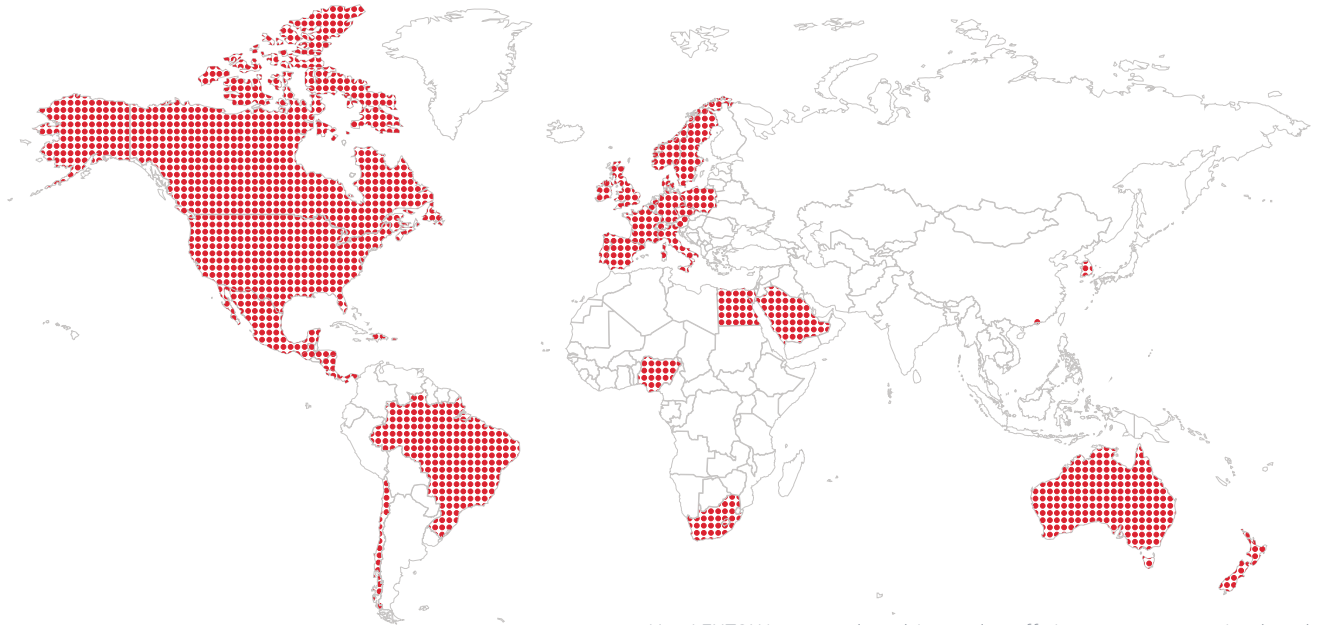


# nVent LENTON Interlok Grout-Filled Precast Splicing Systems



Air Traffic Control Tower, Kansas City Airport



*nVent LENTON is constantly evolving product offerings to meet new regional needs. Reach out to your local nVent LENTON Sales Representative for more information.*

## **nVent LENTON Trusted Experts Across the Globe**

nVent LENTON is a world-leading brand of advanced mechanical rebar splicing systems. Construction in precast concrete is an increasingly popular way to form reliable structures for construction across almost every industry and application. Structures previously made only with cast, in-situ concrete are now constructed using precast concrete. A successful prefab or precast concrete installation for your next job requires special rebar splicing systems that increase the structural integrity of precast concrete constructions.

### **A BETTER SOLUTION**

nVent LENTON Interlok allows for load bearing applications such as columns, beams and shear walls to be efficiently incorporated into projects using segmental precast construction techniques.



### **NVENT LENTON MECHANICAL REBAR SPLICES: PROVEN AND TESTED**



#### **Rebar Splicing Specialists**

Designed by nVent LENTON personnel who understand inherent rebar splicing issues.



#### **Customer Safety**

Our solutions are created with a Safety First mindset.



