



# Cascade

Manufacturers & Suppliers of Pipe Fittings  
for the Water and Gas Industries

## *Cascade Catalogue 2017*

*Saving Time - Saving Money - Saving Resources*



**"Now with even  
more products!"**



# Cascade

Manufacturers & Suppliers of Pipe Fittings  
for the Water and Gas Industries

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# Cascade

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## SupaTite End Restraint Flange Adaptors and Couplings

The Cascade SupaTite range of fittings are a substantial and hard-wearing product line. The built in locking bolts reinforce the fittings attachment to the pipe, making the connection tighter and securer, massively decreasing risks of failure. Now with the new 4G variant with 4X the grippers. The range consists of Flange adaptors, couplings, reducing couplings and adaptors. Cascade can also fabricate these to specifications, including reduced flange sizes.

Pipe sizes: DN350 to DN1400, other sizes available on request.

Pipe types: Ductile Iron, Cast Iron, Steel, PE, PVC and Asbestos Cement.

Large tolerance allows for ovality.



*"Now 4X the grip... Still half the price..."*

### Specifications

- Main body and rings made from Carbon steel.
- Screws, pins, nuts and washers Grade 8.8 galv.
- WRAS approved materials.
- WRAS approved gasket.
- PN16 - Permissible working pressure (PWP): 16 bar.
- End Restraint capabilities 161kN to 260kN dependent on pipe type.





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DN	Range in mm	A mm	B mm	C mm
350 PE/PVC	395-410	270	504	505
350 Steel	350-365	270	470	505
350 Ductile	373-388	270	494	505
400 PE/PVC	445-460	270	562	565
400 Steel	400-416	270	522	565
400 Ductile	434-439	270	545	565
450 PE	495-510	270	604	610
450 Ductile	475-490	270	596	610
500 PE/PVC	555-570	270	656	670
500 Steel	503-518	270	620	670
500 Ductile	527-542	270	648	670
600 PE/PVC	625-640	270	742	780
600 Steel	605-620	270	722	780
600 Ductile	630-645	270	750	780
700 PE/PVC	705-720	270	825	895
700 Steel	706-721	270	825	895
700 Ductile	733-748	270	854	895
800 PE/PVC	795-810	270	915	1015
800 Steel	807-852	270	925	1015
800 Ductile	837-852	270	958	1015
900 PE/PVC	898-910	270	915	1115
900 Steel	909-924	270	1030	1115
900 Ductile	940-955	270	1060	1115
1000 PE/PVC	995-1010	270	1130	1230
1000 Steel	1011-1026	270	1130	1230
1000 Ductile	1043-1058	270	1160	1230
1200 Steel	1215-1230	370	1230	1330
1200 Ductile	1250-1265	370	1260	1330

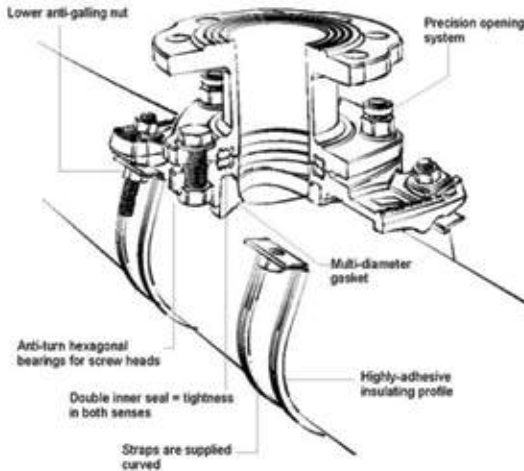


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## Q-Tee

The Q-Tee tapping saddle is ideal for creating branches in under pressure water supply networks. Made with the same anti-turn hexagons for the screw heads and open flaps for easy strap attachment as the Slimline, but with a longer neck and the option of a shut off blade the Q-Tee makes perfect sense for under pressure drilling.



## Specifications

- European standard EN 545.
- PN 16 – Permissible working pressure (PWP): 16 bar
- EN-GJS-450-10 ductile iron body and reel
- Tapping saddle fitted with a multi-diameter tightening seal
- Epoxy coating approved for drinking water
- Coating thickness between 250 and 500 micron
- EPDM gasket suitable for drinking water
- Pipe sizes to suit 3" to 12"
- Outlet sizes DN80 and DN100
- WRAS approved materials.
- WRAS Gasket.

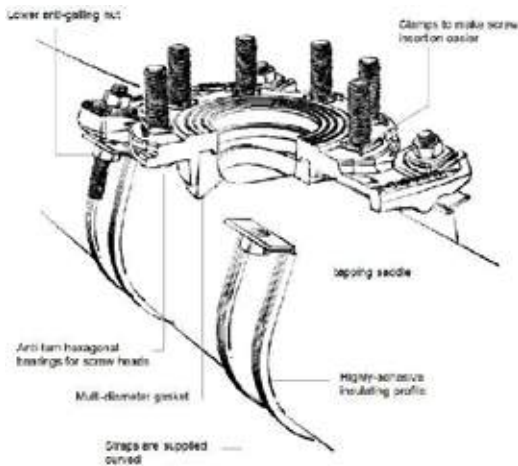


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## Q-Tee Slimline

Due to the Q-Tees slim line profile and minimum weight, they can easily replace the simple traditional necked-saddle. With anti-turn hexagons for the screw heads, open flaps for fast strap attachment and included screw set to make insertion easier during installation. The Slimline Q-Tee makes easy under pressure tapping.



## Sizes and Specifications

- European standard EN 545.
- PN 16 – Permissible working pressure (PWP): 16 bar.
- EN-GJS-450-10 ductile iron body.
- WRAS approved materials.
- WRAS Gasket.
- Pipe sizes: 3" to 12".
- DN80 and DN100 Flanges.



# Cascade

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## QT-I

The QT-I is ideal for creating an under pressure connection without the need for a gate valve saving space and decreasing installation time, the QT-I shut off blade also makes it easy to return to the project as and when a new connection is necessary offering flexibility. They can be used under hydrants, on top of UPT's, for chlorination or flushing points.



### Specifications

- PN 16 – Permissible working pressure (PWP): 16 bar
- EN-GJS-450-10 ductile iron body
- WRAS approved epoxy coating to 250 and 500 micron
- WRAS approved EPDM gasket suitable for drinking water
- Available in Sizes DN80 and DN100
- Full bore drilling will accommodate a 80mm DN80 and 100mm DN100





# Cascade

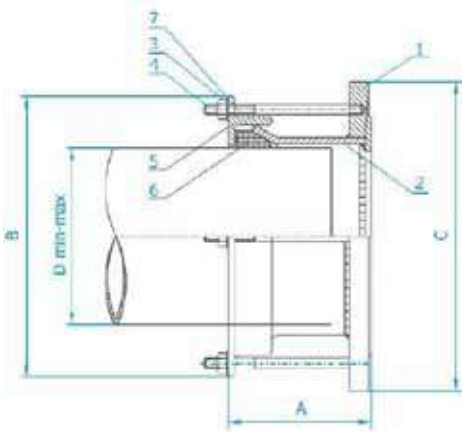
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## SupaFit

The SupaFit range are constructed from Carbon steel and installed with galvanised washers and nuts and an EPDM or NBR gasket depending on requirements. The fittings are coated with an anti-rust epoxy making them strong and durable. For use on Ductile, Cast Iron, Steel, PVC and Asbestos Cement.

The SupaFit range comprises of flange adaptors, couplings, step couplings and reducing flange adaptors offering versatility on any job.

Standard size: DN350 to DN1400 16 Bar, with a 15mm range. Other sizes and working pressures available on request.



