## PRODUCT GUIDE - WC-CF SERIES PNEUMATIC ACTUATOR -



#### **EXPECT QUALITY AND RELIABILITY**

using our brand name CF SERIES PNEUMATIC ACTUATOR

Version 4.



#### **Head Office:**



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DOMESTIC PRODUCTS MADE IN NORTH AMERICA

Details are the difference between ordinary and EXCELLENCE

#### **BODY**



#### INTERNAL BODY PARTS



#### **CYLINDER**



#### **SPRING MODULE**



# CF SERIES DESIGN & CONSTRUCTION

Internal O-ring to ensure water ingress protection.

NUMUR standard for all sizes for assembly of switch boxes and positioners.

Front and rear threaded components for easy assembly of a pneumatic control panel.

Round rolled used for reducing friction between the yoke arm and pin, minimizing the wear.

Replaceable bearings protect the sliding and rotating components. Suitable for dry or lubricated working conditions.

PTFE thrust bar prevents yoke pin axial movement, transferring axial loads directly to the drive module case.

Connects the piston rod with the guide block, compensating for side load deflection and reducing wear on rod, bearings, and seats.

CYLINDER The inner surface of the cylinder is coated by PTFE to prevent resistance and self-lubricating.

PISTONS SEALS Double sealing with O-ring and dynamic ring to prevent metal on metal contact between the piston and the cylinder.

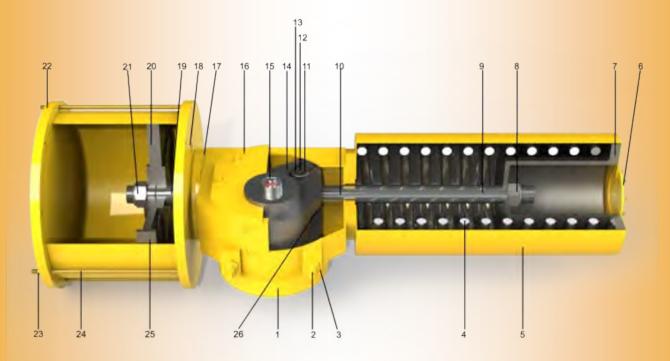
Safe spring lock prevents spring module detachment from the drive module.

Internal hydraulic cylinder for manual pump override.

## Weir USA at work for you

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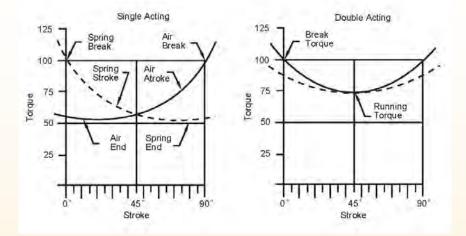
### **CF SERIES PARTS & MATERIAL**



No.	Name	Material
1	Body	Ductile Iron
2	Adjust Stud	Alloy Steel
3	Nut	2H
4	Spring	Alloy Steel
5	Spring Case	Carbon Steel
6	Cover Plate	Carbon Steel
7	Spring Seat	Carbon Steel
8	Nut	2H
9	Tension Rod	Alloy Steel
10	Sliding Bearing	Metal+TFE
11	Roller	Alloy Steel
12	Slider Bearing	Metal +TFE
13	Pin	Alloy Steel
14	Yoke	Carbon Steel
15	Drive Shaft	Alloy Steel
16	Body Cap	Ductile Iron
17	Bolting	Carbon Steel
	Adapter plate	Ductile Iron
19	Oring	NBR
20	Piston	Ductile Iron
21	Nut	2H
22	End Cap	Ductile Iron
23	Nut	2H
24	Body Screw	AlloySteel
25	Oringseals	NBR
26	Guide Block	Ductile Iron

