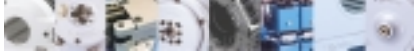


CCB - Combined Clutch and Brake

Description

CHARACTERISTICS
- ❒ Clutch = Pneumatically applied - spring released
- ❒ Brake = Spring applied - Pneumatically released
- ❒ Single disc design
- ❒ For dry use only

UTILISATION
- ❒ End-of-shaft or through shaft mounting
- ❒ Various mounting arrangements available
- ❒ Customised suspension plates available on request

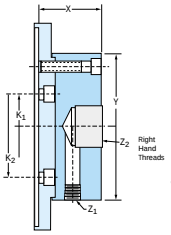
TYPICAL USES
- ❒ For stop/start cyclic applications requiring a pressure applied clutch and a spring applied brake within a single unit

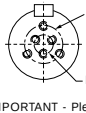
MOUNTING PRECAUTIONS
- ❒ Outer ring of clutch must be supported by Flywheel
- ❒ Outer ring of brake must be supported by machine frame
- ❒ Inner hub of CCB must be supported by machine shaft
- ❒ Designed for horizontal shaft axis. Consult Wichita if vertical mounting is required

SAFETY
- ❒ The CCB should be suitably guarded when in use

OPTIONAL END CAP AND SPIDER (AIR MANIFOLD)

Model Modell	K_1	K_2	X	Y	Z_1	Z_2
CCB 380	22,2 PCD (3 x 10,3 ø)	41,28 PCD (3 x 10,3 ø)	80	107	1/2 BSPT 2 @ 180°	1" - 14NS
CCB 470	31,75 PCD (3 x 10,3 ø)	63,5 PCD (3 x 10,3 ø)	80	107	1/2 BSPT 4 @ 90°	1" - 14NS
CCB 500	41,28 PCD (3 x 10,3 ø)	50,8 PCD (3 x 10,3 ø)	80	125	1/2 BSPT 4 @ 90°	1 1/2" - 12NF
CCB 550	50,8 PCD (3 x 10,3 ø)	76,2 PCD (3 x 10,3 ø)	80	125	1/2 BSPT 4 @ 90°	1 1/2" - 12NF
CCB 600	–	73,0 PCD (3 x 10,3 ø)	80	125	1/2 BSPT 4 @ 90°	1 1/2" - 12NF
CBC 675	–	73,0 PCD (3 x 10,3 ø)	80	125	1/2 BSPT 4 @ 90°	1 1/2" - 12NF
CCB 760	88,9 PCD (3 x 10,3 ø)	114,3 PCD (3 x 10,3 ø)	80	178	1/2 BSPT 4 @ 90°	1 1/2" - 12NF
CCB 830	CONSULT / NACHFRAGE WICHITA					
CCB 910	82,55 PCD (3 x 13,5 ø)	127 PCD (3 x 13,5 ø)	80	185	1/2 BSPT 6 @ 90°	2" - 12NF

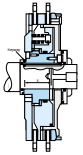




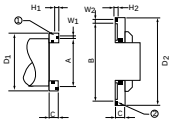
"IMPORTANT - Please note relationship of key-way to tapped holes for mounting end cap."

AIR SUPPLY AND PLATE DIMENSIONS

Model Modell	Dimension Abmessunge	Shaft cross drill Quarbohrung an des Welle	Air feed ø min Luftzuführung	Shaft end tapping Gewinde Wellende	A	B	C	D1	D2	H1	H2	W1	W2	"O" Ring ① TO BS4518 ②
CCB 170	31	ø 4	7	1/4 BSP x 20 DEEP	44,5	69,4	10	52	80	1,8	2,3	2,4	3	0446-24 0695-30
CCB 190	41	ø 5	9	3/8 BSP x 20 DEEP	44,5	69,4	10	52	80	1,8	2,3	2,4	3	0446-24 0695-30
CCB 230	47,5	ø 6	9	3/8 BSP x 20 DEEP	57,7	89,4	10	65	100	1,8	2,3	2,4	3	0576-24 0895-30
CCB 310	59	ø 8	13	1/2 BSP x 25 DEEP	79,4	109,4	10	88	120	2,3	2,3	3	3	0795-30 1095-30



NOTES:
1. Shaft cross drilling must be at 90° to keyway.
2. To aid shaft sealing, keyway must not extend past CCB limits.



Seals and Seal Plates supplied by customers

Air Sets

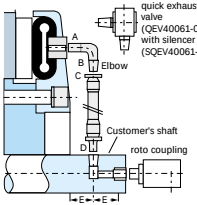
Hoses from the airtube inlets (spuds) are connected to the customers shaft. The shaft must be drilled radially and tapped 1/2" BSPT for these hoses and the end of the shaft drilled and tapped to suite the roto-coupling.