## SupaFit Specifications

No.	Part Name	Material	Standard
1	Flange	S235JR	PN-88
2	Body	S235JR	PN-88
3	Nut	S235JR Galv	PN-EN 24032
4	Stud M12	S235JR Galv	PN-88
5	Rim	S235JR	PN-88
6	Gasket	NBR or EPDM	WRAS
7	Washer	S235JR Galv	ISO 7089



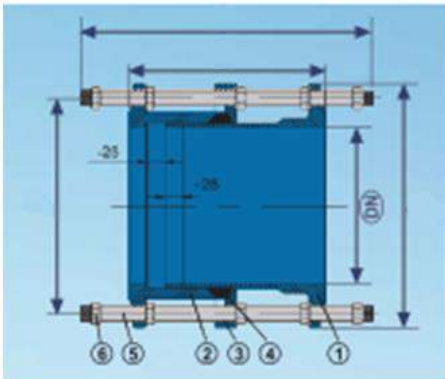
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## Cascade Dismantling Joint

Cascade Dismantling Joints are used for mounting and removing flanged fittings from a pipeline by means of extending the joints face to face length bridging the gap between fittings in a pipeline network. Cascade Dismantling Joints are self-restraining and suitable for PN16 nominal pressure available in sizes from DN40 to DN1800, DN2000 can be made on request.

PN25 and PN40 also available on request.



## Specifications

- Self-restraining.
- Sleeves, rim, flanges – Cast Iron (# 1, 2 and 3).
- Bolts, pins and nuts (# 5 + 6) galvanised steel – Stainless fixings available on request.
- Seal – EPDM (# 4).
- WRAS Approved Epoxy Coating.
- (DN) from DN40 – DN1800



# Cascade

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## Cascade Stainless Steel Under Pressure Tees

### General Information

- Pressure ratings to your requirements from 0.5 bar to 20 bar working pressure, 30 bar test pressure
- Smaller diameter Under Pressure Tees (UPT) will contain more pressure than larger diameter UPT's. Cleaning and lubricating bolt threads will reduce friction and permit greater torque
- The pressure containing capability of a UPT is influenced by pipe size, the surface quality, the environment and service conditions and installation workmanship
- UPTs can be manufactured for all pipe types including Copper, Ductile Iron, Cast iron, PE, PVC, Steel and AC.
- UPT Diameters: - 90mm to 2000mm
- UPT Lengths: - Min 250mm Max 3000mm
- UPT types: - Single and Split Collar
- UPT outlets: - DN50 upwards –PN10/PN16/PN25 and ANSI 150
- Temp Range + - (-40°C to 45°C) Temperatures of up to 230°C with a VITON gasket installed at additional Costings.
- Life expectancy 50 years plus under normal operating conditions in potable water and sewerage pipework





# Cascade

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## Cascade Stainless Steel Under Pressure Tees

### Applicable Standards

ASTM A480/A480M 04A – ASTM A240/A240M 04A

EN10204-3.1B 95 – EN10204-3, 1, B

BS 6920 – BS4504

EPDM – WRAS Approved

BSEN 682:2002 – Type 4711 to WRAS approved and listed.

QMS ISO-9001: QMS ISO 14001



### Materials

LOCKING WASHER PLATE: - Stainless Steel AISI – 304/316 (Locks into position for easy tightening of nuts.)

LUGS: - Stainless Steel AISI – 304/316 - MIG-welded to receiver bar and fully passivated after welding. Leading edge is rounded to prevent them from catching bolt bars during installation.

SHELL:-Stainless Steel AISI - 304/316 2B finish.

BOLTS: - Stainless Steel AISI - 304/316 thread-rolled for strength and coated to prevent galling. Cascade bolts are MIG-welded to the receiver bar and fully passivated after welding.

NUTS: Stainless Steel – 304/316

RECEIVER BARS:-Stainless Steel AISI - 304/316 TIG-welded to shell to form a strong fusion, and fully passivated after welding.

GASKET: ASTM D2240 NR – NBR – EPDM - Formulated for water service, WRAS Approved EPDM.

All gaskets have a gridded design, tapered ends and vulcanized armour plates for easy installation and optimum sealing efficiency.

ARMOUR: Stainless Steel AISI - 304/316 Heavy Gauge



# Cascade

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## Cascade Stainless Steel Repair Clamps

Suitable for cast iron, ductile iron, steel, PVC and asbestos cement water and gas pipe. Pressure ratings to your requirements from 4 bar to 16 bar.

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 more pressure than larger diameter repair clamps. Cleaning and lubricating bolt threads will reduce friction and permit greater torque.



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

### Specifications

- Clamp lengths: - Min 75mm Max 2000mm.
- Clamp types: - Single and Split Collar.
- Diameters: - 15mm to 2000mm.
- Stainless Steel Repair Clamps do not restrain axial pipe movement. Suitable anchorage must be provided where pipe movement may occur.
- Temp Range + - (-40°C to 140°C).
- Life expectancy 50 years plus under normal operating conditions in potable water and sewerage pipework.
- Full wrap around waffle gasket with an armour plate.



# Cascade

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## Cascade Stainless Steel Bossed Repair

Cascade stainless steel bossed repair clamps are suitable for Hot Tapping on Cast Iron, Ductile Iron, and Asbestos Cement Water and Gas Pipe.

### Applicable Standards

ASTM A480/A480M 04A – ASTM A240/A240M 04A

EN10204-3.1B 95 – EN10204-3, 1, B

BS 6920 – BS4504

BSEN 682:2002 – Type 4711 to WRAS approved and listed.

QMS ISO 9001-2001 & QMS ISO 14001

Available with BSP or NPT male and female threads



### Materials

LOCKING WASHER PLATE: - Stainless Steel AISI – 304/316 (Locks into position for easy tightening of nuts.)

LUGS: - Stainless Steel AISI – 304/316 - MIG-welded to receiver bar and fully passivated after welding. Leading edge is rounded to prevent them from catching bolt bars during installation.

SHELL:-Stainless Steel AISI - 304/316 2B finish.

BOLTS: - Stainless Steel AISI - 304/316 thread-rolled for strength and coated to prevent galling. Cascade bolts are MIG-welded to the receiver bar and fully passivated after welding.

NUTS: Stainless Steel – 304/316

RECEIVER BARS:-Stainless Steel AISI - 304/316 TIG-welded to shell to form a strong fusion, and fully passivated after welding.

GASKET: ASTM D2240 NR – NBR – EPDM - Nitrile 4711 Formulated for water service, WRAS Approved. All gaskets have a gridded design, tapered ends and vulcanized armour plates for easy installation and optimum sealing efficiency.

ARMOUR: Stainless Steel AISI - 304/316 Heavy gauge stainless steel vulcanized into the gasket at the time of moulding, to ensure: that it fits permanently, that it fits perfectly, that it provides a smooth transition from gasket.



# Cascade

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for the Water and Gas Industries

## Under Pressure Tee for Hot Tapping, Line Stopping, Stopples and Bypasses on Cast Iron, Ductile Iron, Steel and Asbestos Cement Water and Gas Pipes.

- Under Pressure tees with flanged or bossed Outlets
- 16 Bar Water - 8 Bar Gas
- Fabricated in 10mm epoxy coated carbon steel to any size you require with an energiser O-ring gasket for water and a full face gasket for gas and asbestos cement pipes.
- Designed for use with under pressure pipe drilling machines on live mains.
- These are a dedicated hot tapping tee so it is important that the pipe is accurately callipered top to bottom and side to side with one measurement at the spot where the outlet will be.

### Applicable Standards

Steel: 10mm carbon steel to BS EN 10025: 1993 Grade S275JR.

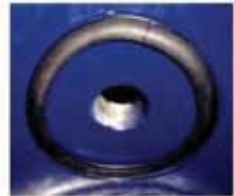
Neck: API 5L welded or seamless pipe.

Flange: BS 4504 – ANSA 150 or flanged to your requirements.

Fasteners: M16 or M20 Grade 8.8 bolts zinc plated, stainless on request.

