

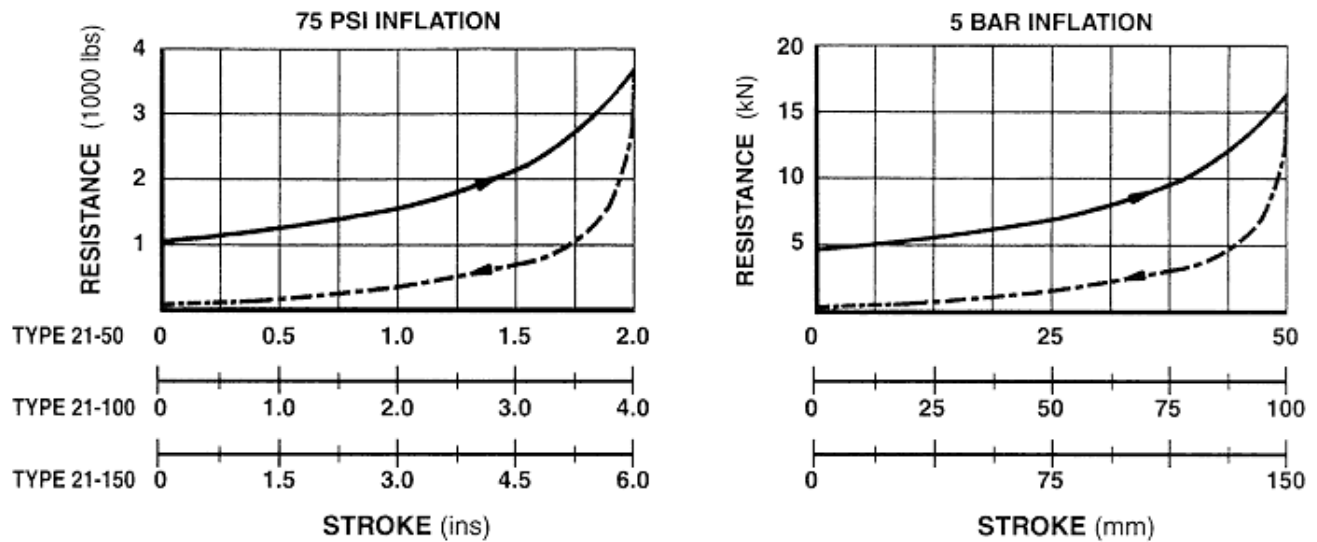
Type 21 Series Bumpers

PERFORMANCE CHARACTERISTICS:

	TYPE 21-50		TYPE 21-100		TYPE 21-150	
STROKE	(2 ins)	50 mm	(4 ins)	100 mm	(6 ins)	150 mm
ENERGY CAPACITY	(7,840 ft-lb)	10 kJ	(15,760 ft-lb)	20 kJ	(23,500 ft-lb)	30 kJ

STATIC RESISTANCE:

The graphs below show the static resistance at a **slow closure speed**, not at impact speed. Consult Gantrex if a reduced static resistance is required.

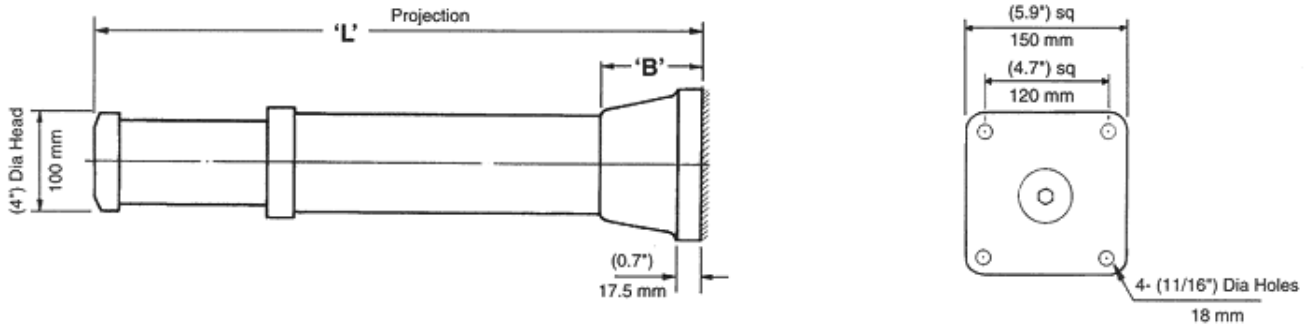


METERING PIN SELECTION:

