

DADCO Nitrogen Gas Spring Selection

Micro – C Series



- Pre-set and adjustable force models
- Color-coded for easy identification
- Threaded body styles available
- Operate self-contained or linked using MINILink® system

Ultra Force® – U Series



- High force and compact height
- Operates self-contained or linked
- UltraPak® cartridge used for long life

Mini – LJ / L Series



- Operate self-contained or linked using MINILink® system
- Variety of bolt-on mounts available
- L Series backed by DADCO's two year/two million stroke Select Guarantee

Ultra Force Extended® – UX Series



- High Force
- Stroke Lengths up to 300 mm
- Matches ISO standard diameter and height

Super Compact – SC Series



- High force, compact height
- Bore seal design
- Optional side port with addition of sub plate

ISO / 90.10 Series



- Matches ISO standards
- Long strokes for deep drawing
- Welded or bolt-on mounts available


Super Compact – SCR Series



- High force, compact height
- M6 port for pressure adjustment
- Linking capabilities

Model	Can Diameter (mm / inch)	Rod Diameter (mm / inch)	Stroke Lengths (mm)		Overall Length (mm)		Max Force on Contact (daN / lb.)		Max Charging Pressure (bar / psi)		Port Size		
C.045	12	.472	6	.24	7-50	63.5-80	(2 x S) + 42	(2 x S) + 45	50	112	177	2560	M6
C.070	15	.591	7	.28	7-50	63.5-125	(2 x S) + 42	(2 x S) + 45	68	154	177	2560	M6
C.090	19	.748	8	.31	7-50	63.5-125	(2 x S) + 42	(2 x S) + 45	89	200	177	2560	M6
U.0175	19	.748	11	.43	7-63.5	75-125	(2 x S) + 30	(2 x S) + 35	171	383	180	2600	M6
C.180	25	.984	12	.47	7-50	63.5-125	(2 x S) + 42	(2 x S) + 45	200	450	177	2560	M6
U.0325	25	.984	15	.59	7-63.5	75-125	(2 x S) + 30	(2 x S) + 35	320	715	180	2600	M6
SC.00420	25	.984	12	.47	10, 16, 25		70, 91, 120		425	956	150	2175	M6
C.250	32	1.260	15	.59	7-50	63.5-125	(2 x S) + 42	(2 x S) + 45	313	701	177	2560	M6
90.10.00170	32	1.260	12	.47	10-125		2 x Stroke + 50		170	381	150	2175	M6
U.0400	32	1.260	16	.63	10-125		2 x Stroke + 30		362	810	180	2600	M6
UH.0400	32	1.260	16	.63	10-125		2 x Stroke + 40		362	810	180	2600	G 1/8
SCR.0500	32	1.260	18	.71	10-80		2 x Stroke + 55		458	1026	180	2600	M6
SC.00740	32	1.260	20	.79	6-50		63-195		736	1655	150	2175	M6
LJ.300	38	1.496	16	.63	12.5-125		2 x Stroke + 30		302	678	150	2175	M6
L.300	38	1.496	16	.63	6.3-125		2 x Stroke + 50.5		302	678	150	2175	M6
U.0600	38	1.496	20	.79	10-125		2 x Stroke + 30		471	1059	150	2175	M6
UH.0600	38	1.496	20	.79	10-125		2 x Stroke + 40		471	1059	150	2175	G 1/8
SCR.0800	38	1.496	25	.98	10-80		2 x Stroke + 55		884	1978	180	2600	M6
SC.01000	38	1.496	20	.79	6-50		61-230		1060	2383	150	2175	M6
FCL.503	44.5	1.750	16	.63	24-124		2 x Stroke + 52.5		302	678	150	2175	M6
LJ.500	44.5	1.750	20	.79	12.5-125		2 x Stroke + 32		471	1059	150	2175	M6
L.500	44.5	1.750	20	.79	6.3-125		2 x Stroke + 50.5		471	1059	150	2175	M6
90.10.00500	44.5	1.750	20	.79	12.5-200		2 x Stroke + 85		471	1059	150	2175	G 1/8
U.0800	44.5	1.750	25	.98	10-125		2 x Stroke + 32		736	1655	150	2175	M6
UK.0800	44.5	1.750	25	.98	12.5-125		2 x Stroke + 42		736	1655	150	2175	G 1/8
UH.0800	44.5	1.750	25	.98	12.5-125		2 x Stroke + 47		736	1655	150	2175	G 1/8
UX.0800	44.5	1.750	25	.98	12.5-200		2 x Stroke + 42		736	1655	150	2175	G 1/8
FCL.755	50	1.968	20	.79	24-124		2 x Stroke + 52.5		471	1059	150	2175	M6
LJ.750	50	1.968	25	.98	12.5-125		2 x Stroke + 38		736	1655	150	2175	M6
L.750	50	1.968	25	.98	6.3-125		2 x Stroke + 50.5		736	1655	150	2175	M6
90.8.00750	50	1.968	25	.98	12.5-250		2 x Stroke + 70		736	1655	150	2175	G 1/8
