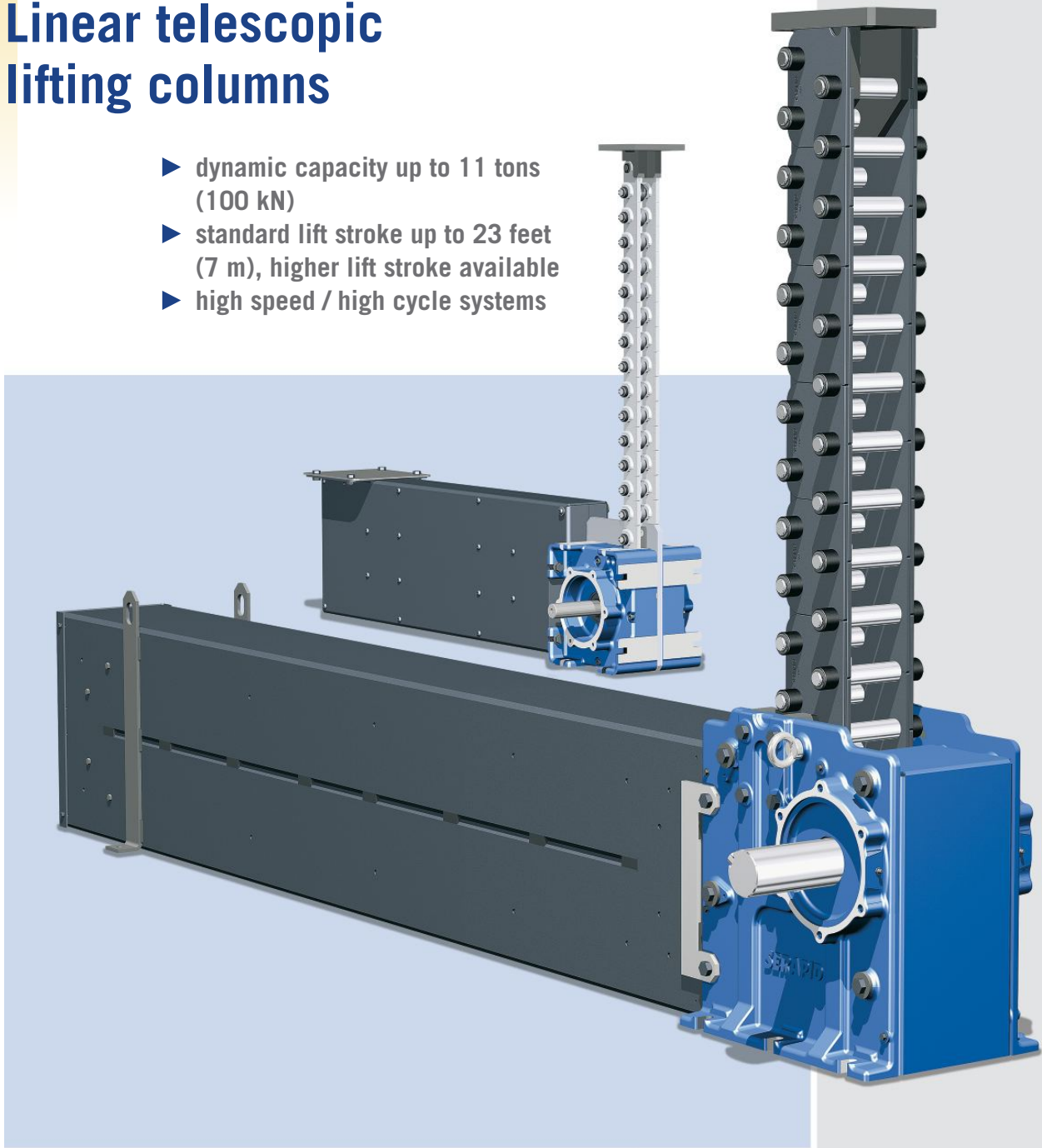


# Linear telescopic lifting columns

- ▶ dynamic capacity up to 11 tons (100 kN)
- ▶ standard lift stroke up to 23 feet (7 m), higher lift stroke available
- ▶ high speed / high cycle systems

