



Hydro-Pneumatic Tool De-Clamp Cylinders PCS Series



for Machining Centers (VMC & HMC)

Application

- To provide high thrust over a short stroke using compressed air. Ideal for use where hydraulics is not used or cannot be used. Widely used in machining centers (VMC & HMC).

Priming

- Pressurize chambers C2 & C4. Open the bleed port & pour oil into the reservoir. When oil starts to flow out of bleed port, plug it. The system is primed & ready to use.

Working Principle

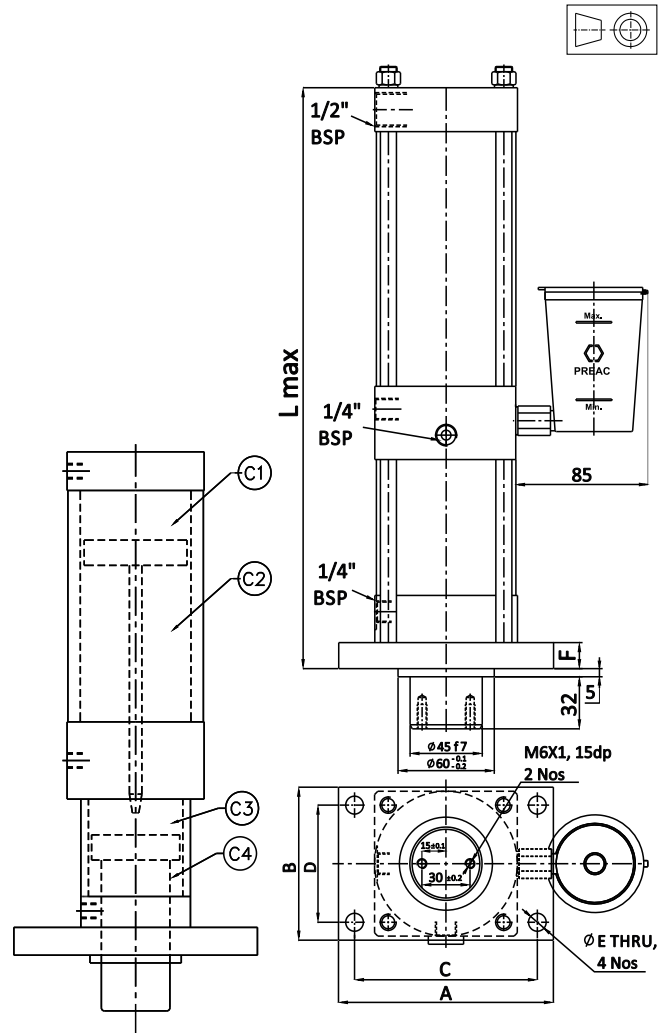
- Compressed air in chamber C1 forces the piston rod into chamber C3 which is primed with oil from the reservoir. As the rod progresses into the sealed area of chamber C3 the oil gets pressurized proportionate to the intensification ratio & this moves the piston rod over the required high pressure stroke. Compressed air is then supplied to chambers C2 & C4 to return both pistons to their original position.

Maintenance

- This unit can operate on dry & filtered air. It is advisable to use lubricated air for longer life. Once lubricated air is used, the unit should not be operated on dry air.
- Oil level in the reservoir should be maintained as marked.
- If excess oil is observed through the valve exhaust ports or oil level in the reservoir drops quickly, there may be a seal failure. If so, replace entire seal kit.

Note

- For horizontal mounting replace 'V' by 'H' in Part number.
- Fully loaded version with valves, limit switches & Air blast can be offered on request.



SUPPLY SPECIFICATION												
Sl. No.	THEORETICAL THRUST in kgf			STROKE in mm	PART No.	L	A	B	C	D	E	F
	at 4 kg/cm ²	at 5 kg/cm ²	at 6 kg/cm ²									
1	2000	2500	3000	9	PCS3-8045-VC09	357	134	94	114	72	11	16
2	2000	2500	3000	13	PCS3-8045-VC13	425	134	94	114	72	11	16
3	2000	2500	3000	16	PCS3-8045-VC16	477	134	94	114	72	11	16
4	3200	4000	4800	9	PCS4-10045-VC09	376	154	112	134	90	11	16
5	3200	4000	4800	13	PCS4-10045-VC13	414	154	112	134	90	11	16
6	3200	4000	4800	16	PCS4-10045-VC16	470	154	112	134	90	11	16
7	5000	6250	7500	9	PCS5-12545-VC09	361	200	140	170	110	14.5	18
8	5000	6250	7500	13	PCS5-12545-VC13	420	200	140	170	110	14.5	18
9	5000	6250	7500	16	PCS5-12545-VC16	468	200	140	170	110	14.5	18