

HEROULTEC

Precast connection solution



Dextra

www.dextragroup.com

Product features

Groutec is a mechanical splicing system with one threaded end specially designed for the connection of pre-cast concrete elements. Designed and manufactured in compliance with Eurocode 2, BS 8110, ACI 318, IBC, AASHTO.

Typically, the bars connected on the threaded side and the cavity side are of the same diameter. However, Groutec can also be used to make a transition between rebar of different sizes. Please refer to our installation instructions for the list of possible combinations.

Benefits

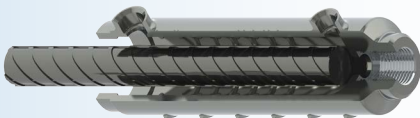
- Ability to easily connect two precast elements with no requirement for in situ wet concrete joint.
- Compact economical splicing solution with one threaded end compatible with either Bartec, Fortec, Rolltec or Griptec bars.
- Can be used with non-shrink grouting mortars easily available from major manufacturers. Groutec has been successfully tested with Sika214 from SIKA Co, Lanko 701 from PAREX-DAVCO Co, Cemrok EasiFlow from POZAMENT or Conbextra GP from FOSROC Co*.
- Allows connection of continuation bars that are not perfectly aligned: Misalignments of up to 12mm for small bars (Ø12-Ø20), up to 20 mm for medium bars (Ø25) and up to 25 mm for large bars (Ø28-Ø40) can be accommodated.
- The same coupler model can also be used for the connection of different diameters (transition splices).

Note *: Dextra is not the owner of the brands mentioned here. These protected trademark rights remain the entire exclusivity of their respective owners and are only mentioned here as a reference in relation with Dextra products.

Two alternative designs

Groutec L

for « Large tolerance », aims at easing your site operation by allowing a larger axial misalignment tolerance.



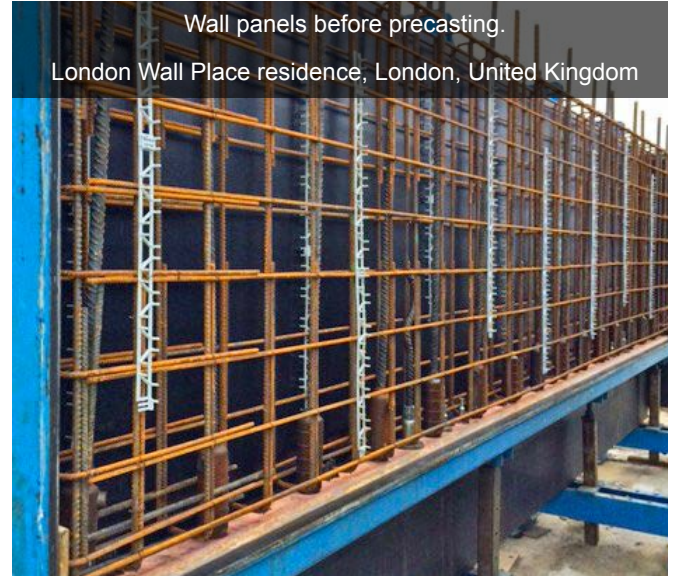
Groutec L
« Large tolerance »

Groutec S

for « Slim body », allows pre-caster willing to work with tighter tolerances to create slim columns and panels. On the same diameter, your grout consumption is also reduced.



Groutec S
« Slim outside diameter »



Wall panels before precasting.

London Wall Place residence, London, United Kingdom



Piperack columns before assembly.
Jamanagar Refinery, Gujarat, India



Shear wall panels during bracing.
Pending protruding bars visible at the bottom.
The Plum Residence, Bangkok, Thailand

