

# Technical Data

Chemical Resistance  
Data Charts

Hose Size vs Flow Capacity

Volumetric Expansion Chart

Conversion Tables



# Chemical Resistance Data

This chart is intended to serve as a guide and does not guarantee suitability of hose material with the chemicals listed.

Final selection of materials is dependent on many factors including variations in temperature, pressure and duration of exposure.

## Hose Material Key

N = Nylon                    H = Polyester  
 P = Polyolefin              U = Polyurethane  
 V = PVC - Polyvinyl Chloride

## Resistance Rating Key

G = Good                    P = Poor  
 L = Limited                NT = Not Tested

	N	H	P	U	V		N	H	P	U	V		N	H	P	U	V
Acetaldehyde	G	G	L	G	P	Carbon Bisulfide	G	L	P	L	P	†Ethylene Glycol	G	G	G	L	G
Acetic Acid	L	L	G	L	G	Carbon Disulfide	G	L	P	L	P	Ethylene Oxide	G	L	L	L	NT
Acetic Anhydride	L	L	G	L	P	Carbon Monoxide	G	G	G	G	G	Fatty Acid	G	G	P	G	G
Acetone	G	L	L	P	P	Carbon Tetrachloride	G	P	P	P	L	Ferric Chloride	L	NT	G	NT	G
Acetyl Bromide	P	P	P	P	P	Carbonic Acid	G	L	G	L	G	Ferric Sulphate	G	G	G	G	G
Acetyl Chloride	P	P	P	P	P	Castor Oil	G	L	G	L	G	Fluoboric Acid	NT	P	G	P	GL
Acetylene	G	G	G	G	NT	Caustic Potash (>20%)	L	L	G	L	L	Fluorine	P	P	P	P	L
Air	G	G	G	G	G	Caustic Potash (<20%)	G	L	G	L	G	Fluorosilicic	NT	NT	G	P	GL
*Alcohols	G	L	G	L	G	Caustic Soda (>20%)	L	L	G	L	L	Formaldehyde	G	L	G	L	G
Aluminum Chloride	P	NT	G	NT	G	Caustic Soda (<20%)	G	L	G	L	G	Formic Acid	P	P	GL	P	GL
Aluminum Sulphate	G	NT	G	NT	G	Cellusolves Union Carbide	G	P	P	P	P	Freon	G	L	L	L	L
Alums	P	NT	G	NT	G	Cellulubes Celanese (Hydraulic						*Fruit Juices	G	G	G	G	G
Ammonia Gas	P	P	P	P	P	Fluid, Phosphate Ester Base)	G	P	P	P	P	Fuel Oil (Aromatic Gas)					
Ammonium Chloride	G	G	G	G	G	Chloracetic Acid	P	P	L	P	P	100 Octane	G	G	L	G	L
Ammonium Hydroxide	P	P	P	P	P	Chloroform	G	P	P	P	P	Fuel Oil	G	G	LP	G	L
Ammonium Nitrate	G	L	G	G	G	Chlordane	G	G	G	G	L	Furfuryl Alcohol	G	G	G	G	G
Ammonium Phosphate	G	L	G	G	G	Chlorinated Solvents	G	P	L	P	P	Galic Acid (<20%)	G	L	G	L	G
Ammonium Sulphate	G	L	G	G	G	Chlorine (Dry)	P	P	P	P	L	** Gas (Natural)	G	G	G	G	G
Amyl Acetate	G	L	P	L	P	Chlorine (Water) (<20%)	L	P	G	L	G	Gas Oil	G	GL	P	G	L
Amyl Alcohol	G	G	G	G	G	Chromic Acid	P	P	GL	P	L	Gasoline	G	G	LP	G	L
Anethole	G	NT	NT	NT	NT	Chromium Salts	G	G	G	G	G	Gasoline (Aromatic)	G	G	LP	G	L
Aniline	L	P	P	P	L	*Cider	G	G	G	G	G	Gasoline (Non-Aromatic)	G	G	LP	G	G
