

# OBVD/OBV MODEL 볼류트펌프 END SUCTION VOLUTE PUMP



## 특 성 FEATURES

### 적용규격

- ISO 2858 (국제표준화규격)
- KS B7501 (한국표준규격)
- JIS B8313 (일본표준공업규격)

### 특 성

- 유량 양정의 표준화로 넓은 사용범위
- 외형치수의 통일로 타사제품과 동일치수
- 액질의 종류에 따른 특수재질 사용가능 (SUS, SC, HASTELLOY, ALLOY, CD4M)
- 부품의 표준화로 최대의 호환성 유지
- 토출구경이 중앙상부에 위치하여 배관 하중의 안전성과 가동시 Balance 유지
- Back Pull out구조로 분해시 설비 배관의 해체없이 작업
- 용도에 따른 패킹 및 M/Seal사용가능
- 직결 TYPE으로 제작시 기계내장용으로 유리하며 좁은 공간에 설치 용이

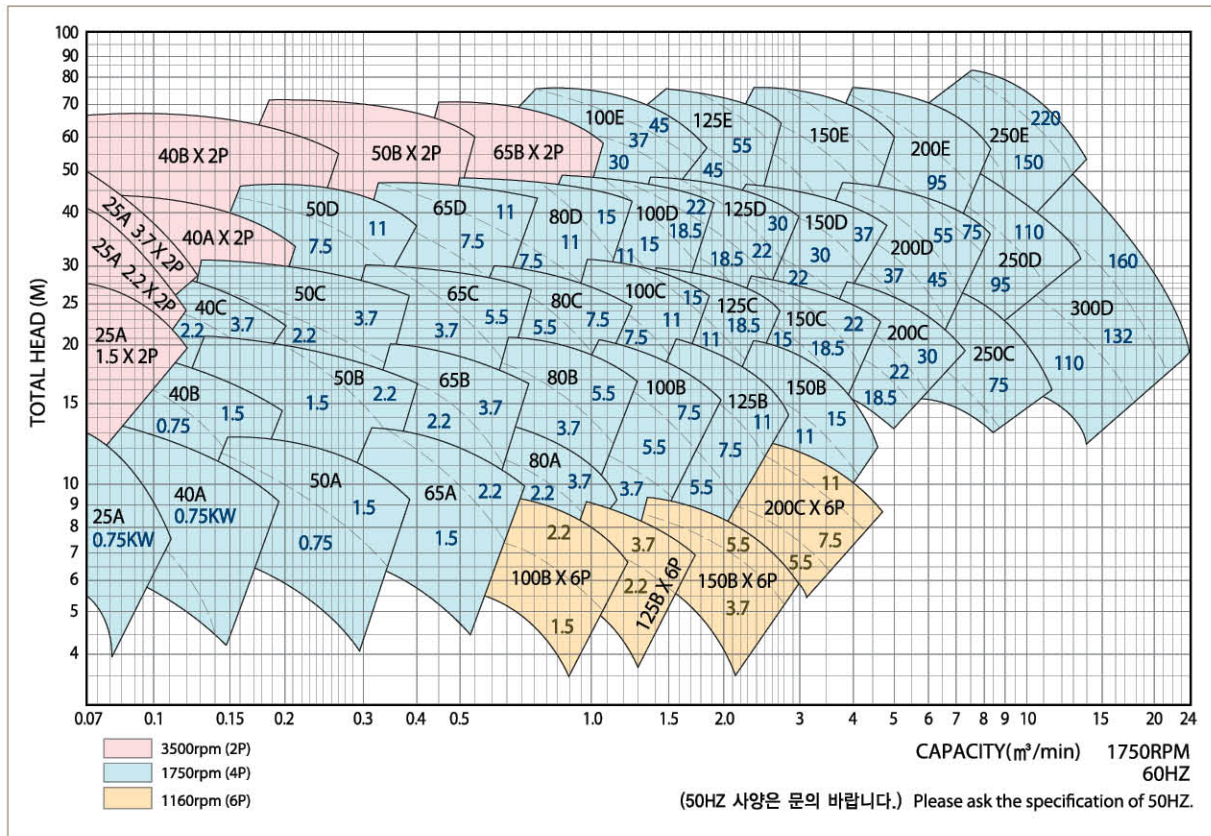
### APPLICATION STANDARD

- ISO 2858 (International Organization for Standardization)
- KS B7501 (Korean Standards)
- JIS B8313 (Japanese Industrial Standards)

