

## **G-Series ISO 15552 Pneumatic**

## Cylinders – 40mm Bore

### 40mm Bore, Double-acting, Magnetic Piston, Cushions



NITRA pneumatic ISO 15552 interchangeable cylinder, 40mm bore, 16mm diameter piston rod, G1/4 (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 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

40mm bore,	double	acting, ta	pped end	caps
Part Number	Price	Stroke Length (mm)	"A" (mm [inch])	Weight (lb)
<u>G40M025MD-MC</u>	\$80.00	25	130 [5.12]	1.8
G40M050MD-MC	\$82.00	50	155 [6.10]	2.0
G40M075MD-MC	\$83.00	75	180 [7.09]	2.2
G40M100MD-MC	\$87.00	100	205 [8.07]	2.5
G40M125MD-MC	\$88.00	125	230 [9.06]	2.7
<u>G40M150MD-MC</u>	\$90.00	150	255 [10.04]	2.9
G40M200MD-MC	\$96.00	200	305 [12.01]	3.4
G40M250MD-MC	\$100.00	250	355 [13.98]	3.8
G40M300MD-MC	\$104.00	300	405 [15.94]	4.3
G40M400MD-MC	\$112.00	400	505 [19.88]	5.1
G40M500MD-MC	\$123.00	500	605 [23.82]	6.0
G40M600MD-MC	\$131.00	600	705 [27.76]	6.9

<sup>\*</sup> 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.

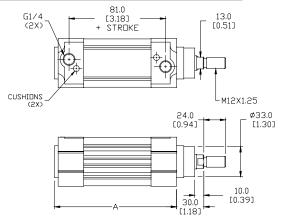
<b>Specifications</b>								
Aluminum body and end caps	Plastoferrite magnet							
C45 chromed piston rod	NBR (Nitrile Butadiene Rubber) buffer + static o-rings							
Die cast aluminum head	NBR (Nitrile Butadiene Rubber) cushioning gasket							
NBR (Nitrile Butadiene Rubber) piston and piston rod 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°F to 176°F							
Self-lubricating technopolymer piston	[-10°C to 80°C]							
Extend force at 100 psi = 194.6 lb.	Retract force at 100 psi = 163.4 lb.							

BSPP = British Standard Pipe Parallel

Mounting Accessories							
Style	Part No.						
Foot Mount	<u>GMB-40MM</u>						
Front or Rear Flange	GFL-40MM						
Male Rear Clevis	<u>GMC-40MM</u>						
Spherical Male Clevis	GSMC-40MM						

Rod Accessories							
Style	Part No.						
Rod Clevis	GRC-M12-125						
Rod Eye	GRE-M12-125						
Self Aligning Rod Coupler	GRCP-M12-125						
Rod Nut	<u>GN-M12-125</u>						

# Dimensions mm [inches]





See our website <u>www.AutomationDirect.com</u> for complete Engineering drawings.



