

7MPa

Clamp cylinder

Push / Pull Clamp model CNA

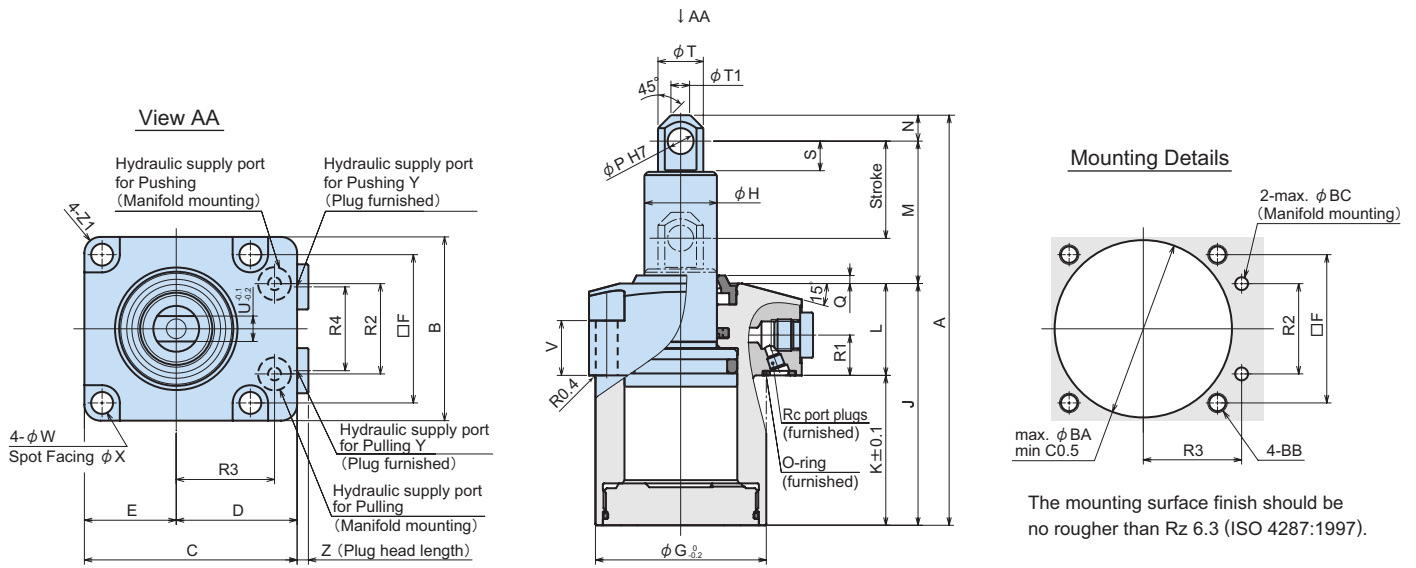


Pascal
corporation

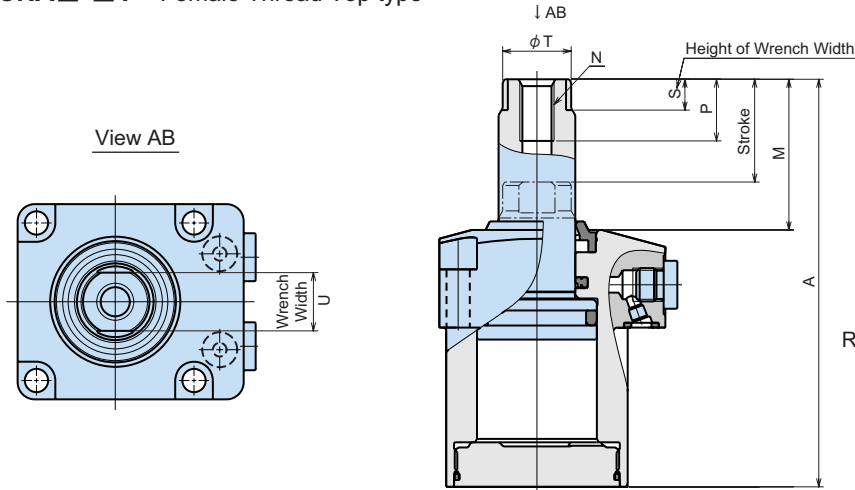
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Dimensions

