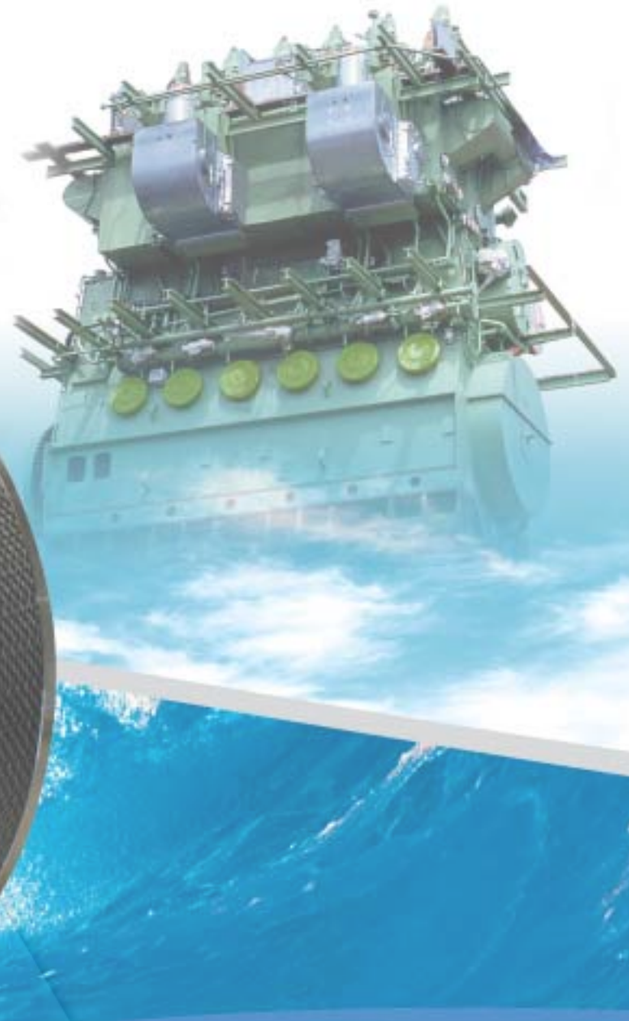
KWANG SAN CO., LTD.

TYPE APPROVAL CERTIFICATES







Crankcase Explosion Relief Valve

KWANG SAN CO., LTD.

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KWANG SAN



Crankcase Explosion Relief Valve

Efficient protection for man, machine and plant

- ☐ Efficient protection from the effect of explosions
- ☐ Special flame absorber
- ☐ Continuous operation after an explosion
- ☐ Approved safety device

KWANG SAN's relief valves provide reliable protection of man and machine against the effects of oil mist, gas or dust explosion.

- ☐ Very quickly reacting relief valves which already open at a standard set pressure of 0.05 bar, are therefore also suitable for relief action in closed space and work reliably in any installation position.
- ☐ Their robust and proven design make Kwang San's relief valves withstand explosions without damage. They close absolutely tightly after an explosion, thus preventing a secondary explosion and enabling an uninterrupted operation after the explosion.
- ☐ All standard range components are made of carbon steel.
- ☐ Valve cover, valve disc, valve seat and flame arrester are protected well against rust.
- ☐ Valves are to be kept air tightness for at least 30 seconds.
- ☐ Valves are not to be occurred pressure rise more than 1.4 bar.



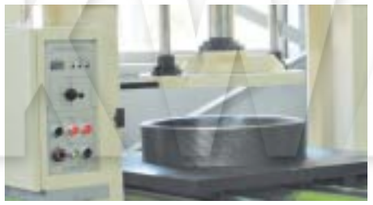
Special features of KWANG SAN's relief valves

- ☐ No flame escape
- ☐ No air inrush thanks to quick opening and closing
- ☐ Absolute tightness after opening and closing
- ☐ Frictionless guiding of the sealing element
- ☐ Changeable flame arrester unit after explosion
- ☐ Easy-to-install
- ☐ Virtually maintenance-free