Animal Oils	G	G	P	G	G	Citric Acid	G	L	G	L	G	Gelatin	G	G	G	G	G
Antimony Salts	G	G	G	G	G	Coal Gas	G	G	G	G	G	Glucose	G	G	G	G	G
Apoclor Monsanto (Chlorinated						Copper Chloride	L	G	G	G	G	Glue (Depends on type)	G	G	G	G	G
Hydrocarbon Hydraulic Fluid)	G	L	L	L	L	Copper Sulphate	G	G	G	G	G	†Glycerine	G	G	G	G	G
Aromatic Hydrocarbons	G	L	P	L	P	*Corn Oil	G	G	G	G	G	†Glycol	G	G	G	L	G
Arsenic Salts	G	G	G	G	G	Cottonseed Oil	G	G	G	G	G	Greases	G	G	L	G	G
Asphalt	G	G	G	G	G	Creosote	P	P	L	P	L	Heavy Water (D2O)	G	G	NT	NT	NT
Auto Transmission Fluid	G	G		G		Cresols	P	P	L	P	L	Heptane	G	G	P	G	L
Barium Chloride	G	G	G	G	G	Cresylic Acid	P	P	L	P	L	Hexane	G	G	P	G	L
Barium Salts	G	G	G	G	G	Crude Petroleum Oil	G	L	P	G	G	†Houghto Safe Houghton 600					
Basic Copper Arsenate	G	G	G	G	G	Cupric Sulphate	L	L	G	L	G	Series (Hyd. Fluid Water					
Benzaldehyde	G	G	L	G	P	Cyclohexane	G	G	NT	G	NT	Glycol Base)	G	L	G	G	G
Benzene	G	L	P	L	P	Cyclohexanone	G	G	P	G	P	†Houghto Safe Houghton 1000					
Benzoic Acid	G	P	G	P	G	Decalin	G	NT	NT	NT	NT	Series (Phosphate Ester					
Benzol (Benzene)	G	L	P	L	P	Diacetone Alcohol	G	L	G	L	P	Base)	G	L	P	L	P
Benzyl Alcohol	L	L	L	L	L	Diammonium Phosphate	G	L	G	P	G	Hydraulic Fluid Petroleum Base	G	G	P	G	P
Borax	G	G	G	G	L	Dibutyl Phthalate	G	L	L	L	NT	†Hydraulic Fluid Water Glycol					
Bordeaux Mixture	G	G	G	G	G	Diesel Fuel	G	G	L	G	L	Base	G	G	G	G	G
Boric Acids	G	G	G	G	G	Diethanolamine (20% conc.)	G	L	NT	L	NT	†Hydraulic Fluid					
Boric Copper Sulphate	G	G	G	G	G	Diethyl Ether	G	L	G	L	L	Phosphate Ester	G	L	P	L	P
Bromine	P	P	P	P	L	Diocetyl Phosphate	G	L	P	I	P	Hydraulic Oil	G	G	P	G	NT
Butanol	G	G	G	G	G	Diocetylphthalate	G	L	P	L	P	Hydrochloric Acid (10%)	G	P	G	L	G
* Butter	G	G	G	G	G	Enamels	G	G	G	G	G	Hydrocyanic Acid	P	NT	G	NT	G
Butyl Acetate	G	L	P	L	P	Essential Oils	G	G	L	G	G	Hydrofluoric Acid	P	P	L	P	L
Calcium Arsenate	G	G	G	G	G	* Ethanol	G	L	L	L	L	Hydrogen Gas	G	G	G	G	G
Calcium Bisulphide	G	G	G	G	L	Ether	G	L	G	L	L	Hydrogen Peroxide (dil.)	G	G	G	G	G
Calcium Chloride	G	G	G	G	G	Ethyl Acetate	G	L	G	L	P	Hydrogen Peroxide (conc.)	P	P	G	P	L
Calcium Hydroxide (<20%)	G	L	G	L	G	* Ethyl Alcohol	G	L	G	L	L	Hydrogen Sulphide	L	L	G	NT	G
Calcium Hypochlorite	G	L	G	L	G	Ethyl Chloride	G	P	P	P	P	†Hydrolube Union Carbide—					
Calcium Salts	G	G	G	G	G	Ethylene Chlorhydrin	P	P	NT	P	P	(Hydraulic Fluid Water Glycol					
Carbolic Acid	P	P	G	P	P	Ethylene Dichloride	G	P	L	P	P	Base)	G	L	G	G	G

