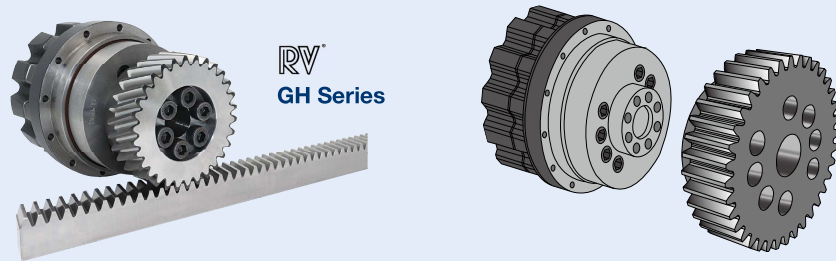


Superior compatibility with servos for speed reducers

We recommend ideal pinions for speed reducers

J Series R Series Even broader lineup!

Perfect for Nabtesco Corporation's GH Series **Nabtesco + R**



Flange attached complete products **R Series**

Nidec Shimpo Corporation

 Sumitomo Heavy Industries, Ltd.

 Harmonic Drive Systems, Inc.



VRG Series



IB Series



HPG Series

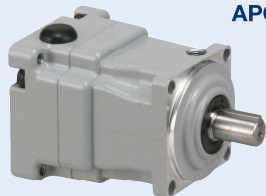
Also perfect for shaft type speed reducers **J Series**

Nissei

Nissei Corporation

Parallel Axes

APG Series



Orthogonal Axes

AFC Series



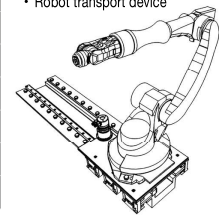
Pinion gear applicability table for Nabtesco GH Series **Nabtesco + R**

Corresponding speed reducer size and pinion gears

See Page 92 for more details

Application examples

Nabtesco GH Series	KHK target products		
	Module Type	CP Type	Helical Type
7	SSG3-30RGH7	SSCPG10-30RGH7	ZSTP3-30LRGH7
17	SSG3-40RGH17	SSCPG10-40RGH17	ZSTP3-30LRGH17
24	SSG4-30RGH24	SSCPG15-30RGH24	ZSTP4-30LRGH24
40	SSG5-30RGH40	SSCPG15-30RGH40	ZSTP5-24LRGH40
100	SSG6-30RGH100	SSCPG20-30RGH100	



Series for flange output speed reducers **R Series**

Rack and pinion for corresponding flange output speed reducers

See Page 90 for more details

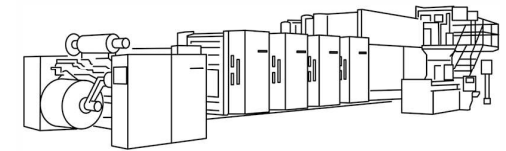
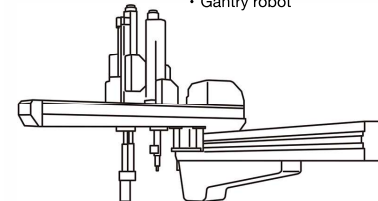
Mounting hub dia. H (Common to all speed reducers)	Nidec Shimpo VRG Series	Sumitomo Heavy Industries IB Series	Harmonic Drive Systems HPG Series	R Series Catalog Numbers	KHK recommended mating rack
24	C90	P120	20	SSG Module - No. of teeth	R24
32	D120	P130	32		R32
47	E170	—	50		R47
60	—	—	65		R60

R series catalog numbers are composed as follows :
(Base SSG ground spur gear catalog number) + R + (mounting hub diameter)

