

PENINSULAR CYLINDER Co.

Pneumatic & Hydraulic Cylinders built to:

Ford Motor Company



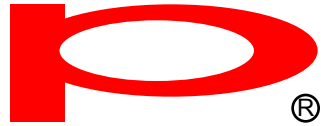
Specifications:

NC9

HD2

NC5

HD1



**PENINSULAR
CYLINDER CO.**

27650 Groesbeck Highway
Roseville, MI 48066-2759

Phone: (586) 775-7211
Fax: (586) 775-4545
Toll Free: (800) 526-7968

[www. PeninsularCylinders.com](http://www.PeninsularCylinders.com)
Sales@PeninsularCylinders.com

PENINSULAR
NC9, HD2, NC5, HD1

ORDERING PROCEDURE

WHEN ORDERING - SPECIFY :

1) MODEL NO. DESCRIPTION

- NC9 (MX1) - Tie Rods Extended Both Ends
- NC9 (MX2) - Tie Rods Extended Cap End
- NC9 (MX3) - Tie Rods Extended Head End
- NC9 (MF1) - Head Rectangular Flange (1 1/2" - 6")
- NC9 (MF2) - Cap Rectangular Flange (1 1/2" - 6")
- NC9 (ME3) - Head Square (8" - 12")
- NC9 (ME4) - Cap Square (8" - 12")
- NC9 (MP1) - Cap Fixed Clevis
- NC9 (MS2) - Side Lug Mount
- NC9 (MT4) - Intermediate Fixed Trunnion

2) Cylinder Bore & Stroke (Customer Selected)

Piston Rod Diameter & Rod-End Style (Do not indicate in model number)
(Only one Rod Diameter available per Bore Size - See Chart Below)

Bore Size	Rod Diameter MM	Thread LL
1 1/2", 2", 2 1/2"	1"	7/8" - 14
3 1/4"	1 3/8"	1 1/4" - 12
4", 5"	1 3/4"	1 1/2" - 12
6"	2"	1 3/4" - 12
8", 10", 12"	2 1/2"	2 1/4" - 12

3) Cushion Location (Must be Specified by Customer)

"CC" Indicates Cap End Cushion

"HC" Indicates Head End Cushion

* Cushion Adjustment is available at position 1, 2, 3, or 4

* Cushions should be specified for cylinders with strokes greater than 2.0"

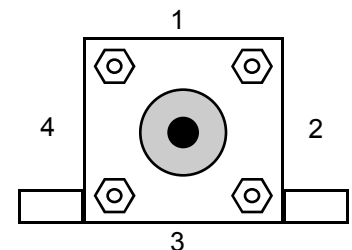
4) Port Location & Port Thread Size (Must be Specified by Customer)

"CT" Indicates Cap End Port

"HT" Indicates Head End Port

"P" Indicates NPTF (Standard).

Ports available at positions 1, 2, 3, or 4.



Example:

NC9 - MS2 - 1.5x3.0 - CC2 - HC2 - CP1 - HP1 - S**

SPECIAL

PORT LOCATION AT 1, HEAD END

PORT LOCATION AT 1, CAP END

CUSHIONED AT POSITION 2, HEAD END

CUSHIONED AT POSITION 2, CAP END

1 1/2" BORE CYLINDER X 3" STROKE

CYLINDER MOUNTING STYLE (SIDE LUG)

GROUP NUMBER

** When using "S" in model number, ALL non-standard dimensions must be specified **

NC9 CYLINDERS are built to Ford Motor Company Vehicle Operation Specifications. Any deviations from this Standard must be approved in writing by the Ford Motor Company.