# G-Series ISO 15552 Pneumatic Cylinders – Accessories

	G-Series Heavy Duty Pneumatic Cylinder Accessories									
Part Number	Description	Pcs/Pkg	Wt (lb)	Drawing Link	Price					
GRC-M10-125	Rod clevis, M10 X 1.25 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	0.2	PDF	\$4.50					
GRC-M12-125	Rod clevis, M12 X 1.25 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	0.3	PDF	\$7.50					
<u>GRC-M16-15</u>	Rod clevis, M16 X 1.5 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	0.8	PDF	\$16.00					
<u>GRC-M20-15</u>	Rod clevis, M20 X 1.5 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	1.5	PDF	\$26.00					
<u>GRE-M10-125</u>	Rod eye, M10 X 1.25 thread, spherical bearing, zinc plated steel. For use with NITRA G-series cylinders.	1	0.2	PDF	\$25.00					
GRE-M12-125	Rod eye, M12 X 1.25 thread, spherical bearing, zinc plated steel. For use with NITRA G-series cylinders.	1	0.3	PDF	\$28.50					
GRE-M16-15	Rod eye, M16 X 1.5 thread, spherical bearing, zinc plated steel. For use with NITRA G-series cylinders.	1	0.5	PDF	\$53.00					
<u>GRE-M20-15</u>	Rod eye, M20 X 1.5 thread, spherical bearing, zinc plated steel. For use with NITRA G-series cylinders.	1	0.9	PDF	\$71.00					
GRCP-M10-125	Self-aligning rod coupler, M10 X 1.25 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	0.5	PDF	\$57.00					
<u>GRCP-M12-125</u>	Self-aligning rod coupler, M12 X 1.25 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	0.7	PDF	\$60.00					
GRCP-M16-15	Self-aligning rod coupler, M16 X 1.5 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	1.4	PDF	\$78.00					
GRCP-M20-15	Self-aligning rod coupler, M20 X 1.5 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	1.5	<u>PDF</u>	\$96.00					
<u>GMB-32MM</u>	Foot mount bracket, zinc plated steel. For use with 32mm bore NITRA G-series cylinders.	1	0.2	<u>PDF</u>	\$7.00					
<u>GMB-40MM</u>	Foot mount bracket, zinc plated steel. For use with 40mm bore NITRA G-series cylinders.	1	0.3	<u>PDF</u>	\$8.25					
GMB-50MM	Foot mount bracket, zinc plated steel. For use with 50mm bore NITRA G-series cylinders.	1	0.4	PDF	\$9.50					
<u>GMB-63MM</u>	Foot mount bracket, zinc plated steel. For use with 63mm bore NITRA G-series cylinders.	1	0.6	<u>PDF</u>	\$10.50					
<u>GMB-80MM</u>	Foot mount bracket, zinc plated steel. For use with 80mm bore NITRA G-series cylinders.	1	1.0	<u>PDF</u>	\$15.00					
<u>GMB-100MM</u>	Foot mount bracket, zinc plated steel. For use with 100mm bore NITRA G-series cylinders.	1	1.3	<u>PDF</u>	\$24.00					
<u>GMC-32MM</u>	Rear pivot eye, zinc plated steel. For use with 32mm bore NITRA G-series cylinders.	1	0.2	<u>PDF</u>	\$18.00					
<u>GMC-40MM</u>	Rear pivot eye, zinc plated steel. For use with 40mm bore NITRA G-series cylinders.	1	0.3	PDF	\$19.00					
GMC-50MM	Rear pivot eye, zinc plated steel. For use with 50mm bore NITRA G-series cylinders.	1	0.6	PDF	\$22.00					
<u>GMC-63MM</u>	Rear pivot eye, zinc plated steel. For use with 63mm bore NITRA G-series cylinders.	1	0.9	PDF	\$26.00					
<u>GMC-80MM</u>	Rear pivot eye, zinc plated steel. For use with 80mm bore NITRA G-series cylinders.	1	1.5	PDF	\$32.00					
<u>GMC-100MM</u>	Rear pivot eye, zinc plated steel. For use with 100mm bore NITRA G-series cylinders.	1	2.4	PDF	\$44.50					
GSMC-32MM	Rear spherical pivot, spherical bearing, zinc plated steel. For use with 32mm bore NITRA G-series cylinders.	1	0.3	PDF	\$25.00					
GSMC-40MM	Rear spherical pivot, spherical bearing, zinc plated steel. For use with 40mm bore NITRA G-series cylinders.	1	0.4	<u>PDF</u>	\$27.00					
GSMC-50MM	Rear spherical pivot, spherical bearing, zinc plated steel. For use with 50mm bore NITRA G-series cylinders.	1	0.5	PDF	\$39.00					
GSMC-63MM	Rear spherical pivot, spherical bearing, zinc plated steel. For use with 63mm bore NITRA G-series cylinders.	1	0.7	<u>PDF</u>	\$50.00					
GSMC-80MM	Rear spherical pivot, spherical bearing, zinc plated steel. For use with 80mm bore NITRA G-series cylinders.	1	1.3	PDF	\$62.00					
GSMC-100MM	Rear spherical pivot, spherical bearing, zinc plated steel. For use with 100mm bore NITRA G-series cylinders.	1	1.9	PDF	\$84.00					
GFL-32MM	Flange mount plate, zinc plated steel. For use with 32mm bore NITRA G-series cylinders.	1	0.5	PDF	\$12.00					
GFL-40MM	Flange mount plate, zinc plated steel. For use with 40mm bore NITRA G-series cylinders.	1	0.6	PDF	\$13.00					
GFL-50MM	Flange mount plate, zinc plated steel. For use with 50mm bore NITRA G-series cylinders.	1	1.2	PDF	\$16.00					
GFL-63MM	Flange mount plate, zinc plated steel. For use with 63mm bore NITRA G-series cylinders.	1	1.5	PDF	\$23.00					
GFL-80MM	Flange mount plate, zinc plated steel. For use with 80mm bore NITRA G-series cylinders.	1	3.1	PDF	\$26.00					
<u>GFL-100MM</u>	Flange mount plate, zinc plated steel. For use with 100mm bore NITRA G-series cylinders.	1	4.5	PDF	\$31.00					
<u>GN-M10-125</u>	Rod nut, M10 X 1.25 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	0.2	PDF	\$1.50					
GN-M12-125	Rod nut, M12 X 1.25 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	0.2	PDF	\$1.75					
GN-M16-15	Rod nut, M16 X 1.5 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	0.2	PDF	\$2.00					
GN-M20-15	Rod nut, M20 X 1.5 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	0.2	PDF	\$2.25					



