

mangueras
HOSES TUYAUX

DICSA



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DICSA

Características Técnicas
Technical Data
Caractéristiques Techniques

Compatibilidad Química

Chemical Compatibility

Compatibilité Chimique

TECHNICAL DATA

E= EXCELLENT G= GOOD C= CONDITIONAL U= UNSATISFACTORY	Synthetic Rubber	Thermoplastic Elastomer			NBR	VITON	Steel	Brass	Stainless Steel	E= EXCELLENT G= GOOD C= CONDITIONAL U= UNSATISFACTORY	Synthetic Rubber	Thermoplastic Elastomer			NBR	VITON	Steel	Brass	Stainless Steel
		PTFE	EPDM									PTFE	EPDM						
FLUID	HOSE			SEALS		METAL			FLUID	HOSE			SEALS		METAL				
Acetaldehyde	U	E	G	E	U	U	G	E	E	Butylene	U	E	-	U	C	E	E	E	E
Acetyc Acid, 10%	U	E	C	C	U	G	U	U	C	Butyl Stearate	U	E	-	U	G	E	G	G	G
Acetic Acid, Glacial	U	E	C	E	U	U	U	U	C	Butyraldehyde	U	E	-	E	U	U	E	E	E
Acetone	U	E	G	E	U	U	E	E	E	Calcium Acetate	G	E	C	E	G	U	G	G	G
Acetophenone	U	E	-	E	U	U	E	E	E	Calcium Bisulfate	E	E	G	U	E	E	U	C	C
Acetyl Acetone	U	E	G	E	U	U	U	C	C	Calcium Chloride	E	E	E	E	E	E	G	G	G
Acetyl Chloride	U	E	U	U	U	E	C	C	C	Calcium Hydroxide	E	E	C	E	E	E	G	G	G
Acetylene	U	E	G	E	U	E	E	E	E	Calcium Hypochlorite	U	E	C	E	U	E	U	G	C
Air, Hot (Up to +160°F)	E	E	E	E	E	E	E	E	E	Calcium Nitrate	E	E	E	E	E	E	G	G	G
Air, Hot (161°F -200°F)	C	E	G	C	G	E	E	E	E	Cane Sugar Liquors	E	E	E	E	E	E	E	G	E
Air, Hot (201°F -300°F)	U	E	U	U	U	E	E	E	E	Carbitol	G	E	G	E	G	G	E	E	E
Air Wet	E	E	C	E	E	E	U	G	E	Carbolic Acid	U	E	U	E	U	E	U	E	E
Aluminum Chloride	E	E	E	E	E	E	U	U	U	Carbonic Acid	G	E	C	E	G	E	U	C	E
Aluminum Fluoride	E	E	E	E	E	E	U	U	U	Carbon Dioxide	G	E	E	E	G	E	E	E	E
Aluminum Nitrate	E	E	E	E	E	E	U	U	C	Carbon Disulfide	U	E	C	U	U	E	G	G	G
Aluminum Sulfate	E	E	G	E	E	E	U	C	E	Carbon Monoxide	G	E	E	E	G	E	E	E	E
Alums	E	E	E	E	E	E	U	C	E	Carbon Tetrachloride	U	E	U	U	U	E	U	G	G
Ammonia, Cold	U	G	U	E	E	U	E	U	E	Castor Oil	E	E	G	E	E	E	E	E	E
Ammonia, Hot	U	G	U	E	U	U	E	U	E	Cellosolve Acetate	U	E	U	E	U	U	U	U	E
Ammonia, Anhydrous	U	G	U	E	E	U	E	U	E	China Wood Oil (Tung Oil)	G	E	C	U	G	E	E	G	E
Ammonia, Aqueous	U	G	U	E	E	U	E	U	E	Chlorine	U	U	U	U	U	G	C	C	C
Ammonium Carbonate	U	E	C	E	U	U	C	U	C	Chloroacetic Acid	U	E	U	E	U	U	U	U	U
Ammonium Chloride	E	E	C	E	E	U	U	U	C	Chloroacetone	U	E	U	E	U	U	G	G	G
Ammonium Hydroxide	C	E	U	E	C	C	G	U	C	Chlorobenzene	U	E	U	U	U	G	G	G	G
Ammonium Nitrate	G	E	C	E	E	U	G	U	G	Chloroform	U	E	U	U	U	E	G	G	G
Ammonium Phosphate	E	E	C	E	E	-	U	C	G	O-Chlorophenol	U	E	U	U	U	E	G	G	G
Ammonium Sulfate/Sulfide	E	E	C	E	E	U	U	U	G	Chlosulfonic Acid	U	E	U	U	U	U	G	U	G
Amyl Acetate	U	E	U	E	U	U	E	E	E	Chrome Plating solution	U	E	-	E	U	E	C	U	U
Amyl Alcohol	G	E	E	E	G	G	G	G	E	Chromic Acid	U	E	-	E	U	E	C	U	U
Aniline, Aniline Oil	U	E	U	E	U	U	E	U	E	Citric Acid	E	E	C	E	E	E	C	C	C
Aniline Dyes	U	E	U	E	U	G	U	C	G	Coke Oven Gas	U	E	-	U	U	E	E	C	E
Arsenic Acid	E	E	G	E	E	E	U	U	G	Copper Chloride	E	E	E	E	E	E	U	U	U
Asphalt	C	E	G	E	G	E	E	G	E	Copper Cyanide	E	E	-	E	E	E	E	U	G
ASTM 1	E	E	E	U	E	E	E	E	E	Copper Sulfate	E	E	G	E	E	E	U	C	G
ASTM 2	G	E	E	U	E	E	E	E	E	Cotton Seed Oil	G	E	E	U	E	E	E	E	E
ASTM 3	G	E	E	U	E	E	E	E	E	Creosote (Coal Tar)	C	E	U	U	G	E	E	C	E
Automatic Trans. Fluid	G	E	G	U	E	E	E	E	E	Crude Oil	G	E	C	U	E	E	G	U	G
Barium Chloride	E	E	C	E	E	E	U	G	E	Cyclohexanol	G	E	C	U	E	E	E	E	E
Barium Hydroxide	E	E	G	E	E	E	G	U	G	Cyclohexanone	U	E	G	E	U	U	E	E	E
Barium Sulfide	E	E	C	E	E	E	C	U	G	Detergent/Water Solution	E	E	C	E	E	E	G	E	E
Benzene, Benzol	U	E	C	U	U	E	G	E	E	Diacetone Alcohol (Acetol)	U	E	C	E	U	U	E	E	E
Benzin	G	E	C	U	E	E	E	E	E	Dibenzyl Ether	U	E	-	E	U	U	G	G	G
Benzoic Acid	U	E	C	U	U	E	U	G	G	Diesel Oil	C	E	C	U	E	E	E	E	E
Benzyl Alcohol	U	E	C	E	U	E	E	G	E	Diethylamine	G	E	-	E	G	U	E	U	E
Black Sulfate Liquor	G	E	C	E	C	E	E	C	E	Diethyl Phthalate (DOP)	U	E	C	E	U	G	E	E	E
Blast Furnace Gas	U	U	C	U	U	E	E	C	E	Dowtherm A&E	U	E	-	U	U	E	G	U	E
Borax	G	E	G	E	G	E	E	E	E	Dowtherm 209	C	E	-	E	C	U	-	-	-
Boric Acid	G	E	G	E	G	E	U	G	C	Ester Blend	C	E	C	E	E	E	E	E	E
Brine	G	E	C	E	E	E	U	G	G	Ethyl Alcohol (Ethanol)	E	E	C	E	E	E	E	E	E
Bromine	U	E	U	U	U	E	U	C	U	Ethyl Acetate	U	E	C	E	U	U	E	E	E
Butane	LPG Approved Hose Only				E	E	E	E	E	Ethyl Benzene	U	E	-	E	U	E	E	G	G
Butyl Acetate	U	E	C	U	U	U	E	E	E	Ethyl Cellulose	G	E	C	E	G	U	E	G	G
Butyl Alcohol	E	E	G	E	E	E	G	G	G	Ethyl Chloride	U	E	U	E	U	E	E	E	E
Butyl Cellosolve	U	E	C	E	U	U	E	E	E	Ethylene Dichloride	U	E	U	U	U	G	G	C	G

HYDRAULIC HOSES

THERMOPLASTIC HOSES

PTFE AND CONVOLUTED SS HOSES

INDUSTRIAL HOSES

Datos Orientativos

This information is for guidance only

Données approximatives

E= EXCELLENT G= GOOD C= CONDITIONAL U= UNSATISFACTORY	Synthetic Rubber	PTFE		Thermoplastic Elastomer		EPDM	NBR	VITON	Steel	Brass	Stainless Steel	E= EXCELLENT G= GOOD C= CONDITIONAL U= UNSATISFACTORY	Synthetic Rubber	PTFE		Thermoplastic Elastomer		EPDM	NBR	VITON	Steel	Brass	Stainless Steel
		FLUID	HOSE		SEALS									METAL		FLUID	HOSE						
Ethylene Glycol	E	E	C	E	E	E	E	U	G	E	E	Methyl Bromide	U	E	U	U	G	E	E	E	E	G	
Ferric Chloride	G	E	-	E	E	E	U	U	U	U	U	Methyl Chloride	U	E	U	U	U	E	E	E	E	E	
Ferric Nitrate	E	E	C	E	E	E	U	U	G	E	E	Methyl Butyl Ketone	U	E	C	E	U	U	E	E	E	E	
Ferric Sulfate	G	E	C	E	G	E	U	U	E	E	E	Methyl Ethyl Ketone	U	E	C	E	U	U	G	G	G	G	
Formaldehyde	C	E	C	E	C	G	E	E	E	E	E	Methylene Chloride	U	E	U	G	U	G	G	G	G	G	
Formic Acid	C	E	U	E	C	U	U	C	C	C	C	Methyl Isobutyl Ketone	U	E	U	G	U	U	G	G	G	G	
Fuel Oil	G	E	E	U	E	E	E	E	E	E	E	Methyl Isopropyl Ketone	U	E	U	G	U	U	G	G	G	G	
Furfural	C	E	-	E	C	U	G	G	G	G	G	Methyl Salicylate	U	E	-	C	U	U	E	G	G	G	
Gallic Acid	G	E	-	E	G	E	U	-	G	G	G	MIL-L-2104	E	E	E	U	E	E	E	E	E	E	
Gasoline	C	E	E	U	E	E	E	E	E	E	E	MIL-H-5606	E	E	E	U	E	E	E	E	E	E	
Gasohol	U	E	G	U	G	E	E	E	E	E	E	MIL-H-6083	E	E	E	U	E	E	E	E	E	E	
Glycerine/Glycerol	E	E	E	E	E	E	E	G	E	E	E	MIL-L-7808	C	E	G	U	G	E	G	G	E	E	
Green Sulfate Liquor	G	E	-	E	G	E	U	U	E	E	E	MIL-L-23699	C	E	-	U	G	E	E	E	E	E	
Helium	C	G	C	E	E	E	E	E	E	E	E	MIL-H-46170	G	E	-	C	E	E	E	E	E	E	
Heptane	G	E	E	U	E	E	E	E	E	E	E	MIL-H-83282	C	E	-	U	E	E	E	E	E	E	
Hexaldehyde	C	E	-	E	U	U	G	G	E	E	E	Mineral Oils	C	E	G	U	E	E	E	E	E	E	
Hexane	G	E	E	U	E	E	E	E	E	E	E	Naphtha	U	E	G	U	C	E	-	-	-	-	
Hydraulic Oils												Naphthalene	U	E	G	U	U	E	E	G	E	E	
Ester Blend	C	E	C	E	E	E	E	E	E	E	E	Naphthenic Acid	U	E	-	U	C	E	-	G	E	E	
Phos. Ester/Petroleum Blend	U	E	C	-	U	C	E	E	E	E	E	Natural Gas	C	U	U	U	E	E	G	G	G	G	
Silicone Oils	E	E	E	E	E	E	E	E	E	E	E	Nickel Acetate	U	E	U	E	C	G	G	C	E	E	
Straight Petroleum Base	E	E	E	U	E	E	E	E	E	E	E	Nickel Chloride	G	E	U	E	E	E	U	U	G	G	
Straight Phosphate Ester	U	E	C	E	U	C	E	E	E	E	E	Nickel Sulfate	E	E	U	E	E	E	U	G	G	G	
Water Glycol	E	E	C	E	E	E	E	E	E	E	E	Nitric Acid, to 10%	U	E	C	U	U	E	U	U	E	E	
Water Petroleum Emulsion	G	E	C	U	E	E	C	E	E	E	E	Nitric Acid, over 10%	U	E	U	U	U	G	U	U	E	E	
Hydrobromic Acid	U	E	U	E	U	E	E	U	E	E	E	Nitrobenzene	U	E	U	E	U	G	E	G	E	E	
Hydrochloric Acid	U	E	U	C	U	E	U	U	U	U	U	Nitrogen	E	E	E	E	E	E	E	E	E	E	
Hydrocyanic Acid	C	E	-	E	C	E	E	E	G	E	E	Octyl Alcohol	E	E	E	E	E	E	E	E	E	E	
Hydrofluoric Acid	U	E	U	C	U	U	U	U	U	U	U	Oleic Acid	U	E	G	U	U	G	C	E	E	E	
Hydrofluorosilicic Acid	G	E	-	E	G	E	U	U	U	U	U	Oleum (Fuming Sulfuric Acid)	U	E	U	U	U	E	G	U	G	G	
Hydrogen	C	C	C	E	E	E	E	E	E	E	E	Oleum (Mineral Spirits)	E	E	G	U	E	E	E	E	E	E	
Hydrogen Peroxide	G	E	G	C	G	E	U	U	G	E	E	Ortho-Dichlorobenzene	U	E	-	U	U	E	G	G	G	G	
Hydrogen Sulfide, Dry	U	C	C	E	U	U	E	G	G	E	E	Oxalic Acid	G	E	C	E	G	E	U	C	C	C	
Isocyanate	U	E	U	U	U	E	G	-	G	E	E	Oxygen	U	U	U	U	-	-	G	G	G	G	
Iso Octane	G	E	E	U	E	E	E	E	E	E	E	Palmitic Acid	G	E	E	E	E	E	G	-	E	E	
Isopropyl Acetate	U	E	C	E	U	U	E	-	E	E	E	Para-Dichlorobenzene	U	E	-	U	U	E	G	G	G	G	
Isopropyl Alcohol	G	E	C	E	G	E	E	E	E	E	E	Pentane	E	E	G	U	E	E	G	G	G	G	
Isopropyl Ether	C	E	-	U	G	U	G	G	G	E	E	Perchloric Acid	C	E	U	E	E	E	U	U	U	U	
JP-4, JP-5	C	E	G	U	E	E	E	E	E	E	E	Perchloroethylene	U	E	U	U	U	E	C	G	G	G	
Kerosene	C	E	G	U	E	E	E	E	E	E	E	Phenol (Carbolic Acid)	U	E	U	U	U	E	U	E	E	E	
Lacquer/Lacquer Solvents	U	E	C	U	U	U	U	E	E	E	E	Phos. Ester/Petroleum Blend	U	E	C	-	U	C	E	E	E	E	
Lime Sulfur	C	E	C	E	U	E	G	U	G	E	E	Phosphoric Acid	U	E	U	E	U	E	U	E	U	U	
Linseed Oil	G	E	G	U	E	E	E	E	E	E	E	Phosphorous Trichloride	U	E	U	E	U	E	C	U	C	C	
LPG	C	-	-	U	E	E	E	E	E	E	E	Potassium Acetate	G	E	-	E	G	U	C	G	C	C	
Lubricating Oils				See Hydraulic Oils								Potassium Chloride	E	E	E	E	E	E	E	C	E	E	
Magnesium Chloride	E	E	C	E	E	E	E	C	C	E	E	Potassium Cyanide	E	E	E	E	E	E	C	U	G	G	
Magnesium Hydroxide	G	E	C	E	G	E	E	G	E	E	E	Potassium Dichromate	E	E	E	E	E	E	C	C	C	C	
Magnesium Sulfate	E	E	C	E	E	E	E	E	E	E	E	Potassium Hydroxide, to 10%	G	E	C	E	G	G	G	G	G	G	
Maleic Acid	U	E	C	E	U	E	E	G	G	E	E	Potassium Hydroxide, over 10%	C	E	U	E	C	U	G	G	G	G	
Maleic Anhydride	U	E	C	U	U	E	G	U	E	E	E	Potassium Nitrate	E	E	E	E	E	E	G	G	E	E	
Malic Acid	G	E	-	U	G	G	U	-	E	E	E	Potassium Sulfate	E	E	E	E	E	E	-	-	-	-	
Mercuric Chloride	E	E	E	E	E	E	U	U	U	U	U	Propane	C	-	-	U	C	-	E	E	E	E	
Mercury	E	E	E	E	E	E	U	U	U	U	U	Propyl Acetate	U	E	-	E	U	U	E	-	E	E	
Methanol	G	E	C	E	G	U	G	G	E	E	E	Propyl Alcohol	E	E	U	E	E	E	E	E	E	E	

Datos Orientativos

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Données approximatives

Compatibilidad Química

Chemical Compatibility

Compatibilité Chimique

TECHNICAL DATA

E= EXCELLENT G= GOOD C= CONDITIONAL U= UNSATISFACTORY	Synthetic Rubber	PTFE	Thermoplastic Elastomer			NBR	VITON	Steel	Brass	Stainless Steel	E= EXCELLENT G= GOOD C= CONDITIONAL U= UNSATISFACTORY	Synthetic Rubber	PTFE	Thermoplastic Elastomer			NBR	VITON	Steel	Brass	Stainless Steel
			EPDM											EPDM							
FLUID	HOSE			SEALS			METAL			FLUID	HOSE			SEALS			METAL				
Propylene	U	E	-	U	U	E	E	E	E	Straight Petroleum Base	E	E	E	U	E	E	E	E	E		
Refrigerant R-12	C	-	G	U	G	E	E	E	E	Straight Phosphate Ester	U	E	C	E	U	C	E	E	E		
Refrigerant R-13	C	-	G	U	G	E	E	E	E	Styrene	U	E	U	U	U	G	E	E	E		
Refrigerant R-22	U	C	U	U	U	U	E	E	E	Sulfur	C	E	G	E	U	E	E	U	G		
Refrigerant R-134a	U	C	U	U	E	U	E	E	E	Sulfur Chloride	U	E	-	U	U	E	G	-	G		
Sewage	E	E	E	E	E	E	G	G	G	Sulfur Dioxide	U	E	U	E	U	E	E	G	G		
Silicone Oils	E	E	E	E	E	E	E	E	E	Sulfur Trioxide	U	E	U	E	U	E	G	C	G		
Soap (Water Solutions)	E	E	C	E	E	E	E	E	E	Sulfuric Acid, to 10%	U	E	U	E	U	E	U	G	C		
Sodium Acetate	G	E	-	E	G	U	E	E	G	Sulfuric Acid, over 10%	U	E	U	U	U	G	C	C	C		
Sodium Bicarbonate	E	E	E	E	E	E	G	G	E	Sulfurous Acid	C	E	U	E	C	U	U	C	C		
Sodium Borate	E	E	E	E	E	E	E	E	E	Tannic Acid	E	E	G	E	E	E	E	E	E		
Sodium Carbonate	E	E	E	E	E	E	E	G	E	Tar (Bituminous)	C	E	G	U	G	E	E	G	E		
Sodium Chloride	E	E	E	E	E	E	U	C	C	Tartaric Acid	G	E	G	E	E	E	U	C	C		
Sodium Cyanide	E	E	E	E	E	E	E	-	C	Tertiary Butyl Alcohol	G	E	G	E	G	E	G	G	G		
Sodium Hydroxide, to 10%	C	E	G	E	U	E	C	G	C	Titanium Tetrachloride	U	E	-	U	C	E	E	U	G		
Sodium Hydroxide, over 10%	U	E	C	E	U	E	C	C	C	Toluene (Toluol)	U	E	U	U	U	E	E	E	E		
Sodium Hypochlorite	C	E	C	C	C	C	U	U	U	Trichlorethylene	U	E	U	E	U	E	E	G	E		
Sodium Metaphospahte	E	E	E	E	E	E	E	G	G	Tricresyl Phosphate	U	E	U	E	U	G	E	-	C		
Sodium Nitrate	G	E	E	E	G	-	E	C	E	Trianthanolamine	C	E	U	E	E	U	E	U	E		
Sodium Perborate	G	E	-	E	G	E	C	U	C	Tung Oil	G	E	C	U	G	E	E	G	E		
Sodium Peroxide	G	E	-	E	G	E	U	U	C	Turpentine	C	E	G	U	G	E	E	G	G		
Sodium Phosphates	E	E	E	E	E	E	U	E	G	Varnish	C	E	G	U	G	E	E	G	E		
Sodium Silicate	E	E	E	E	E	E	E	E	E	Vinyl Chloride	U	E	U	U	U	E	E	U	C		
Sodium Sulfate	E	E	E	E	E	E	C	G	G	Water (to +150°C)	E	E	E	E	E	E	C	G	E		
Sodium Sulfide	E	E	E	E	E	E	C	U	C	Water (+151 °F to +200 °F)	G	E	U	E	E	E	C	G	E		
Sodium Thiosulfate	G	E	E	E	G	E	U	U	C	Water (+201 °F +350 °F)	U	E	U	E	U	G	C	G	E		
Soy Bean Oil	G	E	G	U	E	E	E	E	E	Water Glycol	E	E	C	E	E	E	E	E	E		
Stannic Chloride	E	E	C	E	E	E	U	U	U	Water Petroleum Emulsion	G	E	C	U	E	E	C	E	E		
Steam (up to 388°F)	U	E	U	C	U	C	E	E	E	Xylene	U	E	E	U	U	E	E	E	E		
Stearic Acid	G	E	G	E	G	E	C	C	E	Zinc Chloride	E	E	E	E	E	E	E	U	U		
Stoddard Solvent G	G	E	U	U	E	E	E	E	E	Zinc Sulfate	E	E	-	E	E	E	U	C	G		

Datos Orientativos

This information is for guidance only

Données approximatives

HYDRAULIC HOSES

THERMOPLASTIC HOSES

PTFE AND CONVOLUTED SS HOSES

INDUSTRIAL HOSES

1. Resistencia / *Resistant* / *Résistant*
2. Parcialmente Resistente / *Partially Resistant* / *Partiellement Résistant*
3. Sin Resistencia / *Non Resistant* / *Pas Résistant*

