1

6.0.1 1.F.1

2

2.0.1

2.0.2

2.0.3

2.0.4 “ ”

2.0.5

2.0.6

3

3.1

3.1.1

3.1.2

3.1.3

3.1.4

24

3.2

3.2.1

3.2.2

3.2.3

1

2

3

2.5

4

3.2.4

3.3

3.3.1

300mm ≥1000mm

300mm 200mm

200m

3.3.2

3.3.3

GB 50289

3.0m

3.3.4

5m

3.3.5

3.4

3.4.1

3.4.2

3.1

mm

mm			
	I II III		
100mm ≤ DN ≤ 1600mm			K9
DN 1600mm			

1

2 F

I II III DN 100mm DN 100mm

3

4 100mm

≥ 100mm

3.4.3 PE

3.4.4 DN15 DN20 DN25 DN50 DN80 DN100 DN150 DN200 DN300 DN400

3.4.5 A$

1

2

A ”

3.3

3.3 mm

15	21.3	2.8
20	26.9	2.8
25	33.7	3.2
32	42.4	3.5
40	48.3	3.5
50	60.3	3.8
65	76.1	4.0
80	88.9	4.0
100	114.3	4.0

3.4.7 A

1

K9 K14

K12

2 DN100-1000 T DN1200

STD K

3 200g/m^2 +

PE +

3.4.8

1

GB 50268

2

3

4

3.4.9

3.4.10

1

1)

2) 200g/m²

3)

4) 85% +15% 400g/m²

5) 100% 1mm

6)

2 ≥ 400 μm ≥ 600 μm

≥ 1000 μm

600 μm

100% PU ≥ 650 μm

3PE

3

- -

≥ 180 μm

4

≥ 300 μm

≥ 1600mm

1600mm

5

≥ 300 μm

6

100% PU

≥ 650 μm 3PE

1) ≥ 1000mm

2)

3)

7

3.4.11 1

1 DN ≥ 100mm

2 S30408 06Cr19Ni10

3 S30408 06Cr19Ni10

3.4.12

1

2

3 DN ≥ 400mm

4

5

3.4.13

1

2

3

4 1000m

3.4.14

1

2

3.4.17

D400 400kN

C250 250kN

A φ700 06MS201-6

D

3.4.18 A

3.5

3.5.1

3.5.2

1

2

3

3.5.3

3.5.4

3.5.5

3.5.6

4

4.1

4.1.1

4.1.2

4.1.3

4.1.4 30-35m

4.1.5

4.1.6

4.1.7

4.2

4.2.1 3.2

GB/T 17219

4.2.2

4.2.3

4.2.4

5

4.2.5

4.3

4.3.1

4.3.2

4.3.3

4.4

4.4.1

4.4.2

4.1

		mm		
		DN ≥ 100mm		K9
		DN 100mm		
Ⅰ Ⅱ Ⅲ				
		DN ≥ 100mm		K9
Ⅰ Ⅱ Ⅲ		DN 100mm		

1

2 6

Ⅰ Ⅱ Ⅲ

3

4

4.4.3

1

2

3

4.4.4 DN15 DN20 DN25 DN50 DN80 DN100 DN150 DN200 DN300

4.4.5

1 CJ/T 151 I S S31608 06Cr17Ni12Mo2

4.2

2 0.6-4.0mm

≤ 3mm

3

4

5

4.2 mm

DN15	18	1
DN20	22	1.2
DN25	28	1.2
DN32	35	1.5
DN40	42	1.5
DN50	54	1.5
DN65	76.1	2
DN80	88.9	2
DN100	108	2
DN125	133	2.5
DN150	159	3
DN200	219	3
DN250	273	4
DN300	325	4

4.4.6

1 3.4.6

2 S31608 06Cr17Ni12Mo2

4.3

4.3 mm

15	21.3	2.8
20	26.9	2.8
25	33.7	3.2
50	60.3	3.8
80	88.9	4
100	114	3
150	159	3
200	219	3
300	325	4

4.4.7 3.4.7

4.4.8

4.4.9

5m

4.4.10

1

2

3

4

5

4.4.11

1

2

3 1.6

4.4.12

4.4.13

1 DN≥80mm DN 80mm

S30408 06Cr19Ni10

2

3

4.4.14 DN 80mm DN≥80mm

4.4.15

4.4.16

4.4.17

1

0.6m

2 0.2-0.3m

1.8×0.6m

3 0.3m

20cm 1.2×0.8m 6

1.8×1.2m

6

4 DN75 DN100

5

6

4.5

4.5.1

4.5.2

4.5.3

4.5.4 S31603

022Cr17Ni12Mo2

4.5.5

4.5.6

4.5.7

5

5.1

5.1.1

5.1.2 “▲”

Ⅰ Ⅱ Ⅲ 6

“▲”

5.2

5.2.1 ▲

—— ——

—— ——

—— ——

—— —— ——

—— ——

—— ——

- —— —— ——

——

5.2.2 ▲

5.2.3

5.2.4 ▲

5.2.5

1

1)

PLC

2)

3)

4)

5) PLC

4

1)

2)

3)

4)

5)

6)

5

1)

2)

