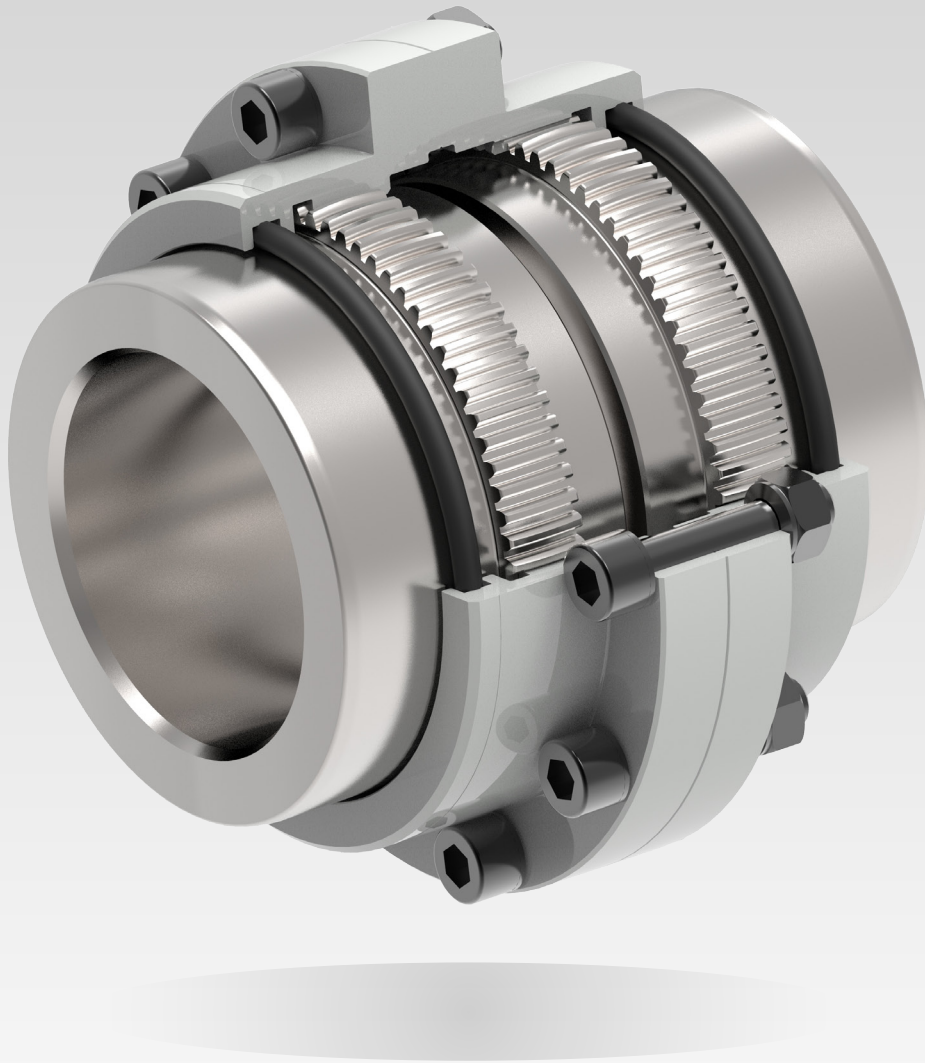




GEAR COUPLING

flexident[®] senior



www.cmd-couplings.com



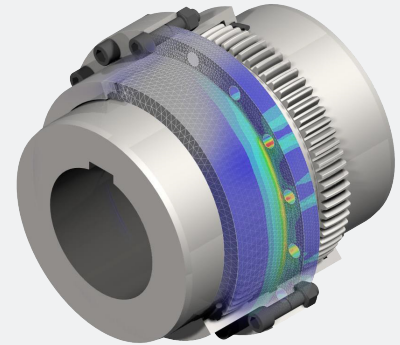


Technical description

flexident® senior is an all steel flexible coupling with crowned curved teeth.

A « premium » product designed & manufactured in our factories with state of the art technologies.

Torques from 1200 Nm up to 7780 kNm for shafts from 38 up to 800 mm (bigger models on request).

