

# Gear Couplings - Series G

Standard version GF and  
version GH for high angular misalignment



Edition 2026/2027



<b>Introduction of Gear Couplings</b>						Page	
Introduction						3	
Basic functions						4	
Compensation of shaft misalignments						5	
Advantages of RINGSPANN toothing						6	
Coupling sleeve, coupling hub and seals						7	
<b>Gear Couplings</b>		Nominal torques $T_{KN}$		Bore diameter max.		Permissible angular misalignment	Page
		inch-lb	Nm	inch	mm		
Standard version							
GFF with double engagement gearing		1 033 000	116 500	10.25	260,35	1.50°	8
GFR with single engagement gearing		1 033 000	116 500	12.25	260,35	0.75°	10
Version for high angular misalignment							
GHF with double engagement gearing		2 695 000	304 500	10.88	276,35	3.50°	12
GHR with single engagement gearing		2 695 000	304 500	14.38	365,25	1.75°	14
<b>Gear Coupling Technology Details</b>						Page	
Special designs						16	
Technical points						18	
Ordering information						19	
Bore dimensions						20	
Questionnaire for selecting Shaft Couplings						22	

Issue 04/2026 – Technical details subject to change without notice

## Introduction



Gear couplings as torsionally rigid couplings are an indispensable machine element for connecting two shafts in many areas of mechanical engineering. In addition to the transmission of rotary movements and torques, their main functions also include the equalization of shaft misalignments. The demands placed on couplings in terms of permissible operating speeds, torques and shaft misalignments are constantly increasing. The ability to reliably and permanently compensate for shaft misalign-

ments is of particular importance. Even complex methods for aligning the shafts during assembly cannot guarantee that they will align perfectly. Despite careful alignment, certain misalignments will always remain. During operation, these errors can be exacerbated by uneven bearing wear, structural bending, settling, thermal length changes and shaft deflection.

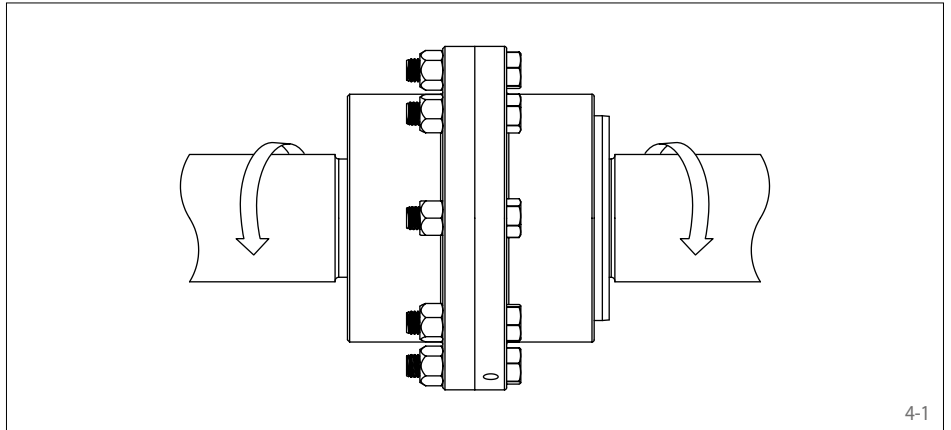
In such cases, RINGSPANN gear couplings with crowned teeth have proven their worth, as they can compensate for angular misalignments in particular with virtually no restoring forces on the machine bearings.

RINGSPANN manufactures gear couplings in the standard versions GFF and GFR with a permissible angular misalignment of  $0.75^\circ$  per tooth. RINGSPANN also offers the GHF and GHR versions with an increased permissible angular misalignment of  $1.75^\circ$  per tooth.

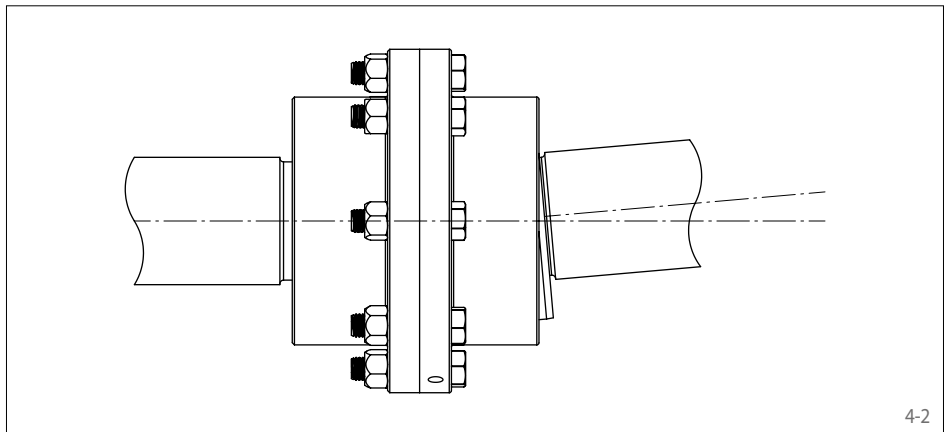
## Basic functions

Gear couplings as torsionally rigid couplings have three basic functions:

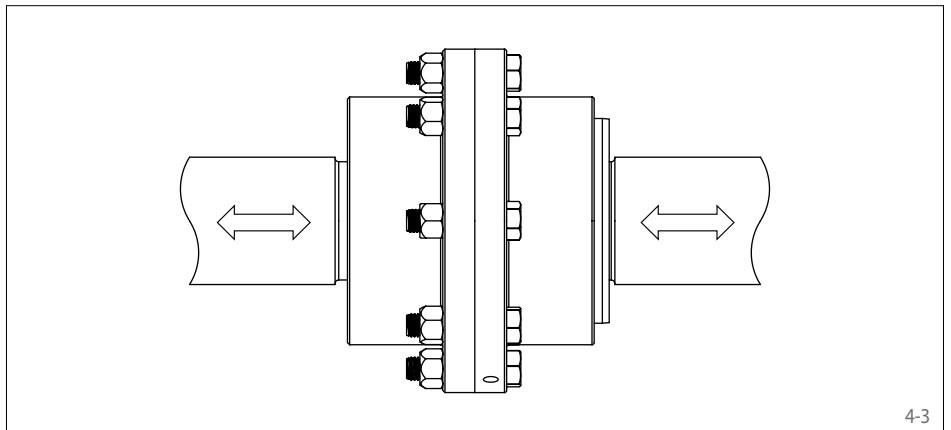
1. Mechanical connection between two shafts for the transmission of torques and rotary movements with a corresponding speed of the two shafts.



2. Compensation of misalignments or shaft misalignments during operation.



3. Compensation of thermal length changes of the shafts.

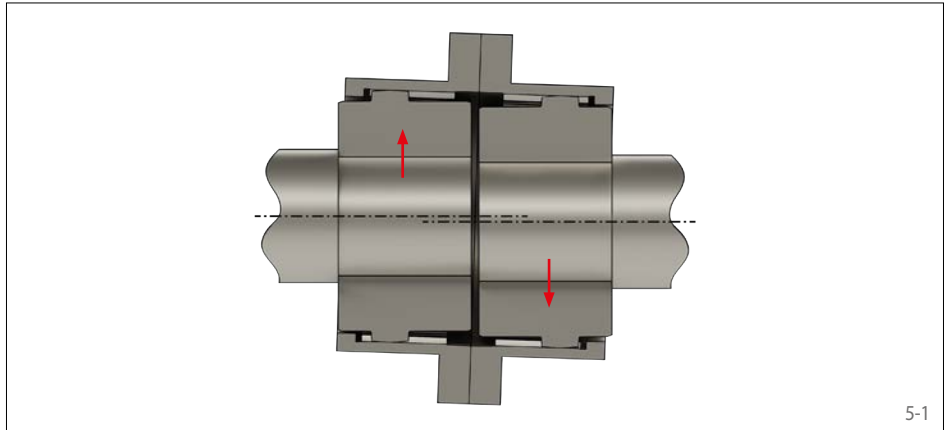


## Compensation of shaft misalignments

Gear couplings as torsionally rigid couplings can compensate for different types of shaft misalignments:

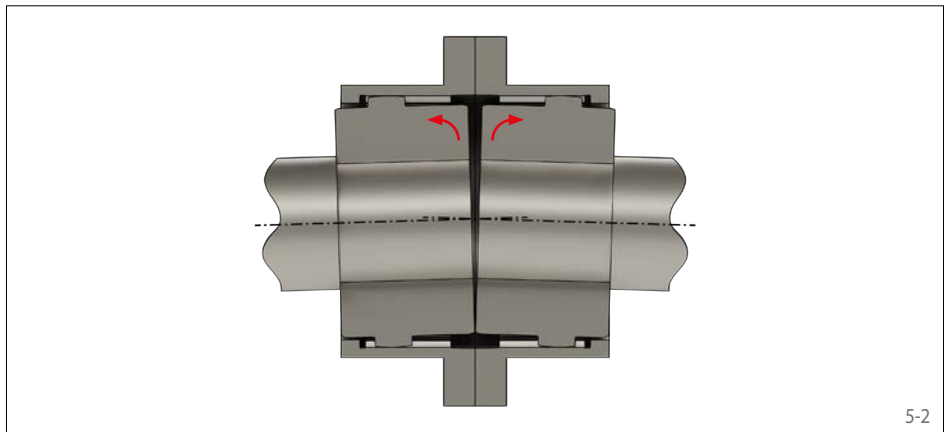
### Radial misalignment

Radial misalignment occurs when the center lines of the shafts have the same alignment but are offset parallel to each other.



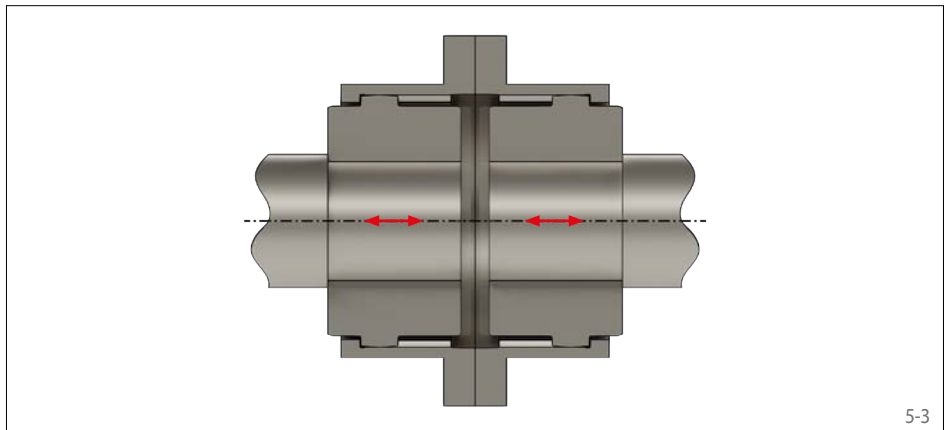
### Angular misalignment

Angular misalignment occurs when the center lines of the shafts lie in one plane but are inclined towards each other.



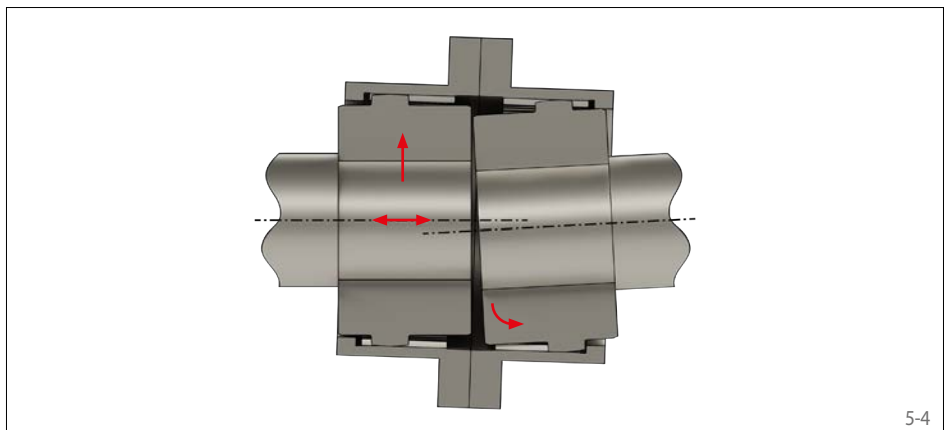
### Axial misalignment

Axial misalignment is when the shafts lie in one plane and are correctly aligned with each other, but the distance between the shaft ends in the axial direction does not correspond to the specified catalog value.