90.10.00750	50	1.968	25	.98	12.5-300		2 x Stroke + 95		736	1655	150	2175	G 1/8
U.1000	50	1.968	28	1.10	12.5-125		2 x Stroke + 38		924	2076	150	2175	M6
UK.1000	50	1.968	28	1.10	12.5-125		2 x Stroke + 48		924	2076	150	2175	G 1/8
UH.1000	50	1.968	28	1.10	12.5-125		2 x Stroke + 52		924	2076	150	2175	G 1/8
UT.1000	50	1.968	28	1.10	12.5-125		2 x Stroke + 52		924	2076	150	2175	G 1/8
UX.1000	50	1.968	28	1.10	12.5-300		2 x Stroke + 93		924	2076	150	2175	G 1/8
U.1200	50	1.968	30	1.18	10-125		2 x Stroke + 38		1060	2383	150	2175	M6
SCR.1900	50	1.968	35	1.38	10-80		2 x Stroke + 80		1732	3877	180	2600	M6
SC.01800	50	1.968	30	1.18	6-50		66-220		1885	4236	150	2175	G 1/8
U.1600	63	2.480	36	1.42	10-125		2 x Stroke + 44		1527	3432	150	2175	M6
UK.1600	63	2.480	36	1.42	12.5-125		2 x Stroke + 54		1527	3432	150	2175	G 1/8
UH.1600	63	2.480	36	1.42	12.5-125		2 x Stroke + 52		1527	3432	150	2175	G 1/8
UX.1600	63	2.480	36	1.42	12.5-300		2 x Stroke + 95		1527	3432	150	2175	G 1/8
SCR.3200	63	2.480	45	1.77	16-80		2 x Stroke + 80		2863	6409	180	2600	M6
SC.03500	63	2.480	45	1.77	10-50		85-205		3185	7160	150	2175	G 1/8
90.8.01500	75	2.953	36	1.42	12.5-250		2 x Stroke + 85		1527	3432	150	2175	G 1/8
90.10.01500	75	2.953	36	1.42	12.5-300		2 x Stroke + 110		1527	3432	150	2175	G 1/8
U.2600	75	2.953	45	1.77	16-125		2 x Stroke + 45		2386	5362	150	2175	M6
UK.2600	75	2.953	45	1.77	25-125		2 Stroke + 55		2386	5362	150	2175	G 1/8
UH.2600	75	2.953	45	1.77	16-125		2 x Stroke + 59		2386	5362	150	2175	G 1/8
UT.2600	75	2.953	45	1.77	16-125		2 x Stroke + 59		2386	5362	150	2175	G 1/8
UX.2600	75	2.953	45	1.77	25-300		2 x Stroke + 108		2386	5362	150	2175	G 1/8
SC.04700	75	2.953	50	1.97	10-50		80-240		4676	10509	150	2175	G 1/8
SCS.4300	75	2.953	55	2.16	15-80		100-250		3564	8010	150	2175	G 1/8
90.8.03000	95	3.740	50	1.97	12.5-250		2 x Stroke + 95		2945	6619	150	2175	G 1/8
90.10.03000	95	3.740	50	1.97	12.5-300		2 x Stroke + 120		2945	6619	150	2175	G 1/8
90.10RX.03000	95	3.740	50	1.97	25-300		2 x Stroke + 120		2945	6619	150	2175	G 1/8
U.4600	95	3.740	60	2.36	16-125		2 x Stroke + 58		4241	9532	150	2175	G 1/8
UH.4600	95	3.740	60	2.36	16-125		2 x Stroke + 62		4241	9532	150	2175	G 1/8
UT.4600	95	3.740	60	2.36	16-125		2 x Stroke + 62		4241	9532	150	2175	G 1/8
UX.4600	95	3.740	60	2.36	25-300		2 x Stroke + 120		4241	9532	150	2175	G 1/8
SC.07500	95	3.740	63	2.48	10-50		90-255		7540	16946	150	2175	G 1/8
SCS.7000	95	3.740	70	2.75	15-80		115-260		5773	12974	150	2175	G 1/8
90.8.05000	120	4.724	65	2.56	25-250		2 x Stroke + 102.5		4977	11187	150	2175	G 1/8
90.10.05000	120	4.724	65	2.56	25-300		2 x Stroke + 140		4977	11187	150	2175	G 1/8
90.10RX.05000	120	4.724	65	2.56	25-300		2 x Stroke + 140		4977	11187	150	2175	G 1/8
U.6600	120	4.724	75	2.95	16-125		2 x Stroke + 68		6627	14894	150	2175	G 1/8
UH.6600	120	4.724	75	2.95	16-125		2 x Stroke + 72		6627	14894	150	2175	G 1/8
UT.6600	120	4.724	75	2.95	16-125		2 x Stroke + 72		6627	14894	150	2175	G 1/8
UX.6600	120	4.724	75	2.95	25-300		2 x Stroke + 140		6627	14894	150	2175	G 1/8
SC.11800	120	4.724	80	3.15	10-50		100-260		11781	26478	150	2175	G 1/8
90.8.07500	150	5.906	80	3.15	25-250		2 x Stroke + 105		7540	16946	150	2175	G 1/8
90.10.07500	150	5.906	80	3.15	25-300		2 x Stroke + 155		7540	16946	150	2175	G 1/8
90.10RX.07500	150	5.906	80	3.15	25-300		2 x Stroke + 155		7540	16946	150	2175	G 1/8
U.9600	150	5.906	90	3.54	25-125		2 x Stroke + 78		9543	21447	150	2175	G 1/8
UT.9600	150	5.906	90	3.54	25-125		2 x Stroke + 78		9543	21447			