### FEATURE

- Extensive use range due to a standardized pump flux head
- Equal sizes with other products from unified outer dimension.
- It's possible to use special materials depending on a category of quality fluid. (SUS, SC, HASTELLOY, ALLOY, CD4M)
- It's possible to maintain a best inter-changeability due to a standardization of parts.
- It's possible to maintain a safety for a weight of plumbing pipe and maintain a balance during operation as a caliber of discharge located in the center up-side.
- It's possible to work without dismantling of plumbing facility as it's a back pull out structure when break the facility down.
- It's possible to use packing and m/seal depending on use purpose.
- It's an advantageous of machinery's internal use when manufacture and convenient for installation in a narrow place as it's a direct type.

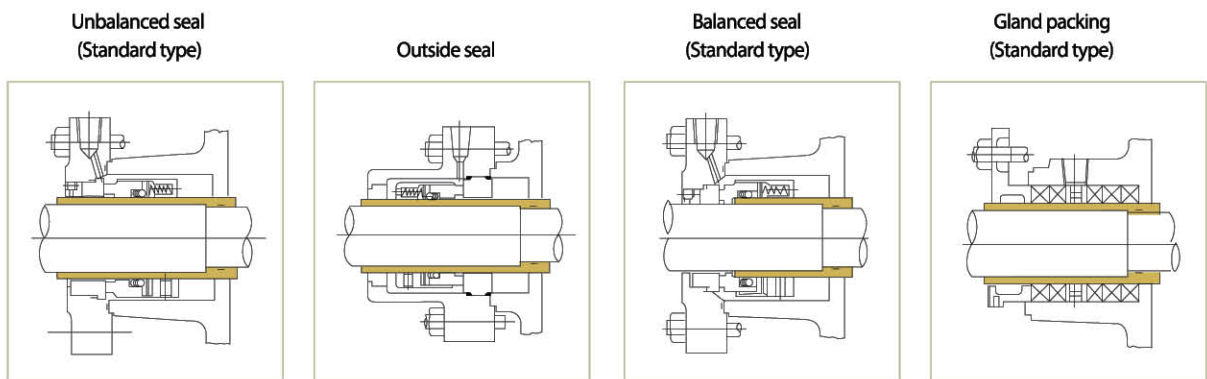
## 선정도표 PERFORMANCE OVERVIEW



**표준 사양 STANDARD SPECIFICATIONS**

모델 Model	항 목 Article	1750rpm	3500rpm	
OBVD	최대유량범위 Maximum capacity range (m3/min)	0.1 ~ 1.0	0.2 ~ 1.0	
	최대양정 Maximum pump head (m)	5 ~ 12	8 ~ 50	
	사용온도범위 Use temperature range (°C)	청수 Clear water 0~90°C		
OBV	최대유량범위 Maximum capacity range (m3/min)	0.1 ~ 25	0.2 ~ 6	
	최대양정 Maximum pump head (m)	5 ~ 80	8 ~ 85	
	사용온도범위 Use temperature range (°C)	청수 Clear water 0~90°C		
OBVD OBV	허용압입압력 Allowed press in pressure (kg/cm <sup>2</sup> G)	10K 10	10K 이하 Below	
	회전방향 Rotation Viewed From Driver	CW		
	최대흡입양정(m) Maximum suction pump head	-6~-7(20°C기준 Criteria)		
	플랜지 (FLANGE)	Rating	KS10kg/cm <sup>2</sup>	
		Facing	RF FF	
	구조 Structure	임펠러 Impeller	OPEN	
		패킹부 packing	GLAND/P, M/Seal	
		베어링형식 Bearing type	Ball B/R	
플랜지 위치 Flange position	흡입플랜지 Suction flange	END SUCTION		
	토출플랜지 Discharge flange	TOP DISCHARGE		

**축봉장치 SHAFT SEALING SYSTEM**



1. m/seal type을 사용하면 누수를 완전히 차단합니다.
2. m/seal type은 Packing type보다 동력소모를 1/3부터 1/6까지 동력소모를 현저히 줄여줍니다.