Application examples

• Gantry robot

• Printing machine



Series for shaft output speed reducers (with key) **J Series**

Pinion gears corresponding to speed reducer sizes

See Page 62 for more details

See Page 52 for more details

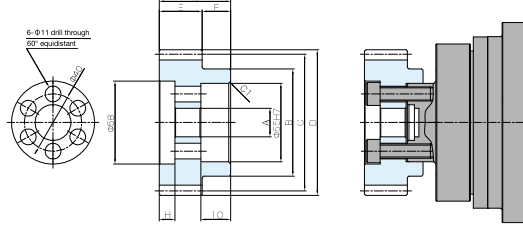
Nissei APG - AFC Series		KHK target products		Nissei APG - AFC Series		KHK target products			
Capacity	Frame No.	Capacity	Catalog Number	Capacity	Frame No.	Capacity	Catalog Number		
100W	12	750W	SSG2-19J12	18	KSG2-32J18	1000W	22	KSG3-25J22	
	15	750W	SSG2.5-19J15	22	KSG3-25J22		1500W	28	KSG3-32J28
	18	750W	SSG2.5-24J18	28	KSG3-32J28			2000W	22
200W	12	1000W	SSG2-19J12	22	KSG3-32J28	1500W	28		KSG3-32J28
	15	1000W	SSG2.5-19J15	22	KSG3-25J22		2000W		28
	18	1000W	KSG2-32J18	28	KSG3-32J28	3000W		22	KSG3-25J22
	22	1000W	KSG3-25J22	28	KSG3-32J28		3000W	28	KSG3-32J28
400W	12	1500W	SSG2-19J12	22	KSG3-25J22	2000W		28	KSG3-32J28
	15	1500W	SSG2.5-19J15	28	KSG3-32J28		3000W	22	KSG3-25J22
	18	1500W	KSG2-32J18	28	KSG3-32J28	3000W		28	KSG3-32J28
	22	1500W	KSG3-25J22	28	KSG3-32J28				

When a key is not needed, try the friction fastening series!

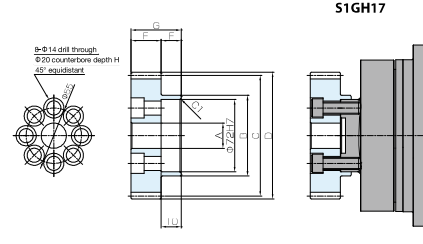


Be sure to calculate the strength under actual usage conditions before use.

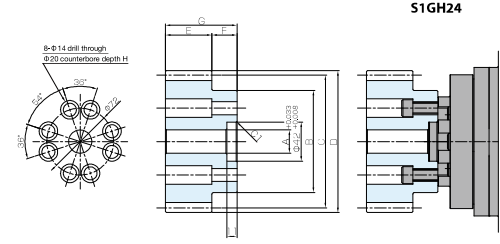
Speed reducer model number GH7 pinion



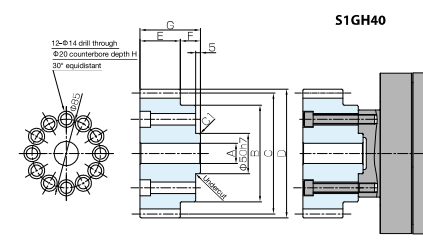
Speed reducer model number GH17 pinion



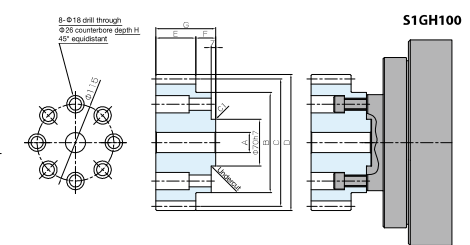
Speed reducer model number GH24 pinion



Speed reducer model number GH40 pinion



Speed reducer model number GH100 pinion



SSG Series

Common Specifications	
Precision grade	JIS N7 grade (JIS B 1702-1:1998)*
Gear teeth	Standard full depth
Pressure angle	20°
Material	S45C
Heat treatment	Gear teeth induction hardened
Tooth hardness	50 to 60HRC
Surface treatment	Black oxide coated except for teeth and portions given secondary operation

SSCPG Series

Common Specifications	
Precision grade	JIS N7 grade (JIS B 1702-1:1998)*
Gear teeth	Standard full depth
Pressure angle	20°
Material	S45C
Heat treatment	Gear teeth induction hardened
Tooth hardness	50 to 60HRC
Surface treatment	Black oxide coated except for teeth and portions given secondary operation

ZSTP Series

Common Specifications	
Precision grade	JIS B 1702-1:1998 N6 grade
Reference section of gear	Normal plane
Gear teeth	Standard full depth
Pressure angle	20°
Helix angle/direction	19° 31' 41" left helix
Material	SCM440
Heat treatment	Thermal refined, gear teeth induction hardened
Tooth hardness	HRC50 to 60
Surface treatment	Black oxide coated except for teeth and portions given secondary operation

Speed reducer model number	Catalog Number	Module/pitch	No. of teeth	Shape	Bore A _{H7}	Hub dia. B	Pitch dia. C	Outside dia. D	Face width E	Hub width F	Total length G
GH7	SSG3-30RGH7	m3	30	S1GH7	25	75	90	96	30	20	50
	SSCPG10-30RGH7	CP10 (m3.1831)	30	S1GH7	20	75	95.49	101.86	30	20	50
	ZSTP3-30LRGH7	m3(CP10)	30	S1GH7	25	85	95.49	104	30	20	50

