

FM-753 3DG

## Gennemstiksanker, 3DG coating

Heavy duty ekspansionsanker for medium laster, i str. M6-M20 til fastgørelse i urevnet beton C20/25 – C50/60.

## Egenskaber

### Materiale

- Stål
- Speciel korrosionsbeskyttende belægning 3DG med mat finish
- Rustfrit stål A4-klips

### Fordele

- Bredt sortiment
- Enkel installation
- Alsidig anvendelse
- Koldformet stål
- Øget tykkelse af ekspansionssegmenter
- Seks tænder samt antislip kant forhindre skridning under tilspænding

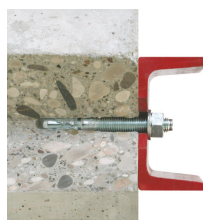
## Anvendelse

### Anvendelsesområder

- Gelændere
- Metal- og træarbejde
- Fasader

### Egnet til

- Urevnet beton
- Sten



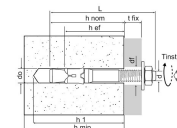
FM-753 3DG

Gennemstiksanker, 3DG coating

### Teknisk data

FM-753 3DG

Gennemstiksanker, 3DG coating



## Product dimensions

| Art. nr.      | Product Reference | Dimensions [ØxL] [mm] | Thread length | Fixture thickness [t <sub>fix,max</sub> ] with standard setting depth [h <sub>ef,STD</sub> ] [mm] | Fixture thickness [t <sub>fix,max</sub> ] with reduced setting depth [h <sub>ef,RED</sub> ] [mm] | Hole diameter in fixture [d <sub>f</sub> ] [mm] | Hole diameter [d <sub>o</sub> ] x depth [h <sub>1</sub> ] in substrate [mm] | Min. support thickness [h <sub>min</sub> ] [mm] | Min. setting depth [h <sub>ef</sub> ] [mm] | Installation torque [T <sub>inst</sub> ] [Nm] | Qty per box | Qty per outer box |
|---------------|-------------------|-----------------------|---------------|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------|-----------------------------------------------------------------------------|-------------------------------------------------|--------------------------------------------|-----------------------------------------------|-------------|-------------------|
| 75320C0604500 | FM-753 3DG        | M6x45*                | 20            | -                                                                                                 | 3                                                                                                | 7                                               | 6x45                                                                        | 100                                             | 30                                         | 6                                             | 200         | 2000              |
| 75320C0606500 |                   | M6x65                 | 40            | 15                                                                                                | (20)                                                                                             | 7                                               | 6x50                                                                        | 100                                             | 35                                         | 6                                             | 100         | 1000              |
| 75320C0608500 |                   | M6x85                 | 60            | 35                                                                                                | (40)                                                                                             | 7                                               | 6x50                                                                        | 100                                             | 35                                         | 6                                             | 100         | 1000              |
| 75320C0610000 |                   | M6x100                | 60            | 50                                                                                                | (55)                                                                                             | 7                                               | 6x50                                                                        | 100                                             | 35                                         | 6                                             | 50          | 500               |
| 75320C0805000 |                   | M8x50*                | 23            | -                                                                                                 | 5                                                                                                | 9                                               | 8x50                                                                        | 100                                             | 30                                         | 15                                            | 100         | 1000              |
| 75320C0806500 |                   | M8x65                 | 38            | 7                                                                                                 | (15)                                                                                             | 9                                               | 8x60                                                                        | 100                                             | 40                                         | 15                                            | 100         | 1000              |
| 75320C0807500 |                   | M8x75                 | 48            | 15                                                                                                | (25)                                                                                             | 9                                               | 8x60                                                                        | 100                                             | 40                                         | 15                                            | 100         | 400               |
| 75320C0809000 |                   | M8x90                 | 63            | 30                                                                                                | (40)                                                                                             | 9                                               | 8x60                                                                        | 100                                             | 40                                         | 15                                            | 100         | 400               |
| 75320C0811500 |                   | M8x115                | 83            | 55                                                                                                | (65)                                                                                             | 9                                               | 8x60                                                                        | 100                                             | 40                                         | 15                                            | 100         | 400               |
| 75320C0813500 |                   | M8x135                | 88            | 75                                                                                                | (85)                                                                                             | 9                                               | 8x60                                                                        | 100                                             | 40                                         | 15                                            | 100         | 400               |
| 75320C0816500 |                   | M8x165                | 88            | 105                                                                                               | (115)                                                                                            | 9                                               | 8x60                                                                        | 100                                             | 40                                         | 15                                            | 50          | 200               |
| 75320C1006000 |                   | M10x60*               | 28            | -                                                                                                 | 5                                                                                                | 12                                              | 10x55                                                                       | 100                                             | 35                                         | 25                                            | 50          | 500               |
| 75320C1007500 |                   | M10x75                | 43            | 5                                                                                                 | (20)                                                                                             | 12                                              | 10x70                                                                       | 100                                             | 50                                         | 25                                            | 50          | 500               |
| 75320C1009000 |                   | M10x90                | 55            | 20                                                                                                | (35)                                                                                             | 12                                              | 10x70                                                                       | 100                                             | 50                                         | 25                                            | 50          | 200               |
| 75320C1010000 |                   | M10x100               | 60            | 30                                                                                                | (45)                                                                                             | 12                                              | 10x70                                                                       | 100                                             | 50                                         | 25                                            | 50          | 200               |
| 75320C1012000 |                   | M10x120               | 85            | 50                                                                                                | (65)                                                                                             | 12                                              | 10x70                                                                       | 100                                             | 50                                         | 25                                            | 50          | 200               |
| 75320C1014500 |                   | M10x145               | 85            | 75                                                                                                | (90)                                                                                             | 12                                              | 10x70                                                                       | 100                                             | 50                                         | 25                                            | 50          | 200               |
| 75320C1017000 |                   | M10x170               | 85            | 100                                                                                               | (115)                                                                                            | 12                                              | 10x70                                                                       | 100                                             | 50                                         | 25                                            | 25          | 100               |
| 75320C1021000 |                   | M10x210               | 85            | 140                                                                                               | (155)                                                                                            | 12                                              | 10x70                                                                       | 100                                             | 50                                         | 25                                            | 25          | 100               |
| 75320C1208000 |                   | M12x80*               | 40            | -                                                                                                 | 7                                                                                                | 14                                              | 12x70                                                                       | 100                                             | 45                                         | 50                                            | 50          | 200               |
| 75320C1210000 |                   | M12x100               | 58            | 10                                                                                                | (25)                                                                                             | 14                                              | 12x85                                                                       | 120                                             | 60                                         | 50                                            | 50          | 200               |
| 75320C1211000 |                   | M12x110               | 68            | 20                                                                                                | (35)                                                                                             | 14                                              | 12x85                                                                       | 120                                             | 60                                         | 50                                            | 50          | 200               |
| 75320C1213500 |                   | M12x135               | 93            | 45                                                                                                | (60)                                                                                             | 14                                              | 12x85                                                                       | 120                                             | 60                                         | 50                                            | 25          | 100               |
| 75320C1216000 |                   | M12x160               | 93            | 70                                                                                                | (85)                                                                                             | 14                                              | 12x85                                                                       | 120                                             | 60                                         | 50                                            | 25          | 100               |
| 75320C1218500 |                   | M12x185               | 93            | 100                                                                                               | (115)                                                                                            | 14                                              | 12x85                                                                       | 120                                             | 60                                         | 50                                            | 25          | 100               |
| 75320C1220000 |                   | M12x200               | 93            | 115                                                                                               | (130)                                                                                            | 14                                              | 12x85                                                                       | 120                                             | 60                                         | 50                                            | 20          | 80                |
| 75320C1222000 |                   | M12x220               | 93            | 135                                                                                               | (150)                                                                                            | 14                                              | 12x85                                                                       | 120                                             | 60                                         | 50                                            | 20          | 80                |
| 75320C1224000 |                   | M12x240               | 93            | 155                                                                                               | (170)                                                                                            | 14                                              | 12x85                                                                       | 120                                             | 60                                         | 50                                            | 20          | 80                |
| 75320C1225500 |                   | M12x255               | 93            | 170                                                                                               | (185)                                                                                            | 14                                              | 12x85                                                                       | 120                                             | 60                                         | 50                                            | 20          | 80                |
| 75320C1228500 |                   | M12x285               | 93            | 200                                                                                               | (215)                                                                                            | 14                                              | 12x85                                                                       | 120                                             | 60                                         | 50                                            | 20          | 80                |
| 75320C1230000 |                   | M12x300               | 93            | 215                                                                                               | (230)                                                                                            | 14                                              | 12x85                                                                       | 120                                             | 60                                         | 50                                            | 20          | 80                |
| 75320C1232500 |                   | M12x325               | 93            | 240                                                                                               | (255)                                                                                            | 14                                              | 12x85                                                                       | 120                                             | 60                                         | 50                                            | 20          | 80                |
| 75320C1611000 |                   | M16x110*              | 53            | -                                                                                                 | 15                                                                                               | 18                                              | 16x95                                                                       | 130                                             | 65                                         | 100                                           | 20          | 80                |
| 75320C1612500 |                   | M16x125               | 68            | 10                                                                                                | (30)                                                                                             | 18                                              | 16x115                                                                      | 170                                             | 85                                         | 100                                           | 20          | 80                |
| 75320C1614500 |                   | M16x145               | 88            | 30                                                                                                | (50)                                                                                             | 18                                              | 16x115                                                                      | 170                                             | 85                                         | 100                                           | 20          | 80                |
| 75320C1617500 |                   | M16x175               | 88            | 60                                                                                                | (80)                                                                                             | 18                                              | 16x115                                                                      | 170                                             | 85                                         | 100                                           | 20          | 60                |
| 75320C1621500 |                   | M16x215               | 88            | 100                                                                                               | (120)                                                                                            | 18                                              | 16x115                                                                      | 170                                             | 85                                         | 100                                           | 15          | 40                |
| 75320C1623000 |                   | M16x230               | 88            | 115                                                                                               | (135)                                                                                            | 18                                              | 16x115                                                                      | 170                                             | 85                                         | 100                                           | 10          | 40                |

