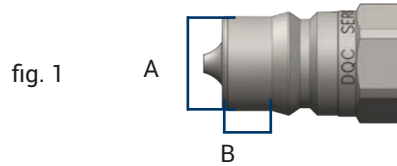


# Quick Coupling Selection Guide

1. Determine the profile (shape) of the plug. Compare your plug shape with the profile chart below to identify the Dixon Quick Coupling pneumatic or hydraulic series.



2. Body size dimension charts can be found within each series section. Measure the **A** (diameter) and **B** (tip length) dimensions to determine the plug body size (figure 1).

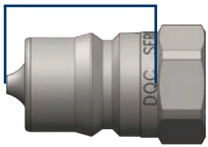







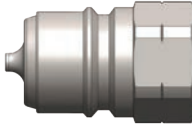













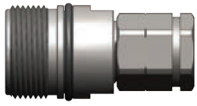


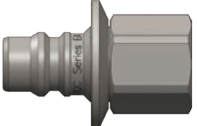
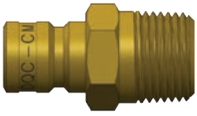


3. Use the industry standard thread chart below (or diagram on page 6) to determine the end connection thread size. If you have a hose barb, the ID measurement of your hose will determine the barb size (figure 2).

Actual Thread OD or ID	3/8"	1/2"	5/8"	3/4"	1"	1-3/8"	1-5/8"	1-29/32"	2-3/8"
Nominal Thread Size	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"



Pneumatic Profile Shape		DF-Series steel • brass • 303 ss	J-Series steel • brass	M-Series steel • brass
		Industrial Interchange page 20	Automotive page 30	ARO 210-310 page 35
<b>CJ-Series</b> steel • brass	<b>SHD-Series</b> steel • aluminum	<b>L-Series</b> steel • brass	<b>U-Series</b> brass	<b>N-Series</b> steel • brass • 303 ss • 316 ss
High-Flow page 39	Twist-Lock page 42	Lincoln page 45	Universal Air page 47	Bowes / Dix-Lock® page 49
<b>P-Series</b> steel • brass • 303 ss	<b>NK-Series</b> steel	<b>BR-Series</b> brass	<b>A-Series</b> steel • brass	<b>SCV-Series</b> brass
Thor / Dual-Lock page 57	Japanese Industrial page 61	21 Series page 63	Compact page 65	Safety Check Valve page 68

<p><b>Hydraulic Profile Shape</b></p> 	<p><b>H-Series</b> steel • brass • 303 ss • 316 ss</p>  <p>ISO7241-B page 70</p>	<p><b>H-BOP-Series</b> steel • 316 ss</p>  <p>ISO7241-B BOP page 80</p>	<p><b>HS-Series</b> steel • brass • 303 ss</p>  <p>ISO7241-B Steam page 82</p>	<p><b>CNG-Series</b> 303 ss</p>  <p>Oasis 300 page 85</p>
<p><b>K-Series</b> steel • 316 ss</p>  <p>ISO7241-A page 87</p>	<p><b>AG-Series</b> steel</p>  <p>Agricultural page 93</p>	<p><b>V-Series</b> steel • brass • 316 ss</p>  <p>MIL-C-51234 page 98</p>	<p><b>TR-Series</b> steel</p>  <p>European page 115</p>	<p><b>HT-Series</b> steel • 316 ss</p>  <p>Correct Connect® ISO16028 page 117</p>
<p><b>HTE-Series</b> steel</p>  <p>ISO16028 Connect Under Pressure Plug pages 125</p>	<p><b>HTZ-Series</b> steel</p>  <p>ISO16028 Connect Under Pressure Coupler page 128</p>	<p><b>HT-AG-Series</b> steel</p>  <p>ISO16028 - AG ISO7241-A page 129</p>	<p><b>XK-Series</b> steel</p>  <p>10K Flushface page 130</p>	<p><b>ST-Series</b> steel • 316 ss</p>  <p>Heavy-Duty Flushface page 132</p>
<p><b>PD-Series</b> steel</p>  <p>ISO15171-1 Test page 138</p>	<p><b>VEP-Series</b> steel • 316 ss</p>  <p>Threaded Flushface page 140</p>	<p><b>VEP-BOP-Series</b> steel</p>  <p>Threaded Flushface BOP page 145</p>	<p><b>W-Series</b> steel • brass</p>  <p>Wingstyle page 147</p>	<p><b>WS-Series</b> steel • 316 ss</p>  <p>Heavy-Duty Wingstyle page 152</p>
<p><b>WS-BOP-Series</b> steel • 316 ss</p>  <p>Heavy-Duty Wingstyle BOP page 158</p>	<p><b>T-Series</b> steel • 316 ss</p>  <p>10K Threaded page 160</p>	<p><b>CVV-Series</b> steel</p>  <p>Euro-Threaded ISO14541 page 163</p>	<p><b>TD-Series</b> 316 ss</p>  <p>15K and 20K Threaded page 167</p>	<p><b>E-Series</b> steel • brass • 303 ss</p>  <p>Straight-Through page 169</p>
<p><b>EA-Series</b> steel</p>  <p>Water Blast page 175</p>	<p><b>CM-Series</b> brass and steel</p>  <p>Mold Coolant page 177</p>			

## Cross Reference Tool

Competitor Series or Standard	Manufacturer	Dixon Series	Page(s)
10000-Series	TEMA	TR-Series	115
1000-Series	Hansen	F-Series	20
10-Series	Parker	J-Series	30
1110-Series	Tomco	L-Series	45
13-Series	Rectus	NK-Series	61
20-Series	Parker	F-Series	20
210/310	Foster	M-Series	35
210/310	Hansen	M-Series	35
210/310	Milton	M-Series	35
21KA	Rectus	BR-Series	63
223-Series	CEJN	BR-Series	63
25KA	Rectus	CJ-Series	39
26KA	Rectus	CJ-Series	39
27KA	Rectus	CJ-Series	39
3000-Series	Hansen	D-Series	20
3000-Series	Parker/Pioneer	T-Series	160
30-Series	Parker	D-Series	20
300-Series	Oasis	CNG-Series	85
315-Series	CEJN	NK-Series	61
320-Series	CEJN	CJ-Series	39
3800-Series	TEMA	TR-Series	115
3FFH-Series	Faster	HTE-Series	125
3-Series	Foster	DF-Series	20
4000 Series	Parker/Pioneer	AG-Series	93
4000-Series	Hansen	D-Series	20
400-Series	Hansen	F-Series	20
410-Series	CEJN	CJ-Series	39
4-Series	Foster	DF-Series	20
5000-Series	Hansen	D-Series	20
5000-Series	TEMA	TR-Series	115
500-Series	Hansen	F-Series	20
50-Series	Parker	M-Series	35
51000-Series	Bowes	N-Series	49
5100-Series	Eaton/Aeroquip	W-Series	147
525-Series	CEJN	TR-Series	115
55KM	Rectus	J-Series	30
56-Series	Snap-Tite	EA-Series	175
5-Series	Foster	DF-Series	20
5TV/6TV-Series	Hydraulics Inc	WS-Series	152
6000-Series	Hansen	D-Series	20

Competitor Series or Standard	Manufacturer	Dixon Series	Page(s)
60-Series	Parker	H-Series	70
60-Series	Snap-Tite	AG-Series	93
60-Series Steam	Parker	HS-Series	82
6100-Series	Foster	W-Series	147
6100-Series	Parker	W-Series	147
61-Series	Snap-Tite	K-Series	87
6600-Series	Parker	K-Series	87
6-Series	Foster	DF-Series	20
70-Series	Parker	L-Series	45
71-Series	DNP	ST-Series	132
71-Series	Snap-Tite	ST-Series	132
72-Series	Snap-Tite	H-Series	70
74-Series	Snap-Tite	HT-Series	117
7500-Series	TEMA	TR-Series	115
75-Series	Snap-Tite	WS-Series/ WS-BOP- Series	152 and 158
76-Series	Snap-Tite	T-Series	160
78-Series	Snap-Tite	W-Series	147
A2100/PT400	Tomco	J-Series	30
A-A-50431A	U.S. Government	N-Series	49
A-A-59439	U.S. Government	DF-Series	20
ANV-Series	DNP	K-Series	87
ANV-Series	Faster	K-Series	87
APM-Series	Stucchi	HTE-Series	125
ARO	Interchange	M-Series	35
A-Series	National	P-Series	57
A-Series	Stucchi	HT-Series	117
Auto-Flo 23	Hansen	U-Series	47
Automotive	Interchange	J-Series	30
BIR-Series	Stucchi	K-Series	87
Bowes	Interchange	N-Series	49
B-Series	National	N-Series	49
C604	Enerpac	T-Series	160
Correct Connect®	Trademark	HT-Series	117
CQD-Series	Spir Star	TD-Series	167
CRS-Series	DNP	TD-Series	167
CS-Series	Nycoil	SHD-Series	42
CVV-Series	Faster	CVV-Series	163
Dixlock	Trademark	N-Series	49