### Combination of misalignments

As a rule, the misalignments described above occur in combination.



## Advantages of RINGSPANN toothings

The GF and GH gear couplings are characterized by **special hub toothings**, **longer sleeve**

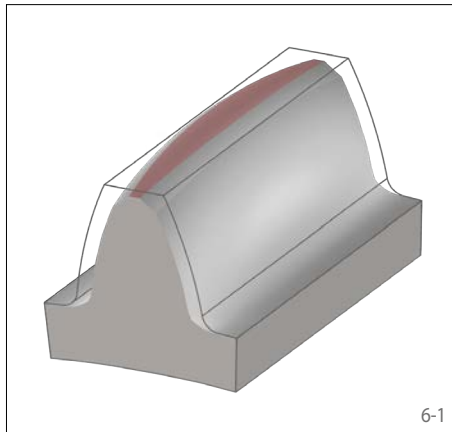
**toothings** and **modern toothings production**.

### Special hub toothings

The hub toothings of the GF and GH gear coupling is completely crowned and has a special gear geometry

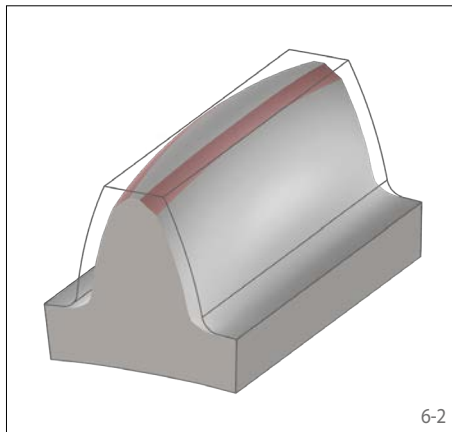
- with rounded tooth heads,
- chamfered tooth flanks and
- crowned tooth flanks.

The crowned contour and chamfered tooth flanks lead to improved tooth contact. This reduces the surface pressure in the tooth flanks and prevents edge pressure at the tooth ends. Both lead to an increase in the load-bearing capacity of the coupling and to a reduction in wear in the tooth flanks. This makes it possible to increase the transmittable torques and compensate for larger shaft misalignments. Better lubrication at the contact point of the gearing allows higher speeds and extends the service life of the gear coupling.



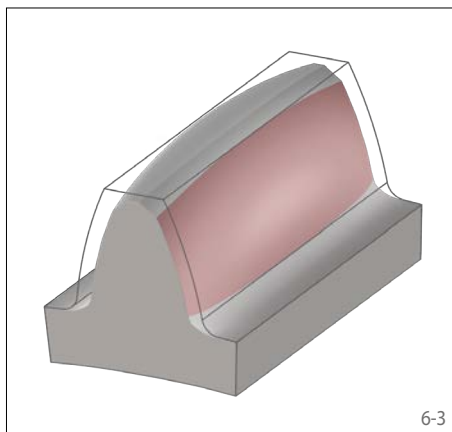
#### Rounded tooth heads

The tooth heads of RINGSPANN gear couplings are rounded. This prevents edge pressure due to radial or angular misalignments and the coupling sleeve can still be guided precisely radially.



#### Chamfered tooth flanks

The tooth flanks of the RINGSPANN GF and GH tooth couplings are chamfered at the transition to the tooth heads. This prevents undercuts on the tooth roots of the sleeve teeth.



#### Crowned tooth flanks

The tooth flanks of the RINGSPANN GF and GH tooth couplings are crowned in the axial direction. This also prevents edge pressure at the tooth ends. This makes it possible to compensate for larger radial and angular misalignments. It also improves the contact between the toothings of the coupling hub and the coupling sleeve. This in turn increases the load-bearing capacity of the gear coupling and reduces wear due to better lubrication in the tooth contact.

### Longer sleeve toothings

The sleeves of the GF and GH gear couplings have longer internal teeth than comparable gear couplings. This makes it possible to com-

pensate for larger axial displacements and thermal length changes.

### Modern toothings production

Our modern toothings production makes it possible to reduce the tooth flank clearance of the GF and GH gear couplings. This allows the

backlash to be reduced when changing the direction of rotation.

## Coupling sleeve, coupling hub and seals

### Coupling sleeve

The coupling sleeve connects the hubs to each other in a torsionally rigid manner. As a rule, the sleeve consists of two halves with straight internal teeth that are bolted together. The flange dimensions fulfill the requirements of AGMA 9008. The coupling sleeve is mounted on the hubs in a floating manner and thus enables axial misalignments to be compensated.

In addition to the split sleeves, one-piece sleeves are also available (see page 16).



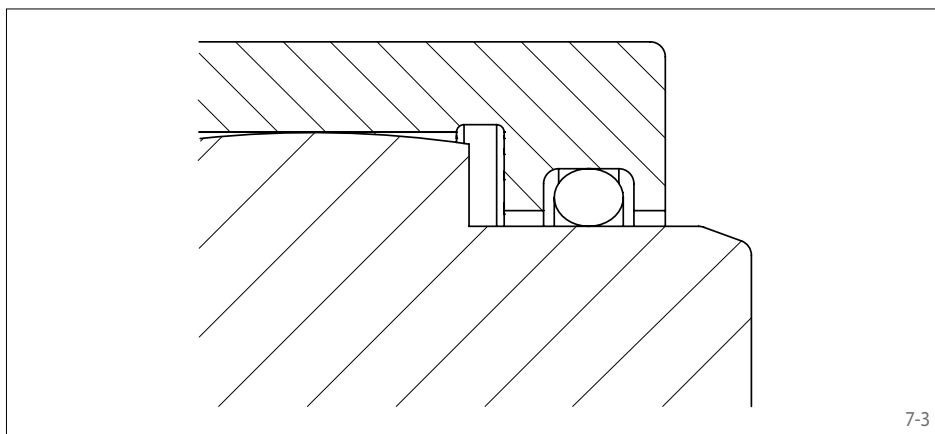
### Coupling hub

The hubs of the GF and GH gear couplings have crowned external teeth on all sides (see page 6). This special toothing enables reliable torque transmission while simultaneously compensating for shaft misalignments.



### Seals

To ensure reliable operation of the gear couplings, the coupling sleeves must be sealed against lubricant leakage and the ingress of dirt and dust. Depending on the lubricants used, the operating conditions and the operating temperature, O-rings made of NBR or Viton are available for this purpose.



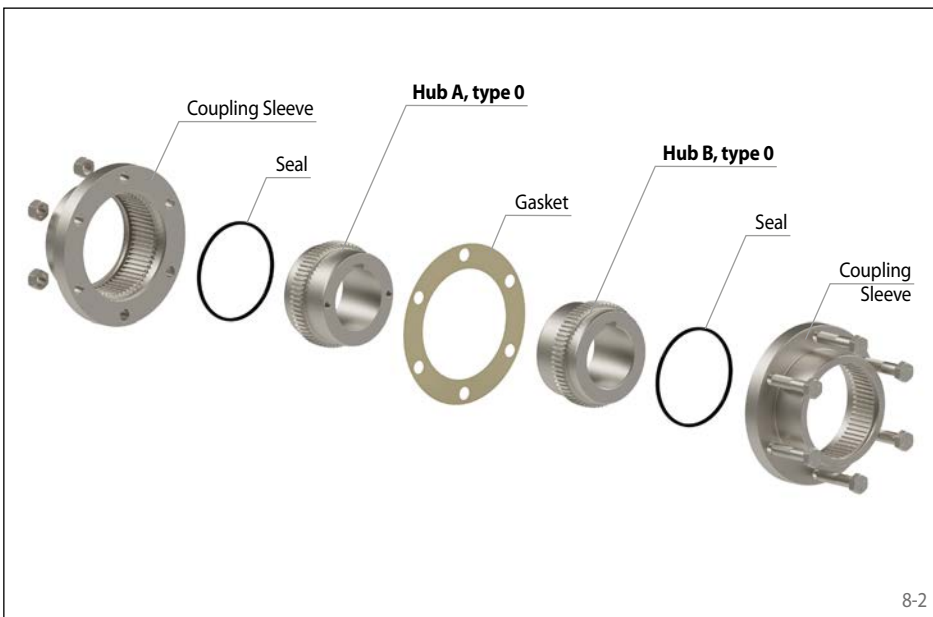
# Gear Couplings GFF

**double engagement gearing – lubricated  
with fully crowned teeth**



## Features

- High nominal torques up to 1 033 200 inch-lb or 116 750 Nm
- Compensation of axial, radial and angular misalignments
- Angular misalignments up to 1.5° permissible
- Sleeve with extended tothing allows greater axial displacements
- Flange geometry in accordance with ANSI/AGMA – compatible with standard AGMA interfaces
- Interchangeable with standard AGMA couplings of the same size
- High power density
- Typical applications: Roller drives in the steel and paper industry, pumps, conveyor systems, fans and blowers



## Custom designs available upon request

- Heat-treated, alloyed or nitrided steels
- Balanced couplings for high speeds
- Other sizes and special versions
- Lubrication ports: NPT (BSP and metric on request)
- Documentation: imperial / metric

## Order example

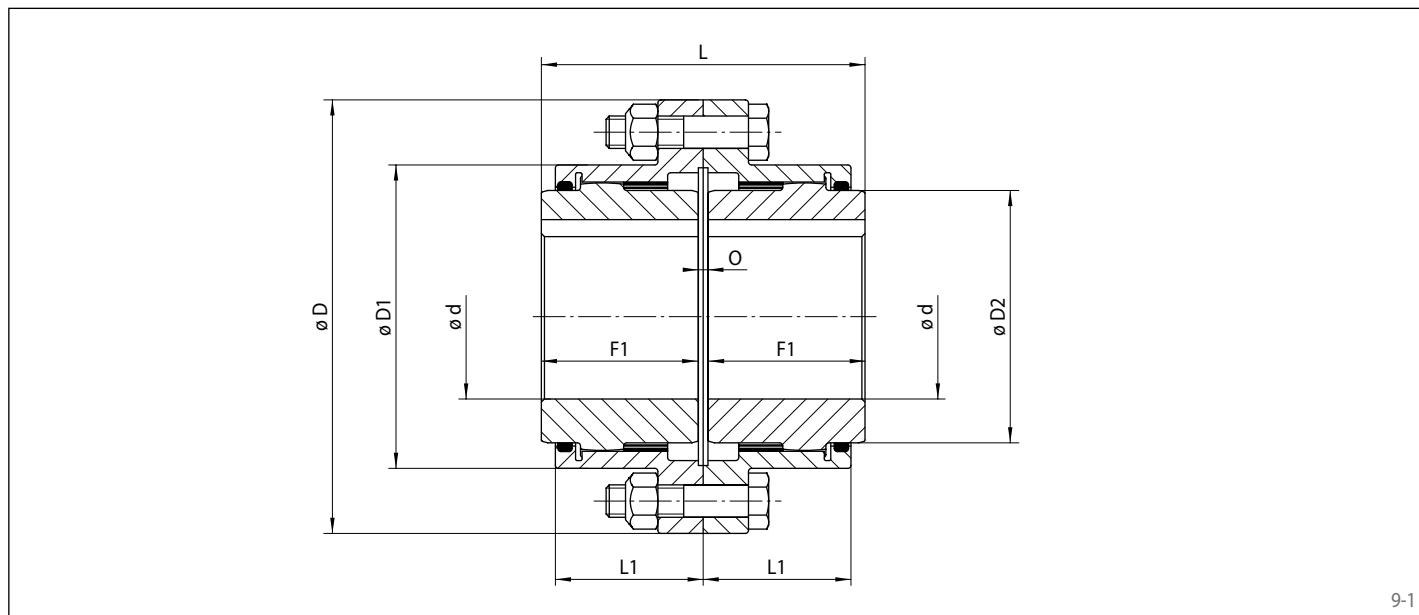
Order example	Code
Coupling design	GFF
Coupling size	1010
Type	DTO
Material of the hub: • Steel	STA
Hub A, type: • 0, standard	0
Hub A, design: • finish bored with keyway • pilot bored	FB VA
Bore diameter hub A in inch: 3/4" * or bore diameter hub A in mm: 19 mm**	AAM 019
Hub B, type: • 0, standard	0
Hub B, design: • finish bored with keyway • pilot bored	FB VA
Bore diameter hub B in inch: 1" * or bore diameter hub B in mm: 25 mm**	ABA 025

GFF 1010 DTO-STA-0FBAAAM-0FBABA

\* Bores are made in accordance with AGMA 9002-C14. Please specify the required bore tolerance in accordance with the order code on page 19.

