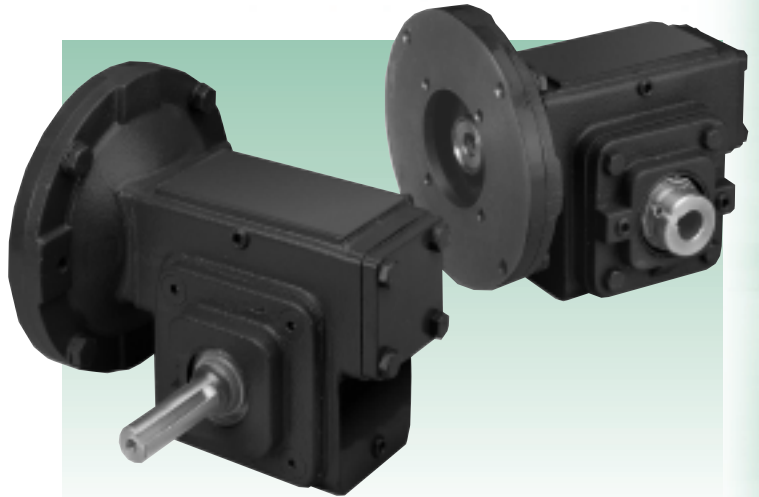


# Metric Speed Reducers

SE Encore worm gear speed reducers are available with a metric input adaptor that mates to most IEC B5 and B14 flanges. Additionally, these reducers can be equipped with either a metric solid or hollow output shaft (supplied with a keyed metric bore, including the drive key and locking set screws). All models can be modified with additional options and accessories as depicted in this catalog. IEC motor flange interface dimensions are available on pages 120-121 of this catalog.



*SE Encore worm gear speed reducers are available with IEC compatible B5 or B14 input adaptors and metric shafts.*

## COMMON METRIC CONVERSIONS

1 watt = 0.0013 HP	
KILOWATTS TO HORSEPOWER	
KW	HP
0.12	0.16
0.18	0.24
0.25	0.34
0.37	0.50
0.55	0.74
0.75	1.01
1.10	1.48
1.50	2.01
2.20	2.95
3.00	4.02
4.00	5.36
5.50	7.38
7.50	10.10
9.20	12.30
11.00	14.80
15.00	20.10
18.50	24.80
22.00	29.50

1 Newton meter = 8.851 lbf-in	
NEWTON METERS TO POUND INCHES	
Nm	lbf-in
20	177
40	354
60	531
80	708
100	885
125	1,106
150	1,328
175	1,549
200	1,770
250	2,213
300	2,655
400	3,540
500	4,425
600	5,310
700	6,196
800	7,081
1,000	8,851
1,200	10,620

