

Rapid Flange Clamps Grade 316 Stainless Steel

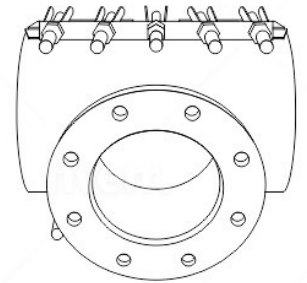
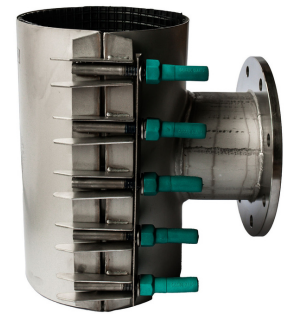
Our CF clamps provide a secure full circumference clamp solution for branch connections requiring a Flange offtake on an existing pipe. CF clamps share their design with our CR repair clamps with the addition of a Flange offtake.

CF Clamps cover a larger surface of the host pipe with length options of 400mm to 600mm. This increased surface area reinforces the host pipe at the tapping point to provide maximum strength and reliability.

Manufactured to conform to WaterMark AS4181 standards.

Components

Shell:	Grade 316 Stainless steel. Fully passivized after welding
Offtake:	AS/NZS4087 (drilled to Table D) Grade 316 Stainless steel Flange Other flange types available on request DN80 to DN250
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 CF 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
80mm - 350mm	88mm - 390mm	1600kPa	PN16
375mm - 600mm	390mm - 680mm	1200kPa	PN12
675mm - 750mm	680mm - 925mm	800kPa	PN8
800mm+	925mm - 1200mm	600kPa	PN6

Maximum Temperature: 0 - 60 degrees C.*

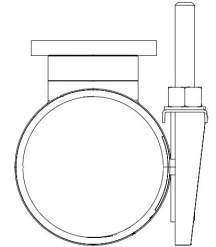


Length and Bolts

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.

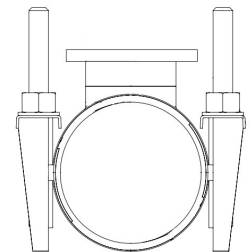
1 Part Clamps

Clamp OD Range	Clamp Length	No. Bolts	Bolts	No. Parts
88mm-113mm	400mm	4	M12	1
110mm - 215mm	400mm	4	M16	1
96mm-103mm	600mm	6	M12	1
105mm - 249mm	600mm	6	M16	1



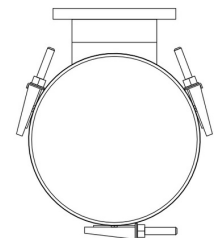
2 Part Clamps

Clamp OD Range	Clamp Length	No. Bolts	Bolts	No. Parts
215mm - 249mm	400mm	8	M16	2
250mm - 650mm	400mm	10	M16	2
215mm - 249mm	600mm	12	M16	2
250mm - 650mm	600mm	16	M16	2



3 Part Clamps

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



General Information

Stainless Steel 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).

DN200 and DN250 Flange offtakes require minimum clamps length of 600mm

Installation instructions

Clean and remove any debris around the host pipe where the clamp will be fitted.

Apply suitable pipe lubricant to rubber gasket and pipe. Loosen the nuts to the end of the threads.

Position the off take to its required position. Hand-tighten the nuts and check it is in the required position.

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.

Re-tension all the nuts 10-15 minutes later to final tension and or when max. operating temperature is reach.

It is necessary to mechanically support the off take fittings separately to the clamp.

It is recommended to pressure test the clamp and fittings before drilling into the pipe.

