



GAS SPRINGS



AZOL 
GAS



HEAVY LOAD CP

- Full height size gas springs
- The highest contact force (150-8000 daN)
- Limited strokes (up to 80 mm)
- Used for extra heavy duty work



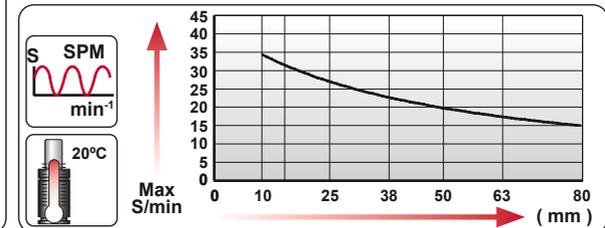
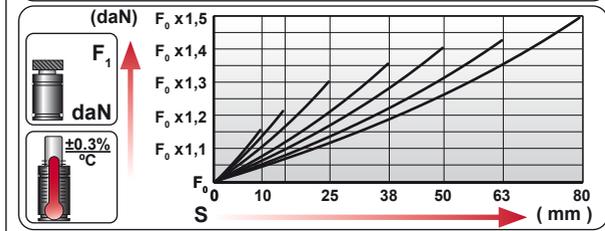
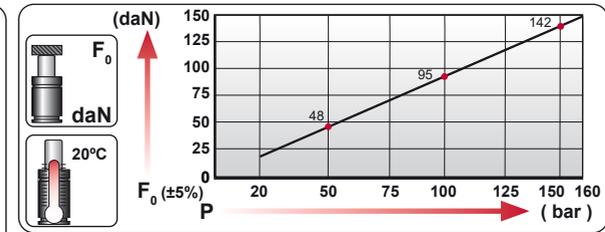
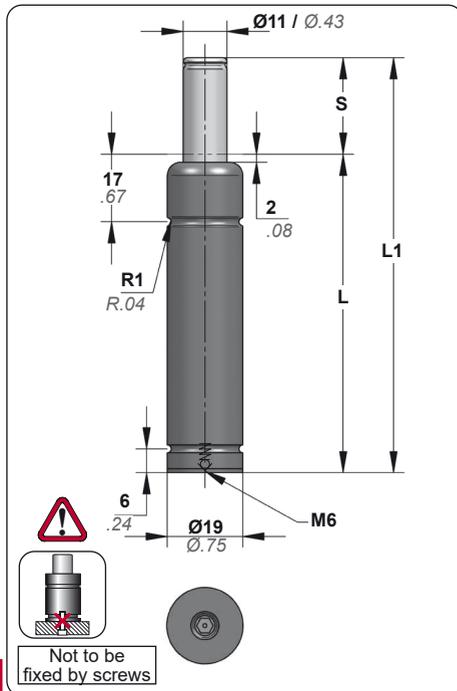
CP HEAVY LOAD LARGE

MODEL	F ₀ daN lb	Ø mm inch	S mm inch	L1 mm inch	Pmax bar psi	Charge Port		
CP 150 V1	150 337	Ø19 Ø0.75	10 - 80 0.39 - 3.15	75 - 220 2.95 - 8.66	160 2320	M6	X	X
CP 300 V1	300 674	Ø25 Ø0.98	10 - 80 0.39 - 3.15	75 - 220 2.95 - 8.66	170 2465	M6	X	✓
CP 500 V1	500 1124	Ø32 Ø1.26	10 - 80 0.39 - 3.15	75 - 225 2.95 - 8.86	200 2900	M6	X	✓
CP 1000 V1	1000 2248	Ø38 Ø1.50	10 - 80 0.39 - 3.15	75 - 240 2.95 - 9.45	205 2975	M6	X	✓
CP 2000 V2	2000 4496	Ø50 Ø1.97	10 - 80 0.39 - 3.15	80 - 245 3.15 - 9.65	210 3045	G1/8"	X	✓
CP 3000 V1	3000 6744	Ø63 Ø2.48	10 - 80 0.39 - 3.15	95 - 255 3.74 - 10.04	190 2755	M6	X	✓
CP 5000 V1	5000 11240	Ø75 Ø2.95	10 - 80 0.39 - 3.15	100 - 275 3.94 - 10.83	200 2900	G1/8"	X	✓
CP 8000 V1	8000 17985	Ø95 Ø3.74	10 - 80 0.39 - 3.15	110 - 290 4.33 - 11.42	180 2610	G1/8"	X	✓

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 						

CP 150 V1

Heavy Load



VDI SAFETY

STANDARS

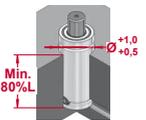
ORDER	S		L1 ±0.25		L		F ₀ Initial Force		F ₁ (ISOTHERMAL) End Force		Vol.			
	mm	inch	mm	inch	mm	inch	daN	lb	daN	lb	cm ³	in ³	Kg.	lb
CP 150 010 V1	10	0.39	75	2.95	65	2.56	150 ±5% 160 bar 2320 psi at 20°C 68°F	337	174	390	7	0.4	0.08	0.18
CP 150 015 V1	15	0.59	85	3.35	70	2.76			182	410	8	0.5	0.09	0.20
CP 150 025 V1	25	0.98	105	4.13	80	3.15			195	439	10	0.6	0.10	0.22
CP 150 038 V1	38	1.50	135	5.31	97	3.82			204	458	14	0.8	0.12	0.26
CP 150 050 V1	50	1.97	160	6.30	110	4.33			211	474	16	1.0	0.14	0.31
CP 150 063 V1	63	2.48	190	7.48	127	5.00			214	482	20	1.2	0.16	0.35
CP 150 080 V1	80	3.15	220	8.66	140	5.51			224	504	23	1.4	0.18	0.40

TECHNICAL DATA														
	Fluid	N ₂		Pmin Pmax	20 bar 160 bar		20°C / 68°F		290 psi 2320 psi		Charging Adapter	06 CG 2-Q		
	Smax	< 90%		Tmin Tmax	0 °C 80 °C		32 °F 176 °F		Connection	X				
	Vmax	0,5 m/s		Force variation by temperature	±0,3% / °C			Seal Kit	X					



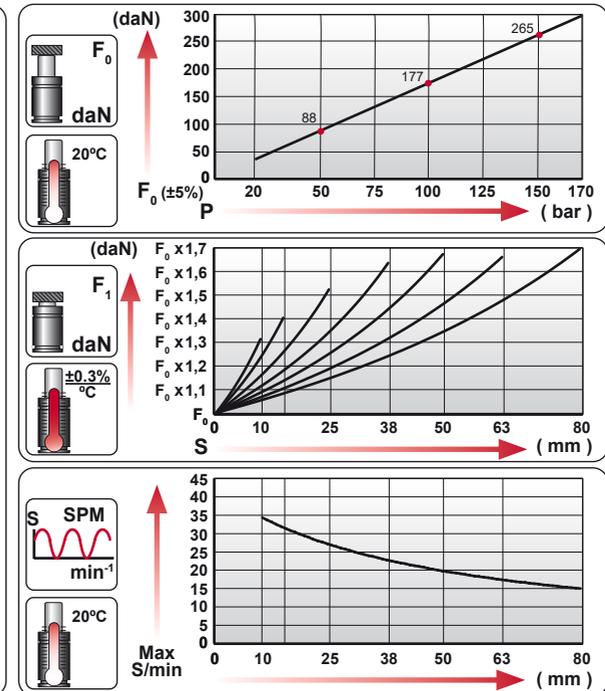
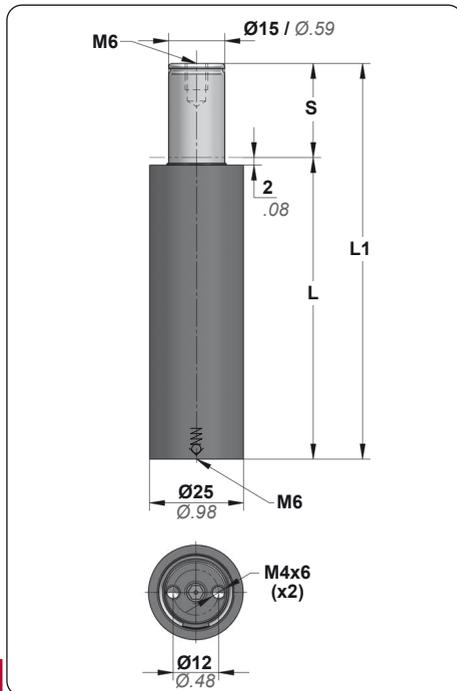
CP 150 V1
Heavy Load