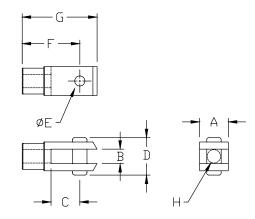
# **G-Series ISO Pneumatic Cylinders – Accessories**

#### **Rod Clevis**



# Dimensions mm [inches]

Part no. GRC-M10-125





Note: Comes with Pivot Pin installed.

Rod Clevis Dimension Table										
Part #	Α	В	С	D	E	F	G	Н		
GRC-M10-125	20.00 [0.78]	10.00 [0.39]	10.00 [0.39]	26.00 [1.02]	10.00 [0.39]	40.00 [1.57]	52.00 [2.04]	M10x1.25		
GRC-M12-125	24.00 [0.94]	12.00 [0.47]	24.00 [0.94]	32.00 [1.25]	12.00 [0.47]	48.00 [1.88]	62.00 [2.44]	M12x1.25		
<u>GRC-M16-15</u>	32.00 [1.25]	16.00 [0.62]	32.00 [1.25]	40.00 [1.57]	16.00 [0.62]	64.00 [2.51]	83.00 [3.26]	M16x1.5		
<u>GRC-M20-15</u>	40.00 [1.57]	20.00 [0.78]	40.00 [1.57]	48.00 [1.88]	20.00 [0.78]	80.00 [3.14]	105.00 [4.13]	M20x1.5		

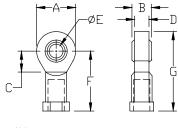
### **Rod Eye**



Part no. GRE-M10-125

## **Dimensions**

mm [inches]





	Rod Eye Dimension Table										
Part #	A	В	С	D	E	F	G	Н	1		
GRE-M10-125	28.00 [1.10]	14.00 [0.55]	15.00 [0.59]	10.50 [0.41]	10.00 [0.39]	43.00 [1.69]	57.00 [2.24]	M10x1.25	19 [0.74]		
GRE-M12-125	32.00 [1.25]	16.00 [0.62]	17.00 [0.66]	12.00 [0.47]	12.00 [0.47]	50.00 [1.96]	66.00 [2.59]	M12x1.25	19 [0.74]		
<u>GRE-M16-15</u>	42.00 [1.65]	21.00 [0.82]	22.00 [0.86]	15.00 [0.59]	16.00 [0.62]	64.00 [2.51]	85.00 [3.34]	M16x1.5	22 [0.86]		
<u>GRE-M20-15</u>	50.00 [1.96]	25.00 [0.98]	26.00 [1.02]	18.00 [0.70]	20.00 [0.78]	77.00 [3.03]	102.00 [4.01]	M20x1.5	27 [1.06]		

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



# **G-Series ISO Pneumatic Cylinders – Accessories**

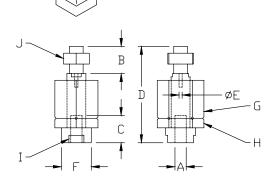
## **Self Aligning Rod Coupler**







Part no. <u>GRCP-M10-125</u>



	Self Aligning Rod Coupler Dimension Table											
Part #	A	В	С	D	E	F	G	Н	1	J		
GRCP-M10-125	M10x1.25	20.00 [0.78]	20.00 [0.78]	71.00 [2.79]	4.00 [0.15]	22.00 [0.86]	30.00 [1.18]	30.00 [1.18]	19.00 [0.74]	17.00 [0.66]		
GRCP-M12-125	M12x1.25	24.00 [0.94]	20.00 [0.78]	75.00 [2.95]	4.00 [0.15]	22.00 [0.86]	30.00 [1.18]	30.00 [1.18]	19.00 [0.74]	19.00 [0.74]		
GRCP-M16-15	M16x1.5	32.00 [1.25]	32.00 [1.25]	103.00 [4.05]	4.00 [0.15]	32.00 [1.25]	41.00 [1.61]	41.00 [1.61]	30.00 [1.18]	24.00 [0.94]		
GRCP-M20-15	M20x1.5	40.00 [1.57]	40.00 [1.57]	119.00 [4.68]	4.00 [0.15]	32.00 [1.25]	41.00 [1.61]	41.00 [1.61]	30.00 [1.18]	30.00 [1.18]		

