NC Threaded Inserts For Suspending, Connecting and Anchoring to Concrete



F-5 Threaded Insert

The Dayton Superior F-5 Threaded Inserts have National Course (NC) threads and are recommended for use under permanent loading conditions. This insert has been approved by the Board of Standards and Appeals for use in New York City under Calendar No. 447-60SM.

The F-5 insert is cast from ductile iron that meets ASTM A-395, Grade 60-40-18.



Threaded Insert

| To Order: |
|----------------------------------|
| Specify: (1) quantity, (2) name, |
| (3) bolt diameter. |
| Example: |

200, F-5 Threaded Inserts, 3/4" bolt diameter.

| F-5 Threaded Insert Selection Chart | | | | | | | | | | |
|--|------------------------------|--------------------|----------|--------|--------|--|--|--|--|--|
| Bolt Diameter and Threads per Inch | Tension Safe Working Load | Bolt Engagement | Α | В | с | | | | | |
| 1/2" – 13 | 1,500 lbs. | 15/16" | 1-5/8" | 2-1/2" | 1-5/8" | | | | | |
| 5/8" – 11 | 2,000 lbs. | 3/4" | 1-5/8" | 3" | 1-5/8" | | | | | |
| 3/4" - 10 | 2,500 lbs. | 7/8" | 1-13/16" | 3" | 1-7/8" | | | | | |
| 7/8" – 9 | 3,000 lbs. | 1-5/16" | 2-1/2" | 3-3/8" | 2-5/8" | | | | | |
| 1" – 8 | 3,000 lbs. | 1-5/16" | 2-1/2" | 3-3/8" | 2-5/8" | | | | | |

Safe Working Load provides a factor of safety of approximately 3 to 1 when the insert is properly embedded in 3,000 psi normal weight concrete.

F-42 Loop Ferrule Insert

The Dayton Superior F-42 Loop Ferrule Insert is fabricated by welding a looped strut to a closed-end ferrule. F-42 insert is available in the sizes shown in the chart below and is well suited for structural connections and the suspension of equipment, piping, etc.

Minimum spacing between inserts is twice the minimum corner distance.

To Order:

Specify: (1) quantity, (2) name, (3) bolt diameter. **Example:** 200, F-42 Loop Ferrule Inserts, 3/4" bolt diameter.



F-42 Loop Ferrule Insert

| F-42 Loop Ferrule Insert Selection Chart | | | | | | | | | |
|--|-----------------------------|-------------------------------|---------------------------------|-------------------------------|----------------------------|--------|--------|--|--|
| Bolt Diameter and Threads per Inch | Minimum Edge Distance | Minimum Corner Distance | Safe Working Load Tension | Safe Working Load Shear | Maximum Bolt Engagement | A | в | | |
| 1/4" – 20 NC | 5" | 5" | 650 lbs. | 650 lbs. | 3/4" | 2-3/4" | 0.243" | | |
| 3/8" – 16 NC | 5" | 5" | 2,000 lbs. | . 1,260 lbs. | 3///" | 2-3/4" | 0.243" | | |
| | 10" | 15" | 2,000 lbs. | 2,000 lbs. | 5/4 | 2-0/4 | 0.243 | | |
| 1/2" – 13 NC | 5" | 5" | 2,000 lbs. | 1,280 lbs. | 1" | 2-3/4" | 0.243" | | |
| | 7" | 10" | 2,000 lbs. | 2,000 lbs. | | 2-0/4 | 0.240 | | |
| 5/8" – 11 NC | 5" | 7" | 2,200 lbs. | 1,990 lbs. | 1_1/8" | 3-1/2" | 0.258" | | |
| | 8" | 8" | 2,200 lbs. | 2,200 lbs. | 1-1/0 | 0-1/2 | 0.230 | | |
| 3/4" – 10 NC | 5" | 7" | 2,200 lbs. | 1,990 lbs. | 1 1/0" | 2 1/2" | 0.258" | | |
| | 8" | 8" | 2,200 lbs. | 2,200 lbs. | 1-1/6 | 5-1/2 | 0.250 | | |
| 7/8" – 9 NC | 8" | 8" | 5,300 lbs. | 4,060 lbs. | 1 1/0" | 6" | 0.275" | | |
| | 10" | 15" | 5,300 lbs. | 5,300 lbs. | 1-1/0 | 0 | 0.375 | | |
| 1" – 8 NC | 8" | 8" | 5,300 lbs. | 4,060 lbs. | 1 1/0" | 6" | 0.275" | | |
| | 10" | 15" | 5,300 lbs. | 5,300 lbs. | 1-1/0 | 0 | 0.375 | | |

Safe Working Load provides a factor of safety of approximately 3 to 1 in 3,000 psi normal weight concrete. Safe Working Loads are based on 1/2" setback from face of concrete.

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Structural Connectors