



ARCUSAFLEX®

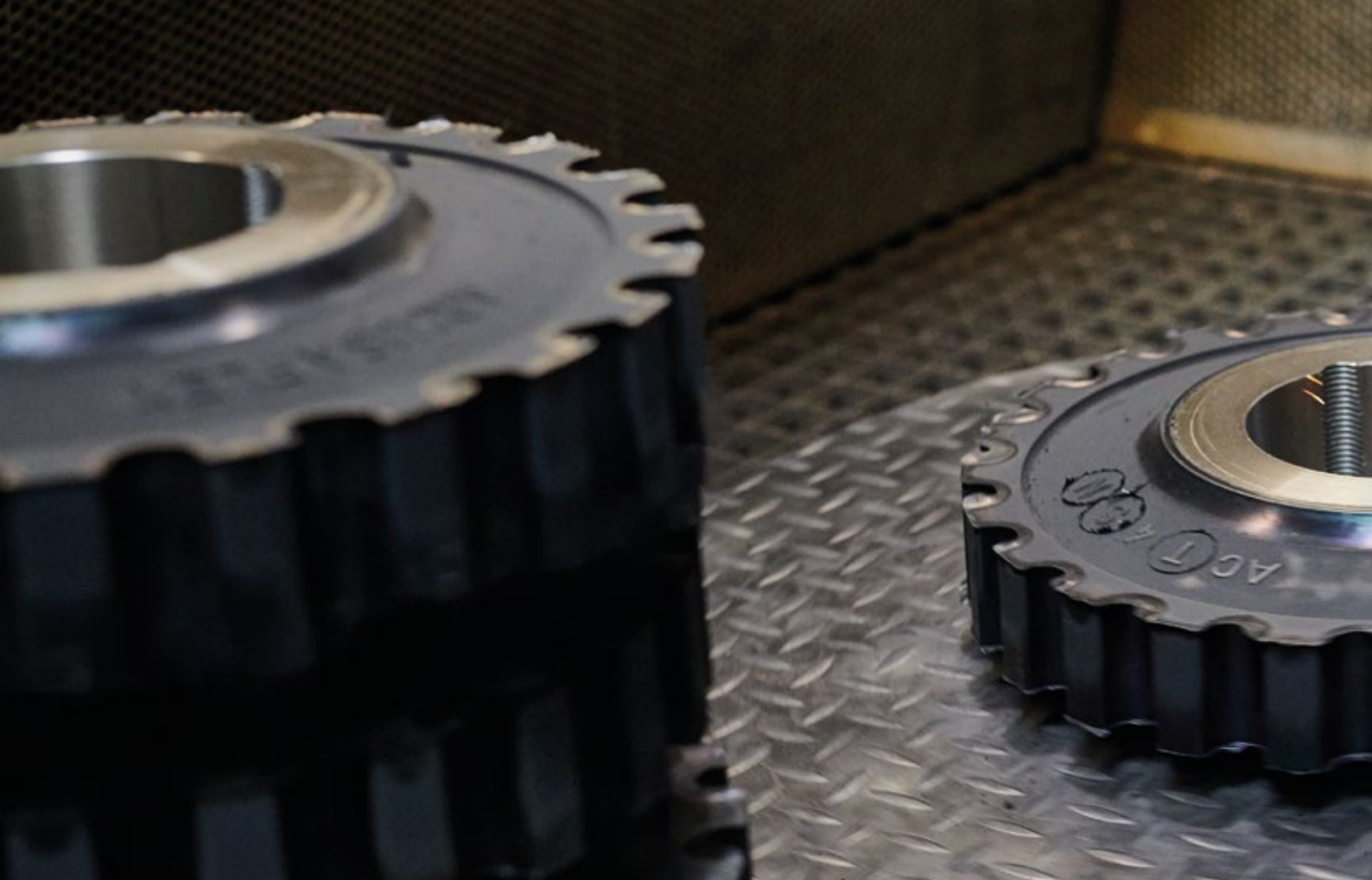
Highly flexible rubber disc coupling for internal combustion engine drives

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SIMPLY **POWERFUL.**





D2C – Designed to Customer

The guiding principle of Designed to Customer is the recipe for success behind REICH. In addition to the catalogue products, we supply our customers with couplings developed to their specific requirements. The designs are mainly based on modular components to provide effective and efficient customer solutions. The special nature of our close cooperation with our partners ranges from; consulting, development, design, manufacture and integration to existing environments, to customer-specific production, logistics concepts and after-sales service - worldwide.

This customer-oriented concept applies to both standard products and production in small batch sizes.

The company policy at REICH embraces, first and foremost, principles such as customer satisfaction, flexibility, quality, prompt delivery and adaptability to the requirements of our customers.

REICH supplies not only a coupling, but a solution:

Designed to Customer – and that is **SIMPLY POWERFUL.**





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General Technical Description



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Highly flexible, axially pluggable flange coupling

The ARCUSAFLEX® coupling (abbreviation: AC) is a highly torsionally flexible flange coupling with an axial plug-in facility, providing a torsionally soft connection between an internal combustion engine and a driven machine. The highly flexible torque transmission characteristic is achieved by a disc-shaped rubber element that is subjected to a torsional load and enables both the absorption of high torsional vibrations and the compensation of major misalignments. Various vulcanisates are available to achieve optimum adaptation to the given application conditions: a natural/synthetic caoutchouc mixture is the standard version for application temperatures of up to 80 °C, more heat resistant mixtures for up to 100 °C/120 °C and a silicone mixture for higher application temperatures up to 130 °C.

The inside diameter of the rubber element is vulcanized directly to a hub body or bolt-on sleeve. The toothed profile on the circumference of the element provides a virtually backlash-free, positive plug-in connection to the coupling flange when in service.

The ARCUSAFLEX® flange coupling series covers a torque range from 210 Nm to 72 000 Nm.

Element versions of different dynamic torsional stiffnesses are available for optimizing the torsional vibration range. The flange connection dimensions of ARCUSAFLEX® couplings comply predominantly with the SAE J 620 and DIN 6281 standards. Other flange dimensions or overall lengths can be provided on request.

Shaft-to-shaft connections when required can be met by ARCUSAFLEX® shaft couplings which consist of an ARCUSAFLEX® flange coupling of the standard type equipped with a second hub. Type approvals from a number of leading classification societies have been obtained. If required, couplings complete with a fail-safe device can also be supplied.

ARCUSAFLEX® couplings comply with ATEX explosion protection. They are certified according to Directive 2014/34/EU and may be used in explosive environments (categories 2 + 3). ATEX documentation to supplement the operating instructions is available on request.



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Nominal torques from 210 Nm to 72 000 Nm

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Advantages and uses

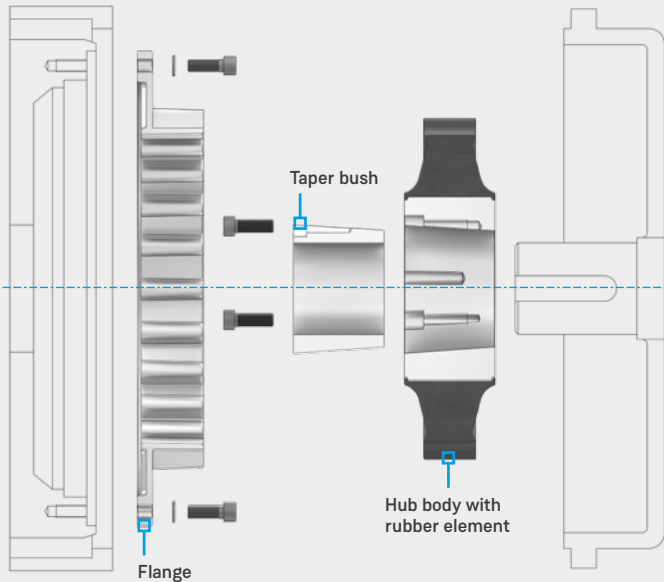
Key features and benefits of the ARCUSAFLEX®-coupling:

→ Very high torsional elasticity with a linear torsional deflection characteristic	→ The selection of different shore hardnesses enables optimum torsional vibration tuning and the shifting of resonances into non-critical operating ranges → System reliability and durability
→ High torsional vibration and shock load damping capability	→ Drive train protection for lower lifecycle costs (LCC)
→ Adaptability to operating conditions, various vulcanizates for ambient temperatures up to 130 °C	→ Global use possible under the toughest conditions
→ Elastomer teeth may slip in the event of an overload	→ Protecting connected components maximises productivity
→ Due to cam gearing on the rubber element and in the coupling flange, almost backlash-free, positive torque transmission	→ Protection against damage to other drive train components. No shocks during load switching or load direction reversal. Smooth running
→ Axial pluggability with large axial float. Cam gearing engages with coupling flange. Compensation of positioning inaccuracies	→ Fast installation and repair times resulting in high economic efficiency
→ Compensation of misalignments and easy positioning of the drive and output side are enabled	→ Little assembly effort. Cost savings due to fast work processing
→ Extended range of application due to ATEX certification in accordance with Directive 2014/34/EU 	→ Use also possible in explosive atmosphere with corresponding safety requirements

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Standard Types

Type AC-T...F2



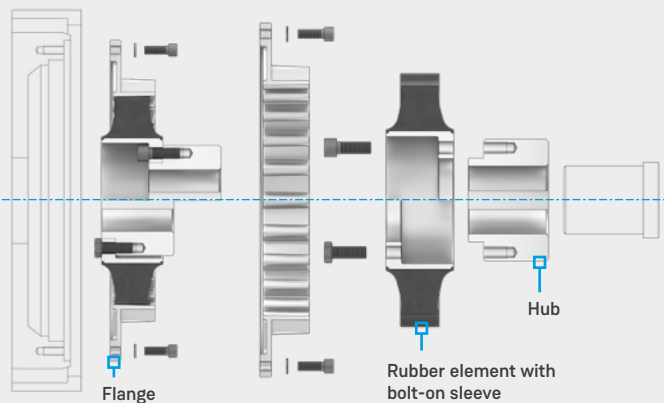
Flange coupling with taper bush

The ARCUSAFLEX® flange coupling type AC-T...F2 is equipped with a taper bush for shaft mounting. The rubber element is vulcanized directly to the hub body of the taper bush. After completion of the assembly, a shrink-fit-like connection, free from backlash is established between the coupling hub with rubber element and the shaft.

Thanks to the use of commercially available taper bushes with a number of different bore dimensions, the need for finishing the bore and keyway of the coupling hub is omitted for the ARCUSAFLEX® coupling type AC-T...F2. The torque, which can be transmitted, depends on the particular taper bush.

+ Advantage: Ease of assembly and disassembly with no need for special tools!

Type AC...F2

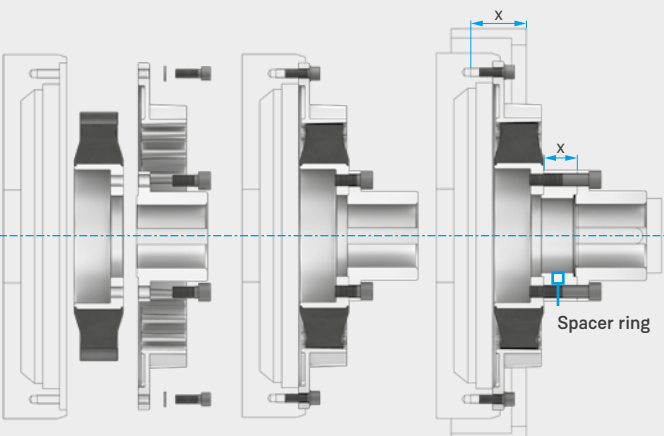


Flange coupling with hub

The ARCUSAFLEX® flange coupling type AC...F2 has the rubber element vulcanized to a bolt-on sleeve which in turn is bolted to a hub or similar component.

+ Advantage: Depending on the arrangement of the rubber element, two different mounting lengths can be achieved using one and the same coupling hub.