Energisers O-ring / Gaskets: WRAS approved EPDM or Nitrile to BS 2494 Grade G.

Coating: WRAS approved Resicoat R4 fusion bonded epoxy 250-300 microns.





# Cascade

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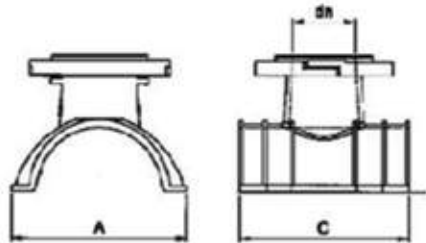
## Cascade UPT's for HDPE/MDPE

Cascade under pressure tees for HDPE/MDPE and PVC are simple and quick to fit. They also offer larger flanged outlets than the Electro fusion tees giving more options when connecting a network and reducing the need to shut down water mains. Sizes to suit pipe diameters from 90mm to 630mm.

### Installation

The Cascade mechanical PE tee is more cost effective and easier to install than an electrofusion tee, they can be fitted anywhere, anytime, in any conditions. All that is necessary is the following:

- Prepare pipe surface by gently rubbing down the contact surface area.
- Split the tee into two halves with the bolts facing down allowing the nuts to sit in the recess provided.
- Tighten by hand and continue tightening by 5nm increments starting at opposite ends of the fitting working towards the middle to a max of 90nm.
- Pressure test the fitting to one and half times the operating pressure (The main must be charged to get accurate result.)
- Make your connection.



### Technical Specifications

- Ductile Iron GGG 40.
- Fusion Bonded Epoxy (mini. 250 microns) WRAS approved.
- WRAS approved EPDM gaskets BS EN 681-1.
- Bolts: A2 Stainless Steel DIN 933 M10.
- WRAS approved materials.
- PWP: 16 Bar.





## Steel Pipe Repair Clamp

Clamps for the repair of holes or cracks in steel water pipes to EN 10255 (BS 1387) from 3/4" to 4" also available with outlet from 1/2" to 2".

### Specifications

- Malleable Iron body
- Galvanised coating
- Stainless Steel bolts
- EPDM Gasket
- Rated for up to 16 bar working pressure
- Maximum operating temperature 90°C



Part Number	DN	DN	Pipe OD Size mm	A MM	B mm	C mm	Weight Kg
CA.01.260.28.00	3/8"	10	17.2	70	28	53	0.2
CA.01.252.28.01	1/2"	15	21.3	134	45	84	1.3
CA.01.252.28.02	3/4"	20	26.9	134	50	88	1.4
CA.01.252.28.03	1"	25	33.7	134	57	98	1.65
CA.01.252.28.04	1 1/4"	32	42.4	134	70	105	1.8
CA.01.252.28.05	1 1/2"	40	48.3	134	75	112	2
CA.01.252.28.06	2"	50	60.3	134	90	122	2.2
CA.01.252.28.07	2 1/2"	65	76.1	134			
CA.01.252.28.08	3"	80	88.9	134			
CA.01.252.28.09	4"	100	114.3	134			

The repair clamps are suitable for the following pipe standards BS 1387, BS 3600, BS 3505, BS 1600, API 5L and EN 10255



## Copper Pipe Repair Clamp

To be used to repair leaks or breaks in copper water pipes. The copper pipe repair clamp will also work on hot water applications as standard they will suit temperatures of up to 90 degrees C. We can also install a VITON gasket which will reach temperatures of up to 230 degrees C. These clamps are also available with outlets for tapping which range from ½" to 2".

Repair clamps for larger diameter pipes are available in Galvanised steel.



### Specifications

- Brass Body
- Stainless steel bolts
- EPDM Gasket
- Rated for up to 10 bar working pressure.
- Maximum temperature of up to 90°C.

Nominal Size	Product No.
10mm	CA.04.620.60.10
12mm	CA.04.620.60.12
14mm	CA.04.620.60.14
15mm	CA.04.620.60.15
16mm	CA.04.620.60.16
18mm	CA.04.620.60.18
22mm	CA.04.620.60.22
28mm	CA.04.620.60.28
35mm	CA.04.620.60.35
42mm	CA.04.620.60.42
54mm	CA.04.620.60.54
64mm	CA.04.620.60.64
70mm	CA.04.620.60.70



# Cascade

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## PE/PVC Pressure Saddle

The PE/PVC Pressure Saddle is a dedicated cost saving alternative to that of the Q-Tee, still enabling the ability for under pressure drilling and making connections to a water network. Made from cast iron this strong and reliable fitting will allow saving but without the loss of quality.



### Specifications

- Sizes covering 40mm to 315mm
- PN16 operating pressure
- GGG-50 nodular cast iron body
- 250m epoxy coating
- Stainless steel bolts and washers
- EPDM rubber seals



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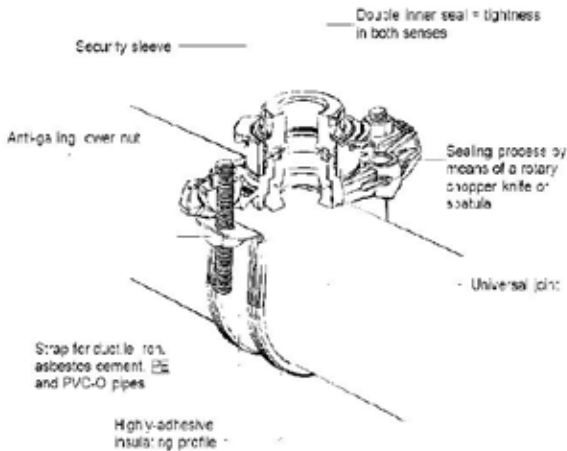
## Hot Tapping Saddle

The Hot Tapping Saddle for creating branches in water supply networks. Sealed by means of a rotating treated stainless steel chopper knife or spatula the Hot Tap also has excellent sealing properties thanks to a double interior joint and an outer safety sleeve.

**Outlet sizes:** 3/4", 1", 1.5" and 2"

**Pipe sizes:** 3" to 12"

**Pipe types:** Cast Iron, Ductile Iron, Steel, Asbestos Cement and PVC



## Specifications

- EN-GJS-450-10 ductile cast body
- Double epoxy coat approved for drinking water (250 to 500 Micron).
- EPDM rubber joint EN 681-1 standard suitable for drinking water
- Safety sleeve made of highly resistant resin.
- Strap, studs and nuts made of AISI 304 stainless steel
- WRAS approved Materials



# Cascade

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## ProDrill 20

The ProDrill 20 allows the user the ability to tap into any pipe through brass faucet risers of 3/4" up to 2". When attached to a threaded tapping saddle it gives excellent results in complete safety. Automatic control of drilling pressure allowed through an adjustable spring. O-ring, pressure seal and machine body protected by a lip seal inserted in the bush. The ProDrill 20 comes with extension rods 150 and 300mm long allowing the drills reach to be extended.



## Specifications

- Body made of Steel with double zinc coating.
- Extension rods of 150mm and 300mm
- Total machine length 415mm fully extended.
- Drill supplied in metal case with operational tools, manual and Hole Saw cutters and connectors to drill 3/4, 1", 1.1/4", 1.1/2" and 2" connections.



# Cascade

Manufacturers & Suppliers of Pipe Fittings  
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## Prodrill 26 Pipe Tapping Machine for DN65, DN80, DN100, DN125 and DN 150 PN16 Flanges



Cascade Prodrill 26 pipe drilling machine for tapping DN65 to DN 150 holes in water pipes at up to 12 bar working pressure and low pressure gas pipe-lines up to 4 bar.

