

Rapid Single & Multi Part Grade 316 Stainless Steel Clamps

Rapid CR clamps are a permanent and cost effective pipe repair solution.

Available for pipe diameters from 40mm up to 2000mm, with clamp lengths from 150mm to 600mm long. Special sizing and larger clamps can be manufactured on request.

Manufactured to conform to WaterMark AS4181 standards.

Components

Shell:	Grade 316 Stainless steel. Fully passivized after welding
Armour:	Heavy gauge Grade 316 Stainless steel vulcanized into the gasket at the time of moulding.
Gasket:	Nitrile rubber for use with gas, water and petrochemicals. Specially formulated for use with drinking water and incorporating antioxidant agents to increase shelf life. Gaskets have a gridded design, tapered ends and vulcanized armour plates for easy installation and optimum sealing efficiency.
Locking Washer Plate:	Grade 316 Stainless steel. Locks into position for easy tightening of nuts
Receiver Bars:	Grade 316 Stainless steel TIG-welded to shell to form a strong fusion. Fully passivized after welding
Lugs:	Grade 316 Stainless steel MIG-welded to receiver bar and fully passivized after welding. Leading edge is rounded to prevent them from catching bolt bars during installation
Bolts:	Grade 316 Stainless steel Thread-rolled for strength and coated to prevent galling. Bolts are MIG-welded to the receiver bar and fully passivized after welding.
Nuts/Washers:	Grade 316 Stainless steel



Operating Pressure

The pressure containing capability of a repair clamp is influenced by the pipe type, the pipe surface finish, extent of damage to the pipe, environment, service conditions and installation workmanship.

The amount of pressure that a full circle repair clamp will contain is proportionate to the diameter of the pipe being repaired and the amount of torque applied to the bolts.

Smaller diameter repair clamps will contain higher pressure than larger diameter repair clamps. Cleaning and lubricating pipe/gasket, will reduce friction between the pipe surface and sealing gasket, creating a better seal. Use soapy water or pipe lubricate.

PIPE DN	CLAMP OD RANGE	OPERATING PRESSURE	RATING
40mm - 350mm	45mm - 390mm	1600kPa	PN16
390mm - 680mm	390mm - 680mm	1200kPa	PN12
680mm - 925mm	625mm - 900mm	800kPa	PN8
800mm+	925mm - 1200mm	600kPa	PN6

Maximum Temperature: 0 - 60 degrees C.*

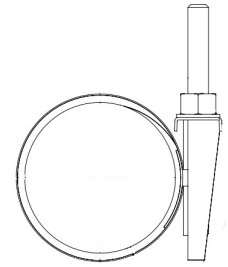


Length and Bolts

Rapid clamps are manufactured to fit a range of pipe OD's and are available in various lengths. Length and OD range determine the number of bolts used. Larger clamps are manufactured in multiple parts and each part will contain a number of bolts. See table below.

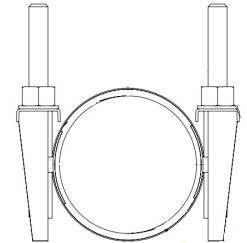
1 Part Clamps

Clamp OD Range	Clamp Length	No. Bolts	Bolts	No. Parts
45mm-104mm	150mm - 200mm	2	M12	1
105mm and larger	150mm - 200mm	2	M16	1
Up to 250mm	300mm	3	M16	1
250mm and larger	300mm	4	M16	1
Up to 250mm	400mm	4	M16	1
250mm and larger	400mm	5	M16	1
Up to 104mm	600mm	6	M12	1
Up to 249mm	600mm	6	M16	1
250mm and larger	600mm	8	M16	1



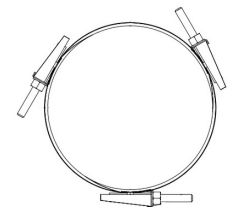
2 Part Clamps

Clamp OD Range	Clamp Length	No. Bolts	Bolts	No. Parts
250mm - 670mm	300mm	8	M16	2
250mm - 670mm	400mm	10	M16	2
250mm - 670mm	600mm	16	M16	2