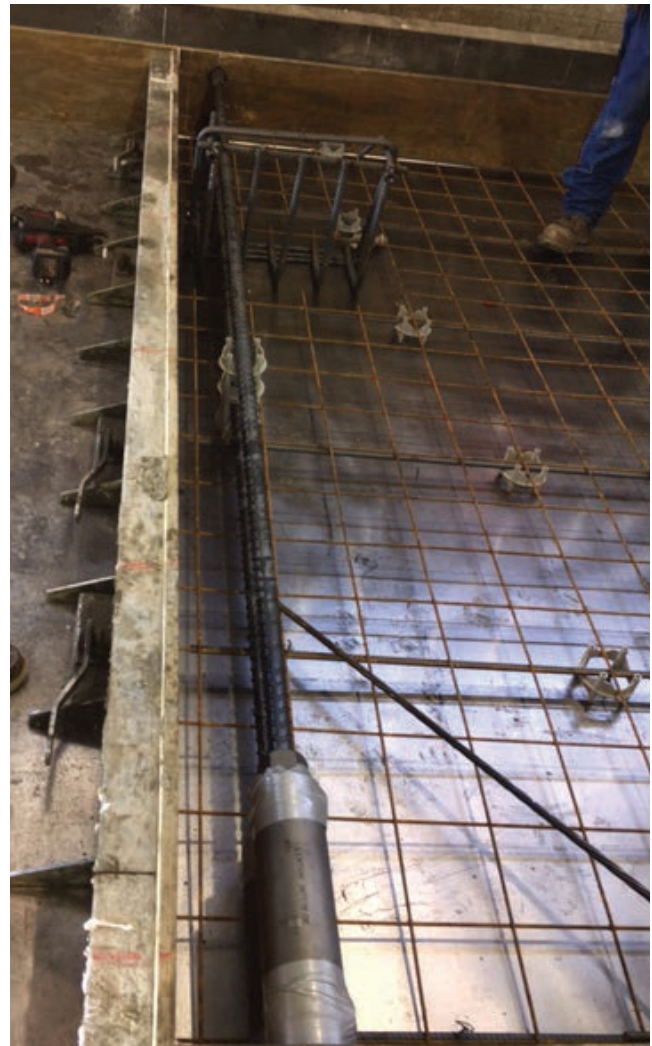
#### **Meets Code Requirements**

The most effective method of joining reinforcing bars and meeting the code requirements of national and international regulatory organizations.

# Rebar Splicing Specialists for the Precast Construction Industry

As precast construction is increasingly used for a wide range of structures, demand for emulation of cast-in-place building performance has also risen. Grouted splices are frequently used in moment frame and diaphragm connection applications due to their ease of use and full-capacity rebar splice performance. Consequently, grouted splices have emerged as the designated solution for efficient precast splicing while maintaining full rebar continuity.

The nVent LENTON Interlok Grout-Fill Precast Splicing System can connect the full range of rebar sizes using superior-quality ductile iron sleeves and high-strength grout. This combination results in a full-strength, reliable splice that is forgiving to misalignment and highly efficient. Architects and engineers gain flexibility in the design and erection of precast concrete elements while reclaiming vital construction time, reducing costs, and improving productivity. Load-bearing applications such as columns, beams, and shear walls can now be systematically incorporated into projects using segmental construction techniques, where previously only structural steel or cast-in-place concrete would have been considered.



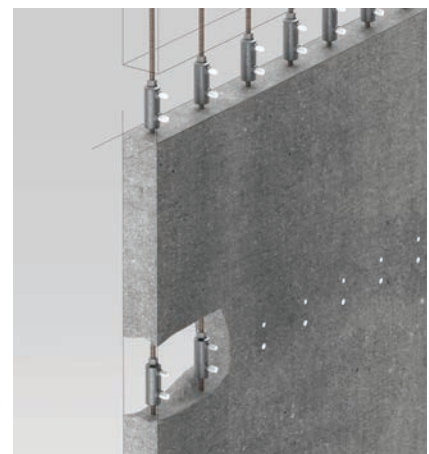
## APPLICATIONS

- Columns to Foundations
- Panel to Panel
- Walls to Floor Slab
- Shear Walls to Foundations
- Architectural Panels

Column to Column



Shear Wall to Shear Wall



# Why nVent LENTON Interlok

## PRE-CAST SPLICING SYSTEM

nVent LENTON Interlok is engineered for use in precast construction. It is designed to provide structural integrity between load bearing precast concrete elements such as columns, beams, shear walls, and panels. nVent LENTON Interlok provides superior dynamic, seismic and ultimate strength performance for moment frame applications.

