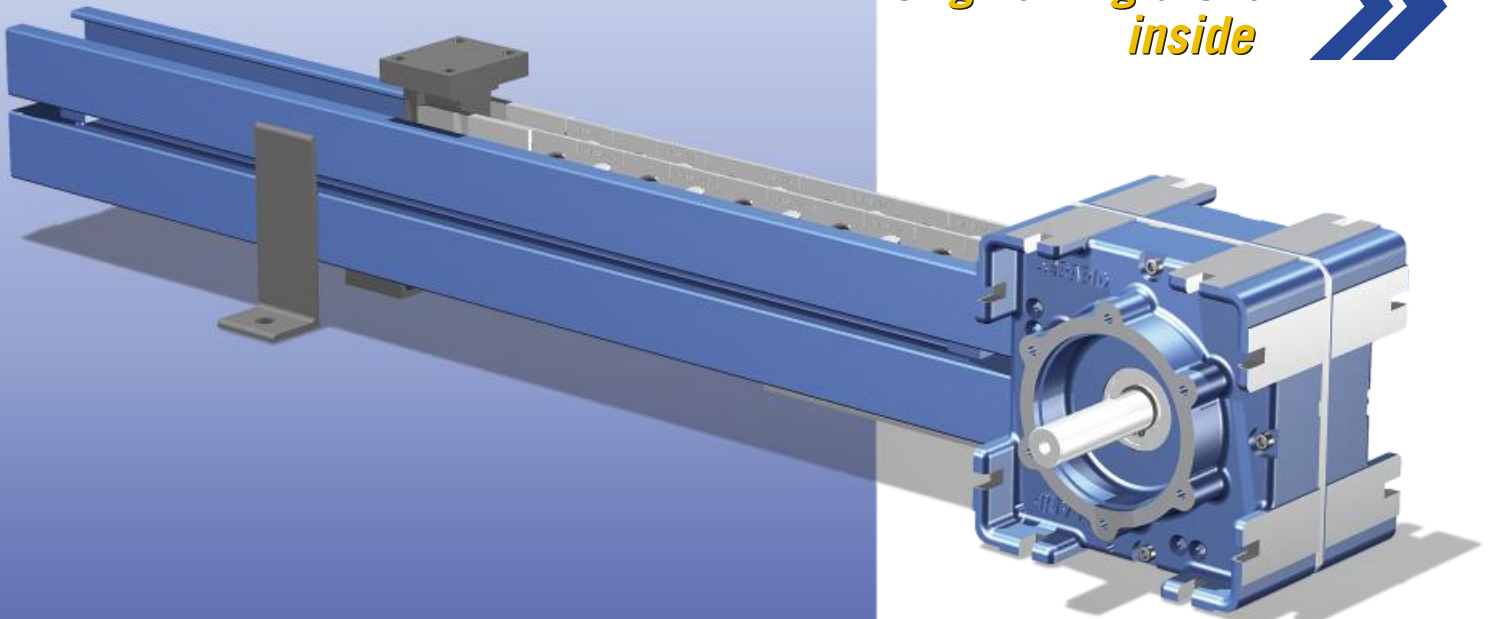


# LinearBeam

The linear actuator solution for  
any load, any distance,  
any environment



*Original Rigid Chain  
inside*



## Key benefits

- stroke: 1 m to unlimited
- capacity: 1 kN to 160+ kN
- harsh-environment models

**SERAPID**  
PUSHING AHEAD



# LinearBeam

## The linear actuator solution for any load, any distance, any environment

The SERAPID **LinearBeam** is a rodless linear actuator with a thrust capacity of up to 160 kN (35,000 lbs) and a stroke of virtually any length. It runs fast and smooth, using the robust and reliable Rigid Chain. Working purely mechanically, this actuator is as well suited for the clean-room as for the harsh factory floor, or any other environment. A full range of options allows adaptation to your individual conditions. Heavy duty models are guaranteed over 1 million cycles of full-load, permanent operation.

**guides** **load bracket** **mounting bracket**

use when load is guided

one pair every 1500 mm ±

### options

- 1 option PB:** protective bellows for harsh environments
- 2 option OB:** oil bath for high cycles (horizontal motion only)
- 3 option GC:** guided load carriage (use when load is not guided)

### recent application examples

- 100 ft (30 meters) linear actuator system for handling nuclear waste
- linear movement of a 200 ton organ on a stage
- steel mills
- furnace loading
- off-shore
- high temperature units
- and many more ...

