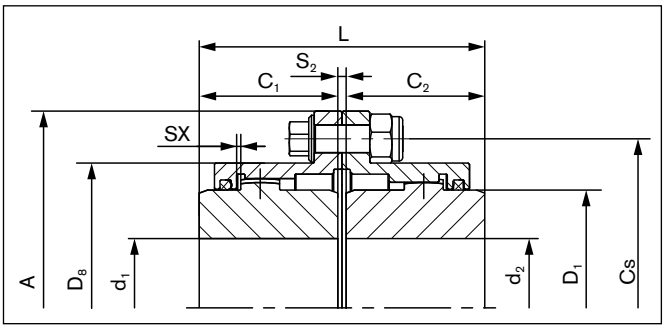
Gear couplings

ECZ 6460 ECOLOC

Combination with 2 short hubs



Sectional view

Dimensions

$d_{1k;2kmin}$ = Min. bore diameter with keyway according to DIN 6885-1
$d_{1k;2kmax}$ = Max. bore diameter with keyway according to DIN 6885-1
A = Max. outer diameter
D_1 = Outer diameter hub
D_8 = Outer diameter
C_1 = Guided length in hub boring d_1
C_2 = Guided length in hub boring d_2
C_S = Pitch circle (screws)
L = Total length
L (AB) = Total length (second choice)
L (BB) = Total length (third choice)
S_2 = Distance between the shaft ends
S_2 **(AB)** = Length of distance (second choice)
S_2 **(BB)** = Length of distance (third choice)
SX = Gap dimension

Metric dimensions

Size	$d_{1k};d_{2k}$ min - max	A	D_1	D_8	C_1	C_2	C_S	L	L (AB)	L (BB)	S_2	S_2 (AB)	S_2 (BB)	SX
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
69	12 - 50	111	69	82,5	43	43	96	89	91	93	3	5	7	1,5
85	18 - 60	142	85	104,5	50	50	122	103	108	113	3	8	13	1,5
107	28 - 75	168	107	130,5	62	62	148	127	138	149	3	14	25	1,5
133	40 - 95	200	133	158,5	76	76	178	157	164	171	5	12	19	2,5
152	50 - 110	225	152	183,5	90	90	203	185	199	223	5	19	43	2,5
178	60 - 130	265	178	211,5	105	105	236	216	237	258	6	27	48	3
209	70 - 155	300	209	245,5	120	120	270	246	272	298	6	32	58	3
234	85 - 170	330	234	275	135	135	300	278	307	336	8	37	66	4
254	95 - 190	370	254	307	150	150	335	308	350	392	8	50	92	4
279	110 - 210	406	279	335	175	175	368	358	403	448	8	53	98	4
305	120 - 230	438	305	367	190	190	400	388	438	488	8	58	108	4
355	130 - 270	505	355	423	220	220	460	450	512	574	10	72	134	5

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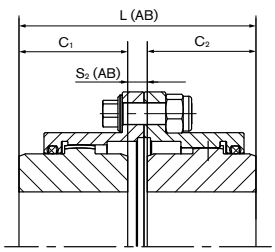
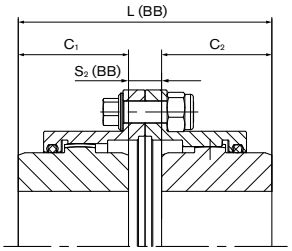
Ordering example: ECZ 6460 ECOLOC

Type, Size	Bore diameter d_{1k}	Bore diameter d_{2k}	Further details*
ECZ 6460-133	40	95	*

*) Without any other specification, we deliver as a standard with keyway according to DIN 6885-1, keyway side fit P9, bore tolerance H7



Model: AB
(One hub turned)

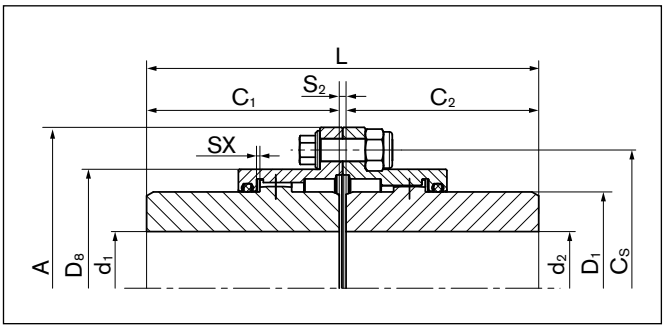


Model: BB
(Both hubs turned)

Gear couplings

ECZ 6469 ECOLOC

Combination with 2 long hubs



Sectional view

Dimensions

$d_{1k;2kmin}$	=	Min. bore diameter with keyway according to DIN 6885-1	D_8	=	Outer diameter	**SX**	= Gap dimension
$d_{1k;2kmax}$	=	Max. bore diameter with keyway according to DIN 6885-1	C_1	=	Guided length in hub boring d_1		
A	=	Max. outer diameter	C_2	=	Guided length in hub boring d_2		
D_1	=	Outer diameter hub	C_S	=	Pitch circle (screws)		
			L	=	Total length		
			S_2	=	Distance between the shaft ends		

