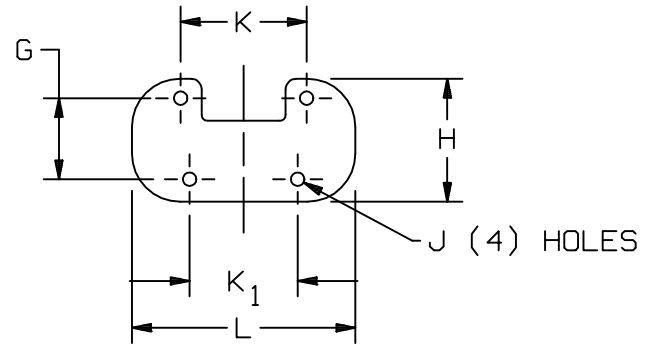
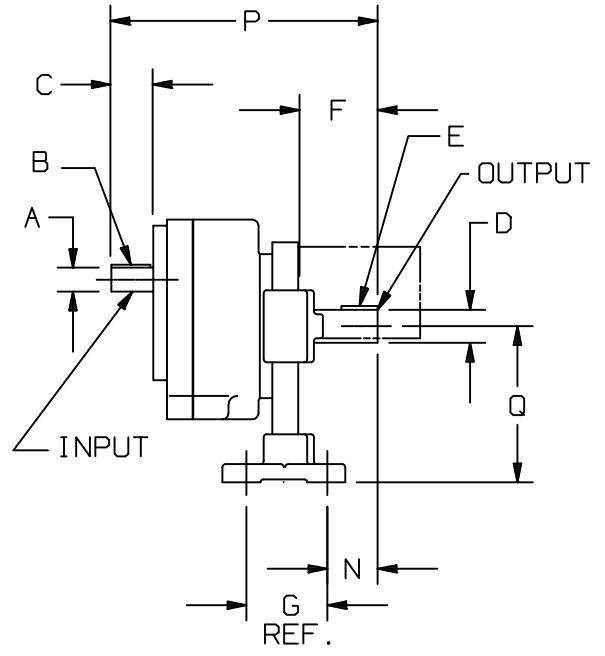
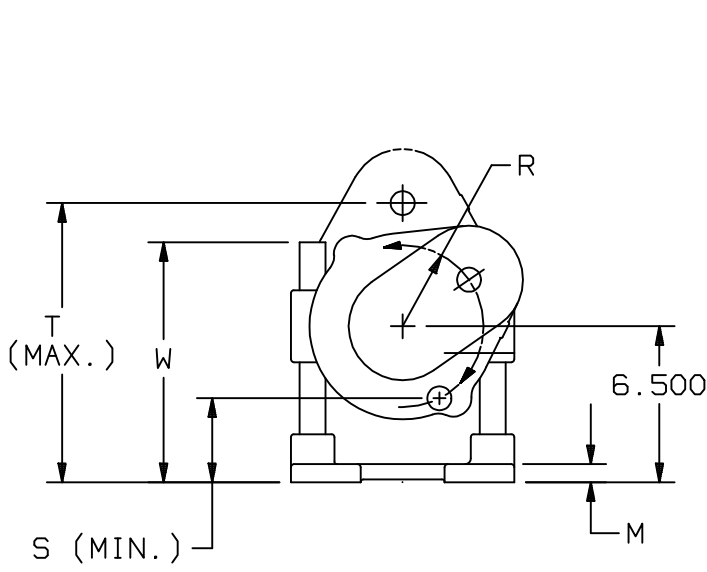




TYPE  
HELICAL  
GEAR REDUCER

MODEL  
HRA

DIMENSIONS 109-102  
Section 100  
Effective March 2003  
Replaces September 2000



DIM TOLERANCE  $\pm .13$

			DIMENSIONS									
UNITS			A	B	C	D	E	F	G	H	J	K
	IN		1	1/4	1 3/4	1 3/8	5/16	3 1/4	3 3/8	5 1/8	9/16	5 1/4
	MM		25,4	6,4	44,5	34,9	7,9	82,6	85,7	130,2	14,3	133,4
			K <sub>1</sub>	L	M	N	P	Q	R	S	T	
	IN		4 1/2	9 5/16	3/4	2 1/8	11 1/8	5 TO 8 1/4	3 3/8	3 1/2	11 5/8	
	MM		114,3	236,5	19,0	54,0	282,6	127 TO 209,6	85,7	88,9	295,3	
			U	V	W	X	Y	Z				
	IN		—	—	10	—	—	—				
	MM		—	—	254	—	—	—				
			WEIGHT									
	LBS		60									
	KG		27,2									