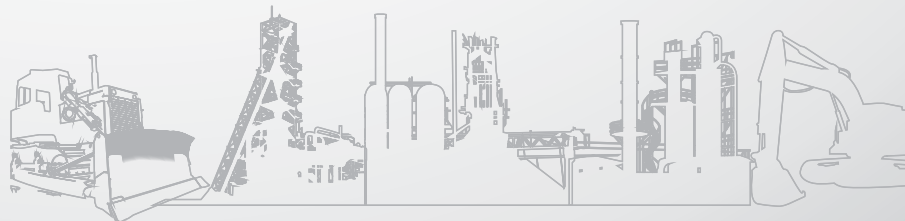




POWERING PROGRESS™



**INDUSTRIAL HOSE
APPLICATION GUIDE**





POWERING PROGRESS™

Gates is India's most advanced and World Class hose and tube assembly manufacturer. As the Indian subsidiary of more than 100 years old Gates Corporation, USA, it has established itself firmly in the Indian hose market. Equipped with the latest technology, the manufacturing facility of Gates India is spread over an area of 35 acres at Lalru, near Chandigarh. Gates also has well equipped assembly facilities in Faridabad and Pune to serve our customers better . Looking at the current usage of extreme high pressure application and customers demand Gates has embarked on various expansion projects at the Lalru facility. With our extremely qualified experienced Employees and Channel partners serving diversified markets across India truly has right mix of people and offerings to delight our customers. Being a world leader we always strive for innovation and providing cutting edge training to serve our customer better at all times .

While providing quality services and products to its customers, Gates growth journey has continued through numerous technological advancements and expansion . It is our continuous commitment to bring in new products and technologies in hydraulics by focusing on key markets like Energy, Exploration & Extraction, Infrastructure and Agriculture, Transportation, Automotive and Process & Specialty. Going forward Gates India focusing a lot on micro markets like Plastic Processing, Machine tools, Petrol dispensing et al.

Continuous investment in R&D, World class Manufacturing Capabilities ,Most advanced Testing Equipment's and process control made our products more reliable and customer friendly. Gates hydraulic hoses are certified by ABS, DNV, GL and Lloyd's Register and specific products are certified by ARAI and UL.

Today, we have to our credit a distinguished client list in the construction, mining & earthmoving industries, Oil & Gas, Injection molding and many more . Our products are also reaching foreign shores through markets in the U.S., Europe, South Africa, Japan, China, Singapore, Australia, Brazil and other countries which ensures one product quality one world .

Over the years, Gates has built its reputation by providing the highest quality products and services. That dedication to quality continues today with the Gates Quality Commitment. At Gates, the definition of quality is simple and straightforward - "To meet or exceed customer expectations with products, services and experiences that are superior to the competition." Gates' stringent quality practices ensure that each 'Made in India' product meets the industry's highest standards and qualifies as Gates Global Hydraulic and Industrial products for Fluid conveyance.

Long-Standing Relationships with Leading Customers

An industry leader in Hose Assemblies, Gates is well known for its superior quality and technological expertise which is further entrusted by our esteemed customers from diversified industries.

- **OEM's** : JCB, CNH, Caterpillar, Atlas Copco, Hyundai, Mahindra & Mahindra, Hyva, Sany, L&T, Gilbarco, Tokheim, Midco, Eimco Elecon , Ferromatik - Milacron , Elgi, John Deere, Daimler, Inductotherm Corp., Hyundai, Komatsu, Doosan, Schindler, Bombardier and many more.
- **Mining** : Coal India, Singareni Collieries Company Ltd., Hindustan Zinc, Vedanta
- **Metal**: Tata Steel, SAIL, JSW, Hindalco Industries Ltd., Balco, Sterlite, Sesa Sterlite, Hindustan Copper, Nalco, Essar, Vizag Steel Plant (RINL), Primetals
- **Oil & Gas** : IOCL, BPCL, HPCL, ONGC, IBP
- **Others** : Major cements plants like ACC, Ultratech, Gujarat Ambuja ,Jaypee and customers from Defence, Railways and NTPC

**Save
Money**



**with
GATES**



THE VALUE CONNECTION RIGHT HOSE, RIGHT APPLICATION, RIGHT PRICE

Gates lineup of high quality, well-designed, constantly improving, robust industrial hoses meet the demanding requirements of today's diverse range of industrial applications. Durability and flexibility are built in. A variety of tube and cover materials, reinforcement, colors, and hose designs provide the choices you need to select the right hose for your application. Whether your transfer job involves liquids, solids, or gases, discharge or solution, low or high pressure, you can always count on Gates Industrial Hoses or optimal performance at a competitive price. We are The Value Connection.

GET GATES CONNECTED™ FOR QUALITY HOSE AND MORE

Connect with Gates and get the best support in the business including: application assistance, expert local field sales assistance, troubleshooting help, an industry-leading safety program and an outstanding distribution network. To assist in choosing the right hose assembly and tips on hose selection, safety, increasing hose life, minimizing downtime, and reducing costly repairs, please contact your Gates Representative. Gates Connected is all geared to providing the knowledge, service and value you need to get the most for your money spent. That's what it means to be Gates Connected!

