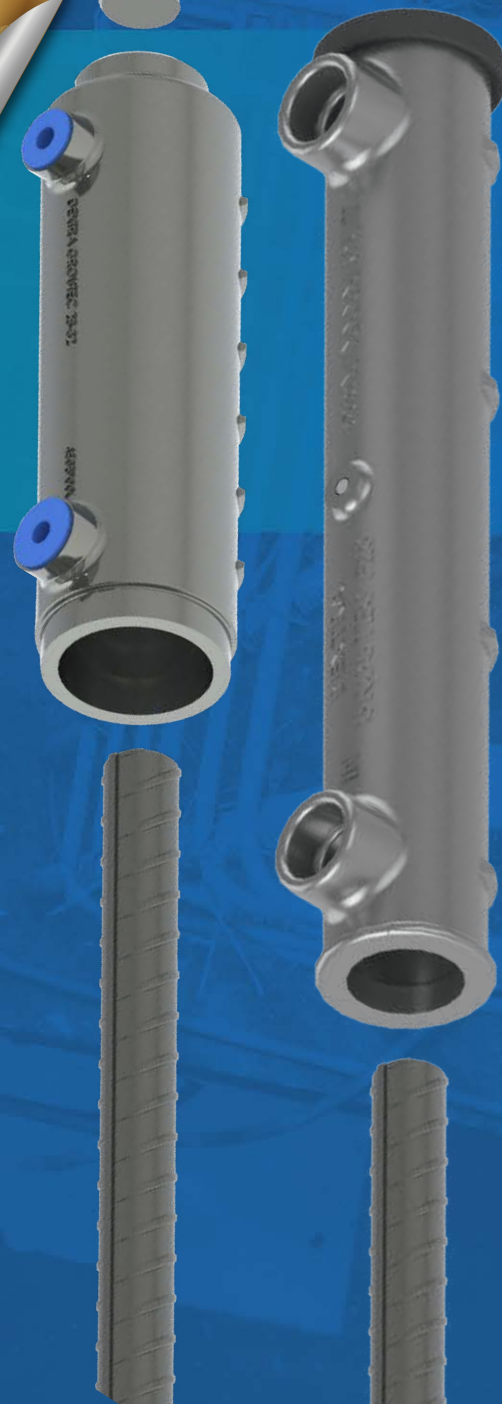


PRODUCT DATASHEET

Groutec S,L and F Datasheet PDS-010 Rev.12_en June 2023



CONTENT

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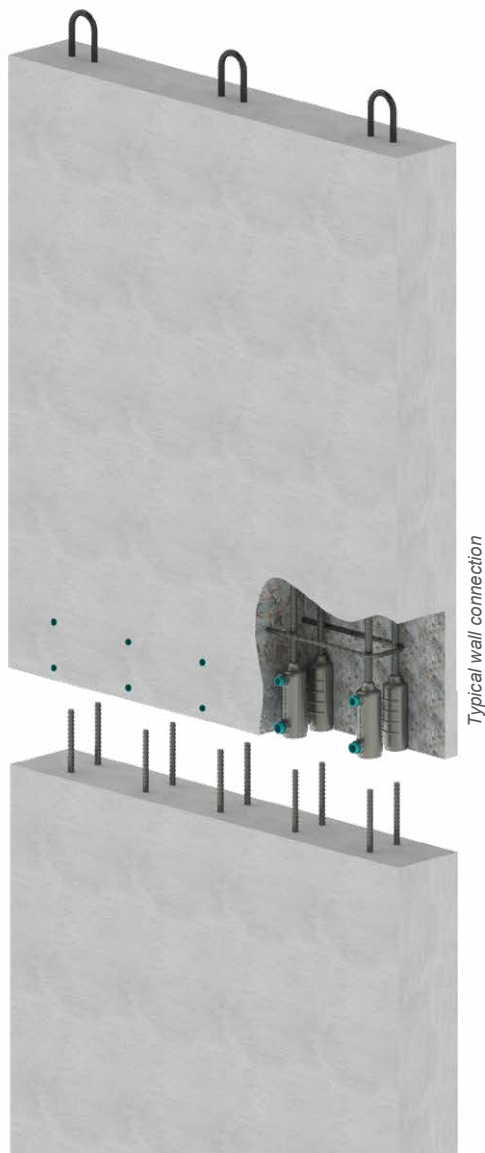
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Product description

Grouotec is a mechanical splicing system designed for the connection of precast concrete elements. Grouotec splice comply with Eurocode 2, ISO 15835, ACI 318 type 2, IS16172 and AASHTO code requirements*. Grouotec L and S sleeves are suitable for metric ribbed reinforcing bars up to grade 500 and ASTM A615/A706 grade 60 bars. Grouotec F sleeves can be used for splicing of metric ribbed reinforcement bar up to grade 600 and ASTM A615/A706 bars up to grade 80. For the use with higher grade bars please contact your Dextra representative for consultation.

Splicing is usually done in two steps: the Grouotec sleeve is first fixed onto the reinforcement prepared at the precast factory, installed flush with the formwork, after which the element is concreted.

The connection is then completed at the construction site, where the precast element is positioned next to the adjacent element so that its protruding bars enter the cavities inside the Grouotec sleeves. The cavities are then filled with grout, either by gravity or by means of a grouting pump.



* For Grouotec L and F rebar diameter greater than 36mm and Grouotec S rebar diameter greater than 32mm evaluation with specific grout is required to confirm compliance with some applicable standards.



Grouotec sleeves have been designed to work with grouts commonly-available on the market place. Grouts must be cementitious non-shrink types, with a minimum compressive strength of 65 MPa.

Three alternative models are available.

Grouotec L, a half-grouted sleeve with one threaded end, has a wide body allowing for more tolerance for the connection of two precast elements.

Grouotec S, a half-grouted sleeve with one threaded end, has a slim body and may be used in compact applications such as slim panels or narrow columns.

Grouotec F, a full grouted sleeve without any threaded end, used for the connection of precast elements.

Grouotec has been tested with grouts from major manufacturers such as Sika, Parex, Davco, Fosroc, BASF and Mapei which have a worldwide distribution network. However, attention is raised to the fact that such cement-based products are often produced locally from local raw materials, and that their properties vary depending not only on their origin, but also on climate conditions.

For first-time users, we strongly recommend that prior tests be carried to confirm the suitability of the selected grout.

Email us at thailand@dextragroup.com for any assistance.

CAD & BIM

CAD & BIM tools to support design engineers in the drawing and modeling of structures are available in the download section of www.dextragroup.com

For designer tools support, contact us at: cadbim@dextragroup.com



Sleeve dimensions

Grouotec is available in three versions:

- **Grouotec L**, which allows for larger misalignment tolerances thanks to a wide cavity.
- **Grouotec S**, which accommodates slim panels and narrow columns thanks to a more compact design.
- **Grouotec F**, which allows for the connection without the need of thread end.

