

E Series Ratings

Single Reduction
Worm Gear Reducers

Double Reduction
Worm - Worm Gear Reducers

Double Reduction
Helical - Worm Gear Reducers

WASHGUARD® Reducers
and GEAR+MOTOR™

Ratio Multipliers

Accessories

1 Select Reducer

Style HMQ Style HM



Maximum Ratings - 18HE

Ratio	Input RPM	Output RPM	Input HP	Output TQ (lb-in)	NEMA Input Frame	Quill Input / Hollow Output Catalog No. ▼	Coupling Input / Hollow Output Catalog No. ▼
8.02	1750	218.20	4.23	1100	56C	E180508.XX	E180524.XX
	1150	143.39	2.78				
	850	105.99	2.06				
	100	12.47	0.24				
11.42	1750	153.24	2.97	1100	56C	E180509.XX	E180525.XX
	1150	101.70	1.95				
	850	74.43	1.44				
	100	8.76	0.17				
15.60	1750	112.18	2.18	1100	56C	E180510.XX	E180526.XX
	1150	73.72	1.43				
	850	54.49	1.06				
	100	6.41	0.12				
19.93	1750	87.81	1.70	1100	56C	E180511.XX	E180527.XX
	1150	57.70	1.12				
	850	42.65	0.83				
	100	5.02	0.10				
29.10	1750	60.14	1.17	1100	56C	E180512.XX	E180528.XX
	1150	39.52	0.77				
	850	29.21	0.57				
	100	3.44	0.07				
43.53	1750	40.20	0.78	1100	56C	E180513.XX	E180529.XX
	1150	26.42	0.51				
	850	19.53	0.38				
	100	2.30	0.04				
52.50	1750	33.33	0.65	1100	56C	E180514.XX	E180530.XX
	1150	21.90	0.42				
	850	16.19	0.31				
	100	1.90	0.04				
58.33	1750	30.00	0.58	1100	56C	E180515.XX	E180531.XX
	1150	19.72	0.38				
	850	14.57	0.28				
	100	1.71	0.03				

Style HMQ Style HM



Maximum Ratings - 24HE

Ratio	Input RPM	Output RPM	Input HP	Output TQ (lb-in)	NEMA Input Frame	Quill Input / Hollow Output Catalog No. ▼	Coupling Input / Hollow Output Catalog No. ▼
7.80	1750	224.4	8.50	2149	56C	E240511.XX	E240541.XX
	1150	147.4	6.76				
	850	109.0	5.00				
	100	12.8	0.59				
11.36	1750	154.0	7.06	2600	56C	E240513.XX	E240543.XX
	1150	101.2	4.64				
	850	74.8	3.43				
	100	8.80	0.40				
15.60	1750	112.2	5.14	2600	56C	E240514.XX	E240544.XX
	1150	73.7	3.38				
	850	54.5	2.50				
	100	6.40	0.29				
19.50	1750	89.7	4.11	2600	56C	E240515.XX	E240545.XX
	1150	59.0	2.70				
	850	43.6	2.00				
	100	5.1	0.24				
28.01	1750	62.5	2.86	2600	56C	E240516.XX	E240546.XX
	1150	41.1	1.88				
	850	30.3	1.39				
	100	3.60	0.16				
39.98	1750	43.8	2.01	2600	56C	E240518.XX	E240548.XX
	1150	28.8	1.32				
	850	21.3	0.97				
	100	2.50	0.11				
52.50	1750	33.3	1.53	2600	56C	E240519.XX	E240549.XX
	1150	21.9	1.00				
	850	16.2	0.74				
	100	1.90	0.09				
59.79	1750	29.3	1.34	2600	56C	E240520.XX	E240550.XX
	1150	19.2	0.88				
	850	14.2	0.65				
	100	1.70	0.08				

▼ Catalog numbers are for hollow output shaft reducers.
When ordering, substitute the XX suffix with the required output bore code.