Warning: All industrial Hose assemblies have a limited life on a given application. Assuming the correct hose has been selected, this can be adversely affected by factors including external abuse, excessive pressures, high temperatures, misapplication, and internal abrasion. Should a hose assembly fail during use, serious injury or destruction could result from propelled couplings, whipping hose, high pressure or high velocity discharge, chemical contact, high temperature materials, explosion, or fire. Contact your local Gates product Application for assistance and hose recommendations on specific applications.

HOSE MAINTENANCE

Good maintenance results in longer life and safe working environment. Given below are few tips:

- Never exceed pressure rating of a hose.
- Never allow excessive pressure spikes or surges above a hose's maximum rated working pressure.
- Never run over hose with equipment or vehicles such as forklifts.
- Do not pull a hose by its coupling. It can lead to a dangerous failure.
- Never lift a heavy, large-diameter hose by the middle with ends hanging down. This can damage the hose's internal reinforcement.
- Support large-dia hoses, every 10 feet [approx.] with slings or rope saddles.
- Where hose is exposed to excessive wear in one spot, add an extra protective cover, such as nylon sleeve, or a pad.
- Any hose that has been mishandled, must be re-inspected and should pass a pressure test before it's re-installation.

HOSE MAINTENANCE

- All hoses should be visually inspected and pressure tested regularly. This is specially important for hoses in critical applications, such as acid/chemical, steam and petroleum.
- Check for coupling seepage and coupling slippage frequently

GENERAL TIPS FOR HOSES

STORAGE

If you want your hose to last 10 years and more, here are some tips:

- Store hose in cool, dry rooms.
- Store them away from direct sunlight and heat vents.
- Keep them away from arc welders and other electrical equipment.
- Do not open hoses from original wrapping till you actually need them.
- If the hose ends are plugged when shipped, do not unplug them till ready for installation.
- Temperature - Hose should be stored in a cool, dry area never exceeding +38 C [+100 F]. If stored below freezing, pre-warming may be required prior to handling, testing and placing into service.
- Do not hang coiled hose on a hook.
- Hose shipped straight should be stored straight.
- Open the packing carefully when using knives or sharp tools.

COUPLINGS

- Different types of couplings to be used for different hoses for the sake of human safety and hose assembly life.
- Use proper size couplings and install them correctly.
- Use approved couplings for steam LP Gas, Corrosive chemicals and petroleum products.
- If the coupling comes in contact with flammable material, make sure it is made of non-sparking material such as brass or aluminium.
- Before installing couplings check them for burns or sharp edges.
- Make sure the hose ends are cut square before installing the couplings.
- Avoid oil based and permanent lubricant when installing couplings. Water soap solution is a better alternative.

STATIC ELECTRICITY

- In some applications, it is important that the hose conducts electricity from the end of one coupling, through the hose, to the other coupling. This electrical bond, called a static bond, dissipates the Static Electricity that some materials generate when they pass through the hose. If this electricity is not picked up and conducted away from the material by the hose, a dangerous explosion could result.
- To discharge Static Electricity, static wires are provided in such hoses e.g. Petrol, Sandblast etc.





INDUSTRIAL HOSE

SIPPER AVIATION HOSE >>

Meets BS EN 1361 & API 1529 Type C



Recommended For: All operations associated with ground fueling & de-fuelling of aircrafts. Suitable for applications with petroleum fuels having an aromatic hydrocarbon content not exceeding 30% by volume.

Tube: Black, Resistant to aviation fuel, Nitrile Rubber

Reinforcement: 2 braid of High-tenacity synthetic yarn

Cover: Black anti-static NBR/PVC Rubber

Temperature Range: -30° C to +65° C

SPECIFICATIONS

Nominal I.D	Nominal O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum
		inch	mm	Kg/cm2	Mpa	Psi	Kg/cm2	Mpa	Psi	mm
1-1/2	56.0	20.00	2.00	285	80.00	8.00	1140	245.00	10.00	25.00
2	66.3	20.00	2.00	285	80.00	8.00	1140	356.00	14.00	25.00
2-1/2	86.0	20.00	2.00	285	80.00	8.00	1140	508.00	20.00	25.00
3	98.5	20.00	2.00	285	80.00	8.00	1140	635.00	25.00	5.00

SAND BLAST (GREENLINE) HOSE >>

Exceeds IS: 5894 Type 1



Recommended For: Sand, shot blasting applications and where abrasive material are carried at high velocity.

Electrical Conductivity: having two numbers braided copper flex wires laid spirally in opposite direction for electrical conductivity.

Tube: Specially compounded abrasion resistant & resilient natural rubber, Black

Reinforcement: High tenacity synthetic yam. Twin copper wires ensure reliable conductivity.

Cover: Specially compounded abrasion resistant natural rubber, Black

Temperature Range: -40° C to +70° C

SPECIFICATIONS

Nominal I.D	Nominal O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum
		inch	mm	Kg/cm2	Mpa	Psi	Kg/cm2	Mpa	Psi	mm
3/4	38.6	7.00	0.70	100	35.00	3.50	500	203	8.0	15
1	45.1	7.00	0.70	100	35.00	3.50	500	304	12.0	5
1-1/4	52.7	7.00	0.70	100	35.00	3.50	500	304	12.0	5
1-1/2	58.5	7.00	0.70	100	35.00	3.50	500	457	18.0	5
2	74.7	7.00	0.70	100	35.00	3.50	500	508	20.0	5





INDUSTRIAL HOSE

SAND BLAST HOSE (10 Bar) >>



Recommended For: Sand & Shot blasting applications, where abrasive materials are carried at high velocity and at 10 Bar.