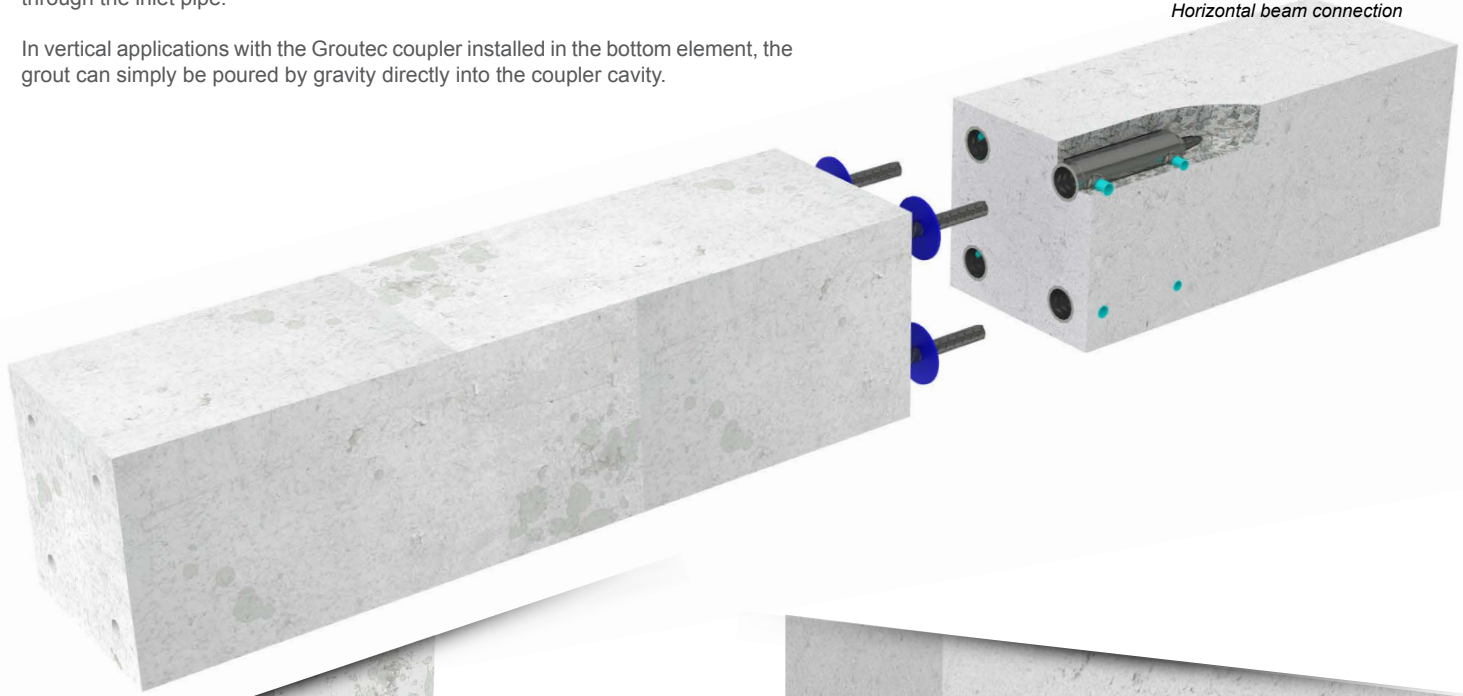
Applications

Grouotec is designed to connect wall or column precast elements either horizontally and vertically.

In horizontal applications, and in vertical applications with the Grouotec coupler installed in the top element, the connection is achieved by injecting the grout through the inlet pipe.