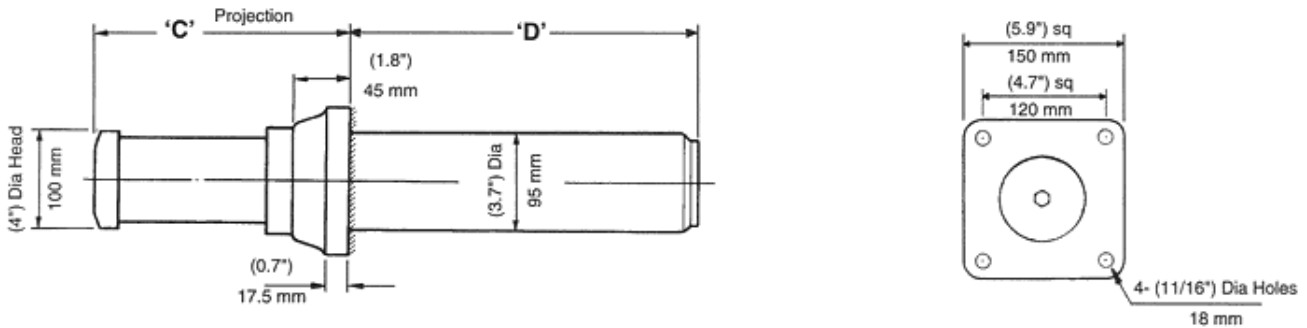
USE "We" AS DETERMINED IN BUMPER SELECTION CALCULATIONS

IMPACT WEIGHT (We)			METERING PIN CODE*
(1000 lbs)		Metric Tonnes	
UP TO	3.7	1.7	1
" "	7.7	3.5	2
" "	15.4	7.0	3
" "	29.0	13.0	4
" "	55.0	25.0	5
" "	110.0	50.0	6
" "	220.0	100.0	7
" "	440.0	200.0	8
" "	880.0	400.0	9

MOUNTING BRACKET SELECTION:



REAR MOUNTING	'L'		'B'		WEIGHT	
21ABS100-05*	(10.2 ins)	260 mm	(3.0 ins)	75 mm	(24 lbs)	10.6 kg
21ABS100-10*	(16.5 ins)	420 mm	(3.0 ins)	75 mm	(31 lbs)	14.1 kg
21ABS100-15*	(23.0 ins)	584 mm	(4.6 ins)	118 mm	(39 lbs)	17.4 kg



FRONT MOUNTING	'C'		'D'		WEIGHT	
21AFS100-05*	(5.2 ins)	133 mm	(5.0 ins)	126 mm	(24 lbs)	10.6 kg
21AFS100-10*	(7.2 ins)	183 mm	(9.3 ins)	236 mm	(31 lbs)	13.8 kg
21AFS100-15*	(9.2 ins)	233 mm	(13.8 ins)	350 mm	(38 lbs)	17.1 kg

* Indicates Metering Pin Code (See over - Metering Pin Selection Table)

- EXTERNAL FINISH:** PLUNGER HAS STANDARD HARD CHROME PLATING. ALL OTHER SURFACES HAVE RED OXIDE PRIMER READY FOR FINISH COAT OF PAINT.
- MARINE PLATING:** MARINE PLATING ON PLUNGER FOR MARINE OR CAUSTIC ENVIRONMENTS. SPECIFY BY USING SUFFIX "F". E.G. 21AFS100-103F.
- BUMPER HEAD:** 125mm DIAMETER HEAD REQUIRED TO MEET AIST CODE. SPECIFY BY REPLACING "100" IN MODEL CODE WITH "125" E.G. 21SFS125-103.
- SAFETY CABLE:** REQUIRED TO MEET AIST AND OSHA CODES. SPECIFY BY REPLACING FIRST LETTER "A" IN MODEL CODE WITH "S" E.G. 21SFS100-103.
- PROTECTIVE BELLOWS:** SPECIFY USING SUFFIX "B" E.G. 21AFS100-103B.
- HIGH TEMPERATURE SEALS:** USE WHERE AMBIENT TEMPERATURE IS HIGHER THAN 140°F. SPECIFY USING SUFFIX "H" E.G. 21AFS100-103H.
- LOW DRIVE DOWN FORCE:** REDUCED PRE-CHARGED PRESSURE TO ALLOW FULL COMPRESSION UNDER DRIVE MOTORS. CONSULT GANTREX FOR ASSISTANCE. SPECIFY USING SUFFIX "L" E.G. 21AFS100-103L.
- MOUNTING BRACKETS:** AVAILABLE IN STANDARD, LOW AND VERY LOW FOOT MOUNTING BRACKETS. CRANE STOPS AND EXTENDER BRACKETS ARE ALSO AVAILABLE. CONSULT GANTREX FOR PROPOSAL DRAWING.