



Start with a 600 Series IRONMAN™ or 500 Series Bravo™ worm gear reducer. Then add one of LEESON's dozens of NEMA C face DC motors to produce a performance-matched GEAR+MOTOR™ package.

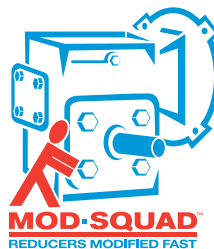
*Bravo™ aluminum-housed gear reducers for specific OEM applications with size and weight targets.*



*IRONMAN BY OHIO GEAR™ cast iron-housed gear reducers for general industrial applications and other heavy-duty uses.*

**Stock Gear+Motors** Listings of off-the-shelf GEAR+MOTORS™ using LEESON DC motors combined with IRONMAN™ general-purpose and WASHGUARD® washdown-duty reducers follow on pages 16 and 17. These ratings have been pre-selected and assembled to provide a variety of torque and output speed combinations that meet many general industrial gearmotor needs. They're ready for immediate shipment, saving you time and expense.

**Modified Stock Gear+Motors** Stock GEAR+MOTORS™ can also be modified using the accessories shown on this page. Modifications may be field assembled from off-the-shelf kits, or factory assembled by the LEESON Gear ModSquad™ on a quick-ship basis. Request Catalog 6050 or check [www.leeson.com](http://www.leeson.com) for more information.



**Custom-Selected Gear+Motors** For specialized needs not covered by pre-selected GEAR+MOTOR™ units, LEESON's Gear ModSquad™ can assemble IRONMAN™ gearmotor packages up to 20 HP. Request Catalog 6050 or check [www.leeson.com](http://www.leeson.com) for more information.

In addition, for OEM applications targeting compact size and light weight, GEAR+MOTORS™ can be assembled using LEESON/Hydro-Mec Bravo™ reducers. These modular, aluminum-housed units weigh up to two-thirds less and are one-third smaller than comparable cast iron designs. Request Catalog 5050 for details.

**ACCESSORIES**



Vertical Mount Kit



Horizontal Base Kit



J Mount Kit



Output Flange Mount Kit



# STOCK FRACTIONAL & INTEGRAL HP GEAR+MOTORS

DC SCR GEARMOTORS • STYLE BMQ  
FOR ADJUSTABLE SPEED SERVICE



## 600 SERIES BMQ STYLE CAST IRON REDUCERS DC SCR MOTOR • TOTALLY ENCLOSED • CONTINUOUS DUTY PERMANENT MAGNET • 20:1 SPEED RANGE WITH FULL WAVE SCR CONTROLS