\*\* Metric bores are produced with the standard tolerance H7. Other bore tolerances are available on request.

double engagement gearing – lubricated  
with fully crowned teeth



9-1

Coupling size	Nominal torque $T_{KN}$		Nominal power at 100 rpm $P_{K100}$		Max. speed $n_{max}$ rpm	Moment of inertia (solid hubs) $J_K$		Permissible misalignments				
	inch-lb	Nm	HP	kW		lb-in <sup>2</sup>	kgm <sup>2</sup>	Axial		Radial		Angular
								inch	mm	inch	mm	°
1010	9600	1090	15.3	11,4	7000	18.25	0,005	±0.02	±0,5	0.054	1,37	1.5
1015	17000	1920	27	20,1	5400	63.15	0,018	±0.02	±0,5	0.057	1,45	
1020	31500	3560	50	37,3	4800	146.60	0,043	±0.02	±0,5	0.078	1,98	
1025	53500	6000	85	63,4	4300	360.00	0,110	±0.02	±0,5	0.102	2,59	
1030	94500	10600	150	111,8	4000	687.00	0,200	±0.02	±0,5	0.119	3,02	
1035	141500	16000	225	167,8	3600	1488.00	0,440	±0.04	±1,0	0.142	3,61	
1040	218500	24700	347	258,8	3200	2835.00	0,830	±0.04	±1,0	0.163	4,14	
1045	324000	36600	515	384,0	3200	4539.00	1,330	±0.04	±1,0	0.187	4,75	
1050	415500	47000	660	492,2	3200	8529.00	2,500	±0.04	±1,0	0.219	5,56	
1055	551000	62000	875	652,5	2400	13535.00	3,960	±0.04	±1,0	0.245	6,22	
1060	749500	84500	1190	887,0	2200	17957.00	5,250	±0.08	±1,0	0.274	6,96	
1070	1033000	116500	1640	1223,0	1800	35948.00	10,520	±0.08	±2,0	0.314	7,98	

Coupling size	Bore $d$						D		D1		D2		F1		L		L1		O		Weight varies by bore solid	
	Pilot		Square key max.*		Reduced key max.*		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm		
1010	Solid	Solid	1.63	41,40	1.75	44,45	4.56	115,82	3.06	77,72	2.38	60,45	1.69	42,93	3.50	88,90	1.64	41,66	0.13	3,30	20	9
1015	Solid	Solid	2.25	57,15	2.38	60,45	6.00	152,40	3.92	99,57	3.13	79,50	1.94	49,28	4.00	101,60	1.82	46,23	0.13	3,30	35	16
1020	Solid	Solid	2.75	69,85	3.00	76,20	7.00	177,80	4.86	123,44	4.00	101,60	2.44	61,98	5.00	127,00	2.34	59,44	0.13	3,30	71	32
1025	Solid	Solid	3.50	88,90	3.75	95,25	8.37	212,60	5.86	148,84	4.88	123,95	3.03	76,96	6.25	158,75	2.86	72,64	0.19	4,83	123	56
1030	1.44	36,58	4.00	101,60	4.38	111,25	9.44	239,78	6.86	174,24	5.75	146,05	3.59	91,19	7.37	187,20	3.47	88,14	0.19	4,83	192	87
1035	1.44	36,58	4.50	114,30	5.00	127,00	11.00	279,40	7.88	200,15	6.50	165,10	4.19	106,43	8.63	219,20	3.91	99,31	0.25	6,35	302	137
1040	1.44	36,58	5.50	139,70	5.88	149,35	12.50	317,50	9.22	234,19	7.75	196,85	4.75	120,65	9.75	247,65	4.53	115,06	0.25	6,35	437	198
1045	2.00	50,80	6.25	158,75	6.75	171,45	13.63	346,20	10.35	262,89	9.00	228,60	5.31	134,87	10.94	277,88	5.00	127,00	0.31	7,87	615	279
1050	2.69	68,33	6.75	171,45	7.00	177,80	15.31	388,87	11.44	290,58	9.50	241,30	6.03	153,16	12.38	314,45	5.78	146,81	0.31	7,87	816	370
1055	3.00	76,20	7.50	190,50	7.75	196,85	16.75	425,45	12.69	322,33	10.50	266,70	6.62	168,15	13.56	344,42	6.34	161,04	0.31	7,87	970	440
1060	3.50	88,90	8.13	206,50	8.75	222,25	18.00	457,20	13.75	349,25	11.50	292,10	7.41	188,21	15.12	384,05	6.94	176,28	0.31	7,87	1442	654
1070	4.00	101,60	9.63	244,60	10.25	260,35	20.75	527,05	16.00	406,40	13.50	342,90	8.69	220,73	17.75	450,85	7.95	201,93	0.38	9,65	2233	1013

\* Maximum bore diameter in accordance with AGMA 9002-C14. For bore tolerance, see order code. Lubrication connections in accordance with the order option (NPT / BSP / metric). Hubs up to and including size 1025 are only supplied with extracting threads on request. The maximum permissible bore diameters may be reduced by extracting threads.

# Gear Couplings GFR

single engagement gearing – lubricated  
with fully crowned teeth



10-1

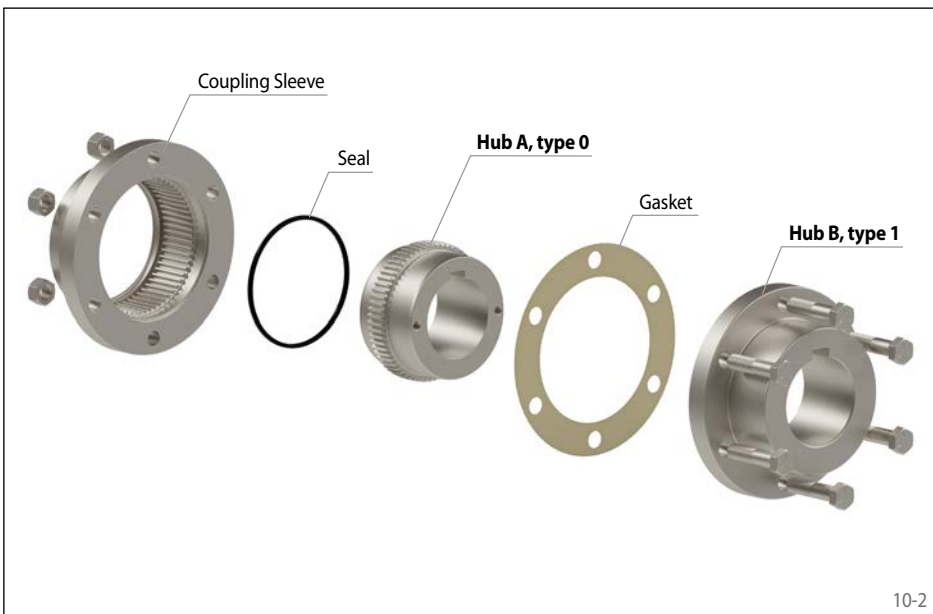
## Features

- High nominal torques up to 1 033 200 inch-lb or 116 750 Nm
- Compensation of axial, radial and angular misalignments
- Angular misalignments up to 1.5° permissible
- Sleeve with extended tothing allows greater axial displacements
- Ideal for use in combination with floating intermediate shafts
- Flange geometry in accordance with ANSI/AGMA – compatible with standard AGMA interfaces
- Interchangeable with standard AGMA couplings of the same size
- High power density
- Typical applications: Roller drives in the steel and paper industry, pumps, conveyor systems, fans and blowers

## Order example

Order example	Code
Coupling design	GFR
Coupling size	1010
Type	DFO
Material of the hub:	STA
• Steel	
Hub A, type:	0
• 0, standard	
Hub A, design:	
• finish bored with keyway	FB
• pilot bored	VA
Bore diameter hub A in inch: 3/4" * or	AAM
bore diameter hub A in mm: 19 mm**	019
Hub B, type:	1
• 1, coupling half, rigid	
Hub B, design:	
• finish bored with keyway	FB
• pilot bored	VA
Bore diameter hub B in inch: 1" * or	ABA
bore diameter hub B in mm: 25 mm**	025

GFR 1010 DFO-STA-0FBAAAM-1FBABA



10-2

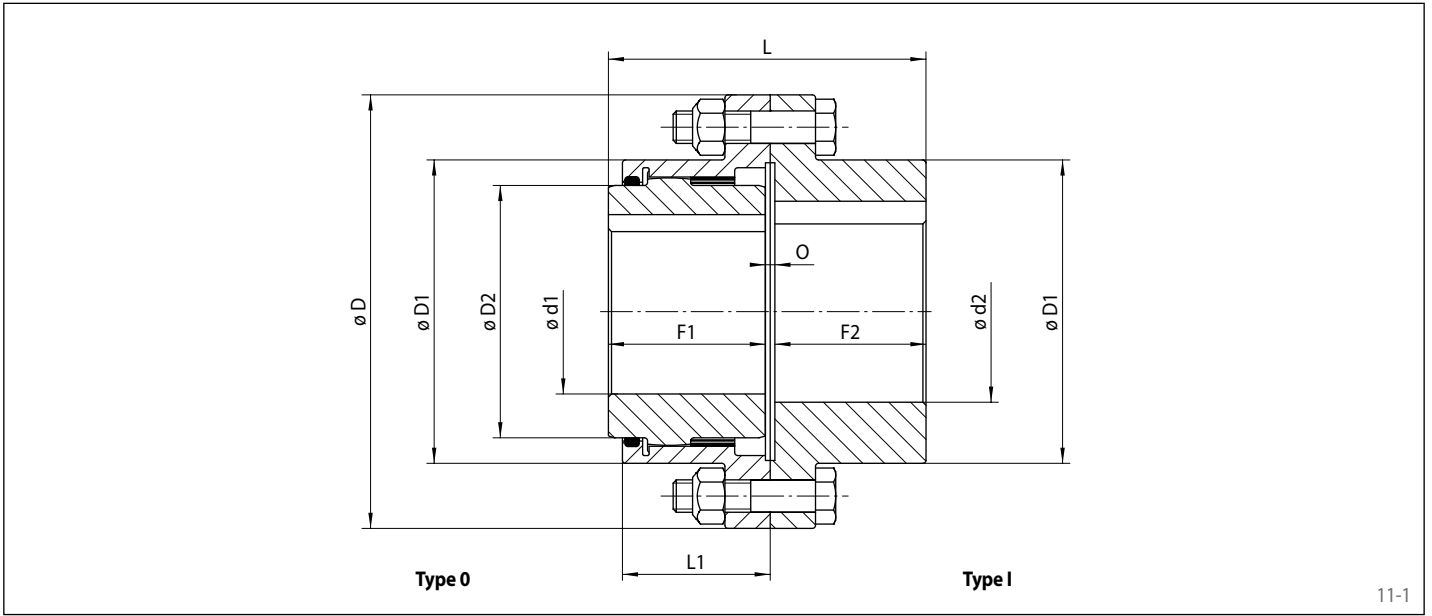
## Custom designs available upon request

- Heat-treated, alloyed or nitrided steels
- Balanced couplings for high speeds
- Other sizes and special versions
- Lubrication ports: NPT (BSP and metric on request)
- Documentation: imperial / metric

\* Bores are made in accordance with AGMA 9002-C14. Please specify the required bore tolerance in accordance with the order code on page 19.

