



## ARCUSAFLEX®

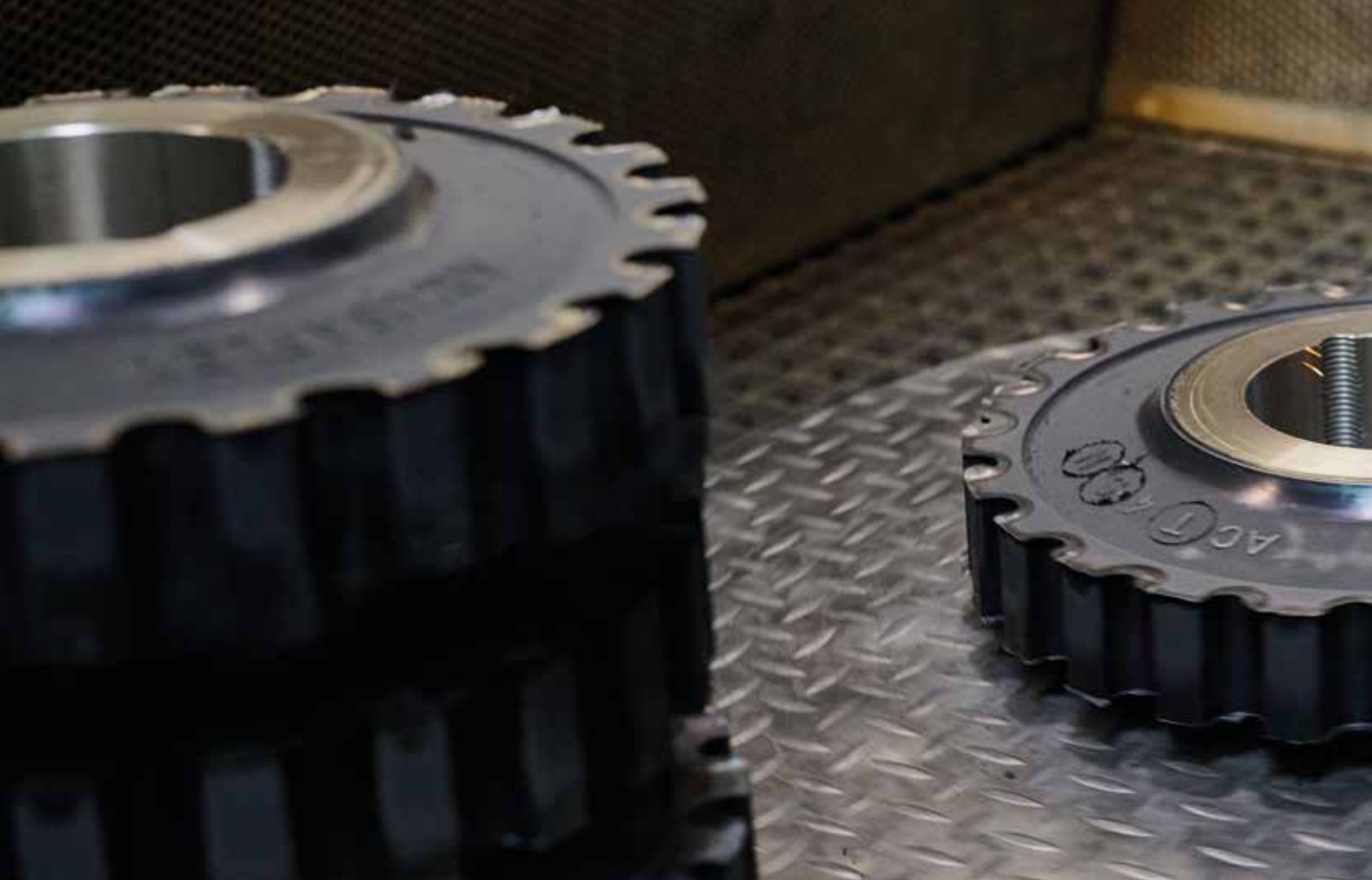
Highly flexible rubber disc coupling  
for internal combustion engine drives

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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 provides you with not only a coupling, but a solution:

Designed to Customer – SIMPLY **POWERFUL**.

**D2C**  
Designed to Customer



# ARCUSAFLEX®

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# ARCUSAFLEX®

## General Technical Description



## ARCUSAFLEX®

### Highly flexible flange coupling with axial plug-in facility

The ARCUSAFLEX® coupling (short form: 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.

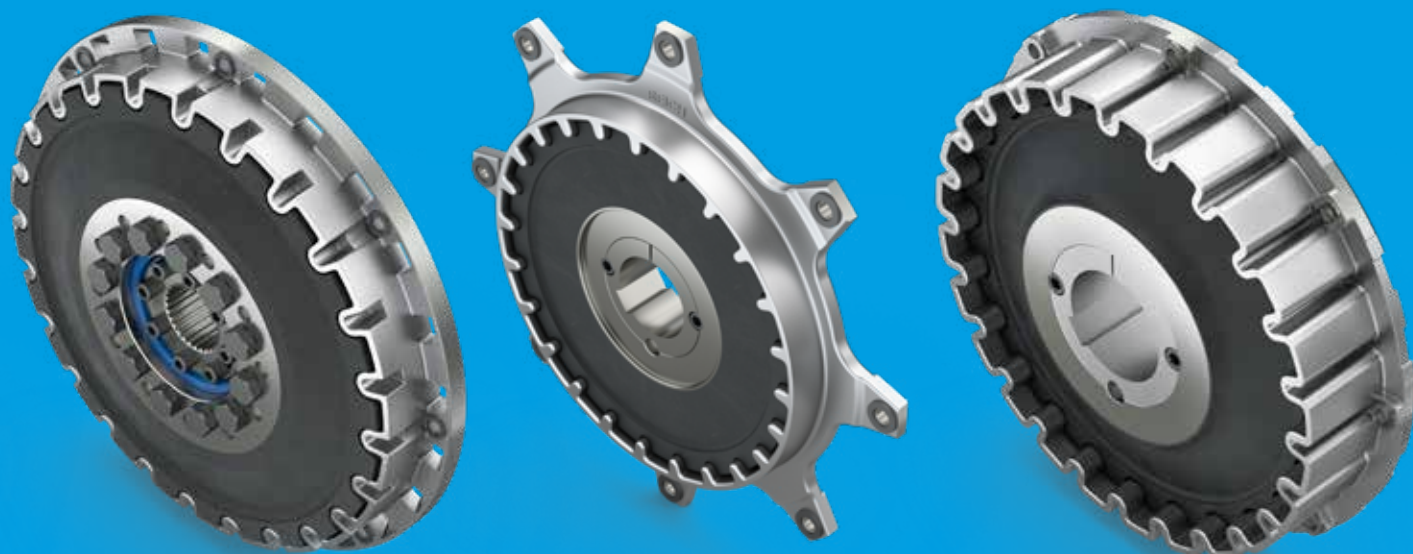
The inside diameter of the rubber element is vulcanized directly to a hub body or bolt-on sleeve. The toothed profile on the circumference of the element provides a virtually backlash-free, positive plug-in connection to the coupling flange when in service.

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 society 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 hazardous locations (categories M2, 2 + 3). ATEX documentation to supplement the operating instructions is available on request.