## HOW TO INSTALL

Interlok Couplers are fastened to the rebar and placed into precast forms. This system incorporates either a tapered-thread or set screw and seal system, which creates a positive lock and reduces chances of contamination. With quick and easy alignment of the coupler onto the rebar, nVent LENTON Interlok provides a full-strength mechanical connection in both tension and compression. The splice is completed on site by inserting the exposed dowel of the adjoining structural member into the sleeve and filling the coupler with nVent LENTON Interlok HY15LM high-strength grout, either poured or pumped into the sleeve. The inlet and outlet ports on the sleeve accept commonly available rigid PVC or flexible plastic tubes. The complete splice provides load path continuity allowing precast structures to function as continuous members. A detailed installation guide is available at [nVent.com/LENTON](http://nVent.com/LENTON) outlining correct installation, grout mixing and formwork mounting procedures.

## INSTALLATION AND DESIGN BENEFITS

- Helps ensure structural integrity between the precast sections
- Provides load path continuity of the reinforcement, acting as one continuous bar
- Designed for all high-yield deformed rebar sizes
- Eliminates field welding damage to concrete
- Helps to overcome rebar misalignment problems in joining of precast concrete members
- Offers a higher strength connection between the precast elements than traditional joining methods
- Eliminates costly and unsightly patchwork
- No closure pours required between adjacent members
- Tensile loads are transferred through the rebar, and are not dependent on the compressive strength of the concrete
- Optimizes production time and is convenient and flexible to use



## PRODUCT SPECIFICATION OPTIONS

Taper-Threaded



Non-Threaded



Durability Coatings



**IMPORTANT NOTE:** Prior to installation of any products, please read and understand the detailed instructions and safety notices provided in the nVent LENTON Interlok Instruction Manual.



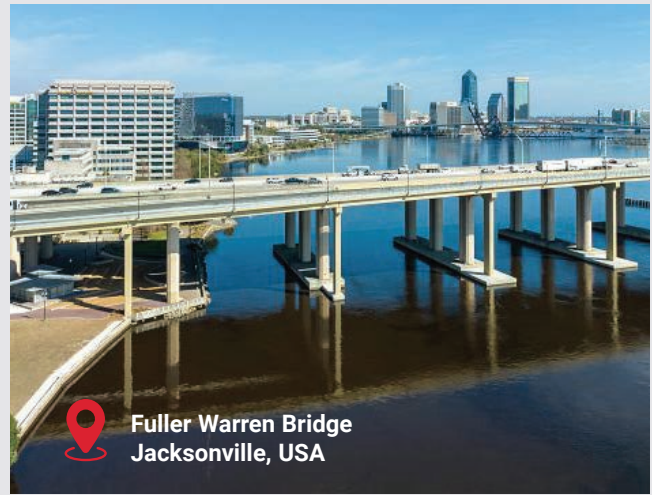
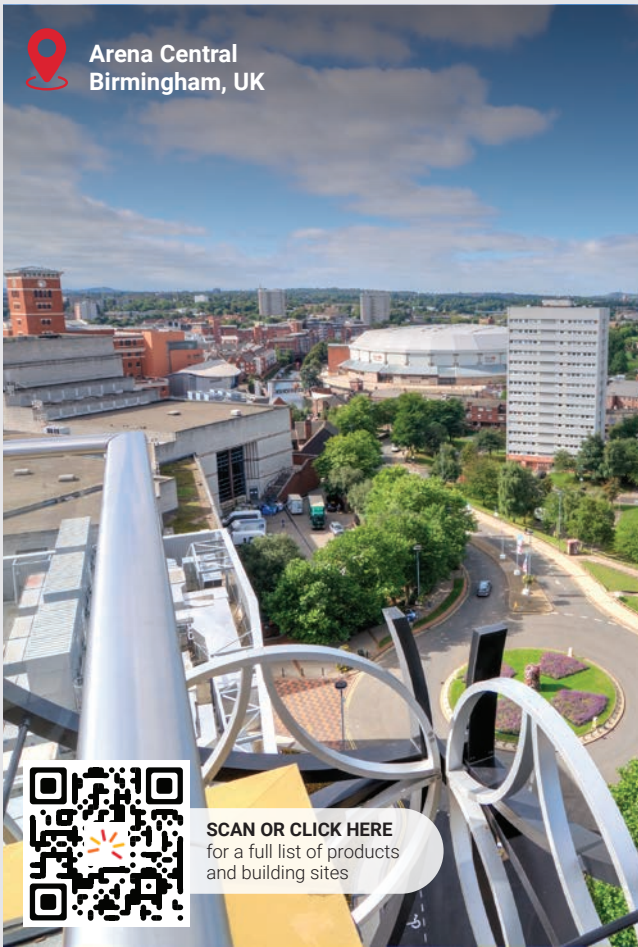
See more information about  
**nVent LENTON Interlok Installation Guide**

