



G-Series ISO 15552 Pneumatic Cylinders – 100mm Bore

100mm Bore, Double-acting, Magnetic Piston, Cushions



NITRA pneumatic ISO 15552 interchangeable cylinder, 100 mm bore, 25mm diameter piston rod, G1/2 (BSPP) female ports, double acting; flange, pivot and clevis mount options available. Adjustable cushions on both ends. See the end of the section for accessory details.

Features

- Adjustable cushions
- Internal magnet for sensor switching
- Three sides with longitudinal slots for inserting and securing retractable sensors such as type CPS9F and CPS9Q (see position switches at the end of the cylinder section for further details)
- G (BSPP) threaded ports



100mm bore, double acting, tapped end caps				
Part Number	Price	Stroke Length (mm)	"A" (mm [inch])	Weight (lb)
G100M025MD-MC		25	163 [6.42]	9.3
G100M050MD-MC		50	188 [7.40]	9.8
G100M075MD-MC		75	213 [8.39]	10.3
G100M100MD-MC		100	238 [9.37]	10.8
G100M125MD-MC		125	263 [10.35]	11.4
G100M150MD-MC		150	288 [11.34]	11.9
G100M200MD-MC		200	338 [13.31]	13.0
G100M250MD-MC		250	388 [15.28]	14.0
G100M300MD-MC		300	438 [17.24]	15.0
G100M400MD-MC		400	538 [21.18]	17.1
G100M500MD-MC		500	638 [25.12]	19.2
G100M600MD-MC		600	738 [29.10]	21.3

Specifications	
Aluminum body and end caps	Plastoferrite magnet
C45 chromed piston rod	NBR (Nitrile Butadiene Rubber) buffer + static o-rings
Die cast aluminum head	NBR (Nitrile Butadiene Rubber) cushioning gasket
NBR (Nitrile Butadiene Rubber) piston and piston rod gasket	Brass cushioning needle with needle out movement safety system
Steel guide bushing with bronze and PTFE (Teflon) insert	Pressure rating 145 psi [10 bar], AIR ONLY
Drawn anodized aluminum body	Temperature rating 14 to 176 °F [-10 to +80 °C]
Aluminum piston with PTFE (Teflon) pad	
Extend force at 100 psi = 1217.4 lb.	Retract force at 100 psi = 1141.3 lb.

BSPP = British Standard Pipe Parallel

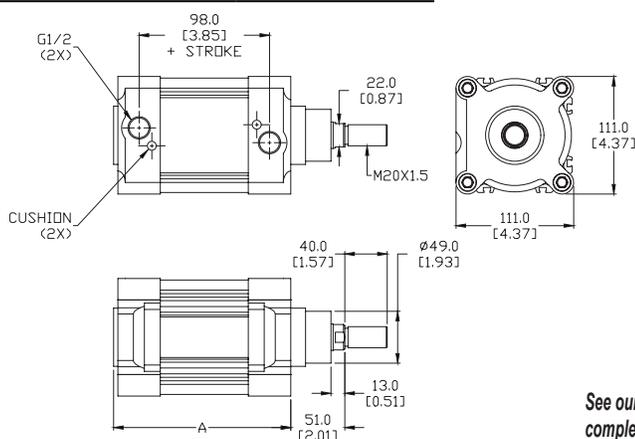
* The cushions decelerate the piston rod over the last mm (approx.) of stroke and are adjustable. Cushioned cylinders have an adjustable orifice and pre-lubricated nitrile cushion seal.

Mounting Accessories	
Style	Part No.
Foot Mount	GMB-100MM
Front or Rear Flange	GFL-100MM
Male Rear Clevis	GMC-100MM
Spherical Male Clevis	GSMC-100MM

Rod Accessories	
Style	Part No.
Rod Clevis	GRC-M20-15
Rod Eye	GRE-M20-15
Self Aligning Rod Coupler	GRCP-M20-15
Rod Nut	GN-M20-15

Dimensions

mm [inches]



See our website www.AutomationDirect.com for complete Engineering drawings.