**PENINSULAR
CYLINDER CO.**

27650 Groesbeck Highway
Roseville, MI 48066-2759

Phone: (586) 775-7211

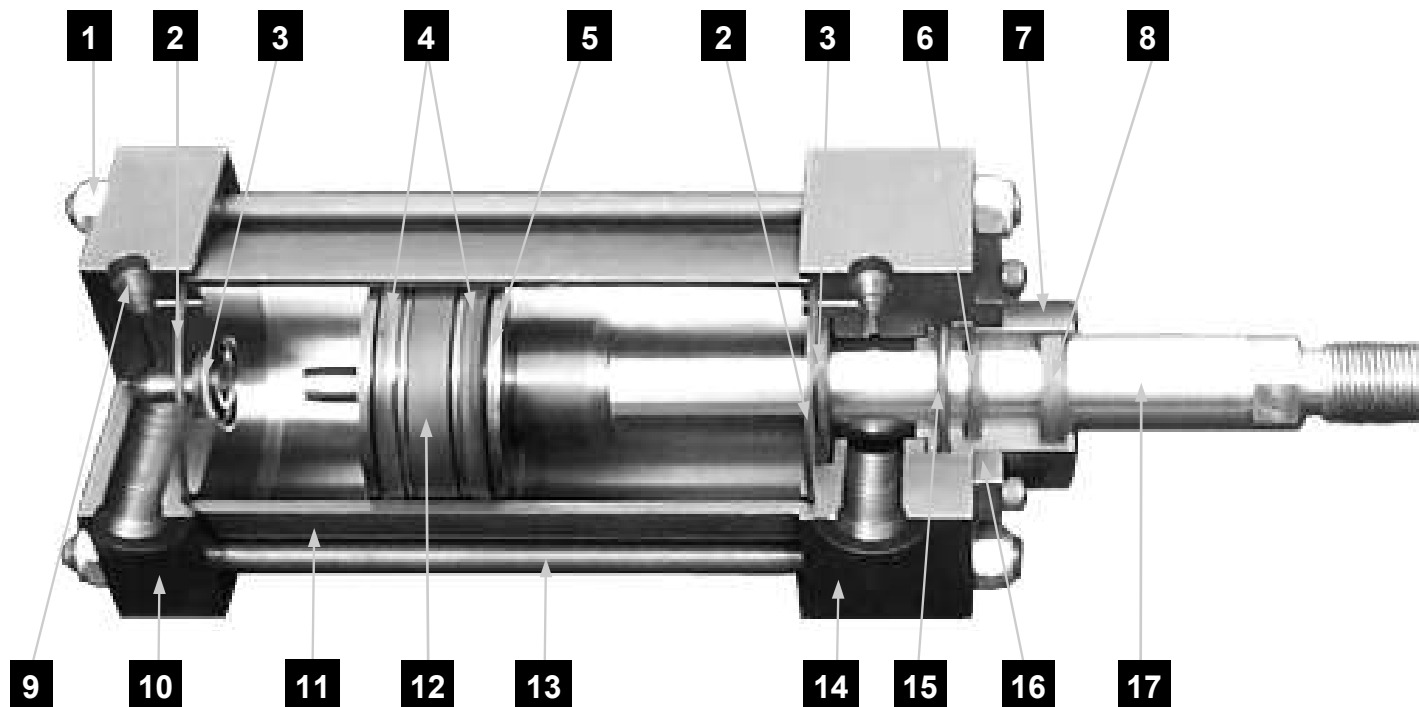
Fax: (586) 775-4545

Toll Free: (800) 526-7968

www.PeninsularCylinders.com
Sales@PeninsularCylinders.com

Note: Consult Factory if the
Cylinder needs to be
Proximity Switch Ready

NC9 Cylinder Parts List



1. Tie Rod Nut
2. Tube O-Ring
3. Cushion Seal
4. Piston U-Cups
5. Piston
6. Rod Seal
7. Rod Cartridge
8. Rod Wiper
9. Cushion Adjustment

10. Cap End
11. Cylinder Tube
12. Wear Band
13. Tie Rod
14. Head
15. Rod Cartridge O-Ring
16. Rod Cartridge Retainer Plate
17. Piston Rod; Specify Rod End Style & Diameter



ORDERING PROCEDURE

WHEN ORDERING - SPECIFY :

- 1) Cushion - Head End (Use Only if Cushion is Required)
- 2) Cylinder Bore (Specify in Inches)
- 3) Specify "HD2" (Standard Group Code used in all HD2 Model Numbers)
- 4) Specify Piston Rod Diameter

Bore Size	Rod Diameter
1 1/2"	5/8", 1"
2"	1", 1 3/8"
2 1/2"	1", 1 3/8"
3 1/4"	1 3/8", 1 3/4"
4"	1 3/4", 2"
5"	2", 2 1/2"
6"	2 1/2", 3 1/2"
8"	3 1/2", 4", 5 1/2"

