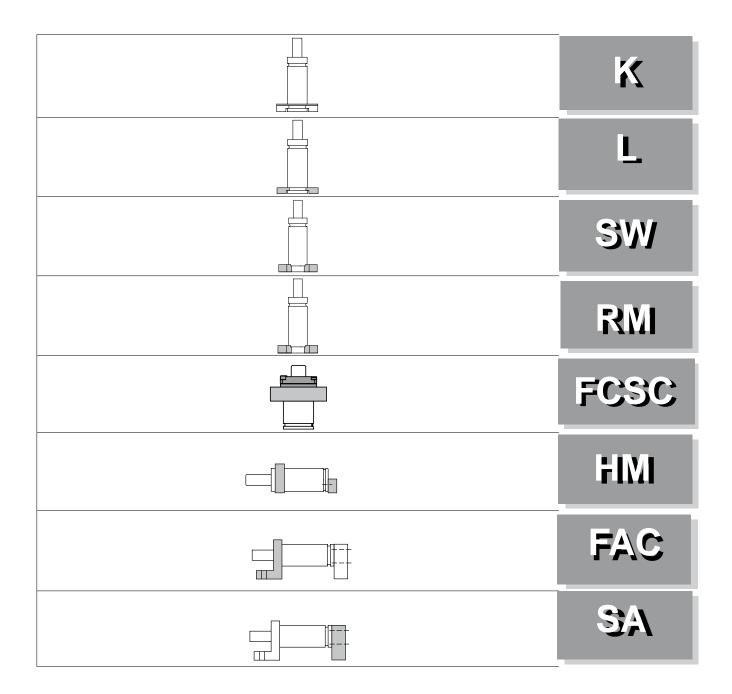
SPECIAL MOUNTS







STANDARD

Dept / Issued by 81153/G Larsson

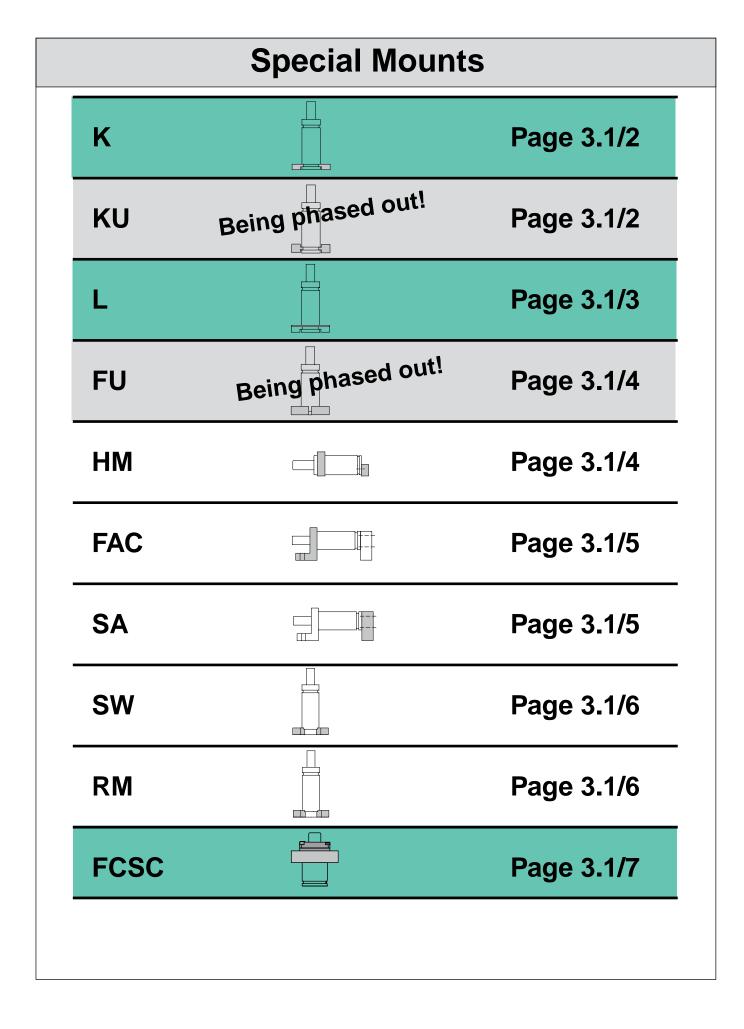
2010-02

Volvo standard

Kaller is the Volvo standard for gas springs, hydraulic cams and roller cams. In the downloads here you find the Volvo part numbers for all Kaller parts that are Volvo standard.

- **GREEN**: Preference 1. The items that are "first choice" have the Volvo part numbers marked green.
- YELLOW: Preference 2. The items with yellow Volvo part numbers can be used if the green marked alternative is impossible to use in the specific case.
- UNCOLOURED: The items with uncoloured Volvo part numbers <u>must not</u> be used for new design, only for replacement in old dies.

Items that are not provided with Volvo part numbers can be used after confirmation from Volvo: please contact <u>glarss16@volvocars.com</u> or your technical contact person at Volvo.



Mounts



The K-lug can be used to clamp the gas spring vertically upright to the tool. The gas spring can be clamped down using 2, 3 or 4 K-lugs.

If only 2 lugs are used, then locking plate L must also be used for fixing the gas spring. Note! When using locking plate L together with K-lugs the spring can not be hosed together as the L-plate will cover the gas charge port of the gas spring (use KU-lugs instead).

Important! The K-lugs are only to be used to mount the spring vertically upright.

