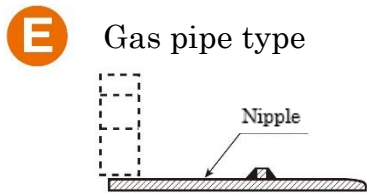
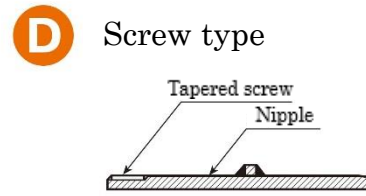
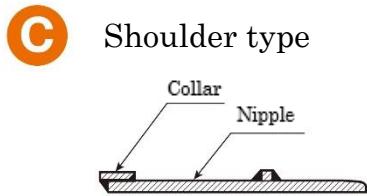
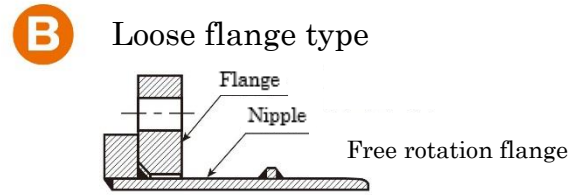
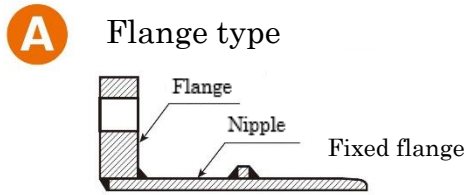


SUCTION AND DELIVERY HOSE

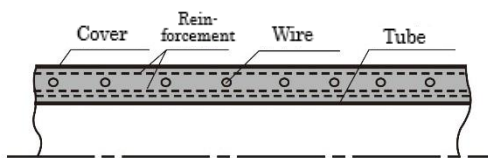
< Coupling >



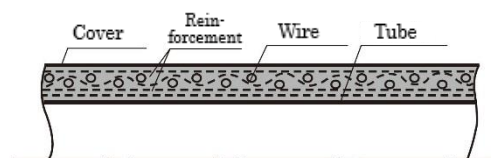
※Coupling made of SUS or other materials can be manufactured.

< Construction of hose >

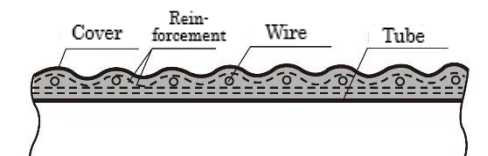
1W_{sm} Single wire / Smooth and texture type



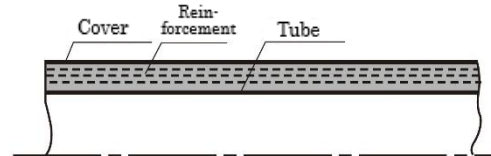
2W_{sm} Double wire / Smooth and texture type



1W_{CR} Single wire / Bellows and texture type



0W_{sm} Wireless / Smooth and texture type



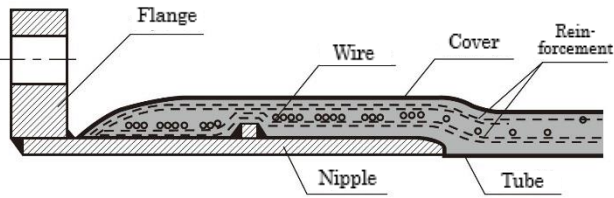
※Wireless type is used only for delivery. The product size is limited by nominal size or pressure, contact TOGAWA RUBBER.

< Hose end >

● Hose with coupling

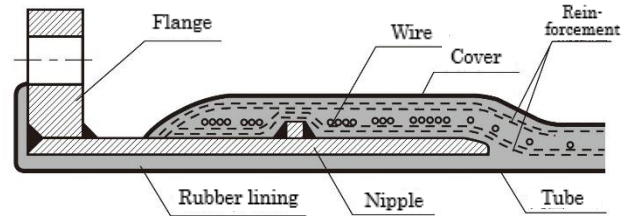
BL Bandless type

Hose end, the nipple of the coupling and the hose vulcanization-adhered together, is tough and easy to pipe connecting.



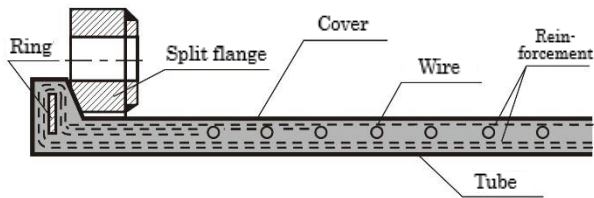
BLT Built-in type

Rubber lined to resist to abrasion and erosion. Applicable to powder, acid or alkali conveying.



