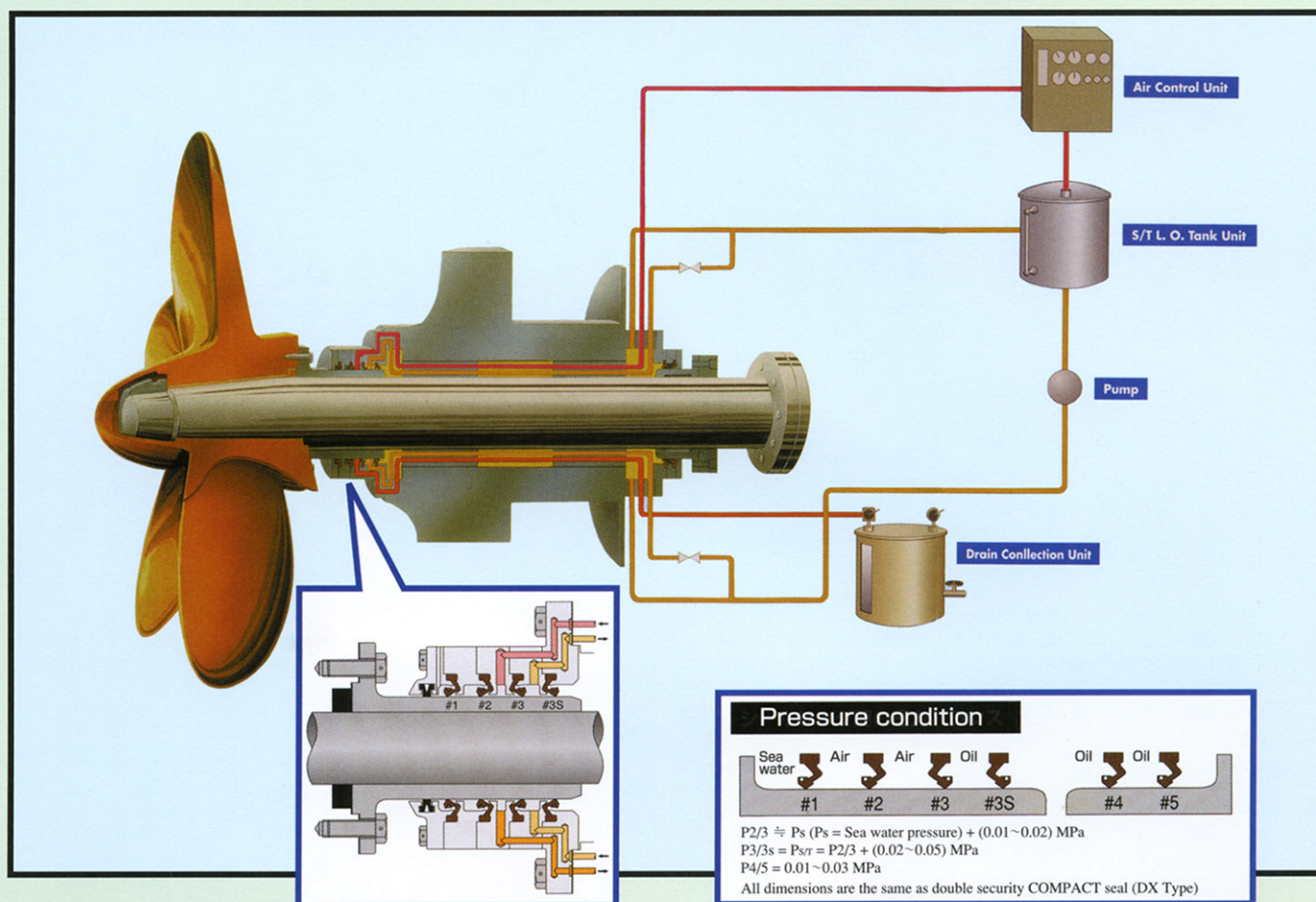


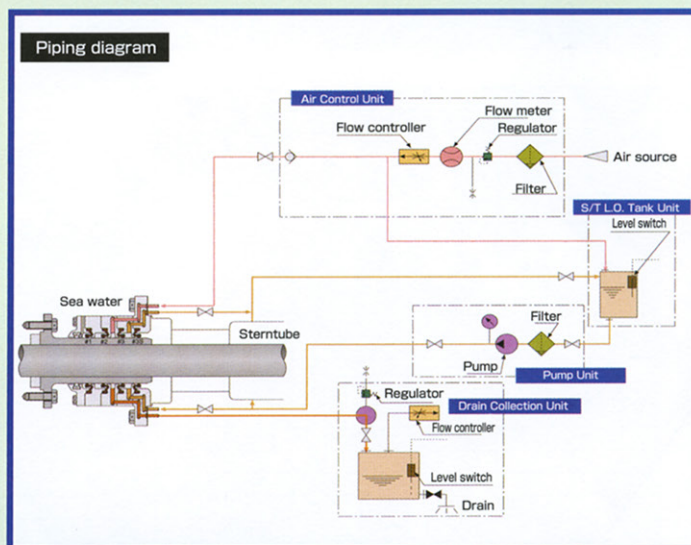
Non-Pollution Air Sealing System



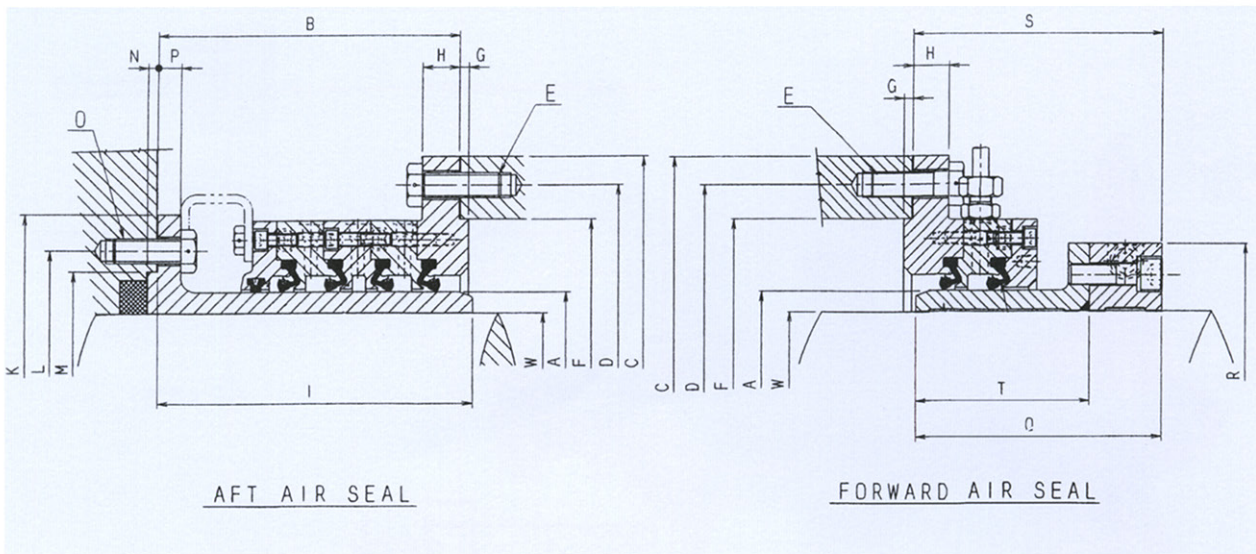
The AX type Air Seal has a simplified structure. Air, supplied from the air source within the ship, passes through #2/3 chamber and is spouted into the sea water. Any change of draft is automatically detected by the air control unit and pressure is adjusted to maintain the optimum pressure on each part.

Features

- **High reliability**
 High reliability is realized with the following two measures:
 *Small pressure difference on all seal rings
 *The provision of two seal rings on sea water side and stern tube oil side. Even if the oil seal rings are damaged the leaked oil is completely collected in an air chamber between seal rings.
- **Easy Maintenance**
 Any draft change is automatically detected and the stern tube pressure changes in accordance with draft changes even on vessels with numerous draft changes due to loading conditions.
- **Low Air Consumption**
 Air is supplied to the #2/3 chamber controlling the chamber pressure with a small amount of air constantly flowing out the drain tank to avoid air deposition in the line. Total air consumption is less than 40 Nℓ/min.
- **Various Emergency Measures**
 Emergency measures include spare seal rings and air control devices. It is possible to convert from air seal systems to Double Security Type COMPACT Seals with simple valve operations, provided that an emergency stern tube gravity tank is prepared.



Standard Dimensions



(If a distance ring is used, length "B" and "I" of the seals smaller in size than A size 380 will be larger than those in the following table.)

