



**simple crown
technical coupling**

Universal fluid tight coupling system



price list

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UNIVERSAL FLUID TIGHT COUPLING SYSTEM

LEGEND

PRODUCT CODE

DN/OD: Nominal diameter (series normalised on external diameter)

DN/ID: Nominal diameter (series normalised on external diameter)

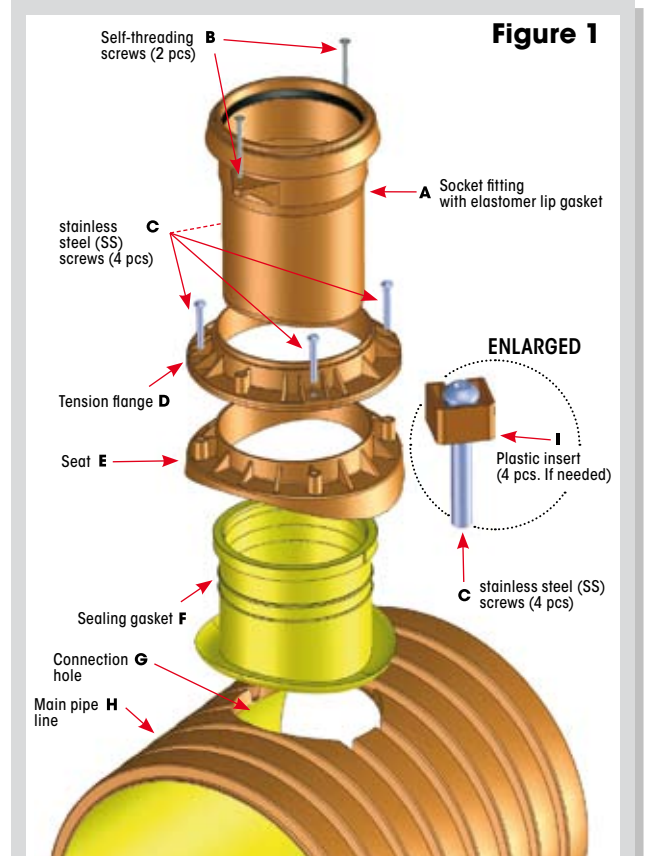
THE SIMPLE CROWN TECHNICAL COUPLING is a universal coupling system with a strong hydrostatic seal, usable for coupling sewage pipes (both those with internal, DN/ID, or external DN/OD normalised diameters) working with couplings on manholes, for inspection wells, or drains.

The simplicity of use and the great adaptability that the **THE SIMPLE CROWN TECHNICAL COUPLING** makes it perfectly suitable for use with PVC in PEHD, in PP, with either structured or smooth pipe walls.

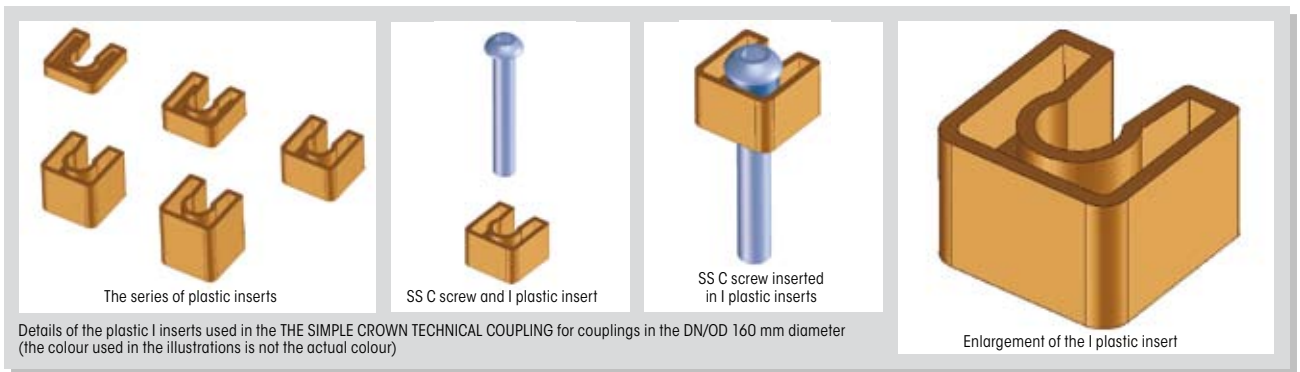
The high quality materials with which the **THE SIMPLE CROWN TECHNICAL COUPLING** has been made (body, flange and seat in PP, parts in rubber in EPDM and steel fasteners), ensure a strong hydrostatic seal and excellent technical and physical performance.

