

GAS SPRINGS



COMPACT HEIGHT CW

- Compact size gas springs
- High contact force (170-20000 daN)
- Meet major automotive standards
- Widely used in progressive die sets and hot forming



CW COMPACT HEIGHT MEDIUM

MODEL	F ₀ daN lb	Ø mm inch	S mm inch	L1 mm inch	Pmax bar psi	Charge Port		
CW 170 V2	170 382	Ø19 Ø0.75	7 - 125 0.28 - 4.92	44 - 285 1.73 - 11.22	180 2610	M6	X	X
CW 320 V2	320 719	Ø25 Ø0.98	7 - 125 0.28 - 4.92	44 - 285 1.73 - 11.22	180 2610	M6	X	X
CW 350 V1	350 787	Ø32 Ø1.26	10 - 125 0.39 - 4.92	50 - 280 1.97 - 11.02	180 2610	M6	✓	✓
CW 500 V1	500 1124	Ø38 Ø1.50	10 - 125 0.39 - 4.92	50 - 280 1.97 - 11.02	150 2175	M6	✓	✓
CW 750 V1	750 1686	Ø45 Ø1.77	10 - 125 0.39 - 4.92	52 - 282 2.05 - 11.10	150 2175	M6	✓	✓
CWC 750 V2	750 1686	Ø45 Ø1.77	10 - 125 0.39 - 4.92	62 - 292 2.44 - 11.50	150 2175	G1/8"	✓	✓
CW 1000 V2	1000 2248	Ø50 Ø1.97	10 - 125 0.39 - 4.92	58 - 288 2.28 - 11.34	150 2175	M6	✓	✓
CWC 1000 V2	1000 2248	Ø50 Ø1.97	10 - 125 0.39 - 4.92	68 - 298 2.68 - 11.73	150 2175	G1/8"	✓	✓
CW 1500 V1	1500 3372	Ø63 Ø2.48	13 - 125 0.51 - 4.92	70 - 294 2.76 - 11.57	150 2175	M6	✓	✓
CWC 1500 V1	1500 3372	Ø63 Ø2.48	13 - 125 0.51 - 4.92	80 - 304 3.15 - 11.97	150 2175	G1/8"	✓	✓
CW 2400 V2	2400 5395	Ø75 Ø2.95	13 - 125 0.51 - 4.92	71 - 295 2.80 - 11.61	150 2175	M6	✓	✓
CWC 2400 V3	2400 5395	Ø75 Ø2.95	13 - 125 0.51 - 4.92	81 - 305 3.19 - 12.01	150 2175	G1/8"	✓	✓
CW 4200 V2	4200 9442	Ø95 Ø3.74	16 - 125 0.63 - 4.92	90 - 308 3.54 - 12.13	150 2175	G1/8"	✓	✓
CW 6600 V1	6600 14837	Ø120 Ø4.72	16 - 125 0.63 - 4.92	100 - 318 3.94 - 12.52	150 2175	G1/8"	✓	✓
CW 9500	9500 21357	Ø150 Ø5.91	19 - 125 0.75 - 4.92	116 - 328 4.57 - 12.91	150 2175	G1/8"	✓	✓
CW 11800	11800 26527	Ø150 Ø5.91	19 - 125 0.75 - 4.92	116 - 328 4.57 - 12.91	150 2175	G1/8"	✓	✓
CW 20000	20000 44962	Ø195 Ø7.68	19 - 125 0.75 - 4.92	148 - 360 5.83 - 14.17	150 2175	G1/8"	✓	✓

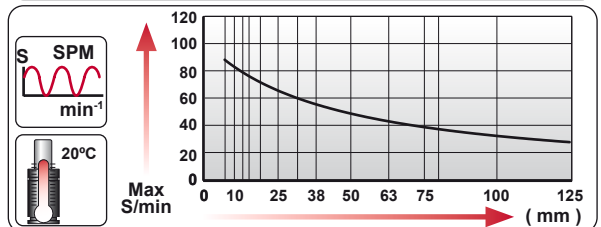
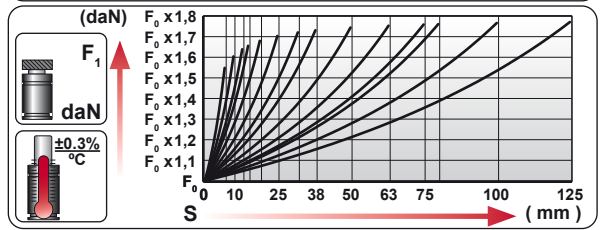
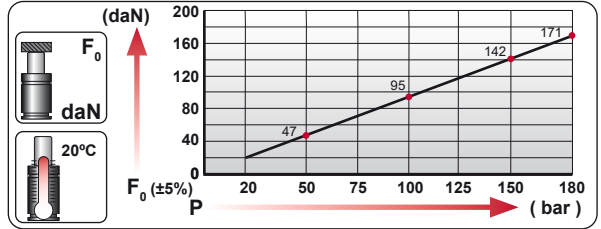
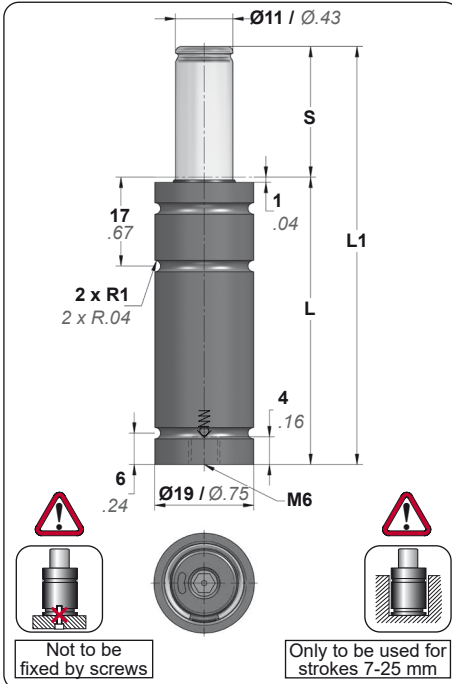
	50	Ø50	50	50	50	50	50	50
		Ø50		Ø50	Ø50	Ø50	Ø50	Ø50
		L1=138 L1=148 L1=152		L1=138 L1=150 L1=150	L1=170 L1=185 L1=195	L1=195	L1=165 L1=175	L1=220
MODEL	X	CW 1000 CWC 1000 KZ/KT 1000	X	CT 1000 CK 1000 FD 750	GN 750 CM 1000 CD 1000	AG 750	CPH 1700 CP 2000	CS 1800
SERIES	MINI	COMPACT HEIGHT	THREADED	LOW PROFILE	HEAVY DUTY	ISO	HEAVY LOAD	POWER SHORT STROKE



CW 170 V2

Compact Height

BMW	B2 4005		
MB	B8 3180 220 000 004		
VW	39D 997		



VDI SAFETY

STANDARDS

ORDER	S		L1 ±0.25		L		F ₀ Initial Force		F ₁ (ISOTHERMAL) End Force		Vol.			
	mm	inch	mm	inch	mm	inch	daN	lb	daN	lb	cm ³	in ³	Kg.	lb
CW 170 007 V2	7	0.28	44	1.73	37	1.46	170	382	255	572	2	0.1	0.08	0.18
CW 170 010 V2	10	0.39	50	1.97	40	1.57			267	601	3	0.2	0.08	0.18
CW 170 013 V2	13	0.51	56	2.20	43	1.69			276	620	3	0.2	0.08	0.18
CW 170 015 V2	15	0.59	60	2.36	45	1.77			280	629	4	0.2	0.09	0.20
CW 170 019 V2	19	0.75	68	2.68	49	1.93			286	644	4	0.3	0.09	0.20
CW 170 025 V2	25	0.98	80	3.15	55	2.17			293	658	6	0.3	0.10	0.22
CW 170 032 V2	32	1.26	94	3.70	62	2.44			298	669	7	0.4	0.11	0.24
CW 170 038 V2	38	1.50	106	4.17	68	2.68			301	676	8	0.5	0.12	0.26
CW 170 050 V2	50	1.97	130	5.12	80	3.15			304	685	11	0.7	0.13	0.29
CW 170 063 V2	63	2.48	156	6.14	93	3.66			307	691	13	0.8	0.15	0.33
CW 170 075 V2	75	2.95	185	7.28	110	4.33			306	688	16	1.0	0.16	0.35
CW 170 080 V2	80	3.15	195	7.68	115	4.53			307	689	17	1.0	0.17	0.37
CW 170 100 V2	100	3.94	235	9.25	135	5.31			309	695	21	1.3	0.20	0.44
CW 170 125 V2	125	4.92	285	11.22	160	6.30			311	699	26	1.6	0.23	0.51

TECHNICAL DATA														
	Fluid	N ₂		Pmin Pmax	20 bar	180 bar		Charging Adapter	06 CG 2-Q					
	Smax	< 90%		Tmin Tmax	290 psi	2610 psi		Connection	X					
	Vmax	1,6 m/s		Force variation by temperature	0 °C	80 °C		Cartridge Kit	X					
					32 °F	176 °F								
					±0,3% / °C									

MODEL	AFJ	CW 170					

MOUNTING OPTIONS

	Drop-in 	Top Mount 	Base Mount 	Foot Mount 	Support Mount
HOW TO ORDER		A14-019 583 A44-019 587 A59-019 588		A19-019 589	

PROTECTION OPTIONS

Longer life to your gas springs by using protective solutions from harsh working environment (i.e. hot stamping), specially designed to minimize the impact of solid or liquid contaminants and extending the useful life of gas springs.

PG Protective Guard

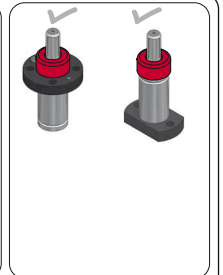
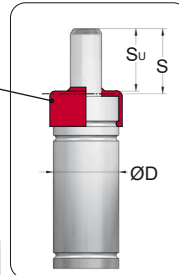
HOW TO ORDER

CW 170 050 V2 **11** **19**

CW 170 050 V2 + PG 011 019



Protective Guard

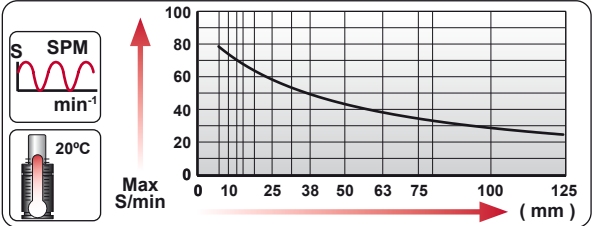
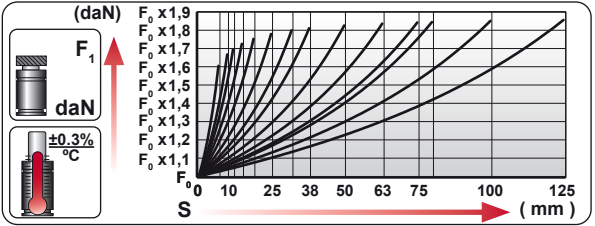
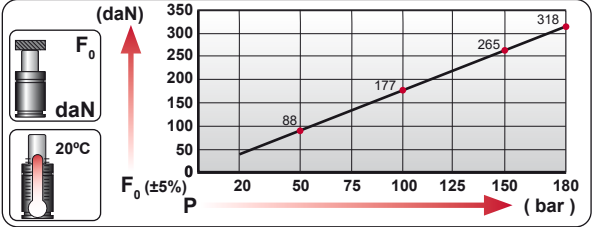
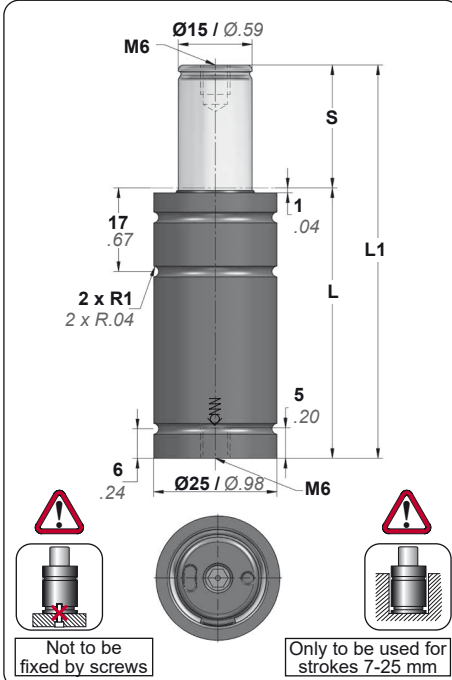


PG involves a variation of the dimensions of the gas spring. The nominal stroke (S) decreases to the size of the useful stroke (Su).

CW 320 V2

Compact Height

VW	39D 997
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VDI SAFETY

>S

>Vmax

>Pmax

STANDARDS

APPROVED PED VDI 3003 ISO 11901

ORDER	S		L1 ±0.25		L		F ₀ Initial Force		F ₁ (ISOTHERMAL) End Force		Vol.		Kg. lb	
	mm	inch	mm	inch	mm	inch	daN	lb	daN	lb	cm ³	in ³		
CW 320 007 V2	7	0.28	44	1.73	37	1.46	320	719	601	1351	3	0.2	0.11	0.24
CW 320 010 V2	10	0.39	50	1.97	40	1.57			621	1396	4	0.2	0.11	0.24
CW 320 013 V2	13	0.51	56	2.20	43	1.69			629	1415	4	0.3	0.12	0.26
CW 320 015 V2	15	0.59	60	2.36	45	1.77			638	1435	5	0.3	0.13	0.29
CW 320 019 V2	19	0.75	68	2.68	49	1.93			646	1453	7	0.4	0.13	0.29
CW 320 025 V2	25	0.98	80	3.15	55	2.17			654	1470	9	0.5	0.15	0.33
CW 320 032 V2	32	1.26	94	3.70	62	2.44			659	1482	11	0.7	0.16	0.35
CW 320 038 V2	38	1.50	106	4.17	68	2.68			662	1489	13	0.8	0.18	0.40
CW 320 050 V2	50	1.97	130	5.12	80	3.15			666	1498	17	1.0	0.21	0.46
CW 320 063 V2	63	2.48	156	6.14	93	3.66			669	1504	21	1.3	0.23	0.51
CW 320 075 V2	75	2.95	185	7.28	110	4.33			671	1508	25	1.5	0.26	0.57
CW 320 080 V2	80	3.15	195	7.68	115	4.53			671	1509	27	1.6	0.27	0.60
CW 320 100 V2	100	3.94	235	9.25	135	5.31			673	1513	34	2.1	0.32	0.71
CW 320 125 V2	125	4.92	285	11.22	160	6.30			674	1516	42	2.6	0.38	0.84

TECHNICAL DATA

Fluid	N ₂	Pmin Pmax	20 bar 180 bar	Charging Adapter	06 CG 2-Q
Smax	< 90%	20°C / 68°F	290 psi 2610 psi	Connection	X
Vmax	1,6 m/s	Tmin Tmax	0 °C 80 °C	Cartridge Kit	X
		Force variation by temperature	±0,3% / °C		



CW 320 V2

Compact Height

MODEL	AFC	CW 320	CK 200 CT 200			CP 300 CS 420

MOUNTING OPTIONS						
	Drop-in 	Top Mount 	Base Mount 	Foot Mount 	Support Mount 	
HOW TO ORDER		A44-025 587 A49-025 587		A19-025 589	D02-025 603	

PROTECTION OPTIONS

Longer life to your gas springs by using protective solutions from harsh working environment (i.e. hot stamping), specially designed to minimize the impact of solid or liquid contaminants and extending the useful life of gas springs.