3) ≥ DN600 ≥ 0.28MPa

6

1)

2)

3)

4)

7

1)

2)

8

1)

2)

3)

4)

5)

9

1)

2)

5.2.6

5.3

5.3.1

，　　，

5.3.2　　0.7m

5.3.3

0.6m

5.3.4

5.3.5

1

2　　1‰

3　　3‰

0.5m　　300mm

200mm

4

PLC

5

5.3.6　　0.2m　　0.3m

2　　40m³/h

DN50

5.3.7

0.4×0.4m

5.3.8

1

2

3

4

5.3.9 TN-S TN-C-S TT

TN-S TN-C-S TT PE

5.3.10

5.3.11

100LX LED

5.3.12

5.3.13

5.3.14

5.4

5.4.1 C25

0.2m 0.3m C25

1m 0.4m

5.4.2

5.4.3

1 0.6

2 1.5m

3 100mm

100mm

5.4.4 7.5kW

5.4.5 pH

5.4.6

“ ”

“ ” “ ” “ ”

5.5

5.5.1

S31603 022Cr17Ni12Mo2

S31603 022Cr17Ni12Mo2

5.5.2 S31608 06Cr17Ni12Mo2

5.5.3 S31608

06Cr17Ni12Mo2 S30408

06Cr19Ni10

5.5.4 DN80

EPDM S30408 06Cr19Ni10

DN80

S30408 06Cr19Ni10

5.5.5 S31608 06Cr17Ni12Mo2

“ ” “ ”

5.5.6 DN80

QT450-10 EPDM

PTFE DN80

5.5.7 DN80 Y QT450-10 S30408

06Cr19Ni10 DN80 Y S30408 06Cr19Ni10

5.5.8 QT450-10

20Cr13 NBR

5.5.9

5.5.10 S30408 06Cr19Ni10

S30408 06Cr19Ni10

5.5.11

GB/T 17219

5.5.12 4×2.5mm²

5.6

5.6.1

5.6.2

1 2 3 GB/T 3216 2B

GB 18613

1 IEC 60034-01 IE3

GB/T 29529 B

GB/T 29531 B

5.6.3

5.6.4

5.6.5 GB 50015

0.2m

5.6.6 5.1

5.1

kW	m	m
0 7.5	0.8	0.4 /0.2
[7.5 22]	0.8	0.4
22 55	1.0	0.8
[55 160]	1.2	1.2
1. 2.		

5.6.7 1.2m

/

5.6.8

1

2

3

5.7

5.7.1

1

20-25%

2

50%

3-5min

5-10min

3

50%

5.7.2 50m^3

2

5.7.3 5.2

5.2 **mm**

		1	2	3	4	
H=1-1.5m	1.5	1.5	1.2			1.5
H=2m	1.5	2.0	1.5			2.0
H=2.5-3m	1.5	2.5	2.0	1.5		2.5
H=3.5-4m	1.5	3.0	2.5	2.0	1.5	3.0

5.7.4

1

2 - -Y - /

- - 1.2m

2 -

PLC

3 0.1m

4 0.2m

18

5 DN50

0.2m

6 DN25 18

7

8 0.1m

0.7m 0.6m

5.7.5

5.7.6 10#

5.7.7 3m 1.5m

0.3m 0.45m

0.5-0.6m

IP Modbus TCP/IP MQTT

5.9

5.9.1

5.9.2

1 400 H.265

2

90

5.9.3

1 PLC

2

30

A.1

A.1.1 Q235B

σ

s 235MPa ≥375MPa

A.1.2

1 GC3 III

≥10%

III

2

100%

3

2 JB/T 4730.2 III

3

JB/T 4730.3

4

X 20

5

AB B

A.1.3 1.25

A.1.4

GB/T 8923 Sa2.5

A.1.5 600μm

100

PU ≥650μm 3PE

A.1.17

ISO 12944

5 GB/T

30790.5 “ A.6 Im1 Im2 Im3

”A6.02 A6.04 A6.06 A6.08 A6.10 H

6

GB/T 30790.6 Im3

A.1.6 100%

A.1.7

A.1.8

CECS 10 SYT 0321

A.1.9

≥ 300μm

A.1.10

5V/μm

A.1.11

VOC

A.1.12 100-150mm

25μm

A.1.13

A.1.14 δ ≤ 10mm ≤ 600mm

δ > 1 3 2mm

A.1.15 δ ≥ 12mm DN 600mm

A.1.16

DN 600mm

100mm DN 600mm 300mm

A.1.17

A.1.18

ISO 12944

5 GB/T 30790.5 “ A.6

Im1 Im2 Im3 ”A6.02 A6.04 A6.06 A6.08 A6.10

H

6 GB/T 30790.6

Im3 A.1.1 A.1.2 A.1.3

A.1.1 **Im1 Im2 Im3**

A B C Sa2.5 GB/T 8923.1

A.1.2

EP=		√	EP=		√
PURC=			PURC=		
PUR=		√	PUR=		√
			EPGF=		
[a] Zn R = Misc.= [b] NDFT= [c] 40-80μm √=					