Type AC...F2K



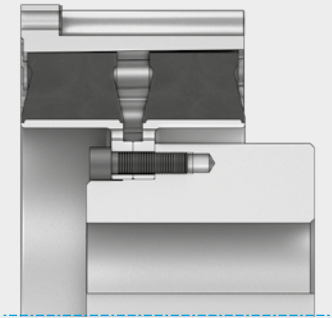
Flange coupling for radial element change

Type AC...F2K allows the detached element to be replaced without moving the coupled machines, provided that the shaft of the driven machine does not protrude from the coupling hub. Where the flywheel or flywheel housing protrudes excessively from the element, a spacer ring corresponding to oversize X is required for radial removal.

+ Advantage: Changing element without having to move the coupled machines possible!

Flange coupling

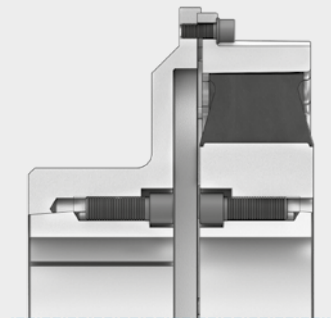
with hub and two coupling elements operating in tandem.



Type AC...D F2

Shaft coupling

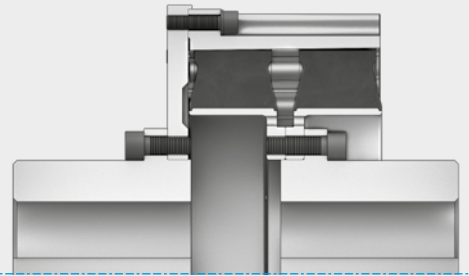
Coupling element and separable flange hub with taper bush.



Type AC-T...T

Shaft coupling

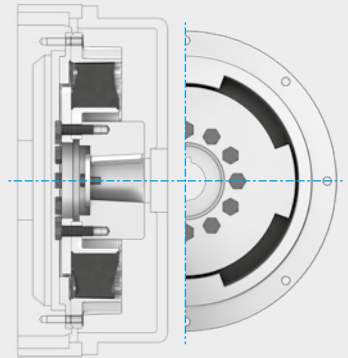
with two hubs and two coupling elements operating in tandem.



Type AC...D TK

Flange coupling

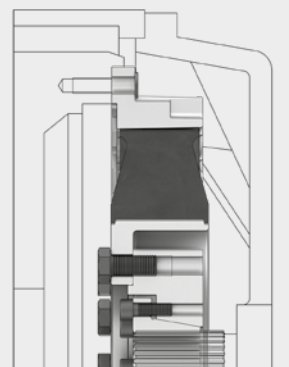
with fail-safe device (get-you-home-device), to be mounted between an internal combustion engine and a marine gearbox.



Type AC...F2 DS

Flange coupling with splined taper bush

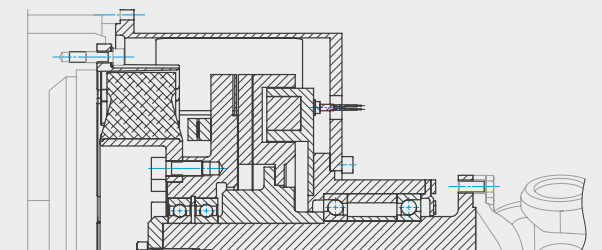
to be mounted between an internal combustion engine and a pump drive.



Type AC...F2
with splined taper bush

Flange coupling with external flange housing and integrated electromagnetic coupling

to disconnect the drive.



Type AC...F2
with electromagnetic coupling

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General Technical Data

Standard version with 1 element - natural/synthetic caoutchouc

Coupling size	Element version	Nominal torque T_{KN} [Nm]	Maximum torque $T_{K \max}$ [Nm]	Continuous fatigue torque $T_{KW} (10 \text{ Hz})$ [Nm]	Dynamic torsional stiffness $C_{T \text{ dyn}}$ [kNm/rad]	Flange size SAE J 620	Max. speed $n_{\max}$ [min ⁻¹]
AC 1.5	WN	210	450	105	1.6	6.5-8 10	4200 3600
	NN	250	625	125	2.6		
	SN	300	750	150	4.8		
	UN	340	850	170	9.2		
AC 2.3	WN	330	750	165	1.6	6.5-8 10	4200 3600
	NN	360	900	180	2.5		
	SN	400	1000	200	4.2		
	UN	450	1000	225	9.2		
AC 2.6/2.7 ¹⁾	WN	500	1250	250	2.4	8 10 11.5	4200 3600 3500
	NN	600	1800	300	3.6		
	SN	700	2100	350	6.1		
	UN	800	2100	400	13.5		
AC 3	WN	800	2000	400	3.6	10 11.5	3600 3500
	NN	900	2700	450	5.0		
	SN	1000	3000	500	7.5		
	UN	1150	3000	575	10.5		
AC 4/4.1	WN	1200	3000	600	8.0	10 11.5 14	3600 3500 3000
	NN	1350	3600	650	10.0		
	SN	1550	4200	750	13.5		
	UN	1800	4200	900	19.0		
AC 4.9	WN	1400	3500	700	10.0	11.5 14	3200 3000
	NN	1800	4500	900	15.0		
	SN	2300	5500	1150	24.0		
	UN	2700	5500	1350	34.0		
AC 5/5.1	WN	1800	4500	900	8.5	11.5 14	3200 3000
	NN	2000	5400	1000	13.0		
	SN	2500	7500	1250	22.0		
	UN	2900	7500	1450	31.0		
AC 6/6.1	WN	3100	7700	1500	16.0	14 18	3000 2300
	NN	3450	10 000	1700	30.0		
	SN	4200	12600	2100	45.0		
	UN	4800	12600	2400	63.0		
AC 6.5	WN	4000	10 000	2000	25.0	14	3000
	NN	4500	13 500	2250	40.0		
	SN	5500	16 500	2750	72.0		
	UN	6200	16 500	3100	100.0		
AC 7	WN	4600	10 000	2300	35.0	14 18	2600 2300
	NN	5200	15 600	2600	56.0		
	SN	6300	18 900	3100	100.0		
	UN	7400	18 900	3700	140.0		
AC 7.5	WN	5600	12500	2800	35.0	14	2600
	NN	6400	19200	3200	56.0		
	SN	7600	22800	3800	100.0		
	UN	8800	22800	4400	145.0		



Coupling size	Element version	Nominal torque	Maximum torque	Continuous fatigue torque	Dynamic torsional stiffness	Flange size SAE J 620	Max. speed
		T_{KN} [Nm]	$T_{K \max}$ [Nm]	$T_{KW} (10 \text{ Hz})$ [Nm]	$C_{T \text{ dyn}}$ [kNm/rad]		$n_{\max}$ [min ⁻¹]
AC 8	WN	6 200	14 000	3 100	38.0	18 21	2 300 2 000
	NN	7 000	21 000	3 500	75.0		
	SN	7 800	23 400	3 900	110.0		
	UN	9 200	23 400	4 600	160.0		
AC 9	WN	8 000	18 000	4 200	55.0	18 21	2 300 2 000
	NN	9 000	27 000	4 800	100.0		
	SN	10 000	30 000	5 500	190.0		
	UN	12 000	30 000	6 000	300.0		
AC 10.2	WN	11 000	28 000	5 500	75.0	18 21	2 300 2 000
	NN	12 500	37 000	6 250	120.0		
	SN	14 000	42 000	7 000	210.0		
	UN	16 000	42 000	8 000	320.0		
AC 11	WN	16 000	40 000	8 000	150.0	21 24	2 000 1 800
	NN	18 000	54 000	9 000	250.0		
	SN	20 000	60 000	10 000	450.0		
	UN	23 000	60 000	11 500	650.0		
AC 11.7	WN	19 200	48 000	9 600	180.0	21 24	2 000 1 800
	NN	21 600	65 000	11 000	300.0		
	SN	24 000	72 000	12 000	540.0		
	UN	27 000	72 000	13 000	785.0		
AC 11.9	WN	24 000	60 000	12 000	250.0	21 24	2 000 1 800
	NN	26 000	78 000	13 000	525.0		
	SN	28 000	84 000	14 000	1200.0		
	UN	31 500	90 000	15 000	1750.0		
AC 12	WN	25 000	75 000	12 500	250.0	similar to DIN 6288	1 500
	NN	28 000	84 000	14 000	400.0		
	SN	31 500	94 000	15 000	700.0		
	UN	36 000	94 000	18 000	1000.0		

 1) dynamic torsional stiffness AC 2.7 on request

Standard version with 2 elements in natural/synthetic caoutchouc

Coupling size	Element version	Nominal torque T_{KN} [Nm]	Maximum torque $T_{K max}$ [Nm]	Continuous fatigue torque T_{KW} (10 Hz) [Nm]	Dynamic torsional stiffness $C_{T dyn}$ [kNm/rad]	Flange size SAE J 620	Max. speed n_{max} [min ⁻¹]
AC 8D	WN	12 400	28 000	6 200	76.0	18 21	2 300 2 000
	NN	14 000	42 000	7 000	150.0		
	SN	15 600	46 800	7 800	220.0		
	UN	18 400	46 800	9 200	320.0		
AC 9D	WN	16 000	36 000	8 400	110.0	18 21 24	2 000 2 000 1 800
	NN	18 000	54 000	9 600	200.0		
	SN	20 000	60 000	11 000	380.0		
	UN	24 000	60 000	12 000	600.0		
AC 10.2D	WN	22 000	56 000	11 000	150.0	21 24	2 000 1 800
	NN	25 000	74 000	12 500	240.0		
	SN	28 000	84 000	14 000	420.0		
	UN	32 000	84 000	16 000	640.0		
AC 11D	WN	32 000	80 000	16 000	300.0	21 24	2 000 1 800
	NN	36 000	108 000	18 000	500.0		
	SN	40 000	120 000	20 000	900.0		
	UN	46 000	120 000	23 000	1 300.0		
AC 11.7D	WN	38 400	96 000	19 200	360.0	21 24	2 000 1 800
	NN	43 200	130 000	22 000	600.0		
	SN	48 000	144 000	24 000	1 080.0		
	UN	54 000	144 000	26 000	1 570.0		
AC 12D	WN	50 000	150 000	25 000	500.0	similar to DIN 6288	1 300
	NN	56 000	168 000	28 000	800.0		
	SN	63 000	189 000	30 000	1 400.0		
	UN	72 000	189 000	36 000	2 000.0		

Shore hardness Sh A, Resonance factor V_R and relative damping ψ

Element version	Sh A	V_R	ψ
WN	55	7.85	0.80
NN	65	5.46	1.15
SN	75	5.03	1.25
UN	85	4.83	1.30

i Due to the physical properties of the rubber material, the measurable rubber hardness is subject to a variation that is defined as $\pm 5^\circ$ Shore a according to DIN 53505. However, this variation is minimized by our own rubber production.

General Technical Information

The technical data applies only to the complete coupling or the corresponding coupling elements. It is the customer's/user's responsibility to ensure there are no inadmissible loads acting on any of the components. In particular, existing connections, e.g. bolted connections, must be checked with regard to the torques to be transmitted. If necessary, further measures, such as additional reinforcement with pins, may be necessary. It is the customer/user's responsibility to make sure that the dimensioning of the

shaft and key and/or other connection, e.g. shrinking or clamping connection, is correct. All components that can rust are protected against corrosion as standard.

REICH have an extensive range of couplings and coupling systems to cover nearly every drive configuration. Customized solutions can be developed and manufactured even in small batches or as prototypes. In addition calculation programs are available for all necessary dimensioning.