1. Block a water leak completely by using a m/seal type  
 2. M/seal type can reduce a consumption of electric power strikingly from 1/3 to 1/6 than packing type.

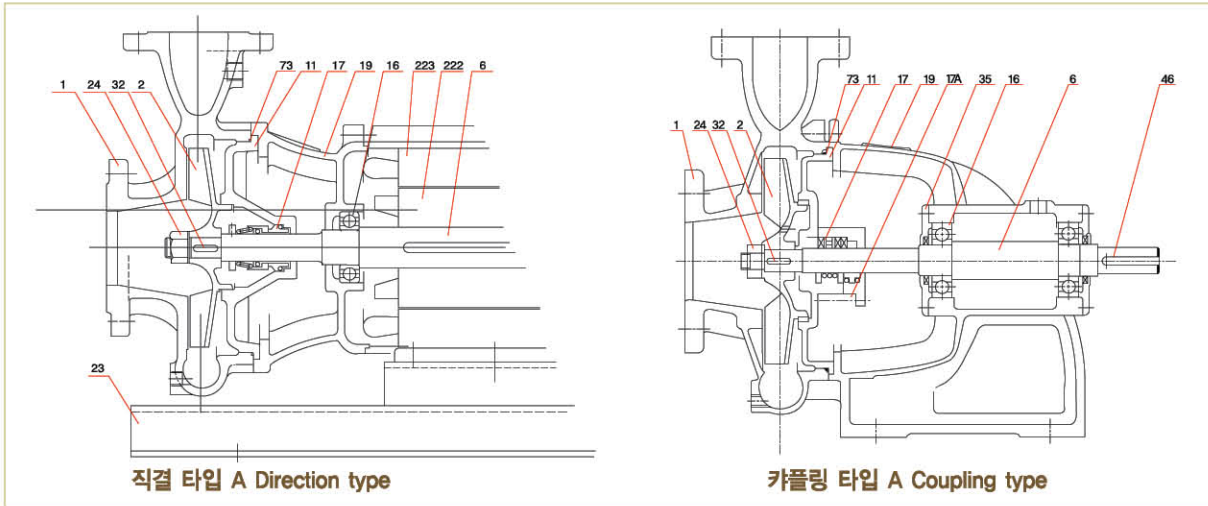
**용 도 APPLICATION**

- 일반산업용  
(해수, 화학액, 기름, 알칼리, 공업용수, 화학공업용(내산용), 가정용수, 급수시설 및 빌딩용수처리용, 냉난방 순환용, 관개 및 선박용, 스프링쿨러, 위생용, 농수용 등)
- 화학공업용
- 석유정제공업용
- 석유화학공업용
- 기타산업용

