



GAS SPRINGS



AZOL GAS



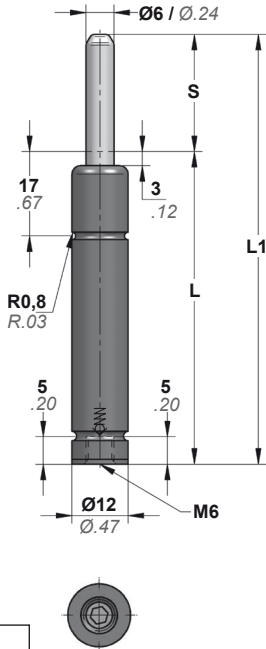
MINI SERIES AF

- Smallest size gas springs
- Lowest contact force (50-360 daN)
- Ideal replacement for coil springs
- Used as part ejectors, pushers or strippers

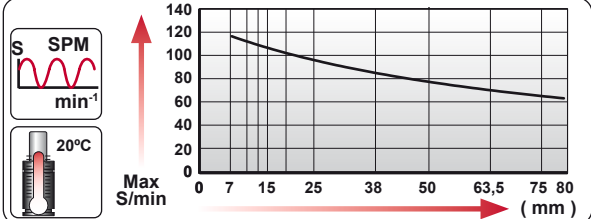
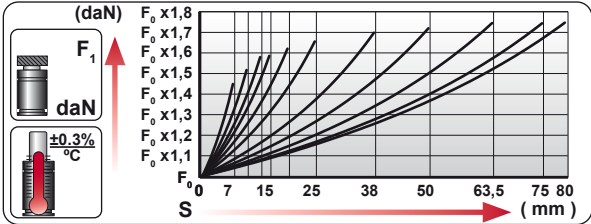
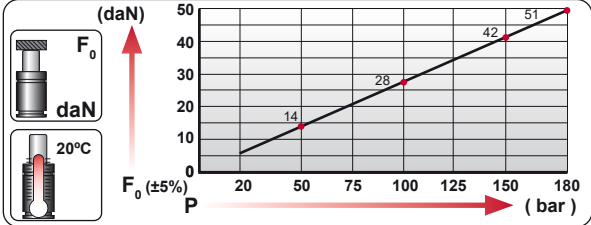
		50	50	50	50	50	50	50
		Ø32	Ø32	Ø32	Ø32	Ø32	Ø32	Ø32
		L1=142	L1=140	L1=137 L1=139	L1=150 L1=150	L1=150	L1=155	L1=195
MODEL	AFT	CW 350 KZ 350	X	CT 300 CK 300	CM 350 CD 300	AG 150	CP 500	CS 770
SERIES	MINI	COMPACT HEIGHT	THREADED	LOW PROFILE	HEAVY DUTY	ISO	HEAVY LOAD	POWER SHORT STROKE

AFB V2

Mini

AZOL
GASNot to be
fixed by screwsVDI
SAFETY

STANDARDS



ORDER	S		L1 ±0.25		L			
	mm	inch	mm	inch	mm	inch	Kg.	lb
AFB --- 007 V2	7	0.28	56	2.20	49	1.93	0.03	0.07
AFB --- 010 V2	10	0.39	62	2.44	52	2.05	0.03	0.07
AFB --- 012 V2	12.7	0.50	67.4	2.65	54.7	2.15	0.04	0.09
AFB --- 015 V2	15	0.59	72	2.83	57	2.24	0.04	0.09
AFB --- 019 V2	19	0.75	80	3.15	61	2.40	0.04	0.09
AFB --- 025 V2	25	0.98	92	3.62	67	2.64	0.04	0.09
AFB --- 038 V2	38	1.50	118	4.65	80	3.15	0.05	0.11
AFB --- 050 V2	50	1.97	142	5.59	92	3.62	0.06	0.13
AFB --- 063 V2	63.5	2.50	172	6.77	108.5	4.27	0.07	0.15
AFB --- 075 V2	75	2.95	195	7.68	120	4.72	0.07	0.15
AFB --- 080 V2	80	3.15	205	8.07	125	4.92	0.08	0.18

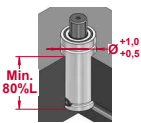
ORDER	COLOR	P	
		bar	psi
AFB 13 050 V2	Green	45	650
AFB 25 050 V2	Blue	90	1305
AFB 38 050 V2	Red	135	1960
AFB 50 050 V2	Yellow	180	2610
AFB XX 050 V2	Black	20-180	290-2610

ORDER	F ₀ Initial Force ±5% 20°C 68°F		F ₁ (ISOTHERMAL) End Force	
	daN	lb	daN	lb
AFB 13 050 V2	13	29	20	45
AFB 25 050 V2	25	56	45	101
AFB 38 050 V2	38	85	65	146
AFB 50 050 V2	50	112	85	191
AFB XX 050 V2	6-50	13-112	10-85	22-191

