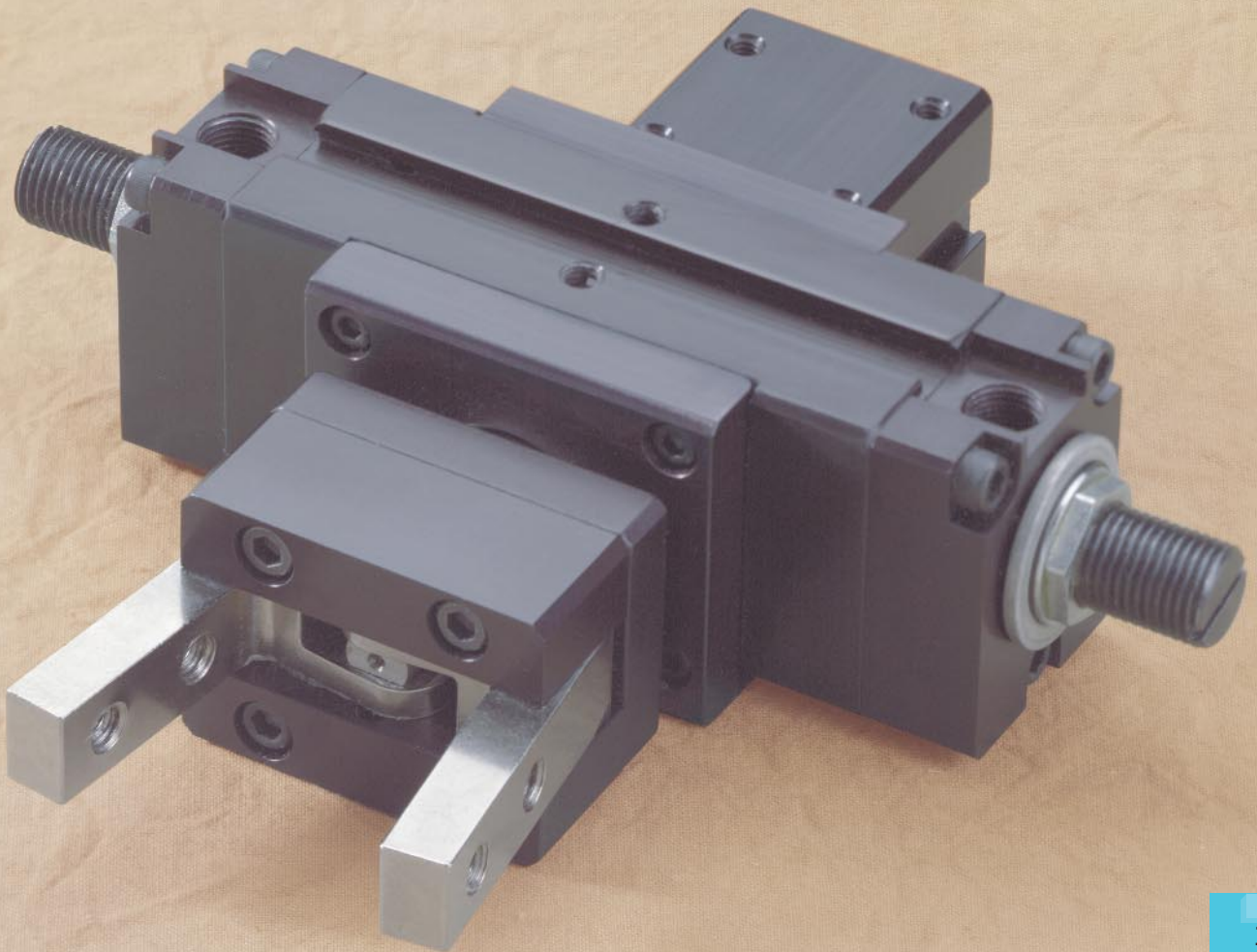
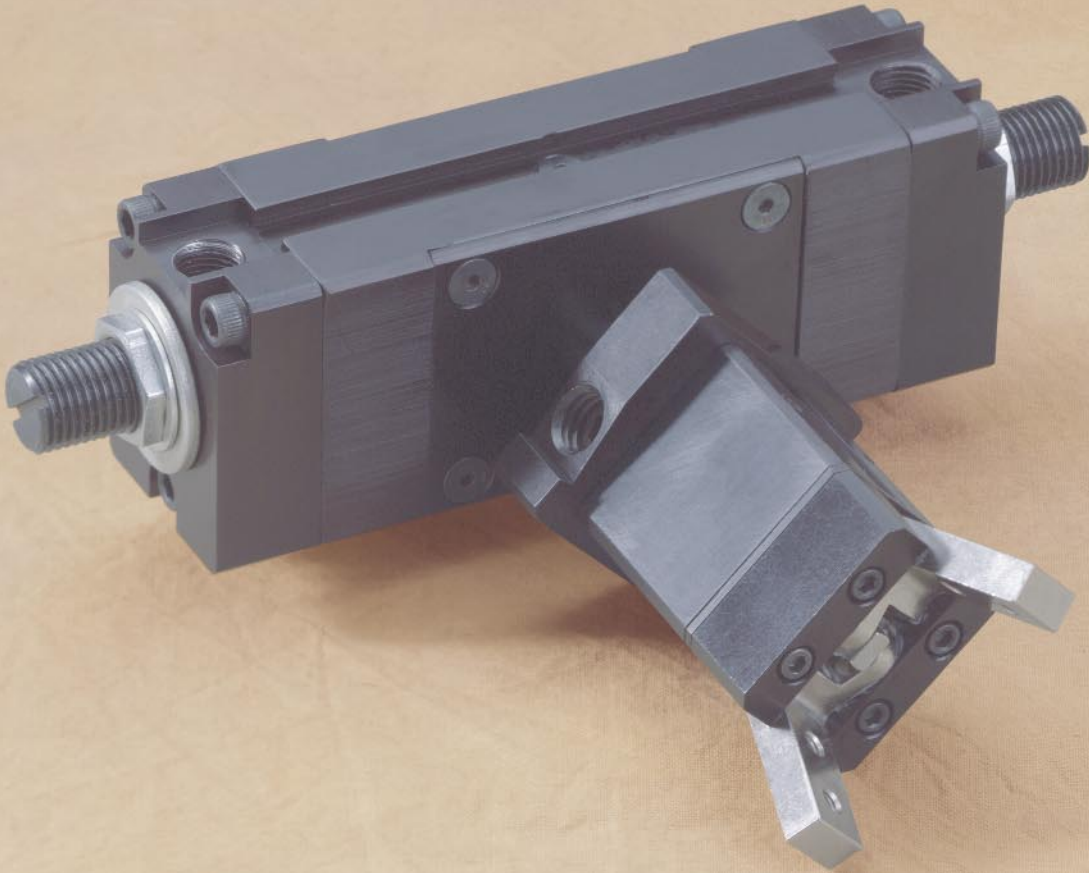


