



# Maraton<sup>®</sup>

**AUTOMOTIVE HOSE CATALOG**

[sales@maraton.com.my](mailto:sales@maraton.com.my)



By MHM Consortium Sdn. Bhd.

Malaysia

TEL: +603 7734 4141 / 6012 320 6840

FAX: +603 7734 1945

[WWW.MARATON.COM.MY](http://WWW.MARATON.COM.MY)

**Type C Air Conditioning Hose SAE J2064**

**Type E Air Conditioning Hose SAE J2064**

**Power Steering Hose SAE J188**

**Air Brake Hose SAE J1402**

**Hydraulic Brake Hose SAE J1401**

**SAE J30 R7 Fuel Hose**

**SAE J30 R9 Fuel Injection Hose**

**SAE J30 R10 Fuel Hose Submerged In Tank**

**Cotton Over Braided Fuel Hose**

**Transmission Oil Cooler Hose**

**SAE J2888 Refrigerant Charging Hose**

**SAE J2196 Refrigerant Charging Hose**

## Type C Air Conditioning Hose SAE J2064



**Applications:** use in the A/C system of vehicle

**Features:** Low Permeability, Pulse-Resistant, Aging Resistance, Ozone Resistance, Shock Resistance

**Tube:** EPDM / CSM / IIR

**Barrier:** PA / Nylon

**Friction:** EPDM / CSM / IIR

**Reinforcement:** PET/ PVA(braiding)

**Cover:** EPDM /Cloth

**Working Temperature:** -40°C to +135°C (-40°F to +275°F)

**Standard:** SAE J2064 / SAE J3062 / QC/T664

**Certificate:** ISO/TS 16949:2009

**Refrigerant:** R134a , R12, R404a

### Type C Barrier



Inch	I.D MM	O.D MM	W.P. Mpa.	W.P. Psi.	B.P. Mpa.	B.P. Psi.
<b>Thick Wall-A20</b>						
5/16"	8.2±0.4	19.0±0.5	3.5	500	21	3000
13/32"	10.5±0.4	23.0±0.5	3.5	500	21	3000
1/2"	13.0±0.4	25.4±0.5	3.5	500	22	3200
5/8"	16.0±0.4	28.6±0.5	3.5	500	18	2600
<b>Thin Wall-A10</b>						
5/16"	8.2±0.4	15.2±0.5	3.5	500	23	3300
7/16"	11.5±0.4	18.4±0.5	3.5	500	22	3200
1/2"	13.0±0.4	21.0±0.5	3.5	500	20	2900
5/8"	15.5±0.4	23.0±0.5	3.5	500	21	3000

## Type E Air Conditioning Hose SAE J2064



**Applications:** use in the A/C system of vehicle

**Features:** Low Permeability, Pulse-Resistant, Aging Resistance, Ozone Resistance, Shock Resistance

**Barrier:** PA / Nylon

**Friction:** EPDM / CSM / IIR

**Reinforcement:** PET/ PVA(braiding)

**Cover:** EPDM /Cloth

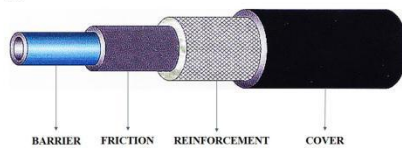
**Working Temperature:** -40°C to +135°C (-40°F to +275°F)

