,6 - 114,3
	219,1	144,9	106,4							C50LR-BR28-68	108,0 - 114,3	102,4 - 108,8	108,0 - 120,7
	225,5	151,2	112,7							C50LR-BR28-72	114,3 - 120,7	108,8 - 115,1	114,3 - 127,0
	231,8	157,6	119,1							C50LR-BR28-76	120,7 - 127,0	115,1 - 121,5	120,7 - 133,4
	238,2	163,9	125,4							C50LR-BR28-80	127,0 - 133,4	121,5 - 127,8	127,0 - 139,7
	244,5	170,3	131,8							C50LR-BR28-84	133,4 - 139,7	127,8 - 134,2	133,4 - 146,1
	250,9	176,6	138,1							C50LR-BR28-88	139,7 - 146,1	134,2 - 140,5	139,7 - 152,4
	257,2	183,0	144,5							C50LR-BR28-92	146,1 - 152,4	140,5 - 146,9	146,1 - 158,8

Standard

LC-2R28G



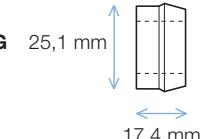
Flanged

3LC-2R28G



Low Profile

8LC-2R28G



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

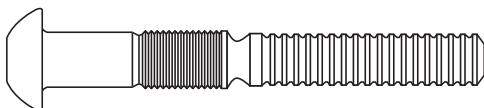
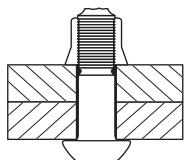
Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)


C50L® Lockbolt - Steel

- Fasteners suitable for extreme conditions
- 8.8 grade large diameter LockBolt
- High resistance to vibrations
- Easy visual inspection of the installation quality



Stem : Steel | Head : Brazier

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		Ø (mm)	kN min	kN min	Clamp load kN		min-max (mm)	
												Standard LC-2R32G	Flanged 3LC-2R32G
25,4	141,6	53,9	11,1	50,8	16,5	27,0	323,4	251,3	229,1	C50LR-BR32-8	12,7 - 19,1	6,4 - 12,7	
	148,0	60,3	17,5							C50LR-BR32-12	19,1 - 25,4	12,7 - 19,1	
	154,3	66,6	23,8							C50LR-BR32-16	25,4 - 31,8	19,1 - 25,4	
	160,7	73,0	30,2							C50LR-BR32-20	31,8 - 38,1	25,4 - 31,8	
	167,0	79,3	36,5							C50LR-BR32-24	38,1 - 44,5	31,8 - 38,1	
	173,4	85,7	42,9							C50LR-BR32-28	44,5 - 50,8	38,1 - 44,5	
	179,7	92,0	49,2							C50LR-BR32-32	50,8 - 57,2	44,5 - 50,8	
	186,1	98,4	55,6							C50LR-BR32-36	57,2 - 63,5	50,8 - 57,2	
	192,4	104,7	61,9							C50LR-BR32-40	63,5 - 69,9	57,2 - 63,5	
	198,8	111,1	68,3							C50LR-BR32-44	69,9 - 76,2	63,5 - 69,9	
	205,1	117,4	74,6	50,8	16,5	27,0	323,4	251,3	229,1	C50LR-BR32-48	76,2 - 82,6	69,9 - 76,2	
	211,5	123,8	81,0							C50LR-BR32-52	82,6 - 88,9	76,2 - 82,6	
	217,8	130,1	87,3							C50LR-BR32-56	88,9 - 95,3	82,6 - 88,9	
	224,2	136,5	93,7							C50LR-BR32-60	95,3 - 101,6	88,9 - 95,3	
	230,5	142,8	100,0							C50LR-BR32-64	101,6 - 108,0	95,3 - 101,6	
	236,9	149,2	106,4							C50LR-BR32-68	108,0 - 114,3	101,6 - 108,0	
	243,2	155,5	112,7							C50LR-BR32-72	114,3 - 120,7	108,0 - 114,3	
	249,6	161,9	119,1							C50LR-BR32-76	120,7 - 127,0	114,3 - 120,7	
	255,9	168,2	125,4							C50LR-BR32-80	127,0 - 133,4	120,7 - 127,0	
	262,3	174,6	131,8							C50LR-BR32-84	133,4 - 139,7	127,0 - 133,4	
	268,6	180,9	138,1							C50LR-BR32-88	139,7 - 146,1	133,4 - 139,7	
	275,0	187,3	144,5							C50LR-BR32-92	146,1 - 152,4	139,7 - 146,1	

Standard

Flanged

d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

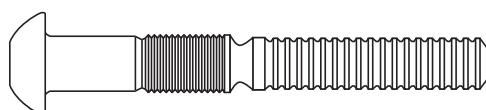
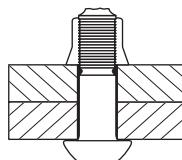
= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C50L® Lockbolt - Steel

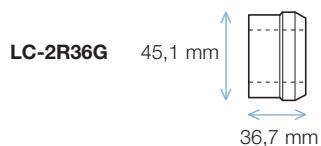
- Fasteners suitable for extreme conditions
- 8.8 grade large diameter LockBolt
- High resistance to vibrations
- Easy visual inspection of the installation quality



Stem : Steel | Head : Brazier

	d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)			Clamp load kN	min-max (mm)	
										Standard LC-2R36G	
28,6	178,1	90,2	40,8							C50LR-BR36-28	41,3 - 54,0
	184,5	96,5	47,2							C50LR-BR36-32	47,6 - 60,3
	190,8	102,9	53,5							C50LR-BR36-36	54,0 - 66,7
	197,2	109,2	59,9							C50LR-BR36-40	60,3 - 73,0
	203,5	115,6	66,2							C50LR-BR36-44	66,7 - 79,4
	209,9	121,9	72,6							C50LR-BR36-48	73,0 - 85,7
	216,2	128,3	78,9							C50LR-BR36-52	79,4 - 92,1
	222,6	134,6	85,3							C50LR-BR36-56	85,7 - 98,4
	228,9	141,0	91,6	54,1	18,4		30,2	369,0	309,2	C50LR-BR36-60	92,1 - 104,8
	235,3	147,3	98,0							C50LR-BR36-64	98,4 - 111,1
	241,6	153,7	104,3							C50LR-BR36-68	104,8 - 117,5
	248,0	160,0	110,7							C50LR-BR36-72	111,1 - 123,8
	254,3	166,4	117,0							C50LR-BR36-76	117,5 - 130,2
	260,7	172,7	123,4							C50LR-BR36-80	123,8 - 136,5
	267,0	179,1	129,7							C50LR-BR36-84	130,2 - 142,9
	273,4	185,4	136,1							C50LR-BR36-88	136,5 - 149,2
	279,7	191,8	142,4							C50LR-BR36-92	142,9 - 155,6

Standard



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

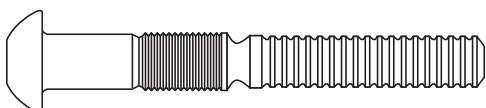
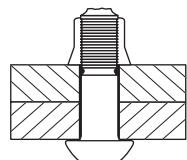
Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - **↙ ↘** = Minimum tensile strength

◀ ▶ = Minimum shear strength - **↑ ↓** = Min. and Max. grip range



C50L® Lockbolt - Stainless steel

- Fasteners suitable for extreme conditions
- 8.8 grade large diameter LockBolt
- High resistance to vibrations
- Easy visual inspection of the installation quality



Stem : Stainless steel | Head : Brazier

	d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		kN min		kN min	Clamp load kN		min-max (mm)	
													Flanged 3LC-2CU16	
12,7 12,52 - 13,08	85,3	31,6	4,8										C50LR-U16-4	3,2 - 6,4
	91,7	37,9	11,1										C50LR-U16-8	9,5 - 12,7
	98,0	44,3	17,5	23,6		8,1	13,1 - 14,3	75,8		61,8			C50LR-U16-12	15,9 - 19,1
	104,4	50,6	23,8										C50LR-U16-16	22,2 - 25,4
	110,7	57,0	30,2										C50LR-U16-20	28,6 - 31,8
	117,1	63,3	36,5										C50LR-U16-24	34,9 - 38,1

Flanged



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

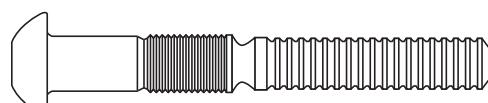
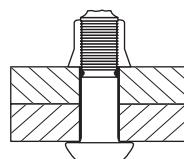
= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)

C50L® Lockbolt - Inox



- Fasteners suitable for extreme conditions
- 8.8 grade large diameter LockBolt
- High resistance to vibrations
- Easy visual inspection of the installation quality



Stem : Stainless steel | Head : Brazier

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)	\emptyset (mm)	kN min	kN min	Clamp load kN	Flanged 3LC-2CU20	
										min-max (mm)	
15,9 15,67- 16,31	97,6	37,2	4,8	30,4	11,0	17,5	120,5	93,4	85,4	C50LR-U20-4	2,3 - 6,4
	104,0	43,5	11,1							C50LR-U20-8	8,7 - 12,7
	110,3	49,9	17,5							C50LR-U20-12	15,1 - 19,1
	116,7	56,2	23,8							C50LR-U20-16	21,4 - 25,4
	123,0	62,6	30,2							C50LR-U20-20	27,8 - 31,8
	129,4	68,9	36,5							C50LR-U20-24	34,1 - 38,1

Flanged



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

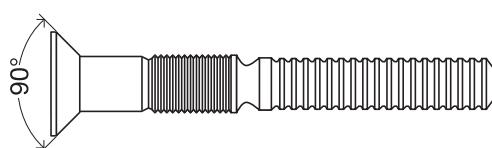
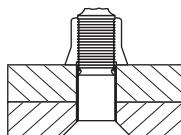
Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)

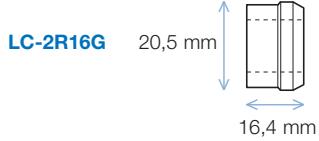

C50L® Lockbolt - Steel

- Fasteners suitable for extreme conditions
- 8.8 grade large diameter LockBolt
- High resistance to vibrations
- Easy visual inspection of the installation quality



Stem : Steel | Head : Countersunk 90°

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		kN min	kN min	Clamp load kN		min-max (mm)	
											Standard LC-2R16G	Flanged 3LC-2R16G
12,7 12,52 - 13,08	91,7	37,9	11,1								C50L90-BR16-8	12,7 - 19,1
	98,0	44,3	17,5								C50L90-BR16-12	19,1 - 25,4
	104,4	50,6	23,8								C50L90-BR16-16	25,4 - 31,8
	110,7	57,0	30,2								C50L90-BR16-20	31,8 - 38,1
	117,1	63,3	36,5								C50L90-BR16-24	38,1 - 44,5
	123,4	69,7	42,9								C50L90-BR16-28	44,5 - 50,8
	129,8	76,0	49,2								C50L90-BR16-32	50,8 - 57,2
	136,1	82,4	55,6	24,1	6,5	13,1 - 14,3	75,8	64,1	53,6		C50L90-BR16-36	57,2 - 63,5
	142,5	88,7	61,9								C50L90-BR16-40	63,5 - 69,9
	148,8	95,1	68,3								C50L90-BR16-44	69,9 - 76,2
	155,2	101,4	74,6								C50L90-BR16-48	76,2 - 82,6
	161,5	107,8	81,0								C50L90-BR16-52	82,6 - 88,9
	167,9	114,1	87,3								C50L90-BR16-56	88,9 - 95,3
	174,2	120,5	93,7								C50L90-BR16-60	95,3 - 101,6
	180,6	126,8	100,0								C50L90-BR16-64	101,6 - 108,0

Standard

Flanged

d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

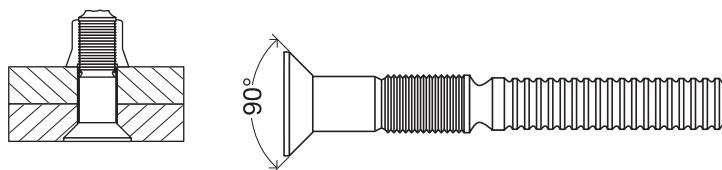
= Minimum shear strength - = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



C50L® Lockbolt - Steel

- Fasteners suitable for extreme conditions
- 8.8 grade large diameter LockBolt
- High resistance to vibrations
- Easy visual inspection of the installation quality



Stem : Steel | Head : Countersunk 90°

v x d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)	Ø (mm)	kN min	kN min	Clamp load kN	min-max (mm)	
										Standard LC-2R20G	Flanged 3LC-2R20G
15,9 15,67 - 16,31	104,0	43,5	11,1							C50L90-BR20-8	12,7 - 19,1
	110,3	49,9	17,5							C50L90-BR20-12	19,1 - 25,4
	116,7	56,2	23,8							C50L90-BR20-16	25,4 - 31,8
	123,0	62,6	30,2							C50L90-BR20-20	31,8 - 38,1
	129,4	68,9	36,5							C50L90-BR20-24	38,1 - 44,5
	135,7	75,3	42,9							C50L90-BR20-28	44,5 - 50,8
	142,1	81,6	49,2	30,2	8,0	17,5	120,5	100,1	85,4	C50L90-BR20-32	50,8 - 57,2
	148,4	88,0	55,6							C50L90-BR20-36	57,2 - 63,5
	154,8	94,3	61,9							C50L90-BR20-40	63,5 - 69,9
	161,1	100,7	68,3							C50L90-BR20-44	69,9 - 76,2
	167,5	107,0	74,6							C50L90-BR20-48	76,2 - 82,6
	173,8	113,4	81,0							C50L90-BR20-52	82,6 - 88,9
	180,2	119,7	87,3							C50L90-BR20-56	88,9 - 95,3
	186,5	126,1	93,7							C50L90-BR20-60	95,3 - 101,6
	192,9	132,4	100,0							C50L90-BR20-64	101,6 - 108,0

Standard



Flanged



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

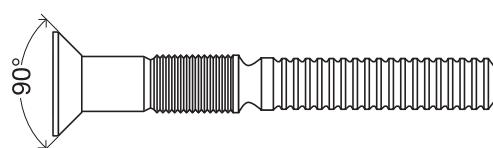
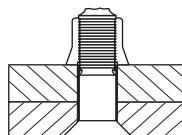
Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter -  = Minimum tensile strength

 = Minimum shear strength -  = Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)


C50L® Lockbolt - Steel

- Fasteners suitable for extreme conditions
- 8.8 grade large diameter LockBolt
- High resistance to vibrations
- Easy visual inspection of the installation quality



Stem : Steel | Head : Countersunk 90°

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)		Ø (mm)	kN min	kN min	Clamp load kN	min-max (mm)	
											Standard LC-2R24G	Flanged 3LC-2R24G
19,1 18,82 - 19,51	123,0	52,0	17,5								C50L90-BR24-12	19,1 - 25,4
	129,4	58,4	23,8								C50L90-BR24-16	25,4 - 31,8
	135,7	64,7	30,2								C50L90-BR24-20	31,8 - 38,1
	142,1	71,1	36,5								C50L90-BR24-24	38,1 - 44,5
	148,4	77,4	42,9								C50L90-BR24-28	44,5 - 50,8
	154,8	83,8	49,2								C50L90-BR24-32	50,8 - 57,2
	161,1	90,1	55,6	36,1	9,6		20,7	178,4	144,1	126,3	C50L90-BR24-36	57,2 - 63,5
	167,5	96,5	61,9								C50L90-BR24-40	63,5 - 69,9
	173,8	102,8	68,3								C50L90-BR24-44	69,9 - 76,2
	180,2	109,2	74,6								C50L90-BR24-48	76,2 - 82,6
	186,5	115,5	81,0								C50L90-BR24-52	82,6 - 88,9
	192,9	121,9	87,3								C50L90-BR24-56	88,9 - 95,3
	199,2	128,2	93,7								C50L90-BR24-60	95,3 - 101,6
	205,6	134,6	100,0								C50L90-BR24-64	101,6 - 108,0

Standard

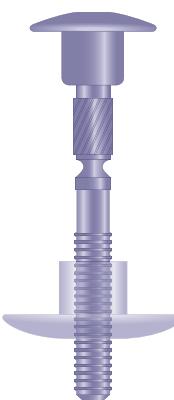
Flanged


The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

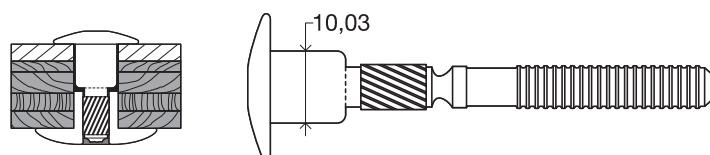
Ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Minimum shear strength - = Min. and Max. grip range



Hucktainer® - Steel

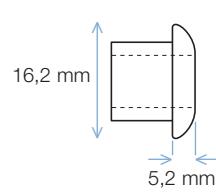
- Designed specifically for joining composite board in trailer applications.
- Will not crush or damage the composite plates
- Integral seal around pin head prevents moisture ingress
- No bulge on both sides after the installation



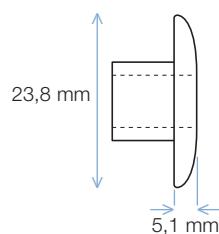
Stem : Steel | Head : Standard low profile head

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)	ø (mm)	kN min	HLPSG-R12-8 HLPSG-R12-9	min-max (mm)		
									Short grip clearance HLPSGC-R12	Short grip medium HLPSGM-R12	Short grip wide bearing HLPSGS-R12
9,5	57,2 58,8	14,4 16,0	3,2 4,8	21,2	3,4	10,7	3,6	HLPSG-R12-8 HLPSG-R12-9	11,1 - 14,3 12,7 - 15,9		

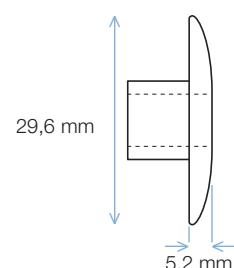
Short grip clearance
HLPSGC-R12



Short grip medium
HLPSGM-R12



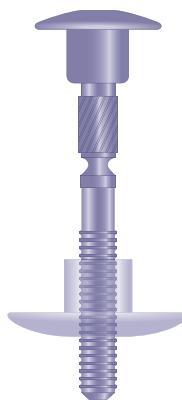
Short grip wide bearing
HLPSGS-R12



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

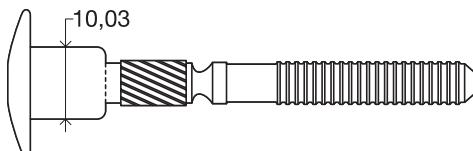
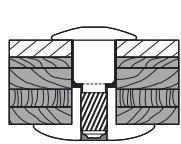
ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Min. and Max. grip range



Hucktainer® - Steel

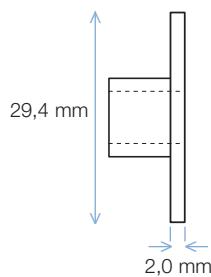
- Designed specifically for joining composite board in trailer applications.
- Will not crush or damage the composite plates
- Integral seal around pin head prevents moisture ingress
- No bulge on both sides after the installation



