

# Saving Danger, More Safe and Better Life

## CRANKCASE EXPLOSION RELIEF VALVE

ERV series

SAFETY IS THE FIRST & MOST IMPORTANT



### Benefits

- Very light weight and volume of 70% against competitor
- Small Outdiameter and Height of 90%
- Perfect protection for fire explosion
- Quick opening and fully relieving pressure
- Non-damaged stronger structure
- Simple and Easy maintenance style
- Innovative structure and design
- Easy assembly and disassembly for ON-BOARD maintenance



International patent pending

- IACS UR M66 & M9 Type Testing Procedure for Crankcase Explosion Relief Valve
- MAN Diesel Quality Specification

# PROSAVE

# CRANKCASE EXPLOSION RELIEF VALVE

## Special features of PROSAVE's relief valves

- Responds and opening even at a very low pressure setting ( standard 0.05bar and 0.075bar below 266 size )
- No Flame escape to outside.
- Due to absolute tightness after opening and closing, it prevents form secondary explosion.
- Frictionless guiding of the sealing element.
- Can be installed in all mounting position from Vertical to horizontal.
- It is small and light to install easy.
- Free area of flame arrester is enough wide and similar relief area.
- Closes and seals immediately after an explosion.

## Rule and QC Specification being applied

### IACS

- IACS UR M66 Type testing procedure for Crankcase Relief Valve
- IACS UR M9 Crankcase Explosion Relief Valves for crankcase of internal combustion engines
- IACS UR M10 Protection of internal combustion engines against crankcase explosion

### MAN Diesel Quality Specification

Quality Specification No. 0742838-0 (Crankcase Relief Valve)  
Production Specification No. 0742839-2 (Function Test of Relief Valve)  
Quality Control No. 0742827-2 (Control of Sub-suppliers)

## Safety is our top priority at PROSAVE

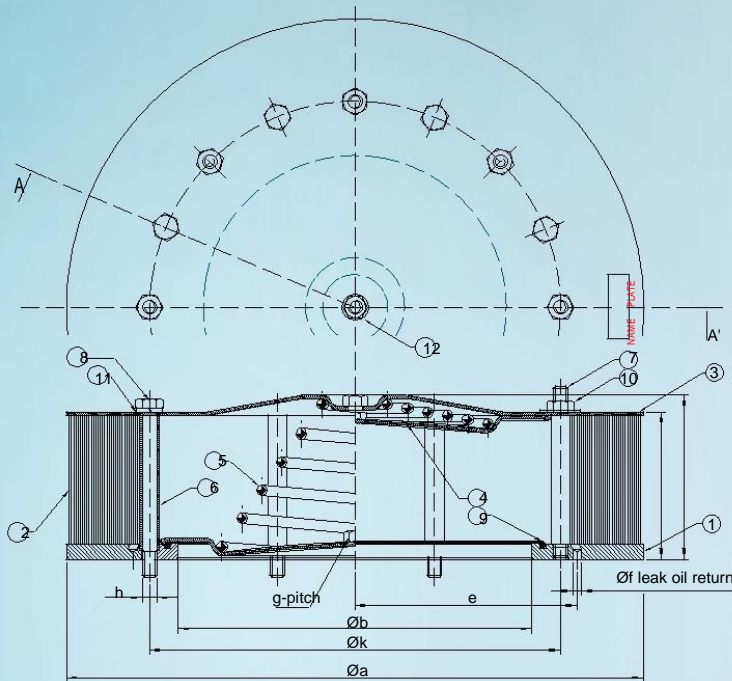
PROSAVE's quality assurance system complies with the latest ISO 9001 provision. PROSAVE explosion relief valves have received top mark in numerous explosion tests conducted by the FTZU institute and approved by GR, KR, LR, ABS, DNV, BV, NK, RINA and MAN B&W .

## Additional function of PROSAVE's relief vales

Suitable for use in tanks, silos, conveyors and applications where explosion hazards exit due to the dust explosions, processing handling and storage of pulverized material. PROSAVE's explosion relief valves are customer designed to the specific application for safety.