Competitor Series or Standard	Manufacturer	Dixon Series	Page(s)
Double Lock	Campbell	P-Series	57
D-Series	DNP	PD-Series	138
Dual-Lock	Trademark	P-Series	57
European Screw-Together	Interchange	CVV-Series	163
European	Nycoil	CJ-Series	39
European High-Flow	Interchange	CJ-Series	39
FB-Series	Faster	W-Series	147
FD45	Eaton/Aeroquip	H-Series	70
FD56 (5600) Series	Eaton/Aeroquip	K-Series	87
FD69-Series	Eaton/Aeroquip	EA-Series	175
FD85-Series	Eaton/Aeroquip	WS-Series	152
FD89-Series	Eaton/Aeroquip	HT-Series	117
FD90-Series	Eaton/Aeroquip	PD-Series	138
FD96-Series	Eaton/Aeroquip	VEP-Series	140
FEC-Series	Parker	HTE-Series	125
FEM-Series	Parker	HT-Series	117
FET-Series	Parker	VEP-Series	140
FF49-Series	Safeway	HT-Series	117
FFEC49-Series	Safeway	HTE-Series	125
FF-GP Series	DNP	HT-Series	117
FFK-Series	DNP	HTE-Series	125
FFN/FFI/2FFN/2FFI	Faster	HT-Series	117
FF-Series	Hansen	HT-Series	117
FF-Series	Parker	HT-Series 3/8" only	117
FHK-Series	Foster	H-Series	70
FH-Series	Voswinkel	HTE-Series	125
FIH/FH	Foster	V-Series	98
FIRG	Stucchi	HT-Series	117
FJT-Series	Foster	CM-Series	177
Flo-Temp	Hansen	CM-Series	177
FSI-BOP-Series	DNP	VEP-BOP-Series	145
FS-Series	Hansen	SCV-Series	68
FST-Series	Foster	E-Series	169
FT-Series	Voswinkel	VEP-Series	140
FVEP-Series	Foster	VEP-Series	140
H/IH-Series	Snap-Tite	V-Series	98
HA15000	Hansen	K-Series	87
HCP-Series	Holmbury	HTE-Series	125

Competitor Series or Standard	Manufacturer	Dixon Series	Page(s)
HFB-Series	Holmbury	E-Series	169
HFT-Series	Holmbury	VEP-Series	140
High Pressure Screw-Together	Interchange	T-Series	160
HKFR-Series	Eaton/Hansen	H-BOP-Series	80
HK-Series	Hansen	H-Series	70
HNV-BOP-Series	DNP	H-BOP-Series	80
HNVFR-Series	Faster	H-BOP-Series	80
HNV-Series	DNP	H-Series	70
HNV-Series	Faster	H-Series	70
HQ-Series	Holmbury	HT-Series	117
HSS-Series	Holmbury	HT-Series	117
HTN-Series	Holmbury	V-Series	98
IA/IAZ-Series	Holmbury	K-Series	87
IA-Series	Voswinkel	K-Series	87
IB/IBZ-Series	Holmbury	H-Series	70
IB-Series	Voswinkel	H-Series	70
Industrial	Interchange	DF-Series	20
IRB/IRBO/IRBX Series	Stucchi	H-Series	70
IRC-Series	Stucchi	TR-Series	115
IR-Series	Stucchi	AG-Series	93
ISO14540	ISO Standard	T-Series	160
ISO14541	ISO Standard	CVV-Series	163
ISO15171-1	ISO Standard	PD-Series	138
ISO16028	ISO Standard	HT-Series	117
ISO5675	ISO Standard	AG-Series	93
ISO6150B	ISO Standard	DF-Series	20
ISO7241-A	ISO Standard	K-Series	87
ISO7241-B	ISO Standard	H-Series	70
IVHP-Series	Stucchi	T-Series	160
Japanese Industrial	Interchange	NK-Series	61
JS-Series	DME	CM-Series	177
LC-Series	Holmbury	WS-Series	152
Lincoln	Interchange	L-Series	45
MC-Series	Tomco	CM-Series	177
Megaflow	Coilhose	CJ-Series	39
MIL-C-3486	Military Spec	N-Series	49
MIL-C-4109F	Military Spec	DF-Series	20

## Cross Reference Tool

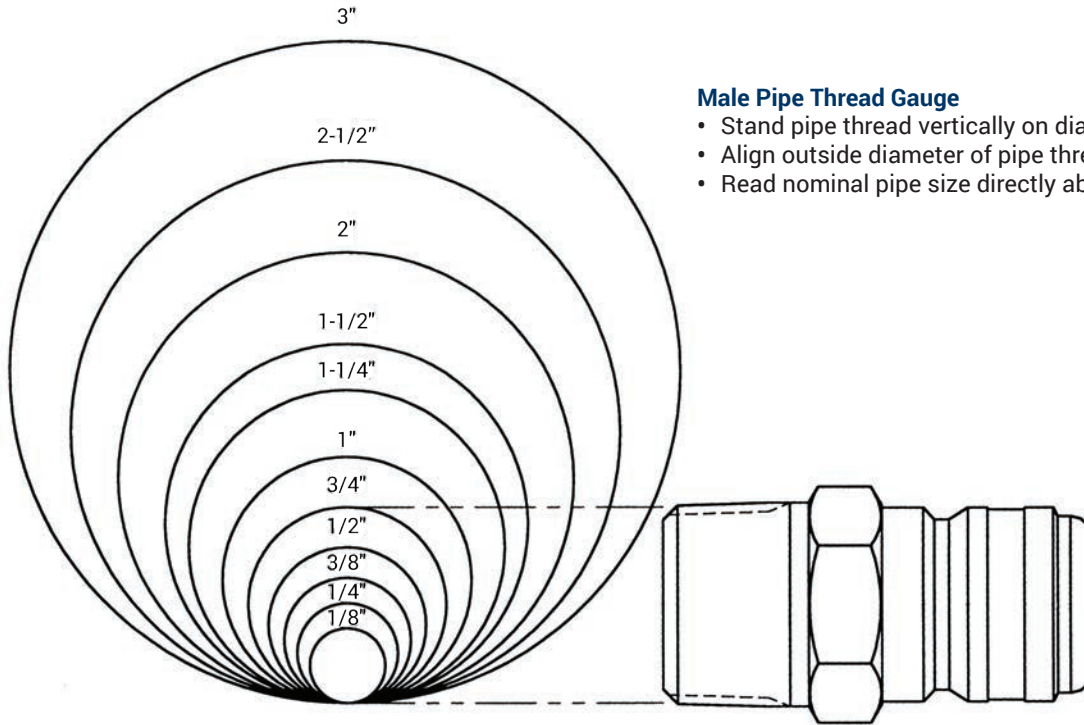
Competitor Series or Standard	Manufacturer	Dixon Series	Page(s)
Mil-C-51234	Military Spec	V-Series	97
Mold Coolant	Interchange	CM-Series	177
Moldmate	Parker	CM-Series	177
MPX-Series	Staubli	HT-Series	117
MQS-A Series	Manuli	K-Series	87
MQS-B Series	Manuli	H-Series	70
MQS-D Series	Manuli	PD-Series	138
MQS-F Series	Manuli	HT-Series	117
MQS-FP Series	Manuli	HTE-Series	125
MQS-SC Series	Manuli	T-Series	160
Ni-Cupla	Nitto Kohki	NK-Series	61
NS-Series	DNP	AG-Series	93
NS-Series	Faster	AG-Series	93
NS-Series/Jiffy-Tite	DME	CM-Series	177
NV-Series	Faster	AG-Series	93
OGF-Series	Faster	ST-Series	132
OGVFR-Series	Faster	WS-BOP-Series	158
OGV-Series	Faster	WS-Series	152
PD-Series	Parker	PD-Series	138
PHC-Series	Thor	P-Series	57
Pioneer Agricultural	Interchange	AG-Series	93
PSB/PSP-Series	Holmbury	T-Series	160
PST4/FSI Series	DNP	VEP-Series	140
PVM-Series	DNP	T-Series	160
PVV3-Series	DNP	CVV-Series	163
PVV3-Series	DNP	CVV-Series	163
PVVM/PVSM-Series	Faster	T-Series	160
Quick-Action	MacDonald	N-Series	49
S10-Series	Safeway	H-Series	70
S20-Series	Safeway	AG-Series	93
S30-Series	Safeway	T-Series	160
S51-Series	Safeway	W-Series	147
S56-Series	Safeway	K-Series	87
Schrader	Interchange	SHD-Series	42
Screw Type	Jet Stream	TD-Series	167
SC-Series	Tomco	BR-Series	63
SHD-Series	Foster	SHD-Series	42
SH-Series	Stucchi	V-Series	98
Single Lock	Campbell	N-Series	49

Competitor Series or Standard	Manufacturer	Dixon Series	Page(s)
STG-Series	Inteva	CVV-Series	163
Straight-Through	Interchange	E-Series	169
ST-Series	DNP	E-Series	169
ST-Series	Hansen	E-Series	169
ST-Series	Parker	E-Series	169
ST-Series	Tomco	E-Series	169
TEMA European	Interchange	TR-Series	115
TF-Series	Foster	J-Series	30
Thor	Interchange	P-Series	57
TL-Series	Parker	SHD-Series	42
TL-Series	Tomco	SHD-Series	42
TNL-Series	Faster	V-Series	98
TNV-Series	DNP	V-Series	98
TNV-Series	Faster	V-Series	98
Tru-Flate	Eaton/Hansen	J-Series	30
Tru-Flate	Hoffmann	J-Series	30
Twist-Lock	Schrader	SHD-Series	42
Type B	Amflo	M-Series	35
Type-17	Coilhose	L-Series	45
Type-HS	Voswinkel	CVV-Series	163
UC-Series	Coilhose	U-Series	47
UC-Series	Parker	U-Series	47
VD-Series	Stucchi	CVV-Series	163
VEP-HD Series	Stucchi	VEP-Series/ VEP-BOP-Series	140 and 145
VEP-P Series	Stucchi	VEP-Series/ VEP-BOP-Series	140 and 145
VFF-HD BOP-Series	DNP	WS-BOP-Series	158
VFF-HD Series	DNP	WS-Series	152
VFF-Series	DNP	W-Series	147
VOF-Series	Stucchi	WS-Series	152
Water-Blast	Interchange	EA-Series	175
WB-Series	DNP	EA-Series	175
WB-Series	Parker	EA-Series	175
Wing Style	Stucchi	W-Series	147
WS56000	Hansen	T-Series	160
WSC-Series	Holmbury	W-Series	147
X64-Series	CEJN	HTE-Series	125
X65/X66-Series	CEJN	HT-Series	117





