,

:

,

M

D P+H

T

X

V

J

B

G

H

F

Z

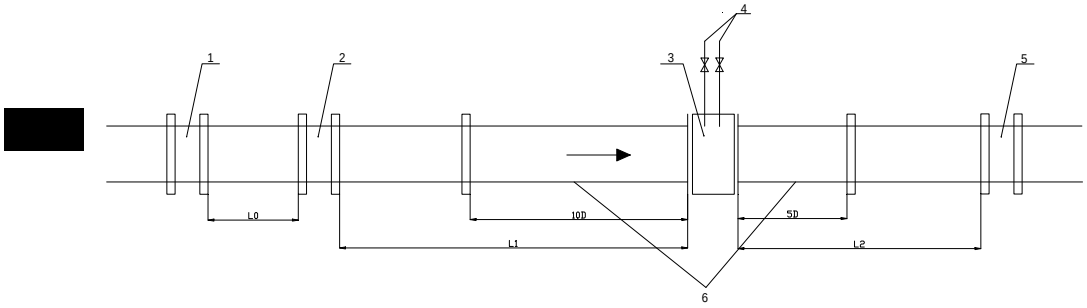
J D D/2

T

C DN25~DN1400mm

50 DN50 2050

,



1

1- 2- 3-
4- 5- 6- ;
L0-
L1- ; L2-

6.1

,

1 L_0 L_1 L_2 ,

, 2

2

L1

L2

β

90°

1.5D~3D 1~2D

2D 0.5D D

90° D

1	2	3	4	5	6	7	8	9
≤0.2	10(6)	14(7)	34(17)	5	16(8)	18(9)	12(6)	4(2)
0.25	10(6)	14(7)	34(17)	5	16(8)	18(9)	12(6)	4(2)
0.30	10(6)	16(8)	34(17)	5	16(8)	18(9)	12(6)	5(2.5)
0.35	12(6)	16(8)	36(18)	5	16(8)	18(9)	12(6)	5(2.5)
0.40	14(7)	18(9)	36(18)	5	16(8)	20(10)	12(6)	6(3)
0.45	14(7)	18(9)	38(19)	5	17(9)	20(10)	12(6)	6(3)
0.50	14(7)	20(10)	40(20)	6(5)	18(9)	22(11)	12(6)	6(3)
0.55	16(8)	22(11)	44(22)	8(5)	20(10)	24(12)	14(7)	6(3)
0.60	18(9)	2 (	(	48(0	0			

2 D

3 “ ” “ 0.5% ò

“ ” ” “ 0.5%

ò 0.5%

4 90º

L_0 L_0 β=0.7 β 1/2

5 ≥2D

30D 15D

1 L_1

30D 15D

6.2

1

2

3 1D

2D

OD D/2 D 2D 4 4

D ±0.3%

OD 2D 8 D

±2%

4

β 1 β=d/D, d D

6.3

1

2 ±1º

3 ε

: ε ≤0.015D 1/β-1

4 ,

5 2

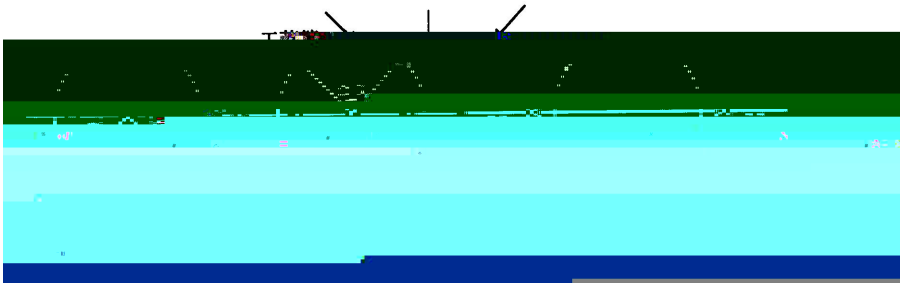
6.4

1

, ,

, ,

2



, ,

(2)

