

**34252—
2017
(ISO 15783:2002)**

II

**(ISO 15783:2002, Seal-less rotodynamic pumps — Class II —
Specification, MOD)**



1.0—2015 «
 1.2—2015 «
 1 ()
 2 245 « »
 3 30 2017 . 102-)

(31 0> 004-97	(3166) 004—97	
	AM BY KZ KG RU	

4 2018 . Ns 918- 34252—2017 (ISO 15783:2002) 2
 1 2019 .
 5 ISO 15783:2002 « rotodynamic pumps — Class II — Specification», MOD II. » («Seal-less (, 1.5—2001. «
 2) ,
 3 F ,
 » (ISO). ISO/TC115 «
 1.5 (3.6).
 6 8

1	.....	1
2	.....	1
3	.....	2
4	.....	6
5	.....	17
6	.....	17
7	.....	20
8	.....	20
	()22
	()29
	() , ()30
	D ()31
	()32
	F ()38
	G ()41
	()42
	43

ISO 15783:2002.

<Amd.1:2008).

ISO 15783

SC>1 «

ISO/TC 115 « »,

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(•)

G.

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II

SeaMess centrifugal pumps. Technical requirements. Class II

— 2019—03—01

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[1]

- a) (,) (.) :
- b) (.) (.) ;
- c) ;
- d) .

2

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18854—94 (76—87)
18855—94 (281—89)
ISO 9966—2015 ()

1.2

3.3.20	[net positive suction head required (NPSHR)]:	-
	3%	-
	(NPSHR)	-
3.4	(starting torque):	-
3.5	(break-out torque):	-
3.6	(locked rotor torque):	-
3.7	(eddy currents):	-
3.8	(magnetic coupling):	-
3.9	(inner magnet ring):	-
3.10	(outer magnet ring):	-
3.11		-
3.11.1	(eddy current drive):	-
	(« »).	-
3.11.2	(eddy current loss):	-
3.11.3	(« ») (torque ring):	-
3.11.4	(decouple):	-
3.11.5	(sltp):	-
	(« »)	-
	()	-
	()	-

3.11.6 (demagnetization):
 3.11.7 (maximum allowable temperature): -
 3.11.8 [maximum allowable working pressure (MAWP)]: -
 (, ,)

3.12 (containment)

3.12.1 (sheath): (MDP)

(); 1 2.

3.12.2 (shell): ; 2.
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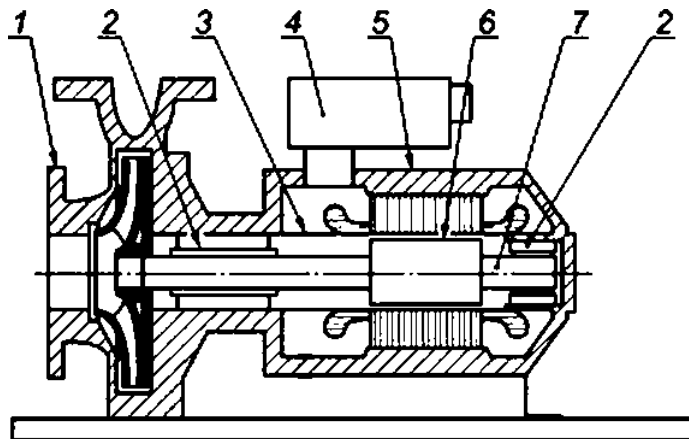
3.12.3 () (liner):

3.12.4 (secondary containment):
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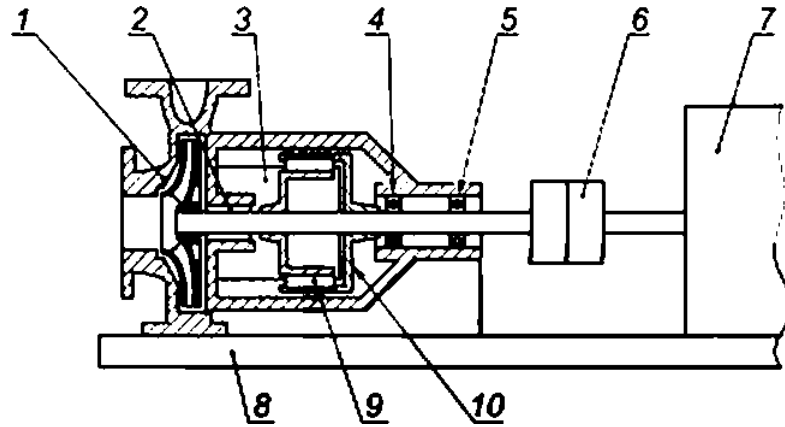
3.12.5 (drive shaft):
 — MDP.