G-Series ISO 15552 Pneumatic Cylinders – Accessories

G-Series Heavy Duty Pneumatic Cylinder Accessories						
Item	Part Number	Description	Pcs/Pkg	Wt (lb)	Drawing Link	Price
	<u>GRC-M10-125</u>	NITRA rod clevis, M10 X 1.25 thread, zinc plated steel. For use with G-series cylinders.	1	0.2	PDF	
	<u>GRC-M12-125</u>	NITRA rod clevis, M12 X 1.25 thread, zinc plated steel. For use with G-series cylinders.	1	0.3	PDF	
	<u>GRC-M16-15</u>	NITRA rod clevis, M16 X 1.5 thread, zinc plated steel. For use with G-series cylinders.	1	0.8	PDF	
	<u>GRC-M20-15</u>	NITRA rod clevis, M20 X 1.5 thread, zinc plated steel. For use with G-series cylinders.	1	1.5	PDF	
	<u>GRE-M10-125</u>	NITRA rod eye, M10 X 1.25 thread, spherical bearing, zinc plated steel. For use with G-series cylinders.	1	0.2	PDF	
	<u>GRE-M12-125</u>	NITRA rod eye, M12 X 1.25 thread, spherical bearing, zinc plated steel. For use with G-series cylinders.	1	0.3	PDF	
	<u>GRE-M16-15</u>	NITRA rod eye, M16 X 1.5 thread, spherical bearing, zinc plated steel. For use with G-series cylinders.	1	0.5	PDF	
	<u>GRE-M20-15</u>	NITRA rod eye, M20 X 1.5 thread, spherical bearing, zinc plated steel. For use with G-series cylinders.	1	0.9	PDF	
	<u>GRCP-M10-125</u>	NITRA self-aligning rod coupler, M10 X 1.25 thread, zinc plated steel. For use with G-series cylinders.	1	0.5	PDF	
	<u>GRCP-M12-125</u>	NITRA self-aligning rod coupler, M12 X 1.25 thread, zinc plated steel. For use with G-series cylinders.	1	0.7	PDF	
	<u>GRCP-M16-15</u>	NITRA self-aligning rod coupler, M16 X 1.5 thread, zinc plated steel. For use with G-series cylinders.	1	1.4	PDF	
	<u>GRCP-M20-15</u>	NITRA self-aligning rod coupler, M20 X 1.5 thread, zinc plated steel. For use with G-series cylinders.	1	1.5	PDF	
	<u>GMB-32MM</u>	NITRA mounting bracket, zinc plated steel. For use with 32mm bore G-series cylinders.	1	0.2	PDF	
	<u>GMB-40MM</u>	NITRA mounting bracket, zinc plated steel. For use with 40mm bore G-series cylinders.	1	0.3	PDF	
	<u>GMB-50MM</u>	NITRA mounting bracket, zinc plated steel. For use with 50mm bore G-series cylinders.	1	0.4	PDF	
	<u>GMB-63MM</u>	NITRA mounting bracket, zinc plated steel. For use with 63mm bore G-series cylinders.	1	0.6	PDF	
	<u>GMB-80MM</u>	NITRA mounting bracket, zinc plated steel. For use with 80mm bore G-series cylinders.	1	1.0	PDF	
	<u>GMB-100MM</u>	NITRA mounting bracket, zinc plated steel. For use with 100mm bore G-series cylinders.	1	1.3	PDF	