## ARCUSAFLEX®

Nominal torques from 210 Nm to 72 000 Nm

## ARCUSAFLEX®

### Advantages

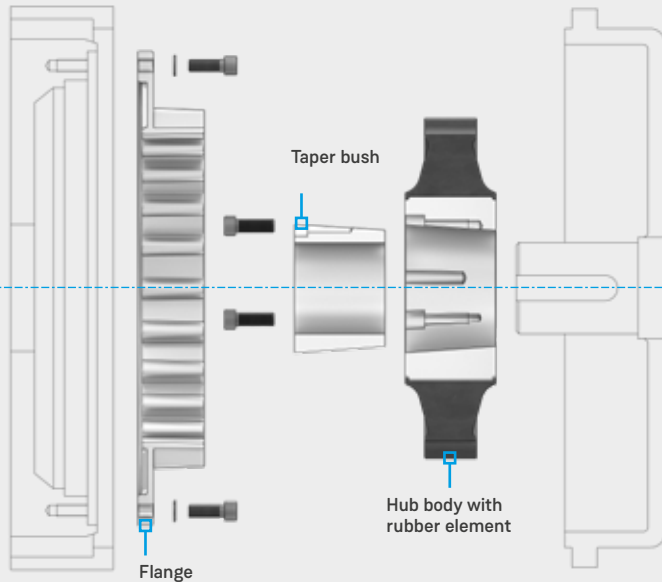
**The most important features and advantages of the highly torsionally flexible ARCUSAFLEX® couplings are:**

- Very high torsional elasticity with a linear torsional deflection characteristic
- High torsional vibration and shock load damping capability
- Backlash-free torque transmission
- Ease of assembly thanks to the plug-in type design with ample axial float
- Compensation of major misalignments
- Torque limiting, protecting the drive from overload
- ATEX 

# ARCUSAFLEX®

## Standard Types

Type AC-T...F2



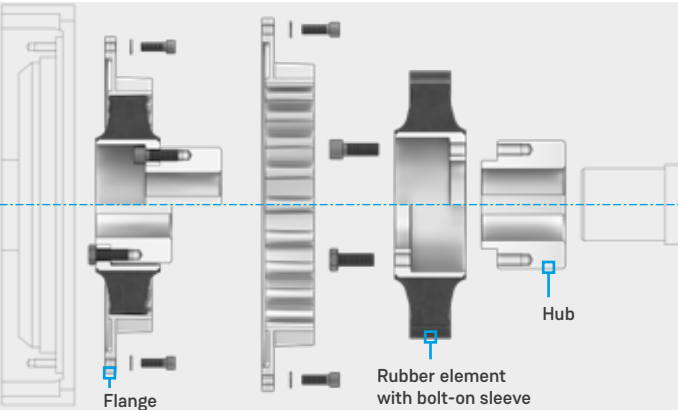
### Flange coupling with taper bush

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

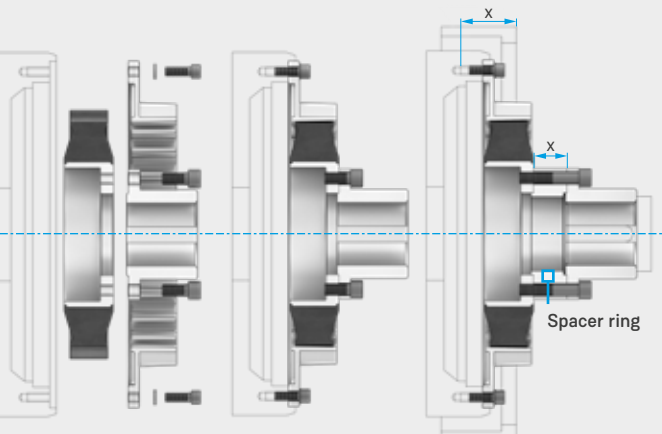


### Flange coupling with hub

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

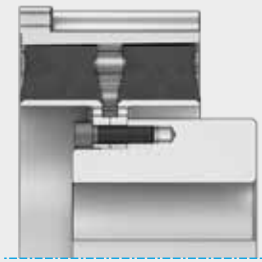


### Flange coupling for radial element exchange

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!**

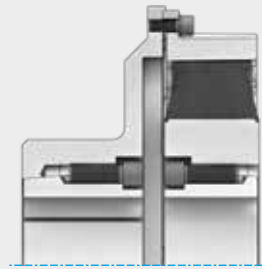
Type AC...D F2



### Flange coupling

with hub and two coupling elements operating in tandem.

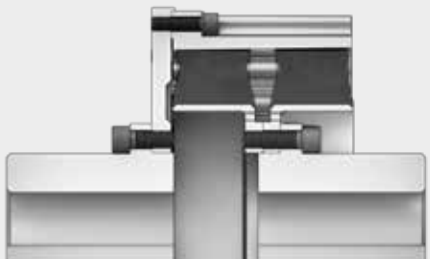
Type AC-T...T



### Shaft coupling

Coupling element and separable flange hub with taper bush.

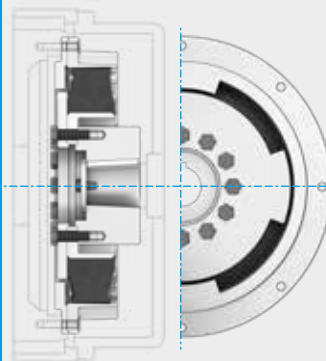
Type AC...D TK



### Shaft coupling

with two hubs and two coupling elements operating in tandem.

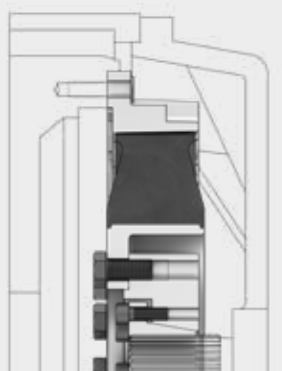
Type AC...F2 DS



### Flange coupling

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

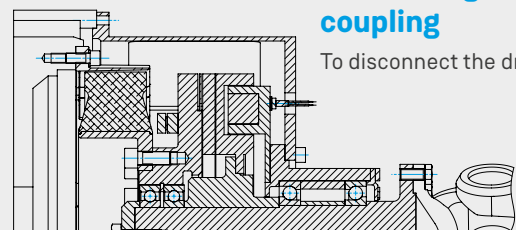
Type AC...F2 with splined taper bush



### Flange coupling with splined taper bush

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

Type AC...F2 with electromagnetic coupling



### Flange coupling with external flange housing and integrated electromagnetic coupling

To disconnect the drive.

# ARCUSAFLEX®

## General Technical Data

### Standard version with 1 element - natural/synthetic caoutchouc

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]	$C_{T \text{ dyn}}$ [Nm/rad]		$n_{\max}$ [min <sup>-1</sup> ]
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 <sup>1)</sup>	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	10000	1700	30.0		
	SN	4200	12600	2100	45.0		
	UN	4800	12600	2400	63.0		
AC 6.5	WN	4000	10000	2000	25.0	14	3000
	NN	4500	13500	2250	40.0		
	SN	5500	16500	2750	72.0		
	UN	6200	16500	3100	100.0		
AC 7	WN	4600	10000	2300	35.0	14 18	2600 2300
	NN	5200	15600	2600	56.0		
	SN	6300	18900	3100	100.0		
	UN	7400	18900	3700	140.0		
AC 7.5	WN	5600	12500	2800	35.0	14	2600 2300
	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]	$C_{T \text{ dyn}}$ [Nm/rad]		$n_{\max}$ [min <sup>-1</sup> ]
AC 8	WN	6200	14000	3100	38.0	18 21	2300 2000
	NN	7000	21000	3500	75.0		
	SN	7800	23400	3900	110.0		
	UN	9200	23400	4600	160.0		
AC 9	WN	8000	18000	4200	55.0	18 21	2300 2000
	NN	9000	27000	4800	100.0		
	SN	10000	30000	5500	190.0		
	UN	12000	30000	6000	300.0		
AC 10.2	WN	11000	28000	5500	75.0	18 21	2300 2000
	NN	12500	37000	6250	120.0		
	SN	14000	42000	7000	210.0		
	UN	16000	42000	8000	320.0		
AC 11	WN	16000	40000	8000	150.0	21 24	2000 1800
	NN	18000	54000	9000	250.0		
	SN	20000	60000	10000	450.0		
	UN	23000	60000	11500	650.0		
AC 11.7	WN	19200	48000	9600	180.0	21 24	2000 1800
	NN	21600	65000	11000	300.0		
	SN	24000	72000	12000	540.0		
	UN	27000	72000	13000	785.0		
AC 11.9	WN	24000	60000	12000	250.0	21 24	2000 1800
	NN	26000	78000	13000	525.0		
	SN	28000	84000	14000	1200.0		
	UN	31500	90000	15000	1750.0		
AC 12	WN	25000	75000	12500	250.0	similar to DIN 6288	1500
	NN	28000	84000	14000	400.0		
	SN	31500	94000	15000	700.0		
	UN	36000	94000	18000	1000.0		