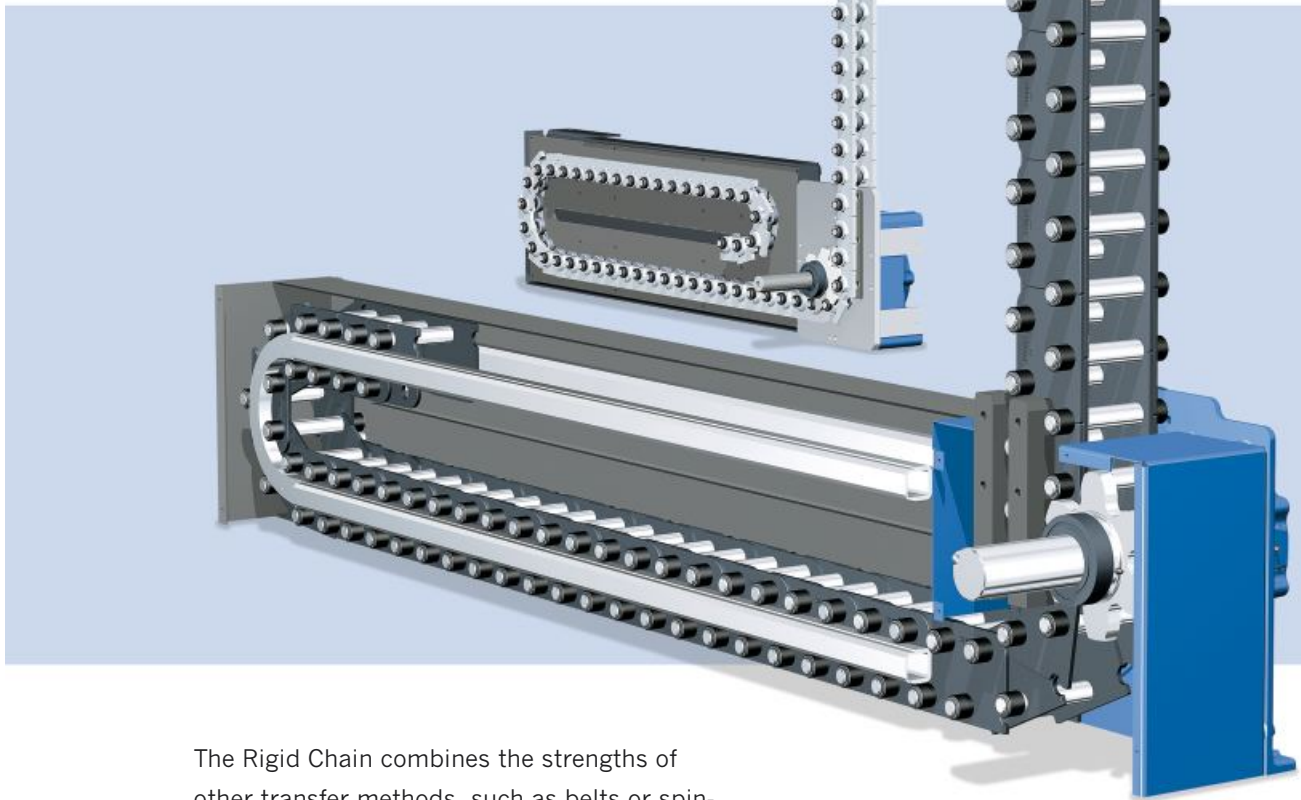


**SERAPID**  
PUSHING AHEAD

SERAPID lift systems provide a mechanical way to elevate heavy loads. Just like the horizontal motion systems, this is based on the locking and unlocking of flexibly connected, linked elements. When lifting a load, the specially shaped chain links interlock with each other, forming a rigid bar or column.

When lowered, the links unlock, allowing it to remain flexible. The chain bends or coils into a compact package.