### Key Features

- Compact and easy to operate
- High quality steel drill made in EU
- Automatic control of drilling pressure via adjustable spring
- Will drill through any wall thickness
- Working stroke of: 250mm, 500mm with extension fitted
- Total length: 450 mm
- Air-valve and safety stop
- Material: zinc plated steel



# Cascade

Manufacturers & Suppliers of Pipe Fittings  
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## Universal Pipe Saddle

*For use on cast iron, ductile iron, steel, PVC and asbestos cement*

Headwork	
Part No.	Bossed
CA-60-034	¾"
CA-60-110	1"



CA-60-114	1 ¼"
CA-60-112	1 ½"
CA-60-200	2"

Stainless Steel Straps		
Part No.	Min Ø	Max Ø
CA-62-00060	60	94
CA-62-00088	88	130
CA-62-00133	133	159
CA-62-00159	159	192
CA-62-00190	190	220
CA-62-00216	216	246
CA-62-00240	240	270
CA-62-00267	267	318
CA-62-00318	318	368
CA-62-00355	355	428
CA-62-00406	406	475
CA-62-00470	470	546
CA-62-00508	508	571

### Fitting Instructions

Clamp headwork to pipe to 70 Nm

When tightening alternate between each 1/2 turn

### Materials

**Pressure Rating:** 16 operating

**pressure Headwork:** GGG-50

**nodular cast iron Coating:** 250µ

RAL epoxy coating

**Bolts:** stainless steel

Stainless steel band strap 60mm wide EPDM rubber coating

**Seals:** EPDM for potable water



# Cascade

Manufacturers & Suppliers of Pipe Fittings  
for the Water and Gas Industries

## WAGA End Loading Flange Adaptor

The WAGA End Load Flange Adaptor for PE, PVC, Cast Iron, Ductile Iron, Steel and Asbestos Cement Pipes, ideal for making connections in pipe networks. This fitting offers a wide tolerance and easy install making tight spaces easier to work in.

The WAGA has excellent end load and permissible working pressure ratings of 16 bar, and will bite onto soft or hard pipes, Inserts are recommended for extra performance on PE Pipe.



### Materials

Ductile iron GGG-45 body  
EPDM to BS EN 681-1 Gasket  
Bolts, Nuts and washers: A2  
Stainless Steel ANSI 304  
Epoxy WRAS approved Resicoat  
9000 R4

Part No	Nominal Bore	Range (mm)	Weight KG
FEL050	2"/50	46-71	5.7
FEL065	60/65	63-90	6.4
FEL080	3"/80	84-105	6.5
FEL100	4"/100	104-132	8.2
FEL125	5"/125	132-155	12.8
FEL150	6"/150	154-192	13.6
FEL200	8"/200	192-232	18
FEL225	9"/225	230-268	29.1
FEL250	10"/250	267-310	30
FEL300	12"/300	315-356	40
FEL350	14"/350	353-393	45
FEL400	16"/400	393-433	52
FEL450	18"/450	450-482	
FEL500	20"/500	500-532	
FEL550	22"/550	548-580	
FEL600	24"/600	605-637	





# Cascade

Manufacturers & Suppliers of Pipe Fittings  
for the Water and Gas Industries

## WAGA End Load Coupling

The WAGA End Load Coupling for PE, PVC, Cast Iron, Ductile Iron, Steel and Asbestos Cement Pipes, ideal for making connections in pipe networks. This fitting offers a wide tolerance and easy install making tight spaces easier to work in.

The WAGA has excellent end load and permissible working pressure ratings of 16 bar, and will bite onto soft or hard pipes, Inserts are recommended for extra performance on PE Pipe.



### Materials

Ductile iron GGG-45 body  
EPDM to BS EN 681-1 Gasket  
Bolts, Nuts and washers: A2  
Stainless Steel ANSI 304  
Epoxy WRAS approved Resicoat  
9000 R4

Part No	Nominal Bore	Range	Weight KG
CEL050	2"/50	46-71	5.7
CEL065	60/65	63-90	6.4
CEL080	3"/80	84-105	6.5
CEL100	4"/100	104-132	8.2
CEL125	5"/125	132-155	12.8
CEL150	6"/150	154-192	15
CEL200	8"/200	192-232	18
CEL225	9"/225	230-268	29.1
CEL250	10"/250	267-310	30
CEL300	12"/300	315-356	41
CEL350	14"/350	353-393	48
CEL400	16"/400	393-433	59
CEL450	18"/450	450-482	
CEL500	20"/500	500-532	
CEL550	22"/550	548-580	
CEL600	24"/600	605-637	



# Cascade

Manufacturers & Suppliers of Pipe Fittings  
for the Water and Gas Industries

## Cascade Universal Couplings and Step Couplings

### General Information

- Cascade Xtra couplings – 40% more range tolerance than standard couplings, allowing pipes with larger differential OD's to be joined and reducing errors and stock.
- Large product range covering pipes from 60mm to 1477 mm.
- Long bodies and large gaskets give improved performance
- Suitable for joining pipes of different rigid materials, such as cast iron, ductile iron, stainless steel, PVC, asbestos cement and so on.
- PN-10 and PN-16 operating pressure.
- GGG-50 (DN-50 / DN-800). Steel (DN-900 / DN-1400).
- 250 µm fusion bonded epoxy coating.
- Equipped with DACROMET coated bolts, nuts and washers, and EPDM rubber seals



ELEMENTS	MATERIAL	COATING	STANDARDS
Coupling (DN-50/DN-800)	GGG-50	250 µm FBE	EN 1514, EN 1563, BS 6920
Coupling(DN-900/DN-1400)	Steel		EN 1025, EN 1514, BS 6920
End Ring (DN-50/DN-800)	GGG-50	250 µm FBE	EN 1514, EN 1563, BS 6920
End Ring (DN-900/DN-1400)	Steel		EN 1025, EN 1514, BS 6920
Bolts, nuts, washers	F-114 High Tensile, DACROMET		DIN 931, DIN 934, DIN 125
	Grade 8.8		
Gasket	EPDM	-	EN 681-1, BS 6920



# Cascade

Manufacturers & Suppliers of Pipe Fittings  
for the Water and Gas Industries

## Cascade Universal Coupling and Step Coupling Size Sheet

REF.	DN	Ø mm	L1 mm	L2 mm
12-DN050	50	60-80	186	190
12-DN065	60/65	70-90	186	200
12-DN080	80	88-113	186	223
12-DN100	100	107-132	186	242
12-DN125	125	133-159	206	269
12-DN150	150	159-184	206	296
12-DN175	175	165-195	222	317
12-DN200-A	200	194-226	222	348
12-DN200	200	216-246	222	368
12-DN250-A	250	244-276	242	398
12-DN250	250	266-297	242	419
12-DN300	300	315-345	242	469
12-DN300-A	300	345-375	242	499
12-DN350	350	375-405	242	529
12-DN400	400	400-435	292	565
12-DN400-A	400	435-470	292	600
12-DN450	450	475-510	292	640
12-DN500-A	500	499-534	292	665
12-DN500	500	530-565	292	695
12-DN600	600	610-645	292	775
12-DN600-A	600	645-680	292	810
12-DN700	700	710-745	300	895
12-DN800	800	810-845	300	995
12-DN900	900	913-949	300	1115
12-DN1000	1000	1016-1052	300	1218
12-DN1100-A	1100	1108-1133	300	1299
12-DN1100	1100	1142-1167	300	1333
12-DN1200-A	1200	1209-1234	300	1400
12-DN1200	1200	1245-1270	300	1436
12-DN1400-A	1400	1412-1437	300	1603
12-DN1400	1400	1452-1477	300	1643

### Step Coupling Sizes

REF.	DN	Ø1/Ø2 mm	L1 mm	L2mm
14-DN200	200	194-226 / 216-246	255	368
14-DN250	250	244-276 / 266-297	255	419
14-DN300	300	315-345 / 345-375	255	499
14-DN350	350	375-405 / 400-435	295	565
14-DN400	400	400-435 / 435-470	302	600
14-DN450	450	475-510 / 530-565	302	695
14-DN500	500	499-534 / 530-565	302	695
14-DN500-A	500	530-565 / 575-610	302	695
14-DN600	600	610-645 / 645-680	302	810



## Cascade Universal Flange Adaptors

### General Information

- Cascade Xtra Flange Adaptors – 40% more range tolerance than standard flange adaptors. Fits odd size pipe OD's and reduces errors and stock levels.
- Wide range of diameters covering pipes from 60 to 1477 millimeters.
- PN-10 and PN-16 operating pressure.
- Long bodies and large gaskets give improved performance.
- Flanges:
  - According to BS EN1092-2 PN10/PN16
  - According to ANSI up to DN-400
  - According to British Standard Table D up to DN-400 (except DN-250)
  - According to BS 4504 Part 3
- GGG-50 (DN-50 / DN-800). Steel (DN-900 / DN-1400).
- 250 µm fusion bonded epoxy coating.
- Equipped with DACROMET coated bolts, nuts and washers, and EPDM rubber seal.