**Standard:** SAE J2064 / SAE J3062 / QC/T664

**Certificate:** ISO/TS 16949:2009

**Refrigerant:** R134a , R12, R404a

### Type E Veneer



Inch	I.D MM	O.D MM	W.P. Mpa.	W.P. Psi.	B.P. Mpa.	B.P. Psi.
5/16"	8.2±0.4	18.7±0.5	3.5	500	20	2900
13/32"	10.5±0.4	22.5±0.5	3.5	500	23	3300
1/2"	13.0±0.4	23.0±0.5	3.5	500	22	3200
5/8"	16.0±0.4	28.0±0.5	3.5	500	21	3000
5/16"	8.2±0.4	15.2±0.5	3.5	500	23	3300
13/32"	10.2±0.4	17.2±0.5	3.5	500	22	3200
13/32"	10.5±0.4	18.7±0.5	3.5	500	22	3200
7/16"	11.5±0.4	18.5±0.5	3.5	500	23	3300
1/2"	13.0±0.4	20.6±0.5	3.5	500	22	3200
1/2"	13.2±0.4	20.8±0.5	3.5	500	22	3200
5/8"	15.2±0.4	22.8±0.5	3.5	500	20	2900
5/8"	15.5±0.4	23.5±0.5	3.5	500	20	2900
3/4"	19.0±0.4	28.5±0.5	3.5	500	18	2600

## Power Steering Hose SAE J188



**Applications:** use in the system of vehicles and cars

**Features:** High Expansion, High Pressure, Pulse Resistance, Decrease Vibration, Ozone Resistance, Reduce System Noise

**Tube:** Oil resistance synthetic rubber (CSM)

**Reinforcement:** High tensile fiber braided, high tensile fiber wire braided

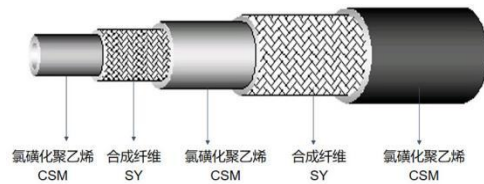
**Cover:** Synthetic rubber with excellent aging resistance and weather ability (CPE/CSM)

**Surface:** Smooth surface and cloth wrapped

**Working Temperature:** -40°C to +150°C (-40°F to +302°F)

**Standard:** SAE J188 / MS263-53

**Burst Pressure:** 65Mpa~85Mpa



SIZE	I.D MM	O.D MM	B.P. Mpa.	B.P. Psi.
6.3x14.5	6.3±0.2	14.5±0.3	65~85	9400~12300
8.0x18.0	8.0±0.2	18.0±0.4	65~85	9400~12300
9.5x18.5	9.5±0.3	18.5±0.4	65~85	9400~12300
9.5x20.0	9.5±0.3	20.0±0.4	65~85	9400~12300
9.8x18.5	9.8±0.3	18.5±0.4	65~85	9400~12300
9.8x19.8	9.8±0.3	19.8±0.4	65~85	9400~12300
10.0x20.0	10.0±0.3	20.0±0.5	65~85	9400~12300
13.0x23.0	13.0±0.5	23.0±0.5	65~85	9400~12300

## Air Brake Hose SAE J1402



**Applications:** use in automotive air brake systems including flexible connections from frame to axle, tractor to trailer, trailer to trailer. Widely used in compressed air brake system of large and medium-sized truck and buses.

**Tube:** black synthetic rubber.

**Reinforcement:** high tensile braided fiber.

**Cover:** black, red and blue ASTM IRM 903 oil-, ozone-resistant synthetic rubber compound.

**Working Temperature:** -40°C to +93°C

**Working Temperature:** -54°C to +93°C (Low Temperature)

**Standard:** SAE J1402

**Flexure Test:** ≥1,000,000 cycles

#	⊖			⊙		⊕		⊕	
	Part No.	I.D.		O.D.		W.P.		B.P.	
	inch	mm	Tolerance	mm	Tolerance	bar	psi	bar	psi
1	1/4"	6.3	±0.3	15	±0.5	15.5	225	62	900
2	5/16"	8	±0.4	17	±0.6	15.5	225	62	900
3	3/8"	9.5	±0.5	19	±0.6	15.5	225	62	900
4	1/2"	12.5	±0.5	23	±0.7	15.5	225	62	900
5	5/8"	16	±0.6	27	±0.8	15.5	225	62	900

### QC and Quality Management system:

	<b>SURFACE VEHICLE RECOMMENDED PRACTICE</b>	<b>SAE</b> J1402 Issued 1942-01 Revised 2005-01	REV. JAN2005
		Superseding J1402 JUN1985	



**D.O.T Approved**

All the products will be tested according to the requirement of SAEJ1402, such as tensile test, ozone-resistant, burst pressure...