THE SIMPLE CROWN TECHNICAL COUPLING is available in DN/OD 160 diameter (usable for coupling to pipes in PVC, PEHD or PP with structured or solid wall pipe with DN/OD or DN/ID diameters from 250 mm to 1200 mm) or in the diameter DN/ID 200 dedicated to KINGCOR RICCINI structured wall pipes in PP from 300 mm to 1000 mm internal diameter DN/ID.

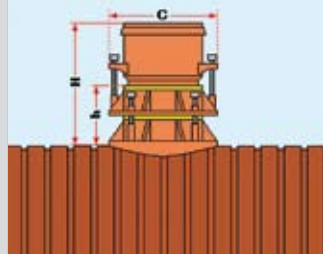
In the case of the **THE SIMPLE CROWN TECHNICAL COUPLING** with DN/OD 160 diameter, the broad range of uses is ensured by the specific use of plastic inserts I to be positioned under the stainless steel (SS) screws C (see Fig 1 to the side and Table 1 on the page to the right).



Exploded diagram of the SIMPLE CROWN TECHNICAL COUPLING for graphic simplicity, the coupling to a pipe has been shown; other possible applications are illustrated in Fig.3. For use of the plastic inserts I (when necessary) see Table 1.



MAXIMUM DIMENSIONS FOR THE SIMPLE CROWN TECHNICAL COUPLING

	DN SIMPLE CROWN TECHNICAL COUPLING	H (mm) maximum height above the pipe profile with socket	h (mm) maximum height above the pipe profile without socket	C (mm) maximum dimensions along the longitudinal axis of the pipe
	DN/OD 160 (CODE 54SC160...)	240	145	245
DN/ID 200 (CODE 54SC200...)	260	130	310	

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Table 1

FOR COUPLINGS WITH EXTERNAL DIAMETER DN/OD 160 mm

For how to choose and for couplings on pipes with external DN/OD less than 160 mm see the note at the foot of the table.

Types of pipes on which to apply couplings with external diam. DN/OD 160 mm. using the SIMPLE CROWN TECHNICAL COUPLING			SIMPLE CROWN TECHNICAL COUPLING to be used (for DN/OD 160 mm couplings)	
 <p>Pipe with structured WALL normalized on INTERNAL DIAM DN/ID (e.g. KINGCOR standard UNI EN 13476-3)</p>	 <p>Pipe with SOLID WALL normalized on EXTERNAL DIAM. DN/OD (e.g. PVC Pipe STANDARD UNI EN1401-1) or normalized triple layer wall on INTERNAL DIAM. DN/ID (e.g. KINGCOR STANDARD UNI EN 13476-2)</p>	 <p>pipe with structured WALLS normalized on EXTERNAL DIAM DN/OD (e.g. PE PIPE STANDARD UNI EN 13476-3)</p>		
Pipe diameter and insert size	Pipe diameter and insert size	Pipe diameter and insert size	CODE	Price €/each
250 mm DN/ID 10 mm I insert	250/315 mm DN/OD 250/300 mm DN/ID I insert not necessary	250/315 mm DN/OD 15 mm I insert	54SC160250	105,00
300 mm DN/ID 10 mm I insert	400 mm DN/OD 400 mm DN/ID I insert not necessary	400 mm DN/OD 20 mm I insert	54SC160300	105,00
400 mm DN/ID 20 mm I insert	500 mm DN/OD 5 mm I insert	500 mm DN/OD 20 mm I insert	54SC160400	105,00
500 mm DN/ID 25 mm I insert	630 mm DN/OD 5 mm I insert	630 mm DN/OD 25 mm I insert	54SC160500	130,00
600 mm DN/ID I insert not necessary	-	800 mm DN/OD 20 mm I insert	54SC160600	130,00
800 mm DN/ID I insert not necessary	-	1000 mm DN/OD 5 mm I insert	54SC1608010	130,00
1000 mm DN/ID 20 mm I insert	-	1200 mm DN/OD 20 mm I insert	54SC1608010	130,00