Tube: Highly abrasion resistant, natural rubber [Black]

Reinforcement: Two braids of high tenacity synthetic textile yarn. Twin copper wires ensure reliable conductivity.

Cover: Abrasion resistant natural rubber- black.

Temperature Range: -30° C to +70° C

SPECIFICATIONS

Nominal I.D	Nominal O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum
		inch	mm	Kg/cm2	Mpa	Psi	Kg/cm2	Mpa	Psi	mm
3/4	38.6	10	1.0	145	50	5.0	725	203	8.0	Contact Gates Representative
1	45.1	10	1.0	145	50	5.0	725	305	12.0	
1-1/4	52.7	10	1.0	145	50	5.0	725	406	16.0	
1-1/2	58.5	10	1.0	145	50	5.0	725	457	18.0	
2	74.7	10	1.0	145	50	5.0	725	508	20.0	

WRESTLER SAND BLAST HOSE >>

Meets IS: 5894



Recommended For: Highly abrasive material used in Sand Blasting applications including River Sand Garnets, Copper Slag, Coal Particles, Corundum, Cast Steel, Grit Glass etc. Specially designed for superior performance-longer life due to very low tube wear.

Tube: Excellent abrasion resistant, Anti-static, Modified NR, Black

Reinforcement: High-tenacity synthetic yarn. 3/4", 1" Single yarn braid, 1-1/4" 1-1/2" Double yarn braid, 2 braid of high tenacity

Temperature Range: -40° C to +75° C

SPECIFICATIONS

Nominal I.D	Nominal O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum
		inch	mm	Kg/cm2	Mpa	Psi	Kg/cm2	Mpa	Psi	mm
3/4	33.2	12.00	1.20	175	48.00	4.80	700	178	7.0	25.00
1	39.2	12.00	1.20	175	48.00	4.80	700	229	9.0	25.00
1-1/4	48.2	12.00	1.20	175	48.00	4.80	700	254	10.0	25.00
1-1/2	56.2	12.00	1.20	175	48.00	4.80	700	304	12.00	25.00





INDUSTRIAL HOSE

GAJRA HOSE >>



Recommended For: Most suitable for highly abrasive particles like Coke particles, Gravel, sand or a mixture of all with air. Out performs any hose in such severe working conditions. Especially recommended for extreme abrasive conditions where normal sand blast hoses are not able to perform.

Special Features : A wire braid version is available in 1-1/2" size addition to extra thick tube to make it suitable for lasting for minimum of 70 heats in steel melting furnaces. Dimensions of textile & wire braid hoses are same as given.

Tube: Extremely high resistant NR/SBR (Black)/Antistatic modified NR.

Reinforcement: Single braid, high tenacity synthetic yarn.

Cover: Excellent abrasion resistant NR/SBR (Black)

Temperature Range: -30° C to +70° C

SPECIFICATIONS

Nominal I.D	Nominal O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum
		Kg/cm2	Mpa	Psi	Kg/cm2	Mpa	Psi	mm	inch	in. of HG
1-1/2	64.52	10	1.0	145	40	4.0	580	381	15	Contact Gates Representative
2	74.70	10	1.0	145	40	4.0	580	508	20	

CONCRETE HOSE (SHOTCRETING) >>

Gates proprietary Hose



Recommended For: To handle the pumping of concrete with high head pressure from concrete boom truck and as a discharge hose on the delivery end of high pressure concrete pumps. Specially designed high abrasion resistant tube is most suited for handling wet concrete. Plaster or gout material.

Tube: Specially compounded abrasion resistant & resilient natural rubber black.

Reinforcement: Two layers of high tensile steel wire

Cover: Specially compounded abrasion resistant natural rubber black.

Temperature Range: -40° C to +70° C

SPECIFICATIONS

Nominal I.D	Nominal O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum
		Kg/cm2	Mpa	Psi	Kg/cm2	Mpa	Psi	mm	inch	in. of HG
2-1/2	89.0	85.00	8.50	1233	255.00	25.00	3700	760	30	10.00
3	100.0	85.00	8.50	1233	255.00	25.00	3700	1000	39.0	10.00





CONCRETE TRANSFER HOSE ASSEMBLY >>



Recommended For: To handle the pumping of concrete with high head pressure from concrete boom truck and as a discharge hose on the delivery end of high pressure concrete pumps. Specially designed high abrasion resistant tube is most suited for handling wet concrete, plaster or gout material.

Tube: Specially compounded abrasion resistant & resilient natural rubber black.

Reinforcement: Two layers of high tensile steel wire.

Cover: Specially compounded abrasion resistant natural rubber black.

Temperature Range: -40° C to +70° C

SPECIFICATIONS

Nominal I.D	Nominal O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum
		inch	mm	Kg/cm2	Mpa	Psi	Kg/cm2	Mpa	Psi	mm
5	155.0	85.00	8.50	1233	170	17	2466	762	30.0	10.00

BLACK SNAKE HOSE >>

Exceeds BS EN1360 Type 3



Recommended For: Dispensing all types of petrol and diesel fuels for service station pumps. A heavy duty hard wall hose which does not collapse in reel use or behind the nozzle in demanding service conditions.