Volvo Part No.	Spring size	Order No.	С	ØD	Е	ØF	Min No. per spring
3054727	250 (X 500)	K-250	20	7	7	56.6	3
3044219	500 (X 750)	K-500	25	9	7	70.7	3
5014957	750 (X 1000)	K-750	30	13.5	14	80	3
	X 1500	KX-1500	30	13.5	14	92	3
5014958	1500 (X 2400)	K-1500	30	13.5	14	104	3
5014959	3000 (X 4200)	K-3000	40	17.5	14	130	3
5014960	5000 (X 6600)	K-5000	50	17.5	14	155	3
5054728	7500 (X 9500)	K-7500	50	21.5	14	195	3
5054729	10 000 (X 20 000)	K-10000	58	21.5	15	240	3

Surface finish = Black oxide.

Note! When ordering lug K for X springs, a lug of smaller size than the spring must be used. For example, a X 2400 spring requires lug K-1500.

KU

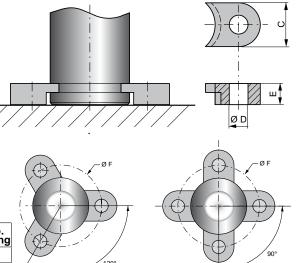
The KU-lug is a reversible variant of the K-lug. KU-lugs are used to clamp the gas spring vertically upright to the tool. The gas springs can be clamped down using 2, 3 or 4 lugs.

If only 2 lugs are used, then the KU-lugs should be positioned as shown in Fig. A and a locking plate L attached before fixing the gas spring. The KU lugs are only to be used to mount the spring vertically upright.

			RO	ind	pr	Min no
Spring size	Order No.	С	ØD	ØE	ØF	Min. no. per spring
750 (X 1000)	KU-750	30	13.5	20	80	3
X 1500	KU-1500	30	13.5	20	92	3
1500 (X 2400)	KU-1500	30	13.5	20	104	3
3000 (X 4200)	KU-3000	40	17.5	26	130	3
5000 (X 6600)	KU-5000	50	17.5	26	155	3
7500 (X 9500)	KU-7500	50	21.5	33.2	195	3

Surface finish = Black oxide.

