



Racing Clutch System

motorsport



RCS 184

If you are looking for a clutch that can easily cope with the harsh demands of modern day motorsports, then you have found what you are looking for. This motorsports clutch is an excellent synthesis of robustness and reliability whilst maintaining its competitive character, due to its favourable mass and inertia properties. Keeping this in mind and knowing that it is used in race winning drivetrains, it additionally provides high thermal stability making it fit for off-track race applications, absorbing the unexpected misuse events.

Designed and developed for:

- Rally
- Circuit racing
- Touring cars

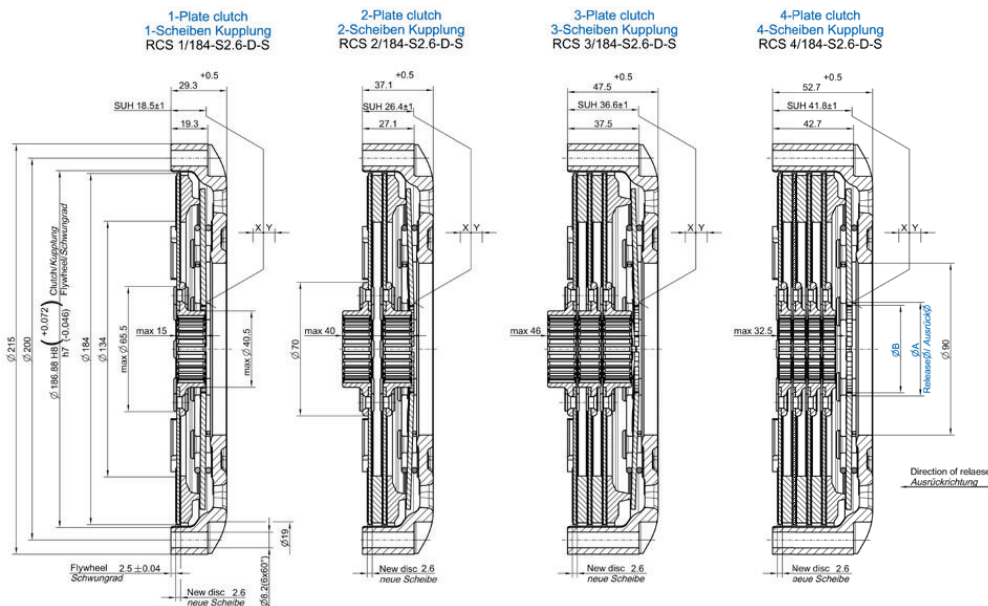
Advantages:

Two spring loads available. Two release diameters. Protection plates for housing increases wear resistance.

Clutch	Torque Range	Number of Discs	Facing	Friction Lining	Actuation	Flywheel Type
RCS 184-S2.6-D-S-XX	385 ... 2,616 Nm	1 / 2 / 3 / 4	S2.6	Sinter	Push Type	Step (internal spigot)
RCS 184-S5.2-D-S-XX	796 ... 1,962 Nm	2 / 3	S5.2	Sinter	Push Type	Step (internal spigot)
RCS 184-S7.8-D-S-XX	385 ... 1,308 Nm	1 / 2	S7.8	Sinter	Push Type	Step (internal spigot)
RCS 184-O7.8-D-S-XX	260 ... 883 Nm	1 / 2	O	Organic	Push Type	Step (internal spigot)

RCS 184-S2.6-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 003019000336	Driven Disc*
[Nm]	[mm]	[mm]	[N]	[mm]	[mm]	[mm]	[kg]	[kgm2]	Part Number	Part number	Qty.	Qty.
1-Disc Clutch												
385	49	46	2,400	1.5	5.0 +0.5	5.0	2.20	0.01255	003072000503	003002001897	0	1
654	49	46	4,300	1.5	5.0 +0.5	5.0	2.25	0.012568	003072000502	003002001897	0	1
2-Disc Clutch												
796	49	46	2,400	1.5	5.0 +0.5	5.0	3.06	0.017199	003072000483	003002001897	1	2
1,308	49	46	4,300	1.5	5.0 +0.5	5.0	3.11	0.017218	003072000478	003002001897	1	2
1,308	44	37	3,900	1.5	5.0 +0.5	5.0	3.12	0.017167	003072000487	003002001770	1	2
3-Disc Clutch												
1,154	49	46	2,400	1.5	5.0 +0.5	5.0	4.06	0.022262	003072000484	003002001898	2	3
1,962	49	46	4,300	1.5	5.0 +0.5	5.0	4.11	0.022582	003072000479	003002001898	2	3
1,962	44	37	3,900	1.5	5.0 +0.5	5.0	4.17	0.023029	003072000494	003002001770	2	3
4-Disc Clutch												
2,616	49	46	4,300	1.5	5.0 +0.5	5.0	4.94	0.27736	003072000480	003002001897	3	4