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G-Series Heavy Duty Pneumatic Cylinder Accessories						
Item	Part Number	Description	Pcs/Pkg	Wt (lb)	Drawing Link	Price
	<u>GMC-32MM</u>	NITRA rear pivot eye, zinc plated steel. For use with 32mm bore G-series cylinders.	1	0.2	PDF	
	<u>GMC-40MM</u>	NITRA rear pivot eye, zinc plated steel. For use with 40mm bore G-series cylinders.	1	0.3	PDF	
	<u>GMC-50MM</u>	NITRA rear pivot eye, zinc plated steel. For use with 50mm bore G-series cylinders.	1	0.6	PDF	
	<u>GMC-63MM</u>	NITRA rear pivot eye, zinc plated steel. For use with 63mm bore G-series cylinders.	1	0.9	PDF	
	<u>GMC-80MM</u>	NITRA rear pivot eye, zinc plated steel. For use with 80mm bore G-series cylinders.	1	1.5	PDF	
	<u>GMC-100MM</u>	NITRA rear pivot eye, zinc plated steel. For use with 100mm bore G-series cylinders.	1	2.4	PDF	
	<u>GSMC-32MM</u>	NITRA rear spherical pivot, spherical bearing, zinc plated steel. For use with 32mm bore G-series cylinders.	1	0.3	PDF	
	<u>GSMC-40MM</u>	NITRA rear spherical pivot, spherical bearing, zinc plated steel. For use with 40mm bore G-series cylinders.	1	0.4	PDF	
	<u>GSMC-50MM</u>	NITRA rear spherical pivot, spherical bearing, zinc plated steel. For use with 50mm bore G-series cylinders.	1	0.5	PDF	
	<u>GSMC-63MM</u>	NITRA rear spherical pivot, spherical bearing, zinc plated steel. For use with 63mm bore G-series cylinders.	1	0.7	PDF	
	<u>GSMC-80MM</u>	NITRA rear spherical pivot, spherical bearing, zinc plated steel. For use with 80mm bore G-series cylinders.	1	1.3	PDF	
	<u>GSMC-100MM</u>	NITRA rear spherical pivot, spherical bearing, zinc plated steel. For use with 100mm bore G-series cylinders.	1	1.9	PDF	
	<u>GFL-32MM</u>	NITRA flange mount plate, zinc plated steel. For use with 32mm bore G-series cylinders.	1	0.5	PDF	
	<u>GFL-40MM</u>	NITRA flange mount plate, zinc plated steel. For use with 40mm bore G-series cylinders.	1	0.6	PDF	
	<u>GFL-50MM</u>	NITRA flange mount plate, zinc plated steel. For use with 50mm bore G-series cylinders.	1	1.2	PDF	
	<u>GFL-63MM</u>	NITRA flange mount plate, zinc plated steel. For use with 63mm bore G-series cylinders.	1	1.5	PDF	
	<u>GFL-80MM</u>	NITRA flange mount plate, zinc plated steel. For use with 80mm bore G-series cylinders.	1	3.1	PDF	
	<u>GFL-100MM</u>	NITRA flange mount plate, zinc plated steel. For use with 100mm bore G-series cylinders.	1	4.5	PDF	
	<u>GN-M10-125</u>	NITRA rod nut, M10 X 1.25 thread, zinc plated steel. For use with G-series cylinders.	1	0.2	PDF	
	<u>GN-M12-125</u>	NITRA rod nut, M12 X 1.25 thread, zinc plated steel. For use with G-series cylinders.	1	0.2	PDF	
	<u>GN-M16-15</u>	NITRA rod nut, M16 X 1.5 thread, zinc plated steel. For use with G-series cylinders.	1	0.2	PDF	
	<u>GN-M20-15</u>	NITRA rod nut, M20 X 1.5 thread, zinc plated steel. For use with G-series cylinders.	1	0.2	PDF	