\*\* Metric bores are produced with the standard tolerance H7. Other bore tolerances are available on request.

single engagement gearing – lubricated  
with fully crowned teeth



11-1

Coupling size	Nominal torque $T_{KN}$		Nominal power at 100 rpm $P_{K100}$		Max. speed $n_{max}$ rpm	Moment of inertia (solid hubs) $J_K$		Permissible misalignments		Angular °
	inch-lb	Nm	HP	kW		lb-in <sup>2</sup>	kgm <sup>2</sup>	Axial		
								inch	mm	
1010	9600	1090	15.3	11,4	7000	18,64	0,005	±0.01	±0,3	0.75
1015	17000	1920	27	20,1	5400	66	0,019	±0.01	±0,3	
1020	31500	3560	50	37,3	4800	150	0,044	±0.01	±0,3	
1025	53500	6000	85	63,4	4300	380	0,111	±0.01	±0,3	
1030	94500	10600	150	111,8	4000	720	0,211	±0.01	±0,3	
1035	141500	16000	225	167,8	3600	1520	0,445	±0.02	±0,5	
1040	218500	24700	347	258,8	3200	2895	0,847	±0.02	±0,5	
1045	324000	36600	515	384,0	3200	4640	1,360	±0.02	±0,5	
1050	415500	47000	660	492,2	3200	9075	2,660	±0.02	±0,5	
1055	551000	62000	875	652,5	2400	14180	4,150	±0.02	±0,5	
1060	749500	84500	1190	887,0	2200	18670	5,460	±0.04	±1,0	
1070	1033000	116500	1640	1223,0	1800	37685	11,030	±0.04	±1,0	

Coupling size	Pilot d1/d2		Bore						D		D1		D2		F1		F2		L		L1		O		Weight varies by bore solid			
			d1 max.*		d2 max.*		inch	mm																			inch	mm
	Square key	Reduced key	Square key	Reduced key																								
1010	Solid	Solid	1.63	41,40	1.75	44,45	2.25	57,15	2.38	60,45	4.56	115,82	3.06	77,72	2.38	60,45	1.69	42,93	1.59	40,39	3.44	87,38	1.64	41,66	0.16	4,06	20	9
1015	Solid	Solid	2.25	57,15	2.38	60,45	2.75	69,85	2.88	73,15	6.00	152,40	3.92	99,57	3.13	79,50	1.94	49,28	1.89	48,01	4.00	101,60	1.82	46,23	0.16	4,06	35	16
1020	Solid	Solid	2.75	69,85	3.00	76,20	3.25	82,55	3.50	88,90	7.00	177,80	4.86	123,44	4.00	101,60	2.44	61,98	2.33	59,18	4.93	125,22	2.34	59,44	0.16	4,06	73	33
1025	Solid	Solid	3.50	88,90	3.75	95,25	4.38	111,25	4.50	114,30	8.37	212,60	5.86	148,84	4.88	123,95	3.03	76,96	2.92	74,17	6.12	155,45	2.86	72,64	0.19	4,83	130	59
1030	1.44	36,58	4.00	101,60	4.38	111,25	5.00	127,00	5.19	131,83	9.44	239,78	6.86	174,24	5.75	146,05	3.59	91,19	3.46	87,88	7.25	184,15	3.47	88,14	0.19	4,83	198	90
1035	1.44	36,58	4.50	114,30	5.00	127,00	5.38	136,65	5.75	146,05	11.00	279,40	7.88	200,15	6.50	165,10	4.19	106,43	3.91	99,31	8.31	211,07	3.91	99,31	0.22	5,59	309	140
1040	1.44	36,58	5.50	139,70	5.88	149,35	6.50	165,10	7.00	177,80	12.50	317,50	9.22	234,19	7.75	196,85	4.75	120,65	4.56	115,82	9.63	244,60	4.53	115,06	0.31	7,87	463	210
1045	2.00	50,80	6.25	158,75	6.75	171,45	7.38	187,45	7.88	200,15	13.63	346,20	10.35	262,89	9.00	228,60	5.31	134,87	5.06	128,52	10.71	272,03	5.00	127,00	0.34	8,64	639	290
1050	2.69	68,33	6.75	171,45	7.00	177,80	7.88	200,15	8.38	212,85	15.31	388,87	11.44	290,58	9.50	241,30	6.03	153,16	5.88	149,35	12.25	311,15	5.78	146,81	0.34	8,64	860	390
1055	3.00	76,20	7.50	190,50	7.75	196,85	9.00	228,60	9.25	234,95	16.75	425,45	12.69	322,33	10.50	266,70	6.62	168,15	6.81	172,97	13.77	349,76	6.34	161,04	0.34	8,64	1014	460
1060	3.50	88,90	8.13	206,50	8.75	222,25	10.00	254,00	10.25	260,35	18.00	457,20	13.75	349,25	11.50	292,10	7.41	188,21	7.06	179,32	14.88	377,95	6.94	176,28	0.41	10,41	1532	695
1070	4.00	101,60	9.63	244,60	10.25	260,35	11.25	285,75	12.25	311,15	20.75	527,05	16.00	406,40	13.50	342,90	8.69	220,73	8.31	211,07	17.50	444,50	7.95	201,93	0.50	12,70	2359	1070

\* Maximum bore diameter in accordance with AGMA 9002-C14. For bore tolerance, see order code. Lubrication connections in accordance with the order option (NPT / BSP / metric). Hubs up to and including size 1025 are only supplied with extracting threads on request. The maximum permissible bore diameters may be reduced by extracting threads.

# Gear Couplings GHF

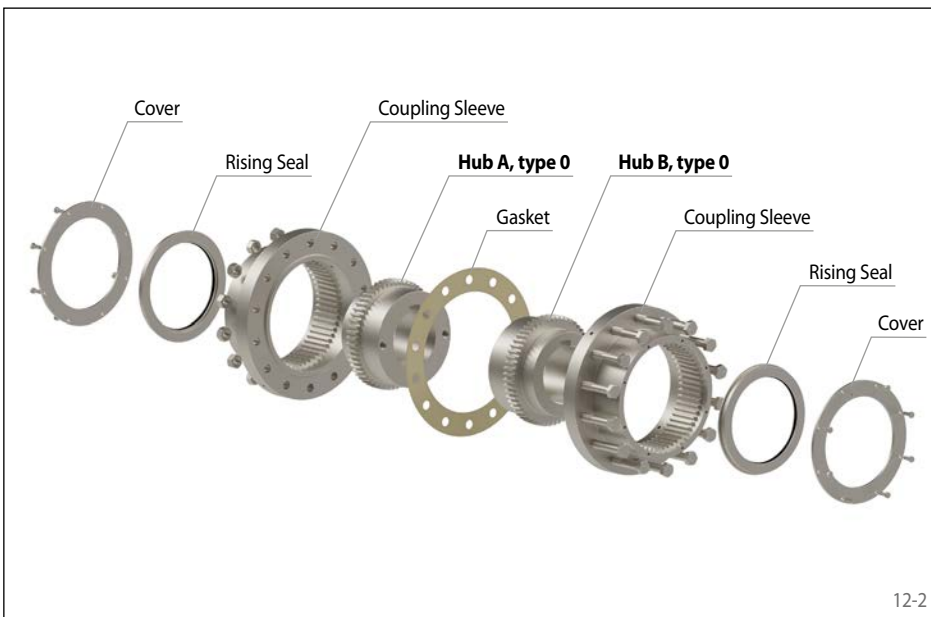
double engagement gearing – lubricated  
with fully crowned teeth and for high angular misalignment



12-1

## Features

- High nominal torques up to 1 033 200 inch-lb or 116 750 Nm
- Compensation of axial, radial and angular misalignments
- Angular misalignments up to 3.5° permissible
- Improved gear design to increase torque capacity and reduce coupling backlash
- Nitrided gear teeth made of high-strength steel for maximum transmissible torques and power density
- O-ring seal that retains grease and keeps contaminants out of the tooth mesh
- High power density
- Typical applications: Roll drives in the steel and paper industries, pumps, conveyors, fans and blowers



12-2

## Custom designs available upon request

- Heat-treated, alloyed or nitrided steels
- Couplings for shaft misalignments up to 6°
- Other sizes and special versions
- Lubrication ports: NPT (BSP and metric on request)
- Documentation: imperial / metric

## Order example

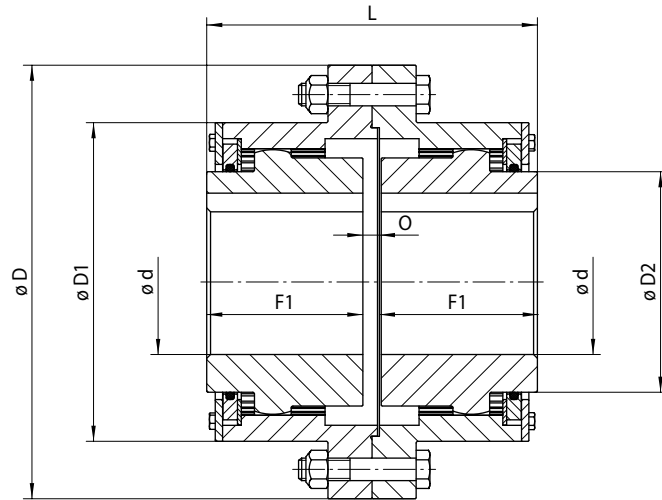
Order example	Code
Coupling design	GHF
Coupling size	H150
Type	DTO
Material of the hub:	STA
• Steel	
Hub A, type:	0
• 0, standard	
Hub A, design:	
• finish bored with keyway	FB
• pilot bored	VA
Bore diameter hub A in inch: 3/4" * or	AAM
bore diameter hub A in mm: 19 mm**	019
Hub B, type:	0
• 0, standard	
Hub B, design:	
• finish bored with keyway	FB
• pilot bored	VA
Bore diameter hub B in inch: 1" * or	ABA
bore diameter hub B in mm: 25 mm**	025

GHF H150 DTO-STA-0FBAAAM-0FBABA

\* Bores are made in accordance with AGMA 9002-C14. Please specify the required bore tolerance in accordance with the order code on page 19.

\*\* Metric bores are produced with the standard tolerance H7. Other bore tolerances are available on request.

double engagement gearing – lubricated  
with fully crowned teeth and for high angular misalignment



13-1

Coupling size	Torque Rating $T_{KN}$ Operating Angle								Max. speed $n_{max}$ rpm	Moment of inertia (solid hubs) $J_K$ lb-in <sup>2</sup>   kgm <sup>2</sup>		Permissible misalignments				
	1°		2°		3°		3.5°					Axial (Offset)		Radial (Offset)		Angular °
	inch-lb	Nm	inch-lb	Nm	inch-lb	Nm	inch-lb	Nm				inch	mm	inch	mm	
H150	23 600	2 660	16 500	1 860	11 800	1 330	10 600	1 200	4 000	61.1	0,018	±0.02	±0,5	0.16	4,1	3.5
H200	42 100	4 760	29 500	3 330	21 000	2 380	18 900	2 140	3 600	135.6	0,039	±0.02	±0,5	0.20	5,2	
H250	56 500	6 300	39 500	4 470	28 200	3 190	25 400	2 870	3 600	287.0	0,083	±0.02	±0,5	0.23	5,7	
H300	147 000	16 600	103 000	11 600	73 500	8 300	62 500	7 000	3 200	522.1	0,151	±0.02	±0,5	0.27	6,9	
H350	227 500	25 700	159 500	18 000	113 500	12 800	97 500	11 000	3 200	1 278.9	0,371	±0.04	±1,0	0.30	7,6	
H400	354 500	40 000	248 000	28 000	177 000	20 000	156 000	17 600	3 000	2 080.3	0,603	±0.04	±1,0	0.34	8,6	
H450	500 500	56 500	350 000	39 500	250 500	28 200	216 500	24 400	3 000	3 251.7	0,943	±0.04	±1,0	0.37	9,3	
H500	585 500	66 000	410 000	46 300	292 500	33 000	247 000	27 900	2 400	6 566.9	1,904	±0.04	±1,0	0.41	10,5	
H550	879 500	99 000	615 500	69 500	439 500	49 600	357 000	40 300	2 000	10 427.1	3,024	±0.04	±1,0	0.44	11,2	
H600	1 348 000	152 000	943 500	106 500	674 000	76 000	581 000	65 500	1 800	15 851.2	4,597	±0.08	±2,0	0.55	14,0	
H700	1 467 500	165 500	1 027 000	116 000	733 500	82 500	660 000	74 500	1 600	30 419.4	8,822	±0.08	±2,0	0.60	15,2	
H800	2 695 000	304 500	1 886 500	213 000	1 347 500	152 000	1 096 500	123 500	1 600	56 193.1	16,296	±0.08	±2,0	0.70	17,9	

