

# GSA/GSM SERIES GUIDED SCREW ACTUATOR

PERFORMANCE DATA • SPECIFICATIONS



## SIDE LOADING CONSIDERATIONS:

Guided screw actuators are designed to push loads that are not separately guided and supported and may be used for applications that require substantial side loading. Use the following graphs to help in determining if the GSA you have chosen will accommodate the side loading your application will have. These graphs assume the GSA is mounted horizontally, as shown in the sketch on the next page. We recommend you use Tol-O-Motion Sizing and Selection software to choose the correct GSA for your application. If you need any assistance, please contact Tol-O-Matic at 1-800-328-2174 for any questions regarding side loading capabilities or choosing any actuator.

GSA PERFORMANCE

GSA/GSM SERIES SPECIFICATIONS

SPECIFICATION	GSA12				GSA16		GSA24		GSA32	
	With 17 FRAME Motor		With 23 FRAME Motor		GUIDE RODS STANDARD	GUIDE RODS OVERSIZE	GUIDE RODS STANDARD	GUIDE RODS OVERSIZE	GUIDE RODS STANDARD	GUIDE RODS OVERSIZE
	GUIDE RODS STANDARD	GUIDE RODS OVERSIZE	GUIDE RODS STANDARD	GUIDE RODS OVERSIZE						
MAX. THRUST (lbs.)	125	125	125	125	125	125	750	750	2400	2400
GUIDE ROD DIAMETER (in.)	0.50	0.63	0.50	0.63	0.63	0.75	0.75	1.00	1.00	1.25
WEIGHTS										
In Line Base Model (lbs.)	3.65	4.44	3.68	4.47	7.25	7.54	16.48	17.35	27.34	28.65
Reverse Parallel Base Model (lbs.)	3.92	4.72	4.05	4.85	7.59	7.88	17.09	17.96	28.81	30.12
Weight per/in. of stroke (lbs.)	.021	.027	.021	.027	0.30	0.38	0.54	0.74	0.93	1.19
MAXIMUM STROKE	18	18	18	18	24	24	30	30	36	36
DEAD LENGTH* (dimension V)										
In Line Base Model (in.)	6.39	6.39	6.39	6.39	7.14	7.14	9.54	9.54	11.59	11.59
Reverse Parallel Base Model (in.)	7.33	7.33	7.61	7.61	8.20	8.20	10.39	10.39	12.99	12.99

\*Without motor and motor adapter

SPECIFICATION	GSM12				GSM16		GSM24		GSM32	
	With 17 FRAME Motor		With 23 FRAME Motor		GUIDE RODS STANDARD	GUIDE RODS OVERSIZE	GUIDE RODS STANDARD	GUIDE RODS OVERSIZE	GUIDE RODS STANDARD	GUIDE RODS OVERSIZE
	GUIDE RODS STANDARD	GUIDE RODS OVERSIZE	GUIDE RODS STANDARD	GUIDE RODS OVERSIZE						
MAX. THRUST (N)	556	556	556	556	556	556	3336	3336	10676	10676
GUIDE ROD DIAMETER (mm)	12.7	15.9	12.7	15.9	15.9	19.1	19.1	25.4	25.4	31.8
WEIGHTS										
In Line Base Model (kgs.)	1.65	2.01	1.67	2.03	3.29	3.42	7.48	7.87	12.40	13.00
Reverse Parallel Base Model (kgs.)	1.78	2.14	1.84	2.20	3.44	3.57	7.75	8.15	13.07	13.66
Weight per/mm of stroke (kgs.)	0.004	0.005	0.004	0.005	0.005	0.007	0.010	0.013	0.017	0.021
MAXIMUM STROKE	457	457	457	457	610	610	762	762	914	914
DEAD LENGTH* (dimension V)										
In Line Base Model (mm)	162.3	162.3	162.3	162.3	181.3	181.3	242.3	242.3	294.4	294.4
Reverse Parallel Base Model (mm)	186.2	186.2	193.3	193.3	208.3	208.3	263.9	263.9	329.9	329.9

\*Without motor and motor adapter

## OPERATION TEMPERATURE RANGE

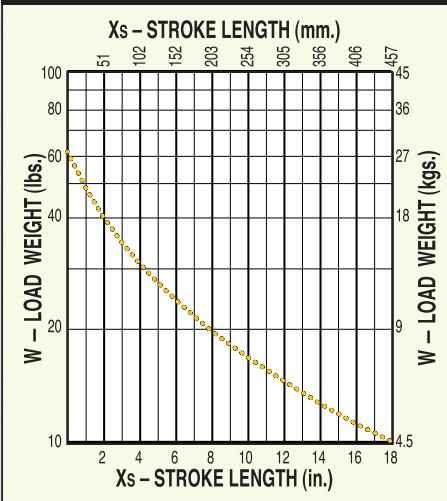
RSA/RSM series actuators should be used in temperatures from 40° to 130°F (4° to 54°C). Please contact Tol-O-Matic for applications with tem-

peratures out of this range. Heat generated by the motor and drive should be taken into consideration as well as linear velocity and work cycle time.

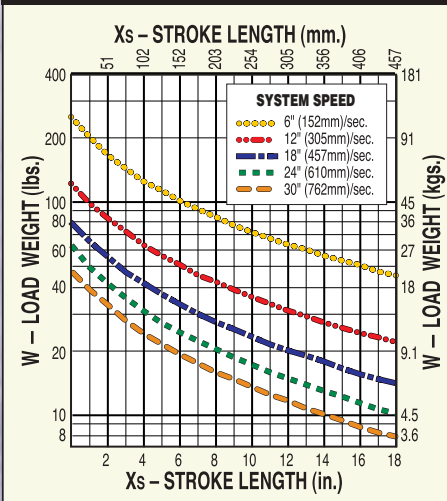
# GSA/GSM SERIES GUIDED SCREW ACTUATOR

## GSA12, GSM12 PERFORMANCE DATA

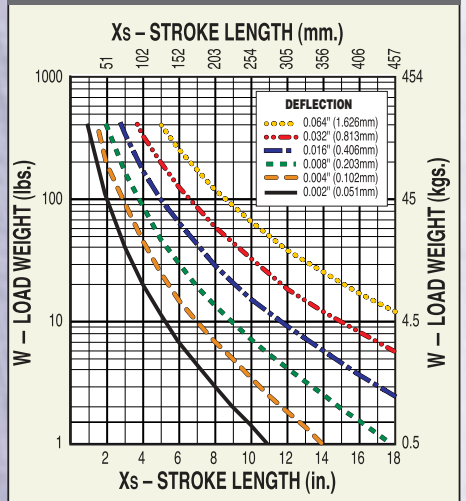
**MAXIMUM LOAD WEIGHT vs STROKE LENGTH  
LINEAR BALL BEARING, STANDARD GUIDE RODS**



**MAXIMUM LOAD WEIGHT vs STROKE LENGTH  
COMPOSITE BEARING, STANDARD GUIDE RODS**



**MAXIMUM LOAD WEIGHT vs STROKE LENGTH  
COMPOSITE BEARING, OVERSIZE GUIDE RODS**



Note: Linear Ball Bearings are not available with stainless-steel guide rods option.