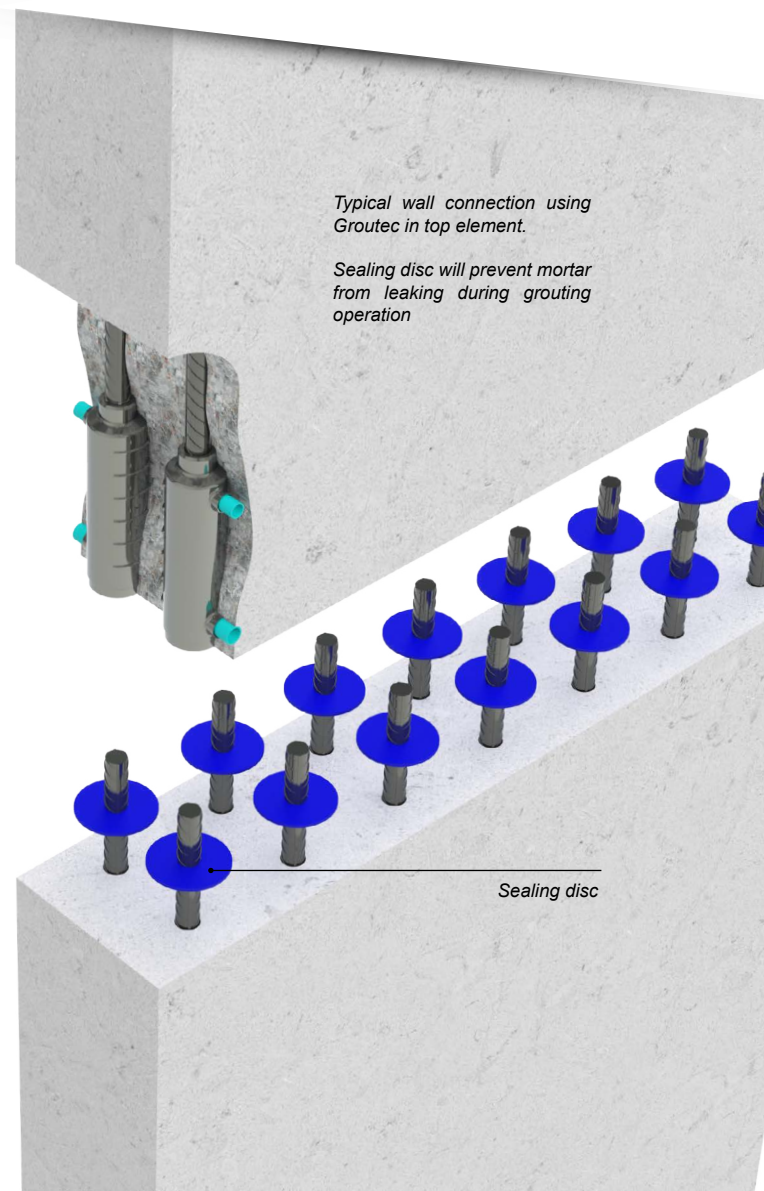
In vertical applications with the Grouotec coupler installed in the bottom element, the grout can simply be poured by gravity directly into the coupler cavity.

Horizontal beam connection



Typical wall connection using Grouotec in top element.

Sealing disc will prevent mortar from leaking during grouting operation



Column connection using Grouotec in the bottom element.

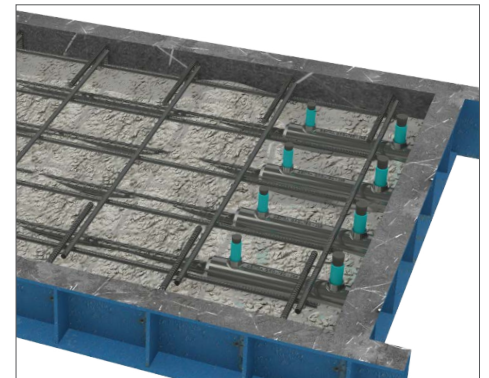
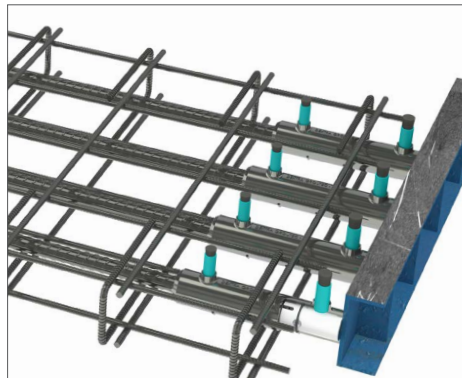
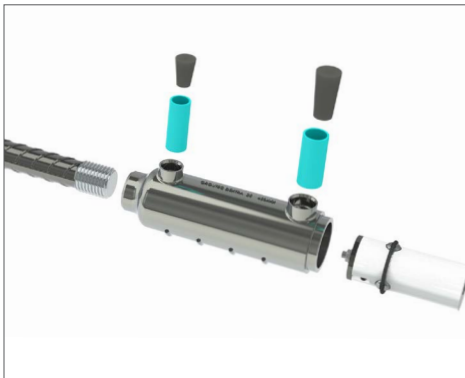
In that case, the use of injection tubes is not necessary. Grouting can simply be done by pouring mortar into the cavity.