Coupling size	Bore $d^*$				D		D1		D2		F1		L		O		Bolt Size	Qty. of Bolts	Weight varies by bore	
	Square key max.		Reduced key max.																solid	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm			lbs.	kg
H150	1.63	41,40	1.75	44,45	6.00	152,40	3.88	98,55	2.31	58,67	2.19	55,63	4.63	117,60	0.25	6,35	0.313-18	8	18,4	8,3
H200	2.13	54,10	2.25	57,15	7.00	177,80	4.75	120,65	2.88	73,15	2.75	69,85	5.81	147,57	0.31	7,87	0.375-16	8	30,7	13,9
H250	2.63	66,80	2.75	69,85	8.00	203,20	5.38	136,65	3.69	93,73	3.06	77,72	6.50	165,10	0.38	9,65	0.500-13	10	48,4	22,0
H300	3.13	79,50	3.38	85,85	9.00	228,60	6.38	162,05	4.38	111,25	3.66	92,96	7.75	196,85	0.44	11,18	0.500-13	12	72,7	33,0
H350	3.63	92,20	3.88	98,55	10.69	271,53	7.63	193,80	5.00	127,00	3.91	99,31	8.31	211,07	0.50	12,70	0.625-11	12	118,6	53,8
H400	4.13	104,90	4.38	111,25	11.63	295,40	8.69	220,73	5.75	146,05	4.44	112,78	9.44	239,78	0.56	14,22	0.625-11	14	165,5	75,1
H450	4.63	117,60	5.00	127,00	12.75	323,85	9.75	247,65	6.44	163,58	4.81	122,17	10.25	260,35	0.63	16,00	0.625-11	14	217,2	98,5
H500	5.25	133,35	5.75	146,05	14.75	374,65	10.88	276,35	7.50	190,50	5.31	134,87	11.25	285,75	0.63	16,00	0.750-10	14	321,8	146,0
H550	6.00	152,40	6.50	165,10	16.38	416,05	12.25	311,15	8.63	219,20	6.00	152,40	12.81	325,37	0.81	20,57	0.750-10	16	426,9	193,6
H600	6.75	171,45	7.25	184,15	18.00	457,20	13.75	349,25	9.25	234,95	7.00	177,80	14.88	377,95	0.88	22,35	0.875-9	14	566,3	256,9
H700	7.75	196,85	8.25	209,55	20.38	517,65	15.75	400,05	11.00	279,40	8.00	203,20	17.06	433,32	1.06	26,92	1.000-8	16	851,4	386,2
H800	10.38	263,65	10.88	276,35	23.25	590,55	18.00	457,20	13.50	342,90	9.00	228,60	19.25	488,95	1.25	31,75	1.125-7	16	1 235,5	560,4

\* Maximum bore diameter in accordance with AGMA 9002-C14. For bore tolerance, see order code. Lubrication connections in accordance with the order option (NPT / BSP / metric).

# Gear Couplings GHR

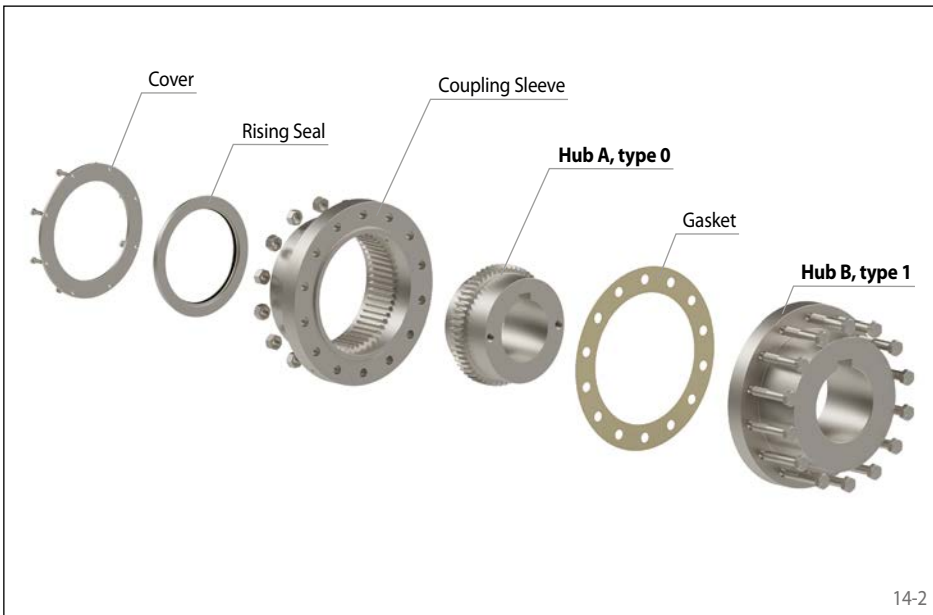
single engagement gearing – lubricated  
with fully crowned teeth and for high angular misalignment



14-1

## Features

- High nominal torques up to 1 033 200 inch-lb or 116 750 Nm
- Compensation of axial, radial and angular misalignments
- Angular misalignments up to 1.75° permissible
- Improved gear design to increase torque capacity and reduce coupling backlash
- Nitrided gear teeth made of high-strength steel for maximum transmissible torques and power density
- O-ring seal that retains grease and keeps contaminants out of the tooth mesh
- High power density
- Typical applications: Roller drives in the steel and paper industry, pumps, conveyor systems, cement industry



14-2

## Custom designs available upon request

- Heat-treated, alloyed or nitrided steels
- Couplings for shaft misalignments up to 3°
- Other sizes and special versions
- Lubrication ports: NPT (BSP and metric on request)
- Documentation: imperial / metric

## Order example

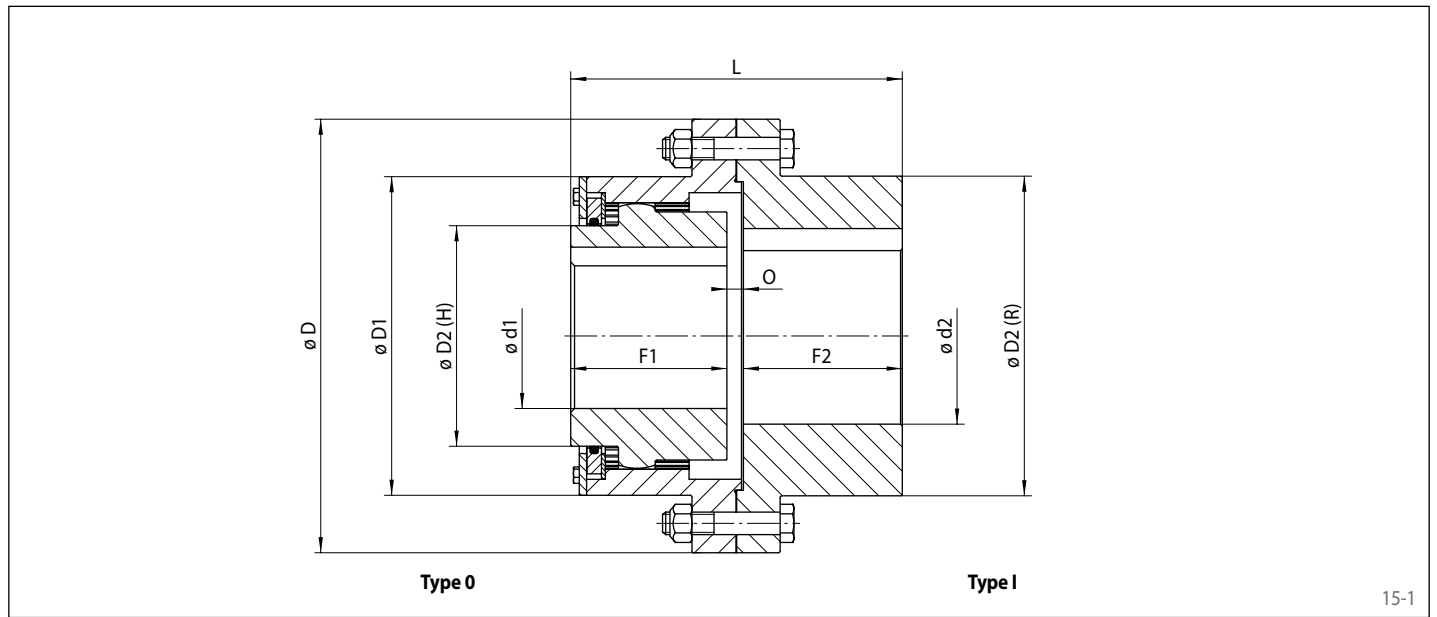
Order example	Code
Coupling design	GHR
Coupling size	H150
Type	DFO
Material of the hub:	STA
• Steel	
Hub A, type:	0
• 0, standard	
Hub A, design:	
• finish bored with keyway	FB
• pilot bored	VA
Bore diameter hub A in inch: 3/4" * or	AAM
bore diameter hub A in mm: 19 mm**	019
Hub B, type:	1
• 1, coupling half, rigid	
Hub B, design:	
• finish bored with keyway	FB
• pilot bored	VA
Bore diameter hub B in inch: 1" * or	ABA
bore diameter hub B in mm: 25 mm**	025

GHR H150 DFO-STA-0FBAAM-1FBABA

\* Bores are made in accordance with AGMA 9002-C14. Please specify the required bore tolerance in accordance with the order code on page 19.

\*\* Metric bores are produced with the standard tolerance H7. Other bore tolerances are available on request.

single engagement gearing – lubricated  
with fully crowned teeth and for high angular misalignment



15-1

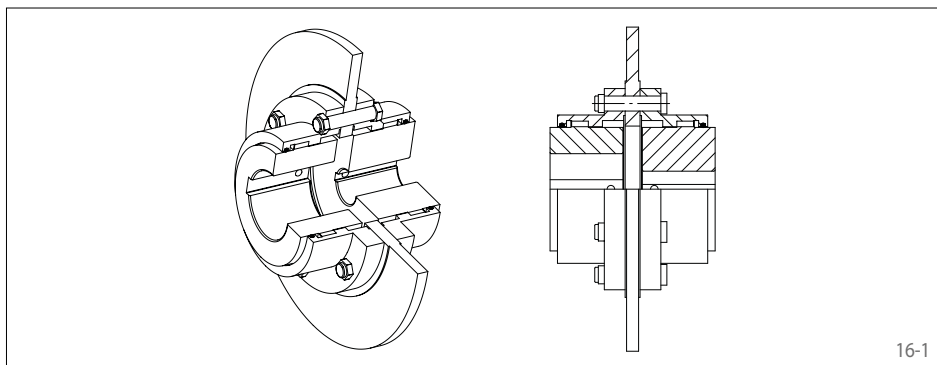
Coupling size	Torque Rating $T_{KN}$ Operating Angle								Max. speed $n_{max}$ rpm	Moment of inertia (solid hubs) $J_k$		Permissible misalignments		
	1°		2°		3°		3.5°			lb-in <sup>2</sup>	kgm <sup>2</sup>	Axial (Offset)		Angular °
	inch-lb	Nm	inch-lb	Nm	inch-lb	Nm	inch-lb	Nm				inch	mm	
H150	23600	2660	16500	1860	11800	1330	10600	1200	4000	65,7	0,019	±0.02	±0,5	1.75
H200	42100	4760	29500	3330	21000	2380	18900	2140	3600	146,6	0,043	±0.02	±0,5	
H250	56500	6300	39500	4470	28200	3190	25400	2870	3600	307,8	0,089	±0.02	±0,5	
H300	147000	16600	103000	11600	73500	8300	62500	7000	3200	576,1	0,167	±0.02	±0,5	
H350	227500	25700	159500	18000	113500	12800	97500	11000	3200	1361,8	0,395	±0.04	±1,0	
H400	354500	40000	248000	28000	177000	20000	156000	17600	3000	2221,3	0,644	±0.04	±1,0	
H450	500500	56500	350000	39500	250500	28200	216500	24400	3000	3478,7	1,009	±0.04	±1,0	
H500	585500	66000	410000	46300	292500	33000	247000	27900	2400	6919,1	2,007	±0.04	±1,0	
H550	879500	99000	615500	69500	439500	49600	357000	40300	2000	11537,5	3,346	±0.04	±1,0	
H600	1348000	152000	943500	106500	674000	76000	581000	65500	1800	17851,7	5,177	±0.08	±2,0	
H700	1467500	165500	1027000	116000	733500	82500	660000	74500	1600	43402,2	12,587	±0.08	±2,0	
H800	2695000	304500	1886500	213000	1347500	152000	1096500	123500	1600	63974,5	18,553	±0.08	±2,0	