TECHNICAL DATA

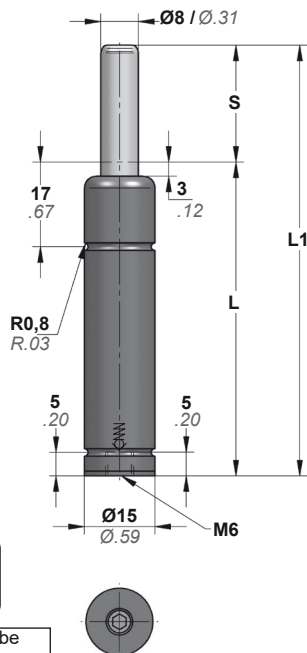
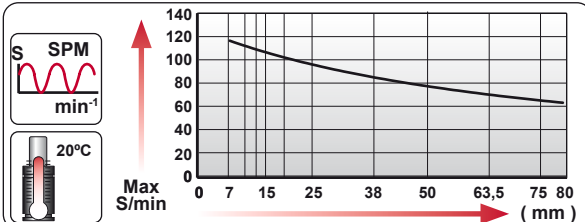
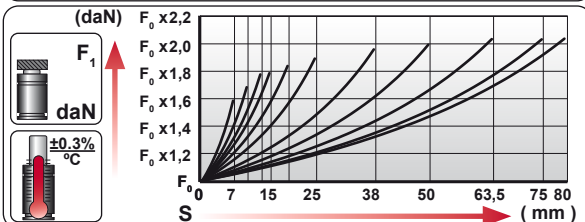
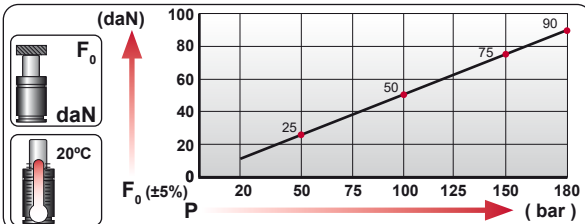
	Fluid	N ₂		Pmin Pmax 20°C / 68°F	20 bar 290 psi	180 bar 2610 psi		Charging Adapter	06 CG 2-Q
	Smax	< 90%		Tmin Tmax	0 °C 32 °F	80 °C 176 °F		Connection	X
	Vmax	1,6 m/s		Force variation by temperature	±0,3% / °C			Cartridge Kit	X

								
								
								
MODEL								

MOUNTING OPTIONS					
	Drop-in 	Top Mount 	Base Mount 	Foot Mount 	Support Mount 
HOW TO ORDER		A14-012  580 A59-012  585			

AFH V1

Mini

**AZOL
GAS**Not to be
fixed by screws**VDI
SAFETY****STANDARDS**

ORDER	S		L1 ±0.25		L			
	mm	inch	mm	inch	mm	inch	Kg.	lb
AFH ... 007 V1	7	0.28	56	2.20	49	1.93	0.05	0.11
AFH ... 010 V1	10	0.39	62	2.44	52	2.05	0.06	0.13
AFH ... 012 V1	12.7	0.50	67.4	2.65	54.7	2.15	0.06	0.13
AFH ... 015 V1	15	0.59	72	2.83	57	2.24	0.06	0.13
AFH ... 019 V1	19	0.75	80	3.15	61	2.40	0.06	0.13
AFH ... 025 V1	25	0.98	92	3.62	67	2.64	0.07	0.15
AFH ... 038 V1	38	1.50	118	4.65	80	3.15	0.08	0.18
AFH ... 050 V1	50	1.97	142	5.59	92	3.62	0.10	0.22
AFH ... 063 V1	63.5	2.50	172	6.77	108.5	4.27	0.11	0.24
AFH ... 075 V1	75	2.95	195	7.68	120	4.72	0.12	0.26
AFH ... 080 V1	80	3.15	205	8.07	125	4.92	0.13	0.29

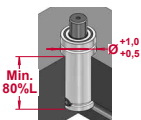
ORDER	COLOR	P	
		bar	psi
AFH 18 050 V1	Green	35	510
AFH 35 050 V1	Blue	70	1015
AFH 50 050 V1	Red	100	1450
AFH 70 050 V1	Yellow	140	2030
AFH XX 050 V1	Black	20-180	290-2610

ORDER	F ₀ Initial Force ±5% 20°C 68°F		F ₁ (ISOTHERMAL) End Force	
	daN	lb	daN	lb
AFH 18 050 V1	18	40	35	79
AFH 35 050 V1	35	79	70	157
AFH 50 050 V1	50	112	100	225
AFH 70 050 V1	70	157	140	315
AFH XX 050 V1	10-90	22-202	20-180	45-405

TECHNICAL DATA

	Fluid	N ₂		Pmin Pmax 20°C / 68°F	20 bar 180 bar 290 psi 2610 psi		Charging Adapter	06 CG 2-Q
	Sm	< 90%		Tmin Tmax 0°C 80°C 32°F 176°F			Connection	X
	Vmax	1.6 m/s		Force variation by temperature	±0,3% / °C		Cartridge Kit	X

								
								
								
MODEL								

MOUNTING OPTIONS					
	Drop-in 	Top Mount 	Base Mount 	Foot Mount 	Support Mount 
HOW TO ORDER		A14-015 A49-015 580 584			