# Chemical Resistance Data

(continued)

N	H	P	U	V	N	H	P	U	V	N	H	P	U	V			
Irus Shell 902 Hydraulic Fluid (Water-Oil Emulsion)	G	G	L	G	G	Oleic Acid	G	G	P	G	L	Sodium Sulphate	G	G	G	G	G
Isocyanates	G	G	G	G	NT	OS 45 Monsanto Hydraulic Fluid (Silicate Ester Base)	G	L	P	L	NT	Sodium Sulphide	G	G	G	G	G
Isopropyl Acetate	G	L	L	L	P	Oxalic Acid (-30%)	G	L	G	G	L	Sodium Thiosulphate	G	G	G	G	G
Kerosene	G	G	LP	G	L	Oxygen						DDT Preparation Hydroxy					
Ketones	G	L	G	L	P	Ozone	G	G	P	G	G	Quinoline	G	NT	NT	NT	G
Lacquer Solvents	G	L	G	L	P	Paint (Oil Base)	G	G	L	G	L	Stannous Chloride	L	G	G	G	G
Lactic Acid	G	NT	L	NT	G	Paint Solvents (Oil Base)	G	L	L	L	L	Steam	P	P	P	P	P
Lard	G	G	G	G	G	Palmitic Acid	G	G	G	G	G	Stearic Acid	G	G	G	G	G
Lead Arsenate	G	G	G	G	G	Pentane	G	G	P	G	L	Stearin	G	G	NT	G	NT
Lead Sulphate	G	G	G	G	G	Perchloric Acid	P	P	G	P	L	Stoddard Solvent	G	P	L	P	L
Lead Tetramethyl	G	G	NT	G	NT	Perchlorethylene	G	P	P	P	L	Styrene	G	L	NT	L	NT
Lime	G	G	G	G	G	Petroleum Oils (Sour)	G	L	L	G	G	Sulphur	G	G	G	G	G
Linseed Cake	G	G	P	G	G	Petroleum Oils (Refined)	G	G	L	G	G	Sulphur Dioxide	P	P	G	P	L
Linseed Oil	G	G	P	G	G	Phenolates	L	L	L	G	L	Sulphur Trioxide	L	P	G	P	G
Lubricating Oils, Petroleum						Phenols	P	P	G	P	L	Sulphuric Acid (dil.)	L	LP	L	LP	G
Base	G	G	L	G	G	Phosphoric Acid	G	P	G	P	G	Sulphuric Acid (conc.)	P	P	L	P	P
†Lubricating Oils, Diester Base	G	L	P	L	NT	Picric Acid	L	P	G	P	G	Sulphurous Acid	P	LP	L	LP	L
Magnesium Chloride	G	G	G	G	G	Potash (Potassium Hydroxide)	L	P	G	P	L	Tannic Acid	G	L	G	L	G
Magnesium Hydroxide (<20%)	G	L	G	L	G	Potassium Chloride	G	G	G	G	G	Tar Oil	G	G	G	G	G
Magnesium Sulphate	G	G	G	G	G	Potassium Hydroxide						Tartaric Acid	G	G	G	G	G
Maleic Acid	G	L	G	L	G	(50% conc.)	L	P	G	P	L	Toluene	G	L	P	L	P
Mercuric Chloride	G	G	G	G	L	Potassium Nitrate	G	G	G	G	G	Toluol	G	L	P	L	P
Mercury	G	G	G	G	G	Potassium Permanganate						Tributyl Phosphate	G	L	P	L	P
**Methane	G	G	NT	G	P	(5% conc.)	P	P	P	P	G	Tricesylphosphate	G	L	P	L	P
Methanol	G	L	G	L	P	Potassium Sulphate	G	G	G	G	G	Trichloracetic Acid	P	P	GL	P	L
Methyl Acetate	G	L	G	L	P	Propane	G	G	G	G	G	Trichloroethylene	G	P	P	P	L
Methyl Bromide	L	P	P	P	P	†Pydraul (Stauffer) F-9, 150, 600,						†Trisodium Phosphate Solution	G	L	NT	L	G
Methyl Chloride	G	P	P	P	P	625	G	L	P	L	P	Turpentine	G	G	P	G	G
Methyl Sulphate	G	G	NT	G	NT	Pyrethrum	G	G	G	G	G	†Ucon Union Carbide (Hydraulic					
Methylethylketone (MEK)	G	L	G	L	P	Pyridine	L	L	G	G	P	Fluid Water Glycol Base	G	L	G	G	G
Methylisobutylketone (MIBK)	G	L	G	L	P	†Sea Water	G	G	G	G	G	Urea	G	L	G	L	G
*Milk	G	G	G	G	G	†Skydrol Monsanto 500, 7000	G	P	P	P	P	Uric Acid	G	P	G	P	G
Mineral Oil	G	G	LP	G	G	†Soap Solution (conc.)	G	G	L	G	G	Varnish	G	G	L	G	P
Molasses	G	G	G	G	G	* † Soda Water	G	G	G	G	G	Vinegar	G	L	G	L	G
Mustard	G	G	NT	G	NT	Sodium Bicarbonate	G	G	G	G	G	† Water (150°F)	G	G	G	G	G
Naphtha	G	L	P	L	P	Sodium Bisulfite	G	G	G	G	G	White & Bagley No. 2190 Cutting					
Naphthalene	G	L	P	L	P	Sodium Borate	G	G	G	G	G	Oil	G	NT	NT	NT	NT
Nickel Chloride	P	P	G	NT	P	Sodium Carbonate	G	G	G	G	G	*Wine	G	G	G	G	G
Nicotine	G	G	G	G	G	Sodium Chloride	G	G	G	G	G	Wool Oil	G	G	G	G	G
Nitric Acid (<20%)	L	L	G	L	G	Sodium Cyanide	G	G	G	G	G	Xylol	G	L	P	L	P
Nitric Acid (>20%)	L	P	L	P	G	Sodium Hydroxide (<20%)	G	L	G	L	G	Xylene	G	L	P	L	P
Nitrobenzene	G	P	P	P	P	Sodium Hypochlorite	L	L	G	L	G	Zinc Chloride	G	G	G	G	G
* Nitrous Oxide	G	G	LP	G	G	Sodium Nitrate	G	G	G	G	G	Zinc Hydrate	P	L	G	L	G
Oil	G	G	L	G	L	†Sodium Phosphate Solution	G	G	G	G	G	Zinc Sulphate	P	L	G	L	G
* Oil of Turpentine	G	G	L	G	G	Sodium Silicate	G	G	G	G	G						

## Hose Material Reference Chart

\* Does not imply NSF or FDA compliance

† Recommended operating temperature not to exceed +150°F (+66°C)

\*\* Does not imply AGA or UL compliance

‰ Recommended operating temperature not to exceed +100°F (+37.8°C)

Series	Core	Cover
25CT	Polyester	Polyester
3630	PVC	PVC
3R30	Nylon-Lined	Polyurethane
3130	Nylon-Lined <sup>(1)</sup>	Polyurethane
3580	Polyester	Polyurethane
3740	Nylon	Polyurethane

Series	Core	Cover
37AL	Polyester	Polyurethane
3440	Polyolefin	Polyurethane
3R80	Nylon	Polyurethane
3E80	Nylon	Polyurethane
3800	Nylon	Polyurethane
3V10	Nylon-Lined	Polyurethane

Series	Core	Cover
3VE0	Nylon-Lined	Polyurethane
34BA	Polyester-Lined	PVC
34PW	Polyolefin	Polyurethane
30CT	Polyester	Polyester

(1) -02 size is a nylon, single-wall design

# Hose Size vs. Flow Capacity

## How to Select the Correct Hose Size

The hose I.D. may be determined if the fluid flow rate and velocity are known by using the nomograph.

