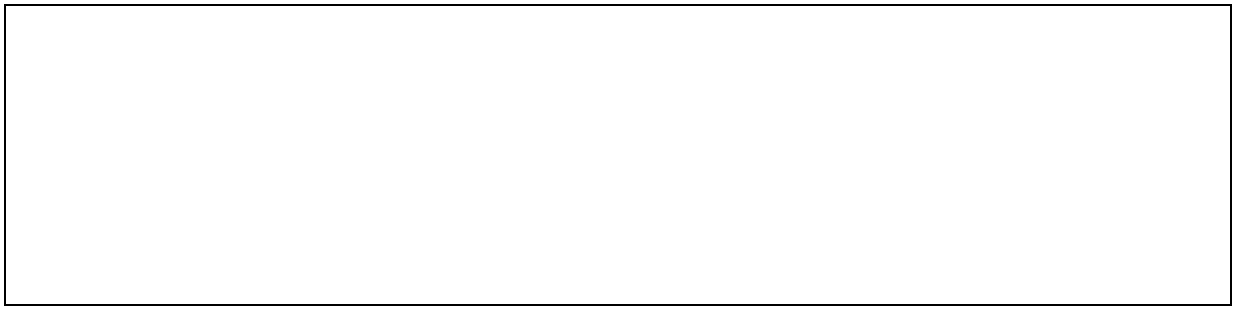
20220728

2022-2024

SSCGQ2022071



1	27.5
2	
3	
4	0559-2131222
5	/
6	
7	60
8	1 2 3 1 , :

	[ ] 12 2 3
9	[2007]119 (2008 248) ( )
10	11
11	12
12	
13	1
14	18
15	

16	
17	
18	
19	
20	15
21	1
22	

23	4000 100 % [2002]1980 100
24	
25	1 8 2 3 15.2 15.3 16.1 19.3
26	( )
27	1 2 3 1 2

[2011]300

1

2

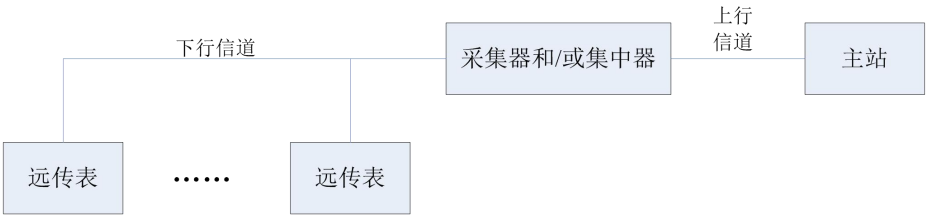
	5 (2014 68) ( ) 6 2017 141 141 7 8 9 2020 46
28	10%

1		DN15		30	DN15--DN25
2		DN15		300	
3		DN20		10	
4		DN25		20	
5	NB-i	DN15		300	
6		DN20		10	
7		DN25		20	
8		DN40		10	
9		DN50		10	
10		DN100		5	
11				1	

1

2

( )



1 :