AFJ V2

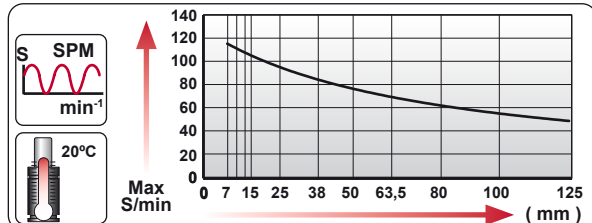
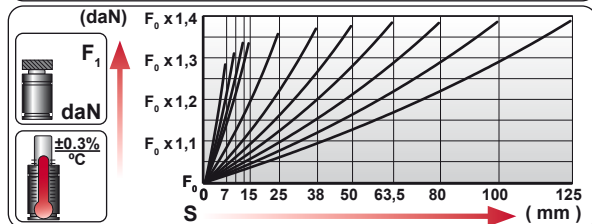
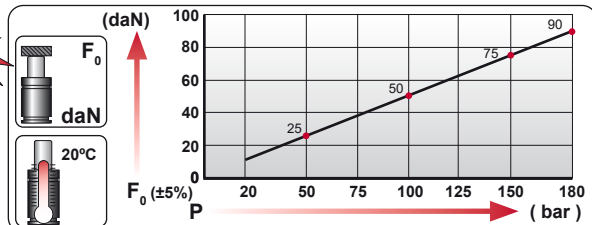
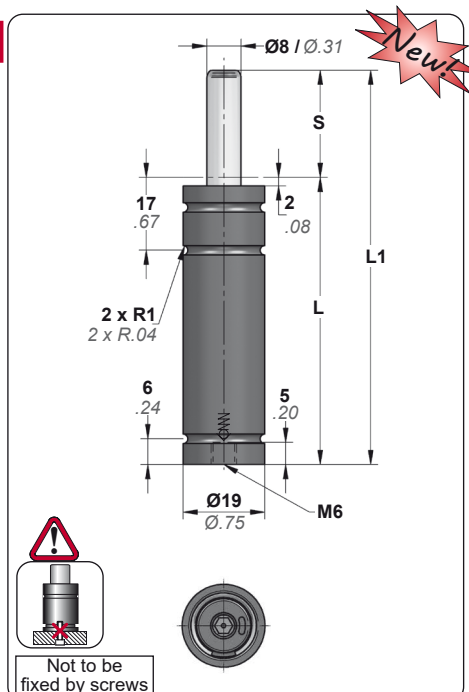
Mini

BMW B2 4006

FORD W-DX35-8036

MB B8 3180 220 000 002

VW 39D 878

AZOL
GASVDI
SAFETY

STANDARDS



ORDER	S		L1 ±0.25		L			
	mm	inch	mm	inch	mm	inch	Kg.	lb
AFJ --- 007 V2	7	0.28	56	2.20	49	1.93	0.08	0.18
AFJ --- 010 V2	10	0.39	62	2.44	52	2.05	0.08	0.18
AFJ --- 012 V2	12.7	0.50	67.4	2.65	54.7	2.15	0.08	0.18
AFJ --- 015 V2	15	0.59	72	2.83	57	2.24	0.09	0.20
AFJ --- 025 V2	25	0.98	92	3.62	67	2.64	0.10	0.22
AFJ --- 038 V2	38	1.50	118	4.65	80	3.15	0.12	0.26
AFJ --- 050 V2	50	1.97	142	5.59	92	3.62	0.13	0.29
AFJ --- 063 V2	63.5	2.50	172	6.77	108.5	4.27	0.15	0.33
AFJ --- 080 V2	80	3.15	205	8.07	125	4.92	0.17	0.37
AFJ --- 100 V2	100	3.94	245	9.65	145	5.71	0.19	0.42
AFJ --- 125 V2	125	4.92	295	11.61	170	6.69	0.22	0.49

ORDER	COLOR	P	
		bar	psi
AFJ 30 050 V2	Green	60	870
AFJ 50 050 V2	Blue	100	1450
AFJ 70 050 V2	Red	140	2030
AFJ 90 050 V2	Yellow	180	2610
AFJ XX 050 V2	Black	20-180	290-2610

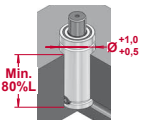
ORDER	F0 Initial Force ±5% 20°C 68°F		F1 (ISOTHERMAL) End Force	
	daN	lb	daN	lb
AFJ 30 050 V2	30	67	40	90
AFJ 50 050 V2	50	112	70	157
AFJ 70 050 V2	70	157	100	225
AFJ 90 050 V2	90	202	125	281
AFJ XX 050 V2	10-90	22-202	14-125	31-281

TECHNICAL DATA

	Fluid	N ₂		Pmin Pmax 20°C / 68°F	20 bar 180 bar 290 psi 2610 psi		Charging Adapter	06 CG 2-Q
	Smax	< 90%		Tmin Tmax	0 °C 80 °C 32 °F 176 °F		Connection	X
	Vmax	1,6 m/s		Force variation by temperature	±0,3% / °C		Cartridge Kit	08X44190B

								
MODEL	AFJ	CW 170					CP 150	

MOUNTING OPTIONS

	Drop-in	Top Mount	Base Mount	Foot Mount	Support Mount
					
HOW TO ORDER		A14-019  580 A44-019  584 A59-019  585		A19-019  586	

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.