CF FLANGE CLAMPS PART NUMBERS

Product code	Description
CF1-88/95-16x80	316SS Flange off take OD88-95mm x 80TD
CF1-96/103-16x80	316SS Flange off take OD96-103mm x 80TD
CF1-100/105-16x80	316SS Flange off take OD100-105mm x 80TD
CF1-110/115-16x80	316SS Flange off take OD110-120mm x 80TD
CF1-110/115-16x100	316SS Flange off take OD110-120mm x 100TD
CF1-113/118-16x80	316SS Flange off take OD113-120mm x 80TD
CF1-113/118-16x100	316SS Flange off take OD113-120mm x 100TD
CF1-120/125-16x80	316SS Flange off take OD120-130mm x 80TD
CF1-120/125-16x100	316SS Flange off take OD120-130mm x 100TD
CF1-125/130-16x80	316SS Flange off take OD125-130mm x 80TD
CF1-125/130-16x100	316SS Flange off take OD125-130mm x 100TD
CF1-160/167-16x80	316SS Flange off take OD160-167mm x 80TD
CF1-160/167-16x100	316SS Flange off take OD160-167mm x 100TD
CF1-160/167-16x150	316SS Flange off take OD160-167mm x 150TD
CF1-167/175-16x80	316SS Flange off take OD167-175mm x 80TD
CF1-167/175-16x100	316SS Flange off take OD167-175mm x 100TD
CF1-167/175-16x150	316SS Flange off take OD167-175mm x 150TD
CF1-175/185-16x80	316SS Flange off take OD175-185mm x 80TD
CF1-175/185-16x100	316SS Flange off take OD175-185mm x 100TD
CF1-175/185-16x150	316SS Flange off take OD175-185mm x 150TD
CF1-195/205-16x80	316SS Flange off take OD195-205mm x 80TD
CF1-195/205-16x100	316SS Flange off take OD195-205mm x 100TD
CF1-195/205-16x150	316SS Flange off take OD195-205mm x 150TD
CF2-0863-16x80	316SS Flange off take OD218-228mm x 80TD
CF2-0863-16x100	316SS Flange off take OD218-228mm x 100TD
CF2-0863-16x150	316SS Flange off take OD218-228mm x 150TD
CF2-0863-24x200	316SS Flange off take OD218-228mm x 200TD
CF2-230/250-16x80	316SS Flange off take OD230-250mm x 80TD
CF2-230/250-16x100	316SS Flange off take OD230-250mm x 100TD
CF2-230/240-16x150	316SS Flange off take OD230-240mm x 150TD
CF2-230/240-24x200	316SS Flange off take OD230-240mm x 200TD
CF2-250/270-16x80	316SS Flange off take OD250-270mm x 80TD
CF2-250/270-16x100	316SS Flange off take OD250-270mm x 100TD
CF2-250/270-16x150	316SS Flange off take OD250-270mm x 150TD
CF2-250/260-24x200	316SS Flange off take OD250-260mm x 200TD
CF2-1075-16x80	316SS Flange off take OD270-280mm x 80TD
CF2-1075-16x100	316SS Flange off take OD270-280mm x 100TD
CF2-1075-16x150	316SS Flange off take OD270-280mm x 150TD
CF2-1075-24x200	316SS Flange off take OD270-280mm x 200TD
CF2-279/290-16x80	316SS Flange off take OD279-290mm x 80TD