Compatibilidad Química Inox Coarrugado

Chemical Compatibility Convuluted Stainless Steel

Compatibilité Chimique Inox Convoluté

CHEMICAL PRODUCT	CONCENTRATION	Tª (°F)	304SS 321SS	316L	CHEMICAL PRODUCT	CONCENTRATION	Tª (°F)	304SS 321SS	316L
Acetic Acid	5-20%	70	1	1	Aniline	3%	70	1	1
Acetic Acid	50%	70	1	1	Aniline Hydrochloride		70	3	3
Acetic Acid	50-80%	Boiling	3	2	Antimony Trichloride		70	3	3
Acetic Acid	80%	70	1	1	Barium Carbonate		70	1	2
Acetic Acid	100%	70	1	1	Barium Chloride	5% & Saturated	70	1	1
Acetic Acid	100%	Boiling	3	2	Barium Hydroxide	Aqueous Solution	Hot	1	1
Acetic Acid	100%@150lbs.	400	3	3	Barium Nitrate	Aqueous Solution	Hot	1	1
Acetic Anhydride		70	1	1	Barium Sulphate		70	1	1
Acetic Anhydride		Boiling	1	1	Barium Sulfide	Saturated Solution	70	1	1
Acetic Acid Vapors	30%	Hot	3	2	Benzene(Benzol)		70	1	1
Acetic Acid Vapors	100%	Hot	3	3	Benzene(Benzol)		Hot	1	1
Acetone		Boiling	1	1	Benzoic Acid		70	1	1
Acetyl Chloride		Cold	2	2	Blood(Meat Juices)		Cold	1**	1
Acetyl Chloride		Boiling	2	2	Borax	5%	Hot	1	1
Acetylene Concentrated		70%	1	1	Borax	5%	Cold	1	1
Acetylene Commercially Pure		70%	1	1	Boric Acid	5% Solution	70-Hot	1	1
Acid Salt Mixture	10%	Boiling	1	1	Boric Acid	5% Solution	Boiling	1	1**
Alcohol, Ethyl	70%	Boiling	1	1	Boric Acid	Saturated Solution	70	1**	1**
Alcohol, Methyl		70	1	1	Boric Acid	Saturated Solution	Boiling	1**	1**
Alcohol, Methyl		150	3	2	Bromine, Bromine Water		70	3	3
Aluminum Molten		1400	3	3	Buttermilk		70	1	1
Aluminum Acetate	Saturated	70	1	1	Butyl Acetate			1	1
Aluminum Acetate	Saturated	Boiling	1	1	Butyric Acid	5%	70-150	1	1
Aluminum Chloride	10% Quiescent	70	3	3	Butyric Acid	Aqueous Solution	Boiling	1	1
Aluminum Chloride	25% Quiescent	70	1	1	Calcium Carbonate		70	1	1
Aluminum Fluoride		70	3	3	Calcium Carbonate		70	1	1
Aluminum Hydroxide	Saturated	70	1	1	Calcium Chlorate	Dilute Solution	70-Hot	1	1
Aluminum Sulphate	5%	150	1**	1	Calcium Chloride	Dilute or Concentrate Solution	70	2**	1**
Aluminum Sulphate	10%	70	1**	1	Calcium Chlorohypochlorite	1% (Bleaching powder)	70	3	3
Aluminum Sulphate	10%	Boiling	2	1	Calcium Chlorohypochlorite	5%	70	3	3
Aluminum Sulphate	Saturated	70	1**	1	Calcium Hypochlorite	2%	70	2**	1**
Aluminum Sulphate	Saturated	Boiling	1	1	Calcium Hydroxide	10-20%	Boiling	1	1
Aluminum Potassium Sulphate	(Alum) 2%-10%	70	1	1	Calcium Sulphate	Saturated	70	1	1
Aluminum Potassium Sulphate	10%	Boiling	2	1	Carbonic Acid		70	1	1
Aluminum Potassium Sulphate	Saturated	Boiling	3	2	Carbolic Acid C.P.		70	1	1
Ammonia (Anhydrous)	All Concentration	70	1	1	Carbolic Acid C.P.		Boiling	1	1
Ammonia (Anhydrous)	Gas	Hot	3	3	Carbonated Water			1	1
Ammonia Liquor		70	1	1	Carbon Bisulfide		70	1	1
Ammonia Liquor		Boiling	1	1	Carbon Monoxide Gas		1400	1	1
Ammonium Bicarbonate		70	1	1	Carbon Tetrachloride	C.P.	70	1	1
Ammonium Bicarbonate		Hot	1	1	Carbon Tetrachloride	Dry C.P.	Boiling	1	1
Ammonium Bromide		70	2	1	Carbon Tetrachloride	Commercial + 1% Water		3**	3
Ammonium Carbonate	1&5%	70	1	1	Carnallite-Cold	Saturated Solution	Boiling	3	1**
Ammonium Chloride	1%	70	1	1	Cellulose			1	1
Ammonium Chloride	10%	Boiling	1**	1**	Chloroacetic Acid			3	3
Ammonium Chloride	28%	Boiling	2**	1**	Chlorbenzol	Concentrate Pure Dry	70	1	1
Ammonium Chloride	50%	Boiling	2**	1**	Chloric Acid			3	3
Ammonium Hydroxide	All Concentration	70	1	1	Chlorine Gas	Dry	70	3	2
Ammonium Monophosphate		70	1	1	Chlorine Gas	Moist	70	3	3
Ammonium Nitrate	All Concentration Agitated	70	1	1	Chlorinater Water	Saturated			3**
Ammonium Nitrate	All Concentration Aerated	70	1	1	Chloroform		70	1	1
Ammonium Nitrate	All Concentration Saturated	Boiling	1	1	Chromic Acid	5% C.P.	70	1	1
Ammonium Oxalate	5%	70	1	1	Chromic Acid	10%	70	3	2
Ammonium Perchlorate	10%	Boiling	1	1	Chromic Acid	10% C.P.	Boiling	3	2
Ammonium Persulphate	5%	70	1	1	Chromic Acid	50% C.P.	70	3	2
Ammonium Phosphate	5%	70	1	1	Chromic Acid	50%	Boiling	3	3
Ammonium Sulphate	1% Aerated & Agitated	70	1	1	Chromic Acid	Comm 50% (Cont. SO3)%	70	3	3
Ammonium Sulphate	5% Aerated & Agitated	70	1	1	Chromic Acid	Comm 50% (Cont. SO3)%	Boiling	3	3
Ammonium Sulphate	10% Saturated	Boiling	2**	1**	Chromic Acid				
Ammonium Sulphite		70	1	1	Chromium Plating Bath		70	1	1
Ammonium Sulphite		Boiling	1	1	Citric Acid	5% Still	70-150	1	1
Amyl Acetate Concentrate		70	1	1	Citric Acid	15% Still	70	1	1
Amyl Chloride		70	1	1	Citric Acid	5% or Concentrated	Boiling	2	1

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Datos Orientativos

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Données approximatives

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Compatibilidad Química Inox Coarrugado

Chemical Compatibility Convuluted Stainless Steel

Compatibilité Chimique Inox Convoluté

CHEMICAL PRODUCT	CONCENTRATION	T ^a (°F)	304SS 321SS	316L	CHEMICAL PRODUCT	CONCENTRATION	T ^a (°F)	304SS 321SS	316L
Coffee		Boiling	1	1	Lactic Acid	1%	70	1	1
Concentrated Crude		70	1	1	Lactic Acid	1%	Boiling	1	1
Copper Acetate	Saturated Solution	70	1	1	Lactic Acid	5%	70	1	1
Copper Chloride	1% Agitated	70	2**	1**	Lactic Acid	5%	150	2	1
Copper Chloride	1% Agitated	158	3	3	Lactic Acid		Boiling	2	1
Copper Chloride	1% Agitated	70	2**	1**	Lactic Acid	10%	70	2	1
Copper Chloride	5% Agitated	70	3**	2**	Lactic Acid	10%	150	2	1
Copper Chloride	6% Aerated	70	3**	3**	Lactic Acid		Boiling	3	2
Copper Cyanide	Saturated Solution	Boiling	1	1	Lactic Acid	Concentrated	70	2	1
Copper Nitrate	1% Still, Agitated & Aerated	70	1	1	Lactic Acid	Concentrated	Boiling	3	2
Copper Nitrate	5% Still, Agitated & Aerated	70	1	1	Lead (Molten)	(Molten)	750	2	2
Copper Nitrate	50% Aqueous Solution	Hot	1	1	Lead	5% Acetate		1	1
Copper Sulphate	5% Still, Agitated & Aerated	70	1	1	Linseed Oil		70	1	1
Copper Sulphate	Saturated Solution	Boiling	1	1	Linseed Oil	3%	380	2	1
Creosote-Coal Tar		Hot	1	1	Magnesium Chloride	1% Quiescent	70	1**	1
Creosote Oil		Hot	1	1	Magnesium Chloride	1% Quiescent	Hot	3	2**
Cyanogen Gas		70	1	1	Magnesium Chloride	5% Quiescent	70	1**	1
Dichloroethane	Dry	Boiling	1	1	Magnesium Chloride	5% Quiescent	Hot	3	2**
Dinitrochlorobenzene	Melted & Solidfied	70	1	1	Magnesium Oxochloride		70	3	2**
Dyewood Liquor		70	1**	1	Magnesium Sulphate		Hot	1	1
Epsom Salt (Magnesium Sulfate)		Hot	1	1	Magnesium Sulphate		Cold	1	1
Epsom Salt (Magnesium Sulfate)		Cold	1	1	Malac Acid		Hot	2	1
Ethers		70	1	1	Malac Acid		Cold	2	1
Ethyl Acetate	Con. Sol.	70	1	1	Mash		Hot	1	1
Ethyl Chloride		70	1	1	Mayonnaise		70	1**	1
Ethylene Glycol		70	1	1	Mercury			1	1
Ferric Chloride	1% Solution, Still	70	2**	1**	Mercuric Chloride	Dilute Solution	70	3	3
Ferric Chloride	1% Solution	Boiling	3	3	Methanol	Methyl Alcohol		1	1
Ferric Chloride	5% Solution, Agitated, Aerated	70	3	3	Milk, Fresh, Sour			1	1
Ferric Hydroxide	(Hydrated Iron Oxide)	701	1	1	Mixed Acids		Cold	1	1
Ferric Nitrate	1%-5% Quiescent or Agitated	70	1	1	Molasses			1	1
Ferric Nitrate	1%-5% Aerated	70	1	1	Muriatic Acid		70	3	3
Ferric Sulphate	1%-5% Quiescent or Agitated	70	1**	1	Mustard		70	1**	1**
Ferric Sulphate	1%-5% Aerated	70	1**	1	Naptha	Crude	70	1	1
Ferric Sulphate	10%	Boiling	1**	1	Naptha	Pure	70	1	1
Ferrous Chloride	Saturated Sol.	70	3	1	Napththalene Sulfonic Acid		70	1	1
Ferrous Sulphate	Dilute Solution	70	1	1	Nickel Chloride Solution		70	1**	1**
Fluorine (Gas) Moist		70	3	3	Nitrating Solutions		Cold	2	2
Formaldehyde	40% Solution		1**	1**	Nitrating Solutions		Hot	2	2
Formic Acid	5% Still	70	2	1	Nickel Sulphate		Cold	1	1
Formic Acid		150	2	1	Nickel Sulphate		Hot	1	1
Fuel Oil	Containing Sulphuric Acid		3	2	Niter Cake	Fused		2	1
Furfural		70	1	1	Nitric Acid	5%	Boiling	1	1
Gallic Acid		70-150	1	1	Nitric Acid	65%	70	1	1
Gallic Acid	Saturated	212	1	1	Nitric Acid	65%	Boiling	2	2
Gasoline		70	1	1	Nitric Acid	Concentrated	70	1	1
Gelatin			1	1	Nitric Acid	65%	Boiling	3	3
Glue Dry		70	1	1	Nitric Acid	Fuming Concentrated	70-110	1	1
Glue Dry	Solution in Acid	70-140	2**	1	Nitric Acid	Fuming Concentrated	Boiling	3	3
Glycerine		70	1	1	Nitrous Acid	5%	70	1	1
Hydrochloric Acid	All Concentration	70	3	3	Oils	Crude	Cold	1**	1**
Hydrocyanic Acid		70	1	1	Oils	Crude	Hot	1**	1**
Hydrofluoric Acid		70	3	3	Oleic Acid		70-400	1**	1
Hydrofluosilic Acid		70	3	3	Oxalic Acid	5%-10%	70	1	1
Hydrogen Peroxide		70	1**	1	Oxalic Acid	5%-10%	Boiling	1	1
Hydrogen Peroxide		Boiling	2**	1	Oxalic Acid	10%	Boiling	3	3
Hydrogen Sulphide		70	1**	1	Oxalic Acid	25%-50%	Boiling	3	3
Hydrogen Sulphide	West	70	2**	1**	Paraffin		Cold	1	2
Hyposulphite Soda (Hypo)			1	1	Paraffin		Hot	1	2
Ink		70	2**	1	Phenol (see Carbolic Acid)				
Iodine		70	3	3	Petroleum Ether			1	1
Iodoform		70	1	1	Phosphoric Acid	1%	70	1*	1*
Kerosene		70	1	1	Phosphoric Acid	1%	Boiling	1*	1*

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Compatibilidad Química Inox Coarrugado

Chemical Compatibility Convuluted Stainless Steel

Compatibilité Chimique Inox Convoluté

NOMBRE	CONCENTRACIÓN	Tª (°F)	304SS 321SS	316L	NOMBRE	CONCENTRACIÓN	Tª (°F)	304SS 321SS	316L
Phosphoric Acid	1%-45% lbs. Pressure	284	1	1	Sodium Chloride	Saturated	Boiling	2**	1
Phosphoric Acid	5% Quiescent or Agitated	70	1	1	Sodium Cyanide		70	1	1
Phosphoric Acid	5% Aerated	70	1	1	Sodium Fluoride	5% Solution	70	2**	1**
Phosphoric Acid	10% Quiescent	70	3	1	Sodium Hydroxide		70	1	1
Phosphoric Acid	10% Agitated or Aerated	70	3	2	Sodium Hypochlorite	5% Still		2**	1**
Phosphoric Acid	10%-50%	Boiling	1	1	Sodium Hyposulphite		70	1**	1
Phosphoric Acid	80%	70	3	3	Sodium Nitrate		Fused	1	1
Phosphoric Acid	80%	230	3	3	Sodium Perchlorate	10%	70-150	1	1
Phosphoric Acid	85%	Boiling	3	3	Sodium Perchlorate		Boiling	1	1
Pictic Acid		70	1	1	Sodium Phosphate	5% Still	70	1	1
Potassium Bichromate	25%	70	1	1	Sodium Sulphate	All Concentration	70	1	1
Potassium Bichromate	25%	Boiling	1	1	Sodium Sulphate	Saturated		2**	1
Potassium Bromide		70	2**	1**	Sodium Sulphide	5%	70	1	1
Potassium Carbonate	1%	70	1	1	Sodium Sulphide	10%	150	1	1
Potassium Carbonate		Hot	1	1	Sodium Thiosulphate	Saturated Solution	70	1	1**
Potassium Chloride	Saturated @ 212	Boiling	1	1	Sodium Thiosulphate	Acid Fixing Bath (hypo)	70	1	1
Potassium Chloride	1% Quiescent	70	1**	1**	Sodium Thiosulphate	25% Solution	70	1	1**
Potassium Chloride	10% Agitated or Aerated	70	1	1	Sodium Thiosulphate	25% Solution	Boiling	1	1**
Potassium Chloride	5% Quiescent	70	1**	1**	Stannic Chloride Solution		70	3	3
Potassium Chloride	10% Agitated or Aerated	70	1	1	Stannic Chloride Solution		Boiling	3	3
Potassium Chloride	5%	Boiling	1	1	Stannous Chloride	Saturated		3	1
Potassium Chromium Sulfate	5%	70	1**	1	Steam			1	1
Potassium Chromium Sulfate		Boiling	3	3	Stearic Acid		70	1	1
Potassium Cyanide		70	1	1	Starch	Aqueous Solution		1	1
Potassium Ferricyanide	5%-25%	70	1	1	Strontium Hydroxide			1	1
Potassium Ferricyanide	25%	Boiling	1	1	Strontium Nitrate	Solution	Hot	1	1
Potassium Ferricyanide	5%	70	1	1	Sulphur	Moist	70	2**	1**
Potassium Hydroxide	5%	70	1	1	Sulphur	Molten	266	1	1
Potassium Hydroxide	27%	Boiling	1	1	Sulphur	Molten	833	3	3
Potassium Hydroxide	50%	Boiling	2	1	Sulphur Chloride	Dry		3	3
Potassium Hypochlorite		70			Sulphur Dioxide Gas	Gas (moist)	70	2	1
Potassium Nitrate	1%-5% Still or Agitated	70	1	1	Sulphur Dioxide Gas	Gas (moist)	575	1	1
Potassium Nitrate	1%-5% Aerated	70	1	1	Sulphuric Acid	5%-10%	70	3	3
Potassium Nitrate	50%	70	1	1	Sulphuric Acid	5%-10%	Boiling	3	3
Potassium Nitrate	50%	Boiling	1	1	Sulphuric Acid	50%	70	3	3
Potassium Nitrate	Molten	1022	1	1	Sulphuric Acid	50%	Boiling	3	1
Potassium Oxalate			1	1	Sulphuric Acid	Concentrated	70	1	3
Potassium Permanganate	5%	70	1	1	Sulphuric Acid	Concentrated	Boiling	3	3
Potassium Sulphate	1%-5% Still or Agitated	70	1	1	Sulphuric Acid	Concentrated	300	3	2
Potassium Sulphate	1%-5% Aerated	70	1	1	Sulphuric Fuming	Concentrated	70	3	2
Potassium Sulphate		Hot	1	1	Sulphurous Acid	Saturated	70	3	2
Potassium Sulphide	Salt		1	1	Saturated	60 lb Pressure			
Pyrogalllic Acid			1	1	Saturated	Saturated 70-125lb pressure			
Quinine Bisulphate	Dry		2	2	Saturated	150 lb Pressure	375	3	2
Quinine Sulphate	Dry		1	1	Sulphurous Spray		70	3	3
Sea Water		70	1**	1**	Tannic Acid		70	1	1
Sewage			1**	1**	Tannic Acid		150	1	1
Silver Bromide			2**	1**	Tanning Liquor		70	1	1
Silver Chloride			3	3	Tar			1	1
Silver Nitrate			1	1	Tartaric Acid			1	1
Soap		70	1	1	Tin		Molten	3	3
Sodium	Acetate (moist)		1**	1	Trichloroacetic Acid		70	3	3
Sodium Bicarbonate	All Concentration	70	1	1	Trichlorethylene	Dry	70	1**	1
Sodium Bicarbonate	5% Still	150	1	1	Trichlorethylene	Moist			
Sodium Bisulphate	Solution	70	1**	1**	Varnish		70	1	1
Sodium Bisulphate	Saturated Solution	70	3	3	Water			1	1
Sodium Bisulphate		68	3	1**	Yeast			1	1
Sodium Carbonate	5%	70-150	1	1	Zinc		Molten	3	3
Sodium Carbonate	5%-50%	Boiling	1	1	Zinc Chloride	5% Still	70	1**	1**
Sodium Carbonate	Molten	1650	3	3	Zinc Chloride		Boiling	2**	2**
Sodium Chloride	5% Still	70-150	1**	1	Zinc Cyanide	Moist	70	1	1
Sodium Chloride	20% Aerated	70	1**	1	Zinc Nitrate Solution	Hot		1	1
Sodium Chloride	Saturated	70	1**	1	Zinc Sulphate			1	1

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Datos Orientativos

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Données approximatives

Tabla para Conversión de Unidades de Presión
Conversion Table for Pressure Units
Table pour Conversion des Unités de Pression

	mbar	bar	p.s.i.	kPa	MPa	Kg/cm ²	mm H ₂ O
1 mbar	1	0,001	0,0145037	0,1	0,0001	0,00102	10,1972
1 bar	1000	1	14,503771	100	0,1	1,02	10197,2
1 p.s.i.	68,94757	0,0689476	1	6,895	0,00689476	0,0070307	703,0697
1 kPa	10	0,01	0,1450377	1	0,001	0,01	102
1 MPa	100000	10	145,03771	1000	1	10,2	1020000
1 Kg/cm²	980,665	0,980665	14,223341	98,0665	0,0980665	1	10000
1 mm H₂O	0,00981	0,0000981	0,0001422	0,000981	0,000000981	0,0001	1

Tabla para Conversión de Unidades de Longitud
Conversion Table for Length Units
Table pour Conversion des Unités de Longueurs

metro m	milímetro mm	pulgada in (")	pie ft
1	1000	39,3700787	3,2808399
0,001	1	0,0393701	0,0032808
0,0254	25,4	1	0,08333
0,3048	304,8	12	1
0,9144	914,4	36	3

Tabla para Conversión de Unidades de Temperatura
Conversion Table for Temperature Units
Table pour Conversion des Unités de Températures

Temperatura en °C = (°F - 32)/1,8
Temperatura en °F = 1,8 °C + 32
Temperatura en °K = °C + 273,14

Tabla de Temperaturas - Metales y Aleaciones

Table of Temperatures - Metals and Alloys

Table de Températures - Metaux et Alliages

Zona o punto de Fusión
Zone or Point of Fusion
Zone ou Point de Fusion

Temperatura de Utilización Máxima
Maximun Use Temperature
Température d'Utilisation Maximale

Elementos / *Elements* / *Elements*

Aleaciones / *Alloys* / *Alliages*

Tungsten (Wolfram) 3370 °C - 6098 °F
 Molybdenum 2610 °C - 4730 °F
 Columbio (Niobio) 2410 °C - 4368 °F
 Chromium 1950 °C - 3542 °F

Iron

Nickel
 Silicon

Beryllium
 Manganese

Copper

Silver

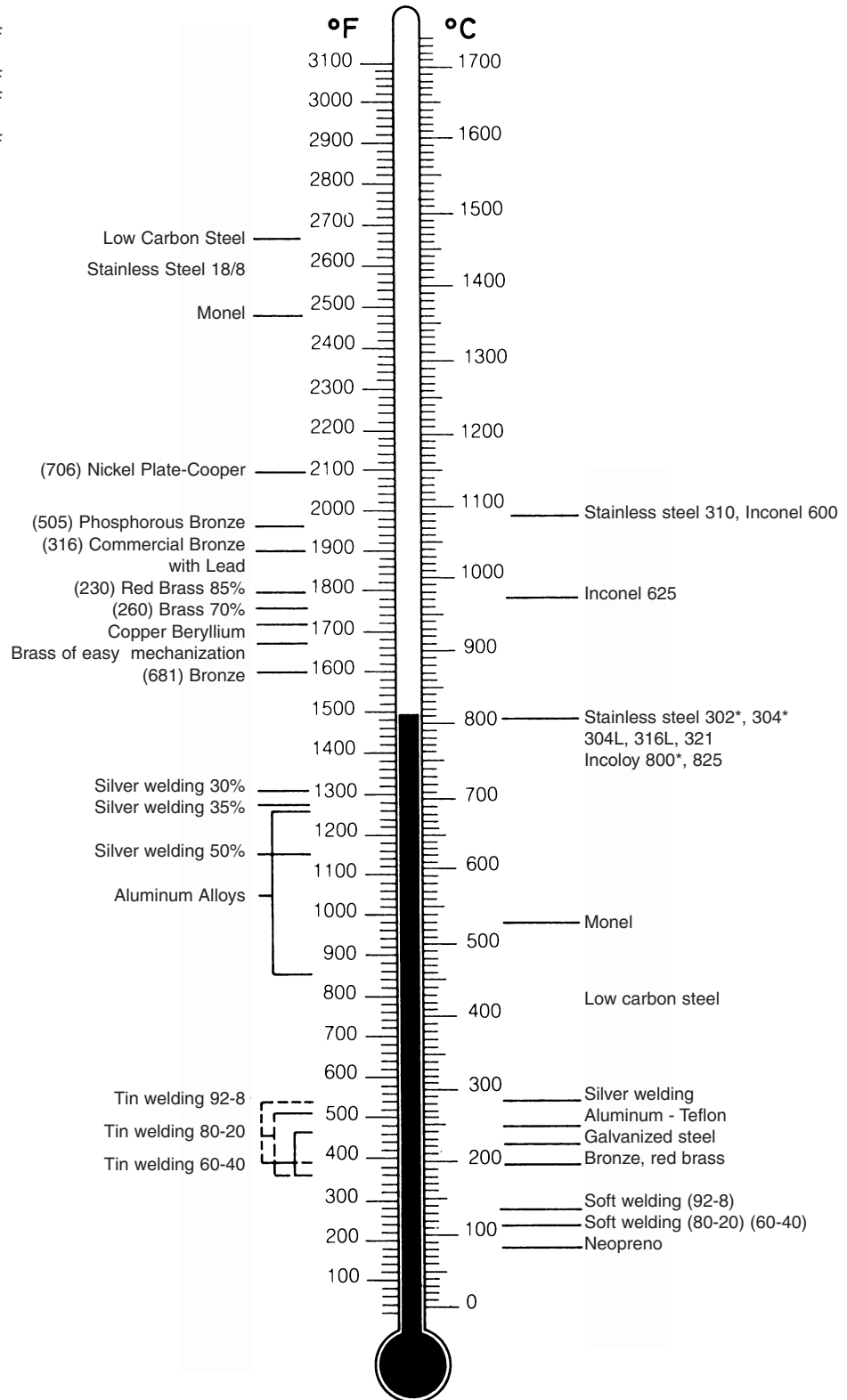
Calcium

Aluminum
 Antimony

Zinc

Lead
 Cadmium
 Bismuth
 Tin

Phosphorus



HYDRAULIC HOSES

THERMOPLASTIC HOSES

PTE AND CONVULTED SS HOSES

INDUSTRIAL HOSES

Cálculo del Diámetro del Tubo

The Size of the Hose

Détermination de la Mesure du Tube

V= Velocidad / *Speed* / *Vitesse*
 Q= Caudal / *Flow* / *Débit*
 DN= Diámetro Nominal / *Nominal Diameter* / *Diamètre Nominal*

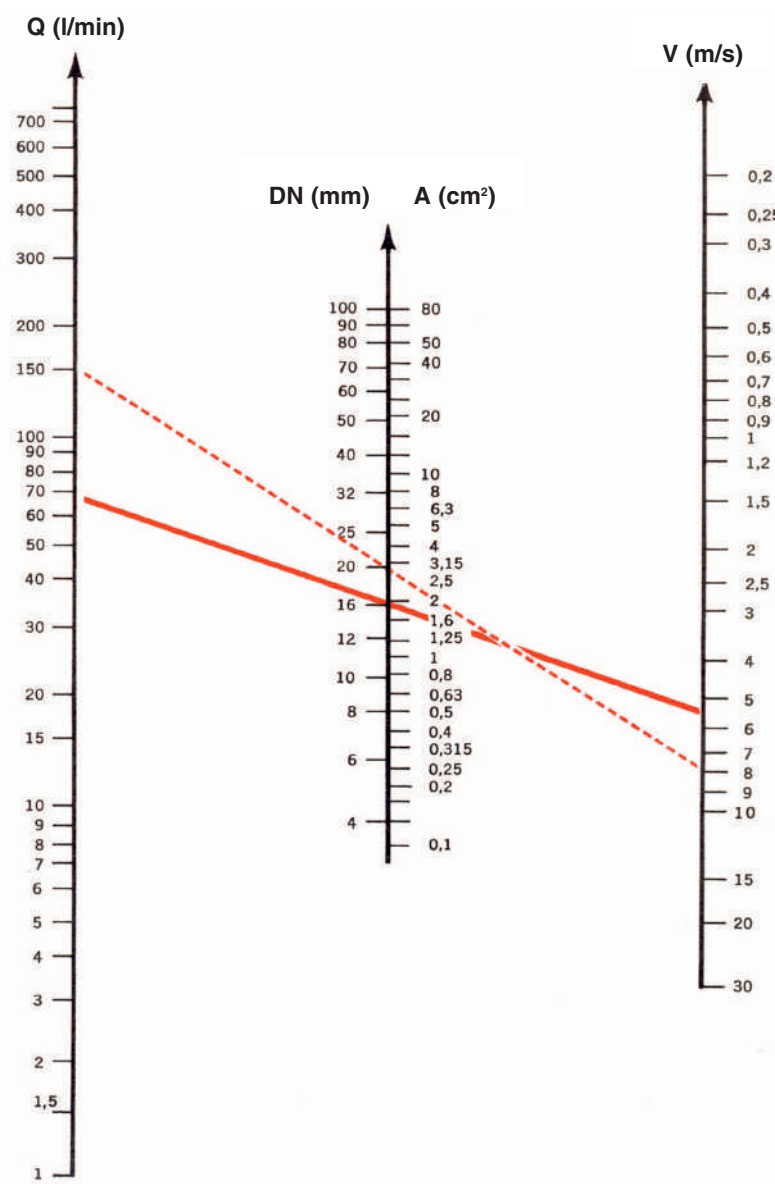
Tamaño necesario en mm (DN) para un conjunto.
Necessary size in mm (DN) for one set.
Mesure en mm (DN) pour un groupe.

