



Racing Clutch System

motorsport



RCS 140

The forged high-strength aluminium housing is the result of brilliant engineering, delivering a motorsport clutch that efficiently fulfils all your performance requirements. The housing design integrates heat ventilation supporting the high-performance friction stack and thus ideal for a wide range of applications. The star in our clutch program is equipped with an extremely wear resistant state of the art patented aluminium coating, providing high mileage capabilities. At the same time it contributes significantly favourable to your race car, in terms of mass and inertia, making it an extremely competitive drivetrain component.

Designed and developed for:

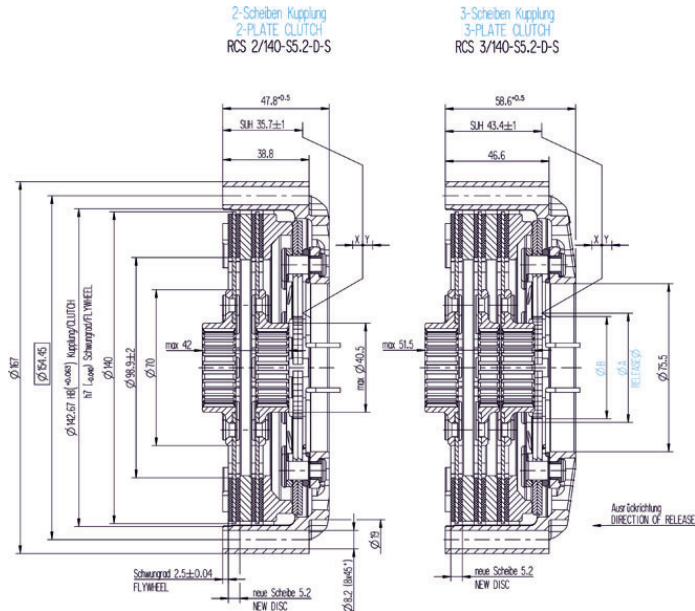
- Circuit racing
- Formula cars
- Touring cars
- Prototypes

Advantages:

A wide range of spring loads available.
Proven and tested in all motorsport classes.
Convertible to carbon/carbon and carbon/
sinter.

RCS 140-S5.2-D-S-XX

Key Dimensions



Selection of driven disc order number:

- Select the suitable hub configuration
- The order number of the driven discs is defined with the ZF Code / spline size application
- A configuration example can be found on pages V15 & V16

Technical Specifications

Selection Criteria			Technical Specification					Purchase Order Number				
Clutch Torque	Release ØA	Spring inner ØB	Release Force max.	Wear Range	Release Travel X	Wear Travel Y	Mass	Inertia	Housing	Pressure Plate	Intermediate Plate	Driven Disc*
[Nm]	[mm]	[mm]	[N]	[mm]	[mm]	[mm]	[kg]	[kgm2]	Part Number	Part number	Qty.	Qty.
2-Disc Clutch												
960	49	46	4,900	1.5	4.0 +0.5	4.5	2.43	0.007754	003072000097	003002001470	1	2
960	38	34	4,200	1.5	4.5 +0.5	5.0	2.47	0.007752	003072000297	003002001470	2	2
3-Disc Clutch												
1,430	49	46	4,900	1.5	4.0 +0.5	4.5	3.07	0.009713	003072000166	003002001469	2	3
1,430	38	34	4,200	1.5	4.5 +0.5	5.0	3.15	0.0098008	003072000149	003002001469	2	3

More clutch torque without safety margin!

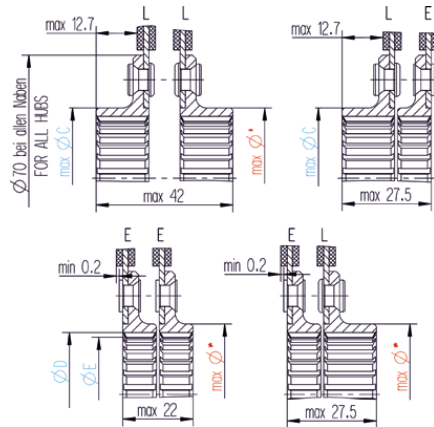
*) The order number for driven discs, according to the required hub spline configuration and spline selection can be found on the following pages