A.1.3

GB/T 30790.2		ISO 2812-2 h		
Im3	H	3000		ISO 4628-2
				ISO 4628-3
				ISO 4628-4
				ISO 4628-5
GB/T 30790.2		GB/T 1771 h		
Im3	H	1440		ISO 4628-2
				ISO 4628-3
				ISO 4628-4
				ISO 4628-5
			1mm	GB/T 30790.6 A

A.2

A.2.1 3 ≥85% ≥7

K9 K14 K12

A.2.2

DN1000 DN1000

A.2.3 DN ≤ 1000mm

≥ 10 K12 ≥ 7 DN1100-2600

≥ 7 ≥ 5

A.2.4 ≥ 420MPa

DN ≤ 1000mm ≥ 12 DN>1000mm ≥ 10

270MPa ≥ 300MPa ≤ 230HB

≤ 250HB

A.2.5 +

1

GB/T 17456.1 ≥ 130g/㎡ ≥ 0.07mm

2

GB/T 17456.2

GB/T 17459 0.08mm

A.2.6

GB/T 17457

A.2.7

1

2 200g/㎡

3

4 85% +15% 400g/㎡

5 100%

+

A.2.10 T IRHD50 IRHD90

GB/T 21873

13

EPDM 100%

3

23 72 -10

A.2.11

GB/T 13295 “

” “ ”

T3 T5 “ ”

GB/T 13295

50

A.2.12 K C

0.8 C

25% 50%

A.2.13 200g/m^2

+ PE +

A.3

A.3.1 GB/T

21835 GB/T 3091 “

A ” S31608

06Cr17Ni12Mo2 S30408 06Cr19Ni10

A.3.2 GB/T 26120

ISO 7-1 ISO 4144

GB/T 7306.1

A.3.3 TIG

A.3.4

-

- ≥180μm

A.3.5

A.1.18

A.4

A.4.1 CJ/T 151 I S

S31608 06Cr17Ni12Mo2

A.4.2

-

GB/T 4334 E

A.4.3

A.4.4 EPDM

A.4.5

A.4.6

A.4.7 0.6-4.0mm

≤3mm

A.4.8

A.5

A.5.1

A.5.2 1.0MPa 0-45

A.5.3

1 QT450-10

GB 12227

2

GB/T 17241.6

3

4

5 1.5MPa

6

EPDM

7 CJ/T 216

A.5.1 GB

12232

A.5.1 mm

	50	80	100	150	200	250	300	400
	7	8	8	9	10	11	12	14

A.5.4

1 20Cr13 12Cr13 GB 1220

2

A.5.10

1

2

3

A.5.11 A.5.2

A.5.2

1	
2	
3	
4	
5	
6	3 “0”

A.6

A.6.1

A.6.2 0-45 1.0MPa

DN800 DN350

S30408 06Cr19Ni10

A.6.3

1	QT450-10

A.6.8

1

2 2

3 IP68

4

5

6

7 300N

A.6.1

A.6.1

	≤ DN1200	≤ 200
	DN1400-2000	≤ 400
	DN2200-2800	≤ 700
	DN3000-3200	≤ 900
	≥ DN3600	≤ 1400

8 20Cr13

A.6.9

1 ROTORK AUMA BERNARD

2 380V 50Hz 220V 50Hz

1) /

2) 4-20mA

3 IP68

4

5 “ ”

6

7 “ ”

8 220V

9

A.6.10

1

1)

06Cr19Ni10 EPDM

NBR

HG/T 3091

2)

20Cr13 1Cr18Ni9Ti

2

3 1.5

GB/T 13927

A.6.11

1

20

2

A.6.16 A.6.2

A.6.2

1	
2	
3	
4	1 2 3 4
5	
6	

A.7

A.7.1

GB/T 12465 B2F

A.7.2 QT450-10 EPDM

Q235

A.7.3

GB/T 8923

Sa2.5

A.7.4

A.7.5 GB 12220

A.7.6

1 GB/T12465

2

3

A.7.7 A.7.1

A.7.1

1	
2	
3	
4	

A.8

A.8.1

DN15 ΦB ≥13mm

DN20 ΦB ≥17mm

DN25 ΦB ≥21mm

DN32 ΦB ≥27mm

DN40 ΦB ≥34mm

DN50 ΦB ≥45mm

DN65 ΦB ≥55mm

DN80 ΦB ≥65mm

DN100 ΦB ≥86mm

A.8.2 Hpb58-2-0.3 C3771

A.8.1 A.8.2

A.8.1 Hpb58-2-0.3

	%					
	Cu	Pb	Al	Fe	Sn	Zn
HPb58-2-0.3	57.0-60.0	1-2.5	0.25	0.8	0.8	

A.8

			%			
	Cu					Al
C3771	57.0-61.0	1.0-2.5	Fe+Sn 1.0			—

A.8.3 A.8.3

A.8.3

0 ضخ

0

A.9.9

A.9.10

A.10

A.10.1

A.10.2

A.10.3 T30 MAP10 Q4 Q3 Q2 Q1

GB/T 778

1 Q3/Q1 R160 Q2/Q1 1.6

2 Q3/Q1 R160 Q2/Q1 1.6

A.10.4

A.10.5 ≤30 ≤1.0MPa

A.10.6

1 Q1 Q2 ±5%

2 Q2 Q4 ±2%

A.10.7

A.10.8 “ ”