## Linear telescopic lifting columns



The Rigid Chain combines the strengths of other transfer methods, such as belts or spindle screws, and at the same time it does away with their weaknesses. This is especially true in the case of vertical motion:

- ▶ repeatable positioning in the millimeter range, even at high speed
- ▶ standard speed up to 9 ft/s (300 mm/s), faster speeds available on request
- ▶ load capacities to 10 tons per lifting column, stroke up to 23 ft (7 m) or more
- ▶ maintains position with no drift
- ▶ space-saving chain return storage
- ▶ simple configuration, design flexibility
- ▶ 80% system efficiency
- ▶ long life and low maintenance

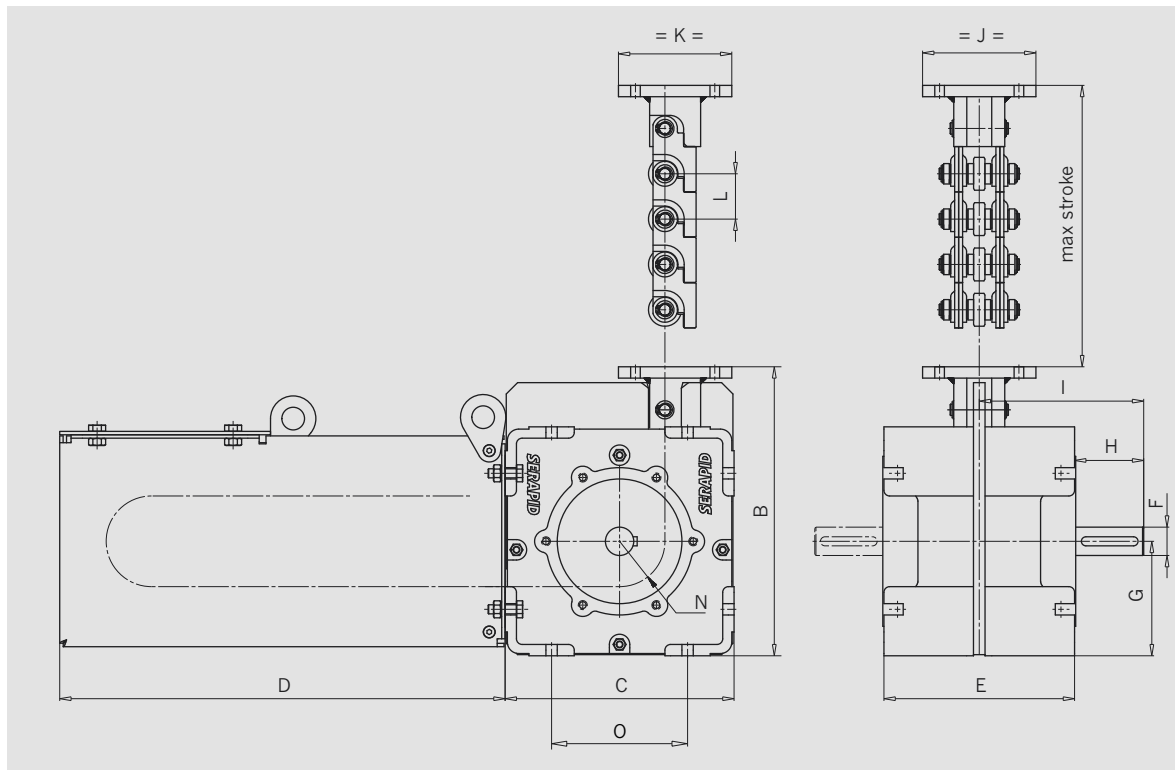
### The ChainLift standard model range

	ChainLift 40	ChainLift 60
dyn / stat capacity [kN (lbf)]	7.5 (1700)	20 (4500)
max stroke [m (in)]	1 (40)	2 (80)
max speed [mm/s (ft/mn)]	200 (40)	200 (40)
pitch of link [mm]	40	60
segment radius of drive pinions [mm]	40	60
weight of chain [kg/m]	7.8	10.5
weight of drive housing [kg]	15	45
standard magazines: length [mm]		
max stroke [mm] 500	396	
1000	646	688.5
2000		1188.5

The ChainLift was developed from our horizontal push-pull chain. The links were reinforced with double plates, four driving rollers, plus larger guide rollers, making the chain capable of lifting. Additional stability is achieved in the drive housing through a thicker and longer reaction plate. The lifting force is applied through four driving pinions.