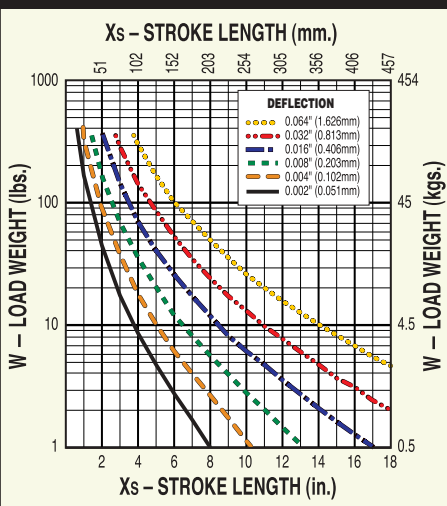
## MAXIMUM LOAD WEIGHT vs. STROKE LENGTH

**Do not exceed Maximum Load curve**  
Maximum Load values are based on 200 million linear inches of travel (see page 204)

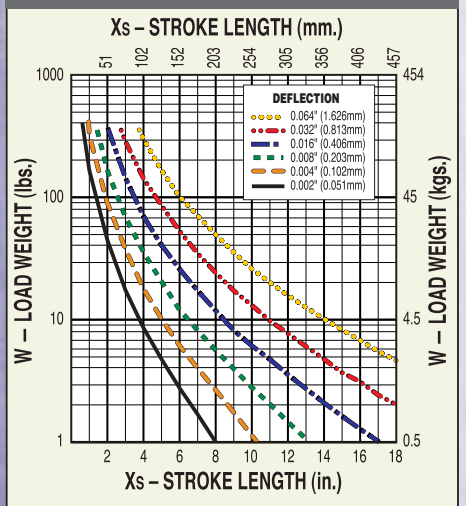
- To obtain most accurate results, stroke length should be adjusted by the distance between the center of mass of the load and the tooling plate.  
(see diagram)  $X_{adj} = X_s + X_{cm}$   
Then use  $X_{adj}$  instead of  $X_s$  on Maximum Load Weight vs. Stroke Length graph.
- For the off-center loads, calculate adjusted load weight using the following formula:  
(see diagram)  $W_{adj} = W(1 + 0.67Y_{cm})$ ,  
where  $Y_{cm}$  is distance between center of mass of off-center load and center of the tooling plate.  
Then use  $W_{adj}$  instead of  $W$  on Maximum Load Weight vs. Stroke Length graph.
- Using your stroke length and load weight evaluate guide rod deflection. If the intersection point is above the highest curve (.064") contact Tol-O-Matic for assistance.

**SEE IMPORTANT NOTES ON PAGE 82**

**GUIDE ROD DEFLECTION  
STANDARD GUIDE RODS**

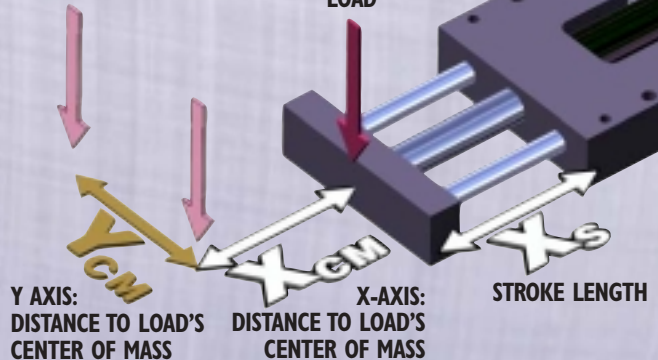


**GUIDE ROD DEFLECTION  
OVERSIZE GUIDE RODS**



Wadj  
OFF-CENTER LOAD

W  
LOAD

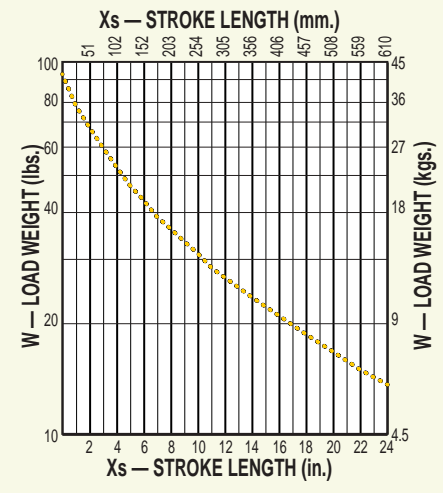


GSA PERFORMANCE

# GSA/GSM SERIES GUIDED SCREW ACTUATOR

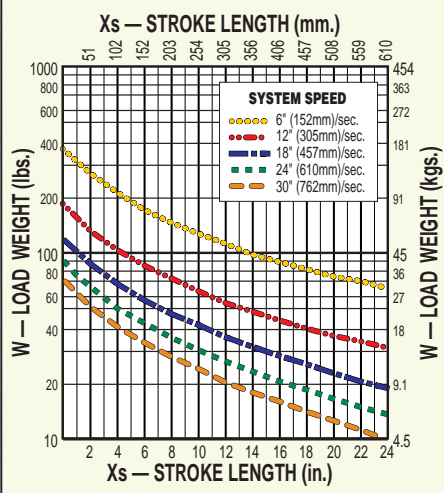
## GSA16, GSM16 PERFORMANCE DATA

**MAXIMUM LOAD WEIGHT vs STROKE LENGTH  
LINEAR BALL BEARING, STANDARD GUIDE RODS**

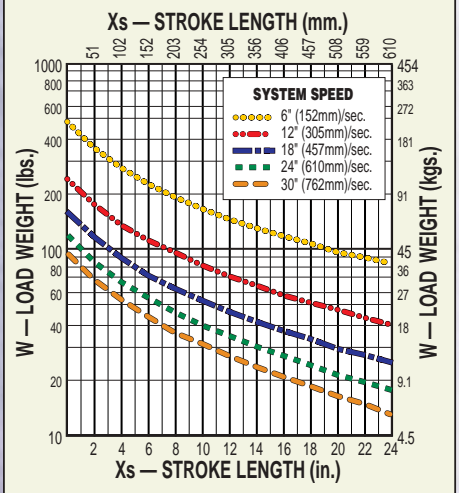


Note: Linear Ball Bearings are not available with stainless-steel guide rods option.