A.11

A.11.1

A.11.2 GPRS

A.11.3 ≥IP68

S31668 06Cr17Ni12Mo2Ti

CJ 266

A.11.4

1

2 DN80-300

3 1.0MPa

4 Q3/Q1≥160 1

GB/T 778.1

5

6

A.11.5

1 0±12m/s

2

10

3

4

5 3.6V

6 5 1.5—5

7 ≥20μs/cm

8 /

9 LCD

LCD

10

11 10

12 IP68

A.11.6 A.11.1

A.11.1

mm	Q4 m^3/h	Q3 m^3/h	Q2 m^3/h	Q1 m^3/h
80	200	160	1	0.63
100	312.5	250	1.6	1
150	787.5	630	4	2.50
200	1250	1000	6.3	4
3000	2000	1600	10	6.3

A.12

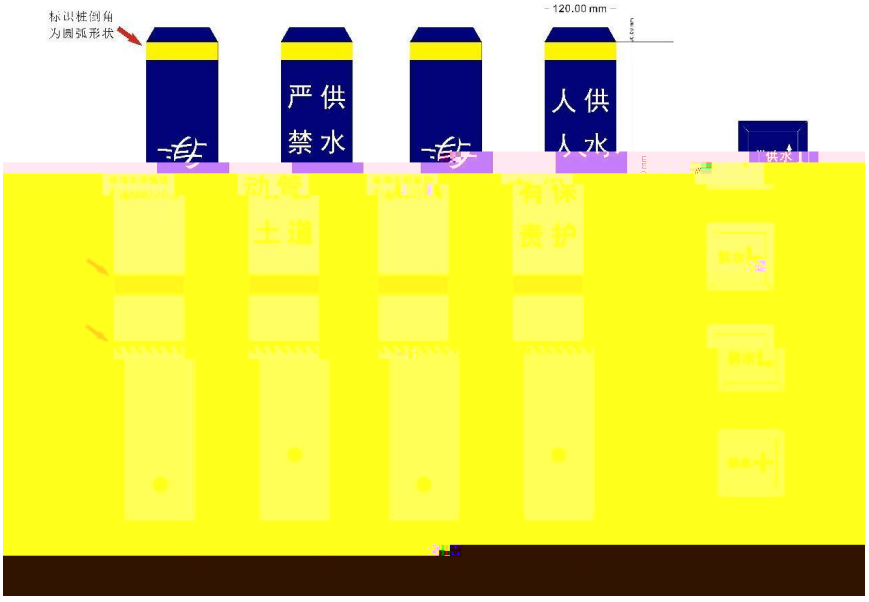
A.12.1

“ ” “

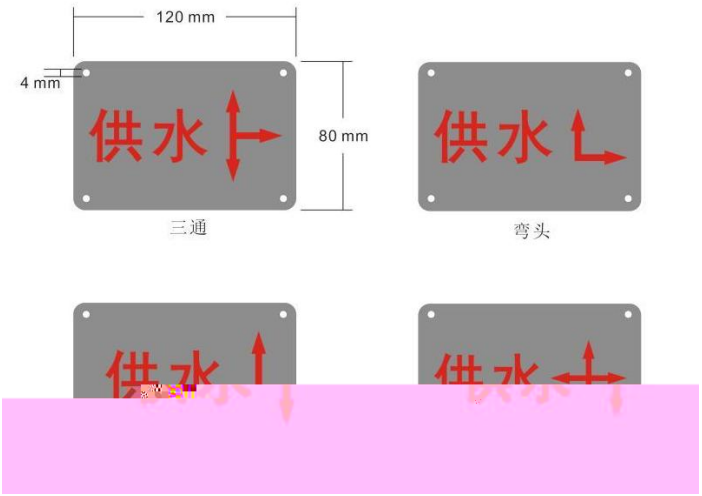
8899110 ” A.12.1 A.12.2 A.12.3

A.12.1

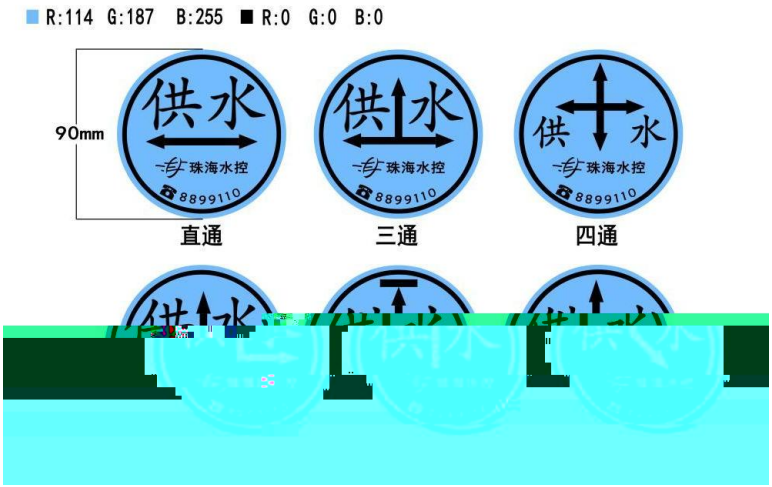
珠海水控集团市政管道标识桩设计图（80cm）



A.12.2



A.12.3



A.12.2

1

2

A.12.3

30

A.12.4

1 120 × 120 × 800mm 120 × 120 × 1200mm

2 120 × 80mm

3 Φ90mm 35mm 25mm

A.12.5

1

100m

2 120 × 120 × 800mm 30-40cm 120 × 120 × 1200mm

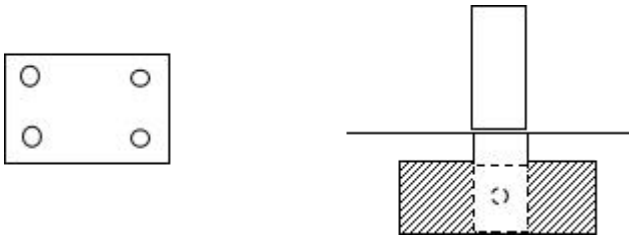
40-50cm

3 C15 400 × 400 × 200mm

20mm A.12.4

4

A.12.4



A.12.6

1

1) 120 × 120 × 800mm 120 × 120 × 1200mm 40mm

A.12.1

2) ±0.05mm ±1mm

2

3

≥ 210MPa

≥ 210MPa

≥ 260kJ/m²

≥ 1400 ≤ -400

≥ 34%

≥ 30

4

1)

2)

3)

4) 990 PHC287

A.12.7

1

1) 120 × 80 × 0.8mm A.12.2

2)

2

300

3

1)

2)

3)

4)

5)

6)

A.12.8

1

1) Φ90mm 35mm 25mm A.12.3

2) ≥ 10mm

2

SMC

3

1)

2)30T 15km/h 5

3)

B.1

GB/T 17219

B.1.1 B.1.1

B.1.1

1			
2	h	≤ 24	
3			
4	mm	≤ 10	