PG Protective Guard

HOW TO ORDER

CW 320 050 V2 15 25

CW 320 050 V2 + PG 015 025

$\varnothing d$ mm

$\varnothing D$ mm

HOT STAMPING

Protective Guard

S_u

S

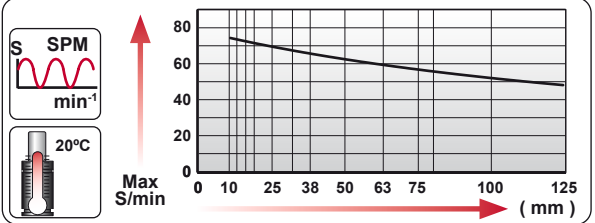
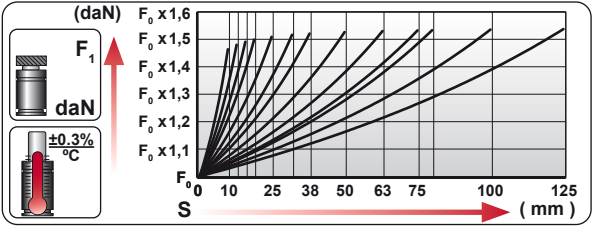
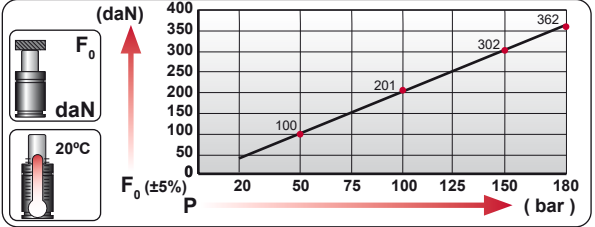
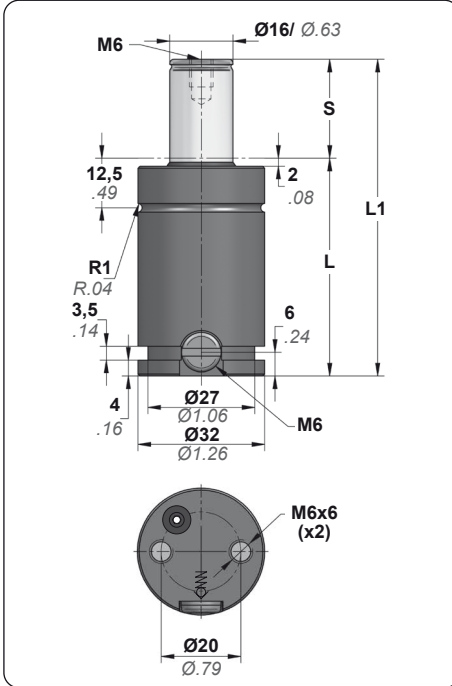
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PG involves a variation of the dimensions of the gas spring. The nominal stroke (S) decreases to the size of the useful stroke (S_u).

CW 350 V1

Compact Height

BMW B2 4005	FORD W-DX35-6204
MB B8 3180 220 000 004	GM 90.25.08
VW 39D 997	



VDI SAFETY

- $>S$
- $>V_{max}$
- $>P_{max}$




STANDARDS

- APPROVED PED
- VDI 3003
- ISO 11901


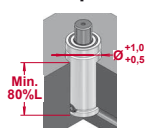



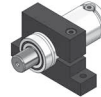




ORDER	S		L1 ±0.25		L		F_0 Initial Force		F_1 (ISOTHERMAL) End Force		Vol.		Kg.	lb
	mm	inch	mm	inch	mm	inch	daN	lb	daN	lb	cm ³	in ³		
CW 350 010 V1	10	0.39	50	1.97	40	1.57	360	809	527	1185	6	0.4	0.18	0.40
CW 350 013 V1	13	0.51	56	2.20	43	1.69			533	1199	8	0.5	0.19	0.42
CW 350 016 V1	16	0.63	62	2.44	46	1.81			537	1208	10	0.6	0.20	0.44
CW 350 019 V1	19	0.75	68	2.68	49	1.93			540	1214	11	0.7	0.21	0.46
CW 350 025 V1	25	0.98	80	3.15	55	2.17			544	1222	15	0.9	0.23	0.51
CW 350 032 V1	32	1.26	94	3.70	62	2.44			546	1228	19	1.2	0.25	0.55
CW 350 038 V1	38	1.50	106	4.17	68	2.68			548	1232	22	1.4	0.28	0.62
CW 350 050 V1	50	1.97	130	5.12	80	3.15			550	1236	29	1.8	0.32	0.71
CW 350 063 V1	63	2.48	156	6.14	93	3.66			551	1239	37	2.2	0.36	0.79
CW 350 075 V1	75	2.95	180	7.09	105	4.13			552	1241	43	2.6	0.40	0.88
CW 350 080 V1	80	3.15	190	7.48	110	4.33			552	1242	46	2.8	0.42	0.93
CW 350 100 V1	100	3.94	230	9.06	130	5.12			553	1243	58	3.5	0.49	1.08
CW 350 125 V1	125	4.92	280	11.02	155	6.10	554	1245	72	4.4	0.57	1.26		

TECHNICAL DATA

Fluid	N ₂	Pmin Pmax	20 bar / 290 psi	180 bar / 2610 psi	Charging Adapter	06 CG 2-Q
Smax	< 90%	20°C / 68°F	0°C / 32°F	80°C / 176°F	Connection	CW-H 350 XXX V1
Vmax	1,6 m/s	Force variation by temperature	±0,3% / °C		Cartridge Kit	1625A135B

								
MODEL			CW 350 KZ 350	CT 300 CK 300	CM 350 CD 300	AG 150	CP 500	CS 770


MOUNTING OPTIONS

	Drop-in 	Top Mount 	Base Mount 	Foot Mount 	Support Mount 
HOW TO ORDER		A14-032  A34-032 		C20-032 	D02-032 

PROTECTION OPTIONS

Longer life to your gas springs by using protective solutions from harsh working environment (i.e. hot stamping), specially designed to minimize the impact of solid or liquid contaminants and extending the useful life of gas springs.

PW Protective Wiper



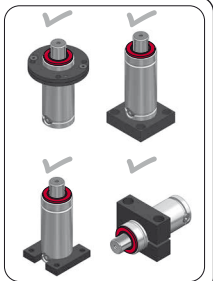
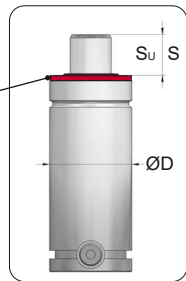
HOW TO ORDER

CW 350 050 V1 16 32

CW 350 050 V1 + PW 016 032




Protective Wiper



PW does not involve any variation of the dimensions of the gas spring. The useful stroke keeps the same as nominal stroke.

PC Protective Cover



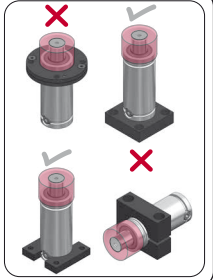
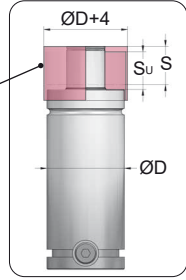
HOW TO ORDER

CW 350 050 V1 16 32 50

CW 350 050 V1 + PC 016 032 050



Protective Cover

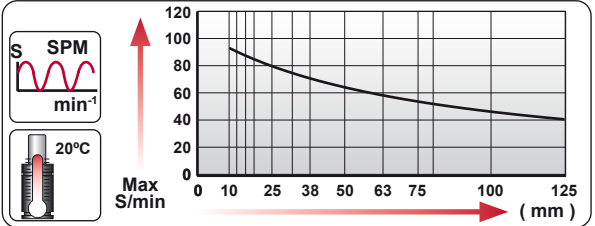
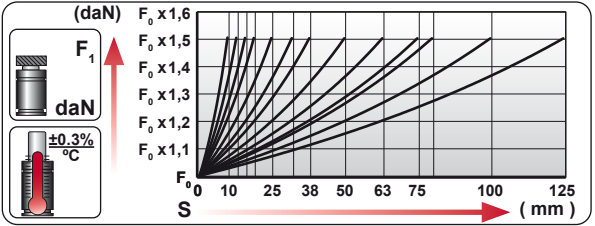
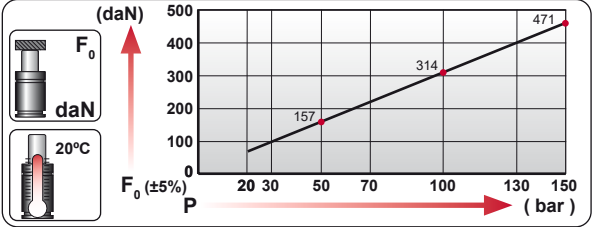
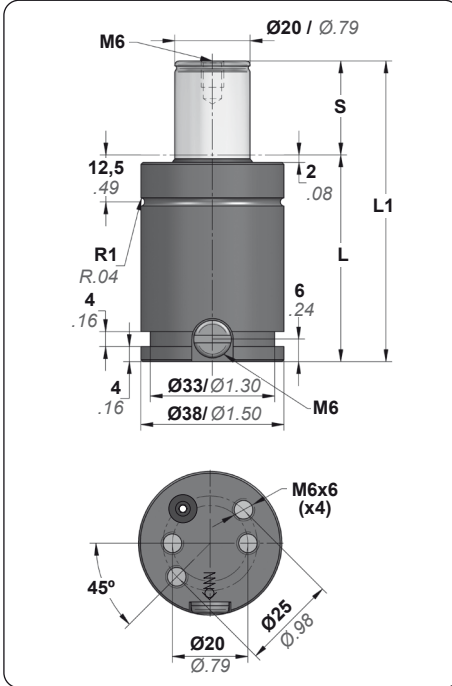


The body diameter (ØD) increases to the size of (ØPC). PC can be used with mounts B and C, but not with mounts type A and D.

CW 500 V1

Compact Height

BMW B2 4005	FORD W-DX35-6204	PSA	E24.54.815.G
MB B8 3180 220 000 004	GM 90.25.08		
VW 39D 997			



VDI SAFETY

- Safety symbol >S
- Safety symbol >Vmax
- Safety symbol >Pmax

STANDARS

- PED
- VDI 3003
- ISO 11901
- ONOMO EM.24.54

ORDER	S		L1 ±0.25		L		F ₀ Initial Force		F ₁ (ISOTHERMAL) End Force		Vol.			
	mm	inch	mm	inch	mm	inch	daN	lb	daN	lb	cm ³	in ³	Kg.	lb
CW 500 010 V1	10	0.39	50	1.97	40	1.57	470 1057 ±5% 150 bar 2175 psi at 20°C 68°F		672	1511	10	0.6	0.24	0.53
CW 500 013 V1	13	0.51	56	2.20	43	1.69		679	1527	13	0.8	0.26	0.57	
CW 500 016 V1	16	0.63	62	2.44	46	1.81		684	1538	16	1.0	0.27	0.60	
CW 500 019 V1	19	0.75	68	2.68	49	1.93		687	1545	19	1.2	0.28	0.62	
CW 500 025 V1	25	0.98	80	3.15	55	2.17		692	1555	25	1.5	0.31	0.68	
CW 500 032 V1	32	1.26	94	3.70	62	2.44		695	1562	31	1.9	0.33	0.73	
CW 500 038 V1	38	1.50	106	4.17	68	2.68		697	1566	37	2.2	0.36	0.79	
CW 500 050 V1	50	1.97	130	5.12	80	3.15		699	1572	48	2.9	0.41	0.90	
CW 500 063 V1	63	2.48	156	6.14	93	3.66		701	1575	60	3.7	0.46	1.01	
CW 500 075 V1	75	2.95	180	7.09	105	4.13		702	1578	71	4.4	0.51	1.12	
CW 500 080 V1	80	3.15	190	7.48	110	4.33		702	1578	76	4.6	0.53	1.17	
CW 500 100 V1	100	3.94	230	9.06	130	5.12		703	1581	95	5.8	0.61	1.34	
CW 500 125 V1	125	4.92	280	11.02	155	6.10		704	1582	118	7.2	0.71	1.57	

TECHNICAL DATA

Fluid	N ₂	Pmin Pmax	20 bar / 290 psi	150 bar / 2175 psi	20°C / 68°F	Charging Adapter	06 CG 2-Q
Smax	< 90%	Tmin Tmax	0 °C / 32 °F	80 °C / 176 °F	Connection	CW-H 500 XXX V1	
Vmax	1,6 m/s	Force variation by temperature	±0,3% / °C		Cartridge Kit	2032D125B	

MODEL	CW 500 KZ 500	CT 500 CK 500 FD 300	CD 500 CM 500	AG 250	CPH 850 CP 1000	CS 1000	

MOUNTING OPTIONS

	Drop-in 	Top Mount 	Base Mount 	Foot Mount 	Support Mount
HOW TO ORDER		A14-038 A34-038		C20-038	D02-038

PROTECTION OPTIONS

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PW Protective Wiper

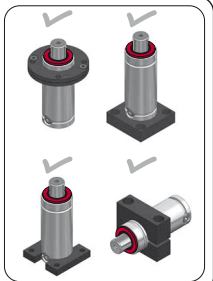
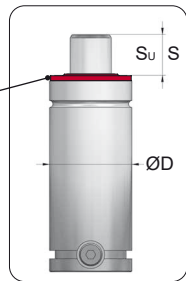
HOW TO ORDER

CW 500 050 V1 20 38

CW 500 050 V1 + PW 020 038



Protective Wiper



PW does not involve any variation of the dimensions of the gas spring. The useful stroke keeps the same as nominal stroke.

