



Valve Remote Control System V.R.C. System



► General Information of VRCS

Valve Remote Control System is applied for remote control of valve and designed primarily for use on board ship. The remote valve is provided with hydraulic actuator powered from hydraulic power unit and controlled by solenoid valves. All remote valve actuators are designed to be capable of local manual operation.



► Control Console

Electric Control Console is designed for centralization control of all valve included in the system. The Control Console is designed and manufactured to include Cargo Handling and Monitoring systems.

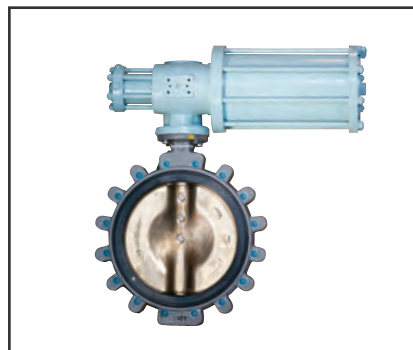
► Hydraulic Actuator

Rack & Pinion Type Hydraulic Actuators are designed to the operation of various type of valves including butterfly valve, globe valve, angle valve and other special valves and have been proved high efficiency and reliability of performance. Single and Double Acting are also available.



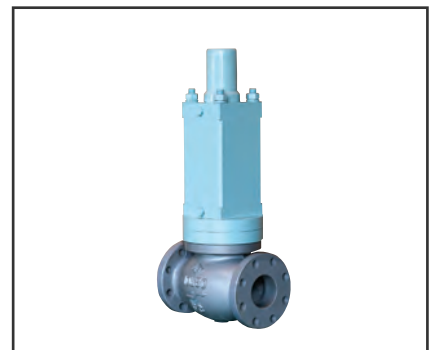
ROTARY (DOUBLE ACTING) ACTUATOR

1. ACTUATOR MODEL	HRB 35/60/80/100/125
2. MECHANISM	RACK & PINION
3. TYPE	DOUBLE ACTING
4. WORKING PRESSURE	100/130 Bar
5. TEST PRESSURE	150/195 Bar
6. ADJUSTABLE RANGE	90 ± 5°
7. FAIL POSITION	FAIL LOCK



ROTARY (SINGLE ACTING) ACTUATOR

1. ACTUATOR MODEL	HRR 35/60/80/100/125
2. MECHANISM	RACK & PINION
3. TYPE	SPRING RETURN
4. WORKING PRESSURE	100/130 Bar
5. TEST PRESSURE	150/195 Bar
6. ADJUSTABLE RANGE	90 ± 5° (At Closed Position)
7. FAIL POSITION	FAIL CLOSE OR OPEN

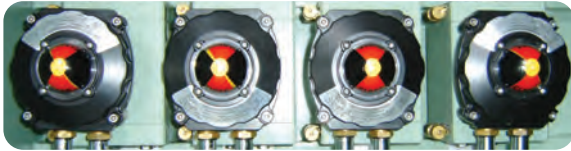


LINEAR(SINGLE ACTING) ACTUATOR

1. ACTUATOR MODEL	HLS 110 / 130
2. MECHANISM	LINEAR PISTON TYPE
3. TYPE	SPRING RETURN
4. WORKING PRESSURE	100 Bar
5. TEST PRESSURE	150 Bar
6. FAIL POSITION	CLOSE
7. APPLICATION VALVE TYPE	GLOBE/GLOBE CHECK/GATE



