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DUPLON

CONSTRUCTION
WATER HOSE

Spreading Joy
Enhancing Lives



DUPLON

Construction Water Hose is ideal for conveying of water especially for Engineering, Construction and Industrial development work. Its special yellow with inner black colour combination makes it more rough and tough with longer service life.

Superior to rubber
Superior to anyone else



○ Key features

- UV Resistant
- More tough hence longer service life
- Kink resistant

○ Available Sizes

12 mm to 30 mm I.D.

○ Applications

- Conveying of water for engineering, construction and industrial development sites

○ Pressure at 30°C

Working Pressure: 5 kg/cm² to 7 kg/cm²

○ Product Specifications

Size in mm	Wall Thickness in mm	Working Pressure kg/cm ²	Standard Length mtrs
12	2	7	25, 30, 50
20	2.5	7	25, 30, 50
25	3	5	25, 30, 50
30	3.8	5	30, 50



DUPLON

NIPPON POLYMERS PVT. LTD.

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Website : www.dutronindia.com

Authorised Dealer

Spreading Joy Enhancing Lives

“Superior to Rubber, Superior to anyone else”

DUPLON HOSE are manufactured by M/s. Nippon Polymers Private Ltd., Ahmedabad, a quality product from the House of DUTRON, manufacturers of Dutron Kanaflex, Suction and Delivery Hose and Duct Hose with technical know-how from M/s. Totaku Industrial Inc., Osaka, Japan.

DUPLON is designed for high-pressure applications. It is a superior replacement to conventional rubber hose as it is made of PVC. This results in convenience due to lightweight and economy in use. It has superior consolidation and adhesion between the braids and covers, as compared to rubber hoses.

DUPLON products have been widely accepted in various large and medium scale Public/Private sector industries throughout the country as well in International market. It is designed to suit best in tropical climates like Indian, the Gulf and African sub-continent.

COMPOSITION: Made by reinforcement (braiding) of synthetic yarn in between two or more layers of soft PVC. The yarn is reinforced in crosswise as well as in longitudinal directions. This provides high pressure carrying capacity as well as good flexibility.

○ SPRAY HOSE AND
CAR WASHING
POWER HOSE

○ POWER SPRAY HOSE

○ ROCK DRILL HOSE



SPRAY HOSE AND CAR WASHING POWER HOSE



Salient Features

- Unique technology
- First and only product made in India of this kind
- Made by full weaving of synthetic yarn in between two thermoplastic layers
- Very light in weight

Also Available

- Hose with factory fitted brass couplings/hose barb crimped at both ends for ready-to-use applications

Applications

- Pesticide, insecticide, fungicide and weeding spraying
- High pressure washing of vehicles in service stations
- Transportation of high pressure fluids in industries
- High pressure pneumatic lines in mines, compressors, excavators and other special areas

Available Sizes

- Spray Hose: 8.5 mm to 12 mm I.D.
- Car Washing Hose: 10 mm & 12 mm

Specifications

Spray Hose

Size (mm)	Wall Thickness (mm)	I.D (mm)	O.D (mm)	Bursting Pressure at 30°C (kg/cm ²)	Standard Packing (mtrs.)
8.5	3.2	8.5	14.9	150	3 x 60 / 2 x 100 / 1 x 200
10	3.25	10	16.5	150	3 x 60 / 2 x 100 / 1 x 200
12	3.65	12.7	20	150	3 x 60 / 2 x 100 / 1 x 200

Car Washing Power Hose (Single Braided)

Size (mm)	Wall Thickness (mm)	I.D (mm)	O.D (mm)	Bursting Pressure at 30°C (kg/cm ²)	Standard Packing (mtrs.)
10	3.25	10	16.5	225	2 x 60 / 1 x 100
12	3.65	12.7	20	200	2 x 60 / 1 x 100

- Economical, yet superior quality
- Special material for Car Washing Power Hose to withstand oil/grease contamination

Pressure at 30°C

- Spray Hose – Bursting Pressure 150 kg/cm²
- Car Washing Power Hose - Bursting Pressure 200 kg/cm² to 225 kg/cm²

Available Color

- Spray Hose
 - Golden yellow
- Car Washing Power Hose
 - Black





POWER SPRAY HOSE



Salient Features

- Unique technology
- First and only product made in India of this kind
- Made by full weaving of synthetic yarn in between two thermoplastic layers
- Very light weight
- Economical, yet superior quality
- Very high pressure carrying capacity
- Better abrasion resistance
- Longer life than Spray Hose

Applications

- Plantation Orchard, Forestry, Parks, Vineyards and a variety of other areas involving spraying by hand or power driven pumps
- Very high pressure spraying of pesticide, fungicide, insecticide and weeding applications
- Transportation of high fluid liquid in industries

Pressure at 30°C

- Bursting Pressure 225 kg/cm²

Available Sizes

- 8.5 mm I.D.

Available Color

- Orange

Specifications

Size (mm)	Wall Thickness (mm)	I.D (mm)	O.D (mm)	Bursting Pressure at 30°C (kg/cm ²)	Standard Packing (mtrs.)
8.5	3.2	8.5	14.9	225	4 x 50 / 2 x 100 / 1 x 200



Closely Braiding with Synthetic Yarn



ROCK DRILL HOSE



Salient Features

- Unique technology
- First and only product made in India of this kind
- Made by full weaving of synthetic yarn in between two thermoplastic layers
- Very light weight
- Economical, yet superior quality

Applications

- Heavy duty pneumatic rock drilling applications in quarries, marble/granite mines, drilling in hard surfaces like road, concrete etc.

Specifications

Size (mm)	Wall Thickness (mm)	I.D (mm)	O.D (mm)	Bursting Pressure at 30°C (kg/cm ²)	Standard Packing (mtrs.)
20	4.45	19.05	28	100	50/100
25	4.8	25.4	35	90	50/100

Available Sizes

- Rock Drill Hose: 20 mm & 25 mm

Available Color

- Golden yellow

Pressure at 30°C

- Bursting Pressure 90 kg/cm² to 100 kg/cm²



DUPLON

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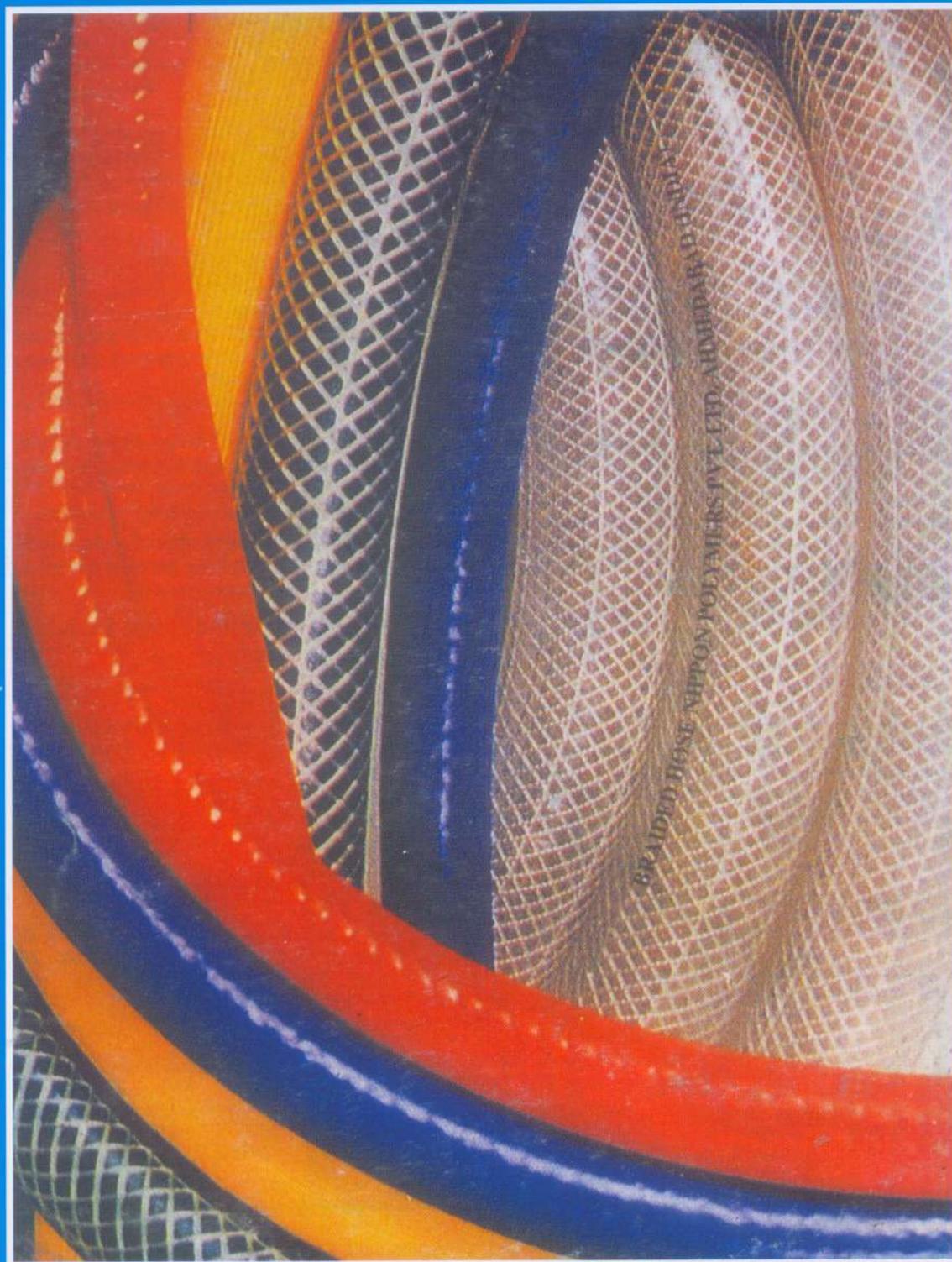
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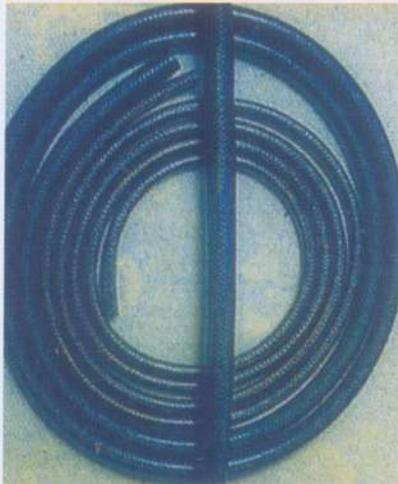
DUPLON

BRAIDED PVC HOSE



**Superior to Rubber.
Superior to Anyone Else.**

WATER HOSE



DUPLON is a new, industrial power hose specially designed for applications requiring a stronger, more resistant hose pipe.

Made from a high quality thermoplastic compound, Duplon is reinforced (braided) with special quality synthetic yarn, crosswise as well as lengthwise, giving the tube greater strength and resistance, even against higher working pressure.

DUPLON proves to be a better alternative to rubber hoses, as it offers better resistance to higher working pressure, Oil, Chemicals, Moisture, Abrasion, Ozone and Climatic condition. Moreover, DUPLON has superior consolidation and adhesion between the braids and covers, as compared to conventional rubber hoses. Easily available at short notice.

DUPLON is light in weight and is unbelievably flexible with ID maintained throughout length

AIR & PNEUMATIC HOSE (Transparent)

DUPLON Air & Pneumatic hose is the only pressure hose which is reinforced in longitudinal section.

It proves to be multipurpose hose for applications like Air/Pneumatic/Heavy Duty Suction and Delivery of Water and Chemicals.

DUPLON SUPER-SPRAY HOSE (Yellow)

DUPLON Super-Spray hose is recommended for high pressure spraying of water based chemicals, insecticides, fungicides, weeding etc.

In Plantation Orchards, Forestry, Parks, Vineyards, and a variety of other areas involving spraying by hand or power driven pumps.

SPECIFICATIONS :

SIZE IN MM.	WALL THICKNESS IN MM	WORKING PRESSURE AT 30°C KG/CM ²	STANDARD LENGTH
5	2.5	15	50/100
6	3	25	50/100
8	3	25	50/100
10	3.5	25	50/100
12	3.5	20	50/100/200
15	3.5	20	50/100
20	4	20	50/100/200
25	4.8	15	50/100
30	4.8	15	50/100
40	5	15	30/50
50	6	10	30/50
SUPER SPRAY			
10	4	40	60/100/200
12	4.5	30	60/100/200
WATER HOSE			
12	2	7	50/100
20	2.5	7	50/100
25	3	5	50/100
WELDING			
8	3	25	50/100
10	3.5	25	50/100
CAR WASHING			
10	5.0	40	30/60
12	5.5	30	30/60

Supplies will be in assorted lengths between 30 to 150 mtrs. as received from the factory.

DUPLON CAR WASHING HOSE (Black)

DUPLON car washing hose is made of 100% oil resistant PVC compound and braided with extra strong fine synthetic yarn to withstand working pressure upto 30/40 Kg/Cm². The outer surface of our hose is totally abrasion resistant.

DUPLON WATER HOSE (Green)

DUPLON Water Hose has been designed for general water delivery in Steel Mills and Engineering works, on Construction sites and Irrigation projects. Gardening and a wide range of allied applications.

DUPLON WELDING HOSE (Red & Blue)

DUPLON Welding Hose is suitable for Oxy-acetylene welding and cutting equipment in all types of Industrial workshops. Oil Refineries, Steel mills, Ship Building and Repair yards; Service stations, Garages etc.

DUPLON Red Welding Hose is used for acetylene applications while Blue/Black Welding Hose or Oxygen and other non-combustible gases.

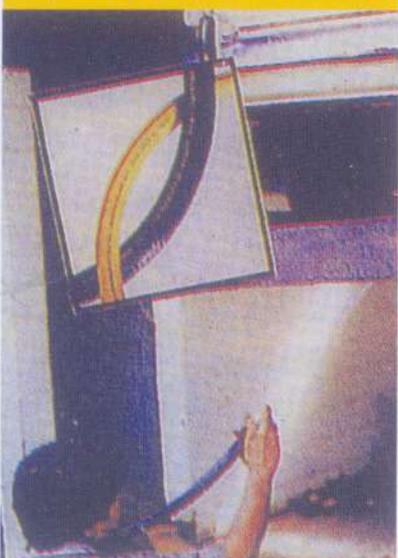
PROPERTIES :

- Light in weight & Flexible
- Strong enough to withstand high pressure, total consolidation and adhesion levels are superb.
- Abrasion resistant : Offers a high degree of resistance to abrasion.
- Rodent Proof : No danger to the pipe from rodents.
- Crush & Kink resistant : Doesn't kink or crush under any rough working condition.
- Resistant to Oil, Chemicals & Moisture : Unaffected by Chemicals, Acids, Alkalies etc. (A chart showing the use of DUPLON for various chemicals can be provided on request)

M.D. ROCK DRILLING



CAR WASHING & PESTICIDES SPRAYING



Introducing

Rock Drill Power Hose
 Hi-Pressure Spray Hose
 Power Hose (Car Washing)
 Range : 8.5/10/12/20 mm
 Pressure : upto
 WP 50 BP 225 kg./cm²

DUPLON

 BRAIDED PVC HOSE

A Challenging Replacement to Braided Rubber Hoses

DUPLON braided flexible PVC hoses have so far successfully replaced at least 25 crores in mtrs. of conventional braided RUBBER HOSES for applications like WATER, AIR, PNEUMATIC, MEDIUM DUTY ROCK DRILLING WELDING, CHEMICAL, AGRICULTURAL SPRAY, CAR WASHING and VARIOUS OTHER INDUSTRIAL APPLICATIONS.

DUPLON is manufactured by M/s. NIPPON POLYMERS PVT. LTD. Ahmedabad-380 009, which is also from the HOUSE OF DUTRON, manufacturers of *Kanaflex* Brand PVC Suction, and Delivery and DUCT hoses with technical know-how from M/s. TOTAKU INDUSTRIAL INC, OSAKA, JAPAN.

DUPLON is the market leader in this line and our products have been widely accepted as a permanent replacement to rubber hoses in various Government

departments, large and medium scale Public/Private Sector Industries throughout the country like ONGC, IPCL, Tata Chemicals, Bajaj Tempo, GEC, Atomic Energy, NALCO, HINDUSTAN ZINC etc.

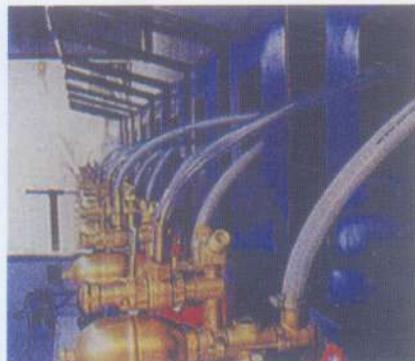
DUPLON braided hoses have been tested in a Government Test House viz. National Test House, Alipore, Calcutta for burst strength and for other parameters like Environmental Stress Cracking Resistance and Chemical Resistance, further tests have been carried out by Central Institute of Plastics Engineering & Technology, Ahmedabad and Italab Pvt. Ltd., Mumbai.

We are reproducing below a comparative chart showing how effectively our **DUPLON** hoses can be used against RUBBER HOSES as a permanent replacement, illustrating the advantages of plastic over rubber.

APPLICATIONS :

DUPLON Braided PVC Hose finds a wide range of applications in Agriculture and Industry-Ideal for transportation of Compressed air, Chemical, high pressure fluids etc. at atmospheric and elevated temperatures.

TEMPERATURE : Up to 70°C



	DUPLON	Nearest Competitors in Quality Rubber Hoses	Other Commercial Rubber Hoses
WORKING PRESSURE	30/40% higher than BIS Standard fixed for rubber hoses.	In line with BIS Standards	Same
CONSOLIDATION & ADHESION BETWEEN THE OUTER & INNER COVERS AND BRAIDS	Much Superior to rubber as our hose is totally a fused object and hence can withstand more pressure and will not burst due to ply looseness which is a common complaint in rubber hoses.	As rubber hoses are manufactured either in ply construction or with spiral braids, failures like bulging and bursting very common due to poor consolidation.	Same
ABRASION RESISTANCE	Excellent	Poor Compared to PVC	Same
RESISTANCE TO OIL CHEMICALS & MOISTURE	PVC has superior resistance to Oil & Chemicals than rubber. NO EFFECT WITH MOISTURE Except for Solvents, our hose can offer excellent resistance to almost all Chemicals, Acids, Alkalies etc. upto a concentration of 60/70%	Oil Drips into the inner layers and braids and finally the consolidation becomes poor and the hose bursts. Chemical also destroys the properties of rubber much faster than PVC. CAN HAVE EFFECT OF MOISTURE DEPENDING ON THE QUALITY of reinforcement used for braiding.	Same
ID VARIATIONS	Uniform ID will be maintained	Chances of ID variations are more with rubber.	Same
AVAILABILITY & RANGE	Readily available, Range : 5 mm to 50 mm	In general, delivery period is more.	Same
LENGTHS	50/100/200 mtr. length or as per order.	----	----
MAX. OPERATING TEMP.	60/70°C	Same	Same
OZONE RESISTANCE	Our expertise in plastic technology offers you a hose which will not crack or lose the flexibility when exposed to sunlight. Climatic conditions will not have any effect on our hoses.	All these can affect the properties of rubber to a greater extent	Same

	DUPLON	Nearest Competitors in Quality Rubber Hoses	Other Commercial Rubber Hoses
LIFE	Equivalent to rubber and in certain applications better than rubber	Equivalent to PVC and in certain applications much lower than PVC	If you compare the commercial quality hoses our PVC can get double the life of such rubber hoses.
EASY TO HANDLE	Lighter by 20/30%	Heavier by 20/30%	Heavier by 20/30%
INVENTORY ECONOMY	Our transparent hose can be used for Air/Pneumatic/M.D. Rock Drilling Heavy Duty Water Suction & Delivery and Chemical which helps the end users to keep a low inventory.	Have to keep different hoses for different applications and hence high inventory level to be maintained.	Same
PRICE	40/60% Cheaper than quality rubber products.	On an average double the cost of PVC	PVC may be costlier by 20% but PVC can offer atleast double the life of these commercial qualities.

The general impression of a customer as regards PVC braided hoses is whether it can take pressure like rubber, or will crack when exposed to sunlight or will it lose the flexibility. Please remember that only DUPLON brand could offer these quality standards. That is why DUPLON brand has established itself in industrial uses where other PVC braided hoses have failed miserably during the tough field trials and rigorous tests.

Kindly do not hesitate to ask for further clarifications or copies of our test certificates and the copies of prestigious order we have received recently. A copy of our chemical resistance chart shall be provided on your request.

HOW TO SELECT OUR HOSES

AIR/PNEUMATIC HOSES

Range 5 mm to 50 mm ID. Our Air/Pneumatic Hose is a multi-purpose hose which can be used for Air Compressors, Heavy duty Water Suction & Delivery, Conveying Chemicals and Gases, Pneumatic and other industrial applications. We are developing shortly special hoses for Rock Drilling.

Our Pneumatic Hose is being successfully used in Steel Casting Units for chipping hammer and grinder and the customers have found the same superior to rubber for reasons stated above. Many of bulk mining units have made it a practice to use few meters of Rubber hose at the Jack Hammer end and then connecting the same with our Pneumatic hose with a hose clamp upto the compressor end. This is done mainly to take full advantage of our superior quality and also to avoid the possible failure of PVC hose at the drilling end due to high temperature build-up and sparks.

M. D. ROCK DRILLING

Our 20 mm. ID transparent hose has emerged as a permanent replacement of Braided Rubber Rock Drill hoses with Jack Hammer applications in Quarries, Marble and Granite Mines etc. Ideal with Tractor mounted Compressors (K.G. Khosla) and VT4 type (Atlas-Copco) Compressors. Special Mining hoses with higher working temp. are being introduced shortly.

Please put on trial immediately our DUPLON hoses in case you have not tried so far.

CAR WASHING HOSE

For washing vehicles at Service Stations. Working Pressure : 30/40 kg/cm² Range : 10 & 12 mm. Only hose which can fully withstand the unavoidable oil/grease contamination in garage.

SUPER SPRAY HOSE

Ideal for spraying Agricultural Pesticides - Range : 10 & 12 mm ID.

WELDING HOSES

For Gas Welding - available in Red & Blue colours. Range : 8 mm & 10 mm. Although PVC can offer more service life than rubber, care should be taken not to get the hose indirect contact with red hot metal surface during the process of welding.

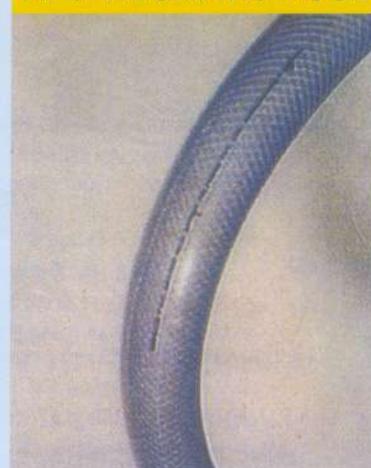
WATER GARDEN HOSE (GREEN COLOUR)

For Gardening & other Water Delivery purposes. Range : 12 mm to 25 mm

HOSE CLAMPS

For low pressure air hoses, you can use worm Drive Hose Clips whereas for high pressure pneumatic applications use ONLY M/I Hoe clamps made of Malleable Iron.

AIR/PNEUMATIC HOSE



A QUALITY PRODUCT FROM THE HOUSE OF DUTRON

For further details, please contact

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Phone : 26561849, 26427522 Fax : (91) (079) 26420894 E-mail : sales@dutronindia.com



It rolls up flat & Pumps up high



DUPLON
FLAT HOSE



DUPLON
FLAT HOSE

A QUALITY PRODUCT
FROM THE MFR. OF

DUTRON
Kanaflex



Now the fastest, quickest & most economical method of transferring liquids today with **DUPLON Lay Flat Hose**

DUPLON FLAT HOSE is the first product made in India of this kind from HOUSE OF DUTRON. It is composed of flexible PVC with synthetic yarn reinforcement to provide extra strength.

DUPLON FLAT HOSE is a superior replacement to conventional cotton / all plastic flat delivery hose pipes.

Advantages :

- **Fit it up, forget it**
Requires no maintenance. Do not rust, Corrode or require cathodic protection
- **Take it to any length**
Extruded in long continuous process for optimum choice of lengths
- **Roll up - Store or Carry**
Roll up easily, requires minimum storage space. And is light weight too
- **Use it the way you like**
Tough and Puncture proof. Can resist external pressure and abrasion in use. Gives a long service life. In case of any Puncture, we can get it repaired on the spot with the help of PVC cement.
- **Touch and feel**
Remains soft and pliable even in extremely cold weather and at below freezing temperature
- **Weather it out**
Offers all weather flexibility. Water absorption is nil. Unaffected by elements.
- **Reach the height**
Can carry water / liquids in higher heads and in hilly areas without inflation

Nominal size mm	Inside dia. mm	Wall Thickness mm	Pressure at 30°C		Standard Lengths mtrs
			Working Pressure kg/cm ²	Bursting Pressure kg/cm ²	
25	26 ± 1	1.0 ± 0.1	4	11 to 12	50 / 60 / 100
40	41 ± 1	1.0 ± 0.1	4	11 to 12	50 / 60 / 100
50	53 ± 1	1.1 ± 0.1	3	8 to 9	50 / 60 / 100
65	66 ± 1	1.2 ± 0.1	3	6 to 7	50 / 60 / 100
75	82 ± 1	1.2 ± 0.1	3	6 to 7	50 / 60 / 100
100	104 ± 2	1.2 ± 0.1	3	6 to 7	50 / 60 / 100
150	154 ± 3	1.8 ± 0.1	3	5 to 6	50 / 60 / 100
200	204 ± 3	2.3 ± 0.2	2	3 to 4	50 / 60 / 100
250	255 ± 3	2.5 ± 0.2	2	2.5 to 3	50 / 60 / 100
300	309 ± 3	2.7 ± 0.3	2	2.5 to 3	50 / 100

*Application of Flat Hose is for delivery purpose, consider maximum bursting pressure 1.5 to 2.5 times the working pressure for better application of the hose.

