

(E19) HYDRAULIC BOOM VANGS

Bamar hydraulic vang is safe and easy to use.

Vang cylinders are equipped with a pressure rod release. Pressure is charged through a "pneumatic" pump located on the cylinder body, near to the boom-side vang terminal.

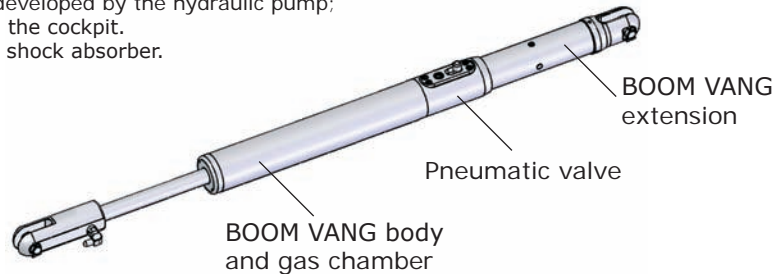
Air pressure should be adjusted depending both on the release speed you wish, and on the thrust needed to contrast the weight of the boom.

Pressure has to be charged at 713-785 psi (50-55 bar).

IMPORTANT: all VANG cylinders may be used with double effect function (push-pull).

CHARACTERISTICS:

- Simple to use, because all controls are within arm reach.
- The rod has a larger diameter in order to prevent distortions due to compression.
- Wide stroke making boom regulation easier.
- Mechanical advantage thanks to the power developed by the hydraulic pump;
- Safety, since the vang can be operated from the cockpit.
- Safety thanks to gas pressure that works as shock absorber.
- Max pressure 345 BAR (5000 PSI)



VANG SPECIFICATIONS

Model #	External Ø	Rod Ø	Stroke	Max cylinder pull (1)	Gas thrust (2) (3)	Standard length	Indicative Weight	Code
-6	40	25	250	731	516	1200 - 1600	5	1041110000006
-10	50	25	250	1600	673	1400 - 2000	6	1041111000010
-12	60	25	250	2591	911	1400 - 2000	7	1041112000012
-17	65	25	300	3720	1066	1400 - 2550	10	1041113000017
-22	75	30	350	5647	1616	1400 - 2650	12	1041114000022
-30	90	30	350	10629	2578	1400 - 2700	16	1041115000030
-40	110	35	400	13752	3418	N/A	21	1041116000040
-60	120	40	450	17273	4390	N/A	53	1041117000060
-90	140	50	500	19930	5498	N/A	70	1041118000090
-110	155	50	500	28500	7271	N/A	N/A	1041119000110
-150	180	60	550	35342	9689	N/A	N/A	1041120000150

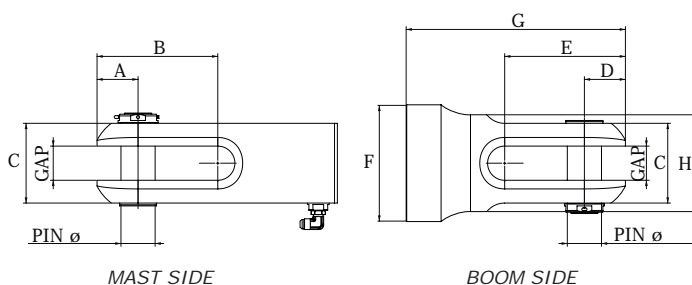
(1) Max cylinder pull @ 5000 PSI (354 bar more or less).

(2) Standard gas push (standard return force) is considered at 713 PSI (circa 50 bar) when the cylinder is all open.

(3) The counter pressure force exercised by gas is calculated with cylinder at half stroke.

DIMENSIONS OF VANG TERMINALS

VANG Ref. #	Pin Ø	GAP	Mast side			Boom side				
			A	B	C	D	E	F	G	H
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
-6	11	11	18.5	44.0	38.0	22.0	55.0	42.0	85.0	40.0
-10	13	13	19.0	56.0	45.0	22.0	57.0	43.5	86.0	40.0
-12	16	16	24.0	60.0	50.0	25.0	59.0	53.5	88.0	48.0
-17	16	16	24.0	60.0	50.0	25.5	62.5	59.0	94.0	54.0
-22	16	16	28.0	67.0	55.0	28.0	66.5	70.0	98.0	60.0
-30	19	19	33.5	72.0	60.0	35.0	95.0	84.0	137.0	74.0
-40	22	22	38.0	88.0	65.0	40.0	95.5	94.0	138.0	84.0
-60	25	25	43.0	94.0	75.0	45.5	104.0	114.5	153.0	94.0
-90	32	32	53.0	116.0	80.0	48.0	116.0	124.5	163.0	100.0
-110	35	35	59.0	135.5	95.0	53.0	138.5	144.5	203.0	110.0
-150	40	40	68.5	154.5	120.0	60.0	155.0	159.5	233.0	124.0



Pneumatic valve:
gas intake pin and tap

