

**SECTION 2 - SYSTEM COMPONENTS**

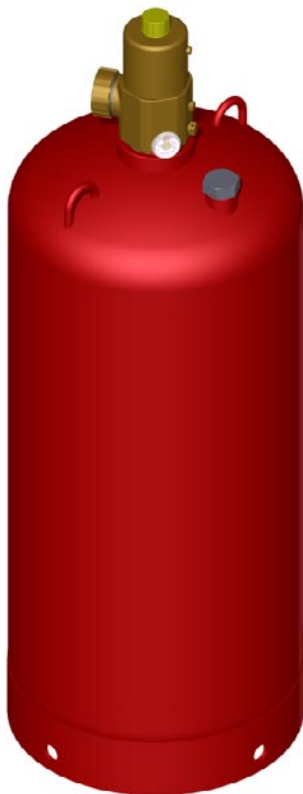
## System Components

This section describes the individual components that comprise a complete system. Some items are optional depending on the application, and are indicated as such.

### FM-200® Container

The container assembly consists of a container fitted with a valve and internal syphon tube, factory filled with FM-200®, and super-pressurised with dry nitrogen to 25 bar @ 21 °C (360 psi @ 70 °F). Containers sharing the same manifold shall be equal in size and fill density. Containers are finished in red and are available in various sizes. A nameplate is fixed to the container displaying the agent weight, tare weight, gross weight, fill density, charge date and fill location.

Figure 1 - FM-200® Container



### Technical Information

The 4.5, 8, 16, 32, 52, 106, 147 and 180 litre containers are manufactured in accordance with DOT 4BW500 or 4BW450, the 343 litre container in accordance with DOT 4BW450 and the 40, 67.5 and 80 litre containers in accordance with DOT 3AA 580.

|                          |                                                    |
|--------------------------|----------------------------------------------------|
| Material:                | Carbon Steel                                       |
| <u>4BW500</u>            |                                                    |
| Hydraulic test pressure: | 69.0 bar (1000 psi)                                |
| Working Pressure:        | 34.5 bar (500 psi)                                 |
| <u>4BW450</u>            |                                                    |
| Hydraulic test pressure: | 62.1 bar (900 psi)                                 |
| Working Pressure:        | 31.0 bar (450 psi)                                 |
| <u>3AA580</u>            |                                                    |
| Hydraulic test pressure: | 70.0 bar (1015 psi)                                |
| Working Pressure:        | 40.0 bar (580 psi)                                 |
| Paint Specification:     | Red epoxy polyester or red polyester powder coated |

The 8, 16, 32, 52, 106 and 147 litre containers are also available manufactured in accordance with EN 13322-1.

|                          |                                                    |
|--------------------------|----------------------------------------------------|
| Material:                | Carbon Steel                                       |
| Hydraulic test pressure: | 40.0 bar (580 psi)                                 |
| Working Pressure:        | 34.5 bar (500 psi)                                 |
| Paint Specification:     | Red epoxy polyester or red polyester powder coated |

Table 4: DOT Container details.

| Part No.<br>(Nominal Volume) | Minimum and Maximum Fills |              | Valve Size |      | Height from floor to outlet (nominal) |         | Diameter |         | Nominal Tare Weight |         |
|------------------------------|---------------------------|--------------|------------|------|---------------------------------------|---------|----------|---------|---------------------|---------|
|                              | kg                        | (lbs)        | mm         | (in) | mm                                    | (in)    | mm       | (in)    | kg                  | (lbs)   |
| 303.205.026 (4.5 litre)      | 2.3 to 4.5                | (5 to 10)    | 25         | (1") | 280                                   | (11")   | 178      | (7")    | 7.7                 | (17)    |
| 303.205.015 (8 litre)        | 4.0 to 8.0                | (9 to 18)    | 25         | (1") | 304                                   | (12")   | 254      | (10")   | 14.8                | (32.6)  |
| 303.205.016 (16 litre)       | 8.0 to 16.0               | (18 to 35)   | 25         | (1") | 502                                   | (19.8") | 254      | (10")   | 18.4                | (40.6)  |
| 303.205.017 (32 litre)       | 16.0 to 32.0              | (35 to 71)   | 25         | (1") | 833                                   | (32.8") | 254      | (10")   | 26.1                | (57.5)  |
| 303.205.030 (40 litre) *     | 20.0 to 40.0              | (44 to 88)   | 50         | (2") | 1352                                  | (53.2") | 227.2    | (9")    | 52.2                | (115)   |
| 303.205.018 (52 litre)       | 26.0 to 52.0              | (58 to 115)  | 50         | (2") | 596                                   | (23.5") | 406      | (16")   | 49.1                | (108.3) |
| 303.205.031 (67.5 litre) *   | 33.8 to 67.5              | (75 to 149)  | 50         | (2") | 1526                                  | (60")   | 265      | (10.4") | 81.6                | (180)   |
| 303.205.032 (80 litre) *     | 40.0 to 80.0              | (88 to 176)  | 50         | (2") | 1685                                  | (66.3") | 276      | (11")   | 95.3                | (210)   |
| 303.205.019 (106 litre)      | 53.0 to 106.0             | (117 to 234) | 50         | (2") | 1021                                  | (40.2") | 406      | (16")   | 71.8                | (158.3) |
| 303.205.020 (147 litre)      | 73.5 to 147.0             | (162 to 324) | 50         | (2") | 1354                                  | (53.3") | 406      | (16")   | 89.9                | (198.2) |
| 303.205.021 (180 litre)      | 90.0 to 180.0             | (198 to 397) | 50         | (2") | 1634                                  | (64.3") | 406      | (16")   | 105.8               | (233.2) |
| 303.205.022 (343 litre)      | 171.5 to 343              | (378 to 756) | 80         | (3") | 1466                                  | (57.7") | 610      | (24")   | 207                 | (456)   |

