



The satisfactory operation and the useful working life of flexible toothed couplings depends on the correct selection of the couplings, as well as on the compatibility of the operating conditions with the performance provided by the coupling. It is essential therefore, to highlight the limiting performance of the couplings and to clarify the actions of the external loads that are exerted on the corresponding couplings.

The basic design ensures that all the couplings are capable of compensating a static angular or assembly misalignment equal to 1 degree and this is ensured by the minimum construction tolerance between the teeth.

The dynamic angular or operating misalignment must never be greater than 0.5 degrees, even if the recommended values should not be greater than 0.25 degrees.

The declared nominal torque values and the maximum rotating speeds indicated refer to an angular or composite misalignment that does not exceed 1/12 of a degree (5 prime divisions).

The 'exceptional' torque values that can be supported as a transient and during the acceleration phases must not be exerted for more than 10-15 seconds and must not occur for more than 5 events/hour.

Fatigue durations are calculated for a conventional limit of 50 million cycles, considering two load cycles for each revolution of the coupling.

Misalignments exceeding 1/8 degrees (7.5 prime divisions) penalise by decreasing the nominal torque and the maximum rotating speed declared for the individual couplings.

The performance of the coupling in terms of torque, limiting speed and useful working life will decrease or increase compared with the declared values in the case of operating conditions that differ from the conditions specified above or for "fixed-term" durations.

The design data has been tested for the purpose of ensuring a reasonable safety margin. The declared performance therefore, is to be understood as valid for a Service Factor equal to 1.

Use of the prescribed lubricants and compliance with the recommended restore time intervals represent the preconditions to achieve the performance as described

in the catalogue. The CHIARAVALLI GROUP SpA Technical Department is available to advise users in selecting the type of coupling most appropriate for the actual operating conditions and to make recommendations in relation to special operating conditions.

#### TECHNICAL DATA

COUPLING TYPE	Power Factor		Torque		Power transmitted in Kw				r.p.m. max	r.p.m. recommended limit	max radial misalignment mm	mass kg	J kg cm <sup>2</sup>
	Kw r.p.m. normal	Kw r.p.m. except.	Nm normal	Nm except.	750 at r.p.m. normal	1000 at r.p.m. normal	1500 at r.p.m. normal	3000 at r.p.m. normal					
GFAS 25	0,061	0,157	600	1.524	45	61	91	183	6.000	5.000	-	1,35	7,31
GFAS 32	0,103	0,259	1.000	2.520	77	103	154	309	5.000	4.000	-	2,43	19,15
GFAS 40	0,128	0,322	1.250	3.125	96	128	192	384	4.200	3.000	-	3,64	34,13
GFAS 56	0,257	0,639	2.500	6.200	192	257	385	-	3.500	2.200	-	6,07	96,56
GFAS 63	0,412	0,985	4.000	9.260	309	412	618	-	3.000	1.600	-	10,00	207,32
GFAS 80	0,773	1,855	7.500	18.000	579	773	-	-	2.600	1.200	-	19,18	492,6
GFAS 100	1,236	2,937	12.000	28.500	927	-	-	-	1.400	700	-	28,00	1.064,00

**N.B.** Class G 2.5 dynamic balancing in compliance with ISO 1940 is recommended for actual operating speeds that exceed 3,600 r.p.m. Couplings can operate with a parallel misalignment value that is double the suggested value and assembly with a misalignment value that is four times greater than the suggested value in exceptional cases.

CAD drawings available on our site

(1) Referred to the normal coupling complete with maximum bore without keyway.