Applications :

In Agriculture use mainly as Delivery Hose. At Construction sites, Mines and Quarries, flushing is faster with Duplon Flat Hose. For Transferring Corrosive Chemicals and Liquids in Chemical factories. Ideal for use as a drainage hose in emergency / flood / disaster situations when large quantities of water must be moved quickly.

Manufactured by :

DUTRON PLASTICS (BHARUCH)

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E-mail : sales@dutronindia.com WebSite : www.dutronindia.com

OTHER RANGE OF PRODUCTS



DUTRON®
WATER TANKS



DUTRON®
CPVC
Pipes & Fittings



DUTRON®
HiFlo
uPVC SOLVENT WELD
PLUMBING SYSTEM



DUTRON®
S.W.R. uPVC
PIPES & FITTINGS



DUTRON®
Drain
UNDERGROUND DRAINAGE
PVC-U PIPE



DUTRON®
uPVC Agricultural
Pipes & Fittings



DUTRON®
uPVC
COLUMN PIPES



DUTRON®
uPVC CASING PIPES



DUTRON®
DWC
DOUBLE WALL
CORRUGATED PIPE



DUTRON®
HDPE
PIPES & FITTINGS



DUPLON®
BRAIDED PVC HOSE



DUPLON®
FLAT HOSE

DUTRON®
Kanaflex

SUCTION & DELIVERY HOSE

DUTRON PLASTICS PRIVATE LIMITED

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Website : www.dutronindia.com

DUTRON®
Kanaflex
SUCTION & DELIVERY HOSE

A true companion of
Farmers & Industries



MEDIUM DUTY
HOSE (GREEN)



HEAVY DUTY
HOSE (GREY)



OIL HOSE
(BLUE)



NON-TOXIC HOSE
(TRANSPARENT)



DUCT HOSE
(GREY)



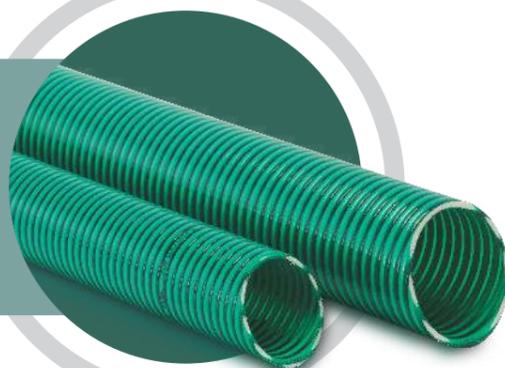
DUTRON
LINE

Spreading Joy
Enhancing Lives

Dutron Kanaflex is considered as the most trusted name in flexible PVC hose pipes in India and around the world. It is most suited for suction and delivery of liquids/gases in varied applications. Dutron Kanaflex PVC Hoses are convenient, light weight and flexible compared to rubber hose. Dutron Kanaflex PVC Hose are manufactured with the technical know-how from Totaku Industries Inc., Japan since 1970's.

Composition: Dutron Kanaflex PVC Hoses are made by adequate reinforcement secured by proper placement of hard spirals of rigid PVC in soft PVC wall that imparts strength and flexibility.

MEDIUM DUTY HOSE (GREEN)



Key Features

- Light in Weight.
- Flexibility is retained – no cracks or brittleness
- No kinking, bulging or bursting even in the most severe working conditions.
- Excellent resistance to high pressure, hence, ideal for high pressure suction & delivery of water.
- Good resistance to Saline Water, Light Acids, Alkalies and other chemicals excepting solvents.
- superior efficiency and offers more service life compared to Rubber Suction & Delivery Hoses.

Applications

Medium Duty Suction & Delivery of water for irrigation purpose in agriculture, saline water, light acids, alkalies and other chemicals except solvents.

Product Specifications

Normal Size		Diameter (mm)		Bending Radius (mm)	Pressure at 30° C		Standard Lengths (mtrs.)
Inches	mm	ID	OD		Working (kg/cm ²)	Bursting (kg/cm ²)	
¾	20	19.0 ± 0.5	23.6 ± 1.0	45	7.0	24.0	30/50
1	25	25.4 ± 0.5	30.0 ± 1.0	55	7.0	23.0	30/50
1¼	30	31.8 ± 0.5	36.8 ± 1.0	75	6.5	20.0	30/50
1½	40	38.2 ± 0.5	43.3 ± 1.0	95	5.0	16.0	30/50
2	50	50.8 ± 0.5	57.8 ± 1.5	122	4.0	16.0	30/45/50
2¼	60	61.0 ± 0.5	69.20 ± 1.5	160	4.0	16.0	30
2½	65	63.5 ± 1.0	72.0 ± 1.5	160	4.0	16.0	30/45
3	75	76.2 ± 1.0	85.0 ± 1.5	272	3.5	15.0	30/36
3½	90	89.6 ± 1.0	99.6 ± 2.0	290	3.5	14.0	30
4	100	101.2 ± 1.0	112.2 ± 2.0	290	3.5	11.0	15/18/30

Recommended Maximum working temperature: 60/70°C



HEAVY DUTY HOSE (GREY)



Key Features

- Excellent resistance to high pressure can easily withstand absolute vacuum too
- Abrasion Resistant
- No kinking, bulging or bursting even in the most rigorous working conditions
- Excellent resistance to saline water, light acids, alkalies & other chemicals excepting solvents
- More efficient & economical than rubber hose
- Smooth surface inside results in quick conveyance of fluids

Applications

Heavy Duty Suction and Delivery of abrasive materials in industries like coal & mineral in mines, stone & lime in quarries, shipping, sewerage disposal, aqua culture, paper mills, cement, chemicals, petrochemicals, oil exploration, construction, fire-fighting equipments, etc.

Product Specifications

Normal Size		Diameter (mm)		Bending Radius (mm)	Pressure at 30° C		Standard Lengths (mtrs.)
Inches	mm	ID	OD		Working (kg/cm ²)	Bursting (kg/cm ²)	
1	25	25.4 ± 0.5	31.5 ± 0.5	48	8	25.0	30
1¼	30	31.8 ± 0.5	36.8 ± 0.5	68	7	21.0	30
1½	40	38.2 ± 0.5	46.3 ± 1.5	70	5.5	18.0	30
2	50	50.8 ± 0.5	60.8 ± 1.5	100	4.5	18.0	30
2½	65	63.5 ± 1.0	74.5 ± 1.5	120	4.5	18.0	30
3	75	76.2 ± 1.0	87.2 ± 1.5	155	4.5	18.0	30
4	100	101.2 ± 1.5	114.2 ± 2.0	213	4.0	14.0	15/18/30
5	125	126.8 ± 1.5	141.0 ± 2.0	230	3.0	10.0	15/18
6	150	152.4 ± 1.5	169.4 ± 2.0	375	2.5	9.0	15/18
8	200	203.2 ± 2.0	224.4 ± 2.0	600	2.5	8.0	4.5/6
10	250	254.0 ± 2.0	284.0 ± 2.0	1000	2.5	8.0	4.5/6
12	300	304.0 ± 2.0	340.0 ± 2.0	1000	2.5	6.0	4.5/6

Recommended Maximum working temperature: 60/70°C

PU LINED HEAVY DUTY HOSE

Also available specially designed highly abrasive resistant Heavy duty (Grey) PVC hose with polyurethane (PU) coating at inner side for conveying high abrasive materials. Size 40mm to 300mm.

**Details will be provided on request.



OIL HOSE (BLUE)



Key Features

- More flexible than rubber hoses
- Made from special polymer compound that provides resistance to oil and other chemicals
- No kinking, bulging or bursting even in the most rigorous working conditions
- No Aging
- Excellent resistance to high vacuum / pressure, external impact
- High flow rate due to smooth inside surface leading to minimum friction loss and saving energy
- No aging hence our oil hose are durable for a very long period & thus proves economical
- Lighter weight hence easy to handle

Applications

Suction and Discharge of oils, conveying Diesel fuels, Kerosene, Liquid Petroleum products, Lubricating oils, Mineral oils, Light oils, Transformer oils

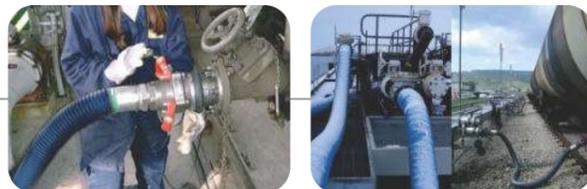
Product Specifications

Normal Size		Diameter (mm)		Bending Radius (mm)	Pressure at 30° C		Standard Lengths (mtrs.)
Inches	mm	ID	OD		Working (kg/cm ²)	Bursting (kg/cm ²)	
1	25	25.4 ± 0.5	31.5 ± 1.0	48	8.0	22	30
1¼	30	31.8 ± 0.5	39.0 ± 1.0	68	7.0	21	30
1½	40	38.1 ± 0.5	46.4 ± 1.0	70	5.5	18	30
2	50	50.8 ± 0.5	60.8 ± 1.5	100	4.5	18	30
2½	65	63.5 ± 1.0	74.5 ± 1.5	120	4.5	18	30
3	75	76.2 ± 1.0	87.2 ± 1.5	155	4.5	18	30
4	100	101.2 ± 1.0	114.2 ± 1.5	213	4.0	14	15/18/30

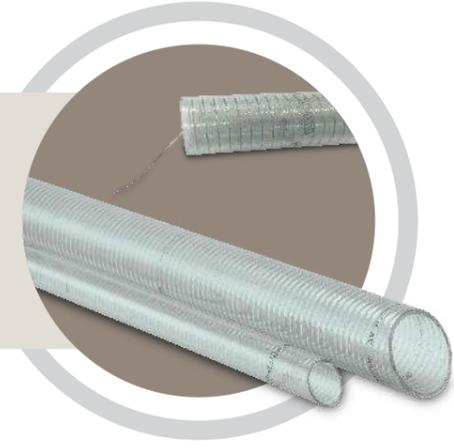
Recommended Maximum working temperature: 60/70°C

Also available flexible oil hose with **copper conductive wire**.

Details will be provided on request.



NON-TOXIC HOSE (TRANSPARENT)



Key Features

- Made from special non-toxic ingredients, that provide safe use in food products
- Good resistance to oil & other chemicals
- No Aging
- Excellent resistance to high vacuum/pressure and external impact
- Total transparency allows one better visualization of the products
- Its total smooth internal surface does not allow setting of residues, preventing contaminations
- Total smooth inside surface leading to minimum friction loss and saving energy & assures high flow rate

Applications

Suction and Discharge of milk, beverages, ice-cream, chocolates, peppermint, cereals, beer, wine and other food items.

Product Specifications

Normal Size		Diameter (mm)		Bending Radius (mm)	Pressure at 30° C		Standard Lengths (mtrs.)
Inches	mm	ID	OD		Working (kg/cm ²)	Bursting (kg/cm ²)	
1	25	25.4 ± 0.5	30.0 ± 1.0	55	7.0	23	30
1¼	30	31.8 ± 0.5	36.8 ± 1.0	75	6.5	20	30
1½	40	38.2 ± 0.5	44.8 ± 1.0	95	4.5	16	30
2	50	50.8 ± 1.5	57.8 ± 1.0	122	4.5	16	30
2½	65	63.5 ± 1.0	72.0 ± 1.5	160	4.5	16	30
3	75	76.2 ± 1.0	85.0 ± 1.5	272	4.5	15	30
4	100	101.2 ± 1.0	112.2 ± 1.5	290	3.5	11	15/18/30

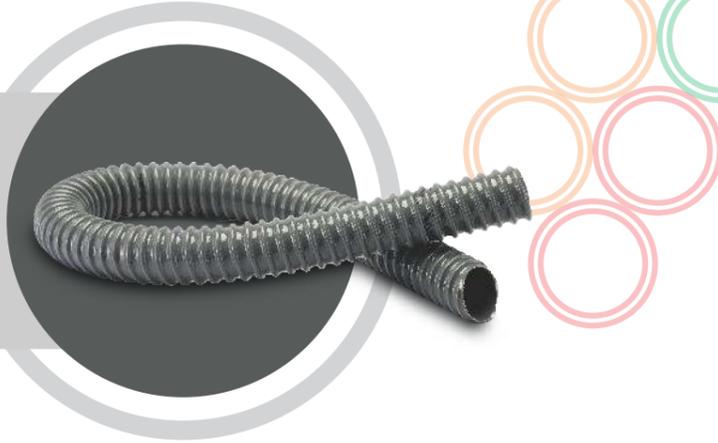
Recommended Maximum working temperature: 60/70°C

Also available in special size and non-toxic flexible hose with **copper conductive wire**.

Details will be provided on request.



DUCT HOSE (GREY)



Key Features

- Light weight & flexibility makes hose easier to carry and install
- Excellent resistance to most of the chemicals, acids & alkalis
- Excellent abrasion resistance which can effectively handle dirt, fibre chips, etc.
- Economical to install

Applications

Duct hose has excellent quality, is useful in various field such as Conveying air and gases, Cold and warm air installation, cooling of motors, Heating Ventilating and Air Conditioning systems, Fume removal, Handling Dust and Light materials, Vacuum Cleaning equipment, Transporting wheat and other cereals, Transporting powder, gases, liquids. Removing fumes from factories, fuel tanks & underground installations

Product Specifications

Normal Size		Diameter (mm)		Bending Radius (mm)	Standard Lengths (mtrs.)
Inches	mm	ID	OD		
½	16	16.6	22.15	22	30
¾	22	22.0	28.60	35	30
1	25	25.4	32.10	45	30
1¼	30	31.8	38.64	50	30
1½	40	38.0	45.00	55	30
2	50	50.8	57.60	65	30
2½	60	60.5	69.60	75	30
3	75	76.5	84.50	95	30
4	100	102.0	112.00	125	30
5	125	127.0	132.50	140	15
6	150	152.4	161.90	205	15
6¼	160	160.0	169.60	210	15
8	200	204.0	214.40	270	10/15
10	250	253.0	264.00	370	10/15
12	300	305.0	320.00	370	10

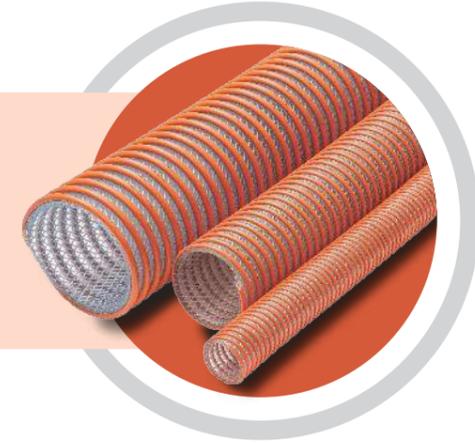
Recommended Maximum working temperature: 60/70°C

80 mm, 90mm, 110mm, 140mm, 225mm sizes are also available on request.

Also available Heavy Duct Hose. Size: 100 to 200 mm.



DUTRON line



Key Features

- **Fabric Reinforcement**
Designed with high tensile strength yarn jacket to handle both suction and high pressure discharge applications.
- **Transparent Construction**
"See the Flow" allows for visual confirmation of material flow.
- **Easy Slide Helix**
Rigid helix design protects hose tube from cover wear and allows hose to slide easily over rough surface.
- Easy to handle
- No elongation occurs during application.

Construction

Flexible PVC, Rigid PVC Helix, Synthetic Braiding, Smooth Bore, Corrugated Outer surface.

Applications

High Pressure Water Suction and Vacuum applications, Irrigation Lines, Fish suction, Mining, Suction and discharge of sand, cement, etc., Suction and press-transfer of various grains, powder & granules, Pumping at places like construction sites, Heavy industries & Submarines.

Product Specifications

Normal Size		Diameter (mm)		Pressure at 30° C		Bending Radius (mm)	Vacuum Rating at 30° C (hg)	Standard Length (mtrs.)
Inches	mm	ID	OD	Working (kg/cm ²)	Bursting (kg/cm ²)			
1 ½	40	38.1	49	7	20	65	28	30
2	50	50.8	64	7	20	100	28	30
2 ½	65	63.5	76	7	20	125	28	30
3	75	76.2	91	6	18	150	28	30
4	100	101.6	118	5	16	200	25	15/18/30
5	125	127.0	151	5	15	230	25	15/18
6	150	152.4	182	5	15	330	25	15/18
8	200	203.2	236	4	12	450	20	6

Also providing bending coil to be fitted at the both end of the hose.

Tolerance ± 2%, *Operation temp. upto 70°C.



DUTRON®

**HDPE
PIPES & FITTINGS**

Spreading **Joy**
Enhancing Lives



Economical, Durable & Stronger

A better substitute to conventional pipes for longer life

IS : 4984 IS : 14333
 
CM/L-7023350 CM/L-7276783

The DUTRON Group

Dutron Group is one of the leading plastic pipe processors in India for the last 5 decades with a wide range of plastic pipe products to suit almost all applications like Agriculture, Construction, Industrial Plumbing, Marine, etc.

The DUTRON Products

- DUTRON Kanaflex Suction & Delivery Hose
- DUTRON Braided PVC Hose
- DUTRON Flat Delivery Hose
- DUTRON uPVC Agricultural Pipes & Fittings
- DUTRON CPVC Pipes & Fittings
- DUTRON SWR Pipes & Fittings
- DUTRON uPVC Hiflo Plumbing System
- DUTRON Casing Pipes
- DUTRON Sprinkler System
- DUTRON HDPE Sheets
- DUTRON Water Tanks
- DUTRON DWC Pipes
- DUTRON HDPE Pipes manufactured in high-tech state-of-the-art machineries. The plant was setup using technology from Wavin Overseas BV, Netherlands, the largest plastic pipe processors in Europe.

DUTRON[®]
HDPE
PIPES & FITTINGS



○ Most Advanced System in Quality Assurance

Range

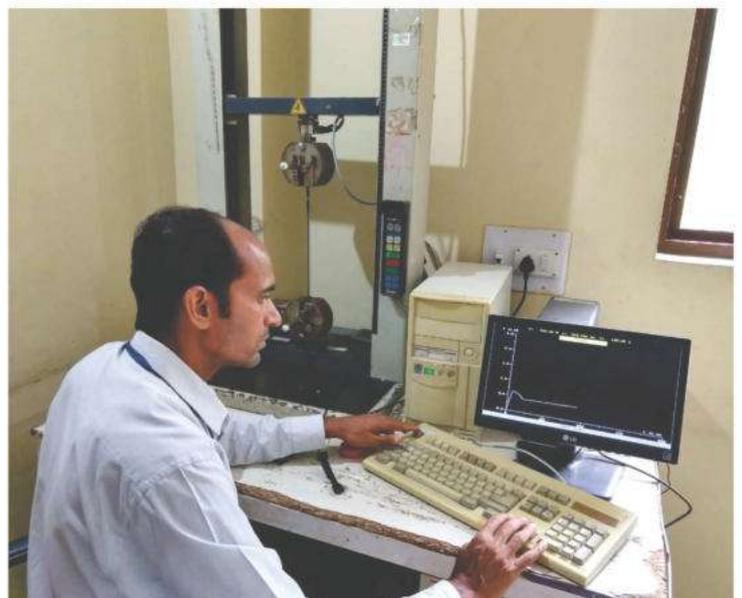
20 mm OD to 710 mm OD in all pressure classes

Specifications

- HDPE PIPES IS 4984 : 2016
- IS 14333 : 1996
- ISO 4427
- ASTM D3350 / F714 and D3035

Quality Assurance

Well equipped laboratory with totally computerized international standard testing machines for carrying out quality checks from raw material to finished goods. This ensures our valued customers, HDPE pipes of International Standards.



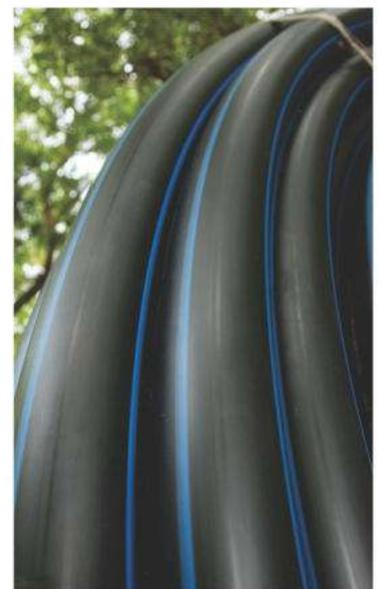
Advantages of Dutron HDPE Pipes over Traditional Pipes

- Light Weight**
 Helps easy handling and speedy installation of pipes.
- Flexibility**
 Pipes up to 110 mm dia can be supplied in coil form which makes laying of pipe much faster and economical.
- Toughness and Flexural Strength**
 Due to excellent impact resistance, it can withstand various loads like earth movement, traffic load etc. It can be safely used for low temperature up to -40°C.
- Smooth Inner Surface**
 This reduce frictional losses and hence saves energy.
- Chemical Resistance**
 Excellent resistance to most corrosive chemicals, acids and alkalis.
- Abrasion Resistance**
 Capable of conveying abrasive materials like slurry, sand, boiler ash, ores, food grains, cola, etc.
- Thermal Conductivity**
 $11-12.4 \times 10^{-4}$ Cal/Sec. cm.°C.
- Electrical Properties**
 Dielectric strength 800 kV/cm²
- Service Life**
 Almost maintenance free for decades.



Classification of Pipe Material

Material Grade	MRS (Min. Required Strength) of material in Mpa at 20°C – 50 Years	Min. allowable Hydrostatic Design Stress in Mpa	
		At 20°C	At 30°C
PE 63	6.3	5.0	4.0
PE 80	8.0	6.3	5.0
PE 100	10.0	8.0	6.3



Applications

HDPE - An engineering plastic most ideal for effluent treatment plants and chemical handling has been accepted worldwide as an economical, efficient and easy to handle replacement to conventional piping's like MS, CI, CS, SS, Spun pipes, AC pipes and concrete reinforced pipes for almost all applications.

Industrial Applications

- Conveying corrosive effluents of chemical and other process industries like petrochemical, paper, dye-stuffs, rayon and fertilizers.
- Conveying acids, alkalies and other corrosive chemicals.
- Sewage handling and solid waste management pipelines.
- Cross country water management pipelines.
- Underwater pipelines.
- Cable conduit lines.
- On-shore and off-shore pipelines for dredging operation.
- DM-RODM plants.
- Air conditioning and ducting.
- Supply of compressed air in mines, factories and construction sites, de-watering of mines, sand stoying and filling, transportation of abrasive slurry, mineral ores, concentrates, tailing, slimes and paper pulp.
- Chilled water circulation.
- Handling edible oil, fruit juices, pulps, milk and other food materials.
- Treated radioactive waste

Gas Distribution

For carrying natural gas, bio-etc. for domestic and industrial purposes.

Potable Water Supply

Water supply in rural and urban areas even in sub-zero temperature.

Project Execution on Turn-key basis

Dutron's project division render services for design, cost estimation, installation, testing and commissioning of projects of any size, anywhere and at any time. Our efficient welding teams are equipped with fully automatic imported butt fusion welding machines and trained operators for carrying out HDPE pipe welding and laying under leadership of qualified engineers.

Dutron has vast experience in handling various projects like portable water lines, ETP and CETP, dredging lines both on-shore and off-shore, de-watering lines for mines, under-water pipelines, DM-RODM Plants, chemical and pharmaceutical process lines, brine pumping lines for salt works, distillery units, natural gas distribution network and cable conduit lines.

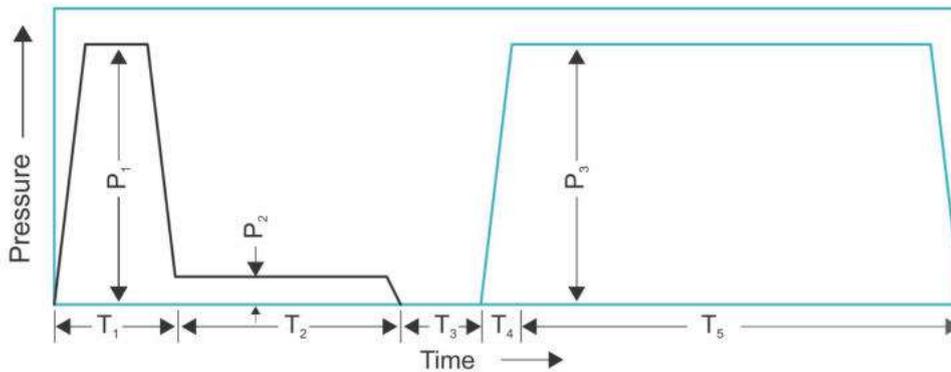


Butt Fusion Welding

Basic procedure is to face pipe ends and temperature is raised to 190-210°C by means of hot plate (mirror) placed between them. The molten joint surfaces are then brought together with a firm, constant pressure and then allowed to cool. Thus, both the faces join together to form a perfectly homogeneous joint. To avoid the manual error, Dutron uses imported fully automatic Butt Fusion welding machines that ensure excellent quality of joints.

Dutron does not recommend manual welding, since it carries risk of human errors like uneven temperature, welding pressure variation, mis-alignment of joint surfaces etc. which would lead to joint breakage & leakage thereafter.

Butt – Fusion Welding Cycle



- T1 = Initial heating time
 - T2 = Release pressure time
 - T3 = Change over time
 - T4 = Welding pressure built-up time
 - T5 = Cooling time
-
- P1 = Initial pressure
 - P2 = Release pressure
 - P3 = Welding pressure

Pipe Support Distance Chart for Ground HDPE Pipelines (Mtrs.)