[nVent.widen.net/s/8vblnzxbmw/pdf008](http://nVent.widen.net/s/8vblnzxbmw/pdf008) and [nVent.widen.net/s/nmr55ccqrv/ipnalk0](http://nVent.widen.net/s/nmr55ccqrv/ipnalk0)



# nVent LENTON Projects

With Interlok Grout-Filled Precast Splicing System



**Hot and Cold  
Temperature Additives**



**Seismic-Rated  
Performance**



**Speedy  
Installation**



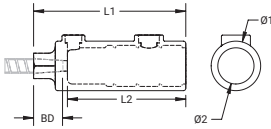
## nVent BIM Library



- ✓ Appeal to clients with data-rich 3D modeling capabilities
- ✓ Enhanced Visualization: Create realistic projects in live time
- ✓ Clash detection quickly identifies and resolves issues, limiting errors on site and maximizing cost savings
- ✓ Design support and service when and where it's needed

# Interlok Grout-Fill Couplers

## nVENT LENTON INTERLOK STANDARD GROUT-FILL COUPLER, PLAIN



- Designed to splice the same diameter bars
- Smaller bars can be installed into the over-sized cavity end if required
- Over-sized cavity allows for greater field tolerance
- Taper-threaded end helps prevent movement of the reinforcing bars and eliminate misalignment
- Requires less grout than most competitive systems
- Digital model available in nVent BIM Library

**Material:** Cast Iron  
**Finish:** Plain

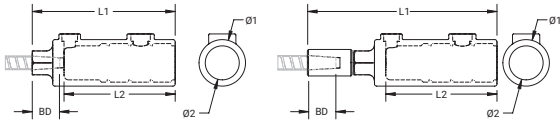


Catalog Number	Rebar Size, Metric	Diameter 1 Ø1	Diameter 2 Ø2	Length 1 L1	Length 2 L2	Bar Depth BD	Unit Weight
LK5	16 mm	65 mm	48 mm	200 mm	156 mm	22 mm	1.98 kg
LK16	16 mm	59 mm	41 mm	201 mm	168 mm	24 mm	1.69 kg
LK6	20 mm	65 mm	48 mm	200 mm	156 mm	28 mm	1.96 kg
LK20	20 mm	62 mm	45 mm	226 mm	178 mm	35 mm	1.98 kg
LK7	22 mm	65 mm	48 mm	200 mm	156 mm	32 mm	1.94 kg
LK8	25 mm	68 mm	51 mm	219 mm	178 mm	34 mm	2.15 kg
LK25	25 mm	68 mm	51 mm	228 mm	178 mm	40 mm	2.26 kg
LK9	28 mm	71 mm	54 mm	248 mm	203 mm	38 mm	2.44 kg
LK10	32 mm	76 mm	59 mm	275 mm	229 mm	40 mm	2.84 kg
LK11	36 mm	80 mm	62 mm	305 mm	251 mm	43 mm	3.63 kg
LK36	36 mm	81 mm	62 mm	313 mm	251 mm	52 mm	4.04 kg
LK40	40 mm	94 mm	70 mm	386 mm	324 mm	57 mm	6.33 kg
LKT14	43 mm	94 mm	70 mm	386 mm	324 mm	56 mm	7.26 kg