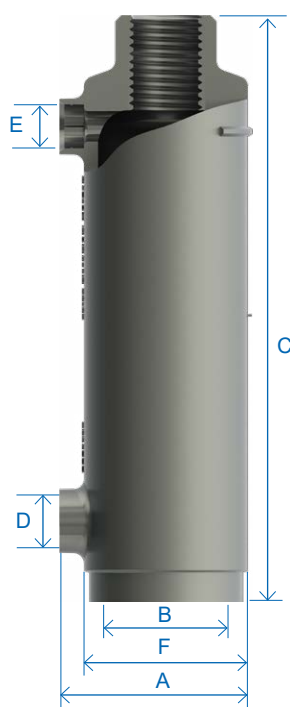
For all models and all rebar diameters, the inlet & outlet holes are designed to fit with PE pipes (PE80/PN12.5) as per ISO 4427-2 and EN12201-2:2003 standards.

For one rebar diameter, different thread sizes are possible depending on whether BARTEC/FORTEC or ROLLTEC is used. It is therefore necessary to indicate the rebar diameter together with the system used to thread it (BARTEC / FORTEC or ROLLTEC).

Standard splices



Grouotec L
« Large tolerance »



Model	Bar size		Thread type	Product code	A	B	C	D	E	F
	mm	US			mm	mm	mm	mm	mm	mm
L12-16	12	#4	Bartec Fortec	FPPC1214201	73	44	182	25	20	61
	14	-		FPPC1216201	73	44	182			61
	16	#5		FPPC1620251	73	44	182			61
L20-22	18	-		FPPC2022251	77	48	195			65
	20	#6		FPPC2024301	77	48	195			65
	22	#7		FPPC2027301	77	48	195			65
L25	25	#8		FPPC2530351	80	50	220			68
L28-32	28,30	#9		FPPC2833351	93	62	290			81
	-	#10		FPPC3236301	93	62	290			81
	32	-		FPPC3236401	93	62	290			81
L40	34	#11		FPPC4039401	107	72	340			95
	36,38	#12		FPPC3642451	107	72	340			95
	40	-		FPPC4045451	107	72	340			95
L12-16	12	#4	Rolltec	FPPC1213153	73	44	182	25	20	61
	-	#5		FPPC1216201	73	44	182			61
	16	-		FPPC1617173	73	44	182			61
L20-22	-	#6		FPPC2020251	77	48	195			65
	20	-		FPPC2021203	77	48	195			65
	-	#7		FPPC2022251	77	48	195			65
L25	24	#8		FPPC2525251	80	50	220			68
	25	-		FPPC2526253	80	50	220			68
	26	-		FPPC2527301	80	50	220			68
L28-32	28	#9		FPPC2829303	93	62	290			81
	30	-		FPPC3230251	93	62	290			81
	32	#10		FPPC3233303	93	62	290			81
L40	-	#11		FPPC4036301	107	72	340			95
	36	-		FPPC3637301	107	72	340			95
	38	#12		FPPC4039301	107	72	340			95
	40	-		FPPC4041303	107	72	340			95

Table 1: Dimensions of Grouotec L sleeves.



Groutec S

» Slim outside diameter «

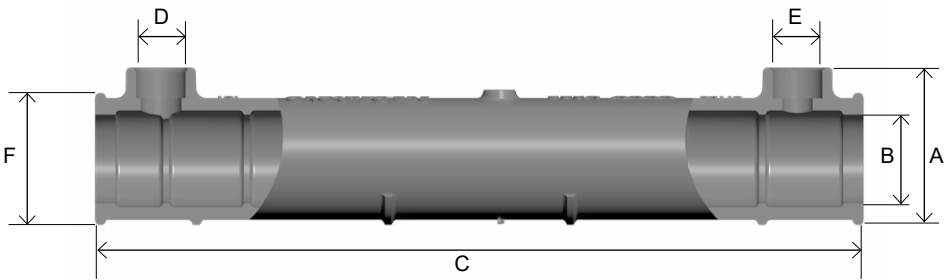


Model		Bar size		Thread type	Product code	A	B	C	D	E	F	
		mm	US			mm	mm	mm	mm	mm	mm	
Groutec S	S12	12	#4	Bartec Fortec	FPPC1214207	52	25	155	25	20	39	
		14	-		FPPC1216207	52	25	155			39	
	S16	16	#5		FPPC1620257	57	30	184			44	
	S20	18	-		FPPC2022257	61	34	204			48	
		20	#6		FPPC2024307	61	34	204			48	
	S25	22	#7		FPPC2527307	67	40	240			55	
		25	#8		FPPC2530357	67	40	240			55	
	S28	28, 30	#9		FPPC2833354	74	46	273			62	
	S32	-	#10		FPPC3236307	80	50	310			68	
		32	-		FPPC3236407	80	50	310			68	
	S40	34	#11		FPPC4039407	95	60	377			83	
		36			FPPC4042457	95	60	377			83	
		38	-		FPPC4042457	95	60	377			83	
		40	-		FPPC4045457	95	60	377			83	
	Groutec S	S12	12	#4	Rolltec	FPPC1213157	52	25	155	25	20	39
			14	-		FPPC1215177	52	25	155			39
		S16	-	#5		FPPC1616207	57	30	184			44
			16	-		FPPC1617177	57	30	184			44
			18	-		FPPC1619257	57	30	184			44
		S20	-	#6		FPPC2020257	61	34	204			48
20			-	FPPC2021207		61	34	204	48			
S25		-	#7	FPPC2522257		67	40	240	48			
		22	-	FPPC2524307		67	40	240	48			
		24	#8	FPPC2525257		67	40	240	55			
		25	-	FPPC2526257		67	40	240	55			
S25		26		FPPC2527307		67	40	240	55			
		S28	28	#9		FPPC2829304	74	46	273			62
S32		30	-	FPPC3030254		74	46	273	62			
		32	#10	FPPC3233307		80	50	310	68			
S40		-	#11	FPPC4036307		95	60	377	83			
		36		FPPC4037307		95	60	377	83			
		38	#12	FPPC4039307		95	60	377	83			
		40	-	FPPC4041307		95	60	377	83			

Table 2: Dimensions of Groutec S sleeves.