3 Part Clamps

Clamp OD Range	Clamp Length	No. Bolts	Bolts	No. Parts
490mm - 840mm	300mm	12	M16	3
490mm - 840mm	400mm	15	M16	3
490mm - 840mm	600mm	24	M16	3



General Information

The general recommendation is that the clamp length should be four times that of the damage being repaired. Where a large section of the pipe wall is broken away, a section of thin gauge sheet metal should be placed over the opening to provide a sealing surface for the gasket. Stainless Steel Repair Clamps do not restrain axial pipe movement. (Suitable anchorage must be provided where pipe movement may occur.)

Pressure ratings may vary due to pipe condition and type. Refer to AS4181-2013 up to and including DN350mm clamps. Type R.

Not recommended for low stiffness factor pipes below SN7500.

Re-tension clamp at Max. operating temp (Specifications are subject to change without notice).

Installation instructions

Clean the pipe where the clamp is to be fitted.

Position the clamp so that the holes in the pipe are in the centre of the clamp and mark the position on the pipe at each end of the clamp.

Remove the clamp from the pipe.

Apply a suitable plumbing lubricant smoothly on the whole area to be covered by the clamp.

Open the clamp by loosening the nuts to the end of the bolts (do not remove the nuts).

Wrap the clamp around the pipe and engage the washer plate/s behind the receiver plate/s.

Position the sides of the clamp to line up with the marks you made ensuring that the hole/s are in the centre of the clamp. Make sure the gasket forms fully around the pipe. No folds.

Tension the nuts, evenly, uniformly, and keep gaps between segments equal. Do not fully tension one nut at a time, slowly tension nuts, moving from one nut to another, until final tension is achieved to all the nuts.

Recommended torque (M16 135Nm) (M12 95Nm).