Tube: Specially compounded Nitrile rubber black, resistant to highly aromatic gasoline.

Reinforcement: Braided high tenacity steel wire.

Cover: Modified Nitrile rubber black.

Temperature Range: -30° C to +49° C

SPECIFICATIONS

Nominal I.D	Nominal O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum
		inch	mm	Kg/cm2	Mpa	Psi	Kg/cm2	Mpa	Psi	mm
5/8	28.7	17.00	1.70	250	51.00	5.10	750	152	6.0	26.00
1	35.0	17.00	1.70	250	51.00	5.10	750	203	8.0	26.00
3/4	25.4	17.00	1.70	250	51.00	5.10	750	152	6.0	26.00
1-1/2	49.8	17.00	1.70	250	51.00	5.10	750	254	10.0	26.00





INDUSTRIAL HOSE

PETROL (GREENLINE) HOSE >>

Exceeds IS : 2396



Recommended For: Dispensing all types of petrol and diesel fuels for service station pumps. Electrical conductivity having two number braided copper flex wires laid spirally in opposite direction for electrical conductivity.

Tube: Specially compounded nitrile rubber black. Resistant to highly aromatic gasoline.

Reinforcement: Two Braid of high tenacity synthetic yam. Copper wire ensures reliable conductivity.

Cover: Modified Nitrite rubber, black.

Temperature Range: -30° C to +49° C

SPECIFICATIONS

Nominal I.D	Nominal O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum
		Kg/cm2	Mpa	Psi	Kg/cm2	Mpa	Psi	mm	inch	
3/4	32.2	7.00	0.70	100	28.00	2.80	400	152	6.9	20.00
1	38.0	7.00	0.70	100	28.00	2.80	400	203	8.0	20.00

GP 60 (CONDUCTIVE HOSE) >>

General Purpose Low Pressure Hose



Recommended For: General industrial applications such as oil, alcohols. aqueous solutions, hydraulic fluids, acids, detergents and chemicals.

Tube : NBR (Nitrite)

Reinforcement: One or Two fiber braids.

Cover : NBR (Nitrite)/PVC

Temperature Range: -40° C to +95° C

SPECIFICATIONS

Nominal I.D	Nominal O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum
		Kg/cm2	Mpa	Psi	Kg/cm2	Mpa	Psi	mm	inch	
1/4	13.3	20.00	2.00	290	60.00	6.00	870	45	1.8	26.00
5/16	15.0	20.00	2.00	290	60.00	6.00	870	65	2.6	26.00
3/8	17.0	20.00	2.00	290	60.00	6.00	870	75	3.0	26.00
1/2	20.5	20.00	2.00	290	60.00	6.00	870	100	3.9	25.00
5/8	24.2	20.00	2.00	290	60.00	6.00	870	125	4.9	20.00
3/4	29.0	20.00	2.00	290	60.00	6.00	870	150	5.9	20.00
1	35.6	20.00	2.00	290	60.00	6.00	870	180	7.1	20.00





INDUSTRIAL HOSE

GP 80 (CONDUCTIVE HOSE) >>

General Purpose Low Pressure Hose



Recommended For: General industrial applications such as oil, alcohols, Aqueous solutions, hydraulic fluids, acids, detergents and chemicals.

Tube: NBR (Nitrile)

Reinforcement: One or Two fiber braids.

Cover: NBR (Nitrile)/ PVC

Temperature Range: -40° C to +95° C

SPECIFICATIONS

Nominal I.D	Nominal O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum
		Kg/cm2	Mpa	Psi	Kg/cm2	Mpa	Psi	mm	inch	in. of HG
1/4	13.3	37.96	3.72	540	112.49	11.03	1600	45	1.8	26.00
5/16	15.0	37.96	3.72	540	112.49	11.03	1600	65	2.6	26.00
3/8	17.0	37.96	3.72	540	112.49	11.03	1600	75	3.0	26.00
1/2	20.5	37.96	3.72	540	112.49	11.03	1600	100	3.9	25.00
5/8	24.2	30.93	3.03	440	91.39	8.96	1300	115	4.5	20.00
3/4	29.0	30.93	3.03	440	91.39	8.96	1300	135	5.3	20.00
1	37.0	30.00	3.00	440	90.00	9.00	1300	165	6.5	-
1-1/4	44.0	30.00	3.00	440	90.00	9.00	1300	200	7.8	-
1-1/2	51.0	30.00	3.00	440	90.00	9.00	1300	300	11.8	-
2	64.0	30.00	3.00	440	90.00	9.00	1300	500	19.7	-

CARBON FREE HOSE >>

Non Conductive Hose



Recommended For: Specialist furnace coolant application in electrical steel industry and other non conductive applications. Engineered with specially developed carbon free tube and cover. whereby meeting service requirements of low leakage current (less than 20 micro amp at 6 KV DC)

Tube: Modified synthetic Rubber, grey

Reinforcement: High tenacity synthetic yarn.