Hub Configuration RCS 140-S5.2

2-Disc Clutch

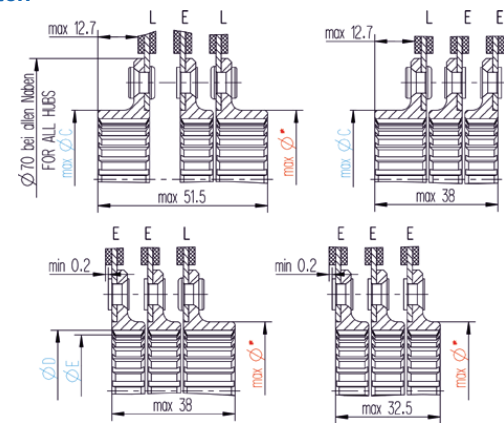
Flywheel



Gearbox

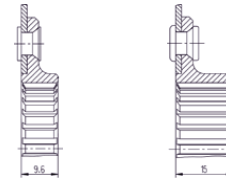
3-Disc Clutch

Flywheel

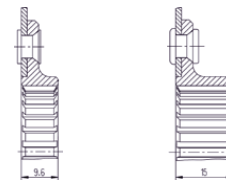


Gearbox

Driven Disc Selection according to Hub Type RCS 140-S5.2



ZF Code	Spline Basic	Spline Inch	No. of Teeth	Dim. C [mm]	Dim. D [mm]	Dim. E [mm]	E	L
002	1 SAE 10C	1" x 10T	10	30.5	25.8	20.6	881864002156	881864002161
003	1 1/8 SAE 10C	1.12" x 10T	10	34.5	28.9	23.4	881864002157	881864002162
010	A10 x 16 x 20		10	26.5	20.0	16.0	881864002274	881864002300
013	A10 x 23 x 29	29mm x 10T	10	34.5	29.0	23.0	881864002158	881864002163
016	A10 x 28 x 35	1.25" x 10T	10	40.5	35.0	28	881864002159	881864002164
035	24 x 2.5	0.8" x 24T	24	25.5	20.4	18.27	881864002275	881864002301
038	25 x 22	1" x 14T	14	32.5	25.0	22.0	881864002276	881864002302
045	24/48-20-30°	0.875" x 20T	20	28.5	22.58	20.109	881864001803	881864002303
047	24/48-23-30°	1" x 23T	23	32.5	25.994	22.995	881864001804	881864002304
065	32/64-20-30°	17.3mm x 20T	20	24.5	17.305	15.08	881864002277	881864002305
075	25 x 23	25mm x 24T	24	32.5	25.0	23.0	881864002278	881864002306
076	24/48-22-30°		22	30.5	25.189	22.225	881864002501	881864002307
081	20x18°		18	26.5	20.0	18.0	881864002279	881864002308
091	24/48-23-30°		23	32.5	26.25	23.28	881864001805	881864002165
092	23 x 3.14		23	30.5	24.2	21.8	881864002280	881864002309
094	24/48-17-30°	20mm x 17T	17	25.5	19.9	16.92	881864002281	881864002310
522	NA	26mm x 24T	24	32.5	26.0	24.0	881864002282	881864002311
532	24/48-26-30°-5		26	34.5	29.55	26.5	881864002283	881864002312
575	N24T-1-30°	1" x 24T	24	32.5	25.6	23.1	881864002284	881864002313