- $v = 8 \text{ m/s}$ $Q = 150 \text{ l/min}$ \rightarrow $DN = 20 \text{ mm}$
- $v = 5,5 \text{ m/s}$ $Q = 70 \text{ l/min}$ \rightarrow $DN = 16 \text{ mm}$

En esta determinación no están considerados el estado del tubo, los codos y las válvulas, así como la viscosidad, como tampoco la influencia de la temperatura sobre la viscosidad y otros factores.

In this table, we have not considered the state of the hose, the elbows, the valves, the viscosity and the influence of the temperature over the viscosity and other factors.

Dans ce tableau, l'état du tuyau n'est pas pris en compte ainsi que les coudes, les valves, la viscosité et l'influence de la température sur la viscosité et autres facteurs.



CÁLCULO DE LAS LONGITUDES DEL LATIGUILLO

Para obtener la máxima durabilidad de un latiguillo tenga en cuenta lo siguiente:

- La mínima longitud del latiguillo debe ser ocho veces el Ø exterior para mangueras con malla metálica y seis veces para mangueras con malla textil.
- El radio de curvatura del latiguillo, bajo presión de trabajo, no debe ser menor al recomendado por el fabricante.

- Montaje presión estática (fig.1) $L=2A+\pi \cdot R$

- Montaje presión dinámica (fig.2) $L=2A+\pi \cdot R+B$

CALCULATION OF HOSE ASSEMBLIES LENGTHS

- The minimum length of the assembly must be 8 times the outside diameter for wire braid hoses and 6 times for textile braid hoses.

- The bend radius of the assembly, under working pressure, must not be below the recommended by the hose manufacturer.

- Static hose installation (fig.1) $L=2A+\pi \cdot R$

- Non static hose installation (fig.2) $L=2A+\pi \cdot R+B$

CALCUL DES LONGUEURS DE FLEXIBLE

Pour obtenir la meilleure durabilité du flexible, il faut tenir compte:

- La longueur minimum du flexible doit être 8 fois le Ø extérieur pour tuyaux avec tresse métallique et 6 fois pour tuyaux avec tresse textile.

- Le rayon de courbure du flexible, sous pression de travail, ne doit pas être plus petit que celui recommandé par le fabricant.

- Montage pression statique (fig.1) $L=2A+\pi \cdot R$

- Montage pression dynamique (fig.2) $L=2A+\pi \cdot R+B$

DN	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1"	1" 1/4	1" 1/2	2"
A mm	100	110	120	130	140	150	170	200	230	260

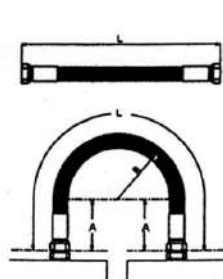


Fig. 1 / Bild 1

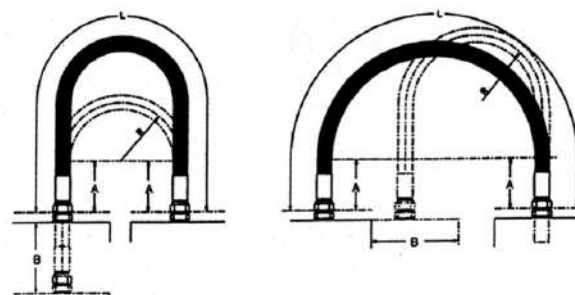
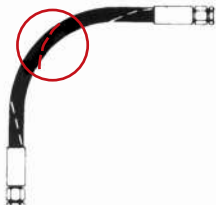
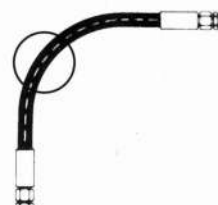
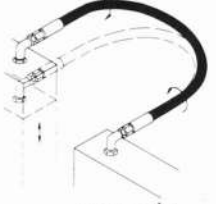
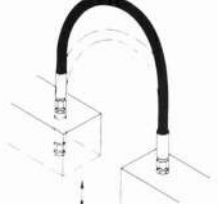
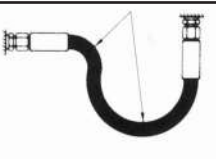
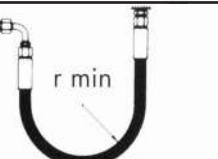
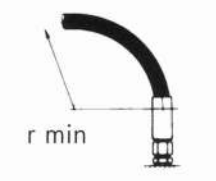
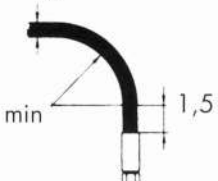


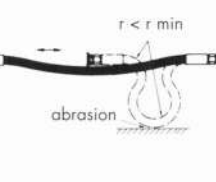
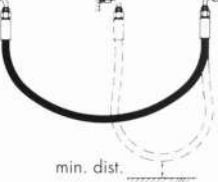


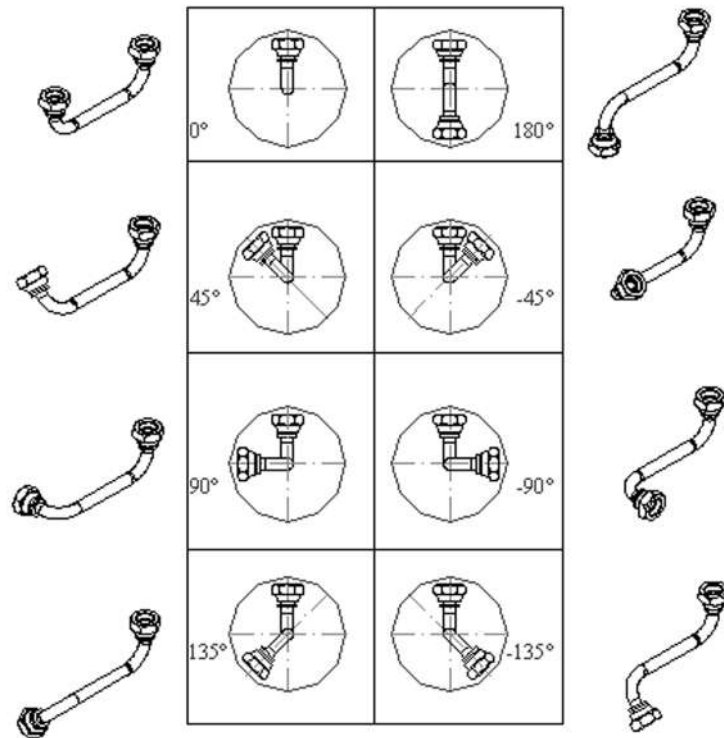


Fig. 2 / Bild 2

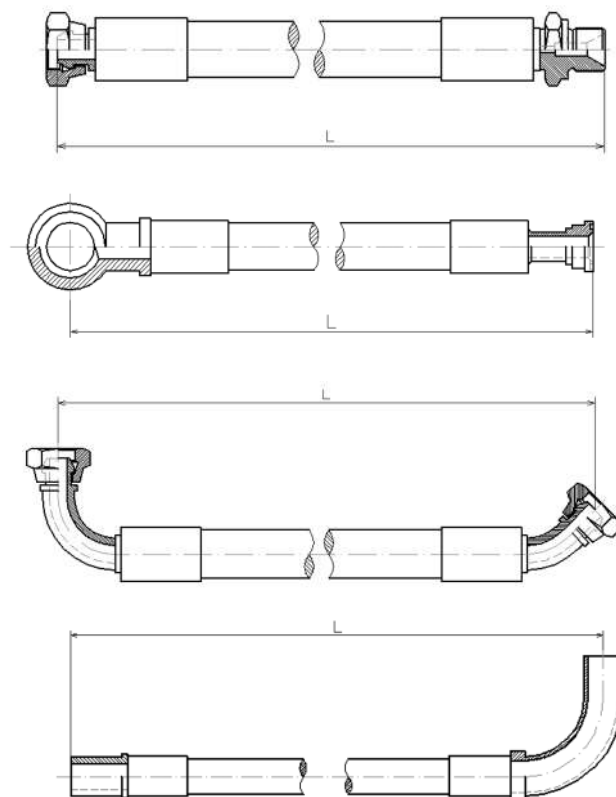
Consejos Técnicos sobre la Instalación de Mangueras
Hose Installation Guide
Guide d'Installation pour Tuyaux

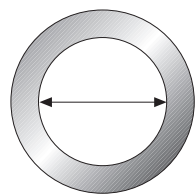
NO	YES
	
 <p>$r < r \text{ min}$</p>	
	 <p>$r \text{ min}$</p>
 <p>$r \text{ min}$</p>	 <p>d $r \text{ min}$ $1,5 d$</p>
	
 <p>$r < r \text{ min}$ abrasion</p>	 <p>min. dist.</p>
 <p>abrasion</p>	

Criterio para la Medición de Ángulos entre Codos
Criterion for Measurement of Angles Between Elbows
Critère pour Mesurer les Angles entre les Coudes

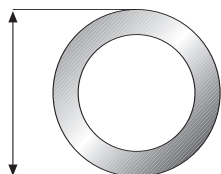


Criterio para la Medición de Longitudes
Criterion for Measurement of Lengths
Critère pour Mesurer les Longeurs

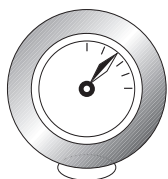




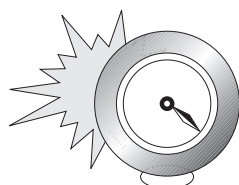
Diámetro Interior
Internal Diameter
Diamètre Intérieur



Diámetro Exterior
External Diameter
Diamètre Extérieur



Presión de trabajo
Working Pressure
Pression de Travail



Presión de rotura
Breaking Pressure
Pression de Rupture



Vacío
Empty
Vide



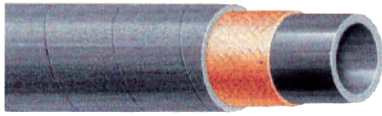
Radio de Curvatura
Bending Radius
Rayon de Courbature



Peso
Weight
Poids





Mangueras Hidráulicas
Hydraulic Hoses
Tuyaux Hydrauliques




SAE 100 R6

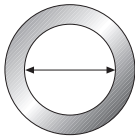
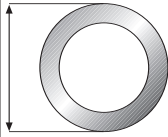
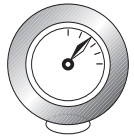
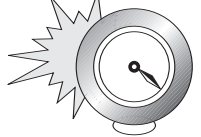


TECHNICAL DATA

 **Composición** Tubo interior: caucho NBR resistente al aceite hidráulico.
Temperatura de trabajo Refuerzo: una malla textil.
 Cubierta: caucho sintético resistente al aceite, a la abrasión y condiciones atmosféricas.
 De -40° C a +100° C.

 **Composition** *Inner tube: special NBR rubber resistant to hydraulic oil.*
Working temperature *Reinforcement: one textile braid.*
Cover: synthetic rubber resistant to oil, abrasion and weather.
From -40° C to +100° C.

 **Composition** *Tube intérieur: caoutchouc NBR résistant à l'huile hydraulique.*
Température de travail *Renfort: une tresse textile.*
Revêtement: caoutchouc synthétique résistant à l'huile, l'abrasion et aux agents atmosphériques.
De -40° C à +100° C.

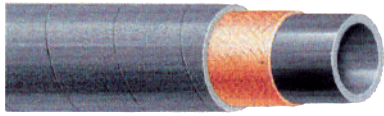
HYDRAULIC HOSES

Referencia Part. Number Référence												
	DN	mm	mm	bar	psi	bar	psi	mm	kg/m			
-	3/16	4,8	11,1	34	493	136	1972	50	0,099			
MB2104	1/4	6,4	12,7	28	406	112	1624	65	0,119			
MB2105	5/16	7,9	14,3	28	406	112	1624	80	0,137			
MB2106	3/8	9,5	15,9	28	406	112	1624	80	0,160			
MB2108	1/2	12,7	19,8	28	406	112	1624	100	0,228			
MB2110	5/8	15,9	23	24	348	96	1392	125	0,268			
MB2112	3/4	19	26,5	21	305	83	1218	150	0,340			
MB2116	1	25,4	34,5	9	131	36	522	170	0,539			

THERMOPLASTIC HOSES



INDUSTRIAL HOSES



Composición

Tubo interior: caucho NBR resistente al aceite hidráulico.
Refuerzo: una malla textil.

Temperatura de trabajo

Cubierta: goma negra resistente al aceite, la abrasión y condiciones atmosféricas.
De -40° C a +100° C.



Composition

Inner tube: NBR rubber resistant to hydraulic oil.
Reinforcement: one textile braid.

Working temperature

Cover: black rubber resistant to oil, abrasion and weather.
From -40° C to +100° C.



Composition

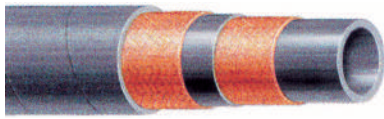
Tube intérieure: caoutchouc NBR résistant à l'huile hydraulique.
Renfort: une tresse textile.

Température de travail

Revêtement: caoutchouc noir résistant à l'huile, l'abrasion et aux agents atmosphériques.
De -40° C à +100° C.


Referencia Part. Number Référence	Ø		Ø	P		P		r	W
	DN	mm		bar	psi	bar	psi		
-	3/16	4,8	11,8	80	1160	320	4640	25	0,114
-	1/4	6,4	13,4	75	1088	300	4350	40	0,144
-	5/16	7,9	14,9	68	986	272	3944	50	0,165
-	3/8	9,5	16,5	63	914	252	3654	60	0,185
-	1/2	12,7	19,7	58	841	232	3364	70	0,237
-	5/8	15,9	23,9	50	725	200	2900	90	0,322
-	3/4	19	27	45	653	180	2610	110	0,382
-	1	25,4	34,4	40	580	160	2320	150	0,557







EN 854 - 3TE

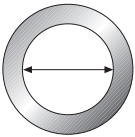
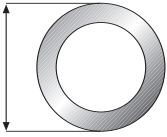

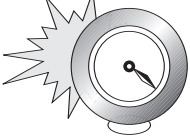


TECHNICAL DATA

 **Composición** Tubo interior: caucho NBR resistente al aceite hidráulico.
Temperatura de trabajo Refuerzo: dos mallas textiles.
 Cubierta: goma negra resistente al aceite, la abrasión y condiciones atmosféricas.
 De -40° C a +100° C.

 **Composition** *Inner tube: NBR rubber resistant to hydraulic oil.*
Working temperature *Reinforcement: two textile braids.*
Cover: black rubber resistant to oil, abrasion and weather.
From -40° C to +100° C.

 **Composition** *Tube intérieur: caoutchouc NBR résistant à l'huile hydraulique.*
Température de travail *Renfort: deux tresses textiles.*
Revêtement: caoutchouc noir résistant à l'huile, l'abrasion et aux agents atmosphériques.
De -40° C à +100° C.

HYDRAULIC HOSES

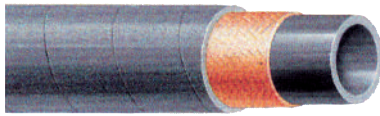
Referencia Part. Number Référence										
	DN	mm	mm	bar	psi	bar	psi	mm	kg/m	
-	3/16	4,8	12,8	160	2320	640	9280	40	0,156	
-	1/4	6,4	14,4	145	2103	580	8410	45	0,187	
-	5/16	7,9	16,9	130	1885	520	7540	55	0,244	
-	3/8	9,5	18,5	110	1595	440	6380	70	0,269	
-	1/2	12,7	21,7	93	1349	372	5394	85	0,335	
-	5/8	15,9	25,9	80	1160	320	4640	105	0,434	
-	3/4	19	29	70	1015	280	4060	130	0,500	
-	1	25,4	36	55	798	220	3190	150	0,667	
-	1 1/4	31,8	42,3	45	653	180	2610	190	0,827	
-	1 1/2	38,1	49,6	40	580	160	2320	240	1,048	

THERMOPLASTIC HOSES

PTFE AND CONVOLUTED SS HOSES



INDUSTRIAL HOSES



CARBUCORD 18

Composición *Tubo interior: caucho NBR resistente al gasoil y al aceite hidráulico.
Refuerzo: una malla textil.
Cubierta: caucho sintético resistente al aceite, a la abrasión y condiciones atmosféricas.
De -30° C a +70° C.*

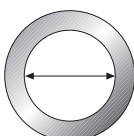
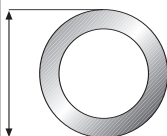
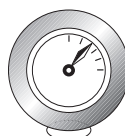
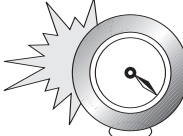

Temperatura de trabajo

Composition *Inner tube: NBR rubber resistant to fuel and hydraulic oil.
Reinforcement: one textile braid.
Cover: synthetic rubber resistant to oil, abrasion and weather.
From -30° C to +70° C.*

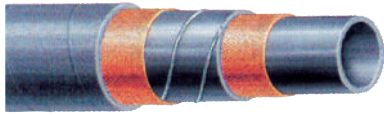
Working temperature

Composition *Tube intérieure: caoutchouc NBR résistant au fuel et à l'huile hydraulique.
Renfort: une tresse textile.
Revêtement: caoutchouc synthétique résistant à l'huile, l'abrasion et aux agents atmosphériques.
De -30° à +70° C.*

Température de travail


Referencia Part. Number Référence							
	mm	mm	bar	psi	bar	psi	kg/m
-	25	37	18	261	72	1044	0,790
M70003041	30	41	18	261	72	1044	0,820
M70003243	32	44	18	261	72	1044	1,000
-	35	46	18	261	72	1044	0,960
-	38	53	18	261	72	1044	1,450
M70004054	40	54	18	261	72	1044	1,410
M70005064	50	64	18	261	72	1044	1,680
-	60	75	18	261	72	1044	2,130
-	100	116	18	261	72	1044	3,580







SAE 100 R4

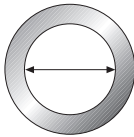
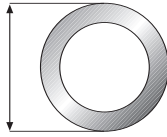

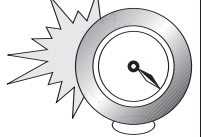


TECHNICAL DATA

 **Composición** Tubo interior: caucho NBR resistente al aceite hidráulico.
Temperatura de trabajo Refuerzo: dos mallas textiles y una espiral metálica.
 Cubierta: caucho negro resistente al aceite, la abrasión y condiciones atmosféricas.
 De -40° C a +100° C.

 **Composition** *Inner tube: special NBR rubber resistant to hydraulic oil.*
Working temperature *Reinforcement: two textile braids with one steel wire helix.*
Cover: black rubber resistant to oil, abrasion and weather.
 From -40° C to +100° C.

 **Composition** *Tube intérieur: caoutchouc NBR résistant à l'huile hydraulique.*
Température de travail *Renfort: deux tresses textiles avec une tresse en spirale métallique.*
Revêtement: caoutchouc noir résistant à l'huile, l'abrasion et aux agents atmosphériques.
 De -40° C à +100° C.

HYDRAULIC HOSES

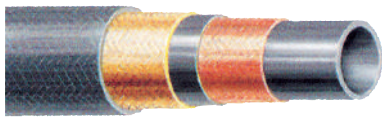
Referencia Part. Number Référence											
	DN	mm	mm	bar	psi	bar	psi	bar	mm	kg/m	
ML701019	3/4	19	32	21	305	84	1218	-0,80	127	0,759	
ML701025	1	25,4	37,4	17	247	68	986	-0,80	152	0,878	
ML701032	1 1/4	31,8	45	14	203	56	812	-0,80	203	1,167	
ML701038	1 1/2	38,1	52	10	145	40	580	-0,80	254	1,510	
-	1 13/16	45	56,5	10	140	40	580	-0,80	275	1,460	
ML701050	2	50,8	64	7	102	28	406	-0,80	305	1,899	
ML701063	2 1/2	63,5	77	4	58	16	232	-0,80	356	2,504	
-	3	76,2	90	4	58	16	232	-0,80	457	3,080	
-	3 1/2	88,9	103	3	44	12	174	-0,80	533	3,359	
-	4	101,6	116	2	29	8	116	-0,80	610	4,122	

THERMOPLASTIC HOSES


PTEF AND CONVOLUTED SS HOSES




INDUSTRIAL HOSES




SAE 100 R5

Composición  **Temperatura de trabajo**

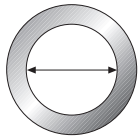
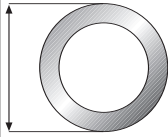

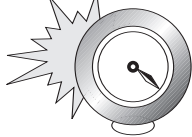


Tubo interior: caucho sintético resistente al aceite hidráulico.
Refuerzo: una malla textil + una malla metálica.
Cubierta: malla textil impregnada en goma sintética, resistente al aceite y condiciones atmosféricas.
De -40° C a +100° C.

Composition  **Working temperature**

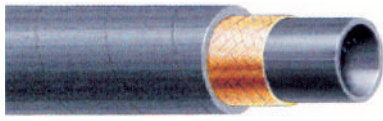
Inner tube: special synthetic rubber resistant to hydraulic oil.
Reinforcement: one textile braid + one braid of steel wire.
Cover: textil braid impregnated with synthetic rubber resistant to oil and weather.
From -40° C to +100° C.

Composition  **Température de travail**


Tube intérieur: caoutchouc synthétique résistant à l'huile hydraulique.
Renfort: une tresse textile + une tresse métallique.
Revêtement: tresse textile imprégnée de caoutchouc synthétique résistant à l'huile, l'abrasion et aux agents atmosphériques.
De -40° C à +100° C.

Referencia Part. Number Référence												
	DN	mm	mm	bar	psi	bar	psi	mm	kg/m			
M250304	3/16	4,8	13,2	207	3002	828	12006	76	0,263			
M250305	1/4	6,4	14,8	207	3002	828	12006	86	0,296			
M250306	5/16	7,9	17,2	155	2248	620	8990	102	0,363			
M250308	13/32	10,3	19,5	138	2001	552	8004	117	0,408			
M250310	1/2	12,7	23,4	121	1755	484	7018	140	0,567			
M250312	5/8	15,9	27,4	103	1494	412	5974	165	0,698			
M250316	7/8	22,2	31,4	55	798	220	3190	187	0,741			
M250320	1 1/8	28,6	38,1	43	624	172	2494	229	0,975			
M250324	1 3/8	34,9	44,5	34	493	136	1972	267	1,134			
M250332	1 13/16	46	56,4	24	348	96	1392	337	1,351			







SAE 100 R1A EN 853 1ST

Composición

Temperatura de trabajo

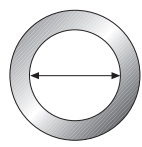
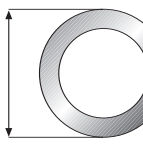

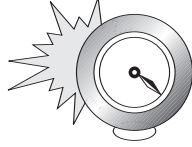
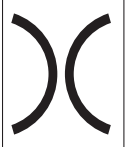

Tubo interior: caucho sintético resistente al aceite hidráulico.
Refuerzo: una malla metálica.
Cubierta: caucho sintético, resiste al aceite, abrasión y condiciones atmosféricas.
 De -40° C a +100° C.

Composition

Working temperature

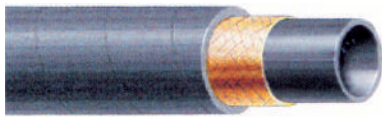
Inner tube: special synthetic rubber resistant to hydraulic oil.
Reinforcement: one braid of steel wire.
Cover: synthetic rubber resistant to oil, abrasion and weather.
 From -40° C to +100° C.

Composition

Température de travail

Tube intérieur: caoutchouc synthétique, résistant à l'huile hydraulique.
Renfort: une tresse métallique.
Revêtement: caoutchouc synthétique résistant à l'huile, l'abrasion et aux agents atmosphériques.
 De -40° C à +100° C.