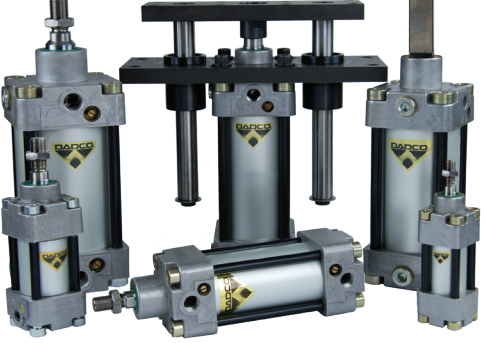
DADCO® Nitrogen Gas Lifter Selection

Micro Nitrogen Gas Spring Lifters – SL Series		Model	Can Diameter (mm / inch)	Stroke Lengths S (mm)	Overall Length (mm)	Max Force on Contact (daN / lb.)		Max Charging Pressure (bar / psi)		Port Size
	E.16	12	.472	15-80	74-207	42	95	150	2175	M6
	E.24	21.5	.846	20-80	100-220	170	381	150	2175	M6
	SL.16	14	.55	10-100	2 x Stroke + 60	51	114	180	2611	M6
	SLN.090	38	1.496	25-125	112-330	89	200	177	2560	–
	SLN.180*	50	1.968	25-125	145-369	200	450	177	2560	–
	SLN.300	75	2.953	50-150	2 x Stroke + 96	302	678	150	2175	M6
	SLC.500	50	1.96	50-200	2 x Stroke + 122.5	220	487	70	1000	G 1/8
	SLC.800	75	2.95	50-200	2 x Stroke + 204	712	1578	70	1000	G 1/8
	Model	Rail Width	Stroke Lengths	Overall Length	Max Force on Contact		Max Charging Pressure		Port Size	
SL2.090	160	6.30	23-198	105-466	89	200	177	2560	M6	
SL2.180	180	7.09	23-198	105-466	200	450	177	2560	M6	
SL2.300	180	7.09	23-198	105-466	302	678	150	2175	M6	

• Non-rotating and internal cushion options
 • Built-in guidance
 • Force provided by Micro and Mini Series gas springs
 • Single, multi-point or rail lift applications
 • Ideal for progressive stamping dies, rail lifters and work holding applications

Refer to DADCO product catalogs for exact dimensions and complete list of stroke lengths.
 *Available in Flange Model (FA / FB) for stripper applications.


DADCO® Air Cylinder Selection

ISO Air Cylinders – HP Series		Model	Bore Size (mm)	Stroke Lengths S (mm)	Cylinder Body Length (mm)	PUSH Force* 6 bar / 80 psi (kN / lb.)		Max Charging Pressure (bar / psi)		Port Style
	HP.Z / HP.W	32-250	25-500	varies by bore size (see catalog)	.483-29.45	100-6087	10	140	NPT/BSPP	
	HP.N	32-100	25-500	varies by bore size (see catalog)	.483-4.71	100-974	10	140	NPT/BSPP	
	HP.TDL2C	40-100	25-400	varies by bore size (see catalog)	.754-4.71	156-974	10	140	NPT/BSPP	
	HP.TDL4	40	25-250	Stroke + 171	.754	156	10	140	NPT/BSPP	
	HP.STB	50	125-200	Stroke + 161	1.080	243	10	140	BSPP	
	HP3	40	80-160	Stroke + 200	See Catalog				BSPP	

• Standard male (HP.Z), optional female (HP.W) and non-rotating (HP.N) rod ends
 • Two post lifters (TDL2C / TDL4)
 • Adjustable cushioning
 • Meets or exceeds most NAAMS, ISO and VDMA standards

Refer to DADCO product catalogs for exact dimensions and complete list of stroke lengths.
 *Reference HP Series product catalog for PULL Force.