ROTOGRIPPERS



ROTOGRIPPERS

DRIVE-FROM-BEHIND ROTOGRIPPER*

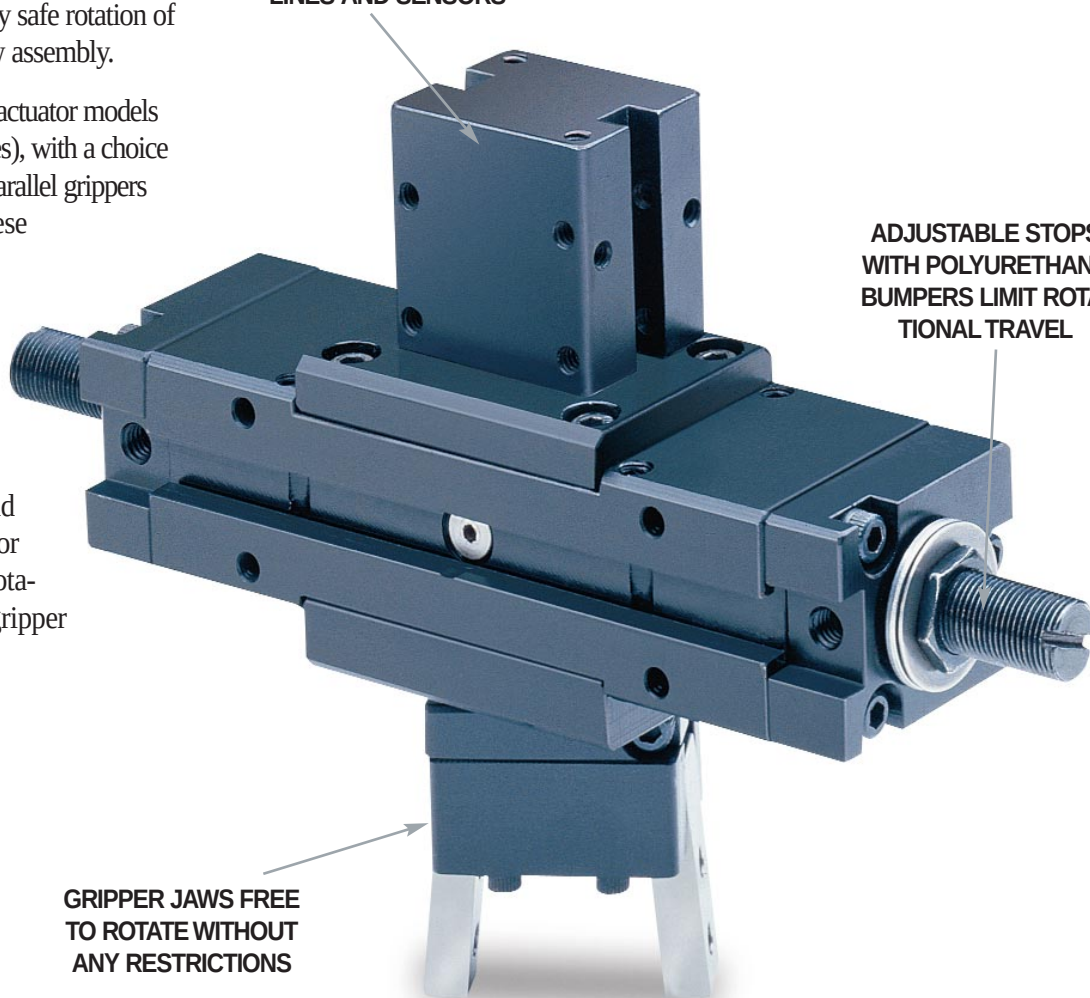
Tol-O-Matic's uniquely designed Drive-From-Behind RotoGripper has a fixed gripper housing allowing air lines and sensors to remain completely stationary for a totally safe rotation of the lower gripper jaw assembly.

Available in 3 rotary actuator models ($\frac{3}{4}$ ", 1", or $1\frac{1}{4}$ " bores), with a choice of either angular or parallel grippers ($\frac{5}{8}$ ", or 1" bores), these preassembled combinations are lightweight, compact and carry a low profile.

Standard adjustable stops on the rack and pinion rotary actuator provide unlimited rotational settings for gripper jaw travel.

FIXED GRIPPER HOUSING
FOR STATIONARY AIR
LINES AND SENSORS

ADJUSTABLE STOPS
WITH POLYURETHANE
BUMPERS LIMIT ROTA-
TIONAL TRAVEL



GRIPPER JAWS FREE
TO ROTATE WITHOUT
ANY RESTRICTIONS

Drive-From-Behind Combinations

The table shown at right lists the possible Drive-From-Behind combinations that are available. Refer to pages 208 and 209 of the ordering section for configuring the appropriate model.

NOTE: Both angular jaw styles of finger (JS1) and flush (JS2) are available in RotoGripper combinations.

*U.S. Patent Number 5,639,136

ROTARY ACTUATOR	GRIPPER
RA075	GPA063
	GPP063
RA100	GPA063
	GPP063
RA100	GPA100
	GPP100
RA125	GPA100
	GPP100

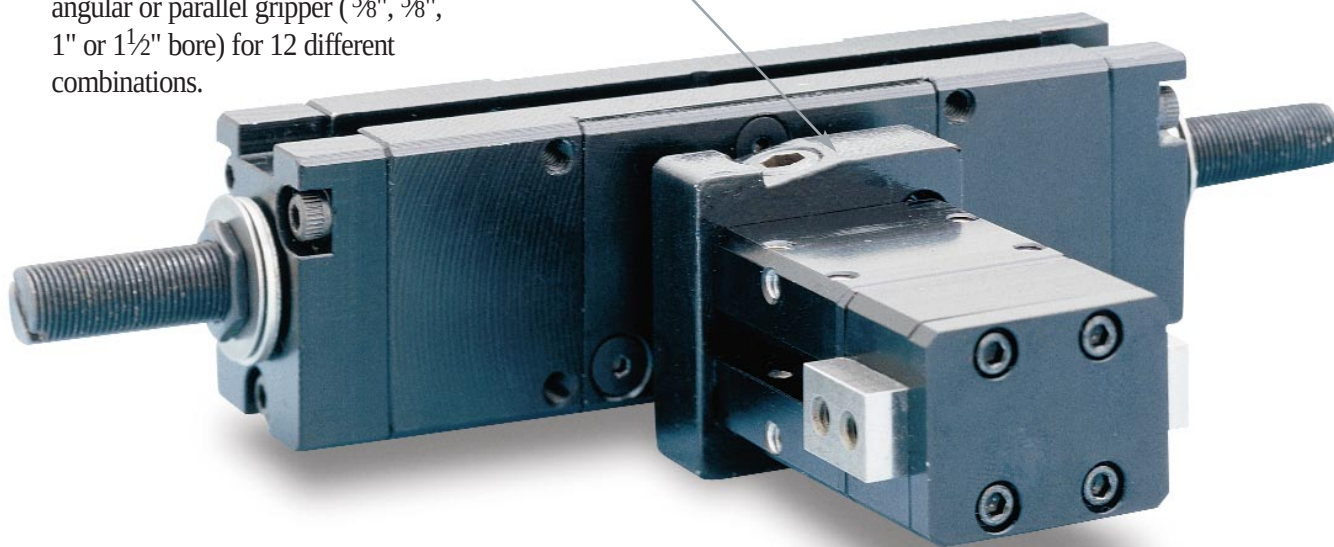
DRIVE-IN-FRONT COMBINATIONS

Drive-In-Front RotoGrippers are an option to Tol-O-Matic's Drive-From-Behind combinations. A simple coupler kit easily combines Tol-O-Matic's standard rack and pinion rotary actuators and grippers for a broader range of size selections.

Three sizes of rotary actuator models ($\frac{3}{4}$ ", 1" or 1 $\frac{1}{4}$ " bores) can be combined with the appropriate size angular or parallel gripper ($\frac{3}{8}$ ", $\frac{5}{8}$ ", 1" or 1 $\frac{1}{2}$ " bore) for 12 different combinations.

Both Drive-From-Behind and Drive-In-Front RotoGripper combinations can be combined with Tol-O-Matic's rod cylinder slides using adapter plates for a variety of multi-axis "pick-and-place" applications.

COUPLER KIT COMBINES STANDARD COMPONENTS



Drive-In-Front Combinations

Drive-In-Front combinations combine Tol-O-Matic standard rack and pinion rotary actuators and grippers together utilizing coupler kits.

The table at right lists the possible rotary actuator and gripper combinations for Drive-In-Front styles. Refer to page 201 for coupling kit specifications, part numbers and ordering procedures.