\* Short series with reduced embedment depth

FM-753 3DG

**Gennemstiksanker, 3DG coating**

| Art. nr.      | Product Reference | Dimensions [ØxL] [mm] | Thread length | Fixture thickness [t <sub>fix,max</sub> ] with standard setting depth [h <sub>ef,STD</sub> ] [mm] | Fixture thickness [t <sub>fix,max</sub> ] with reduced setting depth [h <sub>ef,RED</sub> ] [mm] | Hole diameter in fixture [d <sub>f</sub> ] [mm] | Hole diameter [d <sub>o</sub> ] x depth [h <sub>1</sub> ] in substrate [mm] | Min. support thickness [h <sub>min</sub> ] [mm] | Min. setting depth [h <sub>ef</sub> ] [mm] | Installation torque [T <sub>inst</sub> ] [Nm] | Qty per box | Qty per outer box |
|---------------|-------------------|-----------------------|---------------|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------|-----------------------------------------------------------------------------|-------------------------------------------------|--------------------------------------------|-----------------------------------------------|-------------|-------------------|
| 75320C1625000 |                   | M16x250               | 88            | 135                                                                                               | (155)                                                                                            | 18                                              | 16x115                                                                      | 170                                             | 85                                         | 100                                           | 10          | 40                |
| 75320C1627000 |                   | M16x270               | 88            | 155                                                                                               | (175)                                                                                            | 18                                              | 16x115                                                                      | 170                                             | 85                                         | 100                                           | 10          | 40                |
| 75320C1632000 |                   | M16x320               | 88            | 205                                                                                               | (225)                                                                                            | 18                                              | 16x115                                                                      | 170                                             | 85                                         | 100                                           | 10          | 40                |
| 75320C2017000 |                   | M20x170               | 60            | 30                                                                                                | -                                                                                                | 22                                              | 20x130                                                                      | 200                                             | 95                                         | 160                                           | 10          | 40                |
| 75320C2021500 |                   | M20x215               | 60            | 75                                                                                                | -                                                                                                | 22                                              | 20x130                                                                      | 200                                             | 95                                         | 160                                           | 10          | 40                |
| 75320C2028000 |                   | M20x280               | 60            | 140                                                                                               | -                                                                                                | 22                                              | 20x130                                                                      | 200                                             | 95                                         | 160                                           | 10          | 40                |