Bar dimensions and weights listed may vary by region. Coupler sizes not shown may be available by special order. Contact your nVent LENTON representative for more information.

# Interlok Grout-Fill Couplers

## nVENT LENTON INTERLOK TRANSITION GROUT-FILL COUPLER, PLAIN



- Designed to splice different diameter bars
- Over-sized cavity allows for greater field tolerance
- Taper-threaded end helps prevent movement of the reinforcing bars and eliminate misalignment
- Requires less grout than most competitive systems
- Digital model available in nVent BIM Library

**Material:** Cast Iron  
**Finish:** Plain

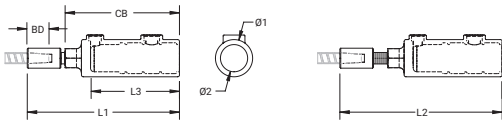
Catalog Number	Product	Rebar Size, Metric	Diameter 1 Ø1	Diameter 2 Ø2	Length 1 L1	Length 2 L2	Bar Depth BD	Unit Weight
LK86	One-Piece Assembly	25 mm, 20 mm	68 mm	51 mm	219 mm	178 mm	28 mm	2.29 kg
LK87	One-Piece Assembly	25 mm, 22 mm	68 mm	51 mm	219 mm	178 mm	32 mm	2.16 kg
LK97	One-Piece Assembly	28 mm, 22 mm	71 mm	54 mm	248 mm	203 mm	32 mm	2.44 kg
LK98	One-Piece Assembly	28 mm, 25 mm	71 mm	54 mm	248 mm	203 mm	34 mm	2.45 kg
LK109	One-Piece Assembly	32 mm, 28 mm	76 mm	59 mm	275 mm	229 mm	38 mm	3.63 kg
LK119	Two-Piece Assembly	36 mm, 28 mm	79 mm	62 mm	373 mm	241 mm	38 mm	4.56 kg
LK1110	One-Piece Assembly	36 mm, 32 mm	80 mm	62 mm	305 mm	251 mm	40 mm	3.61 kg
LK1410	One-Piece Assembly	43 mm, 32 mm	94 mm	70 mm	386 mm	324 mm	40 mm	7.26 kg
LK1411	One-Piece Assembly	43 mm, 36 mm	94 mm	70 mm	386 mm	324 mm	43 mm	7.12 kg
LK1814T	One-Piece Assembly	57 mm, 43 mm	114 mm	83 mm	518 mm	432 mm	56 mm	19.96 kg

Designed to Meet AASHTO; ABNT NBR 8548:1984; ACI 318 Type 1 (125% Specified Yield); ACI 318 Type 2 (Specified Tensile); ACI 349; ACI 359; AS3600

Bar dimensions and weights listed may vary by region. Coupler sizes not shown may be available by special order. Contact your nVent LENTON representative for more information.