\* For UL Listed Systems Only (Not FM Approved)

Table 5: TPED Container details.

| Part No.<br>(Nominal Volume) | Minimum and Maximum Fills |              | Valve Size |      | Height from floor to outlet (nominal) |         | Diameter |       | Nominal Tare Weight |         |
|------------------------------|---------------------------|--------------|------------|------|---------------------------------------|---------|----------|-------|---------------------|---------|
|                              | kg                        | (lbs)        | mm         | (in) | mm                                    | (in)    | mm       | (in)  | kg                  | (lbs)   |
| 303.205.045 (8 litre)        | 4.0 to 8.0                | (9 to 18)    | 25         | (1") | 304                                   | (12")   | 254      | (10") | 17.4                | (38.4)  |
| 303.205.046 (16 litre)       | 8.0 to 16.0               | (18 to 35)   | 25         | (1") | 502                                   | (19.8") | 254      | (10") | 23.4                | (51.6)  |
| 303.205.047 (32 litre)       | 16.0 to 32.0              | (35 to 71)   | 25         | (1") | 833                                   | (32.8") | 254      | (10") | 27.5                | (60.6)  |
| 303.205.048 (52 litre)       | 26.0 to 52.0              | (58 to 115)  | 50         | (2") | 596                                   | (23.5") | 406      | (16") | 68.7                | (151.5) |
| 303.205.049 (106 litre)      | 53.0 to 106.0             | (117 to 234) | 50         | (2") | 1021                                  | (40.2") | 406      | (16") | 88.8                | (195.8) |
| 303.205.050 (147 litre)      | 73.5 to 147.0             | (162 to 324) | 50         | (2") | 1354                                  | (53.3") | 406      | (16") | 108.8               | (239.9) |

Table 4a: DOT Container - valve equivalent lengths.

| Part No.<br>(Nominal Volume) | Equivalent Lengths<br>(m) |
|------------------------------|---------------------------|
| 303.205.026 (4.5 litre)      | 6.096                     |
| 303.205.015 (8 litre)        | 6.096                     |
| 303.205.016 (16 litre)       | 6.096                     |
| 303.205.017 (32 litre)       | 6.096                     |
| 303.205.030 (40 litre)       | 10.668                    |
| 303.205.018 (52 litre)       | 10.668                    |
| 303.205.031 (67.5 litre)     | 10.668                    |
| 303.205.032 (80 litre)       | 10.668                    |
| 303.205.019 (106 litre)      | 10.668                    |
| 303.205.020 (147 litre)      | 10.668                    |
| 303.205.021 (180 litre)      | 10.668                    |
| 303.205.022 (343 litre)      | 25.91                     |

Table 5a: TPED Container - valve equivalent lengths.

| Part No.<br>(Nominal Volume) | Equivalent Lengths<br>(m) |
|------------------------------|---------------------------|
| 303.205.045 (8 litre)        | 6.096                     |
| 303.205.046 (16 litre)       | 6.096                     |
| 303.205.047 (32 litre)       | 6.096                     |
| 303.205.048 (52 litre)       | 10.668                    |
| 303.205.049 (106 litre)      | 10.668                    |
| 303.205.050 (147 litre)      | 10.668                    |