**MAXIMUM LOAD WEIGHT vs STROKE LENGTH  
COMPOSITE BEARING, STANDARD GUIDE RODS**



**MAXIMUM LOAD WEIGHT vs STROKE LENGTH  
COMPOSITE BEARING, OVERSIZE GUIDE RODS**



### MAXIMUM LOAD WEIGHT vs. STROKE LENGTH

#### Do not exceed Maximum Load curve

Maximum Load values are based on 200 million linear inches of travel (see page 204)

- To obtain most accurate results, stroke length should be adjusted by the distance between the center of mass of the load and the tooling plate.

$$(see diagram) X_{adj} = X_s + X_{cm}$$

Then use  $X_{adj}$  instead of  $X_s$  on Maximum Load Weight vs. Stroke Length graph.

- For the off-center loads, calculate adjusted load weight using the following formula:

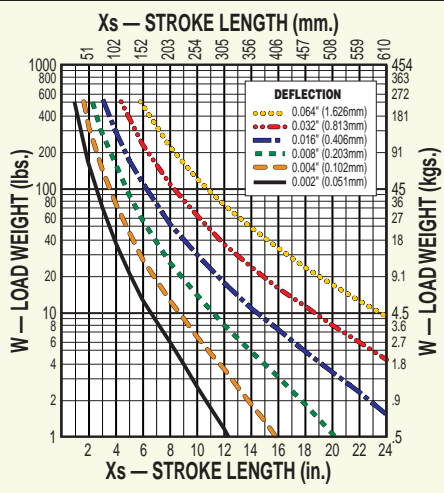
$$(see diagram) For GSA 16: W_{adj} = W (1 + 0.53Y_{cm})$$

where  $Y_{cm}$  is distance between center of mass of off-center load and center of the tooling plate.

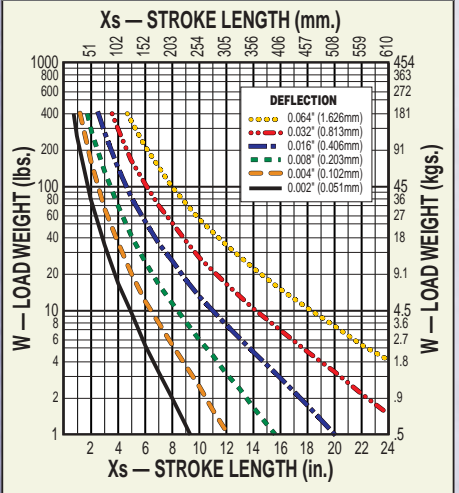
Then use  $W_{adj}$  instead of  $W$  on Maximum Load Weight vs. Stroke Length graph.

- Using your stroke length and load weight evaluate guide rod deflection. If the intersection point is above the highest curve (.064") contact Tol-O-Matic for assistance.

**GUIDE ROD DEFLECTION  
STANDARD GUIDE RODS**



**GUIDE ROD DEFLECTION  
OVERSIZE GUIDE RODS**



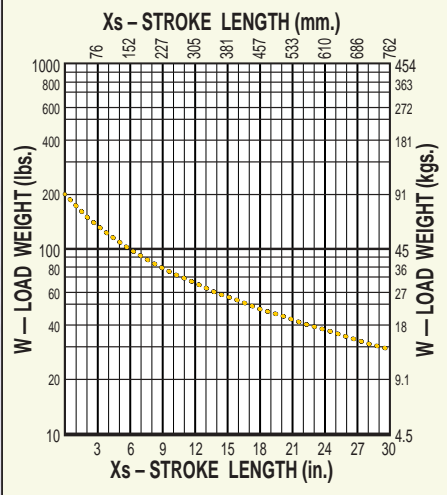
#### IMPORTANT NOTES:

- Impact loading is not recommended for GSA/GSM series actuators. If your application involves such loading please contact Tol-O-Matic.
- Motor brakes may be required on vertically positioned actuators with plastic or ball nuts in applications with risk of load backdriving. (Actuators with bronze nuts will not backdrive for loads, thrusts within catalog specifications.) Please contact Tol-O-Matic for recommendations.

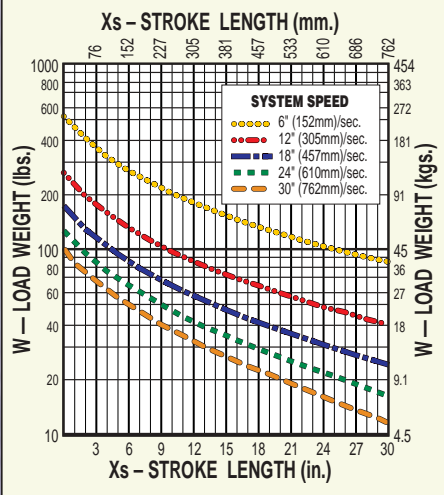
# GSA/GSM SERIES GUIDED SCREW ACTUATOR

## GSA24, GSM24 PERFORMANCE DATA

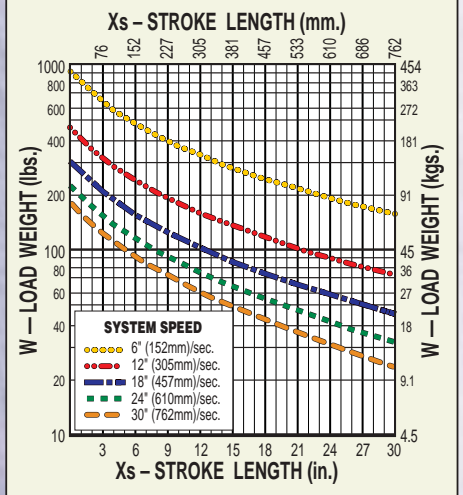
**MAXIMUM LOAD WEIGHT vs STROKE LENGTH  
LINEAR BALL BEARING, STANDARD GUIDE RODS**



**MAXIMUM LOAD WEIGHT vs STROKE LENGTH  
COMPOSITE BEARING, STANDARD GUIDE RODS**



**MAXIMUM LOAD WEIGHT vs STROKE LENGTH  
COMPOSITE BEARING, OVERSIZE GUIDE RODS**



Note: Linear Ball Bearings are not available with stainless-steel guide rods option.