Metric dimensions

Size	$d_{1k};d_{2k}$ min - max	A	D_1	D_8	C_1	C_2	C_S	L	S_2	SX
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
69	12 - 50	111	69	82,5	105	105	96	213	3	1,5
85	18 - 60	142	85	104,5	115	115	122	233	3	1,5
107	28 - 75	168	107	130,5	130	130	148	263	3	1,5
133	40 - 95	200	133	158,5	150	150	178	305	5	2,5
152	50 - 110	225	152	183,5	170	170	203	345	5	2,5
178	60 - 130	265	178	211,5	185	185	236	376	6	3
209	70 - 155	300	209	245,5	215	215	270	436	6	3
234	85 - 170	330	234	275	245	245	300	498	8	4
254	95 - 190	370	254	307	295	295	335	598	8	4
279	110 - 210	406	279	335	300	300	368	608	8	4
305	120 - 230	438	305	367	305	305	400	618	8	4
355	130 - 270	505	355	423	310	310	460	630	10	5

To continue see next page

Ordering example: ECZ 6469 ECOLOC

Type, Size	Bore diameter d_{1k}	Bore diameter d_{2k}	Further details*
ECZ 6469-133	40	95	*

*) Without any other specification, we deliver as a standard with keyway according to DIN 6885-1, keyway side fit P9, bore tolerance H7

Gear couplings

ECZ 6469 ECOLOC

Technical data

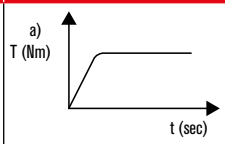
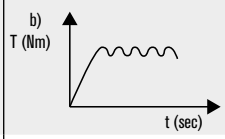
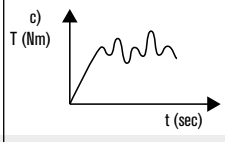
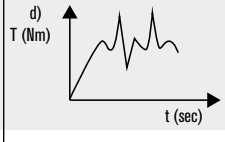
T_{KN} = Nom. transmissible torque
T_{Kmax} = Max. transmissible torque of the coupling
n_{max} = Max. rotation speed
T_{A3} = Tightening torque of the flange bolts (D_{G3})

n_{Sc3} = Quantity of screws at flange
D_{G3} = Thread of the flange screws
L_{Sc3} = Length of screw D_{G3}
ΔKr = Max. permissible radial misalignment
ΔKw = Max. permissible angular misalignment

G_w = Weight
G_{wGr} = Mass of grease

Technical data

Size	T_{KN}	T_{Kmax}	n_{max}	T_{A3}	n_{Sc3}	D_{G3}	L_{Sc3}	ΔKr	ΔKw	G_w	G_{wGr}
	Nm	Nm	1/min	Nm	pcs.	mm	mm	mm	Degree	kg	kg
69	1750	3500	6000	20	6	8	34	0,11	1	4	0,08
85	2750	5500	4600	35	8	10	32	0,13	1	8	0,09
107	5500	11000	4200	35	10	10	32	0,17	1	13	0,15
133	8500	17000	4000	65	10	12	40	0,19	1	26	0,26
152	13500	27000	3850	65	12	12	40	0,25	1	38	0,46
178	22000	44000	3700	145	12	16	62	0,29	1	59	0,70
209	35000	70000	3200	145	14	16	62	0,33	1	91	0,90
234	43000	86000	2900	145	14	16	62	0,38	1	120	1,50
254	68000	136000	2600	225	14	18	66	0,44	1	170	2,30
279	82000	164000	2300	395	14	22	72	0,50	1	230	3,20
305	150000	300000	2100	395	14	22	72	0,54	1	300	4,00
355	195000	390000	1800	515	16	24	80	0,64	1	450	6,00

Torque characteristics at operating point on outputside	Torque characteristics	Minimum load factor S_L
Constant, uniform without torque variation		1
Uniform with little variations, slight shocks		1,4
Non-uniform, also API-671, API-610 moderate shocks		1,75
Non-uniform, fluctuant, heavy shocks		2,5
Other torque characteristics		On request

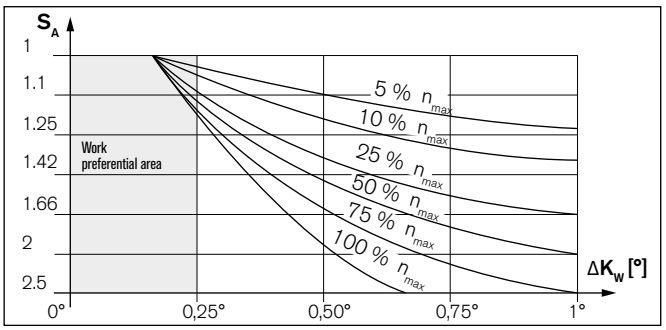
S_L = Load factor of output side

Dimensioning of coupling

For dimensioning of the gear coupling type ECZ multiply the transmissible equipment torque with a safety factor f.
Powered by electric motors use minimum load factor S_L as function of the torque characteristics at operating point multiply with S_A ($f=S_L \times S_A$) to get the safety factor f.

$T_{KN} \geq T_N \times f = 9550 \times P_N / n$

P_N = Operating performance
T_N = Operating torque



Subject to technical changes.