PC Protective Cover

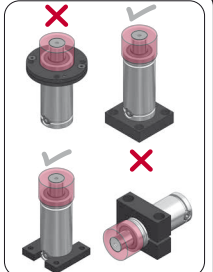
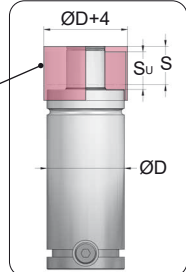
HOW TO ORDER

CW 500 050 V1 20 38 50

CW 500 050 V1 + PC 020 038 050



Protective Cover

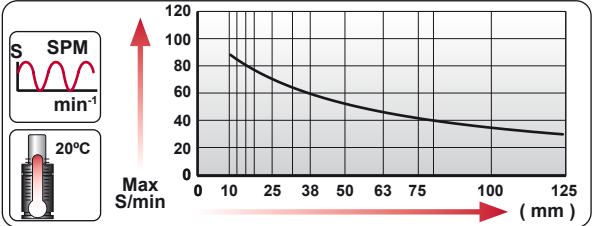
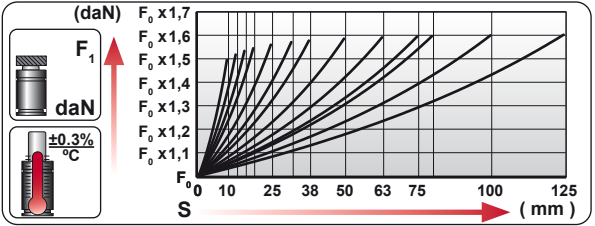
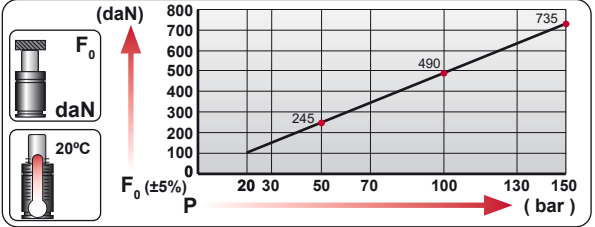
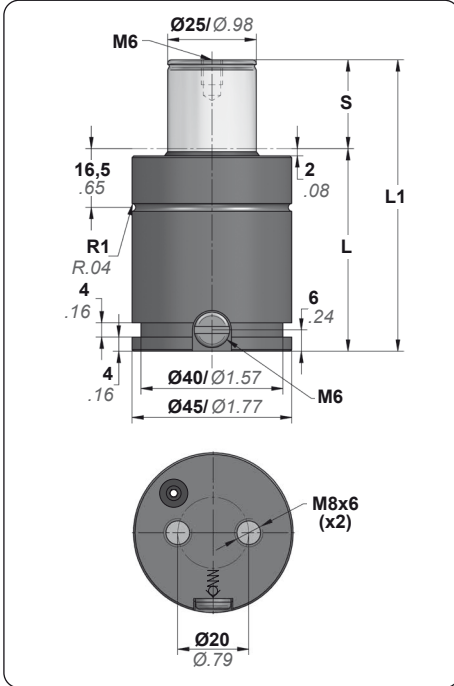


The body diameter (ØD) increases to the size of (ØPC). PC can be used with mounts B and C, but not with mounts type A and D.

CW 750 V1

Compact Height

BMW B2 4005	FORD W-DX35-6204	PSA E24.54.815.G
MB B8 3180 220 000 004	GM 90.25.08	
VW 39D 997		



VDI SAFETY

- $>S$
- $>V_{max}$
- $>P_{max}$

STANDARDS

- PEP
- VDI 3003
- ISO 11901
- ONOMO EM.24.54

ORDER	S		L1 ±0.25		L		F ₀ Initial Force		F ₁ (ISOTHERMAL) End Force		Vol.			
	mm	inch	mm	inch	mm	inch	daN	lb	daN	lb	cm ³	in ³	Kg.	lb
CW 750 010 V1	10	0.39	52	2.05	42	1.65	740 1664 ±5% 150 bar 2175 psi at 20°C 68°F		1106	2486	15	0.9	0.38	0.84
CW 750 013 V1	13	0.51	58	2.28	45	1.77			1123	2525	19	1.1	0.40	0.88
CW 750 016 V1	16	0.63	64	2.52	48	1.89			1135	2551	23	1.4	0.42	0.93
CW 750 019 V1	19	0.75	70	2.76	51	2.01			1143	2571	26	1.6	0.44	0.97
CW 750 025 V1	25	0.98	82	3.23	57	2.24			1155	2596	34	2.1	0.47	1.04
CW 750 032 V1	32	1.26	96	3.78	64	2.52			1163	2615	43	2.6	0.52	1.15
CW 750 038 V1	38	1.50	108	4.25	70	2.76			1168	2626	51	3.1	0.55	1.21
CW 750 050 V1	50	1.97	132	5.20	82	3.23			1174	2640	66	4.0	0.63	1.39
CW 750 063 V1	63	2.48	158	6.22	95	3.74			1179	2649	83	5.1	0.71	1.57
CW 750 075 V1	75	2.95	182	7.17	107	4.21			1181	2655	99	6.0	0.78	1.72
CW 750 080 V1	80	3.15	192	7.56	112	4.41			1182	2657	105	6.4	0.82	1.81
CW 750 100 V1	100	3.94	232	9.13	132	5.20			1185	2663	131	8.0	0.94	2.07
CW 750 125 V1	125	4.92	282	11.10	157	6.18			1187	2668	163	9.9	1.10	2.43

TECHNICAL DATA

Fluid	N ₂	Pmin Pmax	20 bar / 290 psi / 20°C / 68°F	150 bar / 2175 psi / 80°C / 176°F	Charging Adapter	06 CG 2-Q
Smax	< 90%	Tmin Tmax	0°C / 32°F	80°C / 176°F	Connection	CW-H 750 XXX V1
Vmax	1,6 m/s	Force variation by temperature	±0,3% / °C		Cartridge Kit	2538E150B

		50	50	50	50	50	
		Ø45	Ø45	Ø45	Ø45	Ø45	
		L1=132	L1=138	L1=185	L1=185	L1=160	
		L1=142	L1=150				
		L1=147	L1=150				
MODEL		CW 750 CWC 750 KZ 750	CT 700 CK 750 FD 500	CD 700	AG 500	CPH 1250	

MOUNTING OPTIONS

	Drop-in 	Top Mount 	Base Mount 	Foot Mount 	Support Mount
HOW TO ORDER		A14-045 584 A34-045 585	B21-045 593 B76-045 597	C05-045 599 C20-045 601	D02-045 603 D67-045 605

PROTECTION OPTIONS

Longer life to your gas springs by using protective solutions from harsh working environment (i.e. hot stamping), specially designed to minimize the impact of solid or liquid contaminants and extending the useful life of gas springs.

PW Protective Wiper

HOW TO ORDER

CW 750 050 V1 25 45

CW 750 050 V1 + PW 025 045

PW does not involve any variation of the dimensions of the gas spring. The useful stroke keeps the same as nominal stroke.

Protective Wiper

PC Protective Cover

HOW TO ORDER

CW 750 050 V1 25 45 50

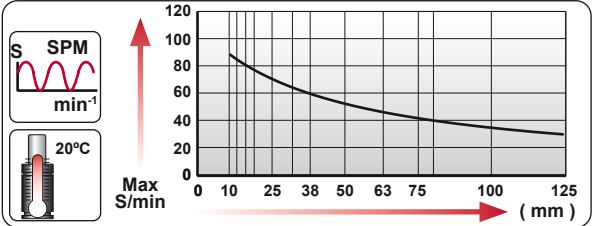
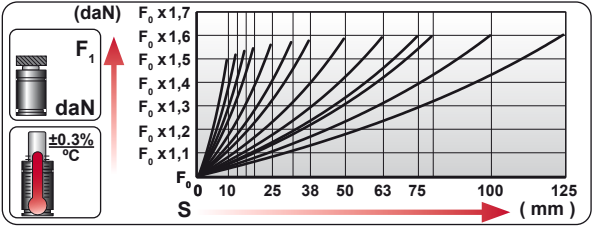
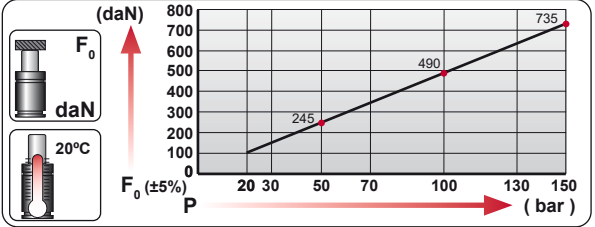
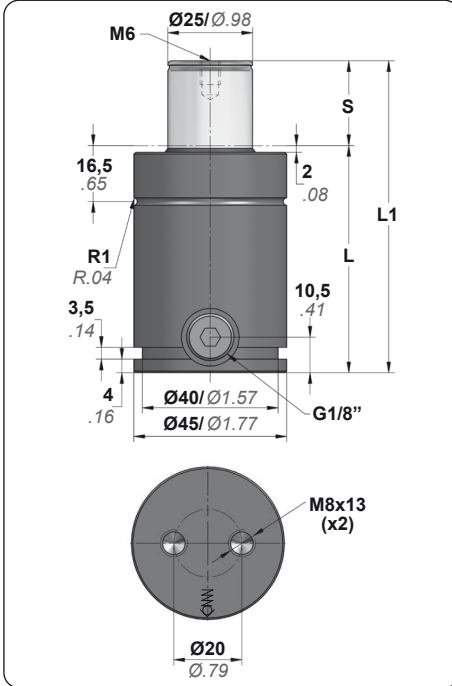
CW 750 050 V1 + PC 025 045 050

The body diameter (ØD) increases to the size of (ØPC). PC can be used with mounts B and C, but not with mounts type A and D.

Protective Cover

CWC 750 V2

Compact Height



VDI SAFETY

STANDARS

ORDER	S		L1 ± 0.25		L		F_0 Initial Force		F_1 (ISOTHERMAL) End Force		Vol.			
	mm	inch	mm	inch	mm	inch	daN	lb	daN	lb	cm ³	in ³	Kg.	lb
CWC 750 010 V2	10	0.39	62	2.44	52	2.05	740 1664 ±5% 150 bar 2175 psi at 20°C 68°F		1106	2486	15	0.9	0.49	1.08
CWC 750 013 V2	13	0.51	68	2.68	55	2.17			1123	2525	19	1.1	0.50	1.10
CWC 750 016 V2	16	0.63	74	2.91	58	2.28			1135	2551	23	1.4	0.52	1.15
CWC 750 019 V2	19	0.75	80	3.15	61	2.40			1143	2571	26	1.6	0.54	1.19
CWC 750 025 V2	25	0.98	92	3.62	67	2.64			1155	2596	34	2.1	0.58	1.28
CWC 750 032 V2	32	1.26	106	4.17	74	2.91			1163	2615	43	2.6	0.62	1.37
CWC 750 038 V2	38	1.50	118	4.65	80	3.15			1168	2626	51	3.1	0.66	1.46
CWC 750 050 V2	50	1.97	142	5.59	92	3.62			1174	2640	66	4.0	0.74	1.63
CWC 750 063 V2	63	2.48	168	6.61	105	4.13			1179	2649	83	5.1	0.82	1.81
CWC 750 075 V2	75	2.95	192	7.56	117	4.61			1181	2655	99	6.0	0.89	1.96
CWC 750 080 V2	80	3.15	202	7.95	122	4.80			1182	2657	105	6.4	0.92	2.03
CWC 750 100 V2	100	3.94	242	9.53	142	5.59			1185	2663	131	8.0	1.05	2.31
CWC 750 125 V2	125	4.92	292	11.50	167	6.57			1187	2668	163	9.9	1.20	2.65

TECHNICAL DATA														
Fluid	N ₂		Pmin Pmax	20 bar 150 bar		20°C / 68°F	290 psi 2175 psi	Charging Adapter	18 CG 1-Q					
Smax	< 90%		Tmin Tmax	0 °C 80 °C		32 °F 176 °F	Connection	CWC-H 750 XXX V2						
Vmax	1,6 m/s		Force variation by temperature	±0,3% / °C			Cartridge Kit	2538E150B						



CWC 750 V2

Compact Height

mm	mm	mm	mm	mm	mm	mm	mm
mm	mm	mm	mm	mm	mm	mm	mm
mm	mm	mm	mm	mm	mm	mm	mm
MODEL		CW 750 CWC 750 KZ 750		CT 700 CK 750 FD 500	CD 700	AG 500	CPH 1250

MOUNTING OPTIONS					
	Drop-in	Top Mount	Base Mount	Foot Mount	Support Mount
HOW TO ORDER		A14-045 584 A34-045 585	B21-045 593 B76-045 597	C05-045 599 C20-045 601	D02-045 603 D67-045 605

PROTECTION OPTIONS

Longer life to your gas springs by using protective solutions from harsh working environment (i.e. hot stamping), specially designed to minimize the impact of solid or liquid contaminants and extending the useful life of gas springs.

PW Protective Wiper

HOW TO ORDER

CWC 750 050 V2 25 45

CWC 750 050 V2 + PW 025 045

$\varnothing d$ mm

$\varnothing D$ mm

Protective Wiper

S_u S

$\varnothing D$

PW does not involve any variation of the dimensions of the gas spring. The useful stroke keeps the same as nominal stroke.

PC Protective Cover

HOW TO ORDER

CWC 750 050 V2 25 45 50

CWC 750 050 V2 + PC 025 045 050

$\varnothing d$ mm

$\varnothing D$ mm

S mm

Protective Cover

$\varnothing D + 4$

S_u S

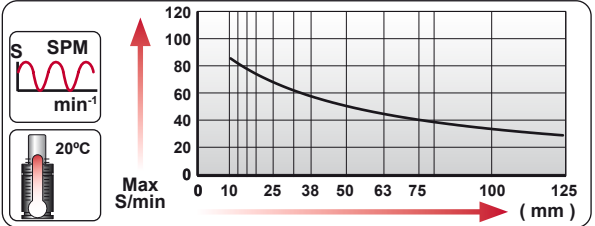
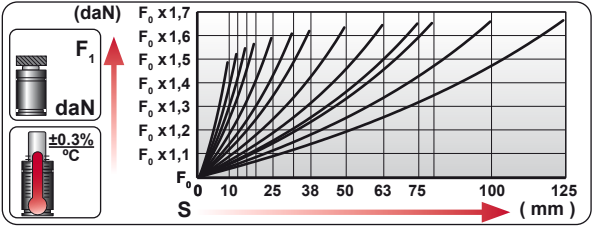
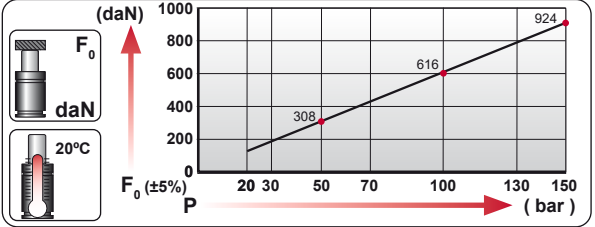
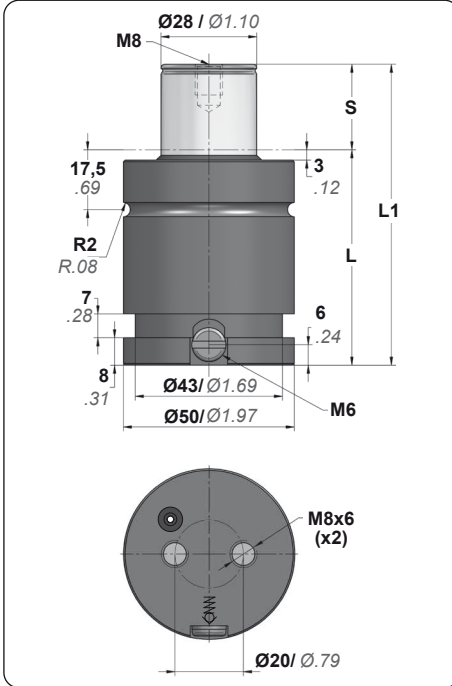
$\varnothing D$

The body diameter ($\varnothing D$) increases to the size of ($\varnothing PC$).
PC can be used with mounts B and C, but not with mounts type A and D.