ELEMENTS	MATERIAL	COATING	STANDARDS
Flange (DN-50/DN-800)	GGG-50	250 µmEPOXY	EN 1514, EN 1563, BS 6920
Flange (DN-900/DN-1400)	Steel		EN 1025, EN 1514, BS 6920
End Ring (DN-50/DN-800)	GGG-50	250 µmEPOXY	EN 1514, EN 1563, BS6920
End Ring (DN-900/DN-1400)	Steel		EN 1025, EN 1514, BS 6920
Bolts, nuts, washers	F-114 High Tensile, Grade 8.8	DACROMET	DIN 931, DIN 934, DIN 125
Gasket	EPDM	-	EN 681-1, BS 6920



# Cascade

Manufacturers & Suppliers of Pipe Fittings  
for the Water and Gas Industries

## Cascade Universal Flange Adaptor Size Sheet

REF.	DN	Ø mm	L1 mm	L2 mm
13-DN050	50	60-80	145	190
13-DN065	60/65	70-90	145	200
13-DN080	80	88-113	150	223
13-DN100	100	107-132	125	242
13-DN125	125	133-159	140	269
13-DN150	150	159-184	175	296
13-DN175	175	165-195	183	317
13-DN200-A	200	194-226	183	354
13-DN200	200	216-246	183	368
13-DN250-A	250	244-276	158	400
13-DN250	250	266-297	158	419
13-DN300	300	315-345	158	469
13-DN300-A	300	345-375	200	499
13-DN350	350	375-405	200	529
13-DN400	400	400-435	209	565
13-DN400-A	400	435-470	298	600
13-DN450	450	475-510	298	640
13-DN500-A	500	499-534	208	665
13-DN500	500	530-565	208	695
13-DN500-B	500	575-610	208	695
13-DN600	600	610-645	208	775
13-DN600-A	600	645-680	298	810
13-DN700	700	710-745	220	910
13-DN800	800	810-845	225	1025
13-DN900	900	913-949	200	1115
13-DN1000	1000	1016-1052	200	1230
13-DN1100-A	1100	1108-1133	200	1340
13-DN1100	1100	1142-1167	200	1340
13-DN1200-A	1200	1209-1234	200	1455
13-DN1200	1200	1245-1270	200	1455
13-DN1400-A	1400	1412-1437	200	1675
13-DN1400	1400	1452-1477	200	1675



# Cascade

Manufacturers & Suppliers of Pipe Fittings  
for the Water and Gas Industries

## Cascade Isiflo Range

The Cascade Isiflo Range is made up of a selection of different fittings suited for the water and gas sector. Due to the fittings construction being made from DZR brass they are also suitable for heating and contaminated ground. Sizes available from 15mm going up to 63mm.

The range also has sizes suitable for Barrier pipe, imperial/metric Steel and Galvanised pipes.

A selection of what the range comprises of are male/female couplings, elbows, single or double step reducing couplings, equal tee's and reducing tee's.

For more info on the product or a list of fittings and sizes available please contact us.





# Cascade

Manufacturers & Suppliers of Pipe Fittings  
for the Water and Gas Industries



Isiflo SPRINT is our new patented range of composite push-fittings combining the safety and strength of a traditional mechanical fitting with the user friendliness of a standard push-fitting.

The installation of Isiflo SPRINT happens in one simple move, requires no tools and no complicated preparation of the pipe. Just cut the pipe squarely and insert, with a slight twist, into the fitting. The result is a strong, firm and long-lasting connection between the pipe and the coupling.



# Cascade

Manufacturers & Suppliers of Pipe Fittings  
for the Water and Gas Industries



## Features and Benefits

The high tech composite material combined with the product's function and design gives the coupling a great deal of benefits and unique features:

- 100% Corrosion resistant
- Lead-free
- Push-in solution that secures tight and reliable fitting without special tools
- Strong like metal
- No material sag over time
- Installation can be carried out regardless of temperature and weather conditions
- Simple and user friendly, minimizes the possibility of incorrect assembly
- Fast to use, the installation of Isiflo Sprint happens in one simple move and provides for effective working
- Approved to be buried under ground
- Approved for freezing water ref. BRL-K 534/03
- 5 years product warranty
- Packed in single bags with the installation procedure printed on each bag
- Possible to dismantle without special tools





# Cascade

Manufacturers & Suppliers of Pipe Fittings  
for the Water and Gas Industries

## Area of applications

Water: -20°C (cooling system) to 40°C

Isiflo Sprint fittings give a tight and firm end-load resistant connection. To be used on the following pipes:

- PE, PEL, PEH (PE40, PE 50, PE 80, PE 100)

**Important** Insert shall be used on thin-walled PE pipes SDR17

- PEX when using support insert

- PVC when using the ISIFLO Sprint PVC Kit

## Working pressure:

· Water - up to 16 bar

· Burst pressure - pipe burst before coupling

## Tests and approvals:

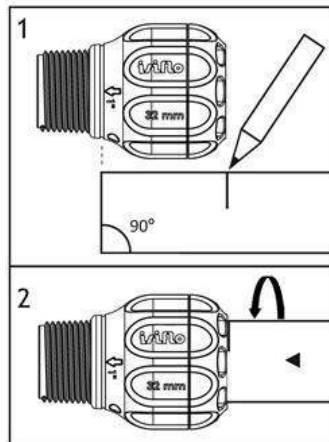
The following approvals are applied for:

UK: WRAS/WRC

Isiflo Sprint is also approved for seawater.

## Installation procedure:

1. Cut the pipe as squarely as possible, checking that it is clean and free from damage.
2. Mark the installation depth on the pipe. The correct depth is indicated on each fitting.
3. Insert the pipe into the fitting with a slight twist. The twisting action reduces the installation force required to make the joint. No tools required.





# Cascade

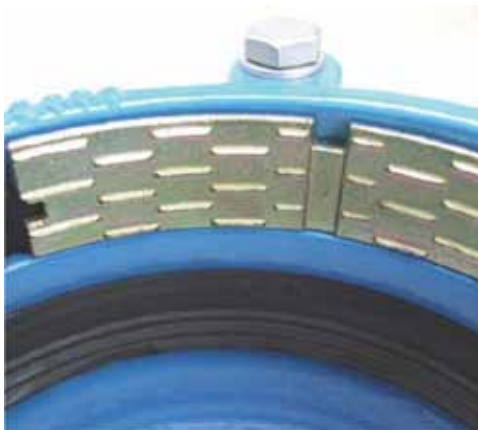
Manufacturers & Suppliers of Pipe Fittings  
for the Water and Gas Industries

## Cascade P-FIX Adaptor

The Cascade P-Fix Flange Adaptor for use on PVC, PVC-O and PE, the fittings design allows it to hold on the pipe by means of the gripper ring and thus prevents axial pipe movement.

This range covers diameters from 63mm to 400mm and can be used without the need for liners due to its design which stops the fitting from crushing the pipe.