Groutec F
-Fully grouted-



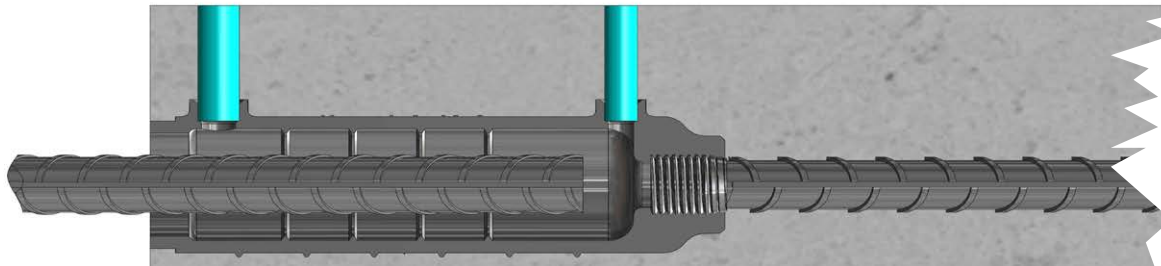
Model		Bar size		Product code	A	B	C	D	E	F
		mm	US		mm	mm	mm	mm	mm	mm
Groutec F	F16	12,16	#4,#5	FPPC1600004	64	32	310	25	25	51
	F20	18,19,20	#6	FPPC2000004	68	36	330			55
	F22	22	#7	FPPC2200004	73	41	380			60
	F25	24,25,26	#8	FPPC2500004	78	44	380			65
	F28	28,29	#9	FPPC2800004	83	48	460			70
	F32	32	#10	FPPC3200004	88	51	500			75
	F36	34,36	#11	FPPC3600004	98	55	580			81
	F40	40,43	#14	FPPC4000004	103	62	600			90

Table 3: Dimensions of Groutec F sleeves.

Transition splices

Transition splicing : L & S

Small diameter rebar threaded connection and large diameter rebar grouted connection / injection grouting.



Model		Type of thread	Rebar diameter				Product Code
			Larger bar (grouted)		Smaller bar (threaded)		
			mm	US	mm	US	
Groutec L	L12-16	Bartec Fortec	14,16,18,20	#5, #6	12	#4	FPPC1214201
			18,20	#6	16	#5	FPPC1620251
	L20-22		22,25	#7,#8	20	#6	FPPC2024301
			25	#8	22	#7	FPPC2027301
	L25		28,30, 32	#9,#10	25	#8	FPPC2530351
			L28-32	32,34,36,38, 40	#10,#11,#12	28,30	#9
	-			#11,#12	-	#10	FPPC3236301
	34,36,38,40			-	32	-	FPPC3236401
	36,38,40			#12	34	#11	FPPC4039401
	L40		40	-	36,38	-	FPPC3642451
		Rolltec	L12-16	14,16,18,20	#5, #6	12	#4
	-			#6	-	#5	FPPC1216201
	L20-20		18,20	-	16	-	FPPC1617173
			-	#7,#8	-	#6	FPPC2020251
			22,24,25,26	-	20	-	FPPC2021203
			-	#8	-	#7	FPPC2022251
	L25		24,25,26	-	22	-	FPPC2024301
			25,26,28,30	#9,#10	24	#8	FPPC2525251
			26,28,32	-	25	-	FPPC2526253
			28,30,32	-	26	-	FPPC2527301
	L28-32		30,32,36,38,40	#10,#11,#12	28	#9	FPPC2829303
			32,36,38,40	-	30	-	FPPC3230251
	L40		36,38,40	#11,#12	32	#10	FPPC3637301
			-	#12	-	#11	FPPC4036301
			40	-	36	-	FPPF3637301
			40	-	38	-	FPPC4039301

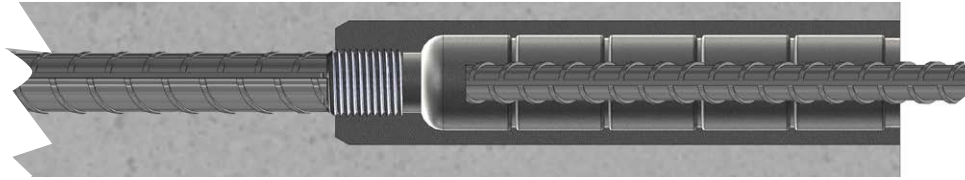
Table 4: Rebar cutting lengths of Bartec / Fortec and Rolltec thread, transition splices using injection grouting method for Groutec L.

Model		Type of thread	Rebar diameter				Product Code
			Larger bar (grouted)		Smaller bar (threaded)		
			mm	US	mm	US	
Groutec S	S12	Bartec Fortec	14	-	12	-	FPPC1214207
	S16		18,20	#6	16	#5	FPPC1620257
	S20		20,22,25	-	18	-	FPPC2022257
			22,25	#7,#8	20	#6	FPPC2024307
	S25		25	#8,#9	22	#7	FPPC2527307
			28,30	#9	25	#8	FPPC2530357
	S32		32,34,36	#10,#11	28,30	#9	FPPC3233357
			-	#11,#12	-	#10	FPPC3236307
			34,36,38	-	32	-	FPPC3236407
	S40		36,38,40	#12	34	#11	FPPC4039407
		40	-	36,38	-	FPPC4042457	
	S12	Rolltec	14	-	12	-	FPPC1213157
	S16		-	#6	-	#5	FPPC1616207
			18,20	-	16	-	FPPC1617177
			20	-	18	-	FPPC1619257
	S20		-	#7,#8	-	#6	FPPC2020257
			22,24,25	-	20	-	FPPC2021207
	S25		-	#8,#9	-	#7	FPPC2522257
			24,25,26,28	-	22	-	FPPC2524307
			25,26,28	#9	24	#8	FPPC2525257
			26,28	-	25	-	FPPC2526257
			28	-	26	-	FPPC2527307
			30,32, 36	#10	28	#9	FPPC3229307
	S32		32,36	-	30	-	FPPC3230257
			36	#11	32	#10	FPPC3233307
	S40		-	#12	-	#11	FPPC4036307
			38,40	-	36	-	FPPC4037307
			40	-	38	-	FPPC4039307

Table 5: Rebar cutting lengths of Bartec / Fortec and Rolltec thread, transition splices using injection grouting method for Groutec S.

Transition splicing : L & S

Large diameter rebar threaded connection and small diameter rebar grouted connection / Gravity grouting.