CNA□-□P Top Pin type



CNA□-□T Female Thread Top type

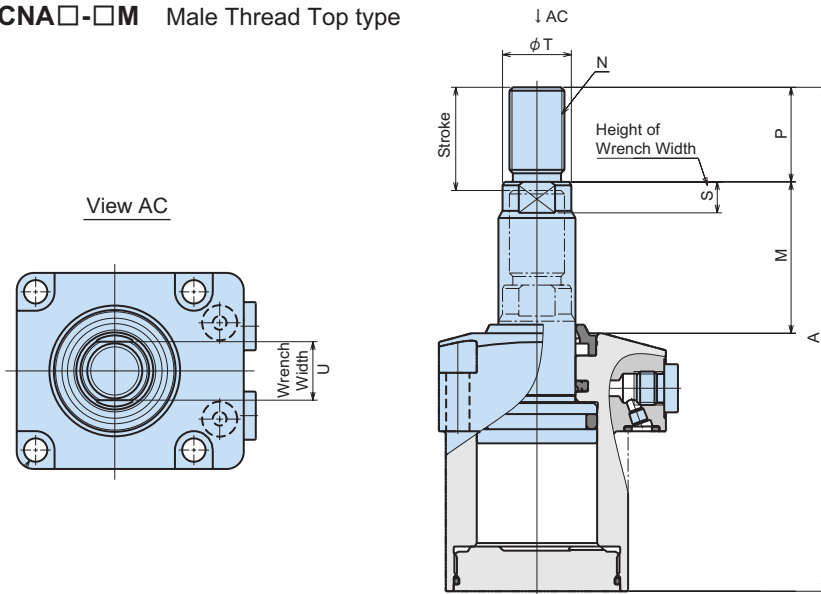


- REMARK 1 .Mounting bolts are not furnished.
 2 .CNA06-40, CNA10-50, CNA16-50, CNA25-60 are using spacer.
 3 .For the dimensions not shown on this drawing, refer to the page of dimensions (page 1).

mm

Model	CNA04	CNA06				CNA10			CNA16			CNA25		
Stroke	30	30	40	50	40	50	60	40	50	60	50	60	70	
A	115.5	119	149	159	148.5	178.5	188.5	156	186	196	185.5	215.5	225.5	
M	43	44	54	64	55	65	75	57	67	77	68.5	78.5	88.5	
N	M8	M10				M12			M16			M20		
P	14	18				21			27			33		
S	8	9				10			12			14		
T	16	20				23			28			33.5		
U	14	17				19			24			30		

CNA□-□M Male Thread Top type



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mm

Model	CNA04	CNA06				CNA10			CNA16			CNA25		
Stroke	30	30	40	50	40	50	60	40	50	60	50	60	70	
A	140.5	146.5	176.5	186.5	178.5	208.5	218.5	191	221	231	230.5	260.5	270.5	
M	43	44	54	64	55	65	75	57	67	77	68.5	78.5	88.5	
N	M14 × 1.5	M16 × 1.5				M20 × 1.5			M24 × 1.5			M30 × 1.5		
P	25	27.5				30			35			45		
S	8	9				10			12			14		
T	16	20				23			28			33.5		
U	14	17				19			24			30		