\* Short series with reduced embedment depth

**FM-753 3DG**
**Gennemstiksanker, 3DG coating**

Design capacities - single anchor - no edge distances

| Art. nr.      | Dimensions<br>[ØxL] [mm] | Product<br>Reference | Design capacities - single anchor - no edge distances |                |                |                |                   |                |                |                |                            |
|---------------|--------------------------|----------------------|-------------------------------------------------------|----------------|----------------|----------------|-------------------|----------------|----------------|----------------|----------------------------|
|               |                          |                      | Design capacity - Non-cracked concrete (3)            |                |                |                |                   |                |                |                | Bending moment<br>MRd [Nm] |
|               |                          |                      | Tension - NRd (1)                                     |                |                |                | Shear - VRd (1-2) |                |                |                |                            |
|               |                          |                      | C20/25<br>[kN]                                        | C30/37<br>[kN] | C40/50<br>[kN] | C50/60<br>[kN] | C20/25<br>[kN]    | C30/37<br>[kN] | C40/50<br>[kN] | C50/60<br>[kN] |                            |
| 75320C0604500 | M6x45*                   | FM-753 3DG           | 3.3                                                   | -              | -              | -              | 4.3               | -              | -              | -              | -                          |
| 75320C0606500 | M6x65                    | FM-753 3DG           | 4                                                     | -              | -              | -              | 4.3               | -              | -              | -              | -                          |
| 75320C0608500 | M6x85                    | FM-753 3DG           | 4                                                     | -              | -              | -              | 4.3               | -              | -              | -              | -                          |
| 75320C0610000 | M6x100                   | FM-753 3DG           | 4                                                     | -              | -              | -              | 4.3               | -              | -              | -              | -                          |
| 75320C0805000 | M8x50*                   | FM-753 3DG           | 4                                                     | -              | -              | -              | 4.3               | -              | -              | -              | -                          |
| 75320C0806500 | M8x65                    | FM-753 3DG           | 8                                                     | -              | -              | -              | 5.4               | -              | -              | -              | -                          |
| 75320C0807500 | M8x75                    | FM-753 3DG           | 8                                                     | -              | -              | -              | 6.1               | -              | -              | -              | -                          |
| 75320C0809000 | M8x90                    | FM-753 3DG           | 8                                                     | -              | -              | -              | 6.1               | -              | -              | -              | -                          |
| 75320C0811500 | M8x115                   | FM-753 3DG           | 8                                                     | -              | -              | -              | 6.1               | -              | -              | -              | -                          |
| 75320C0813500 | M8x135                   | FM-753 3DG           | 8                                                     | -              | -              | -              | 6.1               | -              | -              | -              | -                          |
| 75320C0816500 | M8x165                   | FM-753 3DG           | 8                                                     | -              | -              | -              | 6.1               | -              | -              | -              | -                          |
| 75320C1006000 | M10x60*                  | FM-753 3DG           | 4                                                     | -              | -              | -              | 8.3               | -              | -              | -              | -                          |
| 75320C1007500 | M10x75                   | FM-753 3DG           | 8                                                     | -              | -              | -              | 9.3               | -              | -              | -              | -                          |
| 75320C1009000 | M10x90                   | FM-753 3DG           | 8                                                     | -              | -              | -              | 9.3               | -              | -              | -              | -                          |
| 75320C1010000 | M10x100                  | FM-753 3DG           | 8                                                     | -              | -              | -              | 9.3               | -              | -              | -              | -                          |
| 75320C1012000 | M10x120                  | FM-753 3DG           | 8                                                     | -              | -              | -              | 9.3               | -              | -              | -              | -                          |
| 75320C1014500 | M10x145                  | FM-753 3DG           | 8                                                     | -              | -              | -              | 9.3               | -              | -              | -              | -                          |
| 75320C1017000 | M10x170                  | FM-753 3DG           | 8                                                     | -              | -              | -              | 9.3               | -              | -              | -              | -                          |
| 75320C1021000 | M10x210                  | FM-753 3DG           | 8                                                     | -              | -              | -              | 9.3               | -              | -              | -              | -                          |
| 75320C1208000 | M12x80*                  | FM-753 3DG           | 8                                                     | -              | -              | -              | 9.9               | -              | -              | -              | -                          |
| 75320C1210000 | M12x100                  | FM-753 3DG           | 15.2                                                  | -              | -              | -              | 13.4              | -              | -              | -              | -                          |
| 75320C1211000 | M12x110                  | FM-753 3DG           | 15.2                                                  | -              | -              | -              | 13.4              | -              | -              | -              | -                          |
| 75320C1213500 | M12x135                  | FM-753 3DG           | 15.2                                                  | -              | -              | -              | 13.4              | -              | -              | -              | -                          |
| 75320C1216000 | M12x160                  | FM-753 3DG           | 15.2                                                  | -              | -              | -              | 13.4              | -              | -              | -              | -                          |
| 75320C1218500 | M12x185                  | FM-753 3DG           | 15.2                                                  | -              | -              | -              | 13.4              | -              | -              | -              | -                          |
| 75320C1220000 | M12x200                  | FM-753 3DG           | 15.2                                                  | -              | -              | -              | 13.4              | -              | -              | -              | -                          |
| 75320C1222000 | M12x220                  | FM-753 3DG           | 15.2                                                  | -              | -              | -              | 13.4              | -              | -              | -              | -                          |
| 75320C1224000 | M12x240                  | FM-753 3DG           | 15.2                                                  | -              | -              | -              | 13.4              | -              | -              | -              | -                          |
| 75320C1225500 | M12x255                  | FM-753 3DG           | 15.2                                                  | -              | -              | -              | 13.4              | -              | -              | -              | -                          |
| 75320C1228500 | M12x285                  | FM-753 3DG           | 15.2                                                  | -              | -              | -              | 13.4              | -              | -              | -              | -                          |
| 75320C1230000 | M12x300                  | FM-753 3DG           | 15.2                                                  | -              | -              | -              | 13.4              | -              | -              | -              | -                          |
| 75320C1232500 | M12x325                  | FM-753 3DG           | 15.2                                                  | -              | -              | -              | 13.4              | -              | -              | -              | -                          |
| 75320C1611000 | M16x110*                 | FM-753 3DG           | 17.2                                                  | -              | -              | -              | 28.4              | -              | -              | -              | -                          |
| 75320C1612500 | M16x125                  | FM-753 3DG           | 23.3                                                  | -              | -              | -              | 28.4              | -              | -              | -              | -                          |

1. The design loads have been calculated using the partial safety factors for resistances stated in ETA-approval(s). The loading figures are valid for unreinforced concrete and reinforced concrete with a rebar spacing  $s \geq 15$  cm (any diameter) or with a rebar spacing  $s \geq 10$  cm, if the rebar diameter is 10mm or smaller.