### MAXIMUM LOAD WEIGHT vs. STROKE LENGTH

**Do not exceed Maximum Load curve**

Maximum Load values are based on 200 million linear inches of travel (see page 204)

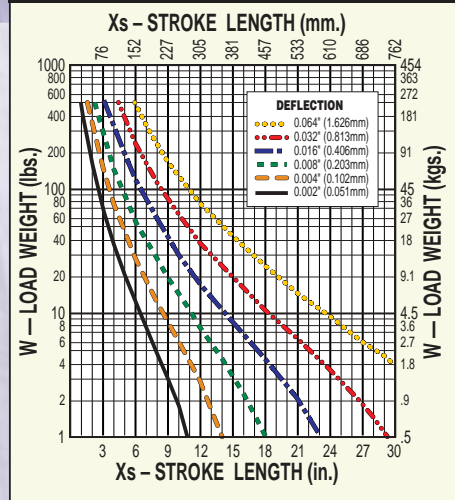
- To obtain most accurate results, stroke length should be adjusted by the distance between the center of mass of the load and the tooling plate.

(see diagram)  $X_{adj} = X_s + X_{cm}$

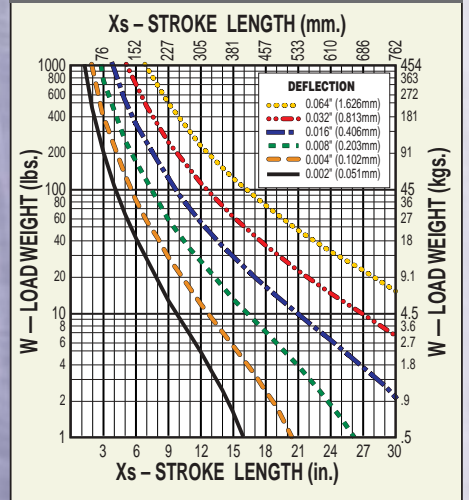
Then use  $X_{adj}$  instead of  $X_s$  on Maximum Load Weight vs. Stroke Length graph.

- For the off-center loads, calculate adjusted load weight using the following formula:  
(see diagram) For GSA 24:  $W_{adj} = W (1 + 0.40Y_{cm})$   
where  $Y_{cm}$  is distance between center of mass of off-center load and center of the tooling plate. Then use  $W_{adj}$  instead of  $W$  on Maximum Load Weight vs. Stroke Length graph.
- Using your stroke length and load weight evaluate guide rod deflection. If the intersection point is above the highest curve (.064") contact Tol-O-Matic for assistance.

**GUIDE ROD DEFLECTION  
STANDARD GUIDE RODS**

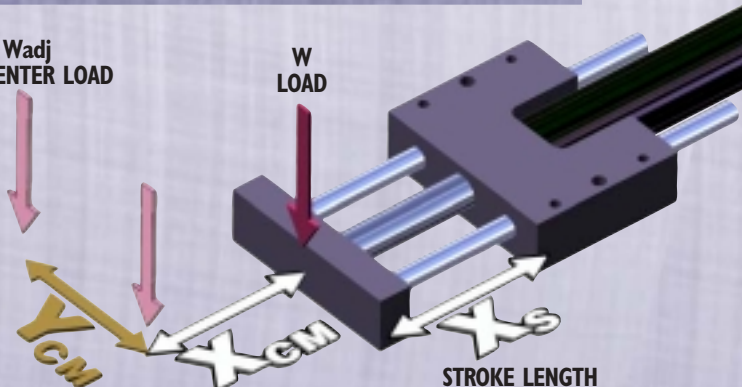


**GUIDE ROD DEFLECTION  
OVERSIZE GUIDE RODS**



$W_{adj}$   
OFF-CENTER LOAD

$W$   
LOAD



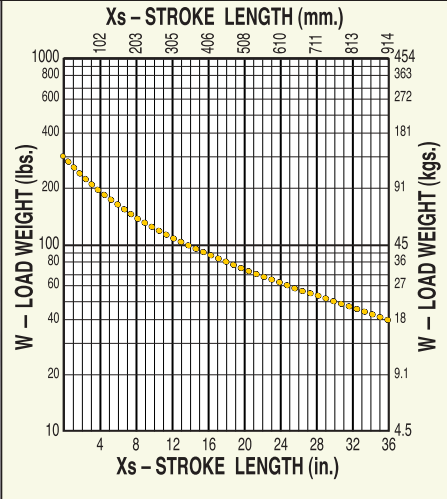
STROKE LENGTH

GSA PERFORMANCE

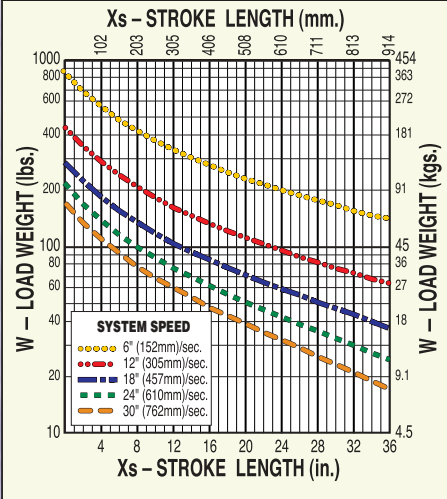
# GSA/GSM SERIES GUIDED SCREW ACTUATOR

## GSA32,GSM32 PERFORMANCE DATA

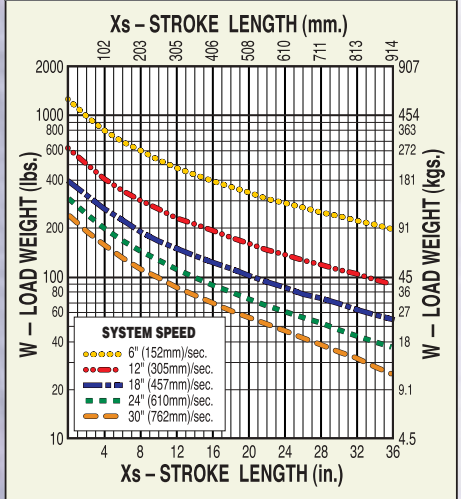
**MAXIMUM LOAD WEIGHT vs STROKE LENGTH  
LINEAR BALL BEARING, STANDARD GUIDE RODS**