See also the usage labels (an example is shown to the right)"





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Table 2

FOR CONNECTION OF KINGCOR PIPES WITH INSIDE DIAMETER DN/ID 200 mm

For connection to 200 mm DN/OD outside diameter pipes see the note at the foot of the table

 KINGCOR RICCI NI normalized pipe on INTERNAL DIAM. DN/ID (UNI EN 13476-3 STANDARD)	DIAMETER	DN/ID 300 mm	DN/ID 400 mm	DN/ID 500 mm	DN/ID 600 mm	DN/ID 800/1000 mm
		For SIMPLE CROWN TECHNICAL COUPLING with DN/ID 200mm, connection the I inserts are not necessary.				
 simple crown technical coupling to be used (for connections to DN/ID 200 mm)	Price €/each	105,00	105,00	130,00	130,00	130,00
	CODE	54SC200300	54SC200400	54SC200500	54SC200600	54SC2008010

Note: besides the KINGCOR RICCI NI pipes with an internal diam. DN/ID 200 mm, it is possible to also connect pipe with an external diam DN/OD 200 mm; in this case the proper transition is required (item code 54ATO200200 - KINGCOR RICCI NI price list). The transition may be coupled on the socket A (see Fig.1) or used replacing the same, reducing the overall dimensions.

HOLE CUTTER FOR SIMPLE CROWN TECHNICAL COUPLING

Table 3

	CODE	Price €/each	SIMPLE CROWN TECHNICAL COUPLING WHERE A HOLE CUTTER IS USED	NOTE: When using the hole cutter it is suggested that the ASSEMBLY INSTRUCTIONS contained in each package of SIMPLE CROWN TECHNICAL COUPLING
	54SC160FRE	230,00	54SC160... FOR COUPLINGS DN/OD 160 mm	
	54SC200FRE	256,00	54SC200... FOR COUPLINGS DN/ID 200 mm	

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REGULATORY REFERENCES

Table 4

THE SIMPLE CROWN TECHNICAL COUPLING undergoes severe test inspections, which involve the whole unit and all of its main components. Testing is performed according to the testing standards and methods summarised in the table

STANDARD	DESCRIPTION
UNI EN 681-1 WC	This is the standard that established the requirements that must be satisfied by the elastomer materials used by the sealing components (gaskets)
UNI EN 1277	Test method in compliance with the UNI EN 13476-1 Standard for the determination of the hydrostatic seal according to the methods below: - Method 1: test with internal hydrostatic pressure of 0.05 bar - Method 2: test with internal hydrostatic pressure of 0.5 bar - Method 3: test with internal negative air pressure of -0.3 bar

In addition, even in the absence of a specific standard, RICCINI S.r.l. has adopted a specific test method based on performance.

DETACHMENT RESISTANCE TEST

THE SIMPLE CROWN TECHNICAL COUPLING to be tested is placed in coupling with a pipe of DN/OD 160 or DN/ID 200 (depending on the unit to be tested) and a structured wall pipe in PP with DN/ID 400. a 200 kg load is applied perpendicularly above the coupled bar 1500 mm from the THE SIMPLE CROWN TECHNICAL COUPLING being tested with a single COUPLING support and a test bench at the end of the coupled bar.

