



AC CLASS RULE

INTERPRETATION NO 07

Rule References:

16.2 The use of stored energy and non-**manual** power is prohibited, except for:

(a) small springs (or collections thereof), shock cords (or collections thereof), and similar passive devices that deliver less than:

- (i) 50 J of energy;
- (ii) 500 N of force; and
- (iii) 10 Nm of torque.

(b) nominal amounts of energy stored in hydraulic systems that when isolated from the hydraulic accumulators permitted in Rules 16.2(c), 16.2(d), and 16.2 (e) deliver less than 0.25 liters hydraulic oil from all hydraulic systems combined, when the system is discharged after pressurizing to maximum pressure;

(c) low pressure hydraulic or gas accumulators of less than 6 bar which provide back pressure to a hydraulic system to prevent cavitation, but do no significant work themselves;

Questions:

Many hydraulic rams used in yachting have a gas back-charge to extend the piston when the hydraulic valve is opened and hydraulic pressure released.

1. Are these gas back-charged pistons considered to be "...similar passive devices....." permitted by 16.2 (a), provided they comply with the limits on delivered energy, force, and torque of that Rule?
2. Are they limited by 16.2 (b) in that the discharged oil volume of all rams of this type combined must be less than 0.25 liters?
3. Are they considered to be "low pressure hydraulic or gas accumulators...." per 16.2 (c)?
4. If they qualify as 16.2 (c) accumulators, are they subject to the 6 bar pressure limit throughout their range of travel, or only at full extension (minimum pressure)?

Interpretation:

1. Yes
2. Yes
3. No
4. Not applicable

Issued by the America's Cup Measurement Committee on December 14 2015