

Quick shipment is standard on all Grove Gear BRAVO® stock and modified stock gear reducers. A wide range of mounting styles are offered and are listed on the accompanying chart. Start with one of the stock reducer styles shown—add an accessory—and create a new mounting style.

Bravo®
Accessory Kits

**STYLE T, U OR J
HORIZONTAL
BASE**



**MOTORIZED
C FLANGE
QUILL INPUT**



(Style BMQ Shown)

NON-FLANGED



(Style B Shown)

Type	Stock Reducer Style	T Base Worm Over	U Base Worm Under	J Base Vertical Input
Single Reduction Solid Shaft	BMQ	TMQ	UMQ*	JMQ
Single Reduction Hollow Shaft	HMQ	THMQ	UHMQ*	JHMQ
Double Reduction Worm-Worm Solid Shaft	DMQ	DTMQ	DUMQ*	DJMQ
Double Reduction Worm-Worm Hollow Shaft	DHMQ	DTHMQ	DUHMQ*	DJHMQ
Double Reduction Helical-Worm Solid Shaft	DXMQ	DXTMQ	DXUMQ*	DXJMQ
Double Reduction Helical-Worm Hollow Shaft	DXHMQ	DXTHMQ	DXUHMQ*	DXJHMQ
Single Reduction Solid Shaft	B	T	U*	J
Single Reduction Hollow Shaft	H	TH	UH*	JH
Double Reduction Worm-Worm Solid Shaft	D	DT	DU*	DJ
Double Reduction Worm-Worm Hollow Shaft	DH	DTH	DUH*	DJH
Double Reduction Helical-Worm Solid Shaft	DX	DXT	DXU*	DXJ
Double Reduction Helical-Worm Hollow Shaft	DXH	DXTH	DXUH*	DXJH

* Not a recommended mounting style. Consult Factory for selection assistance.

Free Mod-Squad™ Service Or Assemble It Yourself!



STYLE F OUTPUT FLANGE



STYLE FL OUTPUT FLANGE



STYLE R REACTION ARM



F Short Output Flange	FL Long Output Flange	R Reaction Arm Shaft
FMQ	FLMQ	RMQ
FHMQ	FLHMQ	RHMQ
DFMQ	DFLMQ	DRMQ
DFHMQ	DFLHMQ	DRHMQ
DXFMQ	DXFLMQ	DXRMQ
DXFHMQ	DXFLHMQ	DXRHMQ
F	FL	R
FH	FLH	RH
DF	DFL	DR
DFH	DFLH	DRH
DXF	DXFL	DXR
DXFH	DXFLH	DXRH

Any of the modified stock gear reducers shown are available on a quick-shipment basis, factory assembled by the **Grove Gear Mod-Squad™**—at no charge for the labor! Just pay for the accessory item. To order, specify the stock reducer and the Gear Mod-Squad Service Number (see below).

Or **assemble it yourself** by ordering the appropriate stock reducer and accessory kit (see below).

Before ordering, check the dimensional information available in this catalog.

More Grove Gear BRAVO® accessories, options and assembly services are available. See next page.

Bravo®
Accessory Kits

Ordering Information

Style T, U or J - Horizontal Base

Series	Accessory Kit Only Catalog No.	Mod-Squad-Service Number			Weight (lbs)
		Style T	Style U	Style J	
512	G175231	T512	U512	J512	2
518	G175205	T518	U518	J518	2
520	G175206	T520	U520	J520	2
525	G175207	T525	U525	J525	3
534	G175208	T534	U534	J534	5

Style F - Short Output Flange

Series	Accessory Kit Only Catalog No.	Mod-Squad-Service Number Style F	Weight (lbs)
518	G175209	F518	1
520	G175210	F520	1
525	G175211	F525	2
534	G175212	F534	3

Style FL - Long Output Flange

Series	Accessory Kit Only Catalog No.	Mod-Squad-Service Number Style FL	Weight (lbs)
518	G175213	FL518	2
520	G175214	FL520	2
525	G175215	FL525	3
534	G175216	FL534	5

Style R - Reaction Arm

Series	Accessory Kit Only Catalog No.	Mod-Squad-Service Number Style R	Weight (lbs)
518	G175201	R518	1
520	G175202	R520	1
525	G175203	R525	2
534	G175204	R534	3

Refer to page 376 for reaction arm dimensions.