Pipe Dia mm Temp. °C	90	110	125/140	160/180	200/225	250	315	355	400	450
20	1.0	1.2	1.4	1.5	1.6	1.8	2.1	2.3	2.5	2.5
30	1.0	1.1	1.3	1.4	1.5	1.7	1.9	2.0	2.1	2.3
40	0.9	1.0	1.1	1.3	1.4	1.5	1.7	1.8	1.9	2.0
50	0.8	0.9	1.0	1.2	1.3	1.4	1.6	1.7	1.8	1.9

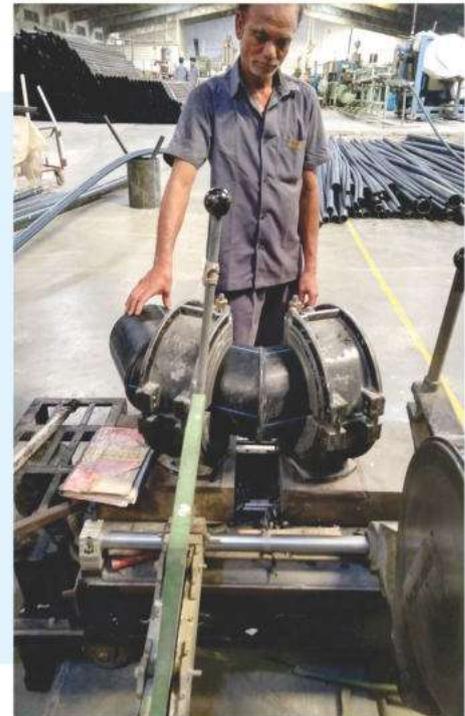
Note: Above distance between two supports are for PN 2.5 & PN 4 class.

For PN 6 and PN 10 class pipes, distance to be multiplied by 1.1 and 1.25 respectively.



○ Welding Procedure

- Set welding mirror temperature between 190 and 210°C
- Clamp pipes to be welded in both fixtures of the machine
- Make both surfaces parallel to each other
- Insert mirror between both pipes
- Apply initial pressure according to pipe size and pressure class as per standard data sheet as for type of M/C
- Release pressure as per the standard data for specified time interval
- Remove welding mirror
- Press two surfaces towards each other and apply welding pressure as per standard data sheet
- Cool down the welded joint for giving cooling time



○ Testing of the Pipe

Testing shall be carried out after the completion of whole length or in parts. Testing shall be carried out with 1.5 time the working pressure. Both the open ends of the pipe under testing shall be plugged either by providing caps or by sluice valve. If necessary, both the ends shall be properly anchored. Number of plug points with ferrule of required diameters shall be provided to serve as injection points, air relief points, etc. The pressure shall be applied by means of a manually operated hand force pump or hydraulic pressure pump and the pressure shall be maintained for half an hour. In case the trench is already back filled, the pressure shall be maintained for at least an hour. While undergoing the test, the pipes shall be stuck with a small hammer to detect any leakage through the hair cracks. For pipe laid on steep gradients or on vertical walls, the test shall be carried out at the lower end of the pipe.

Any pipe or joints showing the slightest leakage shall be replaced or redone, as required and then tested again. No pipe installation shall be accepted unless the leakage is less than 230 liters/day/km per 25mm dia. of the pipe of 3.66 m length, for a working pressure of 10 Kg/m². For other lengths and diameters of pipe the above shall be proportionate.



Pipe Dimensions

IS 4984 : 2016 – Material Grade PE 63

(All Dimensions in mm) Wall Thickness of pipes for Pressure Rating of

SDR PE 63	SDR 41		SDR 33		SDR 26		SDR 21		SDR 17		SDR 13.6		SDR 11		SDR 9		SDR 7.4		SDR 6	
	PN 2		PN 2.5		PN 3.2		PN 4		PN 5		PN 6		PN 8		PN 10		PN 12.5		PN 16	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.								
16															1.8	2.1	2.2	2.5	2.7	3.1
20													1.9	2.2	2.3	2.6	2.7	3.1	3.4	3.8
25										1.9	2.2	2.3	2.6	2.8	3.2	3.4	3.8	4.2	4.7	
32								1.9	2.2	2.4	2.7	2.9	3.3	3.6	4.1	4.4	4.9	5.4	6.0	
40							1.9	2.2	2.4	2.7	3.0	3.4	3.7	4.2	4.5	5.1	5.4	6.0	6.7	7.5
50					2.0	2.3	2.4	2.7	3.0	3.4	3.7	4.2	4.6	5.2	5.6	6.3	6.8	7.6	8.4	9.3
63					2.5	2.9	3.0	3.4	3.7	4.2	4.7	5.3	5.8	6.5	7.0	7.8	8.6	9.6	10.5	11.7
75	1.9	2.2	2.3	2.6	2.9	3.3	3.6	4.1	4.5	5.1	5.6	6.3	6.9	7.7	8.4	9.3	10.2	11.3	12.5	13.9
90	2.2	2.5	2.8	3.2	3.5	4.0	4.3	4.8	5.3	5.9	6.7	7.5	8.2	9.1	10.0	11.1	12.2	13.5	15.0	16.6
110	2.7	3.1	3.4	3.8	4.3	4.8	5.3	6.0	6.5	7.3	8.1	9.0	10.0	11.1	12.3	13.6	14.9	16.5	18.4	20.3
125	3.1	3.5	3.8	4.3	4.8	5.4	6.0	6.7	7.4	8.2	9.2	10.2	11.4	12.7	13.9	15.4	16.9	18.7	20.9	23.1
140	3.5	4.0	4.3	4.8	5.4	6.0	6.7	7.5	8.3	9.2	10.3	11.4	12.8	14.2	15.6	17.3	19.0	21.0	23.4	25.8
160	3.9	4.4	4.9	5.5	6.2	6.9	7.7	8.6	9.5	10.6	11.8	13.1	14.6	16.2	17.8	19.7	21.7	24.0	26.7	29.5
180	4.4	4.9	5.5	6.2	6.8	7.8	8.6	9.6	10.6	11.8	13.3	14.7	16.4	18.1	20.0	22.1	24.4	26.9	30.0	33.1
200	4.9	5.5	6.1	6.8	7.7	8.6	9.6	10.7	11.8	13.1	14.7	16.3	18.2	20.1	22.3	24.6	27.1	29.9	33.4	36.8
225	5.5	6.2	6.9	7.7	8.7	9.7	10.8	12.0	13.3	14.7	16.6	18.4	20.5	22.7	25.0	27.6	30.5	33.7	37.5	41.4
250	6.1	6.8	7.6	8.5	9.7	10.8	12.0	13.3	14.7	16.3	18.4	20.3	22.8	25.2	27.8	30.7	33.8	37.3	41.7	46.0
280	6.9	7.7	8.5	9.5	10.8	12.0	13.4	14.8	16.5	18.3	20.6	22.8	25.5	28.2	31.2	34.4	37.9	41.8	46.7	51.5
315	7.7	8.6	9.6	10.7	12.2	13.5	15.0	16.6	18.6	20.6	23.2	25.6	28.7	31.7	35.0	38.6	42.6	47.0	52.5	57.9
355	8.7	9.7	10.8	12.0	13.7	15.2	16.9	18.7	20.9	23.1	26.1	28.8	32.3	35.6	39.5	43.6	48.0	52.9	59.2	65.2
400	9.8	10.9	12.2	13.5	15.4	17.0	19.1	21.1	23.6	26.1	29.5	32.6	36.4	40.1	44.5	49.1	54.1	59.6	66.7	73.5
450	11.0	12.2	13.7	15.2	17.3	19.1	21.5	23.9	26.5	29.3	33.1	36.5	40.9	45.1	50.0	55.1	60.9	67.1	75.0	82.6
500	12.2	13.5	15.2	16.8	19.3	21.3	23.9	26.4	29.5	32.6	36.8	40.6	45.5	50.2	55.6	61.3	67.6	74.5	83.4	91.8
560	13.7	15.2	17.0	18.8	21.6	23.9	26.7	29.5	33.0	36.4	41.2	45.4	50.9	56.1	62.3	68.6	75.7	83.4	93.4	102.8
630	15.4	17.0	19.1	21.1	24.3	26.8	30.0	33.1	37.1	40.9	46.4	51.1	57.3	63.1	70.0	77.1	85.2	93.8	105.0	115.6
710	17.3	19.1	21.6	23.9	27.3	30.1	33.9	37.4	41.8	46.1	52.2	57.5	64.6	71.2	78.9	86.9	96.0	105.7	118.4	130.3

IS 4984 : 2016 – Material Grade PE 80

(All Dimensions in mm) Wall Thickness of pipes for Pressure Rating of

SDR PE 80	SDR 41		SDR 33		SDR 26		SDR 21		SDR 17		SDR 13.6		SDR 11		SDR 9		SDR 7.4		SDR 6	
	PN 2.5		PN 3.2		PN 4		PN 5		PN 6		PN 8		PN 10		PN 12.5		PN 16		PN 20	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.								
16															1.8	2.1	2.2	2.5	2.7	3.1
20													1.9	2.2	2.3	2.6	2.7	3.1	3.4	3.8
25											1.9	2.2	2.3	2.6	2.8	3.2	3.4	3.8	4.2	4.7
32									1.9	2.2	2.4	2.7	2.9	3.3	3.6	4.1	4.4	4.9	5.4	6.0
40							1.9	2.2	2.4	2.7	3.0	3.4	3.7	4.2	4.5	5.1	5.4	6.0	6.7	7.5
50					2.0	2.3	2.4	2.7	3.0	3.4	3.7	4.2	4.6	5.2	5.6	6.3	6.8	7.6	8.4	9.3
63					2.5	2.9	3.0	3.4	3.7	4.2	4.7	5.3	5.8	6.5	7.0	7.8	8.6	9.6	10.5	11.7
75	1.9	2.2	2.3	2.6	2.9	3.3	3.6	4.1	4.5	5.1	5.6	6.3	6.9	7.7	8.4	9.3	10.2	11.3	12.5	13.9
90	2.2	2.5	2.8	3.2	3.5	4.0	4.3	4.8	5.3	5.9	6.7	7.5	8.2	9.1	10.0	11.1	12.2	13.5	15.0	16.6
110	2.7	3.1	3.4	3.8	4.3	4.8	5.3	6.0	6.5	7.3	8.1	9.0	10.0	11.1	12.3	13.6	14.9	16.5	18.4	20.3
125	3.1	3.5	3.8	4.3	4.8	5.4	6.0	6.7	7.4	8.2	9.2	10.2	11.4	12.7	13.9	15.4	16.9	18.7	20.9	23.1
140	3.5	4.0	4.3	4.8	5.4	6.0	6.7	7.5	8.3	9.2	10.3	11.4	12.8	14.2	15.6	17.3	19.0	21.0	23.4	25.8
160	3.9	4.4	4.9	5.5	6.2	6.9	7.7	8.6	9.5	10.6	11.8	13.1	14.6	16.2	17.8	19.7	21.7	24.0	26.7	29.5
180	4.4	4.9	5.5	6.2	6.8	7.8	8.6	9.6	10.6	11.8	13.3	14.7	16.4	18.1	20.0	22.1	24.4	26.9	30.0	33.1
200	4.9	5.5	6.1	6.8	7.7	8.6	9.6	10.7	11.8	13.1	14.7	16.3	18.2	20.1	22.3	24.6	27.1	29.9	33.4	36.8
225	5.5	6.2	6.9	7.7	8.7	9.7	10.8	12.0	13.3	14.7	16.6	18.4	20.5	22.7	25.0	27.6	30.5	33.7	37.5	41.4
250	6.1	6.8	7.6	8.5	9.7	10.8	12.0	13.3	14.7	16.3	18.4	20.3	22.8	25.2	27.8	30.7	33.8	37.3	41.7	46.0
280	6.9	7.7	8.5	9.5	10.8	12.0	13.4	14.8	16.5	18.3	20.6	22.8	25.5	28.2	31.2	34.4	37.9	41.8	46.7	51.5
315	7.7	8.6	9.6	10.7	12.2	13.5	15.0	16.6	18.6	20.6	23.2	25.6	28.7	31.7	35.0	38.6	42.6	47.0	52.5	57.9
355	8.7	9.7	10.8	12.0	13.7	15.2	16.9	18.7	20.9	23.1	26.1	28.8	32.3	35.6	39.5	43.6	48.0	52.9	59.2	65.2
400	9.8	10.9	12.2	13.5	15.4	17.0	19.1	21.1	23.6	26.1	29.5	32.6	36.4	40.1	44.5	49.1	54.1	59.6	66.7	73.5
450	11.0	12.2	13.7	15.2	17.3	19.1	21.5	23.9	26.5	29.3	33.1	36.5	40.9	45.1	50.0	55.1	60.9	67.1	75.0	82.6
500	12.2	13.5	15.2	16.8	19.3	21.3	23.9	26.4	29.5	32.6	36.8	40.6	45.5	50.2	55.6	61.3	67.6	74.5	83.4	91.8
560	13.7	15.2	17.0	18.8	21.6	23.9	26.7	29.5	33.0	36.4	41.2	45.4	50.9	56.1	62.3	68.6	75.7	83.4	93.4	102.8
630	15.4	17.0	19.1	21.1	24.3	26.8	30.0	33.1	37.1	40.9	46.4	51.1	57.3	63.1	70.0	77.1	85.2	93.8	105.0	115.6
710	17.3	19.1	21.6	23.9	27.3	30.1	33.9	37.4	41.8	46.1	52.2	57.5	64.6	71.2	78.9	86.9	96.0	105.7	118.4	130.3

IS 4984 : 2016 – Material Grade PE 100

(All Dimensions in mm) Wall Thickness of pipes for Pressure Rating of

SDR PE 100	SDR 41		SDR 33		SDR 26		SDR 21		SDR 17		SDR 13.6		SDR 11		SDR 9		SDR 7.4		SDR 6	
	PN 3		PN 4		PN 5		PN 6		PN 8		PN 10		PN 12.5		PN 16		PN 20		-	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.								
16															1.8	2.1	2.2	2.5	2.7	3.1
20													1.9	2.2	2.3	2.6	2.7	3.1	3.4	3.8
25											1.9	2.2	2.3	2.6	2.8	3.2	3.4	3.8	4.2	4.7
32									1.9	2.2	2.4	2.7	2.9	3.3	3.6	4.1	4.4	4.9	5.4	6.0
40							1.9	2.2	2.4	2.7	3.0	3.4	3.7	4.2	4.5	5.1	5.4	6.0	6.7	7.5
50					2.0	2.3	2.4	2.7	3.0	3.4	3.7	4.2	4.6	5.2	5.6	6.3	6.8	7.6	8.4	9.3
63					2.5	2.9	3.0	3.4	3.7	4.2	4.7	5.3	5.8	6.5	7.0	7.8	8.6	9.6	10.5	11.7
75	1.9	2.2	2.3	2.6	2.9	3.3	3.6	4.1	4.5	5.1	5.6	6.3	6.9	7.7	8.4	9.3	10.2	11.3	12.5	13.9
90	2.2	2.5	2.8	3.2	3.5	4.0	4.3	4.8	5.3	5.9	6.7	7.5	8.2	9.1	10.0	11.1	12.2	13.5	15.0	16.6
110	2.7	3.1	3.4	3.8	4.3	4.8	5.3	6.0	6.5	7.3	8.1	9.0	10.0	11.1	12.3	13.6	14.9	16.5	18.4	20.3
125	3.1	3.5	3.8	4.3	4.8	5.4	6.0	6.7	7.4	8.2	9.2	10.2	11.4	12.7	13.9	15.4	16.9	18.7	20.9	23.1
140	3.5	4.0	4.3	4.8	5.4	6.0	6.7	7.5	8.3	9.2	10.3	11.4	12.8	14.2	15.6	17.3	19.0	21.0	23.4	25.8
160	3.9	4.4	4.9	5.5	6.2	6.9	7.7	8.6	9.5	10.6	11.8	13.1	14.6	16.2	17.8	19.7	21.7	24.0	26.7	29.5
180	4.4	4.9	5.5	6.2	6.8	7.8	8.6	9.6	10.6	11.8	13.3	14.7	16.4	18.1	20.0	22.1	24.4	26.9	30.0	33.1
200	4.9	5.5	6.1	6.8	7.7	8.6	9.6	10.7	11.8	13.1	14.7	16.3	18.2	20.1	22.3	24.6	27.1	29.9	33.4	36.8
225	5.5	6.2	6.9	7.7	8.7	9.7	10.8	12.0	13.3	14.7	16.6	18.4	20.5	22.7	25.0	27.6	30.5	33.7	37.5	41.4
250	6.1	6.8	7.6	8.5	9.7	10.8	12.0	13.3	14.7	16.3	18.4	20.3	22.8	25.2	27.8	30.7	33.8	37.3	41.7	46.0
280	6.9	7.7	8.5	9.5	10.8	12.0	13.4	14.8	16.5	18.3	20.6	22.8	25.5	28.2	31.2	34.4	37.9	41.8	46.7	51.5
315	7.7	8.6	9.6	10.7	12.2	13.5	15.0	16.6	18.6	20.6	23.2	25.6	28.7	31.7	35.0	38.6	42.6	47.0	52.5	57.9
355	8.7	9.7	10.8	12.0	13.7	15.2	16.9	18.7	20.9	23.1	26.1	28.8	32.3	35.6	39.5	43.6	48.0	52.9	59.2	65.2
400	9.8	10.9	12.2	13.5	15.4	17.0	19.1	21.1	23.6	26.1	29.5	32.6	36.4	40.1	44.5	49.1	54.1	59.6	66.7	73.5
450	11.0	12.2	13.7	15.2	17.3	19.1	21.5	23.9	26.5	29.3	33.1	36.5	40.9	45.1	50.0	55.1	60.9	67.1	75.0	82.6
500	12.2	13.5	15.2	16.8	19.3	21.3	23.9	26.4	29.5	32.6	36.8	40.6	45.5	50.2	55.6	61.3	67.6	74.5	83.4	91.8
560	13.7	15.2	17.0	18.8	21.6	23.9	26.7	29.5	33.0	36.4	41.2	45.4	50.9	56.1	62.3	68.6	75.7	83.4	93.4	102.8
630	15.4	17.0	19.1	21.1	24.3	26.8	30.0	33.1	37.1	40.9	46.4	51.1	57.3	63.1	70.0	77.1	85.2	93.8	105.0	115.6
710	17.3	19.1	21.6	23.9	27.3	30.1	33.9	37.4	41.8	46.1	52.2	57.5	64.6	71.2	78.9	86.9	96.0	105.7	118.4	130.3

IS 14333 : 2022 – Material Grade PE 63

(All Dimensions in mm) Wall Thickness of pipes for Pressure Rating of

SDR PE 63	SDR 41		SDR 33		SDR 26		SDR 21		SDR 17		SDR 13.6		SDR 11		SDR 9		SDR 7.4		SDR 6	
	PN 3		PN 2.5		PN 3.2		PN 4		PN 5		PN 6		PN 8		PN 10		PN 12.5		PN 16	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.								
63	—	—	—	—	2.5	2.9	3.0	3.4	3.8	4.3	4.7	5.3	5.8	6.5	7.0	7.8	8.6	9.6	10.5	11.7
75	2.0	2.3	2.3	2.7	2.9	3.3	3.6	4.1	4.5	5.1	5.6	6.3	6.9	7.7	8.4	9.4	10.2	11.4	12.5	13.9
90	2.2	2.6	2.8	3.2	3.5	4.0	4.3	4.9	5.3	6.0	6.7	7.5	8.2	9.2	10.0	11.1	12.2	13.6	15.0	16.6
110	2.7	3.1	3.4	3.9	4.3	4.9	5.3	6.0	6.5	7.3	8.1	9.1	10.0	11.1	12.3	13.7	14.9	16.5	18.4	20.4
125	3.1	3.6	3.8	4.3	4.9	5.5	6.0	6.7	7.4	8.3	9.2	10.3	11.4	12.7	13.9	15.4	16.9	18.7	20.9	23.1
140	3.5	4.0	4.3	4.9	5.4	6.1	6.7	7.5	8.3	9.3	10.3	11.5	12.8	14.2	15.6	17.3	19.0	21.0	23.4	25.9
160	4.0	4.5	4.9	5.5	6.2	7.0	7.7	8.6	9.5	10.6	11.8	13.1	14.6	16.2	17.8	19.7	21.7	24.0	26.7	29.5
180	4.4	5.0	5.5	6.2	7.0	7.8	8.6	9.6	10.6	11.8	13.3	14.8	16.4	18.2	20.0	22.1	24.4	27.0	30.0	33.1
200	4.9	5.5	6.1	6.9	7.7	8.6	9.6	10.7	11.8	13.1	14.8	16.4	18.2	20.2	22.3	24.7	27.1	30.0	33.4	36.9
225	5.5	6.2	6.9	7.7	8.7	9.7	10.8	12.0	13.3	14.8	16.6	18.4	20.5	22.7	25.0	27.6	30.5	33.7	37.5	41.4
250	6.1	6.9	7.6	8.5	9.7	10.8	12.0	13.3	14.8	16.4	18.4	20.4	22.8	25.2	27.8	30.7	33.8	37.3	41.7	46.0
280	6.9	7.7	8.5	9.5	10.8	12.0	13.4	14.9	16.5	18.3	20.6	22.8	25.5	28.2	31.2	34.5	37.9	41.8	46.7	51.5
315	7.7	8.6	9.6	10.7	12.2	13.6	15.0	16.6	18.6	20.6	23.2	25.7	28.7	31.7	35.0	38.6	42.6	47.0	52.5	57.9
355	8.7	9.7	10.8	12.0	13.7	15.2	17.0	18.8	20.9	23.1	26.2	29.0	32.3	35.7	39.5	43.6	48.0	52.9	59.2	65.3
400	9.8	10.9	12.2	13.6	15.4	17.1	19.1	21.2	23.6	26.1	29.5	32.6	36.4	40.2	44.5	49.1	54.1	59.7	66.7	73.5
450	11.0	12.2	13.7	15.2	17.4	19.3	21.5	23.8	26.5	29.3	33.1	36.6	41.0	45.2	50.0	55.1	60.9	67.1	75.0	82.6
500	12.2	13.6	15.2	16.9	19.3	21.4	23.9	26.4	29.5	32.6	36.8	40.6	45.5	50.2	55.6	61.3	67.6	74.5	83.4	91.9
560	13.7	15.2	17.0	18.8	21.6	23.9	26.7	29.5	33.0	36.4	41.2	45.5	51.0	56.2	62.3	68.7	75.7	83.4	93.4	102.9
630	15.4	17.1	19.1	21.2	24.3	26.9	30.0	33.1	37.1	41.0	46.4	51.2	57.3	63.2	70.0	77.1	85.2	93.9	105.0	115.6
710	17.4	19.3	21.6	23.9	27.4	30.3	33.9	37.4	41.8	46.1	52.3	57.7	64.6	71.2	78.9	86.9	96.0	105.7	118.4	130.4

Pipe Dimensions

IS 14333 : 2022 – Material Grade PE 80

(All Dimensions in mm) Wall Thickness of pipes for Pressure Rating of

SDR	SDR 41		SDR 33		SDR 26		SDR 21		SDR 17		SDR 13.6		SDR 11		SDR 9		SDR 7.4		SDR 6	
PE 80	PN 2.5		PN 3.2		PN 4		PN 5		PN 6		PN 8		PN 10		PN 12.5		PN 16		PN 20	
Size mm (OD)	Wall Thickness		Wall Thickness																	
	Min.	Max.	Min.	Max.																
63	—	—	—	—	2.5	2.9	3.0	3.4	3.8	4.3	4.7	5.3	5.8	6.5	7.0	7.8	8.6	9.6	10.5	11.7
75	2.0	2.3	2.3	2.7	2.9	3.3	3.6	4.1	4.5	5.1	5.6	6.3	6.9	7.7	8.4	9.4	10.2	11.4	12.5	13.9
90	2.2	2.6	2.8	3.2	3.5	4.0	4.3	4.9	5.3	6.0	6.7	7.5	8.2	9.2	10.0	11.1	12.2	13.6	15.0	16.6
110	2.7	3.1	3.4	3.9	4.3	4.9	5.3	6.0	6.5	7.3	8.1	9.1	10.0	11.1	12.3	13.7	14.9	16.5	18.4	20.4
125	3.1	3.6	3.8	4.3	4.9	5.5	6.0	6.7	7.4	8.3	9.2	10.3	11.4	12.7	13.9	15.4	16.9	18.7	20.9	23.1
140	3.5	4.0	4.3	4.9	5.4	6.1	6.7	7.5	8.3	9.3	10.3	11.5	12.8	14.2	15.6	17.3	19.0	21.0	23.4	25.9
160	4.0	4.5	4.9	5.5	6.2	7.0	7.7	8.6	9.5	10.6	11.8	13.1	14.6	16.2	17.8	19.7	21.7	24.0	26.7	29.5
180	4.4	5.0	5.5	6.2	7.0	7.8	8.6	9.6	10.6	11.8	13.3	14.8	16.4	18.2	20.0	22.1	24.4	27.0	30.0	33.1
200	4.9	5.5	6.1	6.9	7.7	8.6	9.6	10.7	11.8	13.1	14.8	16.4	18.2	20.2	22.3	24.7	27.1	30.0	33.4	36.9
225	5.5	6.2	6.9	7.7	8.7	9.7	10.8	12.0	13.3	14.8	16.6	18.4	20.5	22.7	25.0	27.6	30.5	33.7	37.5	41.4
250	6.1	6.9	7.6	8.5	9.7	10.8	12.0	13.3	14.8	16.4	18.4	20.4	22.8	25.2	27.8	30.7	33.8	37.3	41.7	46.0
280	6.9	7.7	8.5	9.5	10.8	12.0	13.4	14.9	16.5	18.3	20.6	22.8	25.5	28.2	31.2	34.5	37.9	41.8	46.7	51.5
315	7.7	8.6	9.6	10.7	12.2	13.6	15.0	16.6	18.6	20.6	23.2	25.7	28.7	31.7	35.0	38.6	42.6	47.0	52.5	57.9
355	8.7	9.7	10.8	12.0	13.7	15.2	17.0	18.8	20.9	23.1	26.2	29.0	32.3	35.7	39.5	43.6	48.0	52.9	59.2	65.3
400	9.8	10.9	12.2	13.6	15.4	17.1	19.1	21.2	23.6	26.1	29.5	32.6	36.4	40.2	44.5	49.1	54.1	59.7	66.7	73.5
450	11.0	12.2	13.7	15.2	17.4	19.3	21.5	23.8	26.5	29.3	33.1	36.6	41.0	45.2	50.0	55.1	60.9	67.1	75.0	82.6
500	12.2	13.6	15.2	16.9	19.3	21.4	23.9	26.4	29.5	32.6	36.8	40.6	45.5	50.2	55.6	61.3	67.6	74.5	83.4	91.9
560	13.7	15.2	17.0	18.8	21.6	23.9	26.7	29.5	33.0	36.4	41.2	45.5	51.0	56.2	62.3	68.7	75.7	83.4	93.4	102.9
630	15.4	17.1	19.1	21.2	24.3	26.9	30.0	33.1	37.1	41.0	46.4	51.2	57.3	63.2	70.0	77.1	85.2	93.9	105.0	115.6
710	17.4	19.3	21.6	23.9	27.4	30.3	33.9	37.4	41.8	46.1	52.3	57.7	64.6	71.2	78.9	86.9	96.0	105.7	118.4	130.4