Silicone version

Coupling size	Element version	Nominal torque T_{KN}	Maximum torque $T_{K\ max1}$	Maximum torque $T_{K\ max2}$	Fatigue torque $T_{KW}\ (10\ Hz)$	Dynamic torsional stiffness				
						$C_{T\ dyn}$				
						0.10 T_{KN}	0.25 T_{KN}	0.50 T_{KN}	0.75 T_{KN}	1.00 T_{KN}
		[Nm]	[Nm]	[Nm]	[Nm]	[kNm/rad]	[kNm/rad]	[kNm/rad]	[kNm/rad]	[kNm/rad]
AC 2.3	WX	300	450	600	100	0.75	1.0	1.2	1.4	2.0
AC 2.6	WX	450	675	900	185	1.25	1.7	2.1	2.5	3.7
AC 3	WX	750	1125	1500	260	2.4	3.0	3.7	4.4	6.5
AC 4/4.1	WX	1150	1725	2300	430	5.2	6.5	8.3	9.7	14.4
AC 4.9	WX	1600	2400	3200	600	5.5	6.8	8.6	10.0	15.0
AC 5/5.1	WX	1800	2700	3600	700	5.6	7.0	9.0	10.5	15.5
AC 6/6.1	WX	3000	4500	6000	1150	13.0	16.0	20.0	24.0	36.0
AC 6.5	WX	3800	5700	7500	1450	25.0	30.0	34.0	45.0	59.0
AC 7	WX	4500	6750	9000	1800	36.0	44.0	48.0	64.0	84.0
AC 7.5	WX	5800	8700	11600	2200	48.0	60.0	66.0	88.0	115.0
AC 8	WX	6100	9150	12200	2200	38.0	48.0	56.0	68.0	96.0
AC 8D	WX	12200	18300	24400	4400	76.0	96.0	112.0	136.0	192.0
AC 9	WX	7500	11250	15000	2950	54.0	68.0	82.0	108.0	148.0
AC 9D	WX	15000	22500	30000	5900	108.0	136.0	164.0	216.0	296.0
AC 10.2	WX	10000	15000	20000	3700	85.0	104.0	128.0	176.0	240.0
AC 10.2D	WX	20000	30000	40000	7400	170.0	208.0	256.0	352.0	480.0
AC 11	WX	15000	22500	30000	5600	135.0	179.0	215.0	305.0	410.0
AC 11D	WX	30000	45000	60000	11200	270.0	340.0	430.0	610.0	820.0
AC 12	WX	22500	33750	45000	8400	380.0	445.0	555.0	655.0	870.0
AC 12D	WX	45000	67500	90000	16800	760.0	890.0	1100.0	1330.0	1740.0

Additional information for selection of couplings with silicone elements

$$1,6 - 2,0 T_{AN} \leq T_{KN}$$

T_{AN} = nominal torque of the drive

T_{Kmax1} is the highest permissible maximum torque of the application taking into account for example starting, stopping with resonance crossing.

T_{Kmax2} is the highest permissible peak torque which can occur with a limited number of application related conditions, e.g. short-circuit, synchronization failure, emergency stop.

Shore hardness Sh A, Resonance factor V_R and relative damping ψ

Element version	Sh A	V_R	ψ
WX	60	5.46	1.15

i Due to the physical properties of the rubber material, the measurable rubber hardness is subject to a variation that is defined as $\pm 5^\circ$ Shore a according to DIN 53505. However, this variation is minimized by our own rubber production.

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Materials



Coupling flanges:

Coupling size AC 2.3 to AC 10.2D, AC 11D and AC 11.9 made of high grade cast aluminium
Coupling size AC 7.5 and AC 11 to AC 12D made of cast iron with spheroidal graphite



For type AC with hub:

Bolt-on sleeve of cast iron with spheroidal graphite, hub of steel (min. yield strength 360 MPa)



For type AC-T:

Hub body and taper bush of cast iron with lamellar graphite

Material Overview

Rubber mixture	Ambient temperature	Colour	Identifier
Natural / synthetic caoutchouc, standard version	-40 °C to +80 °C	black	...N
Natural/synthetic caoutchouc in temperature-resistant design	-25 °C to +100 °C	black	...T
Synthetic caoutchouc in temperature-resistant design*)	-25 °C to +120 °C	black	...Y
Silicone caoutchouc	-40 °C to +130 °C	blue	...X

 *) technical data on request

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Selection of the coupling size

The coupling size, for use in combustion engines, is designed and selected with a view to torsional vibration. For preliminary selection using the engine torque T_{AN} a general safety factor of $S = 1.3 - 1.5$ should be applied for ARCUSAFLEX® couplings with flexible disc elements of natural/synthetic caoutchouc.

In selecting the coupling size the following should be satisfied:

 The **nominal torque of the coupling** T_{KN} must be taken into account at every temperature and operating load of the coupling while observing the service factors S (e.g: temperature factor S_t) shall be at least equal to the maximum nominal torque on the drive side T_{AN} ; the temperature in the immediate vicinity of the coupling must be taken into account.

$$T_{KN} \geq T_{AN} \cdot S_t$$

 The **nominal torque on the drive side** T_{AN} is calculated with the driving power P_{AN} and the coupling speed n_{AN} .

$$T_{AN} [Nm] = 9550 \frac{P_{AN} [kW]}{n_{AN} [min^{-1}]}$$

 The **temperature factor** S_t allows for the decreasing load capacity of the coupling when affected by elevated ambient temperatures in the vicinity of the coupling. In this connection $S_t = S_{t1}$ is valid for standard version and $S_t = S_{t2}$ for silicone version.

Temperature t	60 °C	70 °C	80 °C	90 °C	100 °C	110 °C	120 °C	130 °C
S_{t1}	1.25	1.4	1.6	On request	-	-	-	-
S_{t2}	1.5	1.5	1.5	1.7	1.9	2.1	2.3	2.5

 The **maximum torque capacity of the coupling**, T_{Kmax} shall be at least equal to the highest torque T_{max} encountered in operation while taking the temperature factor S_t into account.

$$T_{Kmax} \geq T_{max} \cdot S_t$$

 A continuous torsional vibration analysis to verify the coupling selection should confirm that the permissible **continuous fatigue torque** T_{KW} is at least equal to the highest fatigue torque T_W under reversing stresses encountered throughout the operating speed range while taking into account the temperature and frequency.

$$T_{KW} (10 \text{ Hz}) \geq T_W \cdot S_t \cdot S_f$$

 The **frequency factor** S_f allows for the frequency dependence of the permissible continuous fatigue torque under reversing stresses $T_{KW} (10 \text{ Hz})$ with an operating frequency f_x .

$$S_f = \sqrt{\frac{f_x}{10}}$$

The selection of the coupling size should be checked with regard to the permissible coupling load, in particular any fatigue torques occurring, by means of a torsional vibration analysis, which we carry out on request (if all necessary technical data is available) according to the two-mass or n-mass system. When using ARCUSAFLEX® couplings in drives with high torque transmission variations, an additional safety factor should

be applied for torque transmission to the driven machine. The coupling can be equipped with an additional balancing mass on the primary or secondary side, if this is required due to the torsional vibration conditions or for control reasons. Further information for the torsional vibration analysis and for use of the ARCUSAFLEX® rubber disc coupling are available on request.

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Type AC-T...F2

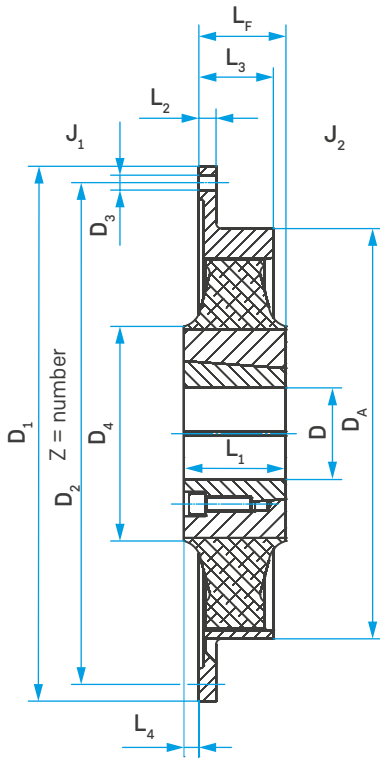


Fig. 1

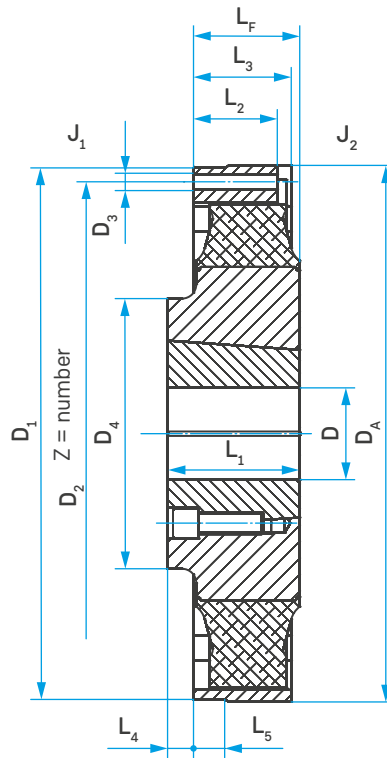
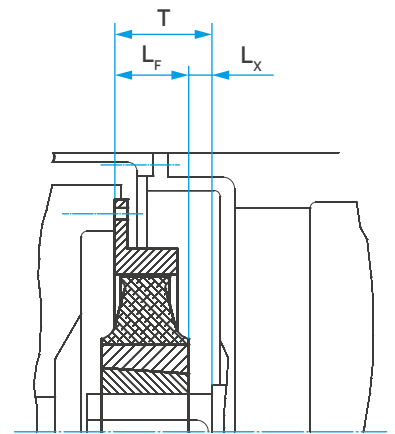


Fig. 2



Mounting instruction:

If engine and generator connecting dimensions comply with DIN 6281, the distance dimension L_X must be observed during assembly. The coupling dimension L_F must be within the tolerance.

Available taper bushes

TB-No.

D = metric bores with keyway acc. to DIN 6885/1

1610	12	14	15	16	18	20	22	24	25	28	30	32	35	38	40	-	-	-	-
2012	14	16	17	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	-
2517	16	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55	60
3030	25	28	30	32	35	38	40	42	45	48	50	55	60	65	70	75	-	-	-
3535	35	38	40	42	45	48	50	55	60	65	70	75	80	85	90	-	-	-	-
4040	40	42	45	48	50	55	60	65	70	75	80	85	90	95	100	-	-	-	-
4535	55	60	65	70	75	80	85	90	95	100	105	110	-	-	-	-	-	-	-
4545	55	60	65	70	75	80	85	90	95	100	105	110	-	-	-	-	-	-	-
5040	70	75	80	85	90	95	100	105	110	115	120	125	-	-	-	-	-	-	-