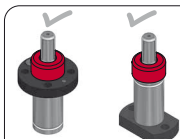
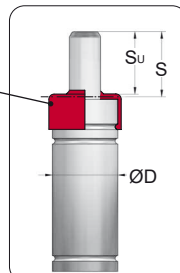
PG Protective Guard

		
HOW TO ORDER		
AFJ --- 050 V2	8	19
AFJ --- 050 V2 + PG 008 019		

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

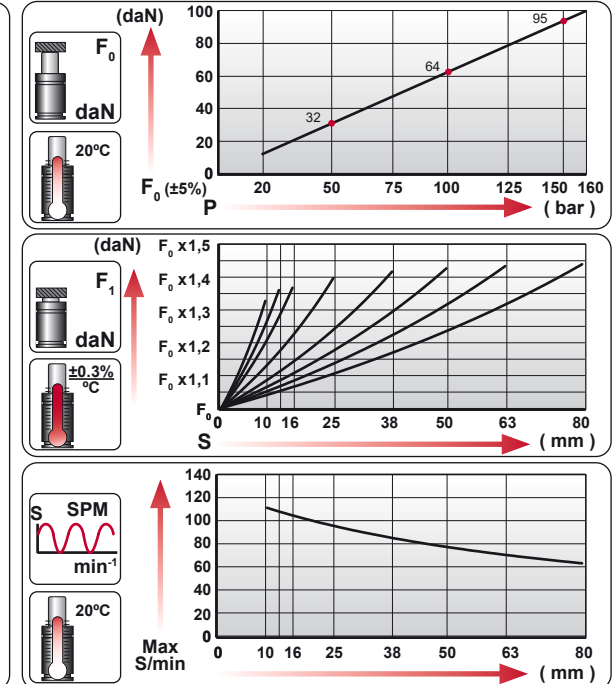
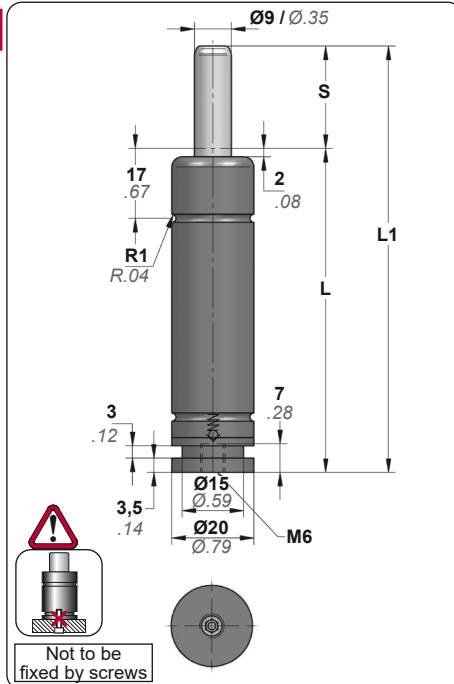


Protective Guard



AFK V1

Mini

AZOL
GASVDI
SAFETY

STANDARDS



ORDER	S		L1 ± 0.25		L			
	mm	inch	mm	inch	mm	inch	Kg.	lb
AFK ... 010 V1	10	0.39	74	2.91	64	2.52	0.12	0.26
AFK ... 012 V1	12.7	0.50	79.4	3.13	66.7	2.63	0.12	0.26
AFK ... 016 V1	16	0.63	86	3.39	70	2.76	0.13	0.29
AFK ... 025 V1	25	0.98	104	4.09	79	3.11	0.14	0.31
AFK ... 038 V1	38	1.50	130	5.12	92	3.62	0.16	0.35
AFK ... 050 V1	50	1.97	154	6.06	104	4.09	0.18	0.40
AFK ... 063 V1	63	2.48	180	7.09	117	4.61	0.19	0.42
AFK ... 080 V1	80	3.15	214	8.43	134	5.28	0.22	0.49

ORDER	COLOR	P	
		bar	psi
AFK 25 050 V1	Green	40	580
AFK 50 050 V1	Blue	80	1160
AFK 75 050 V1	Red	120	1740
AFK 100 050 V1	Yellow	160	2320
AFK XXX 050 V1	Black	20-160	290-2320

ORDER	F_0 Initial Force $\pm 5\%$ 20°C 68°F		F_1 (ISOTHERMAL) End Force	
	daN	lb	daN	lb
AFK 25 050 V1	25	56	35	79
AFK 50 050 V1	50	112	70	157
AFK 75 050 V1	75	169	105	236
AFK 100 050 V1	100	225	140	315
AFK XXX 050 V1	13-100	29-225	18-140	40-315

TECHNICAL DATA

	Fluid	N ₂		Pmin Pmax 20°C / 68°F	20 bar 290 psi	160 bar 2320 psi		Charging Adapter	06 CG 2-Q
	Smax	< 90%		Tmin Tmax 0°C / 32°F	80°C / 176°F			Connection	X
	Vmax	1,6 m/s		Force variation by temperature	$\pm 0,3\%$ / °C			Cartridge Kit	X