  								
<p>MODEL</p>	<p>AFJ</p>	<p>CW 170</p>					<p>CP 150</p>	

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>					

CP 300 V1

Heavy Load



VDI SAFETY

STANDARS



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		
CP 300 010 V1	10	0.39	75	2.95	65	2.56	300 ±5% 170 bar 2465 psi at 20°C 68°F	674	398	894	7	0.4	0.18	0.40
CP 300 015 V1	15	0.59	85	3.35	70	2.76		425	955	9	0.6	0.19	0.42	
CP 300 025 V1	25	0.98	105	4.13	80	3.15		461	1035	13	0.8	0.22	0.49	
CP 300 038 V1	38	1.50	130	5.12	92	3.62		494	1111	17	1.0	0.25	0.55	
CP 300 050 V1	50	1.97	155	6.10	105	4.13		505	1135	22	1.3	0.28	0.62	
CP 300 063 V1	63	2.48	185	7.28	122	4.80		501	1126	28	1.7	0.31	0.68	
CP 300 080 V1	80	3.15	220	8.66	140	5.51		511	1148	34	2.1	0.36	0.79	

TECHNICAL DATA

Fluid	N ₂	Pmin Pmax	20 bar / 290 psi 170 bar / 2465 psi	Tmin Tmax	20°C / 32°F 80°C / 176°F	Charging Adapter	06 CG 2-Q
Smax	< 90%	Force variation by temperature	±0,3% / °C	Connection	X	Seal Kit	S-XXXXXXX
Vmax	0,5 m/s						



CP 300 V1

Heavy Load

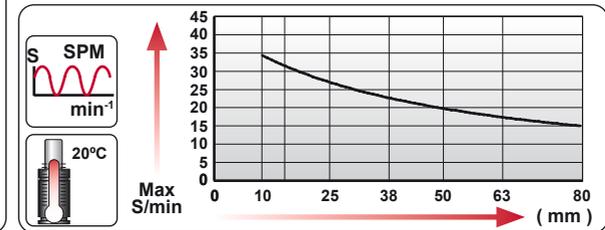
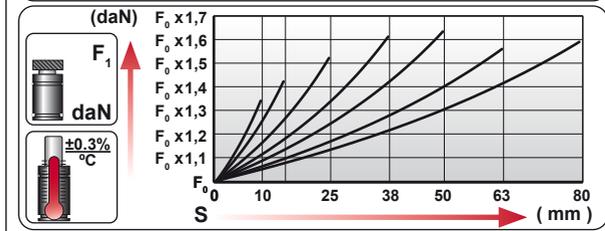
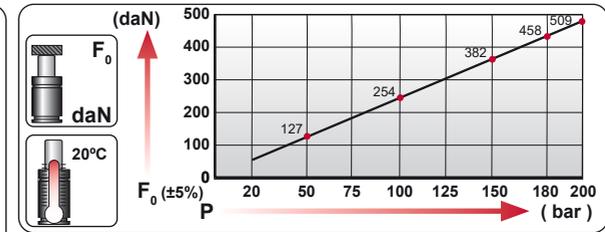
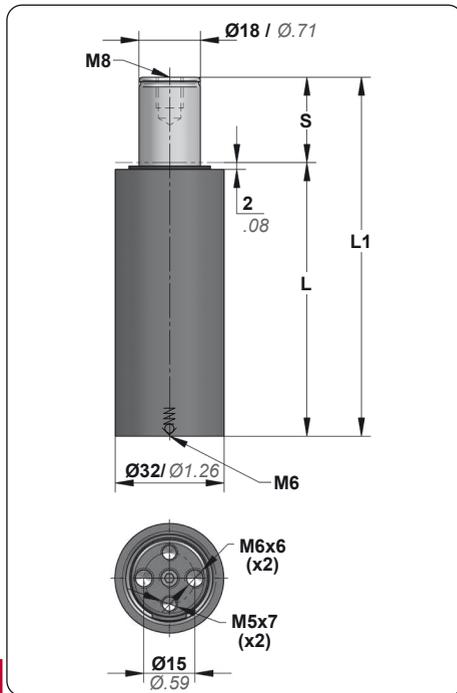
50 mm	50 mm		50 mm	50 mm		50 mm	50 mm
	L1=130		L1=132 L1=133	L1=160		L1=160	L1=195
L1=142 L1=145 L1=154							
MODEL	AFC/AFD AFNA AF	CW 320		CK 200 CT 200	CM 200	CP 300	CS 420

MOUNTING OPTIONS

	Drop-in 	Top Mount 	Base Mount 	Foot Mount 	Support Mount
HOW TO ORDER					

CP 500 V1

Heavy Load



VDI SAFETY

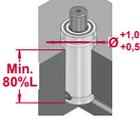
STANDARS

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
CP 500 010 V1	10	0.39	75	2.95	65	2.56	485 190 bar $\pm 5\%$ 2755 psi at 20°C 68°F	1090	650	1460	10	0.6	0.30	0.66
CP 500 015 V1	15	0.59	85	3.35	70	2.76			689	1549	13	0.8	0.32	0.71
CP 500 025 V1	25	0.98	105	4.13	80	3.15			737	1658	19	1.1	0.36	0.79
CP 500 038 V1	38	1.50	130	5.12	92	3.62			781	1757	25	1.6	0.41	0.90
CP 500 050 V1	50	1.97	155	6.10	105	4.13			792	1781	33	2.0	0.46	1.01
CP 500 063 V1	63	2.48	190	7.48	127	5.00			757	1701	45	2.7	0.53	1.17
CP 500 080 V1	80	3.15	225	8.86	145	5.71			772	1735	55	3.3	0.60	1.32

TECHNICAL DATA														
	Fluid	N_2		P_{min} P_{max}	20 bar	200 bar		20°C / 68°F	290 psi / 2900 psi		Charging Adapter	06 CG 2-Q		
	S_{max}	< 90%		T_{min} T_{max}	0°C	80°C		32°F	176°F		Connection	X		
	V_{max}	0,5 m/s		Force variation by temperature	$\pm 0,3\% / ^\circ\text{C}$						Seal Kit	S-XXXXXXX		

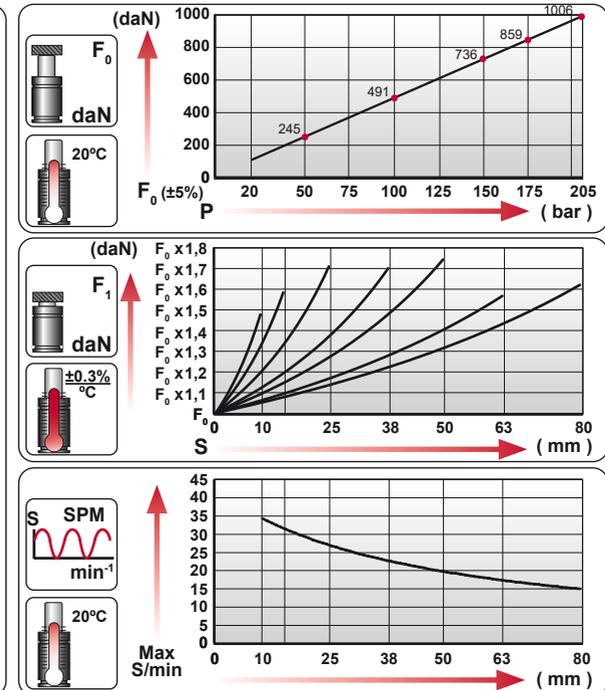
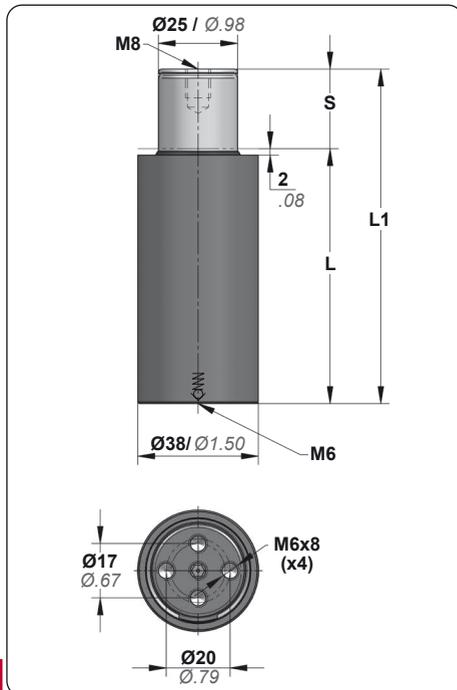
								
	Ø32	Ø32		Ø32	Ø32	Ø32	Ø32	Ø32
	L1=142	L1=140		L1=137 L1=139	L1=150 L1=150 L1=160	L1=150	L1=155	L1=195
MODEL	AFT	CW 350 KZ 350		CT 300 CK 300	CM 350 CD 300 CM 300	AG 150	CP 500	CS 770