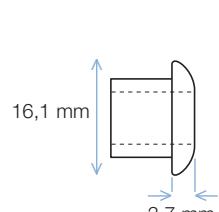
Stem : Steel | Head : Standard low profile head

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)	ø (mm)	kN min		min-max (mm)							
									Flat HLPS-R12XA	Clearance HLPS-C-R12	Medium bearing HLPSM-R12	Wide bearing HLPS-R12				
9,5	58,5	16,0	3,2	21,2	3,4	10,7	3,6	HLPPLS-R12-10	15,88 - 17,46	14,30 - 17,50	15,90 - 19,05	17,50 - 20,63				
	60,1	17,6	4,0					HLPPLS-R12-11	17,46 - 19,05							
	61,7	19,2	5,6					HLPPLS-R12-12	19,05 - 20,63							
	63,2	20,8	6,7					HLPPLS-R12-13	20,63 - 22,22							
	64,8	22,4	8,8					HLPPLS-R12-14	22,22 - 23,81							
	66,4	24,0	10,4					HLPPLS-R12-15	23,81 - 25,40							
	68,0	25,5	11,9					HLPPLS-R12-16	25,40 - 26,98							
	69,6	27,1	13,5					HLPPLS-R12-17	26,98 - 28,57							
	71,2	28,7	15,1					HLPPLS-R12-18	28,57 - 30,16							
	72,8	30,3	16,7					HLPPLS-R12-19	30,16 - 31,75							
	74,4	31,9	18,3					HLPPLS-R12-20	31,75 - 33,33							
	75,9	33,5	19,9					HLPPLS-R12-21	33,33 - 34,92							
	77,5	35,1						HLPPLS-R12-22	34,92 - 36,51							
	79,1	36,7						HLPPLS-R12-23	36,51 - 38,10							
	80,7	38,2						HLPPLS-R12-24	38,10 - 39,68							
	82,3	39,8						HLPPLS-R12-25	39,68 - 41,27							
	83,9	41,4						HLPPLS-R12-26	41,27 - 42,86							
	85,5	43,0						HLPPLS-R12-27	42,86 - 44,45							
	87,1	44,6						HLPPLS-R12-28	44,45 - 46,03							
	88,6	46,2						HLPPLS-R12-29	46,03 - 47,62							
	90,2	47,8						HLPPLS-R12-30	47,62 - 49,21							

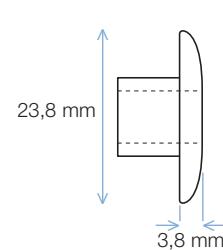
Flat
HLPS-R12XA



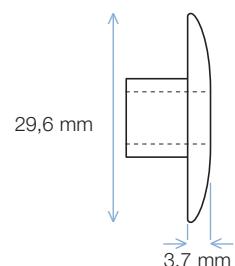
Clearance
HLPS-C-R12



Standard moyenne
HLPSM-R12



Standard large
HLPS-R12

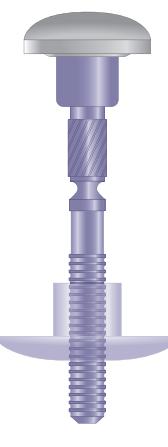


d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

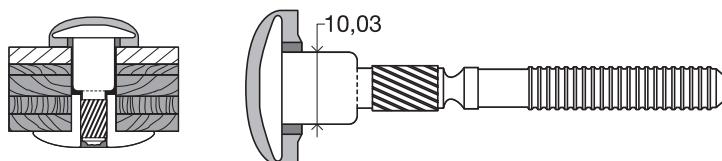
= Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



Hucktainer® - Steel

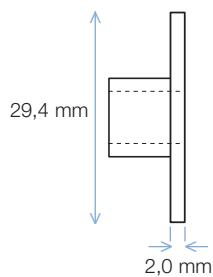
- Designed specifically for joining composite board in trailer applications.
- Will not crush or damage the composite plates
- Integral seal around pin head prevents moisture ingress
- No bulge on both sides after the installation



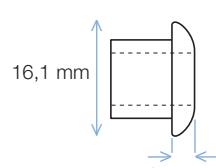
Stem : Steel | Head : Medium bearing colour encapsulated

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)	ø (mm)	kN min		min-max (mm)			
									Flat HLPSC-R12XA	Clearance HLPSC-R12	Medium bearing HLPSM-R12	Wide bearing HLPS-R12
9,5	54,8	14,0	2,0	24,1	7,3	10,7	3,6	HLPSC-R12XA	15,88 - 17,46	14,30 - 17,50	15,90 - 19,05	17,50 - 20,63
	56,4	15,6	3,6					HLPSC-R12	17,46 - 19,05			
	58,0	17,2	5,2					HLPSC-R12	19,05 - 20,63			
	59,6	18,8	6,8					HLPSC-R12	20,63 - 22,22			
	61,1	20,3	8,4					HLPSC-R12	22,22 - 23,81			
	62,7	21,9	10,0					HLPSC-R12	23,81 - 25,40			
	64,3	23,5	11,5					HLPSC-R12	25,40 - 26,98			
	65,9	25,1	13,1					HLPSC-R12	26,98 - 28,57			
	67,5	26,7	14,7					HLPSC-R12	28,57 - 30,16			
	69,1	28,3	16,3					HLPSC-R12	30,16 - 31,75			
	70,7	29,9	17,9					HLPSC-R12	31,75 - 33,33			
	72,3	31,5	19,5					HLPSC-R12	33,33 - 34,92			
	73,8	33,0	21,3					HLPSC-R12	34,92 - 36,51			
	75,4	34,6	22,7					HLPSC-R12	36,51 - 38,10			
	77,0	36,2	24,2					HLPSC-R12	38,10 - 39,68			
	78,6	37,8	25,8					HLPSC-R12	39,68 - 41,27			
	80,2	39,4	27,4					HLPSC-R12	41,27 - 42,86			
	81,8	41,0	29,0					HLPSC-R12	42,86 - 44,45			
	83,4	42,6	30,6					HLPSC-R12	44,45 - 46,03			
	85,0	44,2	32,2					HLPSC-R12	46,03 - 47,62			
	86,5	45,7	33,8					HLPSC-R12	47,62 - 49,21			

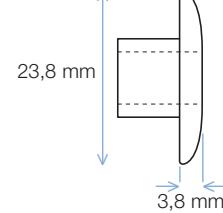
Flat
HLPSC-R12XA



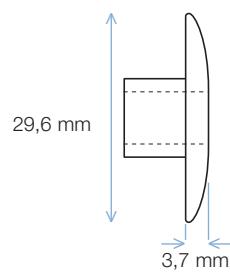
Clearance
HLPSC-R12



Standard moyenne
HLPSM-R12



Standard large
HLPS-R12

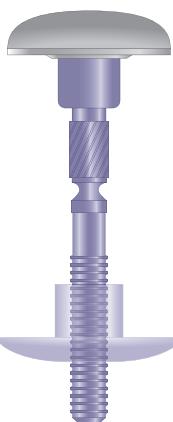


d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

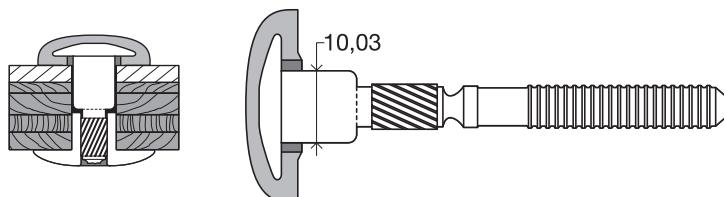
= Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)



Hucktainer® - Steel

- Designed specifically for joining composite board in trailer applications.
- Will not crush or damage the composite plates
- Integral seal around pin head prevents moisture ingress
- No bulge on both sides after the installation

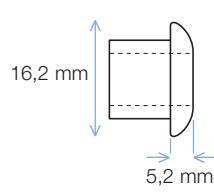


Stem : Steel | Head : Wide bearing colour encapsulated

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)	ø (mm)	kN min		min-max (mm)		
									Clearance	Medium bearing	Wide bearing
9,5	55,6	12,8	1,3	30,7	6,6	10,7	3,6	HLPEG-R12-7	9,5 - 12,7		
	57,1	14,3	2,8					HLPEG-R12-8	11,1 - 14,3		
	56,8	14,3	1,3					HLPEG-R12-9	12,7 - 15,9		

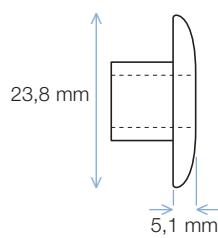
Clearance

HLPSGC-R12



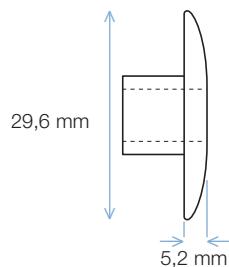
Medium bearing

HLPSGM-R12



Wide bearing

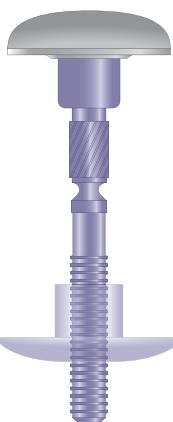
HLPSGS-R12



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

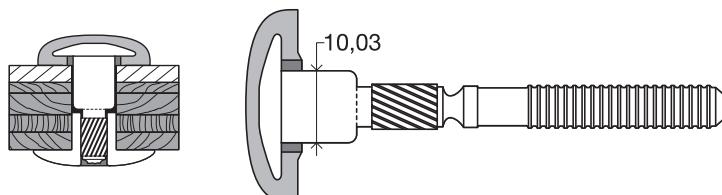
ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Min. and Max. grip range



Hucktainer® - Steel

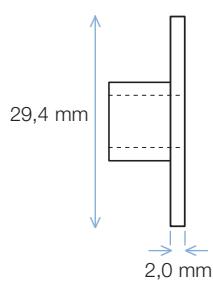
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- No bulge on both sides after the installation



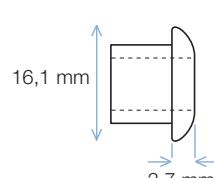
Stem : Steel | Head : Wide bearing colour encapsulated

d1 (mm)	l (mm)	l2 (mm)	l3 (mm)	d2 (mm)	k (mm)	ø (mm)	kN min		min-max (mm)			
									Flat HLPS-R12XA	Clearance HLPSC-R12	Medium bearing HLPSM-R12	Wide bearing HLPS-R12
9,5	58,4	15,9	2,0	30,7	6,6	10,7	3,6	HLPEG-R12-10	15,88 - 17,46		14,30 - 17,50	
	60,0	17,5	3,6					HLPEG-R12-11	17,46 - 19,05		15,90 - 19,05	
	61,6	19,1	5,2					HLPEG-R12-12	19,05 - 20,63		17,50 - 20,63	
	63,2	20,7	6,8					HLPEG-R12-13	20,63 - 22,22		19,00 - 22,22	
	64,8	22,3	8,4					HLPEG-R12-14	22,22 - 23,81		20,60 - 23,81	
	66,3	23,9	10,0					HLPEG-R12-15	23,81 - 25,40		22,20 - 25,40	
	67,9	25,5	11,5					HLPEG-R12-16	25,40 - 26,98		23,80 - 27,00	
	69,5	27,0	13,1					HLPEG-R12-17	26,98 - 28,57		25,40 - 28,60	
	71,1	28,6	14,7					HLPEG-R12-18	28,57 - 30,16		27,00 - 30,20	
	72,7	30,2	16,3					HLPEG-R12-19	30,16 - 31,75		28,60 - 31,75	
	74,3	31,8	17,9					HLPEG-R12-20	31,75 - 33,33		30,20 - 33,33	
	75,9	33,4	19,5					HLPEG-R12-21	33,33 - 34,92		31,70 - 34,92	
	77,5	35,0	21,3					HLPEG-R12-22	34,92 - 36,51		33,30 - 36,51	
	79,0	36,6	22,7					HLPEG-R12-23	36,51 - 38,10		34,90 - 38,10	
	80,6	38,2	24,2					HLPEG-R12-24	38,10 - 39,68		36,50 - 39,70	
	82,2	39,7	25,8					HLPEG-R12-25	39,68 - 41,27		38,10 - 41,30	
	83,8	41,3	27,4					HLPEG-R12-26	41,27 - 42,86		39,70 - 42,90	
	85,4	42,9	29,0					HLPEG-R12-27	42,86 - 44,45		41,30 - 44,45	
	87,0	44,5	30,6					HLPEG-R12-28	44,45 - 46,03		42,90 - 46,03	
	88,6	46,1	32,2					HLPEG-R12-29	46,03 - 47,62		44,40 - 47,62	

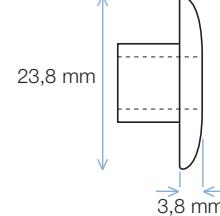
Flat
HLPS-R12XA



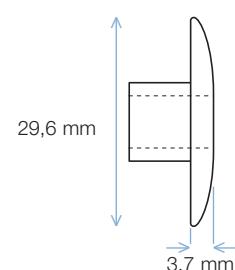
Clearance
HLPSC-R12



Medium bearing
HLPSM-R12



Wide bearing
HLPS-R12



d1 = Diameter - **l** = Length of the stem - **l2** = Position of the breakneck groove - **l3** = Length without grooves

ø = Hole diameter - **k** = Head thickness - **d2** = Head diameter - = Minimum tensile strength

= Min. and Max. grip range

The articles codes in blue correspond to the core range (most commonly used references)

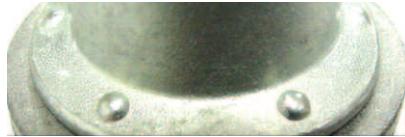


BobTail® system: the most advanced development in LockBolts

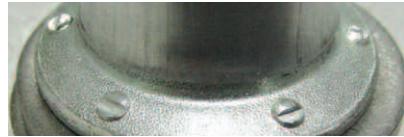
The BobTail® system is composed of LockBolt and associated installation tooling and has been developed to ensure the highest levels of profitability and reliability.

Main advantages:

- A quick installation cycle.
The installation speed of a BobTail® with a diameter of 6.4 mm is less than one second.
The BobTail®, 16 mm in diameter, is installed in 2 seconds: up to 2 times faster than any other LockBolt available on the market.
- No breaking of the riveting stem:
 - reduced wastage,
 - low installation noise
 - increased corrosion resistance
- A fluid installation sequence and without any fuss, eliminating the physical constraints imposed to the operator.
- High resistance to wear and vibration.
- Unique helical lock groove (12 mm diameter and superior). Holds the collar on the stem prior to installation.
- No secondary operations.
- A quick visual inspection enable to check that the installation has been properly done (12 mm diameter and superior).



Before installation

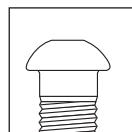


After installation

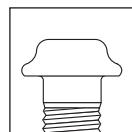
- If you are currently using HUCK® Lockbolts such as the C50L® or C6L®, you can easily switch to BobTail® to get its benefits. Indeed, the changes are simple and quick, it is only necessary to adapt the nose assembly of the tooling.

Diameters available: 12mm, 14mm, 16mm and 20mm
 Different surface treatments with various corrosion resistance are available on request.

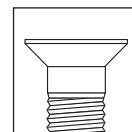
Standard and quality head types:



Brazier
 Standard of 5 grade
 Available in 8.8 grade ($\varnothing > 12.7$ mm)



Flanged
 Standard of 10.9 grade
 Metric range



Countersunk 90°
 On request

	Brazier head	Flanged head
Imperial dimensions	5 grade (\varnothing 3/16 to 3/8) 8.8 grade (\varnothing 1/2 to 1)	–
Metric dimensions	–	10.9 grade (\varnothing 12 to 20mm)

Resistance values lbf (kN)

Diameter	Clamp load	Tensile	Shear
12 mm. (10.9)	14.700 (65,4)	19.700 (87,7)	18.500 (65,4)
14 mm. (10.9)	19.500 (87)	27.000 (120)	21.100 (94)
16 mm. (10.9)	26.000 (116)	36.600 (163)	26.000 (116)
20 mm. (10.9)	40.700 (181)	57.300 (255)	41.000 (182)

BobTail® installation tools

BobTail® tools allow a simpler and faster installation process than a conventional LockBolt system, thanks to a reduced setting force.

The installation tools are lighter and more compact and offer a greater flexibility of use.

The installation process is simple and helps to extend the lifetime of the tool and spare parts.
 In this way, the maintenance and tooling costs are reduced significantly, and increase productivity.