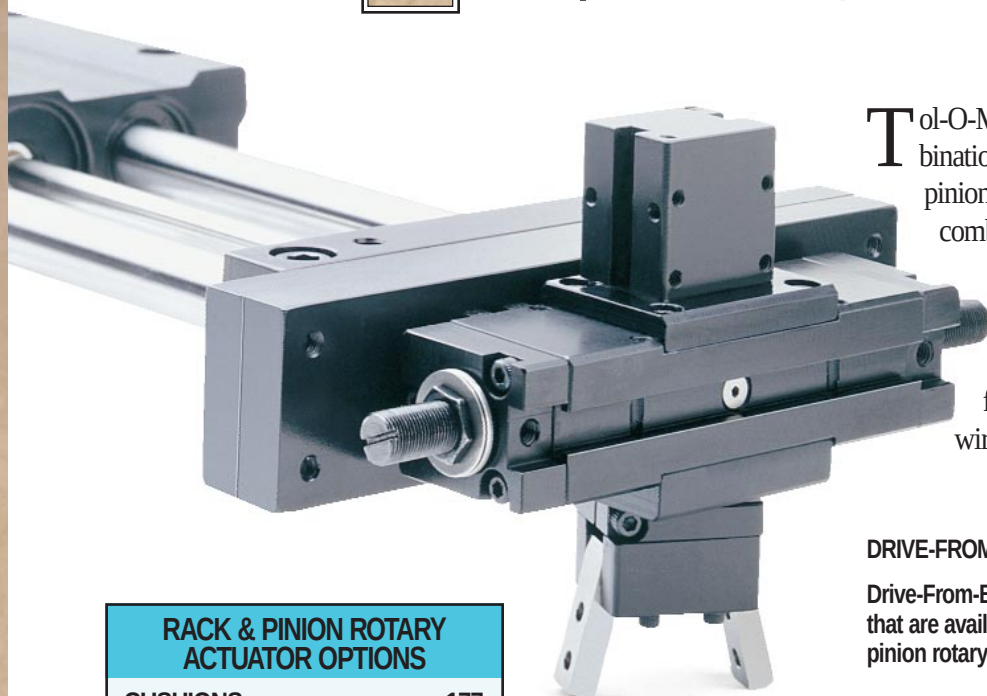
NOTE: Both angular jaw styles of finger (JS1) and flush (JS2) are available in RotoGripper combinations.

GRIPPER OPTIONS	
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RACK & PINION ROTARY ACTUATOR OPTIONS	
CUSHIONS	175
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SWITCHES (HALL-EFFECT) ..	211
APPLICATION GUIDELINES ..	243
ORDERING	176
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ROTARY ACTUATOR	GRIPPER
RA075	GPA038
	GPP038
	GPA063
	GPP063
RA100	GPA063
	GPP063
	GPA100
	GPP100
RA125	GPA100
	GPP100
	GPA150
	GPP150

DRIVE-FROM-BEHIND



Tol-O-Matic drive-from-behind RotoGripper combinations can utilize all three sizes of rack and pinion rotary actuators (3/4", 1" and 1-1/4"), combined with either angular or parallel grippers in 5/8" or 1" bore sizes.

Preassembled, these unique combinations allow the gripper jaws to rotate freely while keeping air lines and sensing wires stationary and out of the rotational path.

DRIVE-FROM-BEHIND OPTIONS:

Drive-From-Behind combinations utilize the same options that are available on all Tol-O-Matic grippers and rack and pinion rotary actuators.

RACK & PINION ROTARY ACTUATOR OPTIONS

CUSHIONS 177
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GRIPPER OPTIONS

SEALS OF VITON® MATERIAL
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ROTARY ACTUATOR / ANGULAR GRIPPER COMBINATIONS

Models Available	Bore (in.)	Base Weights (lbs.)		Rotation
		JS1 Jaw	JS2 Jaw	
RGRA075RO18GPA063	.750	1.00	1.04	180°
RGRA075RO36GPA063	.750	1.11	1.15	360°
RGRA100RO18GPA063	1.00	1.19	1.23	180°
RGRA100RO36GPA063	1.00	1.43	1.47	360°
RGRA100RO18GPA100	1.00	1.65	1.66	180°
RGRA100RO36GPA100	1.00	1.89	1.90	360°
RGRA125RO18GPA100	1.25	2.35	2.36	180°
RGRA125RO36GPA100	1.25	2.81	2.82	360°

ROTARY ACTUATOR / PARALLEL GRIPPER COMBINATIONS

Models Available	Bore	Base Weights (lbs.)	Rotation
RGRA075RO18GPP063	.750	1.04	180°
RGRA075RO36GPP063	.750	1.15	360°
RGRA100RO18GPP063	1.00	1.23	180°
RGRA100RO36GPP063	1.00	1.47	360°
RGRA100RO18GPP100	1.00	1.68	180°
RGRA100RO36GPP100	1.00	1.92	360°
RGRA125RO18GPP100	1.25	2.37	180°
RGRA125RO36GPP100	1.25	2.83	360°

ROTARY ACTUATOR / ANGULAR GRIPPER COMBINATIONS

Models Available	Bore (in.)	Base Weights (kgs.)		Rotation
		JS1 Jaw	JS2 Jaw	
RGRA075RO18GPA063	0.75	0.45	0.47	180°
RGRA075RO36GPA063	0.75	0.50	0.52	360°
RGRA100RO18GPA063	1.00	0.54	0.56	180°
RGRA100RO36GPA063	1.00	0.65	0.67	360°
RGRA100RO18GPA100	1.00	0.75	0.75	180°
RGRA100RO36GPA100	1.00	0.86	0.86	360°
RGRA125RO18GPA100	1.25	1.07	1.07	180°
RGRA125RO36GPA100	1.25	1.27	1.28	360°

ROTARY ACTUATOR / PARALLEL GRIPPER COMBINATIONS

Models Available	Bore (in.)	Base Weights (kgs.)	Rotation
RGRA075RO18GPP063	0.75	0.47	180°
RGRA075RO36GPP063	0.75	0.52	360°
RGRA100RO18GPP063	1.00	0.56	180°
RGRA100RO36GPP063	1.00	0.67	360°
RGRA100RO18GPP100	1.00	0.76	180°
RGRA100RO36GPP100	1.00	0.87	360°
RGRA125RO18GPP100	1.25	1.08	180°
RGRA125RO36GPP100	1.25	1.28	360°

DRIVE-IN-FRONT



Coupler Kits are available to easily combine Tol-O-Matic's rack and pinion rotary actuators with parallel or angular grippers for Drive-In-Front RotoGripper combinations..

Coupler Kits can be utilized two ways. Combined with a rotary actuator and appropriate gripper or attached to a fixed external member allowing the rotary actuator to rotate freely.

To order the appropriate coupler kit, first configure the rotary actuator

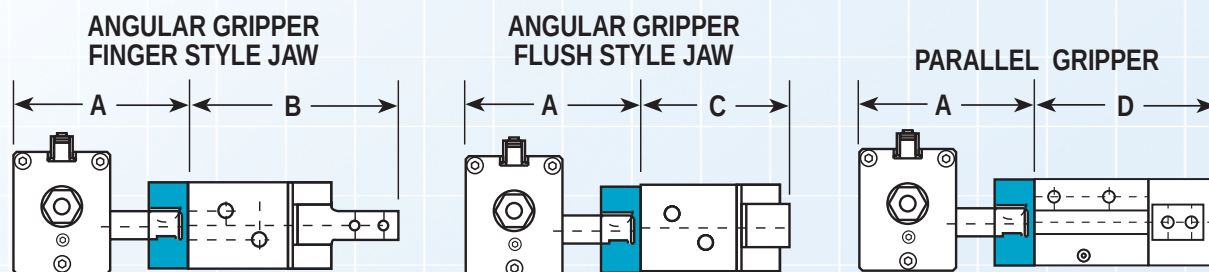
model, then configure the gripper model. Select the corresponding Coupler Kit from the chart shown below.

