

The FLIMU® System – Connecting Reinforcement

Basic Concept

The extruded coupler splice – respectively, the FLIMU® system – has been developed especially for realizing reinforcing connections in large numbers or very limited space conditions.

When realizing a FLIMU® coupler splice, two reinforcing bars are connected by extruding a coupler that has been placed onto both ends of the reinforcing bars. A reducing ring is pushed over the coupler using a high amount of pressure.

The reducing ring significantly reduces the exterior diameter of the coupler and creates a force fit connection between rebar and coupler (extrusion process).

Both B500 reinforcing steel with normal threads in accordance with DIN 488 and GEWI® reinforcing steel threadbar can be spliced using the FLIMU® system. This way, even reinforcing bars that have already been installed can be easily coupled to a GEWI® connecting bar.

The FLIMU® system is also suitable for many similar reinforcing steel bars such as Austrian ARI and ARI-G. Suitability tests can be performed for special applications.

The corresponding extruding equipment has been kept slim on purpose in order to ensure an economic realization of the connections in very limited space and in areas with tight reinforcement layers. Up to 30 connections per hour are possible if installation is done professionally by trained personnel.



Fields of Application

- Connecting reinforcement
- Challenging coupling solutions
- Civil engineering

Key Features

- Bars do not have to be screwed
- Preliminary work at the bars is not required
- High installation performance
- Both threadbars and GEWI® reinforcing bars can be coupled
- Space-saving installation – also for multilayer reinforcement
- The complete equipment and installation aids are on stock
- General building-authority approval for Ø 12 to 32mm

Additional Information

German Approval DIBt Z-1.5-150

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Technical Data

FLIMU® System for B500 & GEWI® and ARI & ARI-G Reinforcing Steel

Nominal diameter \varnothing [mm]	Yield strength / tensile strength $f_{0,2k}/f_{tk}$ [N/mm ²]	Cross- sectional area A [mm ²]	Load at yield F_{yk} [kN]	Ultimate load F_{tk} [kN]	Weight [kg/m]	Approval
16	500/550 (D) 550/620 (A)	201	101	111	1.58	○ ×
20		314	157	173	2.47	○ ×
25		491	245	270	3.85	○ ×
28		616	308	339	4.83	○ ×
32		804	402	442	6.31	○ ×
40		1,257	628	691	9.86	×
50		1,963	982	1,080	15.41	×

○ Germany: DIBt Z-1.5-150
 × Austria: BMVIT 860.300/25-VI/7/92

Overview Extruders

Extruder	Standard equipment for GEWI® Bars \varnothing [mm]	Hydraulic power unit	Weight [kg]
Type 150	16 - 20	77-159	43
Type 250	16 - 28	77-159	75
Type 420	25 - 32	R13.3	206
Type 550	32 - 40	R13.3	225
Type 1000	50	R13.3	740



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