Cover: Specially compounded Nitrile, green

Temperature Range: -40° C to +95° C

SPECIFICATIONS

Nominal I.D	Nominal O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum
		Kg/cm2	Mpa	Psi	Kg/cm2	Mpa	Psi	mm	inch	in. of HG
3/8	17.0	17.00	1.07	246.5	68.00	6.08	986.3	150	5.9	-
1/2	21.8	17.20	1.72	250.0	69.00	6.90	1000.0	102	4.0	25.00
3/4	31.0	17.20	1.72	250.0	69.00	6.90	1000.0	127	5.0	25.00
1	37.5	17.20	1.72	250.0	69.00	6.90	1000.0	152	6.0	25.00
1-1/4	45.2	17.20	1.72	250.0	69.00	6.90	1000.0	191	7.5	25.00
1-1/2	53.6	17.20	1.72	250.0	69.00	6.90	1000.0	203	8.0	20.00
2	65.5	14.00	1.04	200.0	56.00	5.60	800.0	304	12.0	10.00
2-1/4	68.0	14.00	1.04	203.0	40.00	4.00	580.2	500	19.7	-
2-3/8	72.0	14.00	1.04	203.0	40.00	4.00	580.2	650	25.6	-
2-1/2	81.0	14.00	1.04	200.0	56.00	5.60	800.0	508	20.0	10.00
2-3/4	85.0	14.00	1.04	203.0	40.00	4.00	580.2	800	31.5	-
3	93.5	14.00	1.04	200.0	56.00	5.60	800.0	635	25.0	5.00
3-1/2	106.0	14.00	1.04	203.0	40.00	4.00	580.2	1000	39.4	-
4	120.0	10.00	1.00	145.0	40.00	4.00	580.2	1200	47.2	-



INDUSTRIAL HOSE

PLANT MASTER® CF CABLE COOLING HOSE >>



Recommended For: For light weight/water hose for industrial application where non-conductive hose is required.

Tube: Grey oil resistant synthetic rubber (Nitrile)

Reinforcement: One braid of high tenacity synthetic yarn.

Cover: Red, Modified synthetic rubber (Nitrile/PVC)

Temperature Range: -40° C to +100° C

SPECIFICATIONS

Nominal I.D	Nominal O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum
		Kg/cm ²	Mpa	Psi	Kg/cm ²	Mpa	Psi	mm	inch	
3/8	16.00	10	1.0	145	40	4.0	580	102	4.00	25
1/2	20.00	10	1.0	145	40	4.0	580	127	5.00	25
5/8	24.00	10	1.0	145	40	4.0	580	152	6.00	20
3/4	28.00	10	1.0	145	40	4.0	580	152	6.00	15
1	35.00	10	1.0	145	40	4.0	580	203	8.00	15
1-1/4	43.50	10	1.0	145	40	4.0	580	254	10.00	10
1-1/2	53.60	10	1.0	145	40	4.0	580	305	12.00	8
2	65.50	10	1.0	145	40	4.0	580	419	16.50	4

CHEMICAL HOSE >>

Exceeds IS : 7654



Recommended For: Conveying dilute chemicals e.g. Alums Liquor, Caustic Soda. Lime solutions, Dilute Hydrochloric Acid. Dilute Sulphuric acid, Methyl Alcohol, Ethyl alcohol, Butyl alcohol, Isobutanol etc. (Ref. Gates Chemical Resistance Table or Gates representative for further information.)

Tube: Specially compounded EPDM, black.

Reinforcement: High tenacity synthetic yarn.

Cover: Specially compounded EPDM, black.

Temperature Range: -40° C to + 100° C

SPECIFICATIONS

Nominal I.D	Nominal O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum
		Kg/cm ²	Mpa	Psi	Kg/cm ²	Mpa	Psi	mm	inch	
3/4	31.0	10.00	1.00	150	40.00	4.00	600	152	6.0	15.00
1	38.0	10.00	1.00	150	40.00	4.00	600	203	8.0	15.00
1-1/4	45.0	10.00	1.00	150	40.00	4.00	600	203	8.0	10.00
1-1/2	52.0	10.00	1.00	150	40.00	4.00	600	254	10.0	10.00
2	68.0	10.00	1.00	150	40.00	4.00	600	355	14.0	4.00





INDUSTRIAL HOSE

WASHDOWN (GREENLINE) HOSE >>

Exceeds IS : 444 Type 3B



Recommended For: All car washing and pressure washer application in Garages, Service Stations and Industries.

Tube: Modified Nitrile Rubber. Black

Reinforcement: Single braid of high tenacity synthetic yarn.

Cover: Modified Nitrile rubber, black.

Temperature Range: -30° C to +82° C

SPECIFICATIONS

Nominal I.D	Nominal O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum
		Kg/cm2	Mpa	Psi	Kg/cm2	Mpa	Psi	mm	inch	in. of HG
3/8	18.9	28.00	2.80	400	112.00	11.20	1600	102	4.0	26.00
1/2	23.0	28.00	2.80	400	112.00	11.20	1600	127	5.0	26.00

SUPER SPRAY (GREENLINE) HOSE >>

Exceeds IS : 1677 Type 4



Recommended For: Very high pressure spraying of water based pesticides and chemicals in agriculture and forestry. Oil resistant tube ensures long life.

Tube: Modified Nitrile Rubber, Black

Reinforcement: Single braid of high tenacity synthetic yarn.

