

New bevel gearbox

ZIMM[®]



KSZ-H MODEL RANGE

Now available in 7 sizes

- » 7 sizes in the L and T variants

Now in 3 drive ratios

- » 1:1 » 2:1 » 3:1

Now up to 60% more torque

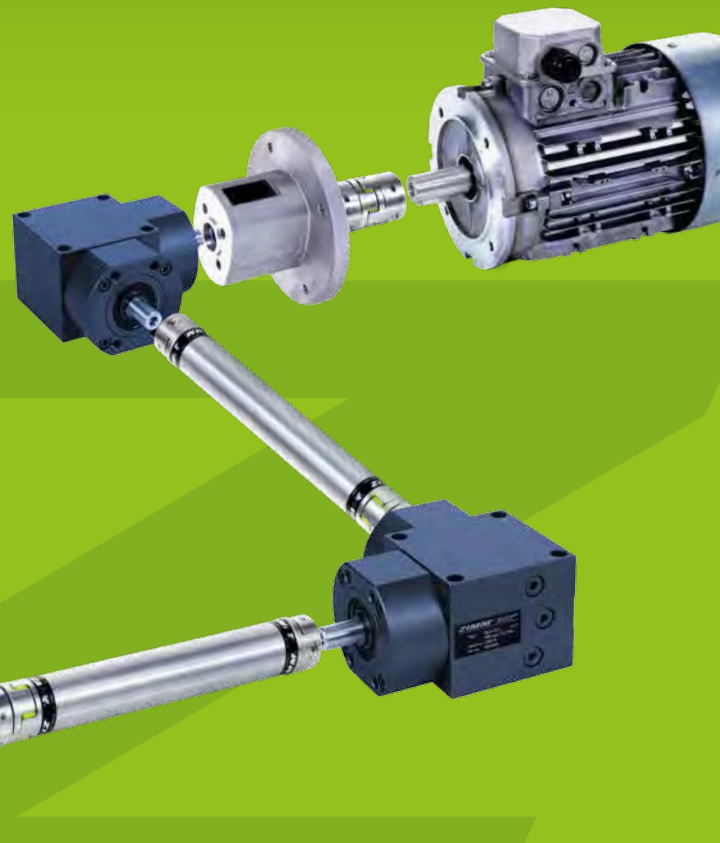
- » Torque up to 60% higher than the previous KSZ range for the same physical size

Now corrosion-resistant as standard

- » The two-component paint finish and smooth surface ensure a long working life and resistance to contamination of the gearbox

Now a modular design in the ZIMM Building Block System

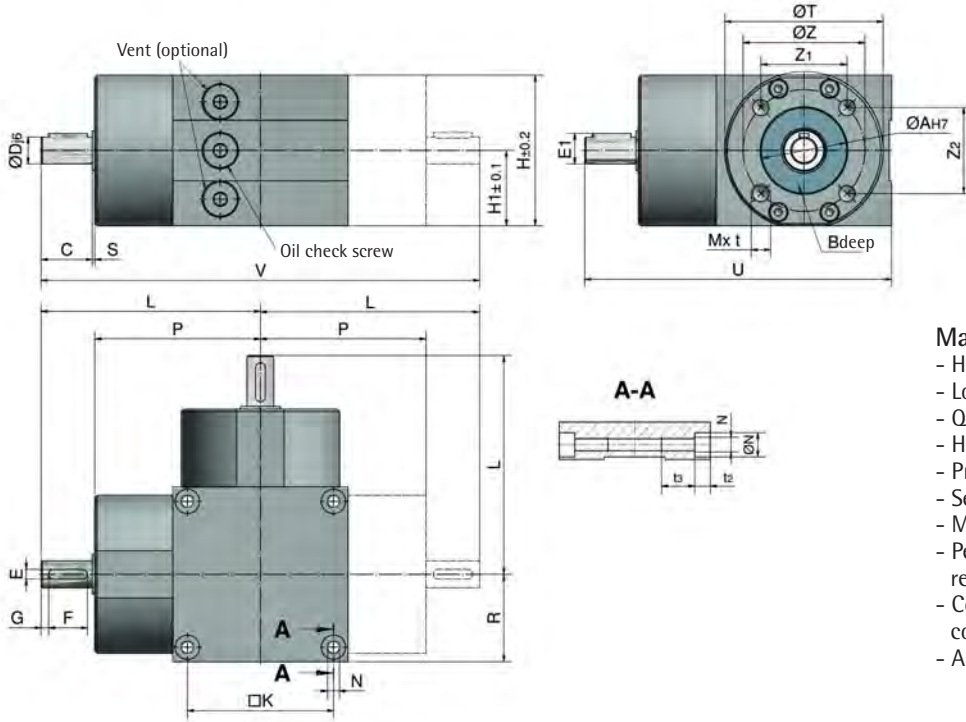
- » Combine the bevel gearbox, screw jack system, couplings, connecting shafts, motors and motor flanges to suit the requirements of each of your applications.



spiral-toothed



Bevel gearboxes KSZ-H – 5 to 35 kN



Material specifications:

- Housing material: EN-GJL-200 (GGL 20)
- Low-backlash version
- Quiet running
- High torque transmission in a small size
- Pre-loaded taper roller bearings
- Sealing by means of shaft seals and O-rings
- Max. 40% duty factor at 1500 rpm
- Permanent lubrication with oil; oil change required only on heavy duty applications
- Compatible with screw jack modular components
- All installation dimensions symmetrical

Dimensions

Part no.	ØAH7	B	C	Dj6	Eh9	E1	F	G	H	H1	□K	L	M	t	N	ØN	t2	t3	P	R	S	ØT	U	V	ØZ	Z1	Z2
KSZ-H-5-L/T	35	3	21	11	4	12.5	16	3	62	31	60	90	M8	12	M6	10	6.4	20	68	36	1	65 ¹⁾	126	180	50	35.4	35.4
KSZ-H-10-L/T	40	3	26	14	5	16	20	3	74	37	70	105	M8	12	M8	11	8.2	25	77.5	42.5	1.5	77 ²⁾	147.5	210	59.4	42	42
KSZ-H-25-L/T	42	3	27	16	5	18	22	3	82	41	78	117	M10	15	M8	11	8.2	25	88.5	47.5	1.5	91 ³⁾	164.5	234	71.7	62	36
KSZ-H-35-L/T	52	4	34	19	6	21.5	28	3	100	50	98	150	M10	20	M10	15	10.2	30	114	60	2	102 ⁴⁾	210	300	86	70	50

1) Flattening-off 61 mm 2) Flattening-off 73 mm 3) Flattening-off 80 mm 4) Flattening-off 99 mm

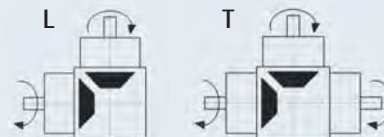
Technical data

Size	i	Permissible torque (drive shaft) Nm at various speeds rpm					Moment of inertia kg cm ²		F _{radial} N	Weight kg	
		100	500	1000	1500	3000	L	T		L	T
KSZ-H-5-L/T	1:1	21	19.8	19.8	19.8	17	0.614	0.748	140	3.1	3.7
	2:1	14	13.7	13.7	13.5	13.2	0.614	0.748	140	3.1	3.7
	3:1	10	10	10.1	10.1	10	0.614	0.748	140	3.1	3.7
KSZ-H-10-L/T	1:1	44.4	41.9	40.2	35.2	28.7	1.855	2.422	200	4.8	6
	2:1	27.5	27.2	27	26.7	26	1.855	2.422	200	4.8	6
	3:1	20.1	20	20	19.9	19.7	1.855	2.422	200	4.8	6
KSZ-H-25-L/T	1:1	72	71	60	52.5	42	3.38	4.215	300	7.2	9.1
	2:1	41	40	40	40	38	3.38	4.215	300	7.2	9.1
	3:1	34	34	33.5	33.5	33	3.38	4.215	300	7.2	9.1
KSZ-H-35-L/T	1:1	162	160	155	135	110	11.055	14.055	550	10.6	14.1
	2:1	78	77	76	74	70	11.055	14.055	550	10.6	14.1
	3:1	51	51	50.5	50	49	11.055	14.055	550	10.6	14.1



Shaft configuration

If one of the shafts is vertical, this must be stated when ordering:
e.g.: "vertical drive shaft"

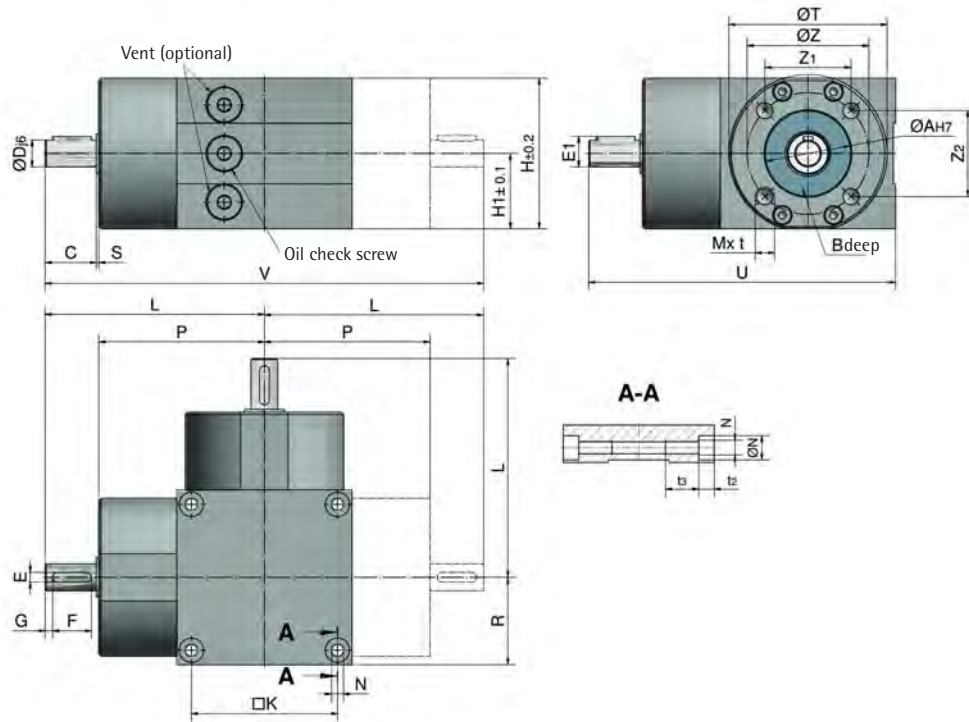


Version T:

The direction of rotation changes when the gearbox is reversed



Bevel gearboxes KSZ-H – 50 to 150 kN



Dimensions

Part no.	ØAH7	B	C	Dj6	Eh9	E1	F	G	H	H1	□K	L	M	t	N	ØN	t2	t3	P	R	S	ØT	U	V	ØZ	Z1	Z2
KSZ-H-50-L/T	52	4	39	20	6	22.5	32	3	116	58	110	165	M10	20	M12	20	12.6	30	124	67.5	2	126 ⁵⁾	232.5	330	86	50	70
KSZ-H-100-L/T	62	4	45	32	10	35	40	3	160	80	154	235	M12	22	M12	20	12.6	35	188	94	2	170 ⁶⁾	329	470	106.5	46	96
KSZ-H-150-L/T	62	5	53	38	10	41	50	1.5	185	92.5	180	275	M12	22	M16	26	15.1	40	220	110	2	188 ⁷⁾	385	550	106.5	46	96

5) Flattening-off 115 mm 6) Flattening-off 159 mm 7) Flattening-off 184 mm

Technical data

Size	i	Permissible torque (drive shaft) Nm at various speeds rpm					Moment of inertia kg cm ²		F _{radial} N	Weight kg	
		100	500	1000	1500	3000	L	T		L	T
KSZ-H-50-L/T	1:1	162	160	158	155	125	11.586	16.269	1100	17	21.4
	2:1	145	144	143	141	115	11.586	16.269	1100	17	21.4
	3:1	100	100	99	98	93	11.586	16.269	1100	17	21.4
KSZ-H-100-L/T	1:1	507	466	455.5	450.5	370	107.8	126.074	1600	54	70.6
	2:1	410	410	400	400	320	107.8	126.074	1600	54	70.6
	3:1	315	315	313	311	320	107.8	126.074	1600	54	70.6
KSZ-H-150-L/T	1:1	781	719.4	703.6	680	540	206.407	236.908	2500	82.1	103
	2:1	675	670	664	657	555	206.407	236.908	2500	82.1	103
	3:1	500	497	494	490	435	206.407	236.908	2500	82.1	103

i The spiral-toothed version is recommended for motorised operation



Ordering example:

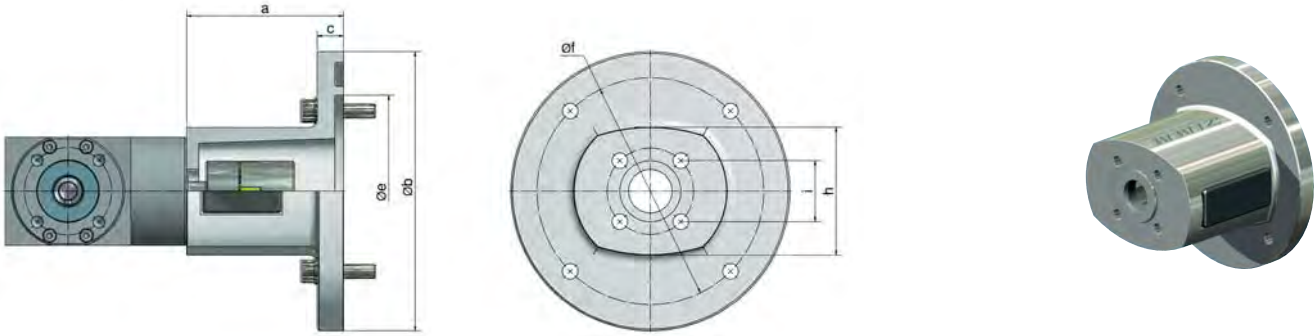
Bevel gearbox
Size
T or L shaft configuration
Drive ratio

KSZ-H-50-T-1:1

spiral-toothed



Bevel gearboxes KSZ-H-5 to KSZ-H-10 – Motor flange combinations



Size KSZ-H	Motor flange part no.	Motor type	Coupling part no. Bore Ø		4 of screws gear- box side 8.8 DIN 7991	4 of socket head cap screws 8.8 DIN 912 (for motor)	a	b	c	e	f	h	i	kg	Transmittable torque Nm ³⁾	
			Size	Gearbox											Motor	max.
KSZ-H-5	Z-10-MF-120-66	63 B14B	KUZ-19	- 11 / 11	M8x16	M6x20 ¹⁾	66	120	10	80	100	73	35.4	0.42	6.1	6.1
KSZ-H-5	Z-10-MF-160-75	71 B14C	KUZ-19	- 11 / 14	M8x16	M8x35 ²⁾	75	160	15	110	130	73	35.4	0.81	5.5	5.5
KSZ-H-5	Z-10-MF-160-90	80 B14B	KUZ-24	- 11 / 19	M8x16	M8x30 ¹⁾	90	160	15	110	130	73	35.4	0.88	13.4	13.4
KSZ-H-10	Z-25-MF-160-105	71 B5	KUZ-28	- 14 / 14	M8x20	M8x35 ²⁾	105	160	15	110	130	81	42	1.11	22.7	22.7
KSZ-H-10	Z-25-MF-160-105	80 B14B	KUZ-28	- 14 / 19	M8x20	M8x30 ¹⁾	105	160	15	110	130	81	42	1.11	27.7	27.7
KSZ-H-10	Z-25-MF-160-105	90 B14B	KUZ-24	- 14 / 24	M8x20	M8x30 ¹⁾	105	160	15	110	130	81	42	1.11	17	27.7
KSZ-H-10	Z-25-MF-160-122	100 B14C	KUZ-28	- 14 / 28	M8x20	M8x30 ¹⁾	122	160	15	110	130	81	42	1.25	27.7	27.7

1) incl. spring washers

2) incl. nuts

3) only valid for these combinations.

CAUTION: Permissible torque for each KSZ-H must be observed

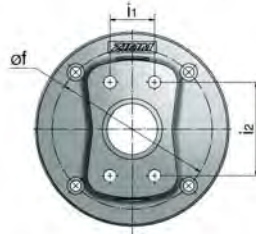
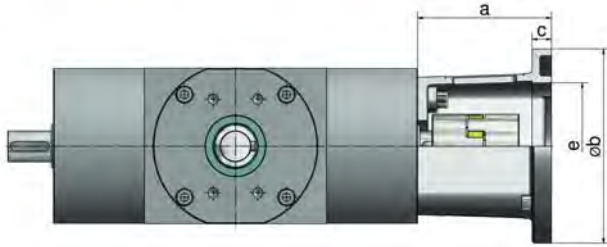


spiral-toothed

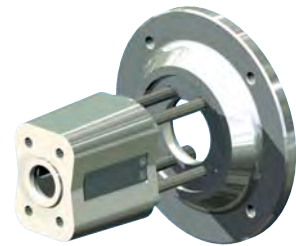
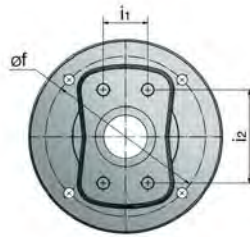
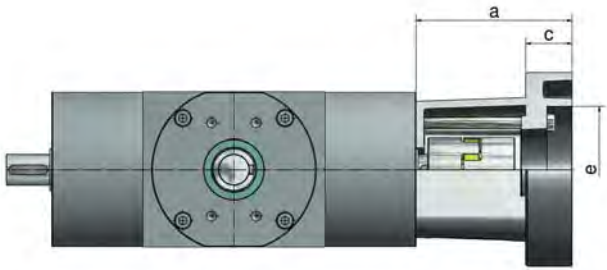


Bevel gearboxes KSZ-H-25 to KSZ-H-150 – Motor flange combinations

Motor flange MF (1 pcs.)



Motor flange base MF-B and Motor flange plate MF-P



Size KSZ-H	Motor flange part no.	Motor type	Coupling part no. Bore Ø		4 of screws gearbox side DIN 912	4 of screws motor side DIN 912	a	b	c	e	f	i1	i2	kg	Transmittable torque Nm ³⁾		
			Size	Gearbox											Motor	max.	
KSZ-H-25	Z-35-MF-160-111	80 B14B	KUZ-24	- 16	/ 19L	M10x30	M8x25 ¹⁾	111	160	15	110	130	36	62	2.6	17	34
KSZ-H-25	Z-35-MF-160-111	90 B14B	KUZ-24	- 16	/ 24	M10x30	M8x25 ¹⁾	111	160	15	110	130	36	62	2.6	17	25.9
KSZ-H-25	Z-35-MF-B+Z-35-MF-P-200	100 B14B	KUZ-28	- 16	/ 28	M10x120	M10x30 ¹⁾	123	200	12	130	165	36	62	3.6	25.9	25.9
KSZ-H-25	Z-35-MF-B+Z-35-MF-P-200	112 B14B	KUZ-28	- 16	/ 28	M10x120	M10x30 ¹⁾	123	200	12	130	165	36	62	3.6	25.9	25.9
KSZ-H-35	Z-50-MF-200-116	90 B5	KUZ-28	- 19	/ 24	M10x30	M10x45 ²⁾	116	200	20	130	165	50	70	4.1	60	72.7
KSZ-H-35	Z-50-MF-200-126	100 B14B	KUZ-28	- 19	/ 28	M10x30	M10x35 ¹⁾	126	200	20	130	165	50	70	4.3	60	72.7
KSZ-H-35	Z-50-MF-200-126	112 B14B	KUZ-28	- 19	/ 28	M10x30	M10x35 ¹⁾	126	200	20	130	165	50	70	4.3	60	72.7
KSZ-H-50	Z-50-MF-200-116	90 B5	KUZ-28	- 20	/ 24	M10x30	M10x45 ²⁾	116	200	20	130	165	50	70	4.1	60	120
KSZ-H-50	Z-50-MF-200-116	100 B14B	KUZ-28	- 20	/ 28	M10x30	M10x35 ¹⁾	126	200	20	130	165	50	70	4.3	60	120
KSZ-H-50	Z-50-MF-200-126	112 B14B	KUZ-28	- 20	/ 28	M10x30	M10x35 ¹⁾	126	200	20	130	165	50	70	4.3	60	120
KSZ-H-100	Z-100/150-MF-200-138	100 B14B	KUZ-38	- 32	/ 28	M12x40	M10x35 ¹⁾	138	200	20	130	165	46	96	5.2	160	164
KSZ-H-100	Z-100/150-MF-200-138	112 B14B	KUZ-38	- 32	/ 28	M12x40	M10x35 ¹⁾	138	200	20	130	165	46	96	5.2	160	164
KSZ-H-100	Z-100/150-MF-B+P-200	132 B14C	KUZ-38	- 32	/ 38	M12x150	M10x65 ¹⁾	161	200	48	130	165	46	96	8.7	160	164
KSZ-H-150	Z-100/150-MF-200-138	100 B14B	KUZ-38	- 38	/ 28	M12x40	M10x35 ¹⁾	138	200	20	130	165	46	96	5.2	160	266
KSZ-H-150	Z-100/150-MF-200-138	112 B14B	KUZ-38	- 38	/ 28	M12x40	M10x35 ¹⁾	138	200	20	130	165	46	96	5.2	160	266
KSZ-H-150	Z-100/150-MF-B+P-200	132 B14C	KUZ-38	- 38	/ 38	M12x150	M10x65 ¹⁾	161	200	48	130	165	46	96	8.7	160	246

1) incl. spring washers

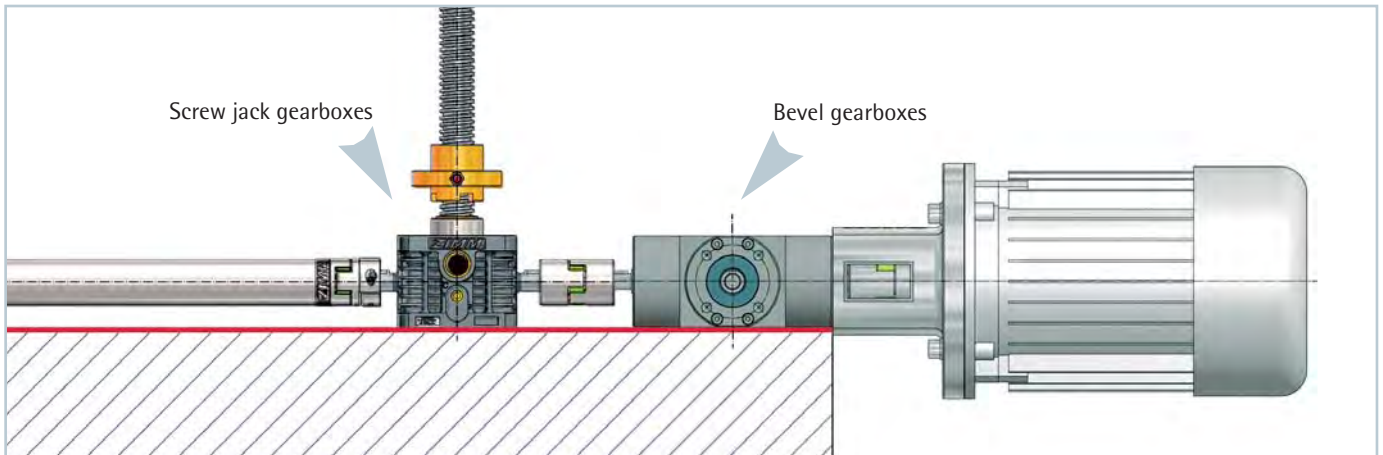
2) incl. nuts

3) only valid for these combinations.

CAUTION: Permissible torque for each KSZ-H must be observed

Bevel gearboxes – Advantages

Same mounting height – no support plates required



The new ZIMM bevel gearboxes in the KSZ-H series have the same fitting height as the ZIMM screw jacks. This makes design and installation easier as no additional support plates are needed, nor do differences in height have to be overcome.

The new KSZ-H series is dimensionally compatible with the previous KSZ and KGZ types.

Additional attachment options

The new KSZ-H series offers an additional attachment option. Besides the standard internal threads for screw connection from below, the special design of the bores now also permits screw connection from above.

DIN 912 hexagon socket head screws can be used here. A wide selection of standard IEC motor flanges of the ZIMM screw jacks are available to ensure simple motor mounting.



Top mounting



Bottom mounting

EUROPE



AUSTRIA



BELGIUM



HUNGARY



RUSSIA



GERMANY



CZECH REPUBLIC



ITALY



SLOVENIA



SWITZERLAND



SLOVAKIA



NETHERLAND



SPAIN



LIECHTENSTEIN



DENMARK



NORWAY



SWEDEN



FINLAND



POLAND



TURKEY



FRANCE



PORTUGAL



GREAT BRITAIN



ROMANIA

ASIA



CHINA



INDIA



ISRAEL



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