Output RPM	Output Torque (Lb. In.)	Input HP	Gear Style	Gear+Motor** Catalog Number	Service* Factor	NEMA Frame	Arm Volts DC	Control Volts AC Input	F.L. Amps DC	App. Wgt. (lbs.)	AG Dim. (Inches)
175 10:1 Ratio	102	1/3		W6130075-098004	2.15	SS56C	90	115	3.5	40	9.25
	102	1/3		W6130075-098005	2.15	SS56C	180	230	1.7	39	9.25
	156	1/2		W6130075-098000	1.40	SS56C	90	115	5.0	41	9.75
	156	1/2		W6130075-098008	1.40	SS56C	180	230	2.5	42	9.75
	237	3/4	BMQ	W6180111-098032	1.84	SS56C	90	115	7.3	51	12.25
	237	3/4		W6180111-098069	1.84	SS56C	180	230	3.8	51	11.75
	315	1		W6180111-108022	1.38	S56C	90	115	10.0	64	13.25
	315	1		W6180111-108023	1.38	S56C	180	230	5.0	64	13.25
	478	1 1/2		W6210111-108092	1.40	S56C	180	230	7.6	81	14.75
638	2		W6210147-128010	1.05	145TC	180	230	9.5	108	18.02	
117 15:1 Ratio	143	1/3		W6130076-098004	1.69	SS56C	90	115	3.5	40	9.25
	143	1/3		W6130076-098005	1.69	SS56C	180	230	1.7	39	9.25
	216	1/2		W6130076-098000	1.12	SS56C	90	115	5.0	41	9.75
	216	1/2		W6130076-098008	1.12	SS56C	180	230	2.5	42	9.75
	335	3/4	BMQ	W6180112-098032	1.40	SS56C	90	115	7.3	51	12.25
	335	3/4		W6180112-098069	1.40	SS56C	180	230	3.8	51	11.75
	446	1		W6180112-108022	1.05	S56C	90	115	10.0	64	13.25
	446	1		W6180112-108023	1.05	S56C	180	230	5.0	64	13.25
	685	1 1/2		W6210112-108092	1.06	S56C	180	230	7.6	81	14.75
920	2		W6240184-128010	1.17	145TC	180	230	9.5	124	18.02	
88 20:1 Ratio	177	1/3		W6130077-098004	1.36	SS56C	90	115	3.5	40	9.25
	177	1/3		W6130077-098005	1.36	SS56C	180	230	1.7	39	9.25
	269	1/2		W6180113-098000	1.78	SS56C	90	115	5.0	48	9.75
	269	1/2		W6180113-098008	1.78	SS56C	180	230	2.5	49	9.75
	439	3/4	BMQ	W6180113-098032	1.09	SS56C	90	115	7.3	51	12.25
	439	3/4		W6180113-098069	1.09	SS56C	180	230	3.8	51	11.75
	590	1		W6210113-108022	1.26	S56C	90	115	10.0	70	13.25
	590	1		W6210113-108023	1.26	S56C	180	230	5.0	70	13.25
	888	1 1/2		W6240149-108092	1.24	S56C	180	230	7.6	97	14.75
1202	2		W6260185-128010	1.22	145TC	180	230	9.5	137	18.02	
58 30:1 Ratio	265	1/3		W6180115-098004	1.83	SS56C	90	115	3.5	47	9.25
	265	1/3		W6180115-098005	1.83	SS56C	180	230	1.7	46	9.25
	402	1/2		W6180115-098000	1.21	SS56C	90	115	5.0	48	9.75
	402	1/2	BMQ	W6180115-098008	1.21	SS56C	180	230	2.5	49	9.75
	625	3/4		W6210115-098032	1.20	SS56C	90	115	7.3	57	12.25
	625	3/4		W6210115-098069	1.20	SS56C	180	230	3.8	57	11.75
	842	1		W6240151-108022	1.32	S56C	90	115	10.0	86	13.25
	842	1		W6240151-108023	1.32	S56C	180	230	5.0	86	13.25
	1255	1 1/2		W6260151-108092	1.18	S56C	180	230	7.6	110	14.75
44 40:1 Ratio	325	1/3		W6180116-098004	1.48	SS56C	90	115	3.5	47	9.25
	325	1/3		W6180116-098005	1.48	SS56C	180	230	1.7	46	9.25
	517	1/2		W6210116-098000	1.44	S556C	90	115	5.0	54	9.75
	517	1/2	BMQ	W6210116-098008	1.44	SS56C	180	230	2.5	55	9.75
	778	3/4		W6240152-098032	1.42	SS56C	90	115	7.3	73	12.25
	778	3/4		W6240152-098069	1.42	SS56C	180	230	3.8	73	11.75
	1037	1		W6240152-108022	1.06	S56C	90	115	10.0	86	13.25
	1037	1		W6240152-108023	1.06	S56C	180	230	5.0	86	13.25
	35 50:1 Ratio	386	1/3		W6180117-098004	1.20	SS56C	90	115	3.5	47
386		1/3		W6180117-098005	1.20	SS56C	180	230	1.7	46	9.25
632		1/2		W6210117-098000	1.14	SS56C	90	115	5.0	54	9.75
632		1/2	BMQ	W6210117-098008	1.14	SS56C	180	230	2.5	55	9.75
927		3/4		W6240153-098032	1.15	SS56C	90	115	7.3	73	12.25
927		3/4		W6240153-098069	1.15	SS56C	180	230	3.8	73	11.75
1270		1		W6260153-108022	1.11	S56C	90	115	10.0	99	13.25
1270	1		W6260153-108023	1.11	S56C	180	230	5.0	99	13.25	
29 60: Ratio	454	1/3		W6210118-098004	1.48	SS56C	90	115	3.5	53	9.25
	454	1/3		W6210118-098005	1.48	SS56C	180	230	1.7	52	9.25
	709	1/2	BMQ	W6240154-098000	1.42	SS56C	90	115	5.0	70	9.75
	709	1/2		W6240154-098008	1.42	SS56C	180	230	2.5	71	9.75
	1052	3/4		W6260154-098032	1.28	SS56C	90	115	7.3	86	12.25
1052	3/4		W6260154-098069	1.28	SS56C	180	230	3.8	86	11.75	

For dimensions, see page 18.