## Hydraulic Brake Hose SAE J1401



**Applications:** a flexible conduit manufactured for use in a brake system to transmit and contain the fluid pressure medium used to apply force to the vehicle's brakes.

**Tube:** special rubber formula with perfect brake fluid compatibility.

**Reinforcement:** high tensile braided fiber.

**Buffer:** synthetic rubber.


**Cover:** black weather-,aging-resistant synthetic rubber.

**Working Temperature:** -40°C to +120°C

**Standard:** SAE J1401

#	⊖			⊗		💡		💡	
Part No.	I.D.			O.D.		W.P.		B.P.	
	inch	mm	Tolerance	mm	Tolerance	bar	psi	bar	psi
1	1/8"	3.2	±0.2	10.5	±0.3	100	1450	490	7000

### QC and Quality Management system:

 <b>SURFACE VEHICLE RECOMMENDED PRACTICE</b>	<b>SAE</b> J1401 Issued 1942-01 Revised 2003-06	REV. JUN2003
	Superseding J1401 SEP1999	



**D.O.T Approved**

All the products will be tested according to the requirement of SAEJ1401,such as expansion,tensile test,burst pressure...

## SAE J30 R7 Fuel Hose



**Applications:** Apply to convey gasoline, diesel and lubricating oil or the vapors present in either the fuel system or in the crankcase of internal combustion engines.

**Tube:** Oil -,Fuel-resistant synthetic rubber compound.

**Reinforcement:** High tensile braided fiber.

**Cover:** suitable oil-, ozone-, and heat-resistant synthetic rubber compound.

**Working Temperature:** -40°C to +125°C

**Standard:** SAE J30 R7

#	⊖			⊕		💡		💡	
	Part No.	I.D.		O.D.		W.P.		B.P.	
	inch	mm	Tolerance	mm	Tolerance	bar	psi	bar	psi
1	1/8"	3.2	±0.3	9	±0.3	20	300	80	1200
2	5/32"	4	±0.3	10	±0.3	20	300	80	1200
3	3/16"	4.8	±0.3	11	±0.3	20	300	80	1200
4	1/4"	6.3	±0.3	12.7	±0.4	20	300	80	1200
5	5/16"	7.9	±0.4	14	±0.5	20	300	80	1200
6	3/8"	9.5	±0.4	16	±0.5	20	300	80	1200
7	15/32"	12	±0.4	19	±0.5	20	300	80	1200
8	1/2"	12.7	±0.5	20	±0.6	20	300	80	1200
9	5/8"	16	±0.5	24	±0.6	10	150	40	600
10	3/4"	19	±0.6	28.8	±0.8	10	150	40	600
11	1"	25.4	±0.8	35	±1	10	150	40	600

### QC and Quality Management system:

	<b>SURFACE VEHICLE STANDARD</b>	<b>SAE</b> J30 FEB2012
		Issued 1946-01 Revised 2012-02 Superseding J30 DEC2008

All the products will be tested according to the requirement of SAEJ30 ,such as oil-resistant,high and low temperature test, burst pressure...

## SAE J30 R9 Fuel Injection Hose



**Applications:** Used in the transportation of gasoline, ethanol extended gasoline, diesel fuel, lubrication oil, or the vapor present in either the fuel injection system or the crankcase of internal combustion engines.