SOLID OUTPUT SHAFT Accessory Kits



SINGLE EXTENSION INCH DIMENSIONS*

Series	Accessory Kit Only Catalog No.	Weight (lbs)
512	CONTACT Factory	
518	G175236	2
520	G175237	3
525	G175521	3
534	G175238	6

SINGLE EXTENSION METRIC DIMENSIONS†

Series	Accessory Kit Only Catalog No.	Weight (lbs)
512	G175240	2
518	G175241	2
520	G175242	3
525	G175243	3
534	G175244	6

DOUBLE EXTENSION INCH DIMENSIONS*

Series	Accessory Kit Only Catalog No.	Weight (lbs)
512	CONTACT Factory	
518	G175221	3
520	G175222	4
525	G175223	4
534	G175224	7

DOUBLE EXTENSION METRIC DIMENSIONS†

Series	Accessory Kit Only Catalog No.	Weight (lbs)
512	G175245	3
518	G175246	3
520	G175247	4
525	G175248	4
534	G175249	7

* Shaft dimensions are in inches. These shafts will only fit into reducers with inch dimensioned output bores.

† Shaft dimensions are in millimeters. These shafts will only fit into reducers with metric dimensioned output bores.

* Shaft dimensions are in inches. These shafts will only fit into reducers with inch dimensioned output bores.

† Shaft dimensions are in millimeters. These shafts will only fit into reducers with metric dimensioned output bores.

Motorized C-Face Quill Input Bushing Kits

NEMA Bushing Kits ◊ - Inches

Frame Conversion	Input Quill Bore Size (Inch)	Accessory Kit Only Catalog No.	Weight (lbs)
180TC to 140TC	1-1/8 to 7/8	G175230	0.5
180TC to 56C	1-1/8 to 5/8	G175229	0.4
140TC to 56C	7/8 to 5/8	G175228	0.4

◊ Bushing reduces the bore size of input quill to accommodate a smaller motor shaft diameter. The application may also require a different input flange size. Bushings are not intended to be used in output bores.

IEC Bushing Kits ◊ - MM

Frame Conversion	Input Quill Bore Size (mm)	Accessory Kit Only Catalog No.	Weight (lbs)
D63 to D56	11 to 9	G175259	0.4
D71 to D63	14 to 11	G175251	0.4
D71 to D56	14 to 9	G175252	0.4
D80 to D71	19 to 14	G175253	0.4
D80 to D63	19 to 11	G175254	0.4
D90 to D80	24 to 19	G175255	0.4
D90 to D71	24 to 14	G175256	0.4
DF100/112 to D90	28 to 24	G175257	0.5
DF100/112 to D80	28 to 19	G175258	0.5

◊ Bushing reduces the bore size of input quill to accommodate a smaller motor shaft diameter. The application may also require a different input flange size. Bushings are not intended to be used in output bores.

Double Reduction Adapter Kits

Series	Accessory Kit Only Catalog No.	Primary Unit Size	Secondary Unit Quill Size	Weight (lbs)
518	G175225	518	0.625	1
520	G175225	518	0.625	1
525	G175226	518	0.875	1
534	G175227	518	1.125	1.5

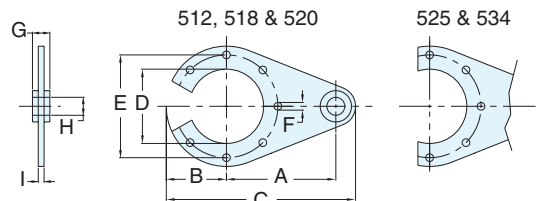
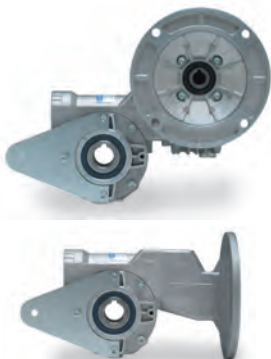
Protection Cap Accessory Kits

Series	Accessory Kit Only Catalog No.	Weight (lbs)
512	G175250	0.3
518	G175217	0.3
520	G175218	0.3
525	G175219	0.4
534	G175220	0.6



This protective cap covers the unused output bore for single extension assemblies. Check OSHA requirements and review installation manual to assure all safety requirements of gear reducer installation are met.

Style R Reaction Arm Dimensions



Style R - Reaction Arm Kits

Series	A	B	C	D	E	F	G	H	I
512	3.94	1.57	6.22	1.97	2.56	0.28	0.16	0.31	0.16
518	3.94	1.77	6.22	1.97	2.56	0.28	0.16	0.31	0.16
520	3.94	2.17	6.81	2.68	3.70	0.28	0.16	0.31	0.16
525	5.91	2.17	9.25	2.95	3.54	0.35	0.79	0.39	0.24
534	7.87	3.15	12.60	4.33	5.12	0.43	0.98	0.79	0.24

Refer to page 375 for accessory kits available.