Referencia Part. Number Référence											
	DN	mm	mm	bar	psi	bar	psi	bar	mm	kg/m	
ML223103	3/16	4,8	12,3	250	3625	1000	14500	-0,80	90	0,191	
ML223104	1/4	6,4	15,5	225	3263	900	13050	-0,80	100	0,288	
ML223105	5/16	8	17,1	215	3118	850	12325	-0,80	115	0,332	
ML223106	3/8	9,5	19,4	180	2610	720	10440	-0,80	130	0,416	
ML223108	1/2	12,7	22,6	160	2320	640	9280	-0,80	180	0,505	
ML223110	5/8	16	25,8	130	1885	520	7540	-0,80	200	0,587	
ML223112	3/4	19	29,8	105	1523	420	6090	-0,80	240	0,719	
ML223116	1	25,4	37,6	88	1276	350	5075	-0,80	300	1,039	
ML223120	1 1/4	31,8	45	63	914	250	3625	-0,60	420	1,348	
ML223124	1 1/2	38,1	51,4	50	725	200	2900	-0,60	500	1,553	
ML223132	2	50,8	66,7	40	580	160	2320	-0,60	630	2,505	





SAE 100 R1AT EN 853 1SN

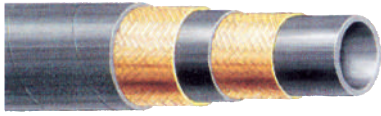
Composición *Composición* **Tubo interior: caucho sintético resistente al aceite hidráulico.**
Refuerzo: una malla metálica.
Cubierta: caucho sintético, resiste al aceite, abrasión y condiciones atmosféricas.
Temperatura de trabajo *Working temperature* **De -40° C a +100° C.**

Composition *Composition* **Inner tube: special synthetic rubber resistant to hydraulic oil.**
Reinforcement: one braid of steel wire.
Cover: synthetic rubber resistant to oil, abrasion and weather.
Working temperature *Working temperature* **From -40° C to +100° C.**


Composition *Composition* **Tube intérieur: caoutchouc synthétique, résistant à l'huile hydraulique.**
Renfort: une tresse métallique.
Revêtement: caoutchouc synthétique résistant à l'huile, l'abrasion et aux agents atmosphériques.
Température de travail *Température de travail* **De -40° C à +100° C.**

Referencia Part. Number Référence											
	DN	mm	mm	bar	psi	bar	psi	bar	mm	kg/m	
ML223003	3/16	4,8	11,8	250	3625	1000	14500	-0,80	90	0,179	
ML223004	1/4	6,4	13,4	225	3263	900	13050	-0,80	100	0,228	
ML223005	5/16	8	15	215	3118	850	12325	-0,80	115	0,265	
ML223006	3/8	9,5	17,4	180	2610	720	10440	-0,80	130	0,343	
ML223008	1/2	12,7	20,6	160	2320	640	9280	-0,80	180	0,420	
ML223010	5/8	16	23,7	130	1885	520	7540	-0,80	200	0,484	
ML223012	3/4	19	27,7	105	1523	420	6090	-0,80	240	0,599	
ML223016	1	25,4	35,6	88	1276	350	5075	-0,80	300	0,895	
ML223020	1 1/4	31,8	43,5	63	914	250	3625	-0,60	420	1,217	
ML223024	1 1/2	38,1	50,6	50	725	200	2900	-0,60	500	1,472	
ML223032	2	50,8	64	40	580	160	2320	-0,60	630	2,108	







SAE 100 R2A EN 853 2ST

Composición
 **Temperatura de trabajo**

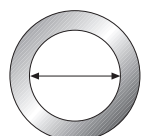
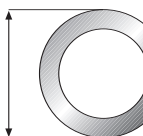
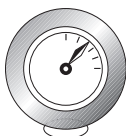
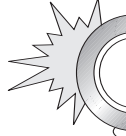


Tubo interior: caucho sintético resistente al aceite hidráulico.
Refuerzo: dos mallas metálicas.
Cubierta: caucho sintético, resiste al aceite, abrasión y condiciones atmosféricas.
De -40° C a +100° C.

Composition
 **Working temperature**

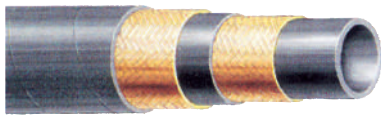
Inner tube: special synthetic rubber resistant to hydraulic oil.
Reinforcement: two braids of steel wire.
Cover: synthetic rubber resistant to oil, abrasion and weather.
From -40° C to +100° C.

Composition
 **Température de travail**

Tube intérieur: caoutchouc synthétique, résistant à l'huile hydraulique.
Renfort: deux tresses métalliques.
Revêtement: caoutchouc synthétique résistant à l'huile, l'abrasion et aux agents atmosphériques.
De -40° C à +100° C.

Referencia Part. Number Référence											
	DN	mm	mm	bar	psi	bar	psi	bar	mm	kg/m	
ML350903	3/16	4,8	15,5	415	6018	1650	23925	-0,95	90	0,346	
ML350904	1/4	6,4	17,1	400	5800	1600	23200	-0,95	100	0,453	
ML350905	5/16	8	18,7	350	5075	1400	20300	-0,95	115	0,500	
ML350906	3/8	9,5	21	330	4785	1320	19140	-0,95	130	0,638	
ML350908	1/2	12,7	24,2	275	3988	1100	15950	-0,95	180	0,743	
ML350910	5/8	16	27,4	250	3625	1000	14500	-0,95	205	0,881	
ML350912	3/4	19	31,4	215	3118	850	12325	-0,80	240	1,069	
ML350916	1	25,4	39	165	2393	650	9425	-0,80	300	1,449	
ML350920	1 1/4	31,8	49,8	125	1813	500	7250	-0,80	420	2,170	
ML350924	1 1/2	38,1	56,2	90	1305	360	5220	-0,80	500	2,432	
ML350932	2	50,8	69,8	80	1160	320	4640	-0,80	630	3,435	





SAE 100 R2AT EN 853 2SN

Composición Tubo interior: caucho sintético resistente al aceite hidráulico.
Refuerzo: dos mallas metálicas.
Cubierta: caucho sintético, resiste al aceite, abrasión y condiciones atmosféricas.
De -40° C a +100° C.

Temperatura de trabajo

Composition *Inner tube: special synthetic rubber resistant to hydraulic oil.
Reinforcement: two braids of steel wire.
Cover: synthetic rubber resistant to oil, abrasion and weather.
From -40° C to +100° C.*

Working temperature

Composition *Tube intérieur: caoutchouc synthétique résistant à l'huile hydraulique.
Renfort: deux tresses métalliques.
Revêtement: caoutchouc synthétique résistant à l'huile, l'abrasion et aux agents atmosphériques.
De -40° C à +100° C.*

Température de travail


Referencia Part. Number Référence	Ø		Ø	P		P		P	r	W
	DN	mm		bar	psi	bar	psi			
ML351103	3/16	4,8	13,4	415	6018	1650	23925	-0,95	90	0,285
ML351104	1/4	6,4	15	400	5800	1600	23200	-0,95	100	0,386
ML351105	5/16	8	16,6	350	5075	1400	20300	-0,95	115	0,427
ML351106	3/8	9,5	19	330	4785	1320	19140	-0,95	130	0,559
ML351108	1/2	12,7	22,2	275	3988	1100	15950	-0,95	180	0,651
ML351110	5/8	16	25,4	250	3625	1000	14500	-0,95	205	0,776
ML351112	3/4	19	29,3	215	3118	850	12325	-0,80	240	0,956
ML351116	1	25,4	38,1	165	2393	650	9425	-0,80	300	1,380
ML351120	1 1/4	31,8	48,3	125	1813	500	7250	-0,80	420	2,024
ML351124	1 1/2	38,1	54,6	90	1305	360	5220	-0,80	500	2,256
ML351132	2	50,8	67,3	80	1160	320	4640	-0,80	630	3,050






SAE 100 R2AT EN 853 2SN


Special Antiabrasion

Composición
 **Temperatura de trabajo**

Tubo interior: caucho sintético resistente al aceite hidráulico.
Refuerzo: dos mallas metálicas.
Cubierta: caucho compuesto de doble capa especialmente resistente a la abrasión.
De -40° C a +100° C.

Composition
 **Working temperature**

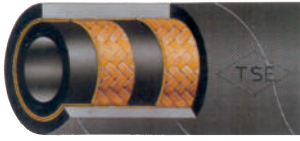
Inner tube: synthetic rubber resistant to hydraulic oil.
Reinforcement: two braids of steel wire.
Cover: compound double special layer resistant to abrasion.
From -40° C to +100° C.

Composition
 **Température de travail**

Tube intérieur: caoutchouc synthétique résistant à l'huile hydraulique.
Renfort: deux tresses métalliques.
Revêtement: caoutchouc double nappe spécial résistant à l'abrasion.
De -40° C à +100° C.

Referencia Part. Number Référence	Ø		Ø	P		P		P	r	W
	DN	mm		bar	psi	bar	psi			
-	3/16	4,8	13,4	415	6018	1650	23925	-0,95	90	0,285
ML351204	1/4	6,4	15	400	5800	1600	23200	-0,95	100	0,386
ML351205	5/16	8	16,6	350	5075	1400	20300	-0,95	115	0,427
ML351206	3/8	9,5	19	330	4785	1320	19140	-0,95	130	0,559
ML351208	1/2	12,7	22,2	275	3988	1100	15950	-0,95	180	0,651
ML351210	5/8	16	25,4	250	3625	1000	14500	-0,95	205	0,776
ML351212	3/4	19	29,3	215	3118	850	12325	-0,80	240	0,956
ML351216	1	25,4	38,1	165	2393	650	9425	-0,80	300	1,380
ML351220	1 1/4	31,8	48,3	125	1813	500	7250	-0,80	420	2,024
ML351224	1 1/2	38,1	54,6	90	1305	360	5220	-0,80	500	2,256





**Alta flexibilidad
High Flexibility
Haute Flexibilité**

SAE 100 R16

Composición Tubo interior: caucho sintético resistente al aceite hidráulico.
 Refuerzo: una o dos mallas metálicas.
 Cubierta: caucho sintético, resiste al aceite, abrasión y condiciones atmosféricas.

Temperatura de trabajo De -40° C a +100° C.

Composition *Inner tube: synthetic rubber resistant to hydraulic oil.
 Reinforcement: one or two braids of steel wire.
 Cover: synthetic rubber resistant to oil, abrasion and weather.*

Working temperature *From -40° C to +100° C.*

Composition *Tube intérieur: caoutchouc synthétique, résistant à l'huile hydraulique.
 Renfort: une ou deux tresses métalliques.
 Revêtement: caoutchouc synthétique résistant à l'huile, l'abrasion et aux agents atmosphériques.*


Température de travail *De -40° C à +100° C.*

Referencia Part. Number Référence	Ø		Ø	P		P		r	W
	DN	mm		bar	psi	bar	psi		
M490004	1/4	6,4	12,3	350	5075	1400	20300	51	0,265
M490005	5/16	7,9	15	300	4350	1172	16994	57	0,367
M490006	3/8	9,5	17	280	4060	1103	15993	64	0,370
M490008	1/2	12,7	20,3	245	3555	965	13992	89	0,480
M490010	5/8	15,9	23,9	190	2755	760	11020	101	0,490
M490012	3/4	19	27,7	155	2250	620	8990	121	0,737
M490016	1	25,4	36,6	138	2000	552	8004	152	1,090
M490020	1 1/4	31,8	42,6	112	1625	448	6500	209	1,380







EN 857 1 SC

Composición
 **Temperatura de trabajo**

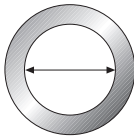
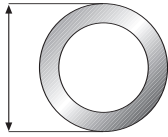
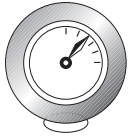
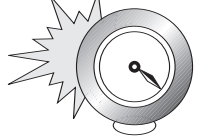


Tubo interior: caucho sintético resistente al aceite hidráulico, mineral y vegetal.
Refuerzo: una malla metálica.
Cubierta: caucho sintético resistente al aceite, la abrasión y condiciones atmosféricas.
 De -40° C a +100° C.

Composition
 **Working temperature**

Inner tube: synthetic rubber resistant to hydraulic, mineral and vegetable oil.
Reinforcement: one braid of steel wire.
Cover: synthetic rubber resistant to oil, abrasion and weather.
 From -40° C to +100° C.

Composition
 **Température de travail**

Tube intérieur: caoutchouc synthétique résistant à l'huile hydraulique, minérale et végétale.
Renfort: une tresse métallique.
Revêtement: caoutchouc synthétique résistant à l'huile, l'abrasion et aux agents atmosphériques.
 De -40° C à +100° C.

Referencia Part. Number Référence											
	DN	mm	mm	bar	psi	bar	psi	bar	mm	kg/m	
M1SC04	1/4	6,4	12,4	225	3263	900	13050	-0,80	75	0,184	
M1SC05	5/16	7,9	14,1	215	3118	860	12470	-0,80	85	0,216	
M1SC06	3/8	9,5	16,1	180	2610	720	10440	-0,80	90	0,281	
M1SC08	1/2	12,7	19,3	160	2320	640	9280	-0,80	130	0,357	
M1SC10	5/8	15,9	22,6	130	1885	520	7540	-0,80	150	0,433	
M1SC12	3/4	19	25,9	105	1523	420	6090	-0,80	180	0,503	
M1SC16	1	25,4	33,8	88	1276	352	5104	-0,80	230	0,768	





Composición **Composición** **Composición**
Temperatura de trabajo **Temperatura de trabajo** **Temperatura de trabajo**

Tubo interior: caucho sintético resistente al aceite hidráulico, vegetal y mineral.
Refuerzo: dos mallas metálicas.
Cubierta: caucho sintético resistente al aceite, a la abrasión y condiciones atmosféricas.
De -40° C a +100° C.

Composition **Composition** **Composition**
Working temperature **Working temperature** **Working temperature**

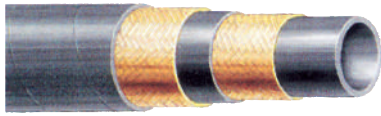
Inner tube: special synthetic rubber resistant to mineral, vegetable and hydraulic oil.
Reinforcement: two braids of steel wire.
Cover: synthetic rubber resistant to oil, abrasion and weather.
From -40° C to +100° C.

Composition **Composition** **Composition**
Température de travail **Température de travail** **Température de travail**

Tube intérieur: caoutchouc synthétique résistant à l'huile minérale, végétale et hydraulique.
Renfort: deux tresses métalliques.
Revêtement: caoutchouc synthétique résistant à l'huile, l'abrasion et aux agents atmosphériques.
De -40° C à +100° C.

Referencia Part. Number Référence	Ø		P		P _{max}		R		W	
	DN	mm	mm	bar	psi	bar	psi	bar		mm
M2SC04	1/4	6,4	13,8	400	5800	1600	23200	-0,95	75	0,302
M2SC05	5/16	7,9	15,6	350	5075	1400	20300	-0,95	85	0,362
M2SC06	3/8	9,5	17,7	330	4785	1320	19140	-0,95	90	0,452
M2SC08	1/2	12,7	21	275	3988	1100	15950	-0,95	130	0,559
M2SC10	5/8	15,9	24,3	250	3625	1000	14500	-0,95	170	0,725
M2SC12	3/4	19	28	215	3118	860	12470	-0,80	200	0,846
M2SC16	1	25,4	35,9	165	2393	660	9570	-0,80	250	1,221





SAE 100 R17

Composición **Tubo interior:** caucho sintético resistente al aceite hidráulico.
Refuerzo: hasta 1/2" una malla y a partir de 5/8" dos mallas metálicas.
Cubierta: caucho sintético resistente a la abrasión, al ozono y condiciones atmosféricas.
De -40° C a +100° C.

Temperatura de trabajo

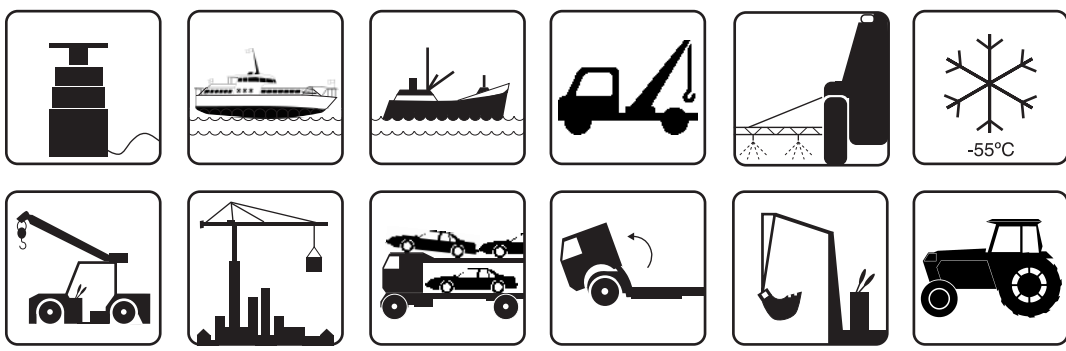
Composition **Inner tube:** synthetic rubber resistant to hydraulic oil.
Reinforcement: up to 1/2" one braid, from 5/8" two braids of steel wire.
Cover: synthetic rubber resistant to oil, abrasion and weather.
From -40° C to +100° C.

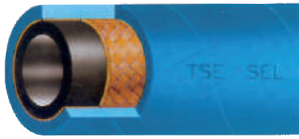
Working temperature

Composition **Tube intérieur:** caoutchouc synthétique résistant à l'huile hydraulique.
Renfort: jusqu'à 1/2" une tresse, à partir de 5/8" deux tresses métalliques.
Revêtement: caoutchouc synthétique résistant à l'huile, l'abrasion et aux agents atmosphériques.
De -40° C à +100° C.

Température de travail

Referencia Part. Number Référence												
	DN	mm	mm	mm	bar	psi	bar	psi	mm	kg/m		
-	1/4	6,4	12,5	210	3045	840	12180	50	0,190			
-	5/16	7,9	14,3	210	3045	840	12180	55	0,220			
-	3/8	9,5	16,5	210	3045	840	12180	65	0,270			
-	1/2	12,7	19,7	210	3045	840	12180	90	0,460			
-	5/8	15,9	24,0	210	3045	840	12180	100	0,570			
-	3/4	19,0	28,0	210	3045	840	12180	120	0,780			
-	1	25,4	36,2	210	3045	840	12180	150	1,400			





Agua Caliente 1SC Superservicio 155°C EN 857

Hot Water Hydrowashing 1SC/155° C/EN 857

Superservice pour Eau Chaude 1SC/155°C/EN 857

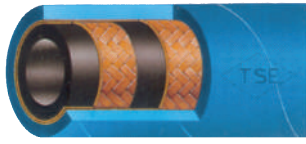
	Composición	Tubo interior: caucho sintético resistente a altas temperaturas. Refuerzo: una malla metálica.
	Temperatura	Cubierta: goma sintética resistente al aceite, la abrasión y condiciones atmosféricas. De -40° C a +155° C (Picos).

	Composition	<i>Inner tube: synthetic rubber resistant to high temperatures. Reinforcement: one braid of steel wire.</i>
	Temperature	<i>Cover: synthetic rubber, resistant to oil, abrasion and weather. From -40° C to +155° C (Peak).</i>

	Composition	<i>Tube intérieure: caoutchouc synthétique résistant aux hautes températures. Renfort: une tresse métallique.</i>
	Température	<i>Revêtement: caoutchouc noir résistant à l'huile, l'abrasion et aux agents atmosphériques. De -40° C à +155° C (Pic).</i>

	Referencia Part. Number Référence	DN	mm	mm	bar	psi	bar	psi		
MC0114A	1/4	6,5	13,5	225	3263	900	13051	75	0,184	
MC0115A	5/16	8,1	14,5	215	3118	860	12471	85	0,216	
MC0116A	3/8	9,7	16,9	180	2610	720	10441	90	0,281	
MC0118A	1/2	12,9	20,4	160	2320	640	9281	130	0,357	


	Referencia Part. Number Référence	DN	mm	mm	bar	psi	bar	psi		
MC0114N	1/4	6,5	13,5	225	3263	900	13051	75	0,184	
MC0115N	5/16	8,1	14,5	215	3118	860	12471	85	0,216	
MC0116N	3/8	9,7	16,9	180	2610	720	10441	90	0,281	
MC0118N	1/2	12,9	20,4	160	2320	640	9281	130	0,357	




Agua Caliente 2SC Superservicio 155°C EN 857

Hot Water Hydrowashing 2SC/155°C/EN 857


Superservice pour Eau Chaude 2SC/155°C/EN 857

Composición
 **Temperatura**

Tubo interior: caucho sintético resistente a altas temperaturas.
Refuerzo: dos mallas metálicas.
Cubierta: goma sintética resistente al aceite, la abrasión y condiciones atmosféricas.
 De -40° C a +155° C (Picos).

Composition
 **Temperature**

Inner tube: synthetic rubber resistant to high temperatures.
Reinforcement: two braids of steel wire.
Cover: synthetic rubber, resistant to oil, abrasion and weather.
 From -40° C to +155° C (Peak).

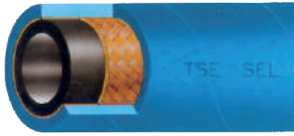
Composition
 **Température**

Tube intérieur: caoutchouc synthétique résistant aux hautes températures.
Renfort: deux tresses métalliques.
Revêtement: caoutchouc noir résistant à l'huile, l'abrasion et aux agents atmosphériques.
 De -40° C à +155° C (Pic).

Referencia Part. Number Référence	DN	mm	mm	bar		psi		mm	kg/m
				bar	psi	bar	psi		
MC0214A	1/4	6,5	14,2	400	5800	1600	23202	75	0,302
MC0215A	5/16	8,1	16,0	350	5075	1400	20302	85	0,362
MC0216A	3/8	9,7	18,3	330	4785	1320	19142	90	0,452
MC0218A	1/2	12,9	21,5	275	3988	1100	15951	130	0,559

Referencia Part. Number Référence	DN	mm	mm	bar		psi		mm	kg/m
				bar	psi	bar	psi		
MC0204G	1/4	6,5	14,2	400	5800	1600	23202	75	0,302
MC0205G	5/16	8,1	16,0	350	5075	1400	20302	85	0,362
MC0206G	3/8	9,7	18,3	330	4785	1320	19142	90	0,452
MC0208G	1/2	12,9	21,5	275	3988	1100	15951	130	0,559


Referencia Part. Number Référence	DN	mm	mm	bar		psi		mm	kg/m
				bar	psi	bar	psi		
MC0204N	1/4	6,5	14,2	400	5800	1600	23202	75	0,302
MC0205N	5/16	8,1	16,0	350	5075	1400	20302	85	0,362
MC0206N	3/8	9,7	18,3	330	4785	1320	19142	90	0,452
MC0208N	1/2	12,9	21,5	275	3988	1100	15951	130	0,559





Agua Caliente 1SX Especial 280 Bar/EN 857 1SC & SMI


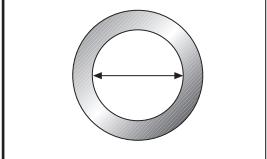
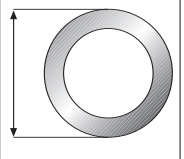
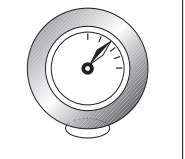
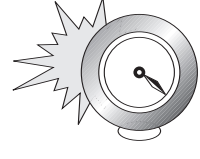
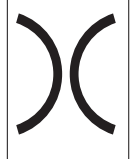


Hot Water Hydrowashing Special 1SX&SMI/280 Bar


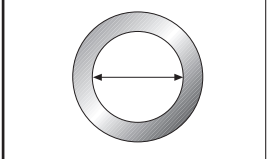
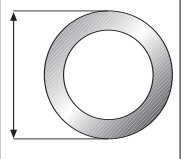
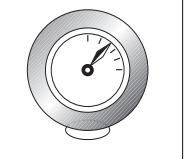
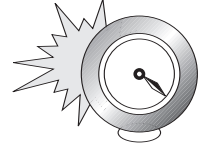
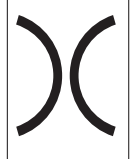


Spécial Superservice pour Eau Chaude 1SX&SMI/280 Bar


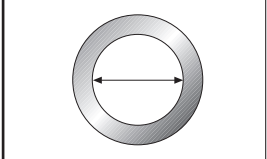
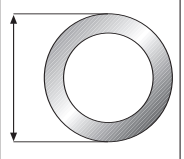
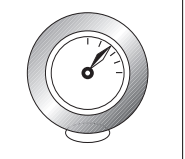
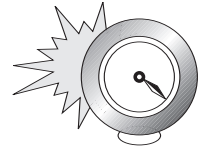
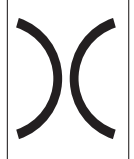


	Composición	Tubo interior: caucho sintético resistente a altas temperaturas. Refuerzo: una malla metálica
	Temperatura	Cubierta: goma sintética resistente al aceite, la abrasión y condiciones atmosféricas. De -40° C a +155° C (Picos).