If selected combination is not listed, please consult factory.

OPTIONS:

Drive-In-Front combinations utilize the same optional features available for grippers and rack and pinion rotary actuators.

DIMENSIONAL DATA



OVERALL DIMENSIONS (INCHES)					
Combination		A	B	C	D
Rotary Actuator	Gripper	Rotary Act. & Coupler	Angular Gripper Finger Jaw	Angular Gripper Flush Jaw	Parallel Gripper
RA075	GPA/GPP038	1.764	1.803	1.313	1.351
RA075	GPA/GPP063	1.764	2.516	1.909	1.959
RA100	GPA/GPP063	2.270	2.516	1.909	1.959
RA100	GPA/GPP100	2.270	3.552	2.539	2.627
RA125	GPA/GPP100	2.791	3.552	2.539	2.627
RA125	GPA/GPP150	2.791	NA	3.215	3.463

OVERALL DIMENSIONS (MILLIMETERS)					
Combination		A	B	C	D
Rotary Actuator	Gripper	Rotary Act. & Coupler	Angular Gripper Finger Jaw	Angular Gripper Flush Jaw	Parallel Gripper
RA075	GPA/GPP038	44.81	45.80	33.35	34.32
RA075	GPA/GPP063	44.81	63.91	48.49	49.76
RA100	GPA/GPP063	57.66	63.91	48.49	49.76
RA100	GPA/GPP100	57.66	90.22	64.49	66.73
RA125	GPA/GPP100	70.89	90.22	64.49	66.73
RA125	GPA/GPP150	70.89	NA	81.66	87.96

OVERALL UNIT SPECIFICATIONS				
Coupler Kit* No.	Couples		Coupler Kit Weight (lbs.)	Coupler Kit Weight (kgs.)
	Rotary Actuator	To Gripper		
6000-9751	RA075	GPA/GPP038	0.20	0.09
6000-9744	RA075	GPA/GPP063	0.30	0.14
6000-9742	RA100	GPA/GPP063	0.30	0.14
6000-9740	RA100	GPA/GPP100	0.30	0.14
6000-9743	RA125	GPA/GPP100	0.50	0.23
6000-9741	RA125	GPA/GPP150	0.50	0.23

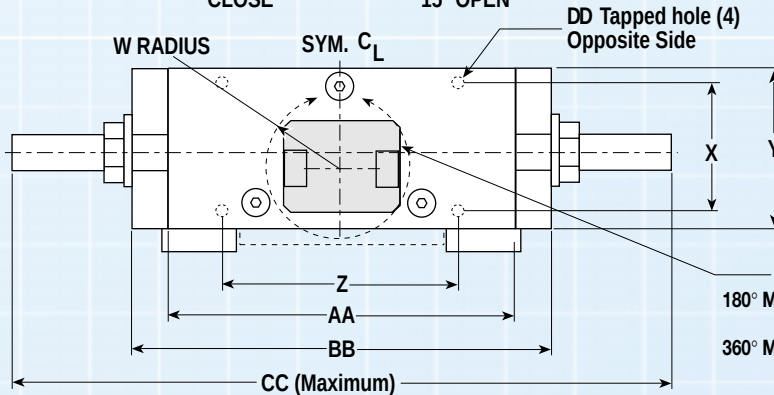
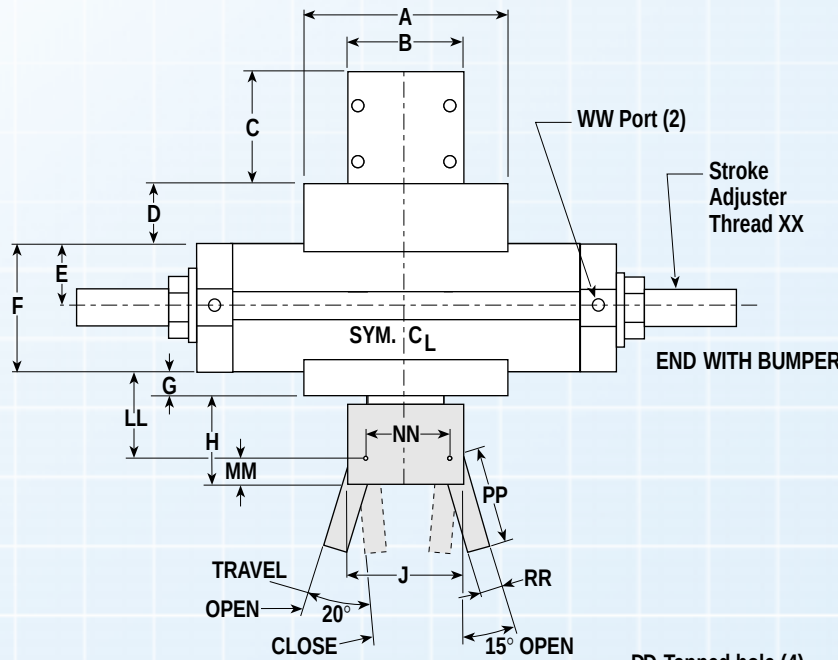
*Coupler Kits come complete with fasteners, customized mounting plate and key.

DRIVE-FROM-BEHIND

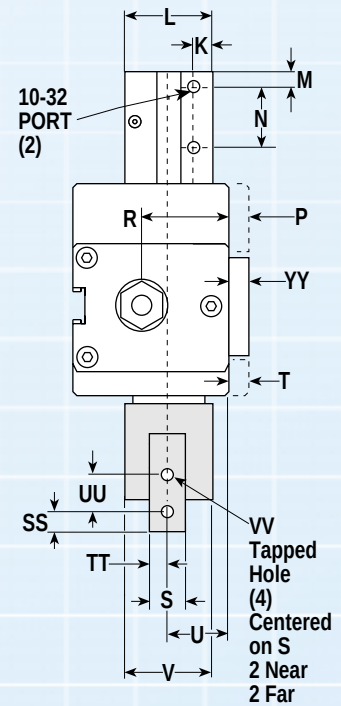
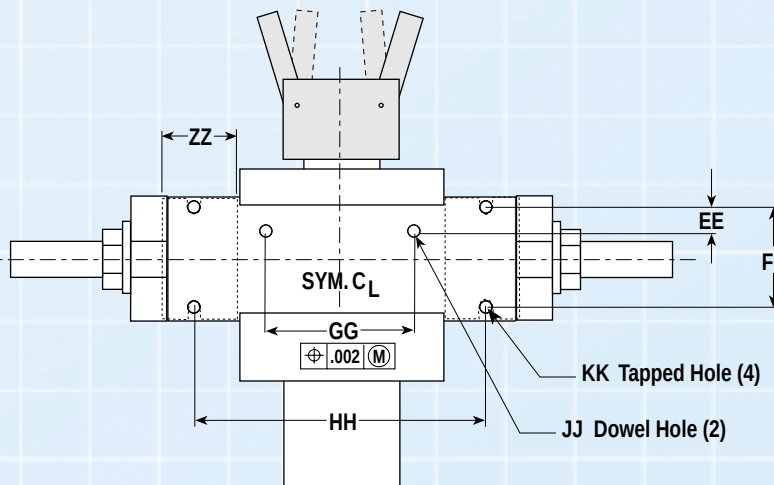
RG.EXE
RA07GP06.DWG
RA07GP06.DXF
RA10GP06.DWG
RA10GP06.DXF

DIMENSIONAL DATA

RG.EXE
RA10GP10.DWG
RA10GP10.DXF
RA12GP10.DWG
RA12GP10.DXF



NOTE: Gripper unit is shown in center position.
180° MODEL: will rotate 90° CW and 90° CCW from position shown.
360° MODEL: will rotate 180° CW and 180° CCW from position shown.



