

# HYGIENIC ELECTRIC ROD STYLE ACTUATOR RSH

The all 316 series stainless-steel RSH Hygienic Electric Rod Style Actuator incorporates hygienic design principles and has an IP69K rating (static). Available in 22, 25 & 30 sizes, the RSH is built-to-order in stroke lengths up to 48 in (1.219 m) with force up to 7,943 lbf (35.3 kN).

### ALL POLISHED 316 STAINLESS STEEL CONSTRUCTION

- 316 series stainless steel for corrosion resistance
- Simplifies and lowers cost of machine design by eliminating the need for protective guards around standard actuators

### DUAL SEAL SYSTEM

Use the dual seal system that provides the longest life in your application

Seal Option	Seal Materials	Usage
PSL	Polyurethane/ Polyurethane Rod Seals (Standard)	Longest Lasting for Most Applications. High Tolerance of Abrasives Like Salt and Sugar
USL	Polyurethane/ UHMWPE Rod Seals (Severe Chemical)	Use When High Concentrations of Caustic Chemicals are Present Including Ammonium Chloride and Hydrogen Peroxide.

### REPLACEABLE SEALS

Quick seal cartridge replacement without special tools

### GREASE PORT

- Screw re-lubrication system provides extended screw life
- Convenient lubrication without disassembly

### WELDED SEAMS

Leaving no gaps which eases cleanup and helps to prevent bacterial growth

### IP69K RATED

- To withstand high-pressure wash-down
- Clean-in-place compatible

### HYGIENIC BREATHER/PURGE PORT

Helps prevent contaminants from entering into actuator

### HYGIENIC STAINLESS STEEL FASTENERS

- Standard metric threads
- Hex fasteners for sturdy construction without potential particle collection areas
- Included for your motor: EHEDG compliant 316 stainless seal sealed bolts

## Features: ERD

### 2. THREADED ROD END

- Compatible with many commercially available metric rod end accessories
- Standard metric threads

### 3. GREASE PORT

- Screw re-lubrication system provides extended screw life
- Convenient lubrication without disassembly

### 6. WELDED SEAMS

- Leaving no gaps which eases cleanup and helps to prevent bacterial growth

### 7. SMOOTH EXTERIOR

- Polished, contoured mating surface designed to provide IP69K seal for today's hygienic servo motors

### 8. IP69K OPTION

- To withstand high-pressure wash-down
- Clean-in-place compatible

### 9. BREATHER/PURGE PORT

- Helps prevent contaminants from entering into actuator

## Improvements: RSH

### 1. FRONT FACE SEALING O-RING

Hygienic design from head to toe

### 2. THREADED ROD END

- Compatible with many commercially available metric rod end accessories
- Standard metric threads

### 3. GREASE PORT

- Screw re-lubrication system provides extended screw life
- Convenient lubrication without disassembly

### 4. CARTRIDGE W/ REPLACEABLE SEALS

Quick seal cartridge replacement without special tools

### 5. DUAL SEAL SYSTEM

Use the dual seal system that provides the longest life in your application

### 6. WELDED SEAMS

- Leaving no gaps which eases cleanup and helps to prevent bacterial growth

### 7. ALL POLISHED 316 STAINLESS STEEL WITH SMOOTH EXTERIOR

- 316 series stainless steel for corrosion resistance
- Simplifies and lowers cost of machine design by eliminating the need for protective guards around standard actuators

### 8. IP69K RATED (STANDARD)

- To withstand high-pressure wash-down
- Clean-in-place compatible

### 9. HYGIENIC BREATHER/PURGE PORT

- Helps prevent contaminants from entering into actuator

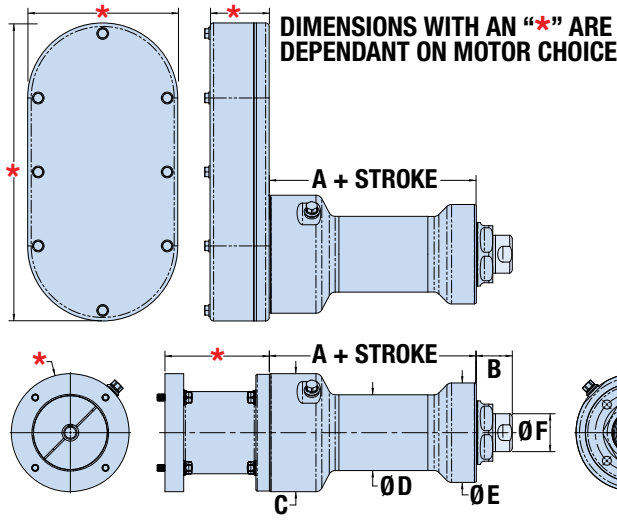
### 10. HYGIENIC STAINLESS STEEL FASTENERS

- Standard metric threads
- Hex fasteners for sturdy construction without potential particle collection areas
- Included for your motor: EHEDG compliant 316 stainless seal sealed bolts

# HYGIENIC ELECTRIC ROD STYLE ACTUATOR

# RSH

## Dimensions:



[tolomatic.com/CAD](http://tolomatic.com/CAD)  
 Download 3D CAD  
 Always use CAD solid model to determine critical dimensions

	A	B	ØC	ØD	ØE	ØF	G
RSH22	155.9	27.3	89.0	57.2	75.0	28.6	26.0
RSH25	211.2	35.3	125.0	89.0	89.0	35.0	30.0
RSH30	237.2	35.3	125.0	89.0	114.0	54.0	50.0