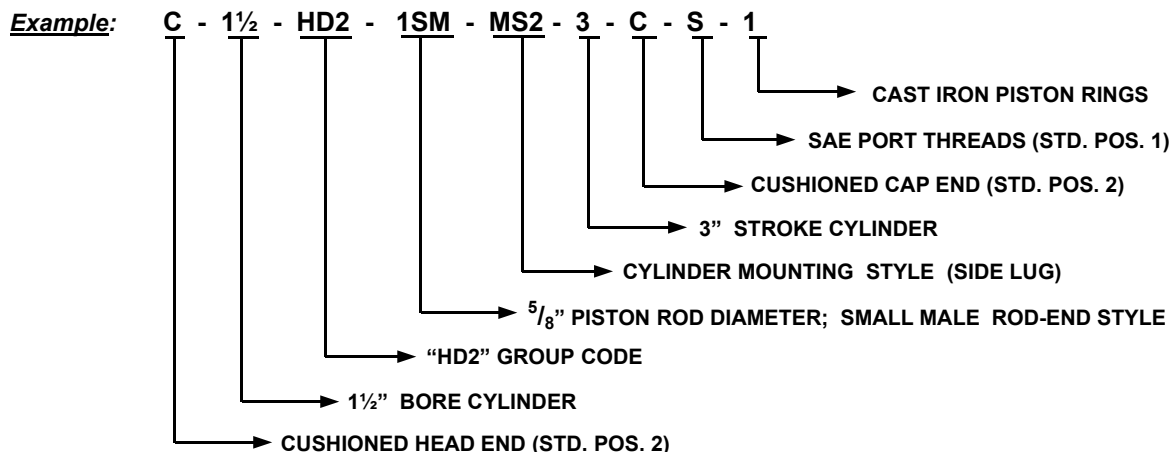
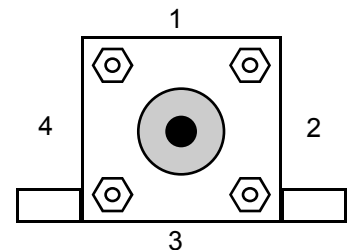
Specify Piston Rod End Style
 "SM" Style Shown. All Others Available

Rod Diameter	"SM" Style Shown
5/8"	7/16 - 20
1"	3/4 - 16
1 3/8"	1 - 14
1 3/4"	1 1/4 - 12
2"	1 1/2 - 12
2 1/2"	1 7/8 - 12
3 1/2"	2 1/2 - 12
4"	3 - 12
5 1/2"	4 - 12

- | | |
|--|--|
| <ol style="list-style-type: none"> 5) <u>MODEL</u> <u>DESCRIPTION</u> MP1 - Cap Fixed Clevis MS2 - Side Lug Mount MT1 - Head Trunnion MT2 - Cap Trunnion MT4 - Intermediate Fixed Trunnion MF1 - Head Rectangular Flange | <ol style="list-style-type: none"> <u>MODEL</u> <u>DESCRIPTION</u> MF2 - Cap Rectangular Flange MF5 - Head Square Flange ME5 - Head Rectangular ME6 - Cap Rectangular MX2 - Tie Rods Extended - Cap End MX3 - Tie Rods Extended - Head End |
|--|--|

- 6) Cylinder Stroke (Specify in Inches)
- 7) Cushion - Cap End (Use Only if Cushion is Required)
- 8) Port Type
 N Indicates NPTF Thread Ports
 S Indicates SAE Thread Ports

- 9) Seal Type
 - 1 Indicates Cast Iron Piston Rings / Buna N Rod Seals
 - 2 Indicates Buna N (Nitrile) throughout
 - 3 Indicates Viton throughout
 - 4 Cast Iron Piston Rings / Viton Rod Seals