BOBTAIL® SWAGEFORWARD
 riveting machine



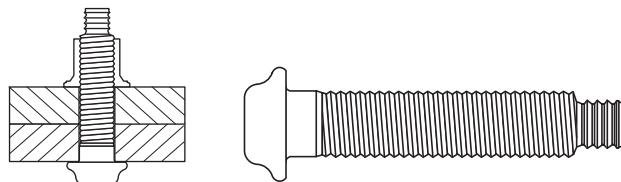
BOBTAIL® BTT
 riveting machine





BobTail® - Steel - Metric dimensions

- No breaking of the riveting stem: increased corrosion resistance, reduced wastage, low installation noise
- A better support provided by the collar and the head of the rivet
- Semi-automatic tooling installation: more accurate and rapidity in the installation
- Unique helical lock groove: Holds the collar on the stem prior to installation
- Zinc collar / stem uncoated (add suffix "G" to the reference for the zinc stem)



Stem : Steel | Head : Flanged

	Ref. of the collar
MBT-DT12-10	
MBT-DT12-15	
MBT-DT12-20	
MBT-DT12-25	
MBT-DT12-30	
MBT-DT12-35	
MBT-DT12-40	
MBT-DT12-45	MBTC-R12BL
MBT-DT12-50	
MBT-DT12-55	
MBT-DT12-60	
MBT-DT12-65	
MBT-DT12-70	
MBT-DT12-75	
MBT-DT12-80	



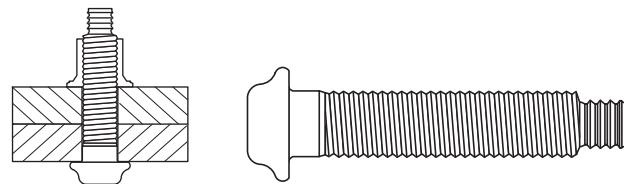
The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **I** = Length of the stem - = Min. and Max. grip range - **Ø** = Hole diameter - **k** = Head thickness
d2 = Head diameter - = Minimum tensile strength - = Minimum shear strength



BobTail® - Steel - Metric dimensions

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Stem : Steel | Head : Flanged

	Ref. of the collar
14,0	MBT-DT14-10
	MBT-DT14-15
	MBT-DT14-20
	MBT-DT14-25
	MBT-DT14-30
	MBT-DT14-35
	MBT-DT14-40
	MBT-DT14-45
	MBT-DT14-50
	MBT-DT14-55
	MBT-DT14-60
	MBT-DT14-65
	MBT-DT14-70
	MBT-DT14-75
	MBT-DT14-80
	MBTC-R14BL



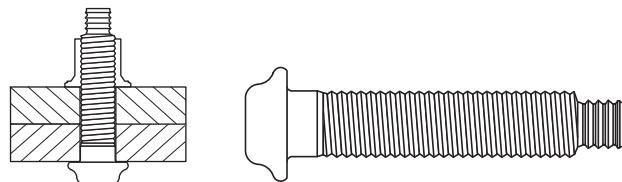
The articles codes in blue correspond to the core range (most commonly used references)

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- Zinc collar / stem uncoated (add suffix "G" to the reference for the zinc stem)



Stem : Steel | Head : Flanged

	d1 (mm)	I (mm)	$\frac{d_2}{k}$ (mm)	d2 (mm)	k (mm)	\emptyset (mm)	min - max (mm)	kN min	kN min	Clamp load kN	Ref. of the collar
16,0	52,0	3,8	33,8	12,2	16,0 - 17,5		5,0 - 15,0	163,00	122,0	116,0	MBT-DT16-10 MBT-DT16-15 MBT-DT16-20 MBT-DT16-25 MBT-DT16-30 MBT-DT16-35 MBT-DT16-40 MBT-DT16-45 MBT-DT16-50 MBT-DT16-55 MBT-DT16-60 MBT-DT16-65 MBT-DT16-70 MBT-DT16-75 MBT-DT16-80
	57,0						10,0 - 20,0				
	62,0						15,0 - 25,0				
	67,0						20,0 - 30,0				
	72,0						25,0 - 35,0				
	77,0						30,0 - 40,0				
	82,0						35,0 - 45,0				
	87,0						40,0 - 50,0				
	92,0						45,0 - 55,0				
	97,0						50,0 - 60,0				
	102,0						55,0 - 65,0				
	107,0						60,0 - 70,0				
	112,0						65,0 - 75,0				
	117,0						70,0 - 80,0				
	122,0						75,0 - 85,0				



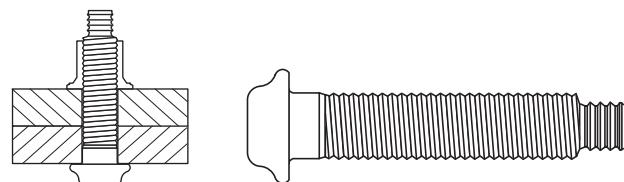
The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **I** = Length of the stem - = Min. and Max. grip range - **∅** = Hole diameter - **k** = Head thickness
d2 = Head diameter - = Minimum tensile strength - = Minimum shear strength



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Stem : Steel | Head : Flanged

	d1 (mm)	I (mm)	\downarrow d2 (mm)	\uparrow k (mm)	\emptyset (mm)	min - max (mm)	kN min	kN min	Clamp load kN	Ref. of the collar
20,0	60,7	3,8	42,4	16,0	20,0 - 22,0	5,0 - 15,0	255,0	191,0	181,0	MBT-DT20-10 MBT-DT20-15 MBT-DT20-20 MBT-DT20-25 MBT-DT20-30 MBT-DT20-35 MBT-DT20-40 MBT-DT20-45 MBT-DT20-50 MBT-DT20-55 MBT-DT20-60 MBT-DT20-65 MBT-DT20-70 MBT-DT20-75 MBT-DT20-80
	65,7					10,0 - 20,0				
	70,7					15,0 - 25,0				
	75,7					20,0 - 30,0				
	80,7					25,0 - 35,0				
	85,7					30,0 - 40,0				
	90,7					35,0 - 45,0				
	95,7					40,0 - 50,0				
	100,7					45,0 - 55,0				
	105,7					50,0 - 60,0				
	110,7					55,0 - 65,0				
	115,7					60,0 - 70,0				
	120,7					65,0 - 75,0				
	125,7					70,0 - 80,0				
	130,7					75,0 - 85,0				



The articles codes in blue correspond to the core range (most commonly used references)

d1 = Diameter - **I** = Length of the stem - = Min. and Max. grip range - **∅** = Hole diameter - **k** = Head thickness
d2 = Head diameter - = Minimum tensile strength - = Minimum shear strength

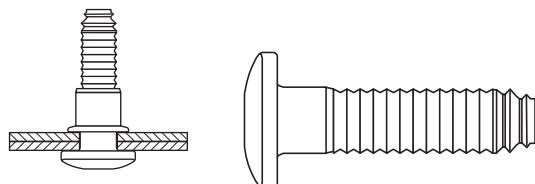


Range of LockBolt



BobTail® - Steel - Imperial dimensions

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- Unique helical lock groove: holds the collar on the stem prior to installation
- 8,8 grade on request



Stem : Steel | Head : Brazier

	d1 (mm)	l (mm)	d2 (mm)	k (mm)	Ø (mm)	min - max (mm)	kN min	kN min	Clamp load kN		Ref. of the collar
1/4 (6,4 mm)	20,7	1,0				0,0 - 4,7					BT-R8-1GA
	22,2	1,6				0,0 - 6,4					BT-R8-2GA
	23,8	3,2				1,6 - 7,9					BT-R8-3GA
	25,4	4,7				3,2 - 9,5					BT-R8-4GA
	27,0	6,4				4,7 - 11,1					BT-R8-5GA
	28,6	7,9				6,4 - 12,7					BT-R8-6GA
	30,2	11,1	13,6	3,6	6,4 - 7,1	9,5 - 15,9	13,3	13,6	8,0		BT-R8-8GA
	31,8	14,3				12,7 - 19,1					BT-R8-10GA
	33,3	17,4				15,9 - 22,2					BT-R8-12GA
	34,9	20,6				19,1 - 25,4					BT-R8-14GA
	36,5	23,8				22,2 - 28,6					BT-R8-16GA
	38,1	27,0				25,4 - 31,8					BT-R8-18GA
	39,7	30,1				28,6 - 34,9					BT-R8-20GA

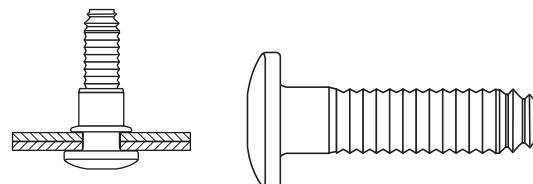


d1 = Diameter - **l** = Length of the stem - = Min. and Max. grip range - **Ø** = Hole diameter - **k** = Head thickness
d2 = Head diameter - = Minimum tensile strength - = Minimum shear strength



BobTail® - Steel - Imperial dimensions

- No breaking of the riveting stem: increased corrosion resistance, reduced wastage, low installation noise
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- Unique helical lock groove: holds the collar on the stem prior to installation
- 8,8 grade on request



Stem : Steel | Head : Brazier

	d_1 (mm)	l (mm)	l_2 (mm)	d_2 (mm)	k (mm)	\emptyset (mm)	min - max (mm)	kN min	kN min	Clamp load kN		Ref. of the collar
5/16 (7,9 mm)	29,4	4,7					3,2 - 9,5					BT-R10-4GA
	32,5	7,9					6,4 - 12,7					BT-R10-6GA
	35,7	11,1					9,5 - 15,9					BT-R10-8GA
	38,9	14,3	17,3	4,4		7,9 - 9,1	12,7 - 19,1	20,5	21,0	12,5		BT-R10-10GA
	42,1	17,4					15,9 - 22,2					BT-R10-12GA
	45,2	20,6					19,1 - 25,4					BT-R10-14GA
	48,4	23,8					22,2 - 28,6					BT-R10-16GA
	51,6	27,0					25,4 - 31,8					BT-R10-18GA
	54,8	30,1					28,6 - 34,9					BT-R10-20GA
												BTC-R10GA/GAH



d_1 = Diameter - **l** = Length of the stem - = Min. and Max. grip range - **\emptyset** = Hole diameter - **k** = Head thickness
 d_2 = Head diameter - = Minimum tensile strength - = Minimum shear strength

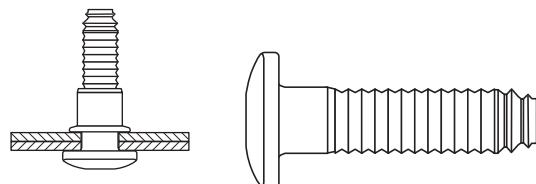


Range of LockBolt



BobTail® - Steel - Imperial dimensions

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- 8,8 grade on request



Stem : Steel | Head : Brazier

	d1 (mm)	l (mm)	d2 (mm)	k (mm)	Ø (mm)	min - max (mm)	kN min	kN min	Clamp load kN		Ref. of the collar
3/8 (9,5 mm)	33,3	4,7				3,2 - 9,5					BT-R12-4GA
	36,5	7,9				6,4 - 12,7					BT-R12-6GA
	39,6	11,1				9,5 - 15,9					BT-R12-8GA
	42,8	14,3				12,7 - 19,1					BT-R12-10GA
	46,0	17,5	20,83	5,3	9,5 - 10,7	15,9 - 22,2	28,9 Voir note 1	5,3 Voir note 1	17,9		BT-R12-12GA
	49,1	20,6				19,1 - 25,4					BT-R12-14GA
	52,3	23,8				22,2 - 28,6					BT-R12-16GA
	55,5	27,0				25,4 - 31,8					BT-R12-18GA
	58,7	30,2				28,6 - 34,9					BT-R12-20GA
BTC-R12GA/GAH											

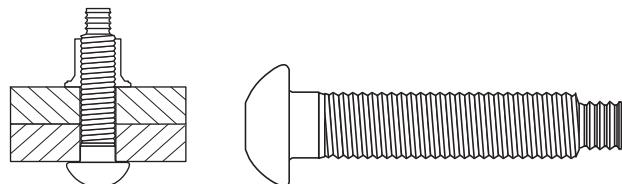


d1 = Diameter - **l** = Length of the stem - = Min. and Max. grip range - **Ø** = Hole diameter - **k** = Head thickness
d2 = Head diameter - = Minimum tensile strength - = Minimum shear strength



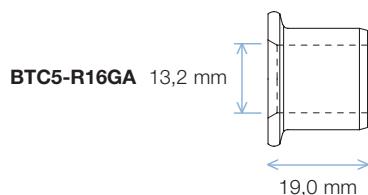
BobTail® - Steel - Imperial dimensions

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- Zinc collar / stem uncoated (add suffix "GA" to the reference for the zinc stem)



Stem : Steel | Head : Brazier

	d_1 (mm)	l (mm)	d_2 (mm)	k (mm)	\emptyset (mm)	min - max (mm)	kN min	kN min	Clamp load kN	Ref. of the collar			
1/2 (12,7 mm)	48,3	3,8	24,2	8,5	12,7 - 14,3	6,4 - 15,7	75,8	62,3	53,6	BTR-BR16-4GA			
	54,6					12,7 - 22,1				BTR-BR16-8GA			
	61,0					19,1 - 28,4				BTR-BR16-12GA			
	67,3					25,4 - 34,8				BTR-BR16-16GA			
	73,7					31,8 - 41,1				BTR-BR16-20GA			
	80,0					38,1 - 47,5				BTR-BR16-24GA			
	86,4					44,5 - 53,8				BTR-BR16-28GA			
	92,7					50,8 - 60,2				BTR-BR16-32GA			
	99,1					57,2 - 66,5				BTR-BR16-36GA			
	105,4					63,5 - 72,9				BTR-BR16-40GA			
	111,8					69,9 - 79,2				BTR-BR16-44GA			
	118,1					76,2 - 85,6				BTR-BR16-48GA			
	124,5					82,6 - 91,9				BTR-BR16-52GA			
	130,8	9,5				88,9 - 98,3				BTR-BR16-56GA			
	137,2					95,3 - 104,6				BTR-BR16-60GA			

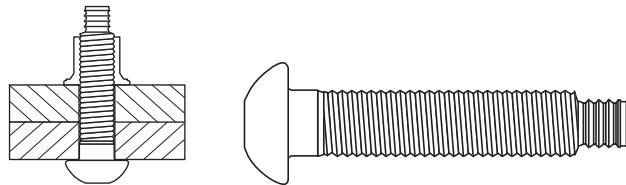


d₁ = Diameter - **l** = Length of the stem - = Min. and Max. grip range - **∅** = Hole diameter - **k** = Head thickness
d₂ = Head diameter - = Minimum tensile strength - = Minimum shear strength



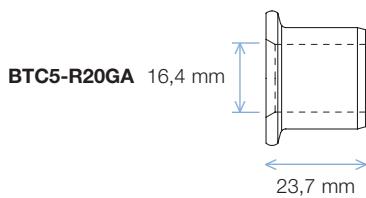
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Stem : Steel | Head : Brazier

	d1 (mm)	l (mm)	$\frac{d_2}{k}$ (mm)	d2 (mm)	k (mm)	\emptyset (mm)	min - max (mm)	kN min	kN min	Clamp load kN	Ref. of the collar
5/8 (15,9 mm)	52,6	3,8	30,4	11,0	15,9 - 17,5		6,4 - 15,7	120,5	100,1	85,4	BTR-BR20-4GA
	58,9						12,7 - 22,1				BTR-BR20-8GA
	65,3						19,1 - 28,4				BTR-BR20-12GA
	71,6						25,4 - 34,8				BTR-BR20-16GA
	78,0						31,8 - 41,1				BTR-BR20-20GA
	84,3						38,1 - 47,5				BTR-BR20-24GA
	90,7						44,5 - 53,8				BTR-BR20-28GA
	97,0						50,8 - 60,2				BTR-BR20-32GA
	103,4						57,2 - 66,5				BTR-BR20-36GA
	109,7						63,5 - 72,9				BTR-BR20-40GA
	116,1						69,9 - 79,2				BTR-BR20-44GA
	122,4						76,2 - 85,6				BTR-BR20-48GA
											BTC5-R20GA

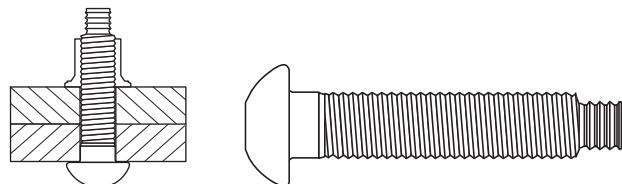


d1 = Diameter - **l** = Length of the stem - = Min. and Max. grip range - **∅** = Hole diameter - **k** = Head thickness
d2 = Head diameter - = Minimum tensile strength - = Minimum shear strength



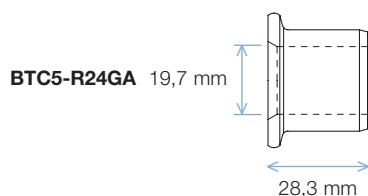
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Stem : Steel | Head : Brazier

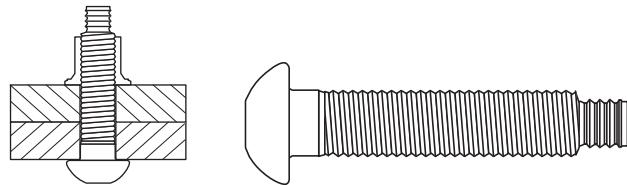
	d1 (mm)	l (mm)	$\frac{d_2}{k}$ (mm)	$\frac{d_2}{k}$ (mm)	$\frac{\emptyset}{\emptyset}$ (mm)	↓ min - max (mm)	↑ kN min	↔ kN min	Clamp load kN	Ref. of the collar
3/4 (19,1 mm)	61,8	4,1	36,6	13,5	19,1 - 20,6	6,4 - 15,7	178,4	144,1	126,3	BTR-BR24-4GA BTR-BR24-8GA BTR-BR24-12GA BTR-BR24-16GA BTR-BR24-20GA BTR-BR24-24GA BTR-BR24-28GA BTR-BR24-32GA BTR-BR24-36GA BTR-BR24-40GA BTR-BR24-44GA BTR-BR24-48GA BTR-BR24-52GA BTR-BR24-56GA BTR-BR24-60GA BTR-BR24-64GA BTR-BR24-68GA BTR-BR24-72GA
	68,1					12,7 - 22,1				
	74,5					19,1 - 28,4				
	80,8					25,4 - 34,8				
	87,2					31,8 - 41,1				
	93,5					38,1 - 47,5				
	99,9					44,5 - 53,8				
	106,2					50,8 - 60,2				
	112,6					57,2 - 66,5				
	118,9					63,5 - 72,9				
	125,3					69,9 - 79,2				
	131,6					76,2 - 85,6				
	138,0					82,6 - 91,9				
	144,3					88,9 - 98,3				
	150,7					95,3 - 104,6				
	157,0					101,6 - 111,0				
	163,4					108,0 - 117,3				
	169,7					114,3 - 123,7				



d1 = Diameter - **l** = Length of the stem - ↓ = Min. and Max. grip range - \emptyset = Hole diameter - **k** = Head thickness
d2 = Head diameter - ↑ = Minimum tensile strength - ← → = Minimum shear strength

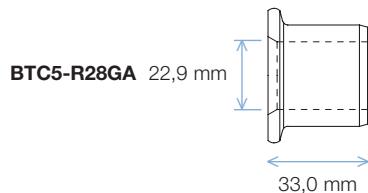

BobTail® - Steel - Imperial dimensions

- No breaking of the riveting stem: increased corrosion resistance, reduced wastage, low installation noise
- A better support provided by the collar and the head of the rivet
- Semi-automatic tooling installation: more accurate and rapidity in the installation
- Unique helical lock groove: Holds the collar on the stem prior to installation
- Zinc collar / stem uncoated (add suffix "GA" to the reference for the zinc stem)



Stem : Steel | Head : Brazier

	d1 (mm)	I (mm)	$\frac{d_2}{k}$ (mm)	d2 (mm)	k (mm)	\emptyset (mm)	min - max (mm)	kN min	kN min	Clamp load kN	Ref. of the collar
7/8 (22,2 mm)	68,7	6,4	42,3	14,9	22,2 - 23,8		6,4 - 15,7	246,7	193,1	174,6	BTR-BR28-4GA
	75,1						12,7 - 22,1				BTR-BR28-8GA
	81,4						19,1 - 28,4				BTR-BR28-12GA
	87,8						25,4 - 34,8				BTR-BR28-16GA
	94,1						31,8 - 41,1				BTR-BR28-20GA
	100,5						38,1 - 47,5				BTR-BR28-24GA
	106,8						44,5 - 53,8				BTR-BR28-28GA
	113,2						50,8 - 60,2				BTR-BR28-32GA
	119,5						57,2 - 66,5				BTR-BR28-36GA
	125,9						63,5 - 72,9				BTR-BR28-40GA
	132,2						69,9 - 79,2				BTR-BR28-44GA
	138,6						76,2 - 85,6				BTR-BR28-48GA
	144,9						82,6 - 91,9				BTR-BR28-52GA
	151,3						88,9 - 98,3				BTR-BR28-56GA
	157,6						95,3 - 104,6				BTR-BR28-60GA
	164,0						101,6 - 111,0				BTR-BR28-64GA
	170,3						108,0 - 117,3				BTR-BR28-68GA
	176,7						114,3 - 123,7				BTR-BR28-72GA