CW 1000 V2

Compact Height

BMW B2 4005	FORD W-DX35-6204	PSA E24.54.815.G
MB B8 3180 220 000 004	GM 90.25.08	
VW 39D 997		



VDI SAFETY

- > S
- > Vmax
- > Pmax

STANDARDS

- PED
- VDI 3003
- ISO 11901
- ONOMO EM.24.54

ORDER	S		L1 ±0.25		L		F ₀ Initial Force		F ₁ (ISOTHERMAL) End Force		Vol.			
	mm	inch	mm	inch	mm	inch	daN	lb	daN	lb	cm ³	in ³	Kg.	lb
CW 1000 010 V2	10	0.39	58	2.28	48	1.89	920 ±5% 150 bar 2175 psi at 20°C 68°F	2068	1404	3156	18	1.1	0.53	1.17
CW 1000 013 V2	13	0.51	64	2.52	51	2.01			1432	3219	22	1.4	0.56	1.23
CW 1000 016 V2	16	0.63	70	2.76	54	2.13			1451	3261	27	1.6	0.58	1.28
CW 1000 019 V2	19	0.75	76	2.99	57	2.24			1465	3293	31	1.9	0.61	1.34
CW 1000 025 V2	25	0.98	88	3.46	63	2.48			1483	3335	41	2.5	0.66	1.46
CW 1000 032 V2	32	1.26	102	4.02	70	2.76			1497	3366	51	3.1	0.72	1.59
CW 1000 038 V2	38	1.50	114	4.49	76	2.99			1505	3384	60	3.7	0.77	1.70
CW 1000 050 V2	50	1.97	138	5.43	88	3.46			1516	3408	78	4.8	0.87	1.92
CW 1000 063 V2	63	2.48	164	6.46	101	3.98			1523	3424	98	6.0	0.98	2.16
CW 1000 075 V2	75	2.95	188	7.40	113	4.45			1528	3435	116	7.1	1.08	2.38
CW 1000 080 V2	80	3.15	198	7.80	118	4.65			1529	3438	124	7.5	1.12	2.47
CW 1000 100 V2	100	3.94	238	9.37	138	5.43			1534	3448	154	9.4	1.29	2.84
CW 1000 125 V2	125	4.92	288	11.34	163	6.42			1538	3456	192	11.7	1.50	3.31

TECHNICAL DATA

Fluid	N ₂	Pmin Pmax	20 bar / 290 psi	150 bar / 2175 psi	20°C / 68°F	Charging Adapter	06 CG 2-Q
Smax	< 90%	Tmin Tmax	0°C / 32°F	80°C / 176°F	Connection	CW-H 1000 XXX V2	
Vmax	1,6 m/s	Force variation by temperature	±0,3% / °C		Cartridge Kit	2840K169B	



CW 1000 V2

Compact Height

	50	50	50	50	50	50	50
	$\varnothing 50$	$\varnothing 50$	$\varnothing 50$	$\varnothing 50$	$\varnothing 50$	$\varnothing 50$	$\varnothing 50$
	L1=138 L1=148 L1=152	L1=138 L1=150 L1=150	L1=170 L1=185 L1=195	L1=195	L1=165 L1=175	L1=220	
MODEL	CW 1000 CWC 1000 KZ/KT 1000	CT 1000 CK 1000 FD 750	GN 750 CM 1000 CD 1000	AG 750	CPH 1700 CP 2000	CS 1800	

MOUNTING OPTIONS

	Drop-in Min. 80%L $\varnothing +0.5$	Top Mount 	Base Mount 	Foot Mount 	Support Mount
HOW TO ORDER		A14-050 584 A34-050 585	B21-050 593 B76-050 597	C05-050 599 C20-050 601	D02-050 603 D67-050 605

PROTECTION OPTIONS

Longer life to your gas springs by using protective solutions from harsh working environment (i.e. hot stamping), specially designed to minimize the impact of solid or liquid contaminants and extending the useful life of gas springs.

PW Protective Wiper

$\varnothing d$ mm $\varnothing D$ mm

HOW TO ORDER
CW 1000 050 V2 28 50
CW 1000 050 V2 + PW 028 050

PW does not involve any variation of the dimensions of the gas spring. The useful stroke keeps the same as nominal stroke.

HOT STAMPING

Protective Wiper

S_u S
 $\varnothing D$

PC Protective Cover

$\varnothing d$ mm $\varnothing D$ mm s mm

HOW TO ORDER
CW 1000 050 V2 28 50 50
CW 1000 050 V2 + PC 028 050 050

The body diameter ($\varnothing D$) increases to the size of ($\varnothing PC$). PC can be used with mounts B and C, but not with mounts type A and D.

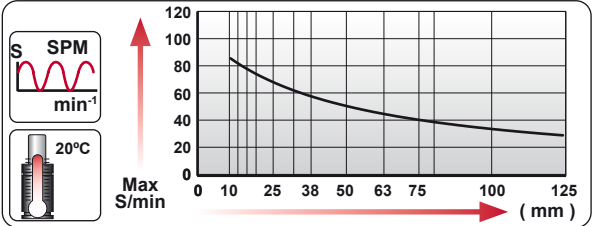
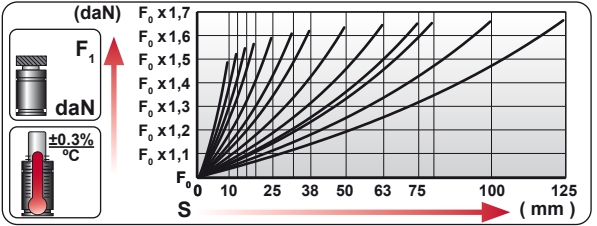
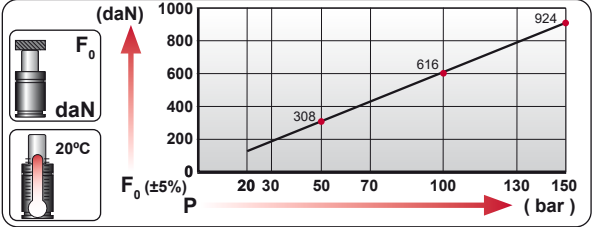
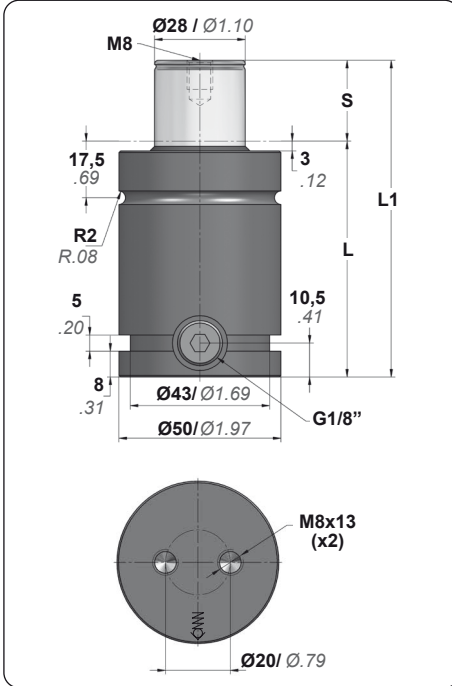
HOT STAMPING

Protective Cover

$\varnothing D + 4$ S_u S
 $\varnothing D$

CWC 1000 V2

Compact Height












VDI SAFETY

STANDARS


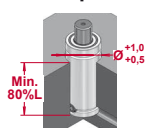



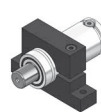








ORDER	S		L1 ± 0.25		L		F_0 Initial Force		F_1 (ISOTHERMAL) End Force		Vol.			
	mm	inch	mm	inch	mm	inch	daN	lb	daN	lb	cm ³	in ³	Kg.	lb
CWC 1000 010 V2	10	0.39	68	2.68	58	2.28	920 2068 ±5% 150 bar 2175 psi at 20°C 68°F		1343	3020	20	1.2	0.73	1.61
CWC 1000 013 V2	13	0.51	74	2.91	61	2.40			1368	3075	24	1.5	0.75	1.65
CWC 1000 016 V2	16	0.63	80	3.15	64	2.52			1384	3112	29	1.8	0.78	1.72
CWC 1000 019 V2	19	0.75	86	3.39	67	2.64			1396	3139	34	2.1	0.80	1.76
CWC 1000 025 V2	25	0.98	98	3.86	73	2.87			1413	3176	44	2.7	0.85	1.87
CWC 1000 032 V2	32	1.26	112	4.41	80	3.15			1425	3203	56	3.4	0.91	2.01
CWC 1000 038 V2	38	1.50	124	4.88	86	3.39			1432	3219	65	4.0	0.96	2.12
CWC 1000 050 V2	50	1.97	148	5.83	98	3.86			1441	3240	85	5.2	1.06	2.34
CWC 1000 063 V2	63	2.48	174	6.85	111	4.37			1447	3254	106	6.5	1.17	2.58
CWC 1000 075 V2	75	2.95	198	7.80	123	4.84			1451	3263	126	7.7	1.27	2.80
CWC 1000 080 V2	80	3.15	208	8.19	128	5.04			1453	3266	134	8.2	1.31	2.89
CWC 1000 100 V2	100	3.94	248	9.76	148	5.83			1457	3275	167	10.2	1.48	3.26
CWC 1000 125 V2	125	4.92	298	11.73	173	6.81			1460	3282	208	12.7	1.69	3.73

TECHNICAL DATA

Fluid	N_2	Pmin Pmax	20 bar / 290 psi 150 bar / 2175 psi	20°C / 68°F	Charging Adapter	18 CG 1-Q
Smax	< 90%	Tmin Tmax	0°C / 32°F 80°C / 176°F	Connection	CWC-H 1000 XXX V2	
Vmax	1,6 m/s	Force variation by temperature	$\pm 0,3\% / ^\circ\text{C}$	Cartridge Kit	2840K169B	

						
mm	50	50	50	50	50	50
	Ø50	Ø50	Ø50	Ø50	Ø50	Ø50
mm	L1=138	L1=138	L1=170	L1=195	L1=165	L1=220
	L1=148	L1=150	L1=185	L1=195	L1=175	
mm	L1=152	L1=150	L1=195			
MODEL	CW 1000 CWC 1000 KZ/KT 1000	CT 1000 CK 1000 FD 750	GN 750 CM 1000 CD 1000	AG 750	CPH 1700 CP 2000	CS 1800


MOUNTING OPTIONS

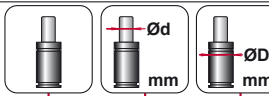
	Drop-in 	Top Mount 	Base Mount 	Foot Mount 	Support Mount 
HOW TO ORDER		A14-050  A34-050 	B21-050  B76-050 	C05-050  C20-050 	D02-050  D67-050 

PROTECTION OPTIONS

Longer life to your gas springs by using protective solutions from harsh working environment (i.e. hot stamping), specially designed to minimize the impact of solid or liquid contaminants and extending the useful life of gas springs.

PW Protective Wiper





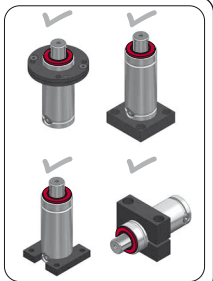
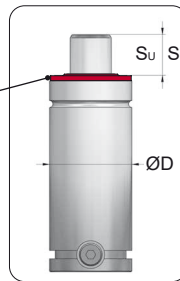
HOW TO ORDER

CWC 1000 050 V2 28 50

CWC 1000 050 V2 + PW 028 050




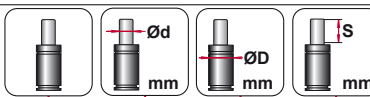
Protective Wiper



PW does not involve any variation of the dimensions of the gas spring. The useful stroke keeps the same as nominal stroke.

PC Protective Cover





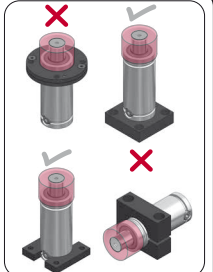
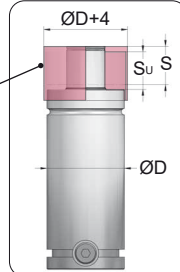
HOW TO ORDER

CWC 1000 050 V2 28 50 50

CWC 1000 050 V2 + PC 028 050 050



Protective Cover

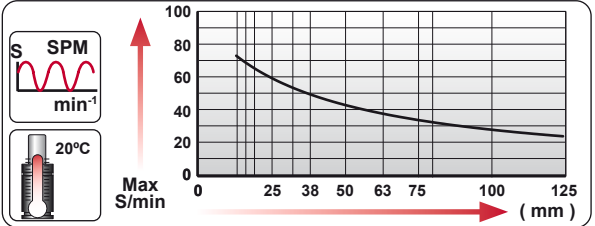
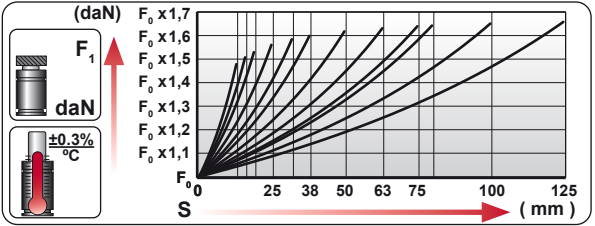
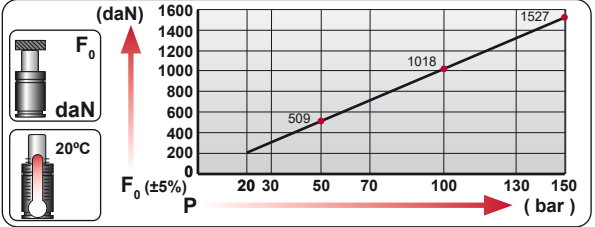
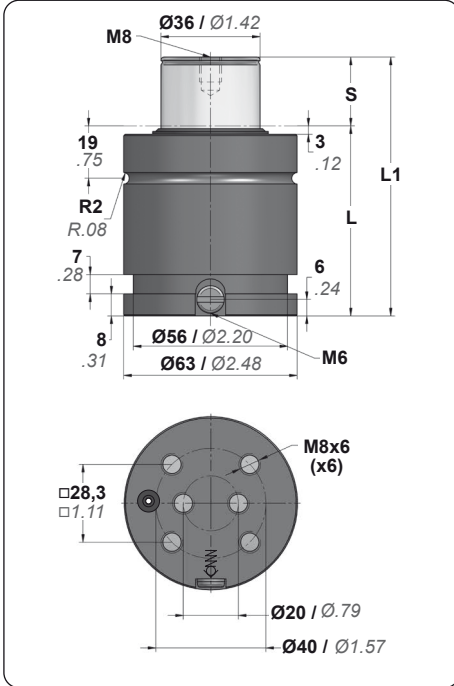


The body diameter (ØD) increases to the size of (ØPC). PC can be used with mounts B and C, but not with mounts type A and D.