Product code	Description
CF2-279/290-16x100	316SS Flange off take OD279-290mm x 100TD
CF2-279/290-16x150	316SS Flange off take OD279-290mm x 150TD
CF2-279/290-24x200	316SS Flange off take OD279-290mm x 200TD
CF2-279/290-24x250	316SS Flange off take OD279-290mm x 250TD
CF2-310/330-16x80	316SS Flange off take OD310-330mm x 80TD
CF2-310/330-16x100	316SS Flange off take OD310-330mm x 100TD
CF2-310/330-16x150	316SS Flange off take OD310-330mm x 150TD
CF2-310/320-24x200	316SS Flange off take OD310-320mm x 200TD
CF2-310/320-24x250	316SS Flange off take OD310-320mm x 250TD
CF2-330/350-16x80	316SS Flange off take OD330-350mm x 80TD
CF2-330/350-16x100	316SS Flange off take OD330-350mm x 100TD
CF2-330/350-16x150	316SS Flange off take OD330-350mm x 150TD
CF2-330/350-24x200	316SS Flange off take OD330-350mm x 200TD
CF2-330/350-24x250	316SS Flange off take OD330-350mm x 250TD
CF2-340/360-16x100	316SS Flange off take OD340-360mm x 100TD
CF2-350/370-16x80	316SS Flange off take OD350-370mm x 80TD
CF2-350/370-16x100	316SS Flange off take OD350-370mm x 100TD
CF2-350/370-16x150	316SS Flange off take OD350-370mm x 150TD
CF2-350/370-24x200	316SS Flange off take OD350-370mm x 200TD
CF2-350/370-24x250	316SS Flange off take OD350-370mm x 250TD
CF2-370/390-16x80	316SS Flange off take OD370-390mm x 80TD
CF2-370/390-16x100	316SS Flange off take OD370-390mm x 100TD
CF2-370/390-16x150	316SS Flange off take OD370-390mm x 150TD
CF2-370/390-24x200	316SS Flange off take OD370-390mm x 200TD
CF2-370/390-24x250	316SS Flange off take OD370-390mm x 250TD
CF2-390/410-16x80	316SS Flange off take OD390-410mm x 80TD
CF2-390/410-16x100	316SS Flange off take OD390-410mm x 100TD
CF2-390/410-16x150	316SS Flange off take OD390-410mm x 150TD
CF2-390/410-24x200	316SS Flange off take OD390-410mm x 200TD
CF2-390/410-24x250	316SS Flange off take OD390-410mm x 250TD
CF2-410/430-16x80	316SS Flange off take OD410-430mm x 80TD
CF2-410/430-16x100	316SS Flange off take OD410-430mm x 100TD
CF2-410/430-16x150	316SS Flange off take OD410-430mm x 150TD
CF2-410/430-24x200	316SS Flange off take OD410-430mm x 200TD
CF2-410/430-24x250	316SS Flange off take OD410-430mm x 250TD
CF2-420/440-16x80	316SS Flange off take OD420-440mm x 80TD
CF2-420/440-16x100	316SS Flange off take OD420-440mm x 100TD
CF2-420/440-16x150	316SS Flange off take OD420-440mm x 150TD
CF2-420/440-24x200	316SS Flange off take OD420-440mm x 200TD
CF2-420/440-24x250	316SS Flange off take OD420-440mm x 250TD

CF FLANGE CLAMPS PART NUMBERS

Product code	Description
CF2-440/460-16x80	316SS Flange off take OD440-460mm x 80TD
CF2-440/460-16x100	316SS Flange off take OD440-460mm x 100TD
CF2-440/460-16x150	316SS Flange off take OD440-460mm x 150TD
CF2-440/460-24x200	316SS Flange off take OD440-460mm x 200TD
CF2-440/460-24x250	316SS Flange off take OD440-460mm x 250TD
CF2-490/510-16x80	316SS Flange off take OD490-510mm x 80TD
CF2-490/510-16x100	316SS Flange off take OD490-510mm x 100TD
CF2-490/510-16x150	316SS Flange off take OD490-510mm x 150TD
CF2-490/510-24x200	316SS Flange off take OD490-510mm x 200TD
CF2-490/510-24x250	316SS Flange off take OD490-510mm x 250TD
CF2-510/530-16x80	316SS Flange off take OD510-530mm x 80TD
CF2-510/530-16x100	316SS Flange off take OD510-530mm x 100TD
CF2-510/530-16x150	316SS Flange off take OD510-530mm x 150TD
CF2-510/530-24x200	316SS Flange off take OD510-530mm x 200TD
CF2-510/530-24x250	316SS Flange off take OD510-530mm x 250TD
CF2-530/550-16x80	316SS Flange off take OD530-550mm x 80TD
CF2-530/550-16x100	316SS Flange off take OD530-550mm x 100TD
CF2-530/550-16x150	316SS Flange off take OD530-550mm x 150TD
CF2-530/550-24x200	316SS Flange off take OD530-550mm x 200TD
CF2-530/550-24x250	316SS Flange off take OD530-550mm x 250TD
CF2-550/570-16x80	316SS Flange off take OD550-570mm x 80TD
CF2-550/570-16x100	316SS Flange off take OD550-570mm x 100TD
CF2-550/570-16x150	316SS Flange off take OD550-570mm x 150TD
CF2-550/570-24x200	316SS Flange off take OD550-570mm x 200TD
CF2-550/570-24x250	316SS Flange off take OD550-570mm x 250TD
CF2-570/590-16x80	316SS Flange off take OD570-590mm x 80TD
CF2-570/590-16x100	316SS Flange off take OD570-590mm x 100TD
CF2-570/590-16x150	316SS Flange off take OD570-590mm x 150TD
CF2-570/590-24x200	316SS Flange off take OD570-590mm x 200TD
CF2-570/590-24x250	316SS Flange off take OD570-590mm x 250TD
CF2-590/610-16x80	316SS Flange off take OD590-610mm x 80TD
CF2-590/610-16x100	316SS Flange off take OD590-610mm x 100TD
CF2-590/610-16x150	316SS Flange off take OD590-610mm x 150TD
CF2-590/610-24x200	316SS Flange off take OD590-610mm x 200TD
CF2-590/610-24x250	316SS Flange off take OD590-610mm x 250TD
CF2-610/630-16x80	316SS Flange off take OD610-630mm x 80TD
CF2-610/630-16x100	316SS Flange off take OD610-630mm x 100TD
CF2-610/630-16x150	316SS Flange off take OD610-630mm x 150TD
CF2-610/630-24x200	316SS Flange off take OD610-630mm x 200TD
CF2-610/630-24x250	316SS Flange off take OD610-630mm x 250TD