Alternatively, where the clutch/brake unit is mounted at the free end of the shaft, the unit can be supplied with an end cap and spider (air manifold).

For cycling duties and fastest response, silenced quick exhaust valves (SQEV) should be used. Where noise is not critical, quick exhaust valves without silencers (QEV) may be used. For other duties elbows are used instead of QEVs.

HOSES AND ROTO COUPLINGS

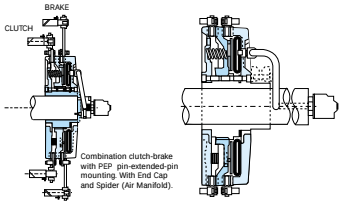
Model Modell	Response Ansprechge	# Hoses # Schläuche	Roto p/n Rotokupplung T-nr.	Pipe ø roto Rohr ø Roto
CCB 380	Standard / Normal	2	40067-740/-750	19
	Fast / Schnell	2	24181-014	19
CCB 470	Standard / Normal	4	40067-740/-750	19
	Fast / Schnell	4	24181-014	19
CCB 500	Standard / Normal	4	24181-040	25
	Fast / Schnell	4	Consult / Nachfrage WICHITA	
CCB 550	Standard / Normal	4	24181-040	25
	Fast / Schnell	4	Consult /Nachfrage WICHITA	
CCB 600	Standard / Normal	4	24181-040	25
	Fast / Schnell	4	Consult / Nachfrage WICHITA	
CCB 675	Standard / Normal	4	24181-040	25
	Fast / Schnell	4	Consult / Nachfrage WICHITA	
CCB 760	Standard / Normal	4	24181-040	25
	Fast / Schnell	4	Consult / Nachfrage WICHITA	
CCB 830	Standard / Normal	6	24181-045	38
	Fast / Schnell	6	Consult / Nachfrage WICHITA	
CCB 910	Standard / Normal	6	24181-045	38
	Fast / Schnell	6	Consult / Nachfrage WICHITA	



THREAD SIZES
Threads A and D are 1/2" NPT which is compatible with 1/2" BSPT.
Threads B and C are 7/8" SAE for hose swivel fitting. Dimension E is 25 mm, 45 mm maximum.
Check assembly drawing for position of shaft holes relative to keyway. Shaft hole size should equal Roto Coupling bore.

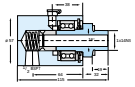
Air set coding example / Beispiel für Luftzatzbezeichnung			Air set No. / Luftsatz Nr.	422 – 18 – RSQ
Qty of air connections / Anzahl der Luftanschlüsse	Qty of fittings / Anzahl der Armaturen	Qty of hoses / Anzahl der Schläuche	Approx hose lenght (*) ca. Schlauchlänge (*)	
4	2	2	– 18 –	

RSQ
- R = roto / Drehkupplung
- E = elbows / Krümmer
- Q = QEV / Schnellentlüftungsventil
- SQ = silenced QEV / Schallgedämpftes Schnellentlüftungsventil

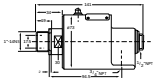


Combination clutch-brake with PEP pin-extended-pin mounting. With End Cap and Spider (Air Manifold).