IS 14333 : 2022 – Material Grade PE 100

(All Dimensions in mm) Wall Thickness of pipes for Pressure Rating of

SDR	SDR 41		SDR 33		SDR 26		SDR 21		SDR 17		SDR 13.6		SDR 11		SDR 9		SDR 7.4	
PE 100	PN 3		PN 4		PN 5		PN 6		PN 8		PN 10		PN 12.5		PN 16		PN 20	
Size mm (OD)	Wall Thickness																	
	Min.	Max.																
63	—	—	—	—	2.5	2.9	3.0	3.4	3.8	4.3	4.7	5.3	5.8	6.5	7.0	7.8	8.6	9.6
75	2.0	2.3	2.3	2.7	2.9	3.3	3.6	4.1	4.5	5.1	5.6	6.3	6.9	7.7	8.4	9.4	10.2	11.4
90	2.2	2.6	2.8	3.2	3.5	4.0	4.3	4.9	5.3	6.0	6.7	7.5	8.2	9.2	10.0	11.1	12.2	13.6
110	2.7	3.1	3.4	3.9	4.3	4.9	5.3	6.0	6.5	7.3	8.1	9.1	10.0	11.1	12.3	13.7	14.9	16.5
125	3.1	3.6	3.8	4.3	4.9	5.5	6.0	6.7	7.4	8.3	9.2	10.3	11.4	12.7	13.9	15.4	16.9	18.7
140	3.5	4.0	4.3	4.9	5.4	6.1	6.7	7.5	8.3	9.3	10.3	11.5	12.8	14.2	15.6	17.3	19.0	21.0
160	4.0	4.5	4.9	5.5	6.2	7.0	7.7	8.6	9.5	10.6	11.8	13.1	14.6	16.2	17.8	19.7	21.7	24.0
180	4.4	5.0	5.5	6.2	7.0	7.8	8.6	9.6	10.6	11.8	13.3	14.8	16.4	18.2	20.0	22.1	24.4	27.0
200	4.9	5.5	6.1	6.9	7.7	8.6	9.6	10.7	11.8	13.1	14.8	16.4	18.2	20.2	22.3	24.7	27.1	30.0
225	5.5	6.2	6.9	7.7	8.7	9.7	10.8	12.0	13.3	14.8	16.6	18.4	20.5	22.7	25.0	27.6	30.5	33.7
250	6.1	6.9	7.6	8.5	9.7	10.8	12.0	13.3	14.8	16.4	18.4	20.4	22.8	25.2	27.8	30.7	33.8	37.3
280	6.9	7.7	8.5	9.5	10.8	12.0	13.4	14.9	16.5	18.3	20.6	22.8	25.5	28.2	31.2	34.5	37.9	41.8
315	7.7	8.6	9.6	10.7	12.2	13.6	15.0	16.6	18.6	20.6	23.2	25.7	28.7	31.7	35.0	38.6	42.6	47.0
355	8.7	9.7	10.8	12.0	13.7	15.2	17.0	18.8	20.9	23.1	26.2	29.0	32.3	35.7	39.5	43.6	48.0	52.9
400	9.8	10.9	12.2	13.6	15.4	17.1	19.1	21.2	23.6	26.1	29.5	32.6	36.4	40.2	44.5	49.1	54.1	59.7
450	11.0	12.2	13.7	15.2	17.4	19.3	21.5	23.8	26.5	29.3	33.1	36.6	41.0	45.2	50.0	55.1	60.9	67.1
500	12.2	13.6	15.2	16.9	19.3	21.4	23.9	26.4	29.5	32.6	36.8	40.6	45.5	50.2	55.6	61.3	67.6	74.5
560	13.7	15.2	17.0	18.8	21.6	23.9	26.7	29.5	33.0	36.4	41.2	45.5	51.0	56.2	62.3	68.7	75.7	83.4
630	15.4	17.1	19.1	21.2	24.3	26.9	30.0	33.1	37.1	41.0	46.4	51.2	57.3	63.2	70.0	77.1	85.2	93.9
710	17.4	19.3	21.6	23.9	27.4	30.3	33.9	37.4	41.8	46.1	52.3	57.7	64.6	71.2	78.9	86.9	96.0	105.7

ISO DP 4427 Design Stress
8.0 N/MM² PE MRS 100

ASTM D3350 - F 714
Table 8 ISO 161

Pipe series	S 8 SDR 17	S 6.3 SDR 13.6	S 5 SDR 11
Nominal pressure PN for 6s 8.0 Mpa	PN 10	PN 12.5	PN 16
O.D. (All Dimension in mm) minimum wall thickness			
32	-	-	3.0
40	-	-	3.7
50	-	-	4.6
63	-	4.7	5.8
75	4.5	5.6	6.8
90	5.4	6.7	8.2
110	6.6	8.1	10.0
125	7.4	9.2	11.4
140	8.3	10.3	12.7
160	9.5	11.8	14.6
180	10.7	13.3	16.4
200	11.9	14.7	18.2
225	13.4	16.6	20.5
250	14.8	18.4	22.7
280	16.6	20.6	25.4
315	18.7	23.2	28.6
355	21.1	26.1	32.2
400	23.7	29.4	36.3
450	26.7	33.1	40.9
500	29.7	36.8	45.4
560	33.2	41.2	50.8
630	37.4	46.2	57.2

DR	41	32.5	26	21	17	11
O.D.	(All Dimension in mm)					
Wall Thickness of Pipes for Pressure Ratings of						
90	-	-	3.5	4.3	5.3	8.2
110	-	3.4	4.2	5.2	6.5	10.0
160	-	4.9	6.2	7.5	9.4	14.5
200	-	6.2	7.7	9.5	11.8	18.2
250	-	7.7	9.6	11.9	14.7	22.7
280	-	8.6	10.8	13.3	16.5	25.5
315	-	9.7	12.1	15.0	18.5	28.6
355	-	10.9	13.7	16.9	20.9	32.3
400	-	12.3	15.4	19.0	23.5	36.4
450	-	13.8	17.3	21.4	26.5	-
500	-	15.4	19.2	23.8	29.4	-
560	-	17.2	21.5	26.7	32.9	-
630	-	19.4	24.2	30.0	37.1	-

ISO DP 4427 Design Stress
5.0 N/MM² PE MRS 63

ISO DP 4427 Design Stress
6.3 N/MM² PE MRS 80

O.D.	S - 16 (SDR 32)	S - 12.5 (SDR 26)	S - 8 (SDR 17)	S - 5 (SDR 11)	S - 3.2 (SDR 7.5)
	Nominal Pressure PN for 6s 5.0 Mpa				
	PN 3.2	PN 4	PN 6*	PN 10	PN 16
Min. Wall Thickness in mm					
16	-	-	-	2.0	2.2
20	-	-	-	2.0	2.8
25	-	-	2.0	2.3	3.5
32	-	-	2.0	2.9	4.4
40	-	2.0	2.4	3.7	5.5
50	-	2.0	3.0	4.6	6.9
63	2.0	2.4	3.8	5.8	8.6
75	2.3	2.9	4.5	6.8	10.3
90	2.8	3.5	5.4	8.2	12.3
110	3.4	4.2	6.6	10.0	15.1
125	3.9	4.8	7.4	11.4	17.1
140	4.3	5.4	8.3	12.7	19.2
160	4.9	6.2	9.5	14.6	21.9
180	5.5	6.9	10.7	16.4	24.6
200	6.2	7.7	11.9	18.2	27.3
225	6.9	8.6	13.4	20.5	30.8
250	7.7	9.6	14.8	22.7	34.2
280	8.6	10.7	16.6	25.4	38.3
315	9.7	12.1	18.7	28.6	43.0
355	10.9	13.6	21.2	32.2	48.5
400	12.3	15.3	23.7	36.3	54.7
450	13.8	17.2	26.7	40.9	61.5
500	15.3	19.1	29.6	45.4	-
560	17.2	21.4	33.2	50.8	-
630	19.3	24.1	37.3	57.2	-

O.D.	S - 10 (SDR 32)	S - 8 (SDR 26)	S - 6.3 (SDR 17)	S - 5 (SDR 11)	S - 4 (SDR 7.5)
	Nominal Pressure PN for 6s 6.3 Mpa				
	PN 6**	PN 8	PN 10	PN 12.5	PN 16
Min. Wall Thickness in mm					
16	-	-	-	-	2
20	-	-	-	-	2.3
25	-	-	-	2.3	2.8
32	-	-	-	3.0	3.6
40	-	-	-	3.7	4.5
50	-	-	-	4.6	5.6
63	-	-	4.7	5.8	7.1
75	-	4.5	5.6	6.8	8.4
90	4.3	5.4	6.7	8.2	10.1
110	5.3	6.6	8.1	10.0	12.3
125	6.0	7.4	9.2	11.4	14.0
140	6.7	8.3	10.3	12.7	15.7
160	7.7	9.5	11.8	14.6	17.9
180	8.6	10.7	13.3	16.4	20.1
200	9.6	11.9	14.7	18.2	22.4
225	10.8	13.4	16.6	20.5	25.2
250	11.9	14.8	18.4	22.7	27.9
280	13.4	16.6	20.6	25.4	31.3
315	15.0	18.7	23.2	28.6	35.2
355	16.9	21.1	26.1	32.2	39.7
400	19.1	23.7	29.4	36.3	44.7
450	21.5	26.7	33.1	40.9	50.3
500	23.9	29.7	36.8	45.4	55.8
560	26.7	33.2	41.2	50.8	-
630	30.0	37.4	46.3	57.2	-

*Wall thickness is calculated on the basis of PN 6.3 pipe

MRS = Minimum required strength
SDR = Standard dimension ratio
S = Series
HDPE pipe can be produced in other pressure ratings to meet customer special requirement.
Standard length : 5 / 6 / 10 / 12 mtrs.

PN = Normal rating (bar)
Pipes up to diameters 140 mm from PN 6 to 16 pressure classes can also be coiled.
To meet specific customer requirements, pipe can be delivered in longer lengths than the standard indicated above, subject to transport possibilities.

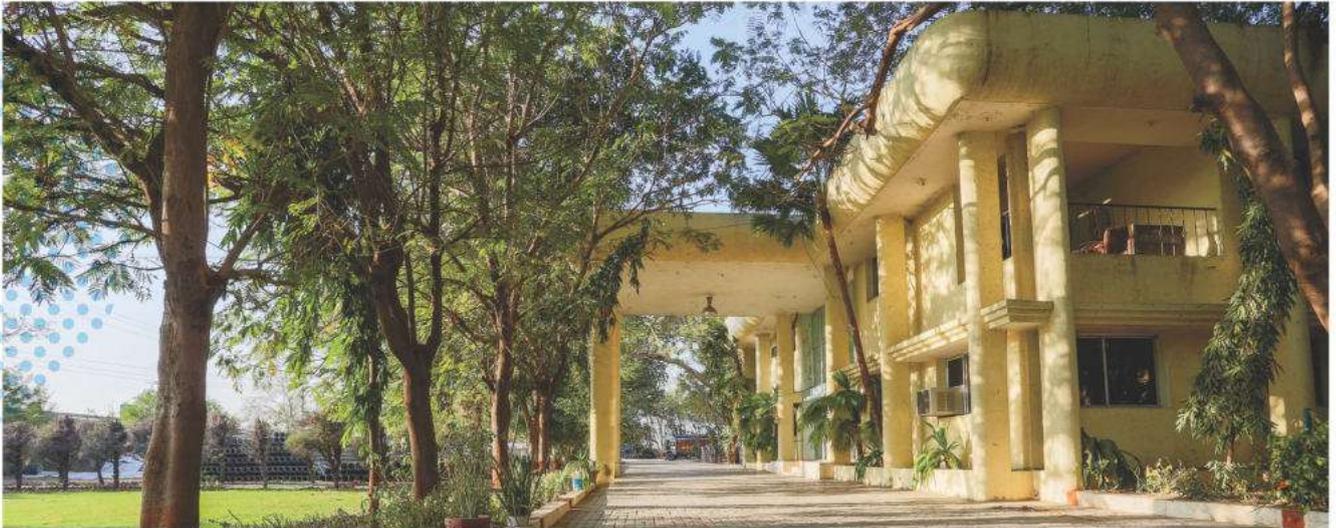
Pipe series is derived by ration 6s/p, where 6s is the design stress at 20°C and p is the nominal pressure rating of the pipes at 20°C.

The nominal pressure (PN) (in bars) is the maximum recommended continuous working pressure of the pipe at 20°C.

**For calculation of the thickness nominal pressure 6.3 bars (0.63 Mpa) is used.

Some of our valued and satisfied customers

- Tata Power Projects, Mumbai
- Gujarat Water Supply & Sewerage Board, Gujarat
- The Green Environment Services Co. Op. Soc. Ltd.
- Tata Motors Ltd.
- Larsen & Toubro Construction, Ahmedabad
- Adani Power Ltd., Mundra
- Nirma Ltd., Bhavnagar
- Intas Pharmaceuticals Ltd., Ahmedabad
- Torrent Pharmaceuticals Ltd., Ahmedabad
- Torrent Power Ltd., Ahmedabad
- The Arvind Mills Ltd., Ahmedabad
- Reliance Ind. Ltd., Gujarat
- Chennai Petroleum Corp. Ltd., Chennai
- Odhav Enviro Project Ltd., Ahmedabad
- Prism Cement, Satna
- Monte Carlo Ltd., Gujarat / Maharashtra
- Ultratech Cement, Rajasthan
- BASF India Ltd., Manglore
- Bakeri Group, Ahmedabad
- Wipro Enterprises Ltd.
- Goyal & Co., Ahmedabad
- Indra Prastha Gas Ltd., Delhi
- Lupin Ltd., Ankleshwar
- Atul Ltd., Valsad
- Gujarat Heavy Chemical Ltd., Veraval



DUTRON®

DUTRON POLYMERS LIMITED

"Dutron House", Nr. Mithakhali Underbridge
Navrangpura, Ahmedabad 380 009 Gujarat, India.

Tel : +91 79 2656 1849, 2642 7522

Fax : +91 79 2642 0894

Email : sales@dutronindia.com

Website : www.dutronindia.com

Authorised Dealer



DUTRON[®]

DWC
DOUBLE WALL CORRUGATED
PIPE

Spreading **Joy**
Enhancing Lives

DUTRON DWC Pipes

Dutron Double Wall Corrugated (DWC) Pipe manufactured from HDPE is an ideal conduit system for protecting electrical and telecom cables. The outer layer having corrugation and inner layer with plain and smooth surface gives excellent mechanical and electrical properties for cable ducting compared to G.I., RCC and PVC. Dutron DWC pipes are manufactured as per IS: 16205 (part 24): 2017



DUTRON Group

Dutron - a well-established brand in the field of plastic pipes & fittings since last 5 decades, always understand customer needs and accordingly continues its endeavor to deliver Superior products to customers through their research & development and are always committed to the excellence.

- Excellent Impact Strength
- Excellent chemical, corrosion and abrasion resistance
- Flame retardant
- Leak Proof
- UV Resistant
- Made from Anti-Rodent Material
- Environment Friendly
- Ability to withstand heavy external loads when properly buried
- Easy jointing and installation
- Flexible enough to adjust to obstacles during installation

Salient Features

- Stronger than GI, RCC or PVC- solid wall pipes
- Long life span
- Easy to transport, handle and install due to light weight
- Low installation Cost

Application

- Protection of cables in suburb sections
- Protection of cables at rail road/crossings/platforms
- Protection of cables across river, canals and culverts
- Protection of power cable in distribution network
- Used as protective casing of street lighting cable

Available Sizes

- 50 mm to 120 mm O.D.

Available Colours

- Orange
- Black

Product Specifications As Per IS: 16205 (part 24): 2017

DUCT SIZE/ NOMINAL OD (MM)	NOMINAL I.D. (MM)	STANDARD LENGTH MTRS
50	38	6
63	51	6
75	63	6
90	76	6
110	96	6
120	103	6

Specific sizes can be supplied in coil form on request.



DUTRON®

DUTRON PLASTICS LIMITED

"Dutron House", Nr. Mithakhali Underbridge
Navrangpura, Ahmedabad 380 009 Gujarat, India.

Tel : +91 79 2656 1849, 2642 7522

Fax : +91 79 2642 0894

Email : sales@dutronindia.com

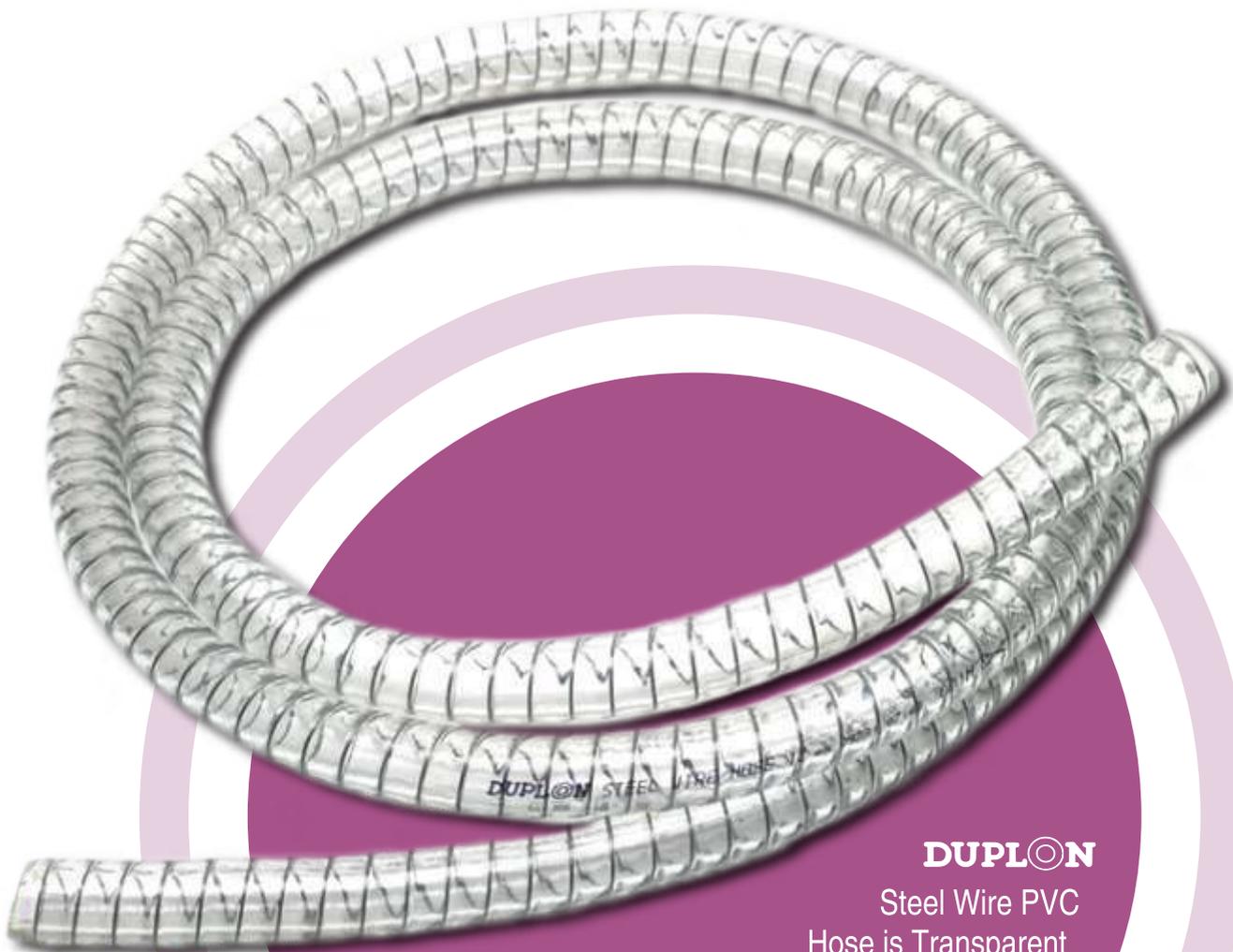
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Authorised Dealer

DUPLON

PVC REINFORCED
STEEL WIRE HOSE

Spreading Joy
Enhancing Lives



DUPLON

Steel Wire PVC
Hose is Transparent
and embedded with spiral
steel wire inside soft PVC body for
extra strength and anti static purpose.

It is NON-TOXIC,
FOOD GRADE Hose.

Superior to rubber
Superior to anyone else

○ Key features

- Embedded Spiral Steel Wire reinforcement inside wall of flexible PVC Tubing
- Made from non-toxic compound that provides safe use in the food products
- Lightweight
- High elastic abrasive resistance
- Kink and crush resistant
- Handles Pressure and full vacuum applications
- Excellent transparency and smooth surface for good visual flow characteristics

○ Applications

Chemical transfer, vacuum lines, floor cleaning, food and beverage lines, material handling, water feeds; in chemical, pharmaceutical, oil, shipping, sanitary industry

○ Available Sizes

12 mm to 65 mm I.D.

○ Product Specifications

Size in mm	I.D. mm	O.D. mm	Wall Thickness in mm	Working Pressure at 30°C kg/cm ²	Standard Length mtrs
12	12.7	18.7	3.0 ± 0.2	7	50, 100
15	15.8	22.8	3.5 ± 0.2	6	50, 100
20	19.1	26.1	3.5 ± 0.2	6	30, 50, 100
25	25.4	33.4	4.0 ± 0.2	5	30, 50, 100
30	31.8	39.8	4.0 ± 0.2	5	30, 50, 100
40	38.1	47.1	4.5 ± 0.2	5	30, 50
50	50.8	60.8	5.0 ± 0.2	5	30, 50
65	63	74	5.5 ± 0.2	5	30



DUPLON

NIPPON POLYMERS PVT. LTD.

"Dutron House", Nr. Mithakhali Underbridge
Navrangpura, Ahmedabad 380 009 Gujarat, India.