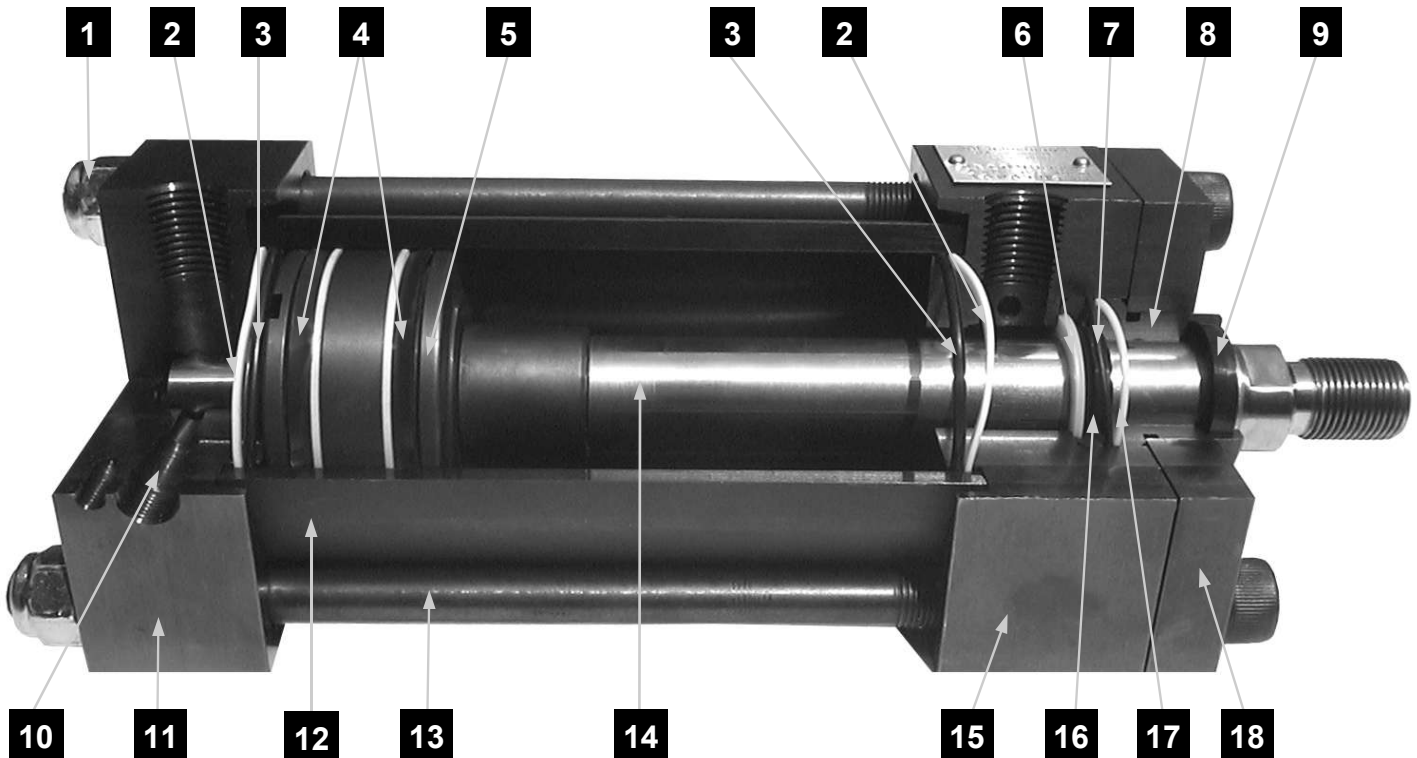
27650 Groesbeck Highway
 Roseville, MI 48066-2759

Phone: (586) 775-7211
 Fax: (586) 775-4545
 Toll Free: (800) 526-7968

www.PeninsularCylinders.com
 Sales@PeninsularCylinders.com

Note: Consult Factory if the
 Cylinder needs to be
Proximity Switch Ready

HD2 Cylinder Parts List



1. Tie Rod Nut
2. Teflon Backup Ring - Tube
3. Tube O-Ring
4. Piston U-Cups
5. Piston
6. Teflon Backup Ring - Z Seal
7. Rod Cartridge O-Ring
8. Rod Cartridge
9. Rod Wiper
10. Cushion Adjustment

11. Cap
12. Cylinder Tube
13. Tie Rod
14. Piston Rod; Specify Rod End Style & Diameter
15. Head
16. Z-Seal
17. Teflon Backup Ring for Rod Cartridge O-Ring
18. Rod Cartridge Retainer Plate



ORDERING PROCEDURE

WHEN ORDERING - SPECIFY :

