



SEUT Maritime a.s.

Sørkilen 8, 1621 Fredrikstad, Norway



NEW SEUT-MARITIME VALVES SA5&SA6

SEE BELOW
PATENTED

Manufacturer and supplier
of vital parts for ship,
offshore and industry.

- BLIND FLANGE VALVES
- CARGO PROCESS VALVES
- CARGO PUMPS
- VALVES

Type Approved by Bureau Veritas and
accepted by DNV, ABS, LRS and other
major Classification Societies



t: +47.69345060 f: +47.69345060
e: torbjorn@seutmaritime.no
www.seutmaritime.no



BLIND FLANGE VALVE

Type: DIN-SA4

DN-50 - DN-300



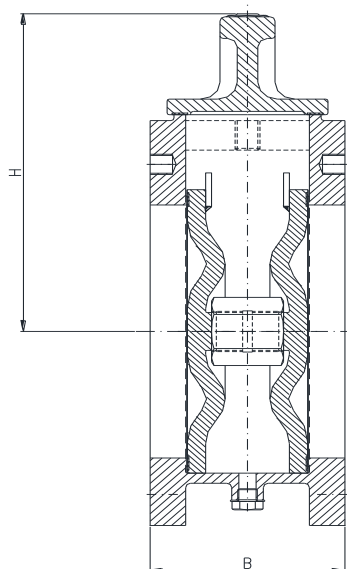
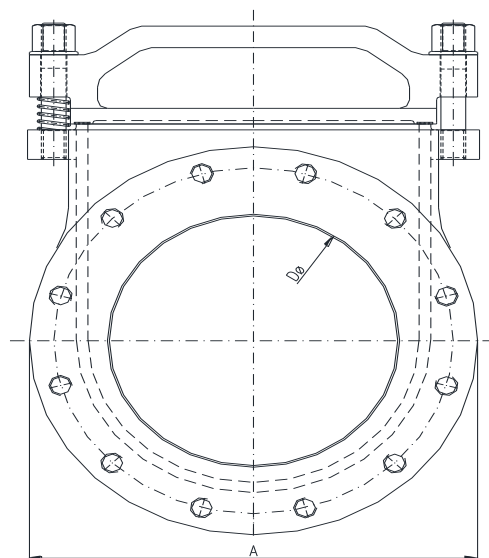
SA-4

Material specifications:

ITEM:

Type: **SA-4**

- | | |
|--------------------------|-------------------------|
| 1. Valve body | - A-216 WCB |
| 2. Valve discs | - AISI 304L |
| 3. Valve seats | - AISI 304L |
| 4. Valve rods | - AISI 304L |
| 5. Top cover | - A-216 WCB |
| 6. Valve bolts | - AISI 304L |
| 7. Drainage plug | - Stainless steel |
| 8. Tightening nut | - AISI 316L |
| 9. Valve spring | - Stainless steel |
| 10. Washers and nuts | - Brass/Stainless steel |
| 11. Valve jointing | - Kemflon |
| 12. Valve cover jointing | - Kemflon |



Dimensions:

Size		A		B		Dø		H		Weight		Antal	PN
in	mm	PN 10	PN 16	PN 10	PN 16	PN 10	PN 16	PN 10	PN 16	LB.	Kg.		
2	50	165	165	154	154	50	50	160	160	44	20		
2 1/2	65	200	200	154	154	65	65	170	170	49	22		
3	80	200	200	154	154	80	80	190	190	64	29		
4	100	230	230	162	162	100	100	200	200	73	33		
5	125	250	250	162	162	125	125	257	257	92	42		
6	150	285	285	162	162	150	150	270	270	108	49		
8	200	340	340	162	162	200	200	300	300	145	66		
10	250	395	405	200	200	250	250	325	330	192	87		
12	300	445	460	200	200	300	300	350	360	247	112		

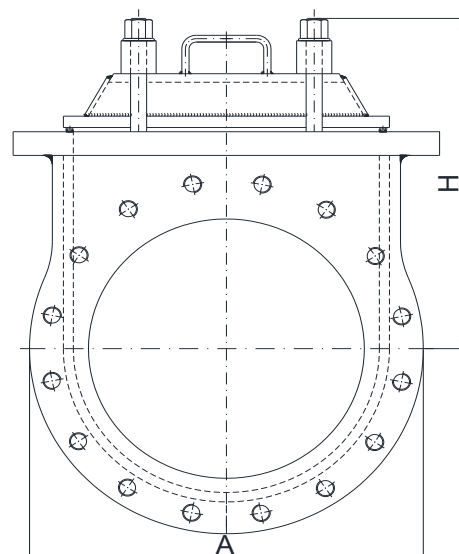
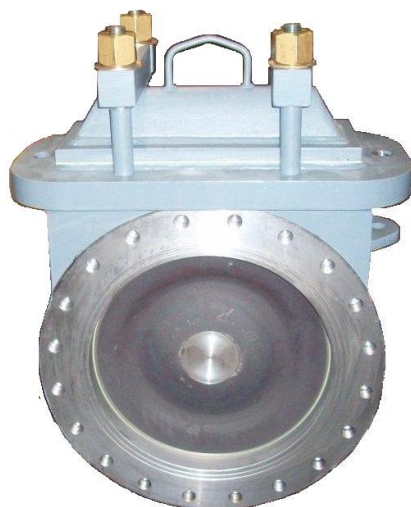