For requirements outside of our specifications, please contact us.

ChainLift



	max stroke	B	C	E	F	G	H	I	J	K	L	N	O
ChainLift 40	1000	255	202	168.2	25	101	59	146	100	100	40	40	120
ChainLift 60	2000	350	272	201.4	45	136	95	197.7	130	130	60	60	140

#### standard magazines, length (D)

max stroke	500	1000	2000
ChainLift 40, D =	396	646	
ChainLift 60, D =		688.5	1188.5

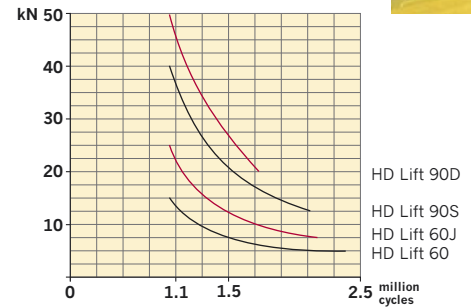


# HD Lift: strength and endurance

The systems in our heavy-duty line are designed for high operating cycles (> 10 cycles / h). The guaranteed minimum lifetime is one million cycles under maximum load. All types include a permanent lubrication system, with oil-proof drive housing and chain magazine. The product range includes five standard systems, covering dynamic loads up to 11240 lbf and strokes up to 8 feet.

The diagram below shows the lifetime curves of our heavy-duty lifts in relation to load. These curves are based on actual test data.

For requirements outside of our specifications, please contact us.