Nomograph data is based on the formula:

$$\text{Area} = \frac{\text{Flow Rate} \times 0,3208}{\text{Velocity}}$$

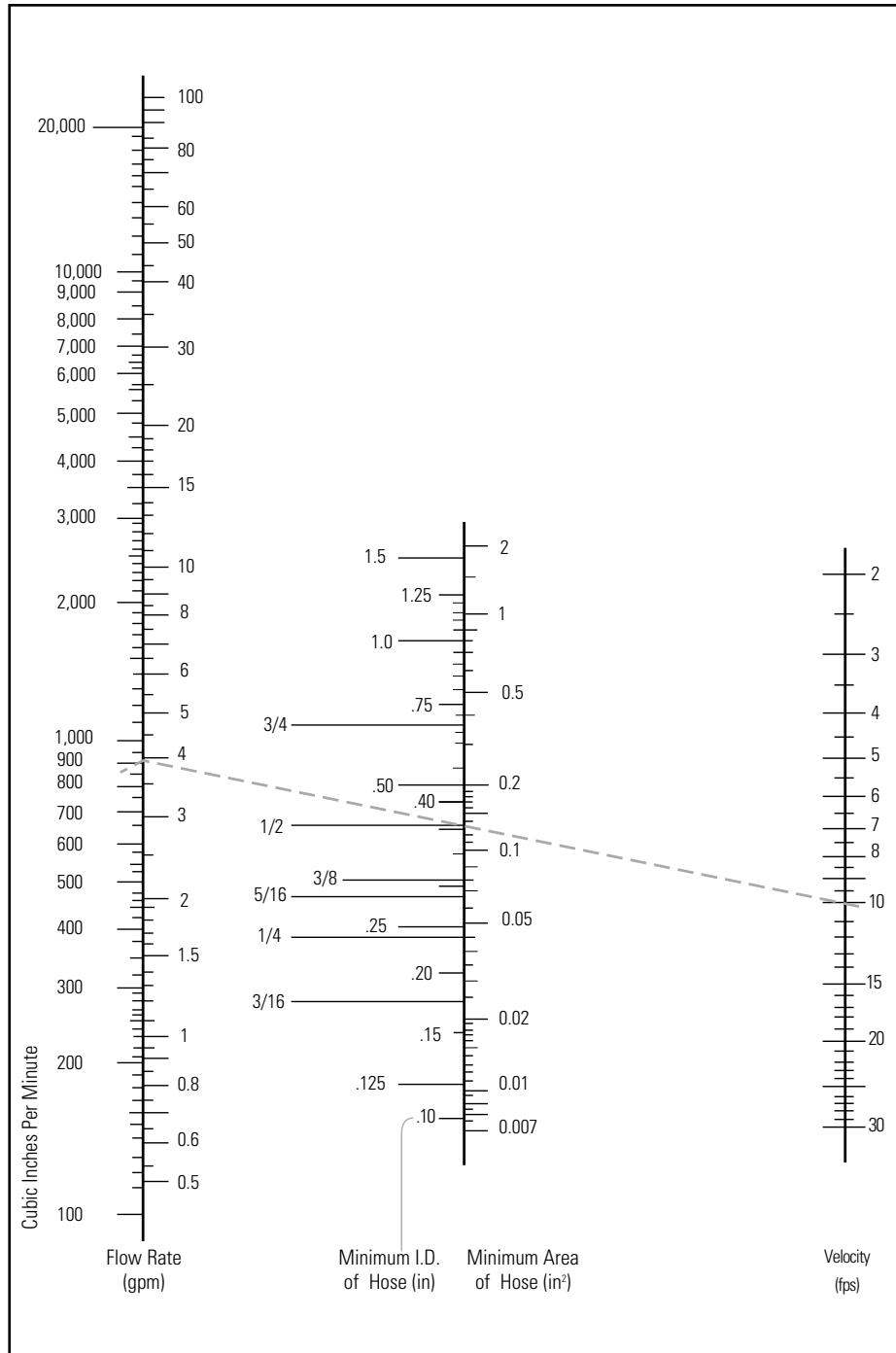
## How to Use the Nomograph

1. Find the two known values.
2. Lay a straight edge to connect the known values.
3. The intersection point on the third vertical line identifies the point for that factor.

## Example

A pump has a flow rate of 4 gpm. The necessary velocity is 10 fps. What hose size is required?

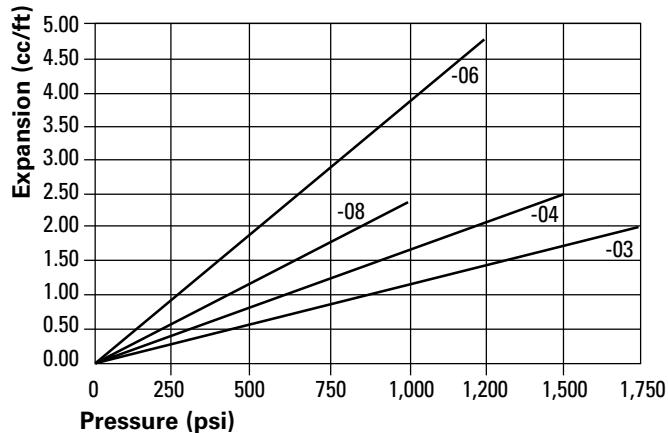
With a straight edge placed on 4 gpm and 10 fps, the answer is 1/2 inch hose I.D.



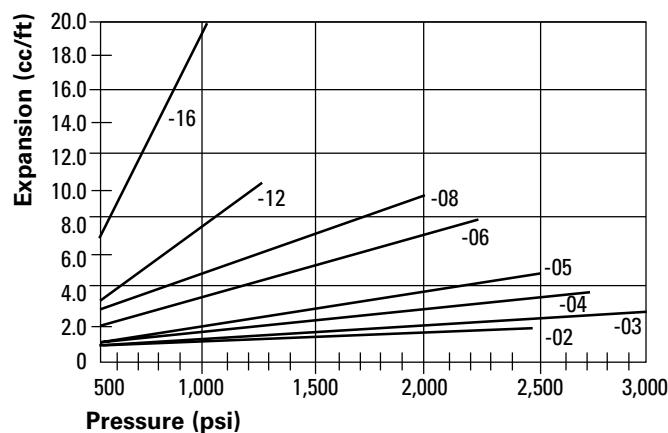
## Volumetric Expansion Data

The following charts are based on a limited testing of each hose size according to SAE J343.