Dimensions in millimeters

	A	B	ØC	ØD	ØE	ØF	G
RSH22	6.14	1.08	3.50	2.25	2.95	1.13	1.02
RSH25	8.31	1.39	4.92	3.50	3.50	1.38	1.18
RSH30	9.34	1.39	4.92	3.50	4.49	2.13	1.97

Dimensions in inches

## SPECIFICATIONS (metric measurement)

RSH SIZE	MAXIMUM STROKE	SCREW CODE	LEAD	LEAD ACCURACY	BACKLASH	MAXIMUM THRUST	DYNAMIC LOAD RATING	WEIGHT		
								LMI	RP	Per 25mm
								Base	Base	kg
22	1000.0	BNM05	5.00	0.10	0.07	7562	13700	5.3	8.6	0.01
	1000.0	BNM10	10.00	0.10	0.07	7562	21000	5.2	8.6	0.01
	1000.0	BNM20	20.00	0.10	0.07	4448	10000	5.3	8.6	0.01
	609.6	RNM04	4.00	0.01	0.03	7562	32500	5.7	9.0	0.01
	609.6	RNM05	5.00	0.01	0.03	7562	32500	5.7	9.0	0.01
	609.6	RNM10	10.00	0.01	0.03	6921	32500	5.7	9.0	0.01
25	1000.0	BN04	6.35	0.10	0.38	12659	14456	15.8	18.2	0.02
	1000.0	BNM05	5.00	0.05	0.06	8896	16800	15.6	18.0	0.01
	1000.0	BNM10	10.00	0.05	0.06	7784	23000	15.7	18.2	0.01
	1000.0	BNM25	25.00	0.10	0.08	3114	20000	15.6	18.1	0.01
	914.4	RNM04	4.00	0.01	0.03	18499	65500	16.7	19.1	0.01
	914.4	RNM05	5.00	0.01	0.03	17249	65500	16.7	19.1	0.01
30	1219.2	RNM10	10.00	0.01	0.03	18499	65500	16.7	19.1	0.01
	1219.2	BN04	6.35	0.10	0.38	20016	18904	18.7	21.1	0.02
	1219.2	BNM05	5.00	0.02	0.06	13344	24900	19.2	21.6	0.02
	1219.2	BNM10	10.00	0.05	0.08	13122	43400	19.8	22.3	0.02
	1219.2	BNM20	20.00	0.05	0.08	8220	42800	19.0	21.4	0.02
	1219.2 <sup>§</sup>	RNM05	5.00	0.01	0.03	34997	65500	19.7	22.2	0.02
1219.2 <sup>§</sup>	RNM10	10.00	0.01	0.03	35330	65500	19.7	22.2	0.02	

## SPECIFICATIONS (US conventional measurement)

RSH SIZE	MAXIMUM STROKE	SCREW CODE	LEAD	LEAD ACCURACY	BACKLASH	MAXIMUM THRUST	DYNAMIC LOAD RATING	WEIGHT		
								LMI	RP	Per Inch
								Base	Base	lb
22	39.4	BNM05	0.197	0.004	0.003	1700	3080	11.6	18.9	0.45
	39.4	BNM10	0.394	0.004	0.003	1700	4721	11.5	18.9	0.45
	39.4	BNM20	0.787	0.004	0.003	1000	2248	11.6	18.9	0.45
	24	RNM04	0.157	0.0004	0.0012	1700	7306	12.5	19.9	0.38
	24	RNM05	0.197	0.0004	0.0012	1700	7306	12.5	19.9	0.38
	24	RNM10	0.394	0.0004	0.0012	1556	7306	12.5	19.9	0.38
25	39.4	BN04	0.250	0.004	0.015	2846	3250	34.8	40.2	0.84
	39.4	BNM05	0.197	0.002	0.0024	2000	3777	34.3	39.7	0.82
	39.4	BNM10	0.394	0.002	0.0031	1750	5171	34.7	40.1	0.82
	39.4	BNM25	0.984	0.004	0.0031	700	4496	34.5	39.9	0.83
	36	RNM04	0.157	0.0004	0.0012	4159	14725	36.8	42.2	0.79
	36	RNM05	0.197	0.0004	0.0012	3878	14725	36.8	42.2	0.79
30	36	RNM10	0.394	0.0004	0.0012	4159	14725	36.8	42.2	0.79
	48	BN04	0.250	0.004	0.015	4500	4250	41.2	46.6	1.30
	48	BNM05	0.197	0.001	0.0024	3000	5598	42.3	47.7	1.32
	48	BNM10	0.394	0.002	0.0031	2950	9757	43.7	49.1	1.32
	48	BNM20	0.787	0.002	0.0031	1848	9622	41.8	47.2	1.32
	48 <sup>§</sup>	RNM05	0.197	0.0004	0.0012	7868	14725	43.5	48.9	1.16
48 <sup>§</sup>	RNM10	0.394	0.0004	0.0012	7943	14725	43.5	48.9	1.16	

<sup>§</sup> RSH30 extended stroke length 50" (1270mm) available for roller screws, contact Tolomatic for production time.



MADE IN U.S.A.

**Tolomatic**<sup>TM</sup>  
 EXCELLENCE IN MOTION

COMPANY WITH  
 QUALITY SYSTEM  
 CERTIFIED BY DNV  
 = ISO 9001 =  
 Certified site: Hamel, MN

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