- 1) Specify "NC5" or "HD1" (Standard Group Code(s) used in all NC5 & HD1 Model Numbers)

- 2) Specify Description NPTF Double Supply Ports are Standard at the following Positions per Mounting Style
- | | | |
|-----|------------------|-----------------|
| F = | Foot Mount | Positions 2 & 4 |
| T = | Trunnion Mount | Positions 2 & 4 |
| C = | Clevis Mount | Positions 2 & 4 |
| R = | Rod End Flange | Positions 2 & 4 |
| B = | Blind End Flange | Positions 1 & 3 |

- 3) Specify Cushion Location

B = Cushion on Blind End
R = Cushion on Rod End
BR = Cushion on Both Blind & Rod Ends
NC = No Cushions

- 4) Specify Cylinder Bore Size

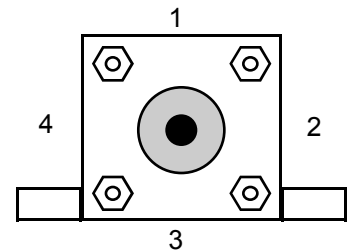


27650 Groesbeck Highway
Roseville, MI 48066-2759

Phone: (586) 775-7211
Fax: (586) 775-4545
Toll Free: (800) 526-7968

www.PeninsularCylinders.com
Sales@PeninsularCylinders.com

Note: Consult Factory if the Cylinder needs to be Proximity Switch



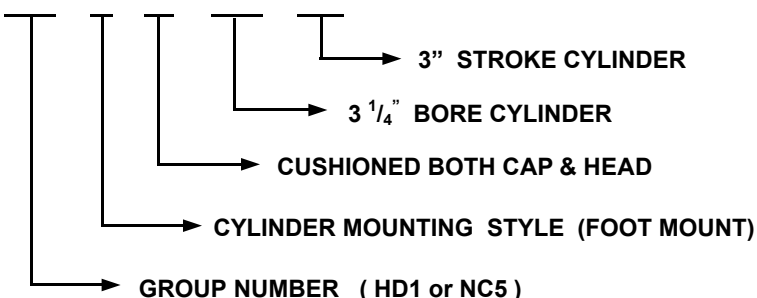
NOTE: Rod Diameters and Threads Sizes are Standard per Bore Size

Bore Size	Rod Diameter	Thread Size
1 1/2"	7/8"	3/4 - 10
2"	1 1/8"	1 - 8
2 1/2", 3 1/4"	1 3/8"	1 1/4 - 12
4", 4 1/2"	1 5/8"	1 1/2 - 12
5", 6"	2 1/8"	2 - 12
8"	3"	2 3/4 - 12