# Interlok Grout-Fill Couplers

## nVENT LENTON INTERLOK POSITION GROUT-FILL COUPLER



- Designed to splice the same diameter bars
- Smaller bars can be installed into the over-sized cavity end if required
- Positional feature allows the threaded coupler end to telescope out to close a gap between forms and to allow alignment of the grout tubes
- Over-sized cavity allows for greater field tolerance
- Taper-threaded end helps prevent movement of the reinforcing bars and eliminate misalignment
- Requires less grout than most competitive systems
- Digital model available in nVent BIM Library

**Material:** Cast Iron

**Finish:** Plain

Catalog Number	Rebar Size, Metric	Diameter 1 Ø1	Diameter 2 Ø2	Length 1 L1	Length 2 L2	Length 3 L3	Bar Depth BD	Coupler Body CB	Unit Weight
LK6STHD	20 mm	65 mm	48 mm	265 mm	284 mm	156 mm	28 mm	200 mm	2.42 kg
LK11STHD	36 mm	80 mm	62 mm	389 mm	414 mm	251 mm	43 mm	305 mm	4.59 kg
LKT14STHD	43 mm	94 mm	70 mm	485 mm	505 mm	312 mm	56 mm	386 mm	8.3 kg

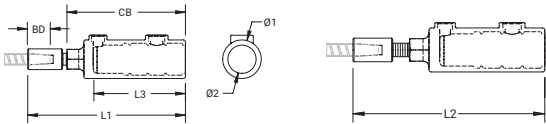
Designed to Meet: AASHTO; ABNT NBR 8548:1984; ACI 318 Type 1 (125% Specified Yield); ACI 318 Type 2 (Specified Tensile); ACI 349; ACI 359; AS3600

Bar dimensions and weights listed may vary by region. Coupler sizes not shown may be available by special order. Contact your nVent LENTON representative for more information.



# Interlok Grout-Fill Couplers

## nVENT LENTON INTERLOK POSITION TRANSITION GROUT-FILL COUPLER



- Designed to splice different diameter bars
- Positional feature allows the threaded coupler end to telescope out to close a gap between forms and to allow alignment of the grout tubes
- Over-sized cavity allows for greater field tolerance
- Taper-threaded end helps prevent movement of the reinforcing bars and eliminate misalignment
- Requires less grout than most competitive systems

**Material:** Cast Iron  
**Finish:** Plain  
**Packaging:** Standard

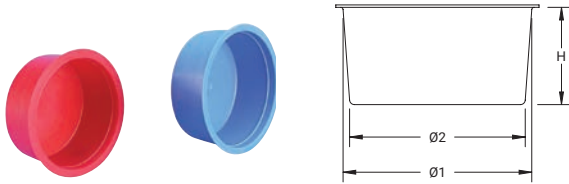
Catalog Number	Rebar Size, Metric	Diameter 1 Ø1	Diameter 2 Ø2	Length 1 L1	Length 2 L2	Length 3 L3	Bar Depth BD	Coupler Body CB	Unit Weight
LK1110STHD	36 mm, 32 mm	80 mm	62 mm	384 mm	410 mm	251mm	40mm	305mm	4.59 kg

Designed to Meet: AASHTO; ABNT NBR 8548:1984; ACI 318 Type 1 (125% Specified Yield); ACI 318 Type 2 (Specified Tensile); ACI 349; ACI 359; AS3600

Bar dimensions and weights listed may vary by region. Coupler sizes not shown may be available by special order. Contact your nVent LENTON representative for more information.

# Interlok Accessories

## DUST CAP

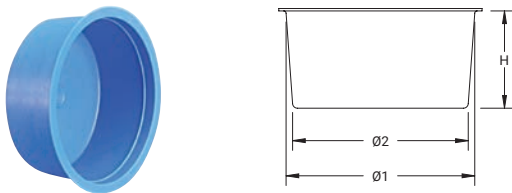


- Snug fit prevents the cap from falling out of the coupler
- Easy to install and remove

**Material:** Polyethylene

Catalog Number	Rebar Size, Metric	Height H	Diameter 1 Ø1	Diameter 2 Ø2	Color
LK507	16 mm, 20 mm	25 mm	49 mm	46 mm	Blue
LK508	25 mm	19 mm	52 mm	50 mm	Red
LK509	28 mm	19 mm	55 mm	54 mm	Red
LK510	32 mm	25 mm	59 mm	55 mm	Blue
LK511	36 mm	25 mm	63 mm	58 mm	Blue

