RUPTURE VALVE VC 3006 - types A*,B,R,G,E*

This device consists of a valve which stops (completely or partially) the oil flow when downward speed exceeds the preset value. This device ensures a deceleration lower than g_n (9,81 m/s^2).
These valves are designed and manufactured to a safety factor greater than 1,7 with respect to the proof stress (non-proportional elongation) calculated on a pressure 2,3 times the maximum static one (45 bar).

SETTING OF THE RUPTURE VALVE :

- Calculate the tripping flow with the following formula:

$$Q_i = \frac{(V_d \cdot 1,3) \cdot 6 \cdot A \cdot N_{vc}}{c_m}$$

where:
Q_i = maximum tripping flow of the valve [l/min]
V_d = rated downward speed of the car [m/s]
A = ram area [cm^2]
N_{vc} = number of jack connected to the rupture valve
c_m = reeving ratio (1 for direct installation 1:1,2 for indirect installation 2:1)

Table 1 - area for single ram jacks

ram	HL 45	HL 55	HL 65											
A [cm^2]	15,90	23,76	33,18											
ram	50	60	70	80	90	100	110	120	130	140	150	180	200	238
A [cm^2]	19,63	28,27	38,48	50,27	63,62	78,54	95,03	113,10	132,73	153,94	176,71	254,47	314,16	444,88

Table 2 - equivalent area for telescopic jacks with hydraulic synchronization

jack type		T42	T50	T63	T70	T85	T100
C2 (2 stages)	A [cm^2]	21,14	29,40	44,22	59,59	84,94	117,61
C3 (3 stages)		33,25	44,04	66,63	88,83	132,27	176,15

Table 3 - equivalent area for telescopic jacks with mechanical synchronization (by chains)

jack type		TCS/EC 60	TCS/EC 75	TCS/EC 90	TCS/EC 105	TCS/EC 120
-2N, Y (2 stages)	A [cm^2]	36,76	54,55	75,87	100,73	129,12
-3Y (3 stages)		45,95	65,50	88,59	115,22	*****
-4Y (4 stages)		56,32	77,64	102,50	*****	*****

- Remove the cap from the adjusting screw and untight the locking nut.
- Screw the adjustment screw in to stop and measure the quote Xo (valve completely closed).
- Read on the diagram for valve setting the quote X with respect to the tripping flow and to the valve dimension (es: VC 3006/B 1"1/4; Qi = 150 l/min; X = 9mm)
- Screw out the adjustment screw to obtain the requested quote X + Xo.

CHECKING OF THE RUPTURE VALVE:

- Call the car with full load to the top floor.
- Tight screw #5 to stop and call the lift back to the bottom floor.
- When the lift reaches the downward speed according the tripping flow, the rupture valve closes and the car stops

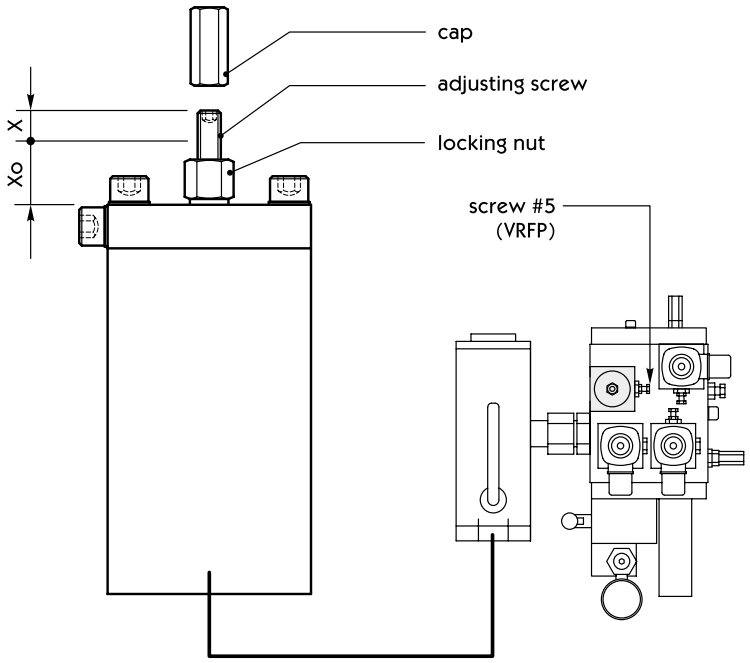
In case of rupture valve with by-pass, the car will continue to descend with low speed. If the valve does not close it is necessary to re-adjust it:

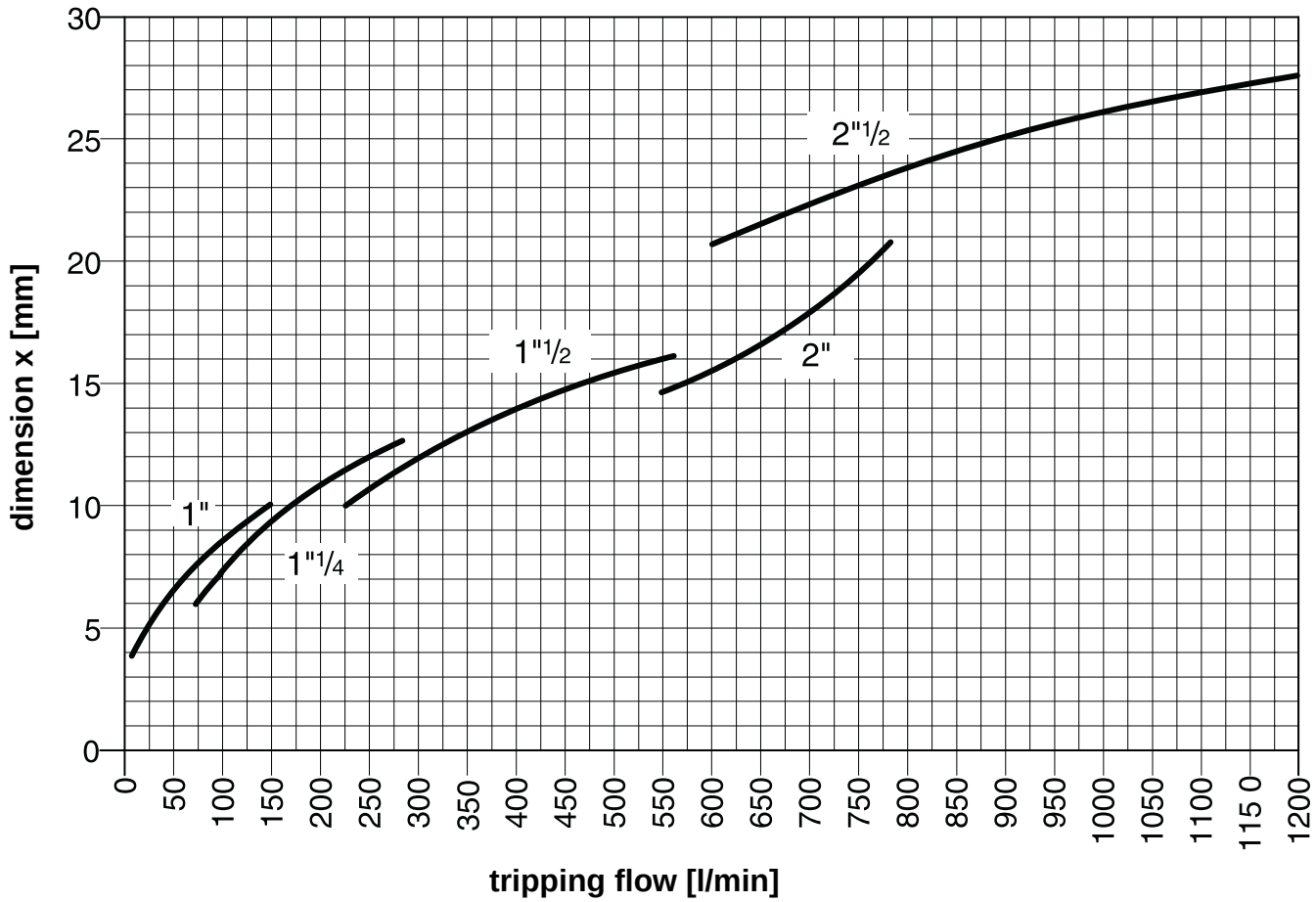
- Untight the locking nut and screw in the adjustment screw one turn.
- Call the lift to the top floor and then back to the bottom floor.
- Repeat this operation until the valve closes.
- Screw out #5 to stop and be sure the valve does not trip during a normal down travel.

IMPORTANT!!!

Once the check is done re-assemble the cap on the adjusting screw.

(*) not certified





RUPTURE VALVE AND DISTRIBUTOR "3010"
DIAGRAM FOR VC3006 ADJUSTMENT

DIAGRAM FOR VC3006 3/4” ADJUSTMENT