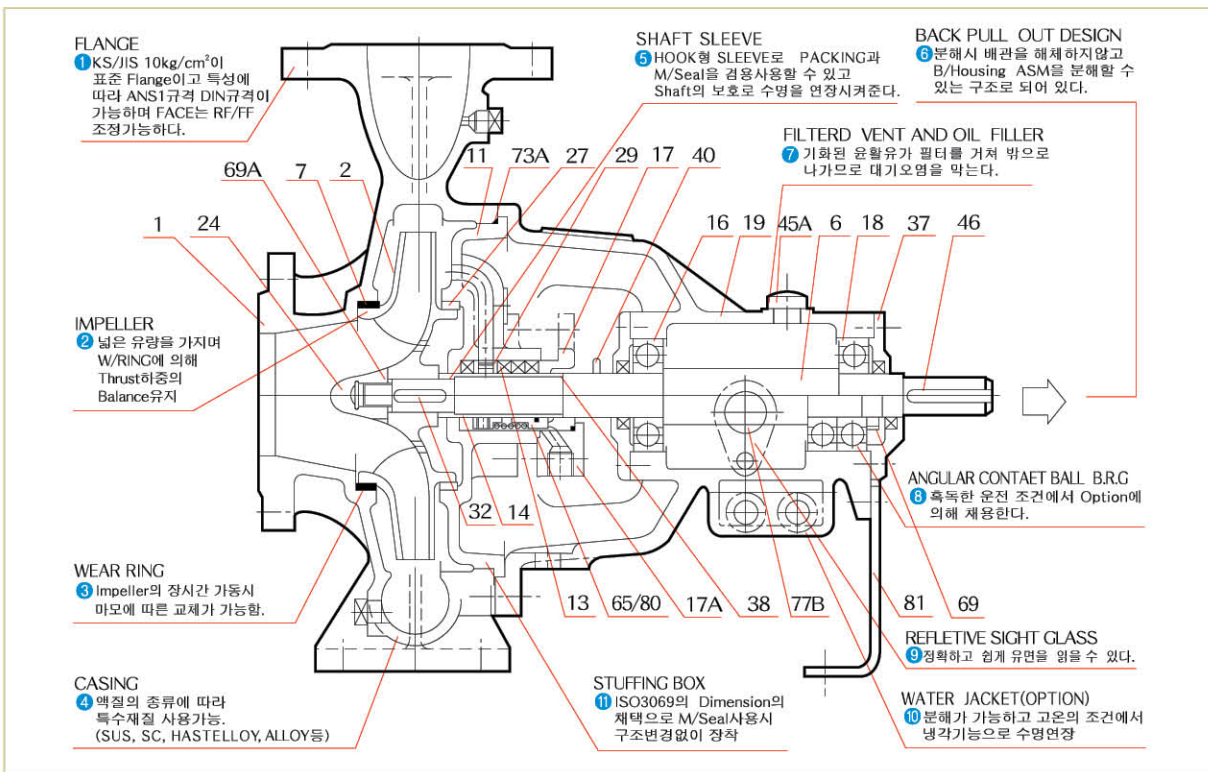
- For an general industry (seawater, chemistry liquid, oil, alkali, industrial water, chemical industry(acidresistance), domestic water, water works, disposal for building water, a circulation of air conditioning and heating, irrigation, marine, spring cooler, sanitation, agriculture and fisheries water.)
- Chemical Industry
- Petroleum Refineries
- The Petrochemical Industry
- Other Various Industries

# OBVD / OBV MODEL PUMP SECTIONAL VIEW

## OBVD - PUMP SECTIONAL VIEW



## OBV - PUMP SECTIONAL VIEW



- ① It's a standard flange for KS/JIS 10KG/CM2 and applicable to ANSI standard or DIN standard depending on characteristics and adjustable face to RF/FF.
- ② It has a wide flow and can maintain a balance of thrust weight by wear ring.
- ③ It's possible to exchange from an abrasion of impeller's long time operation.
- ④ It's possible to use special materials depending on a category of quality fluid. (SUS, SC, HASTELLOY, ALLOY, ETC)
- ⑤ It has a hook shape of sleeve which is a two way use for packing and m/seal, can extend a long life from a protection of shaft.
- ⑥ It's a structure for disassembly for B/Housing ASM without disassembling of plumbing.
- ⑦ Prevent air pollution as vaporized lubricant through a filter and go out.
- ⑧ Adopt an option under a severe condition
- ⑨ Can read the oil level accurately and easily.
- ⑩ Decomposition and high temperature condition will extend the life of cooling function.
- ⑪ Can settle without a change of structure when use the M/Seal from a adoption of ISO 3069's dimension.