	Composition	<i>Inner tube: synthetic rubber resistant to high temperatures. Reinforcement: one braid of steel wire.</i>
	Temperature	<i>Cover: synthetic rubber, resistant to oil, abrasion and weather. From -40° C to +155° C (Peak).</i>

	Composition	<i>Tube intérieur: caoutchouc synthétique résistant aux hautes températures. Renforcement: une tresse métallique.</i>
	Température	<i>Revêtement: caoutchouc noir résistant à l'huile, l'abrasion et aux agents atmosphériques. De -40° C à +155° C (Pic).</i>

									
			bar	psi	bar	psi			
Referencia Part. Number Référence	DN	mm	bar	psi	bar	psi	bar	mm	kg/m
MC0135A	5/16	14,5	280	4060	1100	15950	-0,80	70	0,238
MC0136A	3/8	16,9	280	4060	1120	16240	-0,80	90	0,309


									
			bar	psi	bar	psi			
Referencia Part. Number Référence	DN	mm	bar	psi	bar	psi	bar	mm	kg/m
MC0135G	5/16	14,5	280	4060	1100	15950	-0,80	70	0,238
MC0136G	3/8	16,9	280	4060	1120	16240	-0,80	90	0,309


									
			bar	psi	bar	psi			
Referencia Part. Number Référence	DN	mm	bar	psi	bar	psi	bar	mm	kg/m
MC0135N	5/16	14,5	280	4060	1100	15950	-0,80	70	0,238
MC0136N	3/8	16,9	280	4060	1120	16240	-0,80	90	0,309




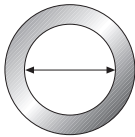
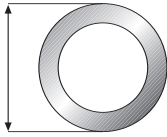

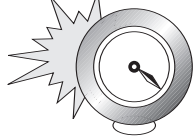


3 Mallas HF300

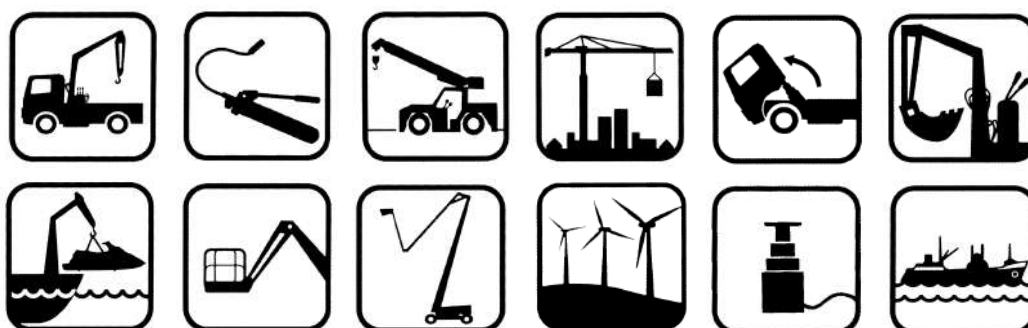
3 Braids HF300
3 Tresses HF300

 **Composición** *Tubo interior: caucho sintético resistente al aceite hidráulico.*
Temperatura de trabajo *Refuerzo: tres mallas metálicas.*
Cubierta: goma negra resistente al aceite, la abrasión y condiciones atmosféricas.
De -40° C a +100° C.

 **Composition** *Inner tube: synthetic rubber resistant to hydraulic oil.*
Working temperature *Reinforcement: three braids of steel wire.*
Cover: Black rubber resistant to oil, abrasion and weather.
From -40° C to +100° C.

 **Composition** *Tube intérieur: caoutchouc synthétique résistant à l'huile hydraulique.*
Température de travail *Renfort: trois tresses métalliques.*
Revêtement: caoutchouc noir résistant à l'huile, l'abrasion et aux agents atmosphériques.
De -40° C à +100° C.

Referencia Part. Number Référence												
	DN	mm	mm	bar	psi	bar	psi	mm	kg/m			
-	1/2	12,7	24,0	470	6815	1880	27260	160	0,951			
-	3/4	19	31,5	375	5438	1500	21750	260	1,347			
-	1	25,4	40	300	4350	1200	17400	310	2,280			





SAE 100 R9R EN 856 4SP

Composición Tubo interior: caucho sintético resistente al aceite hidráulico, mineral y vegetal.
Refuerzo: cuatro mallas metálicas.
Cubierta: goma sintética resistente al aceite, la abrasión y condiciones atmosféricas.

Temperatura de trabajo De -40° C a +100° C.

Composition *Inner tube: special synthetic rubber resistant to mineral, vegetable and hydraulic oil.
Reinforcement: four braids of steel wire.
Cover: synthetic rubber, resistant to oil, abrasion and weather.*

Working temperature *From -40° C to +100° C.*

Composition *Tube intérieur: caoutchouc synthétique résistant à l'huile minérale, végétale et hydraulique.
Renfort: quatre tresses métalliques.
Revêtement: caoutchouc noir résistant à l'huile, l'abrasion et aux agents atmosphériques.*

Température de travail *De -40° C à +100° C.*


Referencia Part. Number Référence	Ø		Ø	P		P		r	W
	DN	mm		bar	psi	bar	psi		
ML429004	1/4	6,4	17,8	450	6522	1800	26085	150	0,615
ML429006	3/8	9,5	21,4	445	6453	1780	25810	180	0,850
ML429008	1/2	12,7	24,6	415	6018	1660	24070	230	0,950
ML429010	5/8	16	28,5	350	5075	1400	20300	250	1,140
ML429012	3/4	19	31,5	350	5075	1400	20300	300	1,485
ML429016	1	25,4	39,7	280	4060	1120	16240	340	2,057
ML424820	1 1/4	31,8	50,8	210	3045	840	12180	460	3,218
ML424824	1 1/2	38,1	57,2	185	2683	740	10730	560	3,741
ML424832	2	50,8	69,8	175	2538	700	10150	660	4,500







EN 856 4SH

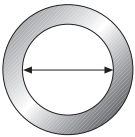
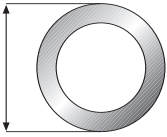

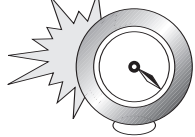


TECHNICAL DATA

 **Composición** Tubo interior: caucho sintético resistente al aceite hidráulico, mineral y vegetal.
Temperatura de trabajo Refuerzo: cuatro mallas metálicas.
 Cubierta: goma sintética resistente al aceite, la abrasión y condiciones atmosféricas.
 De -40° C a +100° C.

 **Composition** *Inner tube: special synthetic rubber resistant to mineral, vegetable and hydraulic oil.*
Working temperature *Reinforcement: four braids of steel wire.*
Cover: synthetic rubber, resistant to oil, abrasion and weather.
 From -40° C to +100° C.

 **Composition** *Tube intérieur: caoutchouc synthétique résistant à l'huile minérale, végétal et hydraulique.*
Température de travail *Renfort: quatre tresses métalliques.*
Revêtement: caoutchouc noir résistant à l'huile, l'abrasion et aux agents atmosphériques.
 De -40° C à +100° C.

HYDRAULIC HOSES

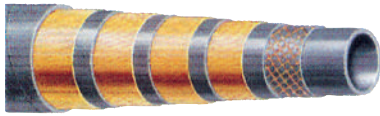
Referencia Part. Number Référence												
	DN	mm	mm	bar	psi	bar	psi	mm	kg/m			
ML456912	3/4	19	32,2	420	6090	1680	24360	280	1,556			
ML456916	1	25,4	38,7	380	5510	1520	22040	340	2,087			
ML456920	1 1/4	32	45,5	325	4713	1300	18850	460	2,571			
ML456924	1 1/2	38	53,5	290	4205	1160	16820	560	3,439			
ML456932	2	50,8	68,1	250	3625	1000	14500	700	4,903			

THERMOPLASTIC HOSES



PTEF AND CONVOLUTED SS HOSES

INDUSTRIAL HOSES



SAE 100 R12 EN 856 R12



Composición

Tubo interior: caucho sintético resistente al aceite hidráulico, mineral y vegetal.
Refuerzo: cuatro mallas metálicas.

Temperatura de trabajo

Cubierta: goma sintética resistente al aceite, la abrasión y condiciones atmosféricas.
De -40° C a +100° C.



Composition

Inner tube: special synthetic rubber resistant to mineral, vegetable and hydraulic oil.
Reinforcement: four braids of steel wire.

Working temperature

Cover: synthetic rubber, resistant to oil, abrasion and weather.
From -40° C to +100° C.



Composition

Tube intérieure: caoutchouc synthétique résistant à l'huile minéral, végétal et hydraulique.
Renfort: quatre tresses métalliques.

Température de travail

Revêtement: caoutchouc noir résistant à l'huile, l'abrasion et aux agents atmosphériques.
De -40° C à +100° C.


Referencia Part. Number Référence	Ø		Ø	P		P		r	W
	DN	mm		bar	psi	bar	psi		
M461206	3/8	9,5	20,4	276	4002	1104	16008	127	0,631
M461208	1/2	12,7	23,8	276	4002	1104	16008	178	0,789
M461212	3/4	19	30,7	276	4002	1104	16008	241	1,230
M461216	1	25,4	38,0	276	4002	1104	16008	305	1,880
M461220	1 1/4	31,8	47,0	207	3002	828	12006	419	2,688
M461224	1 1/2	38,1	53,5	172	2494	688	9976	508	3,400
M461232	2	51	66,7	172	2494	688	9976	635	4,400






SAE 100 R13 EN 856 R13


TECHNICAL DATA

Composición  **Temperatura de trabajo**

Tubo interior: caucho sintético.
Refuerzo: 4 mallas para 3/4" y 1". 6 mallas para 1" 1/4, 1" 1/2 y 2".
Cubierta: goma sintética resistente al aceite, la abrasión y condiciones atmosféricas.
De -40° C a +100° C.

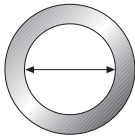
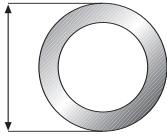

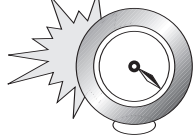


Composition  **Working temperature**

Inner tube: synthetic rubber.
Reinforcement: 4 braids of steel wire for 3/4" and 1". 6 braids of steel wire for 1" 1/4, 1" 1/2 and 2".
Cover: synthetic rubber, resistant to oil, abrasion and weather.
From -40° C to +100° C.

Composition  **Température de travail**

Tube intérieur: caoutchouc synthétique.
Renfort: 4 tresses métalliques pour 3/4" et 1". 6 tresses métalliques pour 1" 1/4, 1" 1/2 et 2".
Revêtement: caoutchouc noir résistant à l'huile, l'abrasion et aux agents atmosphériques.
De -40° C à +100° C.

HYDRAULIC HOSES

Referencia Part. Number Référence												
	DN	mm	mm	bar	psi	bar	psi	mm	kg/m			
M471312	3/4	19	32	345	5003	1380	20010	240	1,665			
M471316	1	25,4	38,4	345	5003	1380	20010	300	2,125			
M471320	1 1/4	31,8	49,3	345	5003	1380	20010	420	3,970			
M471324	1 1/2	38,1	57,3	345	5003	1380	20010	500	4,795			
M471332	2	50,8	71,6	345	5003	1380	20010	630	6,500			

THERMOPLASTIC HOSES



PTFE AND CONVOLUTED SS HOSES

INDUSTRIAL HOSES



SAE 100 R15



Composición

Tubo interior: caucho sintético.
 Refuerzo: 4-6 mallas metálicas.
 Cubierta: goma sintética resistente al aceite, la abrasión y condiciones atmosféricas.
 De -40° C a +100° C.

Temperatura de trabajo



Composition

Inner tube: synthetic rubber.
 Reinforcement: 4-6 braids of steel wire.
 Cover: synthetic rubber, resistant to oil, abrasion and weather.
 From -40° C to +100° C.

Working temperature

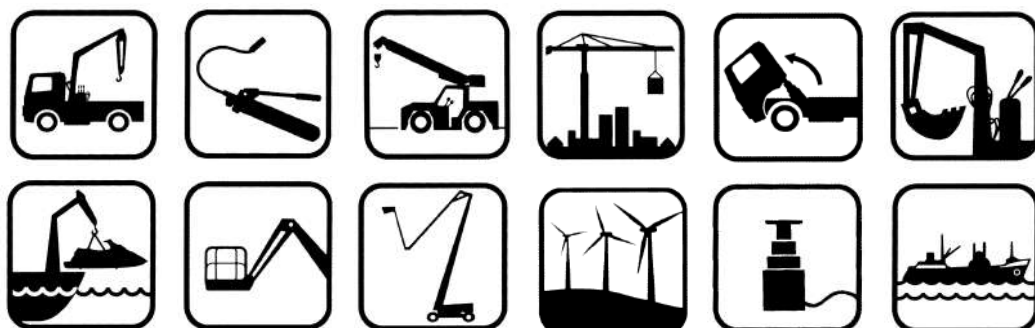


Composition

Tube intérieur: caoutchouc synthétique.
 Renfort: 4-6 tresses métalliques.
 Revêtement: caoutchouc noir résistant à l'huile, l'abrasion et aux agents atmosphériques.
 De -40° C à +100° C.

Température de travail

Referencia Part. Number Référence	Ø		Ø	P		P		r	W
	DN	mm		bar	psi	bar	psi		
-	3/8	9,5	21,2	420	6090	1680	24360	150	0,770
-	1/2	12,7	24,4	420	6090	1680	24360	200	0,910
-	3/4	19	32	420	6090	1680	24360	265	1,535
M481516	1	25,4	38,4	420	6090	1680	24360	330	2,125
M481520	1 1/4	31,8	49,3	420	6090	1680	24360	445	3,970
M481524	1 1/2	38,1	57,3	420	6090	1680	24360	530	4,970






Mangueras Termoplásticas
Thermoplastic Hoses
Tuyaux Thermoplastiques




Micro Hose


TECHNICAL DATA

Composición
 **Temperatura de trabajo**

Tubo interior: elastómero de poliéster.
Refuerzo: una malla de fibra "aramida".
Cubierta: poliuretano anti-adherente negro.
De -40° C a +100° C, limitada a +70° C para aire y fluidos de solución acuosa.

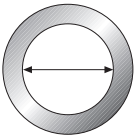
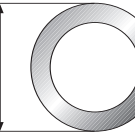
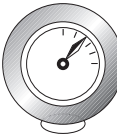
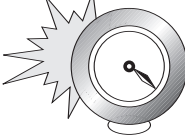


Composition
 **Working temperature**

Inner tube: polyester elastomer.
Reinforcement: one braid of "aramid" fiber.
Cover: anti-grip black polyurethane.
From -40° C to +100° C limited to +70° C for air and water based fluids.

Composition
 **Température de travail**

Tube intérieur: élastomère de polyester.
Renfort: une tresse de fibre "aramid".
Revêtement: polyuréthane anti-adhérent noir.
De -40° C à +100° C limitée à +70° C pour air et fluides solution aqueuse.

HYDRAULIC HOSES

								
Referencia Part. Number Référence	mm	mm	bar	psi	bar	psi	mm	kg/m
M089K02	2	5	630	9100	1900	27300	20	0,020
-	3	6	630	9100	1900	27300	30	0,024
-	4	8	630	9100	1900	27300	40	0,048

THERMOPLASTIC HOSES



PTFE AND CONVOLUTED SS HOSES

INDUSTRIAL HOSES



Composición
 Tubo interior: elastómero de poliéster.
 Refuerzo: una malla de fibra sintética.
 Cubierta: poliuretano anti-adherente negro.

Temperatura de trabajo
 De -40° C a +100° C limitada a +70° C para aire y fluidos de solución acuosa.

Composition
 Inner tube: polyester elastomer.
 Reinforcement: one braid of synthetic fiber.
 Cover: anti-grip black polyurethane.

Working temperature
 From -40° C to +100° C limited to +70° C for air and water based fluids.

Composition
 Tube intérieur: élastomère de polyester.
 Renfort: une tresse de fibre synthétique.
 Revêtement: polyuréthane anti-adhérent noir.

Température de travail
 De -40° C à +100° C limitée à +70° C pour air et fluides de solution aqueuse.


Referencia Part. Number Référence	Ø		Ø	P		P		r	W
	DN	mm		bar	psi	bar	psi		
-	1/8	4	7,1	175	2500	700	10000	20	0,035
-	3/16	5	8,5	150	2100	600	8400	25	0,045
-	1/4	6,5	10,6	140	2000	560	8000	40	0,065
-	5/16	8,1	12,5	120	1700	480	6800	45	0,085
-	3/8	9,7	14,4	110	1500	440	6000	50	0,105
-	1/2	13	19,1	100	1400	400	5600	70	0,175





SAE 100 R7 Antiabrazión EN 855 R7



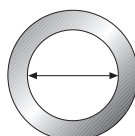
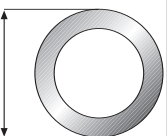
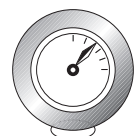
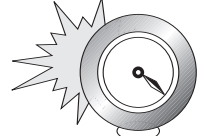


TECHNICAL DATA

Composición
 **Temperatura de trabajo**
 Tubo interior: elastómero de poliéster.
 Refuerzo: una o dos mallas de fibra sintética.
 Cubierta: poliuretano negro.
 De -40° C a +100° C, limitada a +70° C para aire y fluidos de solución acuosa.

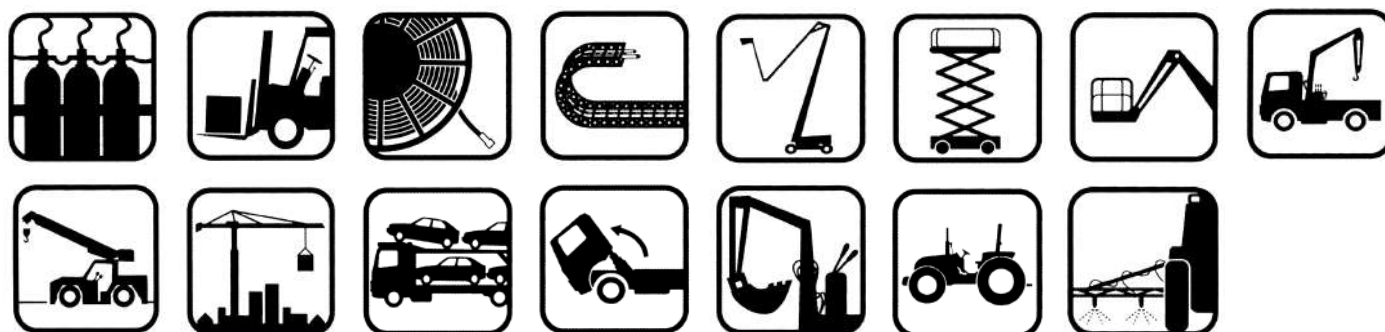
Composition
 **Working temperature**
 Inner tube: polyester elastomer.
 Reinforcement: one or two braids of synthetic fiber.
 Cover: black polyurethane.
 From -40° C to +100° C limited to +70° C for air and water based fluids.

Composition
 **Température de travail**
 Tube intérieur: élastomère de polyester.
 Renfort: une ou deux tresses de fibre synthétique.
 Revêtement: polyuréthane noir.
 De -40° C à +100° C limitée à +70° C pour air et fluides de solution aqueuse.

HYDRAULIC HOSES

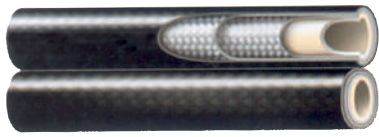
Referencia Part. Number Référence									
	DN	mm	mm	bar	psi	bar	psi	mm	kg/m
M096002	1/8	4	8,3	210	3000	840	12000	25	0,045
M096003	3/16	5	9,6	210	3000	840	12000	25	0,060
M096004	1/4	6,5	12,2	210	3000	840	12000	35	0,095
M096005	5/16	8,1	14,3	175	2500	700	10000	45	0,125
M096006	3/8	9,7	16	160	2300	640	9200	55	0,145
M096008	1/2	13	20,3	140	2000	560	8000	75	0,215
M096010	5/8	16,3	23,7	105	1500	420	6000	110	0,275
M096012	3/4	19,5	27,1	90	1300	360	5200	140	0,330
M096016	1	25,9	34	70	1000	280	4000	190	0,460

THERMOPLASTIC HOSES



PTFE AND CONVOLUTED SS HOSES

INDUSTRIAL HOSES



SAE 100 R7 Bitubo Antiabrasión EN 855 R7 Bitubo

Composición Tubo interior: elastómero de poliéster.
Refuerzo: una o dos mallas de fibra sintética.
Cubierta: poliuretano negro.

Temperatura de trabajo De -40° C a +100° C, limitada a +70° C para aire y fluidos de solución acuosa.

Composition *Inner tube: polyester elastomer.
Reinforcement: one or two braids of synthetic fiber.
Cover: black polyurethane.*

Working temperature *From -40° C to +100° C limited to +70° C for air and water based fluids.*

Composition *Tube intérieure: élastomère de polyester.
Renfort: une ou deux tresses de fibre synthétique.
Revêtement: polyuréthane noir.*

Température de travail *De -40° C à +100° C limitée à +70° C pour air et fluides de solution aqueuse.*


Referencia Part. Number Référence	Ø		Ø	Pressure		Pressure		Bend radius	Weight
	DN	mm		bar	psi	bar	psi		
-	1/8	4	8,3	210	3000	840	12000	25	0,090
M100003	3/16	5	9,6	210	3000	840	12000	25	0,120
M100004	1/4	6,5	12,2	210	3000	840	12000	35	0,190
M100005	5/16	8,1	14,3	175	2500	700	10000	45	0,250
M100006	3/8	9,7	16	160	2300	640	9200	55	0,290
M100008	1/2	13	20,3	140	2000	560	8000	75	0,430
-	5/8	16,3	23,7	105	1500	420	6000	110	0,550
-	3/4	19,5	27,1	90	1300	360	5200	140	0,660
-	1	25,9	34	70	1000	280	4000	190	0,920






SAE 100 R8 Antiabrasión EN 855 R8


TECHNICAL DATA

Composición

Temperatura de trabajo

Tubo interior: elastómero de poliéster.
Refuerzo: una o dos mallas de fibra "aramida".
Cubierta: poliuretano negro.
De -40° C a +100° C limitada a +70° C para aire y fluidos de solución acuosa.

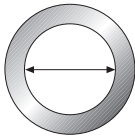
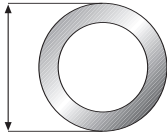
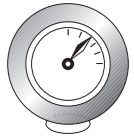
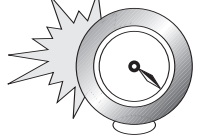


Composition

Working temperature

Inner tube: polyester elastomer.
Reinforcement: one or two braids of "aramid" fiber.
Cover: black polyurethane.
From -40° C to +100° C limited to +70° C for air and water based fluids.

Composition

Température de travail

Tube intérieur: élastomère de polyester.
Renfort: une ou deux tresses de fibre "aramid".
Revêtement: polyuréthane noir.
De -40° C à +100° C limitée à +70° C pour air et fluides de solution aqueuse.

HYDRAULIC HOSES

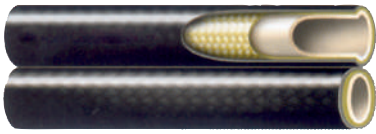
Referencia Part. Number Référence												
	DN	mm	mm	bar	psi	bar	psi	mm	kg/m			
-	1/8	4	7,9	420	6000	1680	24000	25	0,040			
-	3/16	5	8,9	350	5000	1400	20000	30	0,050			
M103004	1/4	6,5	11,5	350	5000	1400	20000	50	0,080			
M103005	5/16	8,1	13,4	300	4300	1200	17200	55	0,100			
M103006	3/8	9,7	15,5	280	4000	1120	16000	60	0,130			
M103008	1/2	13	19,9	245	3500	980	14000	80	0,200			
M103010	5/8	16,3	23,4	200	2900	800	11600	125	0,255			
M103012	3/4	19,5	26,9	165	2300	660	9200	150	0,310			
M103016	1	25,9	34,2	140	2000	560	8000	200	0,455			

THERMOPLASTIC HOSES




PTFE AND CONVOLUTED SS HOSES


INDUSTRIAL HOSES




SAE 100 R8 Bitubo Antiabrazión EN 855 R8 Bitubo

Composición

Temperatura de trabajo

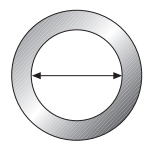
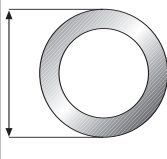
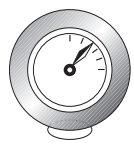
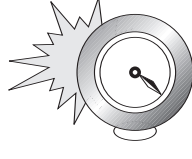


Tubo interior: elastómero de poliéster.
Refuerzo: una o dos mallas de fibra "aramida".
Cubierta: poliuretano negro.
De -40° C a +100° C limitada a +70° C para aire y fluidos de solución acuosa.

Composition

Working temperature

Inner tube: polyester elastomer.
Reinforcement: one or two braids of "aramid" fiber.
Cover: black polyurethane.
From -40° C to +100° C limited to +70° C for air and water based fluids.

Composition

Température de travail

Tube intérieur: élastomère de polyester.
Renfort: une ou deux tresses de fibre "aramid".
Revêtement: polyuréthane noir.
De -40° C à +100° C limitée à +70° C pour air et fluides de solution aqueuse.

Referencia Part. Number Référence										
	DN	mm	mm	bar	psi	bar	psi	mm	kg/m	
-	1/8	4	7,9	420	6000	1680	24000	25	0,080	
-	3/16	5	8,9	350	5000	1400	20000	30	0,100	
M106004	1/4	6,5	11,5	350	5000	1400	20000	50	0,160	
M106005	5/16	8,1	13,4	300	4300	1200	17200	55	0,200	
M106006	3/8	9,7	15,5	280	4000	1120	16000	60	0,260	
M106008	1/2	13	19,9	245	3500	980	14000	80	0,400	
-	5/8	16,3	23,4	200	2900	800	11600	125	0,510	
-	3/4	19,5	26,9	165	2300	660	9200	150	0,620	
-	1	25,9	34,2	140	2000	560	8000	200	0,910	






Malla Metálica Antiabrasión


Steel Braid Antiabrasion

Tresse Métallique Antiabrasion


TECHNICAL DATA

Composición

Temperatura de trabajo

Tubo interior: elastómero de poliéster.
 Refuerzo: una malla metálica.
 Cubierta: poliuretano negro.
 De -40° C a +100° C, limitada a +70° C para aire y fluidos de solución acuosa.