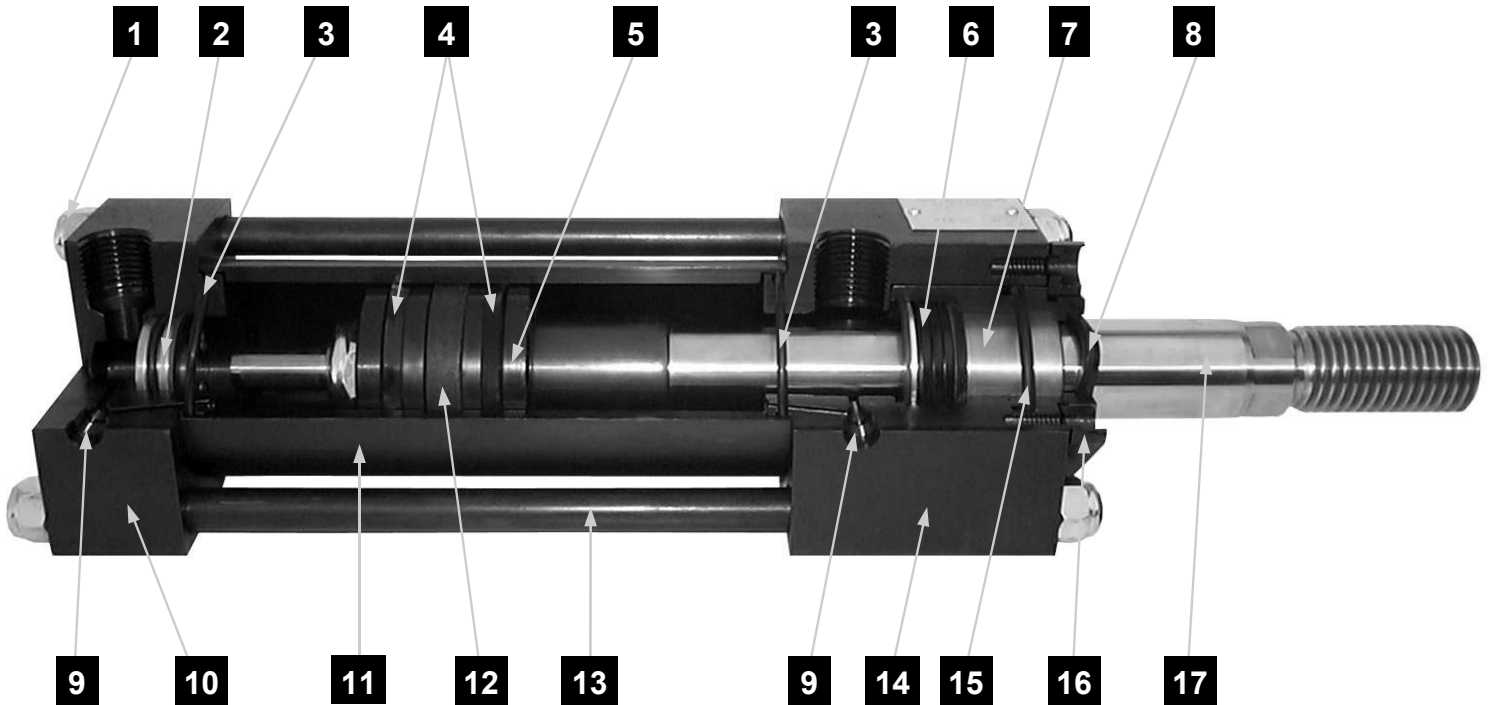
- 5) Specify Cylinder Stroke

Example:

NC5 - F - BR - 3.25 - 7.00



NC5 & HD1 Cylinder Parts List



1. Tie Rod Nut
2. Cushion Seal
3. Tube O-Ring
4. Piston U-Cups
5. Piston
6. Rod Seal
7. Rod Cartridge
8. Rod Wiper
9. Cushion Adjustment

10. Cap End
11. Cylinder Tube
12. Wear Band
13. Tie Rod
14. Head
15. Rod Cartridge O-Ring
16. Rod Cartridge Retainer Plate
17. Piston Rod; Specify Rod End Style & Diameter

Note: The cylinder shown is the NC5. The HD1 is the same except with Teflon backup rings

Hydraulic Cylinders

- * 5,000 PSI Rated - 3,000 PSI Working Pressure
- * All NFPA & Metric Mounting Styles & Rod Sizes
- * Both High & Low Pressure Models Available



Slides & Die Lifter Units

For Severe Side Loaded Applications
 in both English & Metric Versions



Air Cylinders

- * 250 PSIG Rated (Steel & Aluminum Available)
- * All NFPA & Metric Mounting Styles & Rod Sizes
- * Heavy, Medium & Light Duty Models Available



Air or Hydraulic Powered Clamps

Our Clamps Hold Up as Well as Hold Down



Special Cylinders

Special Cylinders can be Manufactured
 Application Specific to the Customer's
 Requirements and/or Specifications.



Cylinder Accessories

NFPA or Metric Cylinder Accessories
 for all of your Cylinder Needs



Products

- * Air Cylinders - (NFPA & Metric - Heavy, Medium, & Light Duty)
- * Hydraulic Cylinders - (NFPA & Metric High & Low Pressure)
- * Special Cylinders - (Per Application)
- * Cylinder Accessories - (NFPA & Metric)
- * Repairs & Rebuilds - (All Makes & Series)
- * Air Powered Slides, Clamps & Die Lifters

Services & Features

- * Quick Delivery & Customer Service
- * Internally Lubricated for Life
- * Lubricated Bearing Cartridge
- * Improved Seals & Cushion Design
- * In-Port Mounted Proximity Switch Sensing without Spacers
- * Magnetic Piston Sensing