### Male / Female Pipe (NPTF) Thread Identification



**Male Pipe Thread Gauge**

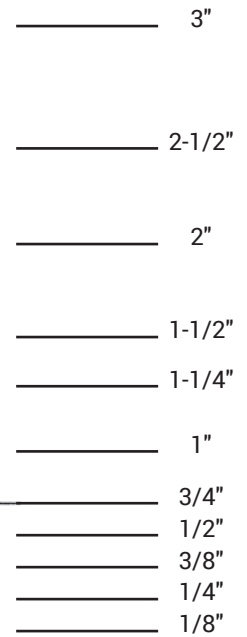
- Stand pipe thread vertically on diagram
- Align outside diameter of pipe thread with matching circle
- Read nominal pipe size directly above circle

Example: 3/4" male pipe  
(Dixon end size = 6)

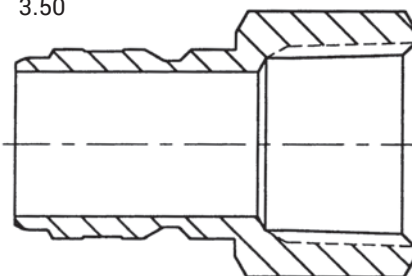
**Female Pipe Thread Gauge**

- Hold pipe thread against scale on edge of page
- Align one side of pipe thread with illustration base line
- Read nominal pipe size directly from scale

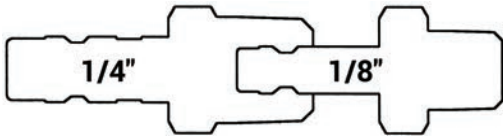
Nominal Pipe Size (inches)	Dixon End Size	Nominal Thread Size (inches)	Nominal Pipe Size (inches)
1/8	1	1/8 - 27	0.41
1/4	2	1/4 - 18	0.54
3/8	3	3/8 - 18	0.68
1/2	4	1/2 - 14	0.84
3/4	6	3/4 - 14	1.05
1	8	1-11 - 1/2	1.32
1-1/4	10	1-1/4 - 11-1/2	1.66
1-1/2	12	1-1/2 - 11-1/2	1.90
2	16	2 - 11-1/2	2.38
2-1/2	20	2-1/2 - 8	2.88
3	24	3 - 8	3.50



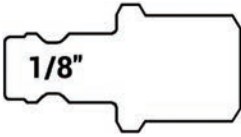
Example: 3/4" female pipe  
(Dixon end size = 6)