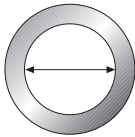
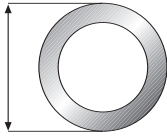

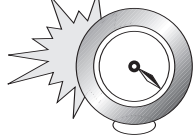


Composition

Working temperature

Inner tube: polyester elastomer.
 Reinforcement: one braid of steel wire.
 Cover: black polyurethane.
 From -40° C to +100° C limited to +70° C for air and water based fluids.

Composition

Température de travail

Tube intérieur: élastomère de polyester.
 Renfort: une tresse métallique.
 Revêtement: polyuréthane noir.
 De -40° C à +100° C limitée à +70° C pour air et fluides de solution aqueuse.

HYDRAULIC HOSES

Referencia Part. Number Référence										
	DN	mm	mm	bar	psi	bar	psi	mm	kg/m	
M087003	3/16	5	9,4	300	4300	1200	17200	30	0,105	
M087004	1/4	6,4	11,7	275	3900	1100	15600	40	0,150	
M087005	5/16	8	13,4	215	3100	860	12400	55	0,175	
M087006	3/8	9,8	15,9	212	3000	850	12000	65	0,240	
M087008	1/2	13	18,4	175	2500	700	10000	85	0,265	
M087010	5/8	16,3	21,6	140	2000	560	8000	115	0,315	
M087012	3/4	19,5	25,7	115	1600	460	6400	145	0,430	
M087016	1	25,8	33	95	1300	380	5200	180	0,615	

THERMOPLASTIC HOSES



PTE AND CONVOLUTED SS HOSES

INDUSTRIAL HOSES



Malla Metálica Bitubo Antiabrasión

Steel Braid Antiabrasion Twin

Tresse Métallique Antiabrasion Bitube

TECHNICAL DATA



Composición

Tubo interior: elastómero de poliéster.
Refuerzo: una malla metálica.

Temperatura de trabajo

Cubierta: poliuretano negro.
De -40° C a +100° C, limitada a +70° C para aire y fluidos de solución acuosa.

HYDRAULIC HOSES



Composition

Inner tube: polyester elastomer.
Reinforcement: one braid of steel wire.
Cover: black polyurethane.

Working temperature

From -40° C to +100° C limited to +70° C for air and water based fluids.



Composition

Tube intérieur: élastomère de polyester.
Renfort: une tresse métallique.
Revêtement: polyuréthane noir.

Température de travail

De -40° C à +100° C limitée à +70° C pour air et fluides de solution aqueuse.

THERMOPLASTIC HOSES

PTE AND CONVULTED SS HOSES

INDUSTRIAL HOSES

Referencia Part. Number Référence	Ø		Ø	P		P		r	W
	DN	mm		bar	psi	bar	psi		
M088003	3/16	5	9,4	300	4300	1200	17200	30	0,210
M088004	1/4	6,4	11,7	275	3900	1100	15600	40	0,300
M088005	5/16	8	13,4	215	3100	860	12400	55	0,350
M088006	3/8	9,8	15,9	212	3000	850	12000	65	0,480
M088008	1/2	13	18,4	175	2500	700	10000	85	0,530
-	5/8	16,3	21,6	140	2000	560	8000	115	0,630
-	3/4	19,5	25,7	115	1600	460	6400	145	0,860
-	1	25,8	33	95	1300	380	5200	180	1,230







Doble Malla Metálica Antiabrasión


Two Steel Braids Antiabrasion

Double Tresse Métallique Antiabrasion

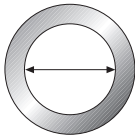
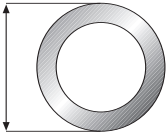

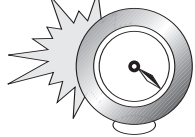


TECHNICAL DATA

 **Composición** Tubo interior: elastómero de poliéster.
Temperatura de trabajo Refuerzo: dos mallas metálicas.
 Cubierta: poliuretano negro.
 de -40° C a +100° C limitada a +70° C para aire y fluidos de solución acuosa.

 **Composition** *Inner tube: polyester elastomer.*
Working temperature *Reinforcement: two braids of steel wire.*
Cover: black polyurethane.
From -40° C to +100° C limited to +70° C for air and water based fluids.

 **Composition** *Tube intérieur: élastomère de polyester.*
Température de travail *Renfort: deux tresses métalliques.*
Revêtement: polyuréthane noir.
De -40° C à +100° C limitée à +70° C pour air et fluides de solution aqueuse.

HYDRAULIC HOSES

Referencia Part. Number Référence												
	DN	mm	mm	bar	psi	bar	psi	mm	kg/m			
-	1/4	6,4	12,8	400	5800	1600	23200	40	0,245			
-	3/8	9,8	16,8	330	4700	1320	18800	65	0,380			
-	1/2	13	20,2	260	3700	1040	14800	85	0,450			
-	5/8	16,3	23,5	220	3100	880	12400	115	0,555			
-	3/4	19,5	27,5	150	2100	600	8400	170	0,690			

THERMOPLASTIC HOSES



PTFE AND CONVOLUTED SS HOSES

INDUSTRIAL HOSES



SAE 100 R7
EN 855 R7

Pintura y Disolvente
Paint and Solvent
Peinture et Dissolvant



Composición

Tubo interior: poliamida.
Refuerzo: una o dos mallas de fibra sintética.
Cubierta: poliuretano azul.

Temperatura de trabajo

De -40° C a +100° C limitada a +70° C para aire y fluidos de solución acuosa.



Composition

Inner tube: polyamide.
Reinforcement: one or two braids of synthetic fiber.
Cover: blue polyurethane.

Working temperature

From -40° C to +100° C limited to +70° C for air and water based fluids.



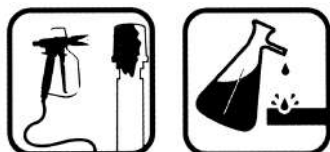
Composition

Tube intérieur: polyamide.
Renfort: une ou deux tresses de fibre synthétique.
Revêtement: polyuréthane bleu.

Température de travail

De -40° C à +100° C limitée à +70° C pour air et fluides de solution aqueuse.

Referencia Part. Number Référence	Ø		Ø	P		P		r	W
	DN	mm		bar	psi	bar	psi		
-	3/16	5	9,6	210	3000	840	12000	25	0,060
-	1/4	6,5	12,2	210	3000	840	12000	35	0,095
-	3/8	9,7	16	160	2300	640	9200	55	0,145
-	1/2	13	20,3	140	2000	560	8000	75	0,215








SAE 100 R8
EN 855 R8

Pintura y Disolvente
Paint and Solvent
Peinture et Dissolvant

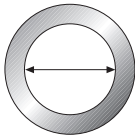
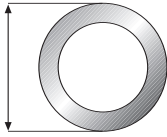
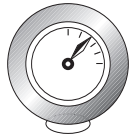
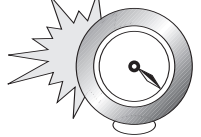


TECHNICAL DATA

 **Composición** Tubo interior: poliamida.
Refuerzo: una malla de fibra "Aramid".
Cubierta: poliuretano azul.
Temperatura de trabajo De -40° C a +100° C limitada a +70° C para aire y fluidos de solución acuosa.

 **Composition** *Inner tube: polyamide.*
Reinforcement: one braid of "Aramid" fiber.
Cover: blue polyurethane.
Working temperature *From -40° C to +100° C limited to +70° C for air and water based fluids.*

 **Composition** *Tube intérieur: polyamide.*
Renfort: une tresse de fibre "Aramid".
Revêtement: polyuréthane bleu.
Température de travail *De -40° C à +100° C limitée à +70° C pour air et fluides de solution aqueuse.*

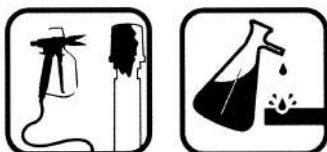
HYDRAULIC HOSES

Referencia Part. Number Référence										
	DN	mm	mm	bar	psi	bar	psi	mm	kg/m	
-	3/16	5	8,9	350	5000	1400	20000	30	0,050	
-	1/4	6,5	11,5	350	5000	1400	20000	50	0,080	
-	3/8	9,7	15,5	280	4000	1120	16000	60	0,130	
-	1/2	13	19,9	245	3500	980	14000	80	0,200	

THERMOPLASTIC HOSES



PTFE AND CONVOLUTED SS HOSES



INDUSTRIAL HOSES



Malla Metálica Pintura y Disolvente

Steel Braid Paint Spray & Solvents

Tresse Métallique Peinture et Dissolvant

**Composición**

Tubo interior: poliamida.
Refuerzo: una malla metálica.
Cubierta: poliuretano azul.

Temperatura de trabajo

De -40° C a +100° C, limitada a +70° C para aire y fluidos de solución acuosa.

**Composition**

Inner tube: polyamide.
Reinforcement: one braid of steel wire.
Cover: blue polyurethane.

Working temperature

From -40° C to +100° C limited to +70° C for air and water based fluids.

**Composition**

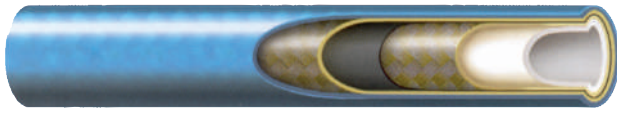
Tube intérieur: polyamide.
Renfort: une tresse métallique.
Revêtement: polyuréthane bleu.

Température de travail

De -40° C à +100° C limitée à +70° C pour air et fluides de solution aqueuse.

Referencia Part. Number Référence	Ø		Ø	P		P		r	W
	DN	mm		bar	psi	bar	psi		
M083003	3/16	5	9,4	300	4300	1200	17200	30	0,105
M083004	1/4	6,4	11,7	275	3900	1100	15600	40	0,150
M083006	3/8	9,8	15,9	212	3000	850	12000	65	0,240
M083008	1/2	13	18,4	175	2500	700	10000	85	0,265
M083012	3/4	19,5	25,7	115	1600	460	6400	145	0,430







Doble Malla Metálica Pintura y Disolvente


Two Steel Braids Paint Spray & Solvents

Double Tresse Métallique Peinture

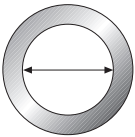
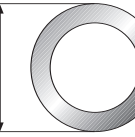
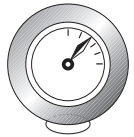
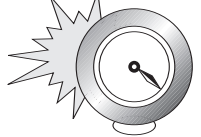


TECHNICAL DATA

 **Composición** Tubo interior: poliamida.
 Refuerzo: doble malla metálica.
 Cubierta: poliuretano azul.
Temperatura de trabajo De -40° C a +100° C limitada a +70° C para aire y fluidos de solución acuosa.

 **Composition** *Inner tube: polyamide.
 Reinforcement: two braids of steel wire.
 Cover: blue polyurethane.*
Working temperature *From -40° C to +100° C limited to +70° C for air and water based fluids.*

 **Composition** *Tube intérieur: polyamide.
 Renfort: double tresse métallique.
 Revêtement: polyuréthane bleu.*
Température de travail *De -40° C à +100° C limitée à +70° C pour air et fluides de solution aqueuse.*

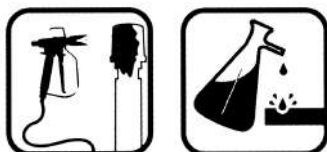
HYDRAULIC HOSES

Referencia Part. Number Référence												
	DN	mm	mm	mm	bar	psi	bar	psi	mm	mm	kg/m	
M081004	1/4	6,4	12,8		400	5800	1600	23200	40		0,245	
M081006	3/8	9,8	16,8		330	4700	1320	18800	65		0,380	
M081008	1/2	13	20,2		260	3700	1040	14800	85		0,450	
M081012	3/4	19,5	27,5		150	2100	600	8400	170		0,690	

THERMOPLASTIC HOSES



PTFE AND CONVOLUTED SS HOSES



INDUSTRIAL HOSES



Altísima Presión

Very High Pressure Thermoplastic Hose

Thermoplastique Très Haute Pression

Composición **Composición** **Composición**
Temperatura de trabajo **Working temperature** **Température de travail**

Tubo interior: elastómero de poliéster.
Refuerzo: una o dos mallas de fibra "Aramid" más una malla metálica.
Cubierta: poliuretano negro.
De -40° C a +100° C, limitada a +70° C para aire y fluidos de solución acuosa.

Inner tube: polyester elastomer.
Reinforcement: one or two braids of "Aramid" fiber plus one braid of steel wire.
Cover: black polyurethane.
From -40° to +100° C, limited to +70° C for air and water based fluids.

Tube intérieure: élastomère de polyester.
Renfort: une ou deux tresses de fibre "Aramid" plus une tresse métallique.
Revêtement: polyuréthane noir.
De -40° C à +100° C, limitée à +70° C pour air et fluides de solution aqueuse.

Composición **Composición** **Composición**
Temperatura de trabajo **Working temperature** **Température de travail**

Tubo interior: elastómero de poliéster.
Refuerzo: una o dos mallas de fibra "Aramid" más una malla metálica.
Cubierta: poliuretano negro.
De -40° C a +100° C, limitada a +70° C para aire y fluidos de solución acuosa.

Inner tube: polyester elastomer.
Reinforcement: one or two braids of "Aramid" fiber plus one braid of steel wire.
Cover: black polyurethane.
From -40° to +100° C, limited to +70° C for air and water based fluids.

Tube intérieure: élastomère de polyester.
Renfort: une ou deux tresses de fibre "Aramid" plus une tresse métallique.
Revêtement: polyuréthane noir.
De -40° C à +100° C, limitée à +70° C pour air et fluides de solution aqueuse.

Composición **Composición** **Composición**
Temperatura de trabajo **Working temperature** **Température de travail**

Tubo interior: elastómero de poliéster.
Refuerzo: una o dos mallas de fibra "Aramid" más una malla metálica.
Cubierta: poliuretano negro.
De -40° C a +100° C, limitada a +70° C para aire y fluidos de solución acuosa.

Inner tube: polyester elastomer.
Reinforcement: one or two braids of "Aramid" fiber plus one braid of steel wire.
Cover: black polyurethane.
From -40° to +100° C, limited to +70° C for air and water based fluids.

Tube intérieure: élastomère de polyester.
Renfort: une ou deux tresses de fibre "Aramid" plus une tresse métallique.
Revêtement: polyuréthane noir.
De -40° C à +100° C, limitée à +70° C pour air et fluides de solution aqueuse.

Referencia Part. Number Référence	Ø		Ø	Pressure		Pressure		Bend radius	Weight
	DN	mm		bar	psi	bar	psi		
M352004	1/4	6,6	13,8	700	10000	2800	40000	35	0,225
-	3/8	9,7	16,9	400	5800	1600	23200	60	0,280
-	1/2	13	21,3	350	5000	1400	20000	80	0,390



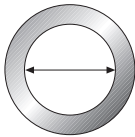
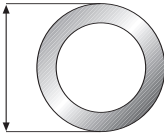

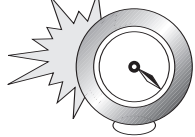


Ecology 200 (Amarillo)
Ecology 200 (Yellow)
Ecology 200 (Jaune)

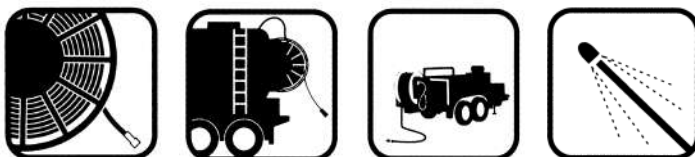


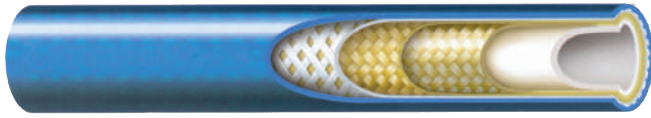
Composición **Tubo interior: polietileno.**
Refuerzo: una o dos mallas de fibra sintética más una malla especial de fibra sintética.
Cubierta: poliuretano amarillo.
Temperatura de trabajo De -40° C a +60° C.

Composition **Inner tube: polyethylene.**
Reinforcement: one or two braids of synthetic fiber plus one special extra braid of synthetic fiber.
Cover: yellow polyurethane.
Working temperature From -40° to +60° C.

Composition **Tube intérieur: polyéthylène.**
Renfort: une ou deux tresses de fibre synthétique plus une tresse spéciale de fibre synthétique.
Revêtement: polyuréthane jaune.
Température de travail De -40° C à +60° C.

Referencia Part. Number Référence									
	DN	mm	mm	bar	psi	bar	psi	mm	kg/m
MEC20012	3/4	19,6	31,5	200	2900	520	7500	120	0,490
MEC20016	1	25,9	38,7	200	2900	520	7500	155	0,710
MEC20020	1 1/4	32,4	46,7	200	2900	520	7500	240	0,940

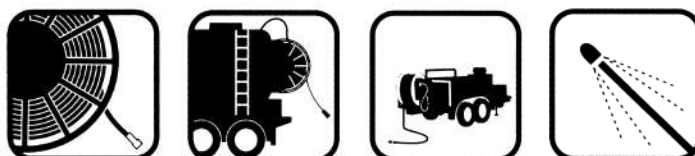








Ecology 250 (Azul)
Ecology 250 (Blue)
Ecology 250 (Bleu)

	<p>Composición</p> <p>Temperatura de trabajo</p>	<p>Tubo interior: polietileno. Refuerzo: una o dos mallas de fibra "Aramid" o sintética más una malla especial de fibra sintética. Cubierta: poliuretano azul. De -40° C a +60° C .</p>
	<p>Composition</p> <p>Working temperature</p>	<p>Inner tube: polyethylene. Reinforcement: one or two braids of "Aramid" or synthetic fiber plus one special braid of synthetic fiber. Cover: blue polyurethane. From -40° C to +60° C.</p>
	<p>Composition</p> <p>Température de travail</p>	<p>Tube intérieur: polyéthylène. Renfort: une ou deux tresses de fibre "Aramid" ou synthétique plus une tresse spéciale de fibre synthétique. Revêtement: polyuréthane bleu. De -40° C à +60° C.</p>

Referencia Part. Number Référence										
	DN	mm	mm	bar	psi	bar	psi	mm		
MEC25008	1/2	13	22,8	250	3600	625	9000	75	0,295	
MEC25012	3/4	19,6	30,3	250	3600	625	9000	120	0,435	
MEC25016	1	25,9	37,9	250	3600	625	9000	155	0,620	
MEC25020	1 1/4	32,5	45,3	250	3600	625	9000	240	0,810	



R7 No Conductiva	
<i>R7 Non-Conductive</i>	
<i>R7 Non-Conducteur</i>	
	<p>Tubo termoplástico no conductor para aplicaciones hidráulicas de 70 a 210 BAR.</p> <p><i>Thermoplastic non-conductive hose for hydraulic applications from 70 to 210 BAR.</i></p> <p><i>Tuyau thermoplastique non-conducteur pour applications hydrauliques de 70 à 210 BAR.</i></p>
R7 Yachting	
<i>R7 Yachting</i>	
<i>R7 Yachting</i>	
	<p>Tubo termoplástico blanco para aplicaciones hidráulicas y yates de 140 a 210 BAR.</p> <p><i>Thermoplastic white hose for hydraulic and yachting applications from 140 to 210 BAR.</i></p> <p><i>Tuyau thermoplastique blanc pour applications hydrauliques et yachts de 140 à 210 BAR.</i></p>
R8 No Conductiva	
<i>R8 Non-Conductive</i>	
<i>R8 Non-Conducteur</i>	
	<p>Tubo termoplástico no conductor para aplicaciones hidráulicas alta presión de 140 a 350 BAR.</p> <p><i>Thermoplastic non-conductive hose for high pressure hydraulic applications from 140 to 350 BAR.</i></p> <p><i>Tuyau thermoplastique non-conducteur pour applications hydrauliques de 140 à 350 BAR.</i></p>
R8 Yachting	
<i>R8 Yachting</i>	
<i>R8 Yachting</i>	
	<p>Tubo termoplástico blanco para aplicaciones hidráulicas alta presión para yates de 245 a 350 BAR.</p> <p><i>Thermoplastic white hose for yachting high pressure hydraulic application from 245 to 350 BAR.</i></p> <p><i>Tuyau thermoplastique blanc pour applications hydrauliques et yachts haute pression de 245 à 350 BAR.</i></p>

Bajo consulta y pedido con cantidad mínima
On request and minimum quantity orders
À consulter et quantité minimum de commandes



**Mangueras PTFE e
Inox Coarrugado**

***PTFE and Convoluted
Stainless Steel Hoses***

***Tuyaux PTFE et Inox
Convoluté***




FHL (Serie Ligera)


FHL (Light Serie)

FHL (Série Légère)


TECHNICAL DATA

Composición  **Temperatura de trabajo**

Tubo interno: tubo liso en PTFE. Espesor fino. Resistente al fuego, químicamente inerte. Apto para uso alimentario según norma FDA.
Refuerzo: malla en acero inox AISI 304.
De -70° C a +260° C.

Composition  **Working temperature**

Inner tube: smooth tube in PTFE. Fine thickness. Resistant to fire, chemically inert. Suitable for food use according to FDA norm.
Reinforcement: stainless steel AISI 304 braid.
From -70° C to +260° C.

Composition  **Température de travail**

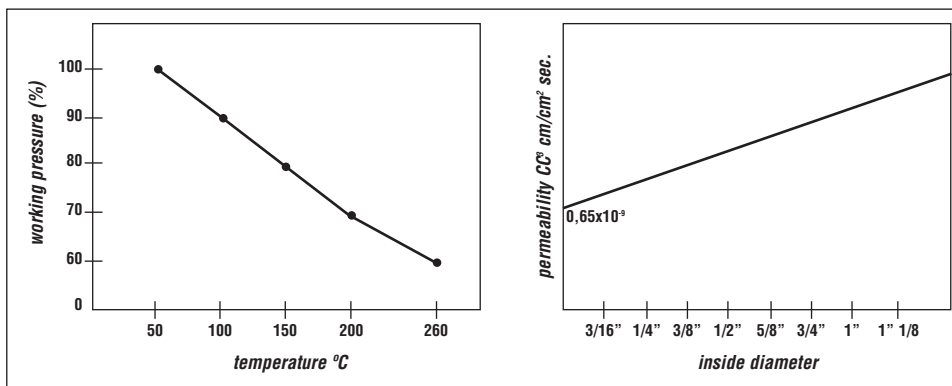
Tube intérieur: tube lisse en PTFE. Faible épaisseur. Résistant au feu, chimiquement inerte. Permet un usage alimentaire suite norme FDA.
Renfort: une tresse en acier inox AISI 304.
De -70° C à +260° C.

HYDRAULIC HOSES

Referencia Part. Number Référence	DN		THICKNESS PTFE mm	mm	bar a 20°C	psi a 20°C	bar a 20°C	psi a 20°C	mm	kg/m
	mm	mm	mm	mm	bar	psi	bar	psi	mm	kg/m
M290005	3/16	4,8	0,7	7,4	200	2900	800	11600	35	0,069
M290006	1/4	6,35	0,7	9	175	2537	700	10150	45	0,087
M290008	5/16	7,9	0,7	10,8	150	2175	600	8700	50	0,127
M290009	3/8	9,5	0,7	12,4	135	1957	540	7830	55	0,145
M290013	1/2	12,7	0,7	15,7	120	1740	480	6960	70	0,212
M290016	5/8	15,9	0,7	19,1	100	1450	400	5800	130	0,260
M290020	3/4	19	0,8	22,2	90	1305	360	5220	190	0,321
M290025	1	25,4	0,8	29,3	65	942	260	3770	270	0,450
-	1 1/8	28,6	1	32,5	55	797	220	3190	300	0,525

THERMOPLASTIC HOSES

Tolerances according to SAE 100 R14 and BS 6564 norms






PTFE AND CONVOLUTED SS HOSES

INDUSTRIAL HOSES

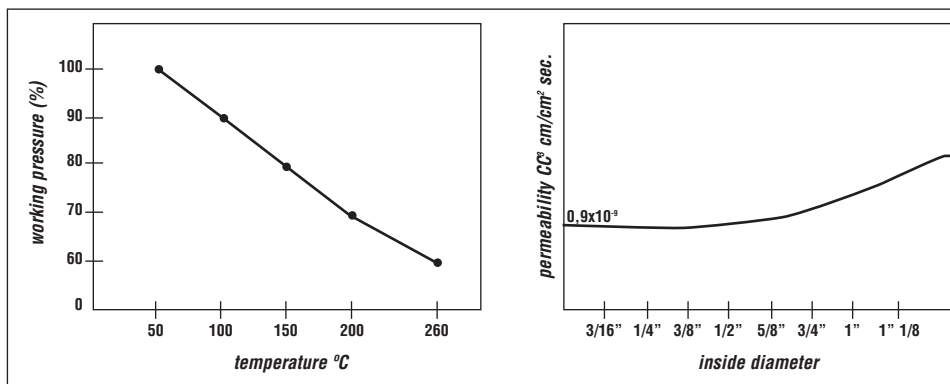


FHM (Serie Media)
FHM (Normal Serie)
FHM (Série Normale)

	Composición	Tubo interno: tubo liso en PTFE. Espesor medio. Resistente al fuego, químicamente inerte. Apto para uso alimentario según norma FDA.
	Temperatura de trabajo	Refuerzo: doble malla en acero inox AISI 304. De -70° C a +260° C.
	Composition	<i>Inner tube: smooth tube in PTFE. Normal thickness. Resistant to fire, chemically inert. Suitable for food use according to FDA norm.</i>
	Working temperature	<i>Reinforcement: two braids of stainless steel AISI 304. From -70° C to +260° C.</i>
	Composition	<i>Tube intérieure: tube lisse en PTFE. Épaisseur normale. Résistant au feu, chimiquement inerte. Permet un usage alimentaire suite norme FDA.</i>
	Température de travail	<i>Renfort: deux tresses en acier inox AISI 304. De -70° C à +260° C.</i>

Referencia Part. Number Référence	Ø		THICKNESS PTFE		Pressure		Pressure		Bend radius r	Weight W
	DN	mm	mm	mm	bar a 20°C	psi a 20°C	bar a 20°C	psi a 20°C		
-	3/16	4,8	0,9	7,8	200	2900	800	11600	35	0,090
-	1/4	6,35	0,9	9,4	175	2537	700	10150	45	0,110
-	5/16	7,9	0,9	11,2	150	2175	600	8700	50	0,150
-	3/8	9,5	0,9	12,8	135	1957	540	7830	55	0,172
-	1/2	12,7	0,9	16	120	1740	480	6960	70	0,244
-	5/8	15,9	0,9	19,2	100	1450	400	5800	130	0,300
-	3/4	19	1	22,5	90	1305	360	5220	190	0,367
-	1	25,4	1,1	29,4	65	942	260	3770	270	0,503
-	1 1/8	28,6	1,1	32,6	55	797	220	3190	300	0,585

Tolerances according to SAE 100 R14 and BS 6564 norms







FHH (Serie Pesada)

FHH (Heavy Serie)


FHH (Série Lourde)

Composición
 **Temperatura de trabajo**

Tubo interno: tubo liso en PTFE. Espesor grueso. Resistente al fuego, químicamente inerte. Apto para uso alimentario según norma FDA.
Refuerzo: malla en acero inox AISI 304.
 De -70° C a +260° C.