CW 1500 V1

Compact Height

BMW B2 4005	FORD W-DX35-6204
MB B8 3180 220 000 004	
VW 39D 997	



VDI SAFETY

STANDARDS

ORDER	S		L1 ±0.25		L		F ₀ Initial Force		F ₁ (ISOTHERMAL) End Force		Vol.		Kg. lb	
	mm	inch	mm	inch	mm	inch	daN	lb	daN	lb	cm ³	in ³		
CW 1500 013 V1	13	0.51	70	2.76	57	2.24	1530 3440 ±5% 150 bar 2175 psi at 20°C 68°F		2315	5205	39	2.4	0.99	2.18
CW 1500 016 V1	16	0.63	76	2.99	60	2.36		2355	5293	47	2.8	1.03	2.27	
CW 1500 019 V1	19	0.75	82	3.23	63	2.48		2384	5359	54	3.3	1.07	2.36	
CW 1500 025 V1	25	0.98	94	3.70	69	2.72		2425	5451	69	4.2	1.15	2.54	
CW 1500 032 V1	32	1.26	108	4.25	76	2.99		2455	5520	86	5.3	1.24	2.73	
CW 1500 038 V1	38	1.50	120	4.72	82	3.23		2474	5561	101	6.2	1.31	2.89	
CW 1500 050 V1	50	1.97	144	5.67	94	3.70		2498	5616	131	8.0	1.47	3.24	
CW 1500 063 V1	63	2.48	170	6.69	107	4.21		2515	5653	164	10.0	1.63	3.59	
CW 1500 075 V1	75	2.95	194	7.64	119	4.69		2525	5677	194	11.8	1.79	3.95	
CW 1500 080 V1	80	3.15	204	8.03	124	4.88		2529	5684	206	12.6	1.85	4.08	
CW 1500 100 V1	100	3.94	244	9.61	144	5.67		2539	5708	256	15.6	2.11	4.65	
CW 1500 125 V1	125	4.92	294	11.57	169	6.65		2548	5728	318	19.4	2.43	5.36	

TECHNICAL DATA													
Fluid	N ₂		Pmin Pmax	20 bar 150 bar		20°C / 68°F	290 psi 2175 psi	0 °C 80 °C	32 °F 176 °F	Charging Adapter	06 CG 2-Q		
Smax	< 90%		Tmin Tmax						Connection	CW-H 1500 XXX V1			
Vmax	1,6 m/s		Force variation by temperature	±0,3% / °C					Cartridge Kit	3651L210A			



CW 1500 V1

Compact Height

s mm	50	50	50	50	50	50	50
	$\varnothing 63$	$\varnothing 63$	$\varnothing 63$	$\varnothing 63$	$\varnothing 63$	$\varnothing 63$	$\varnothing 63$
	L1=144 L1=152 L1=154	L1=152 L1=160	L1=185 L1=195	L1=175 L1=190	L1=175 L1=190	L1=175 L1=190	L1=205
MODEL	CW 1500 KZ/KT 1500 CWC 1500	CT 1500 CK 1500	CM 1500 CD 1500	CPH 2800 CP 3000	CPH 2800 CP 3000	CPH 2800 CP 3000	CS 3000

MOUNTING OPTIONS

	Drop-in Min. 80%L $\varnothing +0.5$	Top Mount 	Base Mount 	Foot Mount 	Support Mount
HOW TO ORDER		A14-063 584 A69-063 586	B21-063 593 B76-063 597	C05-063 599 C35-063 602	D02-063 603 D67-063 605

PROTECTION OPTIONS

Longer life to your gas springs by using protective solutions from harsh working environment (i.e. hot stamping), specially designed to minimize the impact of solid or liquid contaminants and extending the useful life of gas springs.

PW Protective Wiper

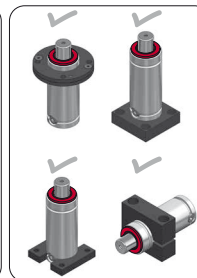
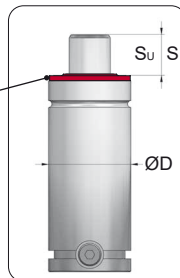
HOW TO ORDER

CW 1500 050 V1 36 63

CW 1500 050 V1 + PW 036 063



Protective Wiper



PW does not involve any variation of the dimensions of the gas spring. The useful stroke keeps the same as nominal stroke.

PC Protective Cover

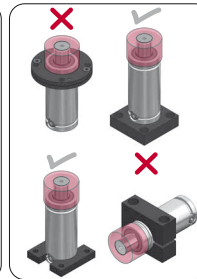
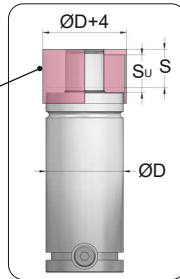
HOW TO ORDER

CW 1500 050 V1 36 63 50

CW 1500 050 V1 + PC 036 063 050



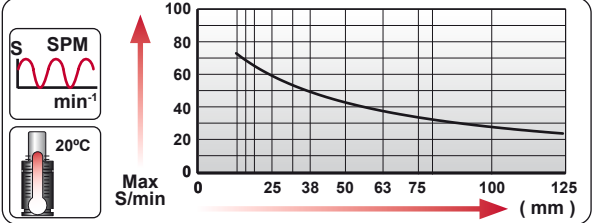
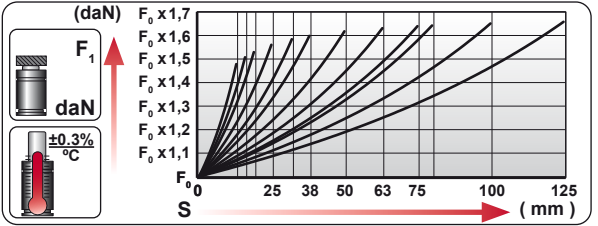
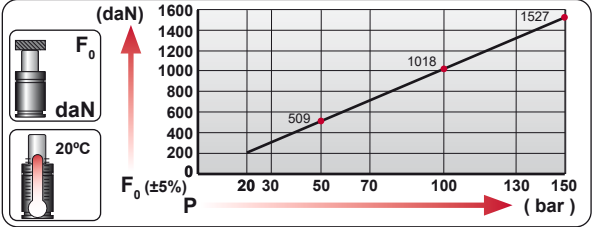
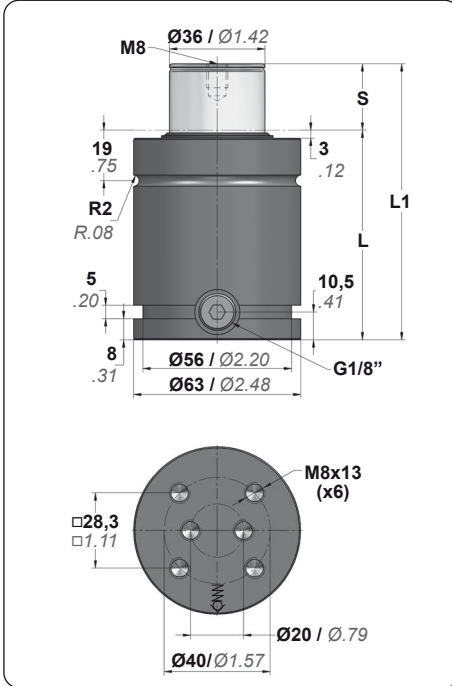
Protective Cover



The body diameter ($\varnothing D$) increases to the size of ($\varnothing PC$). PC can be used with mounts B and C, but not with mounts type A and D.

CWC 1500 V1

Compact Height



VDI SAFETY

STANDARS

ORDER	S		L1 ±0.25		L		F ₀ Initial Force		F ₁ (ISOTHERMAL) End Force		Vol.			
	mm	inch	mm	inch	mm	inch	daN	lb	daN	lb	cm ³	in ³	Kg.	lb
CWC 1500 013 V1	13	0.51	80	3.15	67	2.64	1530 ±5% 150 bar 2175 psi at 20°C 68°F	3440	2315	5205	39	2.4	1.23	2.71
CWC 1500 016 V1	16	0.63	86	3.39	70	2.76			2355	5293	47	2.8	1.27	2.80
CWC 1500 019 V1	19	0.75	92	3.62	73	2.87			2384	5359	54	3.3	1.31	2.89
CWC 1500 025 V1	25	0.98	104	4.09	79	3.11			2425	5451	69	4.2	1.38	3.04
CWC 1500 032 V1	32	1.26	118	4.65	86	3.39			2455	5520	86	5.3	1.47	3.24
CWC 1500 038 V1	38	1.50	130	5.12	92	3.62			2474	5561	101	6.2	1.55	3.42
CWC 1500 050 V1	50	1.97	154	6.06	104	4.09			2498	5616	131	8.0	1.70	3.75
CWC 1500 063 V1	63	2.48	180	7.09	117	4.61			2515	5653	164	10.0	1.87	4.12
CWC 1500 075 V1	75	2.95	204	8.03	129	5.08			2525	5677	194	11.8	2.03	4.48
CWC 1500 080 V1	80	3.15	214	8.43	134	5.28			2529	5684	206	12.6	2.09	4.61
CWC 1500 100 V1	100	3.94	254	10.00	154	6.06			2539	5708	256	15.6	2.35	5.18
CWC 1500 125 V1	125	4.92	304	11.97	179	7.05			2548	5728	318	19.4	2.67	5.89

TECHNICAL DATA														
	Fluid	N ₂		Pmin Pmax 20°C / 68°F	20 bar 290 psi	150 bar 2175 psi		Charging Adapter	18 CG 1-Q					
	Smax	< 90%		Tmin Tmax	0 °C 32 °F	80 °C 176 °F		Connection	CWC-H 1500 XXX					
	Vmax	1,6 m/s		Force variation by temperature	±0,3% / °C			Cartridge Kit	3651L210A					



CWC 1500 V1

Compact Height

mm	mm	mm	mm	mm	mm	mm
mm	mm	mm	mm	mm	mm	mm
mm	mm	mm	mm	mm	mm	mm
MODEL	CW 1500 KZ/KT 1500 CWC 1500	CT 1500 CK 1500	CM 1500 CD 1500	CPH 2800 CP 3000	CS 3000	

MOUNTING OPTIONS

	Drop-in	Top Mount	Base Mount	Foot Mount	Support Mount
HOW TO ORDER		A14-063 584 A69-063 586	B21-075 593 B76-075 597	C05-063 599 C35-063 602	D02-063 603 D67-063 605

PROTECTION OPTIONS

Longer life to your gas springs by using protective solutions from harsh working environment (i.e. hot stamping), specially designed to minimize the impact of solid or liquid contaminants and extending the useful life of gas springs.

PW Protective Wiper

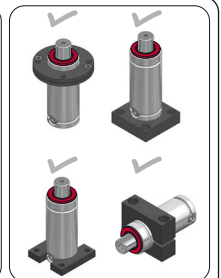
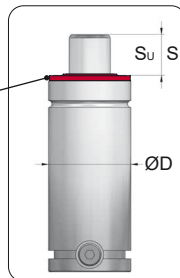
HOW TO ORDER

CWC 1500 050 V1 36 63

CWC 1500 050 V1 + PW 036 063



Protective Wiper



PW does not involve any variation of the dimensions of the gas spring. The useful stroke keeps the same as nominal stroke.

PC Protective Cover

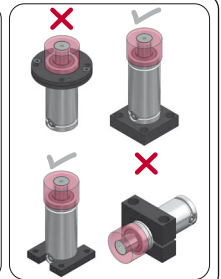
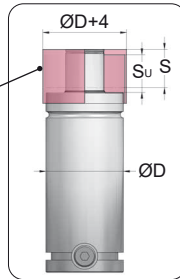
HOW TO ORDER

CWC 1500 050 V1 36 63 50

CWC 1500 050 V1 + PC 036 063 050



Protective Cover

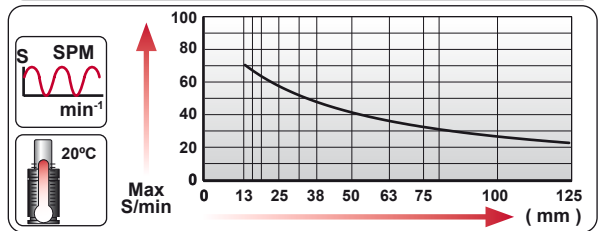
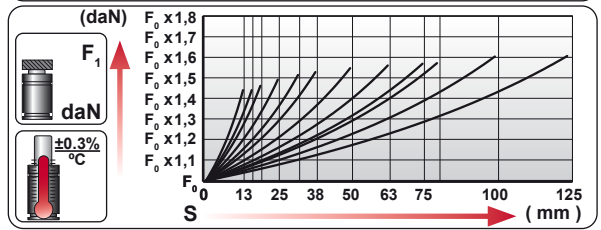
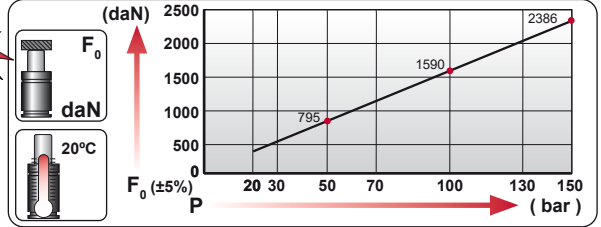
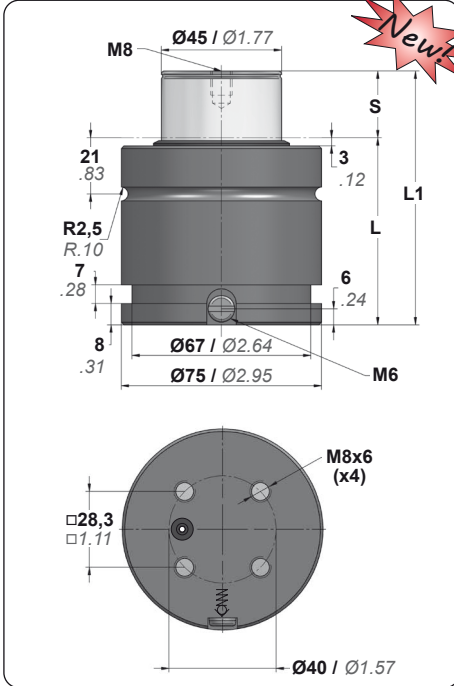


The body diameter (ØD) increases to the size of (ØPC). PC can be used with mounts B and C, but not with mounts type A and D.