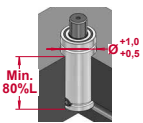


AFK V1

Mini

 1/2 mm								
 3/8 mm								
 1/4 mm								
MODEL								

MOUNTING OPTIONS

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

AFC V1

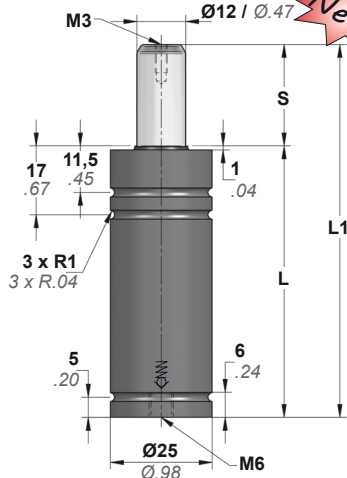
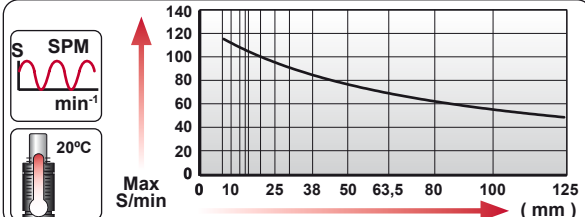
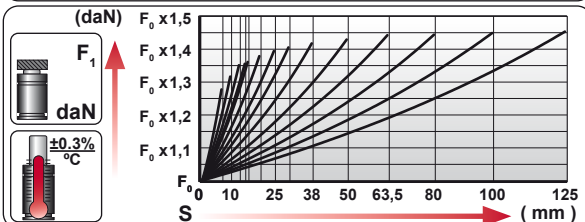
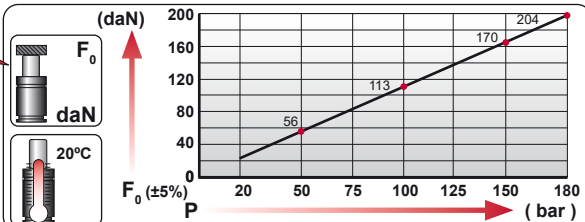
Mini

BMW B2 4006

MB B8 3180 220 000 002

VW 39D 878

PSA E24.54.815.G

**AZOL
GAS**Not to be
fixed by screws**VDI
SAFETY****STANDARDS**

ORDER	S		L1 ±0.25		L			
	mm	inch	mm	inch	mm	inch	Kg.	lb
AFC ... 007 V1	7	0.28	56	2.20	49	1.93	0.15	0.33
AFC ... 010 V1	10	0.39	62	2.44	52	2.05	0.16	0.35
AFC ... 012 V1	12.7	0.50	67.4	2.65	54.7	2.15	0.16	0.35
AFC ... 015 V1	15	0.59	72	2.83	57	2.24	0.17	0.37
AFC ... 016 V1	16	0.63	74	2.91	58	2.28	0.17	0.37
AFC ... 020 V1	20	0.79	82	3.23	62	2.44	0.18	0.40
AFC ... 025 V1	25	0.98	92	3.62	67	2.64	0.19	0.42
AFC ... 030 V1	30	1.18	102	4.02	72	2.83	0.20	0.44
AFC ... 038 V1	38	1.50	118	4.65	80	3.15	0.21	0.46
AFC ... 050 V1	50	1.97	142	5.59	92	3.62	0.24	0.53
AFC ... 063 V1	63.5	2.50	172	6.77	108.5	4.27	0.27	0.60
AFC ... 080 V1	80	3.15	205	8.07	125	4.92	0.30	0.66
AFC ... 100 V1	100	3.94	245	9.65	145	5.71	0.34	0.75
AFC ... 125 V1	125	4.92	295	11.61	170	6.69	0.39	0.86

ORDER	COLOR	P	
		bar	psi
AFC 50 050 V1	Green	45	650
AFC 100 050 V1	Blue	90	1305
AFC 150 050 V1	Red	135	1960
AFC 200 050 V1	Yellow	180	2610
AFC XXX 050 V1	Black	20-180	290-2610

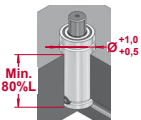
ORDER	F ₀ Initial Force ±5% 20°C 68°F		F ₁ (ISOTHERMAL) End Force	
	daN	lb	daN	lb
AFC 50 050 V1	50	112	70	157
AFC 100 050 V1	100	225	145	326
AFC 150 050 V1	150	337	215	483
AFC 200 050 V1	200	450	285	641
AFC XXX 050 V1	23-200	52-450	35-285	79-641

TECHNICAL DATA

	Fluid	N ₂		Pmin Pmax 20°C / 68°F	20 bar 180 bar 290 psi 2610 psi		Tmin Tmax 0°C 80°C 32°F 176°F		Force variation by temperature	±0,3% / °C		Charging Adapter	06 CG 2-Q
	Smax	< 90%		Tmin Tmax			Connection		Cartridge Kit				X
	Vmax	1,6 m/s		Force variation by temperature	±0,3% / °C		Cartridge Kit		Cartridge Kit				00195108B

									
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		A14-025  580 A44-025  584 A49-025  584			D02-025  600

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.