Composition
 **Working temperature**

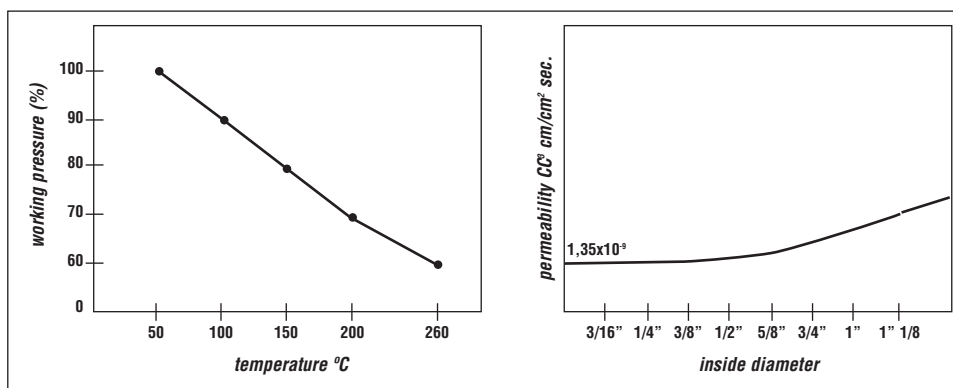
Inner tube: smooth tube in PTFE. Thick thickness. Resistant to fire, chemically inert. Suitable for food use according to FDA norm.
Reinforcement: stainless steel AISI 304 braid.
 From -70° C to +260° C.

Composition
 **Température de travail**

Tube intérieur: tube lisse en PTFE. Grosse épaisseur. Résistant au feu, chimiquement inerte. Permet un usage alimentaire suite norme FDA.
Renfort: une tresse en acier inox AISI 304.
 De -70° C à +260° C.

Referencia Part. Number Référence	DN		THICKNESS PTFE	mm		bar		psi		mm	kg/m
	mm	mm	mm	a 20°C	a 20°C	a 20°C	a 20°C				
-	3/16	4,8	1,2	8,4	245	3552	980	14210	50	0,105	
-	1/4	6,35	1,2	9,9	200	2900	800	11600	100	0,126	
-	5/16	7,9	1,2	11,9	170	2465	680	9860	120	0,172	
-	3/8	9,5	1,2	13,5	160	2320	640	9280	130	0,207	
-	1/2	12,7	1,2	16,7	130	1885	520	7540	160	0,293	
-	5/8	15,9	1,3	20,1	120	1740	480	6960	190	0,360	
-	3/4	19	1,3	23,3	95	1377	380	5510	230	0,423	
-	1	25,4	1,4	30,1	70	1015	280	4060	310	0,640	

Tolerances according to SAE 100 R14 and BS 6564 norms





FHM Doble Malla

FHM Two Braid

FHM Deux Tresses

Composición



Temperatura de trabajo

Tubo interno: tubo liso en PTFE. Espesor PTFE medio. Resistente al fuego, químicamente inerte. Apto para uso alimentario según norma FDA.
Refuerzo: doble malla en acero inox AISI 304.
De -70° C a +260° C.

Composition



Working temperature

Inner tube: smooth tube in PTFE. Normal thickness. Resistant to fire, chemically inert. Suitable for food use according to FDA norm.
Reinforcement: two braids of stainless steel AISI 304.
From -70° C to +260° C.

Composition



Température de travail

Tube intérieur: tube lisse en PTFE. Épaisseur normale. Résistant au feu, chimiquement inerte. Permet un usage alimentaire suite norme FDA.
Renfort: deux tresses en acier inox AISI 304.
De -70° C à +260° C.

Referencia Part. Number Référence	Ø		ESPESOR PTFE		P		P		r	W
	DN	mm	mm	mm	bar a 20°C	psi a 20°C	bar a 20°C	psi a 20°C		
-	3/16	4,8	0,9	7,8	365	5292	1095	15877	35	0,126
M2901206	1/4	6,35	0,9	9,4	330	4785	990	14355	45	0,154
M2901208	5/16	7,9	0,9	11,2	300	4350	900	14355	50	0,210
M2901209	3/8	9,5	0,9	12,8	270	3915	810	11745	55	0,240
M2901213	1/2	12,7	0,9	16	240	3480	720	10440	70	0,341
M2901216	5/8	15,9	0,9	19,2	200	2900	600	8700	130	0,420
M2901219	3/4	19	1	22,5	180	2610	540	7830	190	0,513
M2901225	1	25,4	1,1	29,4	130	1885	390	5655	270	0,704
-	1 1/8	28,6	1,1	32,6	110	1595	330	4785	300	0,819

Tolerances according to SAE 100 R14 and BS 6564 norms

$$P_w = K \times P_{t=20^\circ}$$

t	-60	+20	+100	+150	+200	+250
k	0,95	1,00	0,75	0,50	0,25	0,10





Teflón Coarrugado


Convoluted PTFE

PTFE Convoluté

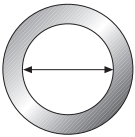
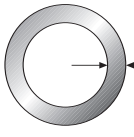
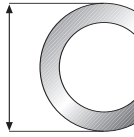
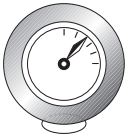
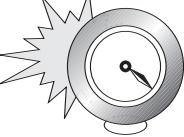

TECHNICAL DATA

Composición  Tubo interno: tubo PTFE coarrugado, resistente al fuego, químicamente inerte y apto para uso alimentario, según norma FDA.
Temperatura de trabajo Refuerzo: malla en acero inox AISI 304.
 De -70° C a +260° C.

Composition  *Inner tube: convoluted tube in PTFE, resistant to fire, chemically inert. Suitable for food use, according to FDA norm.*
Working temperature *Reinforcement: stainless steel AISI 304 braid.*
 From -70° C to +260° C.

Composition  *Tube intérieur: tube convoluté en PTFE. Résistant au feu, chimiquement inerte. Permet un usage alimentaire suite norme FDA.*
Température de travail *Renfort: tresse en acier inox AISI 304.*
 De -70° C à +260° C.

HYDRAULIC HOSES

Referencia Part. Number Référence											
	DN	mm	ESPESOR PTFE mm	max. mm	bar a 20°C	psi a 20°C	bar a 20°C	psi a 20°C	mm		
M292006	1/4	6,35	0,75	12,7	172	2494	517	7496	20		
M292008	5/16	8	0,75	14,7	120	1740	480	6960	25		
M292009	3/8	9,5	0,75	16,2	120	1740	480	6960	30		
M292013	1/2	13	0,75	19,7	110	1595	440	6380	40		
M292016	5/8	16	0,9	22,9	80	1160	320	4640	50		
M292020	3/4	19	0,9	27,5	70	1015	280	4060	80		
M292025	1	25,4	1	34,3	50	725	200	2900	100		
M292032	1 1/4	32	1,1	42	45	667	180	2610	120		
M292038	1 1/2	38	1,15	49,2	40	580	160	2320	140		
M292050	2	51	1,2	63,6	36	522	144	2088	175		
M292075	3	76	1,25	98,8	20	290	80	1160	225		
M292100	4	102	1,3	131,2	15	217	60	870	300		

THERMOPLASTIC HOSES

$$P_w = K \times P_{t=20^\circ}$$

t	-60	+20	+100	+150	+200	+250
k	0,95	1,00	0,75	0,50	0,25	0,10

PTFE AND CONVOLUTED SS HOSES


INDUSTRIAL HOSES





Mangueras Inox Coarrugado 1 Malla

Convolved Stainless Steel Hose with 1 Braid

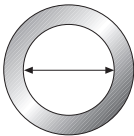
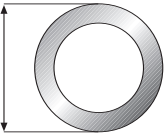




Tuyau Inox Convoluté avec 1 Tresse

	Composición	Tubo interno: tubo inox coarrugado AISI 321 o tubo inox coarrugado AISI 316. Refuerzo: malla inox AISI 304 o malla inox AISI 316.
	Temperatura de trabajo	De -270° C a +700° C.

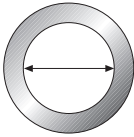
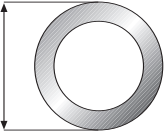




	Composition	Inner tube: convolved stainless steel AISI 321 tube or convolved stainless steel AISI 316 tube. Reinforcement: stainless steel AISI 304 braid or stainless steel AISI 316 braid.
	Working temperature	From -270° C to +700° C.

	Composition	Tube intérieure: tube inox convoluté AISI 321 ou tube inox convoluté AISI 316. Renfort: tresse inox AISI 304 ou tresse inox AISI 316.
	Température de travail	De -270° C à +700° C.

AISI 321 con 1 malla AISI 304 / AISI 321 with 1 braid AISI 304 / AISI 321 avec 1 tresse AISI 304

							
Referencia Part. Number Référence	DN	mm	Ø ext. máx	Kg/cm ²	STATIC mm	FLEXION mm	kg/m
M93211006	1/4	8,0	14	100	25	100	0,300
M93211010	3/8	11,0	17,0	90	40	150	0,400
M93211012	1/2	12,0	19,9	80	50	200	0,500
M93211016	5/8	16,5	24,1	70	50	200	0,600
M93211020	3/4	19,8	29,5	64	70	200	0,650
M93211025	1	25,3	36,9	50	90	200	0,800
M93211032	1 1/4	32,3	43,7	40	110	250	1,500
M93211040	1 1/2	40,3	53,9	30	130	250	1,650
M93211050	2	50,4	68,4	28	175	350	1,800
M93211065	2 1/2	65,4	84	24	200	410	2,400
M93211080	3	79,9	98,5	18	205	450	3,000
M93211100	4	100	121,0	16	230	560	3,700

AISI 316 con 1 malla AISI 316 / AISI 316 with 1 braid AISI 316 / AISI 316 avec 1 tresse AISI 316

							
Referencia Part. Number Référence	DN	mm	Ø ext. máx	Kg/cm ²	STATIC mm	FLEXION mm	kg/m
M93161006	1/4	8,0	14	100	25	100	0,300
M93161010	3/8	11,0	17,0	90	40	150	0,400
M93161012	1/2	12,0	19,9	80	50	200	0,500
M93161016	5/8	16,5	24,1	70	50	200	0,600
M93161020	3/4	19,8	29,5	64	70	200	0,650
M93161025	1	25,3	36,9	50	90	200	0,800
M93161032	1 1/4	32,3	43,7	40	110	250	1,500
M93161040	1 1/2	40,3	53,9	30	130	250	1,650
M93161050	2	50,4	68,4	28	175	350	1,800
M93161065	2 1/2	65,4	84	24	200	410	2,400
M93161080	3	79,9	98,5	18	205	450	3,000
M93161100	4	100	121,0	16	230	560	3,700





Mangueras Inox Coarrugado 2 Mallas


Convuluted Stainless Steel Hose with 2 Braid

Tuyau Inox Convoluté avec 2 Tresse

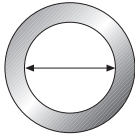
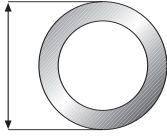
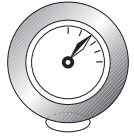



TECHNICAL DATA

	Composición	Tubo interno: tubo inox AISI 321. Refuerzo: doble malla inox AISI 304.
	Temperatura de trabajo	De -270° C a +700° C.

	Composition	Inner tube: stainless steel AISI 321 tube. Reinforcement: two braids of stainless steel AISI 304.
	Working temperature	From -270° C to +700° C.

	Composition	Tube intérieur: tube inox AISI 321. Renfort: deux tresses en inox AISI 304.
	Température de travail	De -270° C à +700° C.

HYDRAULIC HOSES

AISI 321 con doble malla AISI 304 / AISI 321 with 2 braid AISI 304 / AISI 321 avec 2 tresses AISI 304							
							
Referencia Part. Number Référence	DN	mm	Ø ext. máx	Kg/cm ²	STATIC mm	FLEXION mm	kg/m
M93212006	1/4	8,0	14,8	160	25	100	0,400
M93212010	3/8	11,0	17,8	144	40	150	0,550
M93212012	1/2	12,0	21,3	128	50	200	0,700
M93212016	5/8	16,5	26,2	112	50	200	0,800
M93212020	3/4	19,8	31,6	112	70	200	0,975
M93212025	1	25,3	39,0	80	90	200	1,200
M93212032	1 1/4	32,3	48,5	64	110	250	2,050
M93212040	1 1/2	40,3	56,0	48	130	250	2,600
M93212050	2	50,4	71,3	44	175	350	2,800
M93212065	2 1/2	65,4	87,8	38	200	410	3,600
M93212080	3	79,9	101,5	28	205	450	4,600
M93212100	4	100	123,5	26	230	560	5,600

THERMOPLASTIC HOSES

PTFE AND CONVULUTED SS HOSES

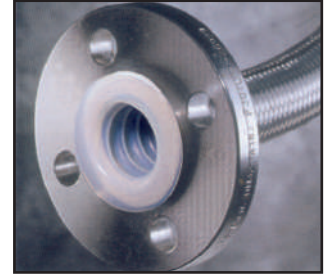
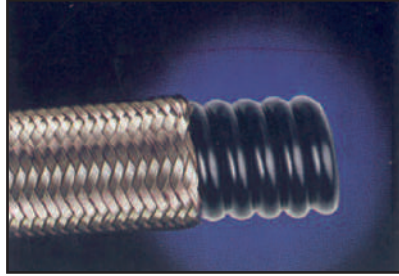
TEMPERATURE CORRECTION FACTORS FOR STAINLESS STEEL HOSES

(°C)	-200	-150	-100	-50	0	20	50	100	150	200	250	300	350	400	450	500	550	600	650	700
Corr. Factor	1.0	1.0	1.0	1.0	1.0	1.0	0.95	0.83	0.75	0.69	0.65	0.61	0.58	0.56	0.54	0.53	0.52	0.34	0.19	0.10

INDUSTRIAL HOSES

Otras posibilidades en Mangueras de Inox Coarrugado y en Mangueras Teflón
Other options for Convolutated Stainless Steel and PTFE Hoses
Autres possibilités de Tuyaux Inox Convoluté et Téflon

TECHNICAL DATA



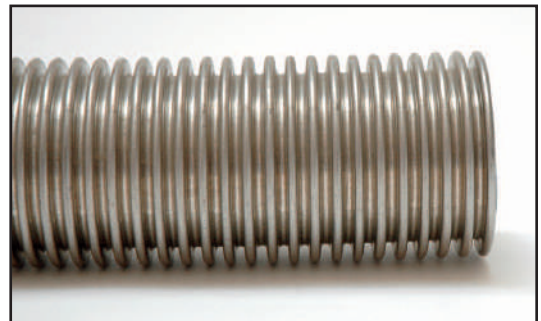
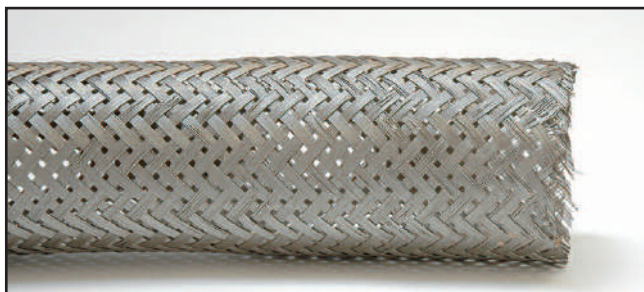
HYDRAULIC HOSES



THERMOPLASTIC HOSES

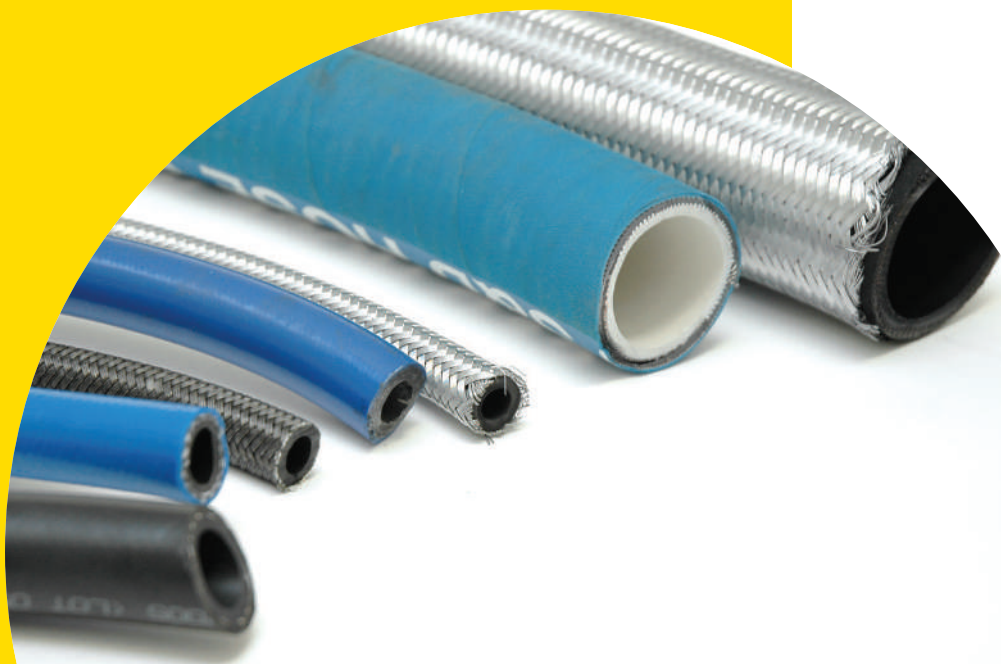


PTFE AND CONVOLUTED SS HOSES

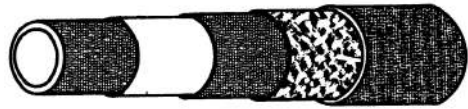


INDUSTRIAL HOSES

Consultar / On request / Sur demande




Mangueras Industriales
Industrial Hoses
Tuyaux Industriels




Manguera de Freon

Air Conditioned Freon


TECHNICAL DATA

 **Composición** Tubo interior: neopreno / nylon / neopreno.
Refuerzo: malla textil.
Cubierta: goma negra resistente a la abrasión, al ozono y al calor.

Temperatura de trabajo De -30° a +95° C.

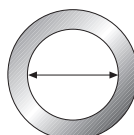
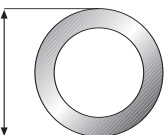
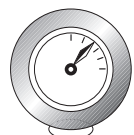
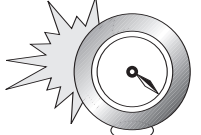

 **Composition** *Inner tube: neoprene / nylon / neoprene.
Reinforcement: textile braid.
Cover: black rubber resistant to abrasion, ozone and heat.*

Working temperature *From -30° C to +95° C.*

 **Composition** *Tube intérieur: néoprène / nylon / néoprène.
Renfort: tresse textile.
Revêtement: caoutchouc noir résistant à l'abrasion, l'ozone et la chaleur.*

Température de travail *De -30° C à +95° C.*

HYDRAULIC HOSES

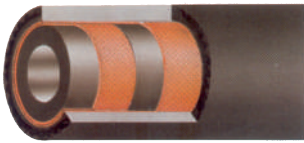
Referencia Part. Number Référence								
	DN	mm	mm	bar	psi	bar	psi	mm
BARRIER N 5/16	5/16	8,2	19,1	24	350	140	2000	98
BARRIER N 13/32	13/32	10,6	23	24	350	140	2000	120
BARRIER N 1/2	1/2	13	25,4	24	350	140	2000	135
BARRIER N 5/8	5/8	16,2	28,6	24	350	122	1750	160

THERMOPLASTIC HOSES



PTFE AND CONVOLUTED SS HOSES

INDUSTRIAL HOSES



Composición
 Tubo interior: caucho sintético.
 Refuerzo: una malla textil.
 Cubierta: goma sintética resistente al aceite, la abrasión y condiciones atmosféricas.

Temperatura de trabajo
 De -40° C a +80° C.

Composition
 Inner tube: synthetic rubber.
 Reinforcement: one textile braid.
 Cover: synthetic rubber, resistant to oil, abrasion and weather.

Working temperature
 From -40° C to +80° C.

Composition
 Tube intérieur: caoutchouc synthétique.
 Renfort: une tresse textile.
 Revêtement: caoutchouc noir résistant à l'huile, l'abrasion et aux agents atmosphériques.

Température de travail
 De -40° C à +80° C.

Referencia Part. Number Référence												
	DN	mm	mm	bar	psi	bar	psi	mm	kg/m			
SAE J 1402												
-	3/8	9,5	19	20	300	60	900	89	0,279			
-	1/2	13	22,2	20	300	60	900	102	0,335			
-	5/8	16	27	20	300	60	900	114	0,479			
DIN 74310												
-	13/32	11	18	10	145	25	363	789	0,217			
-	1/2	13	25	10	145	25	363	102	0,485			







Aire Comprimido y Agua-Impulsión Serie Continua


Compressed Air and Water Continuous Serie

Air Comprimé et de l'Eau Série Continu

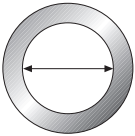
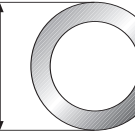
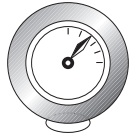
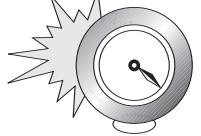


TECHNICAL DATA

 **Composición** Tubo interno: goma sintética y natural.
Temperatura de trabajo Refuerzo: malla textil.
 Cubierta: goma sintética resistente al ozono, la abrasión y condiciones atmosféricas.
 De -25° C a +70° C.

 **Composition** *Inner tube: synthetic and natural rubber.*
Working temperature *Reinforcement: textile braid.*
Cover: synthetic rubber resistant to abrasion, ozone and weather.
From -25° C to +70° C.

 **Composition** *Tube intérieur: caoutchouc synthétique et naturel.*
Température de travail *Renfort: tresse textile.*
Revêtement: caoutchouc synthétique résistant a l'abrasion, l'ozone et aux agents atmosphériques.
De -25° C à +70° C.

HYDRAULIC HOSES

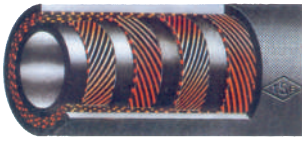
Referencia Part. Number Référence										
	DN	mm	mm	bar	psi	bar	psi	mm	kg/m	
M80000614	1/4	6	14	20	290	64	928	60	0,172	
M80000817	5/16	8	15	20	290	64	928	80	0,174	
M80001017	3/8	10	18	20	290	64	928	100	0,242	
M80001321	1/2	13	23	20	290	64	928	125	0,389	
M80001626	5/8	16	26	20	290	64	928	160	0,456	
M80001939	3/4	19	29	20	290	64	928	190	0,521	

THERMOPLASTIC HOSES



PTFE AND CONVOLUTED SS HOSES

INDUSTRIAL HOSES



Aire y Agua-Impulsión

Compressed Air and Water-Impulsion

Air Comprimé et de l'Eau-Impulsion

**Composición**

Tubo interno: goma sintética y natural.

Refuerzo: malla textil.

Cubierta: goma sintética resistente al ozono, la abrasión y condiciones atmosféricas.

Temperatura de trabajo

De -25° C a +70° C.

**Composition**

Inner tube: synthetic and natural rubber.

Reinforcement: textile braid.

Cover: synthetic rubber resistant to abrasion, ozone and weather.

Working temperature

From -25° C to +70° C.

**Composition**

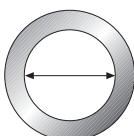
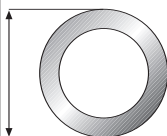
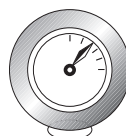
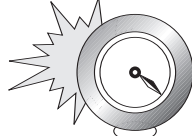


Tube intérieur: caoutchouc synthétique et naturel.