**MAXIMUM LOAD WEIGHT vs STROKE LENGTH  
COMPOSITE BEARING, STANDARD GUIDE RODS**

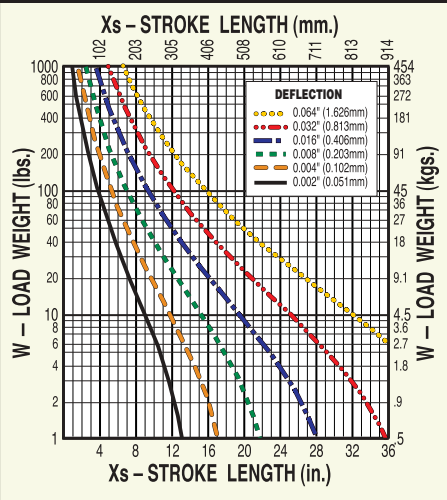


**MAXIMUM LOAD WEIGHT vs STROKE LENGTH  
COMPOSITE BEARING, OVERSIZE GUIDE RODS**

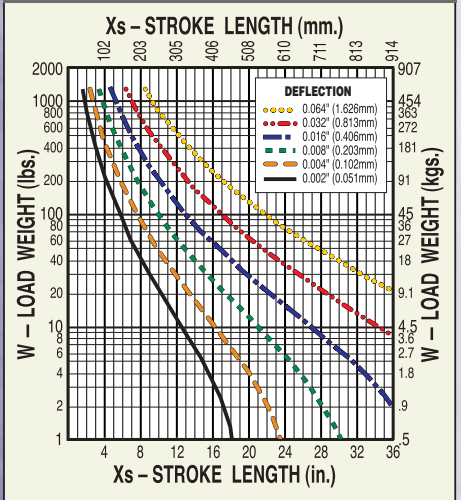


Note: Linear Ball Bearings are not available with stainless-steel guide rods option.

**GUIDE ROD DEFLECTION  
STANDARD GUIDE RODS**



**GUIDE ROD DEFLECTION  
OVERSIZE GUIDE RODS**



### MAXIMUM LOAD WEIGHT vs. STROKE LENGTH

#### Do not exceed Maximum Load curve

Maximum Load values are based on 200 million linear inches of travel (see page 204)

- To obtain most accurate results, stroke length should be adjusted by the distance between the center of mass of the load and the tooling plate.

$$(see diagram) X_{adj} = X_s + X_{cm}$$

Then use  $X_{adj}$  instead of  $X_s$  on Maximum Load Weight vs. Stroke Length graph.

- For the off-center loads, calculate adjusted load weight using the following formula:

$$(see diagram) W_{adj} = W (1 + 0.30Y_{cm})$$

where  $Y_{cm}$  is distance between center of mass of off-center load and center of the tooling plate.

Then use  $W_{adj}$  instead of  $W$  on Maximum Load Weight vs. Stroke Length graph.

- Using your stroke length and load weight evaluate guide rod deflection. If the intersection point is above the highest curve (.064") contact To-O-Matic for assistance.