**OBVD / OBV MODEL OUT LINE OF DIMENSION****OBVD - NAME OF PART & MATERIAL**

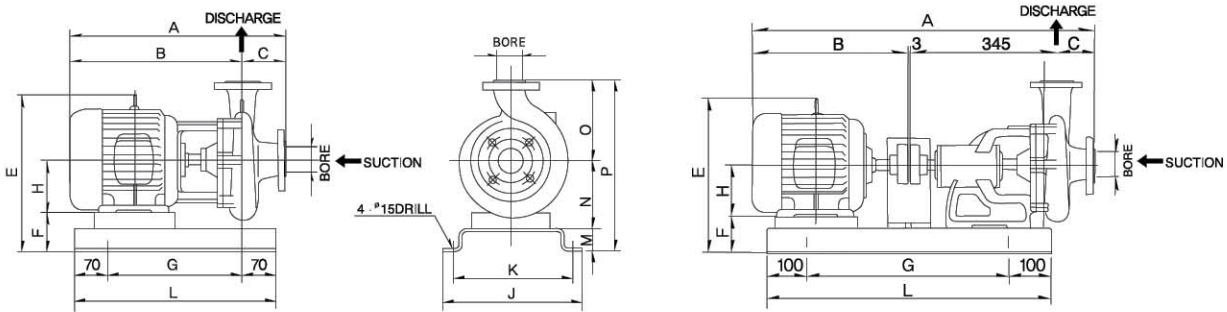
No	NAME OF PART	MATERIAL	Q'TY
1	CASING	SSC13	1
2	IMPELLER	SSC13	1
6	SHAFT	STS304	1
11	STUFFING BOX	SSC13	1
16	BEARING	STB2	2
17	M / SEAL	TC:CA TC:TC / SIC:SIC	1
17	A SEAL COVER	STS304	1
19	BRACKET	GC200	1
23	BASE PLATE	SS410	1
34	IMPELLER NUT	STS304	1
32	IMPELLER KEY	STS304	1
35	BEARING COVER	GC200	2
46	KEY	SM45C	1
73	GASKET	VITON	1
222	ROTOR		1
223	STATOR	N.B .R	1

**OBV - NAME OF PART & MATERIAL**

No	NAME OF PART	MATERIAL		
		CLASS 1	CLASS 2	CLASS 3
1	CASING	GC200	SSC13	SSC14
2	IMPELLER	GC200	SSC13	SSC14
6	SHAFT	SM45C	STS304	STS316
7	CASING RING	BC6	SSC13	SSC14
11	STUFFING BOX	GC200	SSC13	SSC14
13	PACKING	TEFLON	TEFLON	TEFLON
14	SHAFT SLEEVE	STS304	STS304	STS316
16	INBOARD BEARING	STEEL	STEEL	STEEL
17	PACKING GLAND	GC200	SSC13	SSC14
17A	M/SEAL COVER	GC200	SSC13	SSC14
18	OUTBOARD BEARING	STB2	STB2	STB2
19	BEARING HOUSING	GC200	GC200	GC200
24	IMPELLER NUT	SM45C	STS304	STS316
27	STUFFING BOX RING	BC6	SSC13	SSC14
29	LANTERN RING	TEFLON	SSC13	SSC14
32	IMPELLER KEY	SM45C	STS304	STS316
37	BEARING COVER	GC200	GC200	GC200
38	SLEEVE GASKET	RUBBER	NBR	TEFLON
40	DEFLECTOR	RUBBER	NBR	NBR
45A	OIL CAP	PLASTIC	PLASTIC	STEEL
46	COUPLING KEY	SM45C	SM45C	SM45C
65/80	MECHANICAL SEAL	TC/CA	TC/TC	SIC/SIC
69	BEARING LOCK NUT	SM45C	SM45C	SM45C
69A	LOCK WASHER	SM45C	STS304	STS316
73A	CASING GASKET	RUBBER	NBR	TEFLON
77B	OIL GAUGE	PLASTIC	GC200	GLASS
81	SUPPORT	SS41	SS41	SS41