i Taper bushes with inch bores and other dimensions on request

Coupling details

Coupling size	Fig.	Flange connection for SAE J 620						Taper bush TB-No.											DIN 6281				
		SAE	D ₁	D ₂	D ₃	Z			D _A	D ₄	L ₁	L ₂	L ₃	L ₄	L ₅	L _F		T	L _x	J ₁ outside	J ₂ inside	Total mass	
		Size	[mm]	[mm]	[mm]				[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kgm ²]	[kgm ²]	[kg]
AC-T 1.5...F2	1	6.5	215.9	200.0	8.5	6	1610	177	106	25	8	37	-	-	38 ± 2	2	-	-	0.005	0.004	2.2		
	1	7.5	241.3	222.3	8.5	8	1610	177	106	25	8	37	-	-	38 ± 2	2	-	-	0.007	0.004	2.4		
	1	8	263.5	244.5	10.5	6	1610	177	106	25	8	37	-	-	38 ± 2	2	81.0	43	0.010	0.004	2.6		
	1	10	314.3	295.3	10.5	8	1610	177	106	25	8	37	-	-	38 ± 2	2	73.0	35	0.021	0.004	3.1		
AC-T 2.3...F2	-	6.5	215.9	200.0	8.5	6	2012	222	-	32	6	41	-	8	52 ± 2	2	-	-	0.006	0.008	3.0		
	2	7.5	241.3	222.3	8.5	8	2012	222	-	32	33	33	-	8	43 ± 3	3	-	-	0.008	0.008	3.1		
	1	8	263.5	244.5	10.5	6	2012	222	-	32	8	33	-	-	43 ± 3	3	81.0	38	0.011	0.008	3.3		
	1	10	314.3	295.3	10.5	8	2012	222	-	32	8	33	-	-	43 ± 3	3	73.0	30	0.011	0.008	3.2		
AC-T 2.6...F2	2	8	263.5	244.5	10.5	6	2517	263	155	45	33	38	3	-	42 ± 4	4	81.0	41	0.012	0.017	5.0		
	1	10	314.3	295.3	10.5	8	2517	266	155	45	10	38	3	-	42 ± 4	4	73.0	33	0.021	0.017	5.4		
	1	11.5	352.4	333.4	10.5	8	2517	266	155	45	10	38	3	-	42 ± 4	4	58.6	16	0.026	0.017	5.6		
AC-T 2.7...F2	1	8	263.5	244.5	10.5	6	2517	219	150	45	4	37	5	-	40 ± 4	4	81.0	41	0.013	0.013	5.0		
	1	10	314.3	295.3	10.5	8	2517	219	150	45	4	37	5	-	40 ± 4	4	73.0	31	0.029	0.013	5.7		
	1	11.5	352.4	333.4	10.5	8	2517	219	150	45	4	37	5	-	40 ± 4	4	58.6	16	0.046	0.013	6.3		
AC-T 3...F2	1	10	314.3	295.3	10.5	8	2517	291	190	54	16	52	6	-	58 ± 7	7	73.0	14	0.029	0.030	7.4		
	1	11.5	352.4	333.4	10.5	8	2517	291	190	54	16	52	6	-	58 ± 7	7	58.6	0	0.036	0.030	7.6		
AC-T 4...F2	2	10	314.3	295.3	10.5	8	3030	320	229	76	56	56	10	13	66 ± 6	6	73.0	4	0.042	0.069	13.3		
	1	11.5	352.4	333.4	10.5	8	3030	320	229	76	16	70	8	-	68 +16 /-6	106.6	39	0.058	0.069	13.8			
	1	14	466.7	438.2	13.0	8	3030	320	229	76	16	70	8	-	68 +16 /-6	92.4	25	0.090	0.069	14.7			
AC-T 4.9...F2	1	11.5	352.4	333.4	10.5	8	3535	320	192	89	16	77	-	-	92 ± 7	7	106.6	14	0.062	0.092	15.7		
	1	14	466.7	438.2	13.0	8	3535	320	192	89	16	77	-	-	92 ± 7	7	92.4	0	0.095	0.092	16.6		
AC-T 5...F2	2	11.5	352.4	333.4	10.5	8	3535	354	248	89	54	65	13	20.5	76 ± 5	5	106.6	30	0.055	0.118	17.4		
	1	14	466.7	438.2	13.0	8	3535	354	248	89	15	65	13	-	76 ± 5	5	92.4	17	0.155	0.118	19.6		
AC-T 6...F2	1	14	466.7	438.2	13.0	8	4040	420	268	102	18	80	10	-	92 ± 7	7	92.4	0	0.174	0.304	31.5		
	1	16	517.5	489.0	13.0	8	4040	420	268	102	18	80	10	-	92 ± 7	7	82.7	-	0.318	0.304	34.0		
	1	18	571.5	542.9	17.0	6	4040	420	268	102	18	80	10	-	92 ± 7	7	82.7	-	0.494	0.304	36.4		
AC-T 6.5...F2	1	14	466.7	438.2	13.0	8	4535	423	274	90	16	90	-	-	92 ± 4	4	92.4	0	0.241	0.434	38.8		
	1	18	571.5	542.9	17.0	6	4535	423	274	90	16	90	-	-	92 ± 4	4	82.7	-	1.267	0.434	57.2		
AC-T 7...F2	2	14	466.7	438.2	13.0	8	4545	466	235	115	85	85	28	27	87 ± 10	10	92.4	5	0.284	0.669	53.3		
	1	16	517.5	489.0	13.0	8	4545	466	235	115	27	85	28	-	87 ± 10	10	82.7	0	0.390	0.669	55.1		
	1	18	571.5	542.9	17.0	6	4545	466	235	115	18	85	28	-	87 ± 10	10	82.7	0	0.477	0.669	56.1		
AC-T 7.5...F2	2	14	466.7	438.2	13.0	8	4545	478	330	115	100	115	5	15	110 ± 5	5	-	-	1.351	0.729	76.2		
AC-T 8...F2	1	18	571.5	542.9	17.0	12	5040	515	390	102	18	84	-	-	102 ± 5	5	-	-	0.472	1.036	61.9		
	1	21	673.1	641.4	17.0	12	5040	515	390	102	18	84	-	-	102 ± 5	5	-	-	0.967	1.036	67.0		
AC-T 9...F2	1	18	571.5	542.9	17.0	12	5040	562	398	102	35	92	-	-	102 ± 4	4	-	-	0.690	1.543	79.1		
	1	21	673.1	641.4	17.0	12	5040	562	398	102	20	92	-	-	102 ± 4	4	-	-	1.316	1.543	85.7		

Ordering example

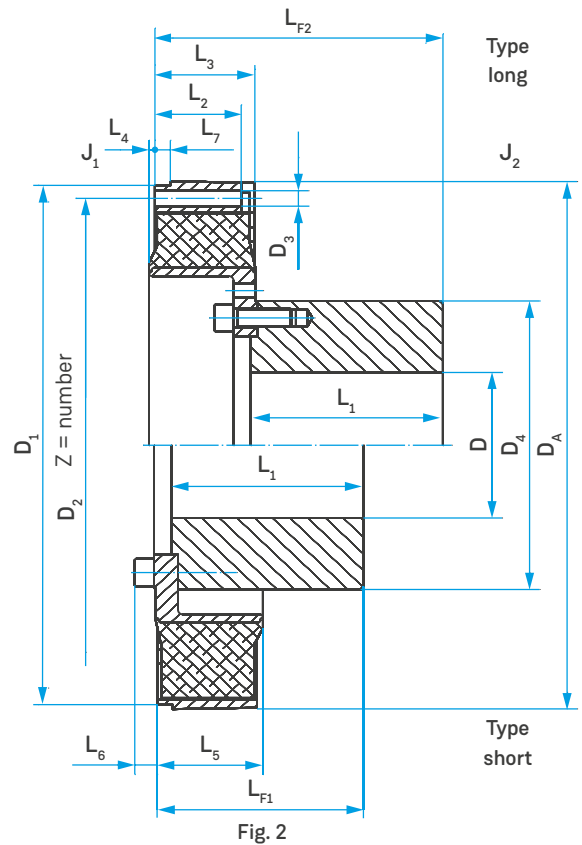
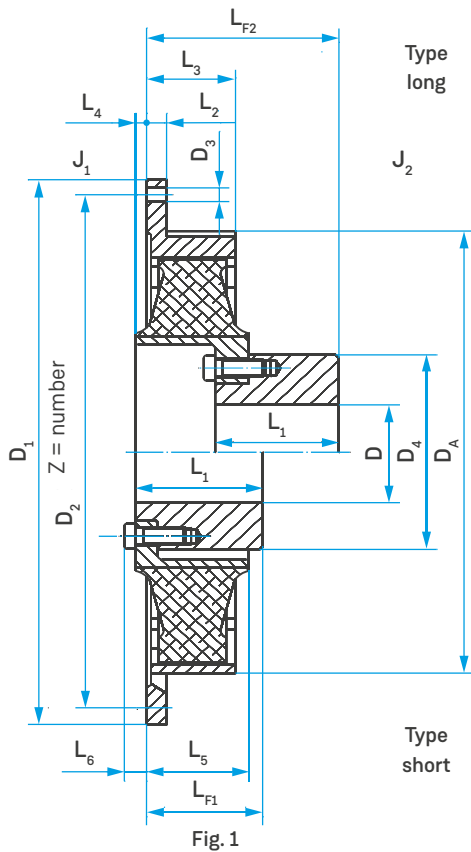
Coupling size	Element version according to "General Technical Data"	Flange version	Flange connection size acc. to SAE J 620	Nominal size of taper bush	Bore diameter
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AC-T 4 .NN. F2. 14. 3030. 65

Coupling designation: AC-T 4 .NN. F2. 14. 3030. 65

ARCUSAFLEX®

Type AC...F2



The option of mounting the coupling element on either side allows for two different mounting lengths with the same coupling hub.

Coupling details

Coupling size	Fig.	Flange connection for SAE J 620						D _A	D		D ₄	L ₁	L ₂	L ₃	L ₄	L ₅	L ₆	L ₇	L _{F1} short	L _{F2} long	J ₁ outside	J ₂ inside	Total mass												
		min.	max.																																
				Size	[mm]	[mm]	[mm]		[mm]	[mm]														[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kgm ²]
AC 2.3...F2	-	6.5	215.9	200.0	8.5	6	222	unbored, pre-centred	60	98	54	6	41	-	52	-	8	-	103	0.006	0.009	4.0													
	2	7.5	241.3	222.3	8.5	8	222		60	98	54	33	33	-	43	-	8	-	94	0.008	0.009	4.1													
	1	8	263.5	244.5	10.5	6	222		60	98	54	8	33	-	43	-	-	-	94	0.011	0.009	4.3													
	1	10	314.3	295.3	10.5	8	222		60	98	54	8	33	-	43	-	-	-	94	0.011	0.009	4.2													
AC 2.6...F2	2	8	263.5	244.5	10.5	6	263		65	118	65	33	38	3	42	12	-	73	104	0.012	0.021	6.9													
	1	10	314.3	295.3	10.5	8	266		65	118	65	10	38	3	42	12	-	73 ¹⁾	104	0.021	0.021	7.3													
	1	11.5	352.4	333.4	10.5	8	266		65	118	65	10	38	3	42	12	-	73	104	0.026	0.021	7.5													
AC 2.7...F2	1	8	263.5	244.5	10.5	6	219		65	118	65	4	37	5	40	-	-	-	102	0.013	0.018	6.9													
	1	10	314.3	295.3	10.5	8	219		65	118	65	4	37	5	40	-	-	-	102	0.029	0.018	7.6													
	1	11.5	352.4	333.4	10.5	8	219		65	118	65	4	37	5	40	-	-	-	102	0.046	0.018	8.2													
AC 3...F2	1	10	314.3	295.3	10.5	8	291		65	118	68	16	52	5	60	12	-	73 ¹⁾	121	0.029	0.033	8.7													
	1	11.5	352.4	333.4	10.5	8	291		65	118	70	16	52	5	60	16	-	58 ¹⁾	107	0.036	0.031	8.2													
AC 4...F2	2	10	314.3	295.3	10.5	8	320		80	140	101	56	56	8	68	15	13	106	166	0.042	0.071	14.8													
	1	11.5	352.4	333.4	10.5	8	320		80	140	101	16	70	8	68	15	-	106 ¹⁾	166	0.058	0.071	15.4													
	1	14	466.7	438.2	13.0	8	320		80	140	87	16	70	8	68	15	-	92 ¹⁾	152	0.090	0.067	15.1													
AC 4.9...F2	1	11.5	352.4	333.4	10.5	8	320		90	160	100	16	77	-	79	7	-	106	165	0.062	0.101	18.2													
	1	14	466.7	438.2	13.0	8	320		90	160	90	16	77	-	79	7	-	92	151	0.095	0.095	17.6													
AC 5...F2	2	11.5	352.4	333.4	10.5	8	354		90	160	110	54	65	13	76	23	20.5	106 ¹⁾	175	0.055	0.130	20.5													
	1	14	466.7	438.2	13.0	8	354		90	160	105	15	65	13	76	23	-	92 ¹⁾	161	0.155	0.124	21.4													
AC 6...F2	1	14	466.7	438.2	13.0	8	420		100	185	102	18	80	10	92	20	-	92 ¹⁾	174	0.174	0.278	29.6													
	1	16	517.5	489.0	13.0	8	420		100	185	102	18	80	10	92	20	-	92	174	0.318	0.278	32.1													
	1	18	571.5	542.9	17.0	6	420		100	185	102	18	80	10	92	20	-	92	174	0.494	0.278	34.5													
AC 6.5...F2	1	14	466.7	438.2	13.0	8	423		120	222	125	16	90	-	92	33	-	92 ¹⁾	164	0.241	0.397	37.6													
	1	18	571.5	542.9	17.0	6	423		120	222	125	16	90	-	92	33	-	92	164	1.267	0.397	56.0													
AC 7...F2	2	14	466.7	438.2	13.0	8	466		120	222	125	85	85	2	88	33	27	92 ¹⁾	164	0.284	0.498	41.4													
	1	16	517.5	489.0	13.0	8	466		120	222	125	27	85	2	88	33	-	92	164	0.390	0.498	43.2													
	1	18	571.5	542.9	17.0	6	466		120	222	125	18	85	2	88	33	-	92	164	0.477	0.498	44.2													
AC 7.5...F2	2	14	466.7	438.2	13.0	8	478		130	222	130	100	115	0	115	16	15	150	240	1.351	0.666	72.8													
AC 8...F2	1	18	571.5	542.9	17.0	12	515		165	250	142	18	84	0	86	10	-	159	225	0.472	0.903	56.8													
	1	21	673.1	641.4	17.0	12	515		165	250	142	18	84	0	86	10	-	159	225	0.967	0.903	61.9													
AC 9...F2	1	18	571.5	542.9	17.0	12	562	75	150	240	140	35	92	0	103	9	-	131	237	0.690	1.185	66.8													
	1	21	673.1	641.4	17.0	12	562	75	150	240	140	20	92	0	103	9	-	131	237	1.316	1.185	73.4													
AC 10.2...F2	2	18	571.5	542.9	17.0	12	580	90	200	310	200	104	104	2.5	107	23	16	215	300	0.671	2.320	106													
	1	21	673.1	641.4	17.0	12	580	90	200	310	200	26	104	2.5	107	23	-	215	300	1.260	2.320	112													
AC 11...F2	2	21	673.1	641.4	17.0	12	682	90	220	380	210	85	111	0	107	24	15	232	312	3.725	5.284	201													
	1	24	733.4	692.2	21.0	12	682	90	220	380	210	20	111	0	107	24	-	232	312	4.620	5.284	208													
AC 11.7...F2	2	21	673.1	641.4	17.0	24	682	90	220	380	250	114	140	0	136	20	15	245	350	4.489	6.030	227													
	1	24	733.4	692.2	21.0	24	682	90	220	380	250	20	140	0	136	20	-	245	350	5.341	6.030	234													
AC 11.9...F2	2	21	673.1	641.4	17.0	24	755	-	180	316	210	24	158	-	158	-	14	250	-	2.886	5.552	160													
	2	24	733.4	692.2	21.0	12	755	-	180	316	210	22	158	-	158	-	14	250	-	3.244	5.552	163													