**SEE IMPORTANT NOTES ON PAGE 82**

$W_{adj}$   
OFF-CENTER LOAD

$W$   
LOAD

Y AXIS:  
DISTANCE TO LOAD'S  
CENTER OF MASS

X-AXIS:  
DISTANCE TO LOAD'S  
CENTER OF MASS

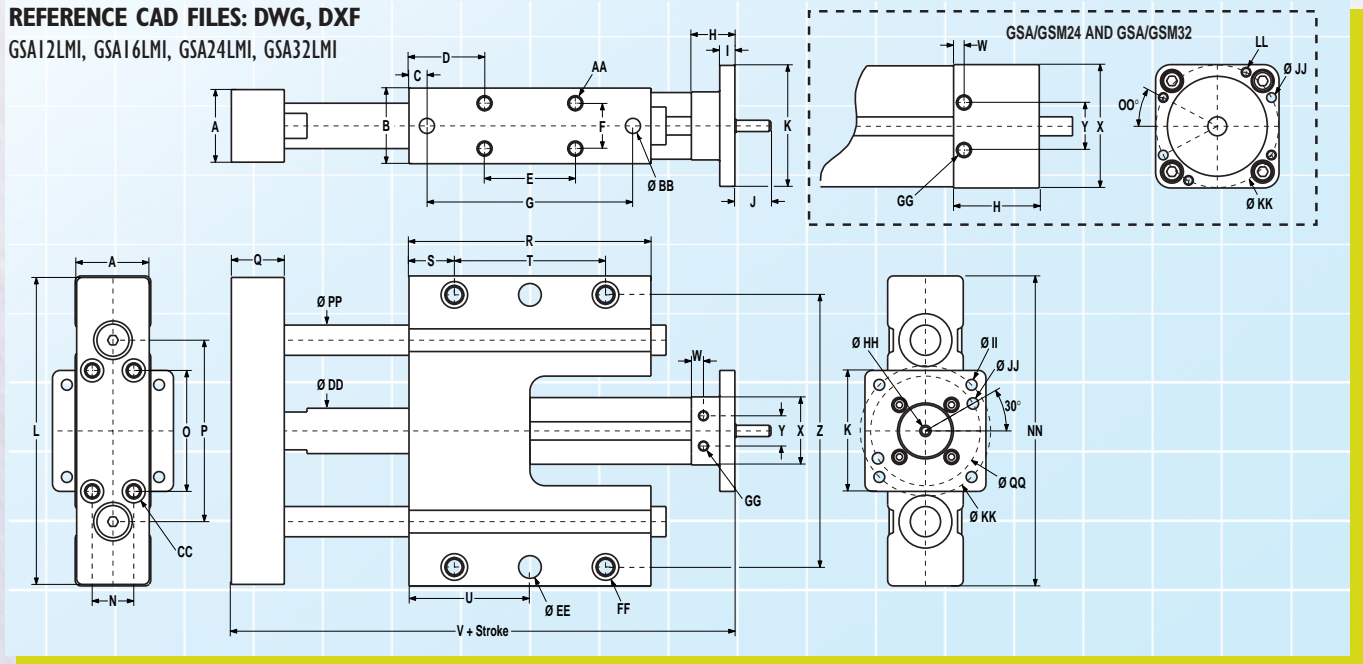
STROKE LENGTH

# GSA/GSM SERIES GUIDED SCREW ACTUATOR

## DIMENSIONS LMI INLINE MOUNTING BASE MODEL

REFERENCE CAD FILES: DWG, DXF

GSA12LMI, GSA16LMI, GSA24LMI, GSA32LMI



### GSA Series

Dimensions in inches

MODEL	A	B	C	D	E	F	G	H	I	J	K	L	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
GSA12	1.20	1.25	0.297	1.250	1.500	0.750	3.406	0.72	0.25	0.60	—	5.08	0.688	2.000	3.000	0.88	4.00	0.750	2.500	2.000	6.39	0.20	1.13	0.50	4.500
GSA16	1.70	1.75	0.516	1.625	1.750	1.000	3.969	0.72	0.25	0.60	2.00	6.20	1.000	2.500	3.750	1.13	5.00	1.188	2.625	2.500	7.14	0.20	1.13	0.50	5.438
GSA24	2.15	2.25	0.438	1.625	2.750	1.250	5.125	1.42	—	0.55	—	7.65	1.375	3.500	5.000	1.38	6.00	1.063	3.875	3.000	9.54	0.17	2.04	0.79	7.000
GSA32	2.65	2.75	0.594	2.125	2.750	1.750	5.812	1.79	—	0.69	—	9.90	1.750	5.000	6.625	1.63	7.00	1.438	4.125	3.500	11.59	0.26	2.58	0.95	9.000

MODEL	AA	BB	CC	DD	EE	FF	GG	HH	II	JJ
GSA12	1/4-20 UNC-2B x .50	.250 x .38	1/4-20 UNC-2B, Ø.38 CB x .22 OPP SIDE	0.75	.375 x .50	.266 THRU, Ø.44 CB x .28, 5/16-18 UNC-2B x .75 OPP SIDE	8-32 UNC-2B x .25	0.187	—	0.188
GSA16	1/4-20 UNC-2B x .50	.250 x .38	5/16-18 UNC-2B, Ø.44 CB x .28 OPP SIDE	0.88	.375 x .50	.266 THRU, Ø.44 CB x .28, 5/16-18 UNC-2B x .75 OPP SIDE	8-32 UNC-2B x .25	0.187	0.180	0.188
GSA24	5/16-18 UNC-2B x .63	.313 x .50	5/16-18 UNC-2B, Ø.44 CB x .28 OPP SIDE	1.25	.500 x .50	.328 THRU, Ø.53 CB x .34, 3/8-16 UNC-2B x 1.00 OPP SIDE	1/4-20 UNC-2B x .31	0.315	—	0.157
GSA32	3/8-16 UNC-2B x .75	.375 x .50	3/8-16 UNC-2B, Ø.53 CB x .50 OPP SIDE	1.75	.500 x .50	.453 THRU, Ø.72 CB x .47, 1/2-13 UNC-2B x 1.50 OPP SIDE	5/16-18 UNC-2B x .50	0.394	—	0.188

MODEL	KK	LL	NN	OO	PP STD	OVS	QQ
GSA12	—	—	5.13	—	0.50	0.63	—
GSA16	2.156	—	6.25	—	0.63	0.75	1.813
GSA24	2.026	M4 x 0.7-6H x .56	7.75	28	0.75	1.00	—
GSA32	2.541	M5 x 0.8-6H x .50	10.00	30	1.00	1.25	—

GSA12 ONLY / MOTOR	K	II	QQ	KK
17 FRAME	1.66	0.141	1.514	1.857
23 FRAME	2.00	0.180	1.813	2.156

GSM12 ONLY / MOTOR	K	II	QQ	KK
17 FRAME	42.2	3.58	38.46	47.17
23 FRAME	50.8	4.57	46.05	54.76

Dimensions in millimeters

MODEL	KK	LL	NN	OO	PP STD	OVS	QQ
GSM12	—	—	130.3	—	12.7	15.9	—
GSM16	54.76	—	158.8	—	15.9	19.1	46.05
GSM24	51.46	M4 x 0.7-6H x 14	196.9	28	19.1	25.4	—
GSM32	64.54	M5 x 0.8-6H x 12	254	30	25.4	31.8	—

### GSM Series

MODEL	A	B	C	D	E	F	G	H	I	J	K	L	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
GSM12	30.5	31.8	7.54	31.75	38.10	19.05	86.51	18.3	6.4	15.2	—	129.0	17.48	50.80	76.20	22.2	101.6	19.05	63.50	50.80	162.26	5.1	28.6	12.7	114.30
GSM16	43.2	44.5	13.11	41.28	44.45	25.40	100.81	18.3	6.4	15.2	50.8	157.5	25.40	63.50	95.25	28.6	127.0	30.18	66.68	63.50	181.31	5.1	28.6	12.7	138.13
GSM24	54.6	57.2	11.13	41.28	69.85	31.75	130.18	36.0	—	14.0	—	194.3	34.93	88.90	127.00	34.9	152.4	27.00	98.43	76.20	242.34	4.3	51.8	20.0	177.80
GSM32	67.3	69.9	15.09	53.98	69.85	44.45	147.62	45.4	—	17.5	—	251.5	44.45	127.00	168.28	41.3	177.8	36.53	104.78	88.90	294.41	6.5	65.5	24.1	228.60