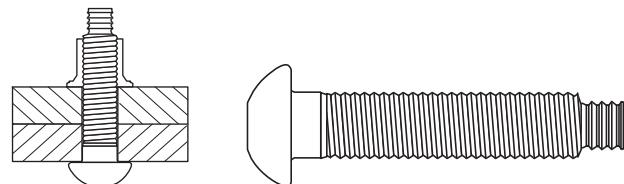


d1 = Diameter - **I** = Length of the stem - = Min. and Max. grip range - **∅** = Hole diameter - **k** = Head thickness
d2 = Head diameter - = Minimum tensile strength - = Minimum shear strength



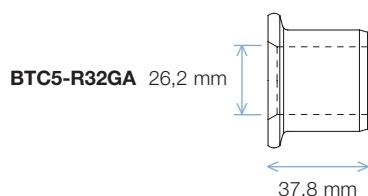
BobTail® - Steel - Imperial dimensions

- No breaking of the riveting stem: increased corrosion resistance, reduced wastage, low installation noise
- A better support provided by the collar and the head of the rivet
- Semi-automatic tooling installation: more accurate and rapidity in the installation
- Unique helical lock groove: Holds the collar on the stem prior to installation
- Zinc collar / stem uncoated (add suffix "GA" to the reference for the zinc stem)



Stem : Steel | Head : Brazier

	d1 (mm)	l (mm)	$\frac{d_2}{k}$ (mm)	$\frac{d_2}{k}$ (mm)	$\frac{\emptyset}{\emptyset}$ (mm)	↓ min - max (mm)	↑ kN min	↔ kN min	Clamp load kN	Ref. of the collar
1 (25,4 mm)	76,2	6,4	50,8	16,5	25,4 - 28,6	6,4 - 15,7	323,4	251,3	229,1	BTR-BR32-4GA
	82,6					12,7 - 22,1				BTR-BR32-8GA
	88,9					19,1 - 28,4				BTR-BR32-12GA
	95,4					25,4 - 34,8				BTR-BR32-16GA
	101,6					31,8 - 41,1				BTR-BR32-20GA
	108,0					38,1 - 47,5				BTR-BR32-24GA
	114,3					44,5 - 53,8				BTR-BR32-28GA
	120,7					50,8 - 60,2				BTR-BR32-32GA
	127,0					57,2 - 66,5				BTR-BR32-36GA
	133,4					63,5 - 72,9				BTR-BR32-40GA
	139,7					69,9 - 79,2				BTR-BR32-44GA
	146,1					76,2 - 85,6				BTR-BR32-48GA
	152,4					82,6 - 91,9				BTR-BR32-52GA
	158,8					88,9 - 98,3				BTR-BR32-56GA
	165,1					95,3 - 104,6				BTR-BR32-60GA
	171,5					101,6 - 111,0				BTR-BR32-64GA
	177,8					108,0 - 117,3				BTR-BR32-68GA
	184,2					114,3 - 123,7				BTR-BR32-72GA



d1 = Diameter - **l** = Length of the stem - = Min. and Max. grip range - = Hole diameter - **k** = Head thickness
d2 = Head diameter - = Minimum tensile strength - = Minimum shear strength

There is a wide range of riveting machines available for the installation of HUCK® structural blind rivets and LockBolts. The choice of the riveter depends on the type and the diameter of the rivet as well as the conditions of accessibility of the application. In most cases, the HUCK® riveting machines can be used for the installation of LockBolt and structural rivets, it is only necessary to change the nose assembly

The HUCK® structural rivets and LockBolt respect all specifications indicated provided that they have been installed with the appropriate riveting machine

The HUCK® riveting machine enables a simple and reliable installation, regardless of the operator's dexterity. The speed of the installation cycle enable to reduce assembly times by about 75%



The most common HUCK® installation tools are presented below, although this is only a small part of the overall range. Please do not hesitate to contact us for any special requests.

Equipment and tools required for the installation of HUCK® rivets

Hydropneumatic tools

	202V	2025LB	254
Weight (Kg)	2,31	2,61	3,90
Tensile force (kN)	17,30	23,53	38,34
Setting stroke (mm)	19,00	17,15	14,30
Ø blind rivet (mm)	4,8 - 6,4	4,8 - 9,5	4,8 - 9,5
Ø LockBolt (mm)	—	4,8 - 6,4	7,9 - 9,5

Add for each tool the laying nose associated to the fastener type to be installed (see the table p132-133)

Hydraulic tools

	2480L	2581-2	2583	2620PT	SF20	3585
Weight (Kg)	1,0	2,49	2,09	4,48	5,0	8,62
Tensile force (kN)	24,0	47,5	48,3	78,93	92,0	203,0
Setting stroke (mm)	22,2	23,8	38,1	36,5	50,8	46
Ø blind rivet (mm)	4,8 - 9,5	7,9	4,8 - 9,5	9,5 - 12,7	—	15,9
ØØ LockBolt (mm)	4,8 - 6,4	4,8 - 9,5	7,9 - 9,5	12,7	12,7 - M16	12,7 - 19,1

Add for each tool the laying nose associated to the fastener type to be installed (see the table p132-133)

HuckForce Powerig™ Range



There are 3 options of electrical Powerig™ for a use with hydraulic installation tools.
BOLLHOFF recommends the use of the hydraulic unit HK32-002 (see page 131).



Hydropneumatic tools

202V

Benefits:

- Lightweight and fast allowing to reduce the operator fatigue
- Ergonomically designed handle
- Collection bottle available to collect pintails.

Compatible rivet types	Diameter (mm)					Installation tools
	4,8	6,4	7,9	9,5	12,7	
Magna-Lok®	■					226 215 00 043 (99-3303L)
		■				226 215 00 025 (99-3305L)
Auto-Bulb®	■					226 215 00 043 (99-3303L)
		■				226 215 00 025 (99-3305L)
Magna-Bulb®	■					226 215 00 043 (99-3303L)
		■				226 215 00 025 (99-3305L)
HuckLok®	■					226 215 00 043 (99-3303L)
		■				226 215 00 025 (99-3305L)



Characteristics

L x A dimensions	258 x 304 mm
Stroke	18,9 mm
Capacity	17,3 kN to 6,21 bar
Weight	2,31 kg
Hydraulic pressure (max)	5,5 - 6,9 bar
Air consumption	244 l/min based on 30 cycles per min
Hydraulic fluid	DEXRON II Automatic Transmission Fluid or equivalent to ATF Specification

226 201 01 001

2025LB

Benefits:

- Ergonomically designed handle
- Robust design
- Fitted pintail bottle

Compatible rivet types	Diameter (mm)					Installation tools
	4,8	6,4	7,9	9,5	12,7	
Magna-Lok®	■					226 215 00 043 (99-3303L)
		■				226 215 00 025 (99-3305L)
Auto-Bulb®	■					226 215 00 043 (99-3303L)
		■				226 215 00 025 (99-3305L)
Magna-Bulb®	■					226 215 00 043 (99-3303L)
		■				226 215 00 025 (99-3305L)
HuckLok®	■					226 215 00 043 (99-3303L)
		■				226 215 00 025 (99-3305L)
C6L®	■					226 215 00 142 (99-3003L)
		■				226 215 00 143 (99-3006L)
Magna-Grip®	■					226 215 00 161 (99-1456L)
		■				226 215 00 091 (99-1477UKL)
Hucktainer®				■		226 215 00 164 (99-3464L)



Characteristics

L x A dimensions	245 x 318 mm
Stroke	17 mm
Capacity	23,53 kN to 6,2 bar
Weight	2,61 kg
Consommation d'air	240 l/min based on 30 cycles per min.
Hydraulic fluid	DEXRON II Automatic Transmission Fluid or equivalent to ATF Specification

226 202 01 001

254

Benefits:

- Compact and ergonomic
- Very good weight to power ratio
- Easy maintenance
- Pull piston is reinforced

Compatible rivet types	Diameter (mm)					Installation tools
	4,8	6,4	7,9	9,5	12,7	
Magna-Bulb®			■			226 215 00 153 (99-3307)
Magna-Lok®				■		226 215 00 115 (99-3329)
Bom®	■					226 215 00 155 (99-1053)
		■				226 215 00 044 (99-830-1)
C6L®			■			226 215 00 159 (99-99-245)
				■		226 215 00 160 (99-100-245)
C120L®			■			226 215 00 159 (99-99-245)
Magna-Grip®		■				226 215 00 162 (99-1439)

**Characteristics**

L x A dimensions	204 x 379 mm
Stroke	14,3 mm
Capacity	38,34 kN to 6,2 bar
Weight	3,9 kg
Hydraulic pressure (max)	6,2 - 6,9 bar
Air consumption	382 l/min based on 30 cycles per min
Hydraulic fluid	DEXRON II Automatic Transmission Fluid or equivalent to ATF Specification

 226 208 01 001



Hydraulic tools

2480L

Benefits:

- Lightweight
- Increased reliability
- Simple design for minimal maintenance

Compatible rivet types	Diameter (mm)					Installation tools
	4,8	6,4	7,9	9,5	12,7	
Magna-Lok®	■					226 215 00 043 (99-3303L)
		■				226 215 00 025 (99-3305L)
Auto-Bulb®	■					226 215 00 043 (99-3303L)
		■				226 215 00 025 (99-3305L)
Magna-Bulb®	■					226 215 00 043 (99-3303L)
		■				226 215 00 025 (99-3305L)
HuckLok®	■					226 215 00 043 (99-3303L)
		■				226 215 00 025 (99-3305L)
C6L®	■					226 215 00 142 (99-3003L)
		■				226 215 00 143 (99-3006L)
Magna-Grip®	■					226 215 00 161 (99-1456L)
		■				226 215 00 091 (99-1477UKL)
Hucktainer®				■		226 215 00 164 (99-3464L)
Bobtail®		■				226 215 00 149 (99-7932L)



Characteristics

L x A dimensions	208 x 166 mm
Stroke	22,2 mm
Capacity	25,4 kN to 579 bar
Weight	1,0 kg
Hydraulic pressure (max)	579 bar
Return pressure (max)	221 bar
Hydraulic fluid	DEXRON II Automatic Transmission Fluid or equivalent to ATF Specification

226 203 01 001

2581-2

Benefits:

- Lightweight and compact tool
- Simple design
- Suitable for use in areas where access is limited

Compatible rivet types	Diameter (mm)					Installation tools
	4,8	6,4	7,9	9,5	12,7	
Magna-Bulb®			■			226 215 00 153 (99-3307)
	■					226 215 00 155 (99-1053)
BOM®		■				226 215 00 044 (99-830-1)
			■			226 215 00 080 (99-769)
				■		226 215 00 022 (99-1272)
C6L®			■			226 215 00 159 (99-99-245)
				■		226 215 00 160 (99-100-245)
C120L®			■			226 215 00 159 (99-99-245)
				■		226 215 00 160 (99-100-245)
Magna-Grip®			■			226 215 00 162 (99-1439)
				■		226 215 00 163 (99-1440)



Characteristics

L x A dimensions	180 x 214 mm
Stroke	23,8 mm
Capacity	47,5 kN to 510 bar
Weight	2,49 kg
Hydraulic pressure (max)	510 bar
Return pressure (max)	220 bar
Hydraulic fluid	Must match DEXTRON® III, DEXTRON® VI, MERCON, Allison C-4 specifications or equivalent ATF specifications

226 215 00 095

2583

**Benefits:**

- Lightweight and compact
- Adapted to install fasteners in limited clearance
- Low maintenance

Compatible rivet types	Diameter (mm)					Installation tools
	4,8	6,4	7,9	9,5	12,7	
Magna-Bulb®			■			226 215 00 153 (99-3307)
Magna-Lok®				■		226 215 00 115 (99-3329)
BOM®	■					226 215 00 155 (99-1053)
		■				226 215 00 044 (99-830-1)
			■			226 215 00 080 (99-769)
FloorTight®			■			226 215 00 158 (99-3452)
C6L®		■				226 215 00 159 (99-99-245)
			■			226 215 00 160 (99-100-245)
C120L®		■				226 215 00 159 (99-99-245)
			■			226 215 00 160 (99-100-245)
				■		226 215 00 162 (99-1439)
Magna-Grip®			■			226 215 00 163 (99-1440)
				■		226 215 00 151 (99-7923)
Bobtail®			■			226 215 00 152 (99-7924)

Characteristics

L x A dimensions	186 x 239 mm
Stroke	31,8 mm
Capacity	48,3 kN to 580 bar
Weight	2,09 kg
Hydraulic pressure (max)	580 bar
Return pressure (max)	22 bar
Hydraulic fluid	DEXRON II Automatic Transmission Fluid or equivalent to ATF Specification

226 215 00 150

2620-PT

Benefits:

- Designed for the installation of large rivets
- Robust design
- Easy maintenance

Compatible rivet types	Diameter (mm)					Installation tools
	4,8	6,4	7,9	9,5	12,7	
Magna-Lok®				■		226 215 00 154 (99-3331)
BOM®				■		226 215 00 156 (99-3122)
				■		226 215 00 157 (99-5101)
				■		226 215 00 111 (99-5002)

Characteristics

L x A dimensions	167 x 179 mm
Stroke	36,5 mm
Capacity	78,93 kN to 448 bar
Weight	4,5 kg
Pression hydraulique	510 bar
Return pressure	221 bar

226 215 00 079



SF20**Benefits:**

- Very good weight to power ratio
- Tool is for the installation of BobTail® LockBolts
- Offers a quicker and easier installation process

Compatible rivet types	Diameter (mm)					Installation tools
	12,7	15,9	M12	M14	M16	
Bobtail®	■					226 215 00 049 (99-7882)
		■				226 215 00 167 (99-7881)
			■			226 215 00 146 (99-7880)
				■		226 215 00 147 (99-7884)
					■	226 215 00 148 (99-7881)

**Characteristics**

L x A dimensions	141 x 216 mm
Stroke	50,8 mm
Capacity	92 kN to 483 bar
Weight	5,0 kg
Hydraulic pressure (max)	483 bar
Return pressure (max)	345 bar
Hydraulic fluid	Must match DEXTRON® III, DEXTRON® VI, MERCON, Allison C-4 specifications or equivalent ATF specifications

226 215 00 048

3585**Benefits:**

- Important setting force
- Ergonomic design
- Ejection of broken stem is facilitated

Compatible rivet types	Diameter (mm)			Installation tools
	12,7	15,9	19,1	
BOM®		■		226 215 00 081 (99-5102)
C50L®		■		226 215 00 110 (99-5008)
			■	226 215 00 046 (99-5010)
Bobtail®	■			226 215 00 165 (99-7835)
		■		226 215 00 166 (99-7831)
			■	226 215 00 168 (99-7836)

**Characteristics**

L x A dimensions	199 x 263 mm
Stroke	46 mm
Capacity	203 kN to 510 bar
Weight	8,62 kg
Hydraulic pressure (max)	510 bar
Return pressure (max)	151 bar
Hydraulic fluid	Must match DEXTRON® III, DEXTRON® VI, MERCON, Allison C-4 specifications or equivalent ATF specifications

226 215 00 109

Powerig® hydraulic group

HK32-002 Powerig® - Hydraulic power system

Benefits:
■ For intensive use
■ Ideal for large production volumes
■ Manoeuvre of the rig is easy, thanks to built-in wheels
■ Sureset / Control process option is available

Characteristic

L x A x P dimensions	720 x 500 x 800 mm
Engine	2,2 kW
Power supply	3x400 VCA (nominal) 50 Hz
Weight	97 kg (Hydraulic oil included)
Machine output	1
Debit	3,2 l/min (nominal)
Hydraulic pressure (max)	600 bar

 226 215 00 047



Hydraulic hoses - Hydraulic tool connection / Powerig®

Length	Reference
5 meters	226 215 00 119 (HS-05-MCE)
10 meters	226 215 00 033 (HS-10-MCE)
15 meters	226 215 00 050 (HS-15-MCE)
20 meters	226 215 00 169 (HS-20-MCE)



		HYDRAULIC TOOLS			
		2480L	2581-2	2583	2620PT
HuckLok®	4,8	99-3303L			
	6,4	99-3305L			
Magna-Lok®	7,9		99-3307	99-3307	
Magna-Lok®	9,5			99-3318 ou 99-3329	
	12,7				99-3331
BOM®	4,8		99-1053	99-1053	
	6,4		99-830-1	99-830-1	
	7,9		99-769	99-769	
	9,5		99-1272		99-3122
	12,7				99-5101
	15,9				
FloorTight®	7,9			99-3452	
C6L®	4,8	99-3003L			
	6,4	99-3006L			
	7,9		99-99-245	99-99-245	
	9,5		99-100-245	99-100-245	
C120L®	7,9		99-99-245	99-99-245	
	9,5		99-100-245	99-100-245	
Magna-Grip®	4,8	99-1456L			
	6,4	99-1477UKL			
	7,9		99-1439	99-1439	
	9,5		99-1440	99-1440	
HuckTainer®	9,5	99-3464L			
C50L®	12,7				99-5002
	15,9				
	19,1				
BobTail®	6,4	99-7932L			
	7,9			99-7923	
	9,5			99-7924	
	12,7				
	15,9				
	19,1				
	M12				
	M14				
	M16				

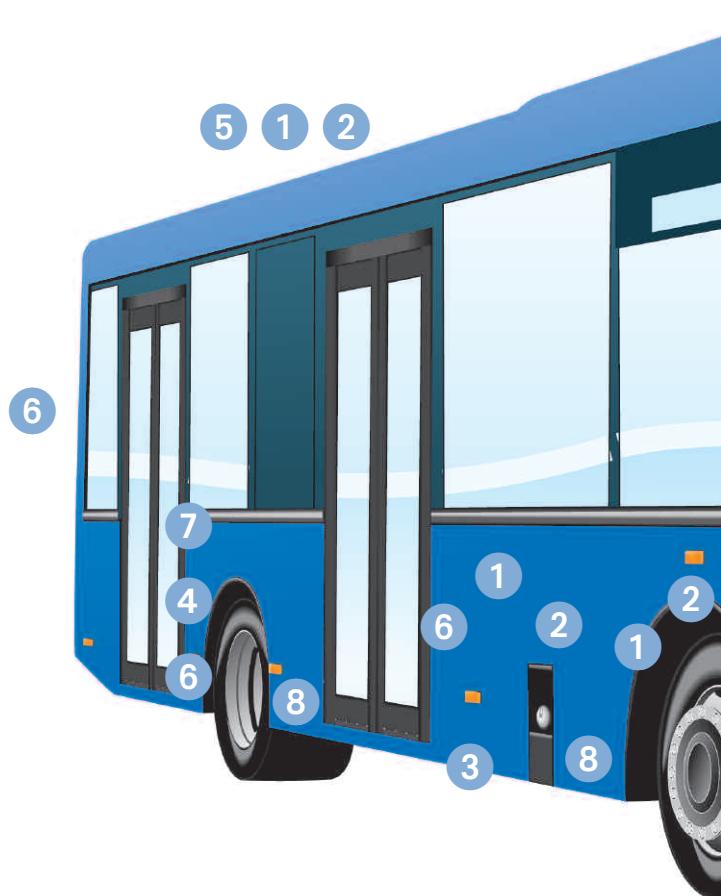
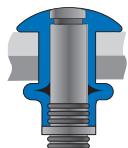
For more information please visit the following link:

https://www.afsrhuck.net/us/en/More_Information/toolingresource-en.html

HYDROPNEUMATIC TOOLS				
3585	SF20	202V	2025LB	254
		99-3303L	99-3303L	
		99-3305L	99-3305L	
				99-3307
				99-3318 ou 99-3329
				99-1053
				99-830-1
99-5102				
			99-3003L	
			99-3006L	
				99-99-245
				99-100-245
				99-99-245
			99-1456L	
			99-1477UKL	
				99-1439
			99-3464L	
99-5008				
99-5010				
99-7835	99-7882			
99-7831	99-7881			
99-7836				
	99-7880			
	99-7884			
	99-7881			