ISO 15552 Pneumatic Cylinders – Accessories

ISO 15552 Pneumatic Cylinder Accessories					
Item	Part No.	Description	Drawing Link	Weight (lbs)	Price
	W0950322003	Metal Work rear clevis mount, aluminum. For use with 32mm bore ISO 15552 cylinders. Mounting hardware included.	PDF	0.24	
	W0950402003	Metal Work rear clevis mount, aluminum. For use with 40mm bore ISO 15552 cylinders. Mounting hardware included.	PDF	0.34	
	W0950502003	Metal Work rear clevis mount, aluminum. For use with 50mm bore ISO 15552 cylinders. Mounting hardware included.	PDF	0.55	
	W0950632003	Metal Work rear clevis mount, aluminum. For use with 63mm bore ISO 15552 cylinders. Mounting hardware included.	PDF	0.84	
	W0950802003	Metal Work rear clevis mount, aluminum. For use with 80mm bore ISO 15552 cylinders. Mounting hardware included.	PDF	1.45	
	W0951002003	Metal Work rear clevis mount, aluminum. For use with 100mm bore ISO 15552 cylinders. Mounting hardware included.	PDF	2.26	
	W0950322017	Metal Work base pivot mount, aluminum. For use with 32mm bore ISO 15552 cylinders.	PDF	0.12	
	W0950402017	Metal Work base pivot mount, aluminum. For use with 40mm bore ISO 15552 cylinders.	PDF	0.18	
	W0950502017	Metal Work base pivot mount, aluminum. For use with 50mm bore ISO 15552 cylinders.	PDF	0.34	
	W0950632017	Metal Work base pivot mount, aluminum. For use with 63mm bore ISO 15552 cylinders.	PDF	0.47	
	W0950802017	Metal Work base pivot mount, aluminum. For use with 80mm bore ISO 15552 cylinders.	PDF	0.73	
	W0951002017	Metal Work base pivot mount, aluminum. For use with 100mm bore ISO 15552 cylinders.	PDF	1.18	

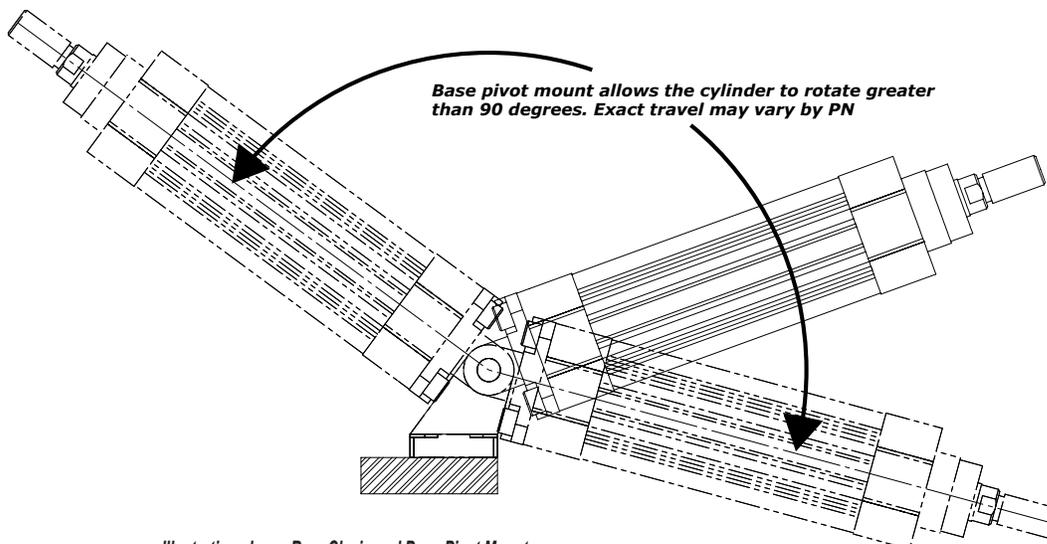


Illustration shows Rear Clevis and Base Pivot Mount assembled and attached to an ISO 15552 cylinder.



CPS Series Cylinder Position Switches

Position Switch Cross Reference Chart			
NITRA Switch Type	Cylinder Brand (may fit some of these cylinders)	Photo Example	Groove Illustration
CPS CPSF	NITRA A-Series NITRA D-Series NITRA F-Series Metal Work ISO-6432		
CPS9C	DE-STA-CO Robohand SMC Compact Air Bimba Fabco		
CPS9D	NITRA L-Series Fabco Numatics Rotomation		
CPS9E	NITRA L-Series Fabco Numatics Rotomation		
CPS9F	NITRA G-Series Fabco Festo Numatics Rotomation Metal Work Dual Rod		
CPS9H	NITRA E-Series NITRA H-Series		
CPS9M	Norgren		
CPS9Q	NITRA L-Series NITRA G-Series Parker Fabco Festo Numatics Rotomation Metal Work Dual Rod		