**i** 1) Dynamic torsional stiffness AC 2.7 on request

## Standard version with 2 elements in natural/synthetic caoutchouc

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 Hz) [Nm]	$C_{T \text{ dyn}}$ [Nm/rad]		$n_{\max}$ [min <sup>-1</sup> ]
AC 8D	WN	12400	28000	6200	76.0	18	2300
	NN	14000	42000	7000	150.0		
	SN	15600	46800	7800	220.0	21	2000
	UN	18400	46800	9200	320.0		
AC 9D	WN	16000	36000	8400	110.0	18	2000
	NN	18000	54000	9600	200.0		
	SN	20000	60000	11000	380.0	21	2000
	UN	24000	60000	12000	600.0		
AC 10.2D	WN	22000	56000	11000	150.0	21	2000
	NN	25000	74000	12500	240.0		
	SN	28000	84000	14000	420.0	24	1800
	UN	32000	84000	16000	640.0		
AC 11D	WN	32000	80000	16000	300.0	21	2000
	NN	36000	108000	18000	500.0		
	SN	40000	120000	20000	900.0	24	1800
	UN	46000	120000	23000	1300.0		
AC 11.7D	WN	38400	96000	19200	360.0	21	2000
	NN	43200	130000	22000	600.0		
	SN	48000	144000	24000	1080.0	24	1800
	UN	54000	144000	26000	1570.0		
AC 12D	WN	50000	150000	25000	500.0	similar to DIN 6288	1300
	NN	56000	168000	28000	800.0		
	SN	63000	189000	30000	1400.0		
	UN	72000	189000	36000	2000.0		

Shore hardness Sh A, Resonance factor  $V_R$  and relative damping  $\Psi$ 

Element version	Sh A	$V_R$	$\Psi$
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.

## Technical Note

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's/user's responsibility to make sure the dimensioning of the shaft and keyed 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 $T_{KN}$ [Nm]	Maximum torque $T_{K\ max1}$ [Nm]	Maximum torque $T_{K\ max2}$ [Nm]	Fatigue torque $T_{KW\ (10\ Hz)}$ [Nm]	Dynamic torsional stiffness				
						$C_{T\ dyn}$				
						0.10 $T_{KN}$ [Nm/rad]	0.25 $T_{KN}$ [Nm/rad]	0.50 $T_{KN}$ [Nm/rad]	0.75 $T_{KN}$ [Nm/rad]	1.00 $T_{KN}$ [Nm/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

$T_{K\ max1}$  is the highest permissible maximum torque of the application taking into account for example starting, stopping with resonance crossing.

$T_{K\ max2}$  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 $\Psi$

Element version	Sh A	$V_R$	$\Psi$
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.

# ARCUSAFLEX®

## Materials



### Coupling flanges:

Coupling size AC 2,3 - AC 10.2D, AC 11D and AC 11.9 out of high grade cast aluminium  
Coupling size AC 7.5 and AC 11 - AC 12D out of cast iron with spheroidal graphite



### With type AC with hub:

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



### With 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

**i** \*) Technical data on request

# ARCUSAFLEX®

## 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, whilst 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  $n_{AN}$ .

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

**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,  $T_{K \max}$**  shall be at least equal to the highest torque  $T_{\max}$  encountered in operation while taking the temperature factor  $S_t$  into account.

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

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.

# ARCUSAFLEX®

## Type AC-T...F2

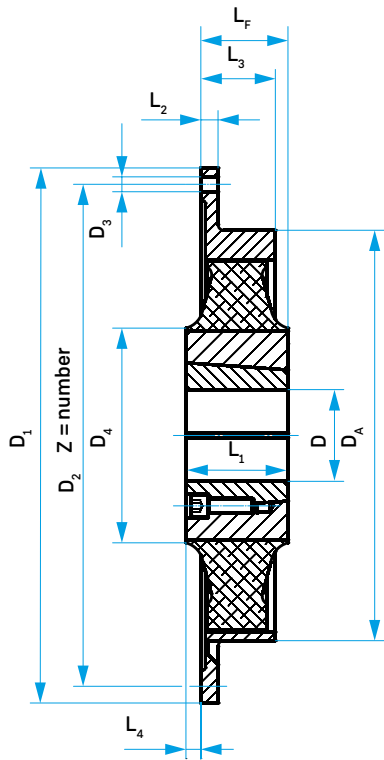


Fig. 1

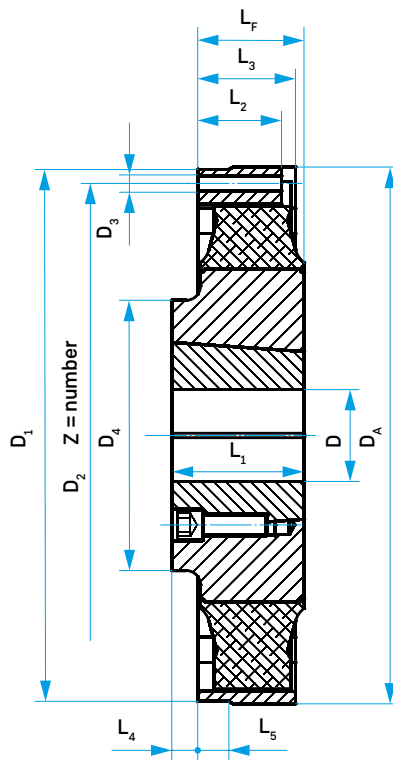
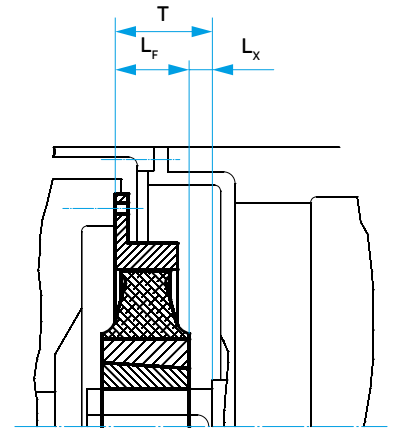


Fig. 2



**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	-	-
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			Total mass [kg]
		SAE	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	Z	D <sub>A</sub>		D <sub>4</sub>	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	L <sub>4</sub>	L <sub>5</sub>	L <sub>F</sub>	T	L <sub>x</sub>	J <sub>1</sub> outside	J <sub>2</sub> inside			
		Size [mm]	[mm]	[mm]	[mm]		[mm]		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kgm <sup>2</sup> ]	[kgm <sup>2</sup> ]		
AC-T 1.5...F2	1	6.5	215.9	200.0	8.5	6	1610	177	106	25	8	37	-	-	38 ± 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	-	-	0.009	0.004	2.6		
	1	8	263.5	244.5	10.5	6	1610	177	106	25	8	37	-	-	38 ± 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	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	-	-	0.006	0.008	3.0		
	2	7.5	241.3	222.3	8.5	8	2012	222	-	32	33	33	-	8	43 ± 3	-	-	0.008	0.008	3.1		
	1	8	263.5	244.5	10.5	6	2012	222	-	32	8	33	-	-	43 ± 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	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	81.0	41	0.012	0.017	2.9		
	1	10	314.3	295.3	10.5	8	2517	266	155	45	10	38	3	-	42 ± 4	73.0	33	0.021	0.017	3.7		
	1	11.5	352.4	333.4	10.5	8	2517	266	155	45	10	38	3	-	42 ± 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	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	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	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	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	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	73.0	4	0.041	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	106.6	14	0.063	0.092	15.8		
	1	14	466.7	438.2	13.0	8	3535	320	192	89	16	77	-	-	92 ± 7	92.4	0	0.096	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	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	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	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	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	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	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	82.7	-	1.262	0.434	57.1		
AC-T 7...F2	2	14	466.7	438.2	13.0	8	4545	466	344	115	85	85	28	27	87 ± 10	92.4	5	0.284	0.669	53.3		
	1	16	517.5	489.0	13.0	8	4545	466	344	115	27	85	28	-	87 ± 10	82.7	0	0.390	0.669	55.1		
	1	18	571.5	542.9	17.0	6	4545	466	344	115	18	85	28	-	87 ± 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	-	-	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	-	-	0.472	1.037	61.9		
	1	21	673.1	641.4	17.0	12	5040	515	390	102	18	84	-	-	102 ± 5	-	-	0.967	1.037	67.0		
AC-T 9...F2	1	18	571.5	542.9	17.0	12	5040	562	398	102	35	92	-	-	102 ± 4	-	-	0.690	1.543	79.1		
	1	21	673.1	641.4	17.0	12	5040	562	398	102	20	92	-	-	102 ± 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