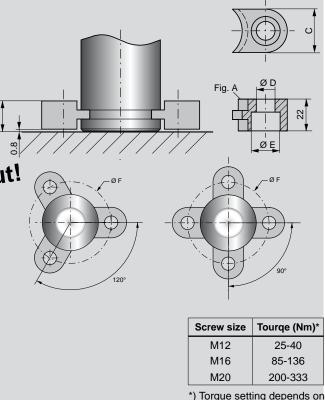
Note! When ordering lug K for X springs, a lug of smaller size than the spring must be used. For example, a X 2400 spring requires lug K-1500.



KALLE

Sc	rew size	Tourqe (Nm)*
	M6	10-17
	M8	25-40
	M12	85-136
	M16	200-333
	M20	390-649

*) Torque setting depends on the strength of screw used!



*) Torque setting depends on the strength of screw used!

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

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3.1/3 Mounts

KALLER

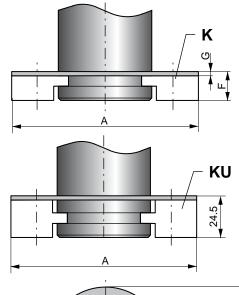
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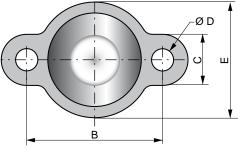
Ι.

When fixing gas springs vertically upright using 2 lugs, K or KU, locking plate L must be used at the same time to ensure that the spring will be fixed radially. Locking plate L in combination with KU-lugs as shown in Fig. A (opposite) can be used for gas springs that are to be connected to a hose system.

Volvo Part No.	Order No.	Α	В	С	ØD	Е	F	G
3054730	L-250	76.6	56.6	20	7	48	9.5	2.5
3044220	L-500	95.8	70.7	25	9	56	9.5	2.5
5014961	L-750	110	80	30	13	61	16.5	2.5
5014962	L-1500	134	104	30	13	86	16.5	2.5
5014963	L-3000	170	130	40	17	106	16.5	2.5
5014964	L-5000	205	155	50	17	131	16.5	2.5
3054731	L-7500	245	195	50	21	170	16.5	2.5

Surface finish = Black oxide.





Mounts

FU

A 2-piece flange with counter bored holes for the bolt heads. Without the addition of a support the flange is designed only for mounting vertically. All sizes except the FU-500 can be reversed. Note! the base of the spring must be backed up at all times.

	Being phase									
Order No.	Α	В	С	ØD	ØΕ	ØF				
FU-500	70	50	20	70.7	9	15				
FU-750	75	56.5	24	80	13.5	View A				
FU-1500	100	73.5	24	104	13.5	20				
FU-3000	120	92	24	130	17.5	26				
FU-5000	140	109.5	24	155	17.5	26				
FU-7500	190	138	24	195.2	21.5	33				

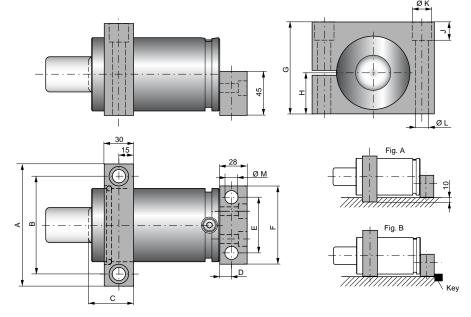
Surface finish = Black oxide.

Note! When ordering flange FU for TB springs, a flange of larger size than the spring must be used. For example, a TB 750 spring requires flange FU-1500.



HM (Horizontal Mount) is a mount for TU 750-3000 springs. This mount is according to FORD and GM automotive standards. The front support can be rotated 180° allowing it to be mounted in a 10 mm key-groove. If the front support is not mounted in a key-groove, we recommend that the rear mount is backed up using a key (see Fig. A and B).

The support is delivered complete with screws for attaching the mount to the spring.