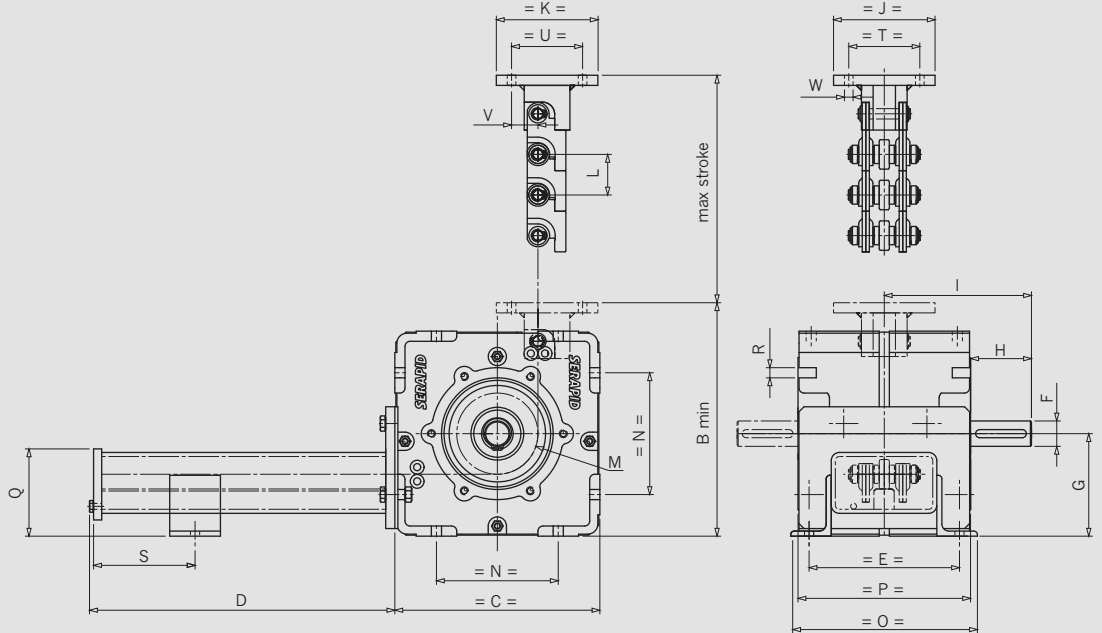


## The HD Lift standard model range

	HD Lift 40	HD Lift 60	HD Lift 60J	HD Lift 90S	HD Lift 90D
dyn / stat capacity [kN (lbf)]	6.5 (1450)	12.5 (2800)	25 (5600)	40 (9000)	50 (11200)
max stroke [m (in)]	1 (40)	1.5 (60)	1.5 (60)	2 (80)	2.5 (100)
max speed [mm/s (ft/mn)]	300 (60)	300 (60)	300 (60)	300 (60)	300 (60)
pitch of link [mm]	40	60	60	90	90
segment radius of drive pinions [mm]	40	60	60	90	90
weight of chain [kg/m]	7.8	10.5	2 x 10.5	31	49

HD Lift

HD Lift 40 / HD Lift 60

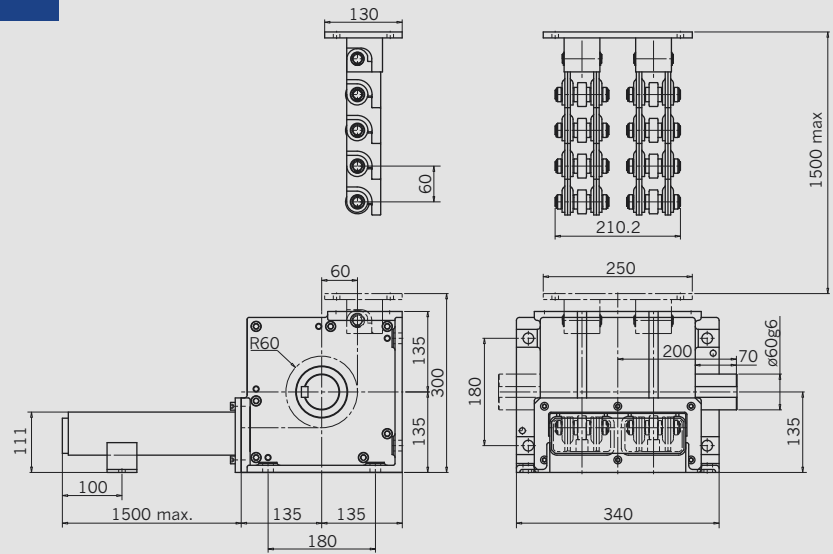


	max stroke	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
HD Lift 40	1000	230	202	1000	148.2	Ø25g6	101	60	145	100	100	40	40	120	184	170	86	10	100	70	70	26	8.5
HD Lift 60	1500	300	272	1500	180	Ø45g6	136	70	140	130	130	60	60	180	220	220	101	18	100	90	90	35	11

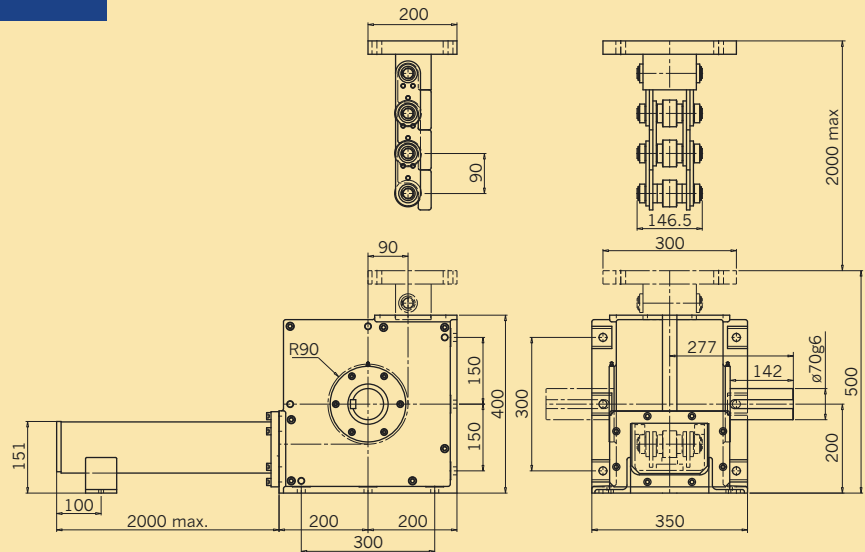
All dimensions in mm.