5	cm	≥ 30	
6	%	≥ 65	
7	μm		GB/T 1724
8			GB/T 9286
9	s	100	GB/T 6753.4
10	g/m^2	135	GB/T 1726
11	60	22	GB/T 9754
12			GB/T 6739

B.1.2 B.1.2

B.1.2

1

2 % ≥ 80 GB/T 1725

3 h

8	25% 168h		GB/T 9274
9	25% 168h		
10	3000h	≥ 5MPa	GB/T 1771

B.1.3

B.1.3 B.1.4

B.1.3

1	μm			≤100	GB/T 1724
2	%			≥98	GB/T 1725
3	h			≤0.5	GB/T 1728
				≤1.5	
				≤1.5	
				≤6	

B.1.4

1	MPa	≥10	SY/T 4106 A
2	65 48h mm	≤12	SY/T 0315
3	23 28d mm	≤12	SY/T 0315
4	23 J	≥5	SY/T 0315
5	1.5°		SY/T 0315
6	Cs17 1kg 1000r mg	≤100	GB/T 1768
7	23 24h %	≤2	GB/T 1034
8	Shore D	≥65	GB/T 2411
9	1000h		GB/T 1771
10	MV/m	≥20	GB/T 1408.1
11	Ω·m	≥1×1013	GB/T 1410
12	10% 3% 30% 28d)		GB 9274
1	600±100μm		
2	7		

B.1.4 IPN8710-3 B.1.5

B.1.5 IPN8710-3

1			
2	μm	≤80	GB/T 6753.1

3	h		≤ 8	GB/T 1728
			≤ 24	
4	cm		≥ 50	GB/T 1732
5	MPa		≤ 2	GB/T 1720
6	mm		≤ 2	GB/T 1731

B.1.5 B.1.6 B.1.7

B.1.6

1	μm	≤ 100	≤ 100	GB/T 1724
3	25 ± 2 h	≤ 4	≤ 4	GB/T 1728
4	25 ± 2 h	≤ 16	≤ 16	
5	%	≥ 98	≥ 98	SYT 0457 A

B.1.7

1				
2	2H			GB/T 6739
3	90d	10%NaOH		GB/T 9274
		10%H_2SO_4		
		3%NaCl		
4	500h		1	GB/T 1771
5	MPa		≥ 8	GB/T 5210
6	1.5 ° 25			SY/T 0442 E
7	25 J		≥ 6	SY/T 0442 F
8	1000g/1000r CS17 mg		≤ 120	GB/T 1768

B.1.6 B.1.8

B.1.8

1		≤ 0.8			
2		≤ ≤ 2.0m			
3		<2			300mm
4		D ≤ 1000	± 2	2	
5		D ≤ 1000	2	1	
6		≤ 500mm²			
7		2 ≤ 10000mm²		m^2	