MOUNTING OPTIONS

	Drop-in 	Top Mount 	Base Mount 	Foot Mount 	Support Mount 
HOW TO ORDER					

CP 1000 V1

Heavy Load

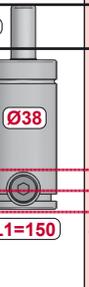


VDI SAFETY

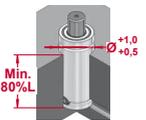
STANDARS

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
CP 1000 010 V1	10	0.39	75	2.95	65	2.56	960 ±5% 195 bar 2830 psi at 20°C 68°F	2158	1444	3245	15	0.9	0.43	0.95
CP 1000 015 V1	15	0.59	85	3.35	70	2.76			1545	3473	19	1.2	0.46	1.01
CP 1000 025 V1	25	0.98	105	4.13	80	3.15			1663	3739	29	1.8	0.51	1.12
CP 1000 038 V1	38	1.50	135	5.31	97	3.82			1647	3704	45	2.7	0.59	1.30
CP 1000 050 V1	50	1.97	160	6.30	110	4.33			1686	3790	57	3.5	0.65	1.43
CP 1000 063 V1	63	2.48	205	8.07	142	5.59			1512	3398	85	5.2	0.77	1.70
CP 1000 080 V1	80	3.15	240	9.45	160	6.30			1563	3513	102	6.2	0.86	1.90

TECHNICAL DATA														
	Fluid	N ₂		Pmin Pmax	20 bar 290 psi	205 bar 2975 psi		Charging Adapter	06 CG 2-Q					
	Smax	< 90%		Tmin Tmax	0 °C 32 °F	80 °C 176 °F		Connection	X					
	Vmax	0,5 m/s		Force variation by temperature	±0,3% / °C			Seal Kit	S-XXXXXXX					

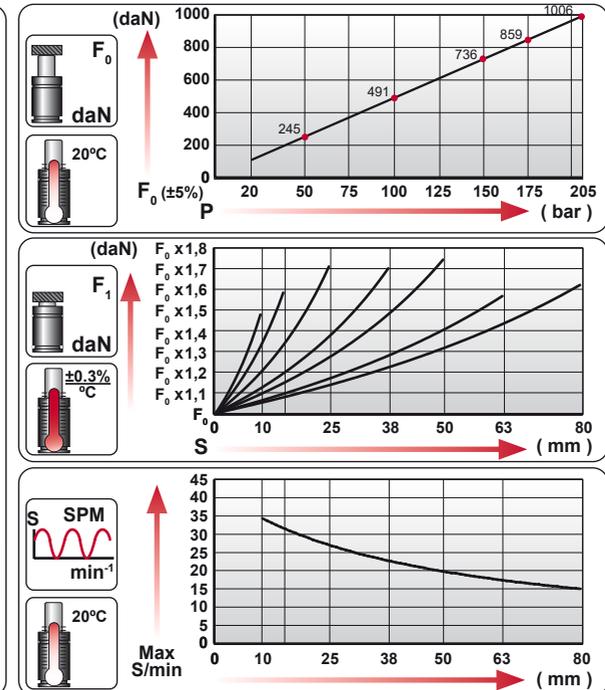
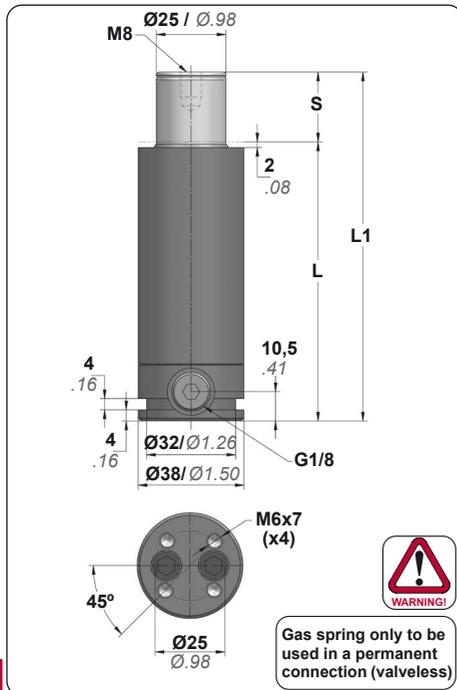
								
								
								
MODEL		CW 500 KZ 500	AS 300	CT 500 CK 500 FD 300	CD 500 CM 500	AG 250	CPH 850 CP 1000	CS 1000

MOUNTING OPTIONS

	Drop-in 	Top Mount 	Base Mount 	Foot Mount 	Support Mount 
HOW TO ORDER					

CP-KC 1000 V1

Heavy Load



VDI SAFETY

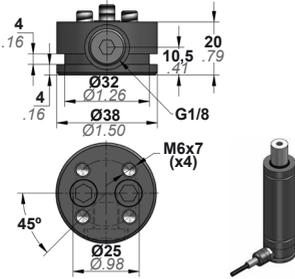
STANDARS

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
CP-KC 1000 010 V1	10	0.39	95	3.74	85	3.35	960 ±5% 195 bar 2830 psi at 20°C 68°F	2158	1444	3246	15	0.9	0.58	1.28
CP-KC 1000 015 V1	15	0.59	105	4.13	90	3.54			1545	3473	19	1.2	0.61	1.34
CP-KC 1000 025 V1	25	0.98	125	4.92	100	3.94			1663	3739	29	1.8	0.66	1.46
CP-KC 1000 038 V1	38	1.50	155	6.10	117	4.61			1647	3703	45	2.7	0.74	1.63
CP-KC 1000 050 V1	50	1.97	180	7.09	130	5.12			1686	3790	57	3.5	0.80	1.76
CP-KC 1000 063 V1	63	2.48	225	8.86	162	6.38			1512	3399	85	5.2	0.92	2.03
CP-KC 1000 080 V1	80	3.15	260	10.24	180	7.09			1563	3514	102	6.2	1.01	2.23

TECHNICAL DATA														
	Fluid	N ₂		Pmin Pmax	20 bar 205 bar		20°C / 68°F		Charging Adapter	SKK 12R 1/8				
	Smax	< 90%		Tmin Tmax	290 °C 80 °C		32 °F 176 °F		Connection	CP-KC 1000 XXX V1				
	Vmax	0,5 m/s		Force variation by temperature	±0,3% / °C				Seal Kit	S-XXXXXXX				

BASE PLATE OPTION

KC 1000



DIN 912 - 12.9	Torque
Thread	Nm
M6	15
M8	38
M10	75

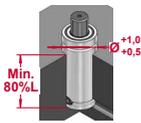
Thread the KC adapter base plate to the CP gas spring by using the adequate screws and torque.

Adapter base-plate has no filling valve, when fitted to a gas spring CP (CP-KC) it only can be pressurised through a hoses system. CP-KC is delivered uncharged.

MOUNTING OPTIONS



Drop-in



Top Mount



Base Mount



Foot Mount



Support Mount

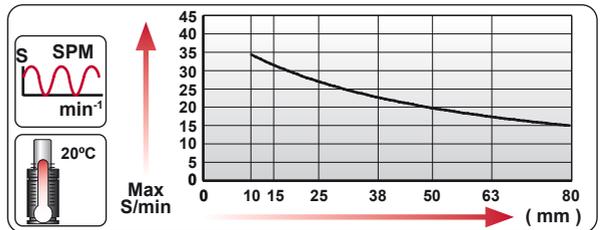
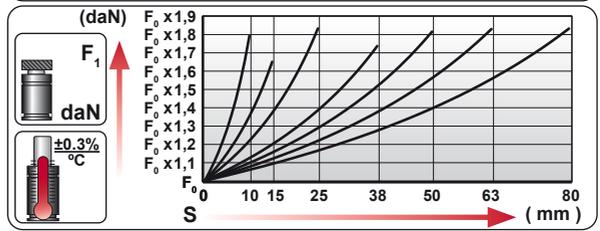
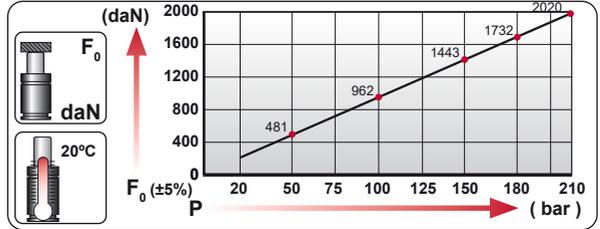
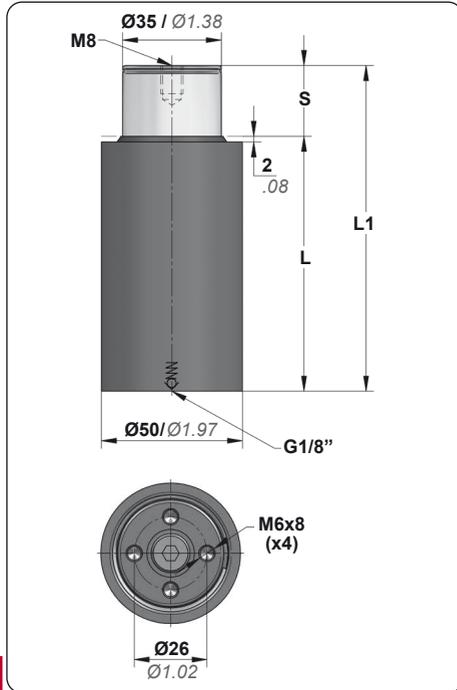