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

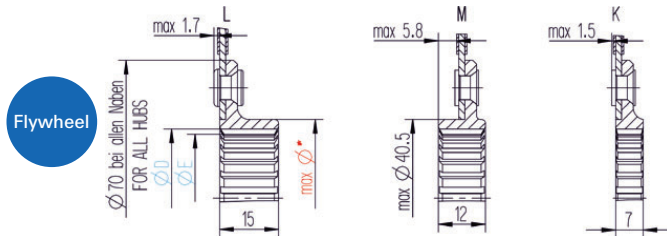
Product Range

ZF motorsport Racing Clutch System

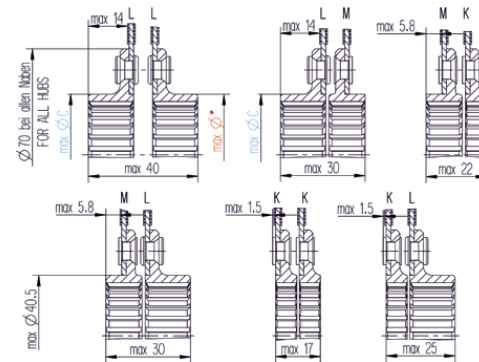
Hub Configuration

RCS 184-S2.6

1-Disc Clutch



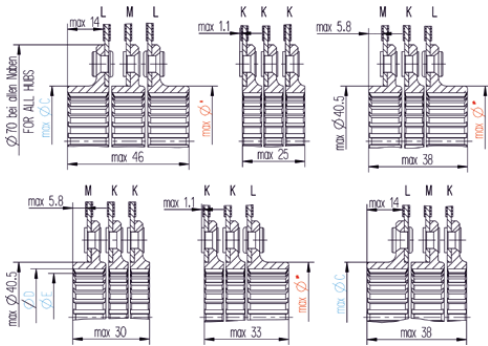
2-Disc Clutch



Gearbox

Flywheel

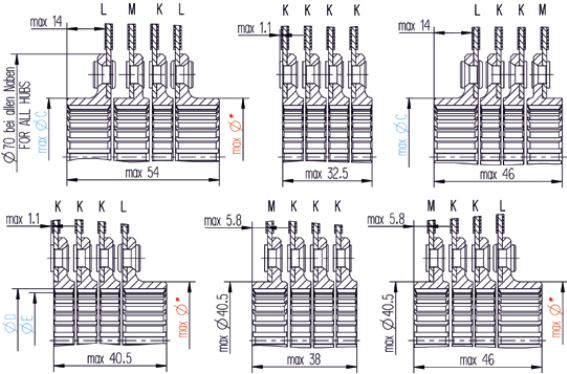
3-Disc Clutch



Gearbox

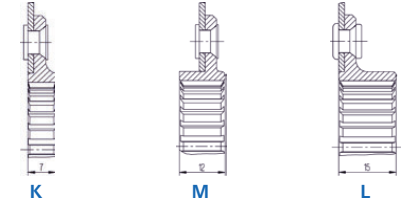
Flywheel

4-Disc Clutch

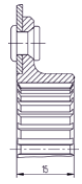


Gearbox

Driven Disc Selection according to Hub Type RCS 184-S2.6



ZF Code	Spline Basic	Spline Inch	No. of Teeth	Dim. C [mm]	Dim. D [mm]	Dim. E [mm]	K	M	L
002	1 SAE 10C	1" x 10T	10	30.5	25.8	20.6	881864001448	881864001370	R88186499A085
003	1 1/8 SAE 10C	1.12" x 10T	10	34.5	28.9	23.4	881864001449	R88186499B086	R88186499B085
010	A10 x 16 x 20		10	26.5	20.0	16.0	881864001939	881864001947	881864000914
013	A10 x 23 x 29	29mm x 10T	10	34.5	29.0	23.0	R88186499C127	R88186499C086	R88186499C085
016	A10 x 28 x 35	1.25" x 10T	10	40.5	35.0	28	R88186499W127	R88186499W086	R88186499W085
035	24 x 2.5	0.8" x 24T	24	25.5	20.4	18.27	R88186499D127	R88186499D086	R88186499D085
038	25 x 22	1" x 14T	14	32.5	25.0	22.0	R88186499E127	881864001371	R88186499E085
045	24/48-20-30°	0.875" x 20T	20	28.5	22.58	20.109	R88186499F127	R88186499F086	R88186499F085
047	24/48-23-30°	1" x 23T	23	32.5	25.994	22.995	R88186499G127	R88186499G086	R88186499G085
065	32/64-20-30°	17.3mm x 20T	20	24.5	17.305	15.08	881864001940	881864001948	881864001951
075	25 x 23	25mm x 24T	24	32.5	25.0	23.0	881864001450	R88186499H086	R88186499H085
076	24/48-22-30°		22	30.5	25.189	22.225	881864001457	R88186499U086	R88186499U085
081	20x18°		18	26.5	20.0	18.0	881864001358	881864001264	881864001259
091	24/48-23-30°		23	32.5	26.25	23.28	R88186499I127	R88186499I086	R88186499I085