Cover: Modified Nitrile rubber, black.

Temperature Range: -30° C to +82° C

SPECIFICATIONS

Nominal I.D	Nominal O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum
		Kg/cm2	Mpa	Psi	Kg/cm2	Mpa	Psi	mm	inch	in. of HG
3/8	21.0	55.00	5.50	800	165.00	16.50	2400	102	4.0	26.00
1/2	24.6	55.00	5.50	800	165.00	16.50	2400	127	5.0	26.00





INDUSTRIAL HOSE

AIR DRILL BLACK HOSE >>



Recommended For: Heavy duty, high pressure use on industrial construction and pneumatic mining applications, requiring an extra heavy duty hose with an oil resistant tube and abrasion resistant cover.

Tube: Specially compounded Nitrile Rubber, Black

Reinforcement: Single braid of high tensile steel wire.

Cover:

Option 1: Specially compounded highly abrasion resistant natural rubber, black

Option 2: Highly abrasion resistant modified Nitrile rubber. yellow All sizes with perforated cover.

Yellow cover MSHA IC 11C. Flame resistant

Temperature Range: -30° C to +82° C

SPECIFICATIONS

Nominal I.D	Nominal O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum
		Kg/cm2	Mpa	Psi	Kg/cm2	Mpa	Psi	mm	inch	
3/4	28.3	34.50	3.45	500	138.00	13.80	2000	152	6.0	25
1	36.6	34.50	3.45	500	138.00	13.80	2000	201	7.9	25
1-1/4	44.2	34.50	3.45	500	138.00	13.80	2000	254	10.0	25
1-1/2	50.5	34.50	3.45	500	138.00	13.80	2000	304	12.0	15
2	63.5	34.50	3.45	500	138.00	13.80	2000	355	14.0	15
2-1/2	79.7	34.50	3.45	500	138.00	13.80	2000	762	30.0	10
3	93.3	34.50	3.45	500	138.00	13.80	2000	914	36.0	10

ROCK DRILL (GREENLINE) HOSE >>

Exceeds IS : 466 Type 3



Recommended For: Heavy duty, high pressure use on industrial construction and pneumatic mining applications, requiring an extra heavy duty hose with an oil resistant tube and abrasion resistant cover.

Tube: Specially compounded Nitrile Rubber, Black

Reinforcement: Single braid of high tenacity synthetic yarn.

Cover: Specially compounded high abrasion resistant Nitrile rubber for size 12.5 mm & 20.0 mm

Black High tension resistant modified natural rubber for size 25.0 mm.

Temperature Range: -30° C to +82° C

SPECIFICATIONS

Nominal I.D	Nominal O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum
		Kg/cm2	Mpa	Psi	Kg/cm2	Mpa	Psi	mm	inch	
1/2	19.8	21.00	2.10	300	84.00	8.40	1200	127	5.0	25
3/1	28.8	21.00	2.10	300	84.00	8.40	1200	152	6.0	25
1	37.6	21.00	2.10	300	84.00	8.40	1200	203	8.0	25





INDUSTRIAL HOSE

CNG Hose >>

Meets SAE J30 R6AIS 028



Recommended For: CNG applications for use in CNG kits in automobiles upto 2.1 Mpa- (cars LCV, HCV etc.)

Tube: Specially compounded oil resistant Nitrile Rubber, Black

Reinforcement: High tenacity synthetic yarn.

Cover: Specially compounded oil abrasion resistant Nitrile rubber, Black

Temperature Range: -40° C to +100° C

SPECIFICATIONS

Nominal I.D	Nominal O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum
		Kg/cm2	Mpa	Psi	Kg/cm2	Mpa	Psi	mm	inch	in. of HG
1/4	12.7	21.00	2.10	300	48.00	4.80	700	76	3.0	26
5/16	14.3	21.00	2.10	300	48.00	4.80	700	102	4.0	26
3/8	15.9	21.00	2.10	300	48.00	4.80	700	102	4.0	26
1/2	19.8	21.00	2.10	300	48.00	4.80	700	127	5.0	20
5/8	23.8	21.00	2.10	300	48.00	4.80	700	152	6.0	15
3/4	28.5	21.00	2.10	300	48.00	4.80	700	152	6.0	15
1	35.0	21.00	2.10	300	48.00	4.80	700	203	8.0	15

STEAM (GREENLINE) HOSE >>

Exceeds IS : 10655 Type 2 & BS : 5342 Type 1



Recommended For: Excellent steam handling. The hose features a specially compounded, perforated synthetic rubber cover intended for use where the hose is exposed to all types of steam-saturated and superheated up to 150 psi and 195 degree centigrade. Note: Do not alternate change between steam and water.

Tube : EPDM, black

Reinforcement : Single braid of high tensile brass coated steel wire for size 12.7 mm

Cover : EPDM, black. All sizes are perforated.