Benefits:

- A simple and fast installation enable to reduced the assembly times of 75%
- Solid fasteners resistant to extreme vibrations, which use fewer parts and allow weight and cost savings
- High quality assembly and sustainability, requiring no maintenance, resulting in lower costs
- Guaranteed return on investment

**STRUCTURAL RIVET****1. Magna-Bulb®**

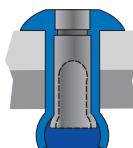
- Self locking structural rivet with 60° lock
- High tensile and shear strength
- High resistance to vibration and loosening
- The good distribution of the joining strengths allows the installation on materials of small thicknesses
- Breaking of the riveting stem is flush
- TIR Certificate

Installation of the windows, fixing of the roof and laterale structure, arc of the wheel

**2. HuckLok™**

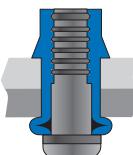
- Self locking structural rivet
- Unique system of double internal pin locking for maximum assembly integrity and high resistance to fatigue
- High resistance to tension loss in the assembly due to vibrations
- Wide clamping range, reduces the number of fasteners
- Breaking of the riveting stem is flush

Installation of the windows, fixing of the roof and laterale structure, arc of the wheel

**3. Magna-Lok®**

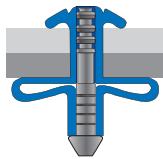
- Structural rivet with internal pin locking mechanism
- Very high shear and high tensile strength
- High resistance to tension loss in the assembly due to vibrations
- Wide clamping range, reduces the number of fasteners
- Breaking of the riveting stem is flush
- TIR Certificate

Seat fasteners, ceiling

**4. BOM®**

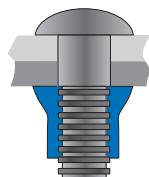
- Structural blind rivet in steel, high resistance
- Realise an efficient assembly

Fixing of pillars, fixing of angles, fixing of bumpers

**LOCKBOLT****5. Magna-Tite™**

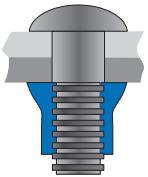
- Structural rivet with high resistance and watertight which is ensured by a polymer seal
- Wide clamping range, allowing to reduce the number of fasteners
- Extra large blind side footprint: Ideal for joining of plastic and composites materials, lower strength or thin sheet joint materials
- Breaking of the riveting stem is flush
- TIR Certificate

No leaks - Roof fixing

**6. Magna-Grip®**

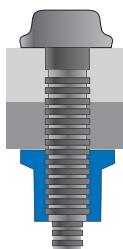
- LockBolt, consistent and with a wide clamping range
- Good vibrations resistance
- Large clamping range, allowing to reduce the number of fasteners
- Breaking of the riveting stem is flush
- TIR Certificate

Fixing of pillars, roof, wheel arc, assembly of rear frame

**7. C6L®**

- LockBolt with high tensile strength and to vibrations
- Has 6 grooves in the joining area allowing a greater clamping range

Fixing of roof and pillars

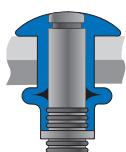
**8. BobTail®**

- Lockbolt with collar or stem in steel of 10,9 grade
- Without breaking of the riveting stem : increase the resistance to corrosion, reduction of waste, noise level is low during the installation
- Offers all the advantages of high strength rivets combined with better support provided by the collar and the head of the rivet
- Installation with semi-automatic riveter: more precision and faster
- Helical lock groove, holds the collar on the stem prior to installation

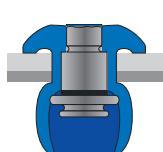
Frame, fixing of the side walls

Benefits:

- A simple and fast installation enable to reduced the assembly times of 75%
- Solid fasteners and resistant to vibrations, allowing to use fewer parts and allows weight and cost savings
- High quality assembly and sustainability, requiring no maintenance, resulting in lower costs
- Guaranteed return on investment

**STRUCTURAL RIVET****1. Magna-Bulb®**

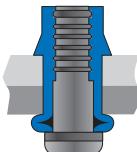
- Self locking structural rivet with 60° lock
- High tensile and shear strength
- High resistance to vibration and loosening
- The good distribution of the joining strengths allows the installation on materials of small thicknesses
- Breaking of the riveting stem is flush
- TIR Certificate

**2. HuckLok™**

- Self locking structural rivet
- Unique system of double internal pin locking for maximum assembly integrity and high resistance to fatigue
- High resistance to tension loss in the assembly due to vibrations
- Wide clamping range, reduces the number of fasteners
- Breaking of the riveting stem is flush

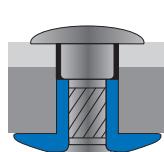
Fixing of angles, aluminium panels and floors, arched roof structure

Applications on trailer roofs, fixing of angles, curtain rails and the external structure of refrigerated trailers

**3. BOM®**

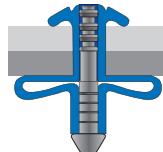
- Structural blind rivet in steel, high resistance
- Realise an efficient assembly

For very demanding applications. In trailer applications, fixing of angles, door locking bracket, mounting bracket

**4. FloorTight®**

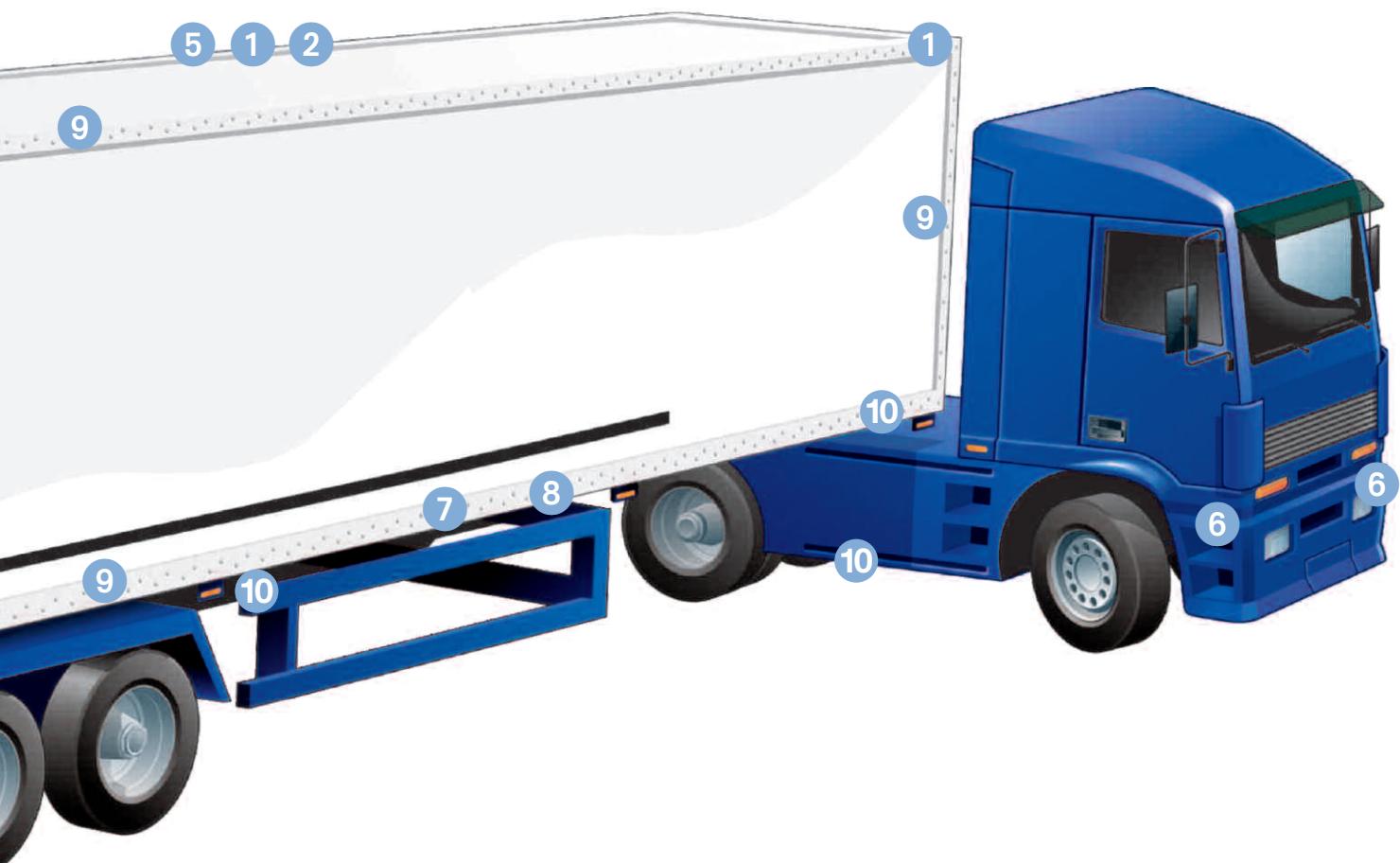
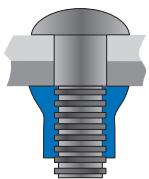
- Superior resistance rivet
- Blind installation
- High tensile and shear strength
- High setting force
- A countersunk head allows the rivet to remain completely flush once it is installed

Trailer floor

**5. Magna-Tite™**

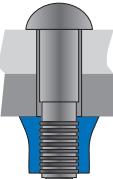
- Structural rivet with high resistance and watertight which is ensured by a polymer seal
- Wide clamping range, reduces the number of fasteners
- Extra large blind side footprint: Ideal for joining of plastic and composites materials, lower strength or thin sheet joint materials
- Breaking of the riveting stem is flush
- TIR Certificate

Trailers roof and locking systems

**LOCKBOLT****6. Magna-Grip®**

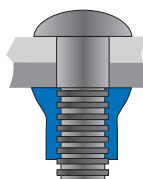
- LockBolt, consistent and with a wide clamping range
- Good vibrations resistance
- Wide clamping range, reduces the number of fasteners
- Breaking of the riveting stem is flush
- TIR Certificate

Fastening of belts and fastening of the chassis structure in truck cabs

**7. C50L®**

- LockBolts for assemblies subject to very demanding conditions
- 8.8 grade
- High resistance to vibration
- Easy visual inspection of the installation quality

Trailer chassis

**8. C6L®**

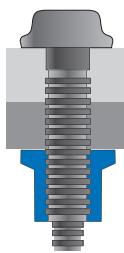
- LockBolt with high tensile strength and to vibrations
- Has 6 grooves in the joining area allowing to get a greater clamping range

Fixing of truck bumpers, radiator mounting

**9. Hucktainer® Plus**

- Designed specifically for joining composite board in trailer applications.
- Will not crush or damage the GRP composite plates
- Wide clamping range
- The low profile provides a high quality finish
- The tightness under the head of the stem prevent moisture
- TIR Certificate

Trailers chassis

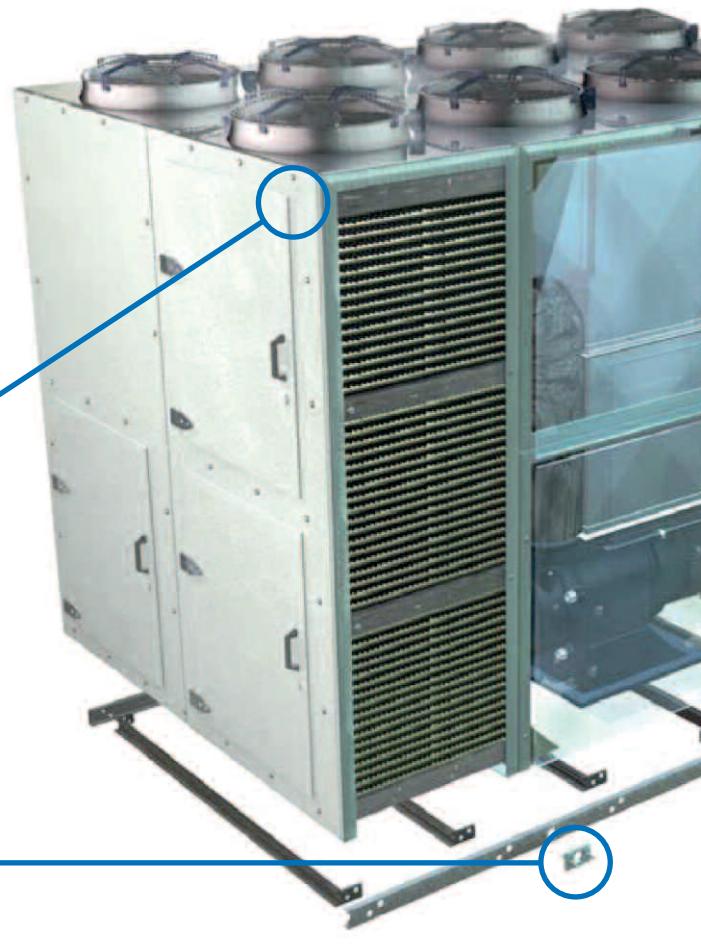
**10. BobTail®**

- Lockbolt with collar or stem in steel of 10.9 grade
- No breaking of the riveting stem : increased corrosion resistance, reduced wastage, low installation noise
- Offers all the advantages of high strength rivets combined with better support provided by the collar and the head of the rivet
- Installation with semi-automatic riveter: faster and more precise
- Helical lock groove, holds the collar on the stem prior to installation

Trailers chassis, fixing of the side walls

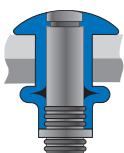
Benefits:

- A simple and fast installation enabled to reduce assembly times by 75%
- Solid fasteners and vibration resistant, allowing fewer parts to be used and allows weight and cost savings
- High quality assembly and sustainability, requiring no maintenance, resulting in lower costs
- Guaranteed return on investment

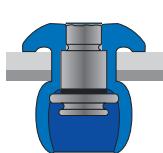


Panels: HUCK® fastening systems allow quick, easy and clean installation of pre-painted panels. A robust and tamperproof assembly is guaranteed

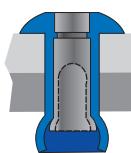
Lifting clamp: HUCK® fastening systems are resistant to vibrations, extend the life of lifting clamp, and offer assemblies that require no maintenance. Easy to install.

STRUCTURAL RIVET**1. Magna-Bulb®**

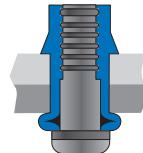
- Self locking structural rivet with 60° lock
- High tensile and shear strength
- High resistance to vibration and loosening
- The good distribution of the joining strengths allows the installation on materials of small thicknesses
- Breaking of the riveting stem is flush
- TIR Certificate

**2. HuckLok™**

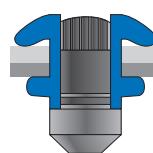
- Self locking structural rivet
- Unique system of double internal pin locking for maximum assembly integrity and high resistance to fatigue
- High resistance to tension loss in the assembly caused by vibrations
- Wide clamping range, reduces the number of fasteners
- Wide clamping range, reduces the number of fasteners
- Breaking of the riveting stem is flush

**3. Magna-Lok®**

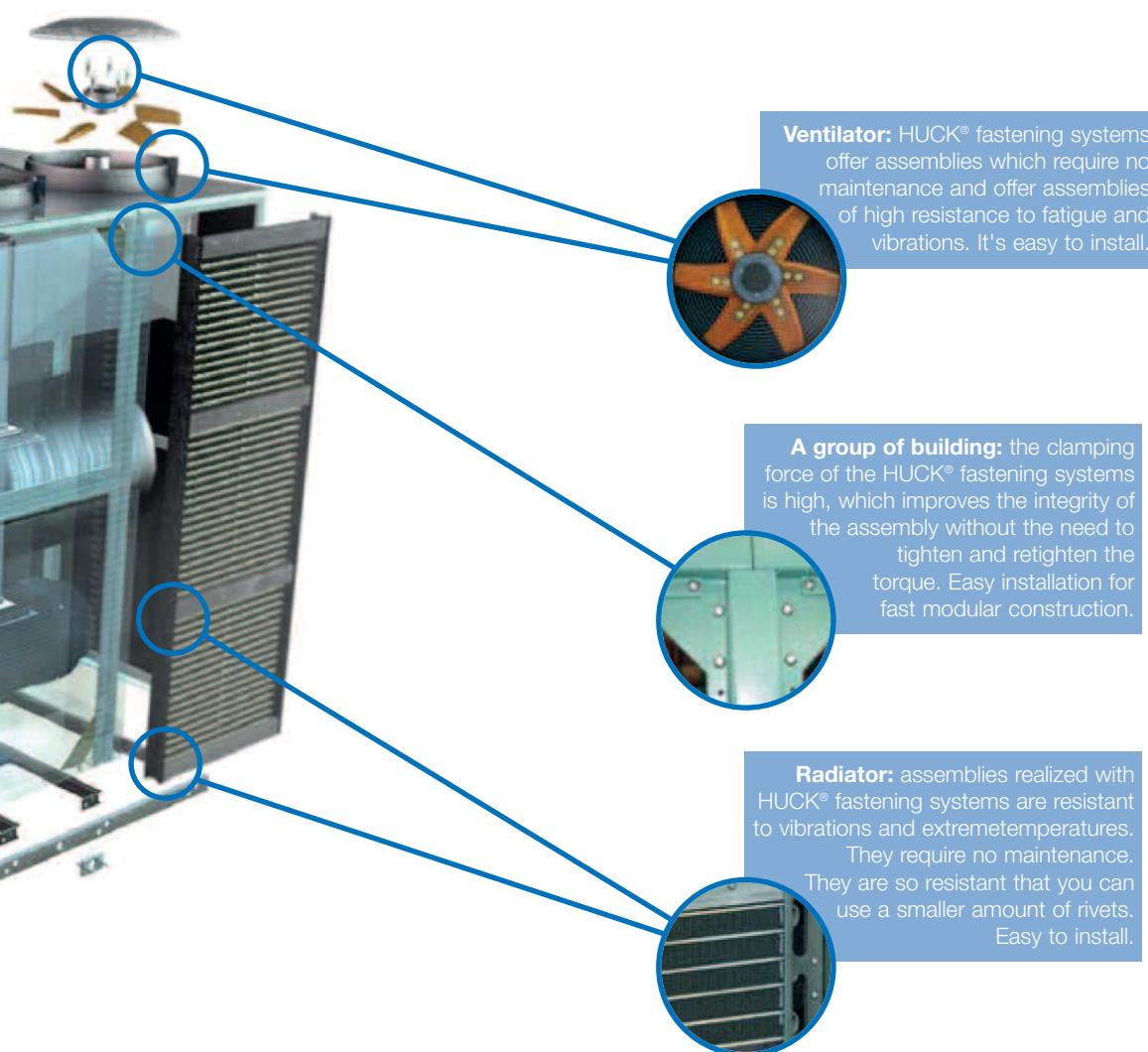
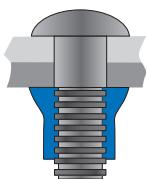
- Structural rivet with internal pin locking mechanism
- High tensile and shear strength
- High resistance to vibration and loosening
- Wide clamping range, reduces the number of fasteners
- Wide clamping range, reduces the number of fasteners
- Breaking of the riveting stem is flush
- TIR Certificate