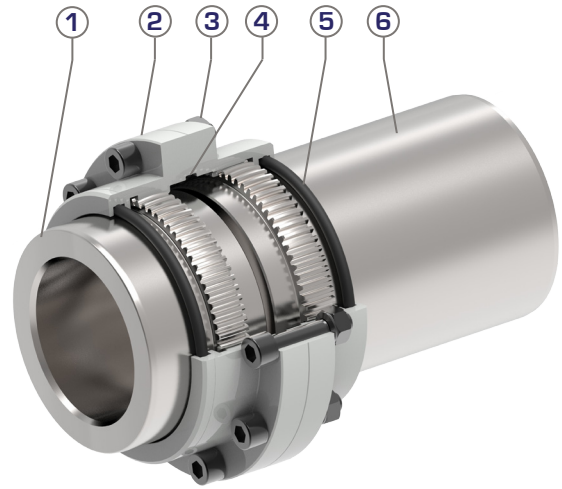
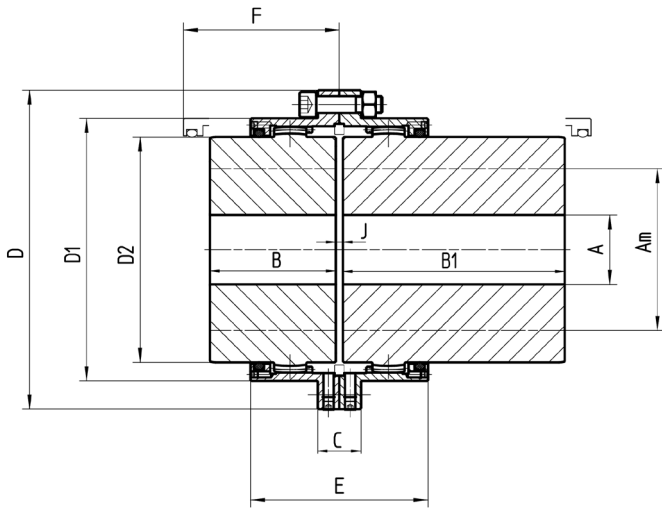


Applications

	FS > Electric motor or turbine driven equipment*
<p>VERY CONTINUOUS DUTY WITHOUT SHOCK LOADS OR OVERLOADS. T_{MAX} < 1.5 T_N UNFREQUENT STARTS. <i>Electric generators, centrifugal pumps & compressors, light duty fans...</i></p>	1
<p>CONTINUOUS DUTY WITH LIGHT AND UNFREQUENT SHOCK LOADS. T_{MAX} < 1.8 T_N LIGHT & SHORT OVERLOADS. <i>Liquids or semi-fluids agitators & mixers. Light duty textile machinery, rotary machine tools, light duty conveyors...</i></p>	1,12
<p>NON CONTINUOUS DUTY WITH MODERATE & FREQUENT SHOCK LOADS. T_{MAX} < 2.2 T_N MODERATE & SHORT OVERLOADS. <i>Semi-fluids or solids agitators & mixers, heavy duty textile machinery, medium duty conveyors, heavy duty cranes & winches, rotary kilns, ball or hammer mills, plastic & rubber extruders & calanders, finishing rolling mills, auxiliary tube, wire, drawer or levelling mills...</i></p>	1,25
<p>IRREGULAR DUTY WITH HEAVY & FREQUENT SHOCK LOADS. T_{MAX} < 3 T_N HEAVY & FREQUENT OVERLOADS &/OR REVERSE MOTION. <i>Cable car, steel heavy duty cranes, drawer bench, plastic & rubber mills & mixers, pulp & paper washing, drying drums, reciprocating pumps & compressors with flywheel...</i></p>	1,60
<p>VERY IRREGULAR DUTY WITH VERY HEAVY & FREQUENT SHOCK LOADS. 3 T_N < T_{MAX} < 3.5 T_N VERY HIGH & FREQUENT OVERLOADS. FREQUENT & FAST REVERSE MOTION. <i>Welding generators, hot rolling mill applications, roughing & reversing mills, shears, saws, crushers, vibrating screens, barking drums, chippers...</i></p>	2

* For any other requirement, please contact CMD for a detailed study.

Dimensions



Item	Designation
1	Standard gear hub
2	Half gear sleeve
3	Fasteners
4	Centering ring (supplied only for vertical or dynamically balanced applications)
5	Seal
6	Long gear hub







Typical designation:

S80 = flexident® senior coupling size 80 - 2 standard hubs

S80 ML = flexident® senior coupling size 80 - 1 standard hub & 1 long hub

(refer to sketch above)