3.12.6 (secondary control):

3.12.7 (secondary control system): (-
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1— : 2— : 3— () ; 4—
 S— « 7—
 1— ()



1— ; 2— ; 3— ; 4— ;
 5— ; 6— ; 7— ; 8— ;
 9— ; 10—

2— (MDP)

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4.1

4.1.1

4.1.2

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(NPSH) (NPSHR)
 ISO 9906. NPSHR
 NPSHR (NPSH3).
 NPSHR NPSH HPSHA
 NPSHR 0.5

4.1.3

4.2

4.2.1

a)

b)

c)

d)):

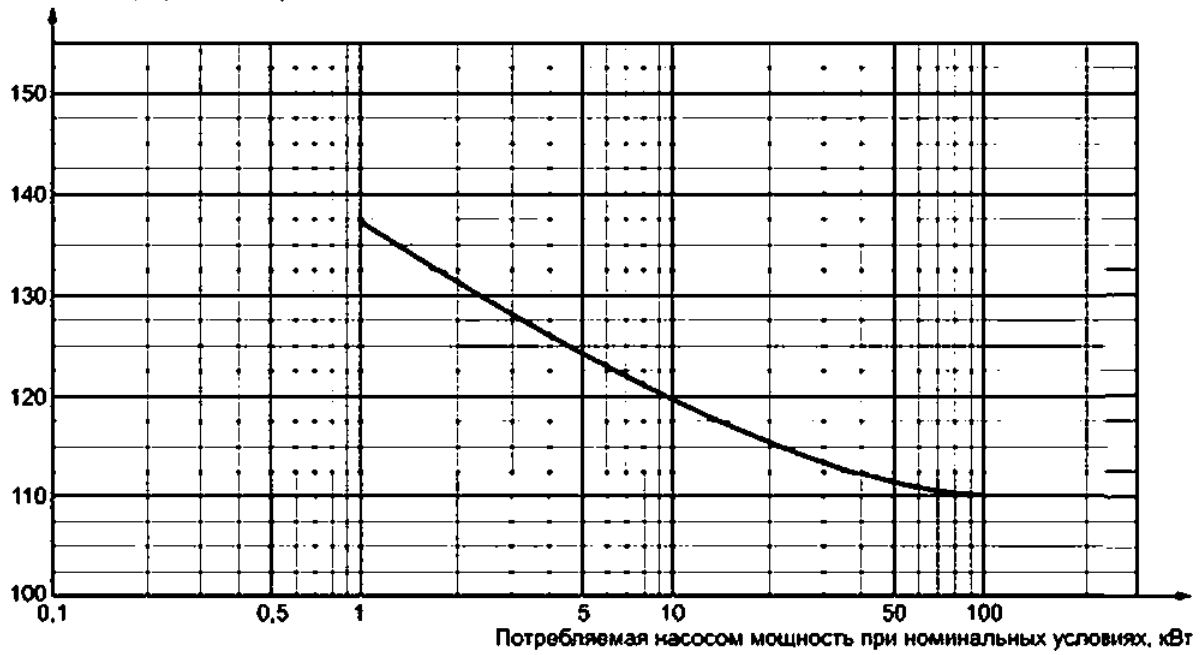
e)

f)):

g)

h)

мощности при расчетных условиях, %



4.2.2

{ . 4.2.1. a—h):

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1000 / 3,

b)

c)

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d)

a)

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c)

4.2.3

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(. 4.2.1, a—h):

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160 (320 °F)

• 160" (320 *F)

4.3

4.3.1

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4.3.2

4.3.2.1

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4.3.2.2

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 (± 5 %) (± 5 %)

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	3.0	4.5
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4.3.2.3

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4.4

4.4.1

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4.4.3

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4.4.4

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4.4.5.2

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4.4.5.3

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4.4.6

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4.4.7

4.4.7.1

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4.4.7.4

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4.5.3.1

4.5.3.2

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4.5.5

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4.5.6

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4.5.7

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4.8.1

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4.11.1

a)

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4.11.2

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4.12.1

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4.12.2

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4.12.3

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6.3.1.2

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6.3.1.3

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b)

6.3.2

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b) 0.4 10 1 °C

7 · 10⁻⁴ / :

c) 10
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6.3.3.1

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6.3.3.2

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6.3.4 ()
6.3.4.1 6.3.3 6.3.4
• 6.3.4.2

• 6.3.4.3

ISO 9906.
2.