Coupling size	Bore								D		D1		D2 (H)		D2 (R)		F1		F2		L		O		Weight varies by bore solid	
	d1 max.* Square key		Reduced key		d2 max.* Square key		Reduced key		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg
	inch	mm	inch	mm	inch	mm	inch	mm																		
H150	1.63	41,40	1.75	44,45	2.75	69,85	2.94	74,68	6.00	152,40	3.88	98,55	2.31	58,67	4.00	101,60	2.19	55,63	2.22	56,39	4.63	117,60	0.22	5,59	20.1	9,1
H200	2.13	54,10	2.25	57,15	3.25	82,55	3.38	85,85	7.00	177,80	4.75	120,65	2.88	73,15	4.75	120,65	2.75	69,85	2.84	72,14	5.81	147,57	0.22	5,59	34.0	15,4
H250	2.63	66,80	2.75	69,85	3.75	95,25	3.88	98,55	8.00	203,20	5.38	136,65	3.69	93,73	5.50	139,70	3.06	77,72	3.09	78,49	6.38	162,05	0.22	5,59	52.4	23,8
H300	3.13	79,50	3.38	85,85	4.50	114,30	4.69	119,13	9.00	228,60	6.38	162,05	4.38	111,25	6.50	165,10	3.66	92,96	3.75	95,25	7.63	193,80	0.22	5,59	80.1	36,3
H350	3.63	92,20	3.88	98,55	5.25	133,35	5.50	139,70	10.69	271,53	7.63	193,80	5.00	127,00	7.63	193,80	3.91	99,31	4.09	103,89	8.25	209,55	0.25	6,35	128.1	58,1
H400	4.13	104,90	4.38	111,25	6.00	152,40	6.50	165,10	11.63	295,40	8.69	220,73	5.75	146,05	8.75	222,25	4.44	112,78	4.53	115,06	9.25	234,95	0.28	7,11	176.9	80,2
H450	4.63	117,60	5.00	127,00	6.50	165,10	7.00	177,80	12.75	323,85	9.75	247,65	6.44	163,58	9.75	247,65	4.81	122,17	4.94	125,48	10.06	255,52	0.31	7,87	232.2	105,3
H500	5.25	133,35	5.75	146,05	7.50	190,50	7.75	196,85	14.75	374,65	10.88	276,35	7.50	190,50	10.88	276,35	5.31	134,87	5.44	138,18	11.06	280,92	0.31	7,87	340.6	154,5
H550	6.00	152,40	6.50	165,10	8.50	215,90	9.00	228,60	16.38	416,05	12.25	311,15	8.63	219,20	12.38	314,45	6.00	152,40	6.31	160,27	12.63	320,80	0.31	7,87	470.8	213,5
H600	6.75	171,45	7.25	184,15	9.50	241,30	10.00	254,00	18.00	457,20	13.75	349,25	9.25	234,95	13.75	349,25	7.00	177,80	7.25	184,15	14.63	371,60	0.38	9,65	630.8	286,1
H700	7.75	196,85	8.25	209,55	11.25	285,75	12.00	304,80	20.38	517,65	15.75	400,05	11.00	279,40	15.88	403,35	8.00	203,20	8.50	215,90	16.88	428,75	0.38	9,65	1094.9	496,6
H800	10.38	263,65	10.88	276,35	14.38	365,25	13.63	346,20	23.25	590,55	18.00	457,20	13.50	342,90	18.00	457,20	9.00	228,60	9.50	241,30	19.00	482,60	0.50	12,70	1377.8	625,0

\* Maximum bore diameter in accordance with AGMA 9002-C14. For bore tolerance, see order code. Lubrication connections in accordance with the order option (NPT / BSP / metric).

## Gear couplings with brake disc

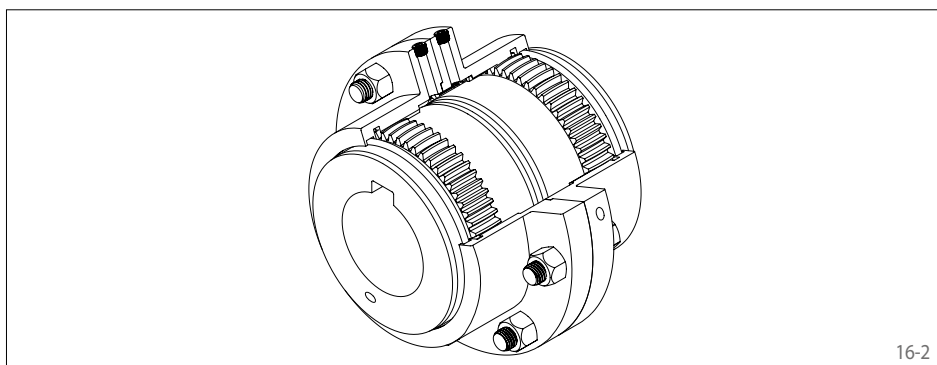
RINGSPANN gear couplings are also available with an integrated brake disc or brake drum. This eliminates the need for an additional shaft journal.



16-1

## Balanced gear couplings for high speeds

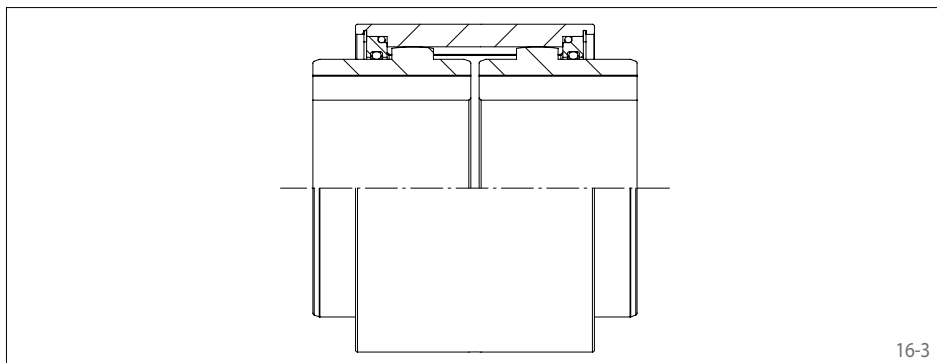
The gear geometry and the manufacturing quality of the components generally also allow the gear couplings to be used at high speeds. The components can be individually balanced for this purpose.



16-2

## Gear couplings with continuous sleeve

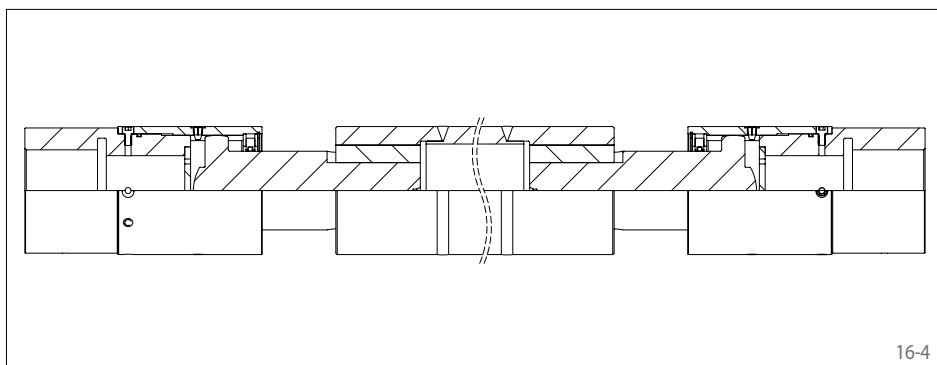
For applications with radially limited installation space, the gear couplings can also be supplied with a continuous coupling sleeve.



16-3

## Gear couplings for leveler spindle

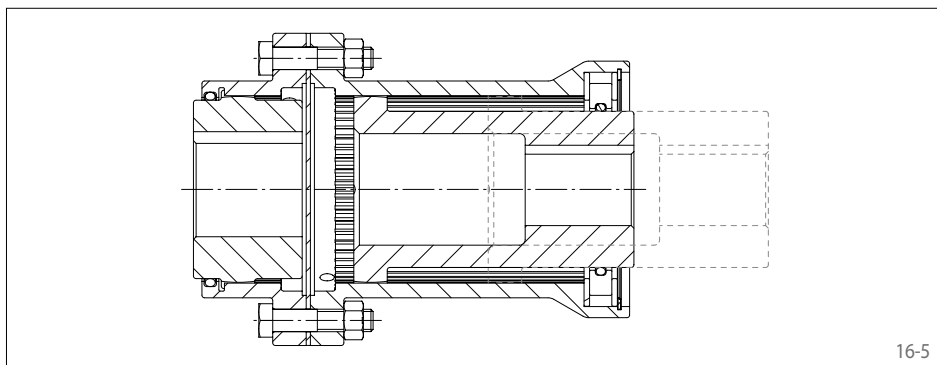
Gear couplings for driving leveling spindles are characterized by their robust design and their ability to compensate for large shaft misalignments. They are therefore particularly suitable for operation in steel rolling mills.



16-4

## Gear couplings with extended travel

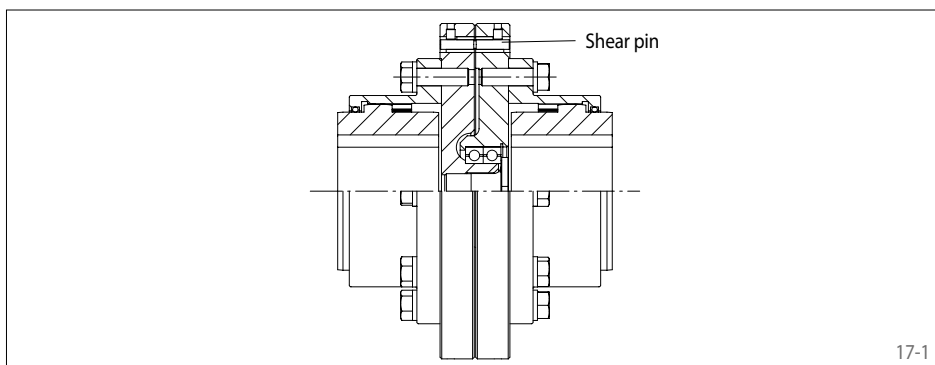
Gear couplings with an extended travel path allow a variable distance between the connected shafts. This makes it possible, for example, to compensate for thermal changes in the length of the shafts or to adapt working machines to different product dimensions or product qualities.



16-5

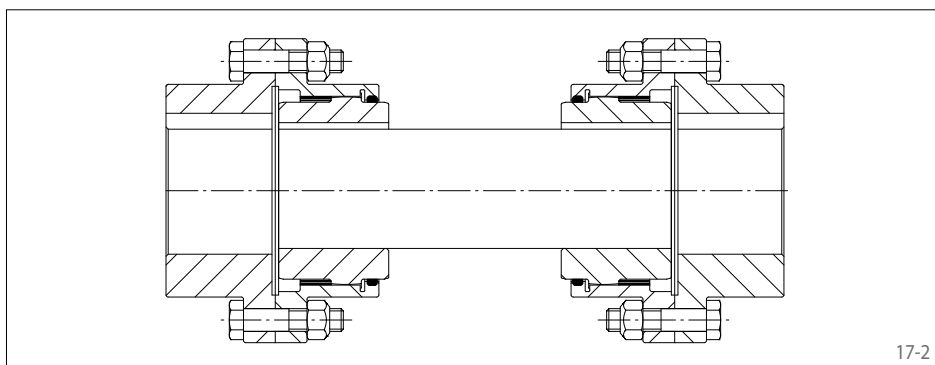
## Gear couplings with shear pins

To protect against overload, the gear couplings can be fitted with one or more shear pins. The torque is transmitted via the shear pins, which are sheared off in the event of an overload if a critical value is exceeded. This separates the input and output from each other.



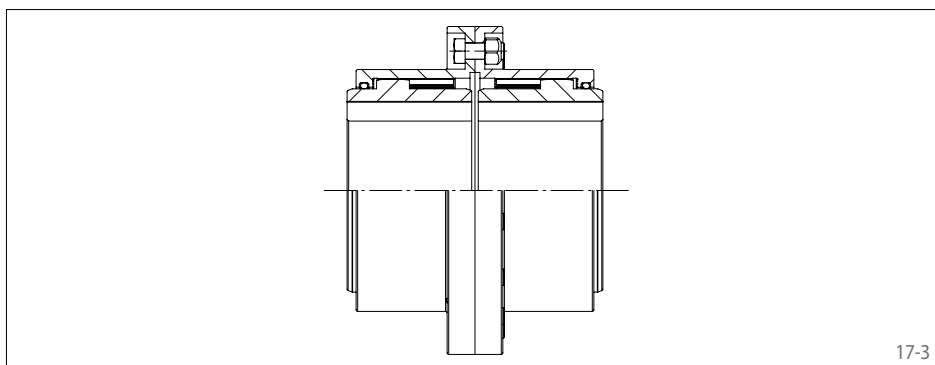
## Gear couplings with floating intermediate shaft

The use of two gear couplings with an intermediate shaft makes it possible to compensate for larger radial misalignments.



