

# RIGHT-ANGLE HELICAL WORM

## SPEED REDUCERS/GEAR MOTORS



### PERFORMANCE SPECIFICATIONS

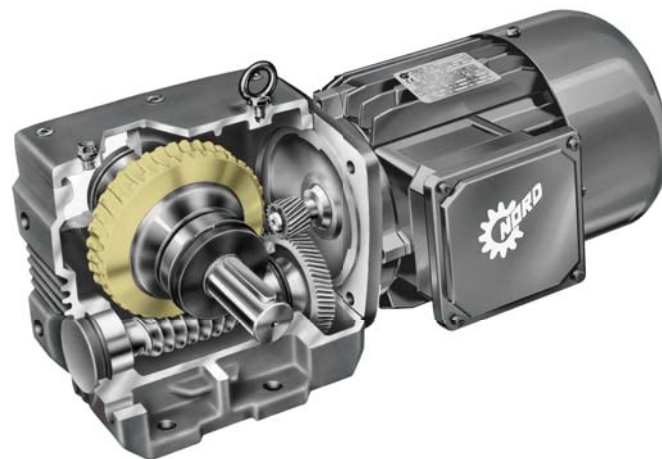
Configuration : right angle  
 Integral motor HP (min/ max) : 0.16 / 20  
 Integral motor kW (min/ max) : 0.12 to 15  
 Typical efficiency : 94% max  
 Number of gear reductions : 2 to 3

### MOUNTING STYLES

Footed housing style: standard  
 B5 flange outside diameter range [in]: 4.72 to 17.72  
 B5 flange outside diameter range [mm]: 120 to 450  
 Shaft mount housing style available  
 B14 flange outside diameter range [in]: 2.91 to 11.42  
 B14 flange outside diameter range [mm]: 74 to 290

### OPTIONS

NEMA C-face or IEC input  
 Custom adapter flange  
 Flange pilot removed  
 Bolt-on torque arm with shock dampener

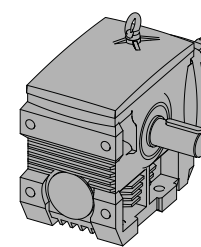
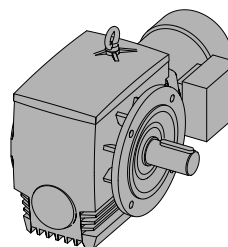
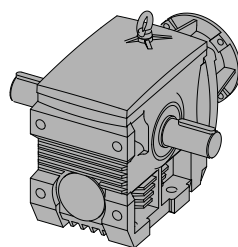
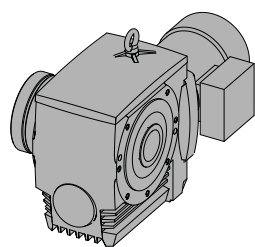


### RATIO AND SPEED

Minimum standard ratio : 4.40:1  
 Maximum standard ratio : 7095.12:1  
 Minimum output speed from 1750 rpm motor : 0.25 rpm  
 Maximum output speed from 1750 rpm motor : 398 rpm

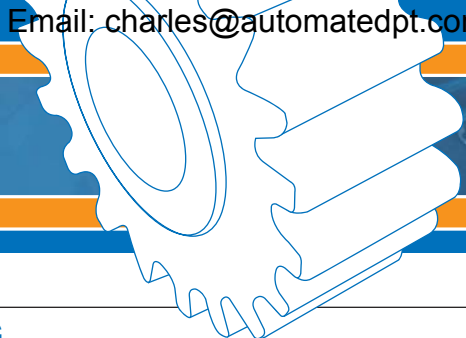
Unit Size	Torque Max *		Ratio Range Min - Max	Solid Shaft Dia.		Keyed Hollow Shaft Dia.						Shrink Disc Dia.	
	[lb-in]	[Nm]		[in]	[mm]	Std-[in]	Opt-[in]	Opt-[in]	Opt-[in]	[mm]	[mm]	[in]	[mm]
SK 02040	885	100	4.40 - 304.20	0.750	20	0.750	-	-	-	20	-	-	-
SK 02050	1637	185	7.13 - 524.79	1.000	25	1.188	1.250	1.000	-	25	30	1.250	30
SK 13050	1726	195	41.74 - 3019.29	1.000	25	1.188	1.250	1.000	-	25	30	1.250	30
SK 12063	3186	360	7.43 - 626.79	1.250	30	1.438	1.375	-	-	30	35	1.438	35
SK 13063	3363	380	65.20 - 3631.55	1.250	30	1.438	1.375	-	-	30	35	1.438	35
SK 12080	6284	710	7.55 - 656.88	1.375	35	1.813	1.750	1.500	1.438	45	40	1.750	45
SK 13080	6814	770	97.65 - 3356.66	1.375	35	1.813	1.750	1.500	1.438	45	40	1.750	45
SK 32100	12567	1420	7.19 - 645.00	1.875	45	2.438	2.375	2.000	-	60	50	2.438	60
SK 33100	14072	1590	53.70 - 5875.95	1.875	45	2.438	2.375	2.000	-	60	50	2.438	60
SK 42125	25222	2850	7.29 - 695.60	2.375	60	2.750	2.375	-	-	70	60	2.750	70
SK 43125	27346	3090	62.50 - 7095.12	2.375	60	2.750	2.375	-	-	70	60	2.750	70