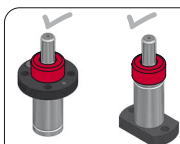
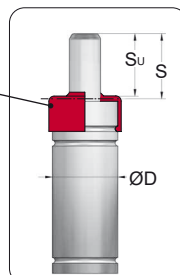
PG Protective Guard

			
HOW TO ORDER	AFC --- 050 V1	12	25
	AFC --- 050 V1 + PG 012 025		

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

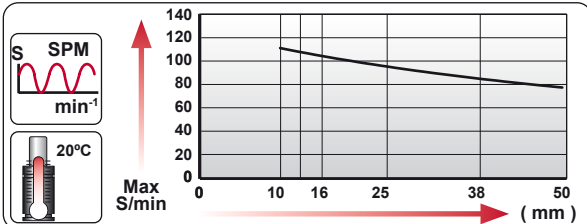
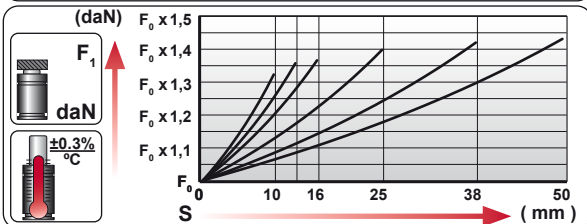
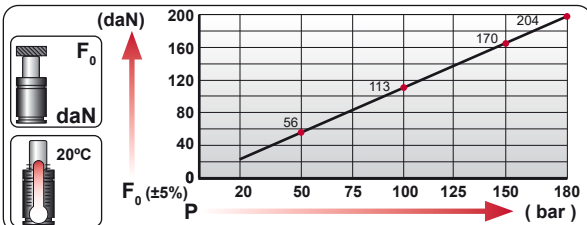
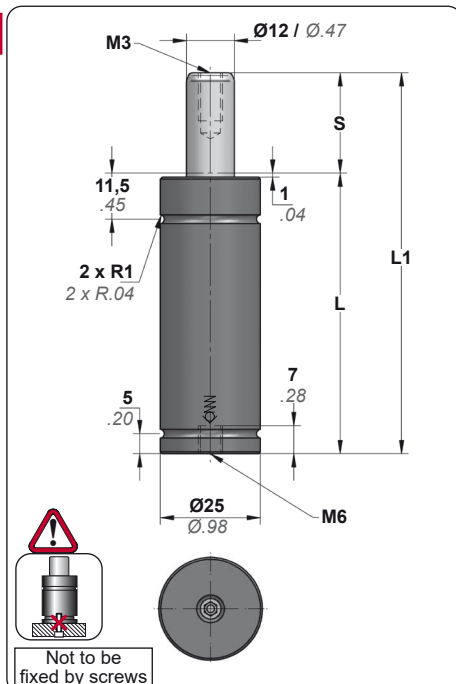


Protective Guard



AFNA

Mini

**AZOL
GAS****VDI
SAFETY****STANDARDS**

ORDER	S		L1 ±0.25		L			
	mm	inch	mm	inch	mm	inch	Kg.	lb
AFNA ... 010	10	0.39	65	2.56	55	2.17	0.17	0.37
AFNA ... 012	12.7	0.50	70.4	2.77	57.7	2.27	0.17	0.37
AFNA ... 016	16	0.63	77	3.03	61	2.40	0.18	0.40
AFNA ... 025	25	0.98	95	3.74	70	2.76	0.20	0.44
AFNA ... 038	38	1.50	121	4.76	83	3.27	0.22	0.49
AFNA ... 050	50	1.97	145	5.71	95	3.74	0.25	0.55

ORDER	COLOR	P	
		bar	psi
AFNA 50 050	Green	45	650
AFNA 100 050	Blue	90	1305
AFNA 150 050	Red	135	1960
AFNA 200 050	Yellow	180	2610
AFNA XXX 050	Black	20-180	290-2610

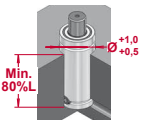
ORDER	F_0 Initial Force ±5% 20°C 68°F		F_1 (ISOTHERMAL) End Force	
	daN	lb	daN	lb
AFNA 50 050	50	112	70	157
AFNA 100 050	100	225	145	326
AFNA 150 050	150	337	215	483
AFNA 200 050	200	450	285	641
AFNA XXX 050	23-200	52-450	33-285	74-641

TECHNICAL DATA

	Fluid	N ₂		Pmin Pmax 20°C / 68°F	20 bar 180 bar 290 psi 2610 psi		Charging Adapter	06 CG 2-Q
	Sm	< 90%		Tmin Tmax 0°C 80°C 32°F 176°F			Connection	X
	Vmax	1,6 m/s		Force variation by temperature	±0,3% / °C		Cartridge Kit	12Y0B170A

