KALLER®

APPROVED PED 97/23/EC

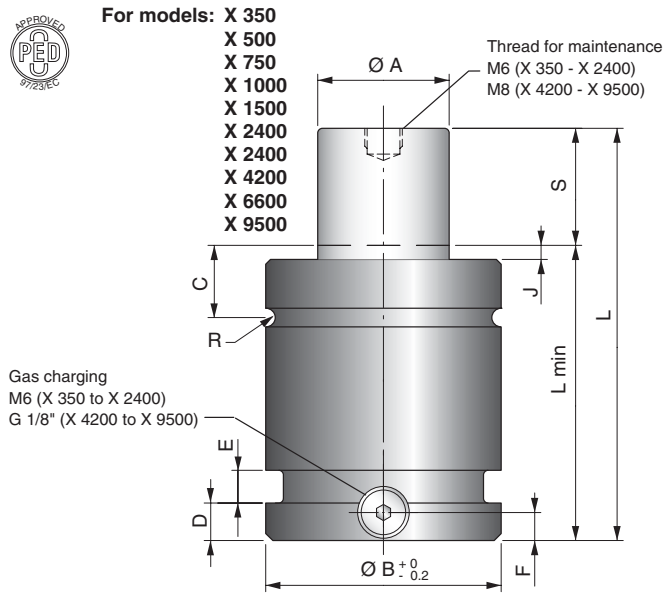
Power Line X 170 - X 9500

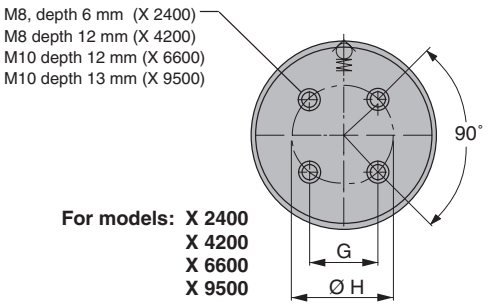
by

STRÖMSHOLMEN

KALLER®

Power Line, X 170 to X 9500

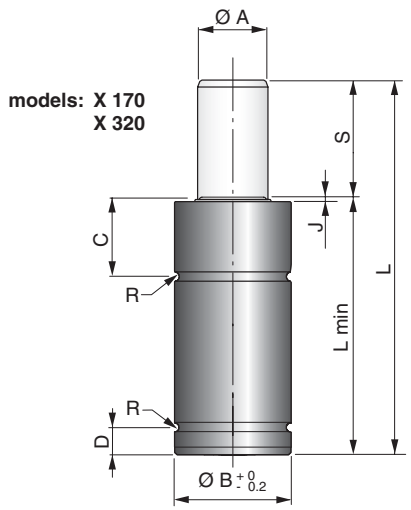


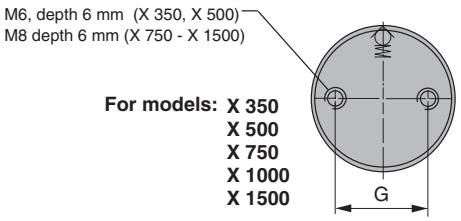


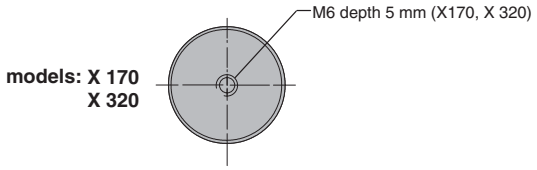
Power Line - The World's shortest, strongest and most advanced rod sealed gas springs.

Features:

Initial forces from 170 to 9500 daN
Over Stroke Protection System (Patented)
Over Drive Protection System (Patented)
Side or bottom charging ports for Hose-system connection
Upper C-groove, lower U-groove (except X 170 and X 320) and bottom threaded holes allow for various standard mounting possibilities.







Model	Spring force in N at 150* bar/ + 20° C		Ø A	Ø B	C	D	E	F	G	Ø H	J	R
	Inital	End force **										
New! X 170	1700	2700	11	19	17	5	--	--	--	--	1	1
X 320	3200	5000	15	25	17	5	--	--	--	--	1	1
X 350	3600	5500	16	32	12.5	4	3.5	6	20	--	2	1
X 500	4700	7200	20	38	12.5	4	4	6	25	--	2	1
X 750	7400	12000	25	45.2	15.5	4	4	6	20	--	2	1
X 1000	9200	14000	28	50.2	15.5	8	7	6	20	--	3	2
X 1500	15000	24000	36	63.2	19	8	7	6	20	--	3	2
X 2400	24000	38000	45	75.2	21	8	7	6	28.3	40	3	2.5
X 4200	42000	66000	60	95.2	24	8	7	10.5	42.4	60	3	2.5
X 6600	66300	99000	75	120.2	25.5	8	7	10.5	56.6	80	3	2.5
X 9500	95000	145000	90	150.2	27.5	8	8	10.5	70.7	100	3	2.5