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Available bore codes 18HE

Fraction Size	3/4"	7/8"	1"	1-1/8"	1-3/16"	1-1/4"	1-7/16"
Decimal Size	0.750	0.875	1.000	1.125	1.188	1.250	1.438
Output Bore Code	12	14	16	18	19	20	23

If a solid output shaft is required for size 18HE, replace "XX" with "23" output bore code on basic reducer.

Available bore codes 24HE

Fraction Size	1"	1-1/8"	1-3/16"	1-1/4"	1-7/16"	1-1/2"
Decimal Size	1.000	1.125	1.188	1.250	1.438	1.500
Output Bore Code	16	18	19	20	23	24

If a solid output shaft is required for size 24HE, replace "XX" with "23" output bore code on basic reducer.

1 Select Reducer (cont.)

Maximum Ratings - 33HE

Ratio	Input RPM	Output RPM	Input HP	Output TQ (lb-in)	NEMA Input Frame	Style HMQ		Style HM	
						Quill Input / Hollow Output Catalog No. ▼	Coupling Input / Hollow Output Catalog No. ▼	Quill Input / Hollow Output Catalog No. ▼	Coupling Input / Hollow Output Catalog No. ▼
7.94	1750	220.4	13.00	3346	56C 143-5TC 182-4TC 213-5TC	E330508.XX	E330548.XX	E330516.XX	E330556.XX
	1150	144.8	11.49			E330524.XX	E330564.XX		
	850	107.1	8.49			E330532.XX	E330572.XX		
	100	12.59	1.00						
10.77	1750	162.5	12.89	4500	56C 143-5TC 182-4TC 213-5TC	E330509.XX	E330549.XX	E330517.XX	E330557.XX
	1150	106.8	8.47			E330525.XX	E330565.XX		
	850	78.9	6.26			E330533.XX	E330573.XX		
	100	9.29	0.74						
15.05	1750	116.3	9.22	4500	56C 143-5TC 182-4TC 213-5TC	E330510.XX	E330550.XX	E330518.XX	E330558.XX
	1150	76.4	6.06			E330526.XX	E330566.XX		
	850	56.5	4.48			E330534.XX	E330574.XX		
	100	6.64	0.53						
21.15	1750	82.7	6.56	4500	56C 143-5TC 182-4TC 213-5TC	E330511.XX	E330551.XX	E330519.XX	E330559.XX
	1150	54.4	4.31			E330527.XX	E330567.XX		
	850	40.2	3.19			E330535.XX	E330575.XX		
	100	4.73	0.38						
30.14	1750	58.1	4.61	4500	56C 143-5TC 182-4TC 213-5TC	E330512.XX	E330552.XX	E330520.XX	E330560.XX
	1150	38.2	3.03			E330528.XX	E330568.XX		
	850	28.2	2.24			E330536.XX	E330576.XX		
	100	3.32	0.26						
43.97	1750	39.8	3.16	4500	56C 143-5TC 182-4TC 213-5TC	E330513.XX	E330553.XX	E330521.XX	E330561.XX
	1150	26.2	2.07			E330529.XX	E330569.XX		
	850	19.3	1.53			E330537.XX	E330577.XX		
	100	2.27	0.18						
53.03	1750	33.0	2.62	4500	56C 143-5TC 182-4TC 213-5TC	E330514.XX	E330554.XX	E330522.XX	E330562.XX
	1150	21.7	1.72			E330530.XX	E330570.XX		
	850	16.0	1.27			E330538.XX	E330578.XX		
	100	1.89	0.15						
58.92	1750	29.7	2.36	4500	56C 143-5TC 182-4TC 213-5TC	E330515.XX	E330555.XX	E330523.XX	E330563.XX
	1150	19.5	1.55			E330531.XX	E330571.XX		
	850	14.4	1.14			E330539.XX	E330579.XX		
	100	1.70	0.13						

▼ Catalog numbers are for hollow output shaft reducers.
When ordering, substitute the XX suffix with the required output bore code.