B.1.7

10×10 cm^2

0.10-0.12mm 12

B.1.9

B.1.9

DN mm	≤250	250-500	≥500
mm	100-250	400	500-700

B.1.8

1

B.2

B.2.1

1

SY/T 0407

2 1

GB/T

8923.1

Sa2.5 St3

3

4 3 80

5

6

7

B.2.2

1

2

15-30min

3

5

4

B.2.3

1 10

2 100-150mm

25μm

3 25μ

m

B.2.4

1 2mm

2

4h

B.2.5

1

2

3

4 —— ——

——

B.3

B.3.1

B.3.1 B.3.2

B.3.1

			μm				
IPN8710-3			≥ 600		4000V		
			≥ 600		4000V		

B.3.2

			μm				
GZ-2			≥ 300		3500V		

B.3.2

1

2

3

B.3.3

1

2 10 1 10 1 1

3 4

2

3

B.3.4

1

2 1500V 3500V 4000V

4h

0.2m/s

3 50mm

B.3.5

1 100mm 45-60

2

1) 50cm^2

2)

20 1 1 20 1

1

2

B.4

150mm

4mm B.4.1

B.4.1

mm		mm	
DN ≤ 200	10	500 DN ≤ 600	4
200 DN ≤ 300	7	600 DN ≤ 800	3
300 DN ≤ 400	6	DN 800	2
400 DN ≤ 500	5		