S80 ML2 = flexident® senior coupling size 80 - 2 long hubs

SIZE		50	68	80	100	115	135	150	170	190	215	230	250	280
Standard SENIOR S capacity	Nm	1200	3000	5200	9000	13700	21300	29200	43000	60700	88200	105000	138000	190000
Reinforced SENIOR SR capacity	Nm	1855	4570	7910	13635	20740	32220	44000	65110	91865	133490	159160	207000	302450
Max bore 	Am*	50	68	80	100	115	135	150	170	190	215	230	250	280
	Am**	46	63	75	92	106	125	140	160	175	200	210	230	250
Min bore 	A	18	18	26	35	35	58	68	83	98	108	118	128	128
	B	43	50	62	76	90	105	120	135	150	175	190	220	310
	B1	105	115	130	150	170	185	215	245	295	300	305	350	-
	C	20	20	22	22	28	36	40	40	48	48	60	60	60
	D	105	140	169	200	228	266	298	330	368	410	440	473	498
	D1	83,6	112,6	134	164	188	219	245	277	309	351	374	407	432
	D2	69,4	95	112,6	138	159	188	209	238	263	302	319	349	374
	E	61	72	84	104	127	148	164	182	200	221	244	271	278
	J	3	3	3	5	5	6	6	8	8	8	8	10	10
	F	55	63	75	93	112	130	145	163	180	205	220	253	343
Weight 	Kg	3,7	7,7	13,2	23,5	36,7	59	84	119	164	243	300	406	616
Weight ML	S.ML	5,5	11,2	18,4	32	49	77	110	157	226	313	373	503	-
Weight ML2	S.ML2	7,3	14,7	23,6	40,5	61,3	95	136	195	288	382	446	600	-
Moment of inertia J 	kgm²	0,004	0,012	0,030	0,079	0,166	0,368	0,649	1,141	1,962	3,63	5,08	8,08	13,07
Max speed 		5400	4000	3400	2700	2400	2000	1800	1600	1500	1300	1200	1100	1000
	y	14000	10500	8900	7200	6300	5400	4800	4200	3800	3300	3100	2900	2700
Lube weight 	kg	0,04	0,08	0,12	0,26	0,38	0,6	0,8	1	1,7	2,2	2,9	3,8	4

SR Reinforced senior coupling «SR» [42CrMo4]

* Bore for keying in accordance with ISO/R 773 or DIN 6885/1

** Shrink fitting

• Solid hubs

y Dynamically balanced

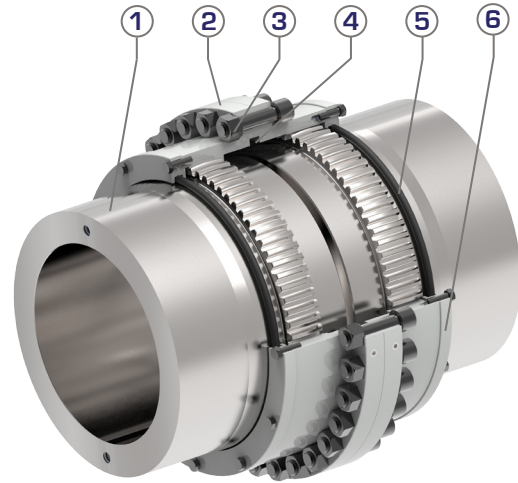
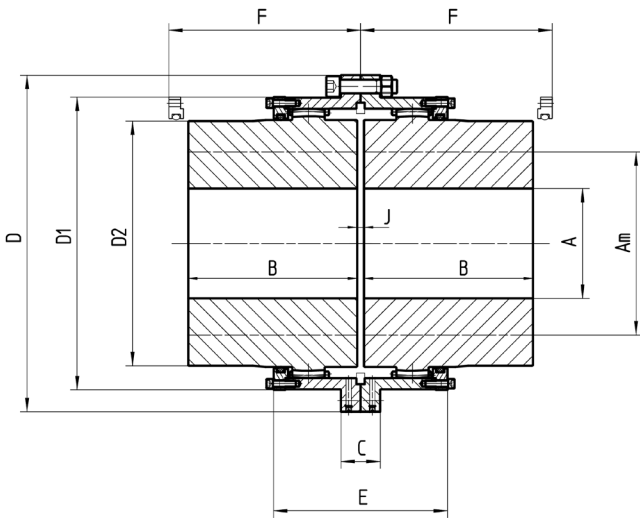
∇ Per coupling



For any QUERY or request for QUOTATION :

couplings@cmdgears.com

Dimensions



Item	Designation
1	Gear hub
2	Half gear sleeve
3	Fasteners
4	Centering ring (supplied only for vertical or dynamically balanced applications)
5	Seal
6	Cover

Typical designation:

S310 = flexident® senior coupling size 310 – 2 standard hubs
(Refer to sketch above)

