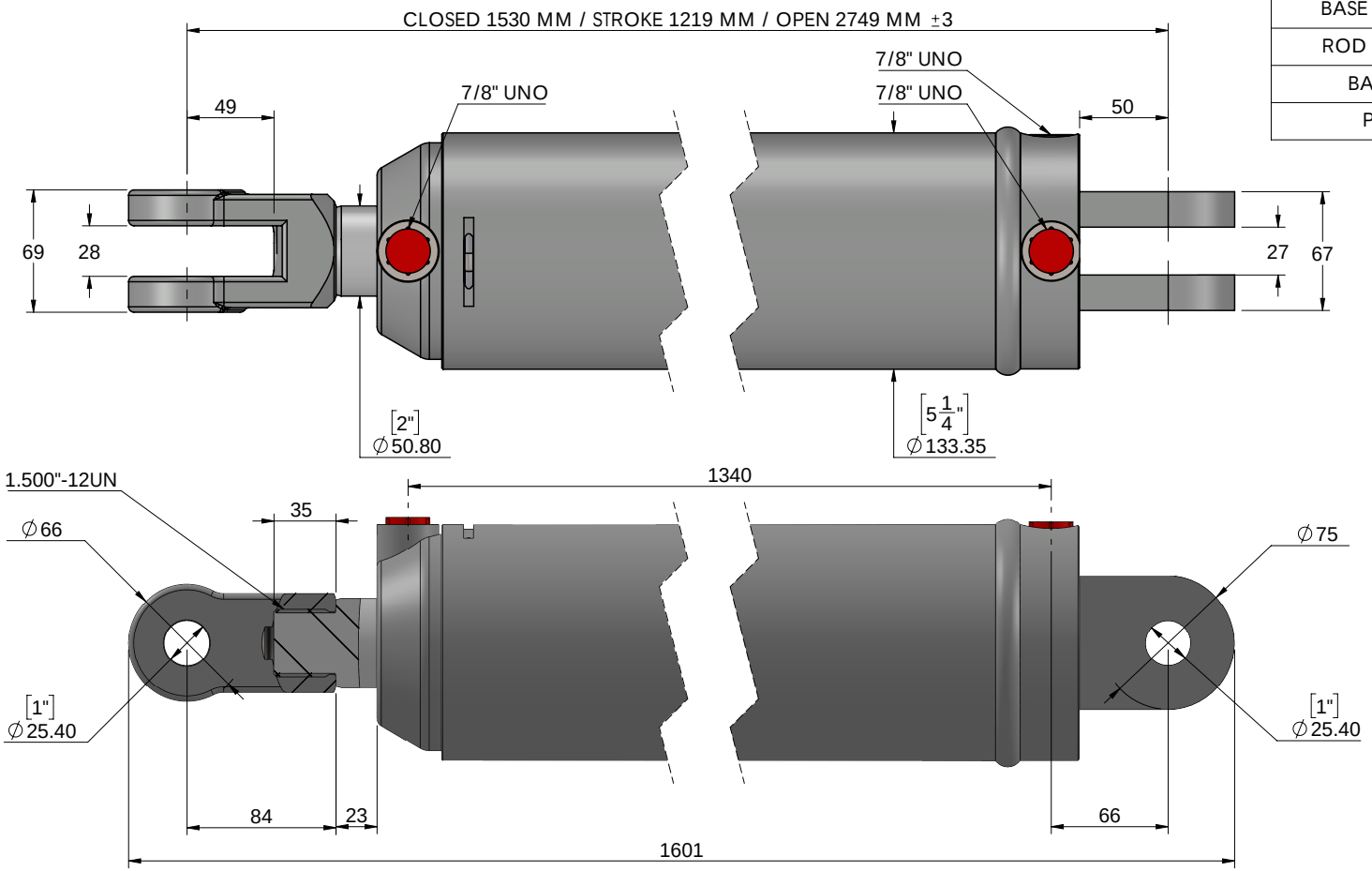
NOTE: PIN HOLE CLEARANCE MACHINED TO SUIT ANSI B4.2 D9/h9
PORT THREADS MACHINED TO ISO11926-1 OTHER THREADS MACHINED TO CLASS 2A/B
GENERAL DIMENSIONS SUIT ISO2768-mK UNLESS OTHERWISE STATED
GENERAL SURFACE MACHINING TO ISO1302
FORCE CALCULATIONS ARE THEORETICAL MAXIMUM. ALLOW UP TO 20% FOR LOSSES

OPERATING CONDITIONS	
MAX PRESSURE	210 BAR
PUSH FORCE @ 210 BAR	21538 Kg
PULL FORCE @ 210 BAR	17283 Kg
FLUID	HYDRAULIC OIL VG46

CYLINDER FACTOR OF SAFETY AT 210 BAR		
STRESS AREA	SAFETY FACTOR	COMMENT
PISTON PULL OFF	1.30:1	
ROD MOUNT PULL OFF	1.75:1	
ROD BUCKLE	2.1:1	AT MAX EXTENSION
BASE MOUNT	4.00:1	
ROD MOUNT	4.25:1	
BARREL	4.17:1	HOOP STRESS
PINS	1.13:1	



CYLINDER SPECIFICATIONS			
CLOSED	1530 MM	PORTS	7/8" UNO
STROKE	1219 MM	BARREL	5 1/4* TUBE 3/8" WALL
OPEN	2749 MM	HEAD CLEVIS	FC0045501002
STAND OUT	23 MM	ROD CLEVIS	FC0000401006
ROD	2.0" - K1045	WEIGHT	72.0 Kg
BORE	4.50"	PAINTING	REFER TO QUOTE

REV	DATE	DRAWN CHECKED	REMARK
B			
A			
0	22/08/2018	MJSTONE	

CLIENT SIGNATURE
APPROVAL DATE

SHEET SIZE: A4
SCALE: 1:4
SHEET OF: 1/1

HYPOWER QUALITY MANUFACTURING

M3000 45

DESCRIPTION: HPWG 4.5" BORE X 1219MM STKX2.000" ROD 7/8" UNO -1.00" PIN

PART NO.: M3000-45-1219-40-AU000
DWG NO.: M3000-45-1219-40-AU000DIM

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION AND IS SUBMITTED IN CONFIDENCE. THIS DOCUMENT IS SUBJECT TO RETURN UPON REQUEST. THE INFORMATION CONTAINED HEREIN IS NOT BE USED IN ANY WAY DETRIMENTAL TO THE INTERESTS OF HYPOWER.