**Permeation Barrier:** Special rubber which has perfect oil-,fuel-resistant performance (FKM).

**Tube:** Oil -,Fuel-resistant synthetic rubber compound(ECO).

**Reinforcement:** High tensile braided fiber (AR).

**Cover:** suitable oil- ,ozone-, and heat-resistant synthetic rubber compound(FKM).

**Working Temperature:** -40°C to +135°C

**Standard:** SAE J30 R9, DIN 73379 3E

#	⊖			⊙		💡		💡	
	Part No.	I.D.		O.D.		W.P.		B.P.	
	inch	mm	Tolerance	mm	Tolerance	bar	psi	bar	psi
1	1/8"	3.2	±0.3	9	±0.3	20	300	80	1200
2	5/32"	4	±0.3	10	±0.3	20	300	80	1200
3	3/16"	4.8	±0.3	11	±0.3	20	300	80	1200
4	1/4"	6.3	±0.3	12.7	±0.4	20	300	80	1200
5	5/16"	7.9	±0.4	14	±0.5	20	300	80	1200
6	3/8"	9.5	±0.4	16	±0.5	20	300	80	1200
7	15/32"	12	±0.4	19	±0.5	20	300	80	1200
8	1/2"	12.7	±0.5	20	±0.6	20	300	80	1200
9	5/8"	16	±0.5	24	±0.6	10	150	40	600
10	3/4"	19	±0.6	28.8	±0.8	10	150	40	600
11	1"	25.4	±0.8	35	±1	10	150	40	600

### QC and Quality Management system:

	<b>SURFACE VEHICLE STANDARD</b>	<b>SAE</b> J30 FEB2012
		Issued 1946-01 Revised 2012-02 Superseding J30 DEC2008

All the products will be tested according to the requirement of SAEJ30 ,such as oil-resistant,high and low temperature test, burst pressure...

## SAE J30 R10 Fuel Hose Submerged In Tank



**Applications:** The hose is capable of handling gasoline, alcohol-extended gasoline or diesel fuel, or for use in fuel injection systems where the hose may be submerged in the fuel tank.

**Tube:** Oil -,permeation-resistant synthetic rubber compound.

**Reinforcement:** High tensile braided fiber.

**Cover:** suitable oil- ,weather-resistant synthetic rubber compound.

**Working Temperature:** -40°C to +100°C

**Standard:** SAE J30 R10

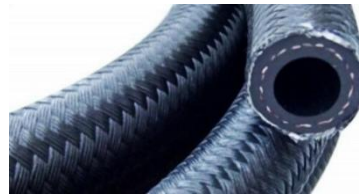
#	⊖			⊗		💡		💡	
	Part No.	I.D.		O.D.		W.P.		B.P.	
	inch	mm	Tolerance	mm	Tolerance	bar	psi	bar	psi
1	1/8"	3.2	±0.3	9	±0.3	20	300	80	1200
2	5/32"	4	±0.3	10	±0.3	20	300	80	1200
3	3/16"	4.8	±0.3	11	±0.3	20	300	80	1200
4	1/4"	6.3	±0.3	12.7	±0.4	20	300	80	1200
5	5/16"	7.9	±0.4	14	±0.5	20	300	80	1200
6	3/8"	9.5	±0.4	16	±0.5	20	300	80	1200
7	15/32"	12	±0.4	19	±0.5	20	300	80	1200
8	1/2"	12.7	±0.5	20	±0.6	20	300	80	1200
9	5/8"	16	±0.5	24	±0.6	10	150	40	600
10	3/4"	19	±0.6	28.8	±0.8	10	150	40	600
11	1"	25.4	±0.8	35	±1	10	150	40	600

### QC and Quality Management system:

	<b>SURFACE VEHICLE STANDARD</b>	<b>SAE</b> J30 FEB2012
		Issued 1946-01 Revised 2012-02 Superseding J30 DEC2008

All the products will be tested according to the requirement of SAEJ30 ,such as oil-resistant,high and low temperature test, burst pressure...

## Cotton Over Braided Fuel Hose



**Applications:** Used as oil return line transporting oil, gasoline, diesel, lubricants and other mineral oil on the condition of positive pressure.