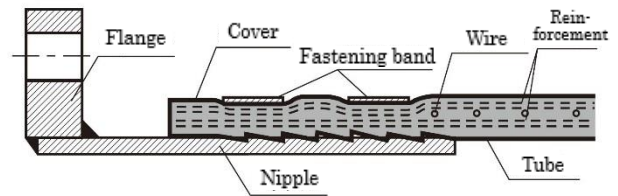
NPL Nippleless type

Since the hose end is firmly reinforced by the ring, a nipple is not required. Freely rotating split flange is easily connected to pipe. Applicable to connecting with a short hose.



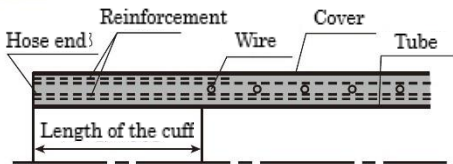
BH Band fastened type

Used for low pressure hose such as general fluids or steam hose. According to application, special nipple and band are available.

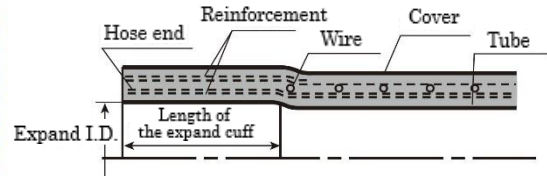


● Hose without coupling

ES Straight cuff



EL Expand cuff



※Please specify expand I.D. and length of the cuff to TOGAWA RUBBER.

※Acid resistant hose is manufactured having no reinforcement exposed at end of the hose.

< Manufactured range >

Hose	Max Working Pressure (MPa)	Shape of the hose end			
		BL	BLT	NPL	BH
Air	0.5	25 to 300	25 to 300	25 to 300	25 to 150
Water					
Abrasion resistant					
Chemical	1.0	25 to 300	25 to 300	25 to 300	25 to 75
Oil resistant					
Strong acid	1.5	25 to 300	25 to 300	—	25 to 65
Oil resistant	2.0	25 to 300	25 to 300	—	—

※Strong acid hose is manufactured from 25A to 200A.

※The table indicates a manufactured range from min. size to max. size of the hose inner diameter. Some sizes can be manufactured 30m as a special length.

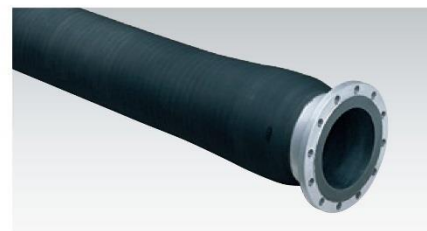
※Oil resistant hose is needed to change its hose end depending on the content of aroma component and ambient temperature of oils such as general hydraulic oil, black fuel oil, crude oil and lubricating oil. Contact TOGAWA RUBBER as needed.

※BL type is recommended when using a hose frequently replaced or a hard packing.

< Specifications >

- Standard size : $\phi 25$ to $\phi 300$
(Strong acid hose : $\phi 25$ to $\phi 200$)

※In suction used, recommended range of working pressure is up to -0.08MPa.



Hose	Air hose			Water hose		
Part No.	AIR-05	AIR-10	AIR-15	WAT-05	WAT-10	WAT-15
Max Working Pressure (MPa)	0.5	1.0	1.5	0.5	1.0	1.5
Temperature	-20°C to +60°C			-20°C to +60°C		
Fluids	Air etc.			Industrial water, Cooling water, etc.		

Hose	Abrasion resistant hose			Chemical hose		
Part No.	ABR-05	ABR-10	ABR-15	CHM-05	CHM-10	CHM-15
Max Working Pressure (MPa)	0.5	1.0	1.5	0.5	1.0	1.5
Temperature	-20°C to +80°C			-20°C to +60°C		
Fluids	Cement, Sediment, Iron ore, Grain, etc.			Chemical agent etc.		

Hose	Oil resistant hose				Strong acid hose		
Part No.	OIL-05	OIL-10	OIL-15	OIL-20	ACD-05	ACD-10	ACD-15
Max Working Pressure (MPa)	0.5	1.0	1.5	2.0	0.5	1.0	1.5
Temperature	-20°C to +80°C				-20°C to +50°C		
Fluids	Crude oil, Heavy oil, Kerosene, etc.				Concentrated sulfuric acid, Concentrated hydrochloric acid, etc.		



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