# OBVD / OBV MODEL PUMP DIMENSIONS

## OBVD - OUT LINE OF DIMENSION



직결 타입 A Direction type

카플링 타입 A Coupling type

### 직결 타입 A Direction type

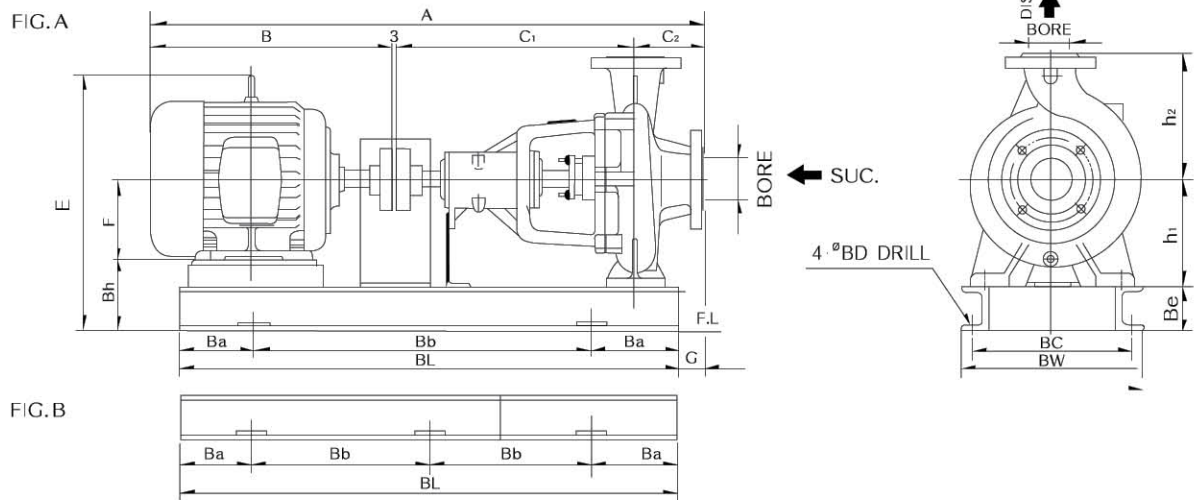
PUMP MODEL	POWER(KW)	A	B	C	E	F	L	G	J	K	M	N	O	P	FRAMEH		
OBVD - 25A	0.75 X 4p	402	337	65	265	105	330	190	290	250	45	140	160	345	90		
	1.5 X 2p	452	387		275	95			340	300					90L		
	2.2 X 2p	452	387		275	95			340	300					90L		
OBVD - 40A	0.75 X 4p	377	337	70	275	105	330	190	290	300	45	140	170	355	80		
	1.5 X 2p	460	387		285	95			340						300	90L	
	2.2 X 2p	460	387		285	95			340						300	90L	
	3.7 X 2p	490	418		307	73			400						260	112M	
OBVD - 50A	1.5 X 4p	457	387	70	285	95	330	190	340	300	45	140	180	365	90L		
	2.2 X 2p	457	387		285	95									330	190	90L
	3.7 X 2p	488	418		307	73									400	260	112M
	7.5 X 2p	533	463		372	53									400	260	390
OBVD - 65A	2.2 X 4p	496	416	80	295	85	400	260	340	300	45	140	190	375	100L		
	3.7 X 2p	498	418		307	73									340	300	112M
	5.5 X 2p	543	463		327	53									390	350	132S
	7.5 X 2p	543	463		327	53									390	350	132S

### 카플링 타입 A Coupling type

PUMP MODEL	POWER(KW)	A	B	C	E	F	L	G	J	K	M	N	O	P	FRAMEH				
OBVD - 25A	0.75 X 4p	707	294	65	265	95	560	360	290	245	45	140	160	345	90				
	1.5 X 2p	767	354		267	85			620	420					340	300	90L		
	2.2 X 2p	767	354		267	85			620	420					340	300	90L		
OBVD - 40A	0.75 X 4p	712	294	70	275	105	560	360	290	245	45	140	170	355	80				
	1.5 X 2p	794	354		285	95			620	420					340	300	90L		
	2.2 X 2p	794	354		285	95			620	420					340	300	90L		
	3.7 X 2p	835	395		307	73			680	480					112M				
OBVD - 50A	1.5 X 4p	772	354	70	285	95	620	420	340	300	45	140	180	365	90L				
	2.2 X 2p	772	354		285	95									620	420	340	300	90L
	3.7 X 2p	813	395		307	73									680	480	112M		
	7.5 X 2p	878	460		327	53									720	520	390	350	132S
OBVD - 65A	2.2 X 4p	821	393	80	295	85	680	480	340	300	45	140	190	375	100L				
	3.7 X 2p	823	395		307	73									340	300	112M		
	5.5 X 2p	888	460		327	53									720	520	390	350	132S
	7.5 X 2p	950	522		327	53									720	520	390	350	132S

