

# Pneumatic Coupling Selection Guide

Pneumatic Coupling Selection Guide (by Interchange)										
Body Sizes (in.)	Connection style	Material*				Locking Mechanism	Std Seal Material	Std Seal Temp Range	Rated Pressure	Coupler Series
		B	S	SS	P					
<b>Industrial Interchange Couplers</b>										
<b>General Purpose</b>										
1/4 to 1/2	Manual Sleeve	■	■	■		Ball	Nitrile	-40° to +250° F	300 psi	<b>20 Series</b>
1/4 to 1/2	Push-to-Connect	■	■			Ball	Nitrile	-40° to +250° F	300 psi	<b>HF Series</b>
1/4 to 3/4	Push-to-Connect	■				Pawl	Nitrile	-40° to +250° F	300 psi	<b>30 Series</b>
1/4	Push-to-Connect	■				Ball	Nitrile	-40° to +250° F	150 psi	<b>Universal Series</b>
<b>Special Purpose</b>										
1/4 & 3/8	Push-to-Connect		■		■	Fingers	Nitrile	-40° to +250° F	300 psi	<b>Tool-Mate (PBH) (non-marring)</b>
1/4 to 1/2	Push-to-Connect		■		■	Fingers	Nitrile	-40° to +250° F	300 psi	<b>Tool-Mate (PBS) (non-marring, exhaust)</b>
1/4 to 3/4	Push-to-Connect		■			Ball	Nitrile	-40° to +250° F	300 psi	<b>E-z-mate (exhaust)</b>
<b>Tru-Flate Interchange Couplings</b>										
1/4 to 1/2	Manual Sleeve	■	■			Ball	Nitrile	-40° to +250° F	300 psi	<b>10 Series</b>
1/4	Push-to-Connect	■				Ball	Nitrile	-40° to +250° F	150 psi	<b>Universal Series</b>
<b>ARO 210 Interchange Couplings</b>										
1/4	Manual Sleeve	■	■			Ball	Nitrile	-40° to +250° F	300 psi	<b>50 Series</b>
1/4	Push-to-Connect	■				Ball	Nitrile	-40° to +250° F	300 psi	<b>HA Series</b>
1/4	Push-to-Connect	■				Ball	Nitrile	-40° to +250° F	150 psi	<b>Universal Series</b>
<b>Lincoln "Long Stem" Interchange Couplings</b>										
1/4	Manual Sleeve	■				Ball	Nitrile	-40° to +250° F	300 psi	<b>70 Series</b>
<b>Common High-Flow European Interchange Couplings</b>										
1/4 & 3/8	Push-to-Connect	■	■			Ball	Nitrile	-40° to +250° F	300 psi	<b>RF Series</b>
1/4	Push-to-Connect		■		■	Fingers	Nitrile	-40° to +250° F	300 psi	<b>Tool-Mate (PER) (non-marring)</b>
1/4	Push-to-Connect		■		■	Fingers	Nitrile	-40° to +250° F	300 psi	<b>Tool-Mate (PES) (non-marring, exhaust)</b>
<b>Schrader Twist -Lock Interchange Couplings</b>										
1/4 & 1/2	Push-to-Connect	■	■			Cam	Nitrile	-40° to +250° F	300 psi	<b>TL Series</b>
<b>Special Purpose - Natural and Propane Gas Couplings</b>										
1/4 to 1-1/4	Manual Sleeve	■				Ball	Fluorocarbon	32° to +200° F	1/2 psi	<b>GF Series</b>

\* Material Code: B = Brass, S = Steel, SS = Stainless Steel, P = Plastic

**Optional Materials and Features:**  
(add code to part number)

Code	Description	Applies to
prefix <b>B</b>	Brass body	Nipples (std is steel) Couplers (3/8" & 1/2" sizes only)
suffix <b>N</b>	Stainless steel springs, locking balls & brass valves	Couplers (10, 20, 30, 50 & 70 Series)
suffix <b>-SL</b>	Sleeve-Lok	Couplers (10, 20, 30, 50 & 70 Series)
suffix <b>R</b>	Grip Ring sleeve	Couplers (10 & 20 Series)
suffix <b>W</b>	Ethylene Propylene seal material (-65° to + 400° F)	Couplers
suffix <b>Y</b>	Fluorocarbon seal material (-30° to + 400° F)	Couplers

Contact QCD for availability and additional options.  
To select proper seal materials, see Fluid Compatibility Chart or contact QCD.