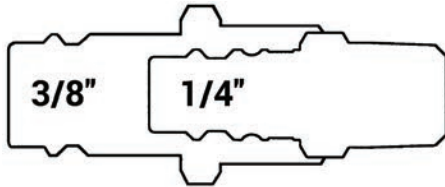
Base line for all sizes



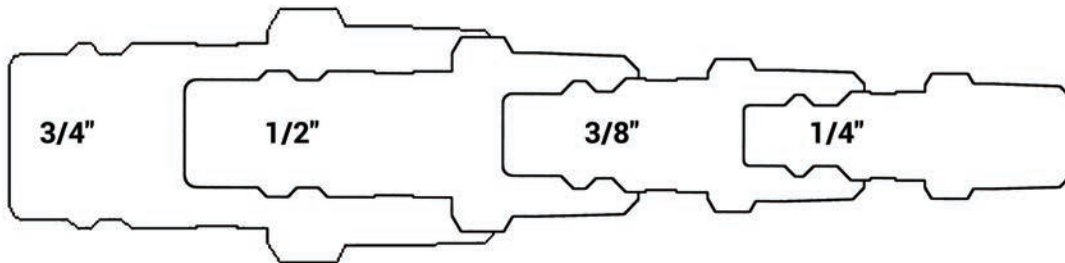
**A-Series**



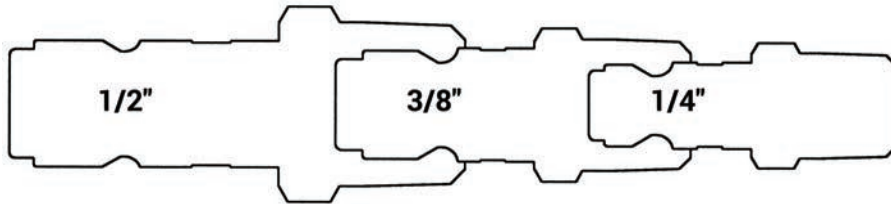
**BR-Series**



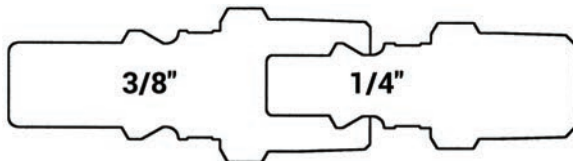
**CJ-Series**



**DF-Series**



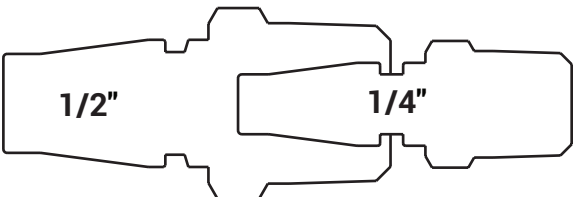
**J-Series**



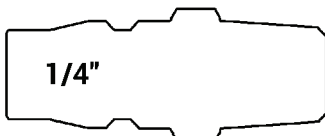
**M-Series**



**L-Series**



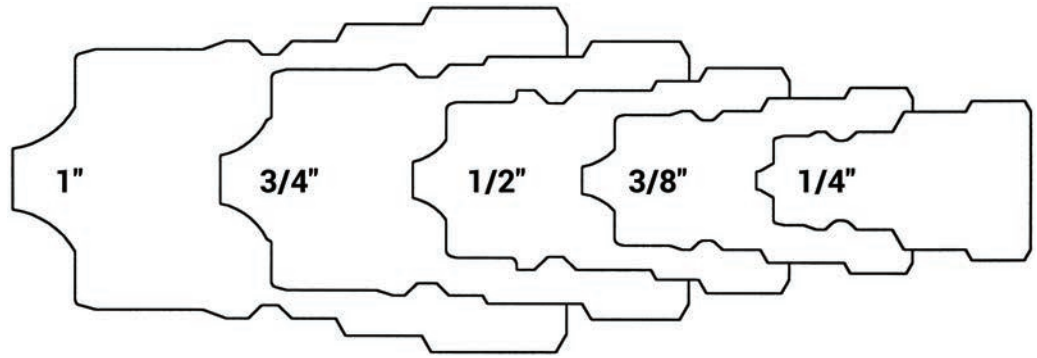
**SHD-Series**



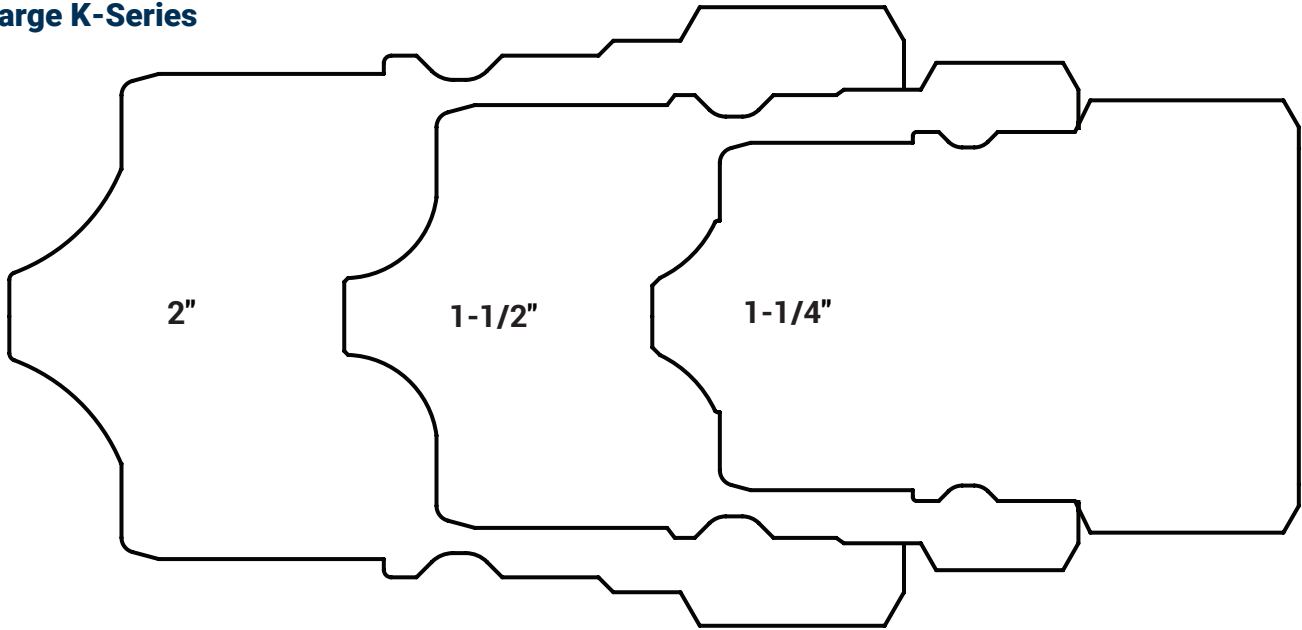
**NK-Series**



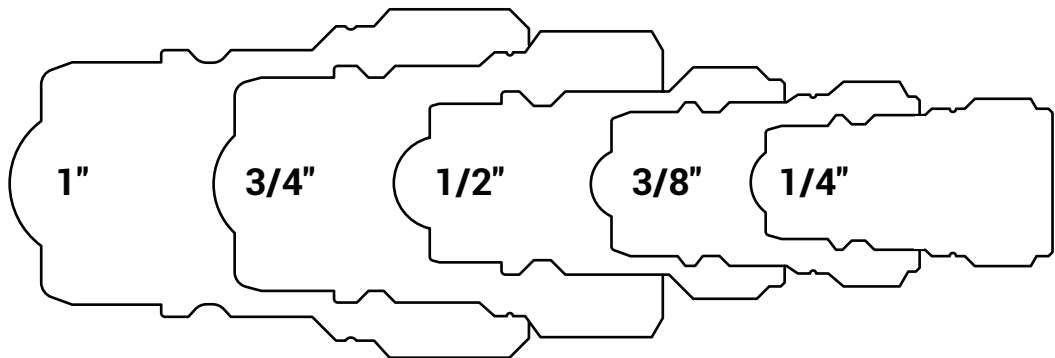
**K-Series**



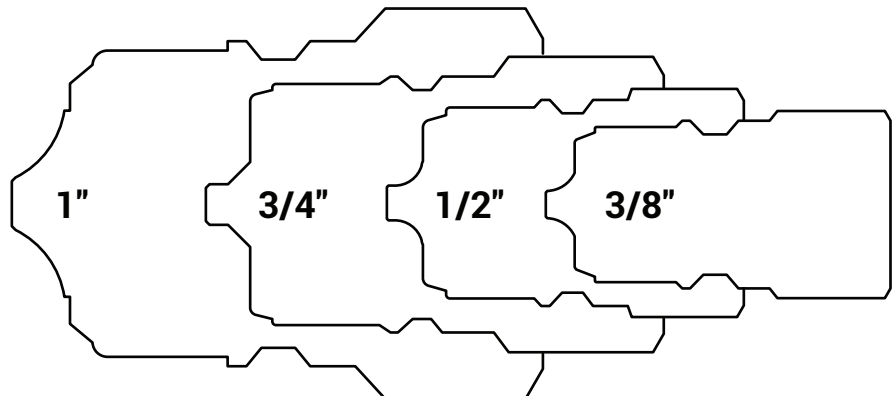
**Large K-Series**

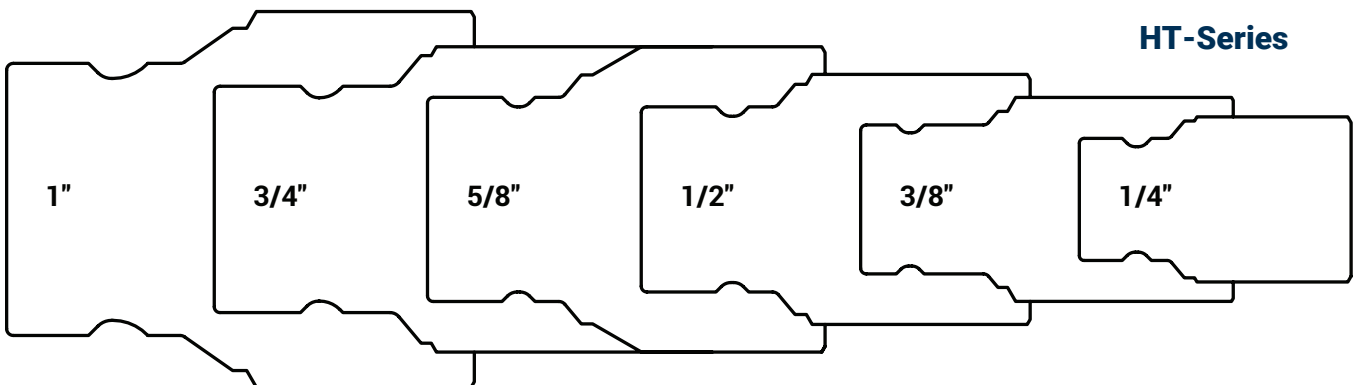
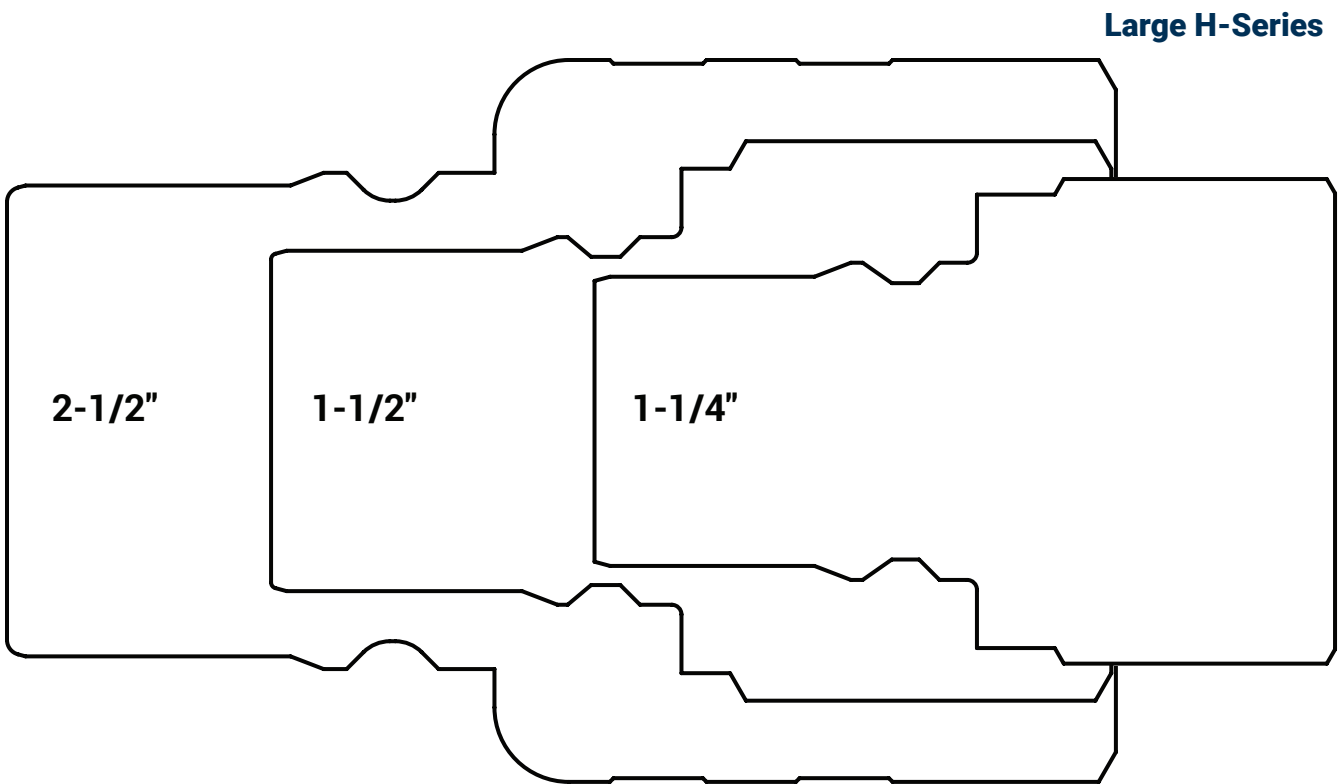
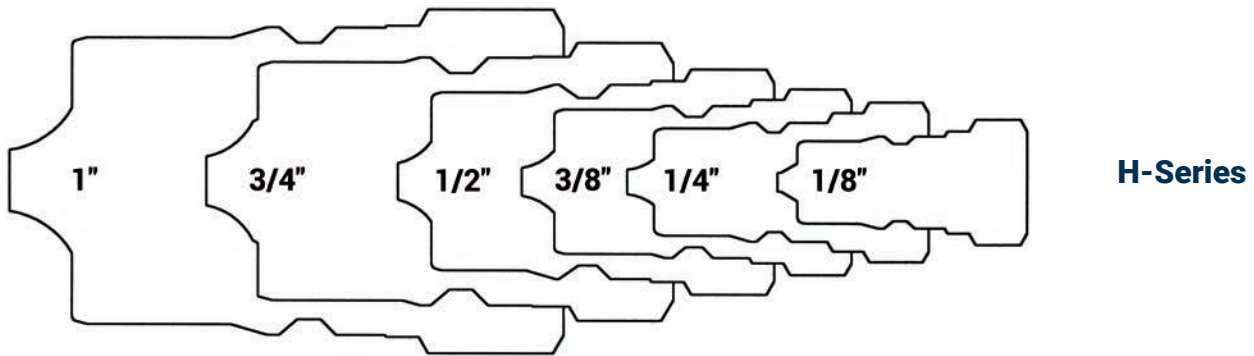