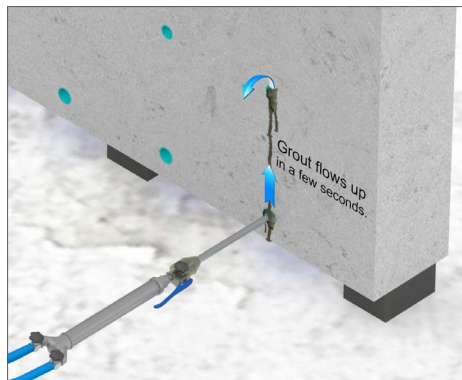
Sealing disc

Installation sequence

- 1 Preposition Groutec onto the formwork thanks to the positioner. Screw in the threaded rebar.
- 2 Proceed with the installation of the rest of the reinforcement.
- 3 Proceed with casting. Once ready, open the formwork. Remove plugs and positioners.

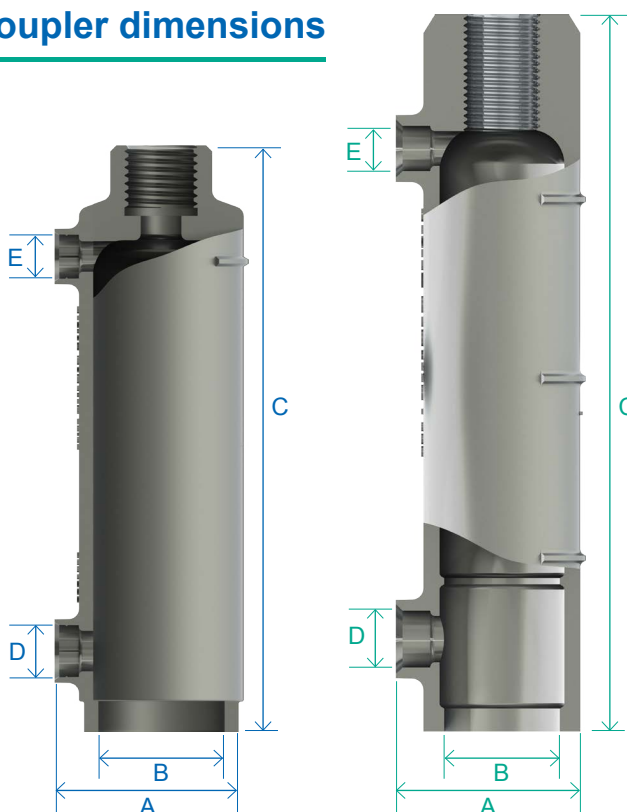


- 4 Transport panel to their final position. Position panel above dowel bars, straighten and brace.
- 5 Inject standard non-shrinking grout. Seal the coupler with plugs when grout overflows.
- 6 Bracing can be removed after drying time (usually about 3 days).



For more detailed installation instructions and design instructions, please check www.dextragroup.com.

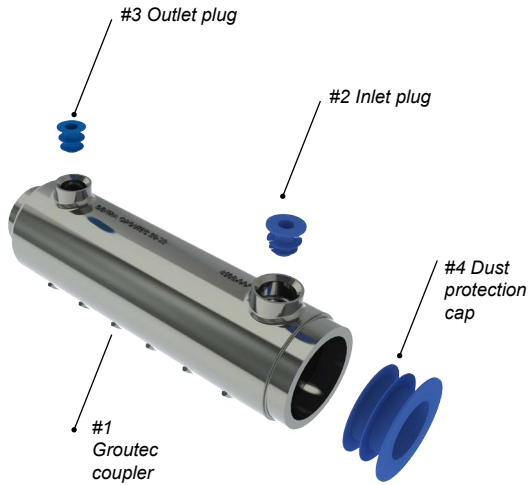
Coupler dimensions



Model	Bar size	A	B	C	D	E
	mm	mm	mm	mm	mm	mm
Groutec L	12	73	44	182	25	20
	16	73	44	182		
	20	77	48	195		
	25	80	50	220		
	28	93	62	290		
	32	93	62	290		
Groutec S	40	107	72	340	25	20
	12	52	25	155		
	16	57	30	184		
	20	61	34	204		
	25	67	40	240		
	32	80	50	310		
	40	95	60	377		