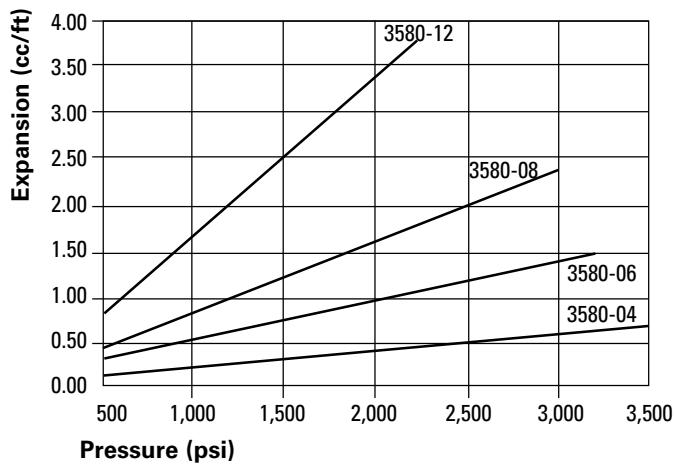
### 3R30 Series



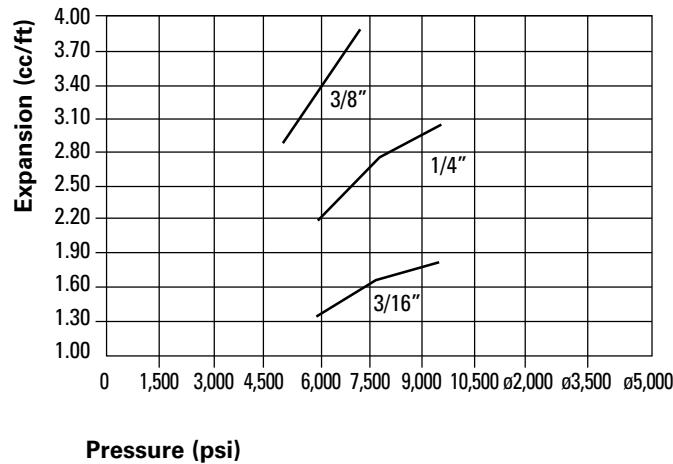
### 3130 Series



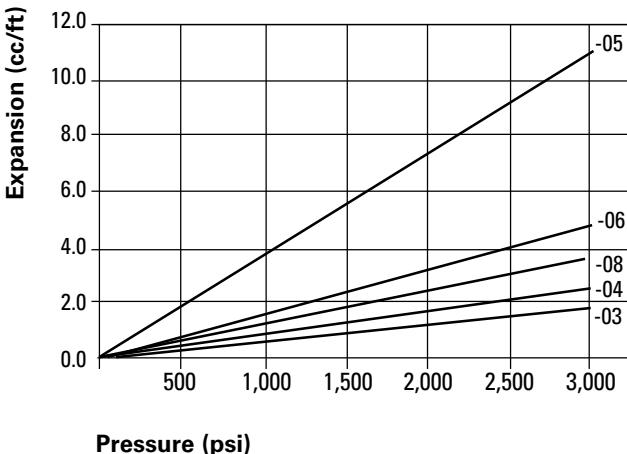
### 3580 Series



### 3V10/3VEO Series



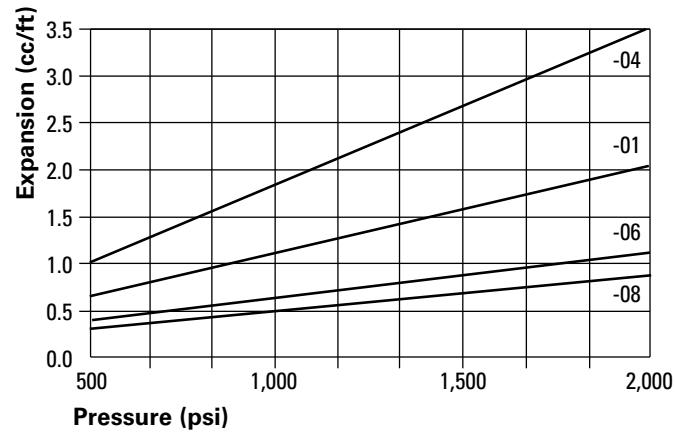
### 37AL/3750 Series



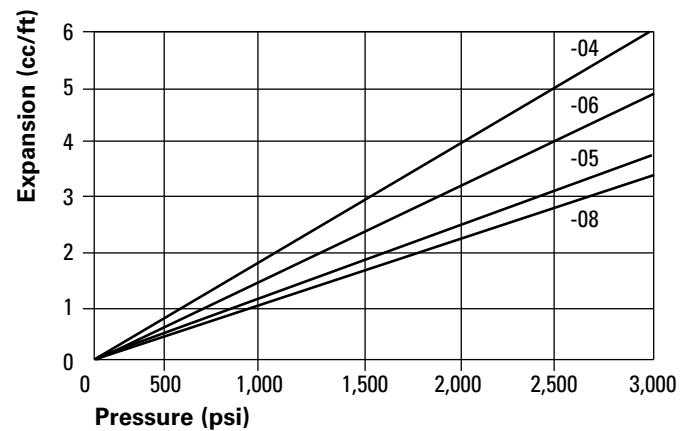
## Volumetric Expansion Data

(continued)