Quantity, availability and prices



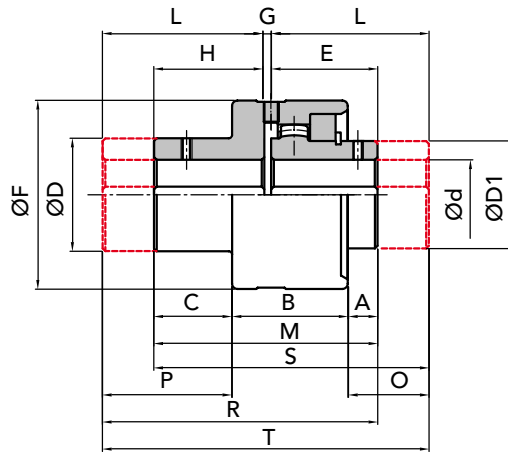


**CONE IN STEEL**

**INTERPRETATION CODES**

- Example  
**GFAS 25-NN** with cone and a normal hub  
**GFAS 25-NL** with cone and a long hub  
**GFAS 25-LL** with long cone and a long hub  
**GFAS 25-LN** with long cone and a normal hub

The characteristic size of the coupling is defined by the maximum diameter bore.



**PART NUMBERS FOR COMPLETE COUPLING**

**PART NUMBERS FOR SIMPLE COMPONENTS**

COUPLING TYPE	P.NUMBER GFAS NN	P.NUMBER GFAS NL	P.NUMBER GFAS LN	P.NUMBER GFAS LL	CONE NORMAL	CONE LONG	HUB NORMAL	HUB LONG	COMPONENTS to assembled coupling
GFAS 25	00302502	00302500	00302506	00302504	00302510	00302511	00302520	00302540	00302560
GFAS 32	00303202	00303200	00303206	00303204	00303210	00302511	00303220	00303240	00303260
GFAS 40	00304002	00304000	00304006	00304004	00304010	00304011	00304020	00304040	00304060
GFAS 56	00305602	00305600	00305606	00305604	00305610	00305611	00305620	00305640	00305660
GFAS 63	00306302	00306300	00306306	00306304	00306310	00306311	00306320	00306340	00306360
GFAS 80	00308002	00308000	00308006	00308004	00308010	00308011	00308020	00308040	00308060
GFAS 100	00310002	00310000	00310006	00310004	00310010	00310011	00310020	00310040	00310060

**MEASUREMENTS - WEIGHTS**

COUPLING TYPE	without bore		Ød finished bore		measures in mm															Kg				
	min	max	normal series					long series										normal bell	normal HUB	long bell	long HUB			
			A	B	C	ØD	ØD1	E	ØF	G	H	M	I	L	O	P	R					S	T	
GFAS 25	-	25	28	13	43	29	42	40	41	70	3	41	85	60	60	32	48	104	104	123	1,03	0,48	1,30	0,69
GFAS 32	-	32	38	16	49	35	55	55	48,5	85	3	48,5	100	80	80	47,5	66,5	131,5	131,5	163	1,75	0,99	2,50	1,58
GFAS 40	-	40	48	18,5	54,5	42	64	64	56	95	3	56	115	80	80	42,5	66	139	139	163	2,71	1,49	3,40	2,10
GFAS 56	-	56	60	27	60	45	80	80	68	120	4	60	132	100	100	59	85	172	164	204	4,43	2,96	6,10	4,22
GFAS 63	-	63	75	31	63	46	100	100	74,5	140	4	61,5	140	119,5	119,5	76	104	198	185	243	6,62	4,90	10,20	7,67
GFAS 80	-	80	90	26	76	51	125	125	82,5	175	5	65,5	153	138	140	83,5	123,5	225,5	210,5	283	10,50	8,68	17,90	14,22
GFAS 100	-	100	110	38	92	71	150	150	105	198	6	90	201	162	174,5	107,5	143	273	270,5	342,5	28,2	15,70	38,1	25,30

**GFAS NN**

**GFAS NL**

**GFAS LL**

**GFAS LN**



**IMPORTANT**

The GFAS couplings can be ordered complete or for single items.

CAD drawings available on our site

Quantity, availability and prices



"GIFLEX®" SERIES GFAS with STEEL BELL