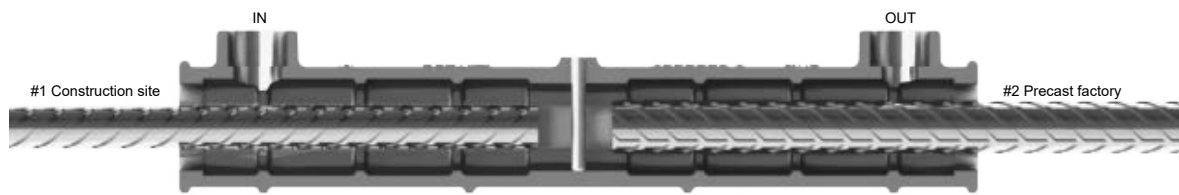
Model		Type of thread	Rebar diameter				Product Code
			Larger bar (threaded)		Smaller bar (grouted)		
Groutec L	L12-16	Bartec Fortec	12	#4	10	#3	FPPC1214201
			14	-	10,12	#3,#4	FPPC1216201
			16	#5	12,14	#4	FPPC1620251
	18		-	16	-	FPPC2022251	
	20		#6	16,18	#4,#5	FPPC2024301	
	22		#7	20,18,16	#6,#5	FPPC2027301	
	25		#8	20,22	#6,#7	FPPC2530351	
	28,30		#9	20,22,25	#6,#7,#8	FPPC2833351	
	-		#10	-	#8,#9	FPPC3236301	
	32		-	25,28,30	-	FPPC3236401	
	34		#11	25,28,32	#8,#9,#10	FPPC4039401	
	36,38		#12	34	#11	FPPC3642451	
	40	-	25, 28,32,34,36,38	-	FPPC4045451		
	L20-22	Rolltec	12	#4	10	#3	FPPC1213153
			-	#5	-	#3,#4	FPPC1216201
			16	-	12,14	-	FPPC1617173
	-		#6	-	#5	FPPC2020251	
	20		-	16,18	-	FPPC2021203	
	-		#7	-	#5,#6	FPPC2022251	
	22		-	16,18,20	-	FPPC2024301	
	24		#8	20,22	#7	FPPC2525251	
	25		-	20,22,24	-	FPPC2526253	
	26		-	20,22,24,25	-	FPPC2527301	
	28		#9	20,22,24,25,26	#7,#8	FPPC2829303	
	30		-	25,26,28	-	FPPC3230251	
	L28-32	L40	32	#10	25,26,28,30	#8,#9	FPPC3233303
			-	#11	-	#8,#9,#10	FPPC4036301
			36	-	28,30,32	-	FPPC3637301
	38		#12	25,26,28,30,32,36	#8,#9,#10,#11	FPPC4039301	
	40		-	25,26,28,30,32,36	-	FPPC4041303	

Table 6: Rebar cutting lengths of Bartec / Fortec and Rolltec thread, transition splices using gravity grouting method for Groutec L.

Model		Type of thread	Rebar diameter				Product Code
			Larger bar (threaded)		Smaller bar (grouted)		
			mm	(US)	mm	(US)	
Groutec S	S12	Bartec Fortec	12	#4	10	#3	FPPC1214207
			14	-	10,12	-	FPPC1216207
	S16		16	#5	12,14	#4	FPPC1620257
	S20		18	-	12,14,16	-	FPPC2022257
			20	#6	12,14,16,18	#4,#5	FPPC2024307
	S25		22	#7	16,18,20	#5,#6	FPPC2527307
			25	#8	16,18,20,22	#5,#6,#7	FPPC2530357
	S28		28,30	#9	22,25,28	#7,#8	FPPC3233357
	S32		-	#10	-	#8,#9	FPPC3236307
			32	-	25,28,30	-	FPPC3236407
	S40		34	#11	32	#10	FPPC4039407
			36	-	32, 34	#11, #10	FPPC4042457
			38	#12	32,34,36	#10,#11	FPPC4042457
			40	-	32,34,36,38	-	FPPC4045457
	S12	Rolltec	12	#4	10	#3	FPPC1213157
	14		-	10,12	-	FPPC1215177	
	S16		-	#5	-	#4	FPPC1616207
			16	-	12,14	-	FPPC1617177
			18	-	12,14,16	-	FPPC1619257
	S20		-	#6	-	#4,#5	FPPC2020257
			20	-	16,18	-	FPPC2021207
	S25		-	#7	-	#6	FPPC2522257
			22	-	20	-	FPPC2524307
			24	#8	20,22	#6,#7	FPPC2525257
			25	-	20,22,24	-	FPPC2526257
			26	-	20,22,24,25	-	FPPC2527307
	S32		28	#9	20,22,24,25,26	#6, #7,#8	FPPC3229307
			30	-	25,26,28	-	FPPC3230257
			32	#10	25,26,28,30	#8,#9	FPPC3233307
	S40		-	#11	-	#9,#10	FPPC4036307
			36	-	32	-	FPPC4037307
			38	#12	32,36	#10,#11	FPPC4039307
			40	-	32,36,38	-	FPPC4041307

Table 7: Rebar cutting lengths of Bartec / Fortec and Rolltec thread, transition splices using gravity grouting method for Groutec S.