Available bore codes 33HE

Fraction Size	1-3/16"	1-1/4"	1-7/16"	1-1/2"	1-5/8"	1-11/16"	1-3/4"	1-7/8"	1-15/16"	2"	2-3/16"
Decimal Size	1.188	1.250	1.438	1.500	1.625	1.688	1.750	1.875	1.938	2.000	2.188
Output Bore Code	19	20	23	24	26	27	28	30	31	32	35

If a solid output shaft is required for size 33HE, replace "XX" with "31" output bore code on basic reducer.

Style HMQ Style HM



Maximum Ratings - 43HE

Ratio	Input RPM	Output RPM	Input HP	Output TQ (lb-in)	NEMA Input Frame	Style HMQ		Style HM	
						Quill Input / Hollow Output Catalog No. ▼	Coupling Input / Hollow Output Catalog No. ▼	Quill Input / Hollow Output Catalog No. ▼	Coupling Input / Hollow Output Catalog No. ▼
9.58	1750	182.67	27.37	8500	56C 143-5TC 182-4TC 213-5TC	E430507.XX	E430542.XX	E430514.XX	E430549.XX
	1150	120.04	17.99			E430521.XX	E430556.XX		
	850	88.73	13.30			E430528.XX	E430563.XX		
	100	10.44	1.56						
15.05	1750	116.28	17.42	8500	56C 143-5TC 182-4TC 213-5TC	E430508.XX	E430543.XX	E430515.XX	E430550.XX
	1150	76.41	11.45			E430522.XX	E430557.XX		
	850	56.48	8.46			E430529.XX	E430564.XX		
	100	6.64	1.00						
21.15	1750	82.74	12.40	8500	56C 143-5TC 182-4TC 213-5TC	E430509.XX	E430544.XX	E430516.XX	E430551.XX
	1150	54.37	8.15			E430523.XX	E430558.XX		
	850	40.19	6.02			E430530.XX	E430565.XX		
	100	4.73	0.71						
30.14	1750	58.06	8.70	8500	56C 143-5TC 182-4TC 213-5TC	E430510.XX	E430545.XX	E430517.XX	E430552.XX
	1150	38.16	5.72			E430524.XX	E430559.XX		
	850	28.20	4.23			E430531.XX	E430566.XX		
	100	3.32	0.50						
37.33	1750	46.88	7.02	8500	56C 143-5TC 182-4TC 213-5TC	E430511.XX	E430546.XX	E430518.XX	E430553.XX
	1150	30.81	4.62			E430525.XX	E430560.XX		
	850	22.77	3.41			E430532.XX	E430567.XX		
	100	2.68	0.40						
53.03	1750	33.00	4.95	8500	56C 143-5TC 182-4TC 213-5TC	E430512.XX	E430547.XX	E430519.XX	E430554.XX
	1150	21.69	3.25			E430526.XX	E430561.XX		
	850	16.03	2.40			E430533.XX	E430568.XX		
	100	1.89	0.28						
58.92	1750	29.70	4.45	8500	56C 143-5TC 182-4TC 213-5TC	E430513.XX	E430548.XX	E430520.XX	E430555.XX
	1150	19.52	2.92			E430527.XX	E430562.XX		
	850	14.43	2.16			E430534.XX	E430569.XX		
	100	1.70	0.25						

▼ Catalog numbers are for hollow output shaft reducers.
When ordering, substitute the XX suffix with the required output bore code.

Available bore codes 43HE

Fraction Size	1-7/16"	1-1/2"	1-15/16"	2"	2-3/16"	2-7/16"	3"	3-7/16"
Decimal Size	1.438	1.500	1.938	2.000	2.188	2.438	3.000	3.438
Output Bore Code	23	24	31	35	35	39	48	55

If a solid output shaft is required for size 43HE, replace "XX" with "39" output bore code on basic reducer.