6

16m 3

mm 3

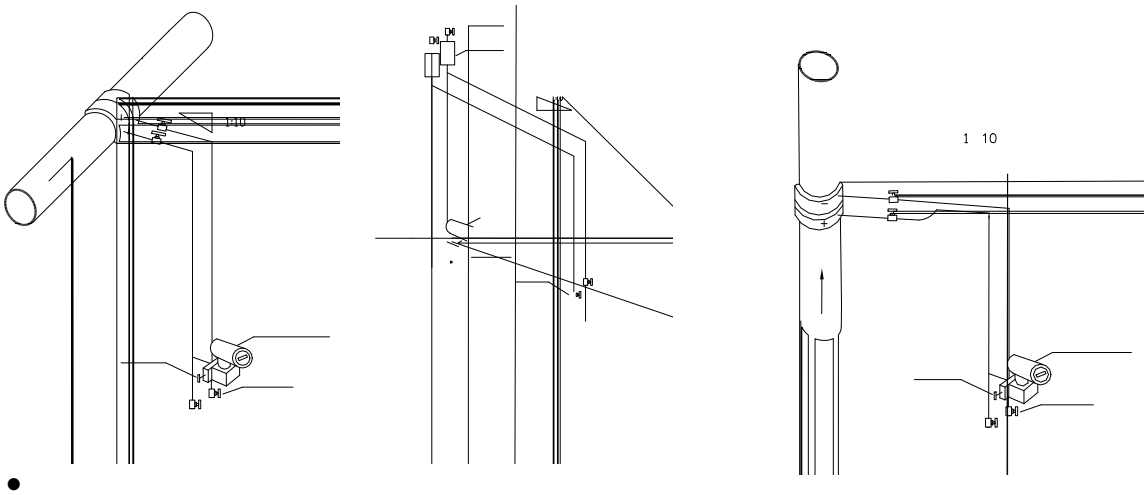
	16000	16000~45000	45000~90000
	7 9	10	13
	13	13	13
	13	19	25
	25	25	38

, 1 10 ,

30m , , ( )

( ) , ,

(3)

- 

-

i

4

$$Q_v = 3600\sqrt{2000} \times \varepsilon \times C \times \frac{\pi}{4} D^2\beta^2 \times \frac{\sqrt{\Delta P}}{\sqrt{\rho} \cdot \sqrt{1-\beta^4}} \quad \text{……} \quad 1$$

$$Q_m = 3600\sqrt{2000} \times \varepsilon \times C \times \frac{\pi}{4} D^2\beta^2 \times \frac{\sqrt{\Delta P \cdot \rho}}{\sqrt{1-\beta^4}} \quad \text{……} \quad 2$$

Q_v —— m^3/h

Q_m —— kg/h

ε —— ʊ

$$Q_{m1} = \frac{\varepsilon_1 \cdot C_1 \cdot \sqrt{\rho_1}}{\varepsilon_0 \cdot C_0 \cdot \sqrt{\rho_0}} \times Q_{m0} \quad \text{……} \quad 4$$

Q_{m0} ε_0 C_0 ρ_0

Q_{m1} ε_1 C_1 ρ_1

$\varepsilon_0 = \varepsilon_1 = 1$

$$Q_{v1} = Q_{v0} \times \frac{\varepsilon_1 \times C_1 \times \sqrt{\rho_0}}{\varepsilon_0 \times C_0 \times \sqrt{\rho_1}} = Q_{v0} \times \frac{\varepsilon_1 \times C_1 \times \sqrt{P_1 \times T_0 \times Z_0}}{\varepsilon_0 \times C_0 \times \sqrt{P_0 \times T_1 \times Z_1}} \quad \text{……} \quad 5$$

Q_{v0} ε_0 C_0 ρ_0 P_0 T_0 Z_0

Q_{v1} ε_1 C_1 ρ_1 P_1 T_1 Z_1

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, 1~2 ,

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1 1 2

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1Cr18Ni9Ti ( ) 20# A3 20#

2 : 6

4

		mm	MPa		
		50~400	≤ 10		ISO5167
		25~40	≤ 10		GB2624
	YHLJ-BH	50~400	≤ 10		
		50~250	≤ 20		
	YHLJ-TG	25~125	≤ 32		
		400~700	≤ 0.6		ISO5167
	YHLJ-BZ	400~600	≤ 1.6		GB2624
		800~1400	≤ 0.6		
		600~800	≤ 0.6		
	YHLJ-BF	50~600	≤ 2.5		
		50~200	≤ 6.3		ISO5167
	YHLJ-BJ	50~700	≤ 6.3		GB2624
		50~400	≤ 10		
	YHLJ-PH	125~300	≤ 10		
		65~250	≤ 20		
	YHLJ-CJ	50~630	≤ 20		ISO5167
	YHLJ-MH	50~300	≤ 10	3	
	YHLJ-WT	400~1200	≤ 1.6		ISO5167
	YHLJ-HH	40~150	≤		