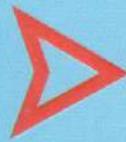
Tel : +91 79 2656 1849, 2642 7522, 2656 1669

Fax : +91 79 2642 0894

Email : sales@dutronindia.com

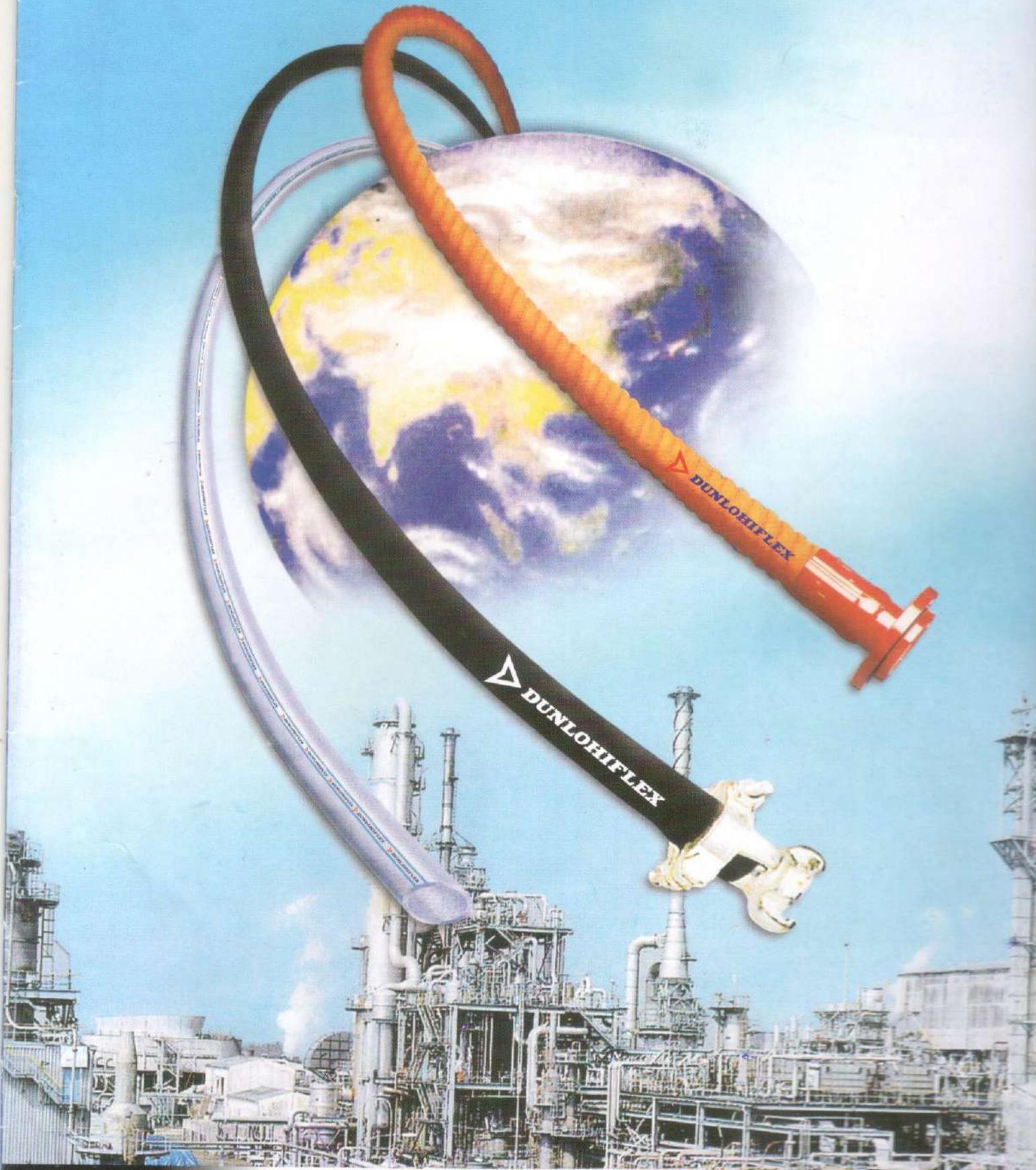
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Authorised Dealer



DUNLOHIFLEX

MANUFACTURER OF INDUSTRIAL DIVISION



INDUSTRIAL HOSES


SAE 100 R1 AT / DIN - EN 853 1 SN STEEL WIRE BRAIDED HYDRAULIC HOSE

TUBE : HYDRAULIC OIL RESISTANT SPECIAL SYNTHETIC RUBBER
 REINFORCEMENT : HIGH TENSILE STEEL 1 WIRE BRAID
 COVER : OIL, ABRASION AND WEATHER RESISTANT WRAPPED SYNTHETIC RUBBER
 APPLICATION : FOR HIGH PRESSURE HYDRAULIC SYSTEMS IN INDUSTRIAL AND AGRICULTURE

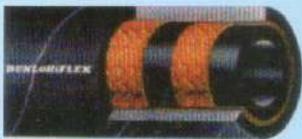
ID		OD	WP		BP		BR
Inch	mm	mm	BAR	PSI	BAR	PSI	mm
3/16	4.8	11.8	250	3625	1000	14500	90
1/4	6.4	13.4	225	3263	900	13050	100
5/16	8	15	215	3118	850	12325	115
3/8	9.5	17.4	180	2610	720	10440	130
1/2	12.7	20.6	160	2320	640	9280	180
5/8	16	23.7	130	1885	520	7540	200
3/4	19	27.7	150	1523	420	6090	240
1	25.4	35.6	88	1276	350	5075	300
1.1/4	31.8	43.5	63	914	250	3625	420
1.1/2	38.1	50.6	50	725	200	2900	500
2	50.8	66.7	40	580	160	2320	630



-40°C / +120°C
-40°F / +232°F

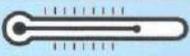
(+125°C Intermittent)

NORMS : SAE J 517 100 R1 AT
DIN EN 853 1 SN


SAE 100 R2 AT / DIN - EN 853 2 SN STEEL WIRE BRAIDED HYDRAULIC HOSE

TUBE : HYDRAULIC OIL RESISTANT SPECIAL SYNTHETIC RUBBER
 REINFORCEMENT : HIGH TENSILE 2 STEEL WIRE BRAID
 COVER : OIL, ABRASION AND WEATHER RESISTANT WRAPPED SYNTHETIC RUBBER
 APPLICATION : FOR HIGH PRESSURE HYDRAULIC SYSTEMS IN INDUSTRIAL AND AGRICULTURE

ID		OD	WP		BP		BR
Inch	mm	mm	BAR	PSI	BAR	PSI	mm
3/16	4.8	13.4	415	6018	1650	23925	90
1/4	6.4	15	400	5800	1600	23200	100
5/16	8	16.6	350	5075	1400	20300	115
3/8	9.5	19	330	4785	1320	19140	130
1/2	12.7	22.2	275	3988	1100	15950	180
5/8	16	25.4	250	3625	1000	14500	205
3/4	19	29.3	215	3118	850	12325	240
1	25.4	38.1	165	2393	650	9425	300
1.1/4	31.8	48.3	125	1813	500	7250	420
1.1/2	38.1	54.6	90	1305	360	5220	500
2	50.8	67.4	80	1160	320	4640	630



-40°C / +120°C
-40°F / +232°F

(+125°C Intermittent)

NORMS : SAE J 517 100 R2 AT
DIN EN 853 2 SN


SAE 100 R3 TEXTILE BRAIDED HYDRAULIC HOSE

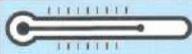
TUBE : HYDRAULIC OIL RESISTANT SPECIAL SYNTHETIC RUBBER
 REINFORCEMENT : 2 HIGH TENSILE SYNTHETIC TEXTILE BRAIDS
 COVER : OIL, ABRASION OZON AND WEATHER RESISTANT BLACK SYNTHETIC RUBBER
 APPLICATION : FOR HYDRAULIC CONTROL LINES, DISCHARGE UNDER PRESSURE OF HYDRAULIC FLUIDS, FUEL, GREASE, AIR AND WATER

ID		OD	WP		BP		BR
Inch	mm	mm	BAR	PSI	BAR	PSI	mm
3/16	4.8	12.7	103	1494	412	5974	80
1/4	6.4	14.3	86	1247	344	4988	80
5/16	8	17.5	83	1204	332	4814	100
3/8	9.5	19.1	78	1131	312	4524	100
1/2	12.7	23.8	69	1000	276	4002	125
5/8	16	27	60	870	240	3480	140
3/4	19	31.8	52	754	208	3016	150
1	25.4	38.1	39	566	156	2262	205
1.1/4	31.8	44.5	26	377	104	1508	255


SAE 100 R6
TEXTILE BRAIDED HYDRAULIC HOSE

TUBE : HYDRAULIC OIL RESISTANT SPECIAL SYNTHETIC RUBBER
REINFORCEMENT : 1 HIGH TENSILE SYNTHETIC TEXTILE BRAND
COVER : OIL, ABRASION, OZONE WEATHER RESISTANT BLACK SYNTHETIC RUBBER
APPLICATION : FOR HYDRAULIC CONTROL LINES, DISCHARGE UNDER PRESSURE OF HYDRAULIC FLUIDS, FUEL, GREASE, AIR AND WATER

ID		OD	WP		BP		BR
Inch	mm	mm	BAR	PSI	BAR	PSI	mm
3/16	4.8	11.1	34	493	136	1972	50
1/4	6.4	12.7	28	406	112	1624	65
5/16	8	14.3	28	406	112	1624	80
3/8	9.5	15.9	28	406	112	1624	80
1/2	12.7	19.8	28	406	112	1624	100
5/8	16	23	24	348	96	1392	125
3/4	19	26.5	21	305	83	1218	150
1	25.4	34.5	9	131	36	522	170



-40°C/ +120°C
-40°F/ +232°F

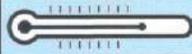
(+125°C Intermittent)

NORMS : SAE J 517 100 R6


DIN - EN 856 4 SP / R99
MULTISPIRAL HYDRAULIC HOSE

TUBE : HYDRAULIC OIL RESISTANT SPECIAL SYNTHETIC RUBBER
REINFORCEMENT : 4 HIGH TENSILE STEEL SPIRALS
COVER : HYDRAULIC OIL, ABRASION AND WEATHER RESISTANT WRAPPED SYNTHETIC RUBBER
APPLICATION : FOR HYDRAULIC SYSTEMS WITH HIGH PEAK PRESSURES AND ARDOUS CONDITIONS OF OPERATIONS

ID		OD	WP		BP		BR
Inch	mm	mm	BAR	PSI	BAR	PSI	mm
3/8	9.5	21.4	445	6453	1780	25810	180
1/2	12.7	24.6	415	6018	1660	24070	230
5/8	16	28.5	350	5075	1400	20300	250
3/4	19	31.5	350	5075	1400	20300	300
1	25.4	39.7	280	4060	1120	16240	340
1.1/4	31.8	50.8	210	3045	840	12180	460
1.1/2	38.1	57.2	185	2683	740	10730	560
2	50.8	69.8	175	2538	700	10150	660



-40°C/ +120°C
-40°F/ +232°F

(+125°C Intermittent)

NORMS : DIN 20023 PART 1 TYPE 4 SP
EN 856 4 SP


DIN - EN 856 4 SH
MULTISPIRAL HYDRAULIC HOSE

TUBE : HYDRAULIC OIL RESISTANT SPECIAL SYNTHETIC RUBBER
REINFORCEMENT : 4 HIGH TENSILE STEEL SPIRALS
COVER : HYDRAULIC OIL, ABRASION AND WEATHER RESISTANT WRAPPED SYNTHETIC RUBBER
APPLICATION : FOR HYDRAULIC SYSTEMS WITH HIGH PEAK PRESSURE & ARDOUS CONDITIONS OF OPERATIONS

ID		OD	WP		BP		BR
Inch	mm	mm	BAR	PSI	BAR	PSI	mm
3/4	19	32.2	420	6090	1680	24360	280
1	25.4	38.7	380	5510	1520	22040	340
1.1/4	32	45.5	325	4713	1300	18850	460
1.1/2	38	53.5	290	4205	1160	16820	560
2	50.8	68.1	250	3625	1000	14500	700



-40°C/ +120°C
-40°F/ +232°F

(+125°C Intermittent)

NORMS : DIN 20023 PART 2 TYPE 4 SH
EN 856 4 SH

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Views From Our Production Facilities

DunloHiflex pioneered the manufacture of long-length hoses in India almost four decades ago and has been a leader in high-technology hoses ever since. Today, it makes and markets India's wildest range of specialist hoses for industrial applications.

DunloHiflex India's products are trusted not only in the domestic markets, but also by discerning customers worldwide. Because DunloHiflex standards are relentlessly maintained through detailing, quality assurance and constant upgrading of technology. DunloHiflex hose plant is Asia's largest and most modern, part of one of the biggest integrated rubber factories in Asia.

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Chirag Shah Mob.: 98211 12554



DUNLOHIFLEX

MANUFACTURER OF INDUSTRIAL DIVISION



INDUSTRIAL HOSES

INDUSTRIAL RUBBER HOSES


NOMINAL I.D.
 (MM)


MEAN O.D.
 (MM)


WORKING PRESSURE
 (Kg / cm²)

 **DUNLOHIFLEX**
 MANUFACTURER OF INDUSTRIAL DIVISION

	NOMINAL I.D. (MM)	MEAN O.D. (MM)	WORKING PRESSURE (Kg / cm ²)	
 AIR / WATER HOSE I.S.444: TYPE III I.S.446 : 1980 TYPE I	12.5	21	18	Application: A new generation hose for general construction work, engineering industries, garages, shipyards, workshops, foundries, steel mills, irrigation projects and a wide range of applications for both air and water. Construction : - Natural rubber tube. - Textile reinforcement. - Abrasion and weather resistant cover .
	19	30	18	
	25	37	18	
	32	44	18	
	38	50	18	
	50	61	18	
	63	76	18	
75	91	12		
100	115	12		
 PNEUMATIC HOSE I.S.446 : 1980 TYPE II	6	15	18	Application: For general construction work, road building, tunnelling, mining; for pneumatic tools in industries; for tyre inflation in service stations. Construction : - Special synthetic rubber tube. - Textile reinforcement. - Abrasion, weather and heat resistant
	8	17	18	
	10	20	18	
	12	22.7	18	
	19	30	16	
	25	37	16	
	32	44	16	
38	50	16		
50	61	16		
 ROCK DRILL HOSE I.S.446 : 1980 TYPE III	12	23	18	Application: For the most severe conditions in open cast mines & quarries. Construction : - Natural and synthetic rubber tube. - Textile reinforcement. - Abrasion, weather and heat resistant cover.
	20	30	16	
	25	37	16	
 SUPER ROCK DRILL HOSE I.S.446 : 1987 TYPE III	20	30	16	Application: Heavy duty services for air drills especially in mines, quarries and general construction work. Construction : - Natural and synthetic rubber tube. - Textile reinforcement. - Abrasion, weather and heat resistant cover.
	25	35.8	16	
	32	44	16	
	38	52	16	
	50	64	16	
	63	76	16	
75	88	16		
 ROCK DRILL HOSE WIRE BRAIDED I.S.446 : 1987 TYPE III	25	35.8	25	Application: For uses in mines where very high pressure is required. Construction : - Oil resistant synthetic nitrile rubber tube. - High tensile steel wire reinforcement. - Abrasion, weather and heat resistant cover.
	32	44	25	
	38	50	25	
	50	66	25	
 CAR WASHING HOSE I.S. 444 TYPE 3B	10	22	50	Application: For washing of motor vehicles at service stations. Construction : - Special synthetic rubber tube. - Textile reinforcement. - Abrasion and weather resistant cover.
	12	24.7	50	

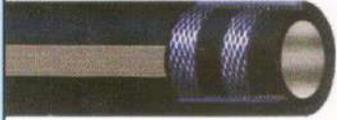
INDUSTRIAL RUBBER HOSES


NOMINAL
I.D.
(MM)


MEAN
O.D.
(MM)


WORKING
PRESSURE
(Kg / cm²)

 **DUNLOHIFLEX**
MANUFACTURER OF INDUSTRIAL DIVISION

	NOMINAL I.D. (MM)	MEAN O.D. (MM)	WORKING PRESSURE (Kg / cm ²)	
<p>DUNLOHIFLEX</p>  <p>SUPER SPRAY HOSE I.S. 1667 : 1968 TYPE 4B</p>	10 12	20 24	50 50	<p>Application: For high pressure spraying of water based chemicals, insecticides, fungicides, herbicides etc by manual or power- driven pumps in agriculture, horticulture, plantations and forestry.</p> <p>Construction :</p> <ul style="list-style-type: none"> - Special synthetic PVC-Nitrile tube. - Textile reinforcement and anti-static copper wire embedded between the layers. - Abrasion, weather, heat and oil resistant nitrile cover.
 <p>CHEMICAL HOSE I.S. 7654 : 1975 TYPE I</p>	20 25 32 38 50 63 75 100	30 35.4 44 50 64 77 90 116	12 12 12 12 12 12 12 12	<p>Application: For conveying alum liquor, caustic soda, lime solution, methyle alcohol, ethyl alcohol, butyl alcohol, zinc chloride, isobutanol, hydrochloric acid, dimethyl sulphate, dilute sulphuric acid, carbon disulphate and other chemicals in fertilizer and process industries.</p> <p>Construction :</p> <ul style="list-style-type: none"> - Synthetic rubber tube. - Textile reinforcement and antistatic copper wire embedded between the layers. - Abrasion, heat, acid, basem, chemical and weather resistant special synthetic rubber cover.
 <p>XLPE CHEMICAL HOSE EN 12115</p>	20 25 32 38 50 63 75 100 125 150	30 36 43 50 64 78 91 119 148 175	14 14 14 14 14 14 14 14 14 14	<p>Application: For handling of special solvents such as toluol, zylene and corrosive chemicals.</p> <p>Construction :</p> <ul style="list-style-type: none"> - Special XLPE material tube. - Textile reinforcement steel wire helix and antistatic copper wire embedded between the layers. - Abrasion, heat, weather solvent and chemicals resistant EPDM rubber cover .
 <p>UHMWPE HOSE EN 12115</p>	20 25 32 38 50 63 75 100 152	30 36 45 51 65 79 92 118 178	14 14 14 14 14 14 14 14 14	<p>Application: For handling of special solvents such as toluol, zylene and corrosive chemicals.</p> <p>Construction :</p> <ul style="list-style-type: none"> - Special UHMWPE material tube. - Textile reinforcement steel wire helix and antistatic copper wire embedded between the layers. - Abrasion, heat, weather solvent and chemicals resistant EPDM rubber cover .
 <p>STEAM HOSE I.S. 5122 : 1975 TYPE II</p>	12.7 19 25 32 38 50 63 75 100	25 33 38 44 50 62 78 98 124	7 7 7 7 7 7 7 7 7	<p>Application: For all applications involving supply of saturated steam.</p> <p>Construction :</p> <ul style="list-style-type: none"> - EPDM rubber tube resistant to steam up to 165 °C. - Textile reinforcement. - Abrasion, steam and weather resistant EPDM rubber cover.

INDUSTRIAL RUBBER HOSES


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	NOMINAL I.D. (MM)	MEAN O.D. (MM)	WORKING PRESSURE (Kg / cm ²)	
  SUPER STEAM HOSE SINGLE WIRE BRAIDED IS : 10655 Type - II	12.7 20 25 32 38 50	24 30.4 37.3 43.5 50.6 63.5	10 10 10 10 10 10	Application: General saturated steam services with high pressure. Construction : - EPDM rubber tube resistant to steam upto 210 degree C - High Tensible steel wire reinforcement - Abrasion, oil, steam and weather resistant rubber cover.
 SUPER STEAM HOSE DOUBLE WIRE BRAIDED IS : 10655 Type - II	12.7 20 25 32 38 50	25 32 39 46 54 65	17 17 17 17 17 17	Application: General saturated steam services with high pressure. Construction : - EPDM rubber tube resistant to steam upto 210 degree C - High Tensible steel wire reinforcement - Abrasion, oil, steam and weather resistant rubber cover.
 SUPER STEAM HOSE WIRE BRAIDED IMP I.S. : 10655 TYPE III (Turkey)	12.7 19 25 32 38 50 63 75 100	25 32 39 46 54 65 79.5 93 124	20 20 20 20 20 20 20 20 20	Application: General saturated steam services with high pressure. Construction : - EPDM rubber tube resistant to steam up to 232 °C. - High tensile steel wire reinforcement. - Abrasion, oil, steam and weather resistant rubber cover.
 PETROL HOSE WIRE BRAIDED I.S. 2396 : 1981	19 25	31 36.6	17 17	Application: For use in dispensing pumps for petrol and diesel fuels. Construction : - Synthetic Nitrile tube. - Soft wall : textile braided reinforcement. - Hard wall : wire braided reinforcement. - Abrasion and weather resistant colored cover.
 PETROL HOSE RAYON BRAIDED I.S. 2396 : 1981	19 25	31 36.6	10 10	Application: For use in dispensing pumps for petrol and diesel fuels. Construction : - Synthetic Nitrile tube. - Soft wall : textile braided reinforcement. - Hard wall : wire braided reinforcement. - Abrasion and weather resistant colored cover.

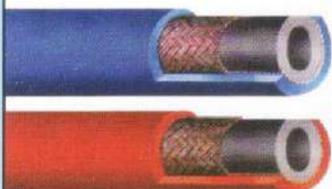
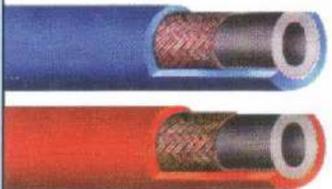
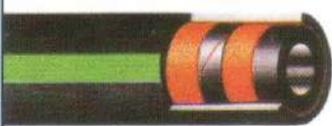
INDUSTRIAL RUBBER HOSES


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WORKING PRESSURE
 (Kg / cm²)

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	NOMINAL I.D. (MM)	MEAN O.D. (MM)	WORKING PRESSURE (Kg / cm ²)	
DUNLOHIFLEX  PREMIUM WELDING HOSE I.S. 447 : 1988	6 8 10	12 15 17	20 20 20	Application: For oxy-acetylene welding and cutting equipment in industries, service stations and garages. Red welding hose for acetylene Blue welding hose for oxygen and other non-combustible gases. Construction : - Special synthetic PVC-nitrile tube. - Textile reinforcement. - Abrasion and weather resistant blue or red fluted cover.
 TWIN WELDING HOSE	6 8 10	13 15 17	20 20 20	Application: For oxy-acetylene welding and cutting equipment in industries, service stations and garages. Red welding hose for acetylene Blue welding hose for oxygen and other non-combustible gases. Construction : - Special synthetic PVC-nitrile tube. - Textile reinforcement. - Abrasion and weather resistant blue or red fluted cover.
 SAND BLASTING HOSE I.S. 5894 : 1980 TYPE I & TYPE II	25 32 38 50 63 75	44 48 57 70 86 99	12 12 12 12 12 12	Application: Used for discharge of bulk material and sandblasting. Construction : - Abrasion resistant conductive natural rubber tube. - Textile reinforcement and antistatic copper wire embedded between the layers. - Abrasion, heat and weather resistant cover.
 WATER SUCTION & DISCHARGE HOSE I.S.3549 : 1983 TYPE I, TYPE II	32 38 50 63 75 100 125 150 200 300	42 48 62 75 89 115 142 167 225 327	10 10 10 10 10 10 10 10 10 10	Application: Water suction and discharge in industrial and construction services. Construction : - Natural rubber tube. - Textile reinforcement and steel wire helix embedded between the layers. - Abrasion and weather resistant cover . AS PER YOUR REQUIREMENT WE CAN ALSO SUPPLY 20 BARS MATERIAL.
 OIL SUCTION & DISCHARGE HOSE I.S. 10733 : 1983	25 32 38 45 50 63 70 75 100 125 150 200	36 43 49 56 63 76 84 89 117 145 170 225	10 10 10 10 10 10 10 10 10 10 10 10	Application: For Suction Discharge Of Gasoline, Fuel And Diesel Oil From Tanks And Other Transfer Services. Construction : - 1 G.I. Helix Wire & 2 G.I. Helix Wire - Cotton/synthetic Fabric Reinforcement - Oil Resistance Synthetic Rubber Tube. - Oil, Weather And Arossion Resistance Smooth Outer Cover - Available In Smooth & Rough Bore.

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 AIRCRAFT REFUELING HOSE	19	29	20	Application: Ground Refueling Of Aircrafts Having An Aromatic Content Upto 30% Construction : - Aviation Gasolines And Jet Fuels Resistant, Conductive Nbr Rubber. - High Tensile Synthetic Textile Braid Abrasion, Ozone, Weather, Heat And Oil Resistant Special Synthetic Rubber. - Special Pin-pricked Synthetic Rubber.
	25	38	20	
	32	45	20	
	38	51	20	
	50	65	20	
	63	79	20	
	76	92	20	
101	120	20		
 CEMENT HOSE Note : AS PER CUSTOMER REQUIREMENT WE CAN ALSO PROVIDE WITH FITTING.	50	62	12	Application: For Discharge Of Bulk Material, Sand, Gravel Cement, Etc. Construction : - Abrasion Resistant Antistatic Natural Rubber - High Tensile Synthetic Textile And Antistatic Copper Wire - Abrasion, Ozone, Weather Resistant Pin Pricked Special Synthetic Rubber
	75	92	12	
	100	120	12	
	125	149	12	
	150	170	12	
 CEMENT HOSE 85 BAR	50	70	85 BAR	Application: For Discharge Of Bulk Material, Sand, Gravel Cement, Etc. Construction : - Abrasion Resistant Antistatic Natural Rubber - High Tensile Synthetic Textile And Antistatic Copper Wire - Abrasion, Ozone, Weather Resistant Pin Pricked Special Synthetic Rubber
	63	88	85 BAR	
	75	102	85 BAR	
	100	130	85 BAR	
	125	155	85 BAR	
	160	184	85 BAR	

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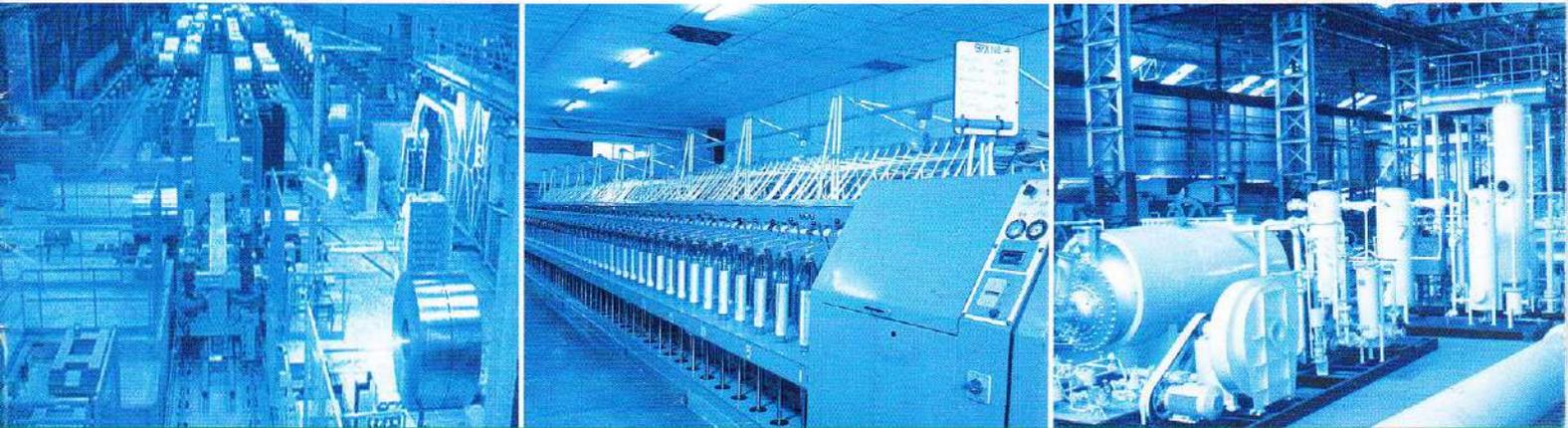
Fenner

POLY-F PLUS PB

THE MATCHLESS PERFORMER

Wrapped Industrial Belts

- Classical Wrapped Belts
- Spacesaver Wedge Belts
- FHP Belts
- Power Loom Belts
- Harvester Combine Belts
- Wet Grinder Belts
- Banded Belts
- VCrested Belts
- Hexagonal Belts



Fenner

J.K. Fenner (India) Limited

Total Power Transmission & Sealing Solutions



Classical Wrapped Belts

Fenner



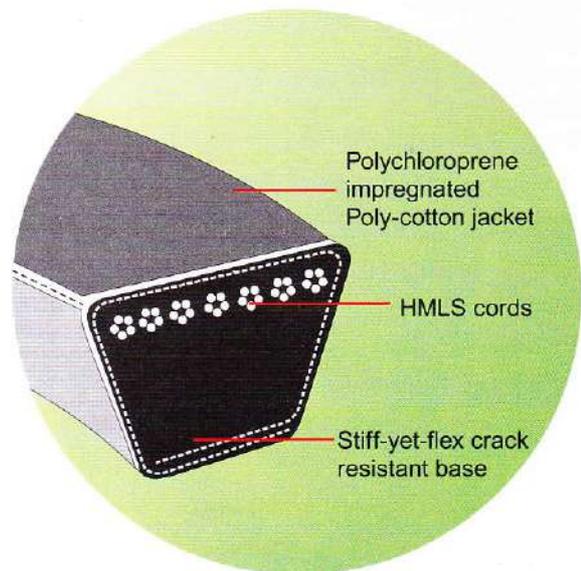
For over 150 years, the name Fenner has been synonymous with the best in mechanical power transmission. Customers have come to trust Fenner V - Belts for performance and reliability; efficiency and economy. Reason why Fenner has been the first choice amongst V -Belts. J. K. Fenner has launched Poly-F Plus PB Belts, built to the highest standards from the best materials available using state-of-the-art manufacturing processes.