BLIND FLANGE VALVE

Type: DIN-SA2

DN-350 – DN-750

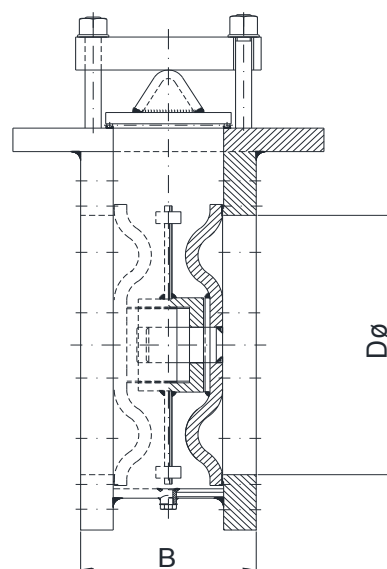


Material specifications:

ITEM:

Type: **SA-2**

- | | |
|---------------------|-------------------|
| 1. Valve body | - A-216 WCB |
| 2. Drainage plug | - Stainless steel |
| 3. Valve discs | - SM steel ST 52 |
| 4. Valve rods | - Stainless steel |
| 5. Tightening nut | - SM steel ST 52 |
| 6. Tightening discs | - SM steel ST 52 |
| 7. Bolt | - SM steel ST 52 |
| 8. Seger ring | - Steel |
| 9. Pressure discs | - Brass |
| 10. Teflon discs | - Teflon |
| 11. Cover | - SM steel ST 52 |
| 12. Cover bars | - A-216 WCB |
| 13. Cover bolts | - AISI 304 L |
| 14. Washers | - Brass |
| 15. Nuts | - Brass |
| 16. Disc jointings | - Kemflon |
| 17. Cover jointing | - Kemflon |



Dimensions:

Size		A		B		Dø		H		Weight		Antal	NP
in	mm	PN 10	PN 16	PN 10	PN 16	PN 10	PN 16	PN 10	PN 16	LB.	Kg.		
14	350	534	534	230	230	350	350	520	520	484	220		
16	400	580	580	230	230	400	400	530	540	616	280		
18	450	615	640	260	260	450	450	595	610	902	415		
20	500	670	715	260	272	500	500	615	645	968	440		
24	600	780	840	360	370	600	600	730	765	1800	818		
28	700	895	910	410	410	700	700	805	815	2650	1205		
30	750	960	975	450	450	750	750	850	850	3080	1400		





BLIND FLANGE VALVE

Type: DIN-SA3

DN-50 - DN-300



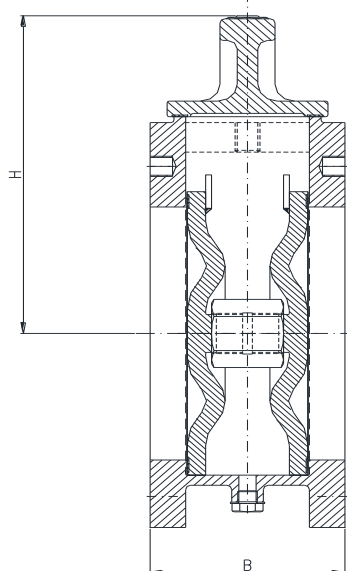
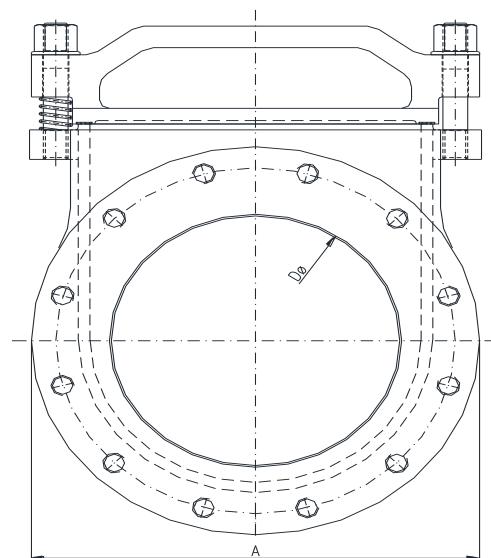
SA-3

Material specifications:

ITEM:

Type: **SA-3**

- | | |
|--------------------------|-------------------|
| 1. Valve body | - AISI 317L |
| 2. Valve discs | - AISI 316L |
| 3. Valve seats | - Stainless steel |
| 4. Valve rods | - Stainless steel |
| 5. Top cover | - AISI 317L |
| 6. Valve bolts | - AISI 304L |
| 7. Drainage plug | - AISI 316L |
| 8. Tightening nut | - AISI 316L |
| 9. Valve spring | - AISI 316L |
| 10. Washers and nuts | - AISI 304L |
| 11. Valve jointing | - Kemflon |
| 12. Valve cover jointing | - Kemflon |



Dimensions:

Size		A		B		Dø		H		Weight		Antal	PN
in	mm	PN 10	PN 16	PN 10	PN 16	PN 10	PN 16	PN 10	PN 16	LB.	Kg.		
2	50	165	165	154	154	50	50	160	160	44	20		
2 1/2	65	200	200	154	154	65	65	170	170	49	22		
3	80	200	200	154	154	80	80	190	190	64	29		
4	100	230	230	162	162	100	100	200	200	73	33		
5	125	250	250	162	162	125	125	257	257	92	42		
6	150	285	285	162	162	150	150	270	270	108	49		
8	200	340	340	162	162	200	200	300	300	145	66		
10	250	395	405	200	200	250	250	325	330	192	87		
12	300	445	460	200	200	300	300	350	360	247	112		



NEWS
PATENTED



SEUT Maritime a.s

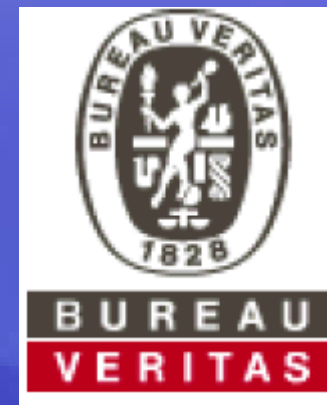
NEW SEUT-MARITIME VALVES:

SA5-SA6

SEUT Maritime as, Sørkilen 8, 1621 Fredrikstad, NORWAY / Tel.: +47 69 34 50 60 / Mob.: +47 93
66 73 87 Fax: +47 69 34 5060, www.seutmaritime.no / E-mail: torbjorn@seutmaritime.no

UPGRADING OF EXISTING VALVES w/NEW INSERT.

- SA2, SA3, SA4 was our previous products
- SA5, SA6 are now new products



PATENTED nr.334236

- Approved by **BUREAU VERITAS**

UPGRADING OF EXISTING VALVES w/NEW INSERT.



All existing Seut-Maritime Blind Flange Valves can be upgraded with the new SA-5 & SA-6 Operating System. The new SA-5 & SA-6 Inserts fit exactly into already installed SA-2/3/ & 4 SEUT-MARITIME Valves.

Only remove existing Top Cover and Insert(Discs). Clean and check existing valve-seats for scratch and dents and installed the new SA-5 or SA-6 discs and Top Cover -Tightening the Top Bolts and lower the discs with the Handwheel(SA-5) or Actuator(SA-6) to see that the discs are well centred and expand the discs out to the valve seats with some pressures.

The Valve are now in operating condition.

Any Butterfly valve who earlier was installed for operating the Seut-Maritime Blind Flange valve can now be removed.

UPGRADING OF EXISTING VALVES w/NEW INSERT.



SA5 Upgrading!

Butterfly Valves in same
pipe line can be
excluded/removed.
Saving valves and
instalation coasts

The installed SA-5 or SA-6 Inserts make the SEUT-MARITIME Valve tight in any condition up to
PN16/25 pressure class(ANSI 150#/-300#) a.o. seats for dents and
possible damage and clean

NEW SEUT-MARITIME VALVES: SA5&SA6

BLIND FLANGE PROCESS VALVE, Technical information

With our experience as manufacture of equipment to the oil, petrochemical, chemical and other industries, we have been approached by many of our customers to make some operational improvements in existing Blind Flange Valves-SEUT-MARITIME type. In recent years we have developed a blind flange valve especially suitable for use on board chemical, solvents and other bulk product tankers/process, and also for chemical works and terminal storage. These blind flange/process valves are also suitable for use in inert gas systems on aboard LNG and LPG tankers. These valves are installed to ensure complete segregation between various grades of cargoes, blanking off parts of pipeline systems, etc. Based on the strict requirements of the various classification institutions the "Seut" blind flange/process valve is of simple yet reliable design and construction. Type Approval by Bureau Veritas.