CW 2400 V2

Compact Height

BMW B2 4005	FORD W-DX35-6204	PSA	E24.54.815.G
MB B8 3180 220 000 004	GM 90.25.08		
VW 39D 997			



VDI SAFETY

- >S
- >Vmax
- >Pmax
- Flex Rod










STANDARDS

- PED
- VDI 3003
- ISO 11901
- ONOMO EM.24.54


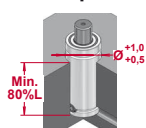












ORDER	S		L1 ±0.25		L		F ₀ Initial Force		F ₁ (ISOTHERMAL) End Force		Vol.			
	mm	inch	mm	inch	mm	inch	daN	lb	daN	lb	cm ³	in ³		Kg.
CW 2400 013 V2	13	0.51	71	2.80	58	2.28	2385 ±5% 150 bar 2175 psi at 20°C 68°F	5362	3289	7394	75	4.6	1.41	3.11
CW 2400 016 V2	16	0.63	77	3.03	61	2.40			3371	7579	87	5.3	1.46	3.22
CW 2400 019 V2	19	0.75	83	3.27	64	2.52			3437	7726	99	6.0	1.51	3.33
CW 2400 025 V2	25	0.98	95	3.74	70	2.76			3534	7946	122	7.5	1.62	3.57
CW 2400 032 V2	32	1.26	109	4.29	77	3.03			3613	8123	150	9.1	1.74	3.84
CW 2400 038 V2	38	1.50	121	4.76	83	3.27			3663	8234	173	10.6	1.84	4.06
CW 2400 050 V2	50	1.97	145	5.71	95	3.74			3732	8390	220	13.4	2.05	4.52
CW 2400 063 V2	63	2.48	171	6.73	108	4.25			3782	8502	271	16.6	2.27	5.00
CW 2400 075 V2	75	2.95	195	7.68	120	4.72			3814	8575	318	19.4	2.47	5.45
CW 2400 080 V2	80	3.15	205	8.07	125	4.92			3825	8599	338	20.6	2.56	5.64
CW 2400 100 V2	100	3.94	245	9.65	145	5.71			3859	8675	416	25.4	2.90	6.39
CW 2400 125 V2	125	4.92	295	11.61	170	6.69			3887	8739	514	31.4	3.33	7.34

TECHNICAL DATA

Fluid	N ₂	Pmin Pmax	20 bar 290 psi	150 bar 2175 psi	Tmin Tmax	0 °C 32 °F	80 °C 176 °F	Charging Adapter	06 CG 2-Q
Smax	< 90%	Force variation by temperature	±0,3% / °C		Connection	CW-H 2400 XXX V2			
Vmax	1,6 m/s	Cartridge Kit	S ≤ 19mm 4563L245A		S ≥ 25mm 45639245A				

								
		50	50	50	50	50	50	50
		Ø75	Ø75	Ø75	Ø75	Ø75	Ø75	Ø75
		L1=145	L1=154	L1=185	L1=210	L1=175	L1=200	L1=240
		L1=155	L1=160	L1=195	L1=210	L1=175	L1=200	L1=240
		L1=159	L1=160	L1=210	L1=210	L1=200	L1=200	L1=240
MODEL		CW 2400 CWC 2400 KZ/KT 2400	CT 3000 CK 2500 FD 1500	GN 1500 CM 2500 CD 2400	AG 1500	CPH 4300 CP 5000		CS 4700


MOUNTING OPTIONS

	Drop-in 	Top Mount 	Base Mount 	Foot Mount 	Support Mount 
HOW TO ORDER		A14-075  584 A34-075  585	B21-075  593 B76-075  597	C05-075  599 C20-075  601	D02-075  604 D67-075  605

PROTECTION OPTIONS

Longer life to your gas springs by using protective solutions from harsh working environment (i.e. hot stamping), specially designed to minimize the impact of solid or liquid contaminants and extending the useful life of gas springs.

PW Protective Wiper



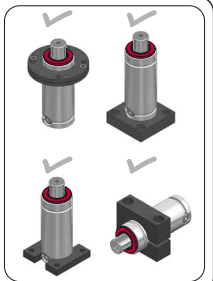
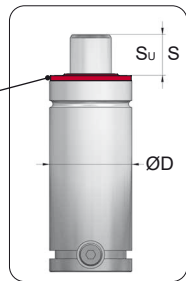
HOW TO ORDER

CW 2400 050 V2 45 75

CW 2400 050 V2 + PW 045 075




Protective Wiper



PW does not involve any variation of the dimensions of the gas spring. The useful stroke keeps the same as nominal stroke.

PC Protective Cover



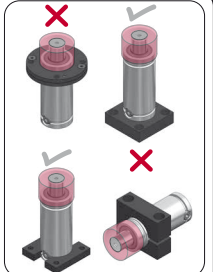
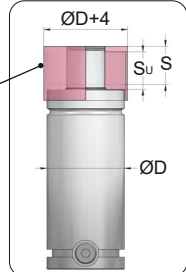
HOW TO ORDER

CW 2400 050 V2 45 75 50

CW 2400 050 V2 + PC 045 075 050



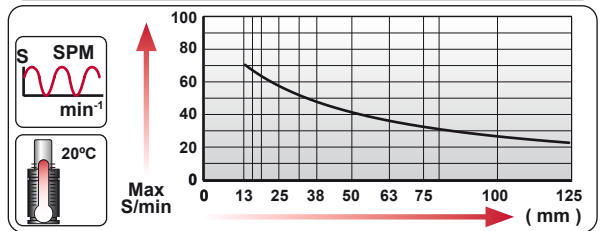
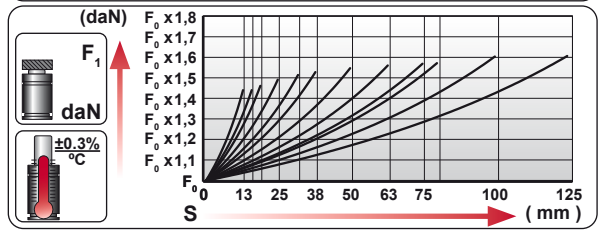
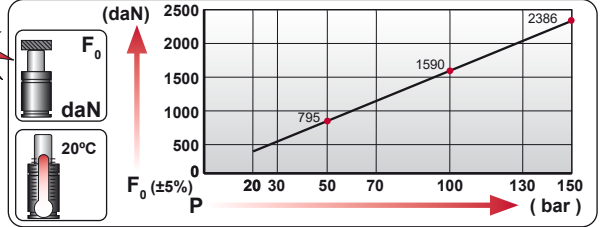
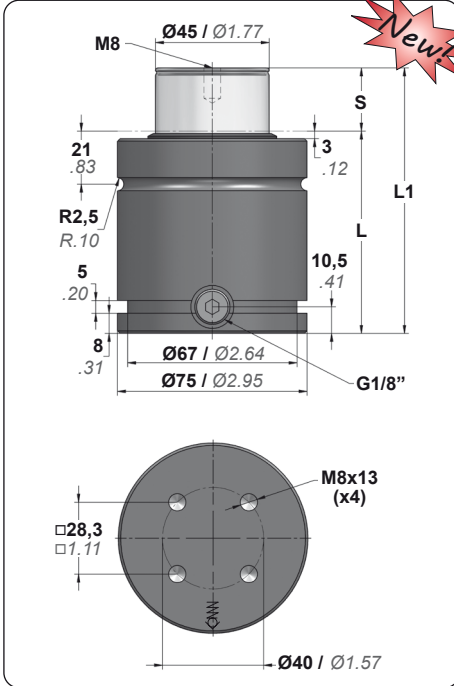
Protective Cover



The body diameter (ØD) increases to the size of (ØPC). PC can be used with mounts B and C, but not with mounts type A and D.

CWC 2400 V3

Compact Height



VDI SAFETY

STANDARS

ORDER	S		L1 ±0.25		L		F ₀ Initial Force		F ₁ (ISOTHERMAL) End Force		Vol.																																																								
	mm	inch	mm	inch	mm	inch	daN	lb	daN	lb	cm ³	in ³	Kg.	lb																																																					
CWC 2400 013 V3	13	0.51	81	3.19	68	2.68	2385	5362	3289	7394	75	4.6	1.73	3.81																																																					
CWC 2400 016 V3	16	0.63	87	3.43	71	2.80									±5%	150 bar	3371	7579	87	5.3	1.78	3.92																																													
CWC 2400 019 V3	19	0.75	93	3.66	74	2.91																	2175 psi	at	3437	7726	99	6.0	1.84	4.06																																					
CWC 2400 025 V3	25	0.98	105	4.13	80	3.15																									68°F	3534	7946	122	7.5	1.94	4.28																														
CWC 2400 032 V3	32	1.26	119	4.69	87	3.43																																3613	8123	150	9.1	2.06	4.54																								
CWC 2400 038 V3	38	1.50	131	5.16	93	3.66																																						3663	8234	173	10.6	2.16	4.76																		
CWC 2400 050 V3	50	1.97	155	6.10	105	4.13																																												3732	8390	220	13.4	2.37	5.22												
CWC 2400 063 V3	63	2.48	181	7.13	118	4.65																																																		3782	8502	271	16.6	2.59	5.71						
CWC 2400 075 V3	75	2.95	205	8.07	130	5.12																																																								3814	8575	318	19.4	2.80	6.17
CWC 2400 080 V3	80	3.15	215	8.46	135	5.31																																																													
CWC 2400 100 V3	100	3.94	255	10.04	155	6.10	3859	8675	416	25.4	3.22	7.10																																																							
CWC 2400 125 V3	125	4.92	305	12.01	180	7.09							3887	8739	514	31.4	3.65	8.05																																																	

TECHNICAL DATA														
Fluid	N ₂		Pmin Pmax	20 bar 150 bar		290 psi 2175 psi		Charging Adapter	18 CG 1-Q					
Smax	< 90%		Tmin Tmax	20°C / 68°F		0 °C 80 °C		Connection	CWC-H 2400 XXX V3					
Vmax	1,6 m/s		Force variation by temperature	±0,3% / °C		32 °F 176 °F		Cartridge Kit	S ≤ 19mm 4563L245A S ≥ 25mm 45639245A					

mm	50	50	50	50	50	50	50	50
mm	Ø75	Ø75	Ø75	Ø75	Ø75	Ø75	Ø75	Ø75
mm	L1=145 L1=155 L1=159	L1=154 L1=160 L1=160	L1=185 L1=195 L1=210	L1=210	L1=175 L1=200	L1=240		
MODEL	CW 2400 CWC 2400 KZ/KT 2400	CT 3000 CK 2500 FD 1500	GN 1500 CM 2500 CD 2400	AG 1500	CPH 4300 CP 5000	CS 4700		

MOUNTING OPTIONS

	Drop-in 	Top Mount 	Base Mount 	Foot Mount 	Support Mount
HOW TO ORDER		A14-075 A34-075	B21-075 B76-075	C05-075 C20-075	D02-075 D67-075

PROTECTION OPTIONS

Longer life to your gas springs by using protective solutions from harsh working environment (i.e. hot stamping), specially designed to minimize the impact of solid or liquid contaminants and extending the useful life of gas springs.

PW Protective Wiper

HOW TO ORDER

CWC 2400 050 V3 45 75

CWC 2400 050 V3 + PW 045 075

PW does not involve any variation of the dimensions of the gas spring. The useful stroke keeps the same as nominal stroke.

Protective Wiper

PC Protective Cover

HOW TO ORDER

CWC 2400 050 V3 45 75 50

CWC 2400 050 V3 + PC 045 075 050

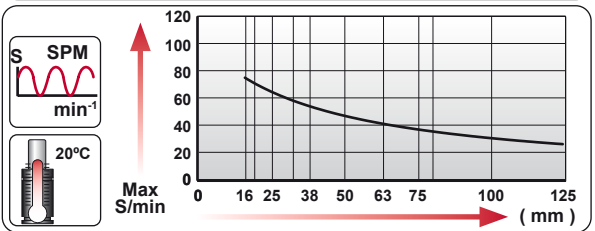
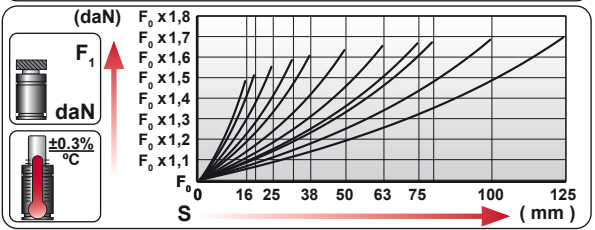
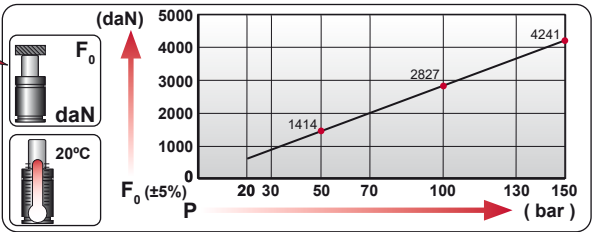
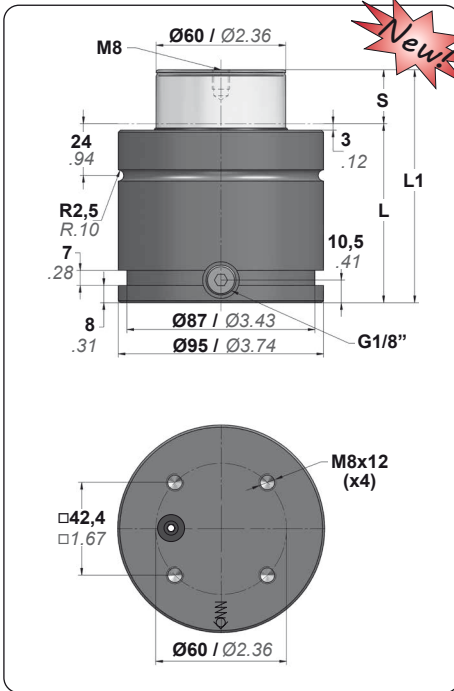
The body diameter (ØD) increases to the size of (ØPC). PC can be used with mounts B and C, but not with mounts type A and D.