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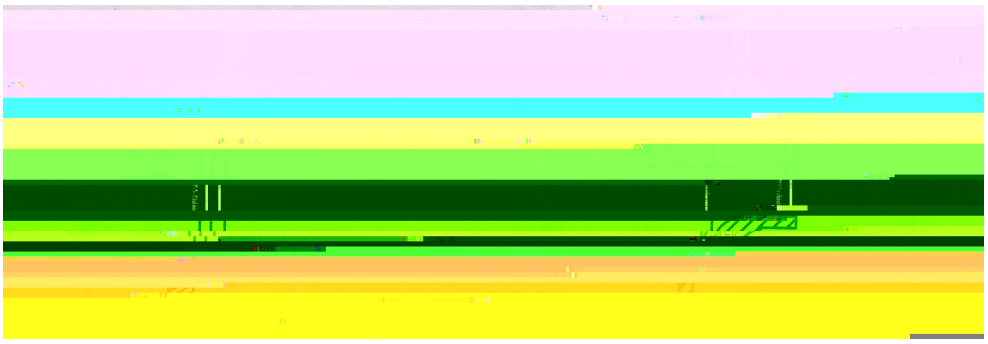
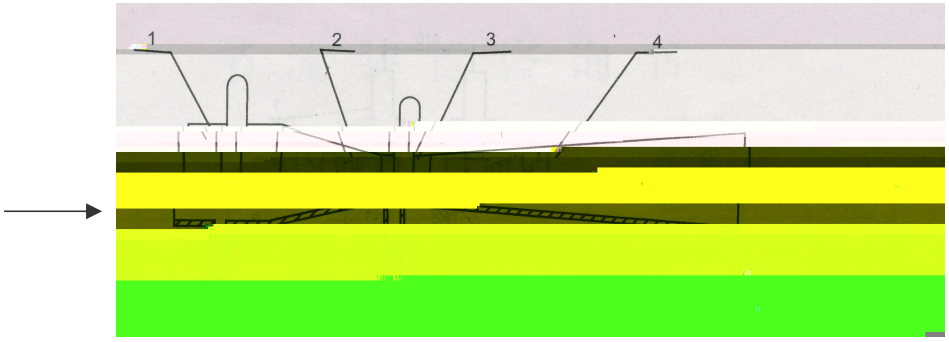
1.

1

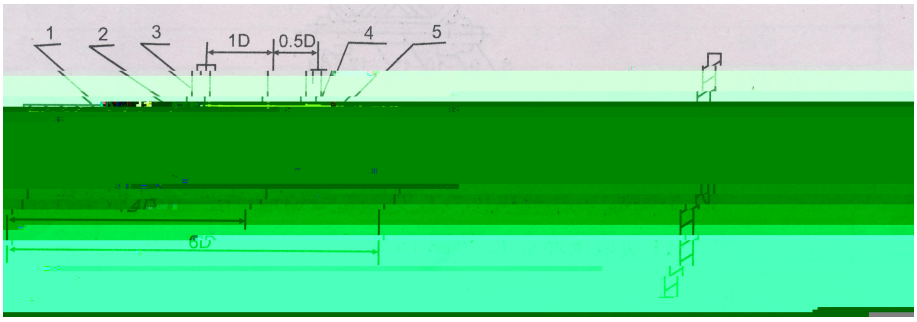


1 1 2



3

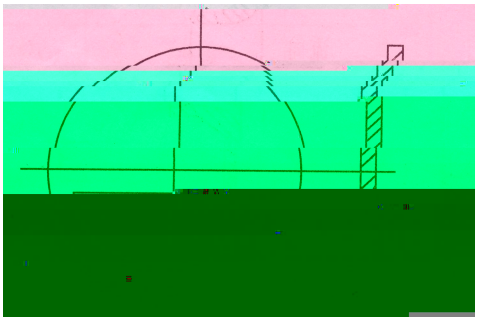
1 2 3 4 5 6



4 5 1/4

1 2 3 4

5



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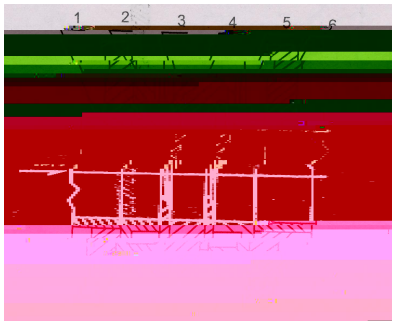
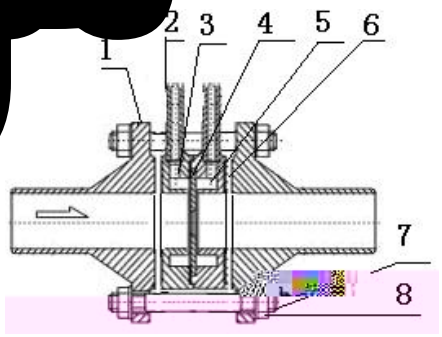


7

1 2 3

4 5 6



12

PN ≤ 2.5Mpa

1 2 3 4 א

5 6 7 8

8 9

13 4

PN=10 20Mpa

1 2 Ē

10

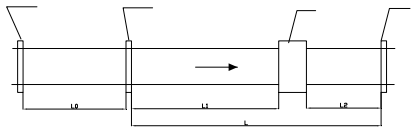
PN=10 20Mpa

1 2

3 4 5 6

7 8 9

1		
2		
3		kpa
4		
5		kg/m^3
6		pa.s
7		Mpa
8		
9		t/h
10		t/h
11		t/h
12		t/h
13		
14		mm
15		mm
16		

1		
2		
3	kpa	
4		
5	kg/m^3	
6	Mpa	
7	Mpa	
8		
9	m^3/h	
10	m^3/h	
11	m^3/h	
12	m^3/h	
13		
14	mm	
15	mm	
16		
17		_____ _____ _____ L_0=_____ L=_____
18		
19		
20		
21