SYJ 4001

2

B.5

B.5.1

1 450mm

2

3 St2

4

100mm

5

6

7

B.5.2

1

2

St2

3

50mm

4

B.6

B.6.1

B.6.2

B.6.3

B.6.4 8.2

B.6.5

B.6.6

B.6.7

B.7

B.7.1

B.7.2

C.1

C.1.1

C.1.2

GB 50052

C.1.3 0.2m

C.1.4

380V/32A 220V/16A 2

1Ω UPS 3kVA

8h

C.1.5

1

2 400V

3 690V 400V

8kV

4 IP55

C.1.6

1 ≥690V Uimp 6kV

2

3 IP20

C.1.7

1 ≥690V Uimp 6kV

2 IP20 IEC 68

3

C.1.8

1 0.5S 2

2 3×220/380V

3

4

5 RS485 Modbus RTU

C.1.9

1 CE IEC 50178 CE EMC IEC 61800 UL 508C CAN/CSA-C22

2 EMC

3

4 PLC

PLC

C.2

C.2.1

1 PLC

2 CPU

3 Modbus RTU Modbus TCP/IP AB-ETHIP S7

4 PLC

5 I/O 20%

C.2.2

1 150KB

4MB 10KB

2 / 20%

C.2.3

C.2.4 PLC UPS

C.3

C.3.1

1 4-20mA

2 IP66 EN 10204-3.1

3

4 ±0.15 FS

5

6

C.3.2

1 4-20mA

2 IP66 EN 10204-3.1

3

4 ±0.15 FS

5

C.3.3

1

2 S31603 022Cr17Ni12Mo2 / C

/

3 IP68

4

5 ±0.5%

6 4-20mA RS485 Modbus RTU

7

8 24V DC 220V AC

C.3.4

1 90 °

2 0.001-100NTU

3 0-40NTU ±2% ±0.015NTU 40-100NTU ±5%

4 0-9.9999NTU 0.0001NTU 10.000-99.999NTU 0.001NTU

5 ±1.0% ±0.002NTU

6 15

7 6 30 60 90

8 200-750mL/min

9 0-50 0-40

10 0.0032NTU ISO 15839

11 2130B USEPA 180.1

