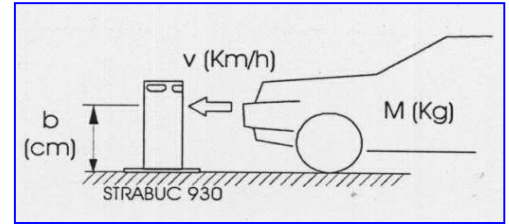


CRASH TEST RESULTS OF STRABUC 930 HEAVY VERSION

Technical specifications of the rising bollards:

Outer diameter	275 mm
Bollard thickness	12 mm
Bollard Max. travel	700 mm
Natural oscillation Strabuc 930 Heavy Version	max. 6 mm
Tire load against Strabuc bollard in up position	30000kg

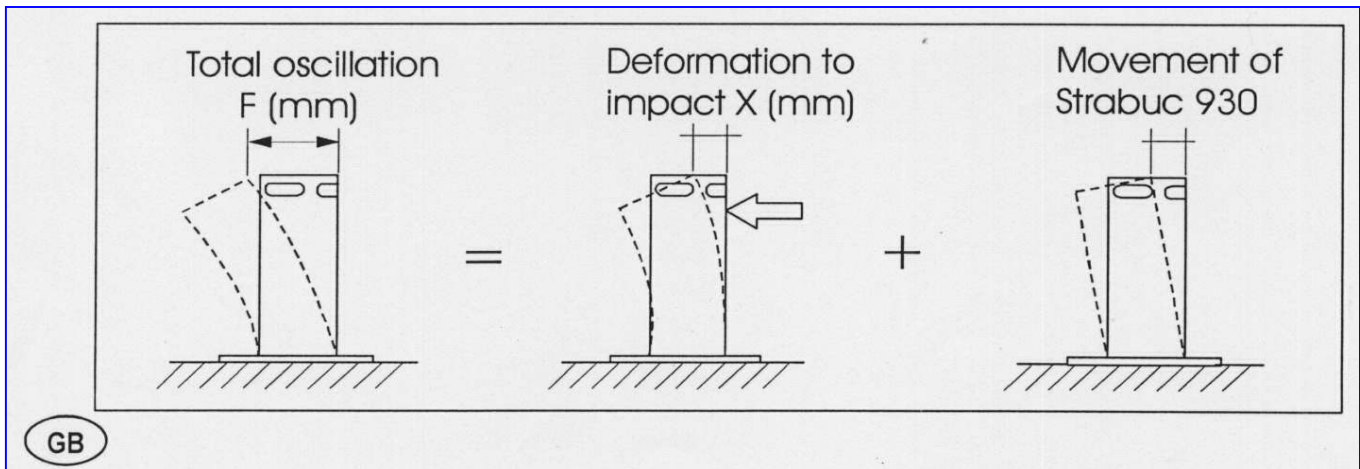
NOTE: In the results mass M is to be considered as non-deformable to impact



CRASH STRENGTH:

Mass M (kg)	Speed V (Km/h)	Impact point from ground b (cm)	Deformation of Strabuc 930 X (mm)	Total Oscillation F (mm)	Energy E (j)	Results
1000	50	50 cm	0,5 - 1 mm	30 - 32 mm	96605	- Car is smashed, it cannot go beyond Strabuc - Strabuc 930 Heavy normally working
1000	50	70 cm	1,5 - 1,8 mm	31 - 32 mm	96605	- Car is smashed, it cannot go beyond Strabuc - Strabuc 930 Heavy normally working
1000	80	50 cm	1,1 - 1,3 mm	31 - 32 mm	246913	- Car is smashed, it cannot go beyond Strabuc - Strabuc 930 Heavy normally working
1000	80	70 cm	3 - 3,2 mm	33 - 35 mm	246913	- Car is smashed, it cannot go beyond Strabuc - Strabuc 930 Heavy to reset
2000	50	50 cm	0,8 - 1 mm	31 - 32 mm	192654	- Car is smashed, it cannot go beyond Strabuc - Strabuc 930 Heavy normally working
2000	50	70 cm	2,5 - 2,8 mm	33 - 35 mm	192654	- Car is smashed, it cannot go beyond Strabuc - Strabuc 930 Heavy to reset
2000	80	50 cm	2,2 - 2,5 mm	33 - 35 mm	493728	- Car is smashed, it cannot go beyond Strabuc - Strabuc 930 Heavy to reset
2000	80	70 cm	6,2 - 6,5 mm	36 - 37 mm	493728	- Car is smashed, it cannot go beyond Strabuc - Strabuc 930 Heavy to reset