# Pneumatic Quick Couplings

## General Purpose

# Industrial Interchange Nipples

## A-A-59439, MIL- C-4109F Design

Non-valved, straight through



Parker Industrial Interchange Nipples are compatible for use with 20 Series, 30 Series, HF Series, Universal or E-z-mate couplers. The standard male tip of the pneumatic industry, these nipples are interchangeable with similar nipples manufactured to the same requirements.

### Features:

- Conforms to A-A-59439 (MIL-C-4109F, ISO 6150-B) requirements for global interchangeability
- Steel nipples have hardened wear points and load-bearing areas
- Unvalved style nipple mates with valved couplers

### Applications include:

- Air compressors
- Pneumatic tools
- Drop-down air lines

### Optional Material:

(add code to part number)

Code	Description	Part Number Example
prefix <b>B</b>	Brass body	BH1E

Contact QCD for availability and additional options.

## Nipples- Female Pipe Thread



Body Size	Part Number Brass	Part Number Steel	Part Number Stainless Steel (303)	Thread Size	Length	Exposed Length*	Largest Diameter	Wrench Flats	Weight (lbs.)
1/4	-	H1C	-	1/8-27 NPTF	1.48	0.71	0.58	0.50	0.03
1/4	BH3C	H3C	SH3C	1/4-18 NPTF	1.56	0.80	0.72	0.62	0.05
1/4	-	H3C-E	SH3C-E	3/8-18 NPTF	1.60	0.83	0.94	0.81	0.08
3/8	-	H1E	-	1/4-18 NPTF	1.60	0.69	0.72	0.62	0.06
3/8	BH3E	H3E	-	3/8-18 NPTF	1.72	0.74	0.94	0.81	0.10
3/8	-	H3E-F	-	1/2-14 NPTF	1.89	0.90	1.16	1.00	0.13
1/2	-	H1F	-	3/8-18 NPTF	2.03	0.79	0.94	0.81	0.12
1/2	BH3F	H3F	-	1/2-14 NPTF	2.20	0.83	1.16	1.00	0.19
1/2	-	H3F-G	-	3/4-14 NPTF	2.30	1.05	1.44	1.25	0.26
3/4	-	H3G-F	-	1/2-14 NPTF	2.22	1.06	1.16	1.00	0.23
3/4	-	H3G	-	3/4-14 NPTF	2.18	1.02	1.44	1.25	0.34
3/4	-	H3G-J	-	1-11 1/2 NPTF	2.41	1.25	1.80	1.63	0.47

\* This dimension represents the portion of the nipple that is exposed when the nipple is connected to a Parker 20 Series coupler.



**Nipples- Male Pipe Thread**



Body Size	Part Number Brass	Part Number Steel	Part Number Stainless Steel (303)	Thread Size	Length	Exposed Length*	Largest Diameter	Wrench Flats	Weight (lbs.)
1/4	-	H0C	-	1/8-27 NPTF	1.68	0.92	0.58	0.50	0.05
1/4	BH2C	H2C	SH2C	1/4-18 NPTF	1.66	0.89	0.65	0.56	0.06
1/4	-	H2C-E	SH2C-E	3/8-18 NPTF	1.90	1.14	0.80	0.69	0.07
3/8	-	H00E	-	1/8-27 NPTF	1.68	0.73	0.72	0.62	0.08
3/8	-	H0E	-	1/4-18 NPTF	1.90	0.95	0.72	0.62	0.08
3/8	BH2E	H2E	-	3/8-18 NPTF	1.90	0.95	0.80	0.69	0.09
3/8	-	H2E-F	-	1/2-14 NPTF	2.03	1.09	1.02	0.88	0.15
1/2	-	H0F	-	3/8-18 NPTF	2.20	0.96	0.79	0.69	0.16
1/2	BH2F	H2F	-	1/2-14 NPTF	2.35	1.09	1.01	0.88	0.18
1/2	-	H2F-G	-	3/4-14 NPTF	2.40	1.16	1.22	1.06	0.24
3/4	-	H2G-F	-	1/2-14 NPTF	2.32	1.16	1.16	1.00	0.22
3/4	BH2G	H2G	-	3/4-14 NPTF	2.28	1.12	1.22	1.06	0.28
3/4	-	H2G-J	-	1-11 1/2 NPTF	2.56	1.40	1.52	1.31	0.36