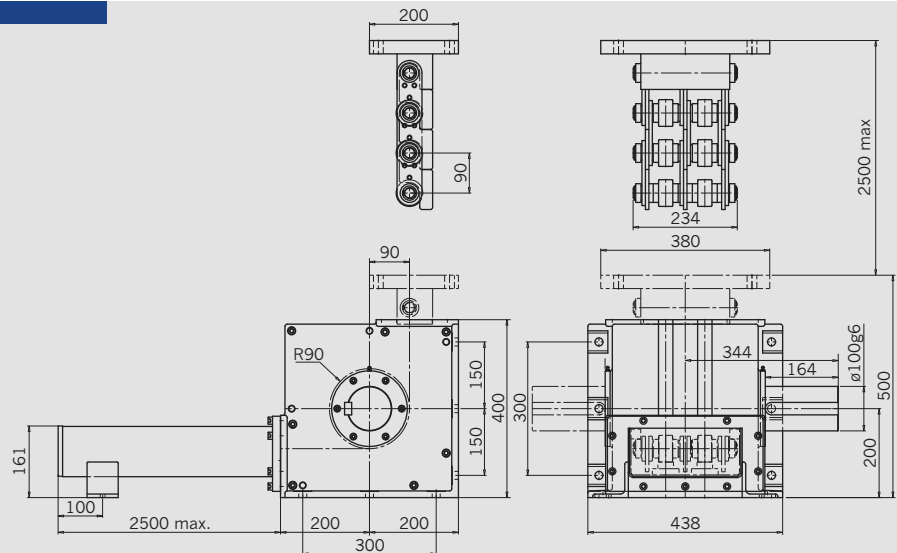
HD Lift 60J



HD Lift 90S



HD Lift 90D

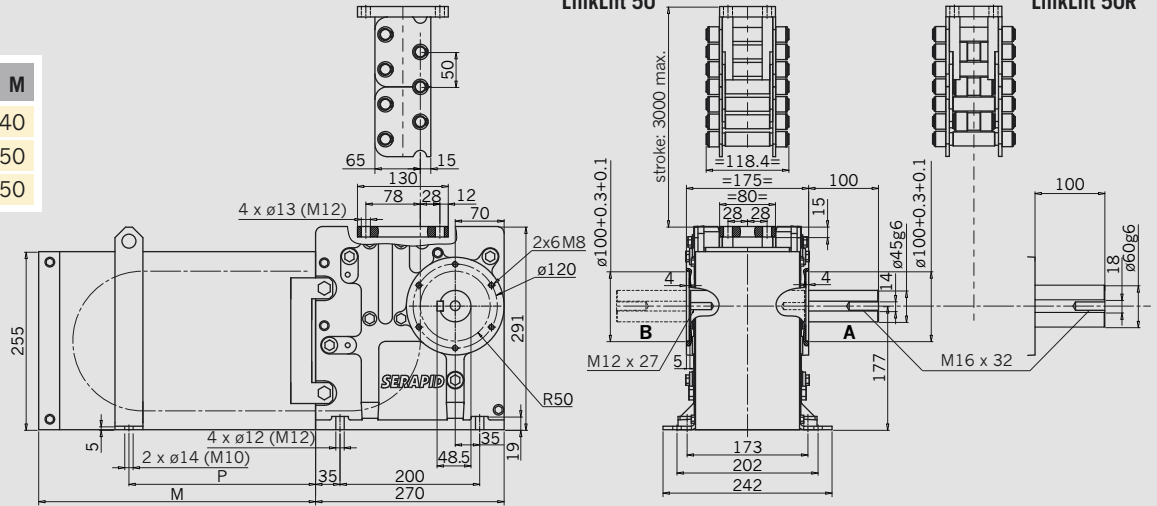




LinkLift 50 / 50R

magazine sizes

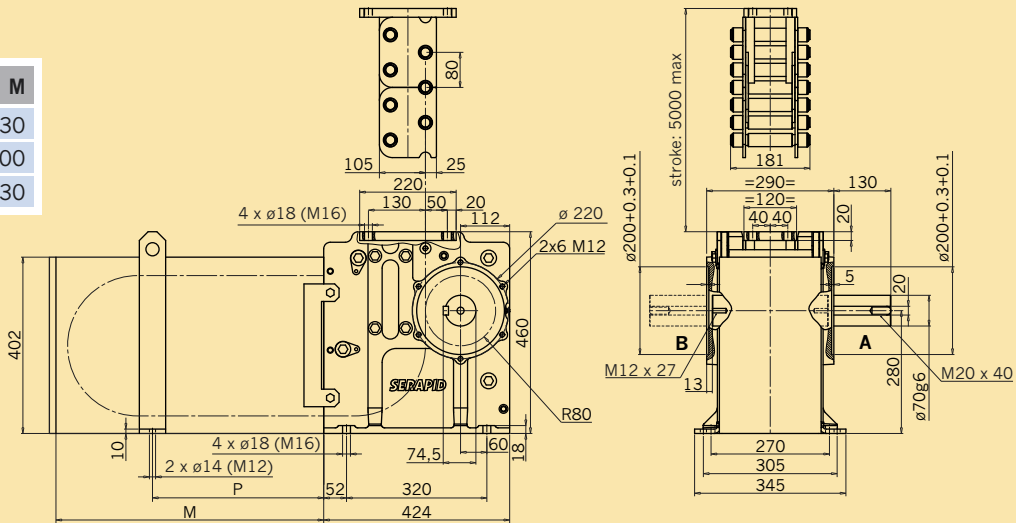