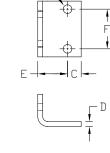
#### **Foot Mount Bracket**

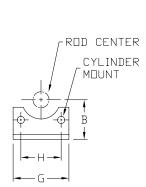


Part no. GMB-32MM

## Dimensions

mm [inches]







Note: Individually packed with 2 screws

		Foot	<b>Mount D</b>	Dimensio	n Table			
Part #	A	В	С	D	E	F	G	Н
<u>GMB-32MM</u>	7.00	32.00	11.00	4.00	24.00	32.00	45.00	32.5
	[0.27]	[1.25]	[0.43]	[0.15]	[0.94]	[1.25]	[1.77]	[1.28]
<u>GMB-40MM</u>	9.00	36.00	15.00	4.00	28.00	36.00	52.00	38.0
	[0.35]	[1.41]	[0.59]	[0.15]	[1.10]	[1.41]	[2.04]	[1.50]
<u>GMB-50MM</u>	9.00	45.00	15.00	4.00	32.00	45.00	52.00	46.5
	[0.35]	[1.77]	[0.59]	[0.15]	[1.25]	[1.77]	[2.04]	[1.83]
<u>GMB-63MM</u>	9.00	50.00	15.00	6.00	32.00	50.00	75.00	56.5
	[0.35]	[1.96]	[0.59]	[0.23]	[1.25]	[1.96]	[2.95]	[2.22]
<u>GMB-80MM</u>	12.00	63.00	20.00	6.00	41.00	63.00	95.00	63.0
	[0.47]	[2.48]	[0.78]	[0.23]	[1.61]	[2.48]	[3.74]	[2.48]
<u>GMB-100MM</u>	14.00	71.00	25.00	6.00	41.00	75.00	115.00	89.0
	[0.55]	[2.79]	[0.98]	[0.23]	[1.61]	[2.95]	[4.52]	[3.50]

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

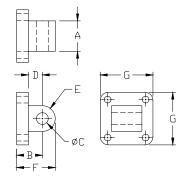


# **G-Series ISO Pneumatic Cylinders – Accessories**

### **Rear Pivot Eye**



Dimensions mm [inches]



Part no. GMC-32MM



Note: Supplied with 4 screws, 4 washers

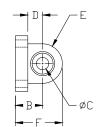
		lale Rear	Clevis Di	imension	Table		
Part #	Α	В	С	D	E	F	G
<u>GMC-32MM</u>	26.00	22.00	10.00	12.00	11.00	33.00	45.00
	[1.02]	[0.86]	[0.39]	[0.47]	[0.43]	[1.29]	[1.77]
<u>GMC-40MM</u>	28.00	25.00	12.00	15.00	13.00	38.00	52.00
	[1.10]	[0.98]	[0.47]	[0.59]	[0.51]	[1.49]	[2.04]
<u>GMC-50MM</u>	32.00	27.00	12.00	15.00	13.00	40.00	65.00
	[1.25]	[1.06]	[0.47]	[0.59]	[0.51]	[1.57]	[2.55]
<u>GMC-63MM</u>	40.00	32.00	16.00	20.00	17.00	49.00	75.00
	[1.57]	[1.25]	[0.62]	[0.78]	[0.66]	[1.92]	[2.95]
<u>GMC-80MM</u>	50.00	36.00	16.00	20.00	17.00	53.00	95.00
	[1.96]	[1.41]	[0.62]	[0.78]	[0.66]	[2.08]	[3.74]
<u>GMC-100MM</u>	60.00	41.00	20.00	25.00	21.00	62.00	115.00
	[2.36]	[1.61]	[0.78]	[0.98]	[0.82]	[2.44]	[4.52]