HOW TO ORDER

C20-038 598

CP 2000 V2

Heavy Load



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
CP 2000 010 V2	10	0.39	80	3.15	70	2.76	1925 ±5% 200 bar 2900 psi at 20°C 68°F	4328	3642	8187	20	1.2	0.87	1.92
CP 2000 015 V2	15	0.59	95	3.74	80	3.15			3264	7337	35	2.1	0.95	2.09
CP 2000 025 V2	25	0.98	115	4.53	90	3.54			3610	8116	52	3.1	1.05	2.31
CP 2000 038 V2	38	1.50	150	5.91	112	4.41			3388	7617	85	5.2	1.23	2.71
CP 2000 050 V2	50	1.97	175	6.89	125	4.92			3536	7949	106	6.4	1.35	2.98
CP 2000 063 V2	63	2.48	205	8.07	142	5.59			3557	7996	132	8.1	1.50	3.31
CP 2000 080 V2	80	3.15	245	9.65	165	6.50			3556	7994	168	10.2	1.71	3.77

TECHNICAL DATA															
	Fluid	N ₂		Pmin Pmax	20 bar 210 bar		Pmin Pmax	20°C / 68°F	20 bar 210 bar	290 psi 3045 psi		Charging Adapter	18 CG 1-Q		
	Smax	< 90%		Tmin Tmax	0 °C 32 °F		Tmin Tmax	80 °C 176 °F		Connection	X				
	Vmax	0,5 m/s		Force variation by temperature	±0,3% / °C		Seal Kit	S-XXXXXXX							



CP 2000 V2

Heavy Load

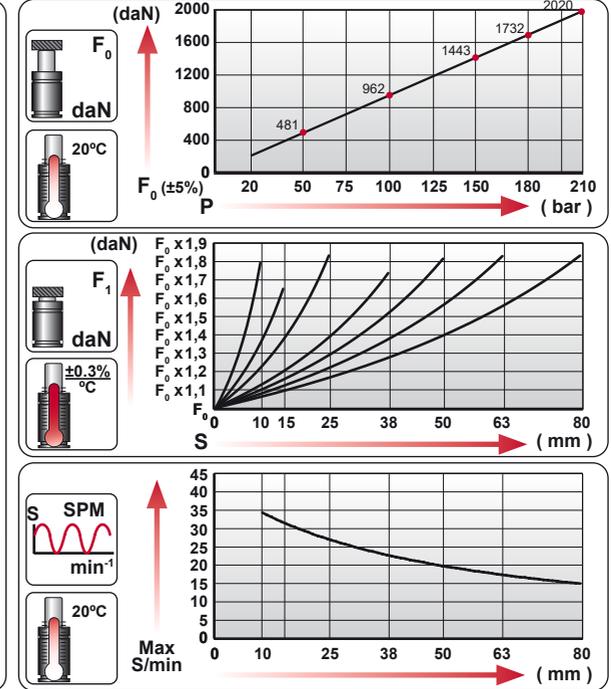
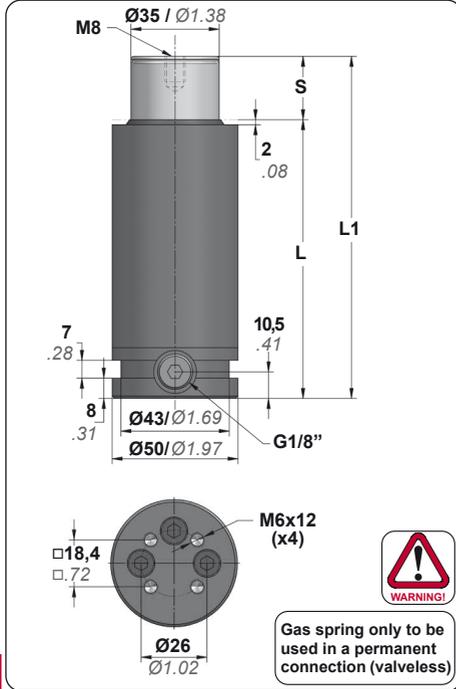
 mm mm mm	 Ø50 L1=138 L1=148 L1=152	 Ø50 L1=138 L1=150 L1=150	 Ø50 L1=170 L1=185 L1=195	 Ø50 L1=195	 Ø50 L1=165 L1=175	 Ø50 L1=220	
	MODEL	CW 1000 CWC 1000 KZ/KT 1000	CT 1000 CK 1000 FD 750	GN 750 CM 1000 CD 1000	AG 750	CPH 1700 CP 2000	CS 1800

MOUNTING OPTIONS

	<p>Drop-in</p>	<p>Top Mount</p>	<p>Base Mount</p>	<p>Foot Mount</p>	<p>Support Mount</p>
HOW TO ORDER					

CP-KC 2000 V2

Heavy Load



VDI SAFETY

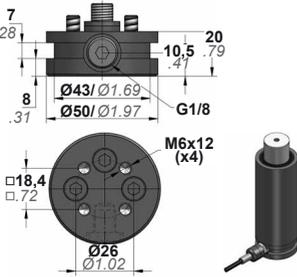
STANDARS

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
CP-KC 2000 010 V2	10	0.39	100	3.94	90	3.54	1925 ±5% 200 bar 2900 psi at 20°C 68°F	4328	3642	8187	20	1.2	1.13	2.49
CP-KC 2000 015 V2	15	0.59	115	4.53	100	3.94			3264	7337	35	2.1	1.20	2.65
CP-KC 2000 025 V2	25	0.98	135	5.31	110	4.33			3610	8116	52	3.1	1.31	2.89
CP-KC 2000 038 V2	38	1.50	170	6.69	132	5.20			3388	7617	85	5.2	1.48	3.26
CP-KC 2000 050 V2	50	1.97	195	7.68	145	5.71			3536	7949	106	6.4	1.61	3.55
CP-KC 2000 063 V2	63	2.48	225	8.86	162	6.38			3557	7996	132	8.1	1.76	3.88
CP-KC 2000 080 V2	80	3.15	265	10.43	185	7.28			3556	7994	168	10.2	1.96	4.32

TECHNICAL DATA														
Fluid	N ₂		Pmin Pmax	20 bar 210 bar		20°C / 68°F	290 psi 3045 psi	Charging Adapter	SKK 12R 1/8					
Smax	< 90%		Tmin Tmax	0 °C 80 °C		32 °F 176 °F	Connection	CP-KC 2000 XXX V2						
Vmax	0,5 m/s		Force variation by temperature	±0,3% / °C		Seal Kit	S-XXXXXXX							

BASE PLATE OPTION

KC 1800



DIN 912 - 12.9	Torque
Thread	Nm
M6	15
M8	38
M10	75

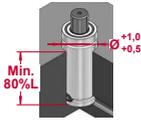
Thread the KC adapter base plate to the CP gas spring by using the adequate screws and torque.

Adapter base-plate has no filling valve, when fitted to a gas spring CP (CP-KC) it only can be pressurised through a hoses system. CP-KC is delivered uncharged.

MOUNTING OPTIONS



Drop-in



Top Mount



Base Mount



Foot Mount



Support Mount

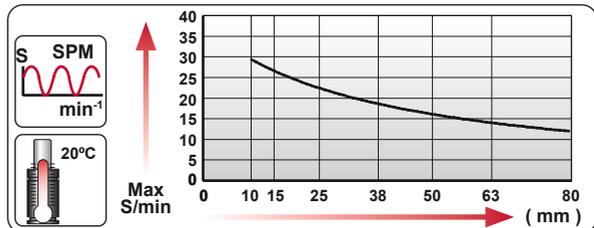
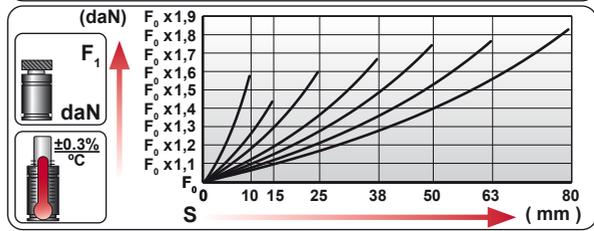
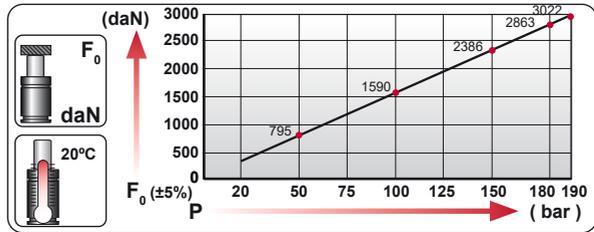
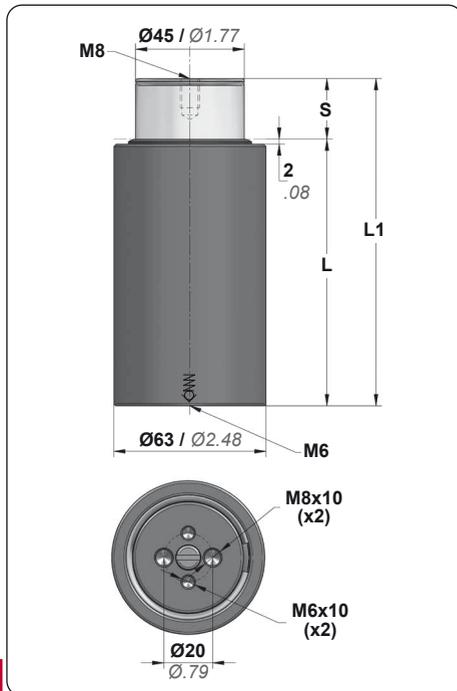