## Materials of Construction



No.	DESCRIPTION	MAT'L	Q'TY
1	BASE FLANGE	SS400	1
2	ELEMENT	PROPERTY	1
3	COVER	SPHC	1
4	DISC	SPHC	1
5	SPRING	PROPERTY	1
6	PIPE	SUS304TP	-
7	STUD BOLT	SS400	-
8	HEX BOLT	8.8	-
9	O-RING	NBR	1
10	NUT	SS400	-
11	S.P/WASHER	SWRM10	-

## Dimension Table & Field Information

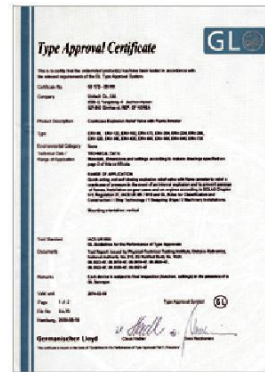
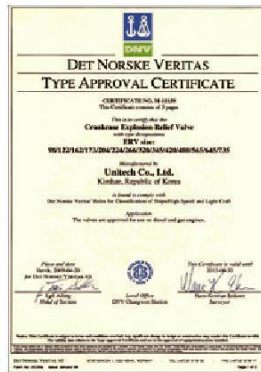
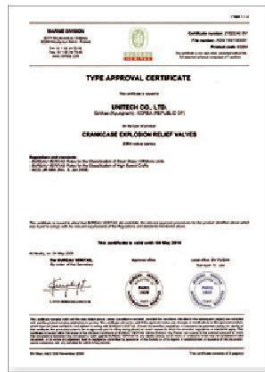
Type	Geom. Relief Area (cm)	Dimension				Leak Oil Return		Connection			Approx Weight (kg)
		a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	No. of Bolts	h Thread	k p.c.d (mm)	
ERV-98	59.4	232	87	49	49	75	8	4	M8 or 1/4"	122	7.5
ERV-122	95	260	110	53.5	61.5	86.5	8	6	M10 or 3/8"	150	9.7
ERV-162	177	298	150	70.5	77.5	110	8	6	M10 or 3/8"	190.5	13.3
ERV-173	201	310	160	76	82	115	8	6	M10 or 3/8"	203	15.5
ERV-204	284	340	190	90	100.5	128	8	6	M10 or 3/8"	230	18.5
ERV-224	346	370	210	94	102	142	8	6	M12 or 1/2"	255	22
ERV-266	499	420	252	110	124	170	10	6	M12 or 1/2"	302	28.5
ERV-320	732	542	305	133	146	197.5	10	6	M12 or 1/2"	355	54
ERV-345	829	577	325	136	148	214	10	6	M16 or 5/8"	390	62
ERV-420	1260	656	400	166	185	251	12	8	M16 or 5/8"	465	82
ERV-480	1665	722	460	190	211	287	12	8	M16 or 5/8"	530	101
ERV-568	2300	806	541	221	240	335	12	12	M16 or 5/8"	615	128.5
ERV-645	2990	890	617	249	268	378	12	12	M16 or 5/8"	700	171
ERV-735	3905	987	705	279	314.4	425	12	12	M16 or 5/8"	795	210.5

# Safety is the First



## Application Fields

- Offshore & Ocean Gas Plants
- Marine Tank Ships
- Cryogenic Gas Facilities
- Sea & Fresh Water Plant
- Tank Terminals
- Refinery Tank Farm
- Gas Plants
- Oil & Chemical Storage Tanks
- Marine Engines
- Generators
- Duct
- Marine Engine



ISO 9001 Registered

**PROSAVE CO., LTD.**

#1136-1, Naesam-ri, Juchon-myeon, Gimhae-si,  
Gyeongsangnam-do, 621-842, Korea  
E-mail: sales@prosavecoltd.com  
www.prosavecoltd.com

Service station • Agent / Distributor



This document is distributed for informational purposes only. It is not to be construed as creating or becoming part of any PROSAVE contractual or warranty obligation unless expressly stated in a written sales contract.

PROSAVE CO., LTD. All Rights Reserved (2010.10)