JS1 (ANGULAR, FINGER STYLE)

MODEL	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	V	W	X	Y	Z
RGRA075RO18GPA063 RGRA075RO36GPA063	1.844	1.200	1.174	0.234	0.531	1.062	0.265	0.922	1.200	0.203	0.935	0.200	0.585	NA	0.688	0.375	0.094	0.525	0.935	0.77	1.063	1.344	2.094
RGRA100RO18GPA063 RGRA100RO36GPA063	2.125	1.200	1.174	0.625	0.656	1.313	0.265	0.922	1.200	0.203	0.935	0.200	0.585	NA	0.875	0.375	NA	0.625	0.935	0.77	1.313	1.625	2.438
RGRA100RO18GPA100 RGRA100RO36GPA100	2.125	1.375	1.500	0.250	0.656	1.313	0.312	1.156	1.875	0.250	1.375	0.250	0.750	0.125	0.875	0.500	0.125	0.625	1.375	1.14	1.313	1.625	2.438
RGRA125RO18GPA100 RGRA125RO36GPA100	2.250	1.375	1.500	0.594	0.781	1.563	0.312	1.156	1.875	0.250	1.375	0.250	0.750	0.047	0.989	0.500	0.094	0.656	1.375	1.14	1.563	1.906	2.625

MODEL	AA	BB	CC*	DD	EE	FF	GG	HH	JJ	KK	LL	MM	NN	PP	RR	SS	TT	UU	VV	WW	XX	YY	ZZ
RGRA075RO18GPA063 RGRA075RO36GPA063	2.750 3.771	3.625 4.646	4.91 5.93	8-32 x .31	0.19	0.750	1.250	2.500	0.125 .1240x22	8-32 x .31	0.906	0.281	0.885	1.000	0.219	0.213	0.187	0.375	6-32	10-32	3/8-32	0.188	0.62
RGRA100RO18GPA063 RGRA100RO36GPA063	3.375 4.946	4.563 6.134	6.24 7.81	10-24 x .38	0.25	1.000	1.500	3.000	0.125 .1240x22	10-24 x .38	0.906	0.281	0.885	1.000	0.219	0.213	0.187	0.375	6-32	1/8-27	1/2-20	0.188	1.00
RGRA100RO18GPA100 RGRA100RO36GPA100	3.375 4.946	4.563 6.134	6.24 7.81	10-24 x .38	0.25	1.000	1.500	3.000	0.125 .1240x22	10-24 x .38	1.046	0.424	1.416	1.600	0.330	0.312	0.250	0.625	10-24	1/8-27	1/2-20	0.188	1.00
RGRA125RO18GPA100 RGRA125RO36GPA100	4.125 6.219	5.313 7.406	6.99 9.08	10-24 x .38	0.36	1.219	1.750	3.188	0.125 .1240x22	10-24 x .38	1.046	0.424	1.416	1.600	0.330	0.312	0.250	0.625	10-24	1/8-27	1/2-20	0.188	0.92

*CC is adjustable. Dimension is maximum value

Dimensions in inches

MODEL	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	V	W	X	Y	Z
RGRA075RO18GPA063 RGRA075RO36GPA063	46.84	30.48	29.82	5.94	13.49	26.97	6.73	23.42	30.48	5.16	23.75	5.08	14.86	NA	17.48	9.53	2.39	13.34	23.75	19.6	27.00	34.14	53.19
RGRA100RO18GPA063 RGRA100RO36GPA063	53.98	30.48	29.82	15.88	16.66	33.35	6.73	23.42	30.48	5.16	23.75	5.08	14.86	NA	22.23	9.53	NA	15.88	23.75	19.6	33.35	41.28	61.93
RGRA100RO18GPA100 RGRA100RO36GPA100	53.98	34.93	38.10	6.35	16.66	33.35	7.92	29.36	47.63	6.35	34.93	6.35	19.05	3.18	22.23	12.70	3.18	15.88	34.93	29.0	33.35	41.28	61.93
RGRA125RO18GPA100 RGRA125RO36GPA100	57.15	34.93	38.10	15.09	19.84	39.70	7.92	29.36	47.63	6.35	34.93	6.35	19.05	1.19	25.12	12.70	2.39	16.66	34.93	29.0	39.70	48.41	66.68

MODEL	AA	BB	CC*	DD	EE	FF	GG	HH	JJ	KK	LL	MM	NN	PP	RR	SS	TT	UU	VV	WW	XX	YY	ZZ
RGRA075RO18GPA063 RGRA075RO36GPA063	69.85 95.78	92.08 118.01	124.71 150.62	8-32 x .31	4.7	19.05	31.75	63.50	0.13 .1240x22	8-32 x .31	23.01	7.14	22.48	25.40	5.56	5.41	4.75	9.53	6-32	10-32	3/8-32	4.78	15.7
RGRA100RO18GPA063 RGRA100RO36GPA063	85.73 125.63	115.90 155.80	158.50 198.37	10-24 x .38	6.4	25.40	38.10	76.20	0.13 .1240x22	10-24 x .38	23.01	7.14	22.48	25.40	5.56	5.41	4.75	9.53	6-32	1/8-27	1/2-20	4.78	25.4
RGRA100RO18GPA100 RGRA100RO36GPA100	85.73 125.63	115.90 155.80	158.50 198.37	10-24 x .38	6.4	25.40	38.10	76.20	0.13 .1240x22	10-24 x .38	26.57	10.77	35.97	40.64	8.38	7.92	6.35	15.88	10-24	1/8-27	1/2-20	4.78	25.4
RGRA125RO18GPA100 RGRA125RO36GPA100	104.78 157.96	134.95 188.11	177.55 230.63	10-24 x .38	9.1	30.96	44.45	80.98	0.13 .1240x22	10-24 x .38	26.57	10.77	35.97	40.64	8.38	7.92	6.35	15.88	10-24	1/8-27	1/2-20	4.78	23.4