Bravo® Single
Reduction Reducers

Bravo® Worm - Worm
Double Reducers

Bravo® Helical - Worm
Double Reduction

Bravo® Accessory
Kits

Helical - Inline
Gear Reducers

Helical - Worm
Gear Reducers

E Series

Single Reduction
Worm Gear Reducers

Double Reduction
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Helical - Worm Gear Reducers

WASHGUARD® Reducers
and GEAR+MOTOR™

Ratio Multipliers

Accessories

2

Add "B" Interchange Base (if replacing larger worm reducer)

Base P/N	Interchange to Traditional Worm Center Distance
CB21HE	2.06"
CB23HE	2.38"
CB26HE	2.62"
CB30HE	3.00"
CB32HE	3.25"
CB38HE	3.75"
CB42HE	4.25"
CB52HE	5.25"
CB60HE	6.00"

"B" Base mounts to basic reducer and allows simple interchange to larger center distance worm reducers.

"B" Bases will be assembled to a reducer at no charge upon request. Contact Factory for details.

3

Add Output Shaft (if solid output shaft is needed)

Single Output P/N	Double Output P/N	Shaft Length (in)	Shaft Dia. (in)	Interchange to Traditional Worm Center Distance
S185040	S185043	4.31	0.875	1.75"
S185041	S185044	4.69	1.000	2.06"
S185042	S185045	5.14	1.125	2.38"
S185000	S185004	5.14	1.125	2.38"
S185001	S185005	5.63	1.125	2.62"
S185002	S185006	6.75	1.250	3.00"
S185003	S185007	7.06	1.375	3.25"
S185020	S185023	7.06	1.375	3.25"
S185021	S185024	7.75	1.625	3.75"
S185022	S185025	8.12	1.875	4.25"
S185030	S185033	8.12	1.875	4.25"
S185031	S185034	9.06	2.000	5.25"
S185032	S185035	10.00	2.250	6.00"

If solid shaft is required, substitute the XX suffix in the catalog number with the appropriate bore code.

Shaft kits will be assembled into a reducer at no charge upon request. Contact Factory for details

4

Add Accessory Kit (if replacing worm reducer)

Worm Reducer Size	Converts Basic Reducer + "B" Base Kit to Worm Reducers Below:				
	Horizontal Base (T-Mount)	Vertical Output (VL/VH Mount) ■	Output Flange (F Mount)	Torque Arm Kit	
18HE	1.75" CD	E185005.00	E185717.00	E185132.00	E185753.00
	2.06" CD*	E185010.00	--	E185133.00	
	2.38" CD*	E185015.00	--	E185734.00	
24HE	2.38" CD	E185015.00	E185017.00	E185134.00	E185454.00
	2.62" CD*	E185020.00	--	E185135.00	
	3.00" CD*	E185121.00	--	E185136.00	
	3.25" CD*	E185025.00	--	--	
33HE	3.25" CD	E185025.00	E185027.00	E185137.00	E185152.00
	3.75" CD*	E185026.00	--	--	
	4.25" CD*	E185030.00	--	E185138.00	
43HE	4.25" CD	E185030.00	E185032.00	E185738.00	E185754.00
	5.25" CD*	E185035.00	--	E185139.00	
	6.00" CD*	E185040.00	--	E185140.00	

* A "B" Base is required to mount accessories to base units for retrofit to larger center distance worm reducers.

■ VL & VH bases must be installed at Factory.

Accessory kits will be assembled to a reducer at no charge upon request. Contact Factory for details.

E Series Cross Reference

Grove Gear Ironman High Efficiency E Series gear reducers are designed to be dimensional and functional replacements of most worm reducer brands. This chart is meant to be a quick reference guide only. For specific dimensions and ratings of brands listed below, consult manufacturer's catalog information.

Grove Gear Style B



Grove Gear Style BM



Grove Gear Style BMQ



Grove Gear Style H



Grove Gear Style HM



Grove Gear Style HMQ



For overlapping units, determine torque and dimensional requirements.