Renfort: tresse textile.

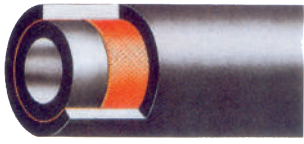
Revêtement: caoutchouc synthétique résistant à l'abrasion, l'ozone et aux agents atmosphériques.

Température de travail

De -25° C à +70° C.

Referencia Part. Number Référence								
	mm	mm	bar	psi	bar	psi	mm	kg/m
-	12,7	23	20	290	64	928	127	0,373
-	16	26	20	290	64	928	160	0,428
-	19	30	20	290	64	928	190	0,526
MA122025	25,4	37	20	290	64	928	254	0,710
MA122032	32	45	20	290	64	928	320	1,005
MA122040	38	52	20	290	64	928	380	1,290
-	44,5	60	20	290	64	928	445	1,578
MA122051	51	65	20	290	64	928	510	1,655
-	63,5	80	20	290	64	928	635	2,450
-	76,2	92	20	290	64	928	762	2,690
-	101,6	118	20	290	64	928	1016	3,765






MM20-Polivalente


MM20 Multi-Function

MM20 Polyvalent


TECHNICAL DATA

Composición  **Tubo interior: EPDM.**
Refuerzo: una malla textil.
Cubierta: goma lisa coloreada, resistente a la abrasión, el ozono y condiciones atmosféricas.

Temperatura de trabajo **De -40° C a +120° C.**

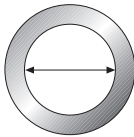
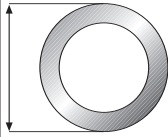

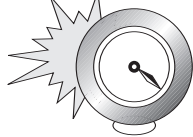


Composition  **Inner tube: EPDM.**
Reinforcement: one textile braid.
Cover: smooth colored rubber resistant to abrasion, ozone and weather.

Working temperature **From -40° C to +120° C.**

Composition  **Tube intérieur: EPDM.**
Renfort: une tresse textile.
Revêtement: caoutchouc lisse coloré résistant à l'abrasion, l'ozone et aux agents atmosphériques.

Température de travail **De -40° C à +120° C.**

HYDRAULIC HOSES

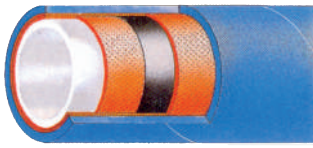
Referencia Part. Number Référence												
	DN	mm	mm	bar	psi	bar	psi	mm	kg/m			
-	5/16	8	15	10	145	30	435	80	0,156			
-	3/8	10	17	10	145	30	435	100	0,183			
-	1/2	13	20	10	145	30	435	130	0,225			
-	5/8	16	23	10	145	30	435	160	0,266			
-	3/4	19	27	10	145	30	435	190	0,356			
MM2008	5/16	8	15	20	290	60	870	80	0,158			
MM2010	3/8	10	18	20	290	60	870	100	0,219			
MM2013	1/2	13	22	20	290	60	870	130	0,308			
MM2016	5/8	16	24	20	290	60	870	160	0,316			
MM2019	3/4	19	27	20	290	60	870	190	0,363			

THERMOPLASTIC HOSES

PTFE AND CONVOLUTED SS HOSES




INDUSTRIAL HOSES




Agua Caliente para Limpieza Industrial

Hot Water for Industrial Cleaning


Eau Chaude pour Nettoyage Industriel

Composición  **Temperatura de trabajo**

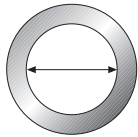
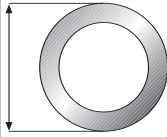

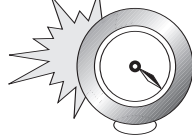


Tubo interno: goma sintética blanca.
Refuerzo: malla textil.
Cubierta: goma sintética resistente al ozono, la abrasión y condiciones atmosféricas.
De -20° C a +100° C (vapor hasta 165° C).

Composition  **Working temperature**

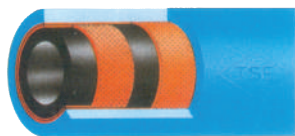
Inner tube: with synthetic rubber.
Reinforcement: textile braid.
Cover: synthetic rubber resistant to abrasion, ozone and weather.
From -20° C to +100° C (steam +165° C).

Composition  **Température de travail**

Tube intérieur: Caoutchouc synthétique blanc.
Renfort: tresse textile.
Revêtement: caoutchouc synthétique résistant à l'abrasion, l'ozone et aux agents atmosphériques.
De -20° C à +100° C (vapeur jusqu'à +165° C).

Referencia Part. Number Référence												
	DN	mm	mm	bar	psi	bar	psi	mm	kg/m			
-	3/8	9,5	21,5	7	102	70	1015	65	0,377			
-	1/2	12,7	24	7	102	70	1015	80	0,443			
MA1601628	5/8	16	30	7	102	70	1015	100	0,658			
MA1601931	3/4	19	33	7	102	70	1015	135	0,745			
MA1602538	1	25,4	39,5	7	102	70	1015	170	0,930			






Fumigación - Serie Continua


Fumigation - Continuous Serie

Fumigation - Série Continu


TECHNICAL DATA

Composición  **Temperatura de trabajo**

Tubo interno: compuesto de PVC resistente a pesticidas y fertilizantes.
Refuerzo: malla textil.
Cubierta: compuesto especial de PVC resistente a la abrasión, ozono y condiciones atmosféricas.
De -10° C a +60° C.

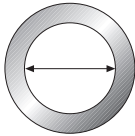
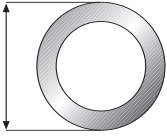

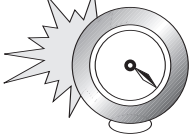


Composition  **Working temperature**

Inner tube: compound PVC resistant to pesticides and fertilizers.
Reinforcement: textile braid.
Cover: special PVC compound resistant to abrasion, ozone and weather.
From -10° C to +60° C.

Composition  **Température de travail**

Tube intérieur: PVC composé résistant aux pesticides et fertilisants.
Renfort: tresse textile.
Revêtement: PVC composée spécial résistant a l'abrasion, l'ozone et aux agents atmosphériques.
De -10° C à +60° C.

HYDRAULIC HOSES

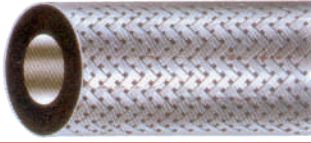
Referencia Part. Number Référence										
	DN	mm	mm	bar	psi	bar	psi	mm	kg/m	
-	5/16	8	14	80	1160	240	3480	80	0,137	
-	5/16	8	15	80	1160	240	3480	80	0,178	
MF8010	3/8	10	18	80	1160	240	3480	100	0,254	
MF8012	1/2	12,5	21	80	1160	240	3480	125	0,327	

THERMOPLASTIC HOSES

PTFE AND CONVOLUTED SS HOSES



INDUSTRIAL HOSES



Gasoil y Aceite Trenzado Acero

Diesel Oil & Oil Hose with Galvanized Steel Braid

Tuyau Gas-Oil et Huile avec Tresse d'Acier Galvanisé

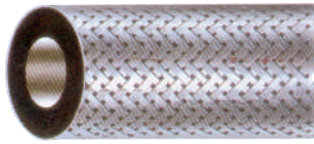
	Composición	Tubo interior: caucho sintético negro. Cubierta: malla acero galvanizado.
	Temperatura de trabajo	De -20° C a +70° C.

	Composition	Inner tube: black synthetic rubber. Cover: galvanized steel braid.
	Working temperature	From -20° C to +70° C.

	Composition	Tube intérieur: caoutchouc synthétique noir. Revêtement: tresse acier galvanisé.
	Température de travail	De -20° C à +70° C.

Referencia Part. Number Référence							
	mm	mm	bar	psi	bar	psi	mm
M10005	5	10	25	362	100	1450	25
M10006	6	12	25	362	100	1450	30
M10007	7	13	25	362	100	1450	35
M10008	8	14	25	362	100	1450	40
M10009	9	14	20	290	80	1160	40
M10012	12	20	20	290	80	1160	50
M10014	14	22	15	217	60	870	55
M10015	15	24	15	217	60	870	60
M10018	18	26	15	217	60	870	90
M10020	20	29	10	145	40	580	100
M10022	22	31	10	145	40	580	100
M10025	26	35	8	116	30	435	200
M10030	30	40	6	87	25	362	300
M10040	40	52	6	87	25	362	400
M10050	50	62	6	87	25	362	500





Gasoil Serie L

Oil Hose - Serie L

Gas-Oil - Série L

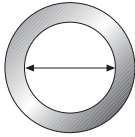
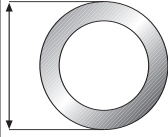
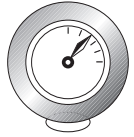
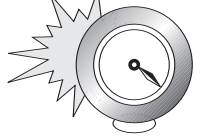


TECHNICAL DATA

Composición Tubo interior: goma negra NBR resistente al aceite y al gasoil.
Cubierta: malla de acero galvanizada.
Temperatura de trabajo De -20° C a +90° C.

Composition Inner tube: NBR black rubber resistant to oil and fuel.
Cover: galvanized steel wire.
Working temperature From -20° C to +90° C.

Composition Tube intérieur: caoutchouc NBR noir résistant à l'huile et fuel.
Revêtement: tresse en acier galvanisée.
Température de travail De -20° C à +90° C.

HYDRAULIC HOSES

Referencia Part. Number Référence								
	mm	mm	bar	psi	bar	psi	mm	kg/m
ML10006	6	11	25	365	75	1088	30	0,160
ML10008	8	13	25	365	75	1088	40	0,230
ML10010	10	15	25	365	75	1088	50	0,280
ML10013	13	19	20	290	60	870	65	0,380
ML10016	16	22	20	290	60	870	80	0,460
-	19	25	15	218	45	653	95	0,570
-	25	33	15	218	45	653	125	0,660

THERMOPLASTIC HOSES

PTFE AND CONVOLUTED SS HOSES



INDUSTRIAL HOSES

Gasolina, Aceite y Gasoil Trenzado Textil

Petrol, Diesel-Oil and Oil with Textile Braid

Tuyau Essence, Huile et Gas-Oil avec Tresse Textil



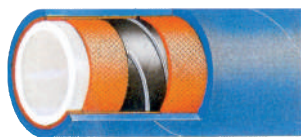
	Composición	Tubo interior: caucho sintético negro. Cubierta: malla textil.
	Temperatura de trabajo	De -20° C a +70° C.

	Composition	Inner tube: black synthetic rubber. Cover: textile braid.
	Working temperature	From -20° C to +70° C.

	Composition	Tube intérieur: caoutchouc synthétique noir. Revêtement: tresse textile.
	Température de travail	De -20° C à +70° C.


Referencia Part. Number Référence							
	mm	mm	bar	psi	bar	psi	mm
M11004	4	8	20	290	78	1131	20
M11005	5	11	20	290	78	1131	25
M11006	6	12	20	290	78	1131	30
M11007	7	13	15	217	59	855	35
M11008	8	13	15	217	59	855	40
M11009	9	16	15	217	59	855	45
M11012	12	20	10	143	39	566	50







Norma FDA, Color Azul
FDA Norm, Blue Colour
Norme FDA, Couleur Bleu

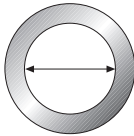
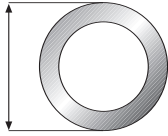
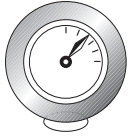
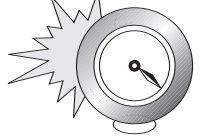


TECHNICAL DATA

 **Composición** Tubo interior: goma natural blanca no tóxica e inodora.
 Refuerzo: malla téxtil y una espiral metálica.
 Cubierta: goma sintética resistente al ozono, la abrasión y condiciones atmosféricas.
Temperatura de trabajo De -40° C a +80° C.

 **Composition** *Inner tube: white colour, non-toxic and odourless natural rubber.*
Reinforcement: textile braid with steel wire helix.
Cover: synthetic rubber resistant to abrasion, ozone and weather.
Working temperature *From -40° C to +80° C.*

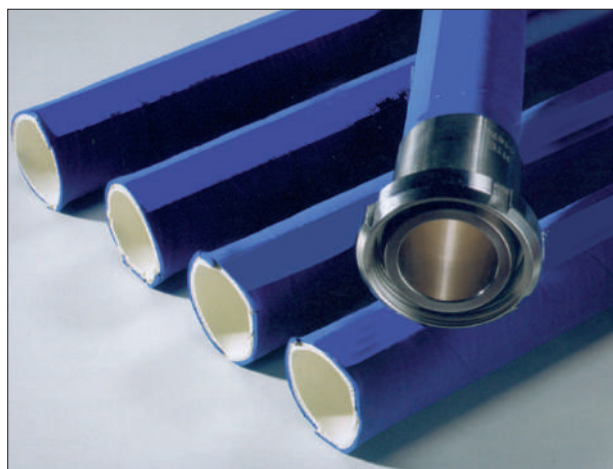
 **Composition** *Tube intérieur: caoutchouc naturel blanc, pas toxic et inodore.*
Renfort: tresse textile avec une tresse en spirale métallique
Revêtement: caoutchouc synthétique résistant a l'abrasion, l'ozone et aux agents atmosphériques.
Température de travail *De -40° C à +80° C.*

HYDRAULIC HOSES

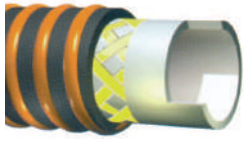
Referencia Part. Number Référence											
	DN	mm	mm	bar	psi	bar	psi	bar	mm	kg/m	
MAS019	3/4	19	31	10	145	30	435	-0,93	114	0,678	
MAS025	1	25,4	38	10	145	30	435	-0,93	152	0,910	
MAS032	1 1/4	32	45	10	145	30	435	-0,93	192	1,165	
MAS038	1 1/2	38	52	10	145	30	435	-0,93	228	1,586	
MAS051	2	50,8	66	10	145	30	435	-0,93	306	2,117	
MAS063	2 1/2	63,5	78,5	10	145	30	435	-0,93	381	2,635	
MAS076	3	76,2	93	10	145	30	435	-0,93	457	3,497	
MAS0101	4	101,6	118,5	10	145	30	435	-0,93	610	4,499	

THERMOPLASTIC HOSES

PTFE AND CONVOLUTED SS HOSES



INDUSTRIAL HOSES



Kanaflex-Polespir

TECHNICAL DATA

Composición **Tubo interno: EPDM.**
Refuerzo: malla de fibra textil.
Cubierta: espiral de polietileno..

Temperatura de trabajo **De -20° C a +60° C.**

HYDRAULIC HOSES

Composition **Inner tube: EPDM.**
Reinforcement: braid of textile fiber.
Cover: polyethylene helix.

Working temperature **From -20° C to +60° C.**

THERMOPLASTIC HOSES

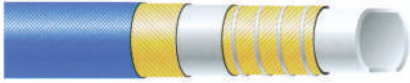
Composition **Tube intérieur: EPDM.**
Renfort: tresse de fibre textile et .
Revêtement: spirale de polyéthylène.


Température de travail **De -20° C à +60° C.**

PTE AND CONVULTED SS HOSES


Referencia Part. Number Référence							
	DN	mm	mm	bar	psi	mm	kg/m
-	32	32,2	41,8	8	116	80	0,750
-	35	34,2	43,8	8	116	80	0,750
-	40	38,2	48,6	8	116	80	0,898
-	45	44,2	54,6	8	116	80	1,046
-	50	51,4	63,5	8	116	130	1,226
-	50	51,4	63,5	8	116	130	1,226
-	55	54,3	66,0	8	116	130	1,396
-	60	60,0	74,5	6	87	150	1,452
-	65	63,5	79,0	6	87	150	1,650
-	70	69,3	83,4	6	87	150	1,760
-	75	76,2	91,7	6	87	180	1,900
-	80	78,0	93,0	6	87	180	2,022
-	90	89,3	103,5	5	72	300	2,598
-	100	103,0	120,0	5	72	300	2,913


INDUSTRIAL HOSES

Manguera para Descarga de Pulverulentos Alimentarios	
<i>Food for Unloading of Food Powdery</i>	
<i>Tuyau pour Décharger de Nourriture Pulvérulent</i>	
	<p>Manguera en espiral muy flexible para aspiración e impulsión para el relleno y el vaciado de camiones de recogida de leche, así como también para el uso en industrias alimentarias y de bebidas. Para transporte de bebidas alcohólicas y sin alcohol como vino, cerveza, zumos, agua mineral. Temperatura: -35°C+80°C, limpieza con vapor de agua hasta 130°C/30min. Norma FDA.</p> <p><i>Very flexible spiral hose for suction and delivery for filling and pouring of trucks of milk, as well as to use in food and beverage industries. For transport of alcohol of non-alcohol drinks such as wine, beer, juices, mineral water. Temperature: -35°C+80°C, water steam cleaning up to 130°C/30 min. FDA norm</i></p> <p><i>Tuyau spiral très flexible pour aspiration et impulsion pour remplissage et vidange de camions de lait, ainsi que pour l'utilisation dans l'industrie alimentaire et de boissons. Pour transport de boissons alcoolisées et non-alcoolisées comme vin, bière, jus, eau minérale. Temperature: -35°C+95°C, nettoyage avec vapeur d'eau jusqu'à 130°C/30 min. Norme FDA.</i></p>

Manguera para Alimentos Grasos	
<i>Hose for Fatty Food</i>	
<i>Tuyau pour Nourriture Graisse</i>	
	<p>Manguera de espiral flexible para aspiración e impulsión, cargar y descargar alimentos grasos. Utilizable para aceites y grasas animales y vegetales Temperatura: -35°C+80°C, limpieza con vapor de agua hasta 130°C/30min.</p> <p><i>Hose of flexible spiral for suction and delivery. To load and unload fatty food. Use for oils and animal and vegetable fats. Temperature: -35°C+80°C, water steam cleaning up to 130°C/30 min.</i></p> <p><i>Tuyau de spiral flexible pour aspiration et impulsion, charger et décharger nourriture grasse. Utilisation pour huiles et grasse végétale et animale. Temperature: -35°C+80°C, nettoyage avec vapeur d'eau jusqu'à 130°C/30 min.</i></p>

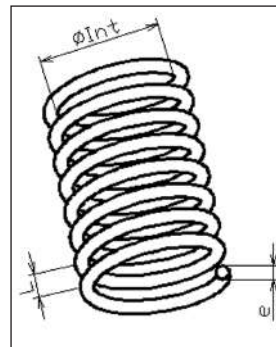
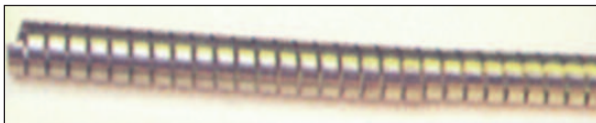
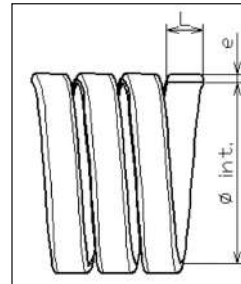
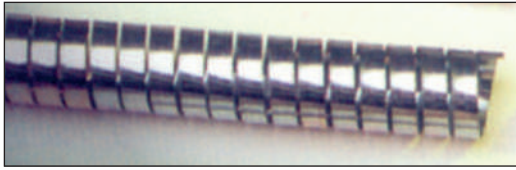
Bajo consulta y pedido con cantidad mínima
 On request and minimum quantity orders
 À consulter et quantité minimum de commandes

Manguera para Bebidas-Impulsión	
<i>Hoses for Beverages-Impulsion</i>	
<i>Tuyaux pour Boissons-Impulsion</i>	
	<p>Manguera para impulsión en fábricas de cerveza así como en industrias alimentarias y de bebidas. Para transporte de bebidas alcohólicas y de alimentos sin y con contenido en grasa. Temperatura: -35°C + 95°C, limpieza con vapor de agua hasta 130°C/30 minutos. Norma FDA.</p> <p><i>Hose for impulsion in beer factories, as well as in food industry and beverages. For transport of alcoholic drinks and fatty or non-fatty food. Temperature: -35°C+95°C, water steam cleaning up to 130°C/30 min. FDA norm.</i></p> <p><i>Tuyau pour impulsion dans usines de bière ainsi que dans l'industrie alimentaire et de boissons. Pour transport de boissons alcoolisées et nourriture avec et sans graisse. Température: -35°C+95°C, nettoyage avec vapeur d'eau jusqu'à 130°C/30 min. Norme FDA.</i></p>

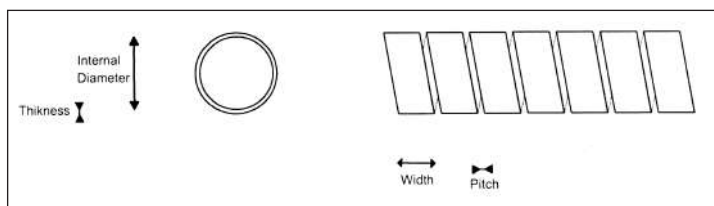
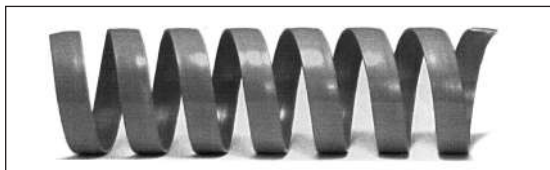
Manguera para Bebidas. Aspiración e impulsión	
<i>Hoses for Beverages. Suction and impulsion</i>	
<i>Tuyaux pour Boissons. Aspiration et impulsion</i>	
	<p>Manguera para impulsión y aspiración en fábricas de cerveza así como en industrias alimentarias y de bebidas. Para transporte de bebidas alcohólicas y de alimentos sin y con contenido en grasa. Temperatura: -35°C + 95°C, limpieza con vapor de agua hasta 130°C/30 minutos. Norma FDA.</p> <p><i>Hose for suction and impulsion in beer factories, as well as in food industry and beverages. For transport of alcoholic drinks and fatty or non-fatty food. Temperature: -35°C+95°C, water steam cleaning up to 130°C/30 min. FDA norm.</i></p> <p><i>Tuyau pour impulsion et aspiration dans usines de bière ainsi que dans l'industrie alimentaire et de boissons. Pour transport de boissons alcoolisées et nourriture avec et sans graisse. Température: -35°C+95°C, nettoyage avec vapeur d'eau jusqu'à 130°C/30 min. Norme FDA.</i></p>

Bajo consulta y pedido con cantidad mínima
 On request and minimum quantity orders
 À consulter et quantité minimum de commandes

• MUELLES METÁLICOS / *METAL SPRINGS* / *RESSORT METALLIQUES*

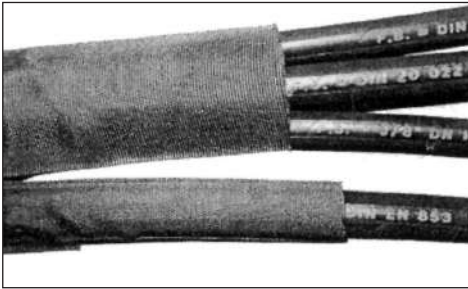


• MUELLES PLÁSTICO / *PLASTIC SPRINGS* / *RESSORT PLASTIQUE*

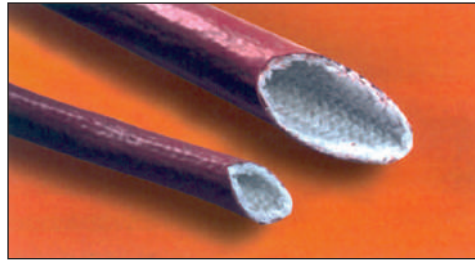


Consultar / *On request* / *Sur demande*

• TUBO DE PROTECCIÓN TÉXTIL / *TEXTILE PROTECTION TUBE* / *GAINE BRISE JET*



Poliéster / *Polyester*



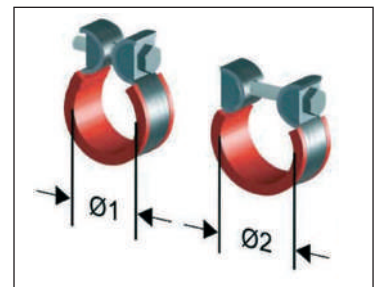
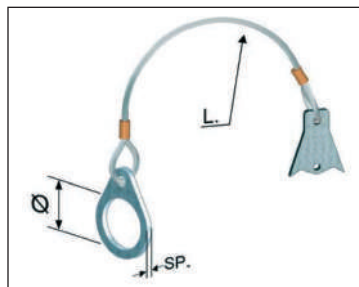
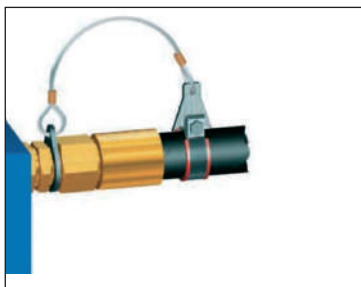
Fibra de Vidrio Siliconado / *Silicone Fiber-glass* / *Fibre de Verre Siliconé*



Fibra de Vidrio / *Fiber-glass* / *Fiber de Verre*



• FIJACIONES DE SEGURIDAD / *SAFE FASTENERS* / *SYSTÈME DE SECURITÉ ANTI-FOUET*



Consultar / *On request* / *Sur demande*



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