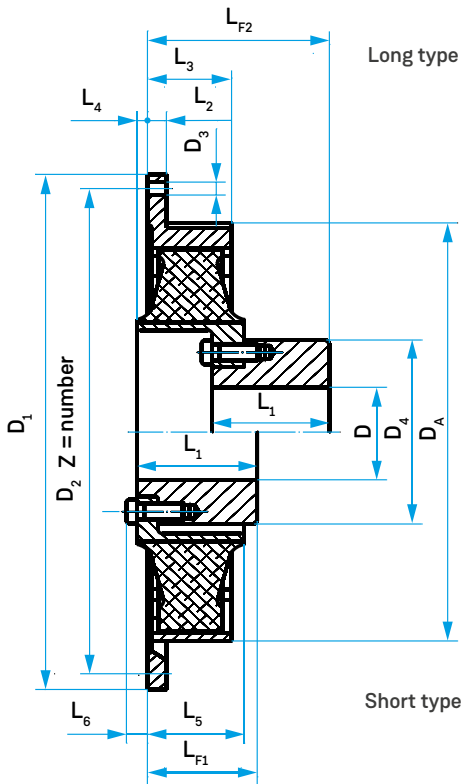


Fig. 1

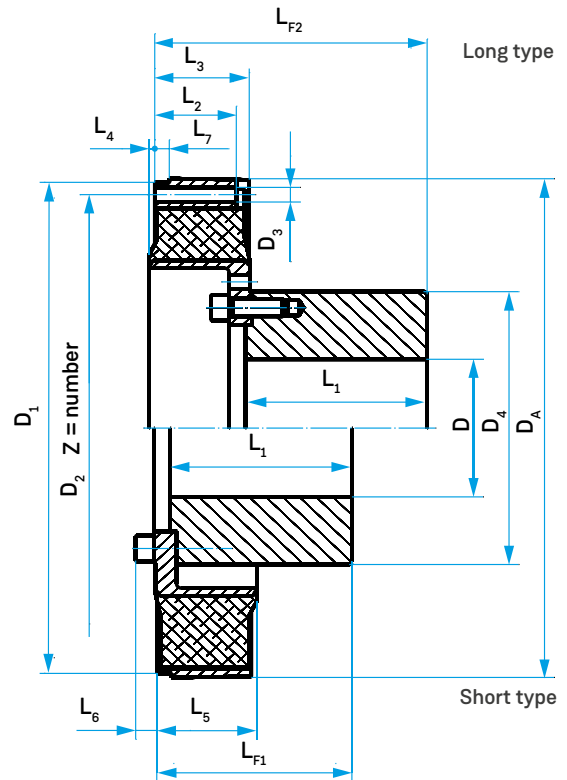


Fig. 2

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	D <sub>4</sub>	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	L <sub>4</sub>	L <sub>5</sub>	L <sub>6</sub>	L <sub>7</sub>	L <sub>F1</sub> short	L <sub>F2</sub> long	J <sub>1</sub> outside	J <sub>2</sub> inside	Total mass	
		SAE	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	Z	D <sub>A</sub>															
		Size	[mm]	[mm]	[mm]	[mm]	[mm]															
AC 2.3...F2	-	6.5	215.9	200.0	8.5	6	222	min.	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	max.	60	98	54	33	33	-	43	-	8	-	94	0.008	0.009	4.1
	1	8	263.5	244.5	10.5	6	222	min.	60	98	54	8	33	-	43	-	-	-	94	0.011	0.009	4.3
	1	10	314.3	295.3	10.5	8	222	max.	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	unbored, precentered	65	118	65	33	38	3	42	12	-	73	104	0.012	0.021	6.8
	1	10	314.3	295.3	10.5	8	266		65	118	65	10	38	3	42	12	-	73 <sup>1)</sup>	104	0.021	0.021	7.2
	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	7.3
AC 2.7...F2	1	8	263.5	244.5	10.5	6	219		65	118	65	4	37	5	40	-	-	-	102	0.013	0.017	6.7
	1	10	314.3	295.3	10.5	8	219		65	118	65	4	37	5	40	-	-	-	102	0.029	0.017	7.5
	1	11.5	352.4	333.4	10.5	8	219		65	118	65	4	37	5	40	-	-	-	102	0.046	0.017	8.1
	1	10	314.3	295.3	10.5	8	291		65	118	68	16	52	5	60	12	-	73 <sup>1)</sup>	121	0.029	0.033	8.7
AC 3...F2	1	11.5	352.4	333.4	10.5	8	291		65	118	70	16	52	5	60	16	-	58 <sup>1)</sup>	107	0.036	0.031	8.2
	2	10	314.3	295.3	10.5	8	320		80	140	101	56	56	8	68	15	13	106	166	0.041	0.071	14.7
AC 4...F2	1	11.5	352.4	333.4	10.5	8	320		80	140	101	16	70	8	68	15	-	106 <sup>1)</sup>	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 <sup>1)</sup>	152	0.090	0.067	15.1
	1	11.5	352.4	333.4	10.5	8	320		90	160	100	16	77	-	79	7	-	106	165	0.063	0.101	18.3
AC 4.9...F2	1	14	466.7	438.2	13.0	8	320		90	160	90	16	77	-	79	7	-	92	151	0.096	0.095	17.7
	2	11.5	352.4	333.4	10.5	8	354		90	160	110	54	65	13	76	23	20.5	106 <sup>1)</sup>	175	0.055	0.129	20.5
AC 5...F2	1	14	466.7	438.2	13.0	8	354		90	160	105	15	65	13	76	23	-	92 <sup>1)</sup>	161	0.155	0.124	21.4
	1	14	466.7	438.2	13.0	8	420		100	185	102	18	80	10	92	20	-	92 <sup>1)</sup>	174	0.174	0.278	29.6
AC 6...F2	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
	1	14	466.7	438.2	13.0	8	423		120	222	125	16	90	-	92	33	-	92 <sup>1)</sup>	164	0.241	0.397	37.6
AC 6.5...F2	1	18	571.5	542.9	17.0	6	423		120	222	125	16	90	-	92	33	-	92	164	1.262	0.397	55.8
	2	14	466.7	438.2	13.0	8	466	120	222	125	85	85	2	88	33	27	92 <sup>1)</sup>	164	0.284	0.498	41.3	
AC 7...F2	1	16	517.5	489.0	13.0	8	466	120	222	125	27	85	2	88	33	-	92	164	0.390	0.498	43.1	
	1	18	571.5	542.9	17.0	6	466	120	222	125	18	85	2	88	33	-	92	164	0.477	0.498	44.1	
	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 7.5...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	5.314	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	-	2.876	5.553	160
	2	24	733.4	692.2	21.0	12	755	-	180	316	210	22	158	-	158	-	14	250	-	3.244	5.553	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 <sub>F1</sub> and L <sub>F2</sub> in millimetres
AC 7	.NN.	F2.	14.	92