i 1) Mounting length for flange connection dimensions according to SAE J 620 or DIN 6281

Other flange and length dimensions on request.

Ordering example

Coupling size	Element version according to "General Technical Data"	Flange version	Flange connection size acc. to SAE J 620	Mounting length L _{F1} and L _{F2} in millimetres
AC 7	.NN.	F2.	14.	92

Coupling designation: AC 7 NN. F2. 14. 92

ARCUSAFLEX®

Type AC...F2K

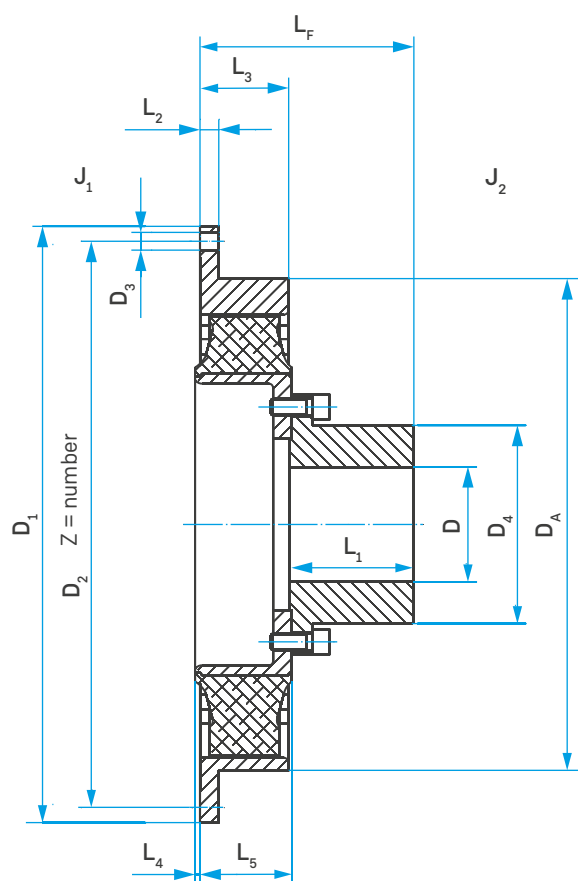


Fig. 1

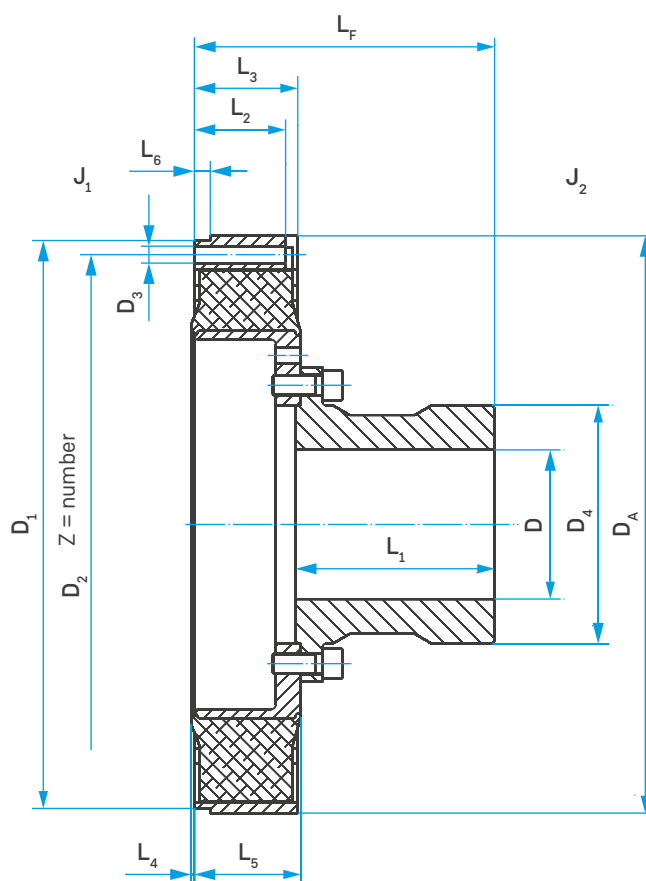


Fig. 2

Coupling details

Coupling size	Fig.	Flange connection for SAE J 620						D _A [mm]													
		SAE	D ₁	D ₂	D ₃	Z	D _{min.}		D _{max.}	D ₄	L ₁	L ₂	L ₃	L ₄	L ₅	L ₆	L _F	J ₁ outside	J ₂ inside	Total mass	
		Size	[mm]	[mm]	[mm]		[mm]		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kgm ²]	[kgm ²]	[kg]	
AC 2.6...F2K	2	8	263.5	244.5	10.5	6	263	unbored, pre-centred	55	78	65	33	38	3	42	-	104	0.012	0.015	4.8	
	1	10	314.3	295.3	10.5	8	266		55	78	65	10	38	3	42	-	104	0.021	0.015	5.3	
	1	11.5	352.4	333.4	10.5	8	266		55	78	65	10	38	3	42	-	104	0.026	0.015	5.4	
AC 2.7...F2K	1	8	263.5	244.5	10.5	6	219		55	78	65	4	37	5	40	-	102	0.013	0.012	4.8	
	1	10	314.3	295.3	10.5	8	219		55	78	65	4	37	5	40	-	102	0.029	0.012	5.5	
	1	11.5	352.4	333.4	10.5	8	219		55	78	65	4	37	5	40	-	102	0.046	0.012	6.1	
AC 3...F2K	1	10	314.3	295.3	10.5	8	291		55	78	65	16	52	5	59	-	121	0.029	0.027	6.8	
	1	11.5	352.4	333.4	10.5	8	291		55	78	65	16	52	5	59	-	121	0.036	0.027	7.0	
AC 4.1...F2K	2	10	314.3	295.3	10.5	8	320		75	112	95	56	56	-	59	13	152	0.042	0.057	11.1	
	1	11.5	352.4	333.4	10.5	8	320		75	112	95	16	70	-	59	-	152	0.058	0.057	11.7	
	1	14	466.7	438.2	13.0	8	320		75	112	95	16	70	-	59	-	152	0.090	0.057	12.5	
AC 4.9...F2K	1	11.5	352.4	333.4	10.5	8	320		85	127	95	16	77	-	79	-	172	0.062	0.084	14.8	
	1	14	466.7	438.2	13.0	8	320		85	127	95	16	77	-	79	-	172	0.095	0.084	15.6	
AC 5.1...F2K	2	11.5	352.4	333.4	10.5	8	354		85	127	95	54	65	-	68	20.5	161	0.055	0.106	15.3	
	1	14	466.7	438.2	13.0	8	354		85	127	95	15	65	-	68	-	161	0.155	0.106	17.5	
AC 6.1...F2K	1	14	466.7	438.2	13.0	8	420		110	165	95	18	80	-	82	-	174	0.174	0.251	24.7	
	1	16	517.5	489.0	13.0	8	420		110	165	95	18	80	-	82	-	174	0.318	0.251	27.2	
	1	18	571.5	542.9	17.0	6	420		110	165	95	18	80	-	82	-	174	0.494	0.251	29.6	
AC 6.5...F2K	1	14	466.7	438.2	13.0	8	423		130	190	119	16	90	-	92	-	209	0.241	0.392	35.8	
	1	18	571.5	542.9	17.0	6	423		130	190	119	16	90	-	92	-	209	1.267	0.392	54.2	
AC 7...F2K	2	14	466.7	438.2	13.0	8	466		130	190	119	85	85	3	87	27	204	0.284	0.487	38.8	
	1	16	517.5	489.0	13.0	8	466		130	190	119	27	85	3	87	-	204	0.390	0.487	40.6	
	1	18	571.5	542.9	17.0	6	466		130	190	119	18	85	3	87	-	204	0.477	0.487	41.6	
AC 7.5...F2K	2	14	466.7	438.2	13.0	8	478		130	190	119	100	115	-	120	15	237	1.351	0.596	64.9	
AC 8...F2K	1	18	571.5	542.9	17.0	12	515		155	227	162	18	84	0	84	-	245	0.472	0.930	59.6	
	1	21	673.1	641.4	17.0	12	515		155	227	162	18	84	0	84	-	245	0.967	0.930	64.7	
AC 9...F2K	1	18	571.5	542.9	17.0	12	562	75	165	240	140	35	92	0	103	-	237	0.690	1.174	63.4	
	1	21	673.1	641.4	17.0	12	562	75	165	240	140	20	92	0	103	-	237	1.316	1.174	70.0	
AC 10.2...F2K	2	18	571.5	542.9	17.0	12	580	90	165	240	200	104	104	2.5	107	16	302	0.671	1.644	78.3	
	1	21	673.1	641.4	17.0	12	580	90	165	240	200	26	104	2.5	107	-	302	1.260	1.644	84.3	
AC 11...F2K	2	21	673.1	641.4	17.0	12	682	90	200	300	210	85	111	0	107	15	312	3.725	3.655	152	
	1	24	733.4	692.2	21.0	12	682	90	200	300	210	20	111	0	107	-	312	4.620	3.655	159	
AC 11.7...F2K	2	21	673.1	641.4	17.0	24	682	90	200	300	250	114	140	0	136	15	381	4.489	4.388	179	
	1	24	733.4	692.2	21.0	24	682	90	200	300	250	20	140	0	136	-	381	5.341	4.388	186	
AC 12...F2K	1	-	860.0	820.0	20.0	32	776	90	260	390	255	27	135	-	137	-	385	9.925	11.80	317	
	1	-	920.0	880.0	20.0	32	776	90	260	390	255	27	136	-	137	-	385	12.48	11.80	329	
	1	-	995.0	950.0	22.0	32	870	90	260	390	255	27	136	-	137	-	385	18.67	11.80	358	

i Other flange and length dimensions on request.