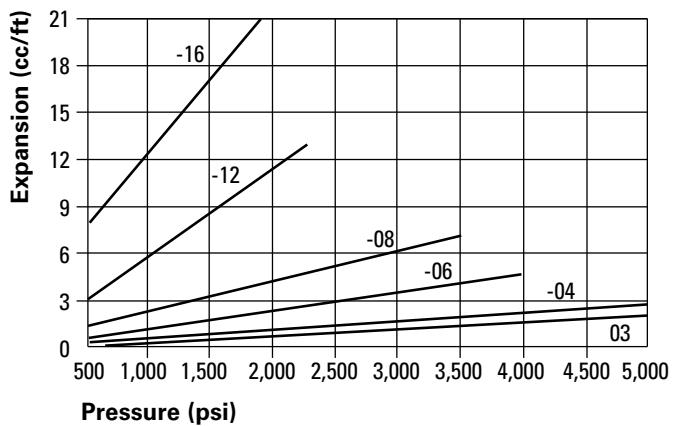
**31N0 Series**



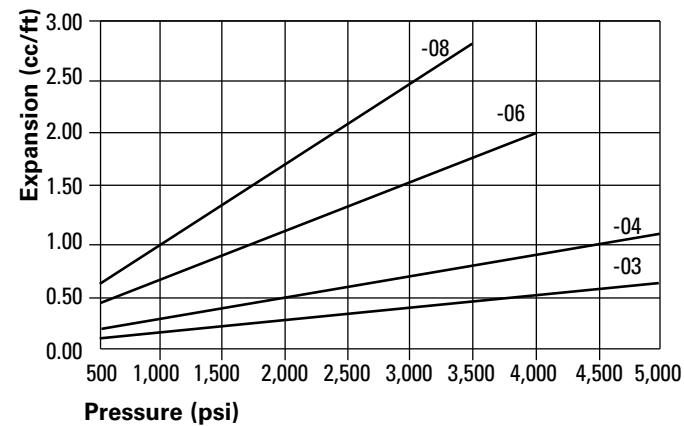
**30CT Series**



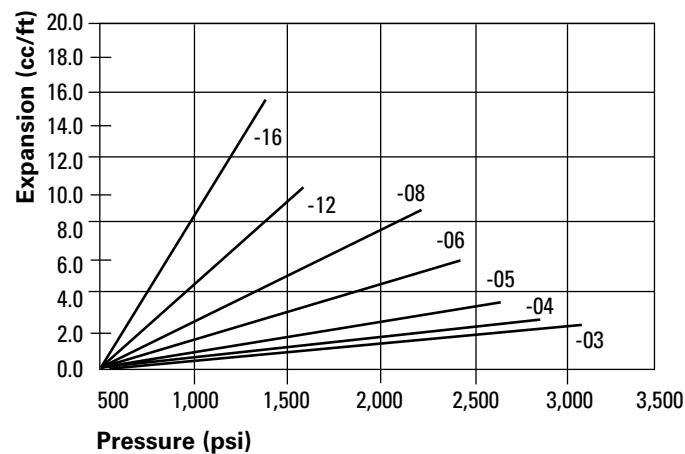
**3R80/3E80 Series**



**3800/3840 Series**



**3740 Series**



# Conversion Tables

## How to Use Conversion Tables

- Locate known unit symbol in left vertical column - FROM
- Locate the desired unit in top horizontal row - TO
- The factor at the intersection of the FROM row and TO column is multiplied by the known unit quantity to calculate the desired unit quantity

## Example:

- Convert 3,000 PSI (psi) of a hydraulic pressure to kPa.
- Locate lb/in<sup>2</sup> row and kPa column in the Pressure Conversion Table; the factor is 6.895
- Calculation:  
 $6.895 \times 3,000 \text{ PSI} = 20,685 \text{ kPa}$

## Pressure Conversions

FROM	TO								
	MMHG	IN HG	IN H <sub>2</sub> O	FT H <sub>2</sub> O	ATM	PSI	KG/CM <sup>2</sup>	KPA	BAR
mmHg	1	0.03937	0.5353	0.044610	0.00132	0.01934	0.00136	0.1333	0.0013
inHg	25.40	1	13.6	1.133	0.03342	0.4912	0.03453	3.387	0.0339
inH <sub>2</sub> O	1.868	0.07355	1	0.08333	0.00246	0.03612	0.00254	0.249	0.0025
ftH <sub>2</sub> O	22.42	0.8826	12	1	0.02950	0.4334	0.03048	2.988	0.0299
atm	760	29.92	406.8	33.9	1	14.7	1.033	101.3	1.013
PSI	51.71	2.036	27.69	2.307	0.06805	1	0.07031	6.895	0.0689
Kg/cm <sup>2</sup>	735.6	28.96	393.7	32.81	0.9678	14.22	1	98.05	0.981
kPa	7.5	0.2953	4.016	0.3347	0.00987	0.1451	0.0102	1	0.01
bar	750	29.53	401.6	33.47	0.987	14.51	1.02	100	1