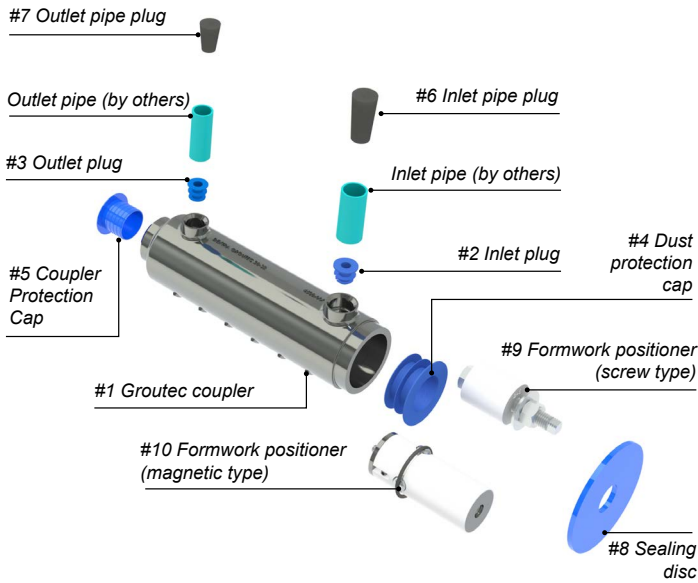
Coupler order codes

Protection accessories coming on couplers. Can also be delivered separately.



Coupler (#1)	Bar size (mm)	Compatible with Bartec and Fortec threaded bars	Compatible with Griptec threaded bars	Compatible with Rolltec threaded bars
Grouotec L	12	FPPC1214201	FPPC1214201	FPPC1213153
	16	FPPC1620251	FPPC1618255	FPPC1617173
	20	FPPC2024301	FPPC2022255	FPPC2021203
	25	FPPC2530351	FPPC2527305	FPPC2526253
	28	FPPC2833351	FPPC2830355	FPPC2829303
	32	FPPC3236401	FPPC2833351	FPPC3233303
Grouotec S	40	FPPC4045451	FPPC4042455	FPPC4041303
	12	FPPC1214207	FPPC1214207	FPPC1213157
	16	FPPC1620257	FPPC1618257	FPPC1617177
	20	FPPC2024307	FPPC2022257	FPPC2021207
	25	FPPC2530357	FPPC2527307	FPPC2526257
	32	FPPC3236407	FPPC3233357	FPPC3233307
40	FPPC4045457	FPPC4042457	FPPC4041307	

Optional accessories available upon request



Model	Bar size (mm)	Formwork Positioner		Dust Protection Cap (#4)
		Screw type (#9)	Magnetic type (#10)	
Grouotec L	12	GACC2090007	GACC2090012	GACC0990009
	16	GACC2090007	GACC2090012	GACC0990009
	20	GACC2090008	GACC2090013	GACC0990010
	25	GACC2090009	GACC2090014	GACC0990006
	28	GACC2090010	GACC2090015	GACC0990001
	32	GACC2090010	GACC2090015	GACC0990001
Grouotec S	40	GACC2090011	GACC2090016	GACC0990002
	12	GACC2090027	GACC2090050	GACC0990018
	16	GACC2090028	GACC2090051	GACC0990019
	20	GACC2090029	GACC2090052	GACC0990020
	25	GACC2090030	GACC2090053	GACC0990021
	32	GACC2090033	GACC2090054	GACC0990006
40	GACC2090034	GACC2090055	GACC0990001	

Bar size (mm)	Coupler Protection Cap (#5)			Sealing disc (#8)
	Bartec & Fortec threads	Griptec threads	Rolltec threads	
12	GMEC0002808		GMEC0010919	GMEC0900143
16	GMEC0002818	GMEC0002817		GMEC0900147
20	GMEC0002820	GMEC0002819		GMEC0900153
25	GMEC0002822	GMEC0002821		GMEC0900145
28	GMEC0002823	GMEC0002822		GMEC0900142
32	GMEC0002824	GMEC0002823		GMEC0900154
40	GMEC0002827	GMEC0002826		GMEC0900141