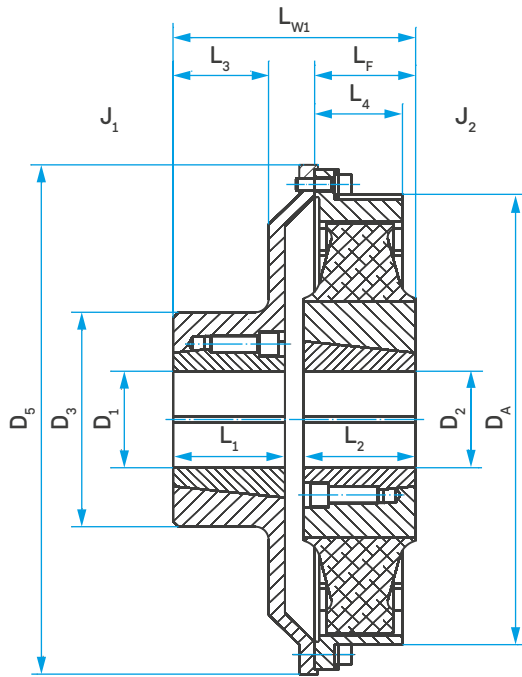
Ordering example

Coupling size	Element version according to "General Technical Data"	Version for element changing	Flange connection size acc.to SAE J 620 (AC 12: D ₁)	Mounting length L _F in mm
AC 9	.NN.	F2K.	18.	237

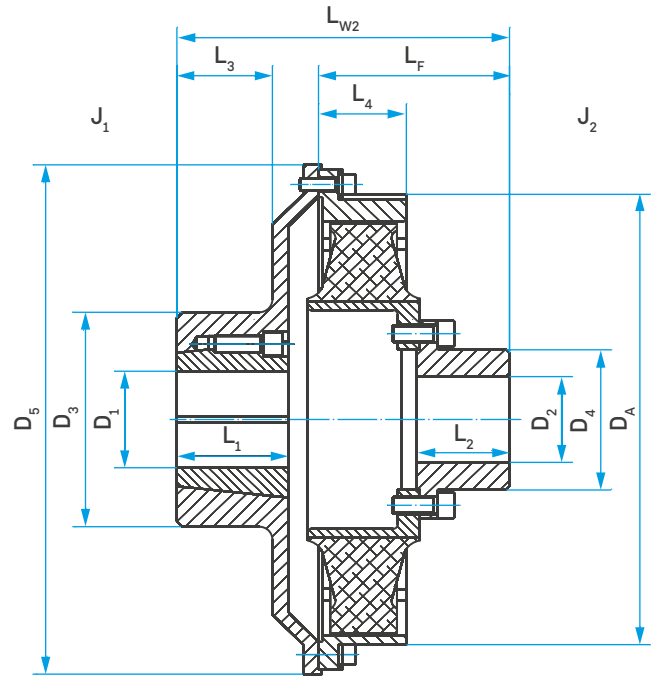
Coupling designation: AC 9 NN. F2K. 18. 237

ARCUSAFLEX®

Type AC-T...T and AC...TK



Type AC-T...T



Type AC...TK + TB-No (for radial element change)

Coupling details

Coupling size	Taper bush		Taper bush		D ₃	D ₄	D ₅	D _A	L ₁	L ₂	L ₃	L ₄	L _F	L _{W1}	L _{W2}	J ₁	J ₂	Total mass
	TB-No.	D ₁ max. [mm]	TB-No.	D ₂ max. [mm]														
AC-T 2.3...T	2012	48	2012	48	102	-	225	222	32	32	23	41	52	84	-	0.026	0.008	6.6
AC-T 2.6...T	2517	60	2517	60	105	-	325	263	45	45	42	38	42	115	-	0.130	0.017	14.6
AC-T 3...T	2517	60	2517	60	105	-	325	291	45	45	42	52	58	131	-	0.139	0.030	16.5
AC 3...TK	2517	60	-	55	105	78	325	290	45	65	42	52	121	-	194	0.139	0.027	15.9
AC-T 4...T	3030	75	3030	75	140	-	360	320	76	76	64	70	66	166	-	0.231	0.069	27.9
AC 4.1...TK	3030	75	-	75	140	112	360	320	76	95	64	70	152	-	250	0.231	0.057	25.7
AC-T 4.9...T	3535	90	3535	90	170	-	360	320	89	89	74	77	92	109	-	0.274	0.092	34.3
AC 4.9...TK	3535	90	-	85	170	127	360	320	89	95	74	77	172	-	289	0.274	0.084	33.3
AC-T 5...T	3535	90	3535	90	170	-	360	354	89	89	74	65	76	193	-	0.272	0.118	36.1
AC 5.1...TK	3535	90	-	85	170	127	360	354	89	95	74	65	161	-	278	0.272	0.106	34.0
AC-T 6...T	4545	110	4040	100	220	-	475	420	115	102	98	80	92	226	-	0.936	0.304	71.4
AC 6.1...TK	4545	110	-	110	220	165	475	420	115	95	98	80	174	-	308	0.936	0.251	64.6
AC-T 6.5...T	4545	110	4535	110	220	-	475	420	115	90	98	90	92	226	-	1.002	0.434	78.8
AC 6.5...TK	4545	110	-	130	220	190	475	420	115	119	98	90	209	-	343	1.002	0.392	75.8
AC-T 7...T	4545	110	4535	110	220	-	475	465	115	90	98	85	87	221	-	1.070	0.617	87.6
AC 7...TK	4545	110	-	130	220	190	475	465	115	119	98	85	204	-	338	1.070	0.487	79.3



Ordering example AC-T...T

Coupling size	Element version according to "General Technical Data"	Version with separable flange	Taper bush nominal size and bore diameter D ₁	Taper bush nominal size and bore diameter D ₂
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AC-T 6.5	.NN.	T.	4545. 110	4535. 85
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Coupling designation: AC-T 6.5 .NN. T 4545. 110 – 4535. 85



Ordering example AC...TK + TB no.

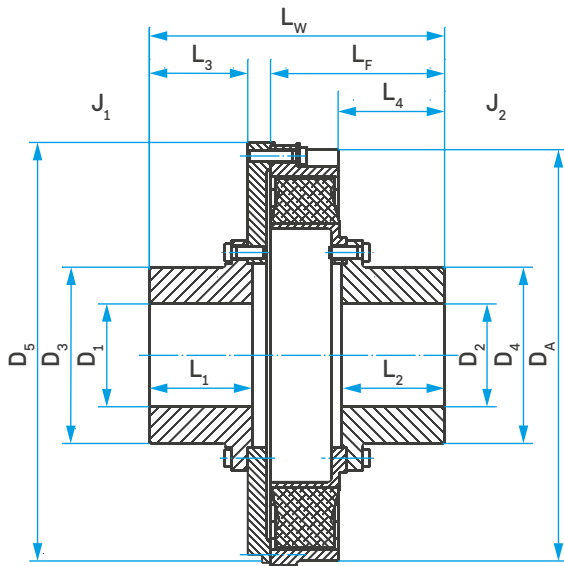
Coupling size	Element version according to "General Technical Data"	Version with separable flange for element changing	Nominal size of taper bush	Bore diameter D ₁
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AC 6.1	.NN.	TK.	4545.	110
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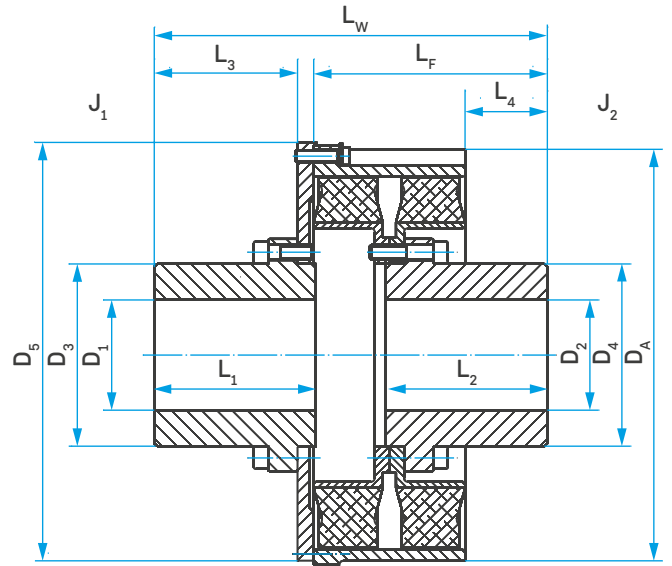
Coupling designation: AC 6.1 NN. TK. 4545. 110

ARCUSAFLEX®

Type AC...TK and AC...D TK



Type AC...TK (for radial element change)



Type AC...D TK (for radial element change)

Coupling details

Coupling size	D ₁ max. [mm]	D ₂ max. [mm]	D ₃ [mm]	D ₄ [mm]	D ₅ [mm]	D _A [mm]	L ₁ [mm]	L ₂ [mm]	L ₃ [mm]	L ₄ [mm]	L _F [mm]	L _W [mm]	J ₁ [kgm ²]	J ₂ [kgm ²]	Total mass [kg]
AC 7...TK	130	130	190	190	475	466	119	119	117	112	204	346	1.073	0.487	76.3
AC 8...TK	150	150	227	227	580	515	162	162	160	166	245	437	3.119	0.930	140.1
AC 8D...TK	150	150	227	227	580	525	226	226	202	142	314	543	3.938	1.751	209
AC 9...TK	150	150	240	240	580	562	140	140	134	145	237	393	2.998	1.170	133
AC 9D...TK	160	160	248	248	580	563	220	220	195	113	318	535	4.373	2.457	237
AC 10.2...TK	165	165	240	240	580	594	200	200	196	202	306	531	3.591	1.644	166
AC 11...TK	200	200	300	300	682	682	210	210	206	209	320	562	10.480	3.655	300
AC 12...TK	260	260	390	390	870	776	255	255	230	259	389	667	27.626	11.80	580

 Other sizes and types on request

Ordering example AC...TK

Coupling size Element version
according to "General
Technical Data" Version with separable flange for radial element changing

AC 8 .NN. TK.

Coupling designation: AC 8 NN. TK

Ordering example AC...D TK

Coupling size Element version
according to "General
Technical Data" Version with separable flange for radial element changing

AC 8D .NN. TK.