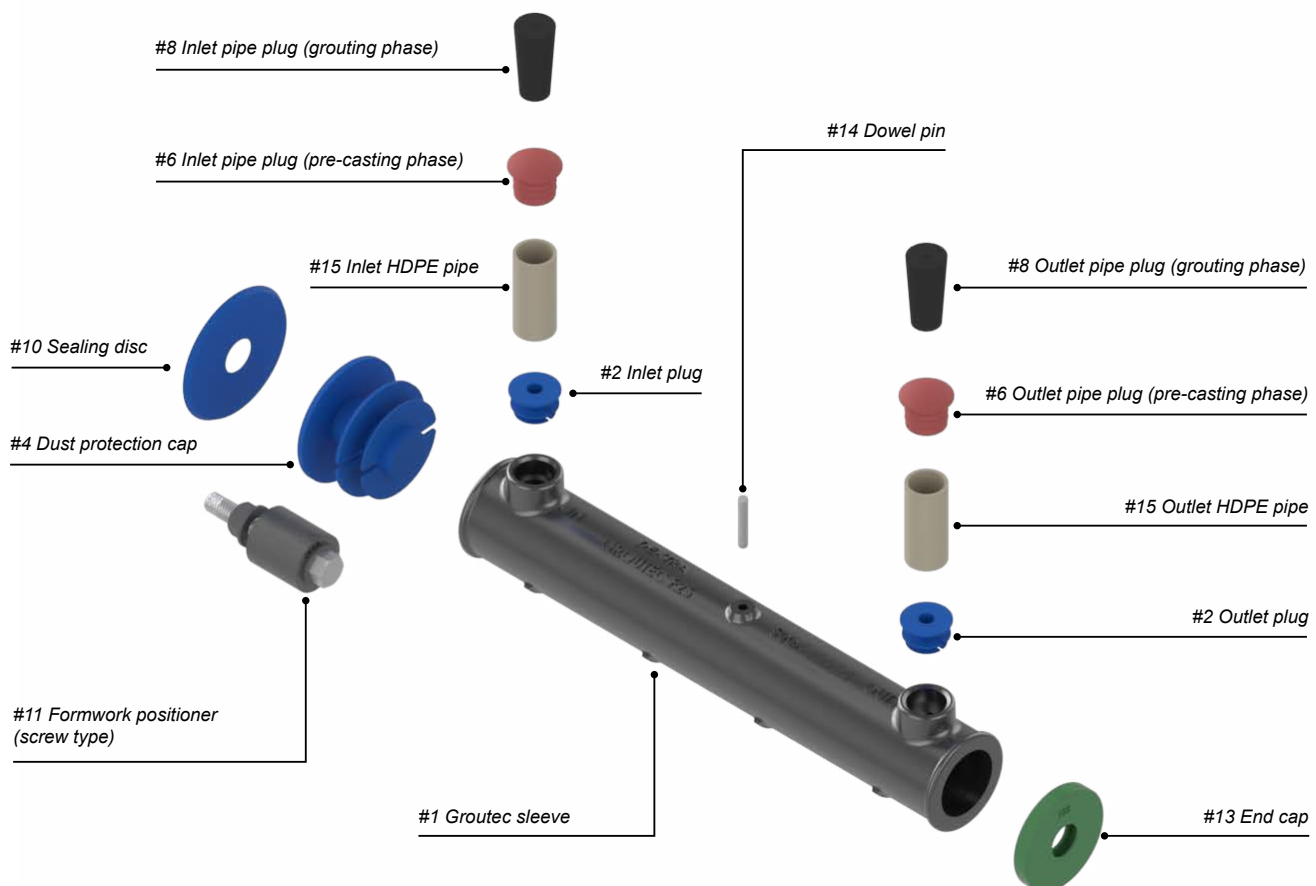
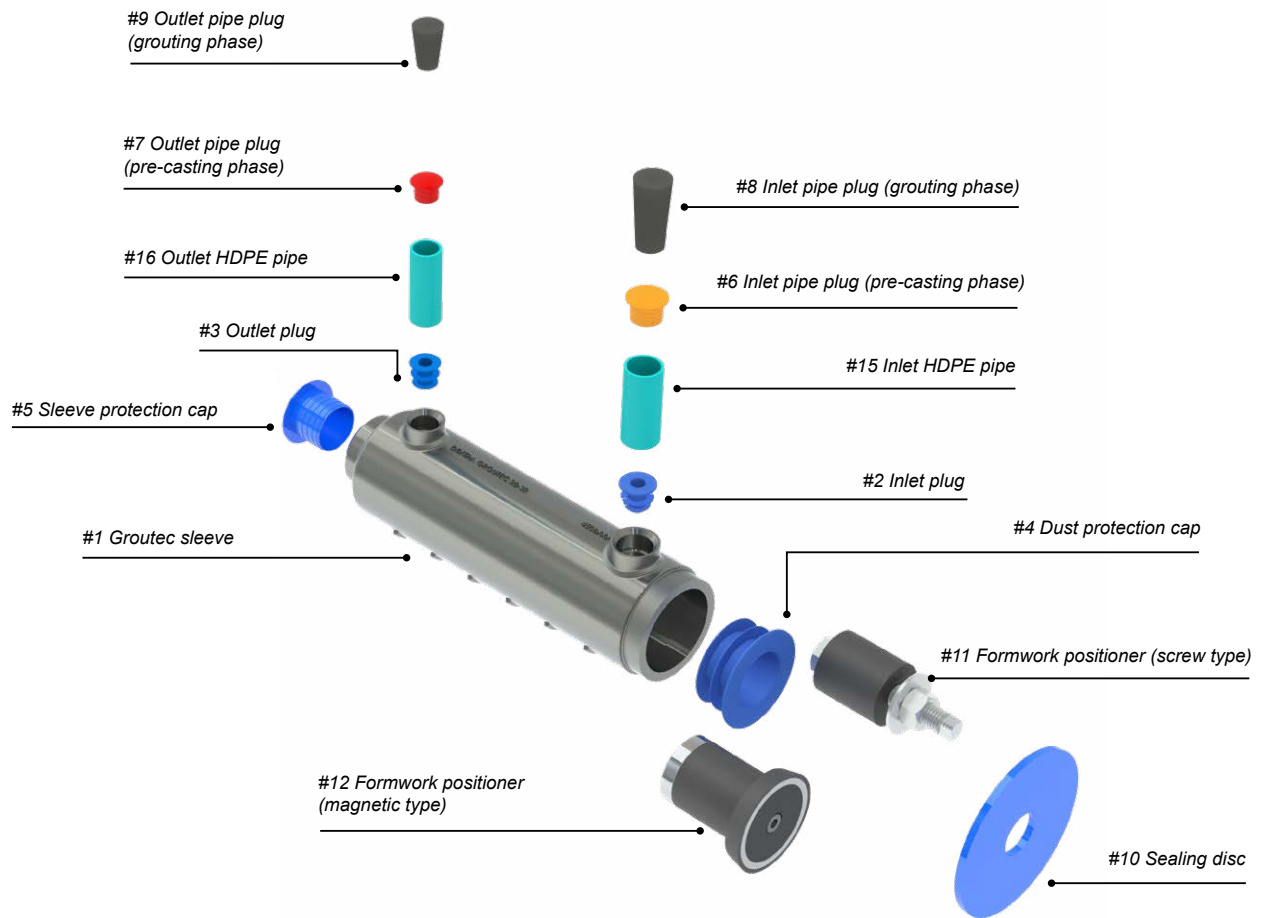
Transition splicing : F



Model	Rebar size			
	#1 Construction site Large bar		#2 Precast factory Small bar	
	mm	US	mm	US
F16	16	#5	12	#4
F20	18,19,20	#6	12,16,18	#4,#5,#6
F22	22	#7	12,16,18	#4,#5,#6
			19,20	#6
F25	24,25,26	#8	12,16,18	#4,#5,#6
			19,20	#6
			22	#7
F28	28,29	#9	19,20	#6
			22,24,25,26	#7,#8
F32	32	#10	19,20	#6
			22,24,25,26	#7,#8
			28,29	#9
F36	34,36	#11	24,25,26	#8
			28,29	#9
			32	#10
F40	40,43	#14	32	#10
			34,36	#11

Table 8: Rebar cutting lengths of transition splices with smaller bar at construction site for Groutec F.