Order No.	Α	В	С	D	Е	F	G	н	J	ØК	ØL	ØМ
HM-750	90	68	43	13	44	65	70	30	25	18	11	11
HM-1500	125	100	45	12	57	80	94	42	19	20	13.5	13.5
HM-3000	140	115	48	15	70	95	115	52.5	40	20	13.5	13.5

Surface finish = Black oxide.



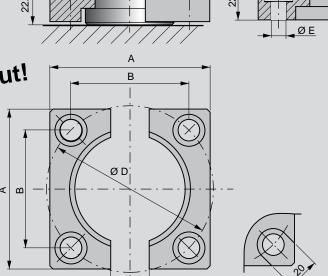
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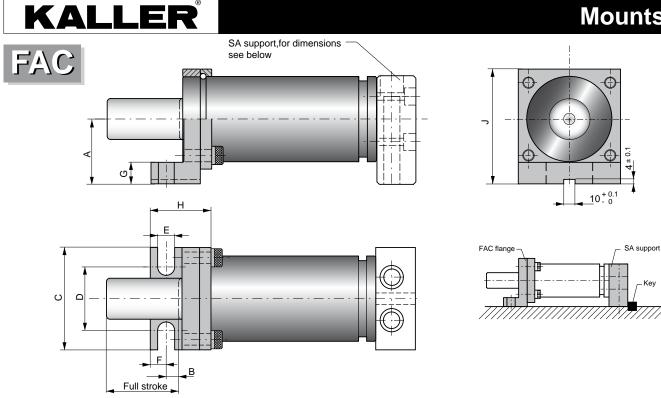
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for FU-750



Key

Mounts



The FAC is a 90° angled, 2-piece flange for TU 750-5000 and TB 750-3000 gas springs. The flange is only to be used together with support SA or other support that supports the bottom of the spring. It is recommended the SA-mount is backed with a key, see figure above.

Order No.	Α	В	С	D	E	F	G	Н	J
FAC-750	38	8	65	33	12	11	13	45.5	70
FAC-1500	57	11	90	37	15	14	19	53.5	101
FAC-3000	66.5	11	110	63	15	14	19	57.5	121
FAC-5000	79	11	140	88	18	14	19	59.5	149

Surface finish = Black oxide.

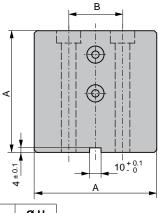
Note! When ordering flange FAC for TB springs, a flange of larger size than the spring must be used. For example, a TB 750 spring requires flange FAC-1500.

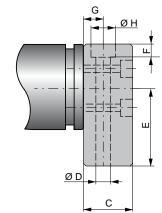


The SA support can be fitted using mounting option B on TU and TB springs and is normally used together with flange FAC, see above. The SA support is delivered with screws needed to mount the support to the spring.

It is recommended to back the SA-mount with a key, see figure above.

								4
Order No.	Α	В	С	ØD	Е	F	G	ØН
SA-750	60	32	30	11.5	38	11	11	18
SA-1500	90	38	35	14.5	57	13	14	20.5
SA-3000	110	63.5	40	14.5	66.5	13	14	20.5
SA-5000	130	88.9	50	17.5	79	16	14	25





Surface finish = Black oxide.

Note! When ordering SA support for TB springs, a larger size than the spring must be used. For example, a TB 750 spring requires an SA-1500 support.

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Mounts



The SW (Square Welded) is a welded mount for the TU 750-7500 springs. This mount must always be ordered together with the gas spring.

For more information about this mount contact your distributor.

Order No.	Α	В	ØC	ØD	Е	F
SW-750	80	56.5	11	18	19	11
SW-1500	100	73.5	11	18	19	11
SW-3000	120	92	13.5	20	25	13
SW-5000	140	109.5	13.5	20	25	13
SW-7500	190	138	17.5	26	25	17

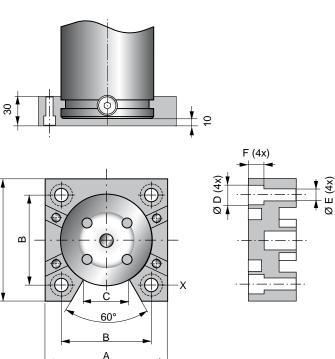
Surface finish = Black oxide.