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

# ARCUSAFLEX®

Type AC...F2K

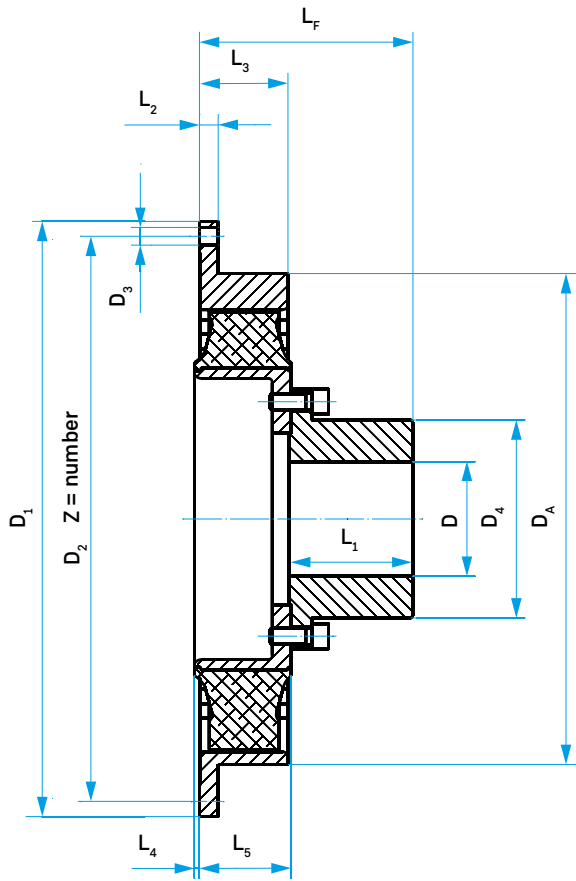


Fig. 1

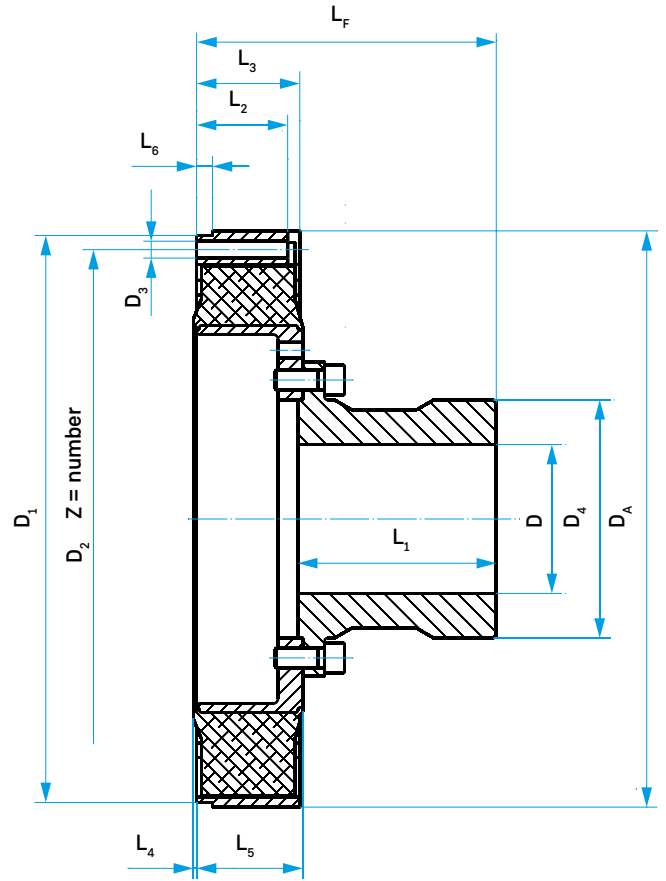


Fig. 2

## Coupling details

Coupling size	Flange connection for SAE J 620							D <sub>A</sub> [mm]	D min. [mm]	D max. [mm]	D <sub>4</sub> [mm]	L <sub>1</sub> [mm]	L <sub>2</sub> [mm]	L <sub>3</sub> [mm]	L <sub>4</sub> [mm]	L <sub>5</sub> [mm]	L <sub>6</sub> [mm]	L <sub>F</sub> [mm]	J <sub>1</sub> outside [kgm <sup>2</sup> ]	J <sub>2</sub> inside [kgm <sup>2</sup> ]	Total mass [kg]
	Fig.	SAE	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	Z	D <sub>A</sub>														
	Size	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]														
AC 2.6...F2K	2	8	263.5	244.5	10.5	6	263	unbored, precentered	55	78	65	33	38	3	42	-	104	0.012	0.015	4.7	
	1	10	314.3	295.3	10.5	8	266		55	78	65	10	38	3	42	-	104	0.021	0.015	5.1	
	1	11.5	352.4	333.4	10.5	8	266		55	78	65	10	38	3	42	-	104	0.026	0.015	5.3	
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	4.7	
	1	10	314.3	295.3	10.5	8	219		55	78	65	4	37	5	40	-	102	0.029	0.012	5.4	
	1	11.5	352.4	333.4	10.5	8	219		55	78	65	4	37	5	40	-	102	0.046	0.012	6.0	
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	0.041	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	0.063	0.084	14.8	
	1	14	466.7	438.2	13.0	8	320		85	127	95	16	77	-	79	-	172	0.096	0.084	15.7	
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	43.8	
	1	18	571.5	542.9	17.0	6	423		130	190	119	16	90	-	92	-	209	1.262	0.392	54.1	
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	1.947	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	0.931	59.6		
	1	21	673.1	641.4	17.0	12	515	155	227	162	18	84	0	84	-	245	0.967	0.931	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	1.197	67.4	
	1	21	673.1	641.4	17.0	12	562	75	165	240	140	20	92	0	103	-	237	1.316	1.201	74.2	
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	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	5.314	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.

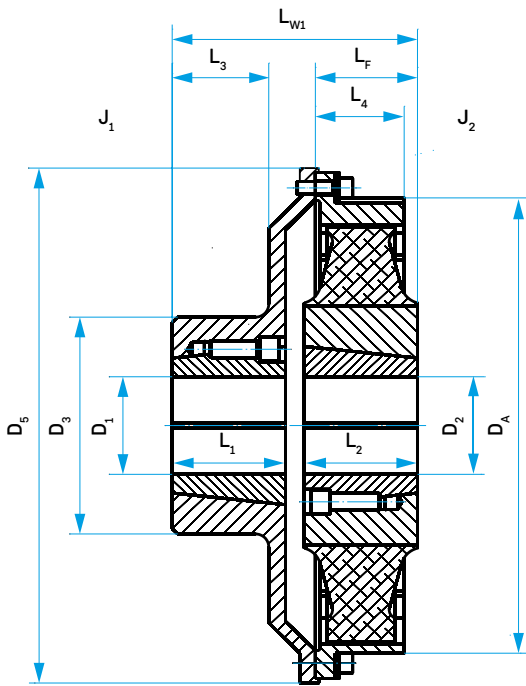
### Ordering example

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

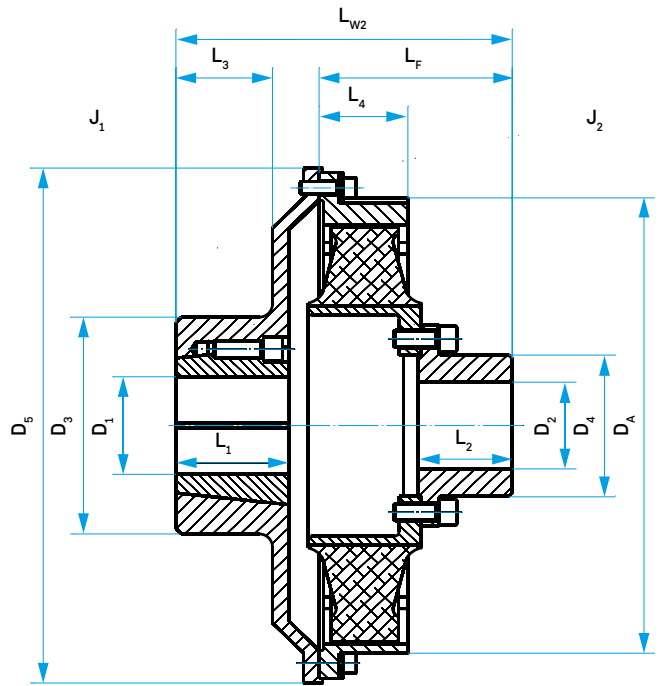
Coupling designation: AC 9 NN. F2K. 18. 237

# 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 <sub>3</sub>	D <sub>4</sub>	D <sub>5</sub>	D <sub>A</sub>	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	L <sub>4</sub>	L <sub>F</sub>	L <sub>W1</sub>	L <sub>W2</sub>	J <sub>1</sub>	J <sub>2</sub>	Total mass
	TB-No.	D <sub>1</sub> max. [mm]	TB-No.	D <sub>2</sub> max. [mm]														
AC-T 2.3...T	2012	48	2012	48	102	-	225	222	32	32	23	41	52	84	-	0.025	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	-	0.275	0.092	34.3
AC 4.9...TK	3535	90	-	85	170	127	360	320	89	95	74	77	172	-	289	0.275	0.084	33.4
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	71.5
AC 6.1...TK	4545	110	-	110	220	165	475	420	115	95	98	80	174	-	308	0.936	0.251	64.7
AC-T 6.5...T	4545	110	4535	110	220	-	475	420	115	90	98	90	92	226	-	1.003	0.434	78.8
AC 6.5...TK	4545	110	-	130	220	190	475	420	115	119	98	90	209	-	343	1.003	0.392	75.8
AC-T 7...T	4545	110	4535	110	220	-	475	465	115	90	98	85	87	221	-	1.071	0.617	87.7
AC 7...TK	4545	110	-	130	220	190	475	465	115	119	98	85	204	-	338	1.071	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 <sub>1</sub>	Taper bush nominal size and bore diameter D <sub>2</sub>
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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.