## Flow Rate Conversions

From	TO				
	L/SEC	GAT/MIN	FT <sup>3</sup> /SEC	FT <sup>3</sup> /MIN	BBL/HR
l/sec	1	15.85	0.3532	2.119	22.66
gal/min	0.06309	1	0.00223	0.1337	1.429
ft <sup>3</sup> /sec	28.32	448.8	1	60	641.1
ft <sup>3</sup> /min	0.4719	7.481	0.01667	1	10.69
bbl/hr	0.04415	0.6997	0.00156	0.09359	1
bbl/day	0.00184	0.02917	6.50x10 <sup>-5</sup>	0.0039	0.04167
					1

## Length Conversions

From	TO				
	FEET	INCHES	KILOMETERS	METERS	MM
feet	1	12	0.000305	0.3048	304.8
inches	0.08333	1	0.0000254	0.0254	25.4
kilometers	3281	39372	1	1000	1000000
meters	3.281	39.37	0.001	1	1000
millimeters	0.003281	0.03937	0.000001	0.001	1
miles	5280	6360	1.609	1609	—
					1

## Weight Conversions

From	TO			
	G	KG	OZ	LB
g	1	0.001	0.03527	0.0022
kg	1000	1	35.27	2.205
oz	28.35	0.02835	1	0.0625
lb	453.6	0.4536	16	1

## Conversion Tables

### Temperature Conversions

$$^{\circ}\text{C} = (\text{ }^{\circ}\text{F} - 32) \times .555$$

$$^{\circ}\text{F} = (^{\circ}\text{C} \times 1.8) + 32$$

Look up the value in the middle column. If in degrees Centigrade, read the Fahrenheit equivalent in right-hand column; if in Fahrenheit degrees, read the Centigrade equivalent in left-hand column.

C	F/C	F	C	F/C	F	C	F/C	F
-73.0	-100	-148.0	5.0	41	105.8	33.3	92	197.6
-68.0	-90	-130.0	5.6	42	107.6	33.9	93	199.4
-62.0	-80	-112.0	6.1	43	109.4	34.4	94	201.2
-57.0	-70	-94.0	6.7	44	111.2	34.0	95	203.0
-51.0	-60	-76.0	7.2	45	113.0	35.6	96	204.8
-46.0	-50	-58.0	7.8	46	114.8	36.1	97	206.6
-40.0	-40	-40.0	8.3	47	116.6	36.7	98	208.4
-34.0	-30	-22.0	8.9	48	118.4	37.2	99	210.2
-29.0	-20	-4.0	9.4	49	120.2	37.8	100	212.0
-23.0	-10	14.0	10.0	50	122.0	43.0	110	230.0
-17.8	0	32.0	10.6	51	123.8	49.0	120	248.0
-17.2	1	33.8	11.1	52	125.6	54.0	130	266.0
-16.7	2	35.6	11.7	53	127.4	60.0	140	284.0
-16.1	3	37.4	12.2	54	129.2	66.0	150	302.0
-15.6	4	39.2	12.8	55	131.0	71.0	160	320.0
-15.0	5	41.0	13.3	56	132.8	77.0	170	338.0
-14.4	6	42.8	13.9	57	134.6	82.0	180	356.0
-13.9	7	44.6	14.4	58	136.4	88.0	190	374.0
-13.3	8	46.4	15.0	59	138.2	93.0	200	392.0
-12.8	9	48.2	15.6	60	140.0	99.0	210	410.0
-12.2	10	50.0	16.1	61	141.8	100.0	212	413.6
-11.7	11	51.8	16.7	62	143.6	104.0	220	428.0
-11.1	12	53.6	17.2	63	145.4	110.0	230	446.0
-10.6	13	55.4	17.8	64	147.2	116.0	240	464.0
-10.1	14	57.2	18.3	65	149.0	121.0	250	482.0
-9.4	15	59.0	18.9	66	150.8	127.0	260	500.0
-8.9	16	60.8	19.4	67	152.6	132.0	270	518.0
-8.3	17	62.6	20.0	68	154.4	138.0	280	536.0
-7.8	18	64.4	20.6	69	156.2	143.0	290	554.0
-7.2	19	66.2	21.1	70	158.0	149.0	300	572.0
-6.7	20	68.0	21.7	71	159.8	154.0	310	590.0
-6.1	21	69.8	22.2	72	161.6	160.0	320	608.0
-5.6	22	71.6	22.8	73	163.4	166.0	330	626.0
-5.0	23	73.4	23.3	74	165.2	170.0	338	640.0
-4.4	24	75.2	23.9	75	167.0	171.0	340	644.0
-3.9	25	77.0	24.4	76	168.8	177.0	350	662.0
-3.3	26	78.8	25.0	77	170.6	182.0	360	680.0
-2.8	27	80.6	25.6	78	172.4	186.0	366	691.0
-2.2	28	82.4	26.1	79	174.2	188.0	370	698.0
-1.7	29	84.2	26.7	80	176.0	193.0	380	716.0
-1.1	30	86.0	27.2	81	177.8	198.0	388	730.0
-0.6	31	87.8	27.8	82	179.6	199.0	390	734.0
0.0	32	89.6	28.3	83	181.4	204.0	400	752.0
0.6	33	91.4	29.8	84	183.2	208.0	406	763.0
1.1	34	93.2	29.4	85	185.0	210.0	410	770.0
1.7	35	95.0	30.0	86	186.8	216.0	420	788.0
2.2	36	96.8	30.6	87	188.6	221.0	430	806.0
2.8	37	98.6	31.1	88	190.4	227.0	440	824.0
3.3	38	100.4	31.7	89	192.2	232.0	450	842.0
3.9	39	102.2	32.2	90	194.0	238.0	460	860.0
4.4	40	104.0	32.8	91	195.8	243.0	470	878.0