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► Valve Position Indicator

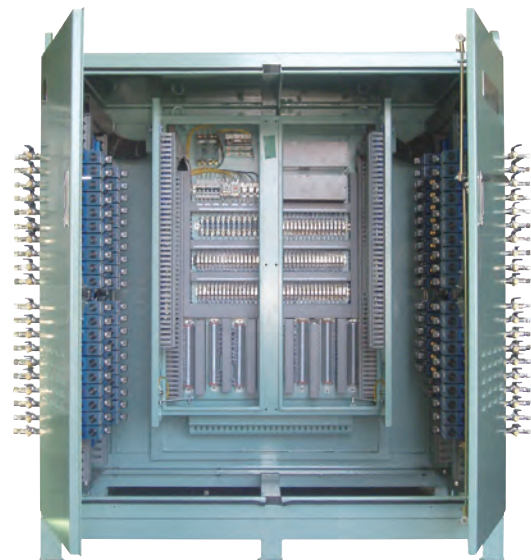
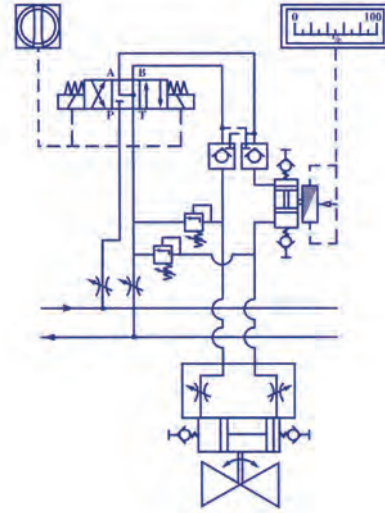
Valve Position Indicator for open / close is designed to indicate the position of hydraulically actuated valves. In general, the valve position indication to be obtained with the limit switch or potentiometer directly mounted on the valve respectively. Both On / Off and Throttle types are available.



► Solenoid Valve Cabinet

Solenoid Valve Cabinet is designed to install of solenoid valves regulating the oil flow to each actuator according to the requirements and to contain complete manifold systems consisting of manifolds, solenoid valves and electric control components. The solenoid cabinet shall be installed in safety area.

► Typical Schematic Diagram





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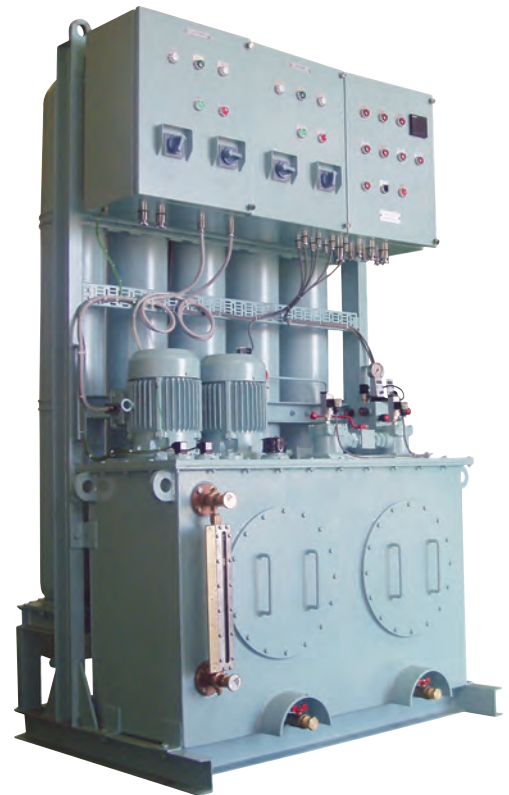


► Emergency Hand Pump Unit

Portable hand pump, when open / close operation of hydraulic remote valve can not be done due to damage of hydraulic piping, electric power failure or malfunction of hydraulic pump, etc., the operation can be done manually by the hand pump.

► Hydraulic Power Unit

HPU is designed to generate hydraulic pressure to open / close operation of the hydraulically operated valve. HPU consists of main electric motor & hydraulic pump and assistant electric motor & hydraulic pump. All components are selected to ensure high reliability and low noise. Accumulator will be provided.



STANDARD SPECIFICATION

Oil Tank Volume	100 ~ 1000 Liters	
Electric Motor	Voltage-3Ø440V60Hz or customer's requirement	
	Enclosure-IP56	
Pump Capacity	2.6 ~ 12.1 Liters	
Accumulator	32 ~ 400 Liters	
Max.Working Pressure	105 bar	
Pressure Switch Setting	Pump	Start at 150 bar
		Stop at 180 bar
Relief Valve Setting	190 bar	
Alarm	Level, Temperature, Low pressure & High Pressure	