**AG-Series**

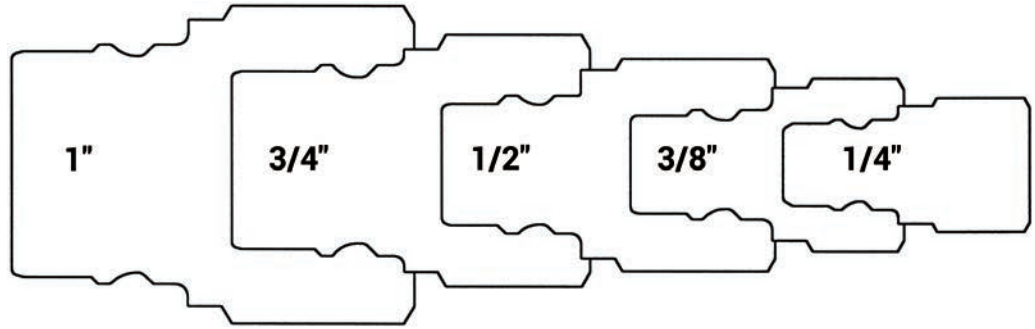


**TR-Series**

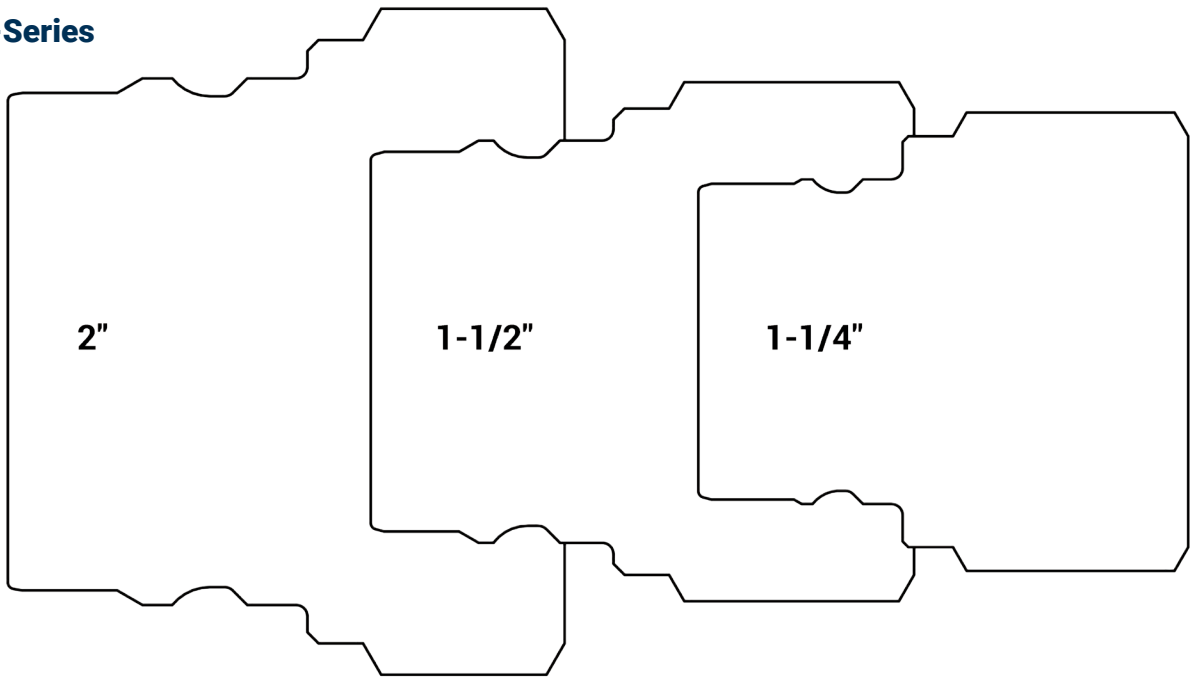




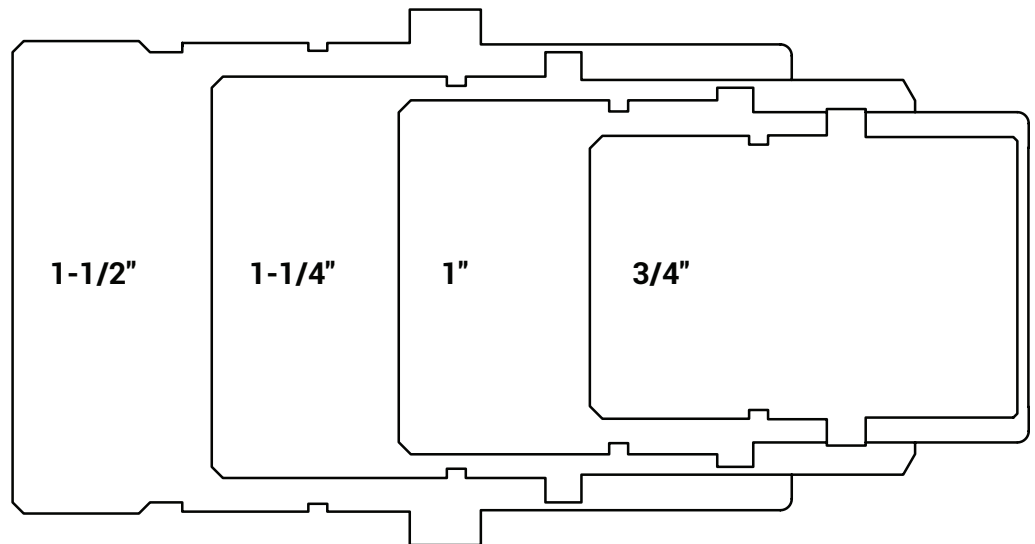
**V-Series**

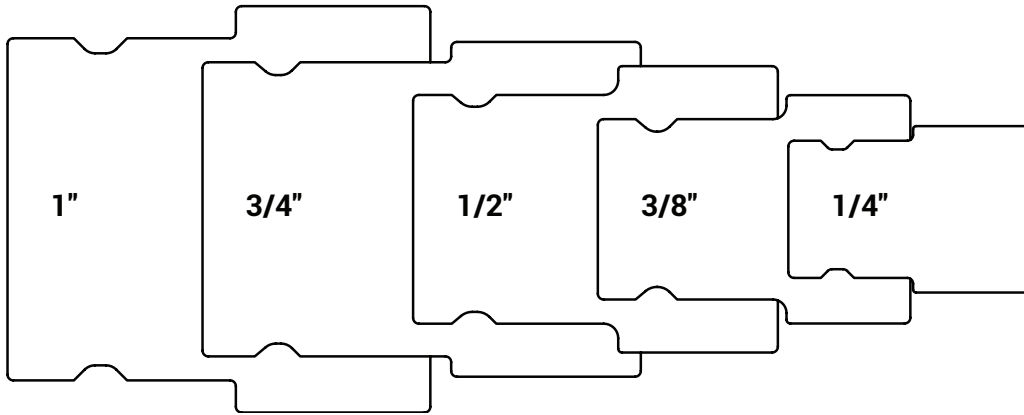


**Large V-Series**

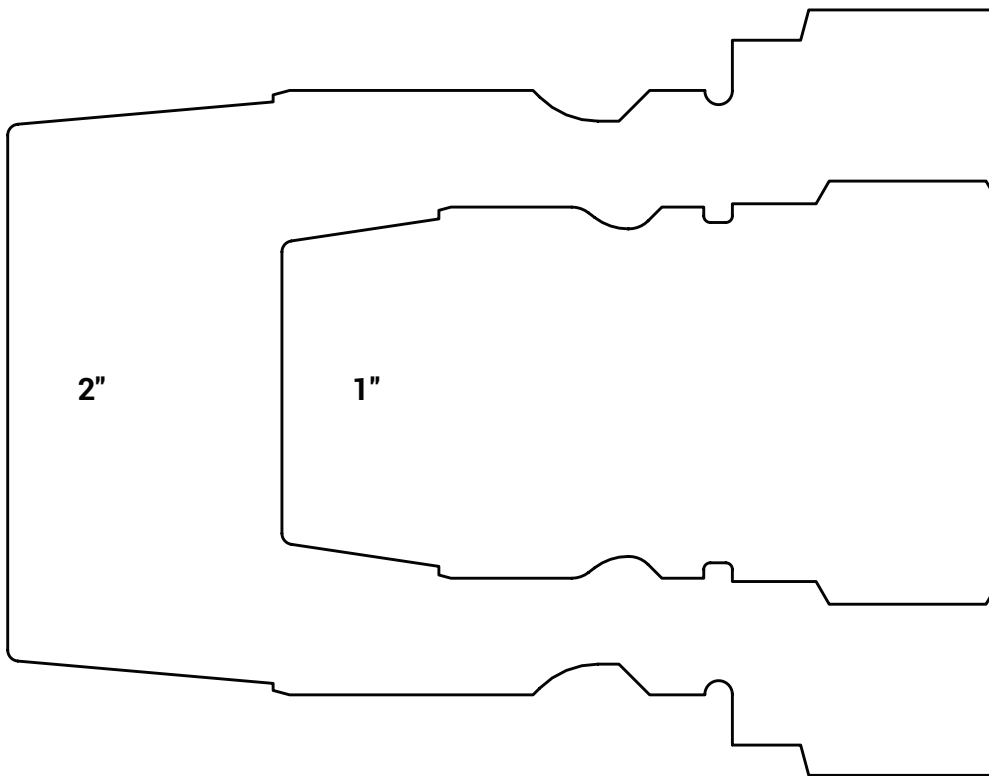


**W-Series**

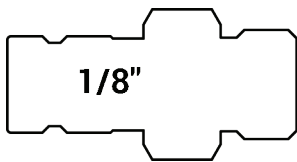




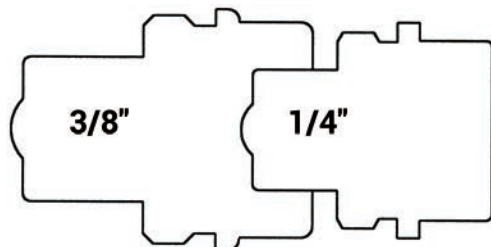
**ST-Series**



**Large ST-Series**

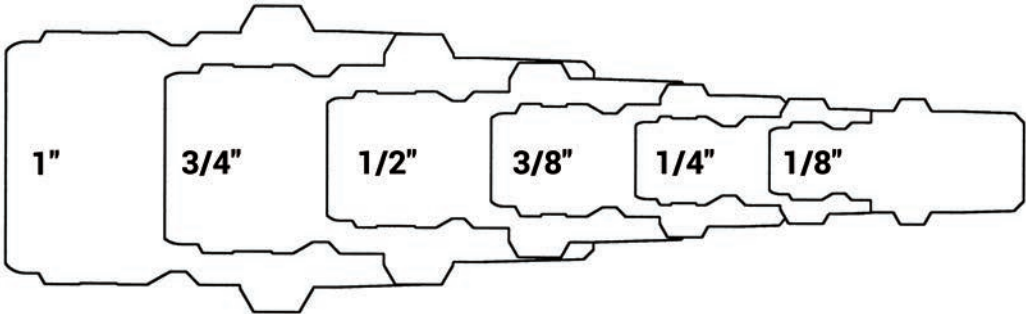


**PD-Series**

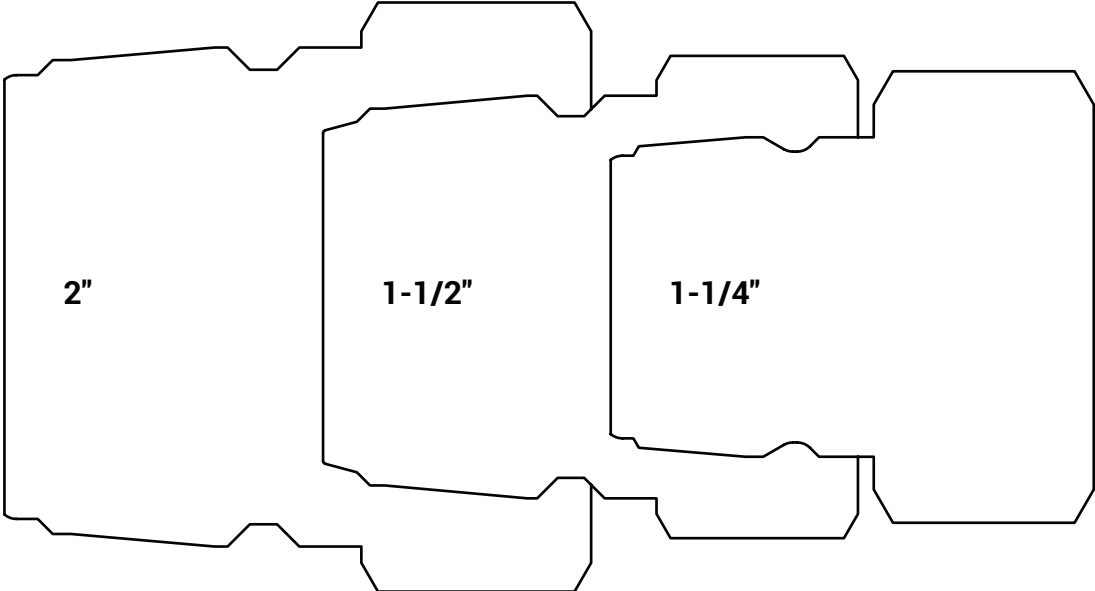


**T-Series**

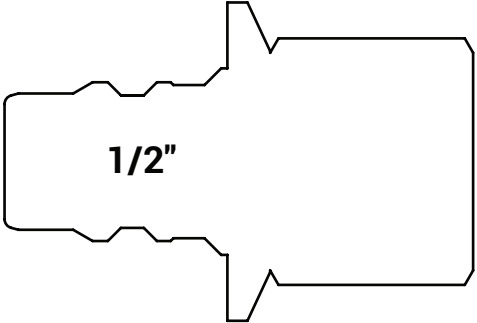
**E-Series**



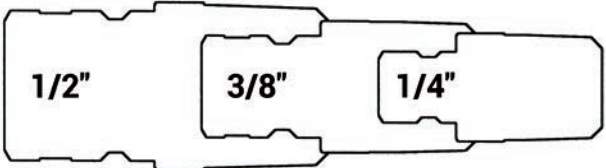
**Large E-Series**



**EA-Series**



**CM-Series**



## Be Safe When Selecting Quick Couplings

**!** All quick disconnect couplings should be viewed as potential hazards that can cause property damage, personal injury or even death if used or installed improperly. Improper use includes selecting a product unsuitable for your application, installing or using the product incorrectly, and/or ignoring signs of imminent failure or misuse. Failure may result in explosive propulsion of components, rapid expulsion of hazardous media, and failure or unintentional movement of a fluid-powered component.

### Proper Selection of Quick Disconnect Couplings

The very properties that make a compressed media useful in almost every area of modern life can also make it dangerous when mishandled. Dixon quick disconnect couplings have been carefully engineered to meet specific industry requirements while maintaining abundant safety margins. If quick disconnect couplings are not used in the correct applications or are incorrectly applied, accidents and downtime can result. It is up to the end user to inform the distributor of the application and pressures involved when ordering quick disconnect couplings, and it is up to the distributor to supply the right coupling for the application.

The use of S.T.A.M.P.E.D. will help in the proper selection of quick disconnect coupling products. When in doubt, Dixon will provide information, including test results (if available), coupling recommendations, and other data to help resolve quick disconnect coupling related issues.

### S.T.A.M.P.E.D. Questions and Selection Process

- Size** Couplings should be selected to handle the flow and pressure requirements of the system. Excessive pressure drop will result in restricted flow, slower actuation, higher fluid velocity, heat generation, and eventually a breakdown of fluids, seals, and components.
1. What size coupler is required?
  2. What is the maximum allowable pressure drop for the application?
  3. Are there any size restrictions due to a 'tight-spot' installation?
- Temperature** Media and ambient temperatures must be limited to the specific operating parameters of the selected sealing materials. Excessive cold will reduce sealing capability, while excessive heat can cause the premature breakdown of body and valve seals.
1. What is the media/fluid temperature?
  2. What is the ambient temperature?
  3. Are there any 'flash' heat or fire sources near the connection?
- Application** Quick coupling interchangeability needs to be closely reviewed. There are several instances where non-interchangeable couplers and plugs may connect. This is very dangerous and these couplings should never be pressurized. Be sure to match like series couplers and plugs.