**4. BOM®**

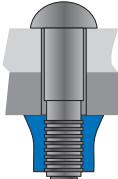
- Structural blind rivet in steel, high resistance
- Realise an efficient assembly

**5. Auto-Bulb®**

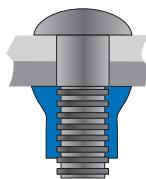
- Purpose design blind side shape for easy hole location
- Large diameter head and large bulge which distributes the load over a larger area

**LOCKBOLT****6. Magna-Grip®**

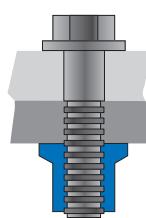
- LockBolt, consistent and with a wide clamping range
- Good vibration resistance
- Wide clamping range, reduces the number of fasteners
- Breaking of the riveting stem is flush

**7. C50L®**

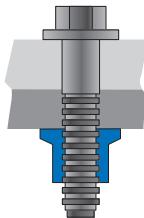
- LockBolts for assemblies subject to very demanding conditions
- 8.8 grade
- High resistance to vibration
- Easy visual inspection of the installation quality

**8. C6L/120L®**

- LockBolt with high tensile strength vibration resistant
- Has 6 grooves in the joining area allowing to get a greater clamping range

**9. Huck-Fit®**

- LockBolts for assemblies subject to very demanding conditions with unique helical lock groove to increase the life of the joining
- Easy installation thanks to the support of the collar on the stem prior to installation
- Joints have a high resistance to vibration
- Can be unscrewed as a standard bolt with a monkey wrench
- 10.9 grade

**10. Huck-Spin®**

- Lockbolt without breaking of the riveting stem with unique helical lock groove to increase the life of the joint
- The "control process" ensures precise installation
- High resistance to tension loss in the assembly due to vibrations
- Can be unscrewed as a standard bolt with a monkey wrench
- 10.9 grade

									
2LC120-R6G	82-86-90	ABP-4U8-M7	17	BOM-R10-14	24	BT-R8-18GA	116	BTR-BR24-16GA	121
2LC120-R8G	83-87-91	ABP-4U8-M8	17	BOM-R10-16	24	BT-R8-20GA	116	BTR-BR24-20GA	121
2LC120-R10G	84-88-92	ABP-4U8-M9	17	BOM-R12-4	25	BT-R10-4GA	117	BTR-BR24-24GA	121
2LC120-R12G	85-89-93	ABP-4U8-M10	17	BOM-R12-6	25	BT-R10-6GA	117	BTR-BR24-28GA	121
2LC-2CU6	42-54-70	ABP-4U8-M12	17	BOM-R12-8	25	BT-R10-8GA	117	BTR-BR24-32GA	121
2LC-2CU8	43-55-71	ABP-4U8-M19	17	BOM-R12-10	25	BT-R10-10GA	117	BTR-BR24-36GA	121
2LC-2CU10	44-56-72	ABP-R6-M2	17	BOM-R12-12	25	BT-R10-12GA	117	BTR-BR24-40GA	121
2LC-2CU12	45-57-73	ABP-R6-M3	17	BOM-R12-14	25	BT-R10-14GA	117	BTR-BR24-44GA	121
2LC-F6	58-74	ABP-R6-M4	17	BOM-R12-16	25	BT-R10-16GA	117	BTR-BR24-48GA	121
2LC-F8	59-75	ABP-R6-M5	17	BOM-R12-18	25	BT-R10-18GA	117	BTR-BR24-52GA	121
2LC-F10	60-76	ABP-R8-M2	17	BOM-R12-20	25	BT-R10-20GA	117	BTR-BR24-56GA	121
2LC-F12	61-77	ABP-R8-M3	17	BOM-R16-4	25	BT-R12-4GA	118	BTR-BR24-60GA	121
2LC-R6G	38-50-66	ABP-R8-M4	17	BOM-R16-6	25	BT-R12-6GA	118	BTR-BR24-64GA	121
2LC-R8G	39-51-67	ABP-R8-M5	17	BOM-R16-8	25	BT-R12-8GA	118	BTR-BR24-68GA	121
2LC-R10G	40-52-68	ABP-R8-M6	17	BOM-R16-10	25	BT-R12-10GA	118	BTR-BR24-72GA	121
2LC-R12G	41-53-69	ABP-R8-M7	17	BOM-R16-12	25	BT-R12-12GA	118	BTR-BR28-4GA	122
3LC120-2R6G	82-86-90	ABP-R8-M8	17	BOM-R16-14	25	BT-R12-14GA	118	BTR-BR28-8GA	122
3LC120-2R8G	83-87-91	ABP-R8-M9	17	BOM-R16-16	25	BT-R12-16GA	118	BTR-BR28-12GA	122
3LC120-2R10G	84-88-92	ABP-R8-M10	17	BOM-R16-18	25	BT-R12-18GA	118	BTR-BR28-16GA	122
3LC120-2R12G	85-89-93	ABP-R8-M11	17	BOM-R16-20	25	BT-R12-20GA	118	BTR-BR28-20GA	122
3LC-2CU6	42-54-70	ABP-R8-M19	17	BOM-R16-22	25	BTR-BR16-4GA	119	BTR-BR28-24GA	122
3LC-2CU8	43-55-71	BOM-R6-2	24	BOM-R16-24	25	BTR-BR16-8GA	119	BTR-BR28-28GA	122
3LC-2CU10	44-56-72	BOM-R6-3	24	BOM-R20-4GA	25	BTR-BR16-12GA	119	BTR-BR28-32GA	122
3LC-2CU12	45-57-73	BOM-R6-4	24	BOM-R20-8GA	25	BTR-BR16-16GA	119	BTR-BR28-36GA	122
3LC-2CU16	100	BOM-R6-5	24	BOM-R20-12GA	25	BTR-BR16-20GA	119	BTR-BR28-40GA	122
3LC-2CU20	101	BOM-R6-6	24	BOM-R20-16GA	25	BTR-BR16-24GA	119	BTR-BR28-44GA	122
3LC-2R6G	38-50-66	BOM-R6-7	24	BOM-R20-20GA	25	BTR-BR16-28GA	119	BTR-BR28-48GA	122
3LC-2R8G	39-51-67	BOM-R6-8	24	BOM-R24-4GA	25	BTR-BR16-32GA	119	BTR-BR28-52GA	122
3LC-2R10G	40-52-68	BOM-R6-9	24	BOM-R24-8GA	25	BTR-BR16-36GA	119	BTR-BR28-56GA	122
3LC-2R12G	41-53-69	BOM-R6-10	24	BOM-R24-12GA	25	BTR-BR16-40GA	119	BTR-BR28-60GA	122
3LC-2R16G	94-102	BOM-R6-11	24	BOM-R24-16GA	25	BTR-BR16-44GA	119	BTR-BR28-64GA	122
3LC-2R20G	95-103	BOM-R6-12	24	BTC5-R16GA	119	BTR-BR16-48GA	119	BTR-BR28-68GA	122
3LC-2R24G	96-104	BOM-R8-2	24	BTC5-R20GA	120	BTR-BR16-52GA	119	BTR-BR28-72GA	122
3LC-2R28G	97	BOM-R8-3	24	BTC5-R24GA	121	BTR-BR16-56GA	119	BTR-BR32-4GA	123
3LC-2R32G	98	BOM-R8-4	24	BTC5-R28GA	122	BTR-BR16-60GA	119	BTR-BR32-8GA	123
3LC-F6	58-74	BOM-R8-5	24	BTC5-R32GA	123	BTR-BR20-4GA	120	BTR-BR32-12GA	123
3LC-F8	59-75	BOM-R8-6	24	BTC-R8GA/GAH	116	BTR-BR20-8GA	120	BTR-BR32-16GA	123
3LC-F10	60-76	BOM-R8-7	24	BTC-R10GA/GAH	117	BTR-BR20-12GA	120	BTR-BR32-20GA	123
3LC-F12	61-77	BOM-R8-8	24	BTC-R12GA/GAH	118	BTR-BR20-16GA	120	BTR-BR32-24GA	123
3LC-I6	46-62-78	BOM-R8-9	24	BT-R8-1GA	116	BTR-BR20-20GA	120	BTR-BR32-28GA	123
3LC-I8	47-63-79	BOM-R8-10	24	BT-R8-2GA	116	BTR-BR20-24GA	120	BTR-BR32-32GA	123
3LC-I10	48-64-80	BOM-R8-11	24	BT-R8-3GA	116	BTR-BR20-28GA	120	BTR-BR32-36GA	123
3LC-I12	49-65-81	BOM-R8-12	24	BT-R8-4GA	116	BTR-BR20-32GA	120	BTR-BR32-40GA	123
8LC-2CU20	101	BOM-R8-13	24	BT-R8-5GA	116	BTR-BR20-36GA	120	BTR-BR32-44GA	123
8LC-2R28G	97	BOM-R8-14	24	BT-R8-6GA	116	BTR-BR20-40GA	120	BTR-BR32-48GA	123
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ABP-4U8-M3	17	BOM-R10-6	24	BT-R8-10GA	116	BTR-BR20-48GA	120	BTR-BR32-56GA	123
ABP-4U8-M4	17	BOM-R10-8	24	BT-R8-12GA	116	BTR-BR24-4GA	121	BTR-BR32-60GA	123
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ABP-4U8-M6	17	BOM-R10-12	24	BT-R8-16GA	116	BTR-BR24-12GA	121	BTR-BR32-68GA	123

									
BTR-BR32-72GA	123	C120L90-R8-22G	91	C120LB-R6-12G	82	C120LB-R8-31G	83	C120LT-R6-20G	86
C120L90-R6-3G	90	C120L90-R8-23G	91	C120LB-R6-13G	82	C120LB-R8-32G	83	C120LT-R6-21G	86
C120L90-R6-4G	90	C120L90-R8-24G	91	C120LB-R6-14G	82	C120LB-R10-4G	84	C120LT-R6-22G	86
C120L90-R6-5G	90	C120L90-R8-25G	91	C120LB-R6-15G	82	C120LB-R10-6G	84	C120LT-R6-23G	86
C120L90-R6-6G	90	C120L90-R8-26G	91	C120LB-R6-16G	82	C120LB-R10-8G	84	C120LT-R6-24G	86
C120L90-R6-7G	90	C120L90-R8-27G	91	C120LB-R6-17G	82	C120LB-R10-10G	84	C120LT-R6-25G	86
C120L90-R6-8G	90	C120L90-R8-28G	91	C120LB-R6-18G	82	C120LB-R10-12G	84	C120LT-R6-26G	86
C120L90-R6-9G	90	C120L90-R8-29G	91	C120LB-R6-19G	82	C120LB-R10-14G	84	C120LT-R6-27G	86
C120L90-R6-10G	90	C120L90-R8-30G	91	C120LB-R6-20G	82	C120LB-R10-16G	84	C120LT-R6-28G	86
C120L90-R6-11G	90	C120L90-R8-31G	91	C120LB-R6-21G	82	C120LB-R10-18G	84	C120LT-R6-29G	86
C120L90-R6-12G	90	C120L90-R8-32G	91	C120LB-R6-22G	82	C120LB-R10-20G	84	C120LT-R6-30G	86
C120L90-R6-13G	90	C120L90-R10-4G	92	C120LB-R6-23G	82	C120LB-R10-22G	84	C120LT-R6-31G	86
C120L90-R6-14G	90	C120L90-R10-6G	92	C120LB-R6-24G	82	C120LB-R10-24G	84	C120LT-R6-32G	86
C120L90-R6-15G	90	C120L90-R10-8G	92	C120LB-R6-25G	82	C120LB-R10-26G	84	C120LT-R8-2G	87
C120L90-R6-16G	90	C120L90-R10-10G	92	C120LB-R6-26G	82	C120LB-R10-28G	84	C120LT-R8-3G	87
C120L90-R6-17G	90	C120L90-R10-12G	92	C120LB-R6-27G	82	C120LB-R10-30G	84	C120LT-R8-4G	87
C120L90-R6-18G	90	C120L90-R10-14G	92	C120LB-R6-28G	82	C120LB-R10-32G	84	C120LT-R8-5G	87
C120L90-R6-19G	90	C120L90-R10-16G	92	C120LB-R6-29G	82	C120LB-R12-4G	85	C120LT-R8-6G	87
C120L90-R6-20G	90	C120L90-R10-18G	92	C120LB-R6-30G	82	C120LB-R12-6G	85	C120LT-R8-7G	87
C120L90-R6-21G	90	C120L90-R10-20G	92	C120LB-R6-31G	82	C120LB-R12-8G	85	C120LT-R8-8G	87
C120L90-R6-22G	90	C120L90-R10-22G	92	C120LB-R6-32G	82	C120LB-R12-10G	85	C120LT-R8-9G	87
C120L90-R6-23G	90	C120L90-R10-24G	92	C120LB-R8-2G	83	C120LB-R12-12G	85	C120LT-R8-10G	87
C120L90-R6-24G	90	C120L90-R10-26G	92	C120LB-R8-3G	83	C120LB-R12-14G	85	C120LT-R8-11G	87
C120L90-R6-25G	90	C120L90-R10-28G	92	C120LB-R8-4G	83	C120LB-R12-16G	85	C120LT-R8-12G	87
C120L90-R6-26G	90	C120L90-R10-30G	92	C120LB-R8-5G	83	C120LB-R12-18G	85	C120LT-R8-13G	87
C120L90-R6-27G	90	C120L90-R10-32G	92	C120LB-R8-6G	83	C120LB-R12-20G	85	C120LT-R8-14G	87
C120L90-R6-28G	90	C120L90-R12-6G	93	C120LB-R8-7G	83	C120LB-R12-22G	85	C120LT-R8-15G	87
C120L90-R6-29G	90	C120L90-R12-8G	93	C120LB-R8-8G	83	C120LB-R12-24G	85	C120LT-R8-16G	87
C120L90-R6-30G	90	C120L90-R12-10G	93	C120LB-R8-9G	83	C120LB-R12-26G	85	C120LT-R8-17G	87
C120L90-R6-31G	90	C120L90-R12-12G	93	C120LB-R8-10G	83	C120LB-R12-28G	85	C120LT-R8-18G	87
C120L90-R6-32G	90	C120L90-R12-14G	93	C120LB-R8-11G	83	C120LB-R12-30G	85	C120LT-R8-19G	87
C120L90-R8-3G	91	C120L90-R12-16G	93	C120LB-R8-12G	83	C120LB-R12-32G	85	C120LT-R8-20G	87
C120L90-R8-4G	91	C120L90-R12-18G	93	C120LB-R8-13G	83	C120LT-R6-2G	86	C120LT-R8-21G	87
C120L90-R8-5G	91	C120L90-R12-20G	93	C120LB-R8-14G	83	C120LT-R6-3G	86	C120LT-R8-22G	87
C120L90-R8-6G	91	C120L90-R12-22G	93	C120LB-R8-15G	83	C120LT-R6-4G	86	C120LT-R8-23G	87
C120L90-R8-7G	91	C120L90-R12-24G	93	C120LB-R8-16G	83	C120LT-R6-5G	86	C120LT-R8-24G	87
C120L90-R8-8G	91	C120L90-R12-26G	93	C120LB-R8-17G	83	C120LT-R6-6G	86	C120LT-R8-25G	87
C120L90-R8-9G	91	C120L90-R12-28G	93	C120LB-R8-18G	83	C120LT-R6-7G	86	C120LT-R8-26G	87
C120L90-R8-10G	91	C120L90-R12-30G	93	C120LB-R8-19G	83	C120LT-R6-8G	86	C120LT-R8-27G	87
C120L90-R8-11G	91	C120L90-R12-32G	93	C120LB-R8-20G	83	C120LT-R6-9G	86	C120LT-R8-28G	87
C120L90-R8-12G	91	C120LB-R6-2G	82	C120LB-R8-21G	83	C120LT-R6-10G	86	C120LT-R8-29G	87
C120L90-R8-13G	91	C120LB-R6-3G	82	C120LB-R8-22G	83	C120LT-R6-11G	86	C120LT-R8-30G	87
C120L90-R8-14G	91	C120LB-R6-4G	82	C120LB-R8-23G	83	C120LT-R6-12G	86	C120LT-R8-31G	87
C120L90-R8-15G	91	C120LB-R6-5G	82	C120LB-R8-24G	83	C120LT-R6-13G	86	C120LT-R8-32G	87
C120L90-R8-16G	91	C120LB-R6-6G	82	C120LB-R8-25G	83	C120LT-R6-14G	86	C120LT-R10-4G	88
C120L90-R8-17G	91	C120LB-R6-7G	82	C120LB-R8-26G	83	C120LT-R6-15G	86	C120LT-R10-6G	88
C120L90-R8-18G	91	C120LB-R6-8G	82	C120LB-R8-27G	83	C120LT-R6-16G	86	C120LT-R10-8G	88
C120L90-R8-19G	91	C120LB-R6-9G	82	C120LB-R8-28G	83	C120LT-R6-17G	86	C120LT-R10-10G	88
C120L90-R8-20G	91	C120LB-R6-10G	82	C120LB-R8-29G	83	C120LT-R6-18G	86	C120LT-R10-12G	88
C120L90-R8-21G	91	C120LB-R6-11G	82	C120LB-R8-30G	83	C120LT-R6-19G	86	C120LT-R10-14G	88