1 NPSH
• 6.3.4.4
ISO 9906.
• 6.3.4.5

[4] [5]

6.3.4.6 ()

6.3.5
6.3.5.1

6.3.5.2

IEC 60034-1.

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IEC 60034-1.

6.3.6

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6/3	(NPSH).		NPSHA
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		b)	.
		c)	.
		d)	,
		e)	(, ,)

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26		"	*								28
29	V*	DN-									29
30	&	PN									30
3'	h	PN									31
32	SS	DN-									32
33		-									33

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52					NPSH			52
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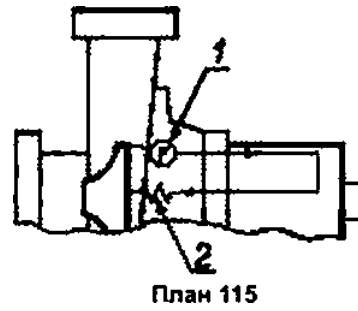
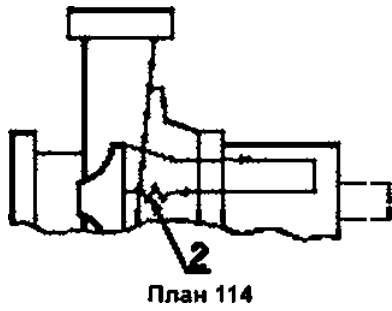
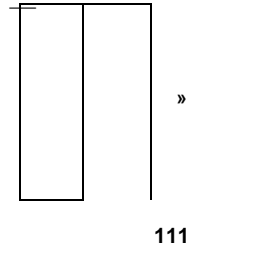
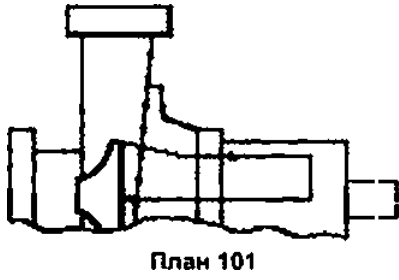
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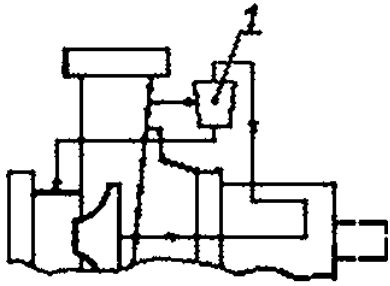
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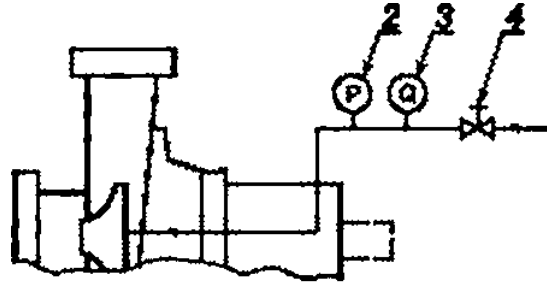


План 131

a)

b)

c)



План 132

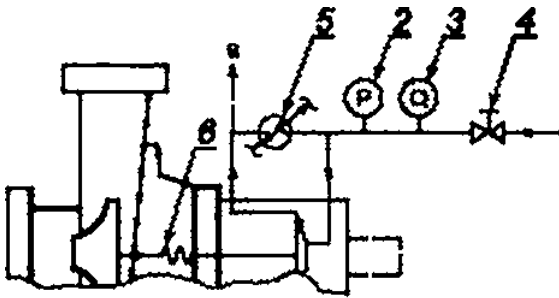
- a)

b)

c)

d)

e)