Classical Wrapped Belts

Fenner Poly-F Plus PB Belts are built to the highest standards from the best materials available using state-of-the-art manufacturing processes and conform to IS2494 (Part 1) and Bs3790.

Construction & Features

- Specially designed Polyester-cotton blended fabric jacket impregnated with Polychloroprene synthetic rubber - imparts superior flexibility, better traction, flex and wear resistance. This makes the belts oil and heat resistant as well as antistatic.
- The High Modulus Low Stretch HMLS Polyester cords enable the belts to carry higher horse power loads with minimum stretch resulting in better belt stability and fewer take-up adjustments.





Classical Wrapped Belts



- **Stiff-yet-flex-crack-resistant base made out of specially compounded Polymers** ensures uniform load transfer to cords preventing power loss and premature belt failure.
- **Poly F Plus PB belts are 'Precision Built' and subject to precise length stability** and hence, no need for matching of belts.
- **The unique 'HSS' process of Heat Stretching and Length Stabilising** ensures that belts retain the tension and stay matched not only in storage but more significantly 'on the drive', resulting in uniform loading and maximum life.
- **Poly - F Plus PB belts require only One shot Tensioning**
 - so fit and forget about belt re-tensioning

All these features make Fenner Poly -F Plus PB a belt that outlasts any other belt. This means,

- reduced down time
- increased productivity and thus - increased profits.

Poly- F Plus PB's superior performance vis-a-vis other belts has been conclusively proven in Test Rig Runs as well as Field Trials.

The importance of Even Belt Loading & the 'PB' advantage

If the belts on a multiple belt drive are not of the same length, shorter belts would be under tension and bear the entire load while the longer ones run slack and contribute little to the power transmission. The drive is therefore under belted in effect and would result in short belt life as shown in Table - 1, even though the drive was properly designed and apparently installed correctly. This problem of slight variation in length was inherent even amongst a group of belts which were nominally of the same length. This was due to the nature of material - textiles and polymers used and the technology adopted.

Fenner was the first to introduce 'PB' Precision Built V-Belts and this problem was completely eliminated. These belts of superior length stability, evenly tensioned, take higher loads for longer periods resulting in maximum belt life.

Table -1:
Effects of underbelting

No. of V - Belts	Percent life
10 Normal number of V-Belts	100
9	70
8	45
7	28
6	17

"One Shot" Tensioning

Poly - F Plus PB Belts are built right from the start to ensure totally precise inherent length, to stay matched during storage and on the drive making "one-shot" tensioning a reality endorsed by satisfied customers.

Put the belts around the pulleys, set them to the appropriate tension value stated in the "Tensioning Forces" Table 2 in page no. 9, using the Belt tension indicator as shown. Run the drive under load for 30 minutes, stop the drive, check the tension, re-setting to catalogue value if necessary. On a properly designed drive for the application there will be no need for any further attention during the life of the drive.



Classical Wrapped Belts

Fenner



Classical Belts Range

Section A			
Size	Pitch Length(mm)	Size	Pitch Length(mm)
A19	520	A73	1890
A20	540	A74	1910
A21	570	A75	1940
A22	590	A76	1960
A23	620	A77	1990
A24	640	A78	2010
A25	670	A79	2040
A26	690	A80	2070
A27	720	A81	2090
A28	740	A82	2120
A29	770	A83	2140
A30	800	A84	2170
A31	820	A85	2190
A32	850	A86	2220
A33	870	A87	2240
A34	900	A88	2270
A35	920	A89	2290
A36	950	A90	2320
A37	970	A91	2340
A38	1000	A92	2370
A39	1020	A93	2400
A40	1050	A94	2420
A41	1070	A95	2450
A42	1100	A96	2470
A43	1130	A98	2520
A44	1150	A100	2570
A45	1180	A105	2700
A46	1200	A108	2780
A47	1230	A110	2830
A48	1250	A112	2880
A49	1280	A115	2950
A50	1300	A116	2980
A51	1330	A118	3030
A52	1350	A120	3080
A53	1380	A124	3180
A54	1400	A125	3210
A55	1430	A128	3280
A56	1460	A130	3340
A57	1480	A134	3440
A58	1510	A136	3490
A59	1530	A140	3590
A60	1560	A144	3690
A61	1580	A158	4050
A62	1610	A160	4100
A63	1630	A162	4150
A64	1660	A168	4300
A65	1680	A173	4430
A66	1710	A174	4450
A67	1730	A180	4610
A68	1760		
A69	1790		
A70	1810		
A71	1840		
A72	1860		

Section B			
Size	Pitch Length(mm)	Size	Pitch Length(mm)
B20	550	B78	2020
B21	580	B79	2050
B22	600	B80	2080
B23	630	B81	2100
B24	650	B82	2130
B25	680	B83	2150
B26	700	B84	2180
B27	730	B85	2200
B28	750	B86	2230
B29	780	B87	2250
B30	810	B88	2280
B31	830	B89	2300
B32	860	B90	2330
B33	880	B91	2350
B34	910	B92	2380
B35	930	B93	2410
B36	960	B94	2430
B37	980	B95	2460
B38	1010	B96	2480
B39	1030	B97	2510
B40	1060	B98	2530
B41	1080	B100	2580
B42	1110	B102	2630
B43	1140	B104	2680
B44	1160	B105	2710
B45	1190	B108	2790
B46	1210	B110	2840
B47	1240	B112	2890
B48	1260	B115	2960
B49	1290	B116	2990
B50	1310	B118	3040
B51	1340	B120	3090
B52	1360	B122	3140
B53	1390	B124	3200
B54	1410	B128	3290
B55	1440	B130	3350
B56	1470	B132	3400
B57	1490	B134	3450
B58	1520	B136	3500
B59	1540	B140	3600
B60	1570	B142	3650
B61	1590	B144	3700
B62	1620	B146	3750
B63	1640	B148	3800
B64	1670	B150	3850
B65	1690	B152	3900
B66	1720	B156	4010
B67	1740	B158	4060
B68	1770	B162	4160
B69	1800	B168	4310
B70	1820	B169	4340
B71	1850	B173	4440
B72	1870	B180	4620
B73	1900	B190	4870
B74	1920	B195	5000
B75	1950	B210	5380
B76	1970	B238	6090
B77	2000	B275	7030

Section C			
Size	Pitch Length(mm)	Size	Pitch Length(mm)
C36	970	C116	3000
C37	1000	C118	3050
C38	1020	C120	3100
C39	1050	C124	3210
C40	1070	C126	3260
C41	1100	C128	3310
C42	1120	C130	3360
C43	1150	C136	3510
C44	1170	C140	3610
C45	1200	C144	3710
C46	1220	C150	3870
C47	1250	C152	3920
C48	1280	C158	4070
C49	1300	C162	4170
C50	1330	C173	4450
C51	1350	C180	4630
C52	1380	C185	4760
C53	1400	C190	4880
C54	1430	C195	5010
C55	1450	C204	5240
C56	1480	C210	5390
C57	1500	C225	5770
C58	1530	C238	6100
C59	1550	C268	6860
C60	1580	C298	7630
C61	1610	C328	8390
C62	1630	C358	9150
C63	1660	C418	10670
C64	1680		
C65	1710		
C66	1730		
C67	1760		
C68	1780		
C69	1810		
C70	1830		
C71	1860		
C72	1880		
C73	1910		
C74	1940		
C75	1960		
C76	1990		
C77	2010		
C78	2040		
C79	2060		
C80	2090		
C81	2110		
C85	2220		
C90	2340		
C93	2420		
C96	2490		
C100	2600		
C105	2720		
C108	2800		
C112	2900		

Section D	
Size	Pitch Length(mm)
D75	1990
D88	2320
D90	2370
D95	2500
D120	3130
D128	3330
D144	3740
D158	4100
D162	4200
D173	4480
D180	4650
D195	5040
D204	5260
D210	5420
D238	6130
D268	6890
D298	7650
D314	8060
D328	8410
D358	9180
D390	9990
D418	10700
D450	11510
D478	12220
D538	13750
D598	15270

Section E	
Size	Pitch Length(mm)
E180	4660
E195	5040
E210	5420
E238	6100
E268	6850
E298	7650
E328	8430
E358	9150
E394	10100
E418	10710
E478	12230
E538	13750
E598	15280



SpacesaVer Wedge Belts

Fenner



SpacesaVer Wedge Belts

Continuous research work and efforts in development of V-Belts have been made to introduce the latest type of SpacesaVer Wedge Belts. This line of Wedge Belt drives is engineered to utilize in full, all the performance capabilities of modern man-made fibres and synthetic rubbers. Four sections of Wedge Belts SPZ, SPA, SPB & SPC confirm to BS3790.

In combination with Fenner Dual Duty Taper Lock® Pulleys machined to close limits from high grade materials, these Wedge Belts result in drives which are extraordinarily compact. They are capable of handling even more than twice as much power in a given space as traditional V-Belt drives.

Special Polyester Cord Cables provide the strength and flexibility needed for immense load carrying capacity of these small sections and an exclusive process of bonding the cables to the rubber element of the belts ensures that all parts of the belts act in unshakable union under conditions of severest flexing.

The benefits of Wedge Belts go beyond compactness and low initial cost. Every Wedge Belt is highly resistant to heat, oil and exposure to weather and has adequate electrical conductivity to deal with normal static hazards.

Wedge belts are narrow V-Belts with an aspect ratio around 0.8. (Aspect ratio = Topwidth/ Height of the belt cross section). The Top width is the same but the height is significantly larger than that of classical belts. Please refer to Table below.

Classical Belts		Wedge Belts	
Section	Cross section (mm)	Section	Cross Section (mm)
Z	10X6	SPZ	10X8
A	13X8	SPA	13X10
B	17X11	SPB	17X14
C	22X14	SPC	22X18

- Lesser number of Wedge belts for transmitting the same power means lesser shaft overhang, lower shaft moments and lower load on bearings, apart from compactness of design.
- Increased height of the cross section ensures better and even support for all the cable cords leading to uniform distribution of stresses and consequently power. Higher belt velocities are possible with wedge belts, the recommended limit being 40 m/sec.

SPZ	SPA	SPB	SPC
Size	Size	Size	Size
SPZ630	SPA800	SPB1250	SPC2000
SPZ670	SPA825	SPB1320	SPC2120
SPZ710	SPA850	SPB1340	SPC2240
SPZ750	SPA875	SPB1400	SPC2360
SPZ760	SPA900	SPB1500	SPC2500
SPZ800	SPA950	SPB1550	SPC2650
SPZ825	SPA975	SPB1600	SPC2800
SPZ850	SPA1000	SPB1700	SPC3000
SPZ900	SPA1030	SPB1800	SPC3150
SPZ940	SPA1060	SPB1900	SPC3350
SPZ950	SPA1090	SPB2000	SPC3550
SPZ1000	SPA1120	SPB2020	SPC3750
SPZ1010	SPA1150	SPB2120	SPC4000
SPZ1060	SPA1180	SPB2150	SPC4250
SPZ1080	SPA1220	SPB2240	SPC4500
SPZ1120	SPA1250	SPB2280	SPC4750
SPZ1140	SPA1280	SPB2360	SPC5000
SPZ1180	SPA1320	SPB2410	SPC5300
SPZ1200	SPA1360	SPB2500	SPC5480
SPZ1250	SPA1400	SPB2530	SPC5600
SPZ1270	SPA1450	SPB2650	SPC6000
SPZ1320	SPA1457	SPB2680	SPC6300
SPZ1340	SPA1500	SPB2800	SPC6700
SPZ1348	SPA1550	SPB2840	SPC7100
SPZ1358	SPA1600	SPB3000	SPC7500
SPZ1400	SPA1650	SPB3150	SPC8000
SPZ1420	SPA1700	SPB3170	SPC8500
SPZ1470	SPA1750	SPB3350	SPC9000
SPZ1500	SPA1800	SPB3550	SPC9500
SPZ1520	SPA1850	SPB3750	SPC10000
SPZ1560	SPA1900	SPB3800	SPC10600
SPZ1600	SPA1925	SPB4000	SPC11200
SPZ1650	SPA1950	SPB4060	SPC11800
SPZ1700	SPA2000	SPB4250	SPC12500
SPZ1800	SPA2060	SPB4310	
SPZ1850	SPA2120	SPB4500	
SPZ1900	SPA2180	SPB4560	
SPZ2000	SPA2240	SPB4750	
SPZ2030	SPA2280	SPB4820	
SPZ2120	SPA2300	SPB5000	
SPZ2160	SPA2360	SPB5070	
SPZ2240	SPA2430	SPB5300	
SPZ2280	SPA2500	SPB5380	
SPZ2360	SPA2580	SPB5600	
SPZ2410	SPA2650	SPB5880	
SPZ2500	SPA2720	SPB6000	
SPZ2540	SPA2800	SPB6300	
SPZ2650	SPA2900	SPB6340	
SPZ2680	SPA3000	SPB6700	
SPZ2800	SPA3150	SPB7100	
SPZ2840	SPA3350	SPB7500	
SPZ3000	SPA3550	SPB8000	
SPZ3150	SPA3750		
SPZ3170	SPA4040		
SPZ3350	SPA4250		
SPZ3550	SPA4500		



SpacesaVer Wedge Belts

Fenner



SpacesaVer Wedge Belts

Delta/3V Belts (10 x 8 mm)			
Belt Designation		Effective Outside Length	
RMA (Imperial)	Delta (Metric)	RMA (Inches)	Delta (mm)
3V200	SPZ500	20.0	500
3V250	SPZ630	25.0	630
3V265	SPZ670	26.5	670
3V270	SPZ680	27.0	680
3V280	SPZ710	28.0	710
3V300	SPZ760	30.0	760
3V315	SPZ800	31.5	800
3V320	SPZ810	32.0	810
3V330	SPZ830	33.0	830
3V350	SPZ880	35.0	880
3V360	SPZ910	36.0	910
3V370	SPZ940	37.0	940
3V380	SPZ960	38.0	960
3V400	SPZ1010	40.0	1010
3V420	SPZ1060	42.0	1060
3V450	SPZ1140	45.0	1140
3V470	SPZ1190	47.0	1190
3V480	SPZ1210	48.0	1210
3V500	SPZ1270	50.0	1270
3V510	SPZ1290	51.0	1290
3V530	SPZ1340	53.0	1340
3V560	SPZ1420	56.0	1420
3V575	SPZ1460	57.5	1460
3V600	SPZ1520	60.0	1520
3V630	SPZ1600	63.0	1600
3V670	SPZ1700	67.0	1700
3V710	SPZ1800	71.0	1800
3V750	SPZ1900	75.0	1900
3V800	SPZ2040	80.0	2030
3V850	SPZ2160	85.0	2150
3V900	SPZ2280	90.0	2280
3V950	SPZ2410	95.0	2410
3V1000	SPZ2540	100.0	2540
3V1060	SPZ2690	106.0	2690
3V1120	SPZ2840	112.0	2840
3V1180	SPZ3010	118.0	2990
3V1200	SPZ3040	120.0	3040
3V1320	SPZ3350	132.0	3350
3V1400	SPZ3550	140.0	3550
3V1450	SPZ3680	145.0	3680
3V1500	SPZ3800	150.0	3810

Delta/5V Belts (16x13mm)			
Belt Designation		Effective Outside Length	
RMA (Imperial)	Delta (Metric)	RMA (Inches)	Delta (mm)
5V420	SPB1060	42.0	1060
5V430	SPB1090	43.0	1090
5V450	SPB1140	45.0	1140
5V480	SPB1210	48.0	1210
5V500	SPB1260	50.0	1270
5V530	SPB1340	53.0	1340
5V600	SPB1520	60.0	1520
5V630	SPB1600	63.0	1600
5V710	SPB1800	71.0	1800
5V750	SPB1900	75.0	1900
5V800	SPB2020	80.0	2030
5V850	SPB2150	85.0	2150
5V900	SPB2280	90.0	2280
5V1000	SPB2530	100.0	2540
5V1060	SPB2680	106.0	2690
5V1120	SPB2840	112.0	2840
5V1180	SPB3000	118.0	2990
5V1250	SPB3170	125.0	3170
5V1320	SPB3350	132.0	3350
5V1400	SPB3550	140.0	3550
5V1500	SPB3800	150.0	3810
5V1600	SPB4060	160.0	4060
5V1700	SPB4310	170.0	4310
5V1800	SPB4560	180.0	4570
5V1900	SPB4820	190.0	4820
5V2000	SPB5070	200.0	5080
5V2030	SPB5150	203.0	5150
5V2120	SPB5380	212.0	5380
5V2240	SPB5680	224.0	5690
5V2360	SPB6000	236.0	5990
5V2500	SPB6340	250.0	6350
5V2650	SPB6730	265.0	6730
5V2800	SPB7100	280.0	7110
5V3000	SPB7620	300.0	7620
5V3150	SPB8000	315.0	8000
5V3350	SPB8500	335.0	8500
5V3450	SPB8760	345.0	8760
5V3750	SPB9520	375.0	9520
5V4000	SPB10160	400.0	10160
5V4250	SPB10790	425.0	10790
5V4500	SPB11430	450.0	11430
5V4750	SPB12060	475.0	12060
5V5000	SPB12700	500.0	12700
5V5500	SPB13970	550.0	13970
5V5650	SPB14350	565.0	14350
5V5700	SPB14470	570.0	14470

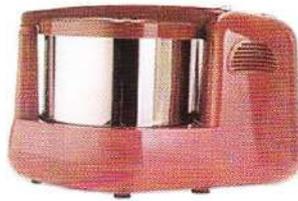
Delta/8V/25N Belts (25x23mm)			
Belt Designation		Effective Outside Length	
RMA (Imperial)	Delta (Metric)	RMA (Inches)	Delta (mm)
8V-1000	25N-2540	100	2540
8V-1060	25N-2690	106	2690
8V-1120	25N-2840	112	2840
8V-1180	25N-3000	118	3000
8V-1250	25N-3180	125	3180
8V-1320	25N-3350	132	3350
8V-1400	25N-3550	140	3550
8V-1500	25N-3810	150	3810
8V-1600	25N-4060	160	4060
8V-1700	25N-4320	170	4320
8V-1800	25N-4570	180	4570
8V-1900	25N-4830	190	4830
8V-2000	25N-5080	200	5080
8V-2120	25N-5380	212	5380
8V-2240	25N-5690	224	5690
8V-2360	25N-6000	236	6000
8V-2500	25N-6350	250	6350
8V-2550	25N-6480	255	6480
8V-2650	25N-6730	265	6730
8V-2800	25N-7100	280	7100
8V-3000	25N-7620	300	7620
8V-3150	25N-8000	315	8000
8V-3350	25N-8500	335	8500
8V-3550	25N-9000	355	9000
8V-3750	25N-9500	375	9500
8V-4000	25N-10160	400	10160
8V-4250	25N-10800	425	10800
8V-4500	25N-11430	450	11430
8V-4750	25N-12060	475	12060
8V-5000	25N-12700	500	12700



Speciality Wrapped Belts

Fenner Fractional Horse Power Belts (FHP Belts).

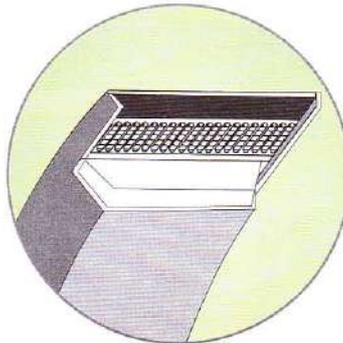
Fenner FHP belts are intended and specifically designed to give satisfaction when used with small diameter pulleys under the conditions of load, usage and service requirements associated with fractional horse power electric motors. Typical applications are Domestic washing machines, Refrigerators, Small fans, Blowers and Centrifugal pumps, Oil Burners and stokers, Meat slicers, Cream separators, Garage equipment, Model makers, Metal and wood working machines.



Applications of FHP belts

F.H.P V-Belts 2000 Series Section 9.5 x 5.5mm			
Size	Size	Size	Size
2170	2280	2380	2500
2180	2290	2390	2510
2190	2300	2395	2520
2200	2310	2400	2530
2210	2320	2410	2540
2220	2330	2420	2549
2230	2334	2430	2560
2240	2340	2440	2580
2245	2350	2450	2594
2250	2355	2460	2664
2260	2360	2475	
2270	2370	2480	
2275	2375	2490	

Power Loom Belts				
Size	Size	Size	Size	Size
A32	A81	A116	B48	B84
A42	A82	A118	B50	B85
A51	A83	A120	B51	B88
A52	A84	A144	B52	B90
A60	A85	A158	B55	B92
A61	A86	A160	B56	B93
A62	A87	A168	B58	B94
A63	A88	A170	B60	B95
A64	A89	A173	B62	B96
A65	A90		B64	B98
A66	A91		B65	B100
A67	A92		B66	B102
A68	A93		B68	B104
A69	A94		B70	B106
A70	A95		B71	B108
A71	A96		B72	B110
A72	A98		B73	B112
A73	A100		B74	B114
A74	A102		B75	B116
A75	A104		B76	B118
A76	A105		B77	B120
A77	A106		B78	
A78	A108		B80	
A79	A110		B81	
A80	A112		B82	



Harvester Combine Belts

Harvester Combine Belts	Wet Grinder Belts	
Size	Size	Size
114x6x3200	A23	A48
114x6x3350	A24	A49
114x6x3400	A25	A50
114x6x3450	A26	A60
114x6x3550	A27	B36
138x6x3895	A28	B37
138x6x3925	A29	B38
138x6x3930	A30	B39
QX1140	A31	B40
R2020	A32	B41
R2150	A33	B42
R2170	A34	B43
R2850	A35	B44
R2920	A36	B45
R3000	A37	B46
R3175	A38	B47
	A39	B48
	A40	B49
	A41	B50
	A42	B51
	A43	B52
	A44	
	A45	
	A46	
	A47	

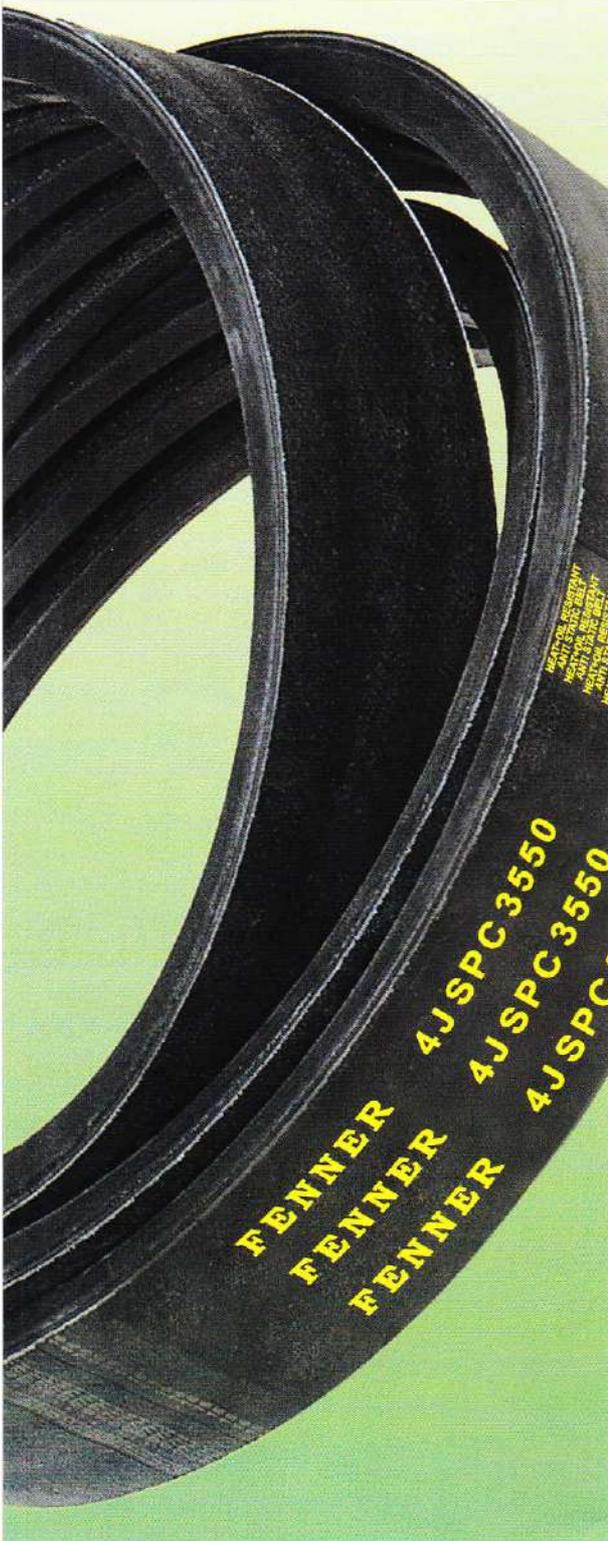
Sewing Machine Belts
Size
6X375
9X375



Banded Belts

POLY-F PLUS PB

THE MATCHLESS PERFORMER



Fenner Banded Belts

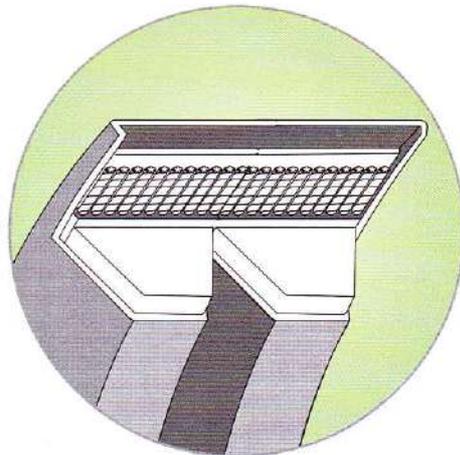
Banded belt consists of multiple belts of standard cross sections like A,B,C,D / SPZ, SPA, SPB,SPC / 3V,5V or 8V etc. are joined together at the top to form a band. This construction provides the following unique benefits:

1. In drives having excessive vibrations such as those encountered in reciprocating drives (Reciprocating Compressors or reciprocating engines driven equipment etc) these belts provide effective damping of vibrations.
2. Since the belts have a common top band, effectively it is a single belt and therefore the problems of matching of individual belts in a multiple belt drive are not present.