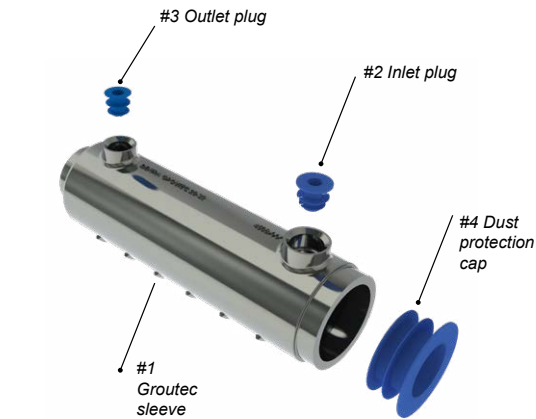
Components necessary for the use of Groutec sleeves



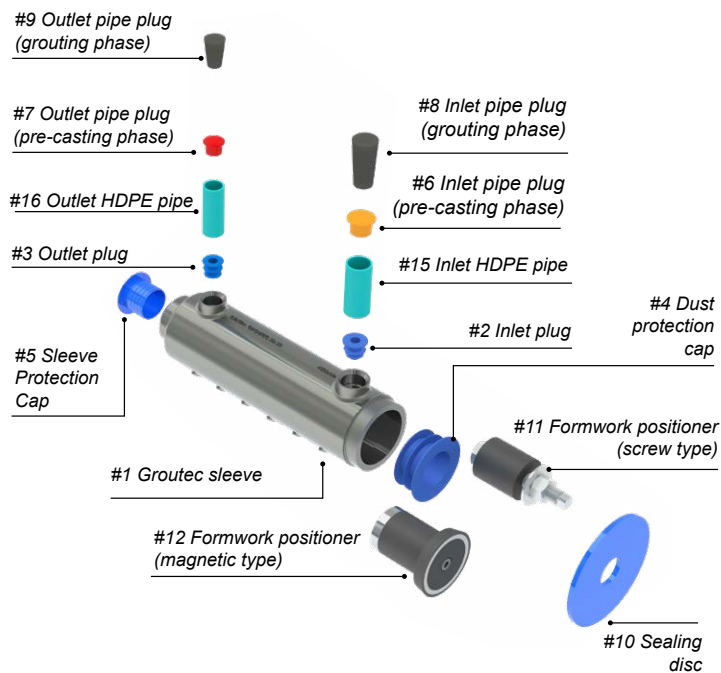
Item No.	Description	Groutec L & S		Groutec F	
		Standard scope of supply	Optional items available upon request	Standard scope of supply	Optional items available upon request
1	Groutec sleeve	X		X	
2	Inlet plug	X	X	X	X
3	Outlet plug	X	X		
4	Dust protection cap	X	X	X	X
5	Sleeve protection cap		X		
6	Inlet pipe plug (pre-casting phase)		X		X
7	Outlet pipe plug (pre-casting phase)		X		
8	Inlet sleeve plastic cap plug (grouting phase)		X		X
9	Outlet sleeve plastic cap plug (grouting phase)		X		
10	Sealing disc		X		X
11	Formwork positioner (screw type)		X		X
12	Formwork positioner (magnetic type)		X		
13	End cap			X	
14	Dowel pin			X	
15	Inlet HDPE pipe		X		X
16	Outlet HDPE pipe		X		

Table 9: Components necessary for the use of Groutec sleeves

Items delivered with Groutec L and S



Optional items available upon request



Bar size		Sleeve Protection Cap (#5)		Sealing disc (#10)
mm	US	Bartec & Fortec threads	Rolltec threads	
12	#4	GMEC0002808	GMEC0010919	GMEC0900143
14	-	GMEC0002816	GMEC0010920	GMEC0900143
-	#5	GMEC0002818	GMEC0002816	GMEC0900147
16	-	GMEC0002818	GMEC0002817	GMEC0900147
18	-	GMEC0002819	GMEC0900071	GMEC0900153
-	#6	GMEC0002820	GMEC0002818	GMEC0900153
20	-	GMEC0002820	GMEC0002819	GMEC0900153
-	#7	GMEC0002821	GMEC0002819	GMEC0900153
22	-	GMEC0002821	GMEC0900072	GMEC0900153
24	-	-	GMEC0010959	GMEC0900145
25	#8	GMEC0002822	GMEC0002821	GMEC0900145
26	-	-	GMEC0900073	GMEC0900145
28,30	#9	GMEC0002823	GMEC0002822	GMEC0900142
32	#10	GMEC0002824	GMEC0002823	GMEC0900154
34	#11	GMEC0002825	GMEC0002824	GMEC0900154
36	-	GMEC0002826	GMEC0009180	GMEC0900154
38	#12	GMEC0002826	GMEC0002825	GMEC0900141
40	-	GMEC0002827	GMEC0002826	GMEC0900141

Table 10: Codes of Sleeve Protection Caps and Sealing disc for Groutec L & S.

Model		Bar size		Formwork Positioner		Dust Protection Cap (#4)
		mm	US	Screw type (#11)	Magnetic type (#12)	
Groutec L	L12-16	12	#4	GACC2090046	GACC2090012	GACC0990009
		14	-	GACC2090046	GACC2090012	GACC0990009
		16	#5	GACC2090046	GACC2090012	GACC0990009
	L20-22	18	-	GACC2090033	GACC2090013	GACC0990010
		20	#6	GACC2090033	GACC2090013	GACC0990010
		22	#7	GACC2090033	GACC2090013	GACC0990010
	L25	24	-	GACC2090033	GACC2090014	GACC0990006
		25	#8	GACC2090033	GACC2090014	GACC0990006
	L28-32	26	-	GACC2090033	GACC2090014	GACC0990006
		28, 30	#9	GACC2090034	GACC2090015	GACC0990001
		32	#10	GACC2090034	GACC2090015	GACC0990001
	L40	34	#11	GACC2090047	GACC2090016	GACC0990002
		36, 38	#12	GACC2090047	GACC2090016	GACC0990002
		40	-	GACC2090047	GACC2090016	GACC0990002
Groutec S	S12	12	#4	GACC2090027	-	GACC0990018
		14	-	GACC2090027	-	GACC0990018
	S16	16	#5	GACC2090028	GACC2090051	GACC0990019
	S20	18	-	GACC2090029	GACC2090052	GACC0990020
		20	#6	GACC2090029	GACC2090052	GACC0990020
	S25	22	#7	GACC2090030	GACC2090053	GACC0990021
		24	-	GACC2090030	GACC2090053	GACC0990021
		25	#8	GACC2090030	GACC2090053	GACC0990021
	S28	26	-	GACC2090030	GACC2090053	GACC0990021
		28, 30	#9	GACC2090033	GACC2090054	GACC0990010
	S32	32	#10	GACC2090033	GACC2090054	GACC0990006
	S40	34	#11	GACC2090034	-	GACC0990001
		36	-	GAXX2090034	GAACC2090055	GACC0990001
		38	#12	GACC2090034	-	GACC0990001
40		-	GACC2090034	GACC2090055	GACC0990001	

Table 11: Codes of Formwork Positioner & Dust protection caps for Groutec L & S.

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

Table 12: Codes of Inlet plug & Outlet plug for Groutec L & S.

Bar size (mm)	Inlet pipe plug (grouting phase) (#8)	Outlet pipe plug (grouting phase) (#9)
All models	GACC2090002	GACC2090001

Table 13: Codes of Inlet pipe plug & Outlet pipe plug (grouting phase) for Groutec L & S.