C.3.5

1 DPD

2

3 0-5mg/L

4 ±5% 0.035mg/L Cl_2

5 ±5% 0.005mg/L Cl_2

6 0.035mg/L

7 10min

8 200-500mL/min

9 0.01-0.5MPa

10 LCD

11 4-20mA

12 Modbus RTU 485

13 5-40 0-90

14 100-230VAC 50/60Hz

15 CE UL1262 ETL CSA 22.2 No.142

16 IP62

17 / /

C.3.6 pH

1

2 0-14pH

3 ±0.01pH

4 24 0.03pH

5 -5-70

6 914m

7 6.9bar 70

8 NTC300Ω

9 3m/s

10 10m

11 IP68

12

C.4

C.4.1

1

2 2s 2s

3 30

4 90-110dB

1

5 PLC

C.4.2

1

2 5

3

4 0.0005lx 0.0001lx 11

160m

5 1920x1080@30fps

1920x1080@25fps 704x576@25fps

6 IP67

7 400

8 90

9 PoE 4 RJ45 10/100M

10 RJ45 10/100M

GB/T 28181 RTSP/ONVIF/PSIA TCP/IP UDP

RTP RTCP

11 2.0Vp-p 1kΩ

12

C.4.3

1

2

3

4

5 10M/100M TCP/IP

6 IP65

7 PLC

C.4.4

1

2

3

4

5 GB 4715

6

7 PLC

C.4.5

1

2

3 2s 100ppm

4 0-50 20-100%RH

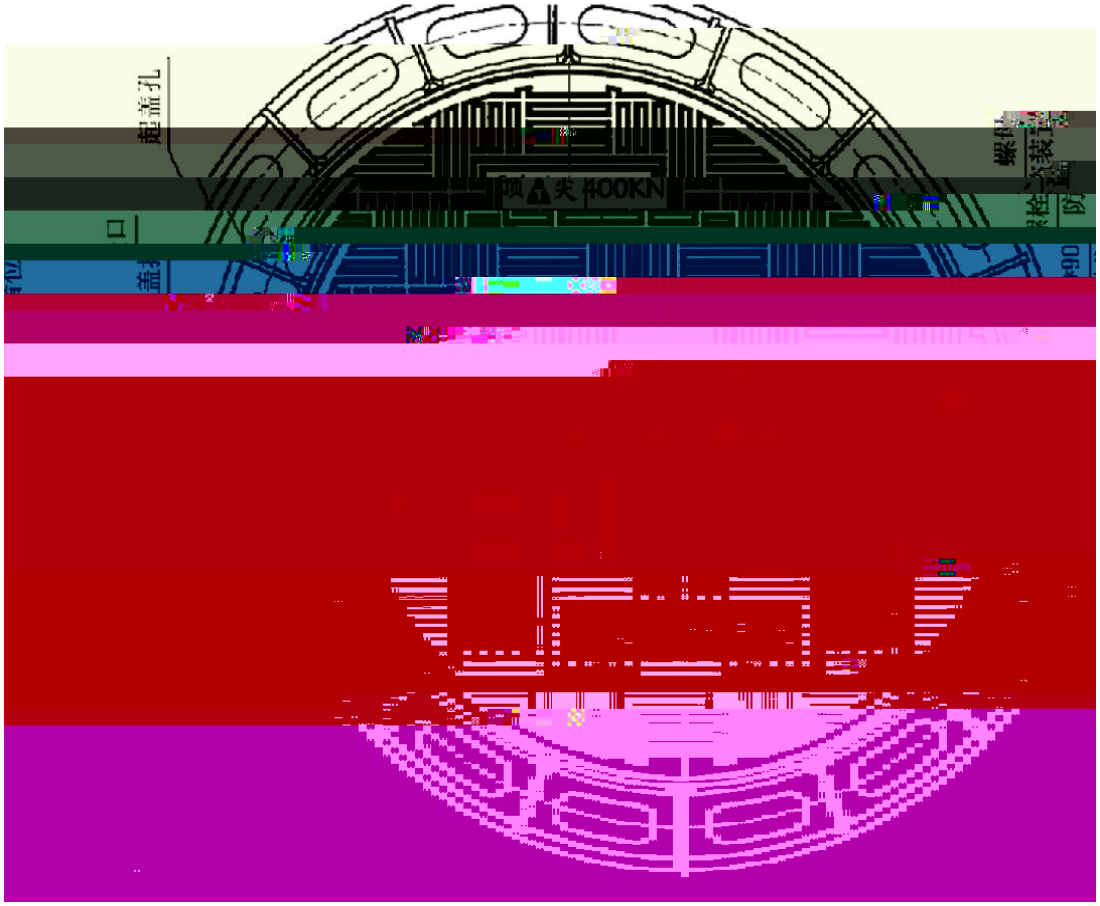
5

6 PLC

D.1

D.1.1

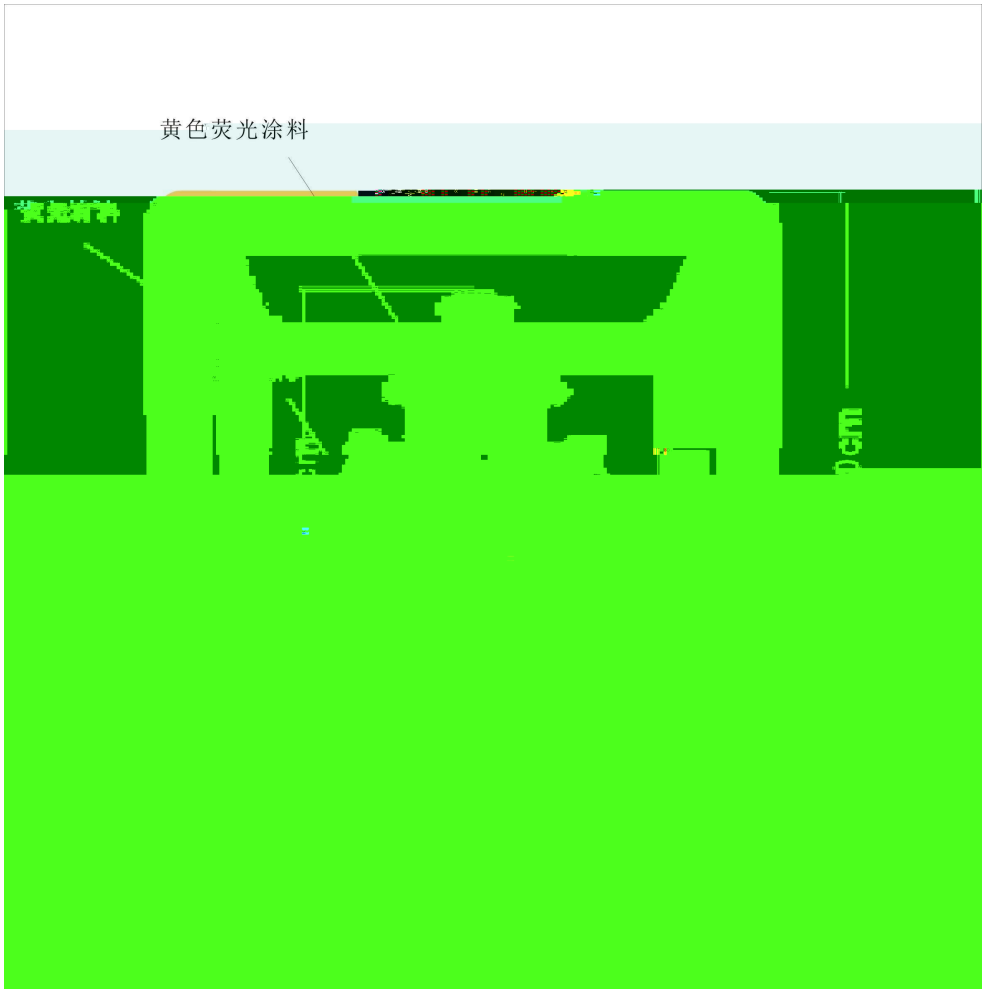
D.1.1



E.1

E.1.1

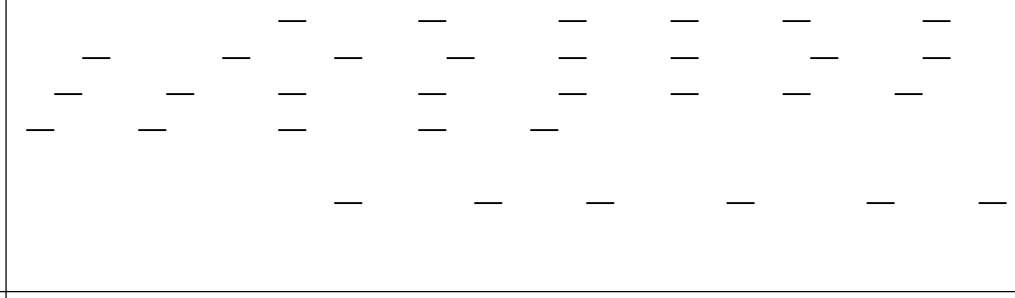
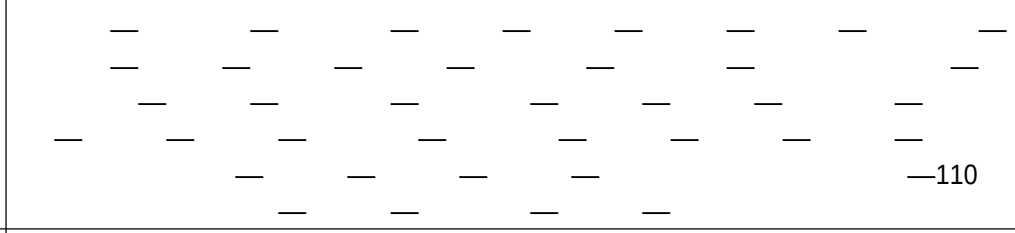
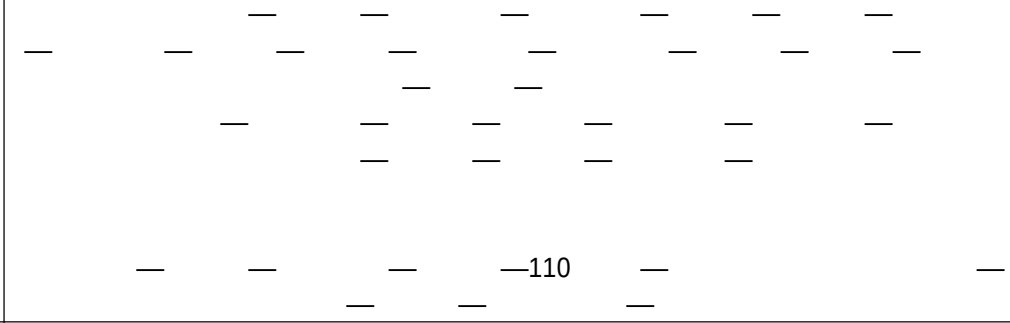
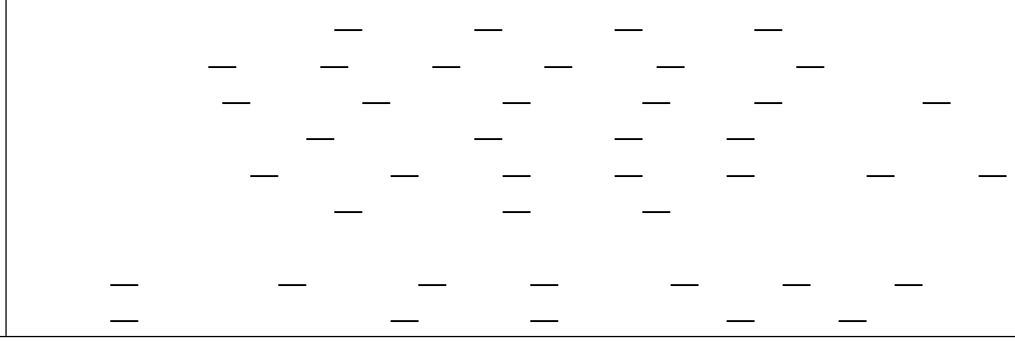
E.1.1



F.1

- F.1.1 F.1.1

F.1.1 -

F.1.1