1. Is an industry interchange coupler required?
  2. What are the functional requirements of the coupling?
  3. Have there been any problems with other couplings in this application?
- Media** Quick disconnect couplings are available with a variety of body materials and seal options. Exposure to harsh and corrosive operating environments may reduce service life. Several quick couplings spill fluid upon disconnection, which may be a safety concern.
1. Which seal and body materials are compatible with the system fluid?
  2. Is air inclusion, system contamination, or fluid loss a concern?
  3. Is this fluid dangerous to the operator?
- Pressure** During the selection process, the published working pressure of the coupling must be equal to or greater than the maximum system pressure. Surge pressures in a fluid power system, higher than the rated pressure, will shorten the service life of the coupling.
1. Is the pressure 'static' or 'dynamic'?
  2. What is the maximum operating pressure required for the application?
  3. Are there any pressure spikes in the system?
- Ends** Many end configurations are available and each one has specific operating parameters. For example, the working pressure of couplings utilizing hose barb or collar hose barb end connections may be dramatically reduced. If in doubt, test under controlled conditions for suitability to the application.
1. What end configuration and size is required? (male threaded, female threaded, or hose barb)
  2. Does the chosen end configuration support the application parameters and system pressure?
  3. What is the ideal valving configuration? (single shut-off, double shut-off, or unvalved)
- Details** Forgotten or missed application details can cause a failure if not properly addressed. Be meticulous in the assessment of your application to ensure that all parameters are considered in the selection of the proper quick disconnect coupling.
1. Are there any side-load, vibration, or swivelling problems associated with the application?
  2. Does the coupling require a safety sleeve-lock mechanism?
  3. Are there any environmental concerns that need to be addressed?



**!** Quick disconnect couplings can fail without warning. Prior to the operation of quick coupling products, be sure to inspect and replace worn out fittings and safety devices. If a leak is detected during operation, release the pressure from the circuit before investigating the cause of the fluid leak. Do not use your fingers or skin to check for leaks. High-pressure leaks of fluids can easily penetrate the skin and can cause serious injury or death.

### Safe Quick Coupling Practices

1. Always wipe the coupling cavities and faces clean before connecting a coupling.
2. Connect coupling before installation to ensure that it works properly.
3. Always check the body seals before connecting a coupling.
4. Shut off power source before connecting a coupling.
5. Always install a safety check valve on a pneumatic line and/or compressor.
6. Always use a safety cable on large air lines (1/2" lines and larger).
7. Always use a whip hose on hydraulic or air tools.
8. Use dust caps or plugs when couplings are not in use.
9. If the locking sleeve is inoperable, check the safety lock.
10. Wear eye protection while connecting or disconnecting a coupling.