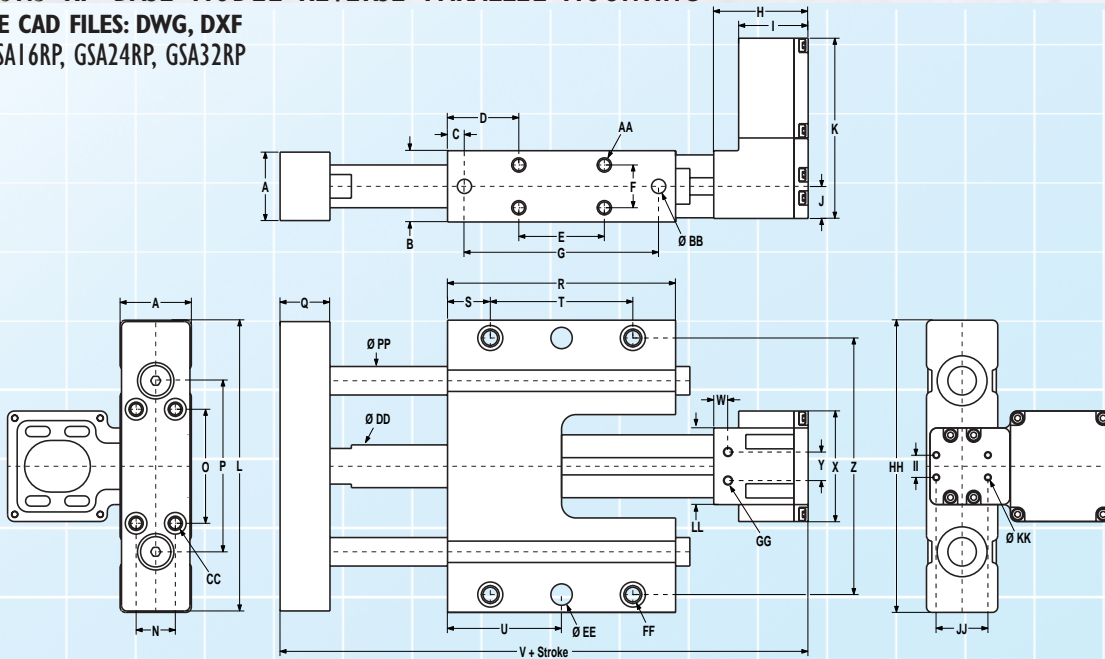
MODEL	AA	BB	CC	DD	EE	FF	GG	HH	II	JJ
GSM12	M6*1.0-6H x 12	6 x 10	M6*1.0-6H, 9.5 CB x 5.6 OPP SIDE	19.1	10 x 12	6.76 THRU, Ø 11.1 CB x 7.1, M8*1.25-6H OPP SIDE	M4*0.7-6H x 6	4.75	—	4.78
GSM16	M6*1.0-6H x 12	6 x 10	M8*1.25-6H, 11.1 CB x 7.1 OPP SIDE	22.4	10 x 12	6.76 THRU, Ø 11.1 CB x 7.1, M8*1.25-6H OPP SIDE	M4*0.7-6H x 6	4.75	4.6	4.78
GSM24	M8*1.25-6H x 16	8 x 12	M8*1.25-6H, 11.1 CB x 7.1 OPP SIDE	31.8	12 x 12	8.33 THRU, Ø 13.5 CB x 8.6, M10*1.5-6H OPP SIDE	M6*1.0-6H x 9	8	—	4
GSM32	M10*1.5-6H x 19	10 x 12	M10*1.5-6H, 13.5 CB *12.7 OPP SIDE	44.5	12 x 12	10.49 THRU, Ø 18.2 CB x 11.9, M12*1.75-6H OPP SIDE	M8*1.25-6H x 13	10	—	4.78

GSA DIMENSIONS

# GSA/GSM SERIES GUIDED SCREW ACTUATOR

## DIMENSIONS RP BASE MODEL REVERSE PARALLEL MOUNTING

REFERENCE CAD FILES: DWG, DXF  
GSA12RP, GSA16RP, GSA24RP, GSA32RP



### GSA Series

Dimensions in inches

MODEL	A	B	C	D	E	F	G	H	I	J	K	L	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
GSA12	1.20	1.25	0.297	1.250	1.500	0.750	3.406	—	—	0.56	—	5.08	0.688	2.000	3.000	0.88	4.00	0.750	2.500	2.000	—	0.250	—	0.500	4.500
GSA16	1.70	1.75	0.516	1.625	1.750	1.000	3.969	1.78	1.41	0.69	3.77	6.20	1.000	2.500	3.750	1.13	5.00	1.188	2.625	2.500	8.20	0.250	2.25	0.500	5.438
GSA24	2.15	2.25	0.438	1.625	2.750	1.250	5.125	2.26	1.14	1.01	4.91	7.65	1.375	3.500	5.000	1.38	6.00	1.063	3.875	3.000	10.39	0.173	2.35	0.787	7.000
GSA32	2.65	2.75	0.594	2.125	2.750	1.750	5.812	3.19	1.72	1.23	5.85	9.90	1.750	5.000	6.625	1.63	7.00	1.438	4.125	3.500	12.99	0.255	2.75	0.950	9.000

MODEL	AA	BB	CC	DD	EE	FF	GG	HH	II	JJ
GSA12	1/4-20 UNC-2B x .50	.250 x .38	1/4-20 UNC-2B, Ø.38 CB x .22 OPP SIDE	0.75	.375 x .50	.266 THRU, Ø.44 CB x .28, 5/16-18 UNC-2B x .75 OPP SIDE	8-32 UNC-2B x .25	5.13	0.391	0.906
GSA16	1/4-20 UNC-2B x .50	.250 x .38	5/16-18 UNC-2B, Ø.44 CB x .28 OPP SIDE	0.88	.375 x .50	.266 THRU, Ø.44 CB x .28, 5/16-18 UNC-2B x .75 OPP SIDE	8-32 UNC-2B x .25	6.25	0.391	0.906
GSA24	5/16-18 UNC-2B x .63	.313 x .50	5/16-18 UNC-2B, Ø.44 CB x .28 OPP SIDE	1.25	.500 x .50	.328 THRU, Ø.53 CB x .34, 3/8-16 UNC-2B x 1.00 OPP SIDE	1/4-20 UNC-2B x .44	7.75	1.603	0.875
GSA32	3/8-16 UNC-2B x .75	.375 x .50	3/8-16 UNC-2B, Ø.53 CB x .50 OPP SIDE	1.75	.500 x .50	.453 THRU, Ø.72 CB x .47, 1/2-13 UNC-2B x 1.50 OPP SIDE	5/16-18 UNC-2B x .47	10.00	1.969	1.182

MODEL	KK	LL	PP	STD	OVS
GSA12	5-40 UNC-2B THRU	—	0.50	0.63	
GSA16	5-40 UNC-2B THRU	1.34	0.63	0.75	
GSA24	10-24 UNC-2B x .21	2.11	0.75	1.00	
GSA32	1/4-20 UNC-2B x .32	2.75	1.00	1.25	