									
C120LT-R10-16G	88	C50L90-BR20-52	103	C50LR-BR20-40	95	C50LR-BR28-60	97	C50LR-U16-12	100
C120LT-R10-18G	88	C50L90-BR20-56	103	C50LR-BR20-44	95	C50LR-BR28-64	97	C50LR-U16-16	100
C120LT-R10-20G	88	C50L90-BR20-60	103	C50LR-BR20-48	95	C50LR-BR28-68	97	C50LR-U16-20	100
C120LT-R10-22G	88	C50L90-BR20-64	103	C50LR-BR20-52	95	C50LR-BR28-72	97	C50LR-U16-24	100
C120LT-R10-24G	88	C50L90-BR24-12	104	C50LR-BR20-56	95	C50LR-BR28-76	97	C50LR-U20-4	101
C120LT-R10-26G	88	C50L90-BR24-16	104	C50LR-BR20-60	95	C50LR-BR28-80	97	C50LR-U20-8	101
C120LT-R10-28G	88	C50L90-BR24-20	104	C50LR-BR20-64	95	C50LR-BR28-84	97	C50LR-U20-12	101
C120LT-R10-30G	88	C50L90-BR24-24	104	C50LR-BR20-68	95	C50LR-BR28-88	97	C50LR-U20-16	101
C120LT-R10-32G	88	C50L90-BR24-28	104	C50LR-BR20-72	95	C50LR-BR28-92	97	C50LR-U20-20	101
C120LT-R12-4G	89	C50L90-BR24-32	104	C50LR-BR20-76	95	C50LR-BR32-8	98	C50LR-U20-24	101
C120LT-R12-6G	89	C50L90-BR24-36	104	C50LR-BR20-80	95	C50LR-BR32-12	98	C6L90-C6-3	58
C120LT-R12-8G	89	C50L90-BR24-40	104	C50LR-BR20-84	95	C50LR-BR32-16	98	C6L90-C6-4	58
C120LT-R12-10G	89	C50L90-BR24-44	104	C50LR-BR20-88	95	C50LR-BR32-20	98	C6L90-C6-5	58
C120LT-R12-12G	89	C50L90-BR24-48	104	C50LR-BR20-92	95	C50LR-BR32-24	98	C6L90-C6-6	58
C120LT-R12-14G	89	C50L90-BR24-52	104	C50LR-BR24-4	96	C50LR-BR32-28	98	C6L90-C6-7	58
C120LT-R12-16G	89	C50L90-BR24-56	104	C50LR-BR24-8	96	C50LR-BR32-32	98	C6L90-C6-8	58
C120LT-R12-18G	89	C50L90-BR24-60	104	C50LR-BR24-12	96	C50LR-BR32-36	98	C6L90-C6-9	58
C120LT-R12-20G	89	C50L90-BR24-64	104	C50LR-BR24-16	96	C50LR-BR32-40	98	C6L90-C6-10	58
C120LT-R12-22G	89	C50LR-BR16-4	94	C50LR-BR24-20	96	C50LR-BR32-44	98	C6L90-C6-11	58
C120LT-R12-24G	89	C50LR-BR16-8	94	C50LR-BR24-24	96	C50LR-BR32-48	98	C6L90-C6-12	58
C120LT-R12-26G	89	C50LR-BR16-12	94	C50LR-BR24-28	96	C50LR-BR32-52	98	C6L90-C6-13	58
C120LT-R12-28G	89	C50LR-BR16-16	94	C50LR-BR24-32	96	C50LR-BR32-56	98	C6L90-C6-14	58
C120LT-R12-30G	89	C50LR-BR16-20	94	C50LR-BR24-36	96	C50LR-BR32-60	98	C6L90-C6-15	58
C120LT-R12-32G	89	C50LR-BR16-24	94	C50LR-BR24-40	96	C50LR-BR32-64	98	C6L90-C6-16	58
C50L90-BR16-8	102	C50LR-BR16-28	94	C50LR-BR24-44	96	C50LR-BR32-68	98	C6L90-C6-17	58
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C50L90-BR16-16	102	C50LR-BR16-36	94	C50LR-BR24-52	96	C50LR-BR32-76	98	C6L90-C6-19	58
C50L90-BR16-20	102	C50LR-BR16-40	94	C50LR-BR24-56	96	C50LR-BR32-80	98	C6L90-C6-20	58
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C50L90-BR16-28	102	C50LR-BR16-48	94	C50LR-BR24-64	96	C50LR-BR32-88	98	C6L90-C6-22	58
C50L90-BR16-32	102	C50LR-BR16-52	94	C50LR-BR24-68	96	C50LR-BR32-92	98	C6L90-C6-23	58
C50L90-BR16-36	102	C50LR-BR16-56	94	C50LR-BR24-72	96	C50LR-BR36-28	99	C6L90-C6-24	58
C50L90-BR16-40	102	C50LR-BR16-60	94	C50LR-BR24-76	96	C50LR-BR36-32	99	C6L90-C6-25	58
C50L90-BR16-44	102	C50LR-BR16-64	94	C50LR-BR24-80	96	C50LR-BR36-36	99	C6L90-C6-26	58
C50L90-BR16-48	102	C50LR-BR16-68	94	C50LR-BR24-84	96	C50LR-BR36-40	99	C6L90-C6-27	58
C50L90-BR16-52	102	C50LR-BR16-72	94	C50LR-BR24-88	96	C50LR-BR36-44	99	C6L90-C6-28	58
C50L90-BR16-56	102	C50LR-BR16-76	94	C50LR-BR24-92	96	C50LR-BR36-48	99	C6L90-C6-29	58
C50L90-BR16-60	102	C50LR-BR16-80	94	C50LR-BR28-8	97	C50LR-BR36-52	99	C6L90-C6-30	58
C50L90-BR16-64	102	C50LR-BR16-84	94	C50LR-BR28-12	97	C50LR-BR36-56	99	C6L90-C6-31	58
C50L90-BR20-8	103	C50LR-BR16-88	94	C50LR-BR28-16	97	C50LR-BR36-60	99	C6L90-C6-32	58
C50L90-BR20-12	103	C50LR-BR16-92	94	C50LR-BR28-20	97	C50LR-BR36-64	99	C6L90-C8-3	59
C50L90-BR20-16	103	C50LR-BR20-4	95	C50LR-BR28-24	97	C50LR-BR36-68	99	C6L90-C8-4	59
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C50L90-BR20-24	103	C50LR-BR20-12	95	C50LR-BR28-32	97	C50LR-BR36-76	99	C6L90-C8-6	59
C50L90-BR20-28	103	C50LR-BR20-16	95	C50LR-BR28-36	97	C50LR-BR36-80	99	C6L90-C8-7	59
C50L90-BR20-32	103	C50LR-BR20-20	95	C50LR-BR28-40	97	C50LR-BR36-84	99	C6L90-C8-8	59
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C50L90-BR20-40	103	C50LR-BR20-28	95	C50LR-BR28-48	97	C50LR-BR36-92	99	C6L90-C8-10	59
C50L90-BR20-44	103	C50LR-BR20-32	95	C50LR-BR28-52	97	C50LR-U16-4	100	C6L90-C8-11	59
C50L90-BR20-48	103	C50LR-BR20-36	95	C50LR-BR28-56	97	C50LR-U16-8	100	C6L90-C8-12	59

									
C6L90-C8-13	59	C6L90-F6-4	62	C6L90-F8-24	63	C6L90-R6-15G	50	C6L90-R10-8G	52
C6L90-C8-14	59	C6L90-F6-5	62	C6L90-F8-25	63	C6L90-R6-16G	50	C6L90-R10-10G	52
C6L90-C8-15	59	C6L90-F6-6	62	C6L90-F8-26	63	C6L90-R6-17G	50	C6L90-R10-12G	52
C6L90-C8-16	59	C6L90-F6-7	62	C6L90-F8-27	63	C6L90-R6-18G	50	C6L90-R10-14G	52
C6L90-C8-17	59	C6L90-F6-8	62	C6L90-F8-28	63	C6L90-R6-19G	50	C6L90-R10-16G	52
C6L90-C8-18	59	C6L90-F6-9	62	C6L90-F8-29	63	C6L90-R6-20G	50	C6L90-R10-18G	52
C6L90-C8-19	59	C6L90-F6-10	62	C6L90-F8-30	63	C6L90-R6-21G	50	C6L90-R10-20G	52
C6L90-C8-20	59	C6L90-F6-11	62	C6L90-F8-31	63	C6L90-R6-22G	50	C6L90-R10-22G	52
C6L90-C8-21	59	C6L90-F6-12	62	C6L90-F8-32	63	C6L90-R6-23G	50	C6L90-R10-24G	52
C6L90-C8-22	59	C6L90-F6-13	62	C6L90-F10-4	64	C6L90-R6-24G	50	C6L90-R10-26G	52
C6L90-C8-23	59	C6L90-F6-14	62	C6L90-F10-6	64	C6L90-R6-25G	50	C6L90-R10-28G	52
C6L90-C8-24	59	C6L90-F6-15	62	C6L90-F10-8	64	C6L90-R6-26G	50	C6L90-R10-30G	52
C6L90-C8-25	59	C6L90-F6-16	62	C6L90-F10-10	64	C6L90-R6-27G	50	C6L90-R10-32G	52
C6L90-C8-26	59	C6L90-F6-17	62	C6L90-F10-12	64	C6L90-R6-28G	50	C6L90-R12-6G	53
C6L90-C8-27	59	C6L90-F6-18	62	C6L90-F10-14	64	C6L90-R6-29G	50	C6L90-R12-8G	53
C6L90-C8-28	59	C6L90-F6-19	62	C6L90-F10-16	64	C6L90-R6-30G	50	C6L90-R12-10G	53
C6L90-C8-29	59	C6L90-F6-20	62	C6L90-F10-18	64	C6L90-R6-31G	50	C6L90-R12-12G	53
C6L90-C8-30	59	C6L90-F6-21	62	C6L90-F10-20	64	C6L90-R6-32G	50	C6L90-R12-14G	53
C6L90-C8-31	59	C6L90-F6-22	62	C6L90-F10-22	64	C6L90-R8-3G	51	C6L90-R12-16G	53
C6L90-C8-32	59	C6L90-F6-23	62	C6L90-F10-24	64	C6L90-R8-4G	51	C6L90-R12-18G	53
C6L90-C10-4	60	C6L90-F6-24	62	C6L90-F10-26	64	C6L90-R8-5G	51	C6L90-R12-20G	53
C6L90-C10-6	60	C6L90-F6-25	62	C6L90-F10-28	64	C6L90-R8-6G	51	C6L90-R12-22G	53
C6L90-C10-8	60	C6L90-F6-26	62	C6L90-F10-30	64	C6L90-R8-7G	51	C6L90-R12-24G	53
C6L90-C10-10	60	C6L90-F6-27	62	C6L90-F10-32	64	C6L90-R8-8G	51	C6L90-R12-26G	53
C6L90-C10-12	60	C6L90-F6-28	62	C6L90-F12-6	65	C6L90-R8-9G	51	C6L90-R12-28G	53
C6L90-C10-14	60	C6L90-F6-29	62	C6L90-F12-8	65	C6L90-R8-10G	51	C6L90-R12-30G	53
C6L90-C10-16	60	C6L90-F6-30	62	C6L90-F12-10	65	C6L90-R8-11G	51	C6L90-R12-32G	53
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C6L90-C10-20	60	C6L90-F6-32	62	C6L90-F12-14	65	C6L90-R8-13G	51	C6L90-U6-4	54
C6L90-C10-22	60	C6L90-F8-3	63	C6L90-F12-16	65	C6L90-R8-14G	51	C6L90-U6-5	54
C6L90-C10-24	60	C6L90-F8-4	63	C6L90-F12-18	65	C6L90-R8-15G	51	C6L90-U6-6	54
C6L90-C10-26	60	C6L90-F8-5	63	C6L90-F12-20	65	C6L90-R8-16G	51	C6L90-U6-7	54
C6L90-C10-28	60	C6L90-F8-6	63	C6L90-F12-22	65	C6L90-R8-17G	51	C6L90-U6-8	54
C6L90-C10-30	60	C6L90-F8-7	63	C6L90-F12-24	65	C6L90-R8-18G	51	C6L90-U6-9	54
C6L90-C10-32	60	C6L90-F8-8	63	C6L90-F12-26	65	C6L90-R8-19G	51	C6L90-U6-10	54
C6L90-C12-6	61	C6L90-F8-9	63	C6L90-F12-28	65	C6L90-R8-20G	51	C6L90-U6-11	54
C6L90-C12-8	61	C6L90-F8-10	63	C6L90-F12-30	65	C6L90-R8-21G	51	C6L90-U6-12	54
C6L90-C12-10	61	C6L90-F8-11	63	C6L90-F12-32	65	C6L90-R8-22G	51	C6L90-U6-13	54
C6L90-C12-12	61	C6L90-F8-12	63	C6L90-R6-3G	50	C6L90-R8-23G	51	C6L90-U6-14	54
C6L90-C12-14	61	C6L90-F8-13	63	C6L90-R6-4G	50	C6L90-R8-24G	51	C6L90-U6-15	54
C6L90-C12-16	61	C6L90-F8-14	63	C6L90-R6-5G	50	C6L90-R8-25G	51	C6L90-U6-16	54
C6L90-C12-18	61	C6L90-F8-15	63	C6L90-R6-6G	50	C6L90-R8-26G	51	C6L90-U6-17	54
C6L90-C12-20	61	C6L90-F8-16	63	C6L90-R6-7G	50	C6L90-R8-27G	51	C6L90-U6-18	54
C6L90-C12-22	61	C6L90-F8-17	63	C6L90-R6-8G	50	C6L90-R8-28G	51	C6L90-U6-19	54
C6L90-C12-24	61	C6L90-F8-18	63	C6L90-R6-9G	50	C6L90-R8-29G	51	C6L90-U6-20	54
C6L90-C12-26	61	C6L90-F8-19	63	C6L90-R6-10G	50	C6L90-R8-30G	51	C6L90-U6-21	54
C6L90-C12-28	61	C6L90-F8-20	63	C6L90-R6-11G	50	C6L90-R8-31G	51	C6L90-U6-22	54
C6L90-C12-30	61	C6L90-F8-21	63	C6L90-R6-12G	50	C6L90-R8-32G	51	C6L90-U6-23	54
C6L90-C12-32	61	C6L90-F8-22	63	C6L90-R6-13G	50	C6L90-R10-4G	52	C6L90-U6-24	54
C6L90-F6-3	62	C6L90-F8-23	63	C6L90-R6-14G	50	C6L90-R10-6G	52	C6L90-U6-25	54

C6L90-U6-26	54	C6L90-U10-30	56	C6LB-F8-5	47	C6LB-F12-18	49	C6LB-R8-13G	39
C6L90-U6-27	54	C6L90-U10-32	56	C6LB-F8-6	47	C6LB-F12-20	49	C6LB-R8-14G	39
C6L90-U6-28	54	C6L90-U12-6	57	C6LB-F8-7	47	C6LB-F12-22	49	C6LB-R8-15G	39
C6L90-U6-29	54	C6L90-U12-8	57	C6LB-F8-8	47	C6LB-F12-24	49	C6LB-R8-16G	39
C6L90-U6-30	54	C6L90-U12-10	57	C6LB-F8-9	47	C6LB-F12-26	49	C6LB-R8-17G	39
C6L90-U6-31	54	C6L90-U12-12	57	C6LB-F8-10	47	C6LB-F12-28	49	C6LB-R8-18G	39
C6L90-U6-32	54	C6L90-U12-14	57	C6LB-F8-11	47	C6LB-F12-30	49	C6LB-R8-19G	39
C6L90-U8-3	55	C6L90-U12-16	57	C6LB-F8-12	47	C6LB-F12-32	49	C6LB-R8-20G	39
C6L90-U8-4	55	C6L90-U12-18	57	C6LB-F8-13	47	C6LB-R6-2G	38	C6LB-R8-21G	39
C6L90-U8-5	55	C6L90-U12-20	57	C6LB-F8-14	47	C6LB-R6-3G	38	C6LB-R8-22G	39
C6L90-U8-6	55	C6L90-U12-22	57	C6LB-F8-15	47	C6LB-R6-4G	38	C6LB-R8-23G	39
C6L90-U8-7	55	C6L90-U12-24	57	C6LB-F8-16	47	C6LB-R6-5G	38	C6LB-R8-24G	39
C6L90-U8-8	55	C6L90-U12-26	57	C6LB-F8-17	47	C6LB-R6-6G	38	C6LB-R8-25G	39
C6L90-U8-9	55	C6L90-U12-28	57	C6LB-F8-18	47	C6LB-R6-7G	38	C6LB-R8-26G	39
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C6L90-U8-11	55	C6L90-U12-32	57	C6LB-F8-20	47	C6LB-R6-9G	38	C6LB-R8-28G	39
C6L90-U8-12	55	C6LB-F6-2	46	C6LB-F8-21	47	C6LB-R6-10G	38	C6LB-R8-29G	39
C6L90-U8-13	55	C6LB-F6-3	46	C6LB-F8-22	47	C6LB-R6-11G	38	C6LB-R8-30G	39
C6L90-U8-14	55	C6LB-F6-4	46	C6LB-F8-23	47	C6LB-R6-12G	38	C6LB-R8-31G	39
C6L90-U8-15	55	C6LB-F6-5	46	C6LB-F8-24	47	C6LB-R6-13G	38	C6LB-R8-32G	39
C6L90-U8-16	55	C6LB-F6-6	46	C6LB-F8-25	47	C6LB-R6-14G	38	C6LB-R10-4G	40
C6L90-U8-17	55	C6LB-F6-7	46	C6LB-F8-26	47	C6LB-R6-15G	38	C6LB-R10-6G	40
C6L90-U8-18	55	C6LB-F6-8	46	C6LB-F8-27	47	C6LB-R6-16G	38	C6LB-R10-8G	40
C6L90-U8-19	55	C6LB-F6-9	46	C6LB-F8-28	47	C6LB-R6-17G	38	C6LB-R10-10G	40
C6L90-U8-20	55	C6LB-F6-10	46	C6LB-F8-29	47	C6LB-R6-18G	38	C6LB-R10-12G	40
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C6L90-U8-29	55	C6LB-F6-19	46	C6LB-F10-14	48	C6LB-R6-27G	38	C6LB-R10-30G	40
C6L90-U8-30	55	C6LB-F6-20	46	C6LB-F10-16	48	C6LB-R6-28G	38	C6LB-R10-32G	40
C6L90-U8-31	55	C6LB-F6-21	46	C6LB-F10-18	48	C6LB-R6-29G	38	C6LB-R12-4G	41
C6L90-U8-32	55	C6LB-F6-22	46	C6LB-F10-20	48	C6LB-R6-30G	38	C6LB-R12-6G	41
C6L90-U10-4	56	C6LB-F6-23	46	C6LB-F10-22	48	C6LB-R6-31G	38	C6LB-R12-8G	41
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C6L90-U10-20	56	C6LB-F6-31	46	C6LB-F12-8	49	C6LB-R8-8G	39	C6LB-R12-24G	41
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C6L90-U10-26	56	C6LB-F8-3	47	C6LB-F12-14	49	C6LB-R8-11G	39	C6LB-R12-30G	41
C6L90-U10-28	56	C6LB-F8-4	47	C6LB-F12-16	49	C6LB-R8-12G	39	C6LB-R12-32G	41