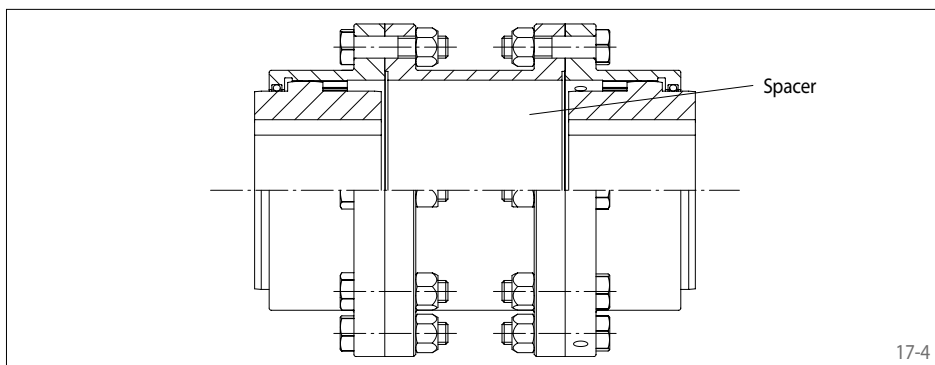
## Gear coupling with shrouded bolts and nuts

Coupling sleeves with shrouded bolts and nuts can be supplied on request.



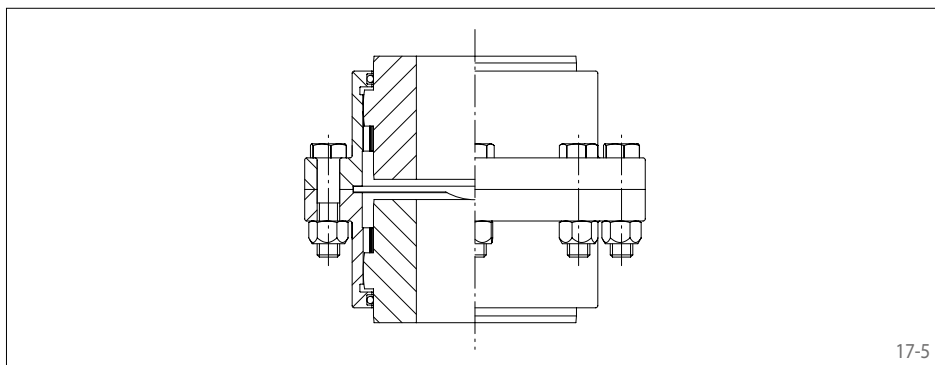
## Gear couplings with spacer

In various applications, the gear coupling must bridge a greater distance between the shafts. For such applications, the coupling sleeves can be extended using spacers, thereby increasing the permissible distance between the shaft ends.



## Gear couplings for vertical mounting

To ensure that the teeth of the upper hub are not damaged by the weight of the coupling sleeve when the gear coupling is installed vertically, it must be fitted with a special pressure plate. As a result, it is supported by the lower shaft and is always held in the correct position.



## Design with service factors

The permissible nominal torque of coupling  $T_{KN}$  must be at least as high as the nominal torque of the machine  $T_N$  with consideration of the operating conditions (service factor  $S_B$ ).

$$T_{KN} \geq T_N \cdot S_B$$

The nominal torque of the machine  $T_N$  results from the following in the

Imperial system:

$$T_N = 63\,000 \cdot \frac{P_N}{n}$$

$n$  = Speed of the machine [rpm]

$P_N$  = Nominal power [HP]

$T_{KN}$  = Nominal torque of the coupling [in-lb]

$T_N$  = Nominal torque of the machine [in-lb]

Metric system:

$$T_N = 9\,550 \cdot \frac{P_N}{n}$$

$n$  = Speed of the machine [min<sup>-1</sup>]

$P_N$  = Nominal power [kW]

$T_{KN}$  = Nominal torque of the coupling [Nm]

$T_N$  = Nominal torque of the machine [Nm]

## Service factor $S_B$

Machine	Individual applications	Service factor
Agitators	Pure liquids	1.0
	Mixtures of liquids of different densities	1.0
Blowers	Centrifugal	1.0
	Lobe	1.2
Can Filling Machines		1.0
Car Dumpers		2.0
Car Pullers, Intermittent Duty		1.5
Compressors	Centrifugal	1.0
	Reciprocating	2.2
Conveyors, Uniformly	Assembly	1.2
	Belt	1.2
Conveyors, Heavy Duty Not Uniformly	Fed assembly, automation technology	1.5
	Belt, uneven loading	1.5
	Oven feed	1.5
	Reciprocating	2.0
	Screw	1.5
	Shaker	1.5
	Bucket elevator	1.5
	Cranes and Hoists*	Main hoists
Trolley drive		2.0
Bridge drive		2.0
Crushers	Ore	3.0
	Stone	3.0
Dredges	Conveyors	2.0
	Cutter head drives	2.0
	Maneuvering winches	2.0
	Pumps	2.0
Fans	Centrifugal	1.0
	Forced draft	1.5
	Induced draft	1.25
	Cooling towers	1.5
Feeders	Screw	1.5
Generators	Not welding	1.0
	Welding	1.5
Hammer Mills		2.0
Laundry Washers Lumber Industry	With reversing	1.5
	Barkers: drum type	2.0
	Edger feed	2.0
	Live rolls	2.0
	Log haul: incline	2.0
	Log haul: well type	2.0
	Off bearing rolls	2.0
	Planer feed chains	1.75
	Planer tilting hoist	1.75
	Planer floor chains	1.75
	Slab conveyor	1.5
Sorting table	1.5	
Trimmer feed	1.5	

\* Unless other values are required by law.

Machine	Individual applications	Service factor
Machine Tools	Bending roll	2.0
	Punch press, gear driven	2.0
	Tapping machines	2.0
	Main drives	1.5
Metal Mills	Auxiliary drives	1.5
	Draw bench - carriage	2.0
	Draw bench - main drive	2.0
Metal Rolling Mills	Forming machines	2.0
	Slitters	1.5
	Blooming mills	2.5
	Coilers, hot mill	2.0
	Coilers, cold mill	1.5
	Cold mills	2.0
	Cooling beds	1.75
	Door openers	2.0
	Draw benches	2.0
	Edger drives	1.75
Feed rolls, reversing mills	3.5	
	Furnace pushers	2.5
	Hot mills	3.0
	Ingot cars	2.5
	Kick-outs	2.5
	Manipulators	3.0
	Merchant mills	3.0
	Piercers	3.0
	Pusher rams	2.5
	Reel drives	1.75
	Reel drums	2.0
	Reelers	3.0
	Rod and bar mills	3.0
	Roughing mill delivery table	3.0
Runout tables	2.5	
Saws, hot & cold	2.5	
Screwdown drives	3.0	
Skelp mills	3.0	
Slitters / longitudinal cutting machine	3.0	
Slabbing mills	1.75	
Soaking pit cover drives	3.0	
Straighteners	2.5	
Tables, transfer & runout	2.5	
Thrust block	3.0	
Traction drive	3.0	
Tube conveyor rolls	2.5	
Unscramblers	2.5	
Wire drawing	1.75	
Mills, Rotary Type	Ball mill	2.25
	Tube dryers & coolers	2.0
	Hammer mill	1.75
	Kilns	2.0
	Pebble & rod	2.0
	Clay mixer, kneading mill, pug mill, continuous mixer	1.75
	Drum mill, grinding drum, deburring barrel, drum polishing machine	2.0

Machine	Individual applications	Service factor	
Table Conveyors	Non-Reversing	2.25	
	Reversing	2.5	
	Wire drawing & flattening machine	2.0	
	Wire winding machine	1.75	
Mixers	Concrete mixers, continuous	1.5	
	Concrete mixers, intermittent	2.0	
Oil Industry	Oil well pumping	2.0	
	Rotary kilns	2.0	
Paper Mills	Agitators, mixers	1.5	
	Barker auxiliaries, hydraulic	2.0	
	Barker mechanical	2.0	
	Pulper, beater, disc refiner	1.75	
	Bleacher	1.0	
	Calenders	2.0	
	Calenders	1.5	
	Chippers	2.5	
	Coaters	1.0	
	Converting Machines	In general, except cutters, platters	1.5
Conveyors		1.5	
Couch roll		1.75	
Cutters, platters		2.0	
Cylinders		1.75	
	Disc refiners	1.75	
	Dryers	1.75	
	Felt stretcher	1.25	
	Felt whipper	2.0	
	Jordans	1.75	
	Line shaft	1.5	
	Log haul	2.0	
	Pulp grinder	1.75	
	Press roll	2.0	
	Reel	1.5	
	Stock chests	1.5	
	Suction roll	1.75	
	Washers & thickeners	1.5	
	Winders	1.5	
	Printing presses	1.5	
Pumps	Centrifugal	1.0	
	Pumps, Reciprocating	Single acting 3 or more cylinders	1.5
		Double acting 2 or more cylinders	2.0
Rotary, Gear Type, Lobe	Vane	1.5	
	Rubber Industry	Mixer	2.0
Rubber calender		2.0	
Screens	Rotary, stone or gravel	1.5	
	Steering gear	1.0	
	Stokers	1.0	
	Textile Industry	Dryers	1.5
Dyeing machinery		1.5	
Windlass		2.0	

## Imperial Dimension order code based on fit type

### Bore and keyway according to AGMA 9002-C14, bore tolerance: interference fit

Bore, whole number	Bore, fractional															
	0	1/16"	1/8"	3/16"	1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"	11/16"	3/4"	13/16"	7/8"	15/16"
0"	AAA	AAB	AAC	AAD	AAE	AAF	AAG	AAH	AAI	AAJ	AAK	AAL	AAM	AAN	AAO	AAP
1"	ABA	ABB	ABC	ABD	ABE	ABF	ABG	ABH	ABI	ABJ	ABK	ABL	ABM	ABN	ABO	ABP
2"	ACA	ACB	ACC	ACD	ACE	ACF	ACG	ACH	ACI	ACJ	ACK	ACL	ACM	ACN	ACO	ACP
3"	ADA	ADB	ADC	ADD	ADE	ADF	ADG	ADH	ADI	ADJ	ADK	ADL	ADM	ADN	ADO	ADP
4"	AEA	AEB	AEC	AED	AEE	AEF	AEG	AEH	AEI	AEJ	AEK	AEL	AEM	AEN	AEO	AEP
5"	AFA	AFB	AFC	AFD	AFE	AFF	AFG	AFH	AFI	AFJ	AFK	AFL	AFM	AFN	AFO	AFP
6"	AGA	AGB	AGC	AGD	AGE	AGF	AGG	AGH	AGI	AGJ	AGK	AGL	AGM	AGN	AGO	AGP
7"	AHA	AHB	AHC	AHD	AHE	AHF	AHG	AHH	AHI	AHJ	AHK	AHL	AHM	AHN	AHO	AHP
8"	AIA	AIB	AIC	AID	AIE	AIF	AIG	AIH	AII	AIJ	AIK	AIL	AIM	AIN	AIO	AIP
9"	AJA	AJB	AJC	AJD	AJE	AJF	AJG	AJH	AJI	AJJ	AJK	AJL	AJM	AJN	AJO	AJP
10"	AKA	AKB	AKC	AKD	AKE	AKF	AKG	AKH	AKI	AKJ	AKK	AKL	AKM	AKN	AKO	AKP
11"	ALA	ALB	ALC	ALD	ALE	ALF	ALG	ALH	ALI	ALJ	ALK	ALL	ALM	ALN	ALO	ALP
12"	AMA	AMB	AMC	AMD	AME	AMF	AMG	AMH	AMI	AMJ	AMK	AML	AMM	AMN	AMO	AMP
13"	ANA	ANB	ANC	AND	ANE	ANF	ANG	ANH	ANI	ANJ	ANK	ANL	ANM	ANN	ANO	ANP
14"	AOA	AOB	AOC	AOD	AOE	AOF	AOG	AOH	AOI	AOJ	AOK	AOL	AOM	AON	AOO	AOP
15"	APA	APB	APC	APD	APE	APF	APG	APH	API	APJ	APK	APL	APM	APN	APO	APP
16"	AQA	AQB	AQC	AQD	AQE	AQF	AQG	AQH	AQI	AQJ	AQK	AQL	AQM	AQN	AQO	AQP
17"	ARA	ARB	ARC	ARD	ARE	ARF	ARG	ARH	ARI	ARJ	ARK	ARL	ARM	ARN	ARO	ARP
18"	ASA	ASB	ASC	ASD	ASE	ASF	ASG	ASH	ASI	ASJ	ASK	ASL	ASM	ASN	ASO	ASP
19"	ATA	ATB	ATC	ATD	ATE	ATF	ATG	ATH	ATI	ATJ	ATK	ATL	ATM	ATN	ATO	ATP
20"	AUA	AUB	AUC	AUD	AUE	AUF	AUG	AUH	AUI	AUJ	AUK	AUL	AUM	AUN	AUO	AUP
21"	AVA	AVB	AVC	AVD	AVE	AVF	AVG	AVH	AVI	AVJ	AVK	AVL	AVM	AVN	AVO	AVP
22"	AWA	AWB	AWC	AWD	AWE	AWF	AWG	AWH	AWI	AWJ	AWK	AWL	AWM	AWN	AWO	AWP
23"	AXA	AXB	AXC	AXD	AXE	AXF	AXG	AXH	AXI	AXJ	AXK	AXL	AXM	AXN	AXO	AXP