Its positive stop feature ensures that there can be no over tightening creating a safe and secure fit.



## Specifications

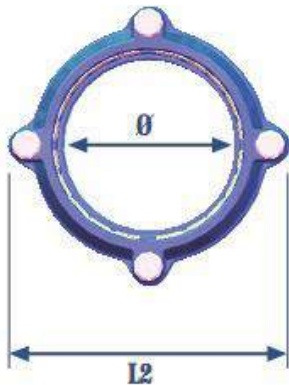
- Designed for use on SDR 11 & 17 PE Pipes without liners.
- Positive stops prevent over tightening.
- Mechanical locking grip ring prevents axial pipe movement.
- Covers pipe diameters from 63-400mm.
- Flanged: PN16.
- Coating: 250 micron Epoxy.
- Material: Ductile iron GGG-40.
- Grip Ring: Steel with electrolytic coating.
- Gasket: EPDM.



# Cascade

Manufacturers & Suppliers of Pipe Fittings  
for the Water and Gas Industries

## Cascade P-FIX Coupling



Code	Outside Pipe Dia.	L1	L2
ELC-63	63	191	133
ELC-75	75	191	146
ELF-90	90	201	161
ELF-110	110	205	181
ELF-125	125	211	196
ELF-140	140	211	212
ELF-160	160	232	235
ELF-180	180	232	255
ELF-200	200	290	284
ELF-250	250	320	335
ELF-315	315	360	400

### Specifications

- Designed for use on SDR 11 & 17 PE pipe without an insert
- Quick and easy to fit
- Positive stops prevent over tightening
- Mechanical locking grip ring prevents axial pipe movement
- Covers pipe diameters from 63-315mm
- Flanged: PN16
- Coating: 250 micron Epoxy
- Material: Ductile iron GGG-40.
- Grip Ring: Steel with electrolytic coating
- Gasket: EPDM
- Bolts: DACROMET coated bolts, nuts and washers

Alternative to the Viking Johnson AquaGrip



# Cascade

Manufacturers & Suppliers of Pipe Fittings  
for the Water and Gas Industries

## Cascade PE Split Collar Clamp/Coupling

The Cascade PE Coupling Clamp is ideal for repairs on PE mains; the fittings robust nature allows it to cover splits, cracks and holes in the pipe with ease.

The fittings length also allows it to cover a larger area, the built in gripper rings in either end also allow this fitting to be used as a Coupling capable of operating at 16 Bar.

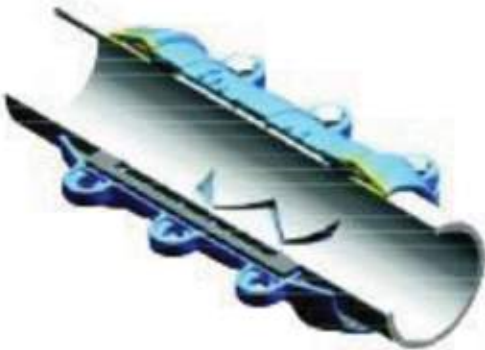
The fittings split collar properties allow it to be installed in narrow and tight working areas, and the bolts lock the fitting firmly in place.

The grip rings are specially designed to avoid pipes axial movement and breaking along the pipe.



### Specifications

- Permanently repairs PE pipes quickly and safely.
- Can be used as both a Clamp and Coupling.
- PWP of 16 Bar
- Constructed of GGG-50 nodular Cast Iron for increased durability.
- 250 Micron Epoxy coating for anti-corrosion.
- Gripper Rings constructed of Steel
- EPDM Seals.





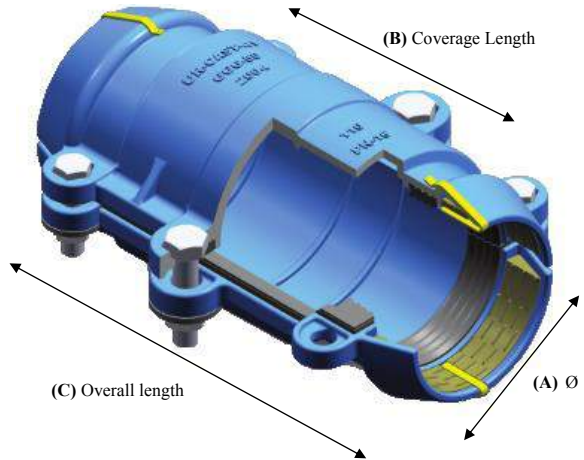
# Cascade

Manufacturers & Suppliers of Pipe Fittings  
for the Water and Gas Industries

## Fusion-Cap

The Cascade Fusion-Cap is purposely designed to permanently encapsulate failed or leaking electrofusion/Butt Fusion joints. Constructed of Cast Iron this robust fitting will quickly and securely stop a leaking joint. Its split collar design enables easy installation and thanks to the steel gripper teeth once installed the Fusion-Cap will not move.

The Fusion-Cap has a permissible working pressure of 16 bar and has GEOMET coated bolts to stop corrosion, its specially designed gripper rings allow mechanical locking avoiding the pipes axial movement.



### Technical Specifications

- Constructed of nodular Cast Iron GGG-50.
- GEOMET coated bolts, nuts and washers.
- WRAS Approved EPDM Seals
- WRAS Approved epoxy coating.
- Steel Gripper rings.
- PWP of 16 Bar.

Part No	A	B	C
CA-41-DE063	63mm	130mm	304mm
CA-41-DE075	75mm	145mm	319mm
CA-41-DE090	90mm	150mm	324mm
CA-41-DE110	110mm	180mm	354mm
CA-41-DE125	125mm	180mm	358mm
CA-41-DE140	140mm	210mm	388mm
CA-41-DE160	160mm	210mm	372mm
CA-41-DE180	180mm	240mm	402mm
CA-41-DE200	200mm	250mm	428mm

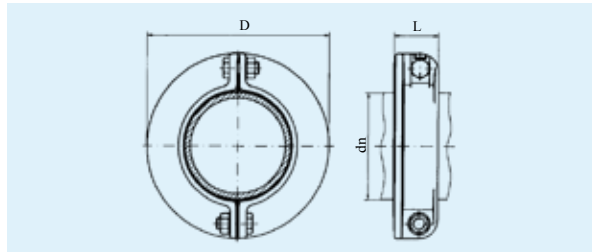


# Cascade

Manufacturers & Suppliers of Pipe Fittings  
for the Water and Gas Industries

## Puddle flange

Bolted puddle flange for ductile iron pipes acc. to EN 545



dimensions in mm				No. of bolts	Screws (bolts)*	All operating pressure/bar		kg/piece**
DN	dn	D	L					
80	98	200	50	2	M 16x50	120	16	3,4
100	118	220	57	2	M 16x50	150	16	3,9
125	144	250	60	2	M 16x50	200	16	4,9
150	170	285	60	2	M 16x50	225	16	5,9
200	222	340	120	4	M 20x60	250	16	11,3
250	274	405	120	6	M 20x60	300	16	16,8
300	326	455	120	6	M 20x60	300	16	20,1

Material: ductile cast iron GGG, a gasket is placed at the factory  
Coating: bitumen

\* Bolts in accordance with DIN EN 24017

\*\* Complete weight including bolts



bis DN 200



ab DN 250



bis DN 200



ab DN 250



# Cascade

Manufacturers & Suppliers of Pipe Fittings  
for the Water and Gas Industries

## Installation instructions for the bolted puddle flange – suitable for GGG pipes to EN 545

The bolted puddle flange for buried water and wastewater pipes is intended to be used as a restrained anchor. It can be used on DI pipes and flanged spigots with pipe outside diameter to EN 545.