Speed reducer model number	Catalog Number	Module/pitch	No. of teeth	Shape	Bore A _{H7}	Hub dia. B	Pitch dia. C	Outside dia. D	Face width E	Hub width F	Total length G
GH17	SSG3-40RGH17	m3	40	S1GH17	25	80	120	126	30	20	50
	SSCPG10-40RGH17	CP10 (m3.1831)	40	S1GH17	25	80	127.32	133.69	30	20	50
	ZSTP3-30LRGH17	m3(CP10)	30	S1GH17	25	85	95.49	104	30	20	50

Speed reducer model number	Catalog Number	Module/pitch	No. of teeth	Shape	Bore A _{H7}	Hub dia. B	Pitch dia. C	Outside dia. D	Face width E	Hub width F	Total length G
GH24	SSG4-30RGH24	m4	30	S1GH24	20	90	120	128	40	25	65
	SSCPG15-30RGH24	CP15 (m4.7746)	30	S1GH24	25	110	143.24	152.79	50	27	77
	ZSTP4-30LRGH24	m4(CP13.333)	30	S1GH24	25	110	127.32	138	40	25	65

Speed reducer model number	Catalog Number	Module/pitch	No. of teeth	Shape	Bore A _{H7}	Hub dia. B	Pitch dia. C	Outside dia. D	Face width E	Hub width F	Total length G
GH40	SSG5-30RGH40	m5	30	S1GH40	25	120	150	160	50	25	75
	SSCPG15-30RGH40	CP15 (m4.7746)	30	S1GH40	25	110	143.24	152.79	50	27	77
	ZSTP5-24LRGH40	m5(CP16.667)	24	S1GH40	25	110	127.32	142	50	25	75

Speed reducer model number	Catalog Number	Module/pitch	No. of teeth	Shape	Bore A _{H7}	Hub dia. B	Pitch dia. C	Outside dia. D	Face width E	Hub width F	Total length G
GH100	SSG6-30RGH100	m6	30	S1GH100	30	150	180	192	60	28	88
	SSCPG20-30RGH100	CP20 (m6.3662)	30	S1GH100	30	150	190.986	203.72	60	30	90

[Cautions on Product Characteristics]
 ① The allowable torques shown in the table are calculated values according to the assumed usage conditions. Please see Page 38 for more details.
 ② The R Series is given secondary operations and has accuracy grades "equivalent" to the original products.

Counterbore depth H	Included screws	Allowable torque (N-m)	Weight (kg)	Mating rack	Catalog Number	Speed reducer model number
11	M10x45	Bending strength	251	209	SRGF3-1000	SSG3-30RGH7
		Surface durability	283	240	SRGCPF10-1000	SSCPG10-30RGH7
11	M10x45	551	676	ZST3-1000R	ZSTP3-30LRGH7	

Counterbore depth H	Included screws	Allowable torque (N-m)	Weight (kg)	Mating rack	Catalog Number	Speed reducer model number
13	M12x45	Bending strength	358	407	SRGF3-1000	SSG3-40RGH17
		Surface durability	403	466	SRGCPF10-1000	SSCPG10-40RGH17
13	M12x45	551	676	ZST3-1000R	ZSTP3-30LRGH17	

Counterbore depth H	Included screws	Allowable torque (N-m)	Weight (kg)	Mating rack	Catalog Number	Speed reducer model number
29	M12x55	Bending strength	595	501	SRGF4-1000	SSG4-30RGH24
		Surface durability	838	577	SRGCPF15-1000	SSCPG15-30RGH24
29	M12x55	986	972	ZST4-1000R	ZSTP4-30LRGH24	

Counterbore depth H	Included screws	Allowable torque (N-m)	Weight (kg)	Mating rack	Catalog Number	Speed reducer model number
13	M12x75	Bending strength	1070	916	SRGF5-1000	SSG5-30RGH40
		Surface durability	978	821	SRGCPF15-1000	SSCPG15-30RGH40
13	M12x75	1980	1850	ZST5-1000R	ZSTP5-24LRGH40	

Counterbore depth H	Included screws	Allowable torque (N-m)	Weight (kg)	Mating rack	Catalog Number	Speed reducer model number
33	M16x75	Bending strength	1850	1600	SRGF6-1000	SSG6-30RGH100
		Surface durability	2090	1850	SRGCPF20-1000	SSCPG20-30RGH100

[Cautions on R Series]
 ① As "available-on-request" products, these items are completed within **two working days (excluding the order date)**. Because the machining starts immediately, **we cannot accept cancellations**. Please see Page 34 for more details.
 ② Number of pieces we can process on one order is **1 to 20 units**. For larger quantities, please request price and delivery quotes.
 ③ Portions subject to secondary operations such as the counter bore holes are not black oxide coated.
 ④ Required number of hexagon socket head cap screws are included.
 ⑤ Be sure to calculate the strength under actual usage conditions before use.