2. The figures for shear are based on a single anchor without influence of concrete edges. For anchorages close to edges ( $c \leq \max [10 \text{ hef}; 60d]$ ) the concrete edge failure shall be checked per ETAG 001, Annex C, design method A.

3. Concrete is considered non-cracked when the tensile stress within the concrete is  $\sigma_L + \sigma_R \leq 0$ . In the absence of detailed verification  $\sigma_R = 3 \text{ N/mm}^2$  can be assumed ( $\sigma_L$  equals the tensile stress within the concrete induced by external loads, anchors loads included).

\*Short series with reduced embedment depth

FM-753 3DG

Gennemstiksanker, 3DG coating

| Art. nr.      | Dimensions<br>[ØxL] [mm] | Product<br>Reference | Design capacities - single anchor - no edge distances |                |                |                |                   |                |                |                |                            |
|---------------|--------------------------|----------------------|-------------------------------------------------------|----------------|----------------|----------------|-------------------|----------------|----------------|----------------|----------------------------|
|               |                          |                      | Design capacity - Non-cracked concrete (3)            |                |                |                |                   |                |                |                |                            |
|               |                          |                      | Tension - NRd (1)                                     |                |                |                | Shear - VRd (1-2) |                |                |                | Bending moment<br>MRd [Nm] |
|               |                          |                      | C20/25<br>[kN]                                        | C30/37<br>[kN] | C40/50<br>[kN] | C50/60<br>[kN] | C20/25<br>[kN]    | C30/37<br>[kN] | C40/50<br>[kN] | C50/60<br>[kN] |                            |
| 75320C1614500 | M16x145                  | FM-753 3DG           | 23.3                                                  | -              | -              | -              | 28.4              | -              | -              | -              | -                          |
| 75320C1617500 | M16x175                  | FM-753 3DG           | 23.3                                                  | -              | -              | -              | 28.4              | -              | -              | -              | -                          |
| 75320C1621500 | M16x215                  | FM-753 3DG           | 23.3                                                  | -              | -              | -              | 28.4              | -              | -              | -              | -                          |
| 75320C1623000 | M16x230                  | FM-753 3DG           | 23.3                                                  | -              | -              | -              | 28.4              | -              | -              | -              | -                          |
| 75320C1625000 | M16x250                  | FM-753 3DG           | 23.3                                                  | -              | -              | -              | 28.4              | -              | -              | -              | -                          |
| 75320C1627000 | M16x270                  | FM-753 3DG           | 23.3                                                  | -              | -              | -              | 28.4              | -              | -              | -              | -                          |
| 75320C1632000 | M16x320                  | FM-753 3DG           | 23.3                                                  | -              | -              | -              | 28.4              | -              | -              | -              | -                          |
| 75320C2017000 | M20x170                  | FM-753 3DG           | 26.7                                                  | -              | -              | -              | 34.3              | -              | -              | -              | -                          |
| 75320C2021500 | M20x215                  | FM-753 3DG           | 26.7                                                  | -              | -              | -              | 34.3              | -              | -              | -              | -                          |
| 75320C2028000 | M20x280                  | FM-753 3DG           | 26.7                                                  | -              | -              | -              | 34.3              | -              | -              | -              | -                          |

1. The design loads have been calculated using the partial safety factors for resistances stated in ETA-approval(s). The loading figures are valid for unreinforced concrete and reinforced concrete with a rebar spacing  $s \geq 15$  cm (any diameter) or with a rebar spacing  $s \geq 10$  cm, if the rebar diameter is 10mm or smaller.

2. The figures for shear are based on a single anchor without influence of concrete edges. For anchorages close to edges ( $c \leq \max [10 \text{ hef}; 60d]$ ) the concrete edge failure shall be checked per ETAG 001, Annex C, design method A.

3. Concrete is considered non-cracked when the tensile stress within the concrete is  $\sigma_L + \sigma_R \leq 0$ . In the absence of detailed verification  $\sigma_R = 3 \text{ N/mm}^2$  can be assumed ( $\sigma_L$  equals the tensile stress within the concrete induced by external loads, anchors loads included).