DADCO® Guide Retainer Sets Selection

Guide Retainer Sets – GRS/GRS HD Series		Model	Rod Diameter (mm / inch)	Retainer Diameter (mm / inch)	Pin Extension (mm)	Overall Length (mm)	Rod Attachment SHCS (Metric / Imperial)		Fastener Quantity	
	GRS.20.HD1	19.05	.750	31.75	1.250	20 - 88.9	Pin Extension + 36.53	M10	3/8"-16	1
	GRS.20.HD2	19.05	.750	31.75	1.250	20 - 152.4	Pin Extension + 61.93	M10	3/8"-16	1
	GRS.20.HA2	19.05	.750	35.56	1.400	20 - 152.4	Pin Extension + 61.93	M10	3/8"-16	1
	GRS.25	24.95	.982	38	1.496	20 - 150	Pin Extension + 58.40	M12	1/2"-13	1
	GRS.25.HD1	24.95	.982	38.10	1.500	20 - 120	Pin Extension + 64.40	M12	1/2"-13	1
	GRS.25.HD2	24.95	.982	38.10	1.500	20 - 152.4	Pin Extension + 89.80	M12	1/2"-13	1
	GRS.25.HA2	24.95	.982	41.91	1.650	20 - 114.3	Pin Extension + 64.40	M12	1/2"-13	1
	GRS.30*	30	1.181	43	1.693	20 - 150	Pin Extension + 58.40	M8	5/16"-18	4
	GRS.30.HD1	30	1.181	44.45	1.750	20 - 90	Pin Extension + 73.98	M8	5/16"-18	4
	GRS.30.HD2	30	1.181	44.45	1.750	20 - 152.4	Pin Extension + 99.38	M8	5/16"-18	4
	GRS.30.HD4/5	30	1.181	NA	NA	20 - 90	Pin Extension + 58.10	M8	5/16"-18	4
	GRS.30.HA2	30	1.181	48.26	1.900	20 - 90	Pin Extension + 73.98	M8	5/16"-18	4
	GRS.36*	36	1.417	50	1.969	20 - 150	Pin Extension + 73.40	M10	3/8"-16	4
	GRS.36.HD	36	1.417	50	1.969	45 - 145	Pin Extension + 100.00	M10	-	4
	GRS.36.HD1	36	1.417	53.98	2.125	20 - 90	Pin Extension + 78.98	M10	3/8"-16	4
	GRS.36.HD2	36	1.417	53.98	2.125	20 - 152.4	Pin Extension + 104.38	M10	3/8"-16	4
	GRS.45.HD1	45	1.772	60.33	2.375	20 - 90	Pin Extension + 76.21	M10	3/8"-16	4
	GRS.45.HD2	45	1.772	60.33	2.375	20 - 152.4	Pin Extension + 101.61	M10	3/8"-16	4
	GRS.45.HD4/5	45	1.772	NA	NA	20 - 90	Pin Extension + 60.3	M10	3/8"-16	4
	GRS.50	50	1.969	68	2.677	20 - 150	Pin Extension + 90.40	M12	1/2"-13	4
GRS.50.HD	50	1.969	70	2.756	55 - 155	Pin Extension + 135.00	M16	-	3	
GRS.50.HD2	50.80	2.000	66.68	2.625	20 - 101.6	Pin Extension + 109.38	M16	-	3	
GRS.50.HD3	50.80	2.000	66.68	2.625	20 - 165.1	Pin Extension + 134.78	M16	-	3	
GRS.65.HD	65	2.559	90	3.543	55 - 155	Pin Extension + 170.00	M16	-	4	

• Robust design with combined guidance and retention
 • Seven rod diameters: 20 mm, 25 mm, 30 mm, 36 mm, 45 mm, 50 mm and 65mm
 • Various stroke lengths to suit application requirements
 • Replaces common pins, bushings and spools

Chart shows Flange and Wide Toe Clamp models.
 *GRS.30 and GRS.36 are available with Alternative Toe Clamps, see product catalog for more information.