

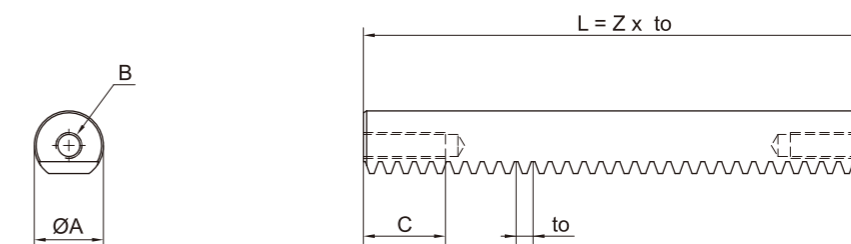
Ext. Dimensions [mm]

Description	Symbol	Unit	SL U1	SL U2	SL U3
	A	mm	80	110	180
	B	mm	80	110	180
	C	mm	70	80	130
	D	mm	55	60	105
	E	mm	50	72	120
	F	mm	38	61	99
	G	mm	20	15	15
Locating Flange	H	mm	Ø 26 K6 Depth 3	Ø 47 K6 Depth 4	Ø 72 K6 Depth 4
	I	mm	Ø 48	Ø 72	Ø 110
Key DIN 6885 P9	J	mm	Ø 14 h7	Ø 25 h7	Ø 42 h7
	K	mm	30	45	60
	L	mm	32	47	62
	M	mm	25	36	50
	N	mm	2	5	5
Key DIN 6885 P9	O	mm	Ø 10 h7	Ø 20 h7	Ø 35 h7
	P	mm	Ø 6 h7 Depth 10	Ø 6 h7 Depth 10	Ø 6 h7 Depth 10
	R	mm	Ø 6 h7 Depth 5	Ø 6 h7 Depth 3	Ø 6 h7 Depth 5
	S	mm	M 8 Depth 16 Ø 6.8 Through Hole	M 10 Depth 20 Ø 8.5 Through Hole	M 12 Depth 27 Ø 10.2 Through Hole
	T	mm	M 6 Depth 12	M 8 Depth 12	M 10 Depth 20
Lube Hole	U	mm	M 10 x 1.0 Depth 10	M 10 x 1.0 Depth 10	M 10 x 1.0 Depth 10
	V	mm	52	60	100
	W	mm	15	18	35
Gear Rack Protection	X	mm	M 4 Depth 6	M 4 Depth 8	M 4 Depth 8
Weight	PW	kg	0.90	2.10	8.29
	ZA1	kg	1.01	2.45	10.14
	ZA2	kg	1.05	2.62	10.80
	PFN	kg	0.93	2.07	8.50

NOTE: In the "double" version, the maximum transmitted torque is the same as for the individual gearbox.

Model	SL U1	SL U2	SL U3
lean SL® double PW	500 145	500 146	500 147
lean SL® double ZA1	500 149	500 150	500 151
lean SL® double ZA2	500 153	500 154	500 155
lean SL® double PFN	500 157	500 158	500 159

lean SL® Gear racks

Ext. Dimensions [mm]


Description	Symbol	Unit	SL U1	SL U2	SL U3
	A	mm	Ø 25 h6	Ø 32 h6	Ø 60 h6
	B	mm	M 10	M 12	M 20
	C	mm	30	35	50
Number of Teeth	Z	mm	as per customer requirements		
Module	m	—	1.0	2.5	2.5
Tooth Pitch	to	mm	3.1416	7.8540	7.8540
Moment of Inertia	lx	mm ⁴	12,054	24,330	352,513
Moment of Inertia	ly	mm ⁴	17,856	44,042	572,284
Polar Moment of Inertia	lp	mm ⁴	29,910	68,372	924,797
Weight	—	kg/m	3.50	5.45	19.10

NOTE: lean SL® series gear racks are supported in sliding bushings.

They are designed to transfer tensile and compressive forces. They cannot bear transverse loads. See the technical data on Page 3.10.02.

The gear rack is symmetrical in construction. When using a gear rack protection, the gear rack length increases accordingly.

Have the theoretical lifespan calculated. Under high loads, or for long service life, we recommend the use of hardened & ground gear racks.

Always add the number of teeth "Z = _ _ _" to the model number.