NEW SEUT-MARITIME VALVES: SA5&SA6

The "Seut-Maritime" SA-5 blind flange/process valve is operated in either one of three positions:

1. I.e. full flow
2. I.e. double shut-off.
3. Partly open/Shut

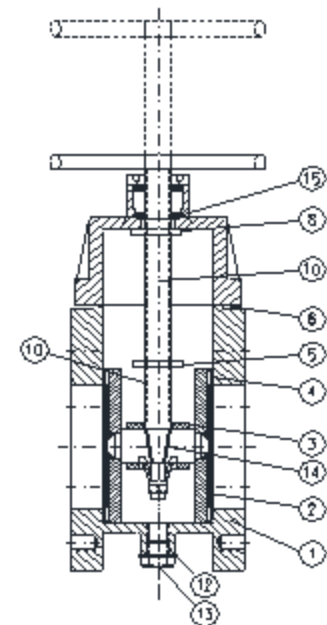
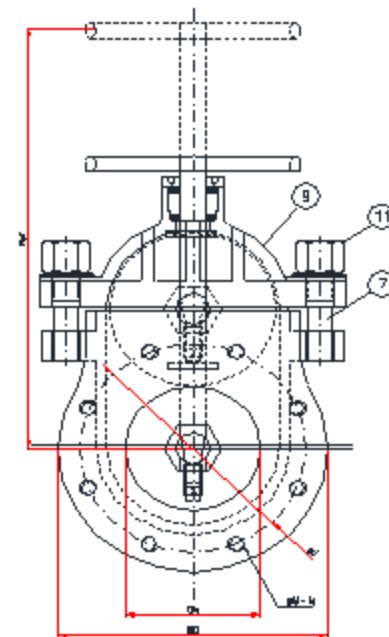
The sealing spool unit consists of two discs which are spread apart by a centre Cone, operated by the rod through the handwheel or for SA-6-through operating the actuator thus pressing the discs on to their seats, and giving a double shut-off in one operation. When tighten the discs they are self aligning. Any leakage that may occur can be drained off through the drain plug. To meet our customers varying requirements the valves can be supplied in several different materials of constructions, including, cast carbon steel, stainless A-216WCB/AISI317L or and other special steels. We can also supply the valves sandblasted and painted with protective coatings of many types. When ordering or enquiring about "Seut" blind flange valves please let us have the fullest possible details of your service conditions so that we may offer the most suitable materials of constructions, including seals, to meet your requirements.

Material specifications:

- | | | | |
|-----|--------------------|---------------------|---------------------------|
| 1. | Valve body | - A- 216WCB | - AISI 317L(Mo Min 3,00%) |
| 2. | Valve discs | - AISI 304L | - AISI 316L |
| 3. | Tightening nut | - AISI 316L | - AISI 316L |
| 4. | Disc seal | - Kemflon | - Kemflon |
| 5. | Tightening flange | - AISI 316L/Kemflon | - AISI 316L/Kemflon |
| 6. | Top cover seal | - Kemflon+PTFE | - Kemflon+PTFE |
| 7. | Top cover bolts | - AISI 316L | - AISI 316L |
| 8. | Upper Fl. | - Stainless steal | - Stainless steal |
| 9. | Top cover | - A- 216WCB | - AISI 316L |
| 10. | Operating rod | - AISI 316L | - AISI 316L |
| 11. | Top cover nut | - Brass | - AISI 316L |
| 12. | Drainage plug seal | - Kemflon+PTFE | - Kemflon+PTFE |
| 13. | Drainage plug | - AISI 316L | - AISI 316L |
| 14. | Expansion cone | - AISI 316L | - AISI 316L |
| 15. | Rod tight gasket | | |



PANTENTED



Size		A		B		Dø		H		Weight		Antal	PN
in	mm	PN 10	PN 16	PN 10	PN 16	PN 10	PN 16	PN 10	PN 16	LB.	Kg.		
2	50	165	165	154	154	50	50	160	160	44	20		
2 1/2	65	200	200	154	154	65	65	170	170	49	22		
3	80	200	200	154	154	80	80	190	190	64	29		
4	100	230	230	162	162	100	100	200	200	73	33		
5	125	250	250	162	162	125	125	257	257	92	42		
6	150	285	285	162	162	150	150	270	270	108	49		
8	200	340	340	162	162	200	200	300	300	145	66		
10	250	395	405	200	200	250	250	325	330	192	87		
12	300	445	460	200	200	300	300	350	360	247	112		

Technical drawing of a valve assembly, showing front and side views with dimensions and a table of specifications.

Dimensions:

- X : Overall height of the valve assembly.
- R : Radius of the valve body.
- DN : Nominal diameter of the valve.
- $\varnothing C$: Diameter of the valve body.
- $\varnothing M-N$: Diameter of the valve stem.

Labels:

- EL. EX. ACTUATOR: Electric actuator.
- THREAD GASKET: Thread gasket.
- EXPANSION CONE: Expansion cone.