# Solutions for your company needs

# **Solutions** for your **company** needs



**Double Acting Unit:** in-lb

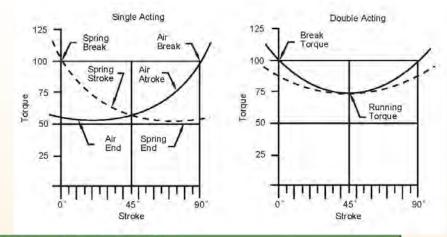
				All Torqu	es listed be	low in-lb						
	Man Tanana at	Air Pressure										
Model	Max Torque of Drive Module	45	45 psig		60psig		75psig		87psig		100psig	
	Drive Module	Break	Run	Break	Run	Break	Run	Break	Run	Break	Run	
CF14-200		7346	4461	9798	5948	12249	7426	14692	8913	17144	10400	
CF14-250	17701	11488	6966	15312	9284	19144	11612					
CF14-300	A 1.5 M	16471	9992									
CF16-250		14356	8709	19144	11612	23932	14515	28721	17418	33509	20321	
CF16-300	35403	20675	12541	27570	16719	34465	20905					
CF16-350		28145	17073	37527	22764							
CF25-350	1 1	34748	21074	46333	28101	57910	35128	69496	42156	11		
CF25-400	70806	44112	26756	58822	35677	73523	44599			1	44	
CF25-450		55839	33872	74452	45165							
CF30-450	17	68239	41395	90985	55193	111342	67540	136478	82789			
CF30-500	141611	84250	51104	112342	68150	140425	85188					
CF30-550		101951	61849	135938	82462							
CF35-550		129751	78709	173005	104952	216249	131185	259503	157427	302756	183670	
CF35-600	283222	154418	93676	205894	124901	257361	156126	308836	187360		1	
CF35-700		210186	127512	280249	170013							
CF40-600			4-1			312518	189591	375031	227516	437534	265432	
CF40-700	557594		7	340301	206443	425382	258060	510455	309668	595528	361286	
CF40-800		333353	202230	444473	357267	555594	337052					
CF48-800				1		653642	396538	784376	475849	915100	555160	
CF48-900	1106338			661811	401494	827257	501861	992712	602237	1158167	702613	
CF48-1000		612796	371756	817061	495683	1021327	619602					
CF60-800			7 7					1058907	642402	1235390	749468	
CF60-900	2012675			893452	542026	1116808	677530	1340173	813034	1563538	948538	
CF60-1000	2212675	827266	501870	1103027	669166	1378780	836453	1654541	1003749	1930293	1171036	
CF60-1100		1000988	607264	1334659	809689	1668322	1012113	2001984	1214528	2335647	1416953	

# Solutions for your company needs

Spring Return Acting

Spring for Air Pressure is 45psi

Unit: in-lb

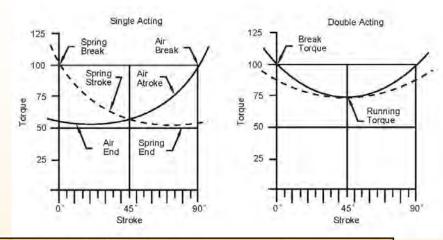


All Torques listed below in-lb									
Model	Max Torque of Drive Module	Spring break	Spring end	Air break	Air end				
CF14-200		4523	2717	4629	2815				
CF14-250	17701	6983	4478	7001	4496				
CF14-300		9550	5965	10568	6992				
CF16-250		9665	5372	8975	4682				
CF16-300	35403	12692	7895	12780	7983				
CF16-350		16781	10860	17285	11355				
CF25-350		19905	13011	20764	13869				
CF25-400	70806	26517	16772	27340	16843				
CF25-450		35049	22428	33403	20781				
CF30-450		42359	25570	42669	25879				
CF30-500	141611	53494	31287	52963	30756				
CF30-550		60778	38492	63451	41165				
CF35-550		81249	47794	81957	48502				
CF35-600	283222	97499	56450	97968	56910				
CF35-700		127884	78833	131344	82294				
CF40-600	-	116219	71815	115687	71284				
CF40-700	557594	144789	90914	164304	110430				
CF40-800		189635	120954	212399	143718				
CF48-800		235597	144983	247200	156578				
CF48-900	1106338	299543	184334	312023	196813				
CF48-1000		405265	257529	355267	207522				
CF60-800		325706	201840	316846	192990				
CF60-900	2212675	417027	246421	423656	253059				
CF60-1000	2212675	561117	338637	488621	266149				
CF60-1100		698126	435605	565392	302862				