Bar size (mm)	Inlet plug (#2)	Outlet plug (#3)
All models	GACC0990011	GACC0990012

Bar size (mm)	Inlet pipe plug (#6)	Outlet pipe plug (#7)
All models	GACC2090002	GACC2090001

Traceability

All Groutec couplers are marked with a code that includes the batch number, allowing Dextra to retrieve, among other data, the following information :

- the material certificate
- the QC inspection report
- the product test report
- the mould number

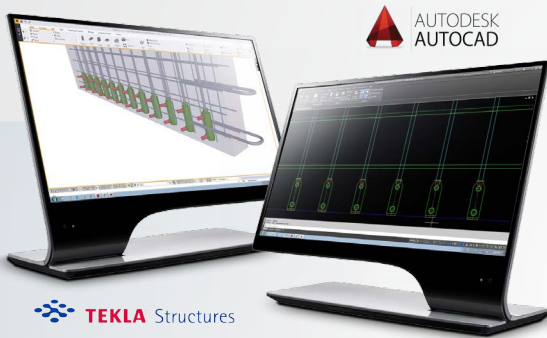


CAD & BIM

All Groutec couplers are available from www.dextragroup.com website to download in the following formats:

- AutoCAD palette tool.
- Tekla attributes for "Rebar Anchor" tool.
- Revit 2017 Product family.

For other formats, please consult us cadbim@dextragroup.com



AUTODESK
AUTOCAD

TEKLA Structures

Packing

Groutec products are packed in wooden crates that can be lifted by a forklift. All products must be stored under a roof and protected from the elements.

Please ensure that order quantities are a multiple of the packaging quantities stated in the table.

Model	Bar size (mm)	Qty (pcs)	Unit weight (kg)	Net weight (kg)	Gross weight (kg)
Groutec L	12	500	1.5	750	800
	16	500	1.5	750	800
	20	400	1.8	720	770
	25	300	2.4	720	770
	28	200	4.3	860	925
	32	200	4.3	860	925
Groutec S	40	125	6.7	838	903
	12	200	0.8	163	188
	16	200	1.1	220	245
	20	250	1.4	340	379
	25	200	2.0	395	434
	32	250	3.8	958	1,018
	40	100	7.0	702	750

Note: The weight of the crates may vary depending on ambient humidity.

Commercial presence in more than 55 countries.



HEADQUARTERS THAILAND
Dextra Manufacturing Co., Ltd.
Tel: (66) 2 021 3800
Fax: (66) 2 328 0374
E-mail: thailand@dextragroup.com



EUROPE
Dextra Europe SARL.
Tel: (33) 1 45 53 70 82
Fax: (33) 1 47 04 28 97
E-mail: europe@dextragroup.com



NORTH AMERICA
Dextra America Inc.
Tel: (1) 805 915 4734 / 818 261 5166
E-mail: america@dextragroup.com



HONG KONG
Dextra Pacific Ltd.
Tel: (852) 2845 7766 / 2511 8236
Fax: (852) 2586 1656 / 2519 0852
E-mail: dplbuilding@dextragroup.com



MIDDLE EAST
Dextra Middle-East FZE
Tel: (971) 4886 5620
Fax: (971) 4886 5621
E-mail: middleeast@dextragroup.com



LATIN AMERICA
Dextra Latam
Tel: (507) 6454 8100 / 831 1442
E-mail: latam@dextragroup.com



CHINA
Dextra Building Products (Guangdong) Co., Ltd.
Tel: (86) 20 2261 9901
Fax: (86) 20 2261 9902
E-mail: china@dextragroup.com



INDIA
Dextra India Pvt. Ltd.
Tel: (91) 22 2839 2694
Fax: (91) 22 2839 2674
E-mail: india@dextragroup.com



SOUTH AMERICA
Dextra do Brasil
Tel: (55) 11 5505 2475 / 11 5505 2477
E-mail: brasil@dextragroup.com



Dextra

www.dextragroup.com