# STOCK FRACTIONAL & INTEGRAL HP GEAR+MOTORS



WASHGUARD® DC SCR GEARMOTORS • STYLE WBMQ  
FOR ADJUSTABLE SPEED SERVICE



## 600 SERIES WBMQ STYLE CAST IRON WASHDOWN REDUCERS DC SCR MOTOR • TOTALLY ENCLOSED • CONTINUOUS DUTY • PERMANENT MAGNET 20:1 SPEED RANGE WITH FULL WAVE SCR CONTROLS • 1750 RPM INPUT

Output RPM	Output Torque (Lb. In.)	Input HP	Gear Style	Gear+Motor™ Catalog Number*	Service Factor*	NEMA Frame	Volts DC	Control Volts AC Input	F.L. Amps DC	App. Wgt. (lbs.)	AG Dim. (Inches)
175 10:1 Ratio	102	1/3		W6133003-108424	2.15	S56C	90	115	3.5	43	9.63
	156	1/2		W6133003-108226	1.40	S56C	90	115	4.9	55	11.82
	156	1/2		W6133003-108227	1.40	S56C	180	230	2.4	56	11.82
	237	3/4	BMQ	W6183003-108228	1.84	S56C	90	115	7.0	74	13.82
	237	3/4		W6183003-108229	1.84	S56C	180	230	3.5	74	13.82
	315	1		W6183003-108230	1.38	S56C	90	115	10.0	66	13.75
	315	1		W6183003-108231	1.38	S56C	180	230	5.0	66	12.75
	478	1½		W6213003-108232	1.40	S56C	180	230	7.6	80	14.75
117 15:1 Ratio	143	1/3		W6133004-108424	1.69	S56C	90	115	3.5	43	9.63
	216	1/2		W6133004-108226	1.12	S56C	90	115	4.9	55	11.82
	216	1/2		W6133004-108227	1.12	S56C	180	230	2.4	56	11.82
	335	3/4	BMQ	W6183004-108228	1.40	S56C	90	115	7.0	74	13.82
	335	3/4		W6183004-108229	1.40	S56C	180	230	3.5	74	13.82
	446	1		W6183004-108230	1.05	S56C	90	115	10.0	66	13.75
	446	1		W6183004-108231	1.05	S56C	180	230	5.0	66	12.75
	685	1½		W6213004-108232	1.06	S56C	180	230	7.6	80	14.75
88 20:1 Ratio	177	1/3		W6133005-108424	1.36	S56C	90	115	3.5	43	9.63
	269	1/2		W6183005-108226	1.78	S56C	90	115	4.9	62	11.82
	269	1/2		W6183005-108227	1.78	S56C	180	230	2.4	63	11.82
	439	3/4	BMQ	W6183005-108228	1.09	S56C	90	115	7.0	74	13.82
	439	3/4		W6183005-108229	1.09	S56C	180	230	3.5	74	13.82
	590	1		W6213005-108230	1.26	S56C	90	115	10.0	72	13.75
	590	1		W6213005-108231	1.26	S56C	180	230	5.0	72	12.75
	888	1½		W6243005-108232	1.24	S56C	180	230	7.6	96	14.75
58 30:1 Ratio	265	1/3		W6183007-108424	1.83	S56C	90	115	3.5	50	9.63
	402	1/2		W6183007-108226	1.21	S56C	90	115	4.9	62	11.82
	402	1/2		W6183007-108227	1.21	S56C	180	230	2.4	63	11.82
	625	3/4	BMQ	W6213007-108228	1.20	S56C	90	115	7.0	80	13.82
	625	3/4		W6213007-108229	1.20	S56C	180	230	3.5	80	13.82
	842	1		W6243007-108230	1.32	S56C	90	115	10.0	88	13.75
	842	1		W6243007-108231	1.32	S56C	180	230	5.0	88	12.75
	1255	1½		W6263007-108232	1.18	S56C	180	230	7.6	109	14.75
44 40:1 Ratio	325	1/3		W6183008-108424	1.48	S56C	90	115	3.5	50	9.63
	517	1/2		W6213008-108226	1.44	S56C	90	115	4.9	68	11.82
	517	1/2		W6213008-108227	1.44	S56C	180	230	2.4	67	11.82
	778	3/4	BMQ	W6243008-108228	1.42	S56C	90	115	7.0	96	13.82
	778	3/4		W6243008-108229	1.42	S56C	180	230	3.5	96	13.82
	1037	1		W6243008-108230	1.03	S56C	90	115	10.0	88	13.75
	1037	1		W6243008-108231	1.06	S56C	180	230	5.0	88	12.75