Coupling designation: AC 8D .NN. TK

ARCUSAFLEX®

Type AC...D F2

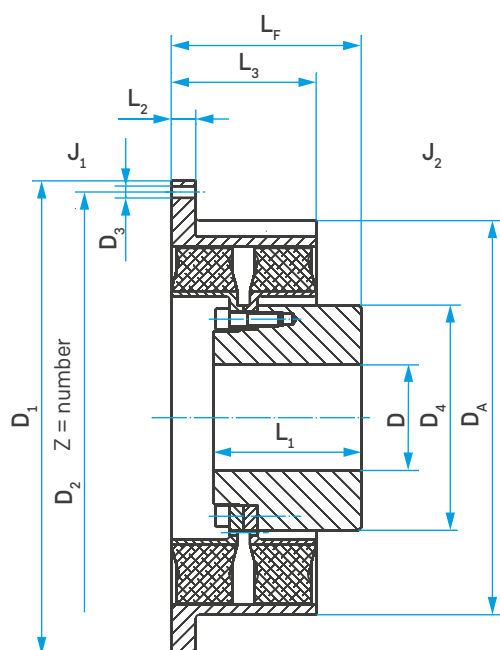


Fig. 1

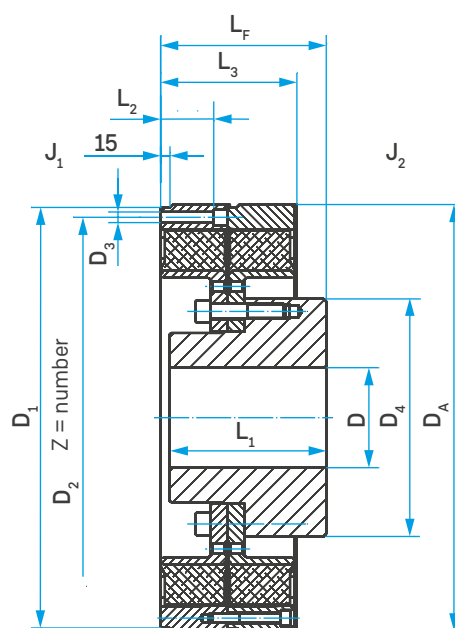


Fig. 2

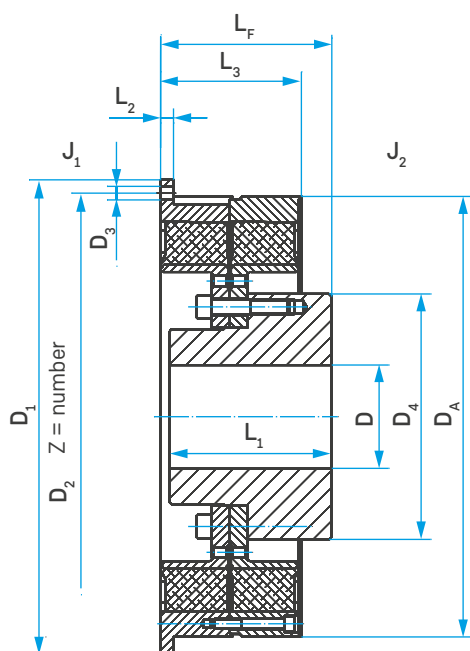


Fig. 3

Coupling details

Coupling size	Fig.	Flange connection for SAE J 620					D _A	D		D ₄	L ₁	L ₂	L ₃	L _F	J ₁ outside	J ₂ inside	Total mass
		SAE	D ₁	D ₂	D ₃	Z		min.	max.								
		Size	[mm]	[mm]	[mm]			[mm]	[mm]		[mm]	[mm]	[mm]	[mm]	[kgm ²]	[kgm ²]	[kg]
AC 8D...F2	1	18	571.5	542.9	17.0	12	525	-	165	250	174	25	172	255	1.020	1.508	88.6
	1	21	673.1	641.4	17.0	12	525	-	165	250	174	18	172	255	1.540	1.508	94.0
AC 9D...F2	1	18	571.5	542.9	17.0	12	563	75	170	316	210	35	205	270	1.531	2.697	140
	1	21	673.1	641.4	17.0	12	563	75	170	316	210	25	205	270	2.271	2.697	147
AC 10.2D...F2	1	21	673.1	641.4	17.0	24	585	90	200	310	250	26	210	350	2.114	3.672	164
	1	24	733.4	692.2	21.0	12	585	90	200	310	250	26	210	350	2.740	3.672	170
AC 11D...F2	2	21	673.1	641.4	17.0	12	682	90	220	380	250	85	218	265	7.564	6.835	256
	1	24	733.4	692.2	21.0	12	682	90	220	380	250	20	218	265	2.662	6.835	210
AC 11.7D...F2	3	24	733.4	692.2	21.0	24	682	90	220	380	280	20	276	375	10.450	8.892	336

 Other flange and length dimensions on request

Ordering example

Coupling size	Element version according to "General Technical Data"	Flange version	Flange connection size acc. to SAE J 620	Mounting length L _F in mm
AC 9D	.NN.	F2.	18.	270

Coupling designation: AC 9D .NN. F2. 18. 270

ARCUSAFLEX®

Type AC...D F2K

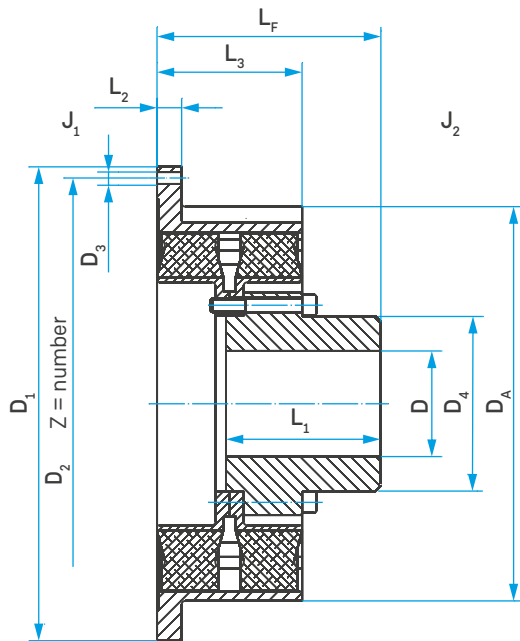


Fig. 1

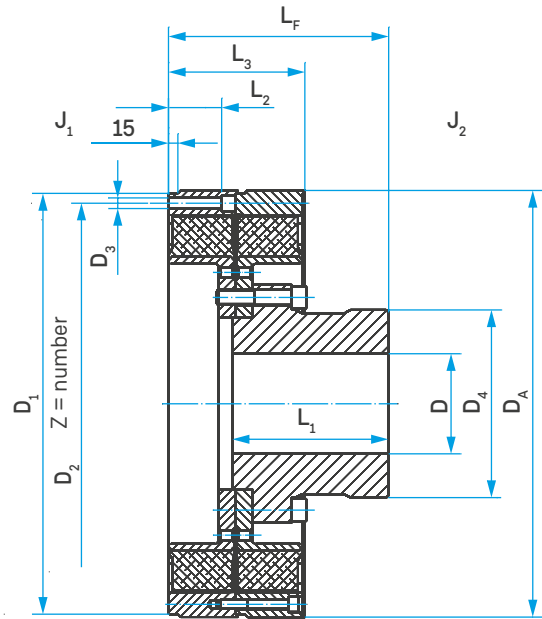


Fig. 2

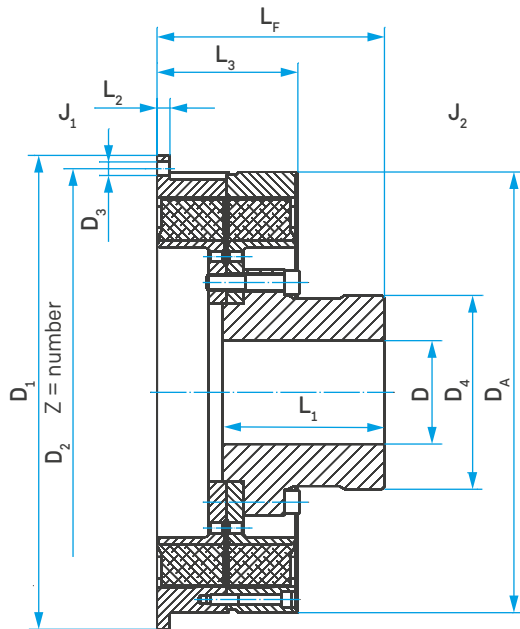


Fig. 3

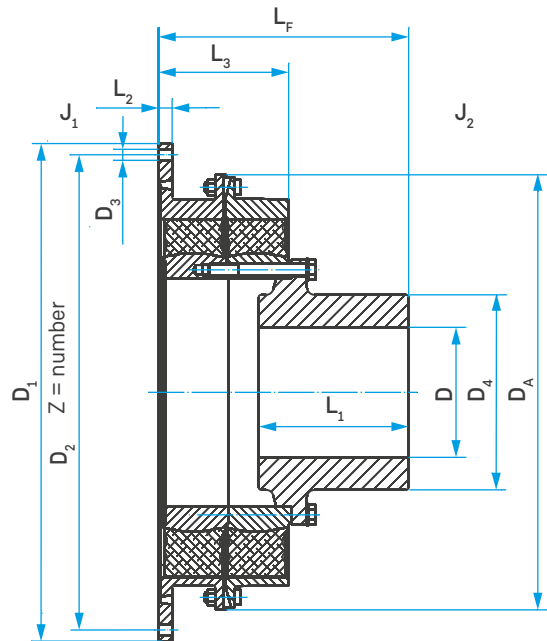


Fig. 4

Coupling details

Coupling size	Fig.	Flange connection for SAE J 620					D _A	D		D ₄	L ₁	L ₂	L ₃	L _F	J ₁ outside	J ₂ inside	Total mass
		SAE	D ₁	D ₂	D ₃	Z		min.	max.								
		Size	[mm]	[mm]	[mm]			[mm]	[mm]		[mm]	[mm]	[mm]	[mm]	[kgm ²]	[kgm ²]	[kg]
AC 8D...F2K	1	18	571.5	542.9	17.0	12	525	-	155	227	226	25	172	307	1.020	1.751	108
	1	21	673.1	641.4	17.0	12	525	-	155	227	226	18	172	307	1.540	1.751	113
AC 9D...F2K	1	18	571.5	542.9	17.0	12	563	75	160	248	220	35	205	318	1.532	2.457	132
	1	21	673.1	641.4	17.0	12	563	75	160	248	220	25	205	318	2.271	2.457	139
AC 10.2D...F2K	1	21	673.1	641.4	17.0	24	585	90	160	240	250	26	210	350	2.114	3.132	147
	1	24	733.4	692.2	21.0	12	585	90	160	240	250	26	210	350	2.732	3.132	152
AC 11D...F2K	2	21	673.1	641.4	17.0	12	682	90	200	300	250	85	218	352	7.564	6.431	252
	1	24	733.4	692.2	21.0	12	682	90	200	300	250	20	218	352	2.662	6.431	205
AC 11.7D...F2K	3	24	733.4	692.2	21.0	24	682	90	200	300	280	20	276	405	10.450	7.862	310
AC 12D...F2K	4	-	860.0	820.0	22.0	32	870	90	260	390	300	19	258	496	22.010	18.098	495
	4	-	920.0	880.0	20.0	32	870	90	260	390	300	27	266	500	25.514	18.098	513
	4	-	995.0	950.0	22.0	32	870	90	260	390	300	27	266	500	30.299	18.098	535

