


DADCO® Nitrogen Gas Spring Selection

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
Micro – C Series							
							
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	150-200	(2 x S) + 53	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	150-200	(2 x S) + 53	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
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
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	150 2175	G 1/8
UX.9600	150 5.906	90 3.54	25-300	2 x Stroke + 155	9543 21447	150 2175	G 1/8
SC.18300	150 5.906	100 3.94	10-50	110-270	18408 41372	150 2175	G 1/8
90.10.10000	195 7.677	95 3.74	50-250	2 x Stroke + 160	10632 23896	150 2175	G 1/8
90.10RX.10000	195 7.677	95 3.74	50-250	2 x Stroke + 160	10632 23896	150 2175	G 1/8
U.20000	195 7.677	130 5.12	25-125	2 x Stroke + 110	19910 44747	150 2175	G 1/8
UX.20000	195 7.677	130 5.12	25-300	2 x Stroke + 160	19910 44747	150 2175	G 1/8
Ultra Force® – U Series							
							
Mini – LJ / L Series							
							
Ultra Force Extended® – UX Series							
							
Super Compact – SC Series							
							
ISO / 90.10 Series							
							
Super Compact – SCR Series							
							


Refer to DADCO product catalogs for exact dimensions and complete lists of stroke lengths. Refer to DADCO Force Chart bulletin B10125E for precise Metric and Imperial force information by cylinder model. Refer to the Gas Spring Installation & Operation bulletin B14141C for proper handling of DADCO Nitrogen Gas Springs. Visit our website at www.dadco.net for a comprehensive list of DADCO's product line and support.

DADCO® Nitrogen Gas Lifter Selection

Micro Nitrogen Gas Spring Lifters – SL Series		Can Diameter (mm / inch)		Stroke Lengths S (mm)	Overall Length (mm)	Max Force on Contact (daN / lb.)		Max Charging Pressure (bar / psi)		Port Size
	Model	12	.472	15-80	74-207	42	95	150	2175	M6
	E.16	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
<ul style="list-style-type: none"> • 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 	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

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
 <ul style="list-style-type: none"> • 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 	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	NPT/BSPP	

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
 <ul style="list-style-type: none"> • Robust design with combined guidance and retention • Four rod diameters: 25 mm, 30 mm, 36 mm and 50 mm • Various stroke lengths to suit application requirements • Replaces common pins, bushings and spools 	GRS.25	25	.984	38	1.496	20-150	Stroke + 50	M12	1/2"-13	1
	GRS.30*	30	1.181	43	1.693	20-150	Stroke + 50	M8	5/16"-18	4
	GRS.36*	36	1.417	50	1.968	20-150	Stroke + 65	M10	3/8"-16	4
	GRS.50	50	1.968	68	2.677	20-150	Stroke + 80	M12	1/2"-13	4
	GRS.36.HD	36	1.417	50	1.969	45-145	Stroke + 100	4 x M10	-	4
	GRS.50.HD	50	1.967	70	2.756	55-155	190-280	3 x M16	-	3
	GRS.65.HD	65	2.557	90	3.543	55-155	225-315	4 x M16	-	4

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.

DADCO® Additional Products

Nitrogen Gas Spring Linked System Components




- Everything you need to construct a Linked System
- Seven different hose options
- Fittings to support a variety of configurations
- Control Panels, Pressure Monitors and Charging Accessories

Sectional Mounting Systems – SMS® and SMS-i®



- Unlimited design configurations
- Uniform pressure in a system
- Simplified maintenance; easy installation and removal
- Alternatives to traditional manifold systems

Power Cam and Power Pump System



- Guided Hydraulic die cam with nitrogen return
- Power Cam may be installed and operated in any orientation
- 15 kN and 40 kN force models available
- Ideal for secondary operations such as punching, piercing, forming or flanging