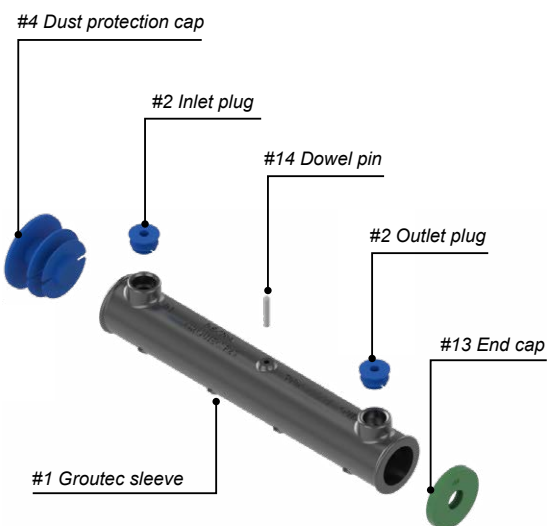
Bar size (mm)	Inlet pipe plug (pre-casting phase) (#6)	Outlet pipe plug (pre-casting phase) (#7)
All models	GMEC0900071	GMEC0902820

Table 14: Codes of Outlet pipe plug & Inlet pipe plug (pre-casting phase) for Groutec L & S.

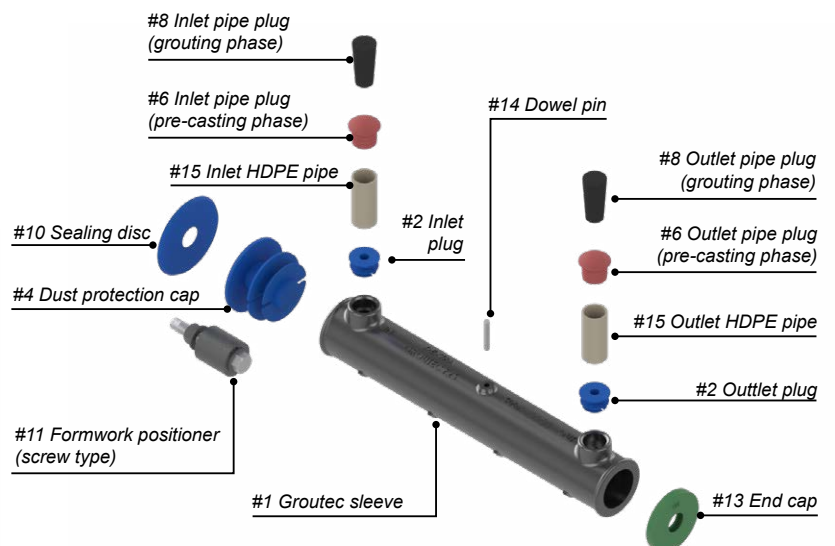
Bar size (mm)	Inlet HDPE pipe (#15)	Outlet HDPE pipe (#16)
All models	GMEC0390001	GMEC0390002

Table 15: Codes of Outlet HDPE pipe & Inlet HDPE pipe for Groutec L & S.

Items delivered with Groutec F



Optional items available upon request



Bar size		Dust protection cap (#4)	Sealing disc (#10)	Formwork positioner screw type (#11)	End cap (#13)	Dowel pin (#14)
mm	US					
12,16	#4,#5	GACC0990020	GMEC0900147	GACC2090029	GACC0990053	GASA1100062
18,19,20	#6	GACC0990021	GMEC0900153	GACC2090029	GACC0990054	GASA1100063
22	#7	GACC0990021	GMEC0900153	GACC2090030	GACC0990055	GASA1100064
24,25,26	#8	GACC0990010	GMEC0900145	GACC2090030	GACC0990056	GASA1100064
28,29	#9	GACC0990010	GMEC0900142	GACC2090033	GACC0990057	GASA1100065
32	#10	GACC0990006	GMEC0900154	GACC2090033	GACC0990058	GASA1100060
34,36	#11	GACC0990001	GMEC0900154	GACC2090033	GACC0990059	GASA1100061
40,43	#14	GACC0990001	GMEC0900141	GACC2090048	GACC0990060	GASA1100061

Table 16: Codes of dust protection cap, sealing disc, formwork positioner, end cap and dowel pin for Groutec F

Bar size	Inlet / Outlet plug (#2)	Inlet / Outlet pipe plug (pre-casting phase) (#6)	Inlet / Outlet pipe plug (grouting phase) (#8)	Inlet / Outlet HDPE pipe (#15)
mm				
All models	GACC0990011	GMEC0900071	GACC2090002	GELC0390001

Table 17: Codes of inlet/outlet plug, inlet/outlet pipe plug, inlet/outlet sleeve plastic cap plug and HDPE inlet/outlet pipe for Groutec F

Grout recommendation

Dextra Groutec sleeve can be used with standard non-shrink grouts meeting the following minimum specifications:

- Compressive strength : ≥ 65 MPa after 28 days as per ASTM C109 (50 mm cube)
- Flowability: high flowability
- Shrinkage: non-shrinking
- Setting time ≥ 30 min
- Maximum aggregate size ≤ 2 mm

Note: Please contact your local Dextra representative to verify the performance of the selected grout.

Identification & Traceability

Each connection is marked with the following symbols to facilitate traceability of the material :

Prefix	Model and bar size (*)	Material designation	Material heat no. (*)
Dextra	Groutec XXXX	YYY	ZZZZZZZZZ

Table 18 : Marking on sleeve circumference

(*) Number of digits may vary.



Quality Assurance

Groutec sleeves are manufactured according to strict technical specifications and under a production process that has been certified to satisfy the ISO 9001 quality assurance standard.

Agency	Certificate N°
 The American Society of Mechanical Engineers	QSC-706
 Bureau Veritas	TH015960 FR071147-1 IND.20.6089/QM/U

Table 19: Quality assurance certifications

Products described in this document are warranted to be free from manufacturing defects and to perform in accordance with the manufacturer's specifications providing that they are installed in accordance with our written instructions.

Approvals

Groutec L and Groutec F mechanical splices have been approved by the most demanding international regulations:

Country	Agency	Certificate N°	Approved products
	 IAPMO UES ER-312	312	Groutec L dia. 16 mm (#5) to 40 mm (#12) Groutec F dia. 12 mm (#4) to 40 mm (#14)
	 ROMANIA	Nr 003-01/144-2020	Groutec L dia. 12 mm to 40 mm as per ISO15835:2018 category B,F,S
	 Dubai Municipality	CL 17020493	Groutec L dia. 12 mm to 40 mm as per ISO15835:2018 category B

Table 20: Groutec precast system certifications.

Disclaimer

As a result of our continuous thrive for technological improvement, Dextra reserves its right to modify the contents of this specification sheet at any time without prior notice. In particular, various sources of raw materials may lead to variations in outside diameters. The information provided on this document, and any outside information linked to, is for guidance only.