092	23 x 3.14		23	30.5	24.2	21.8	R88186499K127	R88186499K086	R88186499K085
094	24/48-17-30°	20mm x 17T	17	25.5	19.9	16.92	881864001451	881864001372	R88186499L085
522	NA	26mm x 24T	24	32.5	26.0	24.0	881864001359	881864001265	881864001260
532	24/48-26-30°-5		26	34.5	29.55	26.5	881864000950	881864000946	R881864000942
575	N24T-1-30°	1" x 24T	24	32.5	25.6	23.1	881864001360	881864001266	881864001261

ZF Code	Spline Basic	Spline Inch	No. of Teeth	Dim. C [mm]	Dim. D [mm]	Dim. E [mm]			
							K	M	L
802	25,2-1-30-24		24	32.5	25.2	22.6	881864001361	881864001267	881864001262
804	26x3.93		26	40.5	35.2	32.6	881864000952	881864000948	881864000944
808	24/48-25-30°		25	36.5	28.5	25.4	881864001941	881864001949	881864001952
812	24/48-28-30°		28	34.5	30.5	28.1	881864000951	881864000947	881864000943
820	22x3.93		22	34.5	29.0	26.5	881864001362	881864001268	881864000945
823	24/48-26-30°		26	34.5	28.68	23.83	881864001942	881864001950	881864001953
906	24/48-25-30°		25	34.5	28.04	24.87	881864000953	881864000949	R88186499Y085
916	24/48-21-37.5°		21	30.5	24.308	21.387	881864001452	881864001373	R88186499M085
924	18.65 x 15.7		14	28.5	18.65	15.7	881864001453	881864001374	R88186499N085
926	20/40-21-30°		21	34.5	28.5	25.4	881864001454	R88186499Q086	R88186499Q085
927	24/48-21-30°	0.92" x 21T	21	28.5	23.75	21.19	881864001455	881864001375	R88186499P085
931	24/48-26-30°	1.16" x 26T	26	34.5	28.68	26.49	R88186499Q127	R88186499Q086	R88186499Q085
935	24/48-18-37.5°		18	26.5	21.01	18.22	881864001458	881864001377	R88186499V085
938	28 x 2.36		28	28.5	22.1	20.3	R88186499S127	R88186499S086	R88186499S085
962	21.8 x 1 x 20		20	28.5	21.8	19.12	881864001363	881864001269	881864001263
980	32/64-26-37.5°		26	28.5	21.91	20.0	881864001456	881864001376	R88186499T085

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.