\*Short series with reduced embedment depth

FM-753 3DG

Gennemstiksanker, 3DG coating

Recommended capacities - single anchor - no edge distances

| Art. nr.      | Product Reference | Dimensions<br>[ØxL] [mm] | Recommended loads - Non-cracked concrete |                |                |                |                          |                |                |                | Bending moment<br>M <sub>zul</sub> [Nm] |
|---------------|-------------------|--------------------------|------------------------------------------|----------------|----------------|----------------|--------------------------|----------------|----------------|----------------|-----------------------------------------|
|               |                   |                          | Tension - N <sub>zul</sub>               |                |                |                | Shear - V <sub>zul</sub> |                |                |                |                                         |
|               |                   |                          | C20/25<br>[kN]                           | C30/37<br>[kN] | C40/50<br>[kN] | C50/60<br>[kN] | C20/25<br>[kN]           | C30/37<br>[kN] | C40/50<br>[kN] | C50/60<br>[kN] |                                         |
| 75320C0604500 | FM-753 3DG        | M6x45*                   | -                                        | -              | -              | -              | -                        | -              | -              | -              | -                                       |
| 75320C0606500 | FM-753 3DG        | M6x65                    | -                                        | -              | -              | -              | -                        | -              | -              | -              | -                                       |
| 75320C0608500 | FM-753 3DG        | M6x85                    | -                                        | -              | -              | -              | -                        | -              | -              | -              | -                                       |
| 75320C0610000 | FM-753 3DG        | M6x100                   | -                                        | -              | -              | -              | -                        | -              | -              | -              | -                                       |
| 75320C0805000 | FM-753 3DG        | M8x50*                   | -                                        | -              | -              | -              | -                        | -              | -              | -              | -                                       |
| 75320C0806500 | FM-753 3DG        | M8x65                    | 5.7                                      | 6.1            | 6.5            | 6.8            | 4.4                      | 4.4            | 4.4            | 4.4            | 11.4                                    |
| 75320C0807500 | FM-753 3DG        | M8x75                    | 5.7                                      | 6.1            | 6.5            | 6.8            | 4.4                      | 4.4            | 4.4            | 4.4            | 11.4                                    |
| 75320C0809000 | FM-753 3DG        | M8x90                    | 5.7                                      | 6.1            | 6.5            | 6.8            | 4.4                      | 4.4            | 4.4            | 4.4            | 11.4                                    |
| 75320C0811500 | FM-753 3DG        | M8x115                   | 5.7                                      | 6.1            | 6.5            | 6.8            | 4.4                      | 4.4            | 4.4            | 4.4            | 11.4                                    |
| 75320C0813500 | FM-753 3DG        | M8x135                   | 5.7                                      | 6.1            | 6.5            | 6.8            | 4.4                      | 4.4            | 4.4            | 4.4            | 11.4                                    |
| 75320C0816500 | FM-753 3DG        | M8x165                   | 5.7                                      | 6.1            | 6.5            | 6.8            | 4.4                      | 4.4            | 4.4            | 4.4            | 11.4                                    |
| 75320C1006000 | FM-753 3DG        | M10x60*                  | -                                        | -              | -              | -              | -                        | -              | -              | -              | -                                       |
| 75320C1007500 | FM-753 3DG        | M10x75                   | 5.7                                      | 6.3            | 6.8            | 7.4            | 6.6                      | 6.6            | 6.6            | 6.6            | 23.3                                    |
| 75320C1009000 | FM-753 3DG        | M10x90                   | 5.7                                      | 6.3            | 6.8            | 7.4            | 6.6                      | 6.6            | 6.6            | 6.6            | 23.3                                    |
| 75320C1010000 | FM-753 3DG        | M10x100                  | 5.7                                      | 6.3            | 6.8            | 7.4            | 6.6                      | 6.6            | 6.6            | 6.6            | 23.3                                    |
| 75320C1012000 | FM-753 3DG        | M10x120                  | 5.7                                      | 6.3            | 6.8            | 7.4            | 6.6                      | 6.6            | 6.6            | 6.6            | 23.3                                    |
| 75320C1014500 | FM-753 3DG        | M10x145                  | 5.7                                      | 6.3            | 6.8            | 7.4            | 6.6                      | 6.6            | 6.6            | 6.6            | 23.3                                    |
| 75320C1017000 | FM-753 3DG        | M10x170                  | 5.7                                      | 6.3            | 6.8            | 7.4            | 6.6                      | 6.6            | 6.6            | 6.6            | 23.3                                    |
| 75320C1021000 | FM-753 3DG        | M10x210                  | 5.7                                      | 6.3            | 6.8            | 7.4            | 6.6                      | 6.6            | 6.6            | 6.6            | 23.3                                    |
| 75320C1208000 | FM-753 3DG        | M12x80*                  | -                                        | -              | -              | -              | -                        | -              | -              | -              | -                                       |
| 75320C1210000 | FM-753 3DG        | M12x100                  | 11.2                                     | 12.3           | 13.4           | 14.6           | 9.6                      | 9.6            | 9.6            | 9.6            | 34.3                                    |
| 75320C1211000 | FM-753 3DG        | M12x110                  | 11.2                                     | 12.3           | 13.4           | 14.6           | 9.6                      | 9.6            | 9.6            | 9.6            | 34.3                                    |
| 75320C1213500 | FM-753 3DG        | M12x135                  | 11.2                                     | 12.3           | 13.4           | 14.6           | 9.6                      | 9.6            | 9.6            | 9.6            | 34.3                                    |
| 75320C1216000 | FM-753 3DG        | M12x160                  | 11.2                                     | 12.3           | 13.4           | 14.6           | 9.6                      | 9.6            | 9.6            | 9.6            | 34.3                                    |
| 75320C1218500 | FM-753 3DG        | M12x185                  | 11.2                                     | 12.3           | 13.4           | 14.6           | 9.6                      | 9.6            | 9.6            | 9.6            | 34.3                                    |
| 75320C1220000 | FM-753 3DG        | M12x200                  | 11.2                                     | 12.3           | 13.4           | 14.6           | 9.6                      | 9.6            | 9.6            | 9.6            | 34.3                                    |
| 75320C1222000 | FM-753 3DG        | M12x220                  | 11.2                                     | 12.3           | 13.4           | 14.6           | 9.6                      | 9.6            | 9.6            | 9.6            | 34.3                                    |
| 75320C1224000 | FM-753 3DG        | M12x240                  | 11.2                                     | 12.3           | 13.4           | 14.6           | 9.6                      | 9.6            | 9.6            | 9.6            | 34.3                                    |
| 75320C1225500 | FM-753 3DG        | M12x255                  | 11.2                                     | 12.3           | 13.4           | 14.6           | 9.6                      | 9.6            | 9.6            | 9.6            | 34.3                                    |
| 75320C1228500 | FM-753 3DG        | M12x285                  | 11.2                                     | 12.3           | 13.4           | 14.6           | 9.6                      | 9.6            | 9.6            | 9.6            | 34.3                                    |
| 75320C1230000 | FM-753 3DG        | M12x300                  | 11.2                                     | 12.3           | 13.4           | 14.6           | 9.6                      | 9.6            | 9.6            | 9.6            | 34.3                                    |
| 75320C1232500 | FM-753 3DG        | M12x325                  | 11.2                                     | 12.3           | 13.4           | 14.6           | 9.6                      | 9.6            | 9.6            | 9.6            | 34.3                                    |
| 75320C1611000 | FM-753 3DG        | M16x110*                 | -                                        | -              | -              | -              | -                        | -              | -              | -              | -                                       |
| 75320C1612500 | FM-753 3DG        | M16x125                  | 16.7                                     | 18.4           | 20             | 21.7           | 20.3                     | 20.3           | 20.3           | 20.3           | 91.9                                    |
| 75320C1614500 | FM-753 3DG        | M16x145                  | 16.7                                     | 18.4           | 20             | 21.7           | 20.3                     | 20.3           | 20.3           | 20.3           | 91.9                                    |

1) In case of interaction of tension and shear loads (lever arm) as well as in case of anchor groups and/or edge influence, a design according to ETAG 001, Annex C, Design Method A (Aug. 2010) or CEN/TS 1992-4-4 shall be carried out taking into account the entire European Technical Assessment ETA-13/0367.

2) The load data take into account the partial safety factors of the resistances given in the European Technical Assessment ETA-13/0367 and a partial safety factor of the

The values given assume unreinforced or normally reinforced concrete with a spacing of the reinforcing bars  $s \geq 15$  cm or  $s \geq 10$  cm with a diameter of the reinforcing bars  $d_s \geq 15$  cm.  
rebar diameter  $d_s \leq 10$  mm.