Grove Gear	Baldor	Boston	Morse (Browning) Raider	Dodge Tigear-2	Falk Omnibox	
18HE	B18HE	S918	718	175U	17S	1175WB
	B21HE	S921	721	206U	20S	1206WB
	B23HE	S924	724	237U	23S	1238WB
	B24HE	S924	724	237U	23S	1238WB
	B26HE	S926	726	262U	26S	1262WB
	B30HE	S930	730	300U	30S	1300WB
24HE	B32HE	S932	732	325U	--	1325WB
	B33HE	S932	732	325U	--	1325WB
	B38HE	S938	738	375U	35S	--
	B42HE	--	--	--	40S	1425WB
33HE	B43HE	--	--	--	40S	1425WB
	B52HE	S952	752	516U	47S	1525WB
43HE	B60HE	S960	760	600U	--	1600WB
	18HE	BM18HE	LF918	RF718	175C	17A
BM21HE		LF912	RF721	206C	20A	1206WBF
BM23HE		LF924	RF724	237C	23A	1238WBF
BM24HE		LF924	RF724	237C	23A	1238WBF
BM26HE		LF926	RF726	262C	26A	1262WBF
BM30HE		LF930	RF730	300C	30A	1230WBF
24HE	BM32HE	LF932	RF732	325C	--	1325WBF
	BM33HE	LF932	RF732	325C	--	1325WBF
	BM38HE	LF938	RF738	375C	35A	--
	BM42HE	--	--	--	40A	1425WBF
33HE	BM43HE	--	--	--	40A	1425WBF
	BM52HE	--	RF752	516C	47A	1525WBF
43HE	BM60HE	--	RF760	600C	--	1600WBF
	18HE	BMQ18HE	F918	F718	175Q	17Q
BMQ21HE		F921	F721	206Q	20Q	1206WBM
BMQ23HE		F924	F724	237Q	23Q	1238WBM
BMQ24HE		F924	F724	237Q	23Q	1238WBM
BMQ26HE		F926	F726	262Q	26Q	1262WBM
BMQ30HE		F930	F730	300Q	30Q	1300WBM
24HE	BMQ32HE	F932	F732	325Q	--	1325WBM
	BMQ33HE	F932	F732	325Q	--	1325WBM
	BMQ38HE	F938	F738	375Q	35Q	--
	BMQ42HE	--	--	--	40Q	1425WBM
33HE	BMQ43HE	--	--	--	40Q	1425WBM
	BMQ52HE	--	F752	516Q	47Q	1525WBM
43HE	BMQ60HE	--	F760	600Q	--	1600WBM
	18HE	H18HE	HS918	H718	175UH	17SH
H21HE		HS912	H721	206UH	20SH	1206WBQ
H23HE		HS924	H724	237UH	23SH	1238WBQ
H24HE		HS924	H724	237UH	23SH	1238WBQ
H26HE		HS926	H726	262UH	26SH	1262WBQ
H30HE		HS930	H730	300UH	30SH	1300WBQ
24HE	H32HE	HS932	H732	325UH	--	1325WBQ
	H33HE	HS932	H732	325UH	--	1325WBQ
	H38HE	HS938	H738	375UH	35SH	--
	H42HE	--	--	--	40SH	1425WBQ
33HE	H43HE	--	--	--	40SH	1425WBQ
	H52HE	--	--	516UH	47SH	1525WBQ
43HE	H60HE	--	--	600UH	--	1600WBQ
	18HE	HM18HE	HLF918	HRF718	175CH	17AH
HM21HE		HLF921	HRF721	206CH	20AH	1206WBQF
HM23HE		HLF924	HRF724	237CH	23AH	1238WBQF
HM24HE		HLF924	HRF724	237CH	23AH	1238WBQF
HM26HE		HLF926	HRF726	262CH	26AH	1262WBQF
HM30HE		HLF930	HRF730	300CH	30AH	1300WBQF
24HE	HM32HE	HLF932	HRF732	325CH	--	1325WBQF
	HM33HE	HLF932	HRF732	325CH	--	1325WBQF
	HM38HE	HLF938	HRF738	375CH	35AH	--
	HM42HE	--	--	--	40AH	1425WBQF
33HE	HM43HE	--	--	--	40AH	1425WBQF
	HM52HE	--	--	516CH	47AH	1525WBQF
43HE	HM60HE	--	--	600CH	--	1600WBQF
	18HE	HMQ18HE	HF918	HF718	175QH	17QH
HMQ21HE		HF921	HF721	206QH	20QH	1206WBQM
HMQ23HE		HF924	HF724	237QH	23QH	1238WBQM
HMQ24HE		HF924	HF724	237QH	23QH	1238WBQM
HMQ26HE		HF926	HF726	262QH	26QH	1262WBQM
HMQ30HE		HF930	HF730	300QH	30QH	1300WBQM
24HE	HMQ32HE	HF932	HF732	325QH	--	1325WBQM
	HMQ33HE	HF932	HF732	325QH	--	1325WBQM
	HMQ38HE	HF938	HF738	375QH	35QH	--
	HMQ42HE	--	--	--	40QH	1425WBQM
33HE	HMQ43HE	--	--	--	40QH	1425WBQM
	HMQ52HE	--	--	516QH	47QH	1525WBQM
43HE	HMQ60HE	--	--	600QH	--	1600WBQM