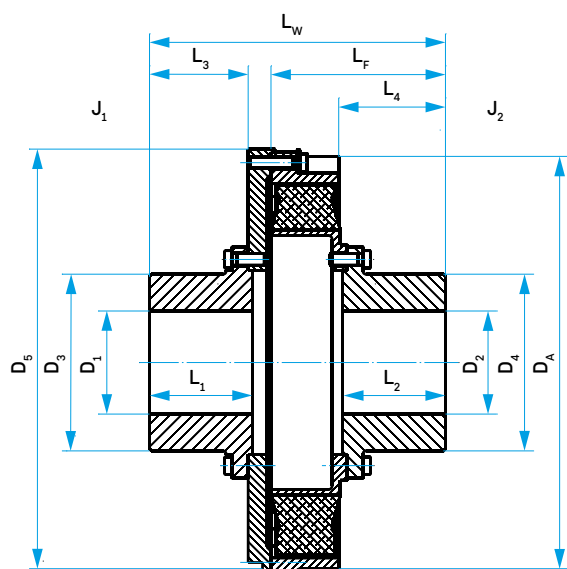
Coupling size	Element version according to "General Technical Data"	Version with separable flange for element changing	Nominal size of taper bush	Bore diameter D <sub>1</sub>
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AC 6.1	.NN.	TK.	4545.	110
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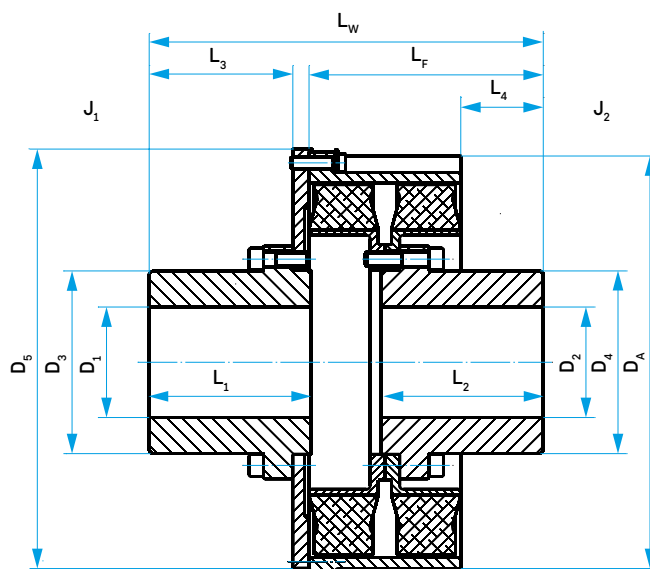
Coupling designation: AC 6.1 NN. TK. 4545. 110

# 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 <sub>1</sub> max. [mm]	D <sub>2</sub> max. [mm]	D <sub>3</sub> [mm]	D <sub>4</sub> [mm]	D <sub>5</sub> [mm]	D <sub>A</sub> [mm]	L <sub>1</sub> [mm]	L <sub>2</sub> [mm]	L <sub>3</sub> [mm]	L <sub>4</sub> [mm]	L <sub>F</sub> [mm]	L <sub>W</sub> [mm]	J <sub>1</sub> [kgm <sup>2</sup> ]	J <sub>2</sub> [kgm <sup>2</sup> ]	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	3.239	0.931	143
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	3.024	1.197	141
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	6.755	3.655	300
AC 12...TK	260	260	390	390	870	776	255	255	230	259	389	667	26.94	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

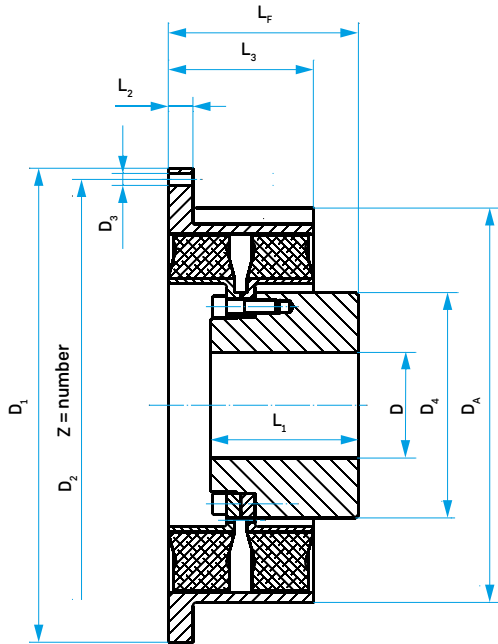


Fig. 1

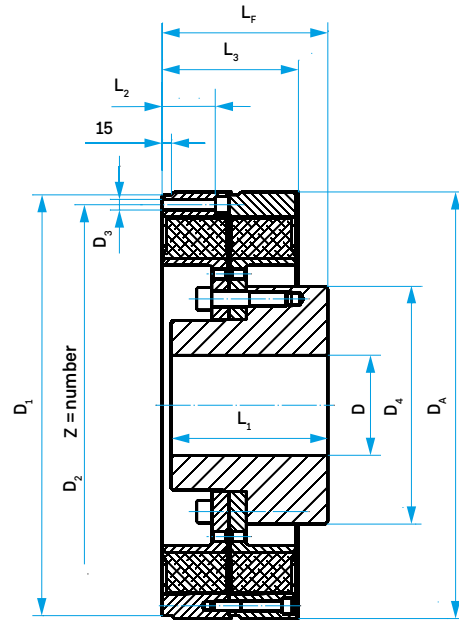


Fig. 2

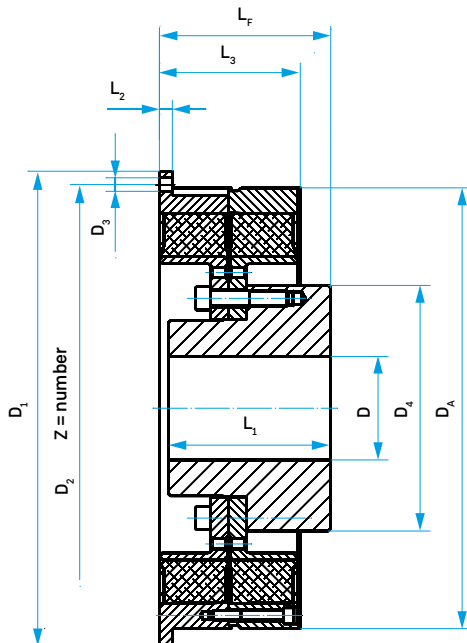


Fig. 3



## Coupling details

Coupling size	Fig.	Flange connection for SAE J 620															
		SAE	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	Z	D <sub>A</sub>	D		D <sub>4</sub>	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	L <sub>F</sub>	J <sub>1</sub> outside	J <sub>2</sub> inside	Total mass
		Size	[mm]	[mm]	[mm]		[mm]	min.	max.	[mm]	[mm]	[mm]	[mm]	[mm]	[kgm <sup>2</sup> ]	[kgm <sup>2</sup> ]	[kg]
									[mm]	[mm]							
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	1.532	2.697	140
	1	21	673.1	641.4	17.0	12	563	75	170	316	210	25	205	270	2.271	2.697	148
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	2.732	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	10.45	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 <sub>F</sub> in mm
AC 9D	.NN.	F2.	18.	270