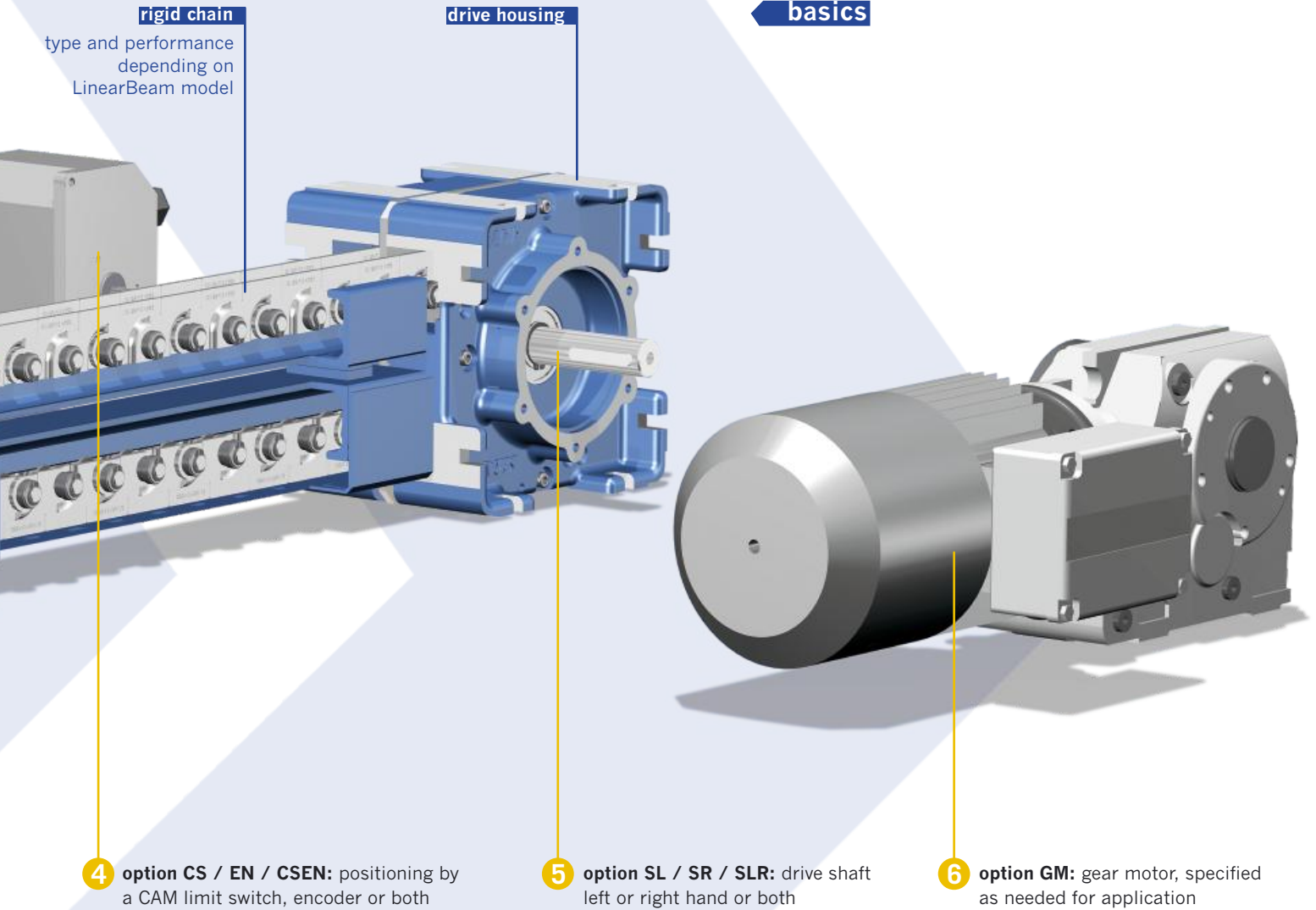
### other features and benefits

- positive, accurate and repetitive positioning
- used for vertical as well as horizontal transfer
- can be part of machine structure
- standard seamless units up to 5 meters of stroke
- transfer speed: up to 2 meter/s
- mechanical system built for heavy-duty industrial applications
- zero maintenance models available (oil bath)
- long list of options and design variations
- electric, pneumatic or hydraulic power source
- uses the SERAPID rigid chain, renowned for its reliability and toughness