Bravo® Single Reduction Reducers

Bravo® Worm - Worm Double Reducers

Bravo® Helical - Worm Double Reduction

Bravo® Accessory Kits

Helical - Inline Gear Reducers

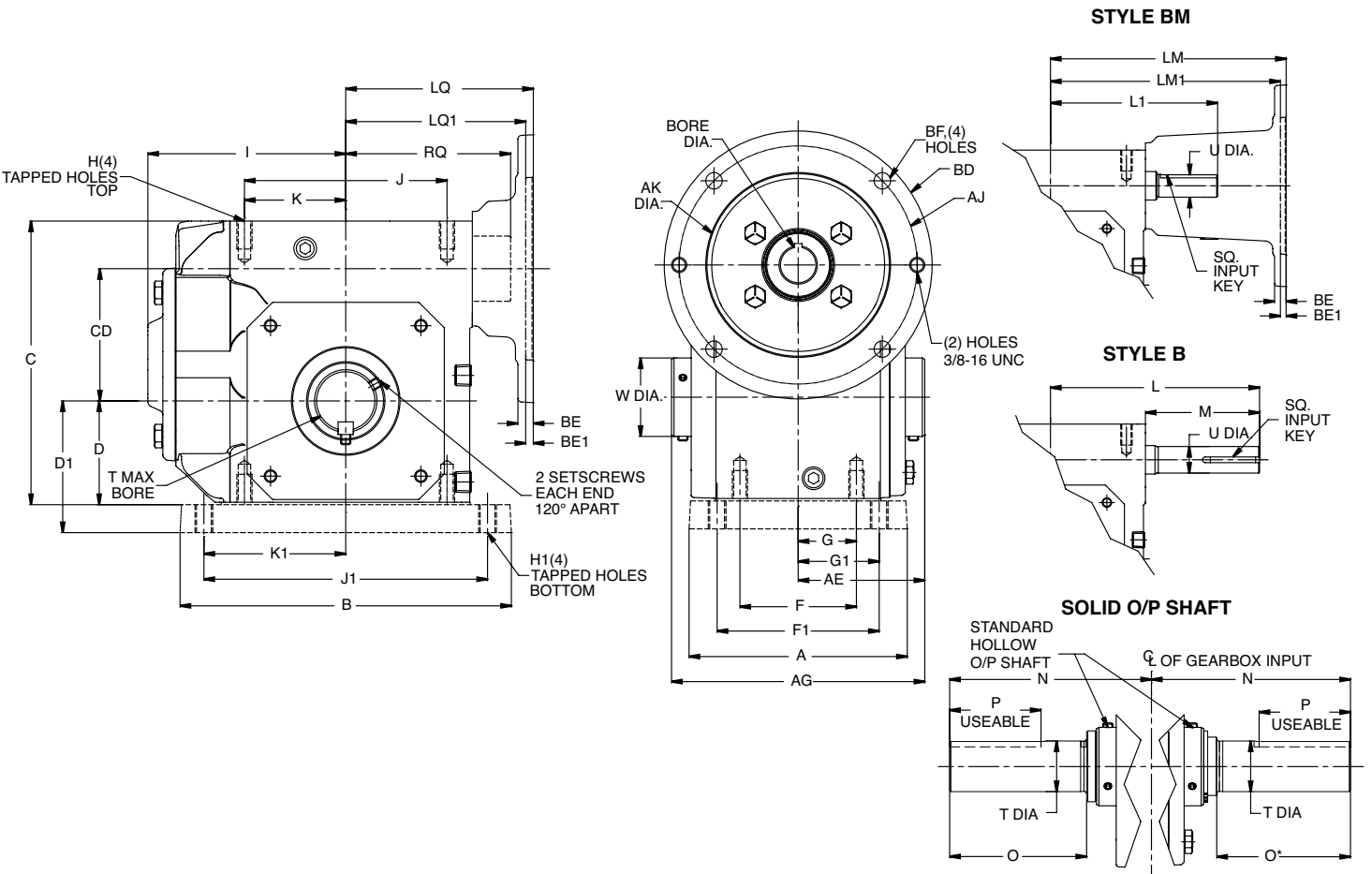
Helical - Worm Gear Reducers

E Series Dimensions

Style HMQ, HM, H • Hollow Output Shaft (Inches)

Reducer Size	A	AE	AG	B	C	CD	D	D1▼	F	F1▼	G	G1▼	H	H1▼	I	J	J1▼	K	K1▼	L	M	T MAX BORE -0.0000 +0.0015
18HE	N/A			N/A				N/A		N/A		N/A		N/A					N/A	4.88	1.44	1.438
	3.85	2.75	5.50	5.84	5.75	2.51	2.06	2.28	2.75	2.88	1.38	1.44	5/16-18	3/8-16	4.25	4.190	5.00	2.09	2.50	5.13	2.13	
	3.87			5.86				2.50		2.88		1.44		3/8-16			5.00		2.50	5.31	2.75	
24HE	4.06	3.13	6.25	6.28	6.94	3.26	2.50	N/A	2.88	N/A	1.44	N/A	3/8-16	N/A	4.88	5.00	N/A	2.50	N/A	5.50	2.00	1.500