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

# ARCUSAFLEX®

Type AC...D F2K

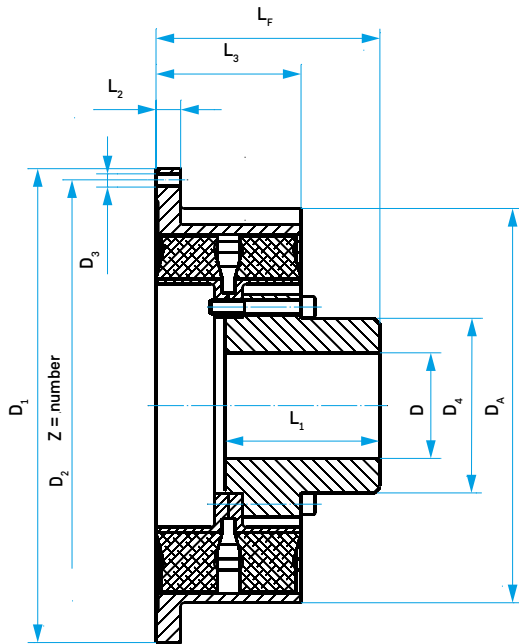


Fig. 1

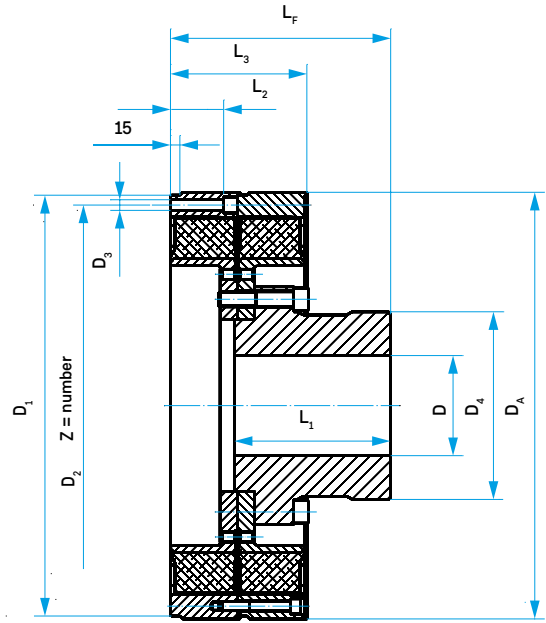


Fig. 2

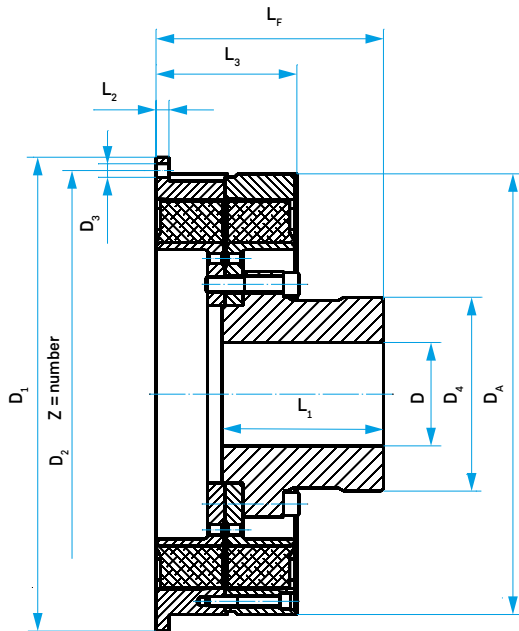


Fig. 3

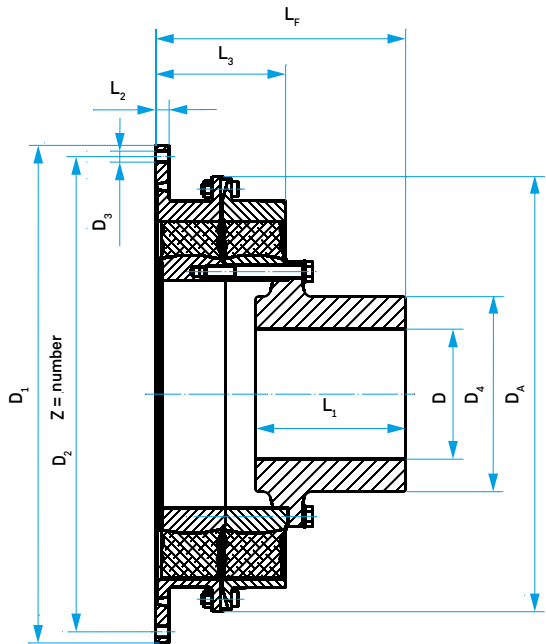



Fig. 4


## Coupling details

Coupling size	Fig.	Flange connection for SAE J 620															
		SAE Size	D <sub>1</sub> [mm]	D <sub>2</sub> [mm]	D <sub>3</sub> [mm]	Z	D <sub>A</sub> [mm]	D		D <sub>4</sub> [mm]	L <sub>1</sub> [mm]	L <sub>2</sub> [mm]	L <sub>3</sub> [mm]	L <sub>F</sub> [mm]	J <sub>1</sub> outside [kgm <sup>2</sup> ]	J <sub>2</sub> inside [kgm <sup>2</sup> ]	Total mass [kg]
								min.	max.								
								[mm]	[mm]								
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	153
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	10.45	7.862	310
AC 12D...F2K	4	-	860.0	820.0	22.0	32	870	90	260	390	300	19	258	496	22.01	18.10	495
	4	-	920.0	880.0	20.0	32	870	90	260	390	300	27	266	500	25.51	18.10	514
	4	-	995.0	950.0	22.0	32	870	90	260	390	300	27	266	500	30.30	18.10	535

 Other flange and length dimensions on request

## Ordering example

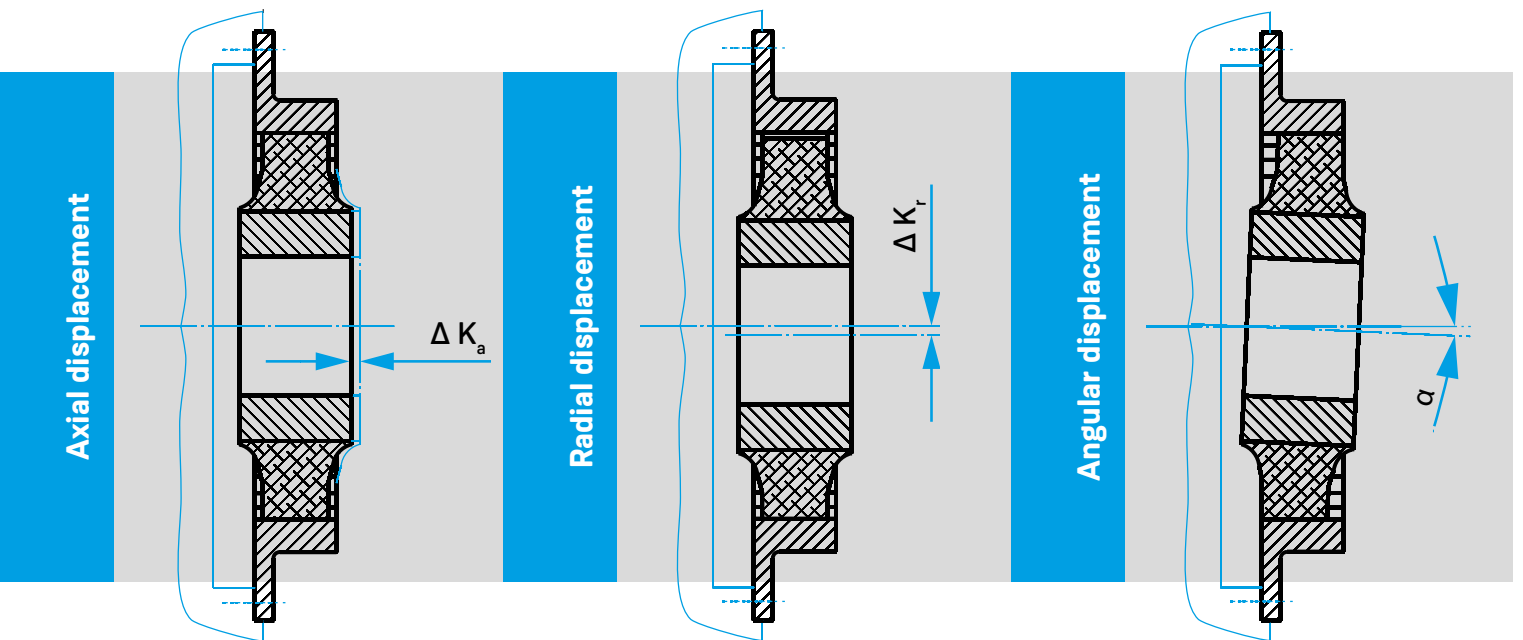
Coupling size	Element version according to "General Technical Data"	Version for element changing	Flange connection size acc.to SAE J 620 ( AC 12: D <sub>1</sub> )	Mounting length L <sub>F</sub> in mm
AC 10.2D	.NN.	F2K.	21.	350

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

# ARCUSAFLEX®

## 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 following reference values 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 *)	$\Delta K_a$ [mm]	±2.5	±3	±4	±7	+16/-6	±7	±5	±7	±4	±10	±7	±5	±4	±3	±4	±3
Max. permissible radial displacement	$\Delta K_r$ [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	$\alpha$ [°]	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: \_\_\_\_\_