### Bolts to be used:

- Hexagon bolts to EN 24017 zinc coated with plain washers and zinc coated nuts to EN 24032
- Minimum material grade 8.8, as corresponding torques must be followed (see table)

### Installation:

- Carefully clean the outside of the pipe in the area of the bolted puddle flange
- If using PE or cement mortar coated pipes, the coat must be peeled off in the contact area of the bolted puddle flange
- Position the bolted puddle flange and ensure that the gasket fits properly on the pipe. Pin must engage in the recess
- Insert the hexagon bolts to EN 24017 in the holes and ensure that the head of the bolts fits in the seat provided (anti-rotation grip). Place the plain washers under the nuts to EN ISO 24032 and bolt together the puddle flange. Ensure that the distances between the fixing lugs are uniform
- Before performing a pressure test, alternately tighten the nuts with the specified bolt tightening torque in Nm (see table) so that there are uniform spaces between the lugs.
- The entire pipe must be deaerated before the leak test
- After the leak test, re-tighten all bolts again according to the bolt tightening torque

Not suitable for FFG and FG pipes with cast iron flange.

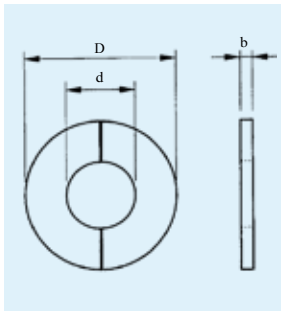


# Cascade

Manufacturers & Suppliers of Pipe Fittings  
for the Water and Gas Industries

## Puddle flange

Puddle flange for welding



Dimensions in mm				
DN	D	d	b	kg/piece
50	165	68	10	1,20
65	185	88	8	1,30
80	200	100	10	1,60
100	220	120	10	1,80
125	250	148	10	2,20
150	285	179	10	3,00
200	340	224	10	3,60
250	405	276	10	5,00
300	455	328	15	7,60
350	520	380	16	11,80
400	580	431	16	20,20
500	715	534	17	22,40
600	840	638	17	30,60
700	900	742	17	40,00
800	1.010	845	20	47,10

2 or 3 segments depending on nominal diameter. For welding according to DVS 1502-2 and DVS 602.





# Cascade

Manufacturers & Suppliers of Pipe Fittings  
for the Water and Gas Industries

## Cascade Studded Flange Converters

Cascade Studded Flange Converters for the use of changing an existing flange to a smaller or larger diameter flange, or for use where there are different drilling patterns.

Available in a large range of standard sizes as well as sizes made to specifications for particular requirements including Metric to Imperial or Metric to Metric.

Available with Gaskets to suit the application such as WRAS Approved EPDM for potable drinking water, or Nitrile (NBR) for Gas, Oils and Petroleum.

Drillings: available made to your specified standard: ISO EN 1092, BS 4505 PN10 PN16, BS 10 Table D, Table E etc., ANSI /ASME B16 Class 150 etc.



### Specifications

- Body: Ductile iron BS EN 1563 EN-GJS-500-7 or mild steel BS EN 10025 S275JR
- Studs and washers: Mild steel BS EN 10025 S275JR bright zinc plated, galvanised or stainless steel on request
- Coating: WRAS approved 250 micron RAL 5015 epoxy coating
- Gasket: EPDM 3mm thick WRAS approved—Nitrile on Request

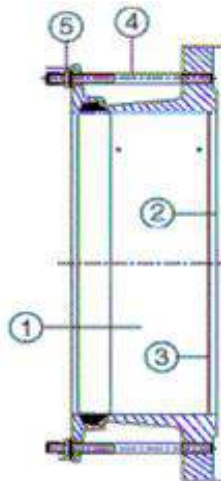


# Cascade

Manufacturers & Suppliers of Pipe Fittings  
for the Water and Gas Industries

## Cascade Fabricated Notched Flange Adaptors

Cascade can fabricate flange adaptors dedicated for most common pipe materials including Ductile and Steel. These can also be made to allow the use of tie bars for anchoring. Constructed from steel, and coated in blue epoxy coating for potable drinking water, they come with an EPDM gasket as standard and are rated to PN16 working pressure.



### Specifications

1. Body: Steel grade S275
2. Bolts: Stud bolts grade 8.8
3. End ring: Steel grade S275
4. Gasket: EPDM grade E to BS2494 (WRAS approved)
5. Fixings: Hex to BS4190
6. Coating: Fusion bonded epoxy powder coat (WRAS approved)



# Cascade

Manufacturers & Suppliers of Pipe Fittings  
for the Water and Gas Industries

## Cascade CK Coupling REP E

### The repair coupling

The Cascade CK-REP E are non-restraint repair couplings. They are used to connect and/or seal damaged metal and plastic pipes. They also enable repairs to be carried out easily, quickly and safely without the need to dismantle the pipes.

Cascade CK-REP E Features:

1. Double-lip sealing system
2. Standard strip insert





# Cascade

Manufacturers & Suppliers of Pipe Fittings  
for the Water and Gas Industries

## Cascade CK Coupling GRIP / GRIP E

### The strong pipe coupling

Cascade CK GRIP/GRIP E axial restraint pipe couplings are used to connect metal pipes. The anchoring ring with conically stamped teeth indents into the pipe surface (steel, stainless steel or cast iron) and provides safe and strong axial restraint. Owing to the special design the coupling can withstand even high vibration loads.

Cascade CK GRIP/GRIP E Features:

1. Double-lip sealing system
2. Standard strip insert
3. Heavy duty lock bars
4. Anchoring ring with conically stamped teeth





# Cascade

Manufacturers & Suppliers of Pipe Fittings  
for the Water and Gas Industries

## Cascade CK Coupling - Combi GRIP / Combi GRIP E

### The combining pipe coupling

Cascade CK Coupling - Combi GRIP/Combi GRIP E axial restraint pipe couplings are used to connect plastic pipes with metal pipes. For the plastic pipe the coupling features on one side

a special anchoring ring with rows of flat teeth which are pressed into the pipe surface without damaging the material.

At the same time the force applied is distributed evenly across the pipe surface. For the metal pipe the coupling features on the other side an anchoring ring with conically stamped teeth which grip into the pipe surface. Due to the special design of the anchoring ring the coupling can withstand even high vibration loads.

Cascade CK Combi GRIP/Combi GRIP E Features:

1. Double-lip sealing system
2. Standard strip insert
3. Anchoring ring

### 6. Optional support sleeve

When joining plastic pipes made from PE and PP a support sleeve must be used. If the pipes to be joined are made from soft thermoplastic material (e. g. Pe) the use of a support sleeve is mandatory. The support sleeve is inserted into the pipe end within the area to be joined and thus protects the pipe from being deformed.





# Cascade

Manufacturers & Suppliers of Pipe Fittings  
for the Water and Gas Industries

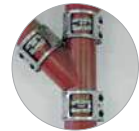
## CK DCS UNIVERSAL RESTRAINT COLLAR Infrastructure Connectors – DCS



- 1 Hexagonal socket bolts
- 2 Guide bolt
- 3 Threaded bolt
- 4 Housing
- 5 Grip ring insert

### The grip-type coupling which resists high tensile loads

Combined with either DCS RAPID, DCS RAPID MSM or DCS CV/CE standards collars, our DCS Universal restraint collars ensure that the system can withstand even high tensile loads. The grip-type coupling which resists high tensile loads for non-pull-out resistant connections.