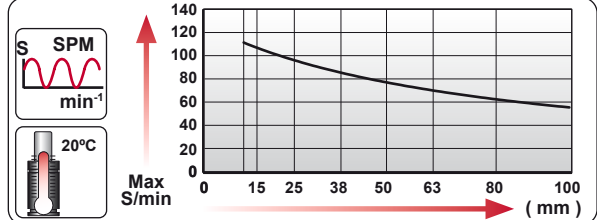
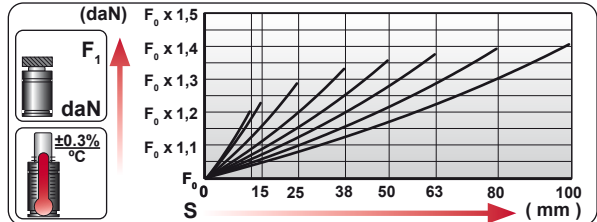
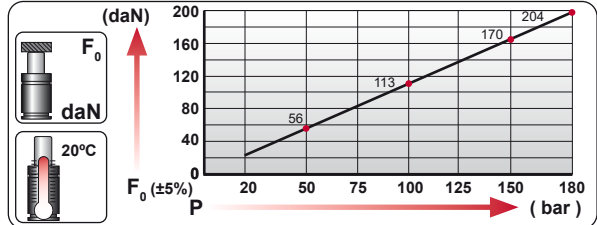
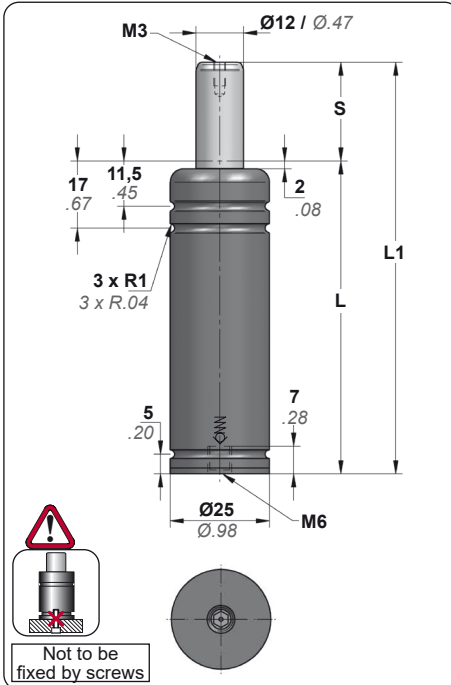
								
mm	50	50		50	50		50	50
	Ø25	Ø25		Ø25	Ø25		Ø25	Ø25
mm		L1=130						
	L1=142			L1=132	L1=160		L1=160	L1=195
mm	L1=145			L1=133				
	L1=154							
MODEL	AFC/AFD AFNA AF	CW 320		CK 200 CT 200	CM 200		CP 300	CS 420

MOUNTING OPTIONS

	Drop-in	Top Mount	Base Mount	Foot Mount	Support Mount
					
HOW TO ORDER		A14-025  580 A44-025  584 A49-025  584			D02-025  600

AF V1

Mini

AZOL
GASVDI
SAFETY

STANDARDS



ORDER	S		L1 ±0.25		L			
	mm	inch	mm	inch	mm	inch	Kg.	lb
AF ... 012 V1	12	0.47	78	3.07	66	2.60	0.17	0.37
AF ... 015 V1	15	0.59	84	3.31	69	2.72	0.18	0.40
AF ... 025 V1	25	0.98	104	4.09	79	3.11	0.20	0.44
AF ... 038 V1	38	1.50	130	5.12	92	3.62	0.22	0.49
AF ... 050 V1	50	1.97	154	6.06	104	4.09	0.25	0.55
AF ... 063 V1	63	2.48	180	7.09	117	4.61	0.27	0.60
AF ... 080 V1	80	3.15	214	8.43	134	5.28	0.30	0.66
AF ... 100 V1	100	3.94	254	10.00	154	6.06	0.34	0.75

ORDER	COLOR	P	
		bar	psi
AF 50 050 V1	Green	45	650
AF 100 050 V1	Blue	90	1305
AF 150 050 V1	Red	135	1960
AF 200 050 V1	Yellow	180	2610
AF XXX 050 V1	Black	20-180	290-2610

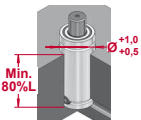
ORDER	F_0 Initial Force ±5% 20°C 68°F		F_1 (ISOTHERMAL) End Force	
	daN	lb	daN	lb
AF 50 050 V1	50	112	70	157
AF 100 050 V1	100	225	135	303
AF 150 050 V1	150	337	205	461
AF 200 050 V1	200	450	270	607
AF XXX 050 V1	23-200	52-450	30-270	67-607

