## <sup>+</sup>Cylinder 5 stage front end with spherical eye

## Customer to fit 1 x 1/8" BSP nipple 40 0 Ø 50 -0.012 BORE R55 for greasing. NG5 or NG6 00 Ø229 \*1694 0 MOUNTING CENTRES 1.25" BSP INLET PORT Q÷ 30° MAX 15° MAX 414 700 270 0 Ø**70** -0.10 80 Customer to fit 2 x 1/8" BSP nipples for greasing. NG5 or NG6 R147 Ø248

## \*Includes 10mm Pull Out. Last Stage Chrome Plated



Edbro plc Nelson Street, Bolton, England, BL3 2JJ Tel +44 (0) 1204 528888 Fax +44 (0) 1204 531957 Email: postmaster@edbro.com Web: www.edbro.com

## CS190S57178B70A01

StageDiameterLengthStrokeSwept Volume022316781198164014044321761640142735315516401437274136164014472151171640146216Total (+5/-10)7177142Final stroke reduced by0Priming Volume28Cylinder Mass (Kg)305Total Volume (Litres)170Maximum Pressure (Bar)190Max. first stage thrust350 KNBODY LENGTH (BL) $43$ 52° 40 49° 38 46° 450dBody Length(BL) $W + OH$ H0Hd0H148 51° 4148° 750For guidance only;Higher working pressures and tipping capacities may be possible. To check your application email - applications@edbro.co.uk					1	1	
StageDiameterLengthStrokeVolume0223167811981640140443217616401427353155164014472151171640146216Total (+5/-10)7177142Final stroke reduced by0Priming Volume28Cylinder Mass (Kg)305Total Volume (Litres)170Maximum Pressure (Bar)190Max. first stage thrust350 KN**TIPPING CAPACITY AT WORKING PRESSURE $d_{1-1} = BU_2 OH_{1-1}$ $g_{150} = g_{250} = g_{750} = g_{75$	SPECIFICATION	TI	PPING CAPA	CITY : 36-4			
1198164014044321761640142735315516401437274136164014472151171640146216Total (+5/-10)7177142Final stroke reduced by0Priming Volume28Cylinder Mass (Kg)305Total Volume (Litres)170Maximum Pressure (Bar)190Max. first stage thrust350 KN**TIPPING CAPACITY AT WORKING PRESSUREdBody Length(BL)0Hii3950° 3747° 36i4352° 4049° 3846° 450i4756° 44451° 4148° 750d = 0; r = 900; Working Pressure 120 barImage: Colored mass, W (tonne)For guidance only;Body + payload mass, W (tonne)Higher working pressures and tipping capacities may be possible.To check your application email - applications@edbro.co.ukNOTES1. This cylinder is for lifting purposes only and side load conditions should be avoided2. Cylinder is painted in primer paint to RAL50133. Refer to www.edbro.com for;-• Bracket details• Installation instructions that must be observed• Correct oil selection	Stage	Diameter	Length				
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Total (+5/-10)7177142Final stroke reduced by0Priming Volume28Cylinder Mass (Kg)305Total Volume (Litres)170Maximum Pressure (Bar)190Max. first stage thrust350 KN***TIPPING CAPACITY AT WORKING PRESSUREdBODY LENGTH (BL)OH3750975097503950° 3747° 3645° 15043<52° 4049° 3846° 4450° 3747° 3645° 15043<52° 4049° 3846° 45043<52° 4049° 3846° 4504451° 3747° 3645° 15043<52° 4049° 3846° 446° 4451° 4148° 750dTipping angle ( $\theta$ )Body + payload mass, W (tonne)Higher working pressures and tipping capacities may be possible.To check your application email - applications@edbro.co.ukNOTES1This cylinder is for lifting purposes only and side load conditions should be avoided2Cylinder is painted	4	136	1640	1447 21			
Final stroke reduced by 0 Priming Volume 28 Cylinder Mass (Kg) 305 Total Volume (Litres) 170 Maximum Pressure (Bar) 190 Max. first stage thrust 350 KN <b>***TIPPING CAPACITY AT WORKING PRESSURE</b> d = 0; r = 900; Working Pressure 120 bar For guidance only; Higher working pressures and tipping capacities may be possible. To check your application email - applications@edbro.co.uk NOTES 1. This cylinder is for lifting purposes only and side load conditions should be avoided 2. Cylinder is painted in primer paint to RAL5013 3. Refer to www.edbro.com for;- • Bracket details • Installation instructions that must be observed • Correct oil selection	5	117	117 1640		16	16	
