

G-Series ISO 15552 Pneumatic

Cylinders – 80mm Bore

80mm Bore, Double-acting, Magnetic Piston, Cushions



NITRA pneumatic ISO 15552 interchangeable cylinder, 80mm bore, 25mm diameter piston rod, G3/8 (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.

- · 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

80mm bore,	double	acting, ta	pped end	caps
Part Number	Price	Stroke Length (mm)	"A" (mm [inch])	Weight (lb)
G80M025MD-MC	\$-010ui:	25	153 [6.02]	6.9
G80M050MD-MC	\$-010uj:	50	178 [7.01]	7.4
G80M075MD-MC	\$010uk:	75	203 [7.99]	7.9
G80M100MD-MC	\$-010ul:	100	228 [8.98]	8.4
G80M125MD-MC	\$010un:	125	253 [9.96]	8.9
G80M150MD-MC	\$010uo:	150	278 [10.94]	9.4
G80M200MD-MC	\$010up:	200	328 [12.91]	10.4
G80M250MD-MC	\$010uq:	250	378 [14.88]	11.4
G80M300MD-MC	\$010us:	300	428 [16.85]	12.4
G80M400MD-MC	\$;010ut:	400	528 [20.79]	14.4
G80M500MD-MC	\$010uu:	500	628 [24.72]	16.4
<u>G80M600MD-MC</u>	\$010uv:	600	728 [28.66]	18.4

* The cushions decelerate and are adjustable. Cush pre-lubricated nitrile cush	hioned cylind			;
G80M600MD-MC	\$010uv:	600	728 [28.66]	
G80M500MD-MC	\$010uu:	500	628 [24.72]	
G80IVI400IVID-IVIC	\$;0 TOUT:	400	528 [20.79]	

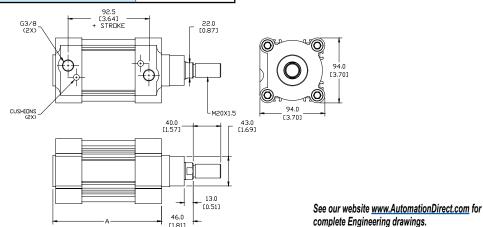
Specific	ations
Aluminum body and end caps	Plastoferrite magnet
C45 chromed piston rod	NBR (Nitrile Butadiene Rubber) buffer + static o-rings
Die cast aluminum head	NBR (Nitrile Butadiene Rubber) cushioning gasket
NBR (Nitrile Butadiene Rubber) piston and piston rod gasket	Brass cushioning needle with 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
Aluminum piston with PTFE (Teflon) pad	[-10°C to 80°C]
Extend force at 100 psi = 779.1 lb.	Retract force at 100 psi = 703.0 lb.

BSPP = British Standard Pipe Parallel

Mounting Accessories						
Style	Part No.					
Foot Mount	<u>GMB-80MM</u>					
Front or Rear Flange	GFL-80MM					
Male Rear Clevis	<u>GMC-80MM</u>					
Spherical Male Clevis	GSMC-80MM					

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

Dimensions mm [inches]