План 133

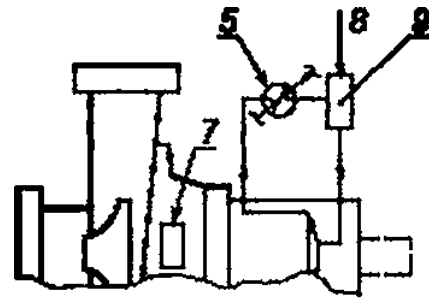
a)

b)

c)

d)

e)



План 153

a)

b)

- c)

- d)

e)

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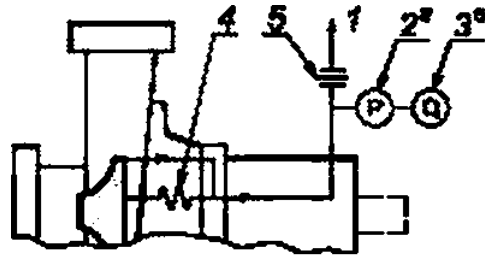
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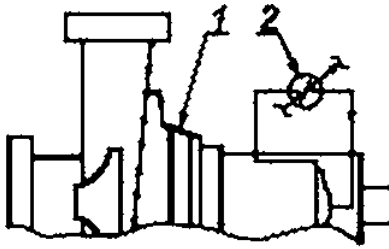


План 113

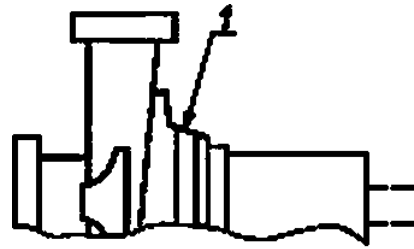
- a)
- b)

1 — ; 2 — ; 3 — ; 4 —
: S — ; —

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План 123



План 102

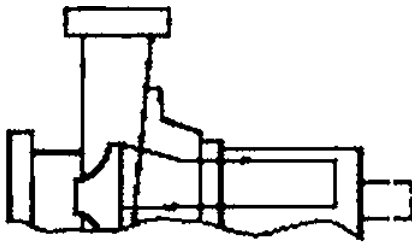
a)

b)

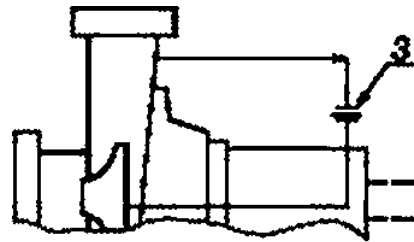
a)

b)

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План 101



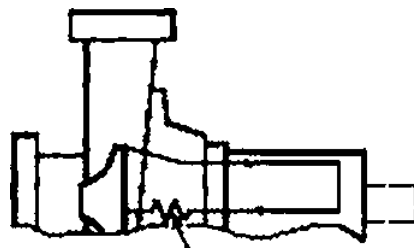
План 111

a)

b)

a)

b)



План 114

a)

b)

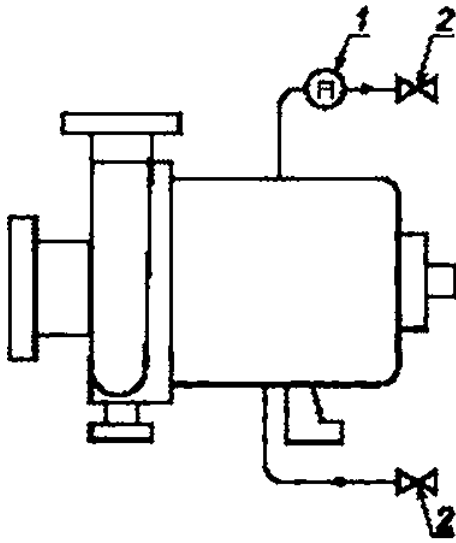
t—

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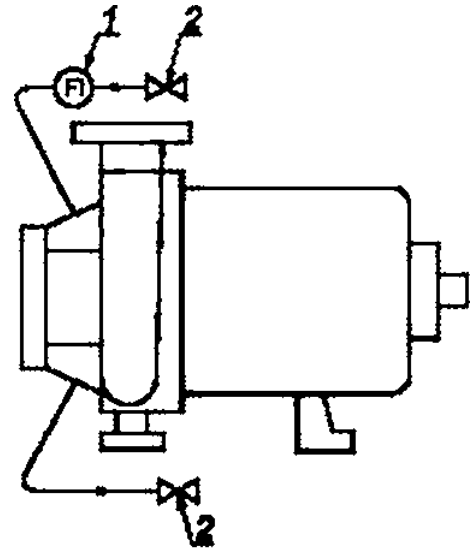
: 3—