### Bore and keyway according to AGMA 9002-C14, bore tolerance: clearance fit

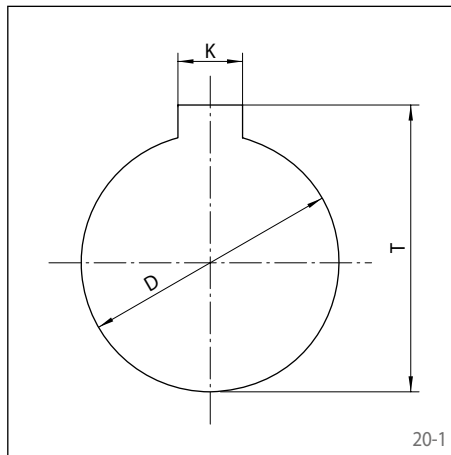
Bore, whole number	Bore, fractional															
	0	1/16"	1/8"	3/16"	1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"	11/16"	3/4"	13/16"	7/8"	15/16"
0"	ZAA	ZAB	ZAC	ZAD	ZAE	ZAF	ZAG	ZAH	ZAI	ZAJ	ZAK	ZAL	ZAM	ZAN	ZAO	ZAP
1"	ZBA	ZBB	ZBC	ZBD	ZBE	ZBF	ZBG	ZBH	ZBI	ZBJ	ZBK	ZBL	ZBM	ZBN	ZBO	ZBP
2"	ZCA	ZCB	ZCC	ZCD	ZCE	ZCF	ZCG	ZCH	ZCI	ZCJ	ZCK	ZCL	ZCM	ZCN	ZCO	ZCP
3"	ZDA	ZDB	ZDC	ZDD	ZDE	ZDF	ZDG	ZDH	ZDI	ZDJ	ZDK	ZDL	ZDM	ZDN	ZDO	ZDP
4"	ZEA	ZEB	ZEC	ZED	ZEE	ZEF	ZEG	ZEH	ZEI	ZEJ	ZEK	ZEL	ZEM	ZEN	ZEO	ZEP
5"	ZFA	ZFB	ZFC	ZFD	ZFE	ZFF	ZFG	ZFH	ZFI	ZFJ	ZFK	ZFL	ZFM	ZFN	ZFO	ZFP
6"	ZGA	ZGB	ZGC	ZGD	ZGE	ZGF	ZGG	ZGH	ZGI	-	-	-	-	-	-	-

## Inch bores

The RINGSPANN shaft couplings are also available with bores in inch dimensions.

RINGSPANN follows the specifications of AGMA 9002-C14 as of 02.2015. Deviating bores, e.g. according to B.S. 46, are possible, but must be requested separately. When ordering inch bores, RINGSPANN recommends specifying not only the bore diameter in inches or millimeters, but also the width and depth of the keyway and the desired fit.

On the next page you will find a selection of the most common bores with the dimensions of the keyways. Further bores can be requested from RINGSPANN.



## Inch bores

	Bore				Keyway							
	Nominal Shaft Diameter	Bore Diameter D	Bore Tolerance		Width K		Width K Tolerance mm	Depth T mm	Depth T Tolerance mm			
			AGMA Clearance Fit mm	AGMA Interference Fit mm	inch	mm						
Square key	3/8	9,525	-0,0000 / +0,0254	-0,0254 / -0,0127	3/32	2,38	-0,000 / +0,051	10,698	-0,000 / +0,381			
	7/16	11,113			1/8	3,18		12,309				
	1/2	12,700			3/16	4,76		14,221				
	5/8	15,875			1/4	6,35		18,026				
	3/4	19,050			5/16	7,94		21,262				
	15/16	23,813			3/8	9,53		26,690				
	1	25,400			1/2	12,70		28,306				
	1 1/4	31,750			-0,0508 / -0,0254	-0,0508 / -0,0254		5/8		15,88	-0,000 / +0,064	34,740
	1 3/8	34,925										62,921
	1 1/2	38,100										67,333
	1 5/8	41,275										70,564
	1 3/4	44,450										73,790
	1 15/16	49,213										77,008
	2	50,800										83,035
	2 1/4	57,150										84,651
	2 3/8	60,325			-0,0762 / -0,0381	-0,0762 / -0,0381		7/8		22,23	-0,000 / +0,076	91,095
	2 1/2	63,500	95,507									
	2 5/8	66,675	98,735									
	2 3/4	69,850	101,961									
	2 15/16	74,613	105,181									
	3	76,200	111,206									
	3 1/4	82,550	112,822									
	3 3/8	85,725	119,268									
	3 1/2	88,900	-0,0889 / -0,0508	-0,0889 / -0,0508	1	25,40	-0,000 / +0,089	122,489				
	3 5/8	92,075						125,705				
	3 3/4	95,250						131,298				
	3 15/16	100,013						134,534				
	4	101,600						139,380				
	4 1/4	107,950						140,993				
	4 3/8	111,125						147,442				
	4 1/2	114,300						150,663				
	4 5/8	117,475	-0,1016 / -0,0635	-0,1016 / -0,0635	1 1/4	31,75	-0,000 / +0,089	153,881				
4 3/4	120,650	159,474										
4 15/16	125,413	162,707										
5	127,000	167,551										
5 1/4	133,350	169,164										
5 3/8	136,525	175,616										
5 1/2	139,700	178,836										
5 5/8	142,875	182,057										
5 3/4	146,050	not specified according ANSI / AGMA 9002-C14	-0,1016 / -0,0635	1 1/2	38,10	-0,000 / +0,102	184,470					
5 15/16	150,813						187,703					
6	152,400						194,163					
6 1/4	158,750						200,612					
6 3/8	161,925						207,056					
6 1/2	165,100						212,700					
6 5/8	168,275						219,159					
6 3/4	171,450						225,610					
7	177,800						232,054					
7 1/4	184,150						238,493					
7 1/2	190,500						244,927					
7 3/4	196,850						252,938					
8	203,200						259,408					
8 1/4	209,550						265,869					
8 1/2	215,900						272,326					
8 3/4	222,250						285,224					
9	228,600	291,666										
9 1/4	234,950	298,105										
9 1/2	241,300	312,577										
9 3/4	247,650	319,039										
10	254,000	325,496										
10 1/2	266,700	338,394										
10 3/4	273,050	344,838										
11	279,400	351,279										
11 1/2	292,100	368,922										
11 3/4	298,450	375,382										
12	304,800	381,838										
12 1/2	317,500	394,739										
12 3/4	323,850	401,185										
13	330,200	407,627										
13 1/2	342,900	425,267										
13 3/4	349,250	431,726										
14	355,600	438,183										
14 1/2	368,300	451,084										
14 3/4	374,650	457,530										
15	381,000											
15 1/2	393,700											
15 3/4	400,050											
16	406,400											
16 1/2	419,100											
16 3/4	425,450											

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Company: .....	Phone: .....
Name: .....	E-Mail: .....
	Date: .....

## 1. Type of application

1.1 Machine type, machine group or drive:

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## 2. Operating data

2.1 Drive type

- Electric motor
- Combustion engine
  - Fuel type:  Petrol
  - Diesel
  - Natural gas
  - Other: .....
- Number of cylinders: .....
- Gearbox
- Other: .....

Service factor  $S_B$  .....

Total torque of the application ..... [Nm]

2.3 Operating data

- in a closed room
- outside, protected
- outside, sea air
- aggressive
- hazardous area, zone

2.2 Performance data

Driving power ..... [kW]

Speed of the drive / of the gearbox ..... [min<sup>-1</sup>]

Other (accessibility, dusty atmosphere, etc.) .....

Ambient temperatures from ..... °C to ..... °C

## 3. Dimensions

3.1 Motor shaft

Cylindrical shaft with keyway

Diameter of the drive shaft ..... [mm]

Keyway dimensions ..... [mm]

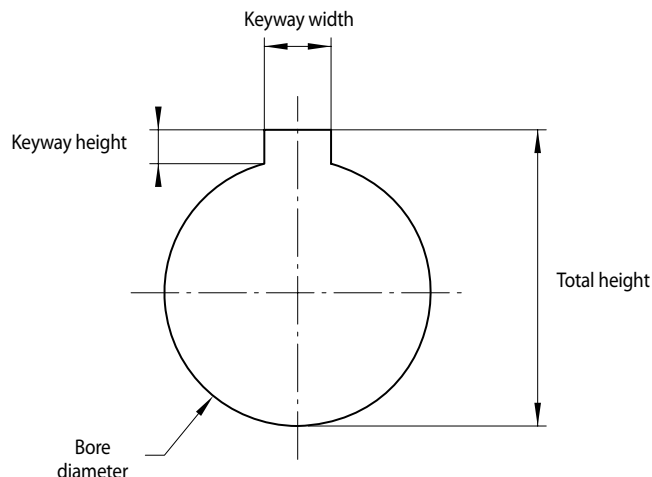
Usable shaft length of the drive shaft ..... [mm]

Please provide more details: clearance fit, press fit, metric coupling size (P7, H7, etc.), with or without set screw, clamping elements / clamping sets

---

Special drive shaft  
Specification

---



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Company: ..... Phone: .....  
 Name: ..... E-Mail: .....  
 Date: .....

### 3.2 Output shaft

#### Cylindrical shaft with keyway

Diameter of the output shaft ..... [mm]

Keyway dimensions ..... [mm]

Usable shaft length of the output shaft ..... [mm]

Please provide more details:  
 clearance fit, press fit, metric coupling size (P7, H7, etc.), with or without set screw, clamping elements / clamping sets

.....  
 .....

#### Taper shaft end

Min. diameter of the taper ..... [mm]

Max. diameter of the taper ..... [mm]

T (gradient) .....

Wrench size .....

Thread coupling size .....

Thread length ..... [mm]

Diameter of the spacer ..... [mm]

Thickness of the disc ..... [mm]

#### Special output shaft Specification

.....  
 .....

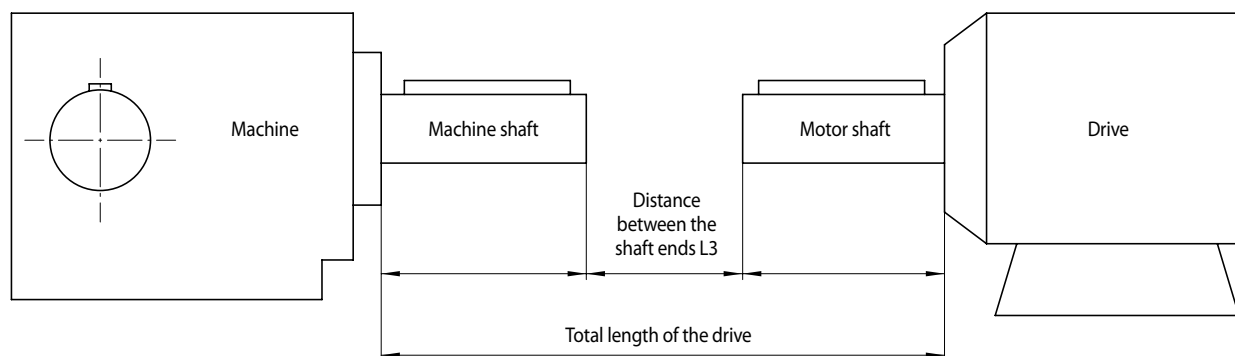
### 3.3 Distances

Distance between the shaft ends ..... [mm]

Total installation length ..... [mm]

Please specify any obstacles, beams, protective grating, pipes, etc.

.....  
 .....



**7. Estimated requirements** ..... Piece (one-off) ..... Piece/month ..... Piece/year

**8. Appendices**  Specifications  Data sheet  Sketch/drawing

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