The prefix 'J' (denoting Joined) is used before the belt cross section for all banded belts. Thus a band of 3 belts of B-81 will be designated as 3JB-81 and a band of 4 belts of SPB 2680 as 4JSPB 2680 etc.

Avantages :

- Eliminate belt whip, belt twist and belt turn over
- Ideal for drives where pulsating loads are present
- Do not require special pulleys
- Low stretch & longer life



**Banded Belts
Classical & Wedge Sections**



Banded Belts

Applications:

Some of the identified applications for Banded Belts :

1. **Harvestor Combines** used for Paddy harvesting, where the application peculiarity involves reverse bending of the belt.
2. **Surface Miners**, used in Lime Stone quarries attached to Cement plants.
3. **Reciprocating Compressor Application:** Banded Belts are most suited for Reciprocating Compressor Application where high vibrations cause severe belt flapping problem.

Wrapped Banded Belts Range

(Li: Inside Length Le: Effective Length Lp: Pitch Length)

Section	Size Range	Belt Width (mm)	Thickness (mm)	Pitch (mm)	Max No. of Belts /Band (N)
JA	42"-120" Li	15.90 X N	11.00	15.90	6
JB	42"-173" Li	19.30 X N	13.50	19.30	6
JB	174"-420" Li	19.30 X N	13.50	19.30	5
JC	70"-120" Li	25.55 X N	17.50	25.55	4
JC	121"-420" Li	25.55 X N	17.50	25.55	6
JD	150"-270" Li	36.60 X N	21.50	36.60	5
JSPZ	1100-1900 MM Lp	12.00 X N	10.50	12.00	5
JSPA	1100-3500 MM Lp	15.00 X N	12.00	15.00	5
JSPB	2350-4500 MM Lp	19.00 X N	15.50	19.00	6
JSPB	4501-10600 MM Lp	19.00 X N	15.50	19.00	5
JSPC	2500-10600 MM Lp	25.55 X N	16.00	25.55	5
J3V	42" - 120" Le	10.30 X N	10.50	10.30	5
J5V	95" - 175" Le	17.50 X N	16.00	17.50	6
J5V	176" - 420" Le	17.50 X N	16.00	17.50	5
J8V	100" - 500" Le	28.58 X N	26.50	28.58	5

Banded Cogged Belts Range

Banded belts are available in Cogged construction -AX, BX, SPZX, SPAX, SPBX, 3VX & 5VX Sections

Section	Size Range	Belt Top Width (mm)	Thickness (mm ± 0.8)	Groove / Pitch (mm)	Max No. of Belts / Band (N)
JSPZX	1100-3000 mm	(12.0 X N) -1.50	10	12.0 ± 0.15	8
JSPAX	1100-3000 mm	(15.0 X N) - 1.5	10.5	15.0 ± 0.15	8
JSPBX	1100-3000 mm	(19.05 X N) - 1.5	15	19.05 ± 0.15	6
JSPCX	2280-3000 mm	(25.5 X N) - 3.0	19	25.5 ± 0.15	5
J3VX	43 -118 inches	(10.3XN) - 0.50	10	10.3 ± 0.15	8
J5VX	43 -118 inches	(17.50XN) - 1.00	16.5	17.5 ± 0.15	6
JAX	43 -118 inches	(15.88XN) - 2.0	10.5	15.88 ± 0.15	8
JBX	43 -118 inches	(19.05XN)-1.50	13	19.05 ± 0.15	6
JCX	44 -118 inches	(25.5XN) -3.0	16.5	25.5 ± 0.15	5
JAV10X	1100-3000 mm	(12.6 X N) -1.5	9.5	12.6 ± 0.15	8
JAV13X	1100-3000 mm	(16.0 X N) -1.5	10.5	16.0 ± 0.15	8



V-Crested Belts and Hexagonal Belts

Belts for ceramic tiles applications

In ceramic tile plants, most of the V-Belts and Timing belts also double up as Conveyor belts for carrying tiles on their top surface.

V-Crested Belts (also known as Pentagon Belts / Diamond Cut belts / Conical belts) of B & C section are used for applications in ceramic tiles manufacturing for conveying tiles from one process to another. The tiles are supported on top edge of the two belts.

Features:

- Perfect matching of lengths to enable tiles to be carried smoothly.
- Hard and rough surface texture for improved life.
- Improved abrasion resistance by providing extra layers of jacket on the sides.
- Much better life.



V- Crested Belts for Ceramic Tile Industry

V-Crested Belt Sizes

B-Section	C-Section	C-Section
B90	C90	C195
B100	C93	C200
B105	C95	C210
B110	C102	C216
B120	C110	C218
B150	C115	C220
B160	C118	C225
B168	C120	C228
B180	C130	C230
B200	C144	C234
B210	C150	C240
B225	C153	C250
B275	C160	C260
	C180	C270
	C190	C275

Hexagonal Belts

Hexagonal belts as the name implies, are hexagonal in cross section, primarily used in agricultural applications. They are also called Double sided V Belts. Basically the construction of the belt will have two classical sections joined together at the top side. the top belt being inverted and joined to the bottom belt over its own top.

The hexagonal belts consist of layers of cord reinforcement located in the middle of the belt section. There is a jacket wrapped around the belt. The area above and below the cords consists of base rubber compound. The Hexagonal belt can drive on both sides and consequently be used to drive a number of devices with the drive path having reverse bends. The drive is also called "Serpentine drive".

The sudden direction changes in belt travel put unique stresses and demands on the belt carcass and structure and such loads are reliably handled by these anti-static and oil resistant belts.

Hexagonal belt sections are designated with a double alphabet while denoting their sections, e.g. AA, BB, CC etc.



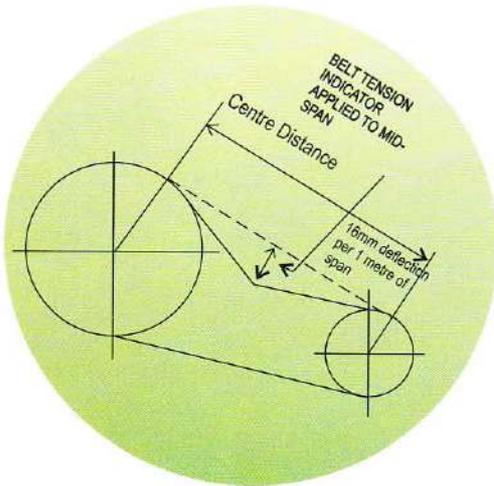
Nomenclature	Dimensions (inches)	Std. Belt Length
AA		62 - 175
BB		62 - 270
CC		83 - 270

HEXAGONAL BELTS	
Size	Size
AA96	BB94
AA120	BB96
AA128	BB100
	BB120
BB75	BB122
BB78	BB124
BB80	BB136
BB82	
BB83	CC112
BB84	CC114
BB85	CC166
BB90	CC176
BB92	CC254



Belt Tensioning Method Using Fenner Belt Tension Indicator

1. Calculate the deflection distance in mm on a basis of 16 mm per metre of span.
Centre Distance (m) x 16 = Deflection (mm)
2. Set the lower marker ring at the deflection distance required in mm on the lower scale.
3. Set the upper marker ring against the bottom edge of the top tube.
4. Place the belt tension indicator on top of the belt at the centre of the span. Apply a force at right angles to the belt deflecting it to the point where the lower marker ring is level with the top of the adjacent belt*
5. Read off the force value indicated by the top edge of the upper marker ring.
6. Compare this force to the kgf value shown in Table-3



* For single belt drives a straight edge should be placed across the two pulleys to act as a datum for measuring the amount of deflection.

If the measured force falls within the values given, the drive should be satisfactory. A measured force below the lower value indicates under-tensioning. A new drive should be tensioned to the higher value to allow for the normal drop in tension during the running-in period. After the drive has been running for 30 minutes, the tension should be checked and readjusted to the higher value, if necessary.

The high performance and efficiency of Fenner Precision Built belts require correct tension. We recommend using the Fenner Belt Tension Indicator.

Table -2:
Tensioning Forces

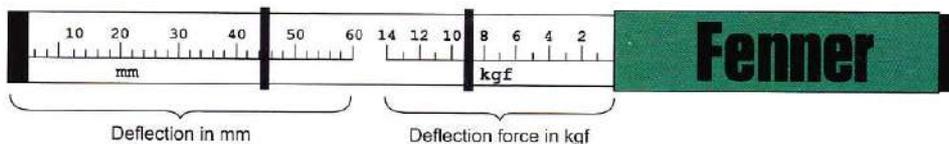
Belt Section	Force Required to deflect belt 16 mm per metre of span		
	Small Pulley Diameter (mm)	Newton (N)	Kilogram force (kgf)
SPZ	67 to 95	10 to 15	1.0 to 1.5
	100 to 140	15 to 20	1.5 to 2.0
SPA	100 to 132	20 to 27	2.0 to 2.7
	140 to 200	27 to 35	2.8 to 3.6
SPB	160 to 224	35 to 50	3.6 to 5.1
	236 to 315	50 to 65	5.1 to 6.6
SPC	224 to 355	60 to 90	6.1 to 9.2
	375 to 560	90 to 120	9.2 to 12.2
8V	335 & above	150 to 200	15.3 to 20.4
A	80 to 140	10 to 15	1.0 to 1.5
B	125 to 200	20 to 30	2.0 to 3.1
C	200 to 400	40 to 60	4.1 to 6.1
D	355 to 600	70 to 105	7.1 to 10.7
E	500 & above	120 to 180	12.2 to 18.3

Table - 3:
Installation, Take-up Allowances

Belt Pitch Length (mm)	Installation Allowances					Take-up (mm)
	SPZ	A & SPA	B & SPB	C & SPC	D & 8V	
410 to 530	20	25	30	50	65	5
530 to 840						10
850 to 1160						15
1170 to 1500						20
1510 to 1830						25
1840 to 2170						30
2180 to 2830						40
2840 to 3500						50
3520 to 4160						60
4170 to 5140						70
5220 to 6150						85
6180 to 7500						105
7600 to 8500						125
8880 to 10170						145
10600 to 12500	175					

Table - 4:
Recommended Minimum Pulley Pitch Diameters (mm)

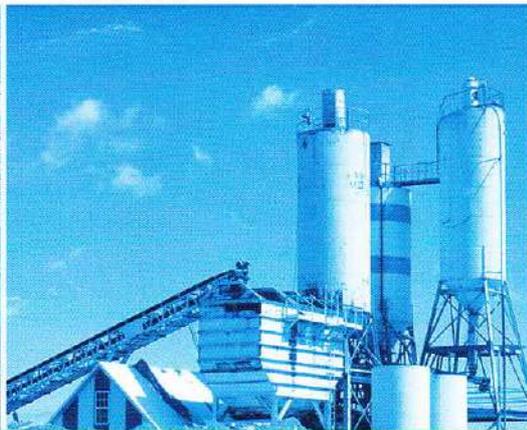
A	B	C	D	E	SPZ	SPA	SPB	SPC	8V
80	125	200	315	450	67	95	160	224	335



Our Product Range



**Taper-Lock Bush Pulleys
Couplings
Shaft Fixings
Gear Boxes
Bearings**



J.K. Fenner (India) Limited

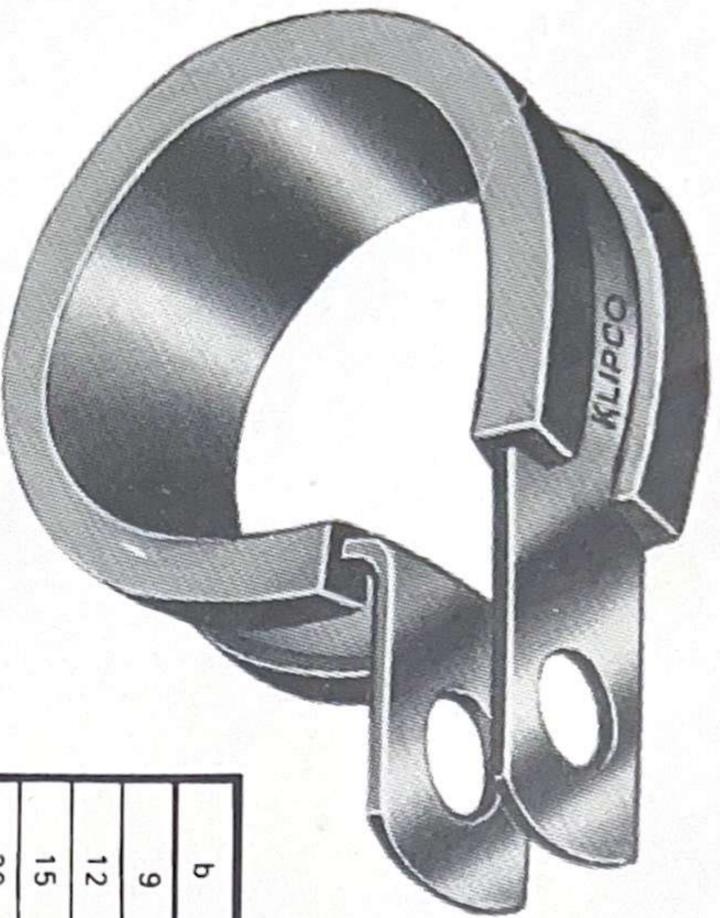
Corporate Office: Khivraj Complex II, V Floor, 480, Anna Salai, Nandanam, Chennai-600 035 Tel: 24312450 to 57, Fax: 044 - 24320193. E.mail: ptd_mhq@jkfenner.com Website: www.jkfennerindia.com

Registered Office: 3, Madurai - Melakkal Road, Kochadai, Madurai - 625 016. Tel: 0452-4283800, Fax: 0452 -2383822.

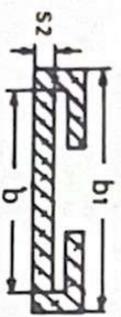
Branches: ● 602 Wall Street Annx., Near Gujarat College Railway Crossing, Ellis Bridge, **Ahmedabad**- 380006 Tel: 079-26408573, 26408572. ● No.20, New Timber Yard Layout, Mysore Road, **Bangalore** - 560 026. Tel: 080-26756333, Fax: 080-26741001. ● 21/3, Old Palasia, Mittal House, Opp. Islamia Karimiya College, **Indore**- 452001 Tel: 99815 07191 ● A-21, Opp. State Bank of India, Bais Godown, Industrial Area, **Jaipur**- 302006, Tel: 0141-2211075, 93148 70878. ● 123/45, Gadarjan Purwa, Gold Spot Road, **Kanpur**-208012 Tel: 0512-2235727, 97939 99997, Fax: 0512-2235727. ● 32/364-A,A-I,A-II Masjid Road, Palarivattom, **Kochi** - 682 025. Tel: 0484-6003888 Ph:98950 71066 Tel: 0484-3242480. ● 58-D, Mirza Ghalib Street, **Kolkata**-700 016. Tel: 033-22298784, 22298791 Fax: 033 -22276136. ● B-XVII/ 2820/48, Opp to Adam Park, Jammu Colony, Link Road, **Ludhiana** -141003. Tel: 0161-2410214, Telefax:0161-2443791. ● 117/6E, Madurai - Usilampatti Road, Meenakshipuram, **Madurai**-625 016, Tel: 0452-2383920, Telefax: 0452-2383921. ● 105, Gauri Complex, Sector-11, CBD-Belapur, **Navi Mumbai**- 400 614 Tel: 022-27560985, 022-27580236. Fax: 022-27563330 ● 2nd Floor, Delite Theatre Building, Asaf Ali Road, **New Delhi** - 110002 Tel: 011-23243113, 23243153, 23243154. Fax: 011-23243114. ● 6-1-190/25, Padmarao Nagar, **Secunderabad**-500 025 Tel: 040-27501125, 27501139. Fax:040-27500665.

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PIPE CLIPS NYLON & INSULATED

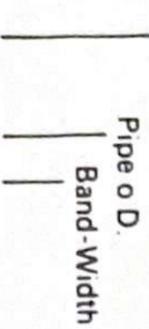


**KLIPCO
RUBBER
INSULATED CLAMPS**



b	b1	s2
9	12.5	1
12	15	1.2
15	18.5	1.5
20	25	2
25	31	3
30	36	3

Example:
Rubber Profile

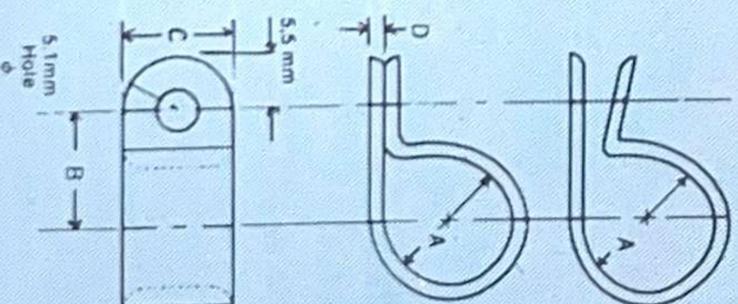
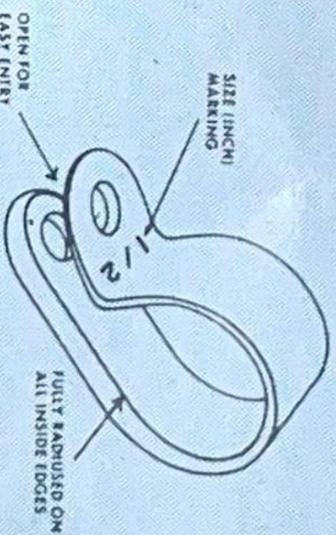
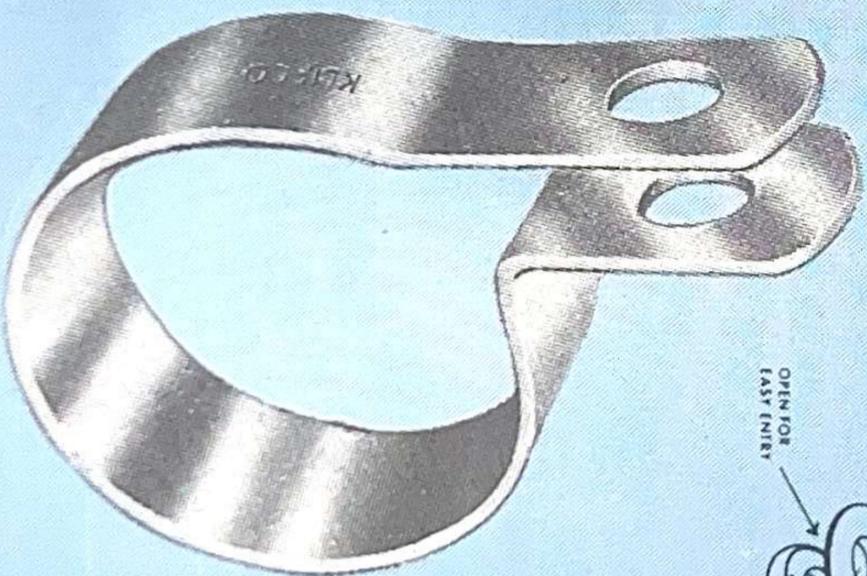


SPGU 120/20 Skz.

Retaining Clips with rubber cushioning offer an elastic fastening with effective vibration damping.

RUBBER-PROFILE: PROPERTIES	POLYCHLOROPRENE	RESISTANCE AGAINST	
Tensile Strength Kg/cm ²	100	Petroleum	satisfactory
Elongation at Break %	200	Oil and Greases	good
Shore Hardness A	70 ± 5	Alcohols	good
Temperature °C	-35° to + 120°	Acids	good
Wear Resistance	good	Alkalies	good
Weathering and Ozone Resistance	very good		
Ageing and Light Crack Resistance	very good		

**KLIPCO
P CLAMPS**



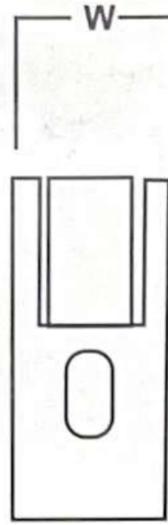
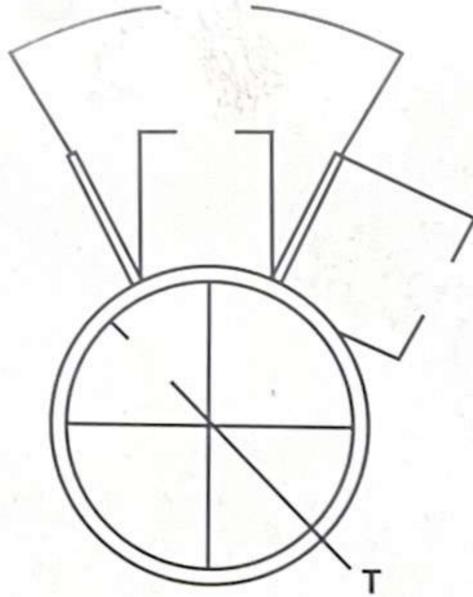
DIMENSIONS				
A	A ₁	B	C	D
3,2	2,9	8,3		
4,8	4,4	9,6		
6,3	5,9	10,4		
7,9	7,5	11,2	9,5	1,3
9,5	9,1	12,0		
11,1	10,7	13,2		
12,7	12,3	14,0		
3,2	2,9	9,1		
4,8	4,4	10,7		
6,3	5,9	11,6		
7,9	7,5	12,6		
9,5	9,1	13,4		
11,1	10,7	14,2		
12,7	12,3	15,0		
14,3	13,9	15,8		
15,9	15,5	16,6		
17,4	17,1	19,1	12,7	1,5
19,0	18,6	19,9		
20,6	20,2	20,7		
22,2	21,9	21,5		
25,4	25,0	23,1		
28,6	28,0	24,6		
30,1	29,6	25,4		
31,8	31,2	27,0		
34,9	34,3	28,6		
38,1	37,5	30,1		

The Finest Clip of India



KLIPCO

Constant Torque Clamp(CTC)



ALL DIMENSIONS ARE IN MM

NOM SIZE OF CLIP DIA	RANGE ± 0.2	BAND		APPLICABLE HOSE OD	HOLDING FORCE MIN. KG.	BAND WIDTH 12 MM				
		T	W			NOM SIZE OF CLIP DIA	RANGE	THICKNESS	APPLICABLE HOSE OD	HOLDING FORCE N
6.8	6.8 - 8.3	0.6	6	7.5	6	13	12 - 14.2	0.8	12.5 - 13.8	50
7.8	7.8 - 9.5	0.6	6	8.5	7	14	13.3 - 15.8		12.5 - 13.6	50
8.6	8.6 - 10.6	0.7	8	9.4	7	15	14 - 16.5		18 - 16.5	65
9.4	9.4 - 11.3	0.7	8	10.2	7	16	14.9 - 12.5		15 - 7	65
10	10 - 12.2	0.7	8	11.1	8	17	15.6 - 18.8		16 - 17.7	65
11	11 - 13	0.8	8	12	8	18	16 - 19		17 - 20	80
11.6	11.6 - 13.6	0.8	8	12.5	10	19	17.8 - 20.2		19 - 20	130
12	12 - 14.2	0.8	8	13	10	20	18.4 - 21.6		19.5 - 20.5	130
12.5	12.5 - 15	0.8	8	13.5	12	22	20.5 - 24.2		21.5 - 23	140
13.1	13.1 - 15.5	0.9	12	14	12	23	21 - 24.7		22 - 24	160
13.8	13.8 - 16.5	0.9	12	15	15	24	22 - 26	23 - 25	180	
14	14 - 17	1.0	10	15.2	15	25	23.5 - 26.8	24 - 26	180	
14.8	15 - 17.7	1.0	10	16	15	26	24.3 - 28	26 - 27	180	
15.5	15.5 - 18.2	1.0	12	17	15	27	25.2 - 28	26.5 - 28	200	
16	16 - 19.5	1.0	12	18	17	28	26.1 - 30.2	27 - 29	200	
17.8	17.8 - 20.2	1.0	12	19.5	17	29	27 - 31.5	28 - 30	200	
18.5	18.5 - 22	1.0	12	20	18	30	28 - 32.5	29 - 31.5	200	
19.8	19.8 - 24	1.0	12	21.3	18	32	29.5 - 34.5	30 - 33	200	
20.8	20.8 - 26	1.0	12	23	20	34	30.6 - 36.4	31 - 34.5	210	
21.7	21.7 - 27	1.0	12	23.5	20	35	31.5 - 38	32.5 - 37	210	
23	23 - 28	1.2	12	25	20	36	32.5 - 39	33 - 38	210	
25	25 - 29	1.2	18	27	20	40	35.5 - 42.5	36.5 - 41.5	220	
26	26 - 31.5	1.2	12	28	22					
26.2	26.2 - 32	1.2	12	28.5	22					



Other sizes on enquiry

Range in 15mm BAND WIDTH available

Material :- Spring steel

D/N : 17222 : MK-75, or 50CRV4/51CRV4,

BS : CS80

SAE :1075 - CK-75

IS : 2507 Grade 6

or equivalent

Heat Treatment : Austempering to HV 470/520

Finish : Iron ZINC and/or as per requirement

Colour : White - Black- Grey or Blue

ISO/TS 16949:2002



A CERTIFIED CO.