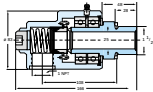
1/2" Roto Coupling Part No 40067-750



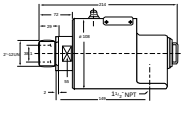
3/4" Roto Coupling Part No 24181-014



1" Roto Coupling Part No 24181-040



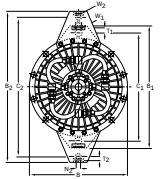
1 1/2" Roto Coupling Part No 24181-045

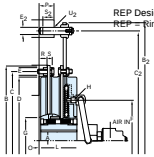


CCB - Combined Clutch and Brake

Wichita Clutch

Performance





REP Design/Konstruktion
REP = Ring to extended Pin/Ring zum verlängerten Stift

Model Modell	Static clutch torque Statsche Kupplungs-drehmoment @ 5,5 bar (Nm)[2]	Dynamic brake torque Dynamische Bremsmoment (Nm)[2]	Max speed Max Drehzahl[1] (min⁻¹)	Inertia / Trägheit Internal parts Interne Teile (kgm²)	Inertia / Trägheit RR style external RR Typ externe Teile (kgm²)	Total weight Gesamt-gewicht (kg)	Airtube displacement Balgvolumen new neu (cm³)	Airtube displacement Balgvolumen worm abgenutz (cm³)
CCB 170/13	130	150	3450	0,013	0,004	5,4	40	60
CCB 170/17	170	110	3450	0,013	0,004	5,4	40	60
CCB 170/21	205	75	3450	0,013	0,004	5,4	40	60
CCB 170/25	245	35	3450	0,013	0,004	5,4	40	60
CCB 190/21	205	240	3050	0,024	0,006	7,7	40	85
CCB 190/27	265	180	3050	0,024	0,006	7,7	55	85
CCB 190/33	325	120	3050	0,024	0,006	7,7	55	85
CCB 190/39	385	60	3050	0,024	0,006	7,7	55	85
CCB 230/41	410	465	2425	0,075	0,020	14,1	55	145
CCB 230/53	525	350	2425	0,075	0,020	14,1	145	
CCB 230/64	640	235	2425	0,075	0,020	14,1	90	145
CCB 230/76	755	120	2425	0,075	0,020	14,1	90	145
CCB 310/92	915	1050	1875	0,221	0,060	27,7	90	275
CCB 310/118	1180	785	1875	0,221	0,060	27,7	165	275
CCB 310/144	1440	525	1875	0,221	0,060	27,7	165	275
CCB 310/171	1705	260	1875	0,221	0,060	27,7	165	275
CCB 380/260	2596	2030	1550	0,52	0,17	45	165	210
CCB 380/310	3100	1525	1550	0,52	0,17	45	45	210
CCB 380/360	3600	1015	1550	0,52	0,17	45	45	210
CCB 380/417	4120	505	1550	0,52	0,17	45	45	210
CCB 470/490	4900	3890	1250	1,4	0,67	86	45	415
CCB 470/587	5870	2920	1250	1,4	0,67	86	70	415
CCB 470/685	6845	1945	1250	1,4	0,67	86	70	415
CCB 470/780	7800	975	1250	1,4	0,67	86	70	415
CCB 550/769	7685	6095	1060	3,0	0,97	132	70	785
CCB 550/921	9210	4570	1060	3,0	0,97	132	152	785
CCB 550/1073	10733	3050	1060	3,0	0,97	132	152	785
CCB 550/1226	12260	1525	1060	3,0	0,97	132	152	785
CCB 600/999	9900	8090	970	5,0	3,0	172	152	860
CCB 600/1200	12000	6070	970	5,0	3,0	172	165	860
CCB 600/1404	14035	4045	970	5,0	3,0	172	165	860
CCB 600/1606	16060	2220	970	5,0	3,0	172	165	860
CCB 675/1490	14900	11910	860	8,8	3,4	240	165	1375
CCB 675/1788	17875	8930	860	8,8	3,4	240	290	1375
CCB 675/2085	20845	5955	860	8,8	3,4	240	290	1375
CCB 675/2382	23820	2975	860	8,8	3,4	240	290	1375
CCB 760/2148	21480	17380	765	15,6	6,5	345	290	1765
CCB 760/2583	25825	13035	765	15,6	6,5	345	370	1765
CCB 760/3017	30170	8690	765	15,6	6,5	345	370	1765
CCB 760/3450	34500	4345	765	15,6	6,5	345	370	1765
CCB 830/2875	28750	22480	700	19,2	9,5	288	500	2400
CCB 830/3499	34990	16870	700	19,2	9,5	288	500	2400
CCB 830/3811	38110	14055	700	19,2	9,5	288	500	2400
CCB 830/4434	44345	8430	700	19,2	9,5	288	500	2400
CCB 910/3915	39150	29160	640	34,5	11,8	540	820	3220
CCB 910/4643	46430	21870	640	34,5	11,8	540	820	3220
CCB 910/5373	52725	14580	640	34,5	11,8	540	820	3220
CCB 910/6600	66000	7290	640	34,5	11,8	540	820	3220

1) For continuous running only. In the case of high speeds it is necessary to balance the unit.
2) For dry running only, it is essential to keep the friction surfaces free of lubricants.

1) Nur für Dauerbetrieb. Bei hohen Drehzahlen muß die Einheit ausgewuchtet werden.
2) Nur für Trockenlaufbetrieb, es ist wichtig, daß die Reibflächen frei von Schmiermitteln gehalten werden.

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MEX (55) 53 63 23 31
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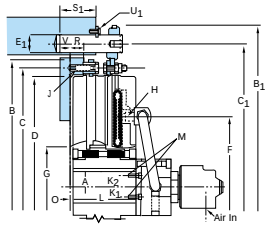
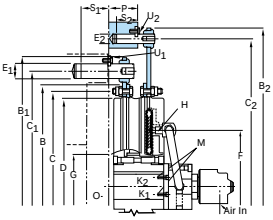
INDUSTRIAL Magza®
DIST. AUTORIZADO

Dimensions

RP Design/Konstruktion
RP = Ring to Pin/Ring zu Stift



PEP Design/Konstruktion
PEP = Pin to Extended Pin/Stift zu verlängertem Stift



This sketch shown with optional End Cap and Spider (Air Manifold).