## Conversion Tables

### Thread Chart

Dash Number	O.D. Tube Size	AN 37°	JIC 37°	SAE 45°	NPTF (Male)
- 2	1/8	5/16-34	5/16-24	5/16-24	1/8-27
- 3	3/16	3/8-24	3/8-24	3/8-24	
- 4	1/4	7/16-20	7/16-20	7/16-20	1/4-18
- 5	5/16	1/2-20	1/2-20	1/2-20	
- 6	3/8	9/16-18	9/16-18	5/8-18	3/8-18
- 8	1/2	3/4-16	3/4-16	3/4-16	1/2-14
- 10	5/8	7/8-14	7/8-14	7/8-14	
- 12	3/4	1 1/16-12	1 1/16-12	1 1/16-14	3/4-14
- 16	1	1 5/16-12	1 5/16-12	1 3/8-12	1-11-1/2

### Decimal Equivalents of Inch Fractions

1/64	0.015625	17/64	0.265625	33/64	0.51563	49/64	0.765625
1/32	0.03125	9/32	0.28125	17/32	0.53125	25/32	0.78125
3/64	0.046875	19/64	0.296875	35/64	0.54688	51/64	0.796875
1/16	0.0625	5/16	0.3125	9/16	0.5625	13/16	0.8125
5/64	0.078125	21/64	0.328125	37/64	0.57813	53/64	0.828125
3/32	0.09375	11/32	0.34375	19/32	0.59375	27/32	0.84375
7/64	0.109375	23/64	0.359375	39/64	0.60938	55/64	0.859375
1/8	0.125	3/8	0.375	5/8	0.625	7/8	0.875
9/64	0.140625	25/64	0.390625	41/64	0.64063	57/64	0.890625
5/32	0.15625	13/32	0.40625	21/32	0.66625	29/32	0.90625
11/64	0.171875	27/64	0.421875	43/64	0.67188	59/64	0.921875
3/16	0.1875	7/16	0.4375	11/16	0.6875	15/16	0.9375
13/64	0.203125	29/64	0.453125	45/64	0.70313	61/64	0.953125
7/32	0.21875	15/32	0.46875	23/32	0.71875	31/32	0.96875
15/64	0.234375	31/64	0.484375	47/64	0.73438	63/64	0.984375
1/4	0.25	1/2	0.5	3/4	0.75	1	1.000000

### Conversion Table - Inches to Millimeters

in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
1/64	0.3969	13/64	5.1594	25/64	9.9219	37/64	14.68	49/64	19.4469	61/64	24.2094	1 9/32	32.544	12 1/32	42.0688
1/32	0.7937	7/32	5.5562	13/32	10.3187	19/32	15.08	25/32	19.8437	31/32	24.6062	1 5/16	33.338	1 11/16	42.8626
3/64	1.1906	15/64	5.9531	27/64	10.7156	39/64	15.48	51/64	20.2406	63/64	25.0031	1 11/32	34.131	1 23/32	43.6563
1/16	1.5875	1/4	6.3500	7/16	11.1125	5/8	15.88	13/16	20.6375	1	25.4001	1 3/8	34.925	1 3/4	44.4501
5/64	1.9844	17/64	6.7469	29/64	11.5094	41/64	16.27	53/64	21.0344	1 1/32	26.1938	1 13/32	35.719	1 25/32	45.2438
3/32	2.3812	9/32	7.1437	15/32	11.9062	21/32	16.67	27/32	21.4312	1 1/16	26.9876	1 7/16	36.513	1 13/16	46.0376
7/64	2.7781	19/64	7.5406	31/64	12.3031	43/64	17.07	55/64	21.8281	1 3/32	27.7813	1 15/32	37.306	1 27/32	46.8313
1/8	3.1750	5/16	7.9375	1/2	12.7000	11/16	17.46	7/8	22.2250	1 1/8	28.5751	1 1/2	38.100	1 7/8	47.6251
9/64	3.5719	21/64	8.3344	33/64	13.0969	45/64	17.86	57/64	22.6219	1 5/32	29.3688	1 17/32	38.894	1 29/32	48.4188
5/32	3.9687	11/32	8.7312	17/32	13.4937	23/32	18.26	29/32	23.0187	1 3/16	30.1626	1 9/16	39.688	1 15/16	49.2126
11/64	4.3656	23/64	9.1281	35/64	13.8906	47/64	18.65	59/64	23.4156	1 7/32	30.9563	1 19/32	40.481	1 31/32	50.0063
3/16	4.7625	3/8	9.5250	9/16	14.2875	3/4	19.05	15/16	23.8125	1 1/4	31.7501	1 5/8	41.275	2	50.800

### Conversion Table - Millimeters to Inches

in	mm														
1	0.0394	8	0.3150	15	0.5905	22	0.866	29	1.1417	36	1.4173	43	1.6929	50	1.9685
2	0.0787	9	0.3543	16	0.6299	23	0.906	30	1.1811	37	1.4567	44	1.7323	51	2.0079
3	0.1181	10	0.3937	17	0.6693	24	0.945	31	1.2205	38	1.4961	45	1.7716		
4	0.1575	11	0.4331	18	0.7087	25	0.984	32	1.2598	39	1.5354	46	1.8810		
5	0.1968	12	0.4724	19	0.748	26	1.0236	33	1.2992	40	1.5748	47	1.8504		
6	0.2362	13	0.5118	20	0.787	27	1.0630	34	1.3386	41	1.6142	48	1.8898		
7	0.2756	14	0.5512	21	0.827	28	1.1024	35	1.3779	42	1.6535	49	1.9291		