	4.43			7.11				2.94		3.38		1.69		3/8-16			6.38		3.19	6.31	2.81	
	5.24			8.11				3.25		4.00		2.00		7/16-14			7.00		3.50	6.88	3.44	
	5.74			8.49				3.50		4.00		2.00		7/16-14			7.50		3.75	7.44	4.00	
33HE	N/A	3.75	7.50	N/A	9.38	3.68	3.50	N/A	4.00	N/A	2.00	N/A	7/16-14	N/A	6.15	7.50	N/A	3.75	N/A	6.75	2.07	2.188
	6.00			10.00				3.88		4.75		2.38		1/2-13			8.50		4.25	8.38	3.70	
	6.12			10.25				4.44		5.00		2.50		5/8-11			8.50		4.25	9.56	4.88	
43HE	N/A	4.75	9.50	N/A	11.38	5.96	4.44	N/A	5.00	N/A	2.50	N/A	5/8-11	N/A	8.36	8.50	N/A	5.00	N/A	7.63	2.07	3.438
	7.20			13.00				5.31		5.81		2.91		5/8-11			11.00		5.50	9.56	4.00	
	8.14			14.50				6.50		6.38		3.19		5/8-11			12.75		6.38	10.69	5.00	

▼ Dimensions refer to "B Base" mounted to Size 18HE, 24HE, 33HE & 43HE reducer.