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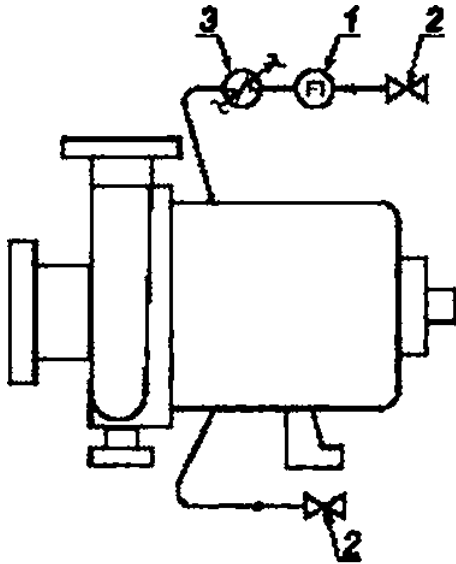
.4—



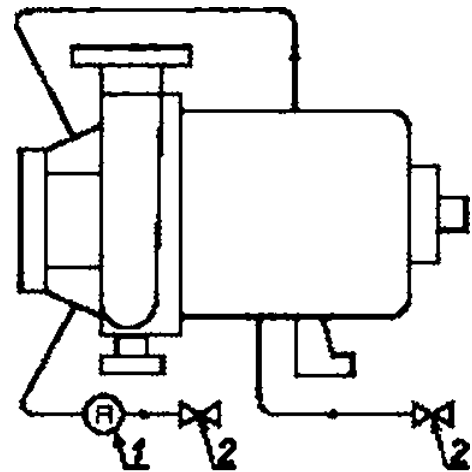
План А



План М

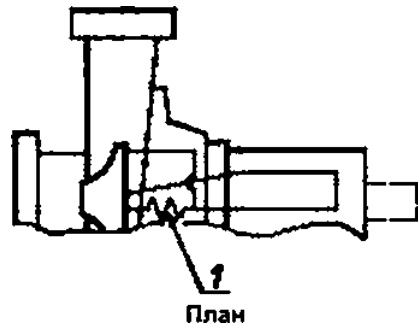
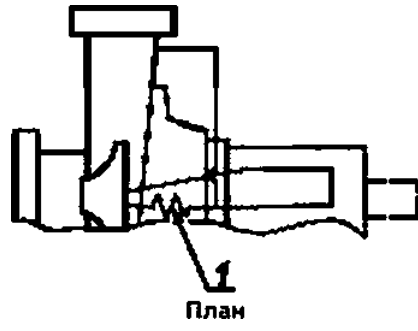


План Р



План N

1— () ; 2— . 3—
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F.1

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F.1

F.1 —

		ISO	ASTM	
		185/Gr. 250	278 30	20; 25
		185/Gr. 300	48 25/30	: 20;
			A216Gr. WCB	20 ; 25 ; 20
	/	683-18- 25	266 2	20; 14 2
	:	683-18- 25	A695Gr. 40	20. 25: 4
		683-18- 45	A576Gr. 1045	45
		2604-2-F31	A193Gr. 7	38
		683-1- 35	A194Gr. 2	35: 45
			516 Gr. 65/70	: ; 4 ; 4 ; 4
			A106Gr.	: 14 2: 15 ; 16 : 18 : 20; 20 ; 25
			105	15 : 20: 25
A1SJ 4140		683-2-3	434	8 : 40 2
			A193Gr. 7	38 ; 40 2
		2604-2-F31	A194Gr. 2	20 ; ; 45; 45
12 %			A217Gr. 15	15 13 ; 20X13
			487 Gr. 6 NM	
	/	683-13-3	182 Gr.F6a 1	10 13 ; 12X13: 15 13
			A182Gr. F6NM	08 12 4 ; 12X13: 15 13
	/	683-13-3	473 410	12X13: 15X13