G-Series ISO 15552 Pneumatic Cylinders – Accessories

	G-Series Heavy Duty Pneumatic Cylinder Acces	enries			
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	\$10v3:
GRC-M12-125	Rod clevis, M12 X 1.25 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	0.3	PDF	\$10v4:
GRC-M16-15	Rod clevis, M16 X 1.5 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	0.8	PDF	\$10v5:
<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	\$10v6:
GRE-M10-125	Rod eye, M10 X 1.25 thread, spherical bearing, zinc plated steel. For use with NITRA G-series cylinders.	1	0.2	<u>PDF</u>	\$10v7:
<u>GRE-M12-125</u>	Rod eye, M12 X 1.25 thread, spherical bearing, zinc plated steel. For use with NITRA G-series cylinders.	1	0.3	PDF	\$10v8:
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	\$10v9:
<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	\$10va:
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	\$10vb:
GRCP-M12-125	Sylfradigning rod coupler, M12 X 1.25 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	0.7	PDF	\$10vc:
<u>GRCP-M16-15</u>	Self-aligning rod coupler, M16 X 1.5 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	1.4	PDF	\$10vd:
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>	\$10ve:
<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>	\$;10vf:
GMB-40MM	Foot mount bracket, zinc plated steel. For use with 40mm bore NITRA G-series cylinders.	1	0.3	<u>PDF</u>	\$10vg:
GMB-50MM	Foot mount bracket, zinc plated steel. For use with 50mm bore NITRA G-series cylinders.	1	0.4	PDF	\$10vh:
<u>GMB-63MM</u>	Foot mount bracket, zinc plated steel. For use with 63mm bore NITRA G-series cylinders.	1	0.6	PDF	\$-10vi:
<u>GMB-80MM</u>	Foot mount bracket, zinc plated steel. For use with 80mm bore NITRA G-series cylinders.	1	1.0	PDF	\$-10vj:
<u>GMB-100MM</u>	Foot mount bracket, zinc plated steel. For use with 100mm bore NITRA G-series cylinders.	1	1.3	PDF	\$10vk:
<u>GMC-32MM</u>	Rear pivot eye, zinc plated steel. For use with 32mm bore NITRA G-series cylinders.	1	0.2	PDF	\$-10vl:
GMC-40MM	Rear pivot eye, zinc plated steel. For use with 40mm bore NITRA G-series cylinders.	1	0.3	PDF	\$10vn:
GMC-50MM	Rear pivot eye, zinc plated steel. For use with 50mm bore NITRA G-series cylinders.	1	0.6	PDF	\$10vo:
<u>GMC-63MM</u>	Rear pivot eye, zinc plated steel. For use with 63mm bore NITRA G-series cylinders.	1	0.9	PDF	\$10vp:
<u>GMC-80MM</u>	Rear pivot eye, zinc plated steel. For use with 80mm bore NITRA G-series cylinders.	1	1.5	PDF	\$10vq:
<u>GMC-100MM</u>	Rear pivot eye, zinc plated steel. For use with 100mm bore NITRA G-series cylinders.	1	2.4	PDF	\$10vs:
GSMC-32MM	Rear spherical pivot, spherical bearing, zinc plated steel. For use with 32mm bore NITRA G-series cylinders.	1	0.3	PDF	\$;10vt:
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>	\$10vu:
GSMC-50MM	Rear spherical pivot, spherical bearing, zinc plated steel. For use with 50mm bore NITRA G-series cylinders.	1	0.5	PDF	\$10vv:
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>	\$10vx:
GSMC-80MM	Rear spherical pivot, spherical bearing, zinc plated steel. For use with 80mm bore NITRA G-series cylinders.	1	1.3	PDF	\$10vy:
GSMC-100MM	Rear spherical pivot, spherical bearing, zinc plated steel. For use with 100mm bore NITRA G-series cylinders.	1	1.9	PDF	\$10vz:
GFL-32MM	Flange mount plate, zinc plated steel. For use with 32mm bore NITRA G-series cylinders.	1	0.5	PDF	\$;10v]:
GFL-40MM	Flange mount plate, zinc plated steel. For use with 40mm bore NITRA G-series cylinders.	1	0.6	<u>PDF</u>	\$;10v[:
GFL-50MM	Flange mount plate, zinc plated steel. For use with 50mm bore NITRA G-series cylinders.	1	1.2	PDF	\$10v_:
GFL-63MM	Flange mount plate, zinc plated steel. For use with 63mm bore NITRA G-series cylinders.	1	1.5	<u>PDF</u>	\$10v#:
GFL-80MM	Flange mount plate, zinc plated steel. For use with 80mm bore NITRA G-series cylinders.	1	3.1	PDF	\$;10v!:
<u>GFL-100MM</u>	Flange mount plate, zinc plated steel. For use with 100mm bore NITRA G-series cylinders.	1	4.5	PDF	\$10v?:
<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	\$;10v,:
<u>GN-M12-125</u>	Rod nut, M12 X 1.25 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	0.2	PDF	\$10x0:
<u>GN-M16-15</u>	Rod nut, M16 X 1.5 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	0.2	PDF	\$10x1:
<u>GN-M20-15</u>	Rod nut, M20 X 1.5 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	0.2	PDF	\$10x2:



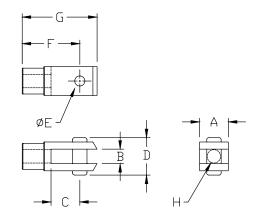
G-Series ISO Pneumatic Cylinders – Accessories

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				

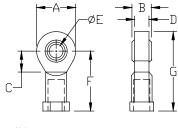
Rod Eye



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

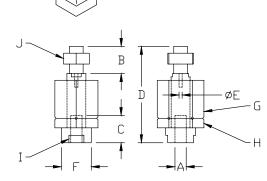
Self Aligning Rod Coupler







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]			

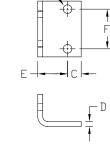
Foot Mount Bracket

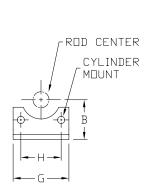


Part no. GMB-32MM

Dimensions

mm [inches]







Note: Individually packed with 2 screws

	Foot Mount Dimension 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.

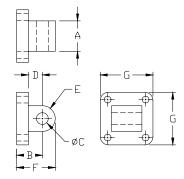


G-Series ISO Pneumatic Cylinders – Accessories

Rear Pivot Eye



Dimensions mm [inches]



Part no. GMC-32MM



Note: Supplied with 4 screws, 4 washers

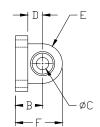
		lale Rear	Clevis Di	imension	Table		
Part #	Α	В	С	D	E	F	G
<u>GMC-32MM</u>	26.00	22.00	10.00	12.00	11.00	33.00	45.00
	[1.02]	[0.86]	[0.39]	[0.47]	[0.43]	[1.29]	[1.77]
<u>GMC-40MM</u>	28.00	25.00	12.00	15.00	13.00	38.00	52.00
	[1.10]	[0.98]	[0.47]	[0.59]	[0.51]	[1.49]	[2.04]
<u>GMC-50MM</u>	32.00	27.00	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]

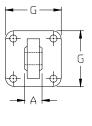
Spherical Rear Pivot



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

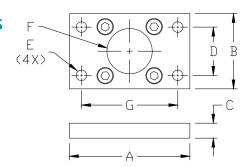


G-Series ISO Pneumatic Cylinders – Accessories

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]

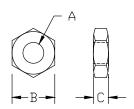
Rod Nut



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			