## **Solutions** for your **company** needs

Unit: in-lb

Spring Return Acting
Spring for Air Pressure is 6opsi

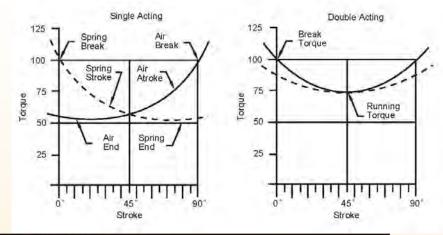


		All Torques lis	ted below in-lb			
Model	Max Torque of Drive Module	Spring break	Spring end	Air break	Air end	
CF14-200		6010	3859	5939	3788	
CF14-250	17701	9550	5965	9346	5762	
CF14-300		13072	8390	13665	8983	
CF16-250		11338	7240	11904	7806	
CF16-300	35403	16781	10860	16710	10789	
CF16-350		22968	14418	23109	14559	
CF25-350		26517	16772	28260	18516	
CF25-400	70806	35049	22428	36394	23773	
CF25-450		43855	26543	47900	30588	
CF30-450		56016	33810	57184	34978	
CF30-500	141611	70177	43094	69248	42156	
CF30-550		82975	51546	84383	52954	
CF35-550		108837	66212	106793	64168	
CF35-600	283222	127884	78833	127061	78001	
CF35-700		168774	102217	178023	111466	
CF40-600		144789	90914	159100	105217	
CF40-700	557594	189635	120954	219338	150665	
CF40-800		265654	166013	278452	178811	
CF48-800		299543	184334	338575	223365	
CF48-900	1106338	405265	257529	404273	256546	
CF48-1000		507570	311545	505508	309491	
CF60-800		417027	246421	459511	288905	
CF60-900	2212675	561117	338637	554806	332326	
CF60-1000	2212675	698126	435605	667422	404893	
CF60-1100		848702	514907	819752	485957	

# **Solutions** for your **company** needs

Spring Return Acting
Spring for Air Pressure is 75psi

Unit: in-lb

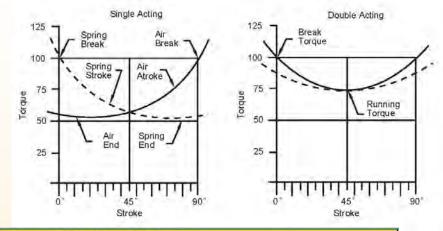


All Torques listed below in-lb									
Model	Max Torque of Drive Module	Spring break	Spring end	Air break	Air end				
CF14-200		6983	4478	7762	5257				
CF14-250	17701	11904	7213	11922	7240				
CF14-300		16639	10674	16887	10931				
CF16-250		13745	8948	14975	10178				
CF16-300	35403	21428	12878	21578	13028				
CF16-350		28269	18454	28455	18640				
CF25-350		35049	22428	33863	21242				
CF25-400	70806	43855	26543	46988	29668				
CF25-450		55990	32978	60079	37067				
CF30-450		70177	43094	69850	43563				
CF30-500	141611	82975	51546	88879	57441				
CF30-550		101128	62769	107147	68788				
CF35-550		127884	78833	137425	88365				
CF35-600	283222	160950	95163	162207	96420				
CF35-700		211213	124875	225427	139089				
CF40-600		189635	120954	191565	122883				
CF40-700	557594	265654	166013	259361	159720				
CF40-800		313536	191874	363720	242058				
CF48-800		405265	257529	396113	248377				
CF48-900	1106338	507570	311545	515721	319696				
CF48-1000		616026	377199	644119	405291				
CF60-800		561117	338637	543778	321298				
CF60-900	2212675	698126	435605	681212	418682				
CF60-1000	22120/5	848702	514907	863873	530077				
CF60-1100		994544	635162	1033169	673777				

# **Solutions** for your **company** needs

Spring Return Acting
Spring for Air Pressure is 87psi

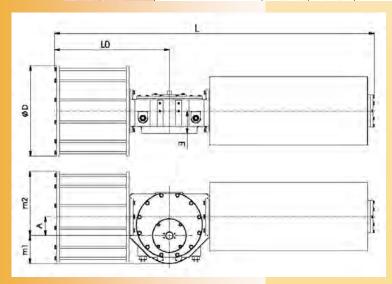
Unit: in-lb



All Torques listed below in-lb									
Model	Max Torque of Drive Module	Spring break	Spring end	Air break	Air end				
CF14-200		9099	5514	9178	5602				
CF14-250	17701	13072	8390	14586	9895				
CF14-300		20277	12904	20180	12807				
CF16-250	1	16781	10860	17861	11931				
CF16-300	35403	22968	14418	26942	18383				
CF16-350		34146	21649	34642	22144				
CF25-350		43855	26543	41005	23693				
CF25-400	70806	55990	32978	55255	32243				
CF25-450		73116	41775	69894	38562				
CF30-450		82975	51546	84949	53511				
CF30-500	141611	101128	62769	105872	67380				
CF30-550		124618	73850	130052	79276				
CF35-550	0	160950	95163	164349	98561				
CF35-600	283222	198884	112546	196300	109961				
CF35-700		256254	153011	267353	164119				
CF40-600		235694	148940	226082	136929				
CF40-700	557594	313536	191874	318581	196910				
CF40-800		422550	259326	407389	253068				
CF48-800		507570	311545	472849	276806				
CF48-900	1106338	616026	377199	615522	376695				
CF48-1000		731776	460024	765559	493807				
CF60-800		698126	435605	625957	360772				
CF60-900	2212675	848702	514907	825266	491471				
CF60-1000	2212675	994544	635162	1019379	659997				
CF60-1100									