Temperature Range: -40° C to +195° C

SPECIFICATIONS

Nominal I.D	Nominal O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum
		Kg/cm2	Mpa	Psi	Kg/cm2	Mpa	Psi	mm	inch	in. of HG
3/4	31.0	10.0	1.10	150	100.00	10.00	1500	254	10.0	25
1	36.6	10.0	1.10	150	100.00	10.00	1500	304	12.0	15
1-1/4	43.5	10.0	1.10	150	100.00	10.00	1500	406	16.0	15
1-1/2	50.5	10.0	1.10	150	100.00	10.00	1500	508	20.0	15
2	63.5	10.0	1.10	150	100.00	10.00	1500	635	25.5	10



INDUSTRIAL HOSE

STEAM KING HOSE >>

Exceeds IS : 10655 Type 3 & BS : 5342 Type 2



Recommended For: Heavy duty industrial uses including heat control, melting of substance such as wax and glue, thawing, cleaning and steam transfer applications. It will handle all types steam saturated and superheated up to 185 psi and +232 degree centigrade. Note: Do not alternate change between steam and water.

Tube: EPDM, black

Reinforcement: Single braid of high tensile brass coated steel wire for size 12.7 mm Two braids of high tensile brass coated steel wire for size 20.0 mm to 50.0 mm

Cover: EPDM, black. All sizes are perforated.

Temperature Range: -40° C to +232° C

SPECIFICATIONS

Nominal I.D	Nominal O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum
		Kg/cm2	Mpa	Psi	Kg/cm2	Mpa	Psi	mm	inch	
3/4	32.3	17.20	1.72	250	172.00	17.20	2500	229	9.0	20
1	40.7	17.20	1.72	250	172.00	17.20	2500	279	11.0	20
1-1/4	46.0	17.20	1.72	250	172.00	17.20	2500	406	16.0	20
1-1/2	54.3	17.20	1.72	250	172.00	17.20	2500	508	20.0	10
2	67.5	17.20	1.72	250	172.00	17.20	2500	635	25.0	10

PNEUMATIC (GREENLINE) HOSE >>

Exceeds IS : 446 Type 2



Recommended For: All types of pneumatic tools in industries, compressed air applications and construction industry.

Tube: Modified Nitrile Rubber, Black

Reinforcement: Single braid of high tenacity synthetic yarn for size 6.3 mm to 25 mm, single braid of high tensile brass coated Steel wire for size 31.5mm to 50.0mm

Cover: Specially compounded high abrasion resistant Nitnle rubber for size 6.3mm to 20 mm. Black Highly abrasion resistant modified natural rubber for sizes 25.0mm and above. Black

Temperature Range: -30° C to +82° C

SPECIFICATIONS

Nominal I.D	Nominal O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum
		Kg/cm2	Mpa	Psi	Kg/cm2	Mpa	Psi	mm	inch	
1/4	12.7	14.00	1.40	200	56.00	5.60	800	76	3.0	26
5/16	14.3	14.00	1.40	200	56.00	5.60	800	102	4.0	26
3/8	16.7	14.00	1.40	200	56.00	5.60	800	102	4.0	26
1/2	20.0	14.00	1.40	200	56.00	5.60	800	127	5.0	25
3/4	28.5	14.00	1.40	200	56.00	5.60	800	152	6.0	15
1	33.5	14.00	1.40	200	56.00	5.60	800	203	8.0	15
1-1/4	41.2	14.00	1.40	200	56.00	5.60	800	254	10.0	15
1-1/2	47.5	14.00	1.40	200	56.00	5.60	800	305	12.0	10
2	60.8	14.00	1.40	200	56.00	5.60	800	305	12.0	10



INDUSTRIAL HOSE

AIR - WATER (GREENLINE) HOSE >>

Exceeds IS : 446 Type1, 444 Type 2



Recommended For: All air and water applications requiring maximum flexibility in engineering Industry, workshop, shipyards, irrigation etc.

Tube: Specially compounded Nitrile rubber, Black

Reinforcement: Single braid of high tenacity synthetic yarn.

Cover: Specially compounded high abrasion resistant Nitrile rubber for size 12.5mm to 20 mm. Black Highly abrasion resistant modified natural rubber for sizes 25.0mm and above. Black

Temperature Range: -30° C to +82° C

SPECIFICATIONS

Nomial I.D	Nomial O.D	Working Pressure			Min Burst Pressure			Bend Radius		Vaccuum
		Kg/cm2	Mpa	Psi	Kg/cm2	Mpa	Psi	mm	inch	
1/2	20.0	12.00	1.20	170	36.00	3.60	510	127	5.0	26
3/4	28.5	12.00	1.20	170	36.00	3.60	510	152	6.0	25
1	33.5	12.00	1.20	170	36.00	3.60	510	203	8.0	15
1-1/4	43.5	12.00	1.20	170	36.00	3.60	510	254	10.0	10
1-1/2	50.0	12.00	1.20	170	36.00	3.60	510	304	12.0	8
2	65.0	12.00	1.20	170	36.00	3.60	510	419	16.5	4

SUPER HOSE >>



Recommended For: High pressure hydraulic ines in long wall mining equipment and roof support systems/petroleum based or water emulsion fluids.

Tube: Black oil resistant synthetic rubber, (Nitrile)

Reinforcement: Two braids of high tensile steel wire.