Diese Skizze zeigt eine wahlweise Endkappe und Luftzusammenführung

	Model Modell	CCB 170	CCB 190	CCB 230	CCB 310	CCB 380	CCB 470	CCB 550	CCB 600	CCB 675	CCB 760	CCB 830	CCB 910
Diameters / Durchmesser (mm)	A max	35	35	45	65	80	95	110	125	140	160	180	180
	B	198	220	275	347	435	535	620	680	775	865	953	1025
	B_1	262	282	360	435	560	695	780	870	1000	1090	1252	1340
	B_2	337	357	442	522	680	855	950	1075	1235	1335	1602	1670
	C ± .18	182	205	255	325	408	500	584	640	725	810	890	965
	C_1 ± .18	230	250	315	390	495	610	695	770	880	970	1100	1180
	C_2 ± .18	305	325	410	490	635	790	885	990	1135	1235	1450	1525
	D	166	188	236	304	380	470	550	600	675	760	830	910
	E	10	10	12	15	18	25	25	30	35	40	45	45
	E_1	14	14	22	22	30	40	40	45	55	55	75	75
	E_2	14	14	14	14	22	30	30	30	45	45	65	65
	F	–	–	–	–	257	314	351	403	406	483	565	619
	G	–	–	–	–	152	178	241	254	273	328	-	382
	H	–	–	–	–	1/2"BSP	1/2"BSP	1/2"BSP	1/2"BSP	1"NPT	1"NPT	1" NPT	1"NPT
	K_1	–	–	–	–	22,22	31,75	50,80	–	–	88,90	-	82,55
	K_2	–	–	–	–	41,28	63,50	76,20	73,02	73,02	114,30	-	127
	W_1	4,5	4,5	5,5	5,5	5,5	7	7	7	9	9	-	11
	W_2	4,5	4,5	4,5	4,5	5,5	85,56	5,5	7	7	7	-	9
Length / Länge (mm)	L	46	58	66	82	112	140	160	185	205	230	203	260
	N_1	20	20	25	25	25	35	35	35	45	45	45	60
	N_2	20	20	20	20	25	25	25	35	35	35	45	45
	O	2	3	4	4	12	10,5	13	12,5	12,5	12,5	13	22,5
	O_1	5,5	5,5	8,5	10	–	–	–	–	–	–	-	–
	P	22	27	32	39	52	66,5	80,5	81	98,5	107,5	109,7	124,5
	P_1	25,5	29,5	36,5	45	–	–	–	–	–	–	-	–
	R	6	10	13	15	24,5	28,5	34	33,5	36	40,5	49,3	53,5
	S	11	11	13	16	19	22	29	27	32	37	45	45
	S_1	25	28	45	45	60	80	80	90	110	110	150	150
	S_2	25	28	28	28	45	60	60	80	90	90	130	130
	T_1	11	11	16	16	20	27	27	29,5	38,5	38,5	43,5	52,5
	T_2	11	11	11	11	16	20	20	27	29,5	29,5	43,5	43,5
	V	3	0	13	10	8	13,5	-0,5	9	11,5	2,5	-	25,5
Thread Gewinde	J	M5	M5	M6	M8	3/8"-16NC	1/2"-13NC	1/2"-13NC	5/8"-11NC	3/4"-10NC	7/8"-9NC	1"-8 NC	1/8"-NC
	M	–	–	–	–	3/8"-16NC	3/8"-16NC	3/8"-16NC	3/8"-16NC	3/8"-16NC	3/8"-16NC	-	1/2"-13NC
	U_1	M4	M4	M5	M5	#10-24NC	1/4"-20NC	1/4"-20NC	1/4"-20NC	5/16"-18NC	5/16"-18NC	5/16"-NC	3/8"-16NC
	U_2	M4	M4	M4	M4	#10-24NC	1/4"-20NC	1/4"-20NC	1/4"-20NC	5/16"-18NC	5/16"-18NC	3/8"-16NC	3/8"-16NC

RR = Ring to Ring. RP = Ring to Pin
PP = Pin to Pin. PEP = Pin to Extended Pin.
Larger bores available with shallow keys.
Max operating pressure P max = 7 bar.
All ring mountings use 12 off bushes "E" diameter, equally spaced on "C" pitch circle diameter.
Non standard suspension plates may be available on request, certified prints showing exact dimensions are sent with every order and should be obtained before finalising any design details.

RR = Ring zu Ring. RP = Ring zu Stift
PP = Stift zu Stift. PEP = Stift zu verlängertem Stift
Größere Bohrungen mit flachen Keilen erhältlich.
Max. Betriebsdruck P max. = 7 Bar
Alle Ringeinbauten verwenden 12 Buchsen, Durchmesser "E", gleichmäßig auf dem "C" Kreisdurchmesser verteilt.
Sonderaufhängungen bei Bedarf erhältlich, beglaubigte Zeichnungen mit genauen Dimensionen werden mit jedem Auftrag verschickt und sollten verfügbar sein bevor die Konstruktion im Detail festgelegt wird.