Protective Cover

CW 4200 V2

Compact Height

BMW B2 4005	FORD W-DX35-6204	PSA E24.54.815.G
MB B8 3180 220 000 004	GM 90.25.08	
VW 39D 997		



VDI SAFETY

- >S
- >Vmax
- >Pmax
- Flex Rod


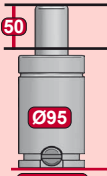







STANDARS

- PED
- VDI 3003
- ISO 11901
- ONOMO EM.24.54


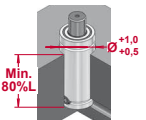












ORDER	S		L1 ±0.25		L		F ₀ Initial Force		F ₁ (ISOTHERMAL) End Force		Vol.			
	mm	inch	mm	inch	mm	inch	daN	lb	daN	lb	cm ³	in ³		Kg.
CW 4200 016 V2	16	0.63	90	3.54	74	2.91	4240	9532	6084	13678	149	9.1	3.03	6.68
CW 4200 019 V2	19	0.75	96	3.78	77	3.03			6222	13987	169	10.3	3.11	6.86
CW 4200 025 V2	25	0.98	108	4.25	83	3.27	±5%		6430	14455	208	12.7	3.29	7.25
CW 4200 032 V2	32	1.26	122	4.80	90	3.54			6602	14842	253	15.4	3.49	7.69
CW 4200 038 V2	38	1.50	134	5.28	96	3.78	150 bar	2175 psi	6711	15088	292	17.8	3.66	8.07
CW 4200 050 V2	50	1.97	158	6.22	108	4.25			6867	15438	370	22.5	4.00	8.82
CW 4200 063 V2	63	2.48	184	7.24	121	4.76	at	20°C	6980	15692	454	27.7	4.37	9.63
CW 4200 075 V2	75	2.95	208	8.19	133	5.24			7055	15860	531	32.4	4.71	10.38
CW 4200 080 V2	80	3.15	218	8.58	138	5.43	68°F		7080	15917	564	34.4	4.85	10.69
CW 4200 100 V2	100	3.94	258	10.16	158	6.22			7159	16094	693	42.3	5.42	11.95
CW 4200 125 V2	125	4.92	308	12.13	183	7.20			7225	16243	855	52.2	6.14	13.54

TECHNICAL DATA

Fluid	N ₂	Pmin Pmax	20 bar / 290 psi	150 bar / 2175 psi	Charging Adapter	18 CG 1-Q
Smix	< 90%	Tmin Tmax	20°C / 68°F	80°C / 176°F	Connection	CW-H 4200 XXX V2
Vmax	1,6 m/s	Force variation by temperature	±0,3% / °C		Cartridge Kit	S ≤ 19mm 6080U275A S ≥ 25mm 6080G275A

						
	$\varnothing 95$	$\varnothing 95$	$\varnothing 95$	$\varnothing 95$	$\varnothing 95$	$\varnothing 95$
	L1=158 L1=162 L1=162	L1=170 L1=170	L1=195 L1=205 L1=220	L1=220	L1=215	L1=255
MODEL	CW 4200 KZ 4200 KT 4200	CK 4000 FD 3000	GN 3000 CM 4000 CD 4200	AG 3000	CP 8000	CS 7500


MOUNTING OPTIONS

	Drop-in	Top Mount	Base Mount	Foot Mount	Support Mount
					
HOW TO ORDER		A14-095  A34-095 	B21-095  B76-095 	C05-095  C20-095 	D02-095  D67-095 

PROTECTION OPTIONS

Longer life to your gas springs by using protective solutions from harsh working environment (i.e. hot stamping), specially designed to minimize the impact of solid or liquid contaminants and extending the useful life of gas springs.

PW Protective Wiper



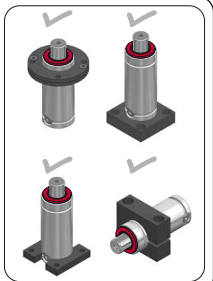
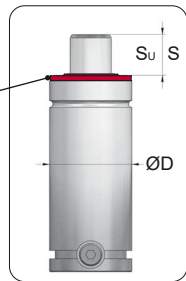
HOW TO ORDER

CW 4200 050 V2 60 95

CW 4200 050 V2 + PW 060 095




Protective Wiper



PW does not involve any variation of the dimensions of the gas spring. The useful stroke keeps the same as nominal stroke.

PC Protective Cover



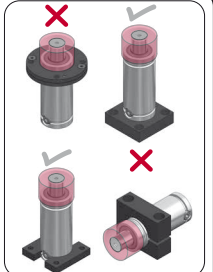
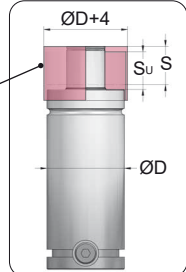
HOW TO ORDER

CW 4200 050 V2 60 95 50

CW 4200 050 V2 + PC 060 095 050



Protective Cover



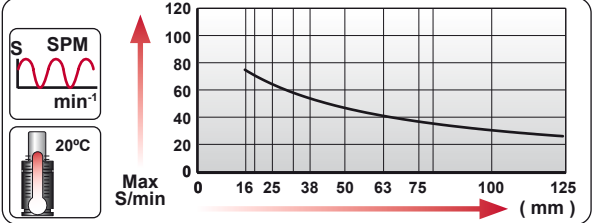
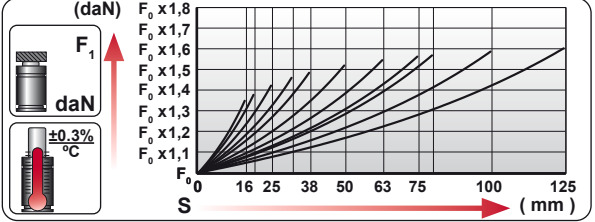
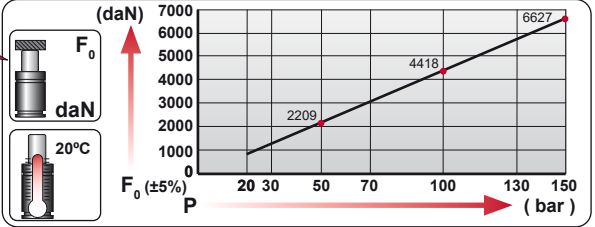
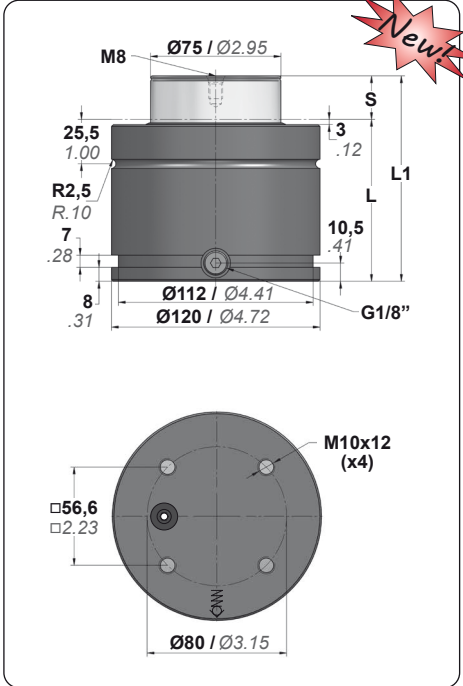
The body diameter (ØD) increases to the size of (ØPC). PC can be used with mounts B and C, but not with mounts type A and D.

CW 6600 V1

Compact Height



BMW B2 4005	FORD W-DX35-6204	
MB B8 3180 220 000 004	GM 90.25.08	
VW 39D 997		



VDI SAFETY

- > S
- > Vmax
- > Pmax
- Flex Rod

STANDARS

- PEP
- VDI 3003
- ISO 11901

ORDER	S		L1 ±0.25		L		F ₀ Initial Force		F ₁ (ISOTHERMAL) End Force		Vol.		Weight	
	mm	inch	mm	inch	mm	inch	daN	lb	daN	lb	cm ³	in ³	Kg.	lb
CW 6600 016 V1	16	0.63	100	3.94	84	3.31	6630 14905 ±5% 150 bar 2175 psi at 20°C 68°F		8746	19662	292	17.8	5.51	12.15
CW 6600 019 V1	19	0.75	106	4.17	87	3.43			8946	20112	324	19.8	5.65	12.46
CW 6600 025 V1	25	0.98	118	4.65	93	3.66			9265	20829	388	23.7	5.93	13.07
CW 6600 032 V1	32	1.26	132	5.20	100	3.94			9544	21455	463	28.3	6.26	13.80
CW 6600 038 V1	38	1.50	144	5.67	106	4.17			9728	21869	527	32.2	6.53	14.40
CW 6600 050 V1	50	1.97	168	6.61	118	4.65			10001	22483	655	40.0	7.09	15.63
CW 6600 063 V1	63	2.48	194	7.64	131	5.16			10207	22946	794	48.5	7.69	16.95
CW 6600 075 V1	75	2.95	218	8.58	143	5.63			10347	23261	922	56.3	8.25	18.19
CW 6600 080 V1	80	3.15	228	8.98	148	5.83			10395	23369	976	59.5	8.48	18.70
CW 6600 100 V1	100	3.94	268	10.55	168	6.61			10548	23712	1189	72.6	9.41	20.75
CW 6600 125 V1	125	4.92	318	12.52	193	7.60	10679	24008	1456	88.9	10.57	23.30		

TECHNICAL DATA

Fluid	N ₂	Pmin Pmax	20 bar 290 psi	150 bar 2175 psi	Tmin Tmax	0 °C 32 °F	80 °C 176 °F	Charging Adapter	18 CG 1-Q
Smax	< 90%	Force variation by temperature	±0,3% / °C		Connection	CW-H 6600 XXX V1		Cartridge Kit	S ≤ 19mm 75A0W360A S ≥ 25mm 75A01360A
Vmax	1,6 m/s								

mm	mm	mm	mm	mm	mm	mm	mm
	50			50	50		50
	$\varnothing 120$			$\varnothing 120$	$\varnothing 120$		$\varnothing 120$
	L1=168			L1=202	L1=240		L1=260
	L1=172			L1=215			
	L1=172			L1=240			
MODEL	CW 6600 KZ 6600 KT 6600			GN 5000 CM 6500 CD 6600	AG 5000		CS 11800

MOUNTING OPTIONS

	Drop-in	Top Mount	Base Mount	Foot Mount	Support Mount
HOW TO ORDER		A14-120 584 A34-120 586	B21-120 594 B76-120 598	C05-120 600 C20-120 602	D02-120 604 D67-120 606

PROTECTION OPTIONS

Longer life to your gas springs by using protective solutions from harsh working environment (i.e. hot stamping), specially designed to minimize the impact of solid or liquid contaminants and extending the useful life of gas springs.

PW Protective Wiper

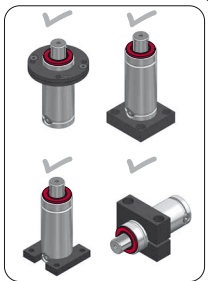
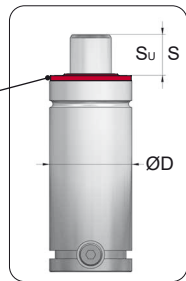
HOW TO ORDER

CW 6600 050 V1 75 120

CW 6600 050 V1 + PW 075 120



Protective Wiper



PW does not involve any variation of the dimensions of the gas spring. The useful stroke keeps the same as nominal stroke.

PC Protective Cover

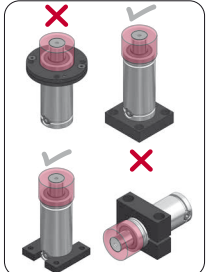
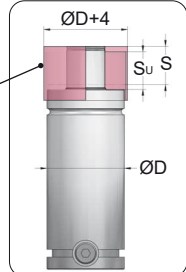
HOW TO ORDER

CW 6600 050 V1 75 120 50

CW 6600 050 V1 + PC 075 120 050



Protective Cover

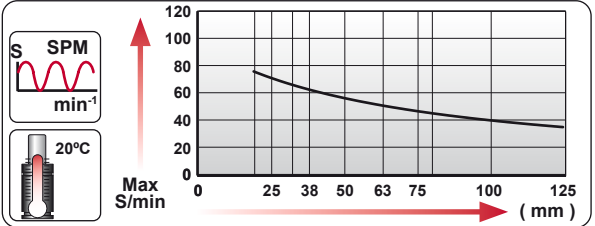
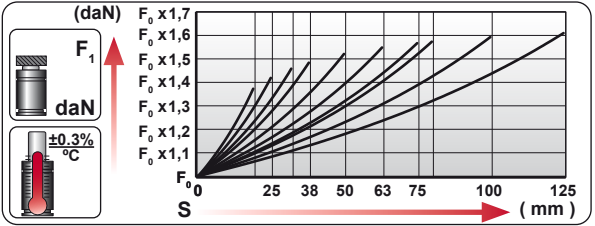
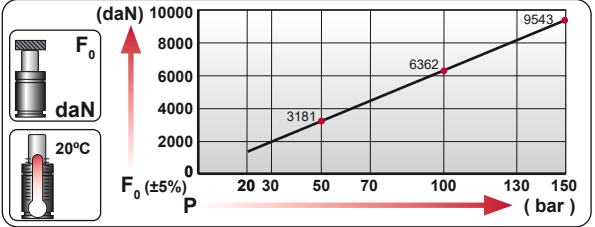
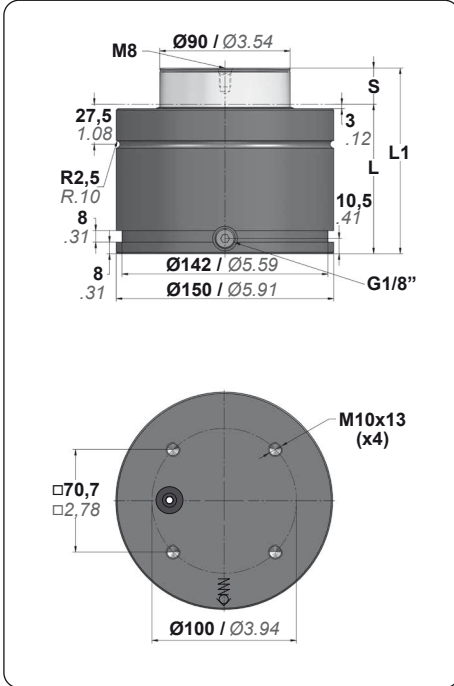


The body diameter (ØD) increases to the size of (ØPC). PC can be used with mounts B and C, but not with mounts type A and D.

CW 9500

Compact Height

BMW B2 4005	FORD W-DX35-6204
MB B8 3180 220 000 004	GM 90.25.08
VW 39D 997	



VDI SAFETY

- >S
- >Vmax
- >Pmax
- Flex Rod




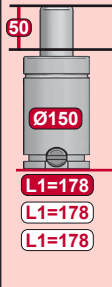
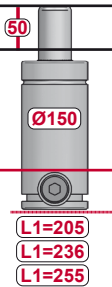
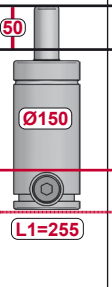
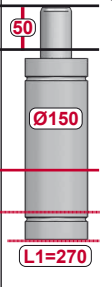
STANDARS

- PED
- VDI 3003
- ISO 11901


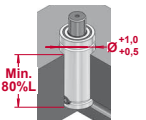












ORDER	S		L1 ±0.25		L		F ₀ Initial Force		F ₁ (ISOTHERMAL) End Force		Vol.			
	mm	inch	mm	inch	mm	inch	daN	lb	daN	lb	cm ³	in ³		Kg.
CW 9500 019	19	0.75	116	4.57	97	3.82	9540 21447 ±5% 150 bar 2175 psi at 20°C 68°F		13263	29817	431	26.3	9.96	21.96
CW 9500 025	25	0.98	128	5.04	103	4.06			13696	30790	524	32.0	10.35	22.82
CW 9500 032	32	1.26	142	5.59	110	4.33			14060	31608	633	38.6	10.82	23.85
CW 9500 038	38	1.50	154	6.06	116	4.57			14295	32136	727	44.4	11.22	24.74
CW 9500 050	50	1.97	178	7.01	128	5.04			14633	32897	914	55.8	12.01	26.48
CW 9500 063	63	2.48	204	8.03	141	5.55			14882	33456	1117	68.1	12.87	28.37
CW 9500 075	75	2.95	228	8.98	153	6.02			15047	33828	1304	79.6	13.67	30.14
CW 9500 080	80	3.15	238	9.37	158	6.22			15104	33955	1382	84.3	14.00	30.86
CW 9500 100	100	3.94	278	10.94	178	7.01			15281	34352	1693	103.3	15.32	33.77
CW 9500 125	125	4.92	328	12.91	203	7.99			15430	34689	2083	127.1	16.98	37.43

TECHNICAL DATA

Fluid	N ₂	Pmin Pmax	20 bar 150 bar	Charging Adapter	18 CG 1-Q
Smax	< 90%	20°C / 68°F	290 psi 2175 psi	Connection	CW-H 9500 XXX
Vmax	1,6 m/s	Tmin Tmax	0 °C 80 °C	Cartridge Kit	90C5X380A
		Force variation by temperature	32 °F 176 °F		
			±0,3% / °C		

						
			CW 9500 CW 11800 KT 9500	GN 7500 CM 10000 CD 9600	AG 7500	CS 18300


MOUNTING OPTIONS

	Drop-in 	Top Mount 	Base Mount 	Foot Mount 	Support Mount 
HOW TO ORDER		A14-150  A34-150 	B21-150  B76-150 	C05-150  C20-150 	D02-150  D67-150 

PROTECTION OPTIONS

Longer life to your gas springs by using protective solutions from harsh working environment (i.e. hot stamping), specially designed to minimize the impact of solid or liquid contaminants and extending the useful life of gas springs.


PW Protective Wiper



HOW TO ORDER

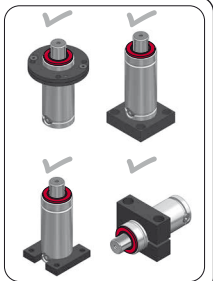
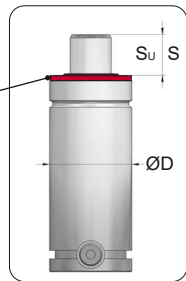
CW 9500 050 **90** **150**

CW 9500 050 + PW 090 150





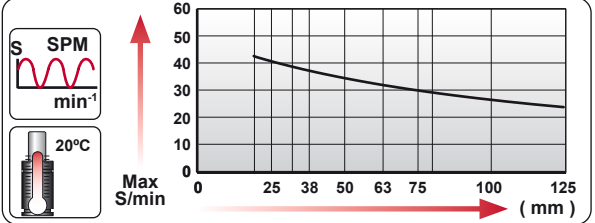
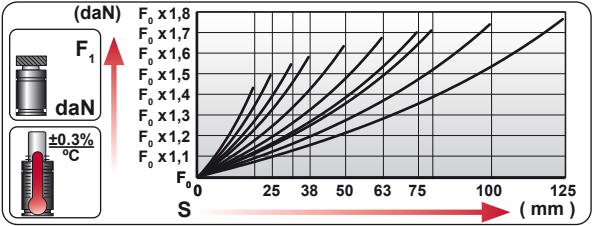
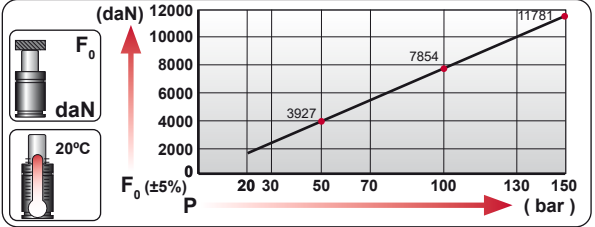
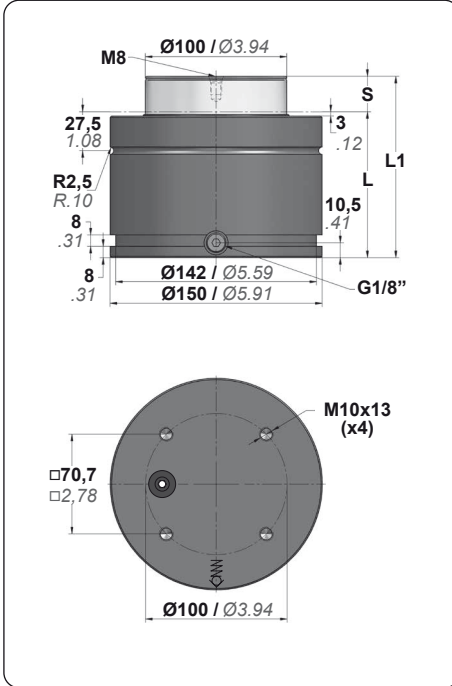
Protective Wiper



PW does not involve any variation of the dimensions of the gas spring. The useful stroke keeps the same as nominal stroke.

CW 11800

Compact Height



VDI SAFETY

- > S
- > Vmax
- > Pmax
- Flex Rod

STANDARS

ORDER	S		L1 ±0.25		L		F ₀ Initial Force		F ₁ (ISOTHERMAL) End Force		Vol.		Weight	
	mm	inch	mm	inch	mm	inch	daN	lb	daN	lb	cm ³	in ³	Kg.	lb
CW 11800 019	19	0.75	116	4.57	97	3.82	11780 ±5% 150 bar 2175 psi at 20°C 68°F	26482	17165	38589	476	29.0	9.89	21.80
CW 11800 025	25	0.98	128	5.04	103	4.06			17876	40186	576	35.1	10.31	22.73
CW 11800 032	32	1.26	142	5.59	110	4.33			18489	41565	693	42.3	10.79	23.79
CW 11800 038	38	1.50	154	6.06	116	4.57			18892	42472	793	48.4	11.21	24.71
CW 11800 050	50	1.97	178	7.01	128	5.04			19486	43805	993	60.6	12.04	26.54
CW 11800 063	63	2.48	204	8.03	141	5.55			19930	44804	1210	73.8	12.94	28.53
CW 11800 075	75	2.95	228	8.98	153	6.02			20229	45478	1410	86.1	13.78	30.38
CW 11800 080	80	3.15	238	9.37	158	6.22			20333	45710	1494	91.2	14.12	31.13
CW 11800 100	100	3.94	278	10.94	178	7.01			20658	46441	1828	111.5	15.51	34.19
CW 11800 125	125	4.92	328	12.91	203	7.99			20937	47067	2245	137.0	17.25	38.03

TECHNICAL DATA													
Fluid	N ₂		Pmin Pmax	20 bar 150 bar		290 psi 2175 psi		Charging Adapter	18 CG 1-Q				
Smix	< 90%		Tmin Tmax	0 °C 80 °C		32 °F 176 °F		Connection	CW-H 11800 XXX				
Vmax	1,6 m/s		Force variation by temperature	±0,3% / °C				Cartridge Kit	A0C5X380A				



CW 11800
Compact Height

 Ls mm	 L1 mm	 L1 mm	 L1 mm	 L1 mm	 L1 mm	 L1 mm
 Ls mm	 L1 mm	 L1 mm	 L1 mm	 L1 mm	 L1 mm	 L1 mm
 L1 mm	 L1 mm	 L1 mm	 L1 mm	 L1 mm	 L1 mm	 L1 mm
MODEL	CW 9500 CW 11800 KT 9500			GN 7500 CM 10000 CD 9600	AG 7500	CS 18300

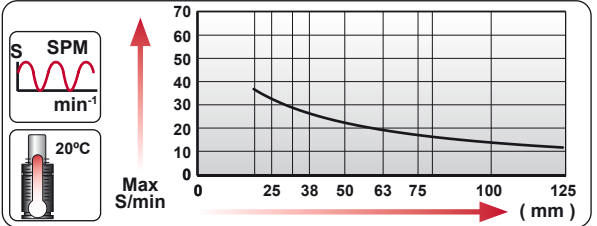
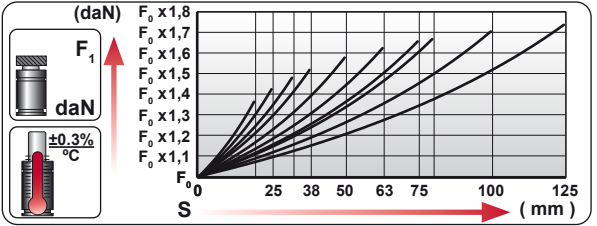
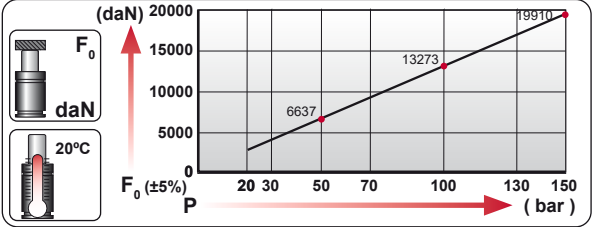
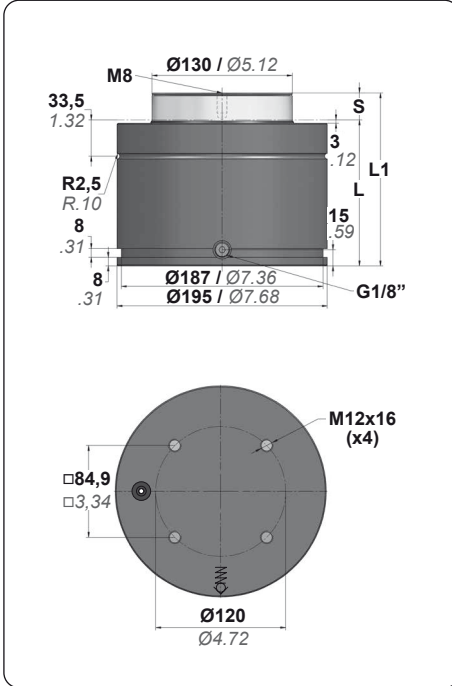
MOUNTING OPTIONS

	<p>Drop-in</p>	<p>Top Mount</p>	<p>Base Mount</p>	<p>Foot Mount</p>	<p>Support Mount</p>
<p>HOW TO ORDER</p>		<p>A14-150 584</p> <p>A34-150 586</p>	<p>B21-150 594</p> <p>B76-150 598</p>	<p>C05-150 600</p> <p>C20-150 602</p>	<p>D02-150 604</p> <p>D67-150 606</p>

CW 20000

Compact Height

	GM	90.25.08
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VDI SAFETY

- $> S$
- $> V_{max}$
- $> P_{max}$
- Flex Rod




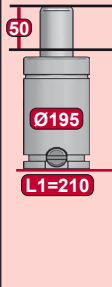


STANDARDS

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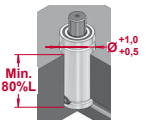











ORDER	S		L1 ± 0.25		L		F_0 Initial Force		F_1 (ISOTHERMAL) End Force		Vol.			
	mm	inch	mm	inch	mm	inch	daN	lb	daN	lb	cm ³	in ³	Kg.	lb
CW 20000 019	19	0.75	148	5.83	129	5.08	19910 ±5% 150 bar 2175 psi at 20°C 68°F	44759	27148	61031	946	57.7	22.69	50.02
CW 20000 025	25	0.98	160	6.30	135	5.31			28360	63756	1114	68.0	23.40	51.59
CW 20000 032	32	1.26	174	6.85	142	5.59			29469	66249	1309	79.9	24.24	53.44
CW 20000 038	38	1.50	186	7.32	148	5.83			30233	67967	1477	90.1	24.95	55.00
CW 20000 050	50	1.97	210	8.27	160	6.30			31410	70612	1813	110.6	26.38	58.16
CW 20000 063	63	2.48	236	9.29	173	6.81			32335	72692	2176	132.8	27.93	61.57
CW 20000 075	75	2.95	260	10.24	185	7.28			32982	74147	2512	153.3	29.36	64.73
CW 20000 080	80	3.15	270	10.63	190	7.48			33210	74658	2652	161.8	29.96	66.05
CW 20000 100	100	3.94	310	12.20	210	8.27			33942	76304	3211	195.9	32.34	71.30
CW 20000 125	125	4.92	360	14.17	235	9.25			34588	77757	3910	238.6	35.32	77.87

TECHNICAL DATA

Fluid	N ₂	Pmin Pmax	20 bar 290 psi 20°C / 68°F	150 bar 2175 psi	Charging Adapter	18 CG 1-Q
Smax	< 90%	Tmin Tmax	0 °C 32 °F	80 °C 176 °F	Connection	CW-H 20000 XXX
Vmax	1,6 m/s	Force variation by temperature	±0,3% / °C		Cartridge Kit	D0G0Y630A

							
			50 Ø195 L1=210	50 Ø195 L1=260	50 Ø195 L1=260		
MODEL			CW 20000	CD 20000	AG 10000		


MOUNTING OPTIONS

	Drop-in 	Top Mount 	Base Mount 	Foot Mount 	Support Mount 
HOW TO ORDER		A14-195  584 A34-195  586	B21-195  594 B76-195  598	C05-195  600 C20-195  602	D02-195  604

PROTECTION OPTIONS

Longer life to your gas springs by using protective solutions from harsh working environment (i.e. hot stamping), specially designed to minimize the impact of solid or liquid contaminants and extending the useful life of gas springs.


PW Protective Wiper



HOW TO ORDER

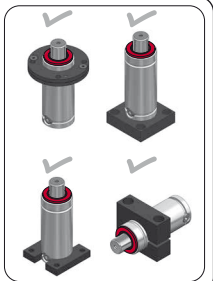
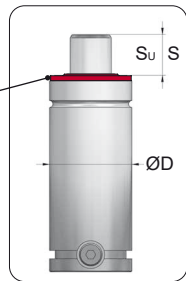
CW 20000 050 **130** **195**

CW 20000 050 + PW 130 195





Protective Wiper



PW does not involve any variation of the dimensions of the gas spring. The useful stroke keeps the same as nominal stroke.