Table of Specifications:

m	mm	PN 10	PN 16	PN 10	PN 16	PN 10	PN 16
2	50	165	95	154	154	50	5
2 1/2	65	200	200	154	154	65	6
3	80	200	200	154	154	80	6
4	100	230	230	162	162	100	1
5	125	250	250	162	162	125	1
6	150	285	285	162	162	150	1
8	200	340	340	162	162	200	2
1C	250	395	405	200	200	250	2
12	300	445	460	200	200	300	3

Size		A		B		De		H		Weight	Also PN 21		
in.	mm	PN 10	PN 16	PN 16	PN 16	PN 10	PN 16	PN 10	PN 16	LB.	Kg	X	R
2	50	165	65	154	154	50	50	130	160	44	20		
2 1/2	65	200	200	154	154	65	65	170	170	49	22		
3	80	200	200	154	154	80	80	140	190	64	29		
4	100	230	230	162	162	100	100	230	200	77	33		
5	125	250	250	162	162	125	125	237	257	92	42	350	410
6	150	285	285	162	162	150	150	270	270	108	49		
8	200	340	240	162	162	200	200	330	330	144	66		
10	250	395	405	200	200	250	250	325	330	162	87		
12	300	445	460	200	200	300	300	330	360	247	112		

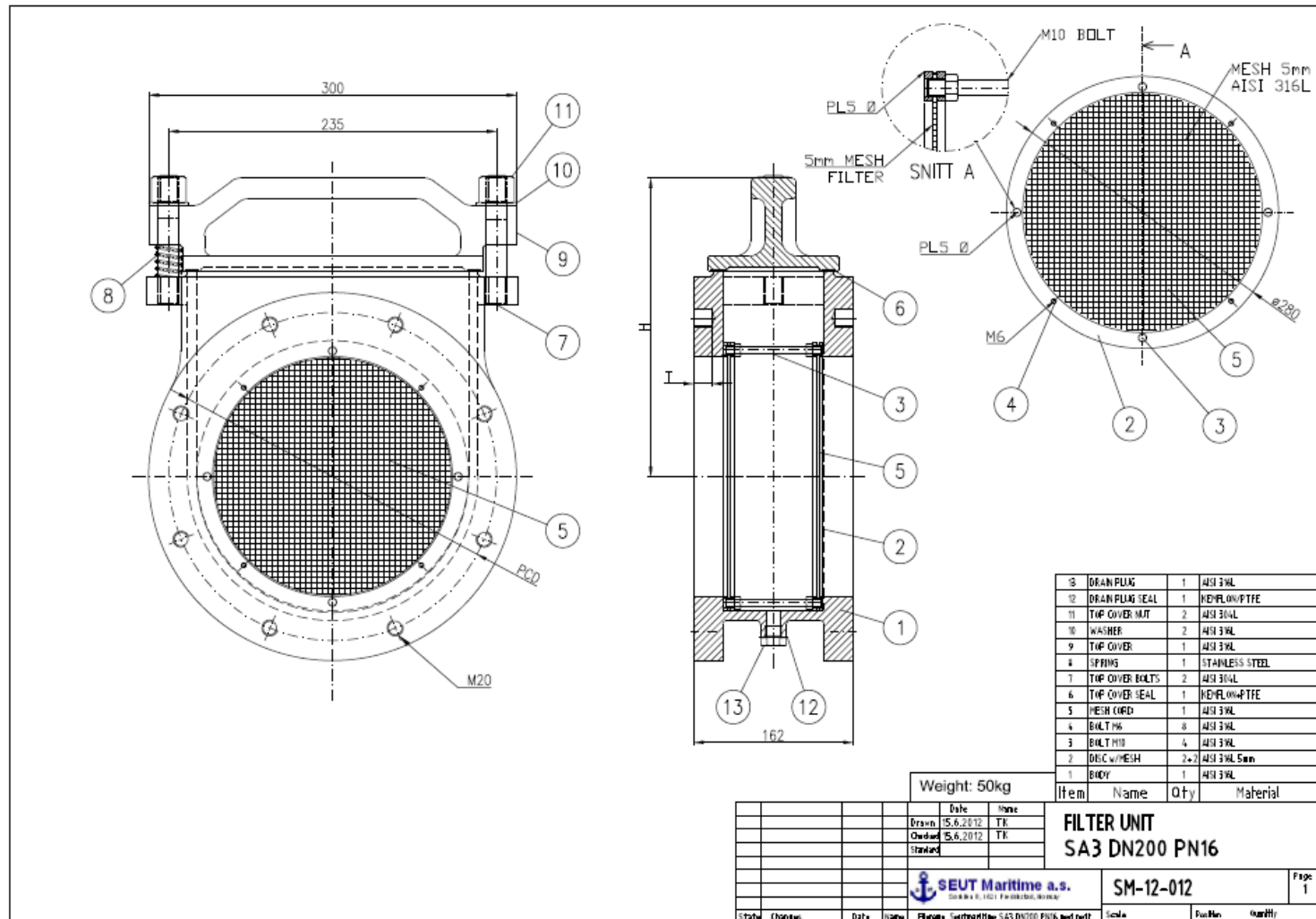
		DIMENSIONS (mm)						
	SIZE	g	H	øJ	L	g	M	N
2"	PN 10	165	173	125	154	M16	4	15
	PN 16	165	173	125	154	M16	4	15
	PN 40	165	173	125	154	M16	4	15
	PN 165	165	173	125	154	M16	4	15
2 1/2"	PN 16	185	193	145	154	M16	4	15
	PN 16	185	193	145	154	M16	4	15
	PN 25	185	193	145	154	M16	8	12
	PN 40	185	193	145	154	M16	8	12
3"	PN 10	200	194	160	154	M16	8	12
	PN 16	200	194	160	154	M16	8	12
	PN 25	200	194	160	154	M16	8	12
	PN 40	200	194	160	154	M16	8	12
4"	PN 10	220	235	180	162	M16	8	20
	PN 16	220	235	180	162	M16	8	20
	PN 25	235	235	190	162	M20	8	20
	PN 40	235	235	190	162	M20	8	20
5"	PN 10	250	245	210	162	M16	8	22
	PN 16	250	245	210	162	M16	8	22
	PN 25	270	245	220	162	M24	8	22
	PN 40	270	245	220	162	M24	8	22
6"	PN 10	285	265	240	162	M20	8	22
	PN 16	285	265	240	162	M20	8	22
	PN 25	300	265	250	162	M24	8	22
	PN 40	300	265	250	162	M24	8	22
8"	PN 10	340	300	295	162	M20	8	24
	PN 16	340	300	295	162	M20	12	24
	PN 25	360	300	312	M24	12	24	
	PN 40	375	300	320	162	M27	12	24
10"	PN 10	395	330	350	200	M20	12	26
	PN 16	405	330	350	200	M24	12	26
	PN 25	425	330	375	200	M27	12	26
	PN 40	450	330	350	200	M27	12	26
12"	PN 10	445	360	420	200	M20	12	26
	PN 16	460	360	410	200	M24	12	26
	PN 25	485	360	430	200	M27	16	26
	PN 40	515	360	450	200	M30	18	26