									
C6LB-U6-2	42	C6LB-U8-21	43	C6LT-C6-10	74	C6LT-C8-29	75	C6LT-F6-18	78
C6LB-U6-3	42	C6LB-U8-22	43	C6LT-C6-11	74	C6LT-C8-30	75	C6LT-F6-19	78
C6LB-U6-4	42	C6LB-U8-23	43	C6LT-C6-12	74	C6LT-C8-31	75	C6LT-F6-20	78
C6LB-U6-5	42	C6LB-U8-24	43	C6LT-C6-13	74	C6LT-C8-32	75	C6LT-F6-21	78
C6LB-U6-6	42	C6LB-U8-25	43	C6LT-C6-14	74	C6LT-C10-4	76	C6LT-F6-22	78
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C6LT-F10-14	80	C6LT-R6-27G	66	C6LT-R10-30G	68	C6LT-U8-4	71	C6LT-U12-16	73
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C6LT-F12-24	81	C6LT-R8-16G	67	C6LT-U6-5	70	C6LT-U8-24	71	HLPEG-R12-8	109
C6LT-F12-26	81	C6LT-R8-17G	67	C6LT-U6-6	70	C6LT-U8-25	71	HLPEG-R12-9	109
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C6LT-R6-13G	66	C6LT-R8-32G	67	C6LT-U6-21	70	C6LT-U10-18	72	HLPEG-R12-24	108
C6LT-R6-14G	66	C6LT-R10-4G	68	C6LT-U6-22	70	C6LT-U10-20	72	HLPEG-R12-25	108
C6LT-R6-15G	66	C6LT-R10-6G	68	C6LT-U6-23	70	C6LT-U10-22	72	HLPEG-R12-26	108
C6LT-R6-16G	66	C6LT-R10-8G	68	C6LT-U6-24	70	C6LT-U10-24	72	HLPEG-R12-27	108
C6LT-R6-17G	66	C6LT-R10-10G	68	C6LT-U6-25	70	C6LT-U10-26	72	HLPEG-R12-28	108
C6LT-R6-18G	66	C6LT-R10-12G	68	C6LT-U6-26	70	C6LT-U10-28	72	HLPEG-R12-29	108
C6LT-R6-19G	66	C6LT-R10-14G	68	C6LT-U6-27	70	C6LT-U10-30	72	HLPMG-R12-10	107
C6LT-R6-20G	66	C6LT-R10-16G	68	C6LT-U6-28	70	C6LT-U10-32	72	HLPMG-R12-11	107
C6LT-R6-21G	66	C6LT-R10-18G	68	C6LT-U6-29	70	C6LT-U12-4	73	HLPMG-R12-12	107
C6LT-R6-22G	66	C6LT-R10-20G	68	C6LT-U6-30	70	C6LT-U12-6	73	HLPMG-R12-13	107
C6LT-R6-23G	66	C6LT-R10-22G	68	C6LT-U6-31	70	C6LT-U12-8	73	HLPMG-R12-14	107
C6LT-R6-24G	66	C6LT-R10-24G	68	C6LT-U6-32	70	C6LT-U12-10	73	HLPMG-R12-15	107
C6LT-R6-25G	66	C6LT-R10-26G	68	C6LT-U8-2	71	C6LT-U12-12	73	HLPMG-R12-16	107

									
HLPMG-R12-17	107	LC-I6	46-62-78	MBP-R8-M12	21	MBT-DT16-30	114	MGL100-R6-9	14
HLPMG-R12-18	107	LC-I8	47-63-79	MBP-R8-M13	21	MBT-DT16-35	114	MGL100-R12-12	14
HLPMG-R12-19	107	LC-I10	48-64-80	MBP-R8-M19	21	MBT-DT16-40	114	MGL100-R16-12	14
HLPMG-R12-20	107	LC-I12	49-65-81	MBP-R8-M32	21	MBT-DT16-45	114	MGL100-R8-8	14
HLPMG-R12-21	107	MBCP-R6-M2	22	MBP-R10-3	21	MBT-DT16-50	114	MGL100-R8-12	14
HLPMG-R12-22	107	MBCP-R6-M3	22	MBP-R10-4	21	MBT-DT16-55	114	MGL100-U6-6	16
HLPMG-R12-23	107	MBCP-R6-M4	22	MBP-R10-5	21	MBT-DT16-60	114	MGL100-U6-9	16
HLPMG-R12-24	107	MBCP-R6-M5	22	MBP-R10-6	21	MBT-DT16-65	114	MGL100-U8-8	16
HLPMG-R12-25	107	MBCP-R6-M6	22	MBP-R10-7	21	MBT-DT16-70	114	MGL100-U8-12	16
HLPMG-R12-26	107	MBCP-R6-M7	22	MBP-R10-8	21	MBT-DT16-75	114	MGLP-316U8-6	10
HLPMG-R12-27	107	MBCP-R6-M8	22	MBP-R10-9	21	MBT-DT16-80	114	MGLP-4U12-12	10
HLPMG-R12-28	107	MBCP-R6-M9	22	MBP-R10-10	21	MBT-DT20-10	115	MGLP-B6-4	8
HLPMG-R12-29	107	MBCP-R6-M10	22	MBTC-R12BL	112	MBT-DT20-15	115	MGLP-B6-7	8
HLPMG-R12-30	107	MBCP-R8-M2	22	MBTC-R14BL	113	MBT-DT20-20	115	MGLP-B6-12	8
HLPLS-R12-10	106	MBCP-R8-M3	22	MBTC-R16BL	114	MBT-DT20-25	115	MGLP-B6-E	8
HLPLS-R12-11	106	MBCP-R8-M4	22	MBTC-R20BL	115	MBT-DT20-30	115	MGLP-B8-4	8
HLPLS-R12-12	106	MBCP-R8-M5	22	MBT-DT12-10	112	MBT-DT20-35	115	MGLP-B8-6	8
HLPLS-R12-13	106	MBCP-R8-M6	22	MBT-DT12-15	112	MBT-DT20-40	115	MGLP-B8-10	8
HLPLS-R12-14	106	MBCP-R8-M7	22	MBT-DT12-20	112	MBT-DT20-45	115	MGLP-B8-14	8
HLPLS-R12-15	106	MBCP-R8-M8	22	MBT-DT12-25	112	MBT-DT20-50	115	MGLP-B8-18	8
HLPLS-R12-16	106	MBCP-R8-M9	22	MBT-DT12-30	112	MBT-DT20-55	115	MGLP-B8-22	8
HLPLS-R12-17	106	MBCP-R8-M11	22	MBT-DT12-35	112	MBT-DT20-60	115	MGLP-B8-E	8
HLPLS-R12-18	106	MBCP-R8-M13	22	MBT-DT12-40	112	MBT-DT20-65	115	MGLP-B12-12	8
HLPLS-R12-19	106	MBCP-R8-M16	22	MBT-DT12-45	112	MBT-DT20-70	115	MGLP-B12-18	8
HLPLS-R12-20	106	MBCP-R8-M19	22	MBT-DT12-50	112	MBT-DT20-75	115	MGLP-B12-24	8
HLPLS-R12-21	106	MBCP-R8-M25	22	MBT-DT12-55	112	MBT-DT20-80	115	MGLP-B16-12	8
HLPLS-R12-22	106	MBCP-R8-M31	22	MBT-DT12-60	112	MGC-F6	29-31-33	MGLP-R6-4	9
HLPLS-R12-23	106	MBCP-R6-M2	21	MBT-DT12-65	112	MGC-F8	29-31-35-37	MGLP-R6-7	9
HLPLS-R12-24	106	MBP-R6-M3	21	MBT-DT12-70	112	MGC-F10	29-31-35	MGLP-R6-12	9
HLPLS-R12-25	106	MBP-R6-M4	21	MBT-DT12-75	112	MGC-F12	29-31-35-37	MGLP-R6-E	9
HLPLS-R12-26	106	MBP-R6-M5	21	MBT-DT12-80	112	MGC-R6U	28-30-32	MGLP-R8-6	9
HLPLS-R12-27	106	MBP-R6-M6	21	MBT-DT14-10	113	MGC-R8U	28-30-34-36	MGLP-R8-10	9
HLPLS-R12-28	106	MBP-R6-M7	21	MBT-DT14-15	113	MGC-R10U	28-30-34	MGLP-R8-14	9
HLPLS-R12-29	106	MBP-R6-M8	21	MBT-DT14-20	113	MGC-R12U	28-30-34-36	MGLP-R8-18	9
HLPLS-R12-30	106	MBP-R6-M9	21	MBT-DT14-25	113	MGCS-F6	29-31-33	MGLP-R8-22	9
HLPS-C-R12	106-107-109	MBP-R6-M10	21	MBT-DT14-30	113	MGCS-F8	29-31-35-37	MGLP-R8-E	9
HLPSG-C-R12	105-108	MBP-R6-M11	21	MBT-DT14-35	113	MGCS-R6U	28-30-32	MGLP-R12-12	9
HLPSGM-R12	105-108	MBP-R6-M12	21	MBT-DT14-40	113	MGCS-R8U	28-30-34-36	MGLP-R12-18	9
HLPSG-R12-8	105	MBP-R6-M13	21	MBT-DT14-45	113	MGCW-F6	29-31-33	MGLP-R12-24	9
HLPSG-R12-9	105	MBP-R6-M14	21	MBT-DT14-50	113	MGCW-F8	29-31-35-37	MGLP-R16-12	9
HLPSGS-R12	105-108	MBP-R8-M2	21	MBT-DT14-55	113	MGCW-R6U	28-30-32	MGLP-U6-4	10
HLPSM-R12	106-107-109	MBP-R8-M3	21	MBT-DT14-60	113	MGCW-R8U	28-30-34-36	MGLP-U6-7	10
HLPS-R12	106-107-109	MBP-R8-M4	21	MBT-DT14-65	113	MGL100-B6-6	15	MGLP-U6-10	10
HLPS-R12XA	106-107-109	MBP-R8-M5	21	MBT-DT14-70	113	MGL100-B6-9	15	MGLP-U6-E	10
LC-2R16G	94-102	MBP-R8-M6	21	MBT-DT14-75	113	MGL100-B6-12	15	MGLP-U6-E8	10
LC-2R20G	95-103	MBP-R8-M7	21	MBT-DT14-80	113	MGL100-B6-14	15	MGLP-U6-E9	10
LC-2R24G	96-104	MBP-R8-M8	21	MBT-DT16-10	114	MGL100-B8-8	15	MGLP-U6-E10	10
LC-2R28G	97	MBP-R8-M9	21	MBT-DT16-15	114	MGL100-B8-12	15	MGLP-U8-4	10
LC-2R32G	98	MBP-R8-M10	21	MBT-DT16-20	114	MGL100-B8-E17	15	MGLP-U8-6	10
LC-2R36G	99	MBP-R8-M11	21	MBT-DT16-25	114	MGL100-R6-6	14	MGLP-U8-7	10

MGLP-U8-10	10	MGPB-E8-10	29	PWFMC-R10-20	27				
MGLP-U8-E	10	MGPB-E8-20	29	PWFMC-R10-26	27				
MGLP-U12-18	10	MGPB-E10-12	29	PWF-R10-20	27				
MGLT-B6-4	11	MGPB-E10-22	29	PWF-R10-26	27				
MGLT-B6-7	11	MGPB-E12-14	29						
MGLT-B6-E	11	MGPB-E12-26	29						
MGLT-B8-6	11	MGPB-R6-10G	28						
MGLT-B8-10	11	MGPB-R6-20G	28						
MGLT-B8-E	11	MGPB-R8-10G	28						
MGLT-B12-12	11	MGPB-R8-20G	28						
MGLT-B12-24	11	MGPB-R10-12G	28						
MGLT-R6-4	12	MGPB-R10-22G	28						
MGLT-R6-7	12	MGPB-R12-14G	28						
MGLT-R6-E	12	MGPB-R12-26G	28						
MGLT-R8-6	12	MGPT-E8-10	35						
MGLT-R8-10	12	MGPT-E8-20	35						
MGLT-R8-E	12	MGPT-E10-12	35						
MGLT-U8-6	13	MGPT-E10-22	35						
MGLT-U8-10	13	MGPT-E12-14	35						
MGLT-U8-E	13	MGPT-E12-26	35						
MGP30-E8-10	37	MGPT-R8-10G	34						
MGP30-E8-24	37	MGPT-R8-20G	34						
MGP30-E12-24	37	MGPT-R10-12G	34						
MGP30-E12-32	37	MGPT-R10-22G	34						
MGP30-R8-10G	36	MGPT-R12-14G	34						
MGP30-R8-24G	36	MGPT-R12-26G	34						
MGP30-R12-24G	36	MTLP-B6-4	19						
MGP30-R12-32G	36	MTLP-B6-8	19						
MGP90-E6-10	31	MTLP-B6-12	19						
MGP90-E6-20	31	MTLP-B6-12X	19						
MGP90-E8-10	31	MTP-B6-5S	18						
MGP90-E8-20	31	MTP-B6-6S	18						
MGP90-E10-12	31	MTP-B6-8S	18						
MGP90-E10-22	31	MTP-B6-10S	18						
MGP90-E12-14	31	MTP-B6-12S	18						
MGP90-E12-26	31	MTP-B8-4S	18						
MGP90-R6-10G	30	MTP-B8-6S	18						
MGP90-R6-20G	30	MTP-B8-7S	18						
MGP90-R8-10G	30	MTP-B8-8S	18						
MGP90-R8-20G	30	MTP-B8-10S	18						
MGP90-R10-12G	30	MTP-B8-12S	18						
MGP90-R10-22G	30	MTV-B6-5S	20						
MGP90-R12-14G	30	MTV-B6-7S	20						
MGP90-R12-26G	30	MTV-B6-8S	20						
MGP98T-E6-10	33	MTV-B6-10S	20						
MGP98T-E6-20	33	MTV-B6-12S	20						
MGP98T-R6-10G	32	PMF-R10-20	26						
MGP98T-R6-20G	32	PMF-R10-26	26						
MGPB-E6-10	29	PWFCLC-R10-20	27						
MGPB-E6-20	29	PWFCLC-R10-26	27						

BÖLLHOFF, the specialist in assembly techniques

Whatever the industry, we have the solution to your fastening needs, including the following sectors:

- automotive - marine - aerospace
- electronic - electric - plastic
- construction - wood - furniture
- machine-tools, rail.



Böllhoff, industrial partner in more than 23 countries

Böllhoff has a worldwide presence, through its production centres and subsidiaries and a network of agents and distributors, an efficient international distribution channel, which specialises in more than 60,000 quality certified products.



Böllhoff, listens to your requests, searching for continuous innovation

To facilitate adaptation to rapid changes in production methods, Böllhoff designs standard and specific products and installation equipment adapted to the needs of its customers



Böllhoff, service and responsiveness

Böllhoff propose a wide range of services whose main objective is to optimise processes and to reduce costs.



Böllhoff, quality at all levels

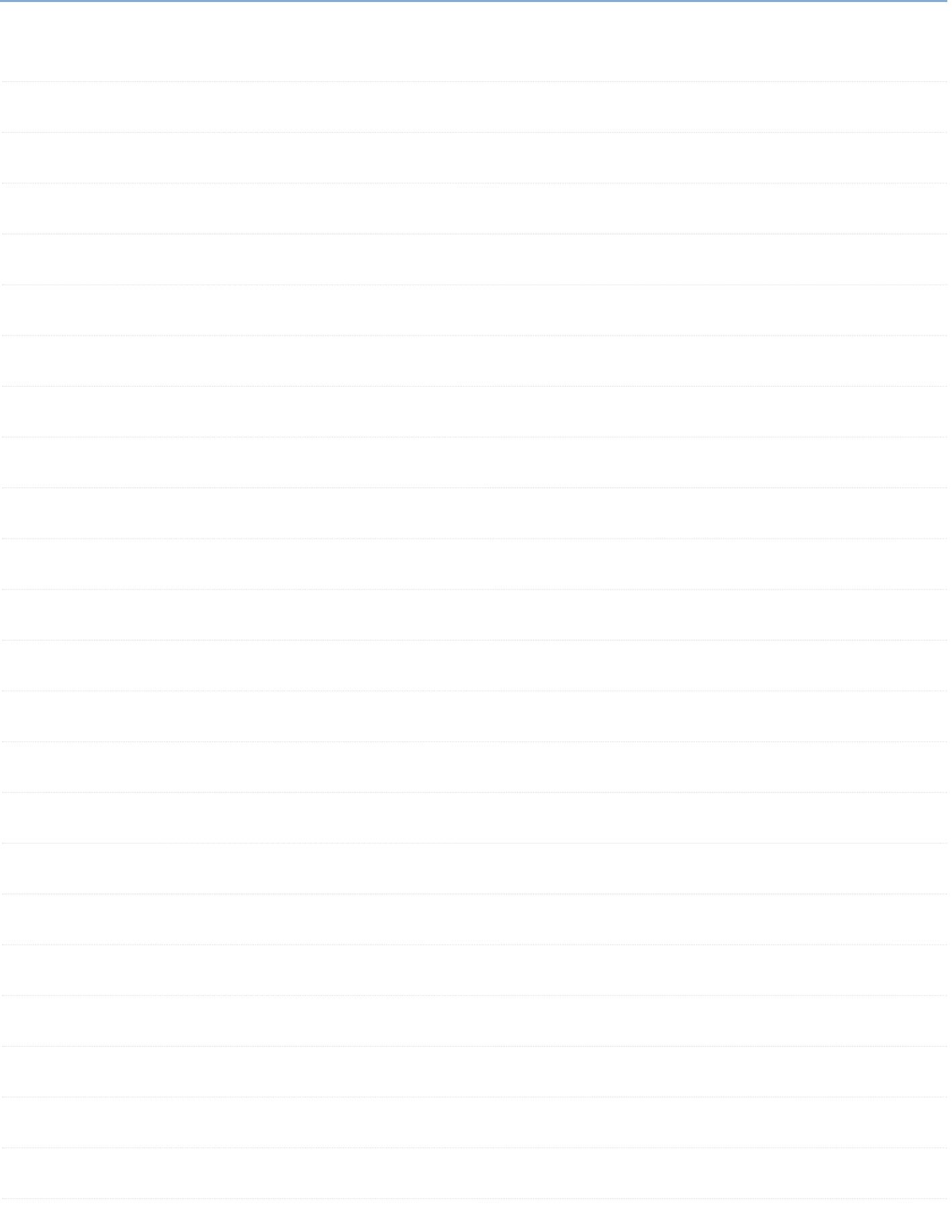
Permanent controls and rigorous organisation allow us to maintain, ISO 9001, QS 9000 and ISO 14001 certifications among many others.

All our factories have quality systems.





Notes



Böllhoff International with companies in:

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Apart from these 24 countries, Böllhoff supports its international customers in other important industrial markets in close partnership with agents and dealers.

Böllhoff Group

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