



- 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

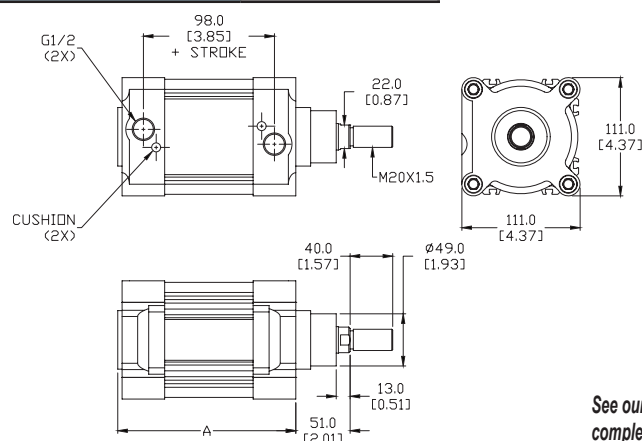


Specifications	
Aluminum body and end caps	Plastoferrite magnet
C45 chromed piston rod	NBR (Nitrile Butadiene Rubber) buffer + static o-rings
Die cast aluminum head	NBR (Nitrile Butadiene Rubber) cushioning gasket
NBR (Nitrile Butadiene Rubber) piston and piston rod gasket	Brass cushioning needle with 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°F to 176°F [-10°C 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.

* 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.

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

mm [inches]



tNPC-113



G-Series ISO 15552 Pneumatic Cylinders – Accessories

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



G-Series ISO Pneumatic Cylinders – Accessories

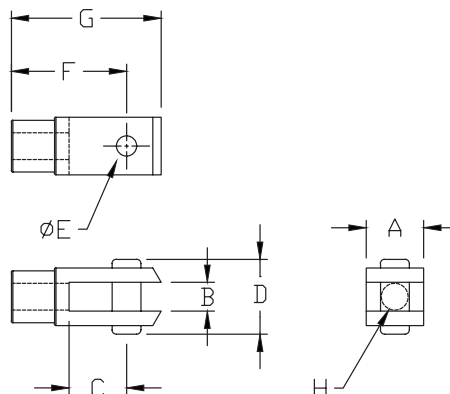
Rod Clevis



Part no. [GRC-M10-125](#)

Dimensions

mm [inches]



Note: Comes with Pivot Pin installed.

Rod Clevis Dimension Table								
Part #	A	B	C	D	E	F	G	H
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
GRC-M16-15	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
GRC-M20-15	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

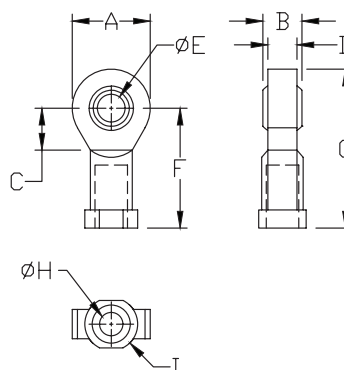
Rod Eye



Part no. [GRE-M10-125](#)

Dimensions

mm [inches]



Rod Eye Dimension Table									
Part #	A	B	C	D	E	F	G	H	I
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]
GRE-M16-15	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]
GRE-M20-15	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.



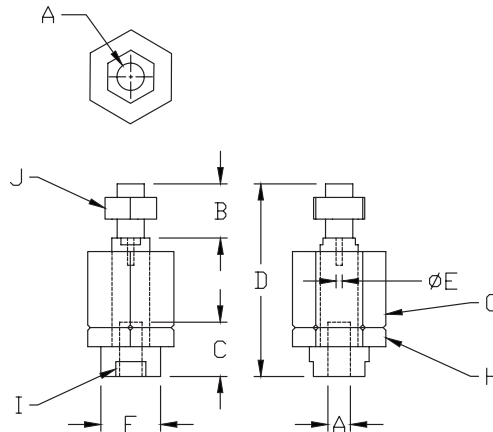
G-Series ISO Pneumatic Cylinders – Accessories

Self Aligning Rod Coupler

Part no. [GRCP-M10-125](#)

Dimensions

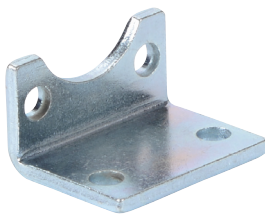
mm [inches]