# OBVD / OBV MODEL PUMP DIMENSIONS

## OBV - OUT LINE OF DIMENSION



PUMP MODEL	FIG	POWER (KW)	PUMP & MOTOR DIMENSIONS(mm)									COMMON BED치수(mm)							WEIGHT(KG)			
			A	B	C1	C2	E	F	G	H1	H2	Ba	Bb	BL	BW	BC	Be	Bh	BD	PUMP	BED	MOTOR
OBV-25A (25 X 25)	A	0.75	755	287	385	80	296	80	20	132	160	100	560	760	320	285	75	127	18	30	20	15
	A	1.5	815	347			307	90										117		30	20	24
	A	2.2	853	385			355	100										107		31	20	30
OBV-25B	A	0.75	765	287	390	85	309	80	25	145	185	100	560	760	320	285	75	140	18	32	20	15
	A	1.5	825	347			320	90										130		32	20	24
	A	2.2	863	385			368	100										120		33	20	30
OBV-40A (40 X 32)	A	0.75	755	287	385	80	296	80	20	132	160	100	560	760	320	285	75	127	18	30	20	15
	A	1.5	815	347			307	90										117		30	20	24
	A	2.2	853	385			355	100										107		31	20	30
OBV-40B	A	0.75	770	287	390	90	309	80	35	145	180	100	560	760	320	285	75	140	18	33	20	15
	A	1.5	830	347			320	90										130		33	20	24
	A	2.2	868	385			368	100										120		34	20	30
OBV-40C	A	2.2	883	385	390	100	403	100	30	180	230	120	610	850	360	325	75	155	18	49	23	30
	A	3.7	883	385			422	112										143		49	23	39
	A	5.5	950	452			442	132										123		50	23	56
OBV-50A (50 X 40)	A	0.75	755	287	385	80	296	80	25	132	160	100	560	760	320	285	75	127	18	31	20	15
	A	1.5	815	347			307	90										117		31	20	24
	A	2.2	853	385			355	100										107		32	20	30
OBV-50B	A	1.5	840	347	390	100	335	90	40	160	180	100	560	760	320	285	75	145	18	42	20	24
	A	2.2	878	385			383	100										135		43	20	30
	A	3.7	878	385			402	112										123		43	20	39
OBV-50C	A	2.2	888	385	400	100	403	100	30	180	225	120	610	850	360	325	75	155	18	51	23	30
	A	3.7	888	385			422	112										143		51	23	39
	A	5.5	954	452			442	132										123		52	23	56
OBV-50D	A	7.5	1123	490	500	130	487	132	60	225	255	120	760	1000	400	365	75	168	18	81	37	70
	A	11	1229	596			549	160					165	81	45	109						
	A	15	1273	640			549	160					165	81	45	136						
OBV-65A (65 X 50)	A	1.5	840	347	385	100	335	90	45	160	180	100	560	760	320	285	75	145	18	45	20	24
	A	2.2	878	385			383	100										135		46	20	30
	A	3.7	878	385			402	112										123		46	20	39
OBV-65B	A	2.2	883	385	390	100	383	100	40	160	200	100	560	760	320	285	75	135	18	53	22	30
	A	3.7	883	385			402	112										123		53	22	39
	A	5.5	950	452			422	132										103		54	22	56
OBV-65C	A	3.7	903	385	400	110	422	112	40	180	230	120	610	850	360	325	75	143	18	58	23	39
	A	5.5	970	452			442	132										123		58	24	56
	A	7.5	1008	490			442	132										123		58	24	70
OBV-65D	A	7.5	1123	490	500	125	487	132	60	225	280	120	760	1000	400	365	75	168	18	83	39	70
	A	11	1229	596			549	160					165	83	45	109						
	A	15	1273	640			549	160					165	83	45	136						