The test has a positive outcome if, after bearing the load for 180 minutes there is a COMPLETE LACK OF ANY DETACHMENT MOVEMENT.
(See also Fig.2)

SPECIFICATIONS ITEM

SIMPLE CROWN MECHANICAL COUPLING FOR CONNECTION OF SECONDARY UTILITIES TO DN/OD/ID.....ON STRUCTURED WALL SEWER SYSTEM PIPES NOT UNDER PRESSURE DN/OD/ID.....

Delivery and installation of in line mechanical coupling on a type pipe for the connection to the main sewer line, not under pressure, of utilities by way of inlet hole made in finished infrastructure pipe.

The coupling must be made up of:

- Cylindrical elastomer gasket, fitted with a shaped lip that guarantees hydrostatic seal on the smooth inside wall of the main pipe which is made solid by way of a seat and a tension flange connected one to the other with stainless steel screws;
- Socket tang in PP to be inserted in the cylindrical gasket and to be attached using self-threading screws on the tension flange.

The cylindrical gasket seal must be made of EPDM. The hydrostatic seal for the connection to the secondary pipes on the mechanical coupling must be ensured by a specific elastomer gasket with a lip, made of EPDM according to the UNI EN 681/1 WC Standard and located in the preformed seat of the coupling socket.

The mechanical coupling, manufactured by an ISO 9001:2008 certified manufacturer, is RAL8023 brown in colour in its PP components whilst its cylindrical elastomer gasket seal is yellow.

In addition the coupling must have, upon request of the client, with its respective test inspection certification or declaration of conformity to the following standards/tests:

- Hydrostatic seal test of the coupling system pursuant to UNI EN 13476-1 performed according to UNI EN 1277, with internal hydrostatic pressure of 0.05 bar and of 0.5 bar and with a negative internal air pressure of (depression) 0.3 bar for 15 minutes;
- Compliance of the corporate quality system with UNI EN ISO 9001:2000

Fig.2



DETACHMENT RESISTANCE TEST:

In the illustrations to the left one may view the 200 kg load applied to the coupling (upper photo) and, as well an overview of the performance phases of the test (lower photo)

To the right: the illustration shows both the seal that the F gasket provides inside of the pipe (or the sump or other system), and the profile designed so as to not obstruct the flow inside of the line.



The photo to the left shows the inside of the A socket with the elastomer gasket provided (ref. Fig. 1).