 Other flange and length dimensions on request

Ordering example

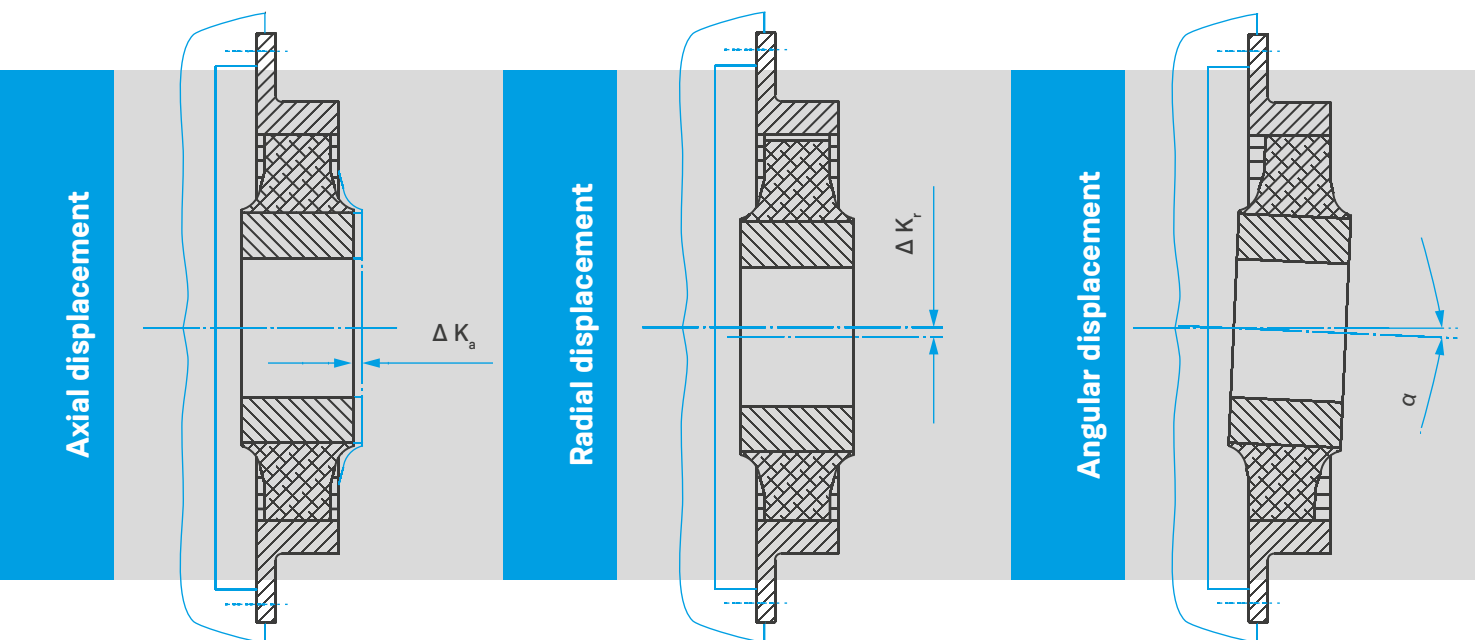
Coupling size	Element version according to "General Technical Data"	Version for element changing	Flange connection size acc.to SAE J 620 (AC 12: D ₁)	Mounting length L _F in mm
AC 10.2D	.NN.	F2K.	21.	350

Coupling designation: AC 10.2D .NN. F2K. 21. 350

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Permissible shaft displacement

The permissibility of major shaft displacements depends on a number of factors such as coupling size, shore hardness of the element, operating speed and torque load of the coupling. The reference values listed below refer to an operating speed of $\approx 1500 \text{ min}^{-1}$. Precise alignment prevents premature wear of the rubber element. Observe the operating instructions.



Technical specifications

Coupling size			1.5	2.3	2.6	3	4 4.1	4.9	5 5.1	6 6.1	6.5	7	7.5	8 8D	9 9D	10 10D	11 / 11D 11,7 / 11,7D 11.9	12 12D
Max. permissible axial displacement *)	ΔK_a	[mm]	±2.5	±3	±4	±7	+16/-6	±7	±5	±7	±4	±10	±7	±5	±4	±3	±4	±3
Max. permissible radial displacement	ΔK_r	[mm]	0.8	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.4	1.5	1.5	1.5	1.5
Max. permissible angular displacement	α	[°]	0.5°	0.5°	0.5°	0.5°	0.5°	0.5°	0.5°	0.4°	0.4°	0.4°	0.4°	0.4°	0.4°	0.3°	0.3°	0.3°

i *) For types AC...F2K and AC...TK the axial fitting length L_F of the coupling should always offer a plus tolerance within the possible tolerance range in order to reach max. axial movability of the dismantled coupling element.

i Larger displacements of short duration, as may occur when starting and stopping the diesel engine, are permissible. These maximum displacements must not occur simultaneously.

Data required for coupling size selection

General

1. Project: _____
2. Application (combined heat and power unit, emergency power generator, fire pump, ...): _____
3. Operating mode (continuous operation, emergency power operation, ...): _____
4. Place of operation/location: _____ Ambient temperature: T_u _____ [°C]
5. Certification/class/requisite rules for selecting the coupling size: _____

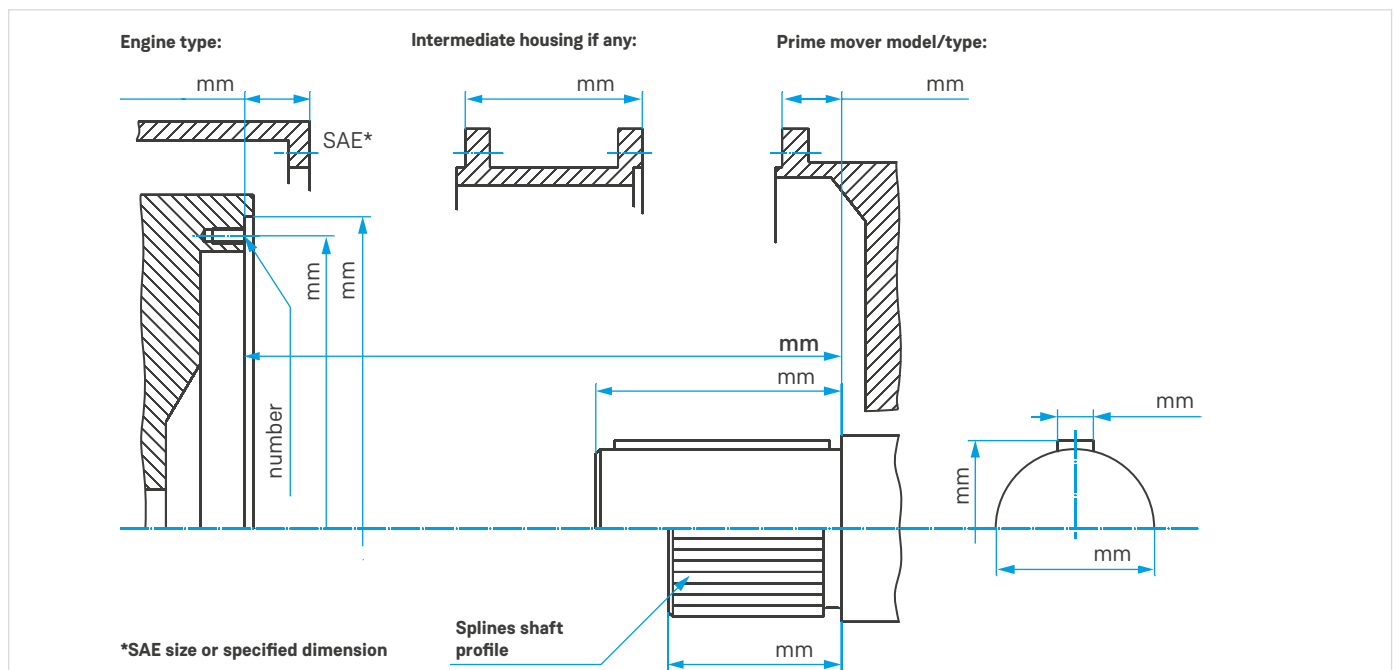
Engine side

1. Engine (manufacturer, designation/type): _____ ☐ Diesel ☐ Gas
2. Engine power (nominal operation): P _____ [kW]
3. Engine speed (nominal speed): n _____ [min⁻¹]
4. Idling speed available? ☐ yes ☐ no
If adjustable from: n _____ [min⁻¹] to _____ [min⁻¹]
5. If variable speed operation, speed range from: n _____ [min⁻¹] to _____ [min⁻¹]
! Please attach corresponding speed/torque/power diagram.
6. Total stroke volume: V_H _____ [ccm] R/V (angle): _____ Number of cylinders: _____
7. Moments of inertia engine incl. damper without flywheel: J _____ [kgm²]
Moments of inertia flywheel: J _____ [kgm²]
Total moments of inertia of the engine (incl. damper, flywheel, etc.): J _____ [kgm²]

Output side

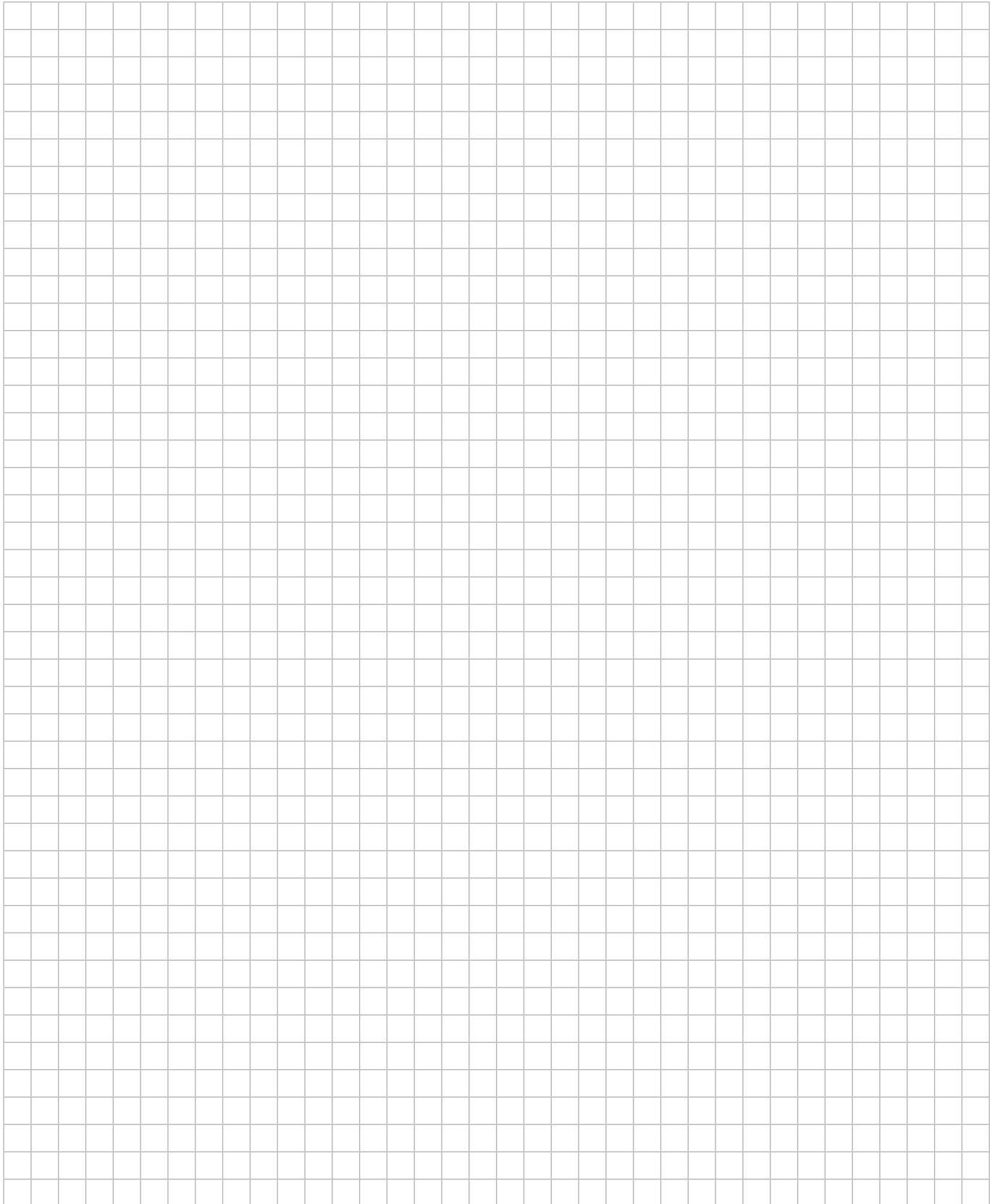
1. Type (generator, pump transfer case, pump, compressor, ...): _____
2. Type (manufacturer, designation): _____
3. Moments of inertia: J _____ [kgm²]
4. Connection dimensions (D x L, toothed shaft (standard), flange, ...): _____
! For branched systems: System sketch with details of the individual inertias (with details of the reference speed) and transmission ratios.

If the prime mover is to be flange-mounted to the engine with an intermediate housing, we require the following to determine an optimum mounting position; specified details and dimensions as in the following sketch:



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Notes





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SIMPLY **POWERFUL.** ————— □

Industrial solutions:

- ⚡ Power generation
- 🚚 Mobile applications
- 🧠 Test benches
- ⚙️ PUMPS & COMPRESSORS
- ⚙️ Industry
- ⚓ Ship & port engineering

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