\* Torque may vary by ratio





# RIGHT ANGLE HELICAL WORM



## SHAFT DATA

- AISI 1045 or 4140 Input and output shaft material
- Inch shaft key dimensions according to AISI B17
- Metric shaft key dimensions according to DIN 747
- Standard output shaft drill and tap
- 2 hollow shaft keys
- Shrink disc size range [in] : 1.250 to 2.750
- Shrink disc size range [mm] : 25 to 70
- Minimum gripping safety factor range [h6 fit] : 3.8 to 5.4

## SHAFT DATA OPTIONS

Double solid output shaft, Shaft fixing element, Custom shaft diameters, Hollow spline per DIN 5480, Custom spline, Cross drilled holes, 304 stainless steel



## MOTOR MOUNTING

- Integral motor : 1/6 to 20 HP
- C-face adapter frame size range : 56C to 250TC
- IEC adapter [B5] frame size range : IEC 63 to IEC 160
- Sugar scoop motor availability : 56 to 256T
- Top mount platform motor availability : 56 to 286T

## MOTOR MOUNTING OPTIONS

Custom motor adapter, Custom coupling diameter



## GEARING

- Up to AGMA Class 13 gear quality rating
- Bronze alloy worm wheel material
- Hardened steel worm material
- 58 Rockwell C minimum gear hardness
- Ground or skive hobbed hard gear teeth finishing
- Standard drop forged gear blanks
- 275% momentary overload capacity
- Standard hunting tooth ratios



## BEARINGS

- ABEC-1 quality bearings
- Standard output ball bearings
- Heavy-duty tapered output bearings



## HOUSING

- Class 35 gray iron housing material
- Single setup machining method
- UNICASE™ one piece main housing design
- Seals directly contact main housing
- Exceptional housing torsional stiffness
- Thick housing wall section
- Casting are dip sealed



## LUBRICANT & SEALING COMPONENTS

- Factory filled ISO 680 synthetic oil
- Standard AUTOVENT™ breather style
- QUADRILIP™ output seal design
- 1 double lip & 1 single lip output shaft oil seals
- Nitrile rubber oil seals

## LUBRICANT & SEALING OPTIONS

Custom synthetic lubricating oil, Custom temperature lubricating oil, Fluid grease lubricant, Food grade lubricating oil, Long term storage preparation, Magnetic drain plug, Bullseye sight glass, Custom drain plug, Fluorinated rubber oil seal material, Custom oil seals



## INTERNAL PARTS ASSEMBLY

- Heavy press fit assembly method
- Standard reversing duty
- Typical backlash range [arc minutes] : 6 to 11

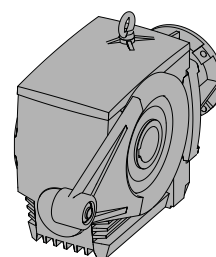
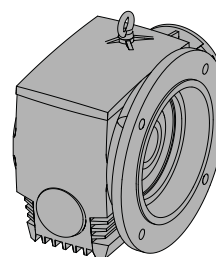
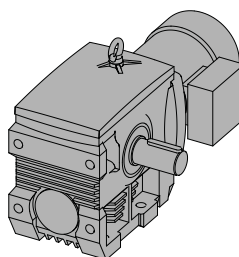


## ENVIRONMENTAL PROTECTION

- Exterior primer coverage on all metal exterior surfaces
- Water Based Resin paint type
- 316 stainless steel flake paint additive
- H1 USDA incidental contact exposure

## ENVIRONMENTAL OPTIONS

Severe duty and washdown duty paint options, Custom paint, Shaft seal covers, High pressure washdown IP66 oil seals



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