Product code	Description
CF2-620/640-16x80	316SS Flange off take OD620-640mm x 80TD
CF2-620/640-16x100	316SS Flange off take OD620-640mm x 100TD
CF2-620/640-16x150	316SS Flange off take OD620-640mm x 150TD
CF2-620/640-24x200	316SS Flange off take OD620-640mm x 200TD
CF2-620/640-24x250	316SS Flange off take OD620-640mm x 250TD
CF2-630/650-16x80	316SS Flange off take OD630-650mm x 80TD
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CF2-630/650-24x200	316SS Flange off take OD630-650mm x 200TD
CF2-630/650-24x250	316SS Flange off take OD630-650mm x 250TD
CF3-650/680-16x80	316SS Flange off take OD650-680mm x 80TD
CF3-650/680-16x100	316SS Flange off take OD650-680mm x 100TD
CF3-650/680-16x150	316SS Flange off take OD650-680mm x 150TD
CF3-650/680-24x200	316SS Flange off take OD650-680mm x 200TD
CF3-650/680-24x250	316SS Flange off take OD650-680mm x 250TD
CF3-690/720-16x80	316SS Flange off take OD690-720mm x 80TD
CF3-690/720-16x100	316SS Flange off take OD690-720mm x 100TD
CF3-690/720-16x150	316SS Flange off take OD690-720mm x 150TD
CF3-690/720-24x200	316SS Flange off take OD690-720mm x 200TD
CF3-690/720-24x250	316SS Flange off take OD690-720mm x 250TD
CF3-720/750-16x80	316SS Flange off take OD720-750mm x 80TD
CF3-720/750-16x100	316SS Flange off take OD720-750mm x 100TD
CF3-720/750-16x150	316SS Flange off take OD720-750mm x 150TD
CF3-720/750-24x200	316SS Flange off take OD720-750mm x 200TD
CF3-720/750-24x250	316SS Flange off take OD720-750mm x 250TD
CF3-750/780-16x80	316SS Flange off take OD750-780mm x 80TD
CF3-750/780-16x100	316SS Flange off take OD750-780mm x 100TD
CF3-750/780-16x150	316SS Flange off take OD750-780mm x 150TD
CF3-750/780-24x200	316SS Flange off take OD750-780mm x 200TD
CF3-750/780-24x250	316SS Flange off take OD750-780mm x 250TD
CF3-780/810-16x80	316SS Flange off take OD780-810mm x 80TD
CF3-780/810-16x100	316SS Flange off take OD780-810mm x 100TD
CF3-780/810-16x150	316SS Flange off take OD780-810mm x 150TD
CF3-780/810-24x200	316SS Flange off take OD780-810mm x 200TD
CF3-780/810-24x250	316SS Flange off take OD780-810mm x 250TD
CF3-810/840-16x80	316SS Flange off take OD810-840mm x 80TD
CF3-810/840-16x100	316SS Flange off take OD810-840mm x 100TD
CF3-810/840-16x150	316SS Flange off take OD810-840mm x 150TD
CF3-810/840-24x200	316SS Flange off take OD810-840mm x 200TD
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