#### Materials

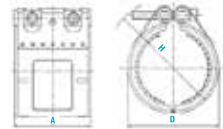
W1	W2	W3	W4	W5
	x			

- W2**
- Material, Housing: AISI 430 Ti
  - Material, Closure unit: Steel, surface protected
  - Material, Grip ring: AISI 301

#### Information

- Recommended for use in combination with types RAPID/RAPID MSM: up to max. 10 bar
- Recommended for use in combination with types CV/CE: up to max. 5 bar (DN 50 – DN 200); up to max. 3 bar (DN 250 – DN 300)

#### Technical data.



CK DCS UNIVERSAL RESTRAINT COLLAR									
Designation	DN	A (mm)	D (mm)	H (mm)	Bolt (mm)	P max (bar)		Torque (Nm)	W2 Product No.
						RAPID / RAPID MSM	CV/CE		
UNIVERSAL RESTRAINT COLLAR DN 50	50	77	85	105	M 8	10	5	Tight-Locking	0262 8401 050
UNIVERSAL RESTRAINT COLLAR DN 70	70	77	100	120	M 8	10	5	Tight-Locking	0262 8402 070
UNIVERSAL RESTRAINT COLLAR DN 80	75/80	77	105	125	M 8	10	5	Tight-Locking	0262 8403 080
UNIVERSAL RESTRAINT COLLAR DN 100	100	97	130	150	M 10	10	5	Tight-Locking	0262 8405 100
UNIVERSAL RESTRAINT COLLAR DN 125	125	97	165	195	M 10	10	5	Tight-Locking	0262 8406 125
UNIVERSAL RESTRAINT COLLAR DN 150	150	97	185	215	M 10	5	5	Tight-Locking	0262 8407 150
UNIVERSAL RESTRAINT COLLAR DN 200	200	113	240	270	M 12	5	5	Tight-Locking	0262 8415 200
UNIVERSAL RESTRAINT COLLAR DN 250	250	139	305	335	M 12	3	3	Tight-Locking	0262 8416 250
UNIVERSAL RESTRAINT COLLAR DN 300	300	139	400	490	M 12	3	3	Tight-Locking	0262 8417 300



# Cascade

Manufacturers & Suppliers of Pipe Fittings  
for the Water and Gas Industries

## CK DCS RAPID

Infrastructure Connectors – DCS



- 1 Hexagonal socket bolt with washer
- 2 Square nut
- 3 Closure unit
- 4 Collar
- 5 Sealing sleeve

### The original Rapid with block tightening

The DCS RAPID with block tightening for non-pull-out resistant connections enables a fast connection. The visible torque control and the single-bolt closure provide for a fast and easy installation.



#### Materials

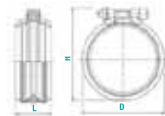
W1	W2	W3	W4	W5
	x			x

- W2, W5**
- Material, Collar: AISI 430 Ti
  - Material, Clamping unit: AISI 304 / AISI 430 Ti
  - Material, Bolts/Nuts: Steel, surface protected
  - Material, Sealing sleeve: EPDM

#### Information

- Resisting axial pull-out forces up to max. 0.5 bar
- DN 40 – DN 200
- Resisting axial pull-out forces up to max 0.3 bar
- DN 250 – DN 300
- Defined locking torque without using a special tool
- Meeting fire protection requirements

#### Technical data.



NORMACONNECT® DCS RAPID									
		Max. Dimensions after Assembly ~							
Designation	DN	D (mm)	H (mm)	L (mm)	P max (bar)	Torque (Nm)	Bolt (mm)	W2 Product No.	W5 Product No.
RAPID DN 40	40	53	64	50	0.5	Tight-Locking	M 5	0245 8254 040	
RAPID DN 50	50	70	80	46	0.5	Tight-Locking	M 8	0245 8218 050	0245 8126 050
RAPID DN 70	70	90	100	43	0.5	Tight-Locking	M 8	0245 8219 070	0245 8127 070
RAPID DN 75	75	87	97	40.5	0.5	Tight-Locking	M 8	0245 8265 075	
RAPID DN 80	75/80	95	105	40	0.5	Tight-Locking	M 8	0245 8220 080	0245 8129 075
RAPID DN 100	100	125	135	39.0	0.5	Tight-Locking	M 8	0245 8221 100	0245 8130 100
RAPID DN 125	125	147	162	37.0	0.5	Tight-Locking	M 8	0245 8222 125	0245 8131 125
RAPID DN 150	150	172	187	35.5	0.5	Tight-Locking	M 8	0245 8223 150	0245 8132 150
RAPID DN 200	200	227	244	33.5	0.5	Tight-Locking	M 10	0245 8224 200	0245 8133 200
RAPID DN 250	250	293	306	96	0.3	Tight-Locking	M 10		0245 8208 250
RAPID DN 300	300	345	360	96	0.3	Tight-Locking	M 10		0245 8209 300



## CK DCS RAPID MSM

## Infrastructure Connectors – DCS



- 1 Hexagonal socket bolt with washer
- 2 Square nut
- 3 Closure unit
- 4 Collar
- 5 Sealing sleeve

### The fast connection with quick release closure

The DCS RAPID MSM connection is easy-fitting and thus especially suitable for repair purposes. It is the fast connection with quick release closure for non-pull-out resistant connections.



### Materials

W1	W2	W3	W4	W5
	x			

- W2**
- Material, Collar: AISI 430 Ti
  - Material, Clamping unit: AISI 304 / AISI 430 Ti
  - Material, Bolts/Nuts: Steel, surface protected
  - Material, Sealing sleeve: EPDM

### Information

- Resisting axial pull-out forces up to max. 0.5 bar
- Defined locking torque without using a special tool
- Meeting the fire protection requirements

### Technical data.



CK DCS RAPID MSM									
Designation	DN	Max. Dimensions after Assembly ~					Torque (Nm)	Bolt (mm)	W2 Product No.
		~ D (mm)	~ H (mm)	~ L (mm)	P max (bar)				
RAPID DN 50 MSM	50	70	80	40	0.5	Tight-Locking	M 8	0245 8257 050	
RAPID DN 70 MSM	70	90	100	40	0.5	Tight-Locking	M 8	0245 8258 070	
RAPID DN 80 MSM	75/80	95	105	40	0.5	Tight-Locking	M 8	0245 8260 080	
RAPID DN 100 MSM	100	125	135	46	0.5	Tight-Locking	M 8	0245 8261 100	
RAPID DN 125 MSM	125	147	162	55	0.5	Tight-Locking	M 8	0245 8262 125	
RAPID DN 150 MSM	150	172	187	55	0.5	Tight-Locking	M 8	0245 8263 150	
RAPID DN 200 MSM	200	227	244	70	0.5	Tight-Locking	M 10	0245 8264 200	





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Manufacturers & Suppliers of Pipe Fittings  
for the Water and Gas Industries

## CK DCS FIX

Infrastructure Connectors – DCS



- 1 Easy handling
- 2 Strong worm-drive hose clip

## The changeover connector with 2 lip seals

### Materials

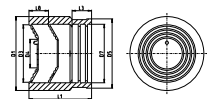
W1	W2	W3	W4	W5
	x			

- Material, Connector: EPDM
- Material, Worm-drive hose clip band: AISI 430

### Advantages at a glance

- The connection of feed or suction lines to a pipe – either made of steel or plastics – is easily and safely achieved with the FIX connector.

### Technical data.



#### NORMACONNECT® DCS FIX, EPDM with TORRO W2, Changeover Connector

Designation	DN	D1 (mm)	D3 (mm)	D4 (mm)	D5 (mm)	D7 (mm)	L1 (mm)	L3 (mm)	L8 (mm)	W2 Product No.
FIX DN 50	50	72	56	30	67.5	57	63	19	19	0245 9003 050
FIX DN 70	70	92	75	41	86.5	77	77	19	24	0245 9003 070
FIX DN 80 56-75	80	92	75	41	91	81	77	19	24	0245 9003 075
FIX DN 80 75-90	80	108	90	58	93	81	88	19	23	0245 9003 080
FIX DN 100	100	128	110	78	118	108	95	21	23	0245 9003 100
FIX DN 125	125	145	126	90	145	132	103	21	27	0245 9003 125



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Manufacturers & Suppliers of Pipe Fittings  
for the Water and Gas Industries

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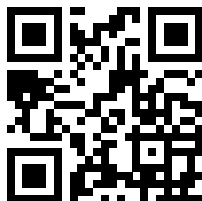
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