Modified

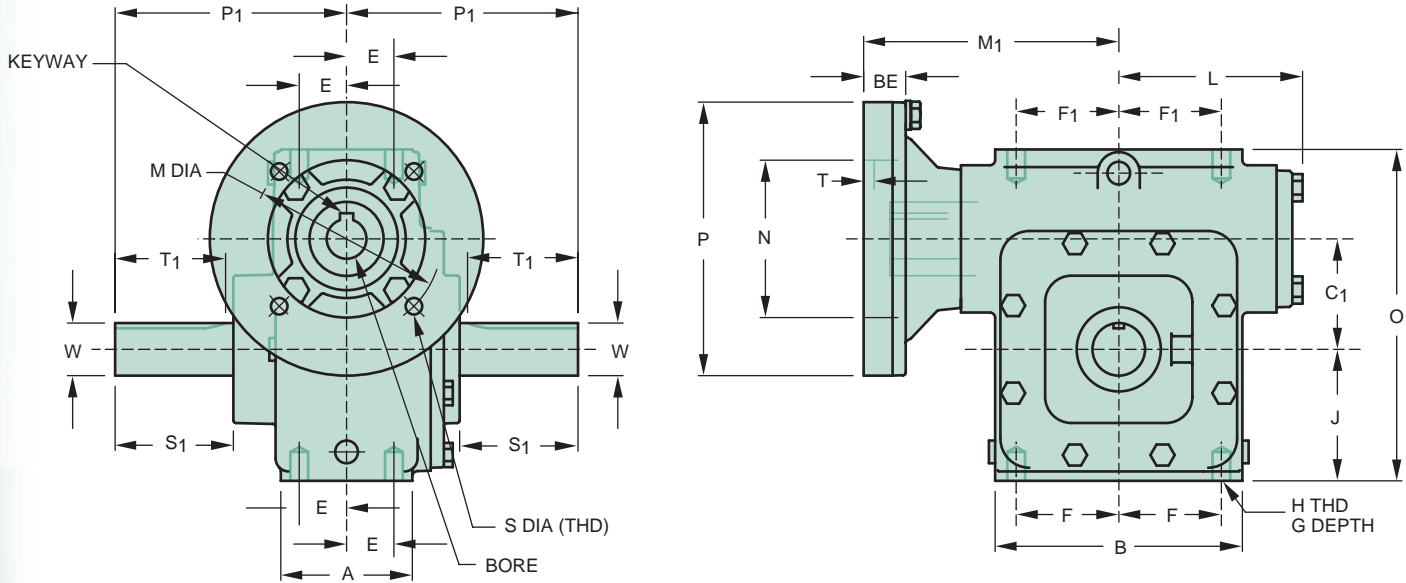


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# Metric Speed Reducers

## SOLID SHAFT DIMENSIONS



	IEC FRAME (mm)							
	B14 FLANGE				B5 FLANGE			
	63	71	80	90	100/112	132	100/112	132
M	75	85	100	115	130	165	215	265
N	60	70	80	95	110	130	180	230
T	6	6	6	6	6	6	6	6
P	165	165	165	165	165	230	250	300
BE	19	19	19	25	25	33	21	22
S	5.8	7	7	10	10	12	M12	M12
KEYWAY	5x2.3	5x2.3	6x2.8	8x3.3	8x3.3	10x3.3	8x3.3	10x3.3
BORE <sup>(1)</sup>	14	14	19	24*	28	38	28	38

<sup>(1)</sup> Bore tolerance 14mm up to and including 28mm is +.020 to +.046  
 Bore tolerance for 38mm is +.030 to +.056  
 \* Note: 24mm bore on sizes E17 & E20, keyway size is 8 x 2.3

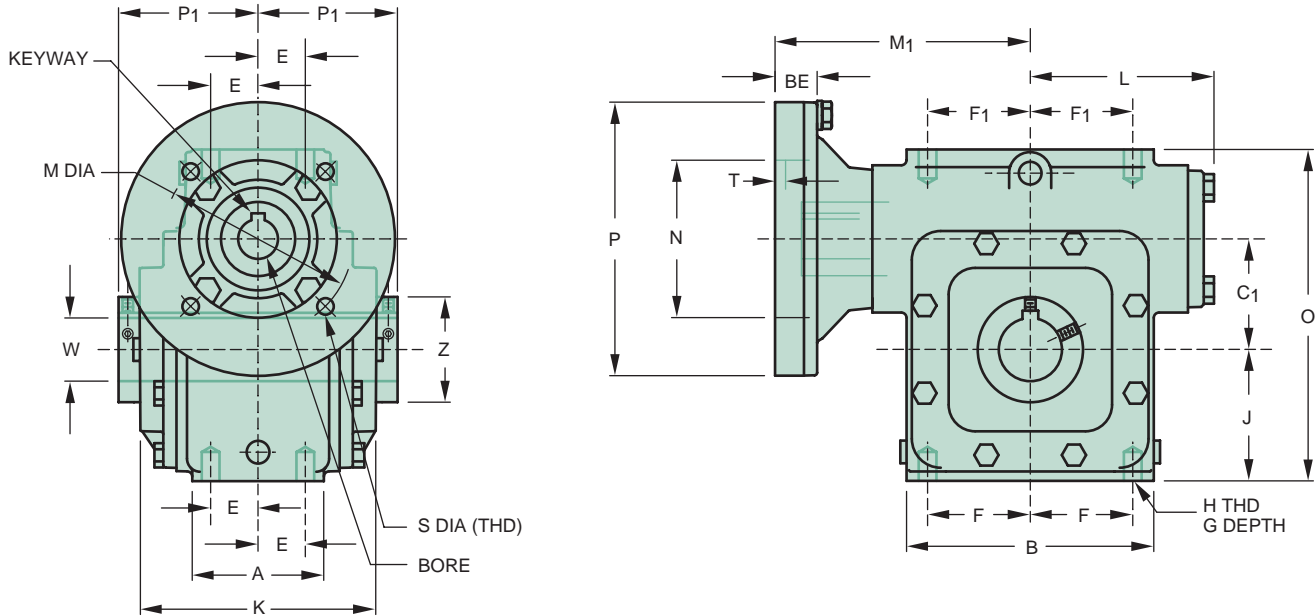
Size	DIMENSION (in)												M <sub>1</sub> DIMENSION (in)								OUTPUT SHAFT DIMENSIONS (mm)			
	A	B	C <sub>1</sub> in/mm	E	F	F <sub>1</sub>	G DEPTH	H THD	J	L	O	P <sub>1</sub>	B14 FLANGE				B5 FLANGE				W*	S <sub>1</sub>	T <sub>1</sub>	KEYWAY
													63	71	80	90	100/112	132	100/112	132				
E17	2.38	4.63	1.750/44.5	.88	1.94	1.69	.56	3/8-16	2.13	3.44	5.38	4.75	4.50	4.50	4.50	4.75					18	65	56	6 x 3.5
E20	2.38	5.25	2.000/50.8	.88	2.19	1.69	.56	3/8-16	2.13	3.44	5.63	4.75		4.50	4.50	4.75					25	65	56	8 x 4.0
E26	3.13	5.88	2.625/66.7	1.13	2.44	2.44	.63	1/2-13	3.13	4.50	7.88	5.50		5.81	5.81	6.06	6.06		6.19		25	71	62	8 x 4.0
E30	3.50	6.62	3.000/76.2	1.31	2.75	2.75	.75	1/2-13	3.50	4.63	9.00	5.88			6.00	6.25	6.25	6.50	6.38	6.69	28	73	64	8 x 4.0
E35	3.75	7.69	3.500/88.9	1.31	3.25	3.25	1.00	5/8-11	4.00	5.46	10.13	7.00			6.25	6.50	6.50	6.75	6.63	6.94	35	95	86	10 x 5.0
E43	4.38	8.75	4.250/108.0	1.63	3.75	3.75	1.00	5/8-11	4.38	6.28	11.50	8.00				7.31	7.31	7.56	7.44	7.75	42	111	102	12 x 5.0

