Product Data Sheet May 2014 SD 6400-2E03

# **Damcos Accumulator Rack**

**Stand Alone System** 





**Damcos**<sup>®</sup>

#### **Damcos Accumulator Rack**

### Description

Stand alone accumulator with stainless steel rack. The standalone accumulator rack contains one or more bladder accumulators, a connection block and a stainless steel rack. The accumulator is used to store energy by pressure and can therefore be used together with DAMCOS hydraulic valve remote control system. The stand alone accumulatorbank can be used for more purposes, the most common used are as following:

#### System-Service

System-service means that the accumulator is in function while the system is running. The system-service is used as a support to the power unit. It compensates for leakage in solenoid valves meaning less start/stop for the power unit. In cases where many valves and/or huge valves are operated at the same time, the accumulator can/will be used to compensate for pressure drop, by supplying oil into the system.

#### May 2014

#### ESD

ESD (emergency shut down) means that, if the power unit for some reasons are not able to deliver oil pressure, the accumulator can be used to maintain enough system pressure to operate some important valves. Please note that this ESD function has a limited oil amount, which means that it is only possible to operate a certain amount of valves without recharging the oil pressure in the accumulator.

### Installation

The accumulator-rack can be installed in more ways. It can be bolted either to the deck through the mounting holes in the bottom or to the wall trough the holes in the back. It can be assembled in groups, side by side, and/or back to back. All holes for fastening and assembly are with a diameter of 13 mm. When more accumulators are used at the same system, they must be connected intermediately by tubing. All the tubing connection, at the accumulator-block, are made with ½" BSP female thread.

# **Hydraulic Diagrams**

### **System Service**



When accumulators are used for system-service the system contains 1 block. This block contains a bypass valve, a pressure relief valve, a manometer and a quick connection for external use. Systems with more accumulators only need one of these blocks. Extra accumulators are connected by tubing to the common block. The extra accumulators needs accumulator nut (for the tube connection) instead of a block.

### ESD (Emergency Shut Down)



When accumulators are used for ESD, the system contains 2 blocks. One similar to the one used for system-service and one which is placed in the solenoid valve cabinet called ESD-block. The ESD-block contains 2 non-return valves and a solenoid valve. This solenoid valve controls when the stored pressure energy is to be used, for example in case of a power loss.

# **Technical Data**

Working pressure	same as system (usually 135 bar)	
Accumulator maximum pressure	330 bar	
Connection block maximum pressure	250 bar	
Weight (dry) 20l	80 kg	
Weight (dry) 32l	125 kg	
Nirtrogen charge pressure	Approx. 125 bar (0.9 x working pressure)	

# Materials

Accumulator	Carbon steel	
Bladder	NBR	
Rack	Stainless steel AISI 316	
Rack edge-protection	NBR	
Connection block	Brass	
Fitting	Stainless steel AISI 316	
Manometer	Stainless steel	

## **ID-Number**

Stainless steel rack	20L rack 165F3297	Main rack including edge protection and lifting eye for safe moving.
	32L rack 165F3298	
Accumulator block	165F2551	Backup block
ESD-block	165F2161	Cabinet block
Adapter kit		Adapter kit depending on configuration and requirements - contact Damcos for further information.
Accumulators	-	Depends on classification societies contact Damcos for further information.

### Damcos Accumulator Rack

# Dimension

Reference	with 20L acc. (mm)	with 32L acc. (mm)
А	1032	1536
В	300	300
С	500	600
D	N/A	900
E	900	1300
F	N/A	800
G	800	1200



Note! The accumulator shown in this picture is of a 32L type.



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## Dimension

### Back to back





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