### Unsafe Quick Coupling Practices

1. Never hit coupling valves to release trapped pressure.
2. Never leave couplings in the path of moving equipment.
3. Never use couplings near a welder, flash heat, or fire/flare sources.
4. Never use API modified sealants or over-apply PTFE tape during installation.
5. Use care if you must install quick couplings onto black iron pipe.
6. Never hit a coupling sleeve with a hammer or blunt object.
7. Never overtighten a coupling connection.
8. Never rotate a quick disconnect coupling under pressure.
9. Do not over-pressurize quick disconnect couplings.
10. Never use a hose with a quick disconnect coupling to lift a tool.

### OSHA Regulations Ensure Operator Safety



Safety King Cable®



Safety Check Valves

#### Standard - 29 CFR, 1926.302 (partial):

(b)(1) Pneumatic power tools shall be secured to the hose or whip by some positive means to prevent the tool from becoming accidentally disconnected.

(b)(2) Safety Clips or retainers shall be securely installed and maintained on pneumatic impact (percussion) tools to prevent attachments from being accidentally expelled.

(b)(4) Compressed air shall not be used for cleaning purposes except where reduced to **30 PSI** and then only with effective chip guarding and personal protective equipment which meets the requirements of Subpart E of this part. The **30 PSI** requirement does not apply for concrete form, mill scale, and similar cleaning purposes.

(b)(5) The manufacturer's safe operating pressure for hoses, pipes, valves, filters and other fittings shall not be exceeded.

(b)(6) The use of hoses for hoisting or lowering tools shall not be permitted.

(b)(7) All hoses exceeding 1/2" inside diameter shall have a safety device at the source of supply or branch line to reduce pressure in case of hose failure.

#### Standard - 29 CFR, 1926.603 (partial):

(a)(9) Steam hose leading to a steam hammer or jet pipe shall be securely attached to the hammer with an adequate length of at least 1/4" diameter chain or cable to prevent whipping in the event the joint at the hammer is broken. Air hammer hoses shall be provided with the same protection as required for steam lines.

(a)(10) Safety chains, or equivalent means, shall be provided for each hose connection to prevent the line from thrashing around in case the coupling becomes disconnected.

*The regulations may be viewed in full on the OSHA website, [osha.gov](http://osha.gov). Please check the website for updates.*

### Be Safe When Installing Quick Couplings

**!** All quick disconnect couplings should be viewed as potential hazards that can cause property damage, personal injury, or even death if used or installed improperly.

Couplings should be installed in a location that will allow easy operation of the coupling and accessibility for all necessary installation tools. Care should be given to consider operator safety, especially if spillage upon disconnection could result in fluid ignition or skin and eye irritation.

Only apply wrenches to the hex or machined wrench flats that are provided for assembly purposes, nowhere else. Never clamp on the sleeve of the coupler or the nose of the plug as this will cause distortion and/or damage.

Finally, always test quick coupling installations before putting into operation by pressurizing the unit to 150% of the working pressure in an enclosed/protective environment.

#### Installation of Tapered Thread Connections (NPTF)

The seal for NPTF threads is created by the metal-to-metal contact between the roots and crests of the male and female threads. Using too much PTFE tape or pairing liquid sealant with PTFE tape may cause distortion, poor thread engagement, or cracking of the coupling during assembly.

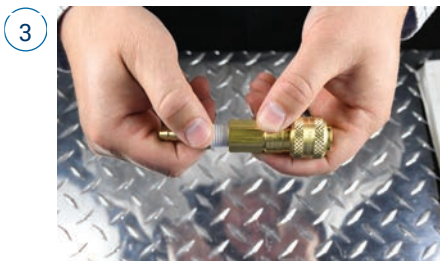
The total number of tapered threads engaged should be between 3-1/2 to 6. Any number of threads outside this range may indicate either under-or-over-tightening of the joint or out-of-tolerance threads. After assembly of an NPTF thread connection, always proof-test the connection before operating the system. If the joint proves to be inadequately tightened during proof-pressure testing, tighten it further in 1/8 turn increments until a reliable seal is attained. (Do not exceed 3 turns from finger tight (TFFT))



Apply 1-1/2 to 2 wraps of PTFE tape, starting one or two threads from the lead edge, in a clockwise direction. For 316 stainless steel, be sure to use stainless grade tape.



Check threads to make sure there is no obvious damage on either half and that tape is properly installed. Align male and female threaded connections and carefully begin threading the two halves together.



Finger tighten the connection and create a reference mark on the hex of the hose end/adaptor and the coupling. This mark will help identify the number of revolutions during the next step in the procedure.



With even and smooth force applied, wrench tighten according to the TFFT values listed below. DO NOT OVERTIGHTEN.

SAE Size	NPTF Thread Size	TFFT
-4	1/4" - 18	2
-6	3/8" - 18	2
-8	1/2" - 14	2
-12	3/4" - 14	1.5
-16	1" - 11-1/2	1.5

## Be Safe When Installing Quick Couplings

### Installation of O-ring Boss (ORB) Connections

1



Lightly lubricate the O-ring on the adapter and thread it into the coupling. Hand-tighten, ensuring that the O-ring is not pinched during installation.

2



Wrench tighten the connection to the appropriate torque specification, as shown in the chart below.

SAE Size	Thread Size	Torque (Nm)	Torque (lb-ft)
-4	7/16" - 20	18 - 20	13 - 15
-6	9/16" - 18	29 - 33	22 - 24
-8	3/4" - 16	49 - 53	40 - 43
-10	7/8" - 14	59 - 64	43 - 48
-12	1-1/16" - 12	93 - 102	68 - 75
-16	1-5/16" - 12	151 - 166	112 - 123
-20	1-5/8" - 12	198 - 218	146 - 161
-24	1-7/8" - 12	209 - 231	154 - 170

### Installation of 37° Flare (JIC) Connections

1



Lightly lubricate the flare on the adapter and thread it into the coupling. Hand-tighten, ensuring that the flare is seated correctly during installation.

2

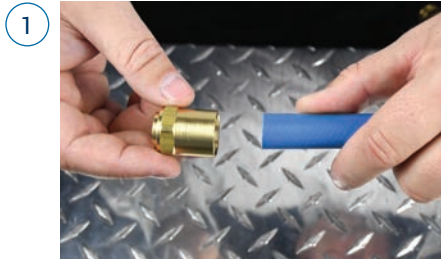


Wrench tighten the connection to the appropriate torque specification, as shown in the chart below.

SAE Size	Thread Size	Torque (Nm)	Torque (lb-ft)
-4	7/16" - 20	15 - 16	11 - 12
-6	9/16" - 18	24 - 28	18 - 20
-8	3/4" - 16	49 - 53	36 - 39
-10	7/8" - 14	77 - 85	57 - 63
-12	1-1/16" - 12	107 - 119	79 - 88
-16	1-5/16" - 12	147 - 154	108 - 113
-20	1-5/8" - 12	172 - 181	127 - 133
-24	1-7/8" - 12	215 - 226	158 - 167

## Be Safe When Installing Quick Couplings

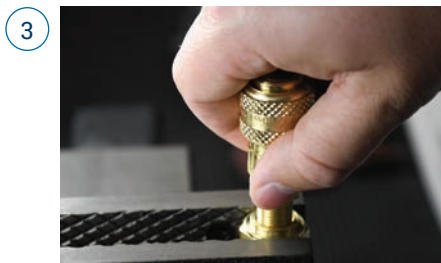
### Installation of Reusable Hose Couplings



Trim the end of the hose as square as possible.



Install ferrule by slipping it onto the end of the hose and twisting it counter-clockwise.

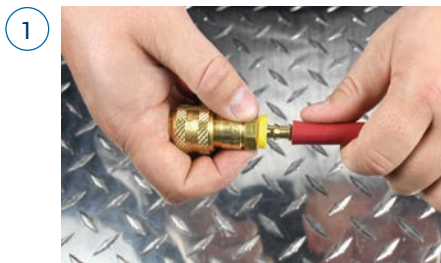


Apply lubricant sparingly to the reusable barbs before inserting it into the ferrule.



Turn the reusable fitting into the ferrule until coupling is seated against ferrule.

### Installation of Push-Loc Hose Connections



Trim hose end squarely and lubricate the Push-Loc barbs and hose. Insert Push-Loc barbs into the hose until first barbs is inside the hose.



Place the end of the fitting against a flat object and grip the hose one inch from end. Push with a steady force until the end of hose is covered by the yellow plastic cap.

## Be Safe When Installing Quick Couplings

### Installation of N and P Series Ferruled Hose Barbs

Note that the charts below are to be used only as a guide and not as a steadfast rule for every coupling application. In some instances, alternative dies and crimped dimensions must be employed. Hoses, as well as couplings, react differently during crimping. This is due to the fact that there are variances in hose constructions for hose with similar dimensions. Some variables are: textile braid versus wire braid, hardwall versus softwall, presence or lack of internal spiral wire as well as differences in hose covers. In addition, the outer diameter of the hose tends to fluctuate from end to end and production lot to production lot. With this in mind, we suggest that you measure the hose O.D. and maintain accurate records for each coupling application.