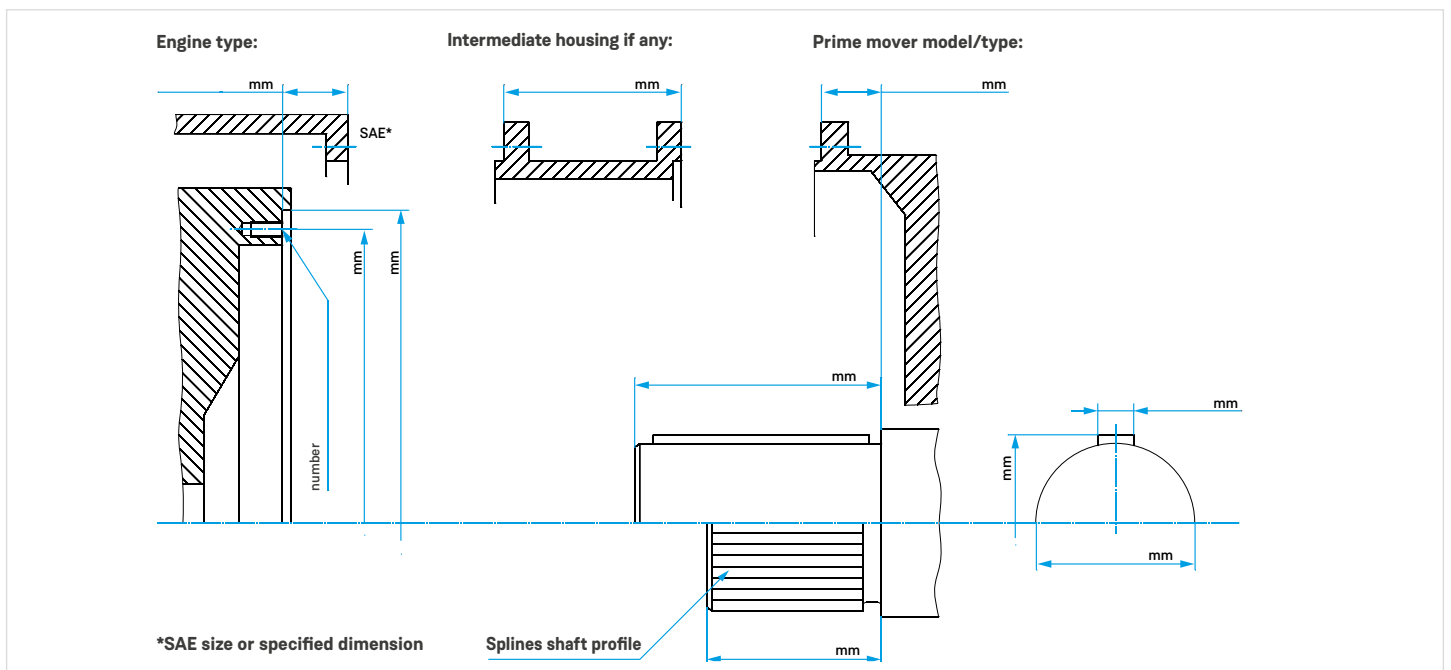
### Engine side

1. Engine (manufacturer, designation/type): \_\_\_\_\_  Diesel  Gas
2. Engine power (nominal operation): P \_\_\_\_\_ [kW]
3. Engine speed (nominal speed): n \_\_\_\_\_ [min<sup>-1</sup>]
4. Idling speed available?  yes  no  
If adjustable from: n \_\_\_\_\_ [min<sup>-1</sup>] to \_\_\_\_\_ [min<sup>-1</sup>]
5. If variable speed operation, speed range from: n \_\_\_\_\_ [min<sup>-1</sup>] to \_\_\_\_\_ [min<sup>-1</sup>]  
**!** 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 \_\_\_\_\_ [kgm<sup>2</sup>]  
Moments of inertia flywheel: J \_\_\_\_\_ [kgm<sup>2</sup>]  
Total moments of inertia of the engine (incl. damper, flywheel, etc.): J \_\_\_\_\_ [kgm<sup>2</sup>]

### Output side

1. Type (generator, pump transfer case, pump, compressor, ...): \_\_\_\_\_
2. Type (manufacturer, designation): \_\_\_\_\_
3. Moments of inertia: J \_\_\_\_\_ [kgm<sup>2</sup>]
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.

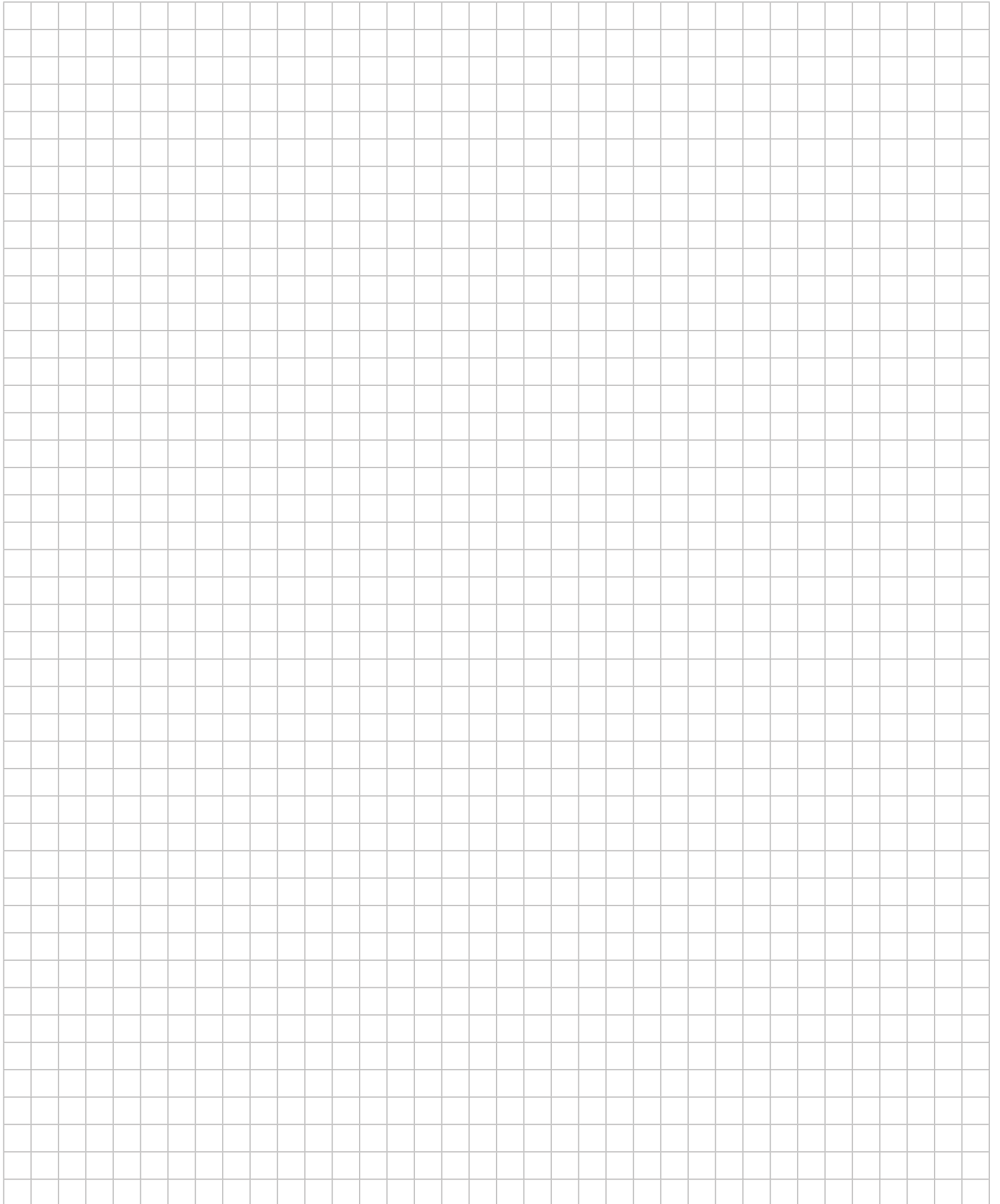
If the prime mover is to be flange-mounted to the engine with an intermediate housing, we require the following to determine an optimum mounting position; specified details and dimensions as in the following sketch:



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Notes

A large grid of graph paper for taking notes, consisting of 30 columns and 40 rows of small squares.











## ARCUSAFLEX®

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