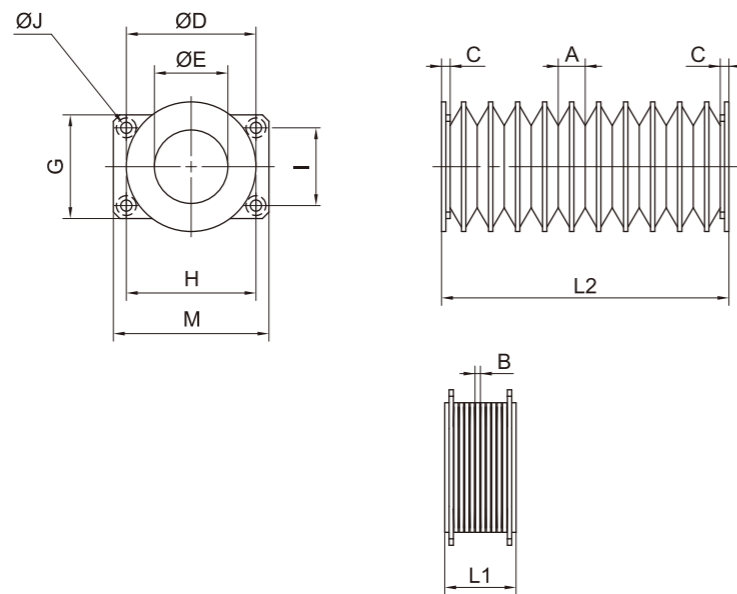
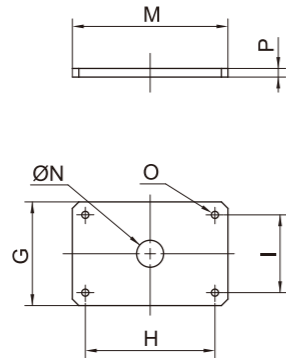
Model	SL U1	SL U2	SL U3
lean SL® Gear Rack	500 161	500 162	500 163
lean SL® Gear Rack (Hardened & Ground)	500 165	500 166	500 167

lean SL® Gear Rack Protection & End Plate

- Suitable for use in welding areas.
- End plate is used for mounting the gear rack protection on the gear rack.



Ext. Dimensions [mm]



lean SL® Gear Rack Protection & End Plate

Description	Symbol	Unit	SL U1	SL U2	SL U3
	A	mm	12.5	12.5	27.5
	B	mm	2.5	2.5	2.5
Stroke per Fold	(A - B)	mm	10	10	25
	C	mm	4	4	4
	D	mm	Ø 50	Ø 60	Ø 110
	E	mm	Ø 26	Ø 34	Ø 60
Number of Folds	F	Each	as per customer requirements		
	G	mm	41	48	80
	H	mm	52	60	100
	I	mm	30	36	70
	J	mm	Ø 4.3 V 8.5 x 90°	Ø 4.3 V 8.5 x 90°	Ø 4.3 V 8.5 x 90°
Stroke	L	mm	L = L2 - L1 = F x (A - B)		
	L1	mm	L1 = 2 x C + F x B		
	L2	mm	L2 = 2 x C + F x A		
	M	mm	63	72	110
	N	mm	Ø 10.5	Ø 12.5	Ø 20.5
	O	mm	M 4	M 4	M 4
	P	mm	4	4	4

NOTE: Check whether the operating conditions require a gear rack protection.

This gear rack protection is **suited for use in welding areas**. It is shipped with two retaining plates and screws.

The gear rack protection is silicone-free.

Always add the number of folds "F = ___" to the model number.

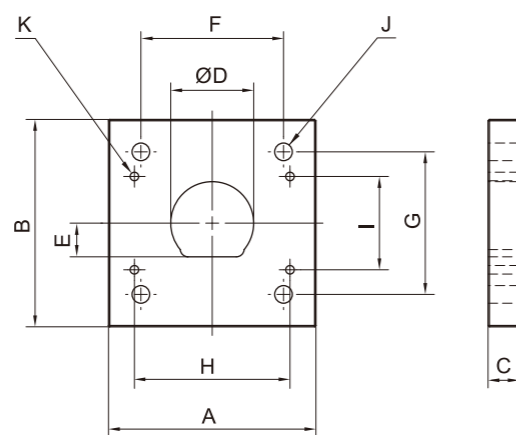
Model	SL U1	SL U2	SL U3
lean SL® Gear Rack Protection	500 177	500 178	500 179
lean SL® End Plate	500 548	500 549	500 550

lean SL® Gear Rack Retaining Plate AZ

- Provides a rigid connection between the mounted parts and the gear rack.



Ext. Dimensions (mm)



Description	Symbol	Unit	SL U1	SL U2	SL U3
	A	mm	70	80	130
	B	mm	70	80	130
	C	mm	10	12	15
	D	mm	Ø 25 p7	Ø 32 p7	Ø 60 p7
	E	mm	10	13	22
	F	mm	50	55	90
	G	mm	50	55	90
	H	mm	52	60	100
	I	mm	30	36	70
	J	mm	M 6	M 8	M 10
	K	mm	M 4	M 4	M 4
Weight	—	kg	0.34	0.5	1.64

NOTE: To this end, the retaining plate is pressed onto the gear rack in the guide direction.
The "J" thread and the end face thread can be used for mounting.
Be sure to indicate precisely which gear rack will be used with the AZ plate when ordering a gear rack retaining plate.

Model	SL U1	SL U2	SL U3
lean SL® Gear Rack Retaining Plate (AZ) Drilled Fit	500 185	500 186	500 187

MEMO

Area with horizontal dashed lines for notes.