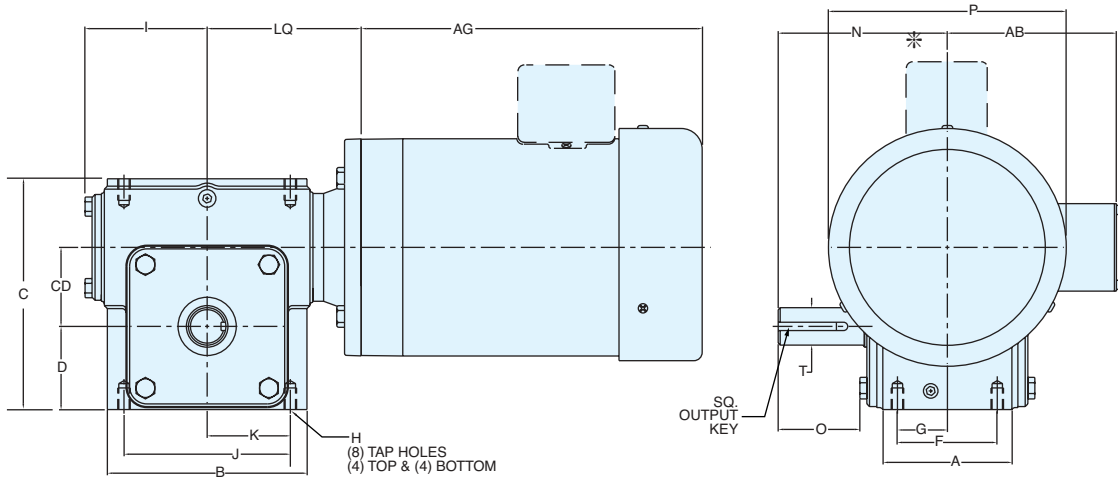
\* Service Factor is based on maximum torque rating of reducer. \*

Gear Reducer Catalog numbers are for left hand output shaft extensions. For right hand output extension, specify MOD GR1. For double output shaft extensions, consult LEESON for price and availability.

For dimensions, see page 18.



# FRACTIONAL & INTEGRAL HP GEAR+MOTORS DIMENSIONS



## BMQ & BM STYLE GEARMOTOR DIMENSIONS (Inches)

Series <sup>‡</sup>	CD	A	B	C	D	F	G	H		I	J	K	LQ		N	O	P	T +0.000 -0.001	Output Key	AB
								Tap Size	Depth				BMQ 56/140TC	BM						
613	1.33	2.75	3.90	4.66	1.72	2.00	1.00	5/16-18 UNC	.50	2.67	3.25	1.63	3.42	6.50	4.00	1.95	6.59	.625	3/16 x 1.50	5.31
618	1.75	3.50	5.00	5.75	2.06	2.75	1.38	5/16-18 UNC	.50	3.17	4.18	2.09	3.99	7.06	4.31	1.88	6.59	.875	3/16 x 1.50	5.31
621	2.06	3.63	5.82	6.38	2.28	2.88	1.44	3/8-16 UNC	.60	3.58	5.00	2.50	4.40	7.47	4.68	2.19	6.59	1.000	1/4 x 1.75	5.31
624	2.38	3.88	6.00	6.94	2.50	2.88	1.44	3/8-16 UNC	.65	3.66	5.00	2.50	4.63	8.13	5.09	2.45	6.59	1.125	1/4 x 2.00	5.31
626	2.63	4.25	7.20	8.00	2.94	3.38	1.69	3/8-16 UNC	.65	4.31	6.38	3.19	5.23	8.73	5.63	2.481	6.59	1.125	1/4 x 2.00	5.31

<sup>‡</sup> Series number is the 3 digits immediately following the W prefix of the Gear+Motor catalog number.

\* Conduit box top-mounted on WASHGUARD® models, side-mounted on general-purpose models.

**AG DIMENSION – See GEAR+MOTORS pages 16 and 17 for AG dimension of individual ratings.**