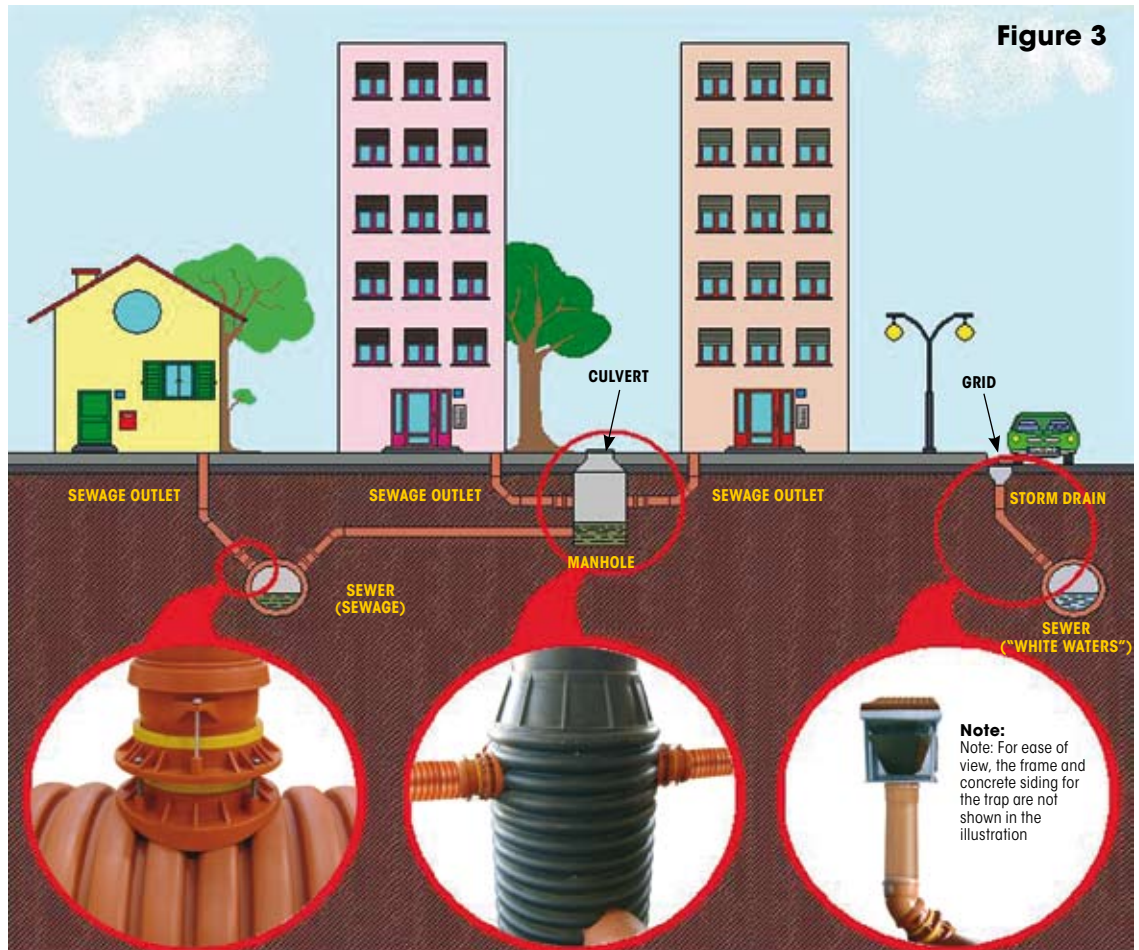
HYDROSTATIC SEAL TEST PURSUANT TO UNI EN 1277:
In the illustrations below one may see the THE SIMPLE CROWN TECHNICAL COUPLING ready for the test and some illustrations of the test apparatus Fig.2



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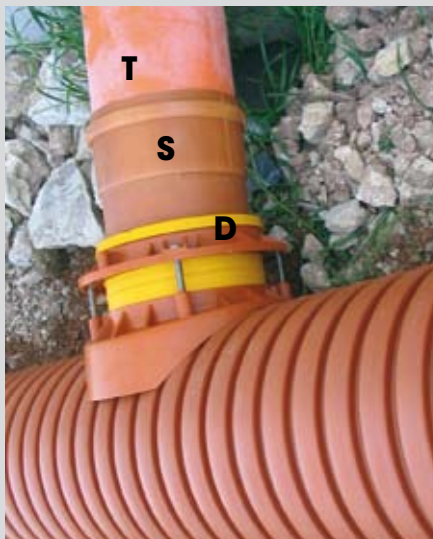
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EXAMPLES OF POSSIBLE APPLICATIONS FOR THE SIMPLE CROWN TECHNICAL COUPLING



The illustration is purely exemplary; therefore the graphic and design conventions normally used are not comparable. The illustration only proposes a schematic rendering of some possible applications of the SIMPLE CROWN TECHNICAL COUPLING. The flexibility of the product enables, in many cases, the design of highly customised approaches.

OTHER POSSIBLE APPLICATIONS



To the left:
transition application code
54AT200200 for connection to a
DN/OD 200mm diameter pipe; note
how the coupling was made without
the socket **A** (see Note in Table 2)
In the picture you can see the pipe
T, the transition **S** and the tension
flange **D**.

To the right:
SIMPLE CROWN TECHNICAL COU-
PLING used to make an inspection
well along a sewage line.





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