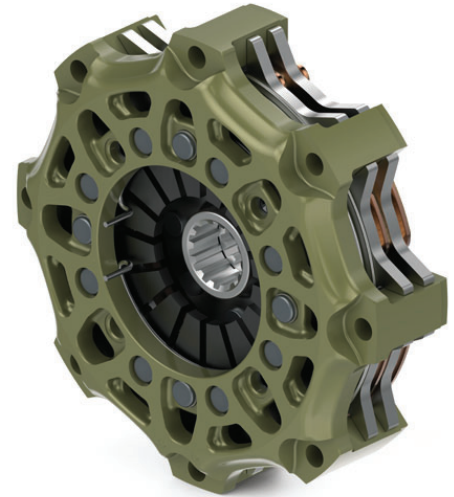
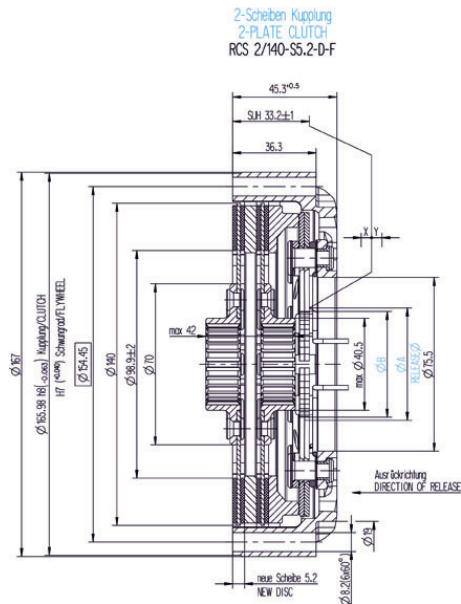
ZF Code	Spline Basic	Spline Inch	No. of Teeth	Dim. C [mm]	Dim. D [mm]	Dim. E [mm]	E	L
802	25,2-1-30-24		24	32.5	25.2	22.6	881864002285	881864002314
804	26x3.93		26	40.5	35.2	32.6	881864002286	881864002315
808	24/48-25-30°		25	36.5	28.5	25.4	881864002287	881864002316
812	24/48-28-30°		28	34.5	30.5	28.1	881864002288	881864002317
820	22x3.93		22	34.5	29.0	26.5	881864002289	881864002318
823	24/48-26-30°		26	34.5	28.68	23.83	881864002290	881864002328
906	24/48-25-30°		25	34.5	28.04	24.87	881864002291	881864002319
916	24/48-21-37.5°		21	30.5	24.308	21.387	881864002292	881864002320
924	18.65 x 15.7		14	28.5	18.65	15.7	881864002293	881864002321
926	20/40-21-30°		21	34.5	28.5	25.4	881864002294	881864002322
927	24/48-21-30°	0.92" x 21T	21	28.5	23.75	21.19	881864002295	881864002323
931	24/48-26-30°	1.16" x 26T	26	34.5	28.68	26.49	881864001799	881864002166
935	24/48-18-37.5°		18	26.5	21.01	18.22	881864002296	881864002324
938	28 x 2.36		28	28.5	22.1	20.3	881864002297	881864002325
962	21.8 x 1 x 20		20	28.5	21.8	19.12	881864002298	881864002326
980	32/64-26-37.5°		26	28.5	21.91	20.0	881864002299	881864002327

The customer is required to check the chosen configuration and that it can be assembled clash free.

*) All red labelled driven discs are not compatible to be used as the first disc on the gearbox / diaphragm spring side with a release diameter of 38 mm or 44 mm respectively.

RCS 140-S5.2-D-F-XX

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[Nm]	[mm]	[mm]	[N]	[mm]	[mm]	[mm]	[kg]	[kgm2]	Part Number	Part number	Qty.	Qty.
2-Disc Clutch												
960	49	46	4,900	1.5	4.0 +0.5	4.5	2.42	0.007699	003072000180	003002001470	1	2

More clutch torque without safety margin!

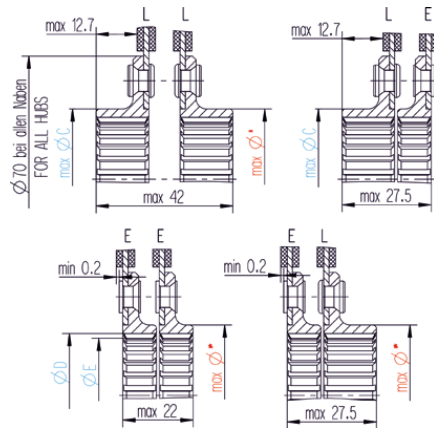
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Hub Configuration RCS 140-S5.2

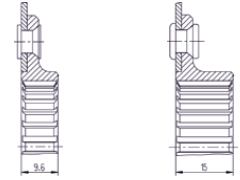
2-Disc Clutch

Flywheel

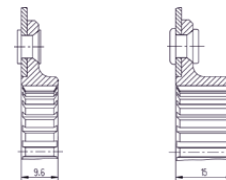


Gearbox

Driven Disc Selection according to Hub Type RCS 140-S5.2



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