HOW TO ORDER

C20-050 598

CP 3000 V1

Heavy Load



VDI SAFETY

STANDARS



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		
CP 3000 010 V1	10	0.39	95	3.74	85	3.35	2860 6430 ±5% 180 bar 2610 psi at 20°C 68°F		4492	10097	44	2.7	1.66	3.66
CP 3000 015 V1	15	0.59	115	4.53	100	3.94			4107	9233	79	4.8	1.82	4.01
CP 3000 025 V1	25	0.98	135	5.31	110	4.33			4565	10262	106	6.5	1.97	4.34
CP 3000 038 V1	38	1.50	165	6.50	127	5.00			4767	10717	151	9.2	2.20	4.85
CP 3000 050 V1	50	1.97	190	7.48	140	5.51			4983	11203	187	11.4	2.39	5.27
CP 3000 063 V1	63	2.48	220	8.66	157	6.18			5047	11346	231	14.1	2.62	5.78
CP 3000 080 V1	80	3.15	255	10.04	175	6.89			5231	11759	281	17.1	2.88	6.35

TECHNICAL DATA

Fluid	N ₂	Pmin Pmax	20 bar / 290 psi	190 bar / 2755 psi	20°C / 68°F	Charging Adapter	06 CG 2-Q
Sm _{max}	< 90%	Tmin Tmax	0°C / 32°F	80°C / 176°F	Connection	X	
V _{max}	0,5 m/s	Force variation by temperature	±0,3% / °C		Seal Kit	S-XXXXXXX	



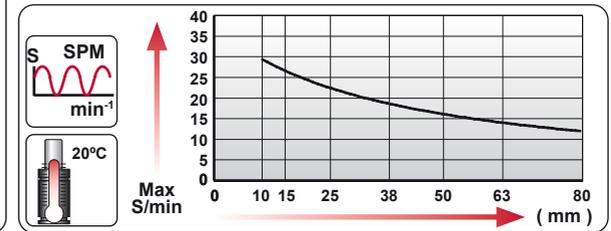
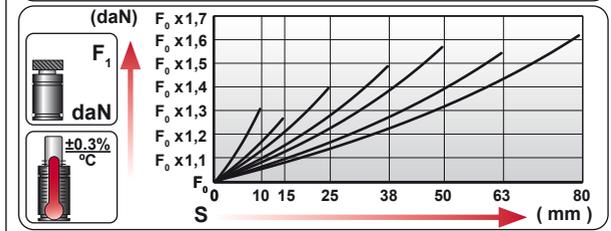
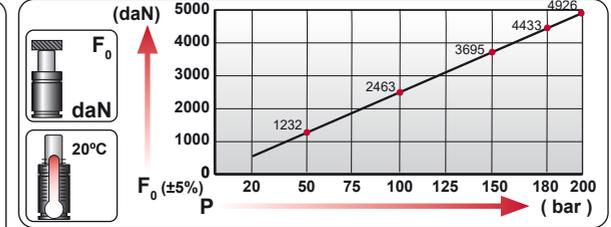
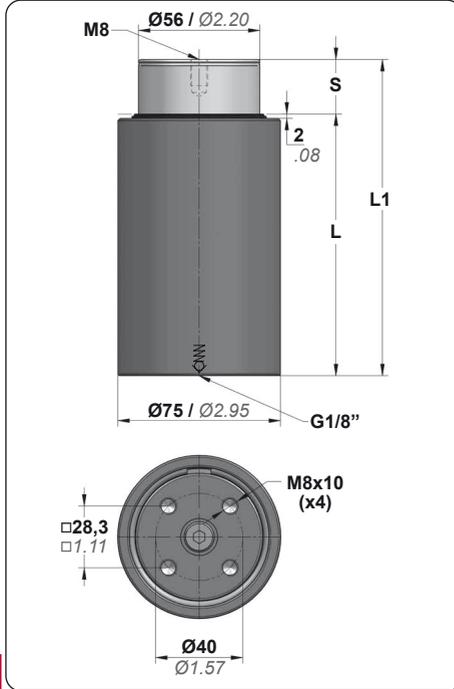
CP 3000 V1
Heavy Load

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					

CP 5000 V1

Heavy Load



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
CP 5000 010 V1	10	0.39	100	3.94	90	3.54	4925 ±5% 200 bar 2900 psi at 20°C 68°F	11072	6450	14501	104	6.4	2.30	5.07
CP 5000 015 V1	15	0.59	125	4.92	110	4.33			6250	14050	174	10.6	2.54	5.60
CP 5000 025 V1	25	0.98	145	5.71	120	4.72			6881	15469	217	13.2	2.75	6.06
CP 5000 038 V1	38	1.50	175	6.89	137	5.39			7338	16495	285	17.4	3.05	6.72
CP 5000 050 V1	50	1.97	200	7.87	150	5.91			7739	17398	339	20.7	3.31	7.30
CP 5000 063 V1	63	2.48	240	9.45	177	6.97			7614	17116	439	26.8	3.71	8.18
CP 5000 080 V1	80	3.15	275	10.83	195	7.68			7981	17942	515	31.4	4.07	8.97

TECHNICAL DATA														
Fluid	N ₂	Pmin Pmax	20 bar 290 psi	200 bar 2900 psi	Pmin Pmax	20°C / 68°F	20°C / 68°F	Charging Adapter	18 CG 1-Q					
Smax	< 90%	Tmin Tmax	0 °C 32 °F	80 °C 176 °F	Connection	X	Seal Kit	S-XXXXXXX						
Vmax	0,5 m/s	Force variation by temperature	±0,3% / °C											



CP 5000 V1
Heavy Load

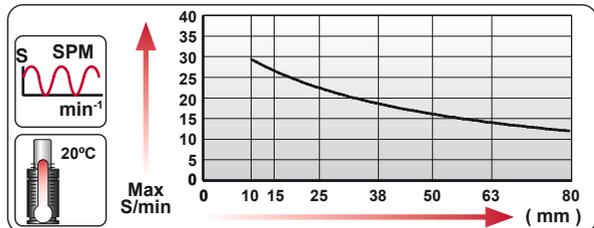
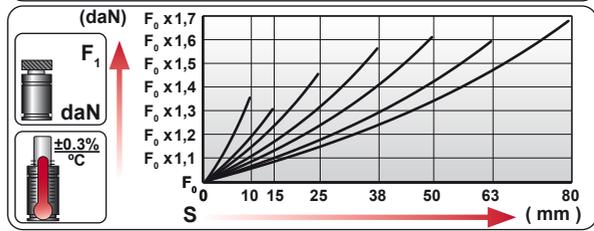
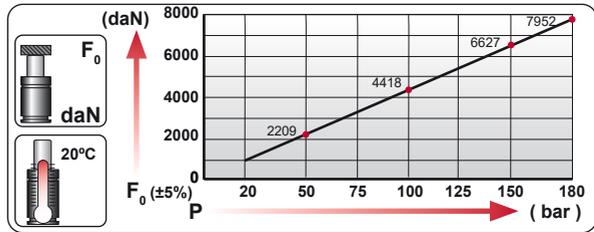
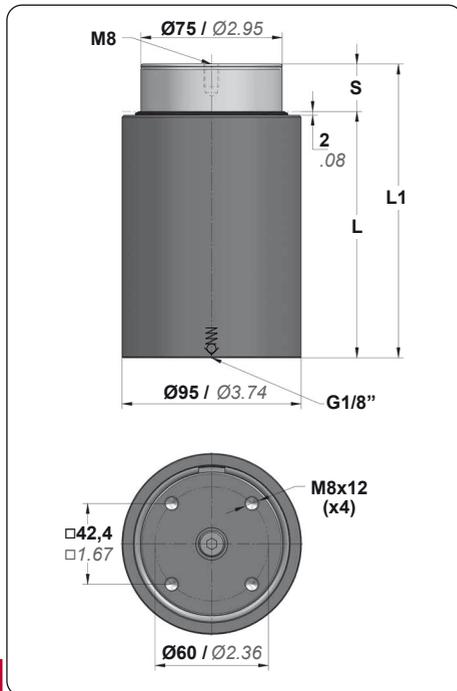
 mm mm mm	 Ø75 L1=145 L1=155 L1=159	 Ø75 L1=154 L1=160 L1=160	 Ø75 L1=185 L1=195 L1=210	 Ø75 L1=210	 Ø75 L1=175 L1=200	 Ø75 L1=240	
	MODEL	CW 2400 CWC 2400 KZ/KT 2400	CT 3000 CK 2500 FD 1500	GN 1500 CM 2500 CD 2400	AG 1500	CPH 4300 CP 5000	CS 4700