*CC is adjustable. Dimension is maximum value

Dimensions in millimeters

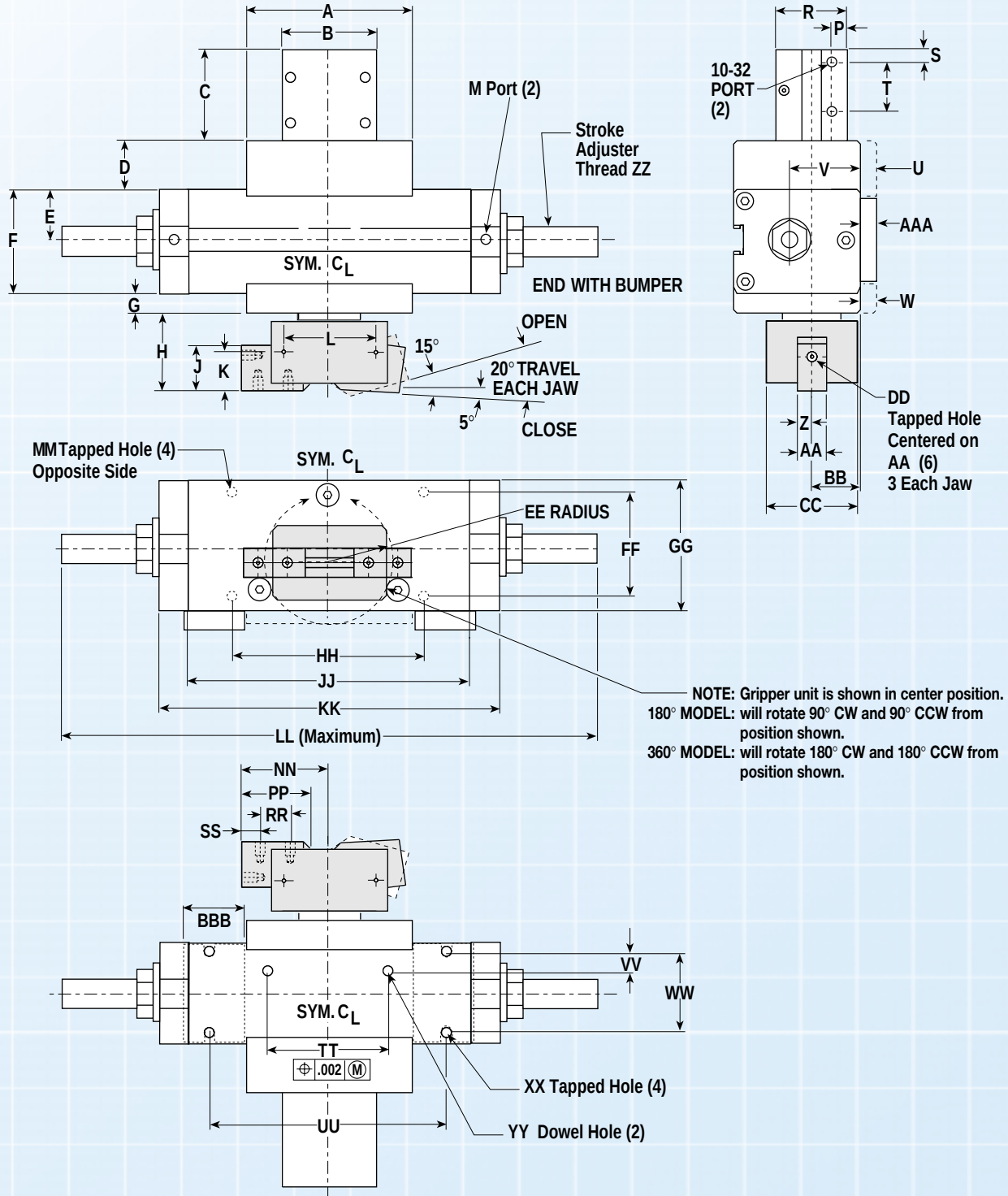
For Assistance Call
1-800-328-2174
(Toll Free U.S. and Canada)
or
763-478-8000
Fax 763-478-8080

DRIVE-FROM-BEHIND

RG.EXE
RA07GP06.DWG
RA07GP06.DXF
RA10GP06.DWG
RA10GP06.DXF

DIMENSIONAL DATA

RG.EXE
RA10GP10.DWG
RA10GP10.DXF
RA12GP10.DWG
RA12GP10.DXF



JS2 (ANGULAR, FLUSH STYLE)

MODEL	A	B	C	D	E	F	G	H	J	K	L	M	P	R	S	T	U	V	W	Z	AA	BB	CC
RGRA075RO18GPA063 RGRA075RO36GPA063	1.844	1.200	1.174	0.234	0.531	1.062	0.265	0.922	0.594	0.437	0.885	10-32	0.203	0.935	0.200	0.585	NA	0.688	0.094	0.187	0.375	0.525	0.935
RGRA100RO18GPA063 RGRA100RO36GPA063	2.125	1.200	1.174	0.625	0.656	1.313	0.265	0.922	0.594	0.437	0.885	1/8-27	0.203	0.935	0.200	0.585	NA	0.875	NA	0.187	0.375	0.625	0.935
RGRA100RO18GPA100 RGRA100RO36GPA100	2.125	1.375	1.500	0.250	0.656	1.313	0.312	1.156	0.812	0.625	1.416	1/8-27	0.250	1.375	0.250	0.750	0.125	0.875	0.125	0.250	0.500	0.625	1.375
RGRA125RO18GPA100 RGRA125RO36GPA100	2.250	1.375	1.500	0.594	0.781	1.563	0.312	1.156	0.812	0.625	1.416	1/8-27	0.250	1.375	0.250	0.750	0.047	0.989	0.094	0.250	0.500	0.656	1.375

MODEL	DD	EE	FF	GG	HH	JJ	KK	*LL	MM	NN	PP	RR	SS	TT	UU	VV	WW	XX	YY	ZZ	AAA	BBB
RGRA075RO18GPA063 RGRA075RO18GPA063	6-32	0.77	1.063	1.344	2.094	2.750 3.771	3.625 4.646	4.91 5.93	8-32 x .31	0.396	0.751	0.375	0.188	1.250	2.500	0.187	0.750	8-32 x .31	0.125 .1240x.22	3/8-32	0.188	0.62
RGRA100RO18GPA063 RGRA100RO36GPA063	6-32	0.77	1.313	1.625	2.438	3.375 4.946	4.563 6.134	6.24 7.81	10-24 x .38	0.396	0.751	0.375	0.188	1.500	3.000	0.250	1.000	10-24 x .38	0.125 .1240x.22	1/2-20	0.188	1.00
RGRA100RO18GPA100 RGRA100RO36GPA100	10-24	1.14	1.313	1.625	2.438	3.375 4.946	4.563 6.134	6.24 7.81	10-24 x .38	1.250	0.875	0.500	0.187	1.500	3.000	0.250	1.000	10-24 x .38	0.125 .1240x.22	1/2-20	0.188	1.00
RGRA125RO18GPA100 RGRA125RO36GPA100	10-24	1.14	1.563	1.906	2.625	4.125 6.219	5.313 7.406	6.99 9.08	10-24 x .38	1.250	0.875	0.500	0.187	1.750	3.188	0.359	1.219	10-24 x .38	0.125 .1240x.22	1/2-20	0.188	0.92

*LL is adjustable. Dimension is maximum value

Dimensions in inches

MODEL	A	B	C	D	E	F	G	H	J	K	L	M	P	R	S	T	U	V	W	Z	AA	BB	CC
RGRA075RO18GPA063 RGRA075RO36GPA063	46.84	30.48	29.82	5.94	13.49	26.97	6.73	23.42	15.09	11.10	22.48	10-32	5.16	23.75	5.08	14.86	NA	17.48	2.39	4.75	9.53	13.34	23.75
RGRA100RO18GPA063 RGRA100RO36GPA063	53.98	30.48	29.82	15.88	16.66	33.35	6.73	23.42	15.09	11.10	22.48	1/8-27	5.16	23.75	5.08	14.86	NA	22.23	NA	4.75	9.53	15.88	23.75
RGRA100RO18GPA100 RGRA100RO36GPA100	53.98	34.93	38.10	6.35	16.66	33.35	7.92	29.36	20.62	15.88	35.97	1/8-27	6.35	34.93	6.35	19.05	3.18	22.23	3.18	6.35	12.70	15.88	34.93
RGRA125RO18GPA100 RGRA125RO36GPA100	57.15	34.93	38.10	15.09	19.84	39.70	7.92	29.36	20.62	15.88	35.97	1/8-27	6.35	34.93	6.35	19.05	1.19	25.12	2.39	6.35	12.70	16.66	34.93

MODEL	DD	EE	FF	GG	HH	JJ	KK	*LL	MM	NN	PP	RR	SS	TT	UU	VV	WW	XX	YY	ZZ	AAA	BBB
RGRA075RO18GPA063 RGRA075RO18GPA063	6-32	19.6	27.00	34.14	53.19	69.85 95.78	92.08 118.01	124.71 150.62	8-32 x .31	10.06	19.08	9.53	4.78	31.75	63.50	4.75	19.05	8-32 x .31	0.125 .1240x.22	3/8-32	4.78	15.7
RGRA100RO18GPA063 RGRA100RO36GPA063	6-32	19.6	33.35	41.28	61.93	85.73 125.63	115.90 155.80	158.50 198.37	10-24 x .38	10.06	19.08	9.53	4.78	38.10	76.20	6.35	25.40	10-24 x .38	0.125 .1240x.22	1/2-20	4.78	25.4
RGRA100RO18GPA100 RGRA100RO36GPA100	10-24	29.0	33.35	41.28	61.93	85.73 125.63	115.90 155.80	158.50 198.37	10-24 x .38	31.75	22.23	12.70	4.75	38.10	76.20	6.35	25.40	10-24 x .38	0.125 .1240x.22	1/2-20	4.78	25.4
RGRA125RO18GPA100 RGRA125RO36GPA100	10-24	29.0	39.70	48.41	66.68	104.78 157.96	134.95 188.11	177.55 230.63	10-24 x .38	31.75	22.23	12.70	4.75	44.45	80.98	9.12	30.96	10-24 x .38	0.125 .1240x.22	1/2-20	4.78	23.4