1

2 GB/T778-2007

JJG162-2009

3

4

◆ 9999

◆ IP65 IP65

◆

◆

◆

◆ 1 Ra NB-1 485

5

◆

◆

2

1 Q3=2.5m3/h Q3/Q1=80 Q2/Q1=1.6

2 T30

3 MAP10

3

1 1.6M a 15mi

2 2.0M a 1mi 0

4

- M-B
-
-
-
-
-

5

5.1

- M-BUS
- 1200/2400b
- 22V-36V
- 2mA 25mA
-
-

6

6.1

99.5%

6.2

0.15%

6.3

GB/T 778.1 2007 5.2.2

1.2.1

Q1 Q2 Q2

4

1.2.2

Q2 Q2 Q4

a 30 2

b 30 3

1.2.3

5.2.1 5.2.2

1.3

1.4 ROC

1.4.1

a T30

b mAT 0.1

c MAT 30

d 20

1.4.2

mAP 30kPa 0.3ba

MAP10 MAP 1.0MPa 10ba

1.4.3

DN 500mm 1MPa 10ba

1.4.4

5 55 3

25 55

1.4.5

40 0 100 40 95

1.4.6

10 10

2

1.5

GB/T778.1 2007 5.5

a U10

b D5

1.6

GB/T778.1 2007 5.6

2

2.1

2.1.1

2.1.2

2.2

a GB/T778.1 2007 4.1

b

c GB/T778.1 2007 4

2.3

2.3.1

a

b

2.3.2

1

1

1	

2.3.3

a CJ/T 188 2004

b 1km

2.3.4

CJ/T 188 2004 7

2.3.5

2.3.6

a

b a

² FU

2.3.7

2.3.7.1

2

2

	1

2.3.7.2

ºÆ € ¦ +6 B+

2.4

0.063 MPa 0.63 ba

2.5 Ë»Ø@Ð `0 1 "HQAñ"d Cµ

500mm

>¡Ø ADH¨¨ E

¦

ºÆ €

ºS

c

2.8

2.8.1

2.8.2

2.8.2.1

a

b

c

d

2.8.2.2

9

2.9

JB/T 9329

2.10

Q3 Q4 GB/T 778.3 2007 8.1.1 1

2.11

MTBF

26500h

2.12

GB 4208 2008

IP65 IP68

3

3.1

a m3

b 2

c Q3 Q3/Q1

d

e

f

g

h H V

i T30

j 1MPa 10ba DN 500 0.6MPa 6ba

k 0.063MPa

GB/T 778.1

l

m

n CMIIT ID

3.2

GB/T 13384 GB/T 191

3.3

3.4

3.4.1

a 5 45

b 85

c 5

3.4.2

5 5

A.1 +2.5-3.7V

A.2 433MHZ

A.3 L Ra

A.4 +20dbm

A.5 200mA

A.6 -139dBm

A.7 10-20mA

A.8 25 A

A.9 9600b

A.10 2000

A.11 6

A.12

[2005]423

a GFSK

b 430-432MH 433.00-434.79MH

c 10 mW(e. .)

d 400 kH

e

30MH 1GH 48.5MH -72.5MH 76MH -108MH 167MH -223MH 470MH -566MH 606MH -798MH -36dBm

1GH 12.75GH -30dBm

48.5MH -72.5MH 76MH -108MH 167MH -223MH 470MH -566MH 606MH -798MH -54dBm

l a

1 GPRS

2 RS 485 M-BUS USB GPRS

NB-IOT

1 NBIOT RS485 3.6V

-
- RS485
- RS485 RS485

-
- EMC ESD EMI
-

2

- DC 3.6V
- 1 7 A

  2 230mA

  3 50mA

  4 25mA
- 23dBm 2dB Ma .
- -128dBm
- 3GPP Rel.13/14NB-I T UDP IP COAP

  CJ/T 188
- 120mA,

5.3.

NB-I T 3GPP Ba1d01 Ba1d02 Ba1d03 Ba1d05 Ba1d08 Ba1d12 Ba1d13 Ba1d14 Ba1d17 Ba1d18 Ba1d19 Ba1d20 Ba1d25 Ba1d26 Ba1d28 Ba1d66

NB-i DN15 1 a

DN20

1		`
2		
3		
4		
5		
6		
7		, 30
8		

3.1

3.1.1

3.1.2

3.1.3

3.1.4

3.1.5

3.2

3.3

3.4

1			
2		8	
3		8	27
4			
5			
6			

7			
8			

1

1.1

1.2

1.3

2

2.1

2.2

3

3.1

3.2

3.3

4

5

6

7

8

9

10

10.1

10.2

11

11.1

11.2

3 3

12

12.1

7

94

12.2

12.3 7

13

13.1

13.1.1

13.1.2

13.2

13.3

14

14.1

14.2

14.3

15

15.1

15.2

〈 〉

15.3

15.4 5

15.5

15.6

15.6.1

15.6.2

15.6.3

16

16.1

16.2

16.3

17

18

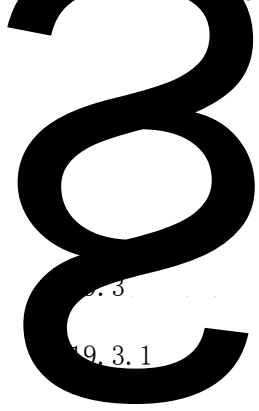
18.1

18.2

19

19.1

19.2



19.3.1

19.3.2 18.1 18.2

20

20.1

20.2

21

ə

23.2

3

4

5

6

7

22.2

23

23.1 5

23.2

24

24.1

24.2

10%

24.3

25

25.1

25.2

26

26.1

26.2

26.3 94

26.4

26.5

27

27.1

_____ _____ _____

_____ _____ _____

__/__

/

, ____ (_____),

_____

1

2

3

4

1

2

3

4

_____

_____

_____ （ ____ ） ___

1

2

3

4

① _____ ② _____

1 _____ _____

_____(_____)_____ _____

2

3

4

5

6

_____

_____

_____

_____

_____

_____

_____

_____

1

2

3

			/
1			
2			
3			

1

2

3

4

1

2

3

3

4

1						
2						
3						

1.

2.

100 20

100 -100 20%--20 10%=100 -20 -2 =78

/

_____

_____

_____

_____

_____

_____

_____

_____

:

1.

2. 1

%

3. 2

%

1

2

: