

NEW

MOTION & CONTROL™

NSK



Ball Screws for High Speed and Heavy Load

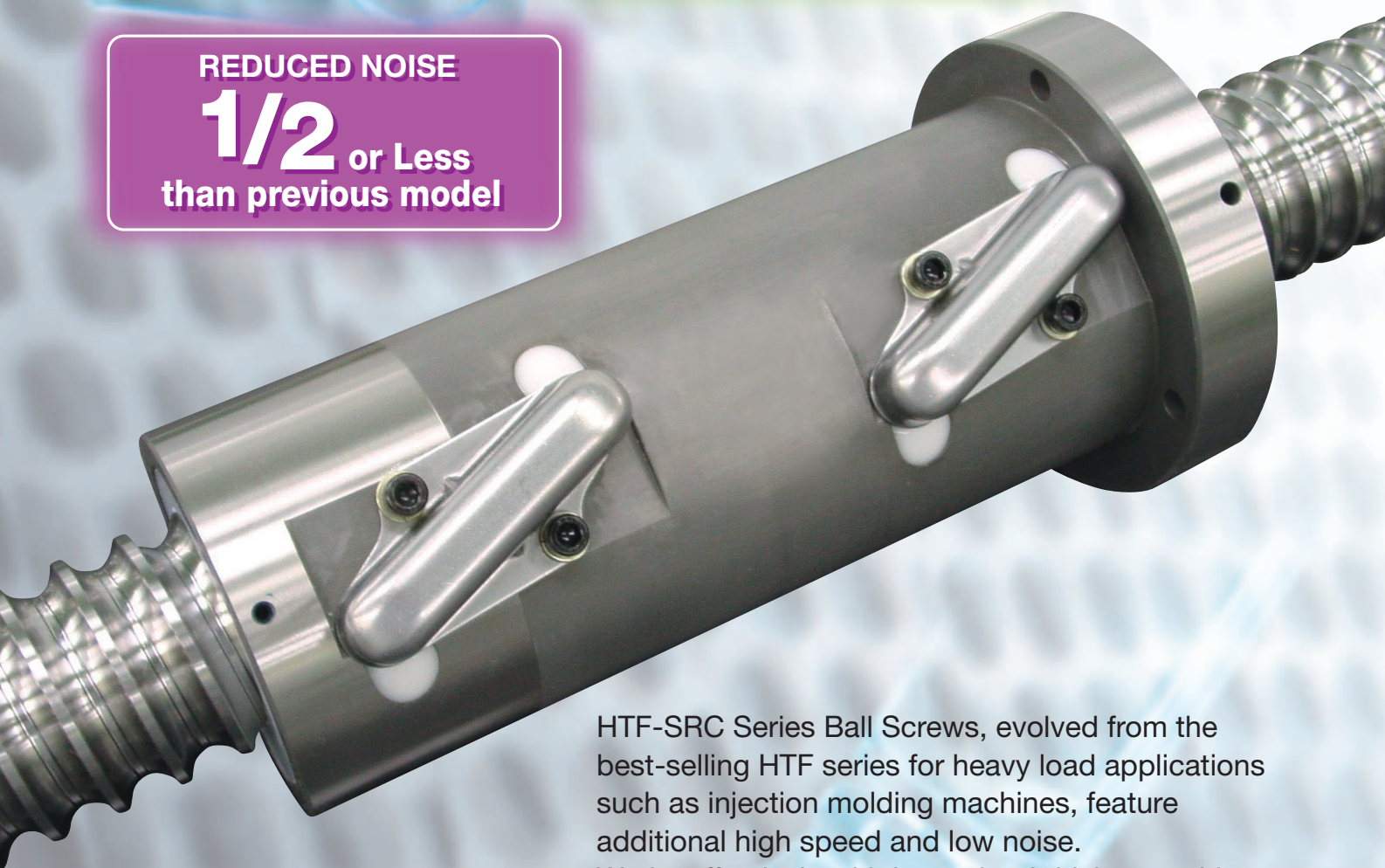
HTF-SRC Series

INCREASED SPEED

Twice as Fast
as previous model

REDUCED NOISE

1/2 or Less
than previous model



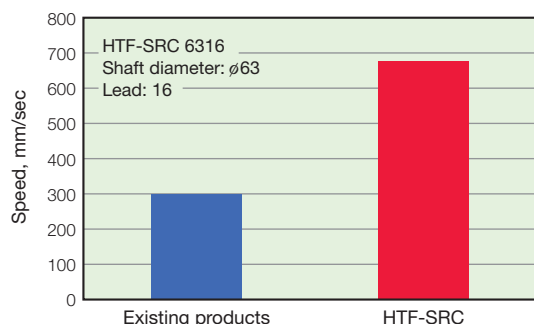
HTF-SRC Series Ball Screws, evolved from the best-selling HTF series for heavy load applications such as injection molding machines, feature additional high speed and low noise. Works effectively with heavy load driving machines that require high speed and high acceleration, while reducing operating noise by half.

Applications: Electric injection molding machines, servo presses, IC mold presses, die casting machines, etc.

*Adopts NSK's newly developed external ball circulation system (patent pending) that improves smooth ball circulation.

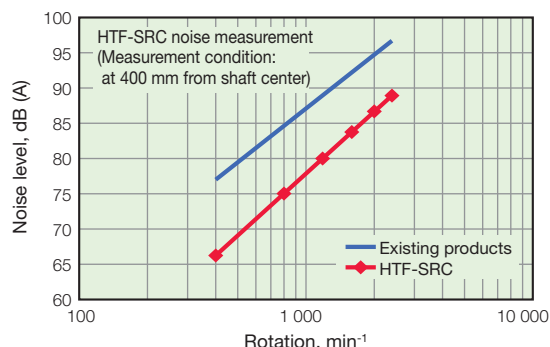
Feed speed is over 2 times faster (high-speed rotation) than the existing HTF series.

Adoption of NSK's newly developed ball circulation system enables more than twice the feed speed (d·n limit value: 140 000, 160 000) of existing products.



Noise level is reduced by 8 to 10 dB (1/2 to 1/3) from the conventional HTF series.

Adoption of the newly developed circulation system allows noise to be reduced 8 to 10 dB from existing products.



Specifications

Maximum speed

Combination of shaft diameter and lead, and maximum feed speed

Shaft diameter \ Lead	16 mm (d·n 160 000)	20 mm (d·n 140 000)	25 mm (d·n 140 000)
φ50	860 mm/s	—	—
φ63	680 mm/s	740 mm/s	—
φ80	540 mm/s	590 mm/s	—
φ100	—	470 mm/s	590 mm/s

Note: d: Outer screw shaft diameter (mm)
n: Rotation (min⁻¹)

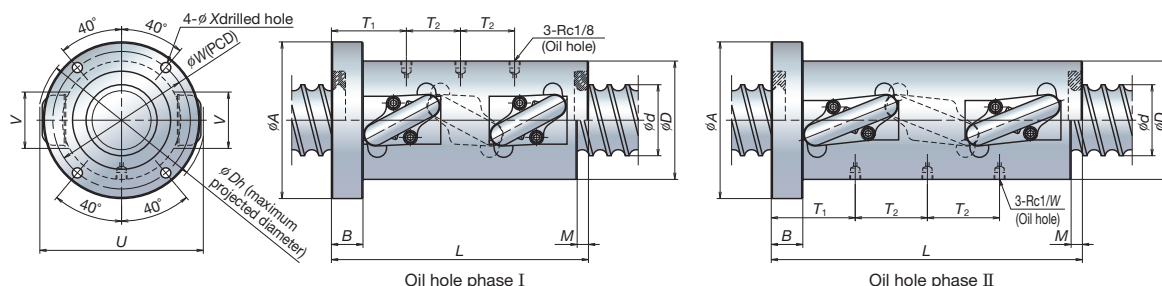
Accuracy

Lead accuracy...JIS C5 and Ct7 are available.

Axial clearance...0.02 mm or less, and 0.05 mm or less are available.

Design information

HTF-SRC ball screws are designed for heavy load driving applications; therefore, they require appropriately designed shaft ends and/or mounting methods. Please contact NSK for your specific design requirements.



	Outer screw shaft diameter d	Lead l	Basic rated load (N)		Nut size										Oil hole		
			Dynamic rated load (C _a)	Static rated load (C _{0a})	D	A	B	L	M	W	X	MAX			Phase	T ₁	T ₂
HTF-SRC 5016-7.5	50	16	306 000	818 000	95	129	28	228	10	112	9	132	50	134	I	66.5	48
HTF-SRC 6316-10.5	63	16	450 000	1 450 000	105	139	28	276	10	122	9	145	50	148	II	74.5	64
HTF-SRC 6320-7.5	63	20	457 000	1 280 000	117	157	32	279	12	137	11	160	62	163	I	80	60
HTF-SRC 8016-10.5	80	16	501 000	1 870 000	120	154	32	278	10	137	9	160	60	165	II	78.5	64
HTF-SRC 8020-10.5	80	20	671 000	2 300 000	130	170	32	339	12	150	11	176	64	180	II	90	80
HTF-SRC 10020-10.5	100	20	749 000	2 910 000	145	185	32	339	12	165	11	194	78	199	II	90	80
HTF-SRC 10025-10.5	100	25	964 000	3 430 000	159	199	40	422	17	179	11	216	79	220	II	111.75	100

Note: 1. All screws are right-hand thread. 2. Nut lengths without seal are shorter by M than those with seal. 3. NSK S1™ ball retaining piece is included as standard equipment.

Handling Precautions Operating temperature range: 70°C Maximum instantaneous operating temperature: 80°C

For more information about NSK products, please contact: www.nsk.com



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