(mm)

A Size	140	160	180	200	220	240	260	280	300	330	355	380	400	420	450	480	
W-min.	111	126	146	166	186	206	226	246	266	286	316	340	363	382	401	429	
W-max.	125	145	165	185	205	225	245	265	285	315	339	362	381	400	428	457	
B	200	200	200	200	200	215	220	220	220	220	235	235	240	240	270	270	
C	290	310	330	350	370	425	445	465	485	515	565	590	610	630	675	705	
D	260	280	300	320	340	390	410	430	450	480	525	550	570	590	630	660	
E	8xM12	8xM12	8xM12	8xM12	8xM12	12xM16	12xM16	12xM16	12xM16	12xM16	12xM20	12xM20	12xM20	12xM20	12xM20	12xM20	
F	225	245	265	285	305	345	365	385	405	435	475	500	520	540	575	605	
G	6	6	6	6	6	6	6	6	6	6	7	7	7	7	8	8	
H	15	15	15	15	15	25	25	25	25	25	25	25	25	25	30	30	
I	220	220	220	220	220	233	236	236	236	236	252	252	257	257	286	286	
K	200	230	260	280	300	320	340	360	375	425	450	480	500	520	550	590	
L	180	210	230	250	270	290	310	330	346	390	416	440	460	486	510	550	
M	160	190	204	224	240	260	284	300	320	360	384	406	424	450	476	510	
N	6	6	6	6	6	6	6	6	6	7	7	7	7	8	8	8	
O	8xM8	8xM8	8xM12	8xM12	8xM12	8xM12	8xM12	12xM12	12xM12	12xM12	12xM16	12xM16	12xM16	12xM16	12xM20	12xM20	
P	12	12	12	12	12	15	15	15	15	15	15	15	20	20	20	20	
Q	149	149	149	149	149	159	159	164	164	164	185	185	185	190	205	205	
R	195	220	240	260	280	300	320	350	370	400	430	460	480	500	530	560	
S	140	140	140	140	140	153	153	158	158	158	184	184	184	189	205	205	
T	109	109	109	109	109	119	119	119	119	119	135	135	135	135	150	150	
Weight	Forward Seal	26	27	31	33	37	52	55	62	70	84	109	119	120	131	170	180
kg	Aft Seal	29	30	34	37	42	59	64	69	76	92	122	130	135	144	203	215

A Size	500	530	560	600	630	670	710	750	800	850	900	950	1000	1060	1120	1180	
W-min.	458	477	505	533	571	599	636	673	711	757	804	851	897	943	999	1054	
W-max.	476	504	532	570	598	635	672	710	756	803	850	896	942	998	1053	1130	
B	270	270	285	285	290	290	330	330	365	365	385	385	385	405	410	410	
C	725	755	820	860	890	930	990	1030	1090	1140	1200	1250	1300	1400	1460	1520	
D	680	710	765	805	835	875	930	970	1030	1080	1135	1185	1235	1325	1385	1445	
E	12xM20	12xM20	12xM24	12xM24	12xM24	12xM24	16xM24	16xM24	20xM24	20xM24	20xM24	20xM24	20xM24	24xM30	24xM30	24xM30	
F	625	655	700	740	770	810	865	905	960	1010	1065	1115	1165	1245	1305	1365	
G	8	8	9	9	9	9	10	10	10	10	11	11	11	11	11	11	
H	30	30	35	35	35	35	40	40	40	40	45	45	45	50	50	50	
I	286	286	298	298	303	303	351	351	393	393	417	417	417	436	441	441	
K	600	630	675	700	760	820	840	885	945	1000	1070	1130	1170	1230	1300	1360	
L	560	590	630	660	710	750	790	836	890	950	1010	1070	1110	1170	1230	1290	
M	526	550	588	620	670	710	740	780	825	870	920	970	1040	1100	1160	1220	
N	8	8	9	9	9	10	10	10	10	10	11	11	11	11	11	12	
O	12xM20	12xM20	12xM20	12xM20	12xM24	12xM24	12xM24	16xM24	16xM24	16xM24	16xM24	16xM24	20xM24	20xM24	20xM30	20xM30	
P	20	20	20	20	22	22	25	25	30	30	35	35	35	35	40	40	
Q	205	205	221	221	238	238	268	318	337	337	349	349	349	389	399	399	
R	580	620	650	690	720	760	830	870	915	974	1027	1076	1130	1200	1260	1340	
S	205	205	223	223	240	240	268	318	336	336	352	352	352	395	405	405	
T	150	150	166	166	168	168	198	198	217	217	229	229	229	244	249	249	
Weight	Forward Seal	189	212	262	290	331	371	477	580	668	736	825	890	998	1222	1380	1495
kg	Aft Seal	220	230	294	325	392	417	504	529	655	735	858	933	1000	1205	1374	1477