## INLET/OUTLET PLUG



- Designed to fit inside schedule 40 PVC pipe
- Easy to install and remove

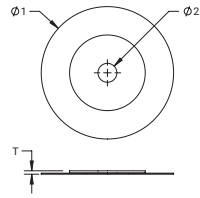
**Color:** Blue

**Material:** Polyethylene

Catalog Number	Type	Height H	Diameter 1 Ø1	Diameter 2 Ø2
LK501	Inlet Tube	16 mm	22 mm	19 mm
LK502	Outlet Tube	13 mm	16 mm	14 mm

# Interlok Accessories

## SEALING DISK



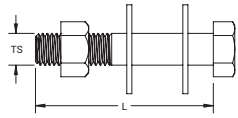
- Rubber seal is designed to fit tightly around there inforcing bar
- Easy to install

**Material:** Steel, Neoprene

Catalog Number	Rebar Size, Metric	Diameter 1 Ø1	Diameter 2 Ø2	Thickness T	Unit Weight
LK607	16 mm	89 mm	12.7 mm	2 mm	0.03 kg
LK608	25 mm	92 mm	22.2 mm	2 mm	0.03 kg
LK609	28 mm	95 mm	25.4 mm	2 mm	0.04 kg
LK610	32 mm	102 mm	28.6 mm	2 mm	0.04 kg
LK611	36 mm	105 mm	28.6 mm	2 mm	0.04 kg
LK614	43 mm	105 mm	38.1 mm	2 mm	0.04 kg

# Interlok Accessories

## NVENT LENTON INTERLOK BOLTED FORM MOUNT

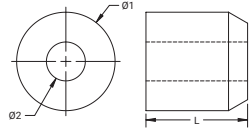


- Durable and reusable
- Standard bolt uses standard sockets and wrenches

Catalog Number	Material	Length L	Thread Size TS	Unit Weight
LK810	Steel	89 mm	5/8" UNC	0.3 kg

# Interlok Accessories

## NVENT LENTON INTERLOK GROMMET



- Color-coded for the appropriate coupler size
- Durable and reusable

**Material:** Polyester Urethane

Catalog Number	Diameter 1 Ø1	Diameter 2 Ø2	Length L	For Use With	Color	Unit Weight
LK307A	46 mm	19 mm	52 mm	LK5, LK6, LK7	Blue	0.08 kg
LK308A	49 mm	19 mm	52 mm	LK8	Red	0.09 kg
LK309A	52 mm	19 mm	52 mm	LK9	Black	0.11 kg
LK310A	57 mm	19 mm	52 mm	LK10	Yellow	0.13 kg
LK311A	60 mm	19 mm	52 mm	LK11	Blue	0.15 kg
LK314A	67 mm	19 mm	52 mm	LK12, LK40, LKT14	Red	0.22 kg
LK316A	40 mm	19 mm	51 mm	LK16	Black	0.12 kg
LK318A	83 mm	19 mm	52 mm	LKT18, LKT50	Black	0.5 kg
LK320A	43 mm	19 mm	51 mm	LK20	Yellow	0.15 kg

## NVENT LENTON INTERLOK HY15LM GROUT



- Cures quickly, allowing early removal of bracing systems
- Nonmetallic grout will not rust or stain structures
- Designed to provide superior dynamic, seismic and ultimate strength performance for moment frame applications
- For use in pump or gravity fill applications



Catalog Number	Compressive Strength	Working Temperature	Unit Weight
HY15LM	24.1 MPa @ 1 d, 110.3 MPa @ 28 d	0 to 38°C	22.68 kg

Compressive Strength is based on room temperature tests performed at 70°F (21°C).

The shelf life of nVent LENTON Interlok Grout is 12 months from the manufacturing date printed on the bag.

nVent LENTON Interlok Grout should be stored in a cool, dry environment. It is recommended that the nVent LENTON Interlok Grout be stored indoors to maintain maximum shelf life and physical properties.