SIZE		310	330	370	400	430	475	510	550	610	650	710	750	800
Standard SENIOR S capacity	Nm	255000	320000	410000	525000	670000	850000	1100000	1400000	1800000	2400000	3200000	3750000	4950000
Reinforced SENIOR SR capacity	Nm	400000	500850	637500	848540	1078000	1356400	1714000	2211000	2830000	3770000	5000100	5890000	7780000
Max bore	Am*	310	330	370	400	430	475	510	550	610	650	710	750	800
	Am**	310	330	370	400	430	475	510	550	610	650	710	750	800
Min bore	A	163	176	191	240	257	279	304	329	358	394	434	457	501
	B	310	330	350	370	430	480	505	515	535	575	610	650	700
	C	68	68	78	86	94	112	112	110	130	140	140	140	150
	D	575	608	676	735	800	940	990	1100	1225	1285	1395	1450	1555
	D1	494	518	576	637	695	785	840	910	1000	1060	1170	1225	1295
	D2	411	438	492	535	581	645	700	770	835	890	975	1030	1095
	E	310	332	332	381	408	424	500	500	540	610	670	690	770
	J	12	12	12	15	15	16	20	20	25	25	30	30	30
	F	350	370	395	420	478	550	570	575	600	640	680	720	770
	Weight	Kg	805	957	1261	1613	2191	3091	3825	4676	5833	7101	9025	10522
Moment of inertia J	kgm ²	21,9	29,1	47,6	74,1	116,9	215,3	307,4	449,9	687,4	936	1419,4	1795,7	2512,1
Max speed		903	857	760	696	643	573	542	495	446	418	377	358	341
	y	2409	2285	2026	1857	1714	1528	1445	1320	1188	1114	1005	955	909
Lube weight	kg	6,2	6,6	7,9	11	13,5	18,2	22,3	23,8	30,5	37,1	48,5	62,2	73,5

SR Reinforced senior coupling «SR» [42CrMo4]

* Bore for keying in accordance with ISO/R 773 or DIN 6885/1

** Shrink fitting

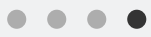
● Solid hubs

y Dynamically balanced

▽ Per coupling



For any QUERY or request for QUOTATION :
couplings@cmdgears.com



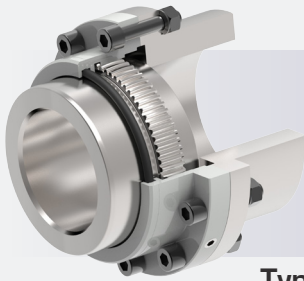
Full range



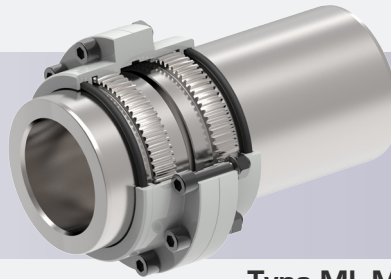
Type S & SR



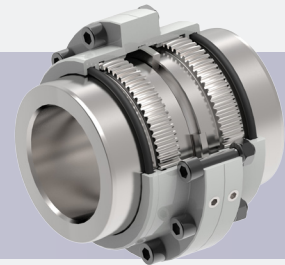
Type S V



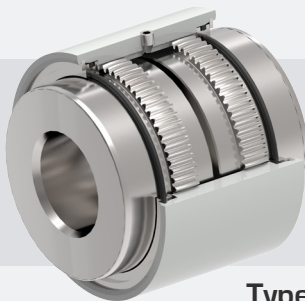
Type S PA



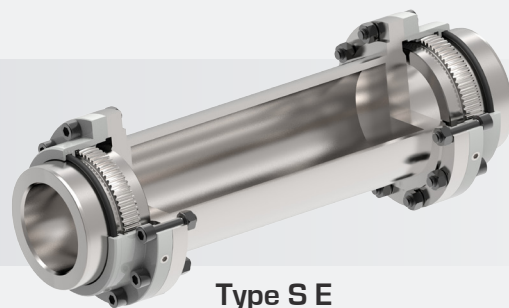
Type ML-ML2



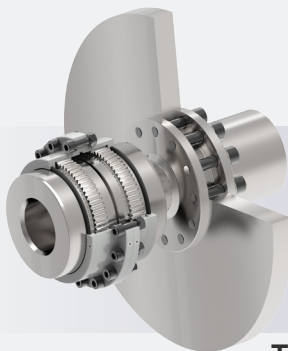
Type JL



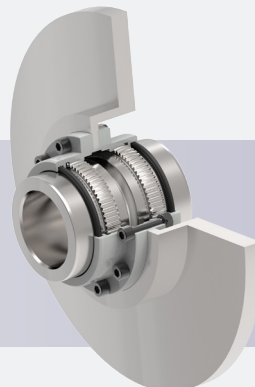
Type SBM



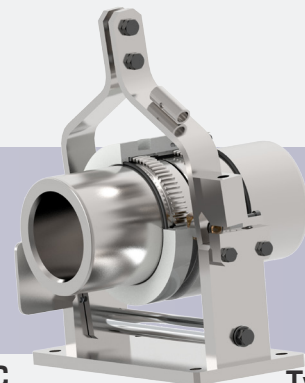
Type S E



Type S DF



Type S DFC



Type S DB



Catalogues are available on our website:

www.cmd-couplings.com



French design & manufacture



HEAD OFFICE
& CAMBRAI PLANT
539, Avenue du Cateau
59400 CAMBRAI
FRANCE

SALES OFFICE
36, Avenue de l'Europe
Immeuble de l'Etendard BP43
78142 VELIZY-VILLACOUBLAY
FRANCE
+33 (0)1 34 63 12 24