Rule and QC Specification being applied

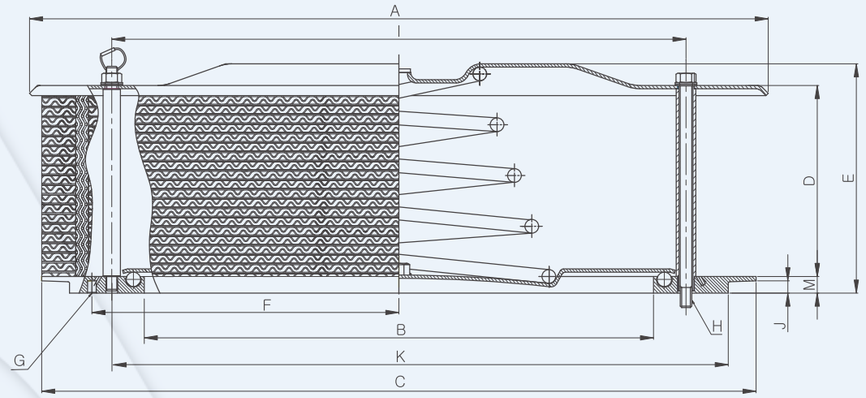
- ☐ IACS
  - – IACS UR M66 Type testing procedure for Crankcase Explosion Relief Valves (Rev.3 Jan. 2008)
  - – IACS UR M9 Crankcase Explosion Relief Valves for crankcase of internal combustion engines (Corr.2 Sept. 2007)
  - – IACS UR M10 Protection of internal combustion engines against crankcase explosions (Corr.2 Oct. 2007)
- ☐ MAN Diesel Quality Specification
  - – Quality Specification No. 0742838-0 Crankcase Relief Valve(Rev.2 July. 2009)
  - – Production Specification No. 0742839-2 Type Approval Test of Relief Valve(Rev.3 July. 2009)
  - – Quality Control No. 0742827-2 (Control of Sub-suppliers)







Dimensions



MODEL	A	B	C	D	E	F	G	H	I	J	K	M	Opening Area cm^2
KSRV-735(H)	1018	705	989	265	318	425	12	12×M16	795	17	912	23	3904
KSRV-645(H)	930	617	894	226.5	275	378	12	12×M16	700	17	840	23	2990
KSRV-565(H)	843	541	809	196	250	335	12	12×M16	615	17	735	23	2299
KSRV-480	754	460	724	164	214	287	12	8×M16	530	17	644	23	1662
KSRV-420	693	400	659	141	186	251	12	8×M16	465	17	579	23	1257
KSRV-345	561	325	552	147	182	214	10	6×M16	390	9	516	17	830
KSRV-320	522	305	512	136	173	197.5	10	6×M12	355	9	471	17	731
KSRV-266	492	252	471	89	130	170	10	6×M12	302	17	422	23	499
KSRV-224	443	210	424	75	109	142	8	6×M12	255	10	371	15	346
KSRV-204	415	190	404	65	103	132.5	8	6×M12	235	11	351	17	284
KSRV-173(A)	382	160	367	55	83	–	–	6×M10	203	11	314	17	201
KSRV-173(B)	382	160	367	55	83	115	8	6×M10	203	11	314	17	201
KSRV-162	366	150	355	50	83	–	–	6×M10	190.5	10	302	16	177
KSRV-122	326	110	314	38	61	–	–	6×M8	150	10	260	16	95
KSRV-98	299	87	283	31	50	–	–	4×M8	122	7	230	12	59

* H means Hinge type Valve.

Why KWANG SAN's Relief Valves ?

- ☐ Fast and reliable opening and closing
- ☐ Responds and opens even at a very low pressure setting (standard 0.05 bar and 0.075 bar below 266 sizes)
- ☐ Flameless pressure relief for the use inside a building
- ☐ Uninterrupted operation, since valves close immediately after an explosion (no secondary explosion)
- ☐ Valve cover design diverts explosion waves towards the equipment
- ☐ Virtually maintenance-free
- ☐ Can be installed in any position both horizontal and vertical