# Interlok Accessories

## **nVENT LENTON INTERLOK HYA15HT GROUT ADDITIVE, HOT OR COLD TEMPERATURE**



- Allows for hot temperature grouting
- Increases grout working time in hot or cold climates
- Allows for cold temperature grouting
- Extends the construction season
- For use in pump or gravity fill applications
- Designed for use with nVent LENTON Interlok HY15LM Grout

Catalog Number	Compressive Strength	Working Temperature	Unit Weight
HYA15HT	24.1 MPa @ 1 d, 110.3 MPa @ 28 d	21 to 50 °C	0.05 kg
HYA15CT	24.1 MPa @ 1 d, 110.3 MPa @ 28 d	-7 to 10 °C	0.68 kg

Extreme weather concreting procedures, such as ACI 305 Hot Weather Concreting and ACI 306 Cold Weather Concreting, must be followed.

HYA15HT can be used in temperatures as low as 70°F (21°C) to extend working time; however, this may slow the compressive strength curve.

## **HY15LM FLOW KIT**



- Includes all components needed to perform the slump test
- Durable and reusable

Part Number	Unit Weight
LK430	2.9 kg

# A Look at nVent LENTON Concrete Reinforcement Products



## WARNING

nVent products shall be installed and used only as indicated in nVent's product instruction sheets and training materials. Instruction sheets are available at [nVent.com/LENTON](http://nVent.com/LENTON) and from your nVent customer service representative. Improper installation, misuse, misapplication or other failure to completely follow nVent's instructions and warnings may cause product malfunction, property damage, serious bodily injury and/or death, and void your warranty.



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IAPMO is a registered trademark of the International Association of Plumbing & Mechanical Officials.

IBC and ICC are registered trademarks of the International Code Council.

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nVent LENTON is a world leader in advanced mechanical rebar splicing systems. Our Rebar Splicing Specialists understand the reinforced concrete business and inherent rebar splicing challenges on today's job sites. nVent LENTON offers a wide range of Mechanical Splices for a wide variety of construction needs:

- nVent LENTON Taper-Threaded Splicing Systems – Ideal alternative to conventional lap splices
- Mechanical Anchors including nVent LENTON Terminator – Ideal alternative to hooked rebar anchorage and shear reinforcement
- nVent LENTON Ultimate Splicing Systems and Terminators – Ideal for high-strain, fatigue, seismic and nuclear performance requirements
- nVent LENTON Interlok Grout-Filled Precast Splicing System – Ideal for precast structures
- nVent LENTON Quick Wedge Lap Splicing System – Ideal for retrofit applications
- nVent LENTON Cadweld – Ideal for curved rebar in nuclear containment structures
- nVent LENTON Connect Shear Bolt Splicing System – Ideal in situ construction

As your rebar splicing specialist, nVent LENTON offers you the expertise you need for all your rebar splicing projects.

nVent Electrical Connections is a leading global manufacturer and marketer of superior engineered products for niche electrical, mechanical and concrete applications. These nVent products are sold globally under a variety of market-leading brands: nVent ERICO welded electrical connections, facility electrical protection, and rail and industrial products; nVent CADDY fixing, fastening and support products; nVent ERIFLEX low voltage power and grounding connections; and nVent LENTON engineered systems for concrete reinforcement. For more information on nVent ERICO, CADDY, ILSCO, ERIFLEX and LENTON, please visit [nVent.com/LENTON](http://nVent.com/LENTON).

## How to Order:

To order the correct nVent LENTON Interlok for your construction applications, please contact your local nVent Customer Care Representative.

## Mechanical splices shall be Interlok, manufactured by nVent LENTON.

**Generic:** Mechanical reinforcing steel splices shall meet building code requirements of developing in tension and compression as required by\*. The sleeve shall be produced as a casting from ductile iron conforming to ASTM A536 standards. One end of the sleeve shall consist of a positive locking tapered thread, while the opposing cylindrical side is designed with equally spaced concentric ribs. Grouting must be performed in accordance with the manufacturer's recommended installation procedures.

\*as required by local norms/codes.



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