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GB 50338 2003

Code for desing for fixed fire monitor extinguishing systems

2003-04-15 2003-08-01

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..... 4
1 6
2 7
2.1 7
3 9
4 10
4.1 10
4.2 10
4.3 10
4.4 12
4.5 13
4.6 13
5 15
5.1 15
5.2 15
5.3 15
5.4 15
5.5 15
5.6 16
5.7 16
5.8 16
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1

1.0.1

1.0.2

1.0.3

1.0.4

1.0.5

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2

2.1

2.1.1 fixed fire monitor extinguishing systems

2.1.2 water monitor extinguishing systems

2.1.3 foam monitor extinguishing systems

2.1.4 powder monitor extinguishing systems

2.1.5 remote-controlled fire monitor extinguishing systems abbreviation remote-controlled monitor svstems

2.1.6 manual-controlled fire monitor estinguishing systems abbreviation manual-controlled monitor systems

2.1.7 extinguishing area

2.1.8 cooling area

2.1.9 fire monitor tower

2.2

Q—— L/s

Q_p—— L/s

Q_s—— L/s

Q_m—— L/s

q_{po}—— L/s

q_{so}—— L/s

P—— MPa

P_0—— MPa

P_e—— MPa

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i——MPa/m

h_1——MPa

h_2——MPa

$\sum h$——

MPa

D_s——m

D_{s0}——m

D_p——m

D_{p0}——m

Z——m

B——m

F——m^2

L——m

L_1——m

d——m

f_{max}——m^2

N_p——

N_s

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3

3.0.1

1

2

3

4

3.0.2

1

2

3

4

5 8m

6

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3

$$D_s = D_{s0} \bullet \sqrt{\frac{P_e}{P_0}} \qquad 4.3.1\text{-}1$$

D_s—— m

D_{s0}—— m

P_e—— MPa

P_0—— MPa

4

5

$$Q_s = q_{s0}\sqrt{\frac{P_e}{P_0}} \qquad 4.3.1\text{-}2$$

Q_s—— L/s

q_{s0}—— L/s

4.3.2 30L/s

4.3.3

1 1.0h

2 2.0h

3

4.3.4

1

40L/s 60L/s

2

3

4 16L/min·m²

4.3.5

1

2

3

$$F = 3BL - f_{\max} \qquad 4.3.5$$

F—— m²

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f_{max}—— m^2

4

4.3.6

4.4

4.4.1

1

90%

2

3

$$D_p = D_{P0} \bullet \sqrt{\frac{P_e}{P_0}} \qquad 4.4.1\text{-}1$$

D_p—— m

D_{P0}—— m

P_e—— MPa

P_0—— MPa

4

5

$$Q_p = q_{p0} \bullet \sqrt{\frac{P_e}{P_0}} \qquad 4.4.1\text{-}2$$

Q_p—— L/s

q_{p0}—— L/s

4.4.2 48L/s

4.4.3

4.4.4

1

2

3

4

4.4.5

4.4.6

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1.2

4.5

4.5.1

90%

4.5.2 4.5.2

4.5.2

	kg/m²
	8.8
	5.2
	3.6

4.5.3

50%

4.5.4 **60s**

4.5.5

1

1.2

2

2000kg

4.5.6 0.005%

1.4MPa 1.6MPa 1.8MPa

4.5.7 20m

10m

4.5.8

1 10m 20m 50L

2 10m 40L

4.6

4.6.1

$$Q = \sum N_p \bullet Q_p + \sum N_s \bullet Q_s + \sum N_m \bullet Q_m$$ 4.6.1

Q—— L/s

N_p——

N_s——

N_m——

Q_p—— L/s

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Q_s —— L/s

Q_m —— L/s

4.6.2

$$\sum h = h_1 + h_2 \qquad 4.6.2\text{-}1$$

$\sum h$ ——

MPa

h_1 —— MPa

h_2 —— MPa

$$h_1 = i \bullet L_1 \qquad 4.6.2\text{-}2$$

i —— MPa m

L_1 —— m

$$i = 0.0000107 \frac{\upsilon^2}{d^{1.3}} \qquad 4.6.2\text{-}3$$

υ —— m/s

d —— m

$$h_2 = \sum \xi \frac{\upsilon^2}{2g} \qquad 4.6.2\text{-}4$$

ξ ——

υ —— m/s

4.6.3

$$P = 0.01 \times Z + \sum h + P_e \qquad 4.6.3$$

P —— MPa

Z —— m

$\sum h$ ——

MPa

P_e —— MPa

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5

5.1

5.1.1

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5.6

5.6.1 300mm

5.6.2

5.6.3

5.6.4

5.6.5

5.6.6

5.7

5.7.1

5.7.2

5.7.3

6L/s

5.7.4

5.8

5.8.1

5.8.2

5.8.3 30m

5.8.4

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