**Tube:** Oil-resistant synthetic rubber with low permeability.

**Outer Shield:** High tensile braided fiber with low shrink . black or gray.

**Working Temperature:** -30°C to +110°C

**Standard:** DIN73379 2B

#	⊖			⊘		⊙		⊙	
	I.D.			O.D.		W.P.		B.P.	
Part No.	inch	mm	Tolerance	mm	Tolerance	bar	psi	bar	psi
1	1/8"	3.2	±0.3	9	±0.3	10	145	30	435
2	9/64"	3.5	±0.3	7.5	±0.3	10	145	30	435
3	5/32"	4	±0.3	9	±0.3	10	145	30	435
4	11/64"	4.5	±0.3	9.5	±0.4	10	145	30	435
5	3/16"	5	±0.3	10	±0.4	10	145	30	435
6	1/4"	6	±0.3	11	±0.4	10	145	30	435
7	9/32"	7	±0.3	12	±0.4	10	145	30	435
8	19/64"	7.5	±0.4	12.5	±0.5	10	145	30	435
9	5/16"	8	±0.4	13	±0.5	10	145	30	435
10	3/8"	9.5	±0.4	15.5	±0.5	10	145	30	435
11	25/64"	10	±0.5	16	±0.6	10	145	30	435
12	15/32"	12	±0.5	18	±0.6	10	145	30	435
13	35/64"	14	±0.5	20	±0.6	10	145	30	435

### QC and Quality Management system:

DEUTSCHE NORM <i>Entwurf</i> <span style="float: right;">Juni 2006</span>	
DIN 73379-2B	

All the products will be tested according to the requirement of DIN 73379 ,such as oil-resistant,high and low temperature test, burst pressure...

## Transmission Oil Cooler Hose



**Applications:** Used for transporting oil to automatic transmission fluid.

**Tube:** Transmission oil- resistant with high performance formula(AEM).

**Reinforcement:** High tensile braided fiber.

**Cover:** Heat-,ozone-resistant with high performance synthetic rubber(AEM).

**Working Temperature:** -40°C to +160°C

**Standard:** SAE J1532

#	⊖			⊕		💡		💡	
	I.D.			O.D.		W.P.		B.P.	
Part No.	inch	mm	Tolerance	mm	Tolerance	bar	psi	bar	psi
1	5/16"	8	±0.3	14	±0.5	20	300	80	1200
2	11/32"	9	±0.3	15	±0.5	20	300	80	1200
3	3/8"	9.5	±0.4	16	±0.5	20	300	80	1200
4	1/2"	12.7	±0.5	20	±0.6	20	300	80	1200

### QC and Quality Management system:

	<b>SURFACE VEHICLE STANDARD</b>	<b>SAE J1532</b>	<b>REV. FEB95</b>
		Issued 1988-10 Revised 1995-02	
Submitted for recognition as an American National Standard		Superseding J1532 JUN93	

All the products will be tested according to the requirement of SAEJ1532,such as ozone- resistant,high and low temperature test,burst pressure...

## SAE J2888 Refrigerant Charging Hose



**Applications:** Intended for conducting liquid and gaseous refrigerants(R1234yf) for service connections from mobile air conditioning systems to service equipment.

**Barrier:** aging -,low temperature resistant with high performance nylon.

**Tube:** Refrigerant-,oil-resistant with high performance special formula.

**Reinforcement:** High tensile braided fiber.

**Cover:** weather-,aging-resistant with high performance synthetic rubber.

**Working Temperature:** -30°C to +95°C

**Standard:** SAE J2888

#	⊖			⊙		💡		💡	
	Part No.	I.D.		O.D.		W.P.		B.P.	
	inch	mm	Tolerance	mm	Tolerance	bar	psi	bar	psi
1	7/32"	5.5	±0.2	11.5	±0.3	56	800	280	4000
2	3/8"	9.5	±0.4	17.5	±0.5	60	870	240	3480

### QC and Quality Management system:

 <b>SURFACE VEHICLE RECOMMENDED PRACTICE</b>	<b>SAE</b> J2888 JAN2013 Issued 2011-02 Revised 2013-01
	Superseding J2888 JAN2012

All the products will be tested according to the requirement of SAE J2888, such as aging-resistant,low temperature test,burst pressure...

## SAE J2196 Refrigerant Charging Hose



**Applications:** Intended for conducting liquid and gaseous refrigerants(R12,22,134a,404,502,410a,600,32) for service connections from mobile air conditioning systems to service equipment.