Hose I.D.	Fractional Hose O.D.	Decimal Hose O.D.	'N' Crimp Length	'N' Crimp O.D. ±.005	'P' Crimp Length	'P' Crimp O.D. ±.005
1/2"	54/64"	0.844	1-1/8"	0.917	1-1/4"	0.917
	55/64"	0.859	1-1/8"	0.929	1-1/4"	0.929
	56/64"	0.875	1-1/8"	0.942	1-1/4"	0.942
	57/64"	0.891	1-1/8"	0.954	1-1/4"	0.954
	58/64"	0.906	1-1/8"	0.967	1-1/4"	0.967
	59/64"	0.922	1-1/8"	0.980	1-1/4"	0.980
	60/64"	0.938	1-1/8"	0.992	1-1/4"	0.992
	61/64"	0.953	1-1/8"	1.005	1-1/4"	1.005
	62/64"	0.969	1-1/8"	1.018	1-1/4"	1.018
	63/64"	0.984	1-1/8"	1.030	1-1/4"	1.030
	1"	1.000	1-1/8"	1.043	1-1/4"	1.043
	1-1/64"	1.016	1-1/8"	1.056	1-1/4"	1.056
1-2/64"	1.031	1-1/8"	1.068	1-1/4"	1.068	
3/4"	1-10/64"	1.156	1-1/4"	1.220	1-1/4"	1.220
	1-11/64"	1.171	1-1/4"	1.235	1-1/4"	1.235
	1-12/64"	1.187	1-1/4"	1.244	1-1/4"	1.244
	1-13/64"	1.203	1-1/4"	1.260	1-1/4"	1.260
	1-14/64"	1.218	1-1/4"	1.270	1-1/4"	1.270
	1-15/64"	1.234	1-1/4"	1.285	1-1/4"	1.285
	1-16/64"	1.250	1-1/4"	1.295	1-1/4"	1.295
	1-17/64"	1.265	1-1/4"	1.310	1-1/4"	1.310
	1-18/64"	1.281	1-1/4"	1.320	1-1/4"	1.320
	1-19/64"	1.296	1-1/4"	1.335	1-1/4"	1.335
	1-20/64"	1.312	1-1/4"	1.345	1-1/4"	1.345
	1-21/64"	1.328	1-1/4"	1.360	1-1/4"	1.360
	1-22/64"	1.343	1-1/4"	1.370	1-1/4"	1.370

### Installation of Light-Duty Ferrules

Hose I.D.	Fractional Hose O.D.	Decimal Hose O.D.	Dixon Part #	Ferrule Thickness	SMOD	% Compression	Crimp Diameter
1/2"	54/64"	0.8438	CCF0906	0.024	0.513	15	0.853
	55/64"	0.8594	CCF0906	0.024	0.513	15	0.866
	56/64"	0.8750	CCF0906	0.024	0.513	15	0.880
3/4"	1-5/64"	1.0781	CCF1120	0.030	0.763	20	1.086
	1-6/64"	1.0938	CCF1120	0.030	0.763	20	1.098
	1-7/64"	1.1094	CCF1149	0.030	0.763	20	1.111
	1-8/64"	1.1250	CCF1149	0.030	0.763	20	1.123
	1-9/64"	1.1406	CCF1190	0.025	0.763	20	1.126
	1-10/64"	1.1563	CCF1190	0.025	0.763	20	1.138
	1-11/64"	1.1719	CCF1218	0.025	0.763	20	1.151
	1-12/64"	1.1875	CCF1218	0.025	0.763	20	1.163
	1-13/64"	1.2031	CCF1246	0.030	0.763	20	1.186
	1-14/64"	1.2188	CCF1246	0.030	0.763	20	1.198
	1-15/64"	1.2344	CCF1277	0.030	0.763	20	1.211
	1-16/64"	1.2500	CCF1277	0.030	0.763	20	1.223
	1"	1-25/64"	1.3906	CCF1438	0.030	1.007	20
1-26/64"		1.4063	CCF1438	0.030	1.007	20	1.392
1-27/64"		1.4219	CCF1469	0.030	1.007	20	1.405
1-28/64"		1.4375	CCF1469	0.030	1.007	20	1.417
1-29/64"		1.4531	CCF1500	0.030	1.007	20	1.430
1-30/64"		1.4688	CCF1500	0.030	1.007	20	1.442
1-31/64"		1.4844	CCF1531	0.030	1.007	20	1.455
1-32/64"		1.5000	CCF1531	0.030	1.007	20	1.467



### Fluid Compatibility Guide

**!** The following chart is intended only as a guide in selecting various elastomers and metals for use with fluids to be conveyed through Dixon quick disconnect couplings. This list does not guarantee suitability for a particular application. Final selection is dependent upon operating pressure, fluid and ambient temperature, concentration of media, duration of exposure, environmental conditions, and frequency of connection and disconnection.

Material	Prefix Code	Trade Name	Range °F	Range °C
Nitrile-N	Standard	Nitrile	-40°F to 250°F	-40°C to 121°C
Nitrile-N (MIL-H-5606 Fluids)	M-	Nitrile	-65°F to 275°F	-54°C to 135°C
Nitrile-N (Hydrocarbon Fuels)	JF-	Nitrile	-65°F to 160°F	-54°C to 71°C
Fluorocarbon Rubber	F-	FKM	-20°F to 400°F	-29°C to 204°C
Ethyl Propylene Diene Monomer	P-	EPDM	-65°F to 300°F	-54°C to 149°C
Neoprene	E-	Neoprene	-45°F to 300°F	-43°C to 149°C
Silicone	S-	Silicone	-100°F to 350°F	-73°C to 177°C
Fluorosilicone (FVMQ)	FS-	Silastic®	-76°F to 376°F	-60°C to 180°C
Urethane	U-	Urethane	-40°F to 180°F	-40°C to 82°C
Polyurethane	UP-	Polyurethane	-65°F to 212°F	-54°C to 100°C
PTFE Encapsulated Silicone	TS-	TES	-100°F to 400°F	-73°C to 204°C
PTFE Encapsulated Fluorocarbon	TF-	TEF	-100°F to 400°F	-73°C to 204°C
Perfluoroelastomer (Compound 1)	K4-	Kalrez® 4079	-4°F to 600°F	-20°C to 316°C
Perfluoroelastomer (Compound 2)	K6-	Kalrez® 6375	-4°F to 525°F	-20°C to 275°C
Perfluoroelastomer (Compound 3)	K7-	Kalrez® 7075	-4°F to 620°F	-20°C to 327°C
Fluoroelastomer	H-	Aflas®	23°F to 400°F	-5°C to 204°C

Media Name	Suggested Seal	Media Name	Suggested Seal	Media Name	Suggested Seal
Acetic Anhydride	P-	Freon, General	E-	Mineral Spirits	Standard
Acetone	P-	Ferric Hydroxide	Standard	Nickel Acetate	P-
Acetylene	Standard	Formaldehyde (50%)	P-	Nickel Sulphate	P-
Air (To 200°F)	Standard	Fuel Oils, General	Standard	Nitrogen, Gas	Standard
Air (Above 200°F)	F-	Gasoline	Standard	Nitrous Oxide	Standard
Alcohol, Ethyl	P-	Glycerine (Glycerol)	Standard	Octane	F-
Alcohol, Methyl	Standard	Glycols	P-	Oleum Spirits	Standard
Alkalis, General	Standard	Helium	Standard	OS45 and OS45-1	F-
Ammonia, Aqueous	P-	Heptane	Standard	Oxygen, Non-Breathing	F-
Ammonia, Gas	P-	Hexane	Standard	Paint Thinner	F-
Ammonia, Anhydrous	P-	Hydraulic Oil, Aircraft	Standard	Paraffin	Standard
Ammonia, Hydroxide	P-	Hydraulic Oil, Petroleum	Standard	Peanut Oil	Standard
Aroclor	F-	Hydraulic Oil, Phosphate	P-	Pentane	Standard
Benzene (Benzol)	F-	Hydrogen Gas	Standard	Perchloroethylene	F-
Bleach Solutions	P-	Hydrolube	Standard	Phosphoric Acid (100%)	P-
Brake Fluid, Non-Petro	P-	Isobutyl Alcohol	P-	Photographic Solutions	P-
Bromine Gas	F-	Isopropyl Alcohol	F-	Potassium Acetate	P-
Butyl Alcohol	Standard	Jet Fuel (to 160°F)	JF-	Propylene	F-
Carbon Dioxide, Dry	Standard	Jet Fuel (above 160°F)	F-	Propylene Glycol	Standard
Carbon Dioxide, Wet	Standard	Kerosene	Standard	Silicone Oil	Nitrile
Carbon Monoxide	Standard	Lindol	P-	Steam, General Service	H-
Carbon Tetrachloride	F-	Magnesium Hydroxide	F-	Stoddard Solvent	Standard
Cellulube	P-	Methane	Standard	Sulphuric Acid (100%)	F-
Creosote	F-	Methanol	Standard	Toluene	F-
Crude Oil	F-	Methyl Bromide	F-	Transmission Fluid (A)	Standard
Cutting Oil	Standard	Methyl Ethyl Ketone (MEK)	P-	Trichloroethylene	F-
Diesel Fuel	Standard	MIL-F-81912 (JP-9)	P-	Turpentine	Standard
Diester Lubricants	F-	MIL-H-5606	M1-	Vegetable Oil	Standard
Ethane	Standard	MIL-H-5806	Standard	Water	Standard
Ethanol	P-	MIL-H-6083	Standard	Water, Distilled	Standard
Ethyl Chloride	Standard	MIL-H-7083	Standard	Water, Dionized	Standard
Ethylene Glycol	P-	Mineral Oils	Standard	Water, Sea	P-