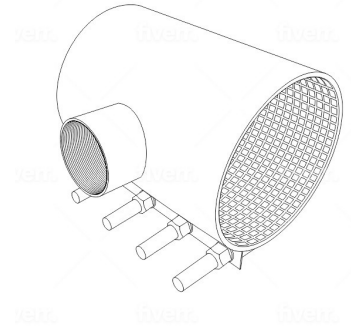


## Rapid BSP Clamps Grade 316 Stainless Steel

Our CTR clamps provide a secure full circumference clamp solution for branch connections requiring a BSP offtake on an existing pipe. CTR clamps share their design with our CR repair clamps with the addition of a BSP parallel threaded offtake. CTR Clamps cover a large surface of the host pipe with length options from 150mm 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

<b>Shell:</b>	Grade 316 Stainless steel. Fully passivized after welding
<b>Offtake:</b>	BSP parallel treaded socket AS 1722 Grade 316 Stainless steel DN15 to DN100
<b>Gasket:</b>	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.
<b>Locking Washer Plate:</b>	Grade 316 Stainless steel. Locks into position for easy tightening of nuts
<b>Receiver Bars:</b>	Grade 316 Stainless steel TIG-welded to shell to form a strong fusion. Fully passivized after welding
<b>Lugs:</b>	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
<b>Bolts:</b>	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.
<b>Nuts/Washers:</b>	Grade 316 Stainless steel



### Operating Pressure

The pressure containing capability of a CTR 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
50mm - 350mm	45mm - 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
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

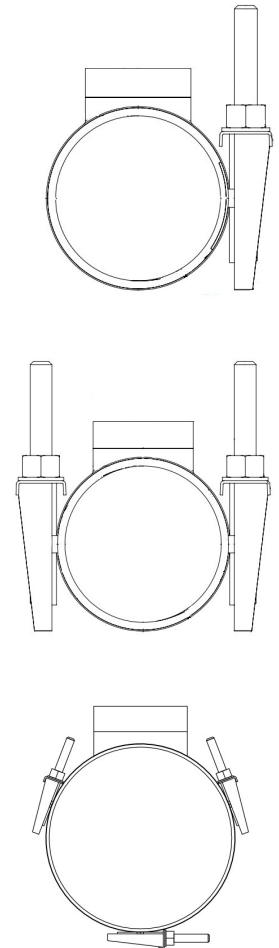
\* The socket size will determine the minimum length of the clamp

### 2 Part Clamps

Clamp OD Range	Clamp Length	No. Bolts	Bolts	No. Parts
250mm - 620mm	300mm	8	M16	2
250mm - 620mm	400mm	10	M16	2
250mm - 620mm	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

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).

## 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.