FM-753 3DG

Gennemstiksanker, 3DG coating

| Art. nr.      | Product Reference | Dimensions<br>[ØxL] [mm] | Recommended loads - Non-cracked concrete |                |                |                |                          |                |                |                | Bending moment<br>M <sub>zul</sub> [Nm] |
|---------------|-------------------|--------------------------|------------------------------------------|----------------|----------------|----------------|--------------------------|----------------|----------------|----------------|-----------------------------------------|
|               |                   |                          | Tension - N <sub>zul</sub>               |                |                |                | Shear - V <sub>zul</sub> |                |                |                |                                         |
|               |                   |                          | C20/25<br>[kN]                           | C30/37<br>[kN] | C40/50<br>[kN] | C50/60<br>[kN] | C20/25<br>[kN]           | C30/37<br>[kN] | C40/50<br>[kN] | C50/60<br>[kN] |                                         |
| 75320C1617500 | FM-753 3DG        | M16x175                  | 16.7                                     | 18.4           | 20             | 21.7           | 20.3                     | 20.3           | 20.3           | 20.3           | 91.9                                    |
| 75320C1621500 | FM-753 3DG        | M16x215                  | 16.7                                     | 18.4           | 20             | 21.7           | 20.3                     | 20.3           | 20.3           | 20.3           | 91.9                                    |
| 75320C1623000 | FM-753 3DG        | M16x230                  | 16.7                                     | 18.4           | 20             | 21.7           | 20.3                     | 20.3           | 20.3           | 20.3           | 91.9                                    |
| 75320C1625000 | FM-753 3DG        | M16x250                  | 16.7                                     | 18.4           | 20             | 21.7           | 20.3                     | 20.3           | 20.3           | 20.3           | 91.9                                    |
| 75320C1627000 | FM-753 3DG        | M16x270                  | 16.7                                     | 18.4           | 20             | 21.7           | 20.3                     | 20.3           | 20.3           | 20.3           | 91.9                                    |
| 75320C1632000 | FM-753 3DG        | M16x320                  | 16.7                                     | 18.4           | 20             | 21.7           | 20.3                     | 20.3           | 20.3           | 20.3           | 91.9                                    |
| 75320C2017000 | FM-753 3DG        | M20x170                  | 19.1                                     | 23.3           | 26.9           | 29.6           | 24.5                     | 24.5           | 24.5           | 24.5           | 161                                     |
| 75320C2021500 | FM-753 3DG        | M20x215                  | 19.1                                     | 23.3           | 26.9           | 29.6           | 24.5                     | 24.5           | 24.5           | 24.5           | 161                                     |
| 75320C2028000 | FM-753 3DG        | M20x280                  | 19.1                                     | 23.3           | 26.9           | 29.6           | 24.5                     | 24.5           | 24.5           | 24.5           | 161                                     |

1) In case of interaction of tension and shear loads (lever arm) as well as in case of anchor groups and/or edge influence, a design according to ETAG 001, Annex C, Design Method A (Aug. 2010) or CEN/TS 1992-4-4 shall be carried out taking into account the entire European Technical Assessment ETA-13/0367.

2) The load data take into account the partial safety factors of the resistances given in the European Technical Assessment ETA-13/0367 and a partial safety factor of the

The values given assume unreinforced or normally reinforced concrete with a spacing of the reinforcing bars  $s \geq 15$  cm or  $s \geq 10$  cm with a diameter of the reinforcing bars  $d_s \geq 15$  cm.

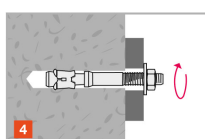
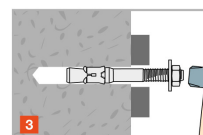
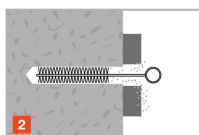
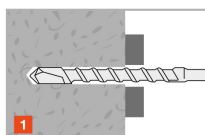
rebar diameter  $d_s \leq 10$  mm.



FM-753 3DG

Gennemstiksanker, 3DG coating

## Montering



FM-753 3DG

Gennemstiksanker, 3DG coating

## Spacing, and Edge Distances

| Art. nr.      | Spacing and edge distances |                       |                                |                          |                                                |                                           |
|---------------|----------------------------|-----------------------|--------------------------------|--------------------------|------------------------------------------------|-------------------------------------------|
|               | Product Reference          | Dimensions [ØxL] [mm] | Min. edge distance [cmin] [mm] | Min. spacing [smin] [mm] | Characteristic spacing(5) - Scr,N [scr,N] [mm] | Characteristic edge distance [ccr,N] [mm] |
| 75320C0604500 | FM-753 3DG                 | M6x45*                | 45                             | 45                       | 90                                             | 45                                        |
| 75320C0606500 | FM-753 3DG                 | M6x65                 | 50                             | 50                       | 105                                            | 53                                        |
| 75320C0608500 | FM-753 3DG                 | M6x85                 | 50                             | 50                       | 105                                            | 53                                        |
| 75320C0610000 | FM-753 3DG                 | M6x100                | 50                             | 50                       | 105                                            | 53                                        |
| 75320C0805000 | FM-753 3DG                 | M8x50*                | 45                             | 45                       | 90                                             | 45                                        |
| 75320C0806500 | FM-753 3DG                 | M8x65                 | 55                             | 55                       | 120                                            | 60                                        |
| 75320C0807500 | FM-753 3DG                 | M8x75                 | 55                             | 55                       | 120                                            | 60                                        |
| 75320C0809000 | FM-753 3DG                 | M8x90                 | 55                             | 55                       | 120                                            | 60                                        |
| 75320C0811500 | FM-753 3DG                 | M8x115                | 55                             | 55                       | 120                                            | 60                                        |
| 75320C0813500 | FM-753 3DG                 | M8x135                | 55                             | 55                       | 120                                            | 60                                        |
| 75320C0816500 | FM-753 3DG                 | M8x165                | 55                             | 55                       | 120                                            | 60                                        |
| 75320C1006000 | FM-753 3DG                 | M10x60*               | 50                             | 50                       | 105                                            | 55                                        |
| 75320C1007500 | FM-753 3DG                 | M10x75                | 55                             | 55                       | 150                                            | 75                                        |
| 75320C1009000 | FM-753 3DG                 | M10x90                | 55                             | 55                       | 150                                            | 75                                        |
| 75320C1010000 | FM-753 3DG                 | M10x100               | 55                             | 55                       | 150                                            | 75                                        |
| 75320C1012000 | FM-753 3DG                 | M10x120               | 55                             | 55                       | 150                                            | 75                                        |
| 75320C1014500 | FM-753 3DG                 | M10x145               | 55                             | 55                       | 150                                            | 75                                        |
| 75320C1017000 | FM-753 3DG                 | M10x170               | 55                             | 55                       | 150                                            | 75                                        |
| 75320C1021000 | FM-753 3DG                 | M10x210               | 55                             | 55                       | 150                                            | 75                                        |
| 75320C1208000 | FM-753 3DG                 | M12x80*               | 80                             | 120                      | 135                                            | 80                                        |
| 75320C1210000 | FM-753 3DG                 | M12x100               | 90                             | 90                       | 180                                            | 90                                        |
| 75320C1211000 | FM-753 3DG                 | M12x110               | 90                             | 90                       | 180                                            | 90                                        |
| 75320C1213500 | FM-753 3DG                 | M12x135               | 90                             | 90                       | 180                                            | 90                                        |
| 75320C1216000 | FM-753 3DG                 | M12x160               | 90                             | 90                       | 180                                            | 90                                        |
| 75320C1218500 | FM-753 3DG                 | M12x185               | 90                             | 90                       | 180                                            | 90                                        |