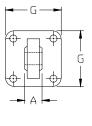
### **Spherical Rear Pivot**



Part no. GSMC-32MM

# Dimensions mm [inches]







Note: Supplied with 4 screws, 4 washers

	Sph	erical Ma	ale Clevis	Dimensio	n Table		
Part #	A	В	С	D	E	F	G
GSMC-32MM	14.00	22.00	10.00	12.00	16.00	38.00	45.00
	[0.55]	[0.86]	[0.39]	[0.47]	[0.62]	[1.49]	[1.77]
GSMC-40MM	16.00	25.00	12.00	15.00	19.00	44.00	52.00
	[0.62]	[0.98]	[0.47]	[0.59]	[0.74]	[1.73]	[2.04]
GSMC-50MM	16.00	27.00	12.00	15.00	19.00	46.00	65.00
	[0.62]	[1.06]	[0.47]	[0.59]	[0.74]	[1.81]	[2.55]
GSMC-63MM	21.00	32.00	16.00	20.00	24.00	56.00	75.00
	[0.82]	[1.25]	[0.62]	[0.78]	[0.94]	[2.20]	[2.95]
GSMC-80MM	21.00	36.00	16.00	20.00	24.00	60.00	95.00
	[0.82]	[1.41]	[0.62]	[0.78]	[0.94]	[2.36]	[3.74]
GSMC-100MM	25.00	41.00	20.00	25.00	30.00	71.00	115.00
	[0.98]	[1.61]	[0.78]	[0.98]	[1.18]	[2.79]	[4.52]

See our website  $\underline{\textit{www.AutomationDirect.com}} \ \textit{for complete Engineering drawings}.$ 

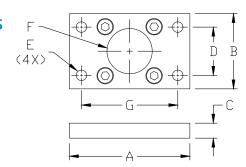


# G-Series ISO Pneumatic Cylinders – Accessories

### Front or Rear Flange



Dimensions mm [inches]





Note: Supplied with 4 screws

	Front or Rear Flange Dimension Table										
Part #	A	В	С	D	E	F	G				
GFL-32MM	80.00	50.00	10.00	32.00	7.00	32.00	64.00				
	[3.14]	[1.96]	[0.39]	[1.25]	[1.25]	[1.25]	[2.52]				
GFL-40MM	90.00	55.00	10.00	36.00	9.00	40.00	72.00				
	[3.54]	[2.16]	[0.39]	[1.41]	[0.35]	[1.57]	[2.83]				
GFL-50MM	110.00	65.00	12.00	45.00	9.00	50.00	90.00				
	[4.33]	[2.55]	[0.47]	[1.77]	[0.35]	[1.96]	[3.54]				
GFL-63MM	120.00	75.00	12.00	50.00	9.00	63.00	100.00				
	[4.72]	[2.95]	[0.47]	[1.96]	[0.35]	[2.48]	[3.93]				
GFL-80MM	153.00	95.00	16.00	63.00	12.00	80.00	126.00				
	[6.02]	[3.74]	[0.62]	[2.48]	[0.47]	[3.14]	[4.96]				
<u>GFL-100MM</u>	178.00	115.00	16.00	75.00	14.00	100.00	150.00				
	[7.00]	[4.52]	[0.62]	[2.95]	[0.55]	[3.93]	[5.90]				

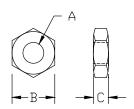
#### **Rod Nut**



Part no. GN-M20-15

## **Dimensions**

mm [inches]



Rod Nut Dimension Table				
Part #	Α	В	С	
<u>GN-M10-125</u>	M10x1.25	17.00 [0.66]	6.00 [0.23]	
<u>GN-M12-125</u>	M12x1.25	19.00 [0.74]	7.00 [0.27]	
<u>GN-M16-15</u>	M16x1.5	24.00 [0.94]	8.00 [0.31]	
<u>GN-M20-15</u>	M20x1.5	30.00 [1.18]	9.00 [0.35]	

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



# **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		Switch Tie Rod Adapter (CFRA Series)  Adapter & Band (CPSB or CPSS Series)	
CPS9C	DE-STA-CO Robohand SMC Compact Air Bimba Fabco		2.53 Min. +/- 0.1 R 2.13 +/- 0.05	
CPS9D	NITRA L-Series Fabco Numatics Rotomation		1.52	
CPS9E	NITRA L-Series Fabco Numatics Rotomation		1.52	
CPS9F	NITRA G-Series Fabco Festo Numatics Rotomation		44 5.1 6.5 —	
СРЅ9Н	NITRA E-Series NITRA H-Series		3.05 TR 0.2 R 0.2 R 0.2	
CPS9M	Norgren		5.1 +/-0.1 R 3.25	
CPS9Q	NITRA L-Series NITRA G-Series Parker Fabco Festo Numatics Rotomation		4.4 3.2 6.5 — 6.5	