MOUNTING OPTIONS

	Drop-in 	Top Mount 	Base Mount 	Foot Mount 	Support Mount
HOW TO ORDER					

CP 8000 V1

Heavy Load



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
CP 8000 010 V1	10	0.39	110	4.33	100	3.94	7950 ±5% 180 bar 2610 psi at 20°C 68°F	17872	10793	24263	168	10.2	4.25	9.37
CP 8000 015 V1	15	0.59	135	5.31	120	4.72			10408	23398	281	17.1	4.65	10.25
CP 8000 025 V1	25	0.98	155	6.10	130	5.12			11588	26052	352	21.5	4.99	11.00
CP 8000 038 V1	38	1.50	185	7.28	147	5.79			12443	27974	465	28.4	5.50	12.13
CP 8000 050 V1	50	1.97	215	8.46	165	6.50			12824	28829	581	35.5	6.00	13.23
CP 8000 063 V1	63	2.48	255	10.04	192	7.56			12683	28512	746	45.5	6.66	14.68
CP 8000 080 V1	80	3.15	290	11.42	210	8.27			13368	30053	872	53.2	7.26	16.01

TECHNICAL DATA															
	Fluid	N ₂		Pmin Pmax	20 bar 180 bar	290 psi 2610 psi		Tmin Tmax	0 °C 80 °C	32 °F 176 °F		Charging Adapter	18 CG 1-Q		
	Smax	< 90%		Tmin Tmax				Tmin Tmax				Connection	X		
	Vmax	0,5 m/s		Force variation by temperature	±0,3% / °C			Seal Kit	S-XXXXXXX						



CP 8000 V1

Heavy Load

L1 mm L2 mm L3 mm	<p>50</p> <p>Ø95</p> <p>L1=158</p> <p>L1=162</p> <p>L1=162</p>	<p>50</p> <p>Ø95</p> <p>L1=170</p> <p>L1=170</p>	<p>50</p> <p>Ø95</p> <p>L1=195</p> <p>L1=205</p> <p>L1=220</p>	<p>50</p> <p>Ø95</p> <p>L1=220</p>	<p>50</p> <p>Ø95</p> <p>L1=215</p>	<p>50</p> <p>Ø95</p> <p>L1=255</p>	
	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

	<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>					



GAS SPRINGS



AZOL 
GAS



HEAVY LOAD CPH

- Full height size gas springs
- The highest contact force (850-4300 daN)
- Limited strokes (up to 80 mm)
- Used for extra heavy duty work

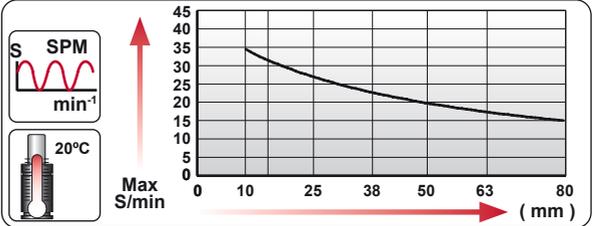
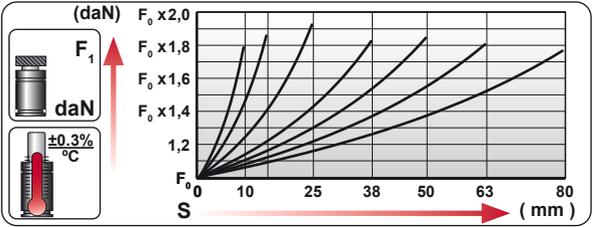
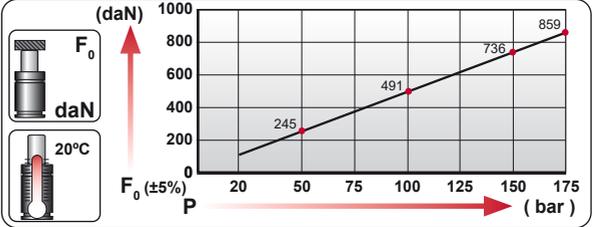
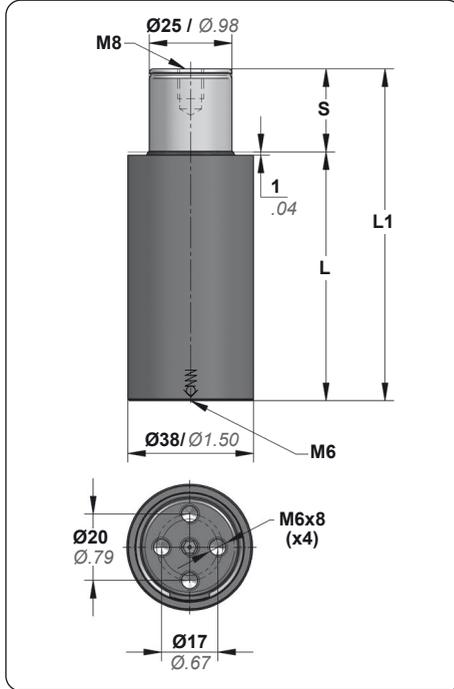


CPH HEAVY LOAD MEDIUM

MODEL	F ₀ daN lb	Ø mm inch	S mm inch	L1 mm inch	Pmax bar psi	Charge Port		
CPH 850 V1	850 1911	Ø38 Ø1.50	10 - 80 0.39 - 3.15	70 - 225 2.76 - 8.86	175 2540	M6	X	✓
CPH 1250 V1	1250 2810	Ø45 Ø1.77	12 - 80 0.47 - 3.15	79 - 230 3.11 - 9.06	175 2540	M6	X	✓
CPH 1700 V2	1700 3822	Ø50 Ø1.97	10 - 80 0.39 - 3.15	80 - 235 3.15 - 9.25	175 2540	G1/8"	X	✓
CPH 2800 V2	2800 6295	Ø63 Ø2.48	10 - 80 0.39 - 3.15	90 - 250 3.54 - 9.84	175 2540	G1/8"	X	✓
CPH 4300 V1	4300 9667	Ø75 Ø2.95	10 - 80 0.39 - 3.15	90 - 250 3.54 - 9.84	175 2540	G1/8"	X	✓

CPH 850 V1

Heavy Load



VDI SAFETY

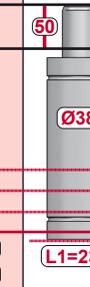
STANDARS



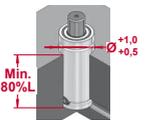
ORDER	S		L1 ±0.25		L		F ₀ Initial Force		F ₁ (ISOTHERMAL) End Force		Vol.		Weight	
	mm	inch	mm	inch	mm	inch	daN	lb	daN	lb	cm ³	in ³	Kg.	lb
CPH 850 010 V1	10	0.39	70	2.76	60	2.36	810 ±5% 165 bar 2395 psi at 20°C 68°F	1821	1505	3383	11	0.6	0.42	0.93
CPH 850 015 V1	15	0.59	80	3.15	65	2.56			1550	3484	15	0.9	0.45	0.99
CPH 850 025 V1	25	0.98	100	3.94	75	2.95			1591	3576	25	1.5	0.50	1.10
CPH 850 038 V1	38	1.50	130	5.12	92	3.62			1496	3363	41	2.5	0.58	1.28
CPH 850 050 V1	50	1.97	155	6.10	105	4.13			1509	3393	53	3.2	0.64	1.41
CPH 850 063 V1	63	2.48	185	7.28	122	4.80			1474	3313	69	4.2	0.72	1.59
CPH 850 080 V1	80	3.15	225	8.86	145	5.71			1440	3237	90	5.5	0.83	1.83

TECHNICAL DATA

Fluid	N ₂	Pmin Pmax	20 bar / 290 psi / 20°C / 68°F	175 bar / 2540 psi	Charging Adapter	06 CG 2-Q
Smax	< 90%	Tmin Tmax	0 °C / 32 °F	80 °C / 176 °F	Connection	X
Vmax	0,5 m/s	Force variation by temperature	±0,3% / °C		Seal Kit	S-XXXXXXX