Cover: Black, oil, abrasion and flame resistant synthetic rubber (Modified Nitrile)

Temperature Range: -40° C to +100° C

SPECIFICATIONS

Nominal I.D	Nominal O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum
		Kg/cm2	Mpa	Psi	Kg/cm2	Mpa	Psi	mm	inch	
1	37.5	215.00	21.50	3125	840.00	84.00	12000	304	12.0	26





INDUSTRIAL HOSE

LOL HOSE >>



Recommended for Petroleum-base hydraulic oils, water, glycol antifreeze solutions, hot lubricating oils, and air. NOTE: Lock-On hose and couplings are not recommended for pressure surge applications or critical applications, such as permanent piping in residential or commercial buildings. Not recommended for gasoline or diesel fuels.

Tube: Type C [Nitrile], Black

Reinforcement: Braided, high tensile synthetic textile cord.

Cover: Type A (Neoprene). Black TypeC, (Modified Nitrile). Blue, red, yellow, green or grey.

Temperature Range: -40° C to +100° C

SPECIFICATIONS

Nominal I.D	Nominal O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum
		Kg/cm2	Mpa	Psi	Kg/cm2	Mpa	Psi	mm	inch	
1/4	12.0	21	2.1	300	84	8.4	1200	76	3.0	26
3/8	16.0	21	2.1	300	84	8.4	1200	76	3.0	26
1/2	19.6	21	2.1	300	84	8.4	1200	127	5.0	26
5/8	23.9	21	2.1	300	84	8.4	1200	152	6.0	26
3/4	26.9	21	2.1	300	84	8.4	1200	178	7.0	15

WATER JET HOSE >>



Recommended For: Ultra high pressure water blasting applications, not to use for Hydraulic application

Tube: Black, oil resistant, synthetic rubber (Nitrile - type C).

Reinforcement: Four spirals of very high tensile steel wire.

Cover: Black, oil resistant, synthetic rubber [Neoprene - type A] Impulse tested for more than 25,000 cycles at 15,000 psi pressure to ensure good service life

Temperature Range: -20° C to +70° C

SPECIFICATIONS

Nomial I.D	Nomial O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum
		Kg/cm2	Mpa	Psi	Kg/cm2	Mpa	Psi	mm	inch	
1/2	24.6	1100	110.0	16000	2760	276.0	40000	229	9.0	Contact Gates Representative





INDUSTRIAL HOSE

WATER BLAST XTUFF HOSE >>



Recommended For: Ultra high pressure water blasting applications, not to use for Hydraulic application

Tube: Black, oil resistant, synthetic rubber (Nitrile - type C),

Reinforcement: Four spirals of very high tensile steel wire.

Cover: Black, oil resistant, synthetic rubber (Neoprene - type A) Impulse tested for more than 25,000 cycles at 15,000 psi pressure to ensure good service life

Temperature Range: -20° C to +70° C

SPECIFICATIONS

Nominal I.D	Nominal O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum in. of HG
		Kg/cm2	Mpa	Psi	Kg/cm2	Mpa	Psi	mm	inch	
1/2	24.6	1034	103.4	15000	2585	258.5	37500	229	9.0	Contact Gates Representative

RIG HOSE >>



Recommended For: Pneumatic services in heavy duty drill rig compressor upto 1100 CFM capacity in ground drilling, quarries, construction and general industry.

Tube: Specially developed blend of synthetic rubber (Black), resistant to high temperature of air & oil mist

Reinforcement: Two braid of high tensile steel wire.

Cover: Highly abrasion resistance & flame resistance Modified CR (Black)

Temperature Range: -40° C to +135° C

SPECIFICATIONS

Nominal I.D	Nominal O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum in. of HG
		Kg/cm2	Mpa	Psi	Kg/cm2	Mpa	Psi	mm	inch	
1-1/2	53.8	69	6.9	1000	275	27.5	4000	510	20	Contact Gates Representative
2	66.5	69	6.9	1000	275	27.5	4000	635	25	





INDUSTRIAL HOSE

PLASTER HOSE >>



Recommended For High Pressure hose for plaster spraying/Hose for conveying cement mixture for plastering applications

Tube: Highly abrasion resistant, natural rubber [Black]

Reinforcement: Two braid of high tenacity synthetic textile yarn.

Cover: Abrasion resistant & resilient natural rubber [Black]

Temperature Range: -30° C to +80° C

SPECIFICATIONS

Nominal I.D	Nominal O.D	Working Pressure			Minimum Burst Pressure			Minimum Bend Radius		Vacuum in. of HG
		Kg/cm ²	Mpa	Psi	Kg/cm ²	Mpa	Psi	mm	inch	
1-1/4	45	40	4.0	580	120	12.0	1740	184	7.5	Contact Gates Representative
1-1/2	53	40	4.0	580	120	12.0	1740	221	9.0	
2	66.5	40	4.0	580	120	12.0	1740	294	12.0	





VALUE PROPOSITION

Why Gates? – 12 Good Reasons >>

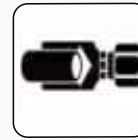
1. Superior Flexibility



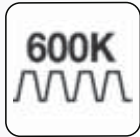
2. 1 Fitting type per range



3. MegaCrimp Fittings



4. Braided Impulse Cycles



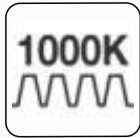
5. Tuff Cover Compounds



6. Field Technical Support



7. Spiral/Braid Impulse Cycles



8. Superior Hex –Chromium free plating



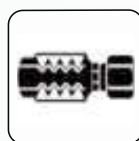
9. Ultimate Bend Radius



10. Guaranteed Leak Free



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