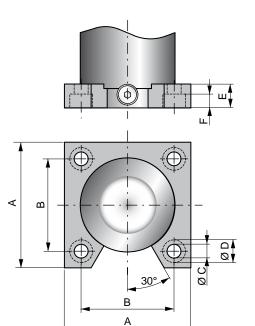
RM

The RM flange is a removable square flange mount that is primarily for mounting onto TU and LCF gas springs. The RM flange is an alternative to a SW-Square Welded flange, making it possible to keep a more flexible inventory of replacement gas springs and flanges on site.

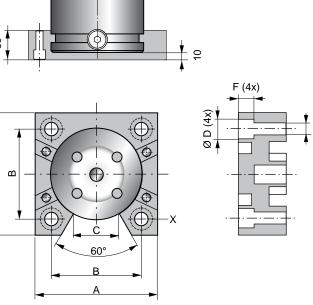
The Ford Motor Company has added the RM series of flanges to their W-DX35-80 Die Design and Construction Specifications for North American dies only.

Order No.	Α	В	С	ØD	ØE	F
		_	-			-
RM-750	80	56.5	21.1	18	11	11
RM-1500	100	73.5	33.7	18	11	11
RM-3000	120	92	43.2	20	13.5	13
RM-5000	140	109.5	55.7	20	13.5	13
RM-7500	190	138	70.7	26	18	17





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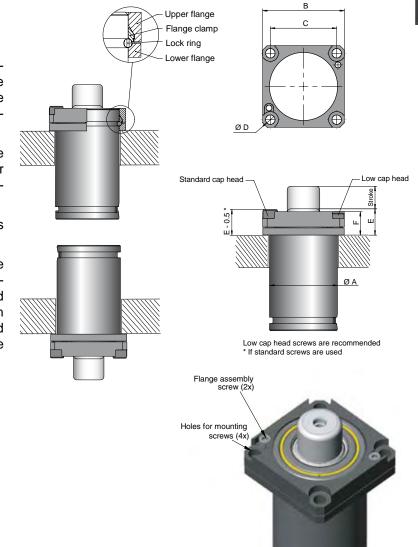
FCSC

The FCSC Clamp Flange has a unique patented design that offers a very robust play free connection between the gas spring and the mount. This play free connection also eliminates rotation of the gas spring.

The FCSC Clamp Flange is especially suitable for gas springs that are to be hosed together and/or have high speed, long stroke upsidedown installations.

The FCSC Clamp Flange is available for gas springs sizes from 750 up to 7500.

Please Note! The FCSC and FCS flanges are fully interchangeable if low cap head mounting screws (4x) are used. Using low cap head screws makes the top of the screw sit flush with the top of the flange. Using normal cap head screws causes the top of the screw to protrude from the top of the flange by 3 mm.



Volvo Part No.	Spring Size	Order No.	ØA	В	С	ØD	E	F
3053995	CU 1800 / X 1000, TU 750 / K 750	FCSC-750	50	70	56.5	9	21/24/22	19.4
3053996	— / X 2400, TU 1500 / —	FCSC-1500	75	90	73.5	10.5	- / 29 / -	26
3053997	— / X 4200, TU 3000 / —	FCSC-3000	95	110	92	12.5	- / 33 / -	30
3053998	CU 11800 / X 6600, TU 5000 / —	FCSC-5000	120	130	109.5	12.5	33/ 36/ -	32.4
3053999	CU 18300 / X 9500, TU 7500 / —	FCSC-7500	150	162	138	16.5	38/41/-	38

Patent No. SE 521352, EP 15 65 670 other patents pending

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