15	DRAIN PLUG	1	AISI 316L
12	DRY COVER SEAL	1	KEMFLOM/PTFE
11	TOP COVER NUT	2	AISI 316L
10	OPERATING ROD	1	AISI 316L
9	TOP COVER	1	A351 Gr.CF800Mn Min 2.75%
8	SPRING	1	STAINLESS STEEL
7	TOP COVER BOLTS	2	AISI 316L
6	TOP COVER SEAL	1	KEMFLOM/PTFE
5	THICKENING FLANGE	2	AISI 316L
4	DISC SEAL	2	KEMFLOM/PTFE
3	TIGHTENING NUT	1	AISI 316L
2	DISC	2	AISI 316L
1	BODY	1	AISI 317LMn Min 3.00%
Item	Name	Qty	Material

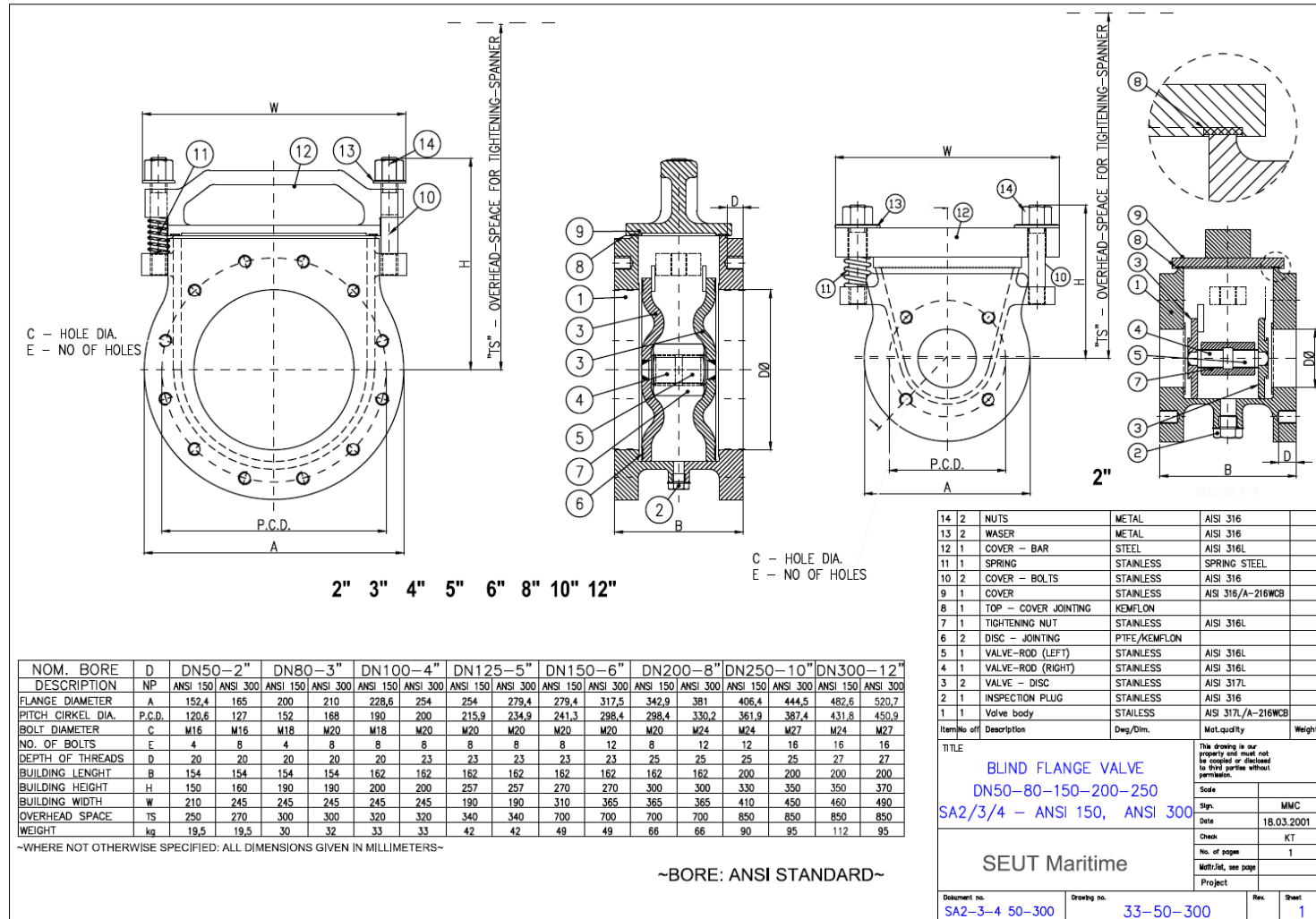
Patent Pending.
All Rights Reserv.