Self Aligning Rod Coupler Dimension Table

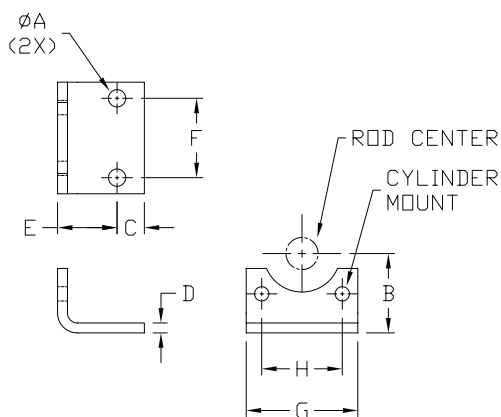
Part #	A	B	C	D	E	F	G	H	I	J
GRCP-M10-125	M10x1.25	20.00 [0.78]	20.00 [0.78]	71.00 [2.79]	4.00 [0.15]	22.00 [0.86]	30.00 [1.18]	30.00 [1.18]	19.00 [0.74]	17.00 [0.66]
GRCP-M12-125	M12x1.25	24.00 [0.94]	20.00 [0.78]	75.00 [2.95]	4.00 [0.15]	22.00 [0.86]	30.00 [1.18]	30.00 [1.18]	19.00 [0.74]	19.00 [0.74]
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	B	C	D	E	F	G	H
GMB-32MM	7.00 [0.27]	32.00 [1.25]	11.00 [0.43]	4.00 [0.15]	24.00 [0.94]	32.00 [1.25]	45.00 [1.77]	32.5 [1.28]
GMB-40MM	9.00 [0.35]	36.00 [1.41]	15.00 [0.59]	4.00 [0.15]	28.00 [1.10]	36.00 [1.41]	52.00 [2.04]	38.0 [1.50]
GMB-50MM	9.00 [0.35]	45.00 [1.77]	15.00 [0.59]	4.00 [0.15]	32.00 [1.25]	45.00 [1.77]	52.00 [2.04]	46.5 [1.83]
GMB-63MM	9.00 [0.35]	50.00 [1.96]	15.00 [0.59]	6.00 [0.23]	32.00 [1.25]	50.00 [1.96]	75.00 [2.95]	56.5 [2.22]
GMB-80MM	12.00 [0.47]	63.00 [2.48]	20.00 [0.78]	6.00 [0.23]	41.00 [1.61]	63.00 [2.48]	95.00 [3.74]	63.0 [2.48]
GMB-100MM	14.00 [0.55]	71.00 [2.79]	25.00 [0.98]	6.00 [0.23]	41.00 [1.61]	75.00 [2.95]	115.00 [4.52]	89.0 [3.50]

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



G-Series ISO Pneumatic Cylinders – Accessories

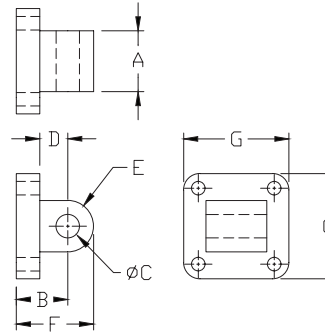
Rear Pivot Eye



Part no. [GMC-32MM](#)

Dimensions

mm [inches]

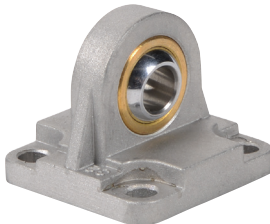


Note: Supplied with 4 screws, 4 washers

Male Rear Clevis Dimension Table

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

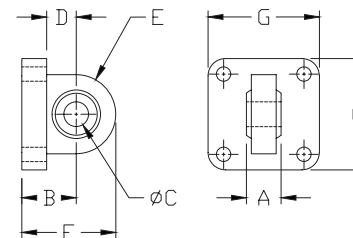
Spherical Rear Pivot



Part no. [GSMC-32MM](#)

Dimensions

mm [inches]



Note: Supplied with 4 screws, 4 washers

Spherical Male Clevis Dimension Table

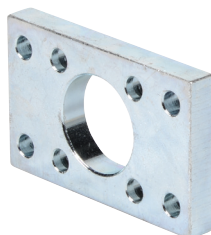
Part #	A	B	C	D	E	F	G
GSMC-32MM	14.00 [0.55]	22.00 [0.86]	10.00 [0.39]	12.00 [0.47]	16.00 [0.62]	38.00 [1.49]	45.00 [1.77]
GSMC-40MM	16.00 [0.62]	25.00 [0.98]	12.00 [0.47]	15.00 [0.59]	19.00 [0.74]	44.00 [1.73]	52.00 [2.04]
GSMC-50MM	16.00 [0.62]	27.00 [1.06]	12.00 [0.47]	15.00 [0.59]	19.00 [0.74]	46.00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

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



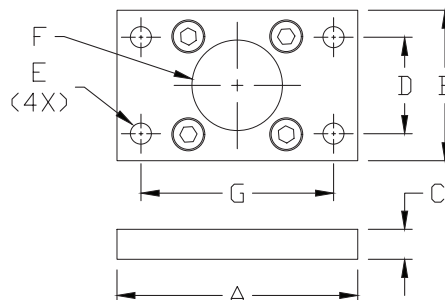
G-Series ISO Pneumatic Cylinders – Accessories

Front or Rear Flange

Part no. [GFL-32MM](#)

Dimensions

mm [inches]



Note: Supplied with 4 screws

Front or Rear Flange Dimension Table

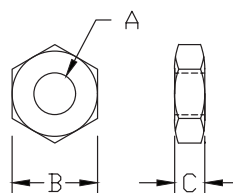
Part #	A	B	C	D	E	F	G
GFL-32MM	80.00 [3.14]	50.00 [1.96]	10.00 [0.39]	32.00 [1.25]	7.00 [1.25]	32.00 [1.25]	64.00 [2.52]
GFL-40MM	90.00 [3.54]	55.00 [2.16]	10.00 [0.39]	36.00 [1.41]	9.00 [0.35]	40.00 [1.57]	72.00 [2.83]
GFL-50MM	110.00 [4.33]	65.00 [2.55]	12.00 [0.47]	45.00 [1.77]	9.00 [0.35]	50.00 [1.96]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

Rod Nut

Part no. [GN-M20-15](#)

Dimensions

mm [inches]



Rod Nut Dimension Table

Part #	A	B	C
GN-M10-125	M10x1.25	17.00 [0.66]	6.00 [0.23]
GN-M12-125	M12x1.25	19.00 [0.74]	7.00 [0.27]
GN-M16-15	M16x1.5	24.00 [0.94]	8.00 [0.31]
GN-M20-15	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			
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			
CPS9H	NITRA E-Series NITRA H-Series			
CPS9M	Norgren			
CPS9Q	NITRA L-Series NITRA G-Series Parker Fabco Festo Numatics Rotomation			