

NEW

# SHUTON i+

EXTENDED RANGE FOR OPTIMISED PERFORMANCE

## INCREASED CIRCUIT QUANTITY

BENEFITS IN LOAD CAPACITY, RIGIDITY,  
LIFE AND MAXIMUM FORCE

## REDUCED NOMINAL DIAMETER

BENEFITS IN TEMPERATURE, NOISE AND  
ENERGY CONSUMPTION

The new SHUTON i+ ballscrew range is the ballscrew range for limit applications. This design optimization can be applied in two different aspects, increased circuit quantity for the same nominal diameter or reduced nominal diameter for the same load capacity, always exceeding the standards we were used to and obtaining extra efficient results in applications in which a regular ballscrew is not enough.



# SHUTON i+

## EXTENDED RANGE FOR OPTIMISED PERFORMANCE

### A INCREASE LOAD CAPACITY & RIGIDITY

#### PRODUCT RANGE

							<i>steel balls</i>
do	Ph	i	Ca [kN]	Coa [kN]	Rb/t [N/μm]	Ln, TD	
40	20	4	84	162	2400	220	
i+	40	20	5	103 +23%	208 +28%	3000 +25%	260
	40	25	3	65	118	1770	206
i+	40	25	4	83 +28%	161 +36%	2360 +33%	262
	50	25	4	96	208	2910	260
i+	50	25	6	137 +43%	320 +54%	4320 +48%	364
	50	30	3	74	153	2170	248
i+	50	30	5	116 +56%	264 +73%	3610 +66%	368
	63	25	6	198	494	5240	372
i+	63	25	8	255 +29%	667 +35%	6810 +30%	472
	63	30	4	138	321	3630	316
i+	63	30	7	226 +64%	581 +81%	6200 +71%	496
	80	30	6	333	875	7160	448
i+	80	30	10	511 +54%	1442 +65%	11620 +62%	686
	80	40	4	233	571	4810	402
i+	80	40	7	368 +58%	981 +72%	8060 +68%	649

#### MEAN FORCE.LIFE COMPARATIVE GRAPHIC

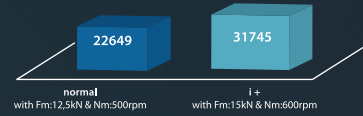
##### 50x25

	Ca [kN]	Fm [kN]	Nm [rpm]	Life [hours]
normal	96	12,5	500	22649
i+	137	15	600	31745

Life [hours]

normal	with Fm:12,5kN & Nm:500rpm	22649
i+	with Fm:15kN & Nm:600rpm	31745

##### 50x25 Life Example (hours)



##### 63x30

	Ca [kN]	Fm [kN]	Nm [rpm]	Life [hours]
normal	138	20	400	20532
i+	226	25	500	36938

Life [hours]

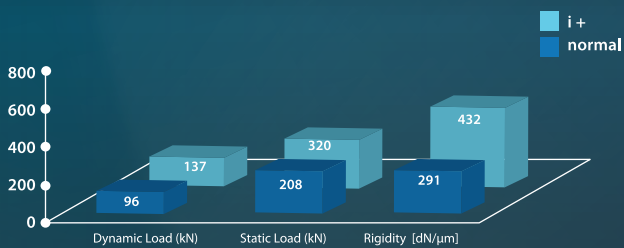
normal	with Fm:20kN & Nm:400rpm	20532
i+	with Fm:25kN & Nm:500rpm	36938

##### 63x30 Life Example (hours)

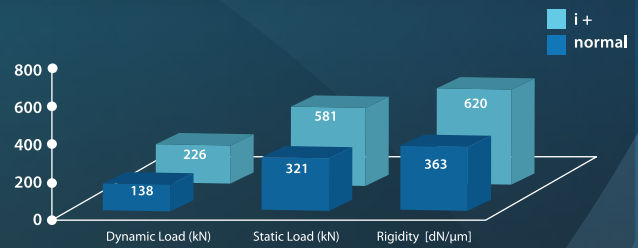


#### LOAD CAPACITY & RIGIDITY COMPARATIVE GRAPHIC

##### 50x25



##### 63x30



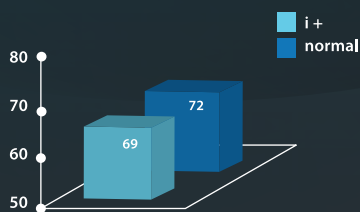
### B IMPROVE NOISE & TEMPERATURE & INERTIA

#### PRODUCT RANGE

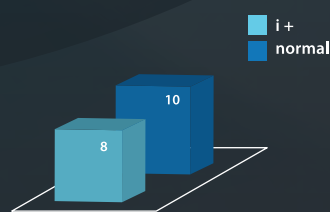
do	Ph	i	Ca [kN]	noise [dB]	ΔT [°C]	J <sub>5,m</sub> [kgm <sup>2</sup> ]	Ln, TD	D1	
50	20	4	96	69	9	0,0048	224	82	
i+	40	20	5	103 +7%	66	7	0,0020	260	70
	63	25	5	132	72	10	0,0122	314	95
i+	50	25	6	137 +4%	69	8	0,0048	364	82
	80	30	6	224	75	11	0,0318	434	120
i+	63	30	7	226 +1%	72	9	0,0122	496	100

#### NOISE, TEMPERATURE & INERTIA GRAPHIC

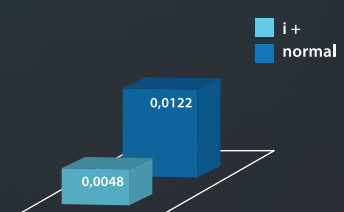
##### NOISE (dB)



##### ΔT (°C)



##### INERTIA 1m-Js (kgm<sup>2</sup>)



\* For other ballscrews references, please contact SHUTON.