Specifications

Model		CNA04	CNA06			CNA10			CNA16			CNA25		
Stroke	(mm)	30	30	40	50	40	50	60	40	50	60	50	60	70
Cylinder Force at 7 MPa (kN)	Push clamp	5.0	6.7			10.6			17.2			26.9		
	Pull clamp	3.2	4.0			7.2			12.3			20.0		
Cylinder Bore	(mm)	30	35			44			56			70		
Rod diameter	(mm)	18	22.4			25			30			35.5		
Effective Area (cm ²)	Push side	7.1	9.6			15.2			24.6			38.5		
	Pull side	4.5	5.7			10.3			17.6			28.6		
Maximum oil flow rate	(ℓ/min)	1.6	2.1			5.0			8.4			17.2		
Cylinder Capacity (cm ³)	Push side	21.3	28.8	38.4	48.0	60.8	76.0	91.2	98.4	123.0	147.6	192.5	231.0	269.5
	Pull side	13.5	17.1	22.8	28.5	41.2	51.5	61.8	70.4	88.0	105.6	143.0	171.6	200.3
Mass (kg)	P: Top Pin type	1.0	1.4	1.6	1.6	2.4	2.7	2.7	3.7	4.3	4.2	7.0	7.8	7.7
	T: Female Thread type	1.0	1.4	1.6	1.6	2.4	2.7	2.7	3.7	4.3	4.2	6.9	7.8	7.7
	M: Male Thread type	1.1	1.4	1.7	1.7	2.5	2.8	2.8	3.9	4.4	4.4	7.2	8.1	8.0
Tightening Torque ※	(N·m)	7	11			25			49			60		

Working Pressure Range : 1~7 MPa Proof Pressure : 10.5 MPa Ambient Temperature : 0~70°C

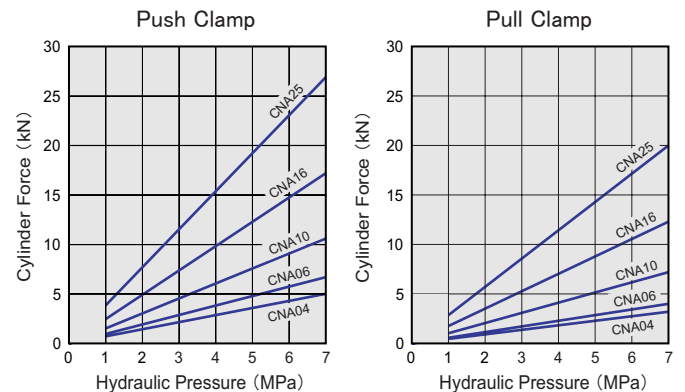
Fluorine rubber (Viton) is adopted at the sealing portions for protection against chlorine coolant. (This is not a heat proof specification)

※ : Mounting Bolt (Strength Class 12.9)

Class Definition CNA ①-②③

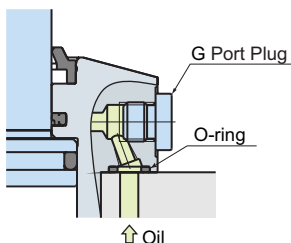
CNA	① Size	② Stroke	③ Rod Top type
	04	30	P : Top Pin type
	06	30 40 50	
	10	40 50 60	T : Female Thread Top type
	16	40 50 60	M : Male Thread Top type
	25	50 60 70	

Performance Diagram

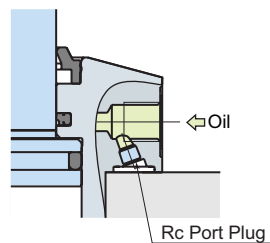


Mounting and Piping

Manifold Mount

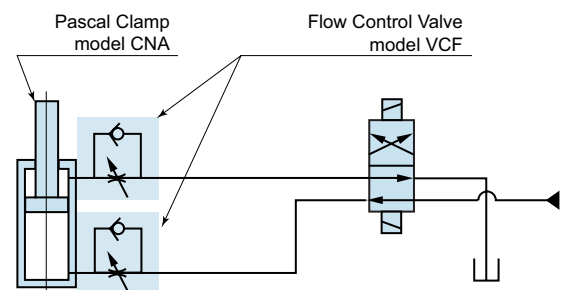


Piping Connection



Model CNA can be used for the applications of manifold mount or piping connection. When used for piping connection applications, remove the G port plugs and O-rings, and install the Rc port plugs furnished. (The Rc port plugs are not installed from the factory at shipment). When tubing is used to connect to the G ports, refer to separate material

Hydraulic Circuit (reference)



Flow control valve with a reverse check should always be used as "Meter-in". If used as "Meter-out", there could be excessive backpressure on the clamping side of cylinder. This backpressure could cause damage.

For manifold mount application, a flow control valve model VCF is an available option (PATENT P.). Air bleeding valve model VCE is also optionally available, refer to separate material.