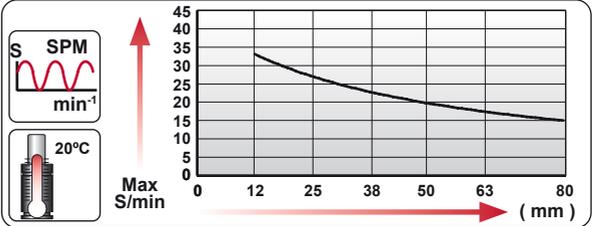
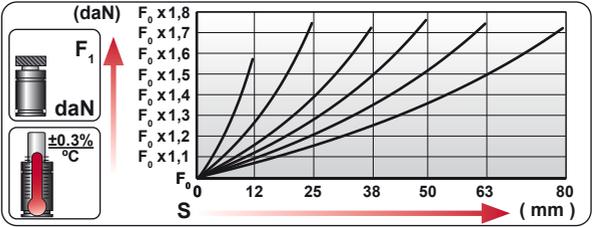
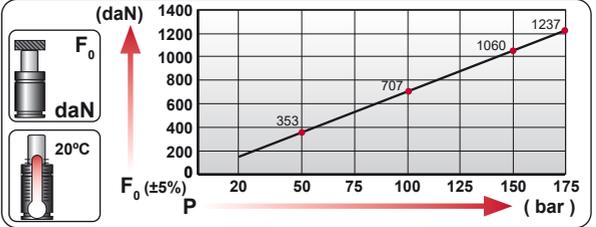
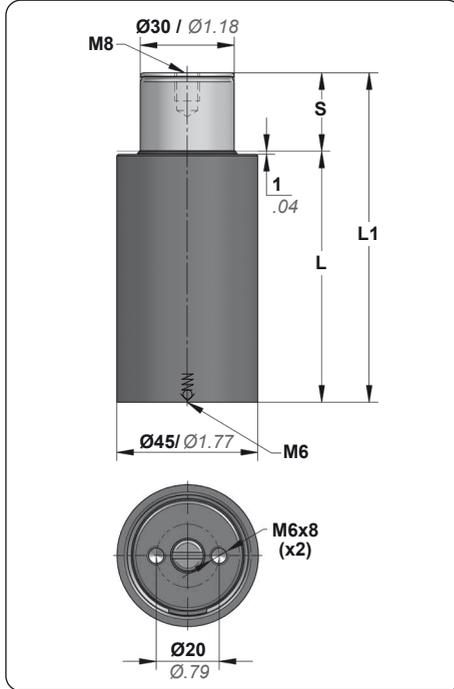
 L1 mm  L2 mm  L1 mm		 <p>50</p> <p>Ø38</p> <p>L1=130</p> <p>L1=140</p>	 <p>50</p> <p>Ø38</p> <p>L1=150</p>	 <p>50</p> <p>Ø38</p> <p>L1=132</p> <p>L1=137</p> <p>L1=150</p>	 <p>50</p> <p>Ø38</p> <p>L1=150</p> <p>L1=155</p>	 <p>50</p> <p>Ø38</p> <p>L1=150</p>	 <p>50</p> <p>Ø38</p> <p>L1=155</p> <p>L1=160</p>	 <p>50</p> <p>Ø38</p> <p>L1=230</p>
	MODEL	CW 500 KZ 500	AS 300	CT 500 CK 500 FD 300	CD 500 CM 500	AG 250	CPH 850 CP 1000	CS 1000

MOUNTING OPTIONS

	<p>Drop-in</p>  <p>+1.0</p> <p>Ø+0.5</p> <p>Min. 80%L</p>	<p>Top Mount</p> 	<p>Base Mount</p> 	<p>Foot Mount</p> 	<p>Support Mount</p> 
HOW TO ORDER					

CPH 1250 V1

Heavy Load



VDI SAFETY

STANDARS



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		
CPH 1250 012 V1	12	0.47	79	3.11	67	2.64	1200	2698	1934	4348	22	1.4	0.64	1.41
CPH 1250 025 V1	25	0.98	105	4.13	80	3.15	$\pm 5\%$ 170 bar 2465 psi at 20°C 68°F	2133	4795	40	2.5	0.74	1.63	
CPH 1250 038 V1	38	1.50	135	5.31	97	3.82		2092	4703	63	3.8	0.84	1.85	
CPH 1250 050 V1	50	1.97	160	6.30	110	4.33		2133	4796	81	4.9	0.93	2.05	
CPH 1250 063 V1	63	2.48	190	7.48	127	5.00		2108	4739	103	6.3	1.04	2.29	
CPH 1250 080 V1	80	3.15	230	9.06	150	5.91		2079	4673	134	8.2	1.18	2.60	

TECHNICAL DATA

Fluid	N ₂	Pmin Pmax	20 bar 175 bar 290 psi 2540 psi	Tmin Tmax	20°C / 68°F 80°C / 176°F	Charging Adapter	06 CG 2-Q
Smax	< 90%	Force variation by temperature	$\pm 0,3\% / ^\circ\text{C}$	Connection	X	Seal Kit	S-XXXXXXX
Vmax	0,5 m/s						



CPH 1250 V1

Heavy Load

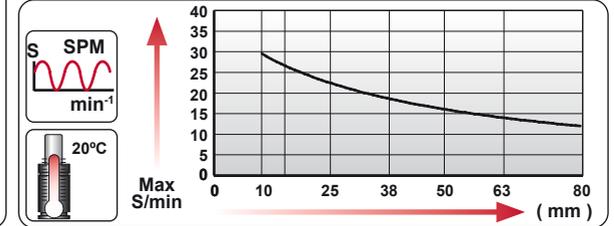
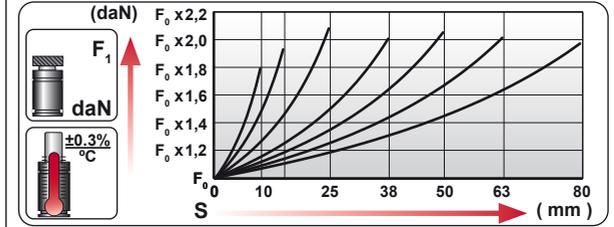
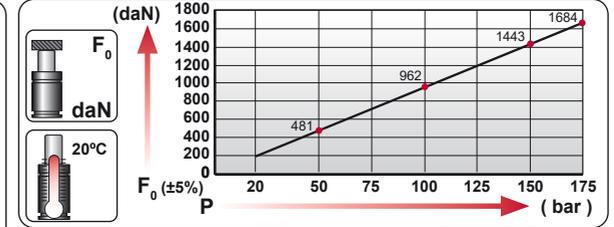
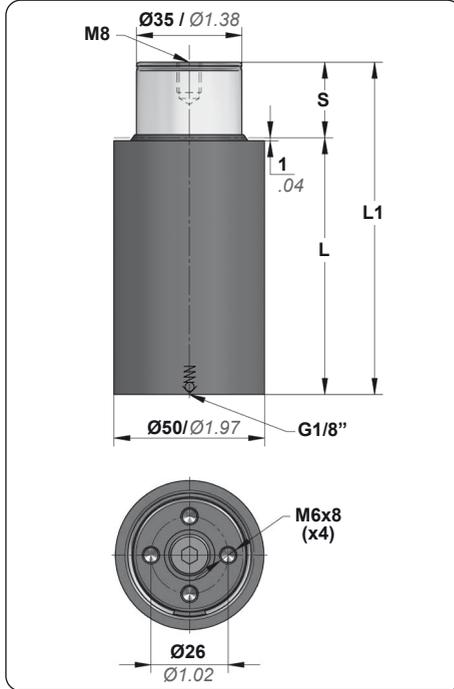
L1 mm L2 mm L1 mm					
	<p>Ø45</p> <p>L1=132</p> <p>L1=142</p> <p>L1=147</p>	<p>Ø45</p> <p>L1=138</p> <p>L1=150</p> <p>L1=150</p>	<p>Ø45</p> <p>L1=160</p> <p>L1=185</p>	<p>Ø45</p> <p>L1=185</p>	<p>Ø45</p> <p>L1=160</p>
	<p>MODEL</p> <p>CW 750</p> <p>CWC 750</p> <p>KZ 750</p>	<p>CT 700</p> <p>CK 750</p> <p>FD 500</p>	<p>CM 600</p> <p>CD 700</p>	<p>AG 500</p>	<p>CPH 1250</p>

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>					

CPH 1700 V2

Heavy Load



VDI SAFETY

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
CPH 1700 010 V2	10	0.39	80	3.15	70	2.76	1635 ±5% 170 bar 2465 psi at 20°C 68°F	3676	3093	6953	20	1.2	0.88	1.94
CPH 1700 015 V2	15	0.59	90	3.54	75	2.95			3302	7424	29	1.7	0.93	2.05
CPH 1700 025 V2	25	0.98	110	4.33	85	3.35			3519	7911	45	2.7	1.03	2.27
CPH 1700 038 V2	38	1.50	140	5.51	102	4.02			3348	7527	71	4.4	1.18	2.60
CPH 1700 050 V2	50	1.97	165	6.50	115	4.53			3411	7669	92	5.6	1.31	2.89
CPH 1700 063 V2	63	2.48	195	7.68	132	5.20			3335	7497	119	7.3	1.46	3.22
CPH 1700 080 V2	80	3.15	235	9.25	155	6.10			3256	7319	155	9.4	1.66	3.66

TECHNICAL DATA

Fluid	N ₂	Pmin Pmax	20 bar / 290 psi	175 bar / 2540 psi	20°C / 68°F	Charging Adapter	18 CG 1-Q
Smax	< 90%	Tmin Tmax	0 °C / 32 °F	80 °C / 176 °F	Connection	X	
Vmax	0,5 m/s	Force variation by temperature	±0,3% / °C		Seal Kit	S-XXXXXXX	