TECHNICAL DATA

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

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

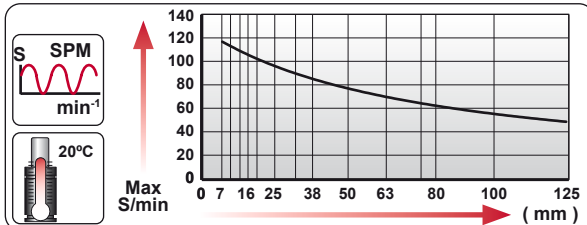
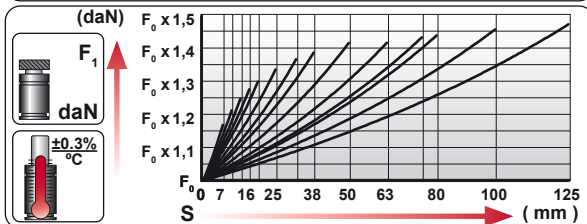
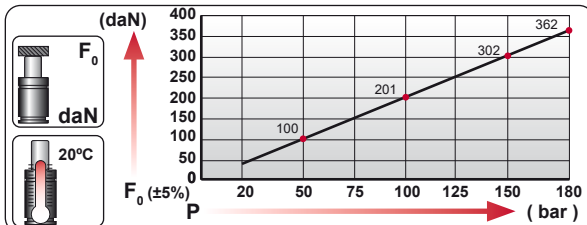
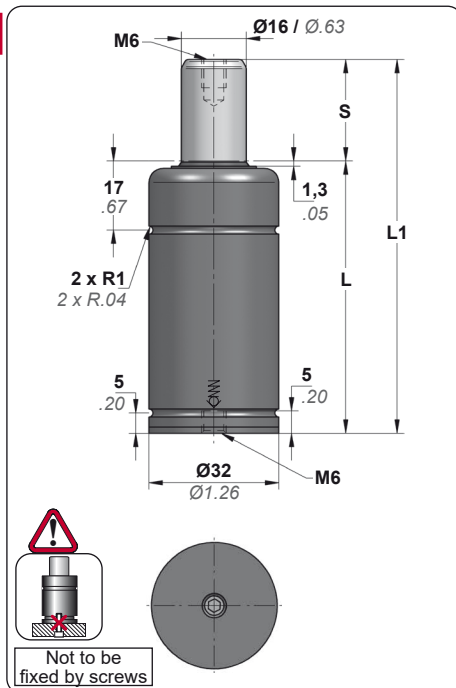
MOUNTING OPTIONS

	Drop-in 	Top Mount 	Base Mount 	Foot Mount 	Support Mount 
HOW TO ORDER		A14-025  580			

AFT V1

Mini

	FORD W-DX35-8040	

**AZOL
GAS****VDI
SAFETY****STANDARDS**

ORDER	S		L1 ±0.25		L			
	mm	inch	mm	inch	mm	inch	Kg.	lb
AFT --- 007 V1	7	0.28	56	2.20	49	1.93	0.22	0.49
AFT --- 010 V1	10	0.39	62	2.44	52	2.05	0.23	0.51
AFT --- 013 V1	13	0.51	68	2.68	55	2.17	0.24	0.53
AFT --- 016 V1	16	0.63	74	2.91	58	2.28	0.25	0.55
AFT --- 019 V1	19	0.75	80	3.15	61	2.40	0.26	0.57
AFT --- 025 V1	25	0.98	92	3.62	67	2.64	0.28	0.62
AFT --- 032 V1	32	1.26	106	4.17	74	2.91	0.30	0.66
AFT --- 038 V1	38	1.50	118	4.65	80	3.15	0.32	0.71
AFT --- 050 V1	50	1.97	142	5.59	92	3.62	0.36	0.79
AFT --- 063 V1	63	2.48	171	6.73	108	4.25	0.42	0.93
AFT --- 075 V1	75	2.95	195	7.68	120	4.72	0.46	1.01
AFT --- 080 V1	80	3.15	205	8.07	125	4.92	0.47	1.04
AFT --- 100 V1	100	3.94	245	9.65	145	5.71	0.54	1.19
AFT --- 125 V1	125	4.92	295	11.61	170	6.69	0.63	1.39

ORDER	COLOR	P	
		bar	psi
AFT 80 050 V1	Green	40	580
AFT 160 050 V1	Blue	80	1160
AFT 240 050 V1	Red	120	1740
AFT 310 050 V1	Yellow	155	2450
AFT XXX 050 V1	Black	20-180	290-2610

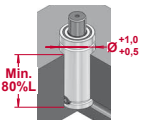
ORDER	F ₀ Initial Force ±5% 20°C 68°F		F ₁ (ISOTHERMAL) End Force	
	daN	lb	daN	lb
AFT 80 050 V1	80	180	115	259
AFT 160 050 V1	160	360	225	506
AFT 240 050 V1	240	540	340	764
AFT 310 050 V1	310	697	440	989
AFT XXX 050 V1	40-360	90-809	65-600	146-1349

TECHNICAL DATA

	Fluid	N ₂		Pmin Pmax 20°C / 68°F	20 bar 180 bar 290 psi 2610 psi		Tmin Tmax 0 °C 80 °C 32 °F 176 °F		Force variation by temperature	±0,3% / °C		Charging Adapter	06 CG 2-Q
	Sm	< 90%		Tmin Tmax			Connection						X
	Vmax	1,6 m/s		Force variation by temperature	±0,3% / °C		Cartridge Kit						X

								
mm	50	50		50	50	50	50	50
								
mm								
								
mm								
	Ø32	Ø32		Ø32	Ø32	Ø32	Ø32	Ø32
	L1=142	L1=130 L1=140		L1=137 L1=139	L1=150 L1=150	L1=150	L1=155	L1=195
MODEL	AFT	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		A14-032 580 A34-032 582 A44-032 584			