\* Not included in the approval

FM-753 3DG

Gennemstiksanker, 3DG coating

| Art. nr.      | Spacing and edge distances |                       |                                |                          |                                                |                                           |
|---------------|----------------------------|-----------------------|--------------------------------|--------------------------|------------------------------------------------|-------------------------------------------|
|               | Product Reference          | Dimensions [ØxL] [mm] | Min. edge distance [cmin] [mm] | Min. spacing [smin] [mm] | Characteristic spacing(5) - Scr,N [scr,N] [mm] | Characteristic edge distance [ccr,N] [mm] |
| 75320C1220000 | FM-753 3DG                 | M12x200               | 90                             | 90                       | 180                                            | 90                                        |
| 75320C1222000 | FM-753 3DG                 | M12x220               | 90                             | 90                       | 180                                            | 90                                        |
| 75320C1224000 | FM-753 3DG                 | M12x240               | 90                             | 90                       | 180                                            | 90                                        |
| 75320C1225500 | FM-753 3DG                 | M12x255               | 90                             | 90                       | 180                                            | 90                                        |
| 75320C1228500 | FM-753 3DG                 | M12x285               | 90                             | 90                       | 180                                            | 90                                        |
| 75320C1230000 | FM-753 3DG                 | M12x300               | 90                             | 90                       | 180                                            | 90                                        |
| 75320C1232500 | FM-753 3DG                 | M12x325               | 90                             | 90                       | 180                                            | 90                                        |
| 75320C1611000 | FM-753 3DG                 | M16x110*              | 100                            | 140                      | 195                                            | 100                                       |
| 75320C1612500 | FM-753 3DG                 | M16x125               | 130                            | 130                      | 255                                            | 130                                       |
| 75320C1614500 | FM-753 3DG                 | M16x145               | 130                            | 130                      | 255                                            | 130                                       |
| 75320C1617500 | FM-753 3DG                 | M16x175               | 130                            | 130                      | 255                                            | 130                                       |
| 75320C1621500 | FM-753 3DG                 | M16x215               | 130                            | 130                      | 255                                            | 130                                       |
| 75320C1623000 | FM-753 3DG                 | M16x230               | 130                            | 130                      | 255                                            | 130                                       |
| 75320C1625000 | FM-753 3DG                 | M16x250               | 130                            | 130                      | 255                                            | 130                                       |
| 75320C1627000 | FM-753 3DG                 | M16x270               | 130                            | 130                      | 255                                            | 130                                       |
| 75320C1632000 | FM-753 3DG                 | M16x320               | 130                            | 130                      | 255                                            | 130                                       |
| 75320C2017000 | FM-753 3DG                 | M20x170               | 145                            | 200                      | 290                                            | 145                                       |
| 75320C2021500 | FM-753 3DG                 | M20x215               | 145                            | 200                      | 290                                            | 145                                       |
| 75320C2028000 | FM-753 3DG                 | M20x280               | 145                            | 200                      | 290                                            | 145                                       |