**Nipples- Standard Hose Barb**



Body Size	Part Number Brass	Part Number Steel	Part Number Stainless Steel (303)	Hose I.D.	Length	Exposed Length*	Largest Diameter	Weight (lbs.)
1/4	-	H8C	-	1/4	1.72	0.95	0.46	0.04
1/4	-	-	SH8C	1/4	2.09	1.33	0.56	0.04
1/4	-	H8C-D	-	5/16	1.96	1.20	0.50	0.04
1/4	-	H9C	SH9C	3/8	1.96	1.20	0.50	0.05
3/8	-	H5E	-	3/8	1.85	0.90	0.59	0.07
3/8	-	H6E	-	1/2	2.09	1.14	0.68	0.08
1/2	-	H4F	-	3/8	2.36	1.12	0.66	0.10
1/2	-	H5F	-	1/2	2.36	1.12	0.66	0.11
1/2	-	H5F-G	-	3/4	2.95	1.71	0.87	0.18
3/4	-	H5G-F	-	1/2	2.47	1.31	0.93	0.19
3/4	BH5G	H5G	-	3/4	3.00	1.84	0.93	0.25
3/4	-	H5G-J	-	1	3.24	2.08	1.24	0.36

\* This dimension represents the portion of the nipple that is exposed when the nipple is connected to a Parker 20 Series coupler.



20 Series Pneumatic Couplers mate with Industrial Interchange nipples, the standard male tip of the pneumatic industry. Available options include Sleeve-Lok, stainless steel locking balls and springs, and grip-ring sleeve.

### Features:

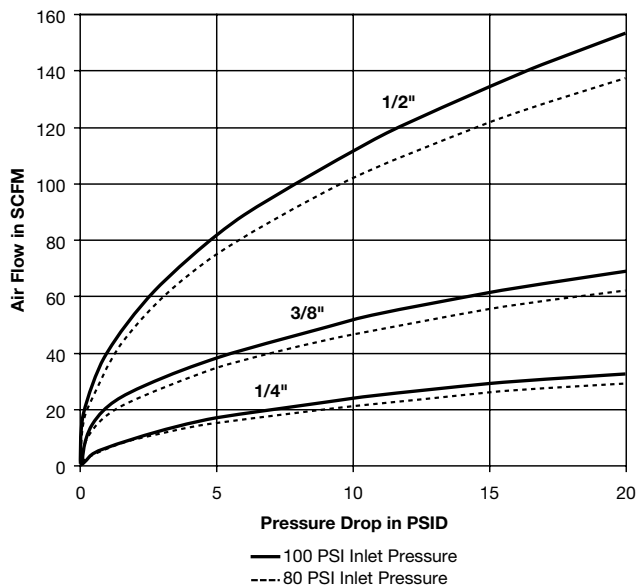
- Mates with Industrial Interchange nipples manufactured to A-A-59439 (MIL-C-4109F, ISO 6150-B) global standards
- 1/4" body size has a brass body and steel valve, 3/8" body size has all steel construction
- Tubular valve delivers high flow with minimal pressure drop
- Integral sleeve guard resists accidental disconnection
- Standard seal is Nitrile

### Applications:

- Air compressors
- Pneumatic tools
- Water
- Grease
- Paint

### Performance

20 Series (1/4", 3/8", 1/2" sizes)



### 20 Series Specifications

Body Size	1/4	3/8	1/2
Rated Pressure (psi)	300		
Temperature Range (std seals)	-40° to +250° F		
Locking Device	4 balls	8 balls	8 balls
Vacuum Data (in. Hg.)	—		
Disconnected (coupler only)	Not Recommended		
Connected	27.4		

### Repair Kits

Body Size	Seal Material	Part No.
1/4	Nitrile	21K
1/4	Ethylene Propylene	21KW
1/4	Fluorocarbon	21KY
3/8	Nitrile	14K
3/8	Ethylene Propylene	14KW
3/8	Fluorocarbon	14KY
1/2	Nitrile	16K
1/2	Ethylene Propylene	16KW
1/2	Fluorocarbon	16KY
3/4	Nitrile	38K
3/4	Ethylene Propylene	38KW
3/4	Fluorocarbon	38KY