# **DROP-IN ANCHOR**

**STANDARD & LIP** 





TDS | 1003.3





ICCONS® DROP-IN ANCHOR is a single piece internally threaded expansion anchor suitable for solid base material available in carbon steel zinc plated and 316 (A4) stainless steel.

The anchor is set by displacement of the pre-assembled expander cone to enable full expansion of the anchor body. The anchor must be set with the correct ICCONS® setting tool (see product guide for full selection).

Available in two anchor body styles "Standard" and "Lip". The lip feature ensures the anchor will mount flush with the concrete surface for consistency. The internal thread is suitable for machined bolts or threaded rod.

| ZINC INTERNAL | 316 EXTERNAL | ZINC INTERNAL |                               | Zø |    |     | 6         |     |      |
|---------------|--------------|---------------|-------------------------------|----|----|-----|-----------|-----|------|
| Part No.      | Part No.     | Part No.      | Description                   | mm | mm | mm  | torque Nm | qty | qty  |
| DM06          |              |               | M6 x 25mm Drop-in             | 8  | 27 | M6  | 5         | 100 | 1000 |
| DM08          | DM08SS       |               | M8 x 30mm Drop-in             | 10 | 32 | M8  | 10        | 100 | 1000 |
|               |              | DLPM1025      | M10 x 25mm <b>Lip</b> Drop-in |    | 27 | M10 | 25        | 50  | 500  |
|               |              | DLPM1030      | M10 x 30mm <b>Lip</b> Drop-in | 12 | 32 |     |           | 50  | 500  |
| DM10          | DM10SS       |               | M10 x 40mm Drop-in            | 12 | 42 |     |           | 50  | 500  |
|               |              | DLPM1040      | M10 x 40mm <b>Lip</b> Drop-in |    | 42 |     |           | 50  | 400  |
|               |              | DLPM1225      | M12 x 25mm <b>Lip</b> Drop-in |    | 27 | M12 | 25        | 50  | 300  |
| DM12          | DM12SS       |               | M12 x 50mm Drop-in            | 15 | 52 |     | 40        | 50  | 400  |
|               |              | DLPM1250      | M12 x 50mm <b>Lip</b> Drop-in |    | 52 |     |           | 50  | 300  |
| DM16          | DM16SS       |               | M16 x 65mm Drop-in            | 20 | 67 | M16 | 95        | 25  | 100  |
| DM20          |              |               | M20 x 80mm Drop-in            | 25 | 82 | M20 | 185       | 25  | 50   |

Information contained in this technical document is based on testing by the manufacturer and should be reviewed and approved by a design professional responsible for the given application. For safety critical fastening applications designed in accordance with SA TS 101:2015, please refer to the Iccons website for a complete suite of compliant post-installed chemical and mechanical anchoring products.

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### PERFORMANCE | RECOMMENDED LOADS

|               |                       |                       |               |                 |                          | N <sub>rec</sub>      |               |               | $V_{rec}$                  |     |     |
|---------------|-----------------------|-----------------------|---------------|-----------------|--------------------------|-----------------------|---------------|---------------|----------------------------|-----|-----|
|               | <b>Z</b> Ø            |                       |               |                 |                          | ZINC & 316<br>TENSION |               |               | ZINC & 316<br>SHEAR        |     |     |
| Part No.      | Drill<br>Size<br>(mm) | Hole<br>Depth<br>(mm) | Depth<br>(mm) | Spacing<br>(mm) | Edge<br>Distance<br>(mm) | 20MPa<br>(kN)         | 32MPa<br>(kN) | 40MPa<br>(kN) | 20MPa, 32MPa,40MPa<br>(kN) |     |     |
| DM06          | 8                     | 27                    | M6            | 75              | 84                       | 1.9                   | 2.2           | 2.5           | 2.0                        |     |     |
| DM08 / DM08SS | 10                    | 32                    | M8            | 90              | 112                      | 3.2                   | 4.0           | 4.5           | 3.5                        |     |     |
| DLPM1025      | 12                    | 27                    |               | 90              | 140                      | 1.9                   | 2.2           | 2.5           | 2.2                        |     |     |
| DLPM1030      |                       | 12 32<br>42           | MIO           | 90              | 140                      | 2.9                   | 3.6           | 4.1           | 3.7                        |     |     |
| DM10 / DM10SS |                       |                       | 12            | 42              | M10                      | 120                   | 140           | 4.2           | 5.2                        | 5.8 | 5.7 |
| DLPM1040      | 42                    |                       |               | 120             | 140                      | 4.2                   | 5.2           | 5.8           | 5.7                        |     |     |
| DLPM1225      |                       | 27                    |               |                 |                          | 1.9                   | 2.2           | 2.5           | 2.2                        |     |     |
| DM12 / DM12SS | 15                    | 15                    | 15 52         | M12             | 150                      | 168                   | 6.4           | 8.2           | 9.1                        | 8.0 |     |
| DLPM1250      |                       | 32                    |               |                 |                          | 0.4                   | 0.2           | 3.1           | 0.0                        |     |     |
| DM16 / DM16SS | 20                    | 67                    | M16           | 195             | 224                      | 8.6                   | 10.8          | 12.1          | 14.2                       |     |     |
| DM20          | 25                    | 82                    | M20           | 240             | 280                      | 11.1                  | 14.1          | 15.6          | 17.5                       |     |     |

**Note:** The above information has been derived from laboratory test results using NATA calibrated equipment. The above load capacities incorporate a safety factor of 3 for concrete and 2.5 for steel. All loads are representative of a single anchor remote from an edge.

**Limit State Design -** Multiply the above loads by 1.8 to determine the Limit State Design capacities.









| Anchor Component        | Standard Yellow Zinc | Standard Stainless Steel | Lip Clear Zinc |
|-------------------------|----------------------|--------------------------|----------------|
| Body                    | C1018                | 316 (A4) Stainless Steel | C1018          |
| Cone                    | C1018                | 316 (A4) Stainless Steel | C1018          |
| Thread                  | Metric               | Metric                   | Metric         |
| Plating (min 5 microns) | Yellow Zinc          |                          | Clear Zinc     |

# Installation Accessories Setting tools for Standard Drop-in and Lip Drop-ins (refer to Product Guide for details) Short SDS drill bit & setting tool for M10x25 & M10x30 Lip Drop-in Anchors (refer to Product Guide for details) Short SDS Drill Bit for M12 Lip Drop-in Anchors (refer to Product Guide for details)

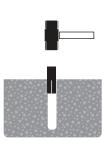
## INSTALLATION



With the correct diameter drill bit, drill a hole to the correct depth.



Clean dust and other material from the hole.



Insert with internal thread facing up, tap in anchor until seated and flush with surface of base material.



With the correct setting tool strike with a heavy hammer until tool is seated with the top of the anchor.



Place fixture in position and insert machined bolt and tighten until firm (do not exceed recommended torque).



For threaded rod installations wind in rod until firm, do not over tighten.