F. 1

		(SO)	ASTM	
12 %	:	683-13-4	479 410	8X13; 10 13 ; 12X13:15 13 : 20X13
	:		276 410	12X13:15 13
	/ : 3A -	683-13-4	276 420	12X13:20X13: 30X13:40X13
			473 416	30X13:40X13
			A 193Gr. 6	8X13: 10 13 : 12X13:15 13 : 20X13
			194 .6	8X13; 13 : 12X13:15 13 : 20X13
		683-13-3	240 410	10 13 : 12X13: 15 13
/		683-13-10	351 Gf.CF3	03 18 11; 10 18 9 : 12 18 9
			743 Or. CF3	
		683-13-19	351 GT.CF3M	03X17H14M3
			A744GT.CF3M	
		683-13-10	A182Gc F304L	03 18 11; 04 18 10: 08 18 10
		683-13-19	182 Or. F316L	03X16H15M3: 03X17H14M3: 10 17 13 2
		683-13-10	479 4 1.	03 18 11: 04 18 10; 08X18 10
		683-13-19	479 318 L	03X16H15M3: 03X17H14M3: 10 17 13 2
		683-13-10	240 . 304 L/316L	03X16H15M3: 03X17H14M3: 03 1 11: 04 16 10; 08 18 10
		683-13-10	312 304U316L	03X16H15M3: 03X17H14M3: 03 18 11; 04 18 10: 08 1 10
		683-13-19		
		683-13-10	182 Or. F304L/316L	03X16H15M3: 03X17H14M3: 03 18 11: 04 18 10; 08 16 10: 10 17 13 2
		683-13-19		

F. 1

		ISO	ASTM	
		683-1-21	193Or.	03X16H15M3; 03X17H14M3; 08 17 13 2 ; 10 17 13 2
		683-1-21	193 . 8	03X16H15M3: 03X17H14M3: 08 17 13 2 : 10 17 13 2
			8900 .	10 18 9
			351 Or. CD4	12 18 9
	/		182 Or. F 51	02 22 5 ; 03 22 5 2: 08 16 13 2 : 08 22 6
			A276-S31803	02 22 5 ; 03 22 5 2: 08 16 13 2 : 08 22 6
			A240-S31803	02 22 5 : 03 22 5 2: 08 16 13 2 ; 08 22 6
			A790-S31803	02 22 5 ; 03 22 5 2: 08 16 13 2 ; 08 22 6
			182 Or. F 51	02 22 5 ; 03 22 5 2; 08 16 13 2 : 08 22 6
			A276-S31803	02 22 5 ; 03 22 5 2: 08 16 13 2 ; 08 22 6
			A276-S31803	02 22 5 ; 03 22 5 2: 08 16 13 2 ; 08 22 6
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4.1.2	(NPSHR)
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6.3.4.4	(NPSH)
6.3.4.5	
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18854—94 (76—87)	MOD	ISO 76:1987 « . »
18855—94 (281—89)	MOO	ISO 281:1990 « . »
ISO 9906—2015	IDT	ISO 9906:2012 « . 1.2 3» -
IEC 80034-1—2014	IDT	IEC 60034-1(2010) « . 1. » -
12162	IDT	EN 12162:2001 « . » -
<p>— :</p> <p>- IDT — :</p> <p>• MOD — .</p>		

- (1] ISO 5199 Technical specifications for centrifugal pumps — Class II () -
II)
- [2] ISO 7005-1 Pipe flanges — Part 1: Steel Ranges for industrial and general service piping systems () -
1.
- (3] ISO 3274 Geometrical Product Specifications (GPS)— Surface texture: Profile method — Nominal characteristics of contact (stylus) instruments ()] -
(GPS).
- (4] ISO 3744 Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Engineering methods for an essentially free field over a reflecting plane () -
8
- (5] ISO 3746 Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure. Survey method using an enveloping measurement surface over a reflecting plane () -
- (6] ISO 8501-1 Preparation of steel substrates before application of paints and related products — Visual assessment of surface cleanliness — Part 1: Rust grades and preparation grades of uncoated steel substrates and of steel substrates after overall removal of previous coatings () -
1.
- (7] API 610 Centrifugal Pumps for Petroleum, Petrochemical and Natural Gas Industries ()

34252—2017

62-762.6:006.354

23.080

MOD

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3—2017/47

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.<1.2018. 04,12.2014. 60 » 84 V&.5,68. .- . . .5.05.

« », <16419, < , 11
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11741631. .2.
www.poslinlo.ru inl0@90slinfd.ru