Style BMQ, BM, B • Solid Output Shaft Model (Inches)

Reducer Size		U -0.0000 +0.0015	W	I/P key Style (B,BM)	O/P key Style (B,BM,BMQ)
18HE	18HE	0.625	1.94	3/16 sq X 1-1/4	3/16 sq X 1-1/8
	21HE			1/4 sq X 1-1/2	
	23HE	0.750		3/16 sq X 1-1/2	1/4 sq X 1-3/4
24HE	24HE	0.750	1.94	3/16 sq. X 1-1/2	1/4 sq X 1-1/2
	26HE				1/4 sq X 1-3/4
	30HE	0.875			1/4 sq X 2-1/4
	32HE				5/16 sq X 2-3/8
33HE	33HE	0.875	2.62	1/4 sq. X 2-1/4	3/8 sq X 2-1/2
	38HE				1/2 sq X 3-1/4
	42HE				1.250
43HE	43HE	0.875	4.25	3/16 sq X 1-1/2	1/2 sq X 2-1/2
	52HE			1/4 sq X 2-1/4	1/2 sq X 3-1/2
	60HE	1.250		1/4 sq X 3	

Reducer Size	N	O	O*	P	T +0.0000 -0.0015
18HE	18HE	4.31	1.38	1.34	1.13
	21HE	4.69	1.76	1.72	1.50
	23HE	5.14	2.21	2.17	1.75
24HE	24HE	5.14	1.77	1.69	1.50
	26HE	5.63	2.25	2.18	2.00
	30HE	6.75	3.38	3.30	2.25
	32HE	7.06	3.69	3.64	2.50
33HE	33HE	7.06	3.06	3.00	2.50
	38HE	7.75	3.75	3.69	2.81
	42HE	8.12	4.12	4.03	3.31
43HE	43HE	8.12	3.06	3.00	2.56
	52HE	9.06	4.00	3.94	3.56
	60HE	10.00	4.94	4.88	3.56

Bravo® Single
Reduction Reducers

Bravo® Worm - Worm
Double Reducers

Bravo® Helical - Worm
Double Reduction

Bravo® Accessory Kits

Helical - Inline
Gear Reducers

Helical - Worm
Gear Reducers

Motor Mounting Dimensions

NEMA Dimensions (Inches)

Reducer Size	L1 All	LM 56/140TC	LM1 180TC/ 210TC	LQ 56/140TC	LQ1 180TC/210TC/ 250TC	RQ 56/140	RQ 180/210/ 250
18HE	18HE	5.32	7.57	N/A	4.44	N/A	3.88
	21HE						
	23HE						
24HE	24HE	5.51	7.76	8.76	4.63	5.06	4.07
	26HE						
	30HE						
	32HE						
33HE	33HE	6.75	9.00	10.00	5.57	6.33	5.01
	38HE						
	42HE						
43HE	43HE	7.63	9.88	10.88	6.45	7.21	5.89
	52HE						
	60HE						

NEMA Dimensions (Inches)

Frame	AJ	AK	BD	BE	BE1	Bore Dia.	Keyway♦	BF
48CZ	3.75	3.00	4.36	0.38	N/A	.500	1/8 X 1/16	0.28
56C	5.88	4.50	6.50	0.38	N/A	.625	3/16 X 3/32	0.41
140TC	5.88	4.50	6.50	0.38	N/A	.875	3/16 X 3/32	0.41
180TC	7.25	8.50	9.00	N/A	0.50	1.125	1/4 X 1/8	0.53
210TC	7.25	8.50	9.00	N/A	0.50	1.375	5/16 X 5/32	0.53
250TC	7.25	8.50	9.00	N/A	0.50	1.625	3/8 X 3/16	0.53

♦ Keyway width by depth