stroke	P	M
< 1400	420	840
< 2200	625	1250
< 3000	825	1650



LinkLift 80

magazine sizes

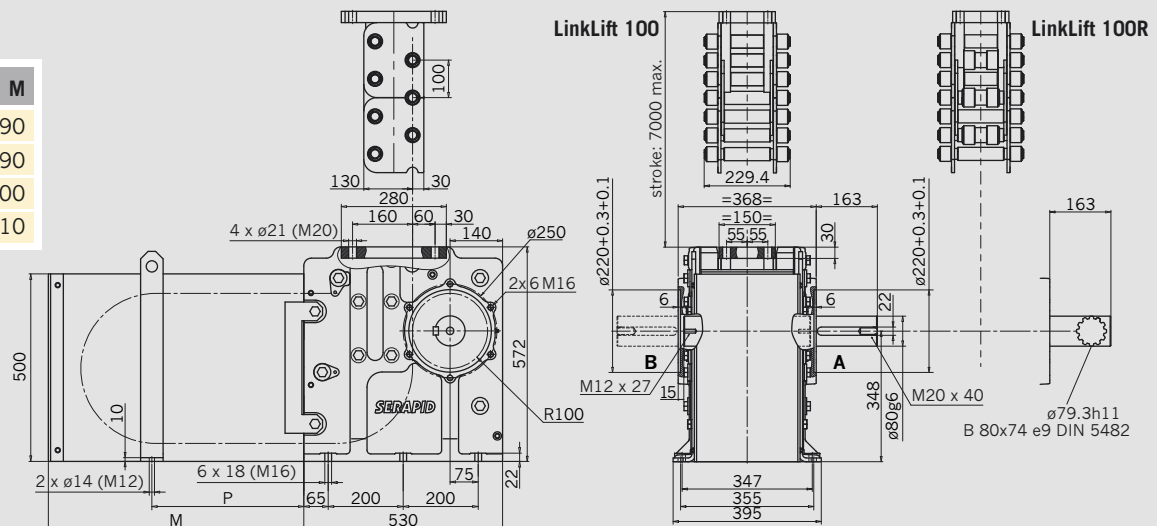
stroke	P	M
< 2200	665	1330
< 3540	1000	2000
< 5000	1365	2730