*LL is adjustable. Dimension is maximum value

Dimensions in millimeters

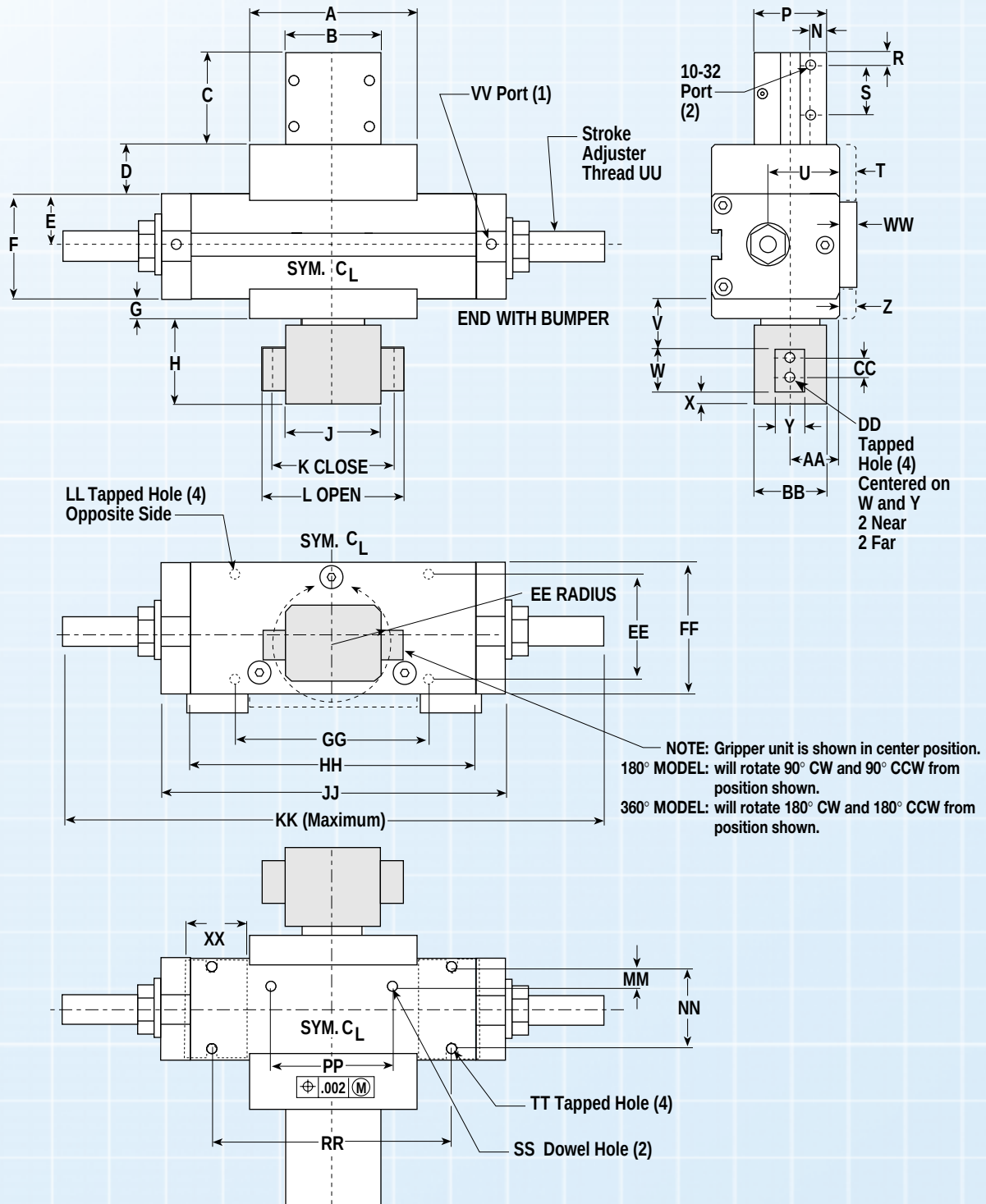
For Assistance Call
1-800-328-2174
(Toll Free U.S. and Canada)
or
763-478-8000
Fax 763-478-8080

DRIVE-FROM-BEHIND

RG.EXE
RA07GP06.DWG
RA07GP06.DXF
RA10GP06.DWG
RA10GP06.DXF

DIMENSIONAL DATA

RG.EXE
RA10GP10.DWG
RA10GP10.DXF
RA12GP10.DWG
RA12GP10.DXF



JS3 (PARALLEL)

MODEL	A	B	C	D	E	F	G	H	J	K	L	N	P	R	S	T	U	V	W	X	Y	Z
RGRA075RO18GPP063 RGRA075RO36GPP063	1.844	1.200	1.174	0.234	0.531	1.062	0.265	1.084	1.200	1.54	1.79	0.203	0.935	0.200	0.585	NA	0.688	0.625	0.563	0.162	0.375	0.094
RGRA100RO18GPP063 RGRA100RO36GPP063	2.125	1.200	1.174	0.625	0.656	1.313	0.265	1.084	1.200	1.54	1.79	0.203	0.935	0.200	0.585	NA	0.875	0.625	0.563	0.162	0.375	NA
RGRA100RO18GPP100 RGRA100RO36GPP100	2.125	1.375	1.500	0.250	0.656	1.313	0.312	1.406	1.875	1.98	2.38	0.250	1.375	0.250	0.750	0.125	0.875	0.719	0.750	0.250	0.500	0.125
RGRA125RO18GPP100 RGRA125RO36GPP100	2.250	1.375	1.500	0.594	0.781	1.563	0.312	1.406	1.875	1.98	2.38	0.250	1.375	0.250	0.750	0.047	0.989	0.719	0.750	0.250	0.500	0.094

MODEL	AA	BB	CC	DD	EE	FF	GG	HH	JJ	*KK	LL	MM	NN	PP	RR	SS	TT	UU	VV	WW	XX
RGRA075RO18GPP063 RGRA075RO36GPP063	0.525	0.935	0.250	6-32 x .19	1.063	1.344	2.094	2.750 3.771	3.625 4.646	4.910 5.930	8-32 x .31	0.187	0.750	1.250	2.500	0.125 .1240 x .22	8-32 x .31	3/8-32	8-32	0.188	0.62
RGRA100RO18GPP063 RGRA100RO36GPP063	0.625	0.935	0.250	6-32 x .19	1.313	1.625	2.438	3.375 4.946	4.563 6.134	6.240 7.810	10-24 x .38	0.250	1.000	1.500	3.000	0.125 .1240 x .22	10-24 x .38	1/2-20	1/8-27	0.188	1.00
RGRA100RO18GPP100 RGRA100RO36GPP100	0.625	1.375	0.375	8-32 x .23	1.313	1.625	2.438	3.375 4.946	4.563 6.134	6.240 7.810	10-24 x .38	0.250	1.000	1.500	3.000	0.125 .1240 x .22	10-24 x .38	1/2-20	1/8-27	0.188	1.00
RGRA125RO18GPP100 RGRA125RO36GPP100	0.656	1.375	0.375	8-32 x .23	1.563	1.906	2.625	4.125 6.219	5.313 7.406	6.990 9.080	10-24 x .38	0.359	1.219	1.750	3.188	0.125 .1240 x .22	10-24 x .38	1/2-20	1/8-27	0.188	0.92