\* Shaft diameter tolerances +0.000 -0.025mm  
 Dimensions shown are for construction purposes only. Please contact Winsmith for certified dimension sheets.

Modified

# Metric Speed Reducers

## HOLLOW SHAFT DIMENSIONS



	IEC FRAME (mm)							
	B14 FLANGE				B5 FLANGE			
	63	71	80	90	100/112	132	100/112	132
M	75	85	100	115	130	165	215	265
N	60	70	80	95	110	130	180	230
T	6	6	6	6	6	6	6	6
P	165	165	165	165	165	230	250	300
BE	19	19	19	25	25	33	21	22
S	5.8	7	7	10	10	12	M12	M12
KEYWAY	5x2.3	5x2.3	6x2.8	8x3.3	8x3.3	10x3.3	8x3.3	10x3.3
BORE <sup>(1)</sup>	14	14	19	24*	28	38	28	38

<sup>(1)</sup> Bore tolerance 14mm up to and including 28mm is +.020 to +.046  
 Bore tolerance for 38mm is +.030 to +.056  
 \* Note: 24mm bore on sizes E17 & E20, keyway size is 8 x 2.3

Size	DIMENSION (in)													M <sub>1</sub> DIMENSION (in)						HOLLOW SHAFT OUTPUT BORE (mm)				
	A	B	C <sub>1</sub> in/mm	E	F	F <sub>1</sub>	G DEPTH	H THD	J	K	L	O	P <sub>1</sub>	Z	B14 FLANGE				B5 FLANGE					
															63	71	80	90	100/112	132	100/112	132	W*	KEYWAY
E17	2.38	4.63	1.750/44.5	.88	1.94	1.69	.56	3/8-16	2.13	2.44	3.44	5.38	3.13	1.49	4.50	4.50	4.50	4.75					18	6 x 2.8
E20	2.38	5.25	2.000/50.8	.88	2.19	1.69	.56	3/8-16	2.13	2.63	3.44	5.63	3.31	2.00		4.50	4.50	4.75					25	8 x 3.3
E26	3.13	5.88	2.625/66.7	1.13	2.44	2.44	.63	1/2-13	3.13	2.81	4.50	7.88	3.50	2.50		5.81	5.81	6.06	6.06		6.19		25	8 x 3.3
E30	3.50	6.62	3.000/76.2	1.31	2.75	2.75	.75	1/2-13	3.50	3.00	4.63	9.00	3.69	2.63			6.00	6.25	6.25	6.50	6.38	6.69	28	8 x 3.3
E35	3.75	7.69	3.500/88.9	1.31	3.25	3.25	1.00	5/8-11	4.00	3.38	5.46	10.13	4.13	2.87			6.25	6.50	6.50	6.75	6.63	6.94	35	10 x 3.3
E43	4.38	8.75	4.250/108.0	1.63	3.75	3.75	1.00	5/8-11	4.38	3.63	6.28	11.50	4.38	3.88				7.31	7.31	7.56	7.44	7.75	42	12 x 3.3

\* Bore tolerances +0.000 -0.050mm  
 Dimensions shown are for construction purposes only. Please contact Winsmith for certified dimension sheets.



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