### **CF SERIES SPRING RETURN ACTING DIMENSIONS**

Mode1	Connect Flange	L	L0	m1	m2	A	В	D	Air Port
CF14-200SR4		1105	449	87. 5	187. 5	60	88	255	RC3/8"
CF14-250 SR4	F14	1105	449	87. 5	212. 5	60	88	305	RC1/2"
CF14-300 SR4		1125	449	87. 5	237.5	60	<b>8</b> 8	360	RC1/2"
CF16-250 SR4		1289	499	105	222. 5	70	92	30 <b>5</b>	RC1/2"
CF16-300 SR4	F16	1289	499	105	247. 5	70	92	360	RC1/2"
CF16-350 SR4		1318	499	105	272. 5	70	92	415	RC1/2"
CF25-350 SR4		1576	556	150	292. 5	90	104	415	RC1/2"
CF25 -400 SR4	F25	1576	556	150	317.5	90	104	465	RC3/4"
CF25 -450 SR4		1674	556	150	350	90	104	520	RC3/4"
CF30-450 SR4		1807	662	175	370	110	130	520	RC3/4"
CF30-500 SR4	F30	1807	662	175	395	110	130	570	RC3/4"
CF30-550 SR4		1807	662	175	420	110	130	620	RC3/4"
CF35-550 SR4		2005	817	207.5	450	140	165	620	RC3/4"
CF35 -600 SR4	F35	2005	817	207.5	450	140	165	670	RC1 "
CF35 -700 SR4		2005	817	207.5	475	140	165	770	RC1 "
CF40-600 SR4		2695	960	237. 5	505	170	200	670	RC1 "
CF40-700 SR4	F40	2695	960	237.5	555	170	200	770	RC1 "
CF40-800 SR4		2695	960	237.5	607. 5	170	200	875	RC1. 1/2"
CF48-800 SR4		3395	1130	280	637. 5	200	210	875	RC1.1/2"
CF48-900 SR4	F48	3395	1130	280	687. 5	200	210	975	RC2 "
CF48-1000SR4		3585	1130	280	787. 5	200	210	1075	RC2 "
CF60-800 SR4		4185	1380	343	707. 5	270	230	875	RC1.1/2"
CF60-900 SR4	EGO	4185	1380	343	757. 5	270	230	975	RC2 "
CF60-1000 SR4	F60	4750	1380	343	807. 5	270	230	1075	RC2 "
CF60-1100 SR4		4750	1380	343	857. 5	270	230	1175	RC2 "



#### **Spring Return Acting**

Dimension above chart are only for the spring return actuators.

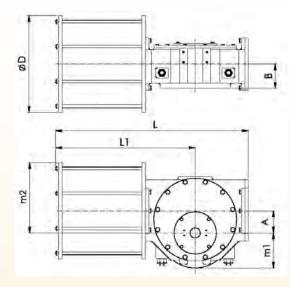
Spring size is 4Bar (6opsi)

For more information contact our tech support (780.462.1910)