* for X 170 - X 350 = 180 bar
** at full stroke

KALLER®

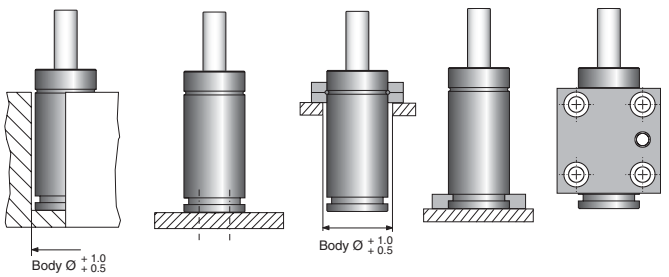
Power Line, X 170 to X 9500

Stroke		7	10	13	15	16	19	25	32	38	50	63	75	80	100	125
New! X 170	L	44	50	--	60	--	68	80	--	106	130	156	185	195	235	285
	L min	37	40	--	45	--	49	55	--	68	80	93	110	115	135	160
X 320	L	44	50	--	60	--	68	80	--	106	130	156	185	195	235	285
	L min	37	40	--	45	--	49	55	--	68	80	93	110	115	135	160
X 350	L	--	50	56	--	62	68	80	94	106	130	156	180	190	230	280
	L min	--	40	43	--	46	49	55	62	68	80	93	105	110	130	155
X 500	L	--	50	56	--	62	68	80	94	106	130	156	180	190	230	280
	L min	--	40	43	--	46	49	55	62	68	80	63	105	110	130	155
X 750	L	--	52	58	--	64	70	82	96	108	132	158	182	192	232	282
	L min	--	42	45	--	48	51	57	64	70	82	95	107	112	132	157
X 1000	L	--	--	64	--	70	76	88	102	114	138	164	188	198	238	288
	L min	--	--	51	--	54	57	63	70	76	88	101	113	118	138	163
X 1500	L	--	--	70	--	76	82	94	108	120	144	170	194	204	244	294
	L min	--	--	57	--	60	63	69	76	82	94	107	119	124	144	169
X 2400	L	--	--	--	--	77	83	95	109	121	145	171	195	205	245	295
	L min	--	--	--	--	61	64	70	77	83	95	108	120	125	145	170
X 4200	L	--	--	--	--	90	96	108	122	134	158	184	208	218	258	308
	L min	--	--	--	--	74	77	83	90	96	108	121	133	138	158	183
X 6600	L	--	--	--	--	100	106	118	132	144	168	194	218	228	268	318
	L min	--	--	--	--	84	87	93	100	106	118	131	143	148	168	193
X 9500	L	--	--	--	--	--	116	128	142	154	178	204	228	238	278	328
	L min	--	--	--	--	--	97	103	110	116	128	141	153	158	178	203

Basic Information

Pressure medium	Nitrogen
Max. charge pressure (X 170 - X 350)	180 bar (at 20° C)
Max. charge pressure (X 500 - X 9500)	150 bar (at 20° C)
Min. charge pressure	25 bar (at 20° C)
Operating temperature	0 to +80°C
Force increase by temperature	±0.3%/°C
Recommended max strokes/min	~ 20 -100 (at 20° C)
Max piston rod velocity	0.8 m/s
Repair Kit	Available for all models except X 170, X 320 and X 2400-016

Mounting possibilities

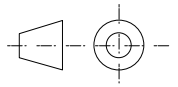


Drop - In | **Bottom threads** | **Top Mount** | **Foot Mount** | **Side Mount** (X 320 Only)

We reserve the right to add, delete or modify components without notification.

All dimensions are stated in mm.
All dimensions are nominal unless tolerance is stated.

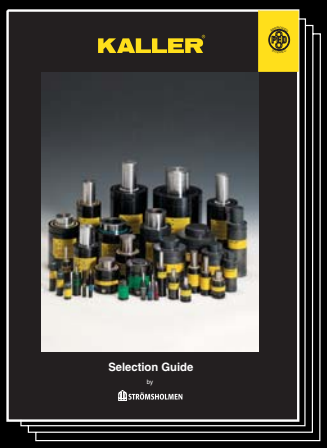
View



STRÖMSHOLMEN

KALLER®

The Safe Choice



Gas Springs
Kaller developed the first nitrogen gas spring for press tools and today offers a comprehensive selection of high quality gas springs for use in different tool & die applications.

Controllable Gas Springs-KF
Kaller controllable springs are a family of gas springs, for use in press tools, that can be locked in their bottom position and where the return stroke of the spring can be controlled.

Flange Stripper Unit
Kaller Flange Stripper Unit is used in flanging dies for stripping/lifting a flanged part after forming. It provides 200 daN of stripping force, can be top or bottom mounted and is self guiding.

Flex Cam™
The Flex Cam is used for piercing, cutting, forming and flanging operations. The system allows for a flexible distribution of forces with optimal direction and velocity. By using a Flex Cam, fewer tools are required in production.

Roller Cam
Kaller Roller Cam is used for piercing, trimming, flanging and restriking. The Roller Cam can be mounted in both vertical and horizontal angles.

Counter Balance
Kaller Counter Balance gas springs can be used to lift, lower, assist, balance, and hold in a multitude of applications.

STRÖMSHOLMEN
Strömsholmen AB
Box 216 • SE-573 23 Tranås • Sweden
Phone +46 140-571 00 • Fax +46 140-571 99
info@kaller.com • www.kaller.com

KALLER® GAS SPRINGS
33280 Groesbeck Higway, Fraser,
MI 48026
Phone: +1 586 415 6677, Fax +1 586 415 6699