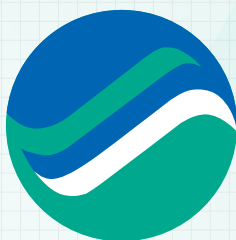


PRODUCT DATASHEET

RepairGrip datasheet PDS-037 Rev.00_en February 2022



Dextra

www.dextragroup.com

CONTENT

03

04

05

06

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09

10

Product Description

The RepairGrip system is a portable system designed to splice bars in situ. It is a simple and proven method to splice bars that did not have their end shop-prepared.

The RepairGrip sleeve is swaged onto the bar ends by a hydraulic tool powered by a separate power unit. The resulting connection guarantees at least 100% of nominal tensile strength on reinforcing bars grade 500 MPa.

RepairGrip splices are butt-to-butt splices that are suitable to both tension and compression applications.



For repair or retrofit works.

- Fits any cold shear cut bar end.
- No reduction of the cross section area of the bar.
- RepairGrip sleeves bear a marking allowing identification and traceability of production number and material origin.

Applications



Change of contract package



Repair & retrofitting package



Short bent bars



CAD & BIM

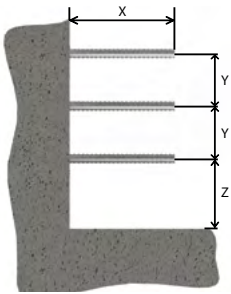
For designer tools support, contact us at:
cadbim@dextragroup.com

Coupler Dimensions

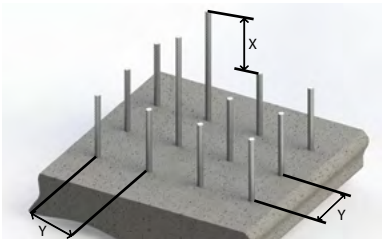
Approximate dimensions in millimeters

Product code	Bar size (mm)	Approximate sleeve dimensions			
		OD (mm)	ID (mm)	L (mm)	Weight (kg)
FPOT1200001	12	24	14	100	0.25
FPOT1600001	16	32	20	100	0.40
FPOT2000001	20	38	24	100	0.45
FPOT2500001	25	45	30	160	1.10
FPOT2800001	28	53.5	34	130	1.40
FPOT3200001	32	57	38	180	2.00
FPOT3600001	36	63	43	180	2.60
FPOT4000001	40	70	48	250	3.70

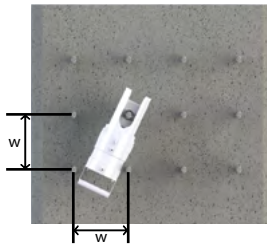
Minimum Bar Spacing



Start by swaging the bar that is closer to the floor or adjacent wall.



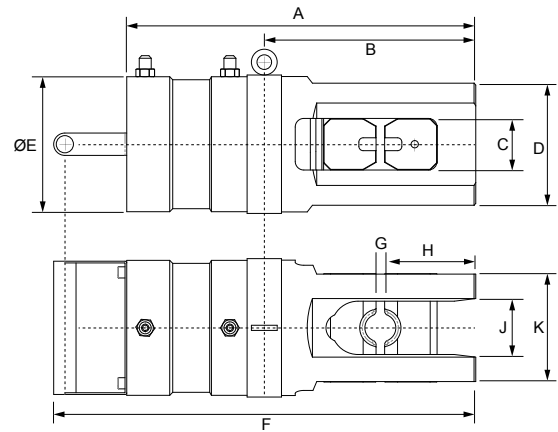
Clustered bars can be spliced if they are staggered and if the central ones are the longest.



If clustered bars are not staggered, the required spacing is wider so that the swaging tool can reach the central bars.

Bar size (mm)	DMG32 (DMG650)						DMG40 (DMG800)	
	12	16	20	25	28	32	36	40
X	150			170	160		190	220
Y	95			100	110		120	120
Z	90			90	90		100	100
W	230			230	230		250	250

Hydraulic Tool Dimensions



Model	A	B	C	D	E	F	G	H	J	K
DMG650-1	430	270	55	116	152	458	35	120	66	116
DMG32 (DMG650-2)	405	250	60	142	157	490	32	106	65	125
DMG40 (DMG800-1)	440	280	60	148	167	530	52	118	73	145
DMG800-2	440	282	60	148	182	526	37	102	73	145

Dimensions in mm

Operating Data

Bar size (mm)	Hydraulic pressure			Number of grips per bar end	Engagement length (mm)	Hydraulic tool model	Weight of Hydraulic jack (kg)
	(MPa)	(bar)	(psi)				
12	35	350	5,080	3	45	DMG32	42
16	40	400	5,800	3	45	DMG32	42
20	45	450	6,530	3	45	DMG32	42
25	60	600	8,700	4	60	DMG32	42
28	65	650	9,430	4	60	DMG32	42
32	65	650	9,430	5	75	DMG32	42
36	60	600	8,710	6	75	DMG40	50
	63.5	635	9,210	6		DMG800-2	50
40	60	600	8,710	8	88	DMG40	50
	63.5	635	9,210	8		DMG800-2	50

Installation Instructions

01

STEP



Site preparation: straighten and clean each rebar before proceeding.