LinkLift 100 / 100R

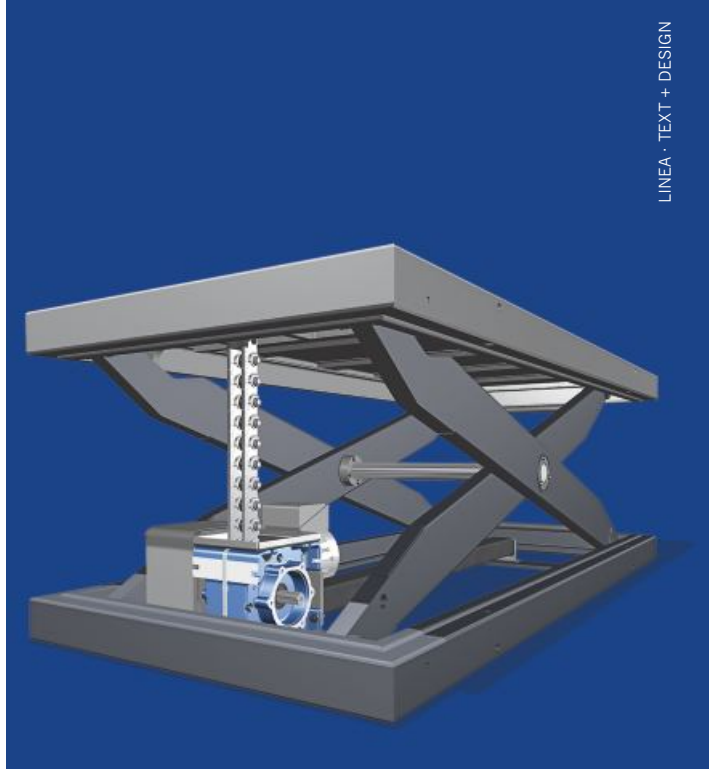
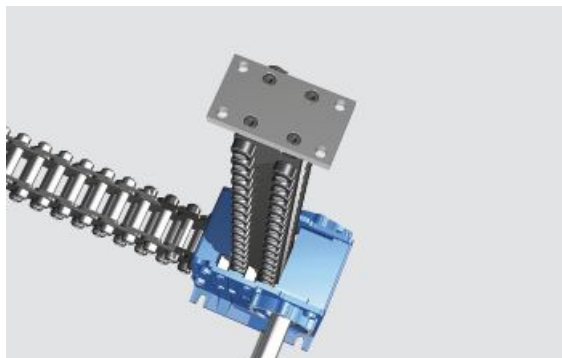
magazine sizes

stroke	P	M
< 2560	745	1490
< 4560	1245	2490
< 5580	1500	3000
< 7000	1855	3710





## Linear telescopic lifting columns



[www.serapid.com](http://www.serapid.com)

### SERAPID USA INC.

5400 18 Mile Road  
Sterling Heights MI 48314, USA  
Phone +1 586 274 0774  
Fax +1 586 274 0775

[info-us@serapid.com](mailto:info-us@serapid.com)

### SERAPID S.A.S.

453, Route de Dieppe · B.P. 15  
F-76660 Londinières, France  
Tél. +33 (0)2 35 93 82 82  
Fax +33 (0)2 35 94 10 93

[info-fr@serapid.com](mailto:info-fr@serapid.com)

### SERAPID Ltd

Elm Farm Park, Great Green, Thurston  
Bury St Edmunds – IP31 3SH, UK

Tel: +44 (0)1359 233335  
Fax: +44 (0)1359 232800

[info-uk@serapid.com](mailto:info-uk@serapid.com)

### SERAPID Deutschland GmbH

Postfach 1711  
D-97967 Bad Mergentheim  
Tel. +49 (0)7931 96 47-0  
Fax +49 (0)7931 96 47-28

[info-de@serapid.com](mailto:info-de@serapid.com)