TITLE	SEUT MARITIME BLIND/PROCES VALVE TYPE: SA-6 ACTUATOR OPERATED.		This drawing is the property of and must not be copied or disclosed to third parties without permission. Scale Sign. MMC Date 20.04.2012 Check No. of pages 1 Material, see page Project	
Document no.	3469	Drawing no.	SMP 1238-01	Rev. 1 Sheet 1

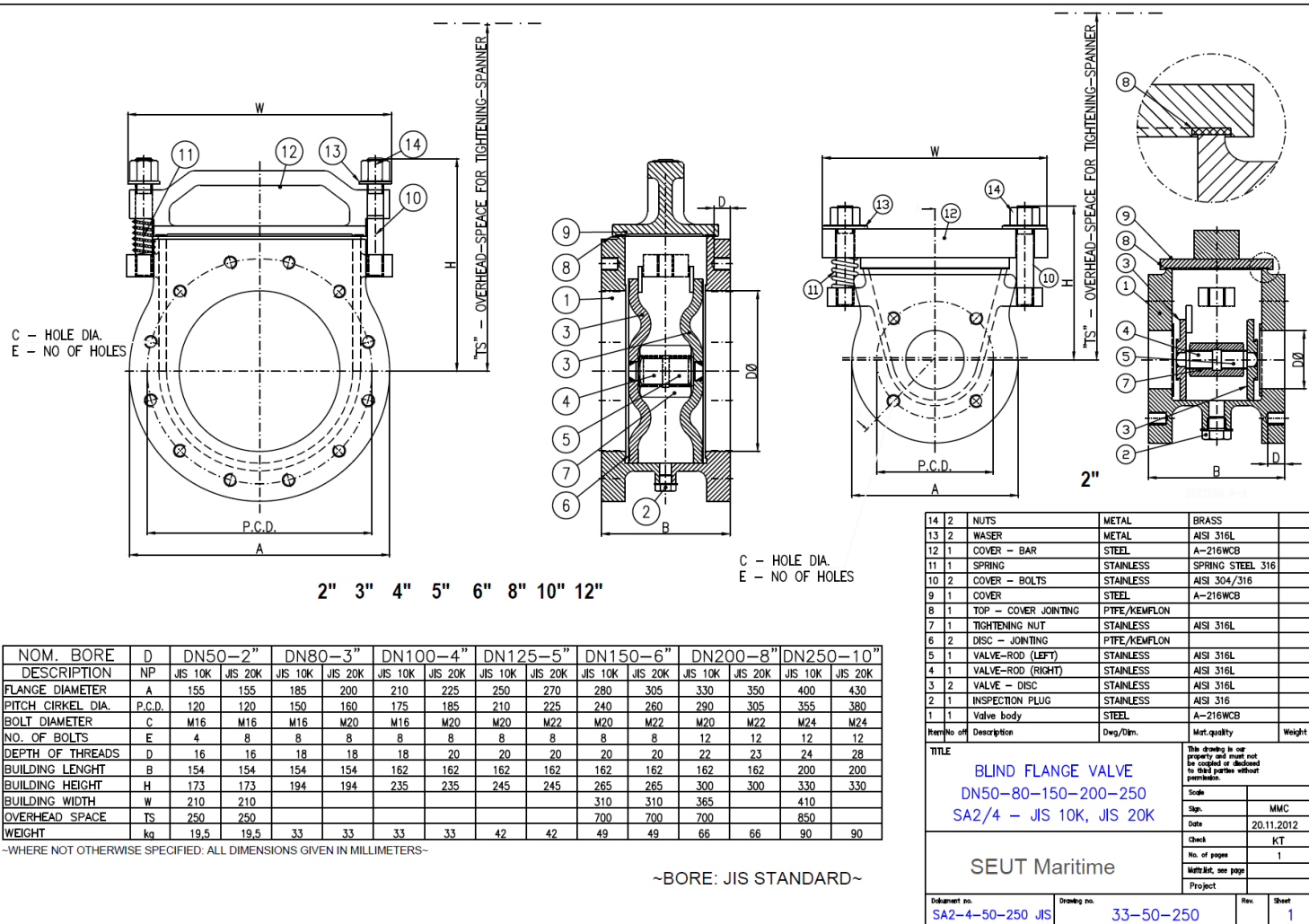
SA 1, Filter unit



SA2 - SA3 - SA4, ANSI



SA2 - SA4, JIS





MARINE DIVISION

Certificate number: 01334/G2 BV
File number: ACM 135/1920/001
Product code: 22271

This certificate is not valid when presented without the full attached schedule composed of 7 sections

www.veristar.com

TYPE APPROVAL CERTIFICATE

This certificate is issued to

SEUT Maritime a.s.
Fredrikstad - NORWAY

for the type of product

BLIND FLANGE CARGO VALVE

SEUT Blind Flange Valves types S-A2, S-A3, SA-4, SA-5 & SA-6

Requirements:

- BUREAU VERITAS Rules for the Classification of Steel Ships
- BUREAU VERITAS Rules for the Classification of Offshore Units

This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 01 Jun 2015

For BUREAU VERITAS,
At BV OSLO, on 11 Sep 2012,
Rune MARSTEIN

Rune Marstein



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine Division available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.



(12) PATENT

(19) NO

(11) 334236

(13) B1

NORGE

(51) Int Cl.
F16K 3/18 (2006.01)
F16K 3/30 (2006.01)