CR REPAIR CLAMPS (TWO & THREE) - PART NUMBERS

Product code	Description
CR2-250/270-16	SS316 repair clamp OD 250-270mm x 400
CR2-250/270-24	SS316 repair clamp OD 250-270mm x 600
CR2-270/290-16	SS316 repair clamp OD 270-290mm x 400
CR2-270/290-24	SS316 repair clamp OD 270-290mm x 600
CR2-290/310-16	SS316 repair clamp OD 290-310mm x 400
CR2-290/310-24	SS316 repair clamp OD 290-310mm x 600
CR2-310/330-16	SS316 repair clamp OD 310-330mm x 400
CR2-310/330-24	SS316 repair clamp OD 310-330mm x 600
CR2-330/350-16	SS316 repair clamp OD 330-350mm x 400
CR2-330/350-24	SS316 repair clamp OD 330-350mm x 600
CR2-350/370-16	SS316 repair clamp OD 350-370mm x 400
CR2-350/370-24	SS316 repair clamp OD 350-370mm x 600
CR2-360/380-16	SS316 repair clamp OD 360-380mm x 400
CR2-360/380-24	SS316 repair clamp OD 360-380mm x 600
CR2-370/390-16	SS316 repair clamp OD 370-390mm x 400
CR2-370/390-24	SS316 repair clamp OD 370-390mm x 600
CR2-390/410-16	SS316 repair clamp OD 390-410mm x 400
CR2-390/410-24	SS316 repair clamp OD 390-410mm x 600
CR2-400/420-16	SS316 repair clamp OD 400-420mm x 400
CR2-400/420-24	SS316 repair clamp OD 400-420mm x 600
CR2-410/430-16	SS316 repair clamp OD 410-430mm x 400
CR2-410/430-24	SS316 repair clamp OD 410-430mm x 600
CR2-420/440-16	SS316 repair clamp OD 420-440mm x 400
CR2-420/440-24	SS316 repair clamp OD 420-440mm x 600
CR2-440/460-16	SS316 repair clamp OD 440-460mm x 400
CR2-440/460-24	SS316 repair clamp OD 440-460mm x 600
CR2-450/470-16	SS316 repair clamp OD 450-470mm x 400
CR2-450/470-24	SS316 repair clamp OD 450-470mm x 600
CR2-470/490-16	SS316 repair clamp OD 470-490mm x 400
CR2-470/490-24	SS316 repair clamp OD 470-490mm x 600
CR2-480/500-16	SS316 repair clamp OD 480-500mm x 400
CR2-480/500-24	SS316 repair clamp OD 480-500mm x 600
CR2-490/510-16	SS316 repair clamp OD 490-510mm x 400
CR2-490/510-24	SS316 repair clamp OD 490-510mm x 600
CR2-500/520-16	SS316 repair clamp OD 500-520mm x 400
CR2-500/520-24	SS316 repair clamp OD 500-520mm x 600
CR2-510/530-16	SS316 repair clamp OD 510-530mm x 400
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CR2-560/585-16	SS316 repair clamp OD 560-585mm x 400
CR2-560/585-24	SS316 repair clamp OD 560-585mm x 600
CR2-570/590-16	SS316 repair clamp OD 570-590mm x 400
CR2-570/590-24	SS316 repair clamp OD 570-590mm x 600
CR2-580/600-16	SS316 repair clamp OD 580-600mm x 400
CR2-580/600-24	SS316 repair clamp OD 580-600mm x 600
CR2-600/620-16	SS316 repair clamp OD 600-620mm x 400
CR2-600/620-24	SS316 repair clamp OD 600-620mm x 600
CR2-620/640-16	SS316 repair clamp OD 620-640mm x 400
CR2-620/640-24	SS316 repair clamp OD 620-640mm x 600
CR2-650/670-16	SS316 repair clamp OD 650-670mm x 400
CR2-650/670-24	SS316 repair clamp OD 650-670mm x 600

Product code	Description
CR3-490/520-16	SS316 repair clamp OD 490-520mm x 400
CR3-490/520-24	SS316 repair clamp OD 490-520mm x 600
CR3-520/550-16	SS316 repair clamp OD 520-550mm x 400
CR3-520/550-24	SS316 repair clamp OD 520-550mm x 600
CR3-550/580-16	SS316 repair clamp OD 550-580mm x 400
CR3-550/580-24	SS316 repair clamp OD 550-580mm x 600
CR3-560/590-16	SS316 repair clamp OD 560-590mm x 400
CR3-560/590-24	SS316 repair clamp OD 560-590mm x 600
CR3-590/620-16	SS316 repair clamp OD 590-620mm x 400
CR3-590/620-24	SS316 repair clamp OD 590-620mm x 600
CR3-610/640-16	SS316 repair clamp OD 610-640mm x 400
CR3-610/640-24	SS316 repair clamp OD 610-640mm x 600
CR3-650/680-16	SS316 repair clamp OD 650-680mm x 400
CR3-650/680-24	SS316 repair clamp OD 650-680mm x 600
CR3-690/720-16	SS316 repair clamp OD 690-720mm x 400
CR3-690/720-24	SS316 repair clamp OD 690-720mm x 600
CR3-720/750-16	SS316 repair clamp OD 720-750mm x 400
CR3-720/750-24	SS316 repair clamp OD 720-750mm x 600
CR3-750/780-16	SS316 repair clamp OD 750-780mm x 400
CR3-750/780-24	SS316 repair clamp OD 750-780mm x 600
CR3-780/810-16	SS316 repair clamp OD 780-810mm x 400
CR3-780/810-24	SS316 repair clamp OD 780-810mm x 600
CR3-810/840-16	SS316 repair clamp OD 810-840mm x 400
CR3-810/840-24	SS316 repair clamp OD 810-840mm x 600