02

STEP



Mark each bar at a distance equal to half a RepairGrip sleeve from the bar end.

03

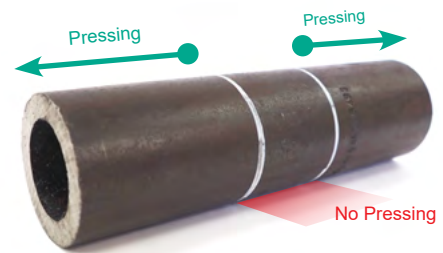
STEP



Put sleeves into the gauge supplied with the equipment and mark the gripping limit on each as shown above.

04

STEP



The central area of the sleeve should not be gripped. Gripping should be made from the limit towards the end of the sleeve.

05

STEP



Prepare the hydraulic tool and set the adequate grip dies. Connect the power. In the case of using 380/440V motor, motor rotation can be corrected with the selector switch.

06

STEP



Insert the sleeve half way onto the continuation bar, using the mark on the bar as the engagement limit.

07

STEP



Start applying the required pressure on the RepairGrip sleeve.

08

STEP



Stop swaging when the pressure reaches the value specified in the [Operating Data table page 5](#).

09

STEP



Repeat the operation for each continuation bar that must be prepared.

10

STEP



At this stage, the second gripping limit should still be visible on sleeves. Caution, central area must not be swaged!

11

STEP



Pre-position connecting bars

12

STEP



Repeat swaging operation beyond the mark and at the required pressure to complete splicing operation.

Identification & Traceability

Each connection is marked with the following symbols that enable to trace it back to each raw material and production batch data.

Model Code	Rebar Diameter	DEXTRA	Production No.	Material Lot No.	Certification Mark
RG	12 to 40	D	Traceability no.		Some models may contain additional certification markings

Quality Assurance

Agency	Certificate N°
 The American Society of Mechanical Engineers	QSC-706
 Bureau Veritas	TH015960

RepairGrip® coupler is manufactured according to strict technical specifications and under a production process that has been certified to satisfy to the ISO 9001 and ASME Boiler and Pressure Vessel Code NCA-3800 quality assurance standard.

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

Approvals

Country	Agency	Certificate N°	Details
 	Dubai Municipality	N° CL 17020493	For standard splices in dia 12 through 40mm.

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

Products are packed in wooden crates that can be lifted by a forklift, 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 following tables.

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

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

Bar size	Product code	QTY (pcs)	Box type	Net weight (kg)	Gross weight (kg)
12	FPOT1200001	1,000	2	230	255
16	FPOT1600001	1,000	3	340	379
20	FPOT2000001	1,000	3	510	549
25	FPOT2500001	500	3	555	594
28	FPOT2800001	500	3	670	709
32	FPOT3200001	500	4	1,005	1,053
36	FPOT3600001	200	4	472	520
40	FPOT4000001	200	4	802	850

Inquiry form

Customer complaints about the product quality shall be investigated to identify their cause.

After corrective action, the work order shall be re-produced and tested to check the effectiveness of the action.

Inquiries on bar preparation issues or splice test results should be conveyed through the assessment form attached in appendix.

The fabricator shall archive the correspondence related to investigations and corrective actions.

1. General information

Company name:		Project / worksite:	
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2. Rebars information

Dia	Grade	Mill		
	Grade			
		Measure #1	Measure #2	Measure #3
	A			
	B			
	C			
	D			
E				

3. Production information

Gripping press model:		Hydraulic cylinder model:	
Gripping mold code:		Hydraulic power unit model:	
Gripping pressure:	Bar	Pressure gauge calibration:	Attach the last calibration certificate.
Appearance after gripping	<input type="checkbox"/> Cracks <input type="checkbox"/> Other:	Crack length, if applicable:	mm
Distance between grip:	mm	Gripping depth:	mm
Rebar engagement length:	mm	Samples recovered:	<input type="checkbox"/> Yes <input type="checkbox"/> No

4. Coupler information

Coupler	Box number

5. Other information

Please attach available:

- test reports
- pictures of the machine name plate
- pictures of the hydraulic cylinder name plate
- pictures of the hydraulic power unit
- pictures of the pressure gauge and reducing valve, and the last calibration certificate of the pressure gauge
- pictures of the gripping tools
- mill certificates of the rebars
- pictures of the samples

6. Please send back this form to e-mail : quality@dextragroup.com



Commercial presence in more than 55 countries.



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