*KK is adjustable. Dimension is maximum value

Dimensions in inches

MODEL	A	B	C	D	E	F	G	H	J	K	L	N	P	R	S	T	U	V	W	X	Y	Z
RGRA075RO18GPP063 RGRA075RO36GPP063	46.84	30.48	29.82	5.94	13.49	26.97	6.73	27.53	30.48	39.1	45.5	5.16	23.75	5.08	14.86	NA	17.48	15.88	14.30	4.11	9.53	2.39
RGRA100RO18GPP063 RGRA100RO36GPP063	53.98	30.48	29.82	15.88	16.66	33.35	6.73	27.53	30.48	39.1	45.5	5.16	23.75	5.08	14.86	NA	22.23	15.88	14.30	4.11	9.53	NA
RGRA100RO18GPP100 RGRA100RO36GPP100	53.98	34.93	38.10	6.35	16.66	33.35	7.92	35.71	47.63	50.3	60.5	6.35	34.93	6.35	19.05	3.18	22.23	18.26	19.05	6.35	12.70	3.18
RGRA125RO18GPP100 RGRA125RO36GPP100	57.15	34.93	38.10	15.09	19.84	39.70	7.92	35.71	47.63	50.3	60.5	6.35	34.93	6.35	19.05	1.19	25.12	18.26	19.05	6.35	12.70	2.39

MODEL	AA	BB	CC	DD	EE	FF	GG	HH	JJ	*KK	LL	MM	NN	PP	RR	SS	TT	UU	VV	WW	XX
RGRA075RO18GPP063 RGRA075RO36GPP063	13.34	23.75	6.35	6-32 x .19	27.00	34.14	53.19	69.85 95.78	92.08 118.01	124.71 150.62	8-32 x .31	4.75	19.05	31.75	63.50	0.125 .1240 x .22	8-32 x .31	3/8-32	8-32	4.78	15.7
RGRA100RO18GPP063 RGRA100RO36GPP063	15.88	23.75	6.35	6-32 x .19	33.35	41.28	61.93	85.73 125.63	115.90 155.80	158.50 198.37	10-24 x .38	6.35	25.40	38.10	76.20	0.125 .1240 x .22	10-24 x .38	1/2-20	1/8-27	4.78	25.4
RGRA100RO18GPP100 RGRA100RO36GPP100	15.88	34.93	9.53	8-32 x .23	33.35	41.28	61.93	85.73 125.63	115.90 155.80	158.50 198.37	10-24 x .38	6.35	25.40	38.10	76.20	0.125 .1240 x .22	10-24 x .38	1/2-20	1/8-27	4.78	25.4
RGRA125RO18GPP100 RGRA125RO36GPP100	16.66	34.93	9.53	8-32 x .23	39.70	48.41	66.68	104.78 157.96	134.95 188.11	177.55 230.63	10-24 x .38	9.12	30.96	44.45	80.98	0.125 .1240 x .22	10-24 x .38	1/2-20	1/8-27	4.78	23.4

*KK is adjustable. Dimension is maximum value

Dimensions in millimeters

For Assistance Call
1-800-328-2174
(Toll Free U.S. and Canada)
or
763-478-8000
Fax 763-478-8080

RG - ORDERING

GRIPPER SUB-ASSEMBLY

MODEL, BORE, AND JAW STYLE

OPTIONS

9.	10.	11.	12.
G P A	1 0 0	J S 2	K X 1

5. SEALS^{1,2}

Enter:

Leave blank for standard Buna N

V for Viton®.

¹ Selected seals will be used in both the Rotary Actuator and Gripper

² Seals of Viton® material are not available when ordering switches

6. CUSHIONS

Enter:

CUR for Cushion End on Right Side³.

CUL for Cushion End on Left Side³.

CUB for Cushion End on Both Sides.

7. SHOCKS

Enter:

SHR for Shock End Right Side³.

SHL for Shock End Left Side³.

SHB for Shock End Both Sides.

³ To identify left/right end see drawing on page 177.

8. SWITCHES

Enter:

KT for Hall-effect (Sinking) 5 meter lead.

KM for Hall-effect (Sinking) 5-meter lead Quick-disconnect

TT for Hall-effect (Sourcing) 5 meter lead.

TM for Hall-effect (Sourcing) 5-meter lead Quick-disconnect

Enter:

Number of switches in third box.

NOTE: Only Universal Mini Hall-effect switches are available for Rotary Actuators

GRIPPER SUB-ASSEMBLY

9. MODEL TYPE

Enter:

GPA for Angular Gripper

GPP for Parallel Gripper

10. BORE SIZE

Enter:

038 for $\frac{3}{8}$ " (0.375 in.)

063 for $\frac{5}{8}$ " (0.625 in.)

100 for 1.00 in.

11. JAW STYLE (Must Choose One)

Enter:

JS1 for Angular Jaw Style One (Finger)

JS2 for Angular Jaw Style Two (Flush).

JS3 for Parallel Jaw Style Three (Flush).

12. SWITCHES

Enter:

KY for Hall-effect (Sinking) 5-meter lead.

KX for Hall-effect (Sinking) 5-meter lead Quick-disconnect

TY for Hall-effect (Sourcing) 5-meter lead.

TX for Hall-effect (Sourcing) 5-meter lead Quick-disconnect

Enter:

Number of switches in third box.

NOTE: Only Universal Mini Hall-effect switches are available for these bore sizes of Grippers

To select the proper RotoGripper combination, each component of the RotoGripper (the rotary actuator as well as the gripper) must be sized individually according to the application requirements.

1. GRIPPER SELECTION

When choosing a gripper, refer to the selection information beginning on page 196.

Select the appropriate angular or parallel gripper size and jaw style according to the load requirements of the application and consider the safety factor values as well.

2. ROTARY ACTUATOR SELECTION

Refer to pages 174 to 179 of the rack and pinion rotary actuator section for selection specifications.

Select a rotary actuator bore size according to its torque requirements, bearing load capacities and consider any options if required.

IMPORTANT NOTE: Calculate the rotational mass moment of inertia (J_m) if the rotary actuator will physically stop the load.

Then, calculate the Kinetic Energy per stop and determine if standard adjustable stops with bumpers, cushions or shock absorbers will be required.

3. SELECT THE ROTOGRIPPER COMBINATION

When selection of the gripper and rotary actuator components are complete, select which RotoGripper combination (a drive-from-behind or a drive-in-front) is desirable for the application.

Drive-From-Behind Combinations

The table shown below lists the possible Drive-From-Behind combinations that are available. Refer to pages 208 and 209 of the ordering section for configuring the appropriate model.

ROTARY ACTUATOR	GRIPPER
RA075	GPA063 GPP063
RA100	GPA063 GPP063
RA100	GPA100 GPP100
RA125	GPA100 GPP100

NOTE: Both angular jaw styles of finger (JS1) and flush (JS2) are available in RotoGripper combinations.

Drive-In-Front Combinations

Drive-In-Front combinations combine Tol-O-Matic standard rack and pinion rotary actuators and grippers together utilizing coupler kits.

The table below lists the possible rotary actuator and gripper combinations for Drive-In-Front styles. Refer to page 201 for coupling kit specifications, part numbers and ordering procedures.

ROTARY ACTUATOR	GRIPPER
RA075	GPA038 GPP038 GPA063 GPP063
RA100	GPA063 GPP063 GPA100 GPP100
RA125	GPA100 GPP100 GPA150 GPP150

NOTE: Both angular jaw styles of finger (JS1) and flush (JS2) are available in RotoGripper combinations.