Dextra products shall be installed and used only as indicated in Dextra's documentation and training materials. Aforementioned documents are available at www.dextragroup.com and from your Dextra customer service representative. Improper installation, misuse, misapplication or other failure to completely follow Dextra's instructions and warnings may cause product malfunction, property damage, serious bodily injury and death. Dextra cannot accept any liability in respect thereof.

Packing details

Groutec sleeves are packed in wooden crates that can be lifted by a forklift. Depending on the order quantities Groutec components can be packed either in carton boxes or wooden crates. 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.

Wooden box type	Inside	Outside	Weight (kg)
	W x L x H (cm)	W x L x H (cm)	
1	36.6x56.6x25.0	43.4x63.4x43.7	17
2	56.6x76.6x29.0	63.4x83.4x47.7	25
3	76.6x116.6x29.0	83.4x123.4x47.7	39
4	76.6x116.6x45.0	83.4x123.4x63.7	48
5	76.6x116.6x65.0	83.4x123.4x83.7	60

Table 21: Wooden crates dimensions

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

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

Model	Bar size		Thread type	Product code	Box type	Quantity (pcs)	Unit weight (kg)	Net weight (kg)	Gross weight (kg)
	mm	US							
Groutec L	L12-16	12	#4	FPPC1214201	3	200	1.56	312	351
		14		FPPC1216201	3	200	1.55	310	349
		16	#5	FPPC1620251	3	200	1.54	308	347
	L20-22	18	-	FPPC2022251	3	150	1.84	276	315
		20	#6	FPPC2024301	3	150	1.83	275	314
		22	#7	FPPC2027301	3	150	1.80	270	309
	L25	25	#8	FPPC2530351	4	200	2.37	474	522
	L28-32	28, 30	#9	FPPC2833351	4	100	4.22	422	470
		-	#10	FPPC3236301	4	100	4.16	416	464
		32	-	FPPC3236401	4	100	4.18	418	466
	L40	34	#11	FPPC4039401	3	50	6.81	341	380
		36, 38	#12	FPPC3642451	3	50	6.75	338	377
		40	-	FPPC4045451	3	50	6.69	335	374
	L12-16	12	#4	FPPC1213153	3	200	1.56	312	351
		-	#5	FPPC1216201	3	200	1.55	310	349
		16	-	FPPC1617173	3	200	1.55	310	349
	L20-22		#6	FPPC2020251	3	150	1.85	278	317
		20	-	FPPC2021203	3	150	1.84	276	315
		-	#7	FPPC2022251	3	150	1.84	276	315
		22	-	FPPC2024301	3	150	1.83	275	314
	L25	24	#8	FPPC2525251	4	200	2.40	480	528
		25	-	FPPC2526253	4	200	2.39	478	526
		26		FPPC2527301	4	200	2.37	474	522
	L28-32	28	#9	FPPC2829303	4	100	4.26	426	474
		30	-	FPPC3230251	4	100	4.24	424	472
		32	#10	FPPC3233303	4	100	4.19	419	467
	L40	-	#11	FPPC4036301	3	50	6.85	343	382
		36		FPPC3637301	3	50	6.83	342	381
		38	#12	FPPC4039301	3	50	6.79	340	379
		40	-	FPPC4041303	3	50	6.74	337	376

Table 22: Packing details of Groutec L sleeves.

Model		Bar size		Thread type	Product code	Box type	Quantity (pcs)	Unit weight(kg)	Net weight (kg)	Gross weight (kg)
		mm	US							
Groutec S	S12	12	#4	Bartec Fortec	FPPC1214207	2	200	0.80	160	185
		14	-		FPPC1216207	2	200	0.80	160	185
	S16	16	#5		FPPC1620257	2	200	1.06	212	237
	S20	18	-		FPPC2022257	3	250	1.31	328	367
		20	#6		FPPC2024307	3	250	1.30	325	364
	S25	22	#7		FPPC2527307	3	200	1.90	380	419
		25	#8		FPPC2530357	3	200	1.87	374	413
	S28	28, 30	#9		FPPC2833354	4	150	2.60	390	438
	S32	-	#10		FPPC3236307	4	150	3.64	546	594
		32	-		FPPC3236407	4	150	3.66	549	597
	S40	34	#11		FPPC4039407	4	100	5.00	500	548
		36	-		FPPC4042457	4	100	6.99	699	747
		38	-		FPPC4042457	4	100	6.80	680	728
		40	-		FPPC4045457	4	100	6.72	672	720
	S12	12	#4	Rolltec	FPPC1213157	2	200	0.81	162	187
		14	-		FPPC1215177	2	200	0.80	160	185
	S16	-	#5		FPPC1616207	2	200	1.08	216	241
		16	-		FPPC1617177	2	200	1.08	216	241
		18	-		FPPC1619257	2	200	1.07	214	239
	S20	-	#6		FPPC2020257	3	250	1.33	333	372
		20	-		FPPC2021207	3	250	1.32	330	369
	S25	-	#7		FPPC2522257	3	200	1.93	386	425
		22	-		FPPC2524307	3	200	1.93	386	425
		24	#8		FPPC2525257	3	200	1.92	384	423
		25	-		FPPC2526257	3	200	1.91	382	421
		26	-		FPPC2527307	3	200	1.90	380	419
	S28	28	#9		FPPC2829304	4	150	2.65	398	446
	S32	30	-		FPPC3030254	4	150	2.64	396	444
		32	#10		FPPC3233307	4	150	3.70	555	603
	S40		#11		FPPC4036307	4	100	5.05	505	553
		36	-		FPPC4037307	4	100	6.99	699	747
		38	#12		FPPC4039307	4	100	6.86	686	734
		40	-		FPPC4041307	4	100	6.78	678	726

Table 23: Packing details of Groutec S sleeves.

Model		Bar size		Product code	Box type	Quantity (pcs)	Unit weight (kg)	Net weight (kg)	Gross weight (kg)
		mm	US						
Groutec F	F16	12,16	#4,#5	FPPC1600004	3	200	1.76	352	391
	F20	18,19,20	#6	FPPC2000004	4	200	2.04	408	456
	F22	22	#7	FPPC2200004	4	150	2.56	384	432
	F25	24,25,26	#8	FPPC2500004	4	150	3.25	488	536
	F28	28,29	#9	FPPC2800004	4	100	4.45	445	493
	F32	32	#10	FPPC3200004	4	50	5.88	294	342
	F36	34,36	#11	FPPC3600004	4	50	8.24	412	460
	F40	40,43	#14	FPPC4000004	4	50	10.55	528	576

Table 24: Packing details of Groutec F sleeves.



Commercial presence in more than 55 countries.



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