F16K 5/14 (2006.01)

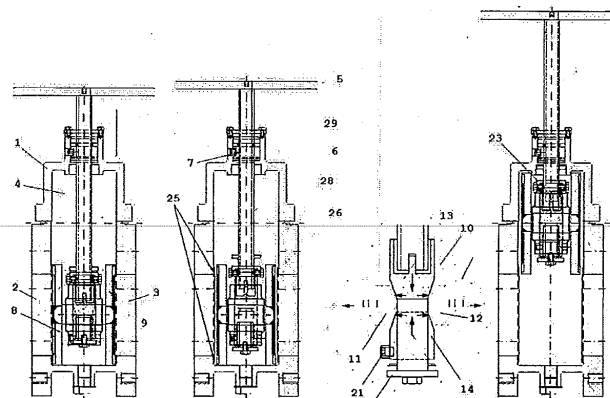
Patentstyret

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(73)	Innehaver	SEUT Maritime AS, Sørkilen 8, 1621 GRESSVIK, Norge		
(72)	Oppfinner	Torbjørn Kjelvik, Sørkilen 8, 1621 GRESSVIK, Norge		
(74)	Fullmektig	Oslo Patentkontor AS, Postboks 7007 Majorstua, 0308 OSLO, Norge		

(54)	Benevnelse	Blindflensventil/prosessventil
(56)	Anferte publikasjoner	
		US 5158264 A
		US 2654563 A
		US 4573860 A

(57) Sammendrag

Det er beskrevet en blindflensventil/prosessventil som inkluderer et hus (1) med et øvre lagringskammer (4) og et nedre operasjonskammer, Idet det nedre operasjonskammeret inkluderer to åpninger (2, 3) med ventiletter (25, 26), en spindel (6) som opererer en spole med to skiver (8, 9), og en lukkemekanisme lokalisert mellom skivene (8, 9), Idet lukkemekanismen opererer til å lukke ventilen ved å presse skivene (8, 9) mot ventiletene (25, 26). Nevnte lukkemekanisme inkluderer en øvre kon (13) og en nedre kon (14) som står motsatt hverandre, hvor konene virker på skivene og tilvebringer et symmetrisk press på skivene (8, 9)



NEW SEUT-MARITIME VALVES: SA5&SA6&SA1



**SEUT Maritime as Sørkilen 8, 1621 Fredrikstad, NORWAY / Tel.: +47 69 34 50 60 /
Mob.: +47 93 66 73 87 Fax: +47 69 34 50 60 / E-mail: torbjorn@seutmaritime.no**

NEW SEUT-MARITIME VALVES: SA5&SA6&SA1

Thank you for your attention