**Tube:** Refrigerant-,oil-resistant with high performance special formula.

**Reinforcement:** High tensile braided fiber.

**Cover:** weather-,aging-resistant with high performance synthetic rubber.

**Working Temperature:** -30°C to +95°C

**Standard:** SAE J2196

#	I.D.			O.D.		W.P.		B.P.	
	inch	mm	Tolerance	mm	Tolerance	bar	psi	bar	psi
1	7/32"	5.5	±0.2	11.5	±0.3	35	500	175	2500
2	7/32"	5.5	±0.2	11.5	±0.3	42	600	210	3000
3	7/32"	5.5	±0.2	11.5	±0.3	56	800	280	4000
4	3/8"	9.5	±0.4	17.5	±0.5	32	870465	128	1860

### QC and Quality Management system:

	<b>SURFACE VEHICLE STANDARD</b>	<b>SAE J2196</b> Issued 1992-06 Reaffirmed 1997-03	REAF. <b>MAR97</b>
		Superseding J2196 JUN92	

All the products will be tested according to the requirement of SAE J2196, such as aging-resistant, low temperature test, burst pressure...

## MHM Consortium Sdn.Bhd.

### MHM Way

MHM is a professional hoses solution provider for global hydraulic and industrial fluid handling systems.

Utilizing its engineering resources, MHM develops different hoses categories for the worldwide market:

Hydraulic Hoses R1AT R2AT 1SN 2SN 1SC 2SC 1ST 2ST R3 R4 R5 R6 R7 R8 4SP 4SH R12 R13 R14 R15 R16 R17, Steam hose, Gasoline/Fuel hose, Pilot hose, Jetwasher hose.

Industrial Hoses Air/Water hose, Oil/Fuel hose, Water/Oil Suction & Discharge hose, Hot Water/Steam hose, Multipurpose hose, Tank Truck hose, Fuel/Diesel/Gasoline/Petroleum hose, Oxygen/Acetylene hose, Twin Welding hose, Propane/LPG hose, Sandblast hose, Cement hose, Plaster/Concrete hose, Slurry/Mud hose, Food hose, Chemical hose UHMWPE.

PTFE Hoses smooth and convoluted tube.

Hose Protector Spiral Hose Guard, Silicone Fiberglass Sleeve, Nylon Protective Sleeve.

Automotive Hoses Air Conditioning Hose SAE J2064, Power Steering Hose SAE J188, Air Brake hose SAE J1402, Hydraulic Brake hose SAE J1401, Fuel hose, Transmission Oil Cooler hose, Refrigerant Charging hose.

PVC Hoses Steel Wire Reinforced hose, Fiber Reinforced hose, Transparent hose, Food Grade hose, Garden hose, LAYFLAT hose, Helix Suction hose.

Hoses Accessories...

MHM also invests many resources on hoses management and services, aiming to provide long term and sustainable solutions for its customers.

MHM hoses have been serving more than 50 countries, with the best research team to explore the most optimized hose performance for different applications.

MHM brand is winning more and more recognition in many segments of the hoses solution industry.

### MHM Mission & Vision

We are determined to make MHM a leading brand in the global hydraulic and industrial fluid handling systems.

To develop the MHM into an integrated hose solution supply and service platform offering comprehensive hose solutions to our customers.

### MHM Value

•Quality - The key for our business sustainability •Integrity - The power of our business conduct •Commitment - The way to make our dream a reality •Togetherness - The spirit of growing together

### MHM Strategy

•Market orientation •Brand image build up •Resources integration •IT reinforced operation

### MHM R&D | Quality Assurance

Thanks to its strong engineering resources integration capacity, MHM provides customers most optimized hose solutions.

MHM attaches the greatest importance to the product quality.



***THE GLOBAL LEADER FOR AUTOMOTIVE HOSES***

**MHM Consortium Sdn. Bhd.**

**D-3A-12, Capital 4, Oasis Square, No. 2, Jalan PJU 1A / 7A,  
47301 Petaling Jaya, Selangor. Malaysia.**

**Tel: +603 7734 4141, Mobile: +6012 320 6840**

**Fax: +603 7734 1945**

**Email : [sales@maraton.com.my](mailto:sales@maraton.com.my)**

**Website: [www.maraton.com.my](http://www.maraton.com.my)**