N.W: The data stated herewith are the result of simply theoretical calculations, therefore merely indicative;
Meccanica Fadini is not liable for practical values different from those stated on this data page.



Drwg.No. 3703

CRASH TEST RESULTS OF STRABUC 930 HEAVY VERSION

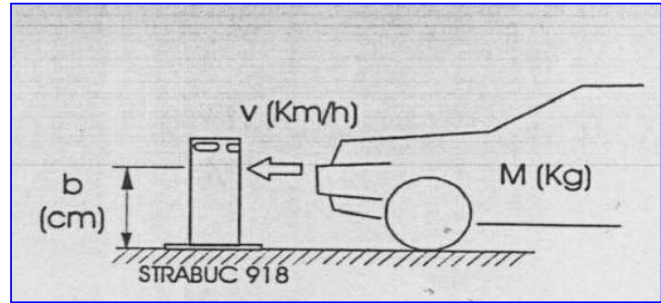


CALCULATION OF IMPACT RESISTANCE OF STRABUC 918 - STANDARD

Technical specifications of the rising post:

Outer diameter	273 mm
Post thickness (standard)	4 mm
Max. post height	700 mm
Natural Oscillation Strabuc 918	max. 6 mm
Tire load against Strabuc in up position	30000kg

NOTE: In the calculation Mass M is to be considered as non deforming on collision



RESISTANCE TO RAMMING:

Mass M (kg)	Speed V (Km/h)	Impact from ground b (cm)	Deformation of Strabuc 918 X (mm)	Total Oscillation F (mm)	Energy E (j)	Force (KN)	Consequences
1000	50	50 cm	12-13 mm	42-45 mm	96500	193	- Car is smashed and stopped - Strabuc 918 is beyond repair, to replace
1000	50	70 cm	35 mm	65-67 mm	96500	138	- Car is smashed and stopped - Strabuc 918 is beyond repair, to replace

RESISTANCE TO HEAVY ACCIDENTAL COLLISION:

Mass M (kg)	Speed V (Km/h)	Impact from ground b (cm)	Deformation of Strabuc 918 X (mm)	Total Oscillation F (mm)	Energy E (j)	Force (KN)	Consequences
1000	30	50 cm	4-6 mm	34-36 mm	34700	69,4	- Car is damaged and stopped - Strabuc 918 is beyond repair, to replace
1000	30	70 cm	12-14 mm	42-46 mm	34700	49,6	- Car is damaged and stopped - Strabuc 918 is beyond repair, to replace

RESISTANCE TO LIGHT ACCIDENTAL COLLISION:

Mass M (kg)	Speed V (Km/h)	Impact from ground b (cm)	Deformation of Strabuc 918 X (mm)	Total Oscillation F (mm)	Energy E (j)	Force (KN)	Consequences
1000	20	50 cm	1-2 mm	31-32 mm	13500	27	- Car is damaged and stopped - Strabuc rods damaged, post working
1000	20	70 cm	3-4 mm	33-34 mm	13500	19,3	- Car is damaged and stopped - Strabuc 918 is beyond repair, to replace

RESISTANCE TO HITTING ON PARKING MANOEUVRES:

Mass M (kg)	Speed V (Km/h)	Impact from ground b (cm)	Deformation of Strabuc 918 X (mm)	Total Oscillation F (mm)	Energy E (j)	Force (KN)	Consequences
1000	10	50 cm	0,5 mm	30 mm	3860	7,7	- Car is safe and stopped - Strabuc 918 can work normally
1000	10	70 cm	1 mm	30-31 mm	3860	5,5	- Car is safe and stopped - Strabuc 918 can work normally