The Finest Clamps of India

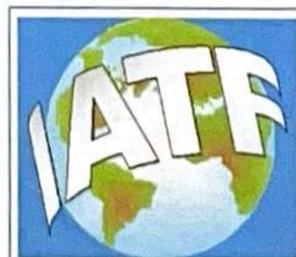
KLIPCO®



T-Bolt Hose Clamps

SAE-J-1508

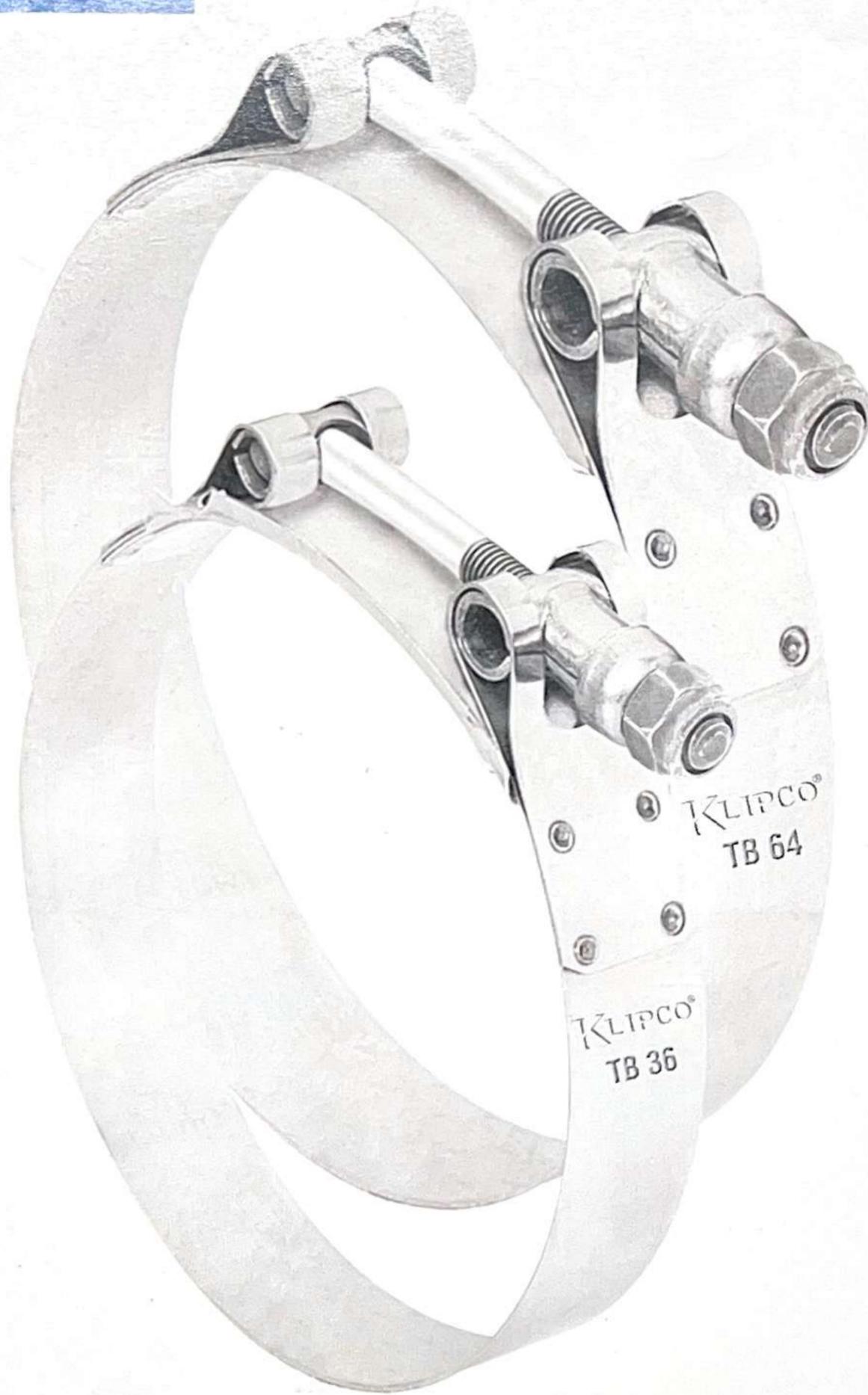
501





KLIPCO

T-Bolt Hose Clamps



KLIPCO®

T - Bolt Clamp

SAE-J-1508 : Type : TB

Klipco T-Bolt clamps are for heavy duty applications, provide leak proof connections, withstand temperature, corrosion resistant and vibration. Gives flat and uniform 360° circumference.

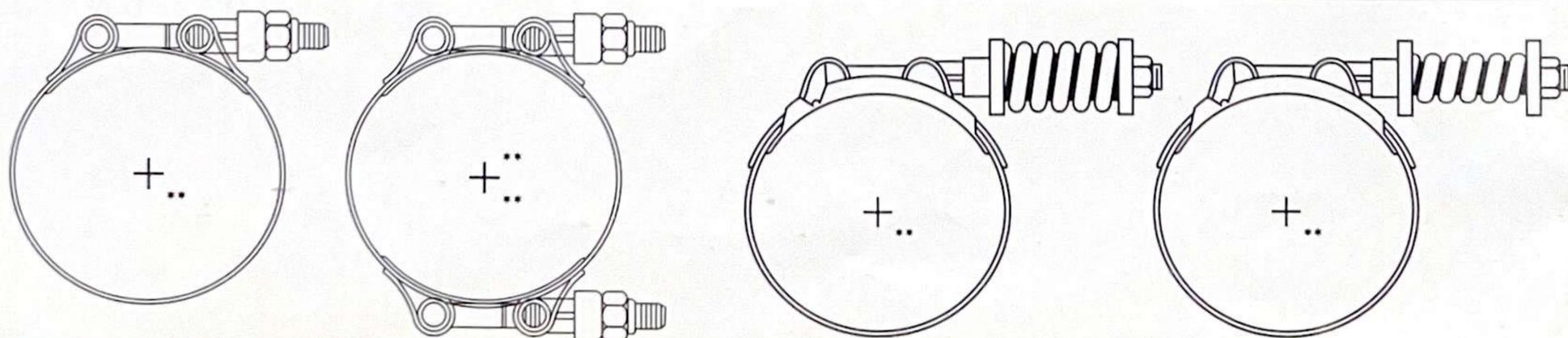
Clamps are made in composite materials and all Stainless Steel materials.

T-Bolt Clamp Components	Materials			Dimensions
	Composite	SS 304	SS 316	
Band & Saddle	SS 201 / 202	304	316	Width - 19 mm Thickness - 0.63 mm
T - Bolt	Carbon Steel	300 400	300 316	Q - 6.35 mm & 28 UNF Threads Length - 75 mm OR 82 mm
Trunnion, Wrapper, Cap	Mild Steel IS : 513	304	316	-----
Nut Hex	CHQ MS Nyloc	304 Lock Nut	316 Lock Nut	A/F 11 mm

All Mild steel Components are Zinc plated & yellow passivated. Clamps are suitable for installation Torque upto 7.9 Nm (70 in-lb)

SAE : Installation Range

SIZE No	OPEN DIA. MM	OPEN DIA. IN.	CLOSE DIA. MM	CLOSE DIA. IN.	SIZE No	OPEN DIA. MM	OPEN DIA. IN.	CLOSE DIA. MM	CLOSE DIA. IN.	SIZE No	OPEN DIA. MM	OPEN DIA. IN.	CLOSE DIA. MM	CLOSE DIA. IN.
28	50.8	2	44.5	1 3/4	136	138.1	5 7/16	130.2	5 1/8	244	223.8	8 13/16	215.9	8 1/2
30	52.4	2 1/16	46.0	1 13/16	138	139.7	5 1/2	131.8	5 3/16	246	225.4	8 7/8	217.5	8 9/16
32	55.6	2 3/16	47.6	1 7/8	140	141.3	5 9/16	133.4	5 1/4	248	227.0	8 15/16	219.1	8 5/8
34	57.2	2 1/4	49.2	1 15/16	142	142.9	5 5/8	134.9	5 5/16	250	228.6	9	220.7	8 11/16
36	58.7	2 5/16	50.8	2	144	144.5	5 11/16	136.5	5 3/8	252	230.2	9 1/16	222.3	8 3/4
38	60.3	2 3/8	52.4	2 1/16	146	146.1	5 3/4	138.1	5 7/16	254	231.8	9 1/8	223.8	8 13/16
40	61.9	2 7/16	54.0	2 1/8	148	147.6	5 13/16	139.7	5 1/2	256	233.4	9 3/16	225.4	8 7/8
42	63.5	2 1/2	55.6	2 3/16	150	149.2	5 7/8	141.3	5 9/16	258	235.0	9 1/4	227.0	8 15/16
44	65.1	2 9/16	57.2	2 1/4	152	150.8	5 15/16	142.9	5 5/8	260	236.5	9 5/16	228.6	9
46	66.7	2 5/8	58.7	2 5/16	154	152.4	6	144.5	5 11/16	262	238.1	9 3/8	230.2	9 1/16
48	68.3	2 11/16	60.3	2 3/8	156	154.0	6 1/16	146.1	5 3/4	264	239.7	9 7/16	231.8	9 1/8
50	69.9	2 3/4	61.9	2 7/16	158	155.8	6 1/8	147.6	5 13/16	266	241.3	9 1/2	233.4	9 3/16
52	71.4	2 13/16	63.5	2 1/2	160	157.2	6 3/16	149.2	5 7/8	268	242.9	9 9/16	235.0	9 1/4
54	73.0	2 7/8	65.1	2 9/16	162	158.8	6 1/4	150.8	5 15/16	270	244.5	9 5/8	236.5	9 5/16
56	74.6	2 15/16	66.7	2 5/8	164	160.3	6 5/16	152.4	6	272	246.1	9 11/16	238.1	9 3/8
58	76.2	3	68.3	2 11/16	166	161.9	6 3/8	154.0	6 1/16	274	247.7	9 3/4	239.7	9 7/16
60	77.8	3 1/16	69.9	2 3/4	168	163.5	6 7/16	155.6	6 1/8	276	249.2	9 13/16	241.3	9 1/2
62	79.4	3 1/8	71.4	2 13/16	170	165.1	6 1/2	157.2	6 3/16	278	250.8	9 7/8	242.9	9 9/16
64	81.0	3 3/16	73.0	2 7/8	172	166.7	6 9/16	158.8	6 1/4	280	252.4	9 15/16	244.5	9 5/8
66	82.6	3 1/4	74.6	2 15/16	174	168.3	6 5/8	160.3	6 5/16	282	254.0	10	246.1	9 11/16
68	84.1	3 5/16	76.2	3	176	169.9	6 11/16	161.9	6 3/8	284	255.6	10 1/16	247.7	9 3/4
70	85.7	3 3/8	77.8	3 1/16	178	171.5	6 3/4	163.5	6 7/16	286	257.2	10 1/8	249.2	9 13/16
72	87.3	3 7/16	79.4	3 1/8	180	173.0	6 13/16	165.1	6 1/2	288	258.8	10 3/16	250.8	9 7/8
74	88.9	3 1/2	81.0	3 3/16	182	174.6	6 7/8	166.7	6 9/16	290	260.4	10 1/4	252.4	9 15/16
76	90.5	3 9/16	82.6	3 1/4	184	176.2	6 15/16	168.3	6 5/8	292	261.9	10 5/16	254.0	10
78	92.1	3 5/8	84.1	3 5/16	186	177.8	7	169.9	6 11/16	294	263.5	10 3/8	255.6	10 1/16
80	93.7	3 11/16	85.7	3 3/8	188	179.4	7 1/16	171.5	6 3/4	296	265.1	10 7/16	257.2	10 1/8
82	95.3	3 3/4	87.3	3 7/16	190	181.0	7 1/8	173.0	6 13/16	298	266.7	10 1/2	258.8	10 3/16
84	96.8	3 13/16	88.9	3 1/2	192	182.6	7 3/16	174.6	6 7/8	300	268.3	10 9/16	260.4	10 1/4
86	98.4	3 7/8	90.5	3 9/16	194	184.2	7 1/4	176.2	6 15/16	302	269.9	10 5/8	261.9	10 5/16
88	100.0	3 15/16	92.1	3 5/8	196	185.7	7 5/16	177.8	7	304	271.5	10 11/16	263.5	10 3/8
90	101.6	4	93.7	3 11/16	198	187.3	7 3/8	179.4	7 1/16	306	273.1	10 3/4	265.1	10 7/16
92	103.2	4 1/16	95.3	3 3/4	200	188.9	7 7/16	181.0	7 1/8	308	274.6	10 13/16	266.7	10 1/2
94	104.8	4 1/8	96.8	3 13/16	202	190.5	7 1/2	182.6	7 3/16	310	276.2	10 7/8	268.3	10 9/16
96	106.4	4 3/16	98.4	3 7/8	204	192.1	7 9/16	184.2	7 1/4	312	277.8	10 15/16	269.9	10 5/8
98	108.0	4 1/4	100.0	3 15/16	206	193.7	7 5/8	185.7	7 5/16	314	279.4	11	271.5	10 11/16
100	109.5	4 5/16	101.6	4	208	195.3	7 11/16	187.3	7 3/8	316	281.0	11 1/16	273.1	10 3/4
102	111.1	4 3/8	103.2	4 1/16	210	196.9	7 3/4	188.9	7 7/16	318	282.6	11 1/8	274.6	10 13/16
104	112.7	4 7/16	104.8	4 1/8	212	198.4	7 13/16	190.5	7 1/2	320	284.2	11 3/16	276.2	10 7/8
106	114.3	4 1/2	106.4	4 3/16	214	200.0	7 7/8	192.1	7 9/16	322	285.8	11 1/4	277.8	10 15/16
108	115.9	4 9/16	108.0	4 1/4	216	201.6	7 15/16	193.7	7 5/8	324	287.3	11 5/16	279.4	11
110	117.5	4 5/8	109.5	4 5/16	218	203.2	8	195.3	7 11/16	326	288.9	11 3/8	281.0	11 1/16
112	119.1	4 11/16	111.1	4 3/8	220	204.8	8 1/16	196.9	7 3/4	328	290.5	11 7/16	282.6	11 1/8
114	120.7	4 3/4	112.7	4 7/16	222	206.4	8 1/8	198.4	7 13/16	330	292.1	11 1/2	284.2	11 3/16
116	122.2	4 13/16	114.3	4 1/2	224	208.0	8 3/16	200.0	7 7/8	332	293.7	11 9/16	285.8	11 1/4
118	123.8	4 7/8	115.9	4 9/16	226	209.6	8 1/4	201.6	7 15/16	334	295.3	11 5/8	287.3	11 5/16
120	125.4	4 15/16	117.5	4 5/8	228	211.1	8 5/16	203.2	8	336	296.9	11 11/16	288.9	11 3/8
122	127.0	5	119.1	4 11/16	230	212.7	8 3/8	204.8	8 1/16	338	298.5	11 3/4	290.5	11 7/16
124	128.6	5 3/16	120.7	4 3/4	232	214.3	8 7/16	206.4	8 1/8	340	300.0	11 13/16	292.1	11 1/2
126	130.2	5 1/8	122.2	4 13/16	234	215.9	8 1/2	208.0	8 3/16	342	301.6	11 7/8	293.7	11 9/16
128	131.8	5 5/16	123.8	4 7/8	236	217.5	8 9/16	209.6	8 1/4	344	303.2	11 15/16	295.3	11 5/8
130	133.4	5 1/4	125.4	4 15/16	238	219.1	8 5/8	211.1	8 5/16	346	304.8	12	296.9	11 11/16
132	134.9	5 5/16	127.0	5	240	220.7	8 11/16	212.7	8 3/8					
134	136.5	5 3/8	128.6	5 1/16	242	222.3	8 3/4	214.3	8 7/16					





TYPE 'A' : SERRATIONS
 MATERIAL : i) MILD STEEL CR TO BS: 1449
 ii) AISI S.S. 304
 BAND WIDTH : 9 and 12 mm
 HOUSING : ONE PIECE



TYPE 'B' : PERFORATED
 MATERIAL : AISI S.S. 304
 BAND WIDTH : 9 mm, 12 mm and 16 mm
 HOUSING : i) ONE PIECE IN 9 AND 12 mm BANDS
 ii) TWO PIECE IN 16 mm BANDS

SPECIFICATION : BS 5315 / 1976 and IS 4762 / 1984

MATERIAL : The material used in manufacture of WORM DRIVE HOSE CLIPS shall be selected at the manufacturer's discretion provided that the finished clamps are capable of passing the tests specified.

MANUFACTURE :

Screw : Shall be held captive in the Clamp Housing.

Band : Band shall have a thread form commencing at the free end and extending for a length sufficient to enable the clamp to be tightened on to the smallest diameter of component within the working range for which it is designated.

Housing : The housing shall not be readily removable from the band.

FINISH : Clamp shall be smooth and free from burrs and sharp edges.

Clamp produced other than from corrosion resistant materials (stainless steel) shall be protected from electroplating coating of zinc-as per Fe Zn12 of IS : 1573/1970 & BS : 1706-Zn3.

DIMENSIONS :

Size -x-	Y Max	Z Max
12 - 20	14 mm	25 mm
22 - 25	20 mm	25 mm
28 - 40	25 mm	30 mm
45 & above	28 mm	33 mm

TESTS

Free running Torque Test : For this purpose the torque required exceed 1.5 Nm. i.e. (13.3 lbf/In or 0.16 kgf/m)

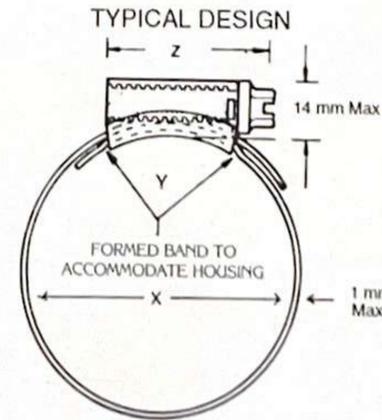
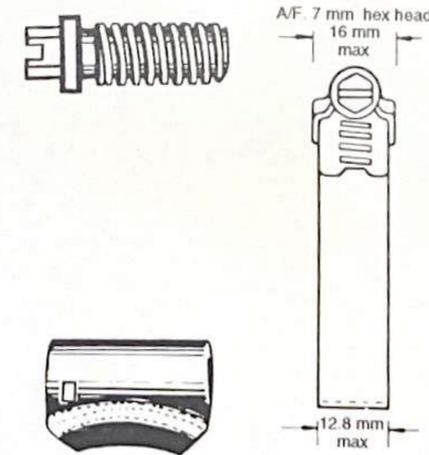
TORQUE TEST :

The Clamp shall be tightened to 75% of the Torque Load, as shown in table. On release, Clamp shall reveal no sign of permanent distortion of the housing, nor efficient functioning of the Clamp size. The Clamp shall then be retightened until permanent distortion or failure occurs, at these point Torque Load shall be in excess of the value shown in table.

HYDRAULIC PRESSURE TEST :

The fluid used for the test shall be water at room temperature. Torque applied shall not be more than 75% of the value. Pressure shall be applied gradually from an external source until leakage or other failure occurs, at which stage the pressure shall be not less than the appropriate value specified.

TYPICAL INTERNATIONAL DESIGN



DIMENSIONS OF WORM DRIVE HOSE CLAMPS Suitable for Hose Outside Diameter						
BS. 5315 / 1976			IS : 4762 / 1984			
IS 4762 Size Type 'A'	Klipco Size	BS 5315 Size Type 'S'	Outside Diameter of Hose-x-			
			MM		INCHES	
			Min	Max	Min	Max
12	000	12	9.5	12	3/8	1/2
16	00M	16	11	16	1/2	5/8
20	00	20	13	20	1/2	3/4
22	0	22	16	22	5/8	7/8
25	25A	25	18	25	3/4	1"
-	0X	-	20	28	3/4	1 1/8
30	1A	30	22	30	7/8	1 1/4
35	35A	35	25	35	1"	1 3/8
-	1	-	30	38	1 1/8	1 1/2
40	1X	40	30	40	1 1/8	5 1/8
45	45A	45	32	45	1 1/4	1 3/4
50	2A	50	38	50	1 1/2	1 7/8
-	2	55	42	55	1 5/8	2 1/8
60	2X	60	45	60	1 3/4	2 3/8
70	3	70	50	70	2"	2 3/4
-	75A	-	55	75	2 1/4	3"
80	3X	80	60	80	2 2/3	3 1/8
90	4	90	70	90	2 3/4	3 1/2
100	4X	100	80	100	3 1/8	4"
-	110A	-	90	110	3 1/2	4 3/8
-	5	120	100	120	4"	4 3/4
130	130A	-	110	130	4 3/8	5 1/4
-	6	140	125	140	5"	5 1/2
-	6X	-	135	150	5 1/2	6"
160	160A	-	140	160	5 5/8	6 3/8

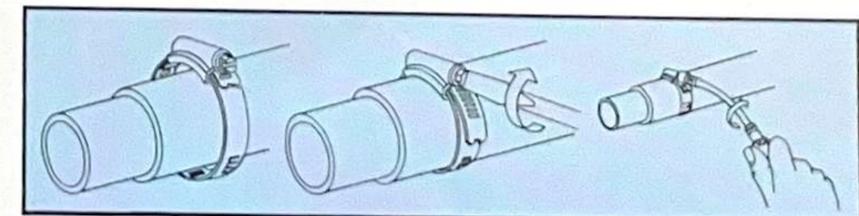
LARGER RANGE

Klipco Size	Outside Diameter of Hose		Klipco Size	Outside Diameter of Hose	
	MM	INCHES		MM	INCHES
7	150	175	13	330	325
8	175	200	14	325	350
9	200	225	15	350	375
10	225	250	16	375	400
11	250	275	17	400	425
12	275	300	18	425	450

to move the screw in either direction shall not

Size mm	Torque value Nm	75% value Nm	Kgf / m	lbf / In
12 to 20	4.5	3.4	0.345	30
22 to 28	5.6	4.20	0.435	37.5
30 to 45	6.8	5.10	0.52	45
50 to 60	7.9	5.92	0.60	52.5
70 to 140	9.0	6.80	0.79	60

	Mpa	Kgf/Cm2	lbf / In2
12 to 30	1.41	14.1	200
35 to 70	0.84	8.4	120
75 to 160	0.42	4.2	60



INTRODUCING

DUPLON

POLYURETHANE HOSE

STRENGTH MEETS FLEXIBILITY



**MADE FROM PREMIUM POLYURETHANE
WITH EMBEDDED COPPER-COATED
SPRING STEEL WIRE FOR ADDED
STRENGTH AND DURABILITY.**

**IDEAL FOR DEMANDING
INDUSTRIAL APPLICATIONS.**

AVAILABLE IN VARIOUS THICKNESS & SIZES.

STRENGTH MEETS FLEXIBILITY

Duplon Polyurethane Hose (PU HOSE) offers exceptional flexibility, durability, and light weight - making it ideal for demanding industrial applications. Its superior resistance to abrasion and high temperature performance makes it the preferred choice for industries that convey abrasive materials under challenging conditions.

Size (Inch)	ID (mm)	OD (mm)	Wall Thickness (mm)	Pressure (Bar)	Vacuum (Bar)	Bending Radius (mm)	Length (Mtrs)
2	51	59	0.4	0.70	0.240	59	15
2¼	60	68	0.4	0.56	0.210	68	15
2½	63	71	0.4	0.55	0.180	71	15
3	76	84	0.4	0.47	0.130	84	15
3¼	80	88	0.4	0.43	0.120	88	15
4	102	110	0.4	0.35	0.080	110	15
5	127	135	0.4	0.28	0.060	135	15
6	152	160	0.4	0.17	0.050	160	15
8	203	211	0.4	0.13	0.030	211	15
10	254	262	0.4	0.10	0.015	262	15
12	305	313	0.4	0.09	0.010	313	15

0.4 mm Wall Thickness



0.6 mm Wall Thickness



Size (Inch)	ID (mm)	OD (mm)	Wall Thickness (mm)	Pressure (Bar)	Vacuum (Bar)	Bending Radius (mm)	Length (Mtrs)
1	25	32	0.6	1.600	0.360	32	15
1½	40	48	0.6	1.020	0.335	48	15
2	51	59	0.6	0.910	0.312	59	15
3	76	84	0.6	0.611	0.169	84	15
4	102	110	0.6	0.455	0.104	110	15
10	254	262	0.6	0.130	0.020	262	15
12	305	313	0.6	0.117	0.013	313	15

Size (Inch)	ID (mm)	OD (mm)	Wall Thickness (mm)	Pressure (Bar)	Vacuum (Bar)	Bending Radius (mm)	Length (Mtrs)
2	51	59	0.9	1.370	0.365	90	15
2½	63	70	0.9	1.050	0.205	113	15
3	76	84	0.9	0.920	0.195	155	15
4	102	110	0.9	0.685	0.115	204	15

0.9 mm Wall Thickness (Food Grade)

1.5 mm Wall Thickness (Food Grade)

Size (Inch)	ID (mm)	OD (mm)	Wall Thickness (mm)	Pressure (Bar)	Vacuum (Bar)	Bending Radius (mm)	Length (Mtrs)
2	51	59	1.5	2.330	0.835	96	15
4	102	110	1.5	1.190	0.355	183	15

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