OR toll free 1.866.462.1910

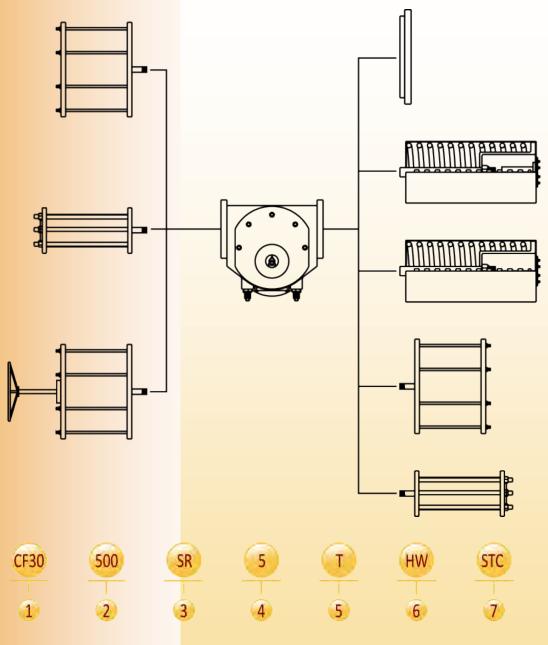
### **CF SERIES SPRING RETURN ACTING DIMENSIONS**

# Solutions for your company needs



Mode1	Connect Flange	L	L1	m 1	m2	A	В	D	Air Port
CF14-200DA		594	449	87. 5	187. 5	60	88	255	RC3/8"
CF14-250 DA	F14	594	449	87. 5	212. 5	60	88	305	RC1/2"
CF14-300 DA		594	449	87. 5	237. 5	60	88	360	RC1/2"
CF16-250DA		679	499	105	222. 5	70	92	305	RC1/2"
CF16-300DA	F16	679	499	105	247. 5	70	92	360	RC1/2"
CF16-350DA		679	499	105	272.5	70	92	415	RC1/2"
CF25-350DA		766	556	150	292. 5	90	104	415	RC1/2"
CF25-400DA	F25	766	556	150	317.5	90	104	465	RC3/4"
CF25-450DA		766	556	150	350	90	104	520	RC3/4"
CF30-450DA		922	662	175	370	110	130	520	RC3/4"
CF30-500DA	F30	922	662	175	395	110	130	570	RC3/4"
CF30-550DA		922	662	175	420	110	130	620	RC3/4"
CF35-550DA		1130	817	207.5	450	140	165	620	RC3/4"
CF35-600DA	F35	1130	817	207.5	450	140	165	670	RC1 "
CF35-700DA		1130	817	207.5	475	140	165	770	RC1 "
CF40-600DA		1320	960	237.5	505	170	200	670	RC1 "
CF40-700 DA	F40	1320	960	237.5	555	170	200	770	RC1 "
CF40-800 DA		1320	960	237.5	607. 5	170	200	875	RC1. 1/2"
CF48-800 DA		1580	1130	280	637. 5	200	210	875	RC1. 1/2"
CF48-900 DA	F48	1580	1130	280	687. 5	200	210	975	RC2 "
CF48-1000DA		1580	1130	280	787. 5	200	210	1075	RC2 "
CF60-800 DA		1960	1380	343	707. 5	270	230	875	RC1. 1/2"
CF60-900 DA	P.CO.	1960	1380	343	757. 5	270	230	975	RC2 "
CF60-1000 DA	F60	1960	1380	343	807.5	270	230	1075	RC2 "
CF60-1100 DA		1960	1380	343	857. 5	270	230	1175	RC2 "

## **CF SERIES - Your Guide for Placing Orders**



1. Body Size. : SF14 to SF60

2. Cylinder Size: 200 to 1100

3. Acting Type

DA: Double Acting SA: Single Acting

4. Spring Size:

3:3Bar 4:4Bar 5:5Bar 6:6Bar 5. Temperature:

LT : Low temperature (-45~80°C) HT : High temperature (20~120°C)

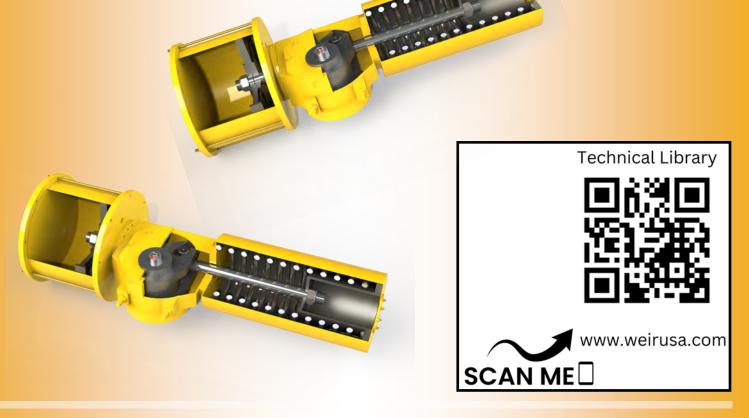
6. Special Code (Selective):H: Jack Screw Manual OverrideEX: Extended Travel StopHY: Hydraulic Override

7. Air failure (Single acting)

STC : Spring to close STO : Spring to open

## **PRODUCT GUIDE**

WEIR WC-CF SERIES PNEUMATIC ACTUATOR



## **SOLUTIONS FOR YOUR COMPANY NEEDS - WORLD WIDE SHIPPING**



#### - HELP DESK -

FOR YOUR SUPPORT AND SERVICE

24 hours a day, 7 days a week NO CHARGE ON CALLS SERVICE

We offer technical assistance, product knowledge, and reliable trouble shooting

Brochures/Maintenance info available online www.weirusa.com



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