GSA12 ONLY / MOTOR	H	I	K	V	X	LL
17 FRAME	1.66	1.22	3.16	7.33	1.94	1.34
23 FRAME	1.94	1.56	3.65	7.61	2.25	1.38

GSM12 ONLY / MOTOR	H	I	K	V	X	LL
17 FRAME	42.2	31.0	80.3	186.2	49.3	34.0
23 FRAME	49.3	39.6	92.7	193.3	57.2	35.1

Dimensions in millimeters

MODEL	KK	LL	PP	STD	OVS
GSM12	M3x0.5-6H THRU	—	12.7	15.9	
GSM16	M3x0.5-6H THRU	34.0	15.9	19.1	
GSM24	M5x0.8-6H x 5	53.6	19.1	25.4	
GSM32	M6x1.0-6H x 8	69.9	25.4	31.8	

### GSM Series

MODEL	A	B	C	D	E	F	G	H	I	J	K	L	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
GSM12	30.5	31.8	7.54	31.75	38.10	19.05	86.51	—	—	14.3	—	129.0	17.48	50.80	76.20	22.2	101.6	19.05	63.50	50.80	—	6.35	—	12.70	114.30
GSM16	43.2	44.5	13.11	41.28	44.45	25.40	100.81	45.2	35.8	17.4	95.8	157.5	25.40	63.50	95.25	28.6	127.0	30.18	66.68	63.50	208.3	6.35	57.2	12.70	138.13
GSM24	54.6	57.2	11.13	41.28	69.85	31.75	130.18	57.4	29.0	25.7	124.7	194.3	34.93	88.90	127.00	34.9	152.4	27.00	98.43	76.20	263.9	4.39	59.7	19.99	177.80
GSM32	67.3	69.9	15.09	53.98	69.85	44.45	147.62	81.0	43.7	31.2	148.6	251.5	44.45	127.00	168.28	41.3	177.8	36.53	104.78	88.90	329.9	6.48	69.9	24.13	228.60

MODEL	AA	BB	CC	DD	EE	FF	GG	HH	II	JJ
GSM12	M6 x 1.0-6H x 12	6 x 10	M6 x 1.0-6H, 9.5 CB x 5.6 OPP SIDE	19.1	10 x 12	6.76 THRU, Ø 11.1 CB x 7.1, M8 x 1.25-6H OPP SIDE	M4 x 0.7-6H x 6	130.3	9.93	23.01
GSM16	M6 x 1.0-6H x 12	6 x 10	M8 x 1.25-6H, 11.1 CB x 7.1 OPP SIDE	22.4	10 x 12	6.76 THRU, Ø 11.1 CB x 7.1, M8 x 1.25-6H OPP SIDE	M4 x 0.7-6H x 6	158.8	9.93	23.01
GSM24	M8 x 1.25-6H x 16	8 x 12	M8 x 1.25-6H, 11.1 CB x 7.1 OPP SIDE	31.8	12 x 12	8.33 THRU, Ø 13.5 CB x 8.6, M10 x 1.5-6H OPP SIDE	M6 x 1.0-6H x 11	196.9	40.72	22.23
GSM32	M10 x 1.5-6H x 19	10 x 12	M10 x 1.5-6H, 13.5 CB x 12.7 OPP SIDE	44.5	12 x 12	10.49 THRU, Ø 18.2 CB x 11.9, M12 x 1.75-6H OPP SIDE	M8 x 1.25-6H x 12	254.0	50.01	30.02

# GSA/GSM SERIES GUIDED SCREW ACTUATOR

OPTIONS AND ACCESSORIES

## STOP COLLARS



Available for both standard and oversize guide rods, these stop collars are an extra safety factor when applications have heavy loads.

## STAINLESS STEEL GUIDE RODS



Available for both standard and oversize guide rods, stainless steel guide rods and fasteners are available. Use in applications where protection from corrosives is required. Linear Bearings are not available with stainless steel guide rod option.

### AVAILABLE OPTIONS – LMI, IN-LINE MODEL

CODE	OPTION	GSA12	GSA16	GSA24	GSA32	GSM12	GSM16	GSM24	GSM32
GH	GEARHEAD REDUCTION	-	-	OP	OP	-	-	OP	OP
MRV	BRUSHLESS SERVO MOTORS, FRAME SIZE =	17, 23	23	23	23, 34	17, 23	23	23	23, 34
MRS	STEPPER MOTORS, FRAME SIZE =	17, 23	23	23	23, 34	17, 23	23	23	23, 34
MRB	BRUSH DC MOTORS, FRAME SIZE =	23	23	23	23, 34, 40	23	23	23	23, 34, 40
pg. 59	SWITCHES (HALL EFFECT, DC REED, AC TRIAC)	OP	OP	OP	OP	OP	OP	OP	OP
S	STAINLESS STEEL GUIDE RODS	OP	OP	OP	OP	OP	OP	OP	OP
	DOUBLE C-FACE BRAKES (AVAILABLE FOR 23 AND 34 FRAME MOTORS)	OP	OP	OP	OP	OP	OP	OP	OP
CK	STOP COLLARS	OP*	OP	OP	OP	OP*	OP	OP	OP

- Not Available      OP Optional

### AVAILABLE OPTIONS – RP, REVERSE PARALLEL MODEL

CODE	OPTION	GSA12	GSA16	GSA24	GSA32	GSM12	GSM16	GSM24	GSM32
RP1	1:1 REDUCTION	OP	OP	OP	OP	OP	OP	OP	OP
RP2	2:1 REDUCTION	-	-	OP	OP	-	-	OP	OP
GH	GEARHEAD REDUCTION	-	-	-	-	-	-	-	-
MRV	BRUSHLESS SERVO MOTORS, FRAME SIZE =	17, 23	23	23	23, 34	17, 23	23	23	23, 34
MRS	STEPPER MOTORS, FRAME SIZE =	17, 23	23	23	23, 34	17, 23	23	23	23, 34
MRB	BRUSH DC MOTORS, FRAME SIZE =	23	23	23	23, 34, 40	23	23	23	23, 34, 40
pg. 59	SWITCHES (HALL EFFECT, DC REED, AC TRIAC)	OP	OP	OP	OP	OP	OP	OP	OP
S	STAINLESS STEEL GUIDE RODS	OP	OP	OP	OP	OP	OP	OP	OP
	DOUBLE C-FACE BRAKES (AVAILABLE FOR 23 AND 34 FRAME MOTORS)	OP	OP	OP	OP	OP	OP	OP	OP
CK	STOP COLLARS	OP*	OP	OP	OP	OP*	OP	OP	OP

- Not Available      OP Optional

\* Stop collar option on GSA(M)12 actuators is not available if switches are mounted on the actuator sides.