Cylinder Mass (Kg) 305 Total Volume (Litres) 400 Max. first stage thrust 350 KN 350 CN 350 ST 39 50° 37 47° 36 45° 150 43 52° 40 49° 38 46° 450 43 52° 40 49° 38 46° 450 47 56° 44 51° 41 48° 750 47 56° 44 51° 41 48° 750 48 750 Body + payload mass,W (tonne) Higher working pressures and tipping capacities may be possible. To check your application email - applications@edbro.co.uk NOTES 1. This cylinder is for lifting purposes only and side load conditions should be avoided 2. Cylinder is painted in primer paint to RAL5013 3. Refer to www.edbro.com for;- • Bracket details • Installation instructions that must be observed • Correct oil selection			Total (+5/-10)	7177	142	>	
Maximum Pressure (Bar)       190       Max. first stage thrust       350 KN         ***TIPPING CAPACITY AT WORKING PRESSURE         d       Body Length(BL)       BODY LENGTH (BL)       0H         a       BODY LENGTH (BL)       0H       8750       9250       9750         a       52°       40       49°       38       46°       450         d = 0; r = 900; Working Pressure 120 bar       Tipping angle (θ)       Body + payload mass,W (tonne)         For guidance only;         Higher working pressures and tipping capacities may be possible.         To check your application email - applications@edbro.co.uk         NOTES         1. This cylinder is for lifting purposes only and side load conditions should be avoided         2. Cylinder is painted in primer paint to RAL5013       Refer to www.edbro.com for;-         Bracket details       Installation instructions that must be observed         Installation instructions that must be observed       Correct oil selection	Final stroke reduced by	0	Priming Volume		28	28	
<ul> <li>***TIPPING CAPACITY AT WORKING PRESSURE</li> <li> <ul> <li>Body Length(BL)</li> <li>L=BL/2-OH</li> <li>BODY LENGTH (BL)</li> <li>8750 9250 9750</li> <li>OH</li> <li>8750 9250 9750</li> <li>OH</li> <li>900 (Pressure 120 bar</li> <li>Comparison of the state of the</li></ul></li></ul>	Cylinder Mass (Kg)	305	Total Volume (Litres)		170	170	
d       Body Length(BL)       BODY LENGTH (BL)       OH         i       i       BODY LENGTH (BL)       OH         i       i       i       i       i         i       i       i       i       i       i         i       i       i       i       i       i       i         i<	Maximum Pressure (Bar)	190	Max. first stage thrust		350 k	350 KN	
$\frac{1}{W + OH}$ $\frac{1}$	***TIPPING CAPACITY	AT WORKIN	G PRESSURE				
An explanation of tipping capacity	<ul> <li>43 52°40 49° 38 46° 450</li> <li>47 56° 44 51° 41 48° 750</li> <li>d = 0; r = 900; Working Pressure 120 bar</li> <li>For guidance only;</li> <li>Higher working pressures and tipping capacities may be possible. To check your application email - applications@edbro.co.uk</li> <li>NOTES</li> <li>1. This cylinder is for lifting purposes only and side load conditions should be avoided</li> <li>2. Cylinder is painted in primer paint to RAL5013</li> <li>3. Refer to www.edbro.com for;-         <ul> <li>Bracket details</li> <li>Installation instructions that must be observed</li> <li>Correct oil selection</li> </ul> </li> </ul>						
Technical Specifications are subject to change without notice	· · · · · · · · · · · · · · · · · · ·			without poti	<u></u>		

Technical Specifications are subject to change without notice Date Created/Updated: 16 July 2012 Refer www.edbro.com to confirm latest specification All dimensions are in 'mm', unless otherwise stated

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