\* Not included in the approval

FM-753 3DG

Gennemstiksanker, 3DG coating

## Installation data

| Art. nr.      | Installation data |                       |                           |                            |                              |                       |                                  |                            |                                    |
|---------------|-------------------|-----------------------|---------------------------|----------------------------|------------------------------|-----------------------|----------------------------------|----------------------------|------------------------------------|
|               | Product Reference | Dimensions [ØxL] [mm] | Ø drilling hole [d0] [mm] | Min. drill depth [h1] [mm] | Ø drilling fixture [df] [mm] | Wrench size [SW] [mm] | Installation torque [Tinst] [Nm] | Embedment depth [hef] [mm] | Min. support thickness [hmin] [mm] |
| 75320C0604500 | FM-753 3DG        | M6x45*                | 6                         | 45                         | 7                            | 10                    | 6                                | 30                         | 100                                |
| 75320C0606500 | FM-753 3DG        | M6x65                 | 6                         | 50                         | 7                            | 10                    | 6                                | 35                         | 100                                |
| 75320C0608500 | FM-753 3DG        | M6x85                 | 6                         | 50                         | 7                            | 10                    | 6                                | 35                         | 100                                |
| 75320C0610000 | FM-753 3DG        | M6x100                | 6                         | 50                         | 7                            | 10                    | 6                                | 35                         | 100                                |
| 75320C0805000 | FM-753 3DG        | M8x50*                | 8                         | 50                         | 9                            | 13                    | 15                               | 30                         | 100                                |
| 75320C0806500 | FM-753 3DG        | M8x65                 | 8                         | 60                         | 9                            | 13                    | 15                               | 40                         | 100                                |
| 75320C0807500 | FM-753 3DG        | M8x75                 | 8                         | 60                         | 9                            | 13                    | 15                               | 40                         | 100                                |
| 75320C0809000 | FM-753 3DG        | M8x90                 | 8                         | 60                         | 9                            | 13                    | 15                               | 40                         | 100                                |
| 75320C0811500 | FM-753 3DG        | M8x115                | 8                         | 60                         | 9                            | 13                    | 15                               | 40                         | 100                                |
| 75320C0813500 | FM-753 3DG        | M8x135                | 8                         | 60                         | 9                            | 13                    | 15                               | 40                         | 100                                |
| 75320C0816500 | FM-753 3DG        | M8x165                | 8                         | 60                         | 9                            | 13                    | 15                               | 40                         | 100                                |
| 75320C1006000 | FM-753 3DG        | M10x60*               | 10                        | 55                         | 12                           | 17                    | 25                               | 35                         | 100                                |
| 75320C1007500 | FM-753 3DG        | M10x75                | 10                        | 70                         | 12                           | 17                    | 25                               | 50                         | 100                                |
| 75320C1009000 | FM-753 3DG        | M10x90                | 10                        | 70                         | 12                           | 17                    | 25                               | 50                         | 100                                |
| 75320C1010000 | FM-753 3DG        | M10x100               | 10                        | 70                         | 12                           | 17                    | 25                               | 50                         | 100                                |
| 75320C1012000 | FM-753 3DG        | M10x120               | 10                        | 70                         | 12                           | 17                    | 25                               | 50                         | 100                                |
| 75320C1014500 | FM-753 3DG        | M10x145               | 10                        | 70                         | 12                           | 17                    | 25                               | 50                         | 100                                |
| 75320C1017000 | FM-753 3DG        | M10x170               | 10                        | 70                         | 12                           | 17                    | 25                               | 50                         | 100                                |
| 75320C1021000 | FM-753 3DG        | M10x210               | 10                        | 70                         | 12                           | 17                    | 25                               | 50                         | 100                                |
| 75320C1208000 | FM-753 3DG        | M12x80*               | 12                        | 70                         | 14                           | 19                    | 50                               | 45                         | 100                                |
| 75320C1210000 | FM-753 3DG        | M12x100               | 12                        | 85                         | 14                           | 19                    | 50                               | 60                         | 120                                |
| 75320C1211000 | FM-753 3DG        | M12x110               | 12                        | 85                         | 14                           | 19                    | 50                               | 60                         | 120                                |
| 75320C1213500 | FM-753 3DG        | M12x135               | 12                        | 85                         | 14                           | 19                    | 50                               | 60                         | 120                                |
| 75320C1216000 | FM-753 3DG        | M12x160               | 12                        | 85                         | 14                           | 19                    | 50                               | 60                         | 120                                |
| 75320C1218500 | FM-753 3DG        | M12x185               | 12                        | 85                         | 14                           | 19                    | 50                               | 60                         | 120                                |
| 75320C1220000 | FM-753 3DG        | M12x200               | 12                        | 85                         | 14                           | 19                    | 50                               | 60                         | 120                                |

## FM-753 3DG

### Gennemstiksanker, 3DG coating

| Art. nr.      | Installation data |                       |                           |                            |                              |                       |                                  |                            |                                    |
|---------------|-------------------|-----------------------|---------------------------|----------------------------|------------------------------|-----------------------|----------------------------------|----------------------------|------------------------------------|
|               | Product Reference | Dimensions [ØxL] [mm] | Ø drilling hole [d0] [mm] | Min. drill depth [h1] [mm] | Ø drilling fixture [df] [mm] | Wrench size [SW] [mm] | Installation torque [Tinst] [Nm] | Embedment depth [hef] [mm] | Min. support thickness [hmin] [mm] |
| 75320C1222000 | FM-753 3DG        | M12x220               | 12                        | 85                         | 14                           | 19                    | 50                               | 60                         | 120                                |
| 75320C1224000 | FM-753 3DG        | M12x240               | 12                        | 85                         | 14                           | 19                    | 50                               | 60                         | 120                                |
| 75320C1225500 | FM-753 3DG        | M12x255               | 12                        | 85                         | 14                           | 19                    | 50                               | 60                         | 120                                |
| 75320C1228500 | FM-753 3DG        | M12x285               | 12                        | 85                         | 14                           | 19                    | 50                               | 60                         | 120                                |
| 75320C1230000 | FM-753 3DG        | M12x300               | 12                        | 85                         | 14                           | 19                    | 50                               | 60                         | 120                                |
| 75320C1232500 | FM-753 3DG        | M12x325               | 12                        | 85                         | 14                           | 19                    | 50                               | 60                         | 120                                |
| 75320C1611000 | FM-753 3DG        | M16x110*              | 16                        | 95                         | 18                           | 24                    | 100                              | 65                         | 130                                |
| 75320C1612500 | FM-753 3DG        | M16x125               | 16                        | 115                        | 18                           | 24                    | 100                              | 85                         | 170                                |
| 75320C1614500 | FM-753 3DG        | M16x145               | 16                        | 115                        | 18                           | 24                    | 100                              | 85                         | 170                                |
| 75320C1617500 | FM-753 3DG        | M16x175               | 16                        | 115                        | 18                           | 24                    | 100                              | 85                         | 170                                |
| 75320C1621500 | FM-753 3DG        | M16x215               | 16                        | 115                        | 18                           | 24                    | 100                              | 85                         | 170                                |
| 75320C1623000 | FM-753 3DG        | M16x230               | 16                        | 115                        | 18                           | 24                    | 100                              | 85                         | 170                                |
| 75320C1625000 | FM-753 3DG        | M16x250               | 16                        | 115                        | 18                           | 24                    | 100                              | 85                         | 170                                |
| 75320C1627000 | FM-753 3DG        | M16x270               | 16                        | 115                        | 18                           | 24                    | 100                              | 85                         | 170                                |
| 75320C1632000 | FM-753 3DG        | M16x320               | 16                        | 115                        | 18                           | 24                    | 100                              | 85                         | 170                                |
| 75320C2017000 | FM-753 3DG        | M20x170               | 20                        | 130                        | 22                           | 30                    | 160                              | 95                         | 200                                |
| 75320C2021500 | FM-753 3DG        | M20x215               | 20                        | 130                        | 22                           | 30                    | 160                              | 95                         | 200                                |
| 75320C2028000 | FM-753 3DG        | M20x280               | 20                        | 130                        | 22                           | 30                    | 160                              | 95                         | 200                                |

Simpson Strong-Tie A/S  
Egeskovvej 33 8700 Horsens  
tel: +45 8781 7400  
info@strongtie.dk

FM-753 3DG  
Gennemstiksanker, 3DG coating

Copyright by Simpson Strong-Tie®  
Oplysningerne i dette dokument ejes eksklusivt af Simpson Strong-Tie® A/S.  
De er kun gældende i forbindelse med produkter, som forhandles af Simpson Strong-Tie® A/S.

2025-11-04



www.strongtie.dk