# Original Rigid Chain inside



## basics



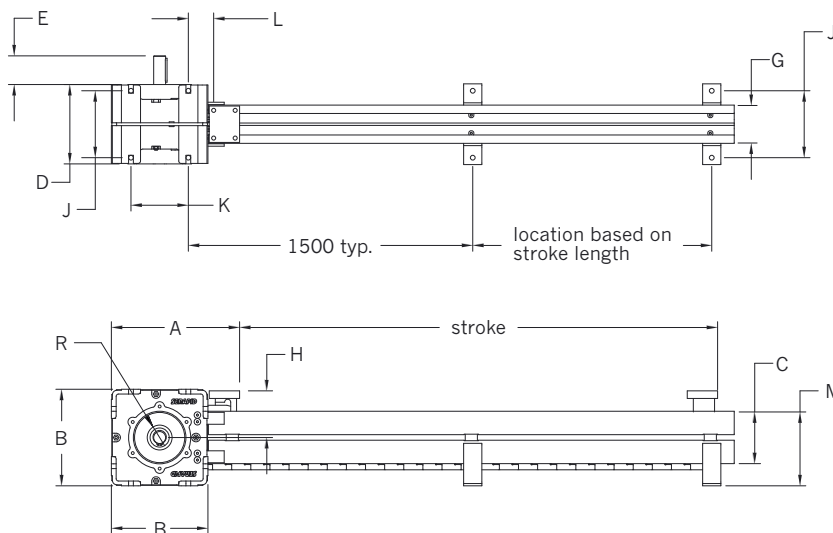
**4 option CS / EN / CSEN:** positioning by a CAM limit switch, encoder or both

**5 option SL / SR / SLR:** drive shaft left or right hand or both

**6 option GM:** gear motor, specified as needed for application

## options

- 1 Protective bellows, order code PB:** Used when there is risk of debris or contaminants falling into the chain guides. Includes end cap and mounting brackets. Standard when the oil bath option is used.
- 2 Oil bath, order code OB:** Used when a maintenance free unit is desired. A sealed oil reservoir runs along the whole actuator. This provides permanent lubrication, especially desirable for high cycle units.
- 3 Guided carriage, order code GC:** Used with unguided loads and in case of moments and/or side loads. Guided on linear bearings lubricated for life.
- 4 Positioning, order code CS / EN / CSEN:** Either a CAM switch (CS) or an encoder (EN) or both (CSEN) can be provided for the positioning of the actuator.
- 5 Drive shaft output, order code SL / SR / SLR:** The drive shaft can be output to the left (SL) or right (SR) side, or both sides (SLR) of the drive housing (facing away from housing)
- 6 Gear motor, order code GM:** Prime mover is typically a 3 phase inverter duty electric motor. Other prime movers (hydraulic, pneumatic) also available. Gear motor custom sized as needed by application.



## Original Rigid Chain inside

Please follow SERAPID instructions on how to calculate thrust. — All dimensions in mm. Dimensions approximate, request drawing file or download from website. — Stroke as required by application.

LinearBeam Model	nominal thrust force F [kN]	R	A	B	C	D	E	G	H	J	K	L	M
LB 40	7.5	40	268	202	108	166	60	80	98	140	120	53	155
LB S60	25	60	390	270	159	136	72	100	135	170	140	70	216
LB D60	37	60	390	270	159	181	72	144	135	214.5	140	70	216
LB J60	50	60	390	270	159	195	72	158	135	228.5	140	70	216
LB S90	80	90	590	400	272	268	142	176	200	300	300	100	338
LB D90	130	90	590	400	272	356	164	264	200	388	300	100	338
LB J90	160	90	590	400	272	375	164	283	200	407	300	100	338
Special	>160												

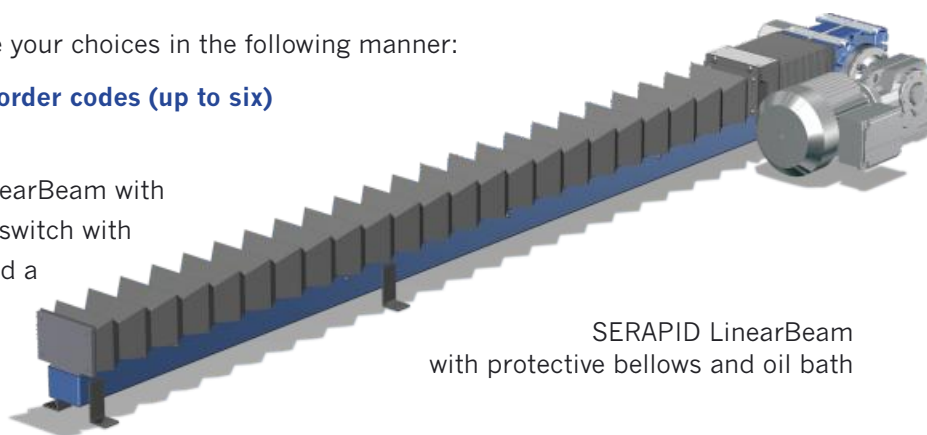
### How to order

To order your specific LinearBeam, summarize your choices in the following manner:

#### Model designation - stroke (meters) - option order codes (up to six)

**Example:** LB S60-3.2-PB-CSEN-SL-GM

This example is for ordering a type LB S60 LinearBeam with 3.2 meters of stroke, protective bellows, CAM switch with encoder positioning, left-hand shaft output, and a gear motor.



SERAPID LinearBeam with protective bellows and oil bath

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