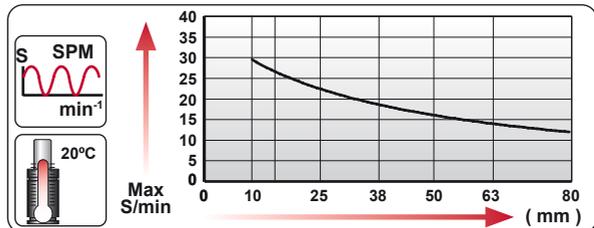
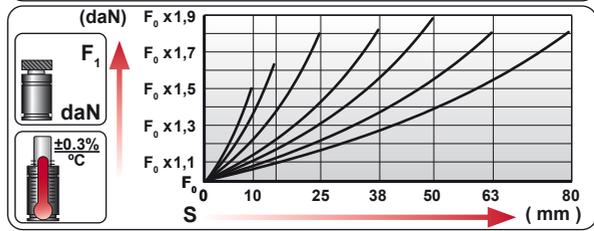
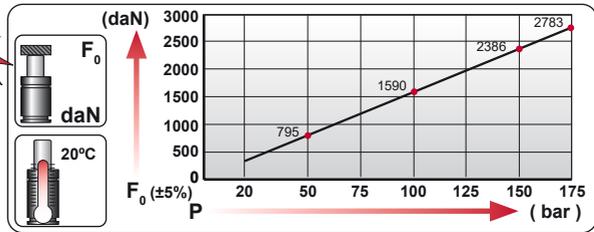
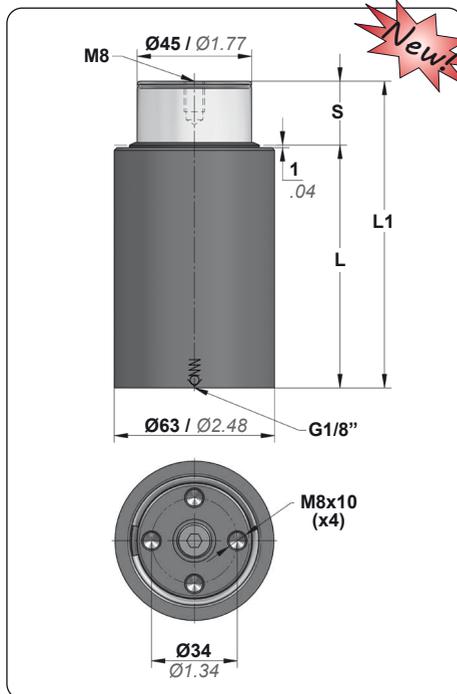
CPH 1700 V2
Heavy Load

 mm mm mm							
	<p>MODEL</p>	<p>CW 1000 CWC 1000 KZ/KT 1000</p>	<p>CT 1000 CK 1000 FD 750</p>	<p>GN 750 CM 1000 CD 1000</p>	<p>AG 750</p>	<p>CPH 1700 CP 2000</p>	<p>CS 1800</p>

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>					

CPH 2800 V2

Heavy Load



VDI SAFETY

STANDARS



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	Kg.	lb
CPH 2800 010 V2	10	0.39	90	3.54	80	3.15	2700 6070 ±5% 170 bar 2465 psi at 20°C 68°F		4125	9273	46	2.8	1.54	3.40
CPH 2800 015 V2	15	0.59	100	3.94	85	3.35			4483	10077	60	3.7	1.62	3.57
CPH 2800 025 V2	25	0.98	120	4.72	95	3.74			4931	11084	88	5.4	1.77	3.90
CPH 2800 038 V2	38	1.50	150	5.91	112	4.41			4965	11161	132	8.1	2.00	4.41
CPH 2800 050 V2	50	1.97	175	6.89	125	4.92			5125	11522	168	10.3	2.18	4.81
CPH 2800 063 V2	63	2.48	210	8.27	147	5.79			4902	11020	223	13.6	2.45	5.40
CPH 2800 080 V2	80	3.15	250	9.84	170	6.69			4906	11028	283	17.3	2.76	6.08

TECHNICAL DATA

Fluid	N ₂	Pmin Pmax	20 bar 175 bar 290 psi 2540 psi	20°C / 68°F	20°C / 68°F	Charging Adapter	18 CG 1-Q
Smax	< 90%	Tmin Tmax	0 °C / 32 °F	80 °C / 176 °F	Connection	X	
Vmax	0,5 m/s	Force variation by temperature	±0,3% / °C		Seal Kit	S-XXXXXXX	



CPH 2800 V2

Heavy Load

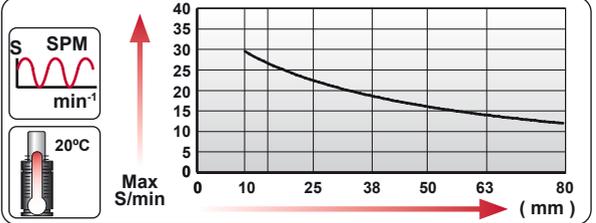
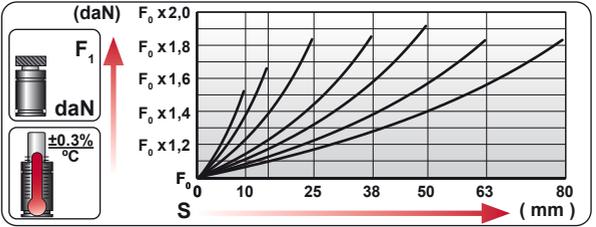
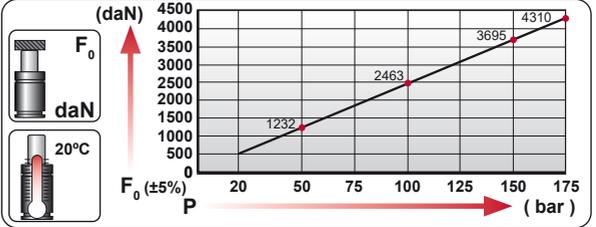
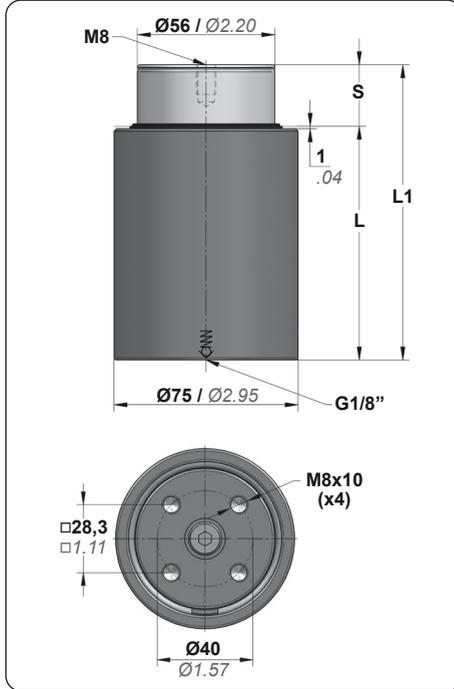
mm	mm	mm	mm	mm	mm	mm	mm
mm	mm	mm	mm	mm	mm	mm	mm
mm	mm	mm	mm	mm	mm	mm	mm
MODEL	CW 1500 KZ/KT 1500 CWC 1500	CT 1500 CK 1500	CM 1500 CD 1500	CPH 2800 CP 3000	CS 3000		

MOUNTING OPTIONS

	Drop-in 	Top Mount 	Base Mount 	Foot Mount 	Support Mount
HOW TO ORDER					

CPH 4300 V1

Heavy Load



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.
CPH 4300 010 V1	10	0.39	90	3.54	80	3.15	4190 ±5% 170 bar 2465 psi at 20°C 68°F	9419	6393	14372	71	4.4	2.19	4.83
CPH 4300 015 V1	15	0.59	100	3.94	85	3.35			6970	15670	93	5.7	2.30	5.07
CPH 4300 025 V1	25	0.98	120	4.72	95	3.74			7708	17328	135	8.2	2.51	5.53
CPH 4300 038 V1	38	1.50	150	5.91	112	4.41			7775	17480	203	12.4	2.81	6.19
CPH 4300 050 V1	50	1.97	175	6.89	125	4.92			8045	18086	257	15.7	3.07	6.77
CPH 4300 063 V1	63	2.48	210	8.27	147	5.79			7681	17269	341	20.8	3.42	7.54
CPH 4300 080 V1	80	3.15	250	9.84	170	6.69			7690	17289	433	26.4	3.83	8.44

TECHNICAL DATA													
	Fluid	N ₂		Pmin Pmax	20 bar 290 psi	175 bar 2540 psi		Charging Adapter	18 CG 1-Q				
	Smax	< 90%		Tmin Tmax	0 °C 32 °F	80 °C 176 °F		Connection	X				
	Vmax	0,5 m/s		Force variation by temperature	±0,3% / °C			Seal Kit	S-XXXXXXX				



CPH 4300 V1

Heavy Load

 mm mm mm	 Ø75 L1=145 L1=155 L1=159	 Ø75 L1=154 L1=160 L1=